INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

VAN BUSKIRK PARK REVITALIZATION PROJECT

STOCKTON, CALIFORNIA



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MITIGATED NEGATIVE DECLARATION

VAN BUSKIRK PARK REVITALIZATION PROJECT

STOCKTON, CALIFORNIA

Submitted to:

City of Stockton
425 North El Dorado Street
Stockton, California 95202

Prepared by:

LSA Associates, Inc.
157 Park Place
Pt. Richmond, California 94801
(510) 236-6810

Project No. 20252166

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LIST OF ABBREVIATIONS AND ACRONYMS

µg/m^3	micrograms per cubic meter
AAQS	ambient air quality standards
AB	Assembly Bill
AC	asphalt concrete
ACE	Altamont Corridor Express
AFY	acre-feet per year
Air District	Bay Area Air District
amsl	above mean sea level
APN	Assessor's Parcel Number
Basin Plan	Water Quality Control Plan for the Sacramento and San Joaquin River Basins
bgs	below ground surface
BMP	best management practice
BPS	best performance standards
CAL FIRE	California Department of Forestry and Fire Protection
Cal Water	California Water Service Company Stockton District
CalEEMod	California Emission Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
California Register	California Register of Historical Resources
Caltrans	California Department of Transportation
Caltrans Manual	*Caltrans Transportation and Construction Vibration Guidance Manual*
CARB	California Air Resources Board

CBC	California Building Code
CCalC	Central California Information Center
CCAP	Climate Change Action Plan
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGS	California Geological Survey
CH_4	methane
CIDH	cast-in-drilled-hole
City	City of Stockton
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
CoIWMP	Countywide Integrated Waste Management Plan
Construction General Permit	NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, Order No. 2022-0057-DWQ, NPDES No. CAS000002
Cortese List	Hazardous Waste and Substances Sites List
County	County of San Joaquin
CRMP	Cultural Resources Management Plan
CVLN	Confederated Villages of Lisjan Nation
CWA	Clean Water Act

dB	decibels
dBA	A-weighted decibels
DCV	design capture volume
DDE	dichlorodiphenyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
Delta Reform Act	Sacramento-San Joaquin Delta Reform Act of 2009
DOC	California Department of Conservation
DPM	diesel particulate matter
DPS	Distinct Population Segment
DTSC	Department of Toxic Substances Control
EFZ	Earthquake Fault Zone
EMFAC2021	EMission FACtor model
EO	Executive Order
EOP	Emergency Operations Plan
FAR	floor-area ratio
FEMA	Federal Emergency Management Agency
FESA	federal Endangered Species Act
General Plan	*Envision Stockton 2040 General Plan*
GHG	greenhouse gas
gpd	gallons per day
gpy	gallons per year
Groundwater Discharge Permit	Central Valley RWQCB's Waste Discharge Requirements Limited Threat Discharges to Surface Water, Order No. R5-2022-0006-02, NPDES No. CAG995002
GSA	Groundwater Sustainability Agency

GSP	Groundwater Sustainability Plan
GWA	Groundwater Authority
GWP	Global Warming Potential
HARP2	Hotspots Analysis and Reporting Program
HazMat	Hazardous Material
HRA	health risk assessment
HVAC	heating, ventilation, and air conditioning
I	Interstate
in/sec	inches per second
IS/MND	Initial Study/Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
Justification Report	*Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans*
L_{dn}	day-night average level
LED	light-emitting diode
L_{eq}	equivalent continuous sound level
LID	Low-Impact Development
L_{max}	maximum instantaneous noise level
LOS	level(s) of service
LSZ	low-salinity zone
LUST	leaking underground storage tank
MEI	maximally exposed individual
mgd	million gallons per day
MLD	Most Likely Descendant

MMI	Modified Mercalli Intensity
mpg	miles per gallon
MRP	Municipal Regional Permit
MS4	Municipal Separate Storm Sewer Systems
MT	metric ton(s)
MUTCD	California Manual on Uniform Traffic Control Devices
N_2O	nitrous oxide
NAHC	Native American Heritage Commission
National Register	National Register of Historic Places
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NOI	Notice of Intent
NO_X	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Governor's Office of Planning and Research
park	Van Buskirk Park
PCC	Portland cement concrete
PCE	Primary Constituent Element
PF	Public Facilities
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter

ppb	parts per billion
ppd	pounds per day
ppt	parts per thousand
PPV	peak particle velocity
PR	Parks and Recreation
PRC	Public Resources Code
project	Van Buskirk Park Revitalization Project
Region-wide MS4 Permit	NPDES Permit and Waste Discharge Requirements General Permit for Discharges from Municipal Separate Storm Sewer Systems, Order No. R5-2016-0040, NPDES No. CAS0085324
RMS	root-mean-square
ROG	reactive organic gases
RWCF	Regional Wastewater Control Facility
RWQCB	Regional Water Quality Control Board
San Joaquin RTD	San Joaquin Regional Transit District
SB	Senate Bill
SEWD	Stockton East Water District
SFD	Stockton Fire Department
SGMA	Sustainable Groundwater Management Act
SJCHS&M	San Joaquin County Historical Society & Museum
SJCOG	San Joaquin Council of Governments
SJMSCP	San Joaquin County Multi-Species Open Space and Habitat Conservation Plan
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District

SLF	Sacred Lands File
SMARA	California Surface Mining and Reclamation Act of 1975
SMC	Stockton Municipal Code
SO_2	sulfur dioxide
SPD	Stockton Police Department
SQG	small-quantity generator
SR	State Route
SRA	State Responsibility Area
SRF	SJMSCP Review Form
SUV	sport utility vehicle
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution and Prevention Plan
SWQCCP	Stormwater Quality Control Criteria Plan
SWQCP	Stormwater Quality Control Plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
TMDL	Total Maximum Daily Load
TPA	Transit Priority Area
URF	unit risk factor
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan

VELB	valley elderberry longhorn beetle
VMT	vehicle miles traveled
WEAP	Worker Environmental Awareness Program

1.0 PROJECT INFORMATION

1. **Project Title:**

   Van Buskirk Park Revitalization Project

2. **Lead Agency Name and Address:**

   City of Stockton
   425 North El Dorado Street
   Stockton, California 95202

3. **Contact Person and Phone Number:**

   Liszet Burgueno
   (209) 937-8993

4. **Project Location:**

   734 Houston Avenue
   Stockton, California 95206
   Assessor's Parcel Number (APN) 163-07-036

5. **Project Sponsor's Name and Address:**

   City of Stockton
   425 North El Dorado Street
   Stockton, California 95202

6. **General Plan Designation:**

   Parks and Recreation (PR)

7. **Zoning:**

   Public Facilities (PF)

8. **Description of Project:**

   The City of Stockton (City) proposes to develop a community park on a 192.71-acre former golf course. The expanded Van Buskirk Park (park) would include additional outdoor basketball courts, a new bike and skate park with associated amenities, a community garden, a multi-purpose lawn area, a splash pad/water play area, an 18-hole disc golf course, a golf academy, indoor facilities, an event lawn with outdoor pavilion, a playground, pickleball courts, and a dog park, as well as walking paths, restoration areas, and parking. See Section 2.0, Project Description, of this Initial Study for a full project description.

9. **Surrounding Land Uses and Setting:**

   The predominant land use to the north is residential, to the south is French Camp Slough/Walker Slough and open space, to the east is the San Joaquin River and farmlands beyond, and to the

west is Interstate (I) 5 and a mix of urban uses. A detailed description of the surrounding land uses and setting is provided in Section 2.0, Project Description.

10. **Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):**
    - United States Army Corps of Engineers (USACE)
    - State Water Resource Control Board (SWRCB)

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

    Native American consultation was conducted in compliance with Assembly Bill (AB) 52. On February 18, 2025, AB 52 consultation letters were sent to all Native American contacts who had formally requested notification. Follow up with nonrespondents was conducted via email on March 17, 2025. Four tribes responded, and the communications are summarized in Section 4.18, Tribal Cultural Resources.

2.0 PROJECT DESCRIPTION

The following describes the proposed Van Buskirk Park Revitalization Project (Project) that is the subject of this Initial Study/Mitigated Negative Declaration (IS/MND) prepared pursuant to the California Environmental Quality Act (CEQA). This section includes a summary description of the proposed Project's location and existing site characteristics, required approvals, and entitlements.

2.1 PROJECT SITE

The following section describes the Project location, existing conditions, surrounding land uses, and regulatory setting.

2.1.1 Project Location

The Project site is located at 734 Houston Avenue in the Conway neighborhood of Stockton in San Joaquin County, California. The 192.71-acre Project site (APN 163-07-036) is located southwest of the center of Stockton. The Project site is bounded by Walker Slough and French Camp Slough to the south, the San Joaquin River to the west, Houston Avenue to the north, and the existing Van Buskirk Community Center and Community Park to the east. Regional vehicular access to the Project site is provided by I-5, with the closest on- and off-ramps to the Project site located along Downing Avenue approximately 1.15 miles southeast of the Project site and by State Route (SR) 4 approximately 0.8 mile to the north via South Fresno Avenue. Direct local access to the Project site is via Houston Avenue. The Project's location and regional vicinity are shown on Figure 2-1, and an aerial of the Project site and surrounding land uses is shown on Figure 2-2.

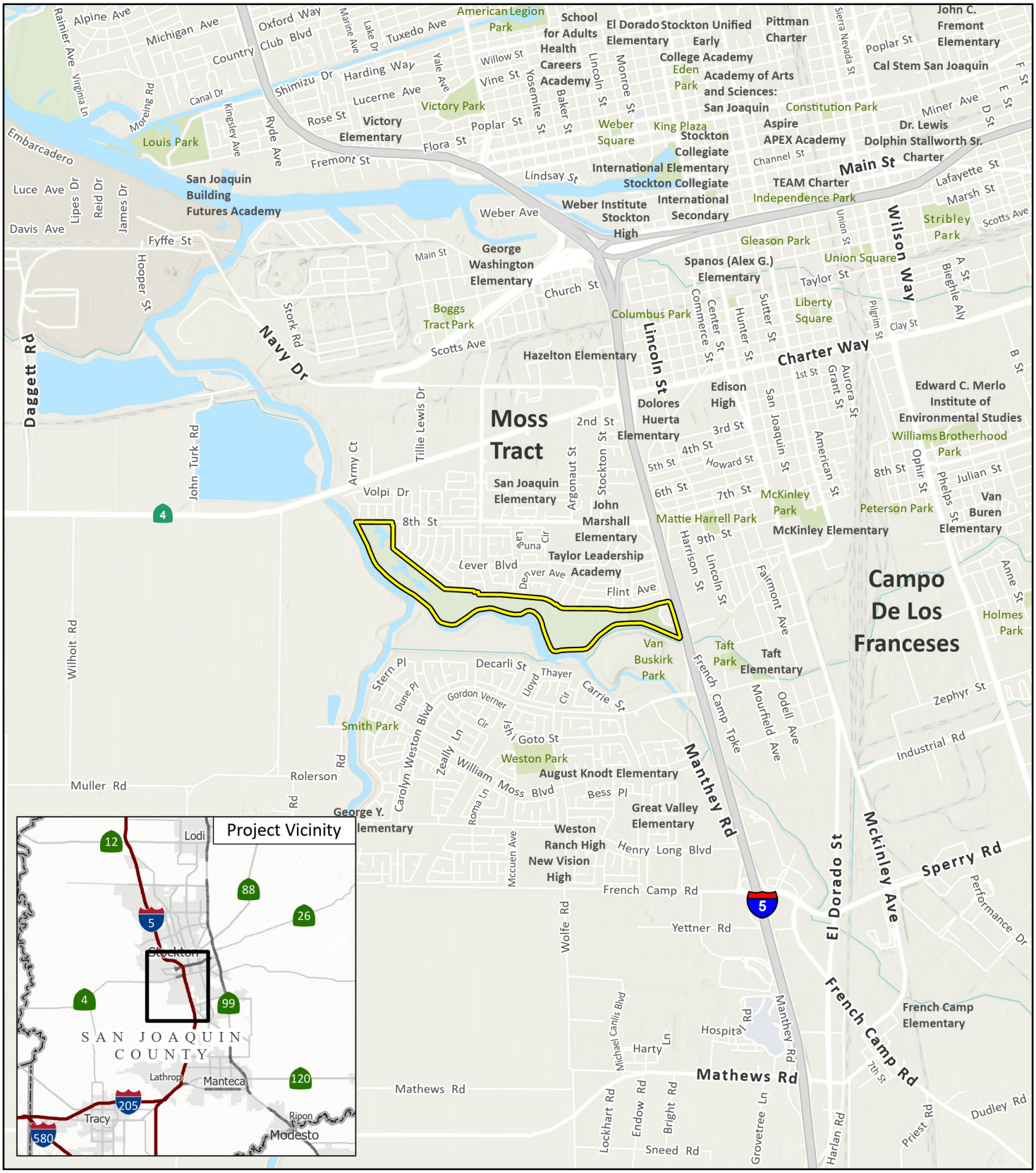
2.1.2 Existing Conditions

The Project site was previously developed as the Van Buskirk Municipal Golf Course, which opened on April 28, 1961,[1] and closed in 2020. The site consists of approximately 125 acres of turf and landscaped areas associated with the former golf course, five ponds (11.25 acres) developed for the former golf course and approximately 3 acres of parking area, and walkways associated with the former golf course. The Project site is bounded by approximately 12,100 linear feet of levee along Walker Slough, French Camp Slough, and the San Joaquin River. The existing Van Buskirk Community Center, park, and ballfields (approximately 27 acres) are located immediately to the east. While the levee (including the area from the water's edge to the levee's inward foot slope) and the existing Van Buskirk Community Center, park, and ballfields are located on the same parcel as the proposed Project, these existing facilities would not be modified as part of the proposed Project, with the exception of the existing basketball courts that would be resurfaced.

[1] *Stockton Record.* n.d. "Memories of Van Buskirk Park Golf Course" podcast. Website: https://www.recordnet.com/story/news/politics/county/2019/08/31/listen-memories-van-buskirk-park/4296042007/ (accessed April 15, 2025).

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EXHIBIT 1



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FIGURE 2-1

Van Buskirk Park Revitalization Project

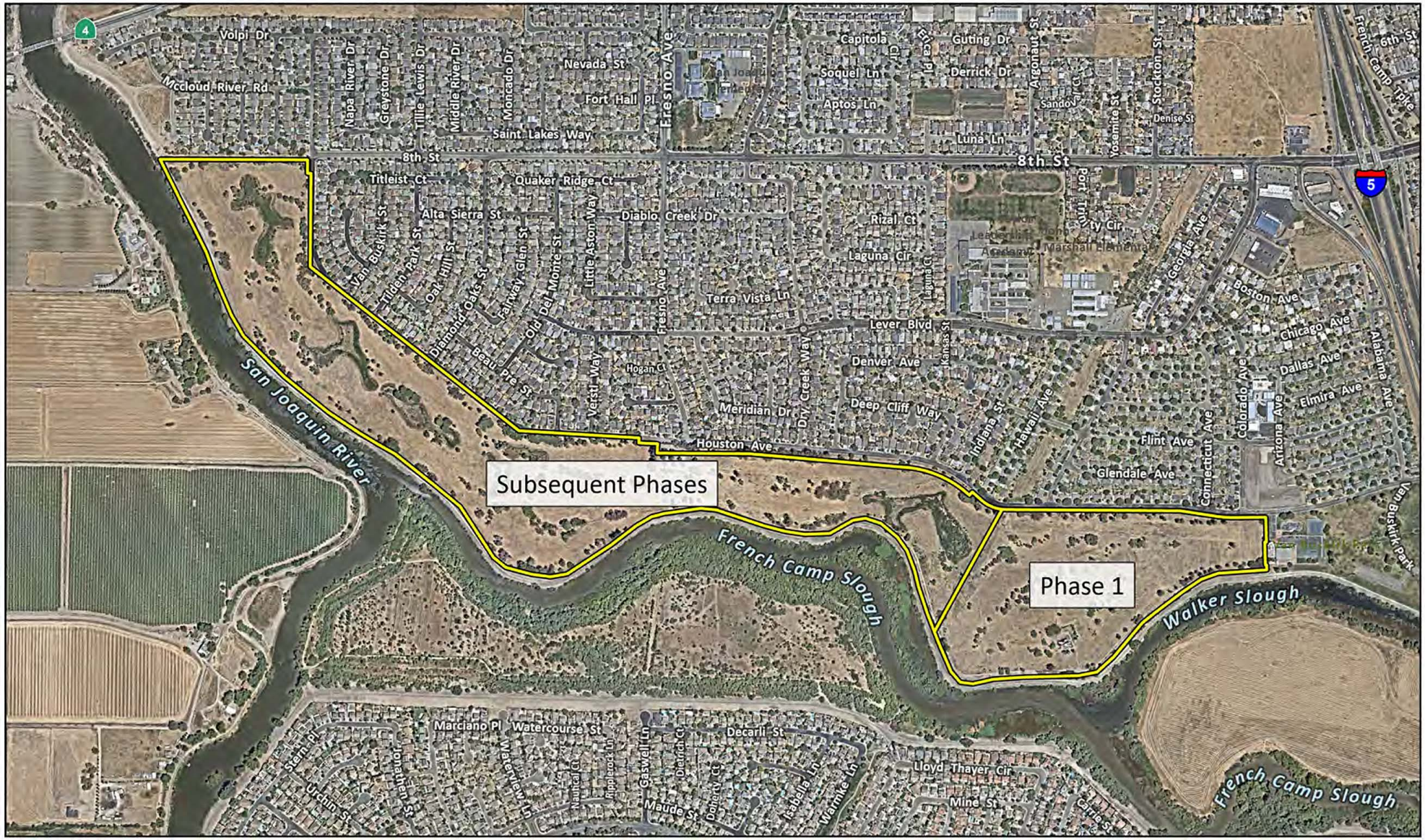
Regional Location

SOURCE: Esri Topographic Basemap

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EXHIBIT 1



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FIGURE 2-2

0 500 1000
FEET

SOURCE: Nearmap Imagery (June 24, 2024)

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Van Buskirk Park Revitalization Project
Project Site and Surrounding Land Uses

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Topographically, the site is relatively flat, with elevations of approximately 50 feet above mean sea level (amsl) with low-lying wetlands consisting of four ponds within the western section of the site, while the fifth pond is isolated to the eastern section of the site.

The majority of the Project site consists of nonnative annual grassland planted as part of the former golf course. A total of 977 mature trees, consisting of 35 species, were recorded within the site's urban forest. Non-native species make up 82 percent of the population. The most abundant tree species are river red gum (*Eucalyptus camaldulensis*), cork oak (*Quercus suber*), and Canary pine (*Pinus canariensis*). The most abundant native California species surveyed is valley oak (*Quercus lobata*).

2.1.3 Surrounding Land Uses

As shown on Figure 2-2, the Project site is bounded by Walker Slough and French Camp Slough to the south. Immediately beyond the southern boundary is undeveloped open space. Further to the south, separated by a levee, are low-density, single-family residential neighborhoods, with some high-density residential and commercial uses to the southeast. The western end of the Project site is bounded by the San Joaquin River. Beyond the western boundary are agricultural uses with associated residential infrastructure. Immediately north of the Project site's boundary, Houston Avenue, are low-density, single-family residential neighborhoods; KIPP Middle School; and the new KIPP High School, with some medium-density residential uses to the northeast. Immediately beyond the I-5 eastern boundary are commercial uses. Further to the east are low-density, single-family residential neighborhoods.

2.1.4 Regulatory Setting

The Project site is subject to the regulatory framework of the *Envision Stockton 2040 General Plan*[2] (General Plan) adopted in 2018 and the City of Stockon Zoning Code, as outlined in Title 16 of the Stockton Municipal Code (SMC).[3] The Project site is designated Parks and Recreation (PR) in the General Plan[4] and is zoned Public Facilities (PF).[5] The Parks and Recreation land use designation provides for City and County of San Joaquin (County) parks, golf courses, marinas, community centers, public and quasi-public uses, and other similar and compatible uses. The maximum floor-area ratio (FAR) for parks and recreation uses is 0.2.[6]

[2] City of Stockton. 2018a. *Envision Stockton 2040 General Plan.* December 4. Website: file:///P:/2025/20252166%20DEW%20Van%20Buskirk%20Park%20Environmental/PRODUCTS/Project%20Description/References/2040%20General%20Plan.pdf (accessed February 2025).

[3] City of Stockton. n.d.-a. *City of Stockton Municipal Code Title 16.* Website: https://ecode360.com/43712404#43712404 (accessed February 2025).

[4] City of Stockton. n.d.-g. *General Plan Designation Map.* LandMaster Online Website: https://stocktonca.mapgeo.io/datasets/properties?abuttersDistance=100&latlng=37.921398%2C-121.308246&panel=search &previewId=16307036-66744&themes=%22%5B%5C%22general-plan-map%5C%22%5D%22&zoom=15 (accessed February 2025).

[5] City of Stockton. n.d.-h. *Zoning Map.* LandMaster Online Website: https://stocktonca.mapgeo.io/datasets/properties?abuttersDistance=100&latlng=37.921398%2C-121.308246&panel=search&previewId=16307036-66744&themes=%22%5B%5C%22zoning%5C%22%5D%22&zoom=15 (accessed February 2025).

[6] City of Stockton. 2018a. *Envision Stockton 2040 General Plan.* December 4. Website: file:///P:/2025/820320252166%20DEW%20Van%20Buskirk%20Park%20Environmental/PRODUCTS/Project%20Description/References/2040%20General%20Plan.pdf (accessed February 2025).

The PF zoning district is applied to areas appropriate for a variety of public and quasi-public land uses, including facilities and lands owned by the City, County, State, or federal governments, as well as religious facilities. The PF zoning district is consistent with the Institutional and Parks and Recreation land use designations of the City's General Plan.[7] Parks and playgrounds are a permitted use in the PF zoning district. Table 2-3.A in Section 16.24.200 of SMC establishes the specific development standards for facilities within the PF zoning district.[8]

The park site is located along the eastern border of the Sacramento-San Joaquin Delta as delineated under the Delta Protection Act (Section 12220 of the California Water Code) passed in 1959. The Sacramento-San Joaquin Delta Reform Act of 2009 (Delta Reform Act) provides for coordination and oversight of State and local agencies proposing to fund, carry out, and approve Delta-related activities. The legally enforceable Delta Plan[9] aims to achieve the State's coequal goals of a reliable Statewide water supply and a protected, restored Delta ecosystem.

2.2 PROJECT BACKGROUND AND OBJECTIVES

The existing Van Buskirk Park is located in southwest Stockton. Despite a strong interest in outdoor recreation, residents face numerous challenges in accessing parks and open spaces. Currently, 72 percent of Stockton residents live in areas with less than 3 acres of parkland per 1,000 residents. Additionally, 55 percent of residents in the Conway neighborhood and nearby neighborhoods lack access to a vehicle, further limiting their ability to reach recreational spaces. Physical barriers such as I-5, SR-4, and the French Camp Slough create additional obstacles to accessing Van Buskirk Park and other open spaces. However, community engagement efforts have demonstrated strong support for park improvements, with particular interest in new facilities adjacent to the existing community center. Enhancing Van Buskirk Park would provide much-needed recreational opportunities and create a valuable open space resource for the surrounding neighborhoods.

In the 1960s, the Van Buskirk Golf Course opened on approximately 214 acres given to the City of Stockton by the Van Buskirk family. Throughout the 2010s, the City was subsidizing the operations of both the Van Buskirk and Swenson golf courses and made the decision to close the Van Buskirk course due to declining public interest compounded with the need for a substantial financial commitment to refurbish the failing irrigation infrastructure. In 2021, the City began a 2-year process of community engagement to redesign the park. Community input has consistently emphasized the need for Van Buskirk Park to be a safe and secure space, with clear access for emergency services to deter negative activity. Residents expressed strong interest in ensuring the park includes amenities that engage children of all ages, from younger kids to middle and high school students. Additionally, there was a shared desire for programming that fosters stronger community connections through a variety of events and gatherings.

7 City of Stockton. n.d.-b. *City of Stockton Municipal Code Section 16.16.020.* Website: https://ecode360.com/43712518#43712519 (accessed February 2025).

8 City of Stockton. n.d.-c. *City of Stockton Municipal Code Sections 16.24.200.* Website: https://ecode360.com/43712790?highlight=a,table%202-3,table%202-3%20a&searchId=29113902881789714#43712779 (accessed May 2025).

9 Delta Stewardship Council. 2013. *Delta Plan.* Website: https://www.deltacouncil.ca.gov/delta-plan/ (accessed February 2025).

In 2023, the City completed a master plan process to redevelop the Van Buskirk Golf Course into a park, Van Buskirk Park, which incorporates several design features to promote community space. The improvements aim to enhance connectivity and accessibility for the surrounding community, including a revitalized neighborhood connection along Houston Avenue. This key corridor would provide safer and more convenient access to the park, while internal walking loops would extend throughout the site, encouraging physical activity and exploration.

The park's design emphasizes safety and visibility to create a more inviting and secure environment. Thoughtfully placed features would enhance sightlines from the surrounding neighborhood, promoting a greater sense of openness. Increased park activity would contribute to a safer atmosphere, while pedestrian pathways would be designed to accommodate security and emergency vehicles when needed.

With a diverse range of amenities, Van Buskirk Park is intended to provide recreational opportunities for all ages and interests and serve as a vibrant community hub for south Stockton, fostering social connections and providing a central gathering place for residents.

2.3 PROPOSED PROJECT

The City proposes to implement the Van Buskirk Park Revitalization Project, which would entail development of a community park on a 192.71-acre portion of the former golf course. Figure 2-3 shows the conceptual master plan. Development of Van Buskirk Park is anticipated to occur in phases, depending on available funds. The City is currently proposing to implement Phase 1, which includes development of recreational amenities in the eastern portion of the park site adjacent to the existing community center. Timing for implementation of subsequent phases would depend on available funding.

This Initial Study evaluates the potential environmental effects of implementing Phase 1 of the Van Buskirk Revitalization Project at a Project level. Given that detailed design for subsequent phases is not known at this time, this Initial Study evaluates the conceptual elements of these subsequent phases at a programmatic level and identifies the potential environmental impacts and mitigation measures that could be required for development of these improvements by the City when funding becomes available. The City intends that future Project-specific actions pursuant to the Van Buskirk Park Revitalization Project that would implement improvements beyond those considered in the programmatic analysis in this Initial Study would be subject to project-level CEQA analysis and compliance. Prior to implementation of specific improvements, City staff will review recommended projects on a case-by-case basis to determine if any supplemental review under CEQA would be required to address potentially adverse project-specific impacts that are not mitigated through the recommended design guidelines and mitigation measures identified in this Initial Study. For the purposes of this Initial Study, the environmental analysis considers full build out of the Project site and assumes that all of these recommended facilities would be constructed in a single phase to provide the most conservative analysis of potential environmental effects.

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EXHIBIT 1



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FIGURE 2-3

N

0 600 1200
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SOURCE: Design Workshop, June 2025
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Van Buskirk Park Revitalization Project
Master Plan

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2.3.1 Proposed Park Improvements—Phase 1

Phase 1 includes development of recreational amenities in the eastern portion of the park, extending west from the existing community center to the existing utility line easement. The proposed park facilities and associated improvements included as part of Phase 1 are shown on Figure 2-4 and described below.

2.3.1.1 Proposed Recreation Facilities

Several key additions and enhancements are proposed to create a vibrant and inclusive community space adjacent to the existing Van Buskirk Community Center. Proposed facilities would include:

- **Additional Outdoor Basketball Courts.** Two additional outdoor basketball courts (approximately 9,500 square feet) would be provided adjacent to the existing Van Buskirk Community Center. Light standards would be installed around the proposed basketball court to accommodate evening use. The basketball courts would be surrounded by approximately 5,500 square feet of concrete surfacing, approximately 3,750 square feet of turf viewing areas, and seat walls.

- **Skate Park.** A concrete skate park (approximately 30,500 square feet) would be provided adjacent to the proposed basketball courts. The skate park would include turf viewing areas (approximately 1,750 square feet) and landscape islands (approximately 10,150 square feet). Adjacent to the skate park itself would be a shared skate and bike plaza, consisting of approximately 4,800 square feet of hardscape with internal planting islands (approximately 1,300 square feet) and a small turf area (approximately 250 square feet).

- **Bike Pump Tracks.** Two engineered pump tracks would include paved loops and small jumps. One pump track is intended to accommodate all ages (approximately 9,000 square feet); the other would be targeted toward smaller children (approximately 1,700 square feet). The tracks would be integrated with the landscape and provide turf viewing areas nearby. Asphalt or chip seal flow trails (approximately 13,500 square feet) would be provided adjacent to the pump tracks.

- **Community Garden.** A community garden including 20 raised beds, an orchard, an outdoor classroom and shade structure, pollinator gardens, and a small greenhouse (420 square feet maximum) is proposed near Houston Avenue. The primary surface throughout the community garden would be decomposed granite (approximately 11,500 square feet). The garden would feature more than 4,500 square feet of pollinator and native plant material.

- **Multipurpose Lawn Area.** Two multipurpose lawn areas (totaling approximately 291,500 square feet) would be the focus of a new park entrance proposed at the intersection of Houston Avenue and Georgia Avenue. The lawn area would support limited organized sports but also provide practice areas for sports teams and informal play. The multipurpose lawn would also provide an area for large family and community gatherings.

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FIGURE 2-4

N

0 180 360
FEET

SOURCE: Design Workshop, June 2025

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Van Buskirk Park Revitalization Project
Phase 1 – Proposed Improvements

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- **Splash Pad/Water Play Area.** A play zone is proposed near the new park entrance at the intersection of Houston Avenue and Georgia Avenue. The play zone would feature playground equipment (such as swings and climbing structures), a splash pad (approximately 800 square feet), and nature play elements (such as logs and boulders). The play zone would integrate turf viewing areas and a variety of meandering pathways for exploration.

2.3.1.2 Parking, Vehicle Access, and Circulation

Parking is currently provided at the existing Van Buskirk Community Center, consisting of 72 parking stalls and an overflow lot with 75 parking stalls, for a total of 147 parking spaces. As part of Phase 1, parking capacity would be expanded by 176 parking stalls at two new parking areas in the eastern portion of the park: (1) a new parking lot off of Houston Avenue adjacent to the existing Van Buskirk Community Center, and (2) a new parking lot at the new park entrance at the intersection of Houston Avenue and Georgia Avenue. Van Buskirk Community Center and Park would provide 374 parking spaces in total. Consistent with the most recently adopted version of the California Green Building Standards Code (CALGreen) Tier 2 measures, the proposed Project would provide electric vehicle charging stations as part of proposed parking improvements. Bike racks would also be provided within the park as part of the proposed Project.

Vehicle access to the park would continue to be provided via Houston Avenue, with new park entrances proposed at the intersection of Houston Avenue and Georgia Avenue, along Houston Avenue east of Georgia Avenue and at the intersection of Houston Avenue and Colorado Avenue. The existing Community Center entrance on Houston Avenue would remain and would provide access to the improvements proposed as part of Phase 1. A linear park with a Class I multi-use path would be constructed along the northern park boundary parallel to Houston Avenue. The Project would also construct additional bike and pedestrian paths to enhance activity within the park and to provide connectivity to adjacent neighborhoods.

2.3.1.3 Landscaping

Landscaping within the Phase 1 area includes a total of 263 trees. The existing mature tree canopy at the park is a significant contributor to the park's character; however, some of the site's trees need removal or pruning according to the Arborist Report[10] prepared for the Project.

As part of the proposed Project, approximately 187 trees would be removed to accommodate proposed park facilities; the exact number of trees to be removed would be determined as part of the final design. However, the proposed Project would include tree planting as part of the overall landscape program. This will consist of native species to the area and varieties that will provide wildlife habitat. The City of Stockton Heritage Tree Ordinance[11,12] requires a permit for the removal

[10] West Coast Arborists, Inc. 2025. *Van Buskirk Golf Course Tree Inspections.* February 20.

[11] City of Stockton. n.d.-e. *City of Stockton Municipal Code Section 16.72.245*. Website: https://ecode360.com/43714683?highlight=heritage%20tree,heritage%20trees&searchId=21328640992123793#43714683 (accessed February 2025).

[12] City of Stockton. n.d.-f. *City of Stockton Municipal Code Section 16.130*. Website: https://ecode360.com/43717326?highlight=&searchId=29114403401589421#437173263 (accessed May 2025).

of specific types of oak trees. Any heritage trees proposed for removal would be permitted and replaced in accordance with the City's Heritage Tree Ordinance.

Other landscaping at the site includes lawn areas and planter beds with large shrubs and ground cover. Except for the proposed multipurpose lawn areas, landscaped areas would be designed for low water use and utilize climate appropriate and native plants.

2.3.1.4 Lighting

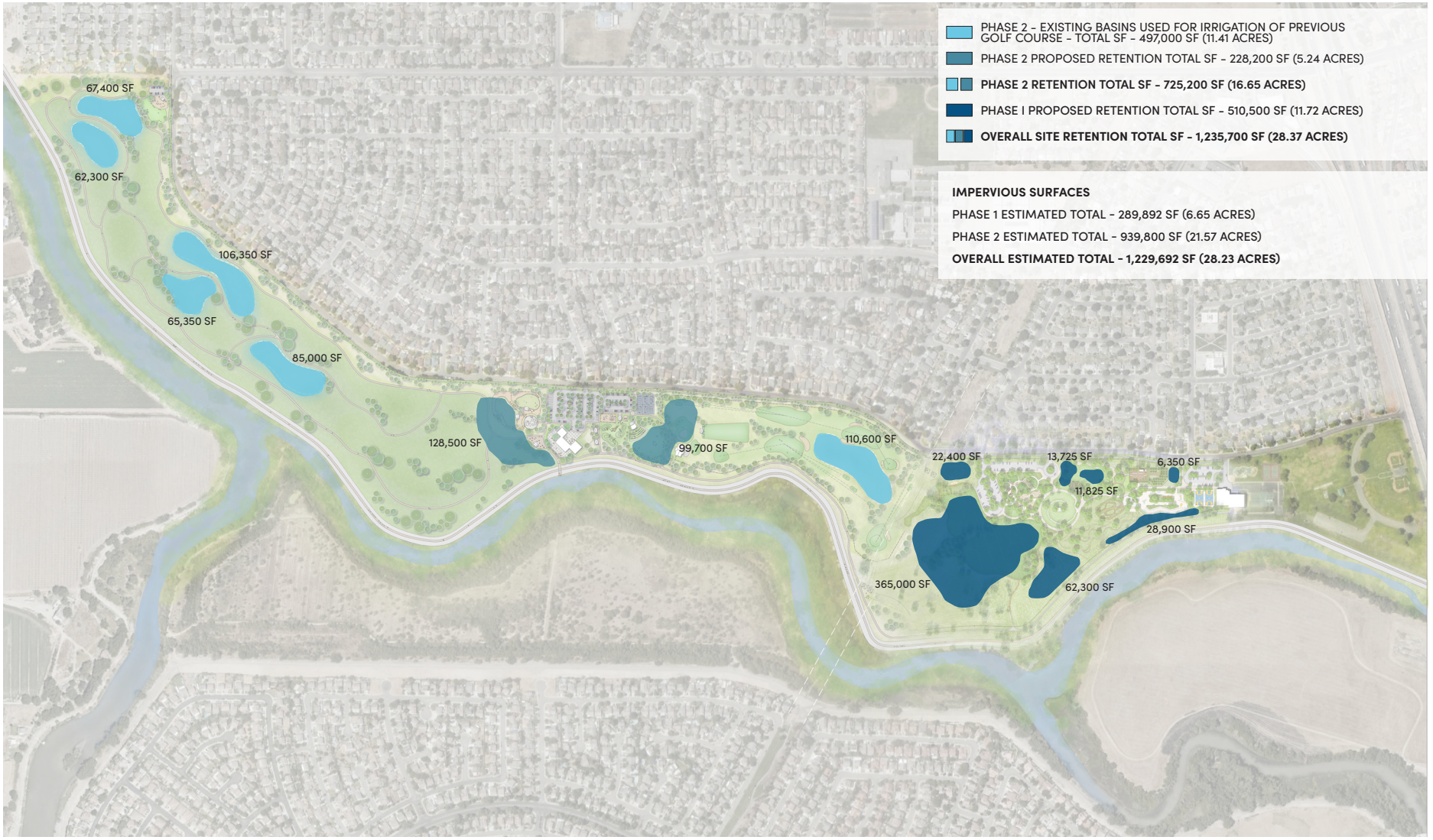
New light-emitting diode (LED) pathway safety lighting, fixtures, and poles would be installed along pathways and parking lots for security lighting. Security cameras would also be installed. Light levels in the park would be kept low after hours to provide for safety/security but are not intended to promote use of the park after the park is closed. Motion sensors would be installed to intensify light levels when movement is detected. Solar-powered light fixtures will be used where feasible. Interior park lighting will consist of 13-foot-tall or taller path lights, while light fixtures at the basketball courts and parking areas will be 20 feet tall.

2.3.1.5 Utilities and Stormwater Management

Utilities exist under and along all streets adjacent to the Project site. The park's needs for domestic water to serve the proposed drinking fountains and restrooms would be provided by new water and wastewater lines that would connect to existing utilities in Houston Avenue. Irrigation water would be pumped from the San Joaquin River via existing pumps that served the former golf course and in accordance with the City's existing entitlement established with development of the former golf course. Alternatively, the City may install an onsite well to provide irrigation water.

As described above, the Project site was formerly developed as a golf course, with some impervious surfaces related to the golf course clubhouse, parking areas, and walkways. Approximately 3 acres of existing impervious surface exist in the entire Project site. Upon construction of the proposed Project, approximately 6.65 acres (289,982 square feet) of the Phase 1 site would be covered by impervious surfaces; the remainder of the Phase 1 site would be covered by pervious surfaces, consisting of landscaped areas with lawns, shrubs, and trees, as well as bioretention facilities. All stormwater would be treated on site. The proposed Project would include approximately 11.72 acres (510,500 square feet) of bioretention space throughout the Phase 1 site that would be used for stormwater control. Bioretention basins and swales would be integrated into the landscape. Figure 2-5 shows the existing and proposed bioretention for the proposed Project.

EXHIBIT 1



LSA

FIGURE 2-5

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SOURCE: Design Workshop, March 2025

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Van Buskirk Park Revitalization Project

Existing and Proposed Stormwater Retention

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2.3.2 Subsequent Phases

As described previously in Section 2.2, the master planning process addressed the redevelopment of the entire Van Buskirk Golf Course site into a community park with a diverse range of amenities to serve local residents. At this time, design of proposed park facilities and associated improvements for the central and western portions of the park are conceptual. As shown on Figure 2-6, the majority of proposed improvements associated with the subsequent phases would occur within the central portion of the park, accessed via the former golf course entry at the intersection of Houston Avenue and Fresno Avenue. The western portion of the park would be limited to low-impact development/restoration, as shown on Figure 2-7. Proposed facilities may include:

- **Golf Academy.** While a full-size golf course would not be feasible, a golf academy with a modest golf training facility is proposed in the central portion of the park. These facilities have been successfully constructed and operated throughout the country, allowing the opportunity to practice key aspects of the game, and would provide a practice facility for the local schools, introducing new players to the game in a much smaller footprint. The City is also considering a nine-hole executive golf course instead of the golf academy that would occupy the area currently shown for the golf academy.

- **Community Event Center.** The proposed community event center will be in the general location of the previous golf clubhouse, with indoor facilities to host community meetings and social gatherings, space for food and beverage operations, educational areas, and staging for events such as running races or outdoor music events.

- **Event Lawn.** To the east of the new buildings, an event lawn with outdoor pavilion would provide a venue for hosting concerts and performances.

- **Adventure Playground/Playground.** This will include premanufactured play equipment as well as the use of natural materials to encourage nature play and adventure for children of all ages, similar to Phase 1.

- **Pickleball Courts.** Approximately six pickleball courts would be installed adjacent to the event lawn area. Lighting may be installed to allow for evening play.

- **Outdoor Education Center.** To the west of the new community center facilities, an area would be developed for environmental education, with a large outdoor deck area for events and river access for nonmotorized watercraft.

- **Dog Park.** Near the existing parking along Houston Avenue, a large, enclosed dog park area would be provided to accommodate dogs of various sizes. The fenced zone would allow dogs to be off-leash and would provide space for them to exercise while discouraging unauthorized off-leash dog use elsewhere in the park. Fencing and perimeter landscaping would blend with the natural park setting.

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FIGURE 2-6

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SOURCE: Design Workshop, June 2025
I:\2025\20252166\G\Central_Park.ai (6/23/2025)

Van Buskirk Park Revitalization Project
Subsequent Phases – Central Park Area

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LSA

FIGURE 2-7

N

0 200 400
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SOURCE: Design Workshop, June 2025

I:\2025\20252166\G\Western_Park.ai (6/23/2025)

Van Buskirk Park Revitalization Project

Subsequent Phases – Western Park Area

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- **Restoration/Environmental Mitigation.** The northwestern portion of the park has been highlighted as potential environmental mitigation to improve the safety of the neighborhoods in the event of flooding. The United States Army Corps of Engineers (USACE) is in the process of repairing and replacing several miles of the levee in the San Joaquin River Delta, and this area of Van Buskirk Park is ideal for the USACE for flood control, wetland mitigation, and habitat enhancement. While this would require ongoing collaboration and coordination with the City, public access and the formation of pedestrian and bicycle trails would be included that would be consistent with the low-impact uses intended for this area.

- **Neighborhood Park.** Although the majority of the north/western portion of the park would be dedicated to restoration/environmental mitigation, a small neighborhood park would be developed centered on a new park entry at West 8th Street. The park would include a playground, a group gathering area, and a lawn area for passive recreation uses.

- **Parking.** Similar to Phase 1, existing parking capacity would be expanded as part of subsequent phases of development. The existing parking area at the intersection of Houston Avenue and Fresno Avenue would be enlarged to accommodate the expanded use in the central portion of the park. In addition, a small parking area in the western portion of the park near West 8th Street would be developed.

- **Lighting.** Similar to Phase 1, new LED pathway safety lighting, fixtures, and poles would be installed along pathways and parking lots for security lighting.

- **Landscaping.** A total of 977 live trees of 35 different species have been identified within the overall park site, the majority of which consist of nonnative species, river red gum (*Eucalyptus camaldulensis*), cork oak (*Quercus suber*) and Canary pine (*Pinus canariensis*). Subsequent phases of park development would aim to preserve the majority of the existing trees on the park site that are in healthy condition as determined by future arborist surveys. New trees and landscaping would also be provided to enhance proposed park amenities. As described above, the City of Stockton Heritage Tree Ordinance[13,14] requires a permit for the removal of specific types of oak trees. Heritage trees would be preserved to the extent feasible, and any heritage trees proposed for removal would be permitted and replaced in accordance with the City's Heritage Tree Ordinance.

- **Utilities and Stormwater.** As described for Phase 1, proposed park facilities would be served by existing utilities associated with the former golf course use and would connect to existing utilities in Houston Avenue. Stormwater facilities would be provided in accordance with the City

[13] City of Stockton. n.d.-e. *City of Stockton Municipal Code Section 16.72.245*. Website: https://ecode360.com/43714683?highlight=heritage%20tree,heritage%20trees&searchId=21328640992123793#43714683 (accessed February 2025).

[14] City of Stockton. n.d.-f. *City of Stockton Municipal Code Section 16.130*. Website: https://ecode360.com/43717326?highlight=&searchId=29114403401589421#437173263 (accessed May 2025).

of Stockton Stormwater Management Plan.[15]As shown on Figure 2-5, development of the subsequent phases is anticipated to result in approximately 21.57 acres of impervious surface (939,800 square feet) in the remainder of the Project site, bringing the total impervious surface area for the entire Project to 28.23 acres (1,229,692 square feet). The existing ponds associated with the former golf course would continue to capture and infiltrate stormwater. In addition, approximately 5.24 acres (228,200 square feet) of additional bioretention would be installed as part of the subsequent phases to capture stormwater associated with the new recreation facilities.

2.3.3 Operation

The proposed Project would be open daily to informal use, including picnicking, walking, jogging, bicycling, and informal sports play. The proposed park would be open 1 hour before sunrise to 1 hour after sunset, consistent with Section 12.650.020 of the SMC. Lighted recreation areas would be open from 6:00 a.m. to 10:00 p.m. The remainder of the Project site would operate similarly to a neighborhood park where residents would come for the playground, picnicking, informal basketball games, and other passive recreation.

Maintenance activities would be performed by existing City of Stockton Public Works, Parks Division staff (including user group partnerships/use agreements that would identify shared maintenance tasks) and landscape maintenance contractors hired by the City. Maintenance activities include mowing, facility cleaning, vegetation management, and maintenance of recreation facilities.

2.3.4 Construction

As described above, the proposed Project would be constructed in phases. Construction of Phase 1 would occur over an approximately 18-month period and is anticipated to begin in June 2026. Construction of subsequent phases would depend on available funding. However, for the purposes of this Initial Study, the environmental analysis assumes that all of these recommended facilities would be constructed in a single phase.

Construction hours would occur during daylight hours, from approximately 8:00 a.m. through 5:00 p.m. daily. Construction staging areas would be determined by the contractor and would be contained within the Project site. Construction workers, equipment, and deliveries would access the site via Houston Avenue.

Although the proposed Project has been designed to minimize earthmoving or grading construction activities, some cut and fill would be required. It is anticipated that a total of 40,000 cubic yards of soils would be moved around the site for Phase 1; however, this analysis assumes that cut and fill would be balanced on site and no off-haul or import of soil would be required. Demolition would include removal of portions of concrete pads and pathways as well as removal of trees in poor health, with permitting as necessary for removal of any qualifying Heritage Trees. The planned new

[15] Larry Walker Associates. 2009. *City of Stockton National Pollutant Discharge Elimination System Municipal Stormwater Program Stormwater Management Plan*. April. Website: https://cms3.revize.com/revize/stockton/Documents/Services/Water,%20Sewer%20&%20Stormwater/Stormwater/sw_swmp.pdf (accessed February 2025).

restroom buildings in Phase 1 would be supported by conventional shallow foundations with interior concrete slabs-on-grade. Shade structures would likely be supported on cast-in-drilled-hole (CIDH) concrete piers. Pavements would likely consist of asphalt concrete (AC) and/or rigid Portland cement concrete (PCC) pavement. As described above, areas of the park would be regraded to improve drainage and to allow for proposed recreation improvements. For Phase 1, it is anticipated that a maximum of 5 feet of excavation would be required. Additional depth, to approximately 8 feet, would be required for installation of light poles; a depth of 10 feet would be required for the proposed skate park.

2.4 PROJECT APPROVALS

A number of permits and approvals would be required for the proposed Project. While the City is the Lead Agency for the Project, other agencies also have discretionary authority related to the Project and approvals. A list of these agencies and potential permits and approvals that may be required is provided in Table 2.A, below.

Table 2.A: Potential Permits and Approvals

Lead Agency	Potential Permits/Approvals
City of Stockton	● Project Approval ● Environmental Review ● Provision of grading, construction, tree removal, parking, traffic, erosion and Storm Water Pollution Prevention Plan permits and approvals ● Encroachment Permits
Other Agencies	
U.S. Army Corps of Engineers	● Section 408 Permit
City of Stockton Fire Department	● Fire Department review
State Water Resources Control Board (SWRCB)	● Coverage under the Construction General Permit
Regional Water Quality Control Board (RWQCB)	● Compliance with the Municipal Regional Permit

Source: LSA (2025).

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3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist in Chapter 3.0.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

3.1 DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Lizzet Burgueno
Signature

08-19-2025
Date

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4.0 CEQA ENVIRONMENTAL CHECKLIST

4.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☐	☒
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

a. Would the project have a substantial effect on a scenic vista? ***(Less Than Significant Impact)***

The *Envision Stockton 2040 General Plan* does not designate any scenic vistas; however, it does identify open space, agricultural fields, and riparian areas, particularly along the San Joaquin River and Calaveras River as significant visual features.[16] The San Joaquin County General Plan identifies I-5, SR-4, and SR-99 as scenic roadways.[17]

The Project site consists of a former golf course. The site is relatively flat, and the surrounding area is developed with residential land uses to the north and the existing Van Buskirk Community Center and Park and I-5 to the east, allowing for limited views of the surrounding landscape to the north and east. The southern boundary of the Project site is defined by the existing levee along the San Joaquin River, which limits views of the river from the Project site. Due to the elevation of I-5, the Project site can be seen from the County-designated scenic roadway.

None of the visual changes that would result from implementation of the proposed Project would have a substantial adverse effect on a scenic vista. The proposed Project would result in the redevelopment of the Project site with a park. Visible elements of the proposed Project would

[16] Placeworks. 2018. *Envision Stockton 2040 General Plan Update and Utility Master Plan Supplements Draft EIR.* June. Website: https://cms3.revize.com/revize/stockton/Documents/Business/Planning%20&%20Engineering/General%20Plan/EnvisionStockton2040GP_Draft.pdf (accessed April 2025).

[17] County of San Joaquin. 2016. San Joaquin County General Plan, Part 3.4, Natural and Cultural Resources Element. December. Website: https://www.sjgov.org/commdev/cgi-bin/cdyn.exe/file/Planning/General%20Plan%202035/Part%203.4a_Natural%20and%20Cultural%20Resources_2016-11-21.pdf (accessed April 2025).

include an events center, a playground area, a skate park, a dog park, pickleball courts, a community garden, an environmental restoration and mitigation area, trails and walkways, parking lots, landscaping, and lighting. Proposed improvements would not include any tall structures (more than one to two stories) or landscaping that would reduce, obstruct, or degrade existing scenic vistas.

Construction of planned improvements would require removal of some existing trees and other vegetation. However, impacts on visual character and quality of the site from tree/vegetation removal are expected to be less than significant. The majority of trees to be removed are in poor health and/or pose safety concerns. Trees qualifying as Heritage Trees have been retained to the extent possible. The proposed Project would include installation of landscaping and construction of new facilities that would result in a beneficial visual impact at the Project site.

During construction of planned improvements, additional vehicles, workers, and materials coming to and from the site, and site preparation activities would be visible to travelers along adjacent roadways and from adjacent uses. However, construction activities would occur within the existing park and would be intermittent and of relatively short duration.

Implementation of the proposed Project would be consistent with the Stockton General Plan's goals and policies, including Action LU-1.3C, which requires the incorporation of scenic views, including open space features like waterways, wetlands, natural landscapes, and parks, into the design of the built environment. As the proposed Project would renovate the existing golf course into a park, introduce Project elements that would be at grade or low-standing, and add to the scenic quality of the area by enhancing natural landscape features, impacts to scenic vistas would be less than significant.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? ***(No Impact)***

No designated State scenic highways are located near the Project site. The nearest eligible State scenic highway to the Project area is SR-160, which is approximately 25.4 miles northwest of the Project site. The nearest eligible State scenic highway is SR-84, which is approximately 18.5 miles west of the Project site.[18] As described above, the Natural and Cultural Resources Element of the San Joaquin County General Plan maps scenic roadways in San Joaquin County, which include I-5, SR-4, and SR-99.[19] However, as shown on Figure NCR-1, State and Local Scenic Routes in the San Joaquin County General Plan, none of these designated scenic roadway segments are located in proximity to or within view of the Project site.[20] Due to distance, topography, and intervening development, the Project site is not visible from any of these designated scenic roadways. Furthermore, the proposed

[18] California Department of Transportation (Caltrans). 2019. California State Scenic Highway System Map. Website: https://www.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa (accessed April 2025).

[19] County of San Joaquin. 2016. San Joaquin County General Plan, Part 3.4, Natural and Cultural Resources Element. December. Website: https://www.sjgov.org/commdev/cgi-bin/cdyn.exe/file/Planning/General%20Plan%202035/Part%203.4a_Natural%20and%20Cultural%20Resources_2016-11-21.pdf (accessed April 2025).

[20] Ibid.

Project would not damage any rock outcroppings or historic buildings, as these resources are not present on the Project site.

As outlined in Section 2.3, Proposed Project, approximately 187 trees would be removed as part of Phase 1 of the proposed Project; the exact number of trees to be removed would be determined as part of the final design. Additional trees would be removed as part of the subsequent phases. However, landscaping, including various tree species, shrubs, and ground cover, would be provided as part of the proposed Project. Therefore, the proposed Project would not affect scenic resources within view of a State or local scenic highway, and there would be no impact.

c. *In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?* ***(Less Than Significant Impact)***

Goals and policies in the Stockton General Plan and the Delta Plan promote the preservation of the County's rural and natural character. The Project site is in an area developed with suburban residential and commercial land uses. Implementation of the proposed Project would provide a needed recreational resource and enhance gathering opportunities to serve this residential area as well as the greater community of the City of Stockton.

While the Project site itself consists of a former golf course, most of the surrounding area is characterized by suburban development, primarily single-family residential uses. As such, the Project site is located within an urbanized area. As noted in Section 2.0, Project Description, the Project site is designated as Parks and Recreation (PR) in the General Plan and is zoned Public Facilities (PF). The Parks and Recreation land use designation provides for City and County parks, golf courses, marinas, community centers, public and quasi-public uses, and other similar and compatible uses. The maximum FAR for parks and recreation uses is 0.2.[21]

The PF zoning district is applied to areas appropriate for a variety of public and quasi-public land uses, including facilities and lands owned by the City, County, State, or federal governments, as well as religious facilities. Parks and playgrounds are a permitted use in the PF zoning district, while some of the facilities proposed, including golf courses, outdoor assembly facilities, and activity centers, are permitted with approval of a Land Use Development Permit. Table 2-3.A in Section 16.24.200 of the SMC establishes the specific development standards for facilities within the PF zoning district.[22] The proposed Project would comply with the 50 percent maximum lot coverage, 75-foot maximum height limit, and setback requirements established in Table 2-3.A of the SMC; therefore, the proposed Project would not conflict with applicable zoning and other regulations governing scenic

[21] City of Stockton. 2018a. *Envision Stockton 2040 General Plan.* December 4. Website: file:///P:/2025/20252166%20DEW%20Van%20Buskirk%20Park%20Environmental/PRODUCTS/Project%20Description/References/2040%20General%20Plan.pdf (accessed February 2025).

[22] City of Stockton. n.d.-c. *City of Stockton Municipal Code Sections 16.24.200.* Website: https://ecode360.com/43712790?highlight=a,table%202-3,table%202-3%20a&searchId=29113902881789714#43712779 (accessed May 2025).

quality. Further, as described above, the proposed Project would help to implement Action LU-1.3C, identified in the City of Stockton General Plan, which requires the incorporation of scenic views, including open-space features like waterways, wetlands, natural landscapes, and parks, into design of the built environment.

Development of the proposed Project would enhance the existing visual character of the Project site and vicinity by redeveloping the former golf course site with a park. The proposed Project would result in the development of public recreation facilities and associated improvements, including walkways, picnic areas, play areas, an event lawn, a community garden, a skate park, a dog park, a golf academy, landscaping, and lighting, as well as environmental restoration and mitigation areas preserving and amplifying the existing natural setting of the site.

The proposed Project would represent an improvement to the visual quality and character of the Project area through the development of recreation improvements and open space areas. Therefore, the proposed Project would not conflict with applicable zoning or other regulations governing scenic quality, and this impact would be less than significant.

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ***(Less Than Significant Impact)***

The Project site is within a developed area with a variety of existing light sources, including streetlights, security lighting at the adjacent community center and park, vehicle head and tail lights on area roadways, and lighting associated with adjacent development.

The proposed park would be open 1 hour before sunrise to 1 hour after sunset, consistent with Section 12.650.020 of the SMC. Lighted recreation areas would be open from 6:00 a.m. to 10:00 p.m. Section 16.32.070 of the SMC[23] requires that all lighting be shielded or modified to prevent emission of light or glare beyond the property line, or upward into the sky. Compliance with these City regulations would ensure that the additional lighting associated with the proposed Project would not create a new source of substantial light or glare that would result in the disruption of day or nighttime views in the area. All lighting associated with the Project would be shielded such that it would minimize light spillage onto adjacent properties in accordance with Section 16.32.070 of the SMC related to light and glare. Through compliance with SMC regulations, lighting would not substantially affect daytime or nighttime views in the Project vicinity. Therefore, this impact would be less than significant.

[23] City of Stockton. n.d.-f. *City of Stockton Municipal Code Section 16.32.070.* Website: https://ecode360.com/43712926#43712939 (accessed April 2025).

4.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation (DOC) as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection (CAL FIRE) regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? ***(No Impact)***

The Project site was previously developed as a golf course and is surrounded by residential neighborhoods, commercial uses, recreational uses, waterways (e.g., Walker Slough, French Camp Slough, and the San Joaquin River), and undeveloped land. Although some agricultural uses exist beyond the western San Joaquin River boundary of the Project site, no agricultural uses are currently located within the Project site. Additionally, the Project area is classified as "Urban and Built-Up Land" by the DOC.[24] Urban and Built-Up Land is occupied by structures with a building density of at

[24] California Department of Conservation (DOC). n.d.-b. *California Important Farmland Finder*. Website: https://maps.conservation.ca.gov/dlrp/ciff (accessed March 2025).

least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. Therefore, the proposed Project would not involve the conversion of agricultural land to a nonagricultural use. The proposed Project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a nonagricultural use, and there would be no impact.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? ***(No Impact)***

The Project site is designated Parks and Recreation (PR) in the General Plan[25] and is zoned Public Facilities (PF).[26] Neither the land use designation nor the zoning designation allow for agricultural activities and facilities. The California Land Conservation Act of 1965, also referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or open-space use. The Project area is not subject to a Williamson Act contract.[27] Therefore, the proposed Project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and the proposed Project would have no impact.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? ***(No Impact)***

The Project site is located within an existing urban area, is designated Parks and Recreation and zoned PF, which does not allow for timber production. The Project site is not considered forest land (as defined in Public Resources Code [PRC] Section 12220[g]) or timberland (as defined by PRC Section 4526), and is not zoned Timberland Production (as defined by Government Code Section 51104[g]). The proposed Project would not conflict with the existing zoning for, or cause rezoning of, forest land or conversion of forest land to nonforest uses. Therefore, the proposed Project would have no impact related to forest land, timberland, or timberland zoned Timberland Production.

d. Would the project result in the loss of forest land or conversion of forestland to non-forest use? ***(No Impact)***

Refer to Section 4.2.c, above. The proposed Project would not result in the loss of forest land or conversion of forest land to nonforest uses. Therefore, the proposed Project would have no impact related to loss of forest land or conversion of forest land.

[25] City of Stockton. 2018b. *General Plan Land Use Designation Map.* Online Website: https://cms3.revize.com/revize/stockton/Documents/Business/Planning%20&%20Engineering/General%20Plan/Stockton_General_Plan_Adopted.pdf (accessed March 2025).

[26] City of Stockton. n.d.-h. *Zoning Map.* LandMaster Online. Website: https://stocktonca.mapgeo.io/datasets/properties?abuttersDistance=100&latlng=37.921398%2C-121.308246&panel=search&previewId=16307036-66744&zoom=15 (accessed March 2025).

[27] DOC. n.d.-c. *California Williamson Act Enrollment Finder.* Website: https://maps.conservation.ca.gov/dlrp/WilliamsonAct/App/index.html (accessed March 2025).

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? ***(No Impact)***

Refer to Sections 4.2.a and 4.2.c. The Project area was previously developed as a golf course and is surrounded by residential neighborhoods, commercial uses, waterways (e.g., Walker Slough and French Camp Slough), and undeveloped land. The proposed Project would result in the development of a park on a site that is not utilized for agricultural or forestry operations; therefore, the proposed Project would not involve other changes that could result in conversion of farmland or forest land to a nonagricultural or nonforest use. No impact would occur.

4.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

a. Would the project conflict with or obstruct implementation of the applicable air quality plan? ***(Less Than Significant Impact)***

The City of Stockton is part of the San Joaquin Valley Air Basin (SJVAB), which is within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAPCD is responsible for air quality regulation within the eight-county San Joaquin Valley region. Both the State and the federal government have established health-based ambient air quality standards (AAQS) for six criteria air pollutants: carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead, and suspended particulate matter ($PM_{2.5}$ and PM_{10}). The SJVAB is designated as nonattainment for O_3 and $PM_{2.5}$ for federal standards and nonattainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards.

CEQA requires that certain projects be analyzed for consistency with the applicable air quality plan. An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a nonattainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State air quality standards. To bring the SJVAB into attainment, the SJVAPCD adopted the *2022 Plan for the 2015 8-Hour Ozone Standard* in December 2022 to satisfy Clean Air Act requirements and ensure attainment of the 70 parts per billion (ppb) 8-hour O_3 standard.

To ensure the SJVAB's continued attainment of the United States Environmental Protection Agency (USEPA) PM_{10} standard, the SJVAPCD adopted the *2007 PM_{10} Maintenance Plan* in September 2007. SJVAPCD Regulation VIII (Fugitive PM_{10} Prohibitions) is designed to reduce PM_{10} emissions generated by human activity. The SJVAPCD adopted the *2024 Plan for the 2012 $PM_{2.5}$ Standard* to address the USEPA federal annual $PM_{2.5}$ standard of 12 micrograms per cubic meter ($\mu g/m^3$) by 2030.

For a project to be consistent with SJVAPCD air quality plans, the pollutants emitted from a project should not exceed the SJVAPCD emission thresholds or cause a significant impact on air quality. In addition, emission reductions achieved through implementation of offset requirements are a major component of the SJVAPCD air quality plans. As discussed below, construction of the proposed Project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. Implementation of SJVAPCD Regulation VIII (Fugitive PM_{10} Prohibitions), described in Section 4.3.b. would further reduce construction dust impacts. As discussed below, long-term operational emissions associated with the proposed Project, including area, energy, and mobile-source emissions, would also not exceed SJVAPCD established significance thresholds. Therefore, impacts related to the proposed Project's potential to conflict with or obstruct implementation of the applicable air quality plan would be less than significant.

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? ***(Less Than Significant Impact)***

The SJVAB is designated as nonattainment for O_3 and $PM_{2.5}$ for federal standards and nonattainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards. The SJVAPCD's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary. The following analysis assesses the potential project-level construction- and operation-related air quality impacts.

Short-Term Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by grading, paving, building, and other activities. Emissions from construction equipment are also anticipated and would include CO, nitrogen oxides (NO_X), reactive organic gases (ROGs), directly emitted particulate matter ($PM_{2.5}$ and PM_{10}), and toxic air contaminants (TACs) such as diesel exhaust particulate matter.

Project construction activities would include site preparation, grading, building construction, paving, and architectural coating activities. Construction-related effects on air quality from the proposed Project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would

depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SJVAPCD has implemented Regulation VIII measures for reducing fugitive dust emissions (PM_{10}). With the implementation of Regulation VIII measures, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_x, ROG, and some soot particulates ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

The SJVAPCD has established construction emissions thresholds on an annual basis as shown in Table 4.A, below. Construction emissions for the proposed Project were analyzed using the California Emissions Estimator Model (CalEEMod) version 2022.1. As discussed in Section 2.0, Project Description, the proposed Project would be constructed in phases, with Phase 1 beginning in June 2026 and occurring over an approximately 18-month period. Construction of subsequent phases would depend on available funding. As discussed in the Project Description, this analysis assumes that all of the recommended facilities would be constructed in a single phase. As such, CalEEMod assumes that construction of the entire Project would begin June 2026 and occur over an 18-month period. Cut and fill would be balanced on site, and no off-haul or import of soil would be required. Other precise details of construction activities are unknown at this time; therefore, default assumptions (e.g., construction worker and truck trips and fleet activities) from CalEEMod were used. Construction-related emissions are presented in Table 4.A. CalEEMod output sheets are included in Appendix A.

Table 4.A: Project Construction Emissions (Tons per Year)

Construction Year	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2026	0.1	2.1	1.6	<0.1	0.2	0.1
2027	0.2	1.9	1.5	<0.1	<0.1	<0.1
Maximum Annual Construction Emissions	**0.2**	**2.1**	**1.6**	**<0.1**	**0.2**	**0.1**
SJVAPCD Significance Threshold	10.0	10.0	100.0	27.0	15.0	15.0
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: LSA (May 2025).
CO = carbon monoxide
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gas
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_X = sulfur oxides

As shown in Table 4.A, construction emissions would not exceed the SJVAPCD threshold for annual construction emissions for the proposed Project. In addition to the construction-period thresholds of significance, the SJVAPCD has implemented Regulation VIII measures for dust control during

construction to reduce construction fugitive dust impacts to a less than significant level. These measures are required by SJVAPCD for all construction projects, including the proposed Project. Consistent with SJVAPCD Regulation VIII (Fugitive PM_{10} Prohibitions), the following controls are required to be included as specifications for the proposed Project and implemented at the construction site:

- All disturbed areas, including storage piles, that are not being actively utilized for construction purposes shall be effectively stabilized of dust emissions using water or a chemical stabilizer/suppressant, and covered with a tarp or other suitable cover or vegetative ground cover.

- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or a chemical stabilizer/suppressant.

- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.

- When materials are transported off site, all material shall be covered or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container shall be maintained.

- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden).

- Following the addition of materials to, or removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or a chemical stabilizer/suppressant.

Implementation of the fugitive dust control measures, as required by SJVAPCD Regulation VIII (Fugitive PM_{10} Prohibitions) would ensure that the proposed Project complies with Regulation VIII and further reduce the short-term construction period air quality impacts. Therefore, with implementation of required fugitive dust control measures, construction of the proposed Project would result in a less than significant impact related to a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable federal or State AAQS.

Long-Term Operational Emissions. Long-term air pollutant emission impacts associated with the proposed Project are those related to mobile sources (e.g., vehicle trips), energy sources (e.g., natural gas), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment).

Mobile-source emissions include ROGs and NO_X emissions that contribute to the formation of O_3. Additionally, PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways.

Energy-source emissions result from activities in buildings for which natural gas is used. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission factor of the fuel source. The proposed Project would be all-electric and would not require natural gas; therefore, the proposed Project would result in negligible energy-source emissions.

Typically, area-source emissions consist of direct sources of air emissions located at the Project site, including architectural coatings, consumer products, and the use of landscape maintenance equipment.

Emission estimates for operation of the proposed Project were calculated using CalEEMod. Model results are shown in Table 4.B. Trip generation rates for the proposed Project were based on the Project's trip generation estimates, as identified in Section 4.17, Transportation. As discussed in Section 4.17, Transportation, the proposed Project would generate approximately 575 average daily trips. Where Project-specific data were not available, default assumptions (e.g., electricity usage, water usage, and solid waste generation) from CalEEMod were used to estimate Project emissions. CalEEMod output sheets are included in Appendix A.

The primary emissions associated with the proposed Project are regional in nature, meaning that air pollutants are rapidly dispersed on release or, in the case of vehicle emissions associated with the proposed Project; emissions are released in other areas of the Air Basin. The annual emissions associated with Project operational trip generation and area sources are identified in Table 4.B.

Table 4.B: Project Operation Emissions (Tons per Year)

	ROG	NO_X	CO	SO_x	PM_{10}	$PM_{2.5}$
Mobile Source Emissions	0.4	0.3	2.5	<0.1	0.5	0.1
Area Source Emissions	0.1	0.0	0.0	0.0	0.0	0.0
Energy Source Emissions	<0.1	0.0	0.0	0.0	0.0	0.0
Total Project Operation Emissions	**0.5**	**0.3**	**2.5**	**<0.1**	**0.5**	**0.1**
SJVAPCD Significance Threshold	10.0	10.0	100.0	27.0	15.0	15.0
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: LSA (May 2025).
CO = carbon monoxide
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gas
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_X = sulfur oxides

The results shown in Table 4.B indicate the proposed Project's operational emissions would not exceed the significance criteria for annual CO, NO_x, ROG, SO_X, PM_{10}, or $PM_{2.5}$ emissions. Therefore, operation of the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the proposed Project region is in non-attainment under an applicable federal or State AAQS. As a result, impacts would be less than significant.

c. Would the project expose sensitive receptors to substantial pollutant concentrations? ***(Less Than Significant Impact)***

According to the SJVAPCD, a project would result in a significant impact if it would expose sensitive receptors to TACs, resulting in an increased cancer risk greater than 20.0 in 1 million, increased noncancer risk of greater than 1.0 on the Hazard Index (chronic or acute), or an annual average ambient $PM_{2.5}$ increase greater than 0.3 $\mu g/m^3$.

The Project site is in an urban area in proximity to existing residential uses that could be exposed to diesel emissions exhaust during the construction period. Therefore, a construction health risk assessment (HRA), which evaluates construction-period health risk to off-site receptors, was performed for construction of the proposed Project. To estimate the potential cancer risk associated with construction activities from equipment exhaust (including diesel particulate matter [DPM]), a dispersion model was used to translate an emissions rate from the source location to a concentration at the receptor location of interest (i.e., a nearby residence and work sites). Dispersion modeling varies from a simpler, more conservative screening-level analysis to a more complex and refined detailed analysis.

For the purposes of an HRA, emissions are analyzed for acute health impacts, chronic, and carcinogenic health impacts. A multi-pathway assessment was conducted to evaluate the Project's emissions during construction following the modeling techniques recommended in the California Environmental Protection Agency's (CalEPA) Office of Environmental Health Hazard Assessment (OEHHA) *Air Toxic Hot Spots Program Risk Assessment Guidelines*.[28] The analysis herein has been conducted in accordance with the SJVAPCD's requirements for HRAs.

The HRA analysis was conducted using three models: (1) CalEEMod to determine DPM emissions during Project construction; (2) the USEPA AERMOD air dispersion model to determine how the TACs would move through the atmosphere; and (3) CARB's Hotspots Analysis and Reporting Program (HARP2) model to translate the pollutant concentrations from AERMOD into individual health risks at any sensitive receptor locations surrounding the Project site.

The OEHHA has determined that long-term exposure to diesel exhaust particulates poses the highest cancer risk of any TAC it has evaluated. Exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, DPM made people with allergies more susceptible to the materials to which they were allergic, such as dust and pollen. Exposure to DPM also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks. For risk assessment procedures, the OEHHA specifies that the surrogate for whole diesel exhaust is DPM. The HRA analyses used PM_{10} emissions to represent DPM emissions, consistent with OEHHA guidance.

[28] California Environmental Protection Agency (CalEPA) Office of Environmental Health Hazard Assessment (OEHHA). 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. March. Website: https://oehha.ca.gov/air/air-toxics-hot-spots (accessed April 2025).

The conservative nature of this analysis is due primarily to the following factors:

- The CARB-adopted diesel exhaust unit risk factor (URF) of 300 in 1 million per µg/m^3 is based on the upper 95th percentile of estimated risk for each of the epidemiological studies used to develop the URF. Therefore, the risk factor is representative of DPM.

- The exposure to DPM is assumed to be constant for the given period analyzed (i.e., 70 years). However, emissions from DPM are expected to substantially decrease in the future with the implementation of standard regulatory requirements and technological advancement to reduce DPM.

Table 4.C, below, identifies the results of the analysis. Model outputs and snapshots of the sources are provided in Appendix B.

Table 4.C: Unmitigated Inhalation Health Risks from Project Construction to Off-Site Receptors

	Carcinogenic Inhalation Health Risk in 1 Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Residential Receptor MEI	3.81	0.003	<0.001
Worker Receptor MEI	0.21	0.009	<0.001
School Receptor MEI	0.09	<0.001	<0.001
Threshold	**20.0**	**1.0**	**1.0**
Exceed Threshold?	**No**	**No**	**No**

Source: Compiled by LSA (May 2025).
µg/m^3 = micrograms per cubic meter
MEI = maximally exposed individual
$PM_{2.5}$ = particulate matter less than 2.5 microns in size

As shown in Table 4.C, the maximum cancer risk for the residential receptor maximally exposed individual (MEI) associated with Project construction would be 3.81 in 1 million, which would not exceed the SJVAPCD's cancer risk of 20 in 1 million. The school receptor MEI and worker receptor MEI risk would be lower at 0.21 in 1 million and 0.09 in 1 million, respectively, which would also not exceed the SJVAPCD's cancer risk threshold. The chronic hazard index would be 0.003 for the residential receptor MEI, 0.009 for the worker receptor MEI and less than 0.001 for the school receptor MEI, which are below the threshold of 1. In addition, the acute hazard index would be nominal (0), which would also not exceed the threshold of 1. Therefore, construction of the proposed Project would not exceed SJVAPCD thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations.

Once the proposed Project is constructed, it would not be a source of substantial emissions, and consequently, implementation of the proposed Project would not result in new sources of TACs. Therefore, the Project would not expose sensitive receptors to substantial levels of TACs, and this impact would be less than significant.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? ***(Less Than Significant Impact)***

During Project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. Once operational, the proposed Project would not include any activities or operations that would generate objectionable odors and once operational, the Project would not be a source of odors. Therefore, the proposed Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. This impact would be less than significant.

4.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

*a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? **(Less Than Significant with Mitigation Incorporated)***

Species listed under the California Endangered Species Act (CESA) or the federal Endangered Species Act (FESA) require special protection to avoid "take" or cause other adverse effects upon their habitat. Additionally, impacts to other nonlisted special-status species, such as those classified as Species of Special Concern by the California Department of Fish and Wildlife (CDFW), should be avoided and mitigated under CEQA. Some rare plant species also require protection pursuant to the California Native Plant Protection Act, although there are no rare plants present or potentially present at the Project site due to lack of habitat. In 2025, LSA conducted a review of multiple existing databases to compile the list of potential special-status species that may be present at the Project site. Table 4.D and Figure 4-1 show special-status species records and/or observations within 1 mile of the Project site.

Table 4.D: Special-Status Species and Sensitive Natural Communities Occurring within 1 Mile of the Project Site

Common Name/Scientific Name	Federal Status[1]	State Status[2]	Global Rank[3,4]	State Rank[5]	Rare Plant Rank[6]	CDFW Status	Habitat	Potential to Occur
Plants								
Alkali milk-vetch *Astragalus tener* var. *tener*	None	None	G2G1	S1	1B.2		Playas, vernal-pools, freshwater wetlands, alkali sink, valley grassland, and wetland-riparian.	No suitable habitat.
Heartscale *Atriplex cordulata* var. *cordulata*	None	None	G3T2	S2	1B.2		Shadescale scrub, valley grassland, and wetland-riparian.	No suitable habitat.
Big tarplant *Blepharizonia plumosa*	None	None	G1G2	S1S2	1B.1		Valley and foothill grassland, and clay (usually).	No suitable habitat.
Watershield *Brasenia schreberi*	None	None	G5	S3	2B.3		Still or slow-moving water of ponds, shallow lakes, margins of deeper lakes and manmade reservoirs, freshwater marshes, sloughs, and canals.	No suitable habitat, but potential habitat is adjacent to Project area.
Palmate-bracted bird's-beak *Chloropyron palmatum*	FE	CE	G1	S1	1B.1		Chenopod scrub, valley and foothill grassland, and alkaline.	No suitable habitat.
San Joaquin spearscale *Extriplex joaquinana*	None	None	G2	S2	1B.2		Chenopod scrub, meadows and seeps, playas, valley and foothill grassland, and alkaline.	No suitable habitat.
Woolly rose-mallow *Hibiscus lasiocarpos* var. *occidentalis*	None	None	G5T3	S3	1B.2		Marshes and swamps (freshwater); often in riprap on the sides of levees.	No suitable habitat.
Delta tule pea *Lathyrus jepsonii* var. *jepsonii*	None	None	G5T2	S2	1B.2		Marshes and swamps (brackish and freshwater).	No suitable habitat.
Sanford's arrowhead *Sagittaria sanfordii*	None	None	G3	S3	1B.2		Marshes and swamps (shallow freshwater).	No suitable habitat.
Suisun marsh aster *Symphyotrichum lentum*	None	None	G2	S2	1B.2		Marshes and swamps (brackish and freshwater).	No suitable habitat.
Saline clover *Trifolium hydrophilum*	None	None	G2	S2	1B.2		Marshes and swamps, valley and foothill grassland (mesic and alkaline), and vernal pools.	No suitable habitat.
Insects								
Monarch butterfly *Danaus plexippus*	FC		G4	None			Milkweed species (A*sclepias* spp.) are the sole larval host plants.	High to moderate.

Table 4.D: Special-Status Species and Sensitive Natural Communities Occurring within 1 Mile of the Project Site

Common Name/Scientific Name	Federal Status[1]	State Status[2]	Global Rank[3,4]	State Rank[5]	Rare Plant Rank[6]	CDFW Status	Habitat	Potential to Occur
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT	None	G3T2	S2			Riparian habitat; requires elderberry bushes.	Present.
Crotch's bumble bee *Bombus crotchii*	None	CC	G2	S1			Open grassland and scrub habitats. Nesting occurs underground.	Suitable habitat present. Recent CNDDB observations near Tracy.
Western bumble bee *Bombus occidentalis*	None	CC	G2	S1			Open grassland and scrub habitats. Nesting occurs underground.	Suitable habitat present, but species was last observed in San Joaquin County in 1962.
Fish								
Steelhead (Central Valley DPS) *Oncorhynchus mykiss*	FT	None	G5T2Q	S2			Inland streams and rivers.	No suitable habitat, but critical habitat is adjacent to Project area.
Green sturgeon (Southern DPS) *Acipenser medirostris*	FT	None	G2T1	S1			Inland streams and rivers.	No suitable habitat, but critical habitat is adjacent to Project area.
Amphibians								
Western spadefoot toad *Spea hammodii*	FT	CT	G2G3	S2S3		WL	Vernal pool grasslands.	No suitable habitat.
California tiger salamander (*Ambystoma californiense*)	FT, Central California DPS	CT, Central California DPS	G2G3T3	S3		WL	Vernal pool grasslands.	No suitable habitat.
Reptiles								
Northwestern pond turtle *Actinemys marmorata*	None	CC	G5	S4		SSC	Permanent and intermittent waters of rivers, creeks, small lakes and ponds, marshes, irrigation ditches, and reservoirs. Turtles bask on land or near water on logs, branches or boulders. Nesting and overwintering in uplands.	Suitable habitat is present; no observations.
Birds								
Burrowing owl *Athene cunicularia*	None	CC	G4	S3		SSC	Open, dry, sparsely vegetated land with available burrows, adequate food supply, and perches for horizontal visibility.	Suitable habitat is present; no observations.

Table 4.D: Special-Status Species and Sensitive Natural Communities Occurring within 1 Mile of the Project Site

Common Name/Scientific Name	Federal Status[1]	State Status[2]	Global Rank[3,4]	State Rank[5]	Rare Plant Rank[6]	CDFW Status	Habitat	Potential to Occur
Swainson's hawk *Buteo swainsoni*	None	CT	G5	S3			Needs open habitats for foraging; adjusted well to agricultural settings (e.g., hay and alfalfa fields, pastures, grain crops, and row crops). Nests in riparian woodlands and scattered stands of trees near agricultural fields and grasslands.	Present.
Tricolored blackbird *Agelaius tricolor*	None	CT	G1G2	S1S2		SSC	Nests in wetlands with cattails, bulrushes, and willows, triticale fields, and patches of Himalayan blackberry near stock ponds or irrigated pastures. Foraging habitats include cultivated fields, feedlots associated with dairy farms, and wetlands.	No suitable habitat.

Sources: *California Native Plant Society (2020), California Department of Fish and Wildlife (2020), and United States Fish and Wildlife Service (2020).*

[1] Federal Status Codes (USFWS): FE= Listed as Endangered (in danger of extinction) by the Federal Government; FT = Listed as Threatened (likely to become Endangered within the foreseeable future) by the Federal Government; FC = Candidate to become a proposed species; FSC = Federal Species of Concern. May be Endangered or Threatened, but not enough biological information has been gathered to support listing at this time; FC = Candidate to become a proposed species.

[2] State Status Codes (CDFW): CE = Listed as Endangered by the State of California; SSC = California Species of Special Concern; CT = Listed as Threatened by the State of California; CR = California Rare; CC = State Candidate for listing as an Endangered Species; WL = Watch List.

[3] Global Rank: G1: Critically Imperiled – At very high risk of extinction due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors; G2: Imperiled – At high risk of extinction due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors. G3: Vulnerable – At moderate risk of extinction due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors. G4: Apparently Secure – At fairly low risk of extinction due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors. G5: Secure – At very low risk of extinction due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.

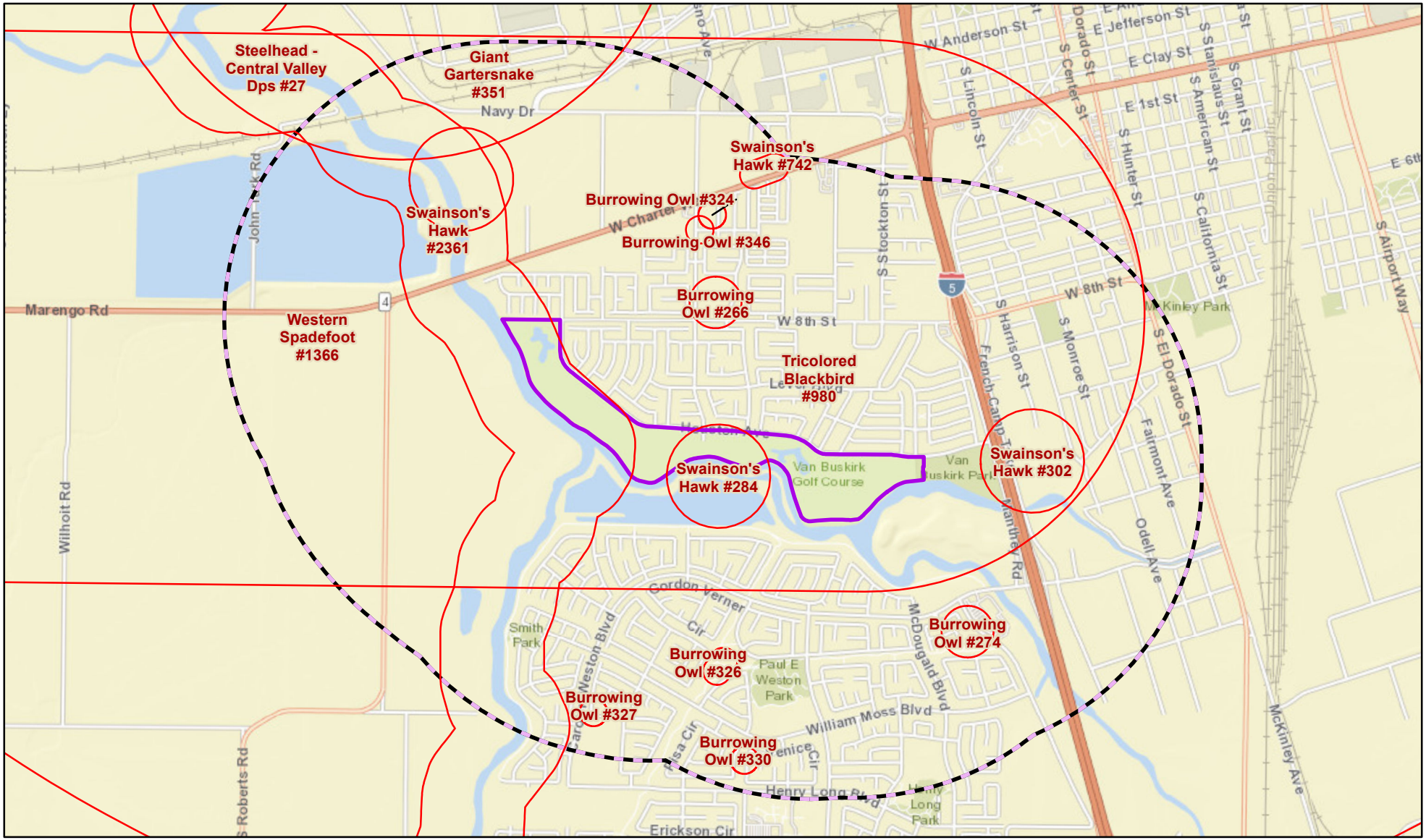
[4] Taxa which are subspecies receive a taxon rank (T-rank) in addition to the G-rank. Whereas the G-rank reflects the condition of the entire species, the T-rank reflects the global status of just the subspecies.

[5] State Rank: S1: Critically Imperiled – At very high risk of extirpation in the State due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors. S2: Imperiled – At high risk of extirpation in the State due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors. S3: Vulnerable – At moderate risk of extirpation in the State due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors. S4: Apparently Secure – At a fairly low risk of extirpation in the State due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors. S5: Secure – At very low or no risk of extirpation in the State due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.

[6] California Native Plant Society Rare Plant Inventory: Rank 1A: Plants Presumed Extinct in California; Rank 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere; Rank 2: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere; Rank 3: Plants About Which We Need More Information—A Review List; Rank 4: Plants of Limited Distribution—A Watch List.

CDFW = California Department of Fish and Wildlife
DPS = Distinct Population Segment
USFWS = United States Fish and Wildlife Service

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LSA

LEGEND

- Study Area
- 1-mile Buffer of Study Area
- CNDDB Occurrence

0 0.25 0.5
MILES

FIGURE 4-1

Van Buskirk Park Revitalization Project

CNDDB Occurrences within 1 Mile

SOURCE: CDFW CNDDB (04/2021); Esri World Street Map (2021).

I:\DEW2002\GIS\Maps\Ecosystem Values Report\Figure 5_CNDDB Occurrences within 1 Mile.mxd (4/27/2021)

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Of the species identified in Table 4.A, 16 are unlikely to occur at the Project site either because the site is outside their current distribution or due to a lack of suitable habitat. Fish species and giant garter snake would not be present at the Project site because the aquatic habitat in French Camp Slough and the San Joaquin River is outside the Project site boundaries.

Special-Status Plants. Based on the results of the database search and literature review, 11 special-status plant species were evaluated as potentially occurring in the site vicinity (Table 4.A). However, the extensive development and lack of suitable habitat at the site precludes any of these special-status plant species from occurring on the Project site. Therefore, impacts to special-status plant species would not occur. **Special-Status Wildlife.** The following species potentially occur at the Project site and could be affected by the proposed Project: monarch butterfly (*Danaus plexippus*), valley elderberry longhorn beetle (VELB; *Desmoderus californicus*), western bumble bee (*Bombus occidentalis*), Crotch's bumble bee (*Bombus crotchii*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), tricolored blackbird (*Agelaius tricolor*), nesting birds, northwestern pond turtle (*Actinemys marmorata*), and bats. The Project site is also adjacent to critical habitat for the southern Distinct Population Segment (DPS) of green sturgeon and Central Valley steelhead.

The proposed Project would result in redevelopment of the Project site as a park. Special-status wildlife species could be impacted both directly and indirectly during construction or during operational activities after construction has been completed. The potential for protected resources to be impacted by construction and operation of the proposed Project is a function of the likelihood the species is present when the Project is constructed, as well as the type and duration of construction activities. Another factor is the sensitivity of the species or resource to disturbance.

Mitigation Measures BIO-1 through BIO-4 are identified below to address general construction-period impacts to special-status species that may be present on the site. These measures require biological monitoring, environmental education, best management practices (BMPs), and preconstruction surveys prior to and during construction activities, as applicable, to ensure that potential direct and indirect impacts to special-status species would be reduced to a less than significant level.

The special-status species occurring in the vicinity of the site, their potential presence on the site, and potential species-specific Project impacts and mitigation measures are discussed further below.

Mitigation Measure BIO-1 **Biological Monitor.** A qualified biologist shall be present on site as a Biological Monitor to survey and monitor special-status species during all construction work within the Project site. The Biological Monitor shall conduct all preconstruction surveys and will ensure that any construction barrier fencing and work exclusion zones are established and maintained. The Biological Monitor shall furthermore supervise and monitor all Project activities to ensure that appropriate protective measures are implemented. The Biological Monitor shall conduct clearance surveys at the beginning of each day within or adjacent to suitable special-status species habitat, including wetlands and riparian habitats. The Biological Monitor shall have the authority to halt work activities that may

affect special-status species at any life stage. If a special-status species enters the work site, all work shall stop until it leaves on its own volition. If the Biological Monitor finds that any special-status species are present at the work site, all Project work shall stop, and the appropriate regulatory agencies (California Department of Fish and Wildlife [CDFW], United States Fish and Wildlife Service [USFWS], and/or the National Marine Fisheries Service [NMFS]) shall be notified. If there is imminent danger of injury to special-status species from Project-related activities and the special-status species individual(s) do not move out of the work site on their own, the Biological Monitor shall relocate the animal(s) to the nearest suitable habitat outside the work zone and notify the appropriate regulatory agencies within 24 hours.

Mitigation Measure BIO-2 **Worker Environmental Awareness Training (WEAT).** During Project construction, before any work occurs in the Project site, including grading, vegetation removal, and equipment staging, all construction personnel shall participate in WEAT regarding special-status species and sensitive habitats present in the Project area. Any additional construction personnel who are employed following the initial start of construction shall receive the mandatory training before beginning work. As part of the training, an environmental awareness handout shall be provided to all personnel that describes and illustrates sensitive resources (i.e., special-status species and habitat, nesting birds/raptors) to be avoided during the proposed Project construction and lists measures to be followed by personnel for the protection of biological resources.

Mitigation Measure BIO-3 **Implement General Wildlife Protection Measures During Construction.** The City of Stockton (City) and its contractors' employees and volunteers shall implement general wildlife protection measures during construction that shall include, but may not be limited to, the following:

- Limit construction activities to daylight hours to the extent feasible. Conduct all in-water construction activities between May 1 and November 30.
- Confine clearing to the minimal area necessary to facilitate construction activities.
- Clearly delineate the Action Area limits by using fencing, flagging, or other means prior to the start of construction activities.

- Limit the number of new temporary access routes, number and size of staging areas, and total area of construction activities when working in or adjacent to wetlands, streams, and riparian areas. Movement of heavy equipment shall be confined to existing roadways, and excavation equipment shall be operated from the tops of banks to minimize habitat disturbance.

- Keep all fueling and maintenance of vehicles and other mechanized equipment in designated areas at least 100 feet from any aquatic habitat. Each designated fueling/maintenance area shall be protected by a containment barrier designed to prevent any spilled or leaked fuel or other contaminants from running into an aquatic habitat. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

- Reduce the risk of spreading harmful pathogens by sanitizing all vehicles and equipment before use in natural areas. All vehicular and equipment cleaning work shall be conducted in self-contained work areas at least 100 feet from any aquatic habitat; wash water shall not be disposed of in any natural areas.

- Avoid wildlife entrapment by completely covering or providing escape ramps for all excavated steep-walled holes or trenches more than 1 foot deep at the end of each work day.

- Inspect the work area and any equipment or material left on site overnight for listed species prior to the start of construction activities each day.

- Dispose of garbage in wildlife-proof containers and remove the garbage from the construction area regularly during the construction period.

- Check under equipment and in staging areas for wildlife species each morning prior to work.

- Stay within designated work areas.

- Maintain exclusion/silt fencing.

- No pets or firearms shall be allowed on site.

- Report to the supervisor on site any observed incident of death or injury to a special-status species or damage to habitat. The supervisor shall immediately notify the Qualified Biologist.

Mitigation Measure BIO-4 **Preconstruction and Construction Monitoring.** The City shall avoid and minimize effects to special-status species during construction, habitat restoration, and maintenance activities associated with the Project. The following preconstruction and construction monitoring measures shall be implemented:

1. Preconstruction surveys shall be conducted for nesting Swainson's hawk, following the "Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in the California's Central Valley"[29]; these surveys shall include a 0.25-mile radius outside the Project area. Nest trees shall only be removed between September 16 and February 1, when nests are unoccupied. Construction work (including grading, earthmoving, surveying, and any operation of construction equipment) shall not occur within a 0.25-mile buffer zone around an active, occupied Swainson's hawk nest with eggs or young. Construction work may commence in the buffer zone when a qualified biologist has confirmed that nesting activity is complete (e.g., Swainson's hawk young have fully fledged, are capable of flight, and have left the nest, or the adults have abandoned the nest for a minimum of 7 days and there is no evidence of re-nesting activity). The size of nest site buffer zones may be reduced only under the following conditions:

    a. A site-specific analysis prepared by a qualified biologist indicates that the nesting pair under consideration are not likely to be adversely affected by construction activities (e.g., the nest is located in an area where the hawks are habituated to human activity and noise levels are comparable to anticipated construction work). CDFW must approve this analysis before construction may begin within 0.25 mile of a nest.

    b. Monitoring by a qualified biologist is conducted for a sufficient time (during all construction activities for a minimum of 10 consecutive days following the initiation of construction), and the nesting pair does not exhibit adverse reactions to construction activities (e.g., changes in behavioral patterns, reactions to construction noise).

    c. Monitoring is continued at least once per week through the nesting cycle at that nest. This longer-term monitoring may

[29] Swainson's Hawk Technical Advisory Committee. 2000. *Recommended timing and methodology for Swainson's hawk nesting surveys in the central valley of California.* Available on the Internet at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990 (accessed April 23, 2025).

be reduced to a minimum of 2 hours in the morning and 2 hours in the afternoon during construction activities; however, additional and more frequent monitoring may be required if any adverse reactions are noted.

d. Weekly monitoring reports shall be submitted to CDFW during construction and monitoring activities.

If adverse effects are identified, construction activities shall cease immediately and construction shall not resume until the qualified biologist, in consultation with CDFW, has determined that construction may continue under modified restrictions or that nesting activity is complete.

2. Preconstruction surveys for elderberry bushes shall be conducted at least 14 days prior to any ground disturbance. All areas to be avoided during construction activities shall be fenced and/or flagged. Activities that may damage or kill an elderberry shrub (e.g., trenching, paving) may need an avoidance area of at least 6 meters (20 feet) from the dripline.

3. A qualified biologist shall conduct a burrowing owl habitat assessment and surveys if habitat for burrowing owl is present prior to construction. The habitat assessment and surveys shall follow the *Department of Fish and Game State Report on Burrowing Owl Mitigation*[30] methodology, and the qualified biologist shall prepare a report documenting the survey results, submit the report to CDFW, and obtain CDFW's written approval of the report prior to Project construction. The habitat assessment and surveys shall encompass the Project site and a sufficient buffer zone to detect owls nearby that may be impacted, which is up to 500 meters (1,640 feet) around the Project site pursuant to the above methodology. Habitat assessments and surveys shall occur annually for the duration of the Project, as conditions may change annually and suitable refugia for burrowing owl, such as small mammal burrows, can be created within a few hours or days. Surveys for either nonbreeding or breeding burrowing owls shall be spread over four visits during the nonbreeding and breeding seasons. Time lapses between surveys or Project activities shall trigger subsequent surveys including, but not limited to, a final survey within 24 hours prior to ground disturbance. If the habitat assessment does not identify habitat and surveys are not

[30] California Department of Fish and Game. 2012. *Staff Report on Burrowing Owl Mitigation*. Website: nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843 (accessed July 29, 2021).

conducted, an additional habitat assessment shall be conducted within 14 days prior to construction. If new refugia are present, such as burrows or novel Project infrastructure, surveys shall be conducted as described above. The qualified biologist shall have a minimum of 2 years of experience implementing the above methodology. The following measures shall be implemented should surveys find burrowing owls to be present:

a. The City shall immediately notify CDFW if burrowing owl is detected and implement a construction avoidance buffer around any detected burrowing owls pursuant to the buffer distances outlined in the *Department of Fish and Game State Report on Burrowing Owl Mitigation.* Any detected owls shall be monitored by the qualified biologist to ensure they are not disturbed during construction activities.

b. If the City cannot ensure burrowing owls and their burrows are fully avoided, the City shall consult with CDFW and obtain a California Endangered Species Act (CESA) take authorization or otherwise demonstrate compliance with CESA. Take is likely to occur and City shall obtain an Incidental Take Permit (ITP) if burrowing owl surveys detect burrowing owl occupancy of burrows or burrow surrogates within the Project site. Occupancy of habitat may also be indicated by burrowing owl sign, including molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance or perch site.

c. If burrowing owls or their burrows or burrow surrogates are detected within 500 meters (1,640 feet) of the Project site, but not on the Project site, the City shall consult with CDFW to determine if avoidance is feasible or an ITP is warranted.

d. To prevent burrowing owls from sheltering or nesting in exposed material, all construction pipes, culverts, hoses, or similar materials greater than 2 inches in diameter stored at the Project site shall be capped or covered before the end of each work day and shall be inspected thoroughly for wildlife before the pipe or similar structure is buried, capped, used, or moved.

4. Preconstruction bumble bee surveys shall be conducted in all grassland areas at least 14 days prior to construction, following nonlethal survey protocols and current State and federal guidelines. A minimum of three pre-activity surveys shall be conducted within 30 days during appropriate activity periods

(i.e., March through September) prior to the start of ground-disturbing activities to identify bumble bee activity. Surveys should be repeated for each year of the Project activities. The preactivity surveys shall occur when temperatures are above 60°Fahrenheit (15.5°Celsius) and not during wet conditions (e.g., foggy, raining, or drizzling). The survey shall be conducted at least 2 hours after sunrise and 3 hours before sunset, and shall occur at least 1 hour after rain subsides. Preferably, the survey should be conducted during sunny days with low wind speeds (less than 8 miles per hour), but surveying during partially cloudy days or overcast conditions is permissible if the surveyors can still see their own shadows.

If western bumble bees, or potential Crotch's or western bumble bees (since bumble bees can be difficult to identify in the field) are observed within the Project site, a plan to protect special-status bumble bee nests and individuals shall be developed and implemented in consultation with CDFW. The plan shall include, but not be limited to, the following measures:

a. Specifications for construction timing and sequencing requirements (e.g., avoidance of mowing, tilling, or other ground disturbance until late March to protect overwintering queen bumble bees);

b. Establishment of appropriate no-disturbance buffers for bumble bee nest sites to avoid impacts to the bees and monitoring by a qualified biologist to ensure compliance if bumble bee nests are identified;

c. Restrictions associated with construction equipment or materials that may harm bumble bees (e.g., avoidance of pesticides/herbicides, BMPs to minimize the spread of invasive plant species);

d. Provisions to avoid western bumble bees, or potential western bumble bees if observed away from a bumble bee nest during Project activity (e.g., ceasing of Project activities until the animal has left the active work area on its own volition); and

e. Prescription of an appropriate restoration seed mix targeted for the western bumble bee, including native plant species known to be visited by native bumble bee species and containing a mix of flowering plant species with continual

floral availability through the entire active season of the western bumble bee (March through September).

If Project impacts to special-status bumble bees cannot be completely avoided, the City shall apply obtain an ITP from CDFW.

If the Project will result in permanent impacts to suitable special-status bumble bee habitat, the City shall provide compensatory mitigation at a minimum ratio of 3:1. Floral resources shall be replaced as close to their original location as is feasible. If active special-status bumble bee nests have been identified and floral resources cannot be replaced within 200 meters (656 feet) of their original location, floral resources shall be planted in the most centrally available location relative to identified nests. This location shall be no more than 1.5 kilometers (4,921 feet) from any identified nest. Replaced floral resources may be split into multiple patches to meet distance requirements for multiple nests. Mitigation lands shall be protected in perpetuity under a conservation easement with an endowment established for long-term management of the lands.

5. Preconstruction surveys shall be conducted during the monarch breeding season (March 16 through October 31) to determine if milkweed is present on site and is being used for monarch breeding. Surveys shall be conducted by a qualified biologist no more than 14 days prior to ground or vegetation disturbance activities. The biologist will search for evidence of monarch eggs, caterpillars, chrysalises, and adults.

6. Prior to any construction activities, preconstruction surveys for northwestern pond turtle shall be performed by a qualified biologist within the Project area and staging area (including a 50-foot buffer) to determine whether northwestern pond turtles or their active nests are present. Preconstruction surveys for northwestern pond turtles, shall be conducted 24 hours prior to construction activities. Surveys shall be repeated if a lapse in construction activity of 2 weeks or more occurs.

7. Preconstruction breeding bird surveys shall be conducted within 14 days prior to the start of construction. If there is a break in construction of 1 week or more, surveys shall be conducted prior to the reinitiation of construction. If birds or nests are located within this buffer, USFWS will be contacted for further guidance to ensure birds or nests are not disturbed. If surveys

determine that the species is present and nesting within this area, an appropriate nest protection buffer shall be established by a qualified biologist based on the species, type of construction or maintenance activities, and line of sight to the work area. Under this measure, nesting birds and offspring would not be disturbed or killed, and nests and eggs would not be destroyed. Work shall be conducted no less than 500 feet from an active raptor nest and 100 feet from an active migratory bird nest, although buffer distances for all nesting birds may differ based on consultation with CDFW and USFWS. To prevent encroachment, the established buffer(s) shall be clearly marked by high-visibility material if it has been determined by the qualified biologist that high-visibility material would not attract predators to the nest site. No construction activities, including tree removal, shall occur within the buffer zone until the young have fledged or the nest is no longer active, as confirmed by the qualified biologist. If construction or maintenance activities must occur within established buffer zones, a qualified biologist shall establish monitoring measures, including frequency and duration, based on species, individual behavior, and type of construction activities. If birds are showing signs of distress within the established buffer(s), construction or maintenance activities shall be modified or the buffer(s) shall be expanded to prevent birds from abandoning their nests. At any time, the biologist shall have the authority to halt work if there are any signs of distress or disturbance that may lead to nest abandonment. Work shall not resume until corrective measures have been taken or it is determined that continued activity would not adversely affect nest success. The monitor shall continue monitoring the nest until construction within 0.5 mile of the nest is completed, or until all chicks have completely fledged and are no longer dependent on the nest.

With implementation of Mitigation Measures BIO-1 through BIO-4, in conjunction with species-specific measures described below, impacts to special-status wildlife species would be reduced to less than significant with mitigation by ensuring that direct and indirect effects to special-status species are avoided during Project construction.

As described above, based on a review of the species' habitat requirements, the existing habitats on the site, and a survey of the Project site, it was determined that the Project could impact eight special-status animal species. These species are described further below. None of the remaining species identified in Table 4.A are likely to occur due to a lack of habitat.

Monarch Butterfly. The monarch butterfly is a migratory butterfly that has been listed as a candidate for inclusion on the USFWS list of endangered and threatened wildlife since December

2020. The monarch butterfly is currently federally listed as "Proposed Threatened" under FESA. Monarchs are currently not listed as threatened or endangered under CESA, but they are listed by the State of California as a California Special Resource because their overwintering habitat is threatened by disturbance and by alteration and destruction of habitat. Monarch butterfly overwintering sites are typically found in a narrow stretch of land within 3 miles of the Pacific coastline.

The Western Monarch Milkweed Mapper[31] shows several recent observations of monarch adults and larvae in Stockton. Monarch butterfly is known to occur in all natural communities, including open-space areas as well as disturbed and developed lands (e.g., residential areas, vacant lots, rights-of-way, and firebreak zones). Monarch butterfly relies exclusively on milkweed species as a larval host plant. No milkweed plants have been identified during biological surveys of the site; however, milkweed plants and monarch larvae may be present. The Project site currently has an abundance of flowering nonnative eucalyptus trees, although other flowering forbs and shrubs are rare. Numerous bees and butterflies (mainly western swallowtail [*Papilio rutulus*]) were observed during site surveys.

The Project could impact breeding monarch butterflies if their milkweed host plants are present during Project construction activities. In addition, implementation of the proposed Project could reduce potential habitat for pollinators, including monarch butterfly, through development of recreation facilities. Implementation of the following mitigation measures, in addition to Mitigation Measures BIO-1 through BIO-4, would reduce potential impacts to monarch butterfly to a less than significant level by requiring a preconstruction survey; implementing a salvage and relocation plan for milkweed, if present on the Project site; and conducting pollinator habitat enhancement and restoration. With restoration and habitat enhancement (Mitigation Measure BIO-6), the site could provide an ideal habitat area to contribute to monarch butterfly and pollinator conservation. The eastern section of the Project site provides the greatest opportunity to establish pollinator habitat through the planting of pollinator and butterfly gardens, hedgerows, and other areas where nectar plants could be established.

Mitigation Measure BIO-5 **Monarch Butterfly Avoidance.** The recommended management timing for vegetation management in the Central Valley is October 31 through March 15. If active monarch breeding is identified, any milkweed stand shall be protected from disturbance and maintenance, or until the City develops and implements a salvage and relocation plan that has been reviewed and approved by USFWS. The following general recommendations shall be implemented:

- Spot mowing shall be used and focused on areas with weeds and other target vegetation. Mowing of natural vegetation communities (outside active recreation features)

[31] Xerces Society for Invertebrate Conservation, Idaho Department of Fish and Game, Washington Department of Fish and Game, National Fish and Wildlife Foundation, and United States Fish and Wildlife Service. 2021. Western Monarch Milkweed Mapper. Website: https://www.monarchmilkweedmapper.org.

shall be limited to no more than twice per year. Milkweed mowing during the monarch breeding season (March 15 through October 31) shall be avoided and delayed as late as possible (i.e., late summer or early fall) to provide a longer period for monarch caterpillars to develop and extend the availability of nectar plants to monarchs and other pollinators into the late summer. Generally, fall mowing after the first frost is ideal to avoid mowing floral resources and host plants for breeding and migrating monarchs. Existing milkweed patches shall be flagged, when feasible, and mowing avoided to conserve milkweed plants and avoid causing direct mortality to immature stages of monarchs. Mower operators shall be trained to recognize milkweed plants and important native nectar plants so they can be spared during mowing. Mowing shall be at a minimum height of 10 to 12 inches to avoid cutting newly emerged milkweed plants in the spring (March through early June). Mowing should occur during the middle of the day. Monarch adults are typically most active during the warmer parts of the day, which means they are better suited to escaping a mower. If invasive nonnative and/or noxious weeds are present, the mowing equipment shall be cleaned after use and between sites to limit the spread of these weeds.

- Insecticide treatments shall be planned to avoid direct exposure to both juvenile and adult monarchs. Insecticide use and subsequent impacts on pollinators shall be reduced by creating an integrated pest management plan. Conditions that allow pest populations to survive and reproduce shall be prevented. Diverse management techniques (e.g., biological, physical, and cultural) shall be employed and pesticides used only when pests pose an economic or public health threat. Pesticides shall be selected and applied to minimize risks to nontarget organisms and applied at the lowest effective application rate specified on the product label. Pesticide applications shall be timed to avoid monarch exposure. Pesticides (especially insecticides) shall not be applied when monarchs (adult and immature) are present (March 15 through October 31). Precautions shall be taken to avoid off-site movement and reduce the risk of drift. Spray nozzles shall be carefully chosen and calibrated. Applications shall be conducted on calm days when wind speed is less than 10 miles per hour. Application shall be avoided during a temperature inversion and when

conditions are likely to cause evaporation. Using backpack sprayers and applying from the ground should be considered. On boom sprayers, the lowest effective pressure and largest droplet size possible shall be used. Nozzles shall be set low so they operate just above plant height. Aerial applications and mist blowers shall be avoided whenever possible.

Mitigation Measure BIO-6 **Pollinator Habitat Restoration.** To limit any potential adverse effects on pollinators, all herbaceous vegetation removal activities shall be conducted from September 1 through February 28. This includes any vegetation control with herbicides. When using herbicides, application shall be implemented by a person holding a Qualified Applicator License from the State of California. Any application of pesticides shall be completed in a manner that avoids drift and contamination of nontarget plants and areas. Ecologically invasive weeds shall be treated with spot spraying of an approved herbicide only. Targeted application of herbicides may be used in conjunction with removal of nonnative invasive weeds. Restoration of natural areas shall include establishing native seed mixes containing a diversity of native wildflowers, including milkweed, as appropriate. Native seed mixes shall be applied in bare-soil areas, including those recently cleared, graded, or disturbed. Nesting needs of ground-nesting bees and bumble bees shall be taken into consideration when restoring this habitat.

With implementation of Mitigation Measures BIO-5 and BIO-6, in addition to Mitigation Measures BIO-1 through BIO-4, impacts to milkweed and monarch butterfly would be less than significant.

Valley Elderberry Longhorn Beetle. The VELB has been observed at the Project site and at the nearby VELB conservation bank. The VELB is dependent on blue elderberry shrubs (*Sambucus mexicana*), which is its host plant. Elderberry is a common shrub near and on the Project site. The Project site was completely inventoried on February 17 through 25, 2021, and again on April 20, 2021. Since elderberry is the host plant for this species, habitat and environmental conditions that support a robust elderberry community would also benefit VELB. Nonfragmented stands of elderberries are essential for dispersal corridors for this species and may be necessary to maintain long-term gene flow over large areas. The 84-acre French Camp Conservation Bank, directly opposite the Project site across French Camp Slough, is dedicated to habitat conservation for the VELB and provides such a nonfragmented connectivity to the Project site. The Project site provides habitat for the beetle, and occupied blue elderberry bushes (evidenced by exit boreholes on stems) have been observed throughout the Project site. Development of the proposed Project could result in direct impacts to VELB through the removal of blue elderberry shrubs. Implementation of Mitigation Measure BIO-7 would reduce potential

impacts to VELB by requiring all elderberry plants within the Project area to be flagged and avoided by Project activities.

Mitigation Measure BIO-7 **Valley Elderberry Longhorn Beetle (VELB).** The following measures shall be implemented to avoid and minimize effects to VELB and/or its habitat:

- Prior to implementation of any activities that may damage or kill an elderberry shrub (e.g., trenching, paving), an avoidance area of at least 6 meters (20 feet) shall be established from the dripline, depending on the type of activity. All areas to be avoided during construction activities shall be fenced and/or flagged as close to the construction limits as feasible. All elderberry plants (with stems greater than 1 inch in diameter at ground level) occurring within the Project area shall be marked with flagging and avoided. No construction shall occur within the protected 20-foot buffer area. No elderberry shrub with one or more stems greater than 1 inch in diameter at ground level shall be removed if it is possible to avoid it (for shrubs that cannot be avoided, see the transplanting procedures below).

- A qualified biologist shall provide training for all contractors, work crews, and any on-site personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance (see Mitigation Measure BIO-2).

- A qualified biologist shall monitor the work area at Project-appropriate intervals to ensure that all avoidance and minimization measures are implemented. The amount and duration of monitoring will depend on the Project specifics and should be discussed with the qualified biologist.

- All activities that could occur within 165 feet of the elderberry shrub shall be conducted outside the flight season of the VELB (March through July). Trimming of elderberry bushes may remove or destroy VELB eggs and/or larvae and may reduce the health and vigor of the elderberry shrub. In order to avoid and minimize adverse effects to VELB when trimming, trimming shall occur between November and February and shall avoid the removal of any branches or stems that are greater than or equal to 1 inch in diameter. Measures to address regular and/or large-scale maintenance (trimming) shall be established in consultation with the USFWS. Mechanical

weed removal within the dripline of the shrub shall be limited to the season when adults are not active (August through February) and shall avoid damaging the elderberry. No flail-type mower shall be used within an elderberry shrub dripline with one or more stems measuring more than 1 inch in diameter at ground level.

- Herbicides shall not be used within the dripline of the shrub. Insecticides shall not be used within 30 meters (98 feet) of an elderberry shrub. All chemicals shall be applied using a backpack sprayer or similar direct application method.

- Erosion control shall be implemented, and the affected area shall be revegetated with appropriate native plants.

- In order to protect VELB larvae to the greatest extent possible, all elderberry shrubs with stems greater than 1 inch in diameter shall be transplanted if the elderberry shrub cannot be avoided or if indirect effects will result in the death of stems or the entire shrub. The removal shall either include the roots or just the removal of the aboveground portion of the plant. It is recommended to remove the entire root ball and transplant the shrub, if possible. In order to minimize the fragmentation of VELB habitat, elderberry shrubs shall be relocated as close as possible to their original location. Elderberry shrubs may be relocated adjacent to the Project footprint if: (1) the planting location is suitable for elderberry growth and reproduction; and (2) the project proponent is able to protect the shrub and ensure the shrub becomes reestablished. If these criteria cannot be met, the shrub may be transplanted to an appropriate USFWS-approved mitigation site. Any elderberry shrub that is unlikely to survive transplanting because of poor condition or location, or any shrub that would be extremely difficult to move because of access problems, may not be appropriate for transplanting. A qualified biologist shall be on site for the duration of transplanting activities to ensure compliance with avoidance and minimization measures and other conservation measures.

- Exit-hole surveys shall be completed immediately before transplanting. The number of exit holes found, the GPS location of the plant to be relocated, and the GPS location of where the plant is transplanted will be reported to the

USFWS and the California Natural Diversity Database (CNDDB).

- Elderberry shrubs shall be transplanted when the shrubs are dormant (November through the first 2 weeks in February) and after they have lost their leaves. Transplanting during the nongrowing season will reduce shock to the shrub and increase transplantation success. Transplanting shall follow the most current version of the ANSI A300 (Part 6) guidelines for transplanting (http://www.tcia.org/).

- Trimming shall occur between November and February and shall minimize the removal of branches or stems that exceed 1 inch in diameter.

- Herbicides shall not be used within 100 feet of elderberry plants, but hand removal of invasive weeds may be conducted from August through February. Basal bark or foliar techniques shall be utilized when herbicide application must occur within 100 feet of the dripline of an elderberry shrub with one or more stems measuring greater than or equal to 1 inch in diameter or greater at ground level. Basal application techniques include cutting off a non-elderberry shrub and applying an oil-based herbicide directly to the stump. Foliar application techniques include hand spraying of an herbicide, with a deposition/ retention additive, to control overspray. The application of herbicides shall be completed or supervised by a certified pesticide applicator in compliance with the herbicide application prescription. Herbicide application shall occur from July through April on an as-needed basis.

With implementation of Mitigation Measure BIO-7, impacts to VELB would be less than significant.

Western Bumble Bee and Crotch's Bumble Bee. Western bumble bee and Crotch's bumble bee were once common bumble bees. Bumble bees play a crucial role in the pollination of native flowering plants and commercially important crops. The Xerces Society for Invertebrate Conservation now considers the species in steep decline. In 2018, the California Fish and Game Commission advanced the western and Crotch's bumble bees to Candidate status. This was challenged in court, but a California court of appeals ultimately upheld the Commission's determination, and Candidacy was reinstated on September 30, 2022. As Candidate species, the western and Crotch's bumble bee receive the same legal protection afforded to Endangered or

Threatened species.[32] In 2016, the USFWS found that listing the western bumble bee may be warranted. The species status assessment for western bumble bee is currently under review.

These species inhabit open grasslands and meadows and use underground cavities to nest. western bumble bees have been documented nesting in logs. Riparian forest is not considered suitable habitat. Any surface or subsurface disturbance of grasslands or linear features like hedgerows, ditches, and unmanaged weed patches can be harmful to bumble bees. No records of observations of western or Crotch's bumble bee have been verified for the Project area or its vicinity. However, there is suitable bumble bee foraging and nesting habitat and nectar plants within the Project site. In addition, there is moderate potential that bumble bees nesting off site could visit the Project area to forage. In that case, ground disturbance and vegetation removal associated with the development of proposed park improvements could impact foraging habitat. Implementation of Mitigation Measures BIO-1 through BIO-4 would reduce potential impacts to western and Crotch's bumble bee. In addition, implementation of Mitigation Measure BIO-6 (Pollinator Habitat Restoration), which limits all herbaceous vegetation removal activities from September 1 through February 28 and guides habitat restoration, would further reduce impacts to pollinators by providing replacement foraging habitat for these species. Therefore, impacts to western bumble bee and Crotch's bumble bee would be less than significant.

Burrowing Owl. In 2024, burrowing owl was designated as a Candidate species under CESA. As a Candidate species, the burrowing owl receives the same legal protection afforded to Endangered or Threatened species.[33] Burrowing owl is a small ground-dwelling owl that generally inhabits gently sloping areas characterized by low, sparse vegetation. Burrowing owls nest in ground burrows (often squirrel burrows). Burrowing owls are also known to use artificial burrows, including pipes, culverts, and nest boxes. There is suitable habitat for this species at the Project site, but no owls have been observed in recent history. Records of burrowing owls exist from within a 1-mile radius around the park.[34] Although the likelihood that burrowing owls are present in the Project area is considered low, suitable habitat for this species exists at the Project site. Construction-related activities could result in loss or abandonment of an active burrowing nest nesting through direct disturbance on an occupied burrow or through noise, vibration, or visual disturbance. In addition, construction-related activities could result in harm to wintering burrowing owls, should they occur in or near the construction area. Implementation of Mitigation Measures BIO-1 through BIO-4 would reduce potential direct impacts to burrowing owl to a less than significant level by requiring a preconstruction survey for burrowing owl and establishing buffers around occupied burrows to ensure that no direct or indirect harm to this species would occur. With implementation of these mitigation measures, impacts to burrowing owl would be less than significant.

[32] California Fish and Game Code Sections 2074.2 & 2085 (2023).

[33] California Fish and Game Code. 2023. Sections 2074.2 & 2085.

[34] California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database, commercial version dated February 2023. Biogeographic Data Branch, California Department of Fish and Wildlife, Sacramento.

Swainson's Hawk. Swainson's hawk is State listed as threatened and is a Bird of Conservation Concern. Approximately 95 percent of California's Swainson's hawk population (approximately 1,770 to 2,393 breeding pairs) resides in the Central Valley. The Swainson's hawk occurs widely in the lowlands of the Central Valley. There are hundreds of records of Swainson's hawks for San Joaquin County, including many nests in isolated trees. Swainson's hawks have adapted well to agricultural landscapes with crop types that provide abundant foraging opportunities, particularly alfalfa. The best habitat is concentrated along permanent waterways with a more or less continuous canopy of trees with grassland, irrigated pasture, alfalfa, or grain fields nearby. Most Swainson's hawks winter in Central and South America, primarily in northern Argentina, Uruguay, and southern Brazil. Swainson's hawk nest sites are typically located in riparian woodlands, lone trees, or groves of trees, including cottonwoods, oaks, willows (*Salix* sp.), walnuts, eucalyptus, pines, and Deodar cedar. Urban nesting by Swainson's hawks has been documented in Central Valley. Swainson's hawks are frequently observed foraging at the Project site, and at least one nest was verified within 500 yards of the Project site in 2021. Up to four individuals were observed in active courtship, including copulations, during bird surveys in spring 2021 at the Project site.

Construction of proposed recreational facilities could disturb Swainson's hawk during courtship, incubation, and the rearing of young. The increased use of the eastern half of the Project site by human visitors and the conversion of grassland to recreational facilities could reduce the availability of rodents and may reduce the quality of foraging habitat. Impacts to Swainson's hawk from Project activities could include:

- Disruption of courtship, nesting, incubation, and rearing of young during the breeding season due to disturbance from equipment and human presence. However, Swainson's hawks frequently select roadside tree rows, isolated trees, and rural residential trees as nesting trees and exhibit a remarkable tolerance to human presence, noise, and disturbance. This species is also highly responsive to farming activities that expose and concentrate prey, such as cultivating, harvesting, and disking. During these activities, particularly late in the season, Swainson's hawks will hunt behind tractors searching for exposed prey.

- Loss of nest trees (if they choose to nest in tree earmarked for removal).

- Predation of young due to nest predators (e.g., ravens, crows) being attracted to the construction site.

Implementation of Mitigation Measures BIO 1 through BIO-4, which require preconstruction surveys and establishment of buffers, would reduce potential impacts to Swainson's hawk during construction activities associated with the Project. Therefore, impacts to Swainson's hawk would be less than significant.

Tricolored Blackbird. Tricolored blackbird is State-listed as threatened and a CDFW Species of Special Concern. This species is a year-round resident in California, where it is largely endemic. The species is common locally throughout the Central Valley and in coastal areas from Sonoma County south through Monterey County. It nests in large colonies, typically between February 1 and August 31, within stands of cattails, tules, blackberry brambles, or willows, and within 490

meters (1,600 feet) of open, accessible water. Tricolored blackbirds forage in a variety of habitats, including agricultural fields (such as cut grain fields, rice, and alfalfa), dairies and feedlots, irrigated pastures, annual grasslands, ephemeral pools and ponds, wetlands, riparian scrub, and freshwater marsh. There may be suitable nesting habitat in expansive marsh vegetation or large blackberry thickets along the San Joaquin River, French Camp Slough, or other wetlands in the vicinity of the Project site. The Project site does not provide suitable nesting habitat for tricolored blackbird, but there is considerable suitable foraging habitat within the wetlands and urban grasslands of the Project site. There is at least one historic record (1972) of a breeding colony of approximately 5,000 birds 3.6 miles south of the Project site. However, no recent observations have been recorded; therefore, the potential of tricolored blackbird being present is low. Project activities, such as noise, dust, machinery, and staging along access roads, could disturb foraging tricolored blackbirds if they are present at the Project site during construction activities. Implementation of Mitigation Measures BIO-1 through BIO-4 would reduce potential impacts to tricolored blackbirds to less than significant. Therefore, impacts to tricolored blackbird would be less than significant.

Other Birds. Suitable habitat for nesting birds is present in the trees, shrubs, and grasslands on and adjacent to the site. In addition to the special-status bird species identified above, other common, nonspecial-status native bird species whose active nests are protected by the Migratory Bird Treaty Act and/or California Fish and Game Code could also nest in the vegetation on or adjacent to the site.

Construction of the proposed Project could adversely impact special-status birds or other native migratory bird species. Tree removal, demolition, and construction activities may result in the removal of trees that could be used for nesting. If conducted during the nesting season (February 1 to August 31), such activities could directly impact nesting birds. Construction-related disturbance (e.g., noise, vehicle traffic, and personnel working adjacent to nesting habitat) could also indirectly impact nesting birds by causing adults to abandon nearby nests, resulting in nest failure and reduced reproductive potential. Implementation of Mitigation Measures BIO 1 through BIO-4 (which require environmental training), implementation of BMPs, preconstruction surveys for nesting birds, establishment of construction-free buffer zones around active nests, and monitoring during construction activities would reduce potential impacts to nesting birds to a less than significant level. With implementation of these mitigation measures, potential impacts on nesting migratory birds would be less than significant.

Northwestern Pond Turtle. The northwestern pond turtle is the only native freshwater turtle of the Pacific coastal states. Populations of northwestern pond turtles are in decline due to disease, upland and aquatic habitat alterations and destruction, and the introduction of predators and nonnative pet turtle releases. It is a thoroughly aquatic turtle and may be found in lakes, ponds, rivers, marshes, streams, and irrigation ditches, especially where rocky or muddy bottoms and watercress, cattails, or other vegetation are present. Western pond turtles may be seen basking along logs, cattail mats, and mud banks. Suitable habitat for foraging, nesting, and hibernation for this species occurs on and adjacent to the Project site, but the presence of nonnative red-eared sliders may preclude northwestern pond turtle use of any potential habitat. No

northwestern pond turtles have been identified on the site. Currently, the potential of northwestern pond turtles being present is low.

Project activities, such as construction in and near the existing wetlands, could disturb western pond turtles, their nests, or hatchlings if they are present during such activities. Implementation of Mitigation Measure BIO-8, in addition to Mitigation Measures BIO-1 through BIO-4, would reduce potential impacts to northwestern pond turtle to less than significant.

Mitigation Measure BIO-8 **Northwestern Pond Turtle Avoidance.** The qualified biologist shall identify all areas of northwestern pond turtle habitat to be avoided in or adjacent to the work area. If necessary, in consultation with CDFW, exclusion fencing shall be used when needed to direct the turtles and move them to an area of suitable habitat outside the construction activity. This fencing will be maintained throughout the duration of construction. The avoided areas shall be flagged, and signage stating "Environmentally Sensitive Area" shall be erected.

The Project site shall be inspected daily for the presence of northwestern pond turtles. If a northwestern pond turtle individual or nest is observed in the impact area, construction activities will stop until the Biological Monitor establishes an appropriate buffer or the turtle is no longer in the impact area. A qualified biologist (with pond turtle trapping/handling experience and holding a CDFW Scientific Collecting Permit) may relocate northwestern pond turtles to an appropriate nearby location if authorized by CDFW. Relocation areas and protocols shall be approved by CDFW prior to relocation of any turtles.

With implementation of Mitigation Measure BIO-8, which requires placement of exclusion fencing, establishment of buffers around identified sites, and potential relocation of turtles, in addition to Mitigation Measures BIO-1 through BIO-4, impacts to northwestern pond turtle would be less than significant with mitigation incorporated.

Bats. There are 23 bat species found in California. Ten species listed by the State of California and the federal government can be found in northern California. There are several bat species that may occur at the Project site, including:

- Yuma myotis (*Myotis yumanensis*), a federal Category 2 candidate for listing by the USFWS as Threatened or Endangered.

- Long-eared myotis (*Myotis evotis*), a federal Category 2 candidate for listing by the USFWS as Threatened or Endangered.

- Fringed myotis (*Myotis thysanodes*), a federal Category 2 candidate for listing by the USFWS as Threatened or Endangered.

- Long-legged myotis (*Myotis volans*), a federal Category 2 candidate for listing by the USFWS as Threatened or Endangered.

- Small-footed myotis (*Myotis ciliolabrum*), a federal Category 2 candidate for listing by the USFWS as Threatened or Endangered.

- Spotted bat (*Euderma maculatum*), a federal Category 2 candidate for listing by the USFWS as Threatened or Endangered, and a CDFW Species of Special Concern.

- Two subspecies of the big-eared bat (*Plecotus townsendii townsendii* and *Plecotus townsendii pallescens*), a federal Category 2 candidate for listing by the USFWS as Threatened or Endangered, and a CDFW Species of Special Concern.

- Pallid bat (*Antrozous pallidus*), a CDFW Species of Special Concern and very sensitive to disturbance of roosting sites. No observations of pallid bats are available for the park, but their presence is likely.

- Western mastiff bat (*Eumops perotis californicus*), a federal Category 2 candidate for listing by the USFWS as Threatened or Endangered, and a CDFW Species of Special Concern.

In addition, the Project site may also provide habitat for red bat (*Lasiurus blossevilli*) and Mexican free-tailed bat (*Tadarida brasiliensis*). Currently, there are no records of various bat observations at the Project site, but bats are highly likely to occur at the site. Bats occur in a variety of habitats and can utilize large trees, cavities, tunnels, buildings, or other human-made structures for roosting. Open grasslands, ponds, and open water habitats provide excellent foraging habitat. Bats are nocturnal feeders on insects in flight. Prey includes moths, flies, beetles, and other insects. Most bats require a nearby water source. The species of bats that most likely occupy the Project site are big brown bat (*Eptesicus fuscus*), little brown bat (*Myotis lucifugus*), Mexican free-tailed bat, pallid bat, and Yuma myotis. Bat maternity roosts are considered native wildlife nursery sites and are protected under CEQA. If bats are roosting in buildings or trees within the Project site or in the trees that are planned to be removed, potential disturbance or loss of roosting habitat could occur as a result of construction activity. Implementation of Mitigation Measure BIO-9, in addition to Mitigation Measures BIO-1 through BIO-4, would reduce impacts to roosting bats to less than significant.

Mitigation Measure BIO-9 **Roosting Bat Protection Measures.** Before the spring breeding season and prior to construction, a qualified biologist shall conduct a survey for roosting bat habitat. The survey shall include work areas adjacent to appropriate roosting habitat that are accessible from public or Project areas within 200 feet of a work area. For trees considered to have a high or moderate probability for bat roosting, acoustic monitoring shall be conducted before any construction activities begin during the breeding season to determine if there are any roosting sites present. Surveys shall be conducted at the appropriate times to maximize detectability. If an active roost or maternity roost is

found within 100 feet of a work area, the limits of the work area will be clearly marked, and a qualified biological monitor shall remain on site during construction activities within the vicinity of the roost or maternity roost.

The biologist shall ensure that construction activities do not encroach upon the 100-foot buffer around an active roost or maternity colony site. Buffers shall remain in place until the qualified biologist has determined that bats have vacated the occupied roost sites. If buffer reductions are requested and approved, a monthly report shall be submitted to CDFW with all the information in the buffer reduction requests, monitoring results, and effects on bats. Reports shall be submitted for the duration of construction activities within buffer areas.

Trees containing maternity roosts shall not be removed during the breeding season (March 1–August 31) to avoid disturbing females with young that cannot fly. No trees containing maternity roosts may be removed until the qualified biologist determines that breeding is complete and the young are able to fly.

If fall/winter hibernacula cannot be avoided, humane techniques may be implemented to passively vacate bats from roosts. Methods to passively evict bats from tree roosts may include incrementally trimming limbs to alter the air flow and temperature around the roost feature where slight changes to the surrounding environment of roost features encourage bats to vacate roost features on their own. If acoustic monitoring detects that bats are using trees that need to be cut down, these trees shall be removed only after it has been confirmed that roosting bats have departed.

With implementation of Mitigation Measure BIO-9 (which requires identifying the presence or absence of roosting bats, and if present, preventing disturbance or loss of roosting habitat), in addition to Mitigation Measures BIO-1 through BIO-4, impacts to roosting bats would be less than significant.

Critical Habitat (Delta Smelt). Critical habitat areas are defined in FESA and used by the USFWS and National Marine Fisheries Service (NMFS) as areas that are essential for the conservation and recovery of a federally threatened or endangered species that requires special management and protection. Under Section 7 of FESA, all federal agencies are required to use their authorities to ensure that the federal government does not contribute to the decline of endangered and threatened species or their potential for recovery. Federal agencies are prohibited from destroying or adversely modifying designated critical habitat. This means they must consult with the USFWS about actions that they carry out, fund, or authorize to ensure that they will not

destroy or adversely modify critical habitat. Therefore, potential impacts to designated critical habitat must be analyzed through a consultation process.

The only species with designated critical habitat that includes the Project site is Delta smelt. Delta smelt is currently listed as threatened under FESA. The following are the Delta smelt critical habitat Primary Constituent Elements (PCEs) as defined in the critical habitat rule:

- **Primary Constituent Element 1:** "Physical habitat" is defined as the structural components of habitat. Physical habitat in the Bay-Delta includes substrate, water depth variation, and channel morphology for spawning adults, and potentially foraging habitat for rearing juveniles along marsh edges. Because all work would be conducted in the uplands behind a 30-foot levee, at least 100 feet from the water's edge, no physical habitat for Delta smelt occurs within the Project site. Therefore, PCE 1 is not present in the Project site and the Project would have no effect on this PCE.

- **Primary Constituent Element 2:** "Water" is defined as water of suitable quality to support various Delta smelt life stages with the abiotic elements that allow for survival and reproduction. Delta smelt inhabit open waters of the Delta and Suisun Bay. Certain conditions of temperature, turbidity, and food availability characterize suitable pelagic habitat for Delta smelt. Because all work would be conducted in the uplands behind a 30-foot levee, at least 100 feet from the water's edge, no water of suitable quality to support various Delta smelt life stages occurs within the Project site. Therefore, PCE 2 is not present in the Project site, and the Project would have no effect on this PCE.

- **Primary Constituent Element 3:** "River flow" was originally believed to be critical as transport flow to facilitate adult dispersal and the transport of offspring to low-salinity zone (LSZ) rearing habitats. However, most transport and retention mechanisms for Delta smelt (and their prey) involve the selective use of tidal currents rather than net flows. River flow includes both "inflow to" and "outflow from" the Delta, both of which influence the net movements of water through the Delta and exert some influence on the distribution of Delta smelt. Because all work would be conducted in the uplands behind a 30-foot levee, at least 100 feet from the water's edge and because there is no hydrological connection between the Project site and French Camp Slough, Walker Slough, or the San Joaquin River, PCE 3 is not present in the Project site. Therefore, the Project would have no effect on this PCE.

- **Primary Constituent Element 4:** "Salinity" is defined as the LSZ nursery habitat. The LSZ is where fresh water transitions into brackish water; the LSZ is defined as 0.5–6.0 parts per thousand (ppt). The 2 ppt isohaline is a specific point within the LSZ where the average daily salinity at the bottom of the water is 2 ppt. The density of Delta smelt's primary prey is related to X2 in the spring, but not in the summer and fall. Because all work would be conducted in the uplands behind a 30-foot levee, at least 100 feet from the water's edge, and because there is no hydrological connection between the Project site and French Camp Slough, Walker Slough, or the San Joaquin River, PCE 4 is not present in the Project site. Therefore, the Project would have no effect on this PCE.

Because all work would be done in the uplands behind a 30-foot levee, at least 100 feet from the water's edge, and because there is no hydrological connection between the Project site and Delta smelt critical habitat, the proposed Project would have no impact on Delta smelt critical habitat.

Other Fish Species. The southern DPS of green sturgeon is protected as a Threatened species under FESA. Southern DPS green sturgeon are found in the Sacramento and San Joaquin rivers and the Delta. They primarily spawn in the upper main stem of the Sacramento River. The extent to which the species uses the San Joaquin River is unclear at this time, although an adult fish was recently found in a major tributary, the Stanislaus River, indicating at least some use of that system. Because the Project would not include any construction activity beyond the toe of the slope of the existing levee, the proposed Project would not impact critical habitat for green sturgeon. No impact would occur.

Central Valley steelhead is currently listed as threatened under FESA. Steelhead and rainbow trout are the same species. In general, steelhead refers to the anadromous form of the species. Central Valley steelhead are considered "ocean-maturing," also known as winter steelhead. They enter fresh water from August through April to spawn and rear, with juvenile steelhead migrating to the ocean primarily during the spring. Because the Project would not include any construction activity beyond the toe of the slope of the existing levee, the proposed Project would not impact critical habitat for steelhead. No impact would occur.

Conclusion. With implementation of Mitigation Measures BIO-1 through BIO-9, impacts to special-status wildlife, including monarch butterfly, VELB, Crotch's bumble bee, western bumble bee, burrowing owl, Swainson's hawk, tricolored blackbird, other nesting birds, northwestern pond turtle, and roosting bats would be reduced to a less than significant level. This impact is less than significant.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ***(No Impact)***

No riparian habitat or other sensitive natural communities are present on the Project site. Therefore, the proposed Project would have no impact on any riparian habitat or other sensitive natural community.

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? ***(No Impact)***

Five ponds associated with the former golf course are present on the Project site, of which some or all may be historical oxbows associated with French Camp Slough. The ponds of the Project site are generally shallow. During operation of the golf course, these ponds were used as water storage for irrigation water and were refilled with riparian water pumped directly from French Camp Slough and the San Joaquin River. The total area of these ponds is approximately 11.25 acres (Table 4.E).

Table 4.E: Existing Ponds

Pond ID	Stratum	Size (acres)	Depth	Location (Lat / Long)
1	W	2.83	<3 feet	37.925387° / -121.322000°
2	W	2.54	<3 feet	37.922865° / -121.319915°
3	W	1.82	< 3feet	37.921404° / -121.318229°
4	W	1.54	<3 feet	37.920411° / -121.315940°
5	E	2.62	<3 feet	37.919700° / -121.305171°

Source: Compiled by LSA (2021).

Four of these ponds are in the western area of the Project site, which is designated for future restoration/mitigation. Pond 5 is isolated from Ponds 1 through 4 and is located in the eastern portion of the Project site. During operation of the golf course, river water was pumped into Pond 5 from a different diversion than for Ponds 1 through 4. Ponds 1 through 4 are currently connected via pipes and culverts, many of which are in poor condition. River water has not been pumped into these ponds since 2022. All ponds at the Project site are isolated from the floodplain of French Camp Slough by a levee and are considered managed water features that are jurisdictional wetlands and waters of the United States/waters of the State. The existing ponds would be preserved and maintained as part of Project implementation. Therefore, the proposed Project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (CWA). No impact would occur.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? ***(Less Than Significant with Mitigation Incorporated)***

The Project site consists of a former golf course that is surrounded by residential and commercial development to the north, south, and east. No identified linkages or movement corridors are connected with the Project site. Improvements proposed as part of the Project are not expected to interfere with the migration of wildlife species, such as birds and bats. However, there is a potential for bat maternity roosts to be present in the large, mature trees on the site. Bat maternity roosts are considered native wildlife nursery sites and are protected under CEQA. If bats are roosting in buildings or trees within the Project site or in the trees that are planned to be removed, potential disturbance or loss of roosting habitat could occur as a result of construction activity. Implementation of the Mitigation Measures BIO-1 through BIO-4 and BIO-9, described above, would reduce this impact to less than significant by first identifying the presence or absence of roosting bats, and if present, preventing disturbance or loss of roosting habitat. With implementation of these mitigation measures, impacts to wildlife movement/wildlife corridors and native wildlife nursery sites would be less than significant.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? ***(Less Than Significant Impact)***

The City of Stockton's Heritage Tree Ordinance requires a permit for the removal of specific types of oak trees. Per Section 16.240.020 of the SMC, a Heritage Tree is "Any *Quercus lobata* (commonly known as "Valley Oak"), *Quercus agrifolia* (Coast Live Oak), and *Quercus wislizenii* (Interior Live Oak) tree which is located on public or private property within the limits of the city, and which has a trunk diameter of 16 inches or more, measured at 24 inches above actual grade. For Oak trees of the species mentioned above, with multiple trunks, the combined total trunk diameter shall be used for all trunks measuring six (6) inches or greater measured at 24 inches above actual grade." Trees on the Project site are predominantly nonnative species. However, there are a total of nine mature California valley oak trees on the Project site (four on the eastern side and five on the western side). All five valley oak trees on the western side of the Project site and three of the four oaks on the eastern side of the Project site qualify as Heritage Trees as defined above. Consistent with the Section 16.130, Heritage Tree Permit, of the SMC, except for emergency removal, Heritage Trees to be removed must be replaced on a three-for-one basis at the discretion of the Director of Community Development. New trees would be planted as part of the proposed Project, consistent with the replacement requirement identified in the SMC. Therefore, the proposed Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. This impact would be less than significant.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? ***(Less Than Significant)***

The Project site is within the coverage area of the San Joaquin County Multi-Species Open Space and Habitat Conservation Plan (SJMSCP), [35] a habitat conservation plan adopted by the County and its incorporated cities and managed by the San Joaquin Council of Governments (SJCOG). The SJMSCP provides compensation (mitigation) for the conversion of open space to non-open-space uses that impact covered plant, fish, and wildlife species. The SJMSCP assesses a habitat conservation fee on participating projects that convert open space land to an urban or industrial use. Based on a review of the City of Stockton Compensation Map,[36] the Project site is considered Urban Habitat under the SJMSCP; therefore, there are no SJMSCP land conversion fees associated with Project development. The mitigation measures described above are consistent with the San Joaquin Council of Governments' Incidental Take Minimization Measures for special-status species on the Project site; therefore, no alternative mitigation would be required to be considered "in kind equal" with coverage under the SJMSCP. In accordance with SJMSCP requirements, the City would need to provide a SJMSCP Review Form (SRF) for the proposed Project to be covered under the habitat plan permits. Therefore, the Project would not conflict with any approved local, regional, or State habitat conservation plan. This impact would be less than significant.

[35] San Joaquin Council of Governments. 2000. *San Joaquin County Multi-Species Habitat Conservation and Open Space Plan.* November 14.

[36] San Joaquin Council of Governments. 2007. SJMSCP Compensation Map – Stockton. October.

4.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

A cultural resources study[37] was prepared for the proposed Project, consisting of background research and a field survey. The results of the study are summarized below.

Background Research. To identify historical resources at the Project site, a records search at the Central California Information Center (CCaIC) of the California Historical Resources Information System (CHRIS) was performed.[38] The record search included a review of all recorded historic-period and precontact cultural resources within a 0.5-mile radius of the Project site, as well as a review of known cultural resources surveys and excavation reports (CCaIC File No. 13190L). The results indicated that 44 studies were previously conducted within a 0.5-mile of the Project area, 11 of which included portions of the Project site (SJ-00729,-757, -831, -3154, -3296, --6447, -6648, -6723, -6724,-6723, and -6995). A substantial precontact resource (habitation site) was previously recorded partially within the Project area (39-000237). The locations of two others (P-39-000218 and P-39-000227; both include human remains) are indeterminate and have been posited (mapped) outside the Project site by the CCAlC, but one of them may correspond to “Mound 4” and be partially within it.[39] Another prehistoric resource has been documented on the south side of the slough from the study area (39-000228). An additional three historic-period archaeological resources (39-000342, 39-005496, and 39-005409) were documented within 0.5 mile of the Project site.

Interested Parties Consultation and Archival Research. On March 3, 2025, LSA sent a letter describing the Project with maps depicting the Project site to local historical societies requesting information or concerns they may have. Organizations contacted included the San Joaquin County Historical Society & Museum (SJCHS&M) archives at Mickie Grove Park in Lodi and the Haggin Museum. The Haggin Museum responded, providing scanned images, including a 1959 aerial of the Project site and a golf course blueprint from 1968. On March 7, an LSA cultural resources specialist visited the SJCHS&M archives. Documentation reviewed included copies of Stockton City Council resolutions, copies of official correspondence between City officials and the Van Buskirk family

[37] LSA Associates, Inc. (LSA). 2025. *Cultural Resource Study of the Van Buskirk V Park Revitalization Phase 1 Project, Stockton, San Joaquin County, California*.

[38] The CCaIC is an affiliate of the State of California Office of Historic Preservation and is the official State repository of cultural resources records and reports for San Joaquin County.

[39] Jones, Philip Mills. 1923. *Mound Excavations Near Stockton* in University of California Publications in American Archaeology and Ethnology Vol. 20.

regarding land donations and conditions, clippings of articles from the *Stockton Record* and the *Lodi News-Sentinel* articles, and County plat maps.

The archival research indicated Van Buskirk Park is the result of a phased series of land donations by Lodi residents and "vineyardist" Carles Robert Buskirk and his wife, Bertha S. Van Buskirk, between January 1957 and March 15, 1967, and totaling 192.83 acres. Accordingly, the park's amenities also developed in phases as the park expanded westward to the San Joaquin River. The easternmost portion of the park, covering roughly 20 acres, was developed first. This portion of the park contains the existing Community Center and Van Buskirk Community Park.

The main landscape feature was the Van Buskirk Golf Course. Landscape architect Robert Muir Graves designed a nine-hole golf course at Van Buskirk Park in 1960. Graves was a prolific golf course designer who planned golf courses in nine western states as well as Malaysia and the United Kingdom. The golf course opened April 28, 1961.[40] Graves designed, remodeled, or consulted on over 650 golf courses, the majority of which were in the western United States and abroad. Graves served as President of the American Society of Golf Course Architects, taught landscape architecture at the university level, and published articles that shaped the art of golf course design as an aspect of landscape architecture.[41]

In 1970, Bob Orchard, landscape architect for the City of Stockton, designed an additional 9 holes to complement the original 9-hole course to create the 18-hole course that was in operation until 2020. In addition, the golf course expansion in 1970 included construction of a three-part clubhouse that shared a variable-pitched roof with wide overhanging eaves.[42] The Clubhouse at Van Buskirk and at Swenson Golf Course were constructed by Henry Beuving & Sons, a building contractor based in the southern San Joaquin County community of Ripon.[43] The golf course was closed by 2020 and the buildings demolished and cleared away.

SJCHS&M indicated that a potential shell mound may be present within the Project site. As documentation of the feature, SJCHS&M provided LSA with an article by Philip Mills Jones titled, "Mound Excavations Near Stockton" in Volume 20 of the University of California Publications in American Archaeology and Ethnography published in 1923. "Mound 4" in the article has been posited as corresponding to Site 39-000218 by Carrie Feldman of the National Museum of the American Indian in 2008, and the article's 1900 map resembles the geography of a bend in the levee and an adjacent area on the southern periphery of the Project.

40 *Stockton Record.* n.d. "Memories of Van Buskirk Park Golf Course" podcast. Website: https://www.recordnet.com/story/news/politics/county/2019/08/31/listen-memories-van-buskirk-park/4296042007/ (accessed April 15, 2025).

41 Cornish, Geoffrey, and Ronald E. Whitten. 1981. *The Architects of Golf*. HarperCollins, New York. Page 278.

42 A comparable example of this multi-unit building arrangement and architectural aesthetic is at the Swenson Park Golf Course, located at 6803 Alexandria Place, Stockton.

43 *Stockton Record*. 1969. "Van Buskirk Clubhouse Vandalized." July 9. Page 1. Website: www.newspapers.com (accessed April 18, 2025).

Additional Background Research. Historical topographic quadrangle maps and aerial photographs of the Project site and setting were also reviewed in order to understand the general land use and development patterns from the early 20th century to today.

Field Survey.LSA cultural resources specialist conducted a pedestrian field survey of Van Buskirk Park on March 6, 2025. The purpose of the field survey was to photograph existing buildings, structures, and objects, their notable features (if any), and their setting, and to describe any alterations not reflected in background research. The field survey found the former Van Buskirk Golf Course no longer operational and closed to the public. The former clubhouses were demolished and removed circa 2020, leaving only their concrete slab foundations. The golf course has been neglected, the driving range netting is deteriorated, and the vestiges of how the fairways were laid out are barely discernible through the arrangement of the surviving trees.

The eastern portion of Van Buskirk Park, consisting of approximately 20 acres, contains a single-story community center, originally in place by 1963, expanded by 1982, and expanded and remodeled to its current state by circa 2009. Van Buskirk Park currently includes with four handball courts, three parking lots, two baseball diamonds, two tennis courts, a basketball court, an area with playground equipment, a soccer field, a restroom, and open grassy areas.

On March 6, 2025, an archaeologist (accompanied by tribal monitors from the Northern Valley Yokuts Tribe and Nototomne Cultural Preservation) conducted a pedestrian survey within the boundary of Site 39-00237 with very limited visibility and negative results (no trace of the site was found). As the balance of the Project area was almost completely obscured by overgrown vegetation and buildings, it was determined by LSA and the consulting tribe that continuation of a conventional survey would be unproductive under current conditions. A subsequent field survey was conducted on March 27, 2025; no trace of the portion of Site P-39-000218/-000227 (“Mound 4”) was identified within the Project area, and no other cultural resources were identified.

Sacred Lands File Search.LSA submitted a request to the Native American Heritage Commission (NAHC) to search the Sacred Lands File (SLF) for Native American cultural resources that may be impacted by the proposed Project. The NAHC maintains the SLF database and is the official State repository of Native American sacred-site location records in California. The NAHC responded to the SLF search request on January 22, 2025, stating that a search of the SLF for the study area had negative results for Native American cultural resources within the Project site.

Auger Test Program. Due to the obscured ground surface, an auger test program was conducted on May 27, 2025, to determine the presence/absence of subsurface resources. The testing program was a series of 16 auger samples placed between the previous 2022 USACE borings and planned geotechnical borings and percolation tests. The sampling was manually augered at 20-centimeter intervals (when possible) to a maximum depth of 100 centimeters. All sampled material was screened through a ⅛-inch mesh screen, and all recovered artifacts were to be fully documented (i.e., measured, photographed, and described) and reburied in their respective auger holes. The results of the auger test program were negative—no traces of any cultural resources were detected.

Geoarchaeological Analysis. A geoarchaeological analysis[44] revealed that the Project area was occupied by nontidal, freshwater wetlands, and although such an environment was probably used by the prehistoric Native American inhabitants of the region for resource extraction (e.g., tule and sedge plant material, hunting), it is not considered conducive to the formation of archaeological sites as it was more or less constantly wet and not viable for human settlement.

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? ***(Less Than Significant with Mitigation Incorporated)***

Cultural resources are sites, buildings, structures, objects, and districts that may have cultural value for their historical significance. For a cultural resource to be considered a "historical resource" for the purposes of CEQA, it generally must be 50 years or older (California Code of Regulations [CCR] Section 4852(d)(2)) and: (1) be listed in, or determined eligible for listing in, the California Register of Historical Resources (California Register); (2) be included in a local historical register of historical resources, as defined in PRC §5020.1(k), or identified as part of a survey meeting the requirements of PRC §5024.1(g); or (3) be determined by the lead agency as historically significant. Under CEQA, historical resources can include precontact (i.e., Native American) archaeological deposits, historic-period archaeological deposits, historic buildings, and historic districts.

According to the *CEQA Guidelines*, a proposed Project may have a significant effect on the environment if it would create "an effect that may cause a substantial adverse change in the significance of a historical resource." Specifically, substantial adverse changes include "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (*CEQA Guidelines* §15064.5(b)(1)).

Background research identified the following two previously recorded cultural resources within/partially within the Project area:

- **P-39-00237, CA-SJO-103.** This resource was first recorded in 1951 as a "village deposit" and located "where the old highway used to cross river on east bank of San Joaquin River." The original site record noted "the site was reported to have been plowed during leveling." The site was revisited in 2012, but no evidence of the site was observed. The site was apparently destroyed during the construction of the original route of SR-4 and the subsequent development of the adjacent tract housing and golf course. A pump house (Eighth Street and San Joaquin County River Storm Station) now sits on the site, and the surrounding ground is asphalt.

- **P-39-005408; SAS-001.** This resource was initially identified and recorded in 2021 by SAS and consists "of two pair [sic] of Pacific Gas and Electric Company (PG&E) steel lattice towers and overhead electrical transmission lines" installed in the Project area sometime between 1943 and 1954 per USGS mapping. The resource record did not include a National Register of Historic Places (National Register) or California Register evaluation. A segment of this linear resource not previously identified and recorded extends southwest into the study area. LSA updated the SAS

[44] Alta Archaeological Consulting. 2025. *Van Buskirk Golf Course Re-Use Study, Geoarchaeological Context.* May 29.

record to describe the segments within the study area and to include additional historical context regarding the resource, its typology, and a National Register- and California Register-based eligibility evaluation of these segments. LSA's update is specific to the segments of P-39-005408 identified within the study area and did not resurvey the segment identified and recorded by SAS in 2021.

An evaluation of these resources determined that because these segments and support towers no longer retain sufficient integrity to convey this association, these resources are ineligible for inclusion in the National Register or California Register and are not historical resources for the purposes of CEQA.

Additionally, due to the age of the Van Buskirk Golf Course, LSA prepared a joint National Register and California Register eligibility evaluation of the park. Although associated with the development of recreational facilities in Stockton in the mid-to-late 20th century, the Project site's existing built environment does not possess specific, important associations to distinguish it from other similar public recreational amenities, such as buildings and structures with similar design, construction history, and uses in Stockton, San Joaquin County, or other urban areas statewide. Further, background research indicates that the Project site is not associated with individuals who are of singular importance in the history of Stockton, San Joaquin County, California, or the nation; is not a representative example of an architectural style or as a specimen of a noted architect, an architectural firm, or other notable design professional(s); and is unlikely to yield information important to the history of Stockton, San Joaquin County, California, or the nation.

Therefore, the Project site is not eligible for inclusion on the National Register or the California Register. Thus, the Van Buskirk Golf Course does not qualify as a historical resource for the purposes of CEQA as defined in PRC Section 21084.1, as defined in PRC Section 5020.1(k), or deemed significant pursuant to criteria set forth in PRC Section 5024.1(g). Because this built environment resource has been evaluated for significance as a historical resource and was found to be not eligible for National Register or California Register placement, its redevelopment would not adversely cause a substantial adverse change in the significance of a historical resource.

As described above, the search of the CCaIC database indicates that there is one previously recorded precontact archaeological resource partially within the Project site (39-000237); no trace of it was identified by a pedestrian survey, but surface visibility was poor. Two very small (<5-millimeter) mussel shell fragments were noted, but because there is no original surface/context remaining, these could have been deposited by a flood event, or imported in dredged soil (from the slough) or with fill, and are at best ecofacts, which are considered not significant under the evaluative criteria of Section 106 of the National Historic Preservation Act (NHPA) and CEQA.

There is potential for a portion of a second precontact resource (39-000218) that was documented as including human remains within the Project area. An archaeological survey of the balance of the Project area was not conducted due to critically limited surface visibility. An auger test series in the area of direct impact within the Phase 1 project site was conducted instead. The results of the auger test program were negative—no traces of any cultural resources were detected.

Given the presence of previously identified resources within and in proximity to the Project site and the site's position in the landscape along an existing watercourse, the Project site is considered sensitive for precontact archaeological resources. The overall archaeological sensitivity of the Project area is lessened by past land uses that included years of mowing and earthmoving activities associated with development of the former golf course (which may have impacted previously extant precontact and historic-period archaeological resources). The depth of these landscape modifications in the Project area is not known. Beneath the zone of disturbance, however, intact buried archaeological resources may remain.

The proposed Project would include excavation to a depth of up to 10 feet below the ground surface. Therefore, ground-disturbing activities could have a substantial adverse change on unrecorded buried archeological deposits that qualify as historical resources, as defined in *CEQA Guidelines* §15064.5, and could materially impair precontact archeological deposits. Implementation of Mitigation Measures CUL-1a through CUL-1c would reduce potential impacts to historical resources to less than significant.

Mitigation Measure CUL-1a

Preparation of a Cultural Resources Management Plan. Prior to ground disturbance, the City of Stockton (City) shall retain an archaeologist that meets the Secretary of the Interior's (SOI) Professional Qualifications Standards in archaeology *or* is certified by the Register of Professional Archaeologists (RPA) to prepare (or direct the preparation of) a Cultural Resources Management Plan (CRMP) in consultation with the Confederated Villages of Lisjan Nation (CVLN), Northern Valley Yokuts Tribe and the Muwekma Tribe (Tribes). The CRMP shall include (but not be limited to) the following components:

- As survey of the entire Project area would be unproductive (due to thick, ubiquitous xeric vegetation), a controlled clear-and-grub program shall be developed for the Project in coordination with consulting tribes and the City.

- A qualified professional archaeologist (either SOI- or RPA-certified as indicated above) or an archaeologist supervised by such an archaeologist shall monitor all ground-disturbing activities prior to finish grade associated with Project implementation. Archaeological monitoring shall occur during these excavation activities until the Project Archaeologist, based on their observations, is satisfied that there is little or no potential remaining to encounter in situ archaeological resources. The Project Archaeologist may also determine that it is appropriate to reduce monitoring to a part-time or spot-check basis.

- Communication protocols for notification in the event of the identification of cultural resources shall be defined, as well as

methods for treatment of such resources (e.g., avoidance, documentation, collection, identification).

- Methods of protection for cultural resources, including items such as protective fencing, securing temporary on-site storage. and protocol for notifying local authorities (i.e., law enforcement) shall be prescribed in the event looting or other resource damage occurs.

The CRMP shall also include a stipulation that, during the course of the monitoring, the frequency of archaeological and Native American monitoring may be reduced based on the conditions and only if the consulting tribes and the qualified archaeologist agree.

Mitigation Measure CUL-1b **Cultural Resources and Tribal Cultural Resources Sensitivity Worker Environmental Awareness Program [WEAP] Training.** Prior to commencement of any ground-disturbing activity, all personnel involved in Project-related ground-disturbing activities (e.g., on-site construction managers, equipment operators and other crew) shall be required to participate in a workers' environmental awareness program (WEAP) training prior to any such activities (including clear & grub and building foundation removal). The training shall include relevant information regarding cultural resources including applicable regulations and consequences of violating State laws and regulations and will also describe communication and procedural protocols (including avoidance) in the event cultural resources are encountered. The training shall be presented by a professional archaeologist (RPA or RA) and will emphasize the requirement for confidentiality and culturally appropriate treatment of all archaeological discoveries.

Mitigation Measure CUL-1c **Unanticipated Discovery.** In the event that any precontact or historic subsurface cultural resources are discovered during ground-disturbing activities, all work within 50 feet of the resources shall be halted and the City shall consult with a qualified archaeologist to assess the significance of the find.

If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified professional archaeologist would meet to determine the appropriate avoidance measures or other appropriate measures, with the ultimate determination to be made by the City. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by the qualified professional according to current professional standards.

In considering any suggested measure proposed by the qualified professional, the City shall determine whether avoidance is necessary or feasible in light of factors such as the uniqueness of the find, Project design, costs, and other considerations.

If avoidance is unnecessary or infeasible, other appropriate measures (e.g., extended documentation and/or data recovery) may be required in the event of a significant find. Work may proceed on other parts of the Project site while a treatment plan for cultural resources is developed and carried out.

If significant materials are recovered, the qualified professional shall include the findings in the monitoring report for submittal to the Central California Information Center.

With implementation of Mitigation Measures CUL-1a through CUL-1c, which require preparation and implementation of a CRMP, WEAP training, monitoring, and work stoppage in the event of an archaeological discovery, potential impacts to archaeological historical resources would be reduced to a less than significant level. This impact is less than significant.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? ***(Less Than Significant with Mitigation Incorporated)***

According to the *CEQA Guidelines*, "When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource" (*CEQA Guidelines* §15064.5(c)(1)). Those archaeological sites that do not qualify as historical resources shall be assessed to determine if they qualify as "unique archaeological resources" (PRC §21083.2).

Archaeological deposits identified during Project construction (if any) shall be treated by the City in consultation with a qualified archaeologist, in accordance with Mitigation Measure CUL-1a through CUL-1c. With implementation of Mitigation Measures CUL-1a through CUL-1c, identified above, impacts to archaeological resources would be reduced to less than significant. Therefore, this impact would be less than significant.

c. Would the project disturb any humans remains, including those interred outside of formal cemeteries? ***(Less Than Significant Impact)***

No human remains have been previously documented at the Project site; however, due to the ambiguity regarding the location and potential remaining aspects of Site 39-000218, there is some limited potential for human remains to be present within the Project area. The proposed Project would require excavation to a depth of up to 10 feet below the ground surface. Ground-disturbing activities could disturb, and in turn have a substantial adverse change on, unrecorded human remains. If human remains are encountered at the Project site, State Health and Safety Code §7050.5 and *State CEQA Guidelines* §15064.5(e)(1) state that no further disturbance shall occur to the area of the find until the County Coroner has made a determination of origin and disposition of the human bone pursuant to PRC Section 5097.98. The County Coroner must be notified of the find

immediately and shall make a determination within 2 working days of being notified. If the remains are determined to be Native American, the County Coroner shall notify the NAHC by phone within 24 hours, and the NAHC shall then immediately determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment of the remains within 48 hours of being granted access to the site. MLD recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.

Compliance with the California Health and Safety Code §7050.5 and PRC §5097.98 regarding the treatment of human remains would ensure that potential impacts to human remains would be less than significant.

4.6 ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation? ***(Less Than Significant Impact)***

The proposed Project would result in a small increase in demand for electricity and gasoline. The discussion and analysis provided below is based on data included in the CalEEMod output, which are included in Appendix A.

Construction-Period Energy Use. The proposed Project would require grading, site preparation, and building activities during construction. Construction of the proposed Project would require energy for the manufacture and transport of construction materials, preparation of the site for grading activities, and construction of the proposed residential development. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. In order to increase energy efficiency on the site during Project construction, the idling times for construction vehicles would be restricted to 5 minutes or less and construction workers would be required to shut off idle equipment, as required by the SJVAPCD. In addition, construction activities are not anticipated to result in inefficient use of energy, as gasoline and diesel fuel would be supplied by construction contractors that would conserve the use of their supplies to minimize their costs on the Project. Energy usage on the Project site during construction would be temporary in nature, and no unusual Project characteristics would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or the State. Therefore, construction energy impacts would be less than significant.

Operational Energy Use. Operational energy usage is typically associated with natural gas use, electricity consumption, and fuel used for vehicle trips. The proposed Project would consume electricity associated with lighting, which would be minimal. Additionally, the proposed Project would be all-electric and would not require natural gas. As such, electricity demand associated with the proposed Project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

Additionally, PG&E is the private utility that would supply the proposed Project's electricity. In 2022, approximately 40 percent of PG&E's delivered electricity came from renewable sources, including

solar, wind, geothermal, small hydroelectric, and various forms of bioenergy.[45] PG&E reached California's 2020 renewable energy goal in 2017 and is positioned to meet the State's 60 percent by 2030 renewable energy mandate set forth in Senate Bill (SB) 100. In addition, PG&E plans to continue to provide reliable service to its customers and upgrade its distribution systems as necessary to meet future demand.

The primary source of energy usage associated with the proposed Project would be from gasoline and diesel to fuel Project-related vehicle trips. Based on the CalEEMod analysis, the proposed Project would result in approximately 1,525,543 vehicle miles traveled (VMT) per year. The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles [SUVs]) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.8 mpg in 2022.[46] The average fuel economy for heavy-duty trucks in the United States has also steadily increased, from 5.7 mpg in 2013 to a projected 8.0 mpg in 2021.[47] Therefore, using the USEPA fuel economy estimates, the proposed Project would result in the consumption of approximately 53,105 gallons of gasoline per year and 38,679 gallons of diesel fuel per year.

Based on fuel consumption obtained from CARB's EMission FACtor model (EMFAC2021), approximately 272.6 million gallons of gasoline and approximately 97.7 million gallons of diesel fuel will be consumed from vehicle trips in San Joaquin County in 2025. Therefore, gasoline and diesel fuel demand generated by vehicle trips associated with the proposed Project would be a minimal fraction of gasoline and diesel fuel consumption in San Joaquin County. Fuel consumption associated with vehicle trips generated by Project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

Furthermore, the Project site was previously developed as the Van Buskirk Municipal Golf Course. The Project site is located within walking or bicycling distance from surrounding residential and commercial uses. The proposed Project would be open daily to informal use, including picnicking, walking, jogging, bicycling, and unprogrammed sports play. The Project would operate similarly to a neighborhood park where residents would come for the playground, picnicking, pick-up basketball games, and other passive recreation. Therefore, the Project would support the ability of visitors to use alternative modes of transportation, including walking, jogging, and bicycling to the Project site. As such, fuel consumption associated with Project vehicle trips would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region, and this impact would be less than significant.

Therefore, the proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy or energy efficiency

[45] Pacific Gas & Electric (PG&E). 2023. *Exploring Clean Energy Solutions*. Website: https://www.pge.com/en/about/corporate-responsibility-and-sustainability/taking-responsibility/clean-energy-solutions.html (accessed April 2025).

[46] United States Department of Transportation (USDOT). 2023. "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." Website: https://www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles (accessed April 2025).

[47] California Energy Commission (CEC). 2015. Medium and Heavy-Duty Truck Prices and Fuel Economy 2013–2026. Website: efiling.energy.ca.gov/getdocument.aspx?tn=206180 (accessed April 2025).

measures into building design, equipment use, and transportation. Construction and operation period impacts related to consumption of energy resources would be less than significant.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? ***(Less Than Significant Impact)***

In 2002, the State Legislature passed SB 1389, which required the California Energy Commission (CEC) to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and their infrastructure needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

The most recently adopted CEC energy report is the *2024 Integrated Energy Policy Report Update*.[48] The *2024 Integrated Energy Policy Report Update* provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The *2024 Integrated Energy Policy Report Update* covers a broad range of topics, including implementation of SB 350 (Clean Energy and Pollution Reduction Act of 2015), integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency barriers faced by disadvantaged communities, demand response, transmission and landscape-scale planning, the California Energy Demand Preliminary Forecast, the preliminary transportation energy demand forecast, renewable gas (in response to SB 1383), updates on Southern California electricity reliability, the natural gas outlook, and climate adaptation and resiliency.

As indicated above, energy usage on the Project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed Project would be relatively small in comparison to the State's available energy sources, and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the Project's total impact to regional energy supplies would be minor, the proposed Project would not conflict with California's energy conservation plans as described in the CEC *2024 Integrated Energy Policy Report Update*. Therefore, the proposed Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and this impact would be less than significant.

[48] CEC. 2024. *2024 Integrated Energy Policy Report Update.* Docket Number: 24-IEPR-01.

4.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

a. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

*i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. **(No Impact)***

The State of California enacted the Alquist-Priolo Earthquake Fault Zoning Act in 1972, requiring the State Geologist to delineate Earthquake Fault Zones (EFZs) along known active faults that have high potential for fault rupture. Active faults are defined as faults that have surface displacement within the last 11,000 years.[49] State regulations prohibit habitable structures from being sited within 50 feet of an active fault. The Project site is not located within or adjacent to an Alquist-Priolo EFZ. [50]

[49] DOC. 2019. Alquist-Priolo Earthquake Fault Zones. Website: www.conservation.ca.gov/cgs/alquist-priolo (accessed April 2025).

[50] California Geological Survey (CGS). 2019. California Earthquake Hazards Zone Application. Website: maps.conservation.ca.gov/cgs/EQZApp/app/ (accessed April 2025).

Therefore, the proposed Project would not directly or indirectly cause substantial adverse effects related to fault rupture. No impact would occur.

ii. Strong seismic ground shaking? ***(Less Than Significant)***

Ground shaking is a general term referring to all aspects of motion of the Earth's surface resulting from an earthquake and is normally the major cause of damage in seismic events. The extent of ground shaking is controlled by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. The magnitude of a seismic event is a measure of the energy released by an earthquake; it is assessed by seismographs that measure the amplitude of seismic waves. The intensity of an earthquake is a subjective measure of the perceptible effects of a seismic event at a given point. The Modified Mercalli Intensity (MMI) scale is the most commonly used scale to measure the subjective effects of earthquake intensity. It uses values ranging from I to XII.[51]

The closest significant earthquake fault to Stockton is the Greenville Fault, which is located roughly 22 miles west-southwest. The maximum forecasted earthquake on this fault is magnitude 6.0.[52] The Project site could experience significant ground shaking during a major earthquake in the San Francisco Bay area to the west. However, such seismic ground shaking would almost certainly be less intense than in the Bay Area, due to the site's distance from the Greenville Fault.

The most significant adverse impact associated with strong seismic shaking is potential damage to structures and improvements. No habitable structures would be constructed as part of the proposed Project; however, implementation of the proposed Project would increase the use of the Project site and result in the construction of improvements in areas subject to seismic shaking. The risk of ground-shaking impacts is reduced through adherence to the design and materials standards set forth in building codes. The City of Stockton has adopted the 2022 California Building Code (CBC) (Title 24, Part 2 of the CCR), which provides for stringent construction requirements on projects in areas of high seismic risk.[53] The design and construction of the proposed Project would be required to conform with, or exceed, current best standards for earthquake-resistant construction in accordance with the most recent CBC adopted by the City and with the generally accepted standards of geotechnical practice for seismic design in Northern California.

Adherence to the 2022 CBC, or CBC in effect at the time that the Project is constructed, requires a site-specific geotechnical investigation to be performed for the proposed Project to evaluate soil stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on soil-bearing capacity, compressibility, liquefaction, and expansiveness. It also requires that a

[51] United States Geological Survey. 2018. The Modified Mercalli Intensity Scale. Website: www.usgs.gov/natural-hazards/earthquake-hazards/science/modified-mercalli-intensity-scale?qt-science_center_objects=0#qt-science_center_objects (accessed April 2025).

[52] Placeworks. 2018. *Envision Stockton 2040 General Plan Update and Utility Master Plan Supplements Draft EIR.* June. Website: https://cms3.revize.com/revize/stockton/Documents/Business/Planning%20&%20Engineering/General%20Plan/EnvisionStockton2040GP_Draft.pdf (accessed April 2025).

[53] City of Stockton Municipal Code. 2022. Chapter 15 Building Code. Website: https://ecode360.com/43711444 (accessed April 2025).

geotechnical report be prepared to provide recommendations on foundation type and design criteria. With conformance with the CBC seismic design standards and completion of the required site-specific geotechnical investigation, potential impacts associated with strong seismic ground shaking would be reduced to a less than significant level.

iii. Seismic-related ground failure, including liquefaction? ***(Less Than Significant)***

Liquefaction is the transformation of loose, fine-grained sediment to a fluid-like state similar to quicksand. This phenomenon occurs due to strong seismic activity and lessens the soil's ability to support a structural foundation. The primary factors affecting the possibility of liquefaction in soil are: (1) intensity and duration of earthquake shaking; (2) soil type and relative density; (3) overburden pressures; and (4) depth to groundwater. Soil most susceptible to liquefaction is clean, loose, fine-grained sands and nonplastic silts that are saturated.

The California Geological Survey (CGS) has mapped Seismic Hazard Zones that delineate areas susceptible to liquefaction and/or landslides that require proposed new developments in these areas to conduct additional investigation to determine the extent and magnitude of potential ground failure. The Project site is located in an area for which earthquake-induced landslide and liquefaction hazards have not yet been evaluated by CGS.[54] The Project site is underlain by overbank deposits (sand, silt, and clay), alluvial deposits (undifferentiated sand, silt and gravel), and marsh deposits (silt and clay), which could be susceptible to liquefaction. However, the design and construction of the proposed Project would be required to conform with, or exceed, current best standards for earthquake-resistant construction in accordance with the most recent CBC adopted by the City and with the generally accepted standards of geotechnical practice for seismic design in Northern California. With conformance with the CBC seismic design standards and completion of the required site-specific geotechnical investigation, potential impacts associated with liquefaction would be reduced to a less than significant level.

iv. Landslides? ***(No Impact)***

A landslide generally occurs on relatively steep slopes and/or on slopes underlain by weak materials. Topographically, the site is relatively flat, with elevations of approximately 50 feet amsl. No habitable structures would be constructed as part of the proposed Project, nor would construction of the proposed Project increase the potential for landslide hazards, as no slopes are present in proximity to the Project site. Therefore, the proposed Project would not expose people or structures to potential substantial adverse effects from landslides. No impact would occur.

[54] CGS. 2019. California Earthquake Hazards Zone Application. Website: maps.conservation.ca.gov/cgs/EQZApp/app/ (accessed April 2025).

b. Would the project result in substantial soil erosion or the loss of topsoil? ***(Less Than Significant Impact)***

Topsoil is defined as the upper part of the soil profile that is relatively rich in humus and is technically known as the A-horizon of the soil profile.[55] The potential for soil erosion exists during the period of earthwork activities and between the time when earthwork is completed and new vegetation is established, or hardscape is installed. Exposed soils could be entrained in stormwater runoff and transported off the Project site. As part of construction activities, over 40 acres soil would be disturbed during site grading. Because the proposed Project would involve over 1 acre of land disturbance, it would be required to comply with the Construction General Permit,[56] which requires preparation and implementation of a Stormwater Pollution and Prevention Plan (SWPPP) prior to any ground-disturbing activities. Although designed primarily to protect stormwater quality, the SWPPP would provide the details of the erosion control measures to be applied on the Project site during the construction period, including BMPs for erosion control that are recognized by the Regional Water Quality Control Board (RWQCB). Additional details regarding the SWPPP are provided in Section 4.10, Hydrology and Water Quality. Compliance with the requirements of the Construction General Permit would ensure that the proposed Project would result in less than significant impacts related to soil erosion or the loss of topsoil.

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? ***(Less Than Significant Impact)***

As discussed in Section 4.7.a, the site would not likely be subject to substantial adverse effects as a result of landslides or liquefaction. The proposed Project would be designed and constructed in accordance with standard engineering practices and the CBC. The Project site is not anticipated to become unstable as a result of the proposed Project or to potentially result in on- or off-site landslides, liquefaction, or lateral spreading. Further, preparation of a site-specific geotechnical evaluation as required by the CBC and implementation of proposed geotechnical recommendations would ensure that the proposed Project would not result in a geologic hazard from landslide, lateral spreading, subsidence, liquefaction, or collapse. This impact would be less than significant.

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? ***(Less Than Significant Impact)***

Expansive soils are characterized by the potential for shrinking and swelling as the moisture content of the soil decreases and increases, respectively. Shrink-swell potential is influenced by the amount and type of clay minerals present and can be measured by the percentage of change in the soil

[55] California State Mining and Geology Board. 2014. Surface Mining Reclamation Act Regulations. California Code of Regulations, Title 14, Division 2, Chapter 8, Subchapter 1.

[56] State Water Resources Control Board (SWRCB). 2009. Division of Water Quality. *Construction General Permit Fact Sheet*. 2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ. Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo_2009_0009_factsheet.pdf (accessed April 2025).

volume. Based on soil testing conducted as part of the site-specific geotechnical report, soils at the Project site have moderate to high expansion potential when subjected to changes in moisture content. Soils underlying the Project site are composed of Guard clay loam (0 to 2 percent slopes), Jacktone-Urban land complex (0 to 2 percent slopes) and Rioblancho-Urban land complex, drained (0 to 2 percent slope) according to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey.[57] These soils have a moderate to high shrink-swell potential.[58] As described above, the proposed Project would be required to comply with the 2022 CBC and the geotechnical recommendations identified in the site-specific geotechnical investigation. Compliance with geotechnical recommendations and the 2022 CBC during design and construction would ensure that the potential impacts associated with expansive soils would be less than significant.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? ***(No Impact)***

The proposed Project would connect to the City's wastewater conveyance system. On-site treatment and disposal of wastewater is not proposed for the Project; therefore, the proposed Project would have no impacts associated with soils incapable of supporting alternative wastewater disposal systems.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? ***(Less Than Significant with Mitigation Incorporated)***

No paleontological resources or unique geologic features are known to exist within the Project site, and ground disturbance for the proposed Project is not expected to extend below a depth of 10 feet. Therefore, construction activities for the proposed Project are not expected to extend deep enough to impact scientifically important paleontological resources. Implementation of Mitigation Measure GEO-1, described below, would mitigate direct or indirect impacts to unique paleontological resources or unique geologic features in the event such resources are encountered during ground disturbance. With implementation of Mitigation Measure GEO-1, impacts to paleontological resources would be less than significant.

Mitigation Measure GEO-1 **Paleontological Resources Discovery.** If paleontological resources are encountered during the course of ground disturbance, work in the immediate area of the find shall be redirected and a paleontologist contacted to assess the find for scientific significance. If determined to be significant, the fossil shall be collected from the field. The paleontologist may also make recommendations regarding

[57] United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2025. Web Soil Survey. Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (accessed April 2025).

[58] USDA NRCS. 1992. *Soil Survey of San Joaquin County, California.* Website: https://dn720006.ca.archive.org/0/items/usda-general-soil-map-soil-survey-of-san-joaquin-county-california/usda-general-soil-map-soil-survey-of-san-joaquin-county-california.pdf (accessed April 2025).

additional mitigation measures, such as paleontological monitoring. Scientifically significant resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a museum repository. If scientifically significant paleontological resources are collected, a report of findings shall be prepared to document the collection.

4.8 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☒	☐	☐

*a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? **(Less Than Significant Impact)***

Greenhouse gas (GHG) emissions are present in the atmosphere naturally and are released by natural sources or formed from secondary reactions taking place in the atmosphere. However, over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global climate change. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons
- Perfluorocarbons
- Sulfur hexafluoride

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and the length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse GHG emission impact if the project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reduction the emissions of GHGs.

Section 15064.4 of the *State CEQA Guidelines* states that: "A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." In performing that analysis, the lead agency has discretion to determine whether to use a model or methodology to quantify GHG emissions, or to rely on a qualitative analysis or performance-based standards. In making a determination as to the significance of potential impacts, the lead agency then considers the extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting, whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project, and the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Neither the City of Stockton nor the SJVAPCD has developed or adopted numeric GHG significance thresholds. Therefore, this analysis evaluates the GHG emissions based on the Project's design elements consistent with the Bay Area Air District's (Air District) GHG thresholds. The Air District adopted the *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans* (Justification Report),[59] which identifies GHG significance thresholds that would be applicable to the proposed Project. These thresholds evaluate a project based on its effect on achieving California's long-term climate goal of carbon neutrality by 2045. Based on this research, the Air District has determined that new land use development projects must incorporate specified design elements to contribute the "fair share" toward implementation of the goal of carbon neutrality by 2045. If a project is designed and built to incorporate the identified design elements related to natural gas, energy, VMT, and electric vehicles, then it would contribute its portion of what is necessary to achieve California's long-term climate goals—its "fair share"—and an agency reviewing the project under CEQA can conclude that the project would not make a cumulatively considerable contribution to global climate change. The document concludes that if a project does not incorporate these design elements, then it should be found to result in a significant climate impact because it would hinder California's efforts to address climate change.

The Justification Report provides substantial evidence supporting the use of these thresholds for projects throughout California because the thresholds are applicable to meeting the State's established GHG reduction goals. In the absence of any City or SJVAPCD specific guidelines or thresholds, this analysis evaluates the proposed Project for consistency with the identified project design elements as the applicable thresholds of significance to establish whether the proposed

[59] Bay Area Air District. 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans*. April.

Project is achieving its “fair share” of emission reductions to support long-term State goals for GHG emissions and carbon neutrality.

According to the Justification Report, a project would have a less than significant impact related to GHG emissions if it would include the following project design elements:

1. Buildings

    a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).

    b. The project will not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.

2. Transportation

    a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor’s Office of Planning and Research's *Technical Advisory on Evaluating Transportation Impacts in CEQA*:

        1. Residential projects: 15 percent below the existing VMT per capita
        2. Office projects: 15 percent below the existing VMT per employee
        3. Retail projects: no net increase in existing VMT

    b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

    c. Or be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

These project design elements are utilized in the following analysis as the thresholds of significance to evaluate the project’s potential GHG emissions impact.

Per the significance thresholds described above, a less than significant GHG impact would occur if the Project were consistent with the identified design standards, as evaluated below.

Construction Emissions. Construction activities associated with the proposed Project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The SJVAPCD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using CalEEMod, it is estimated that the annual emissions associated with construction of the proposed Project would be approximately 485.9 metric tons (MT) of CO_2e per year. Construction GHG emissions were amortized over the life of the Project (assumed to be 30 years) and added to the operational emissions. When annualized over the life of the Project, amortized construction emissions would be approximately 16.2 MT CO_2e per year.

Operational GHG Emissions. Long-term GHG emissions are typically generated from mobile sources (e.g., vehicle trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (landfilling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include Project-generated vehicle trips to and from the Project. Area-source emissions would be associated with activities such as landscaping and maintenance on the Project site. Energy-source emissions would be generated at off-site utility providers as a result of increased electricity demand generated by the Project. Waste-source emissions generated by the proposed Project include energy generated by landfilling and other methods of disposal related to transporting and managing Project generated waste. In addition, water-source emissions associated with the proposed Project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

For informational purposes, GHG emissions for operation of the Project were calculated using CalEEMod. Based on the analysis results, summarized in Table 4.F, the proposed Project would result in emissions of approximately 591.8 MT CO_2e per year. These estimated emissions are provided for informational purposes, and the significance of the proposed Project is further analyzed below.

Table 4.F: Project Greenhouse Gas Emissions

Emission Type	Operational Emissions (Metric Tons per Year)			
	CO_2	**CH_4**	**N_2O**	**CO_2e**
Mobile Sources	560.6	<0.1	<0.1	570.6
Area Sources	0.0	0.0	0.0	0.0
Energy Sources	0.0	0.0	0.0	0.0
Water Sources	<0.2	<0.1	<0.1	<0.1
Waste Sources	1.4	0.1	0.0	5.0
Amortized Construction Emissions				16.2
Total Operational Emissions				**591.8**

Source: Compiled by LSA (May 2025).
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
N_2O = nitrous oxide

As discussed above, in the absence of any City or SJVAPCD specific guidelines or thresholds, this analysis evaluates the proposed Project for consistency with project design elements as the applicable thresholds of significance. If a project is designed and built to incorporate design elements related to natural gas, energy, VMT, and electric vehicles, then it would contribute its portion of what is necessary to achieve California's long-term climate goals—its "fair share"—and an

agency reviewing the project under CEQA can conclude that the project would not make a cumulatively considerable contribution to global climate change.

Natural Gas Usage. A less than significant GHG impact would occur if the project does not include natural gas appliances or natural gas plumbing. The proposed Project would be all-electric and would not include natural gas. Therefore, the proposed Project would be consistent with this design element.

Energy Usage. The project must not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under Section 21100(b)(3) and Section 15126.2(b) of the *State CEQA Guidelines*.

As discussed in Section 4.6, Energy, operational energy usage is typically associated with natural gas use, electricity consumption, and fuel used for vehicle trips. The proposed Project would generate electricity associated with lighting, which would be minimal. Additionally, the proposed Project would be all-electric and would not require natural gas. As such, electricity demand associated with the proposed Project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

The primary source of energy usage associated with the proposed Project would be from gasoline and diesel to fuel Project-related trips. As discussed in Section 4.6, Energy, the proposed Project would result in the consumption of approximately 53,105 gallons of gasoline per year and 38,679 gallons of diesel fuel per year. Based on fuel consumption obtained EMFAC2021, approximately 272.6 million gallons of gasoline and approximately 97.7 million gallons of diesel fuel will be consumed from vehicle trips in San Joaquin County in 2025. Therefore, gasoline and diesel fuel demand generated by vehicle trips associated with the proposed Project would be a minimal fraction of gasoline and diesel fuel consumption in San Joaquin County. Fuel consumption associated with vehicle trips generated by Project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

Furthermore, the Project site was previously developed as the Van Buskirk Municipal Golf Course. The Project site is located within walking or bicycling distance from surrounding residential and commercial uses. The proposed Project would be open daily to informal use, including picnicking, walking, jogging, bicycling, and unprogrammed sports play. The Project would operate similarly to a neighborhood park where residents would come for the playground, picnicking, informal basketball games, and other passive recreation. Therefore, the Project would support the ability of visitors to use alternative modes of transportation, including walking, jogging, and bicycling to the Project site. As such, fuel consumption associated with Project vehicle trips would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

As such, based on this analysis, as required under Section 21100(b)(3) and Section 15126.2(b) of the *State CEQA Guidelines*, the proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy and energy efficiency measures into the building design, equipment use, and transportation. As such, the proposed Project would be consistent with this design element.

Vehicle Miles Traveled. As discussed above, development that meets a locally adopted SB 743 VMT target would be considered to have a less than significant GHG emissions impact from transportation sources. As described in Section 4.17, Transportation, the *City of Stockton Transportation Impact Analysis Guidelines* (May 2023) establishes land use project screening. Locally serving public facilities (e.g., parks) that contribute to and support community needs are presumed to have a less than significant impact on VMT and do not require a VMT analysis. Additionally, the Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* describes how locally serving projects can redistribute trips and reduce regional VMT by facilitating residents to choose a closer option and shorten trip length. Many of the visitors to the proposed Project are likely to reside in the adjacent neighborhood and could make walking or biking trips to the proposed Project. Other visitors may consider the proposed Project a better option than similar amenities located farther from their residence. As such, the proposed Project would be a locally serving park facility presenting an intervening option allowing visitors to shorten vehicle trips. Therefore, VMT impacts can be assumed to be less than significant. Therefore, the proposed Project would be consistent with this design element.

Electric Vehicle Requirements. This criterion requires that the project achieve compliance with off-street electric vehicle requirements in the most recently adopted version of the CALGreen Tier 2 measures. As described in Section 2.3.1.2, the proposed Project would provide electric vehicle charging capabilities consistent with current CALGreen Tier 2 measures. Therefore, the proposed Project would be consistent with the project design elements that would achieve California's long-term climate goals. As such, the proposed Project would not generate significant GHG emissions that would have a significant effect on the environment, and this impact would be less than significant.

b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? ***(Less Than Significant Impact)***

The SJVAPCD has adopted a Climate Change Action Plan (CCAP), which includes suggested best performance standards (BPS) for proposed development projects. However, the SJVAPCD's CCAP was adopted in 2009 and was prepared based on the State's 2020 GHG targets, which are now superseded by State policies (i.e., the 2019 CALGreen) and the 2030 GHG targets established in SB 32.

The following discussion evaluates the proposed Project according to the goals of Executive Order (EO) B-30-15, SB 32, AB 197, AB 1279, and the 2022 Scoping Plan.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. CARB released the 2017 Scoping Plan to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 keeps the State on the path toward achieving the 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data collected by CARB was posted in December 2016. AB 1279 codifies the State goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter.

In addition, the 2022 Scoping Plan assesses progress toward the statutory 2030 target while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The Air District's Justification Report established guidance on how individual projects would be consistent with California's long-term climate goals and provides substantial evidence in supporting the use of its thresholds for projects throughout California because the thresholds are designed to meet the State's established GHG reduction goals, including the 2022 Scoping Plan goals. If a project is designed and built to incorporate these design elements related to VMT, natural gas, energy, and electric vehicles, then it would contribute its portion of what is necessary to achieve California's long-term climate goals and an agency reviewing the project under CEQA can conclude that the project would be consistent with the State's 2022 Scoping Plan. As discussed above, the proposed Project would be consistent with the Air District's project design elements and would a have a less than significant GHG emissions impact. As analyzed against the thresholds of significance, the proposed Project would be contributing its "fair share" of emissions reductions to support long-term State goals of GHG emission reductions and carbon neutrality and would therefore be found to be consistent with regional and State goals and applicable plans for GHG emissions reductions.

As such, the proposed Project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in EO B 30 15, SB 32, AB 197, and AB 1279 and would be consistent with applicable plans and programs designed to reduce GHG emissions. Therefore, the proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant.

4.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The proposed Project involves the construction of a park. Normal operations would not introduce potentially hazardous materials. Some of the planting and turf areas would require typical maintenance such as fertilizer and irrigation. California law requires all facilities that use or store more than certain quantities of hazardous materials on site to file hazardous materials business plans that list and map the location of on-site hazardous materials storage and use and that describe procedures in the event of an accident. The City would be required to comply with existing governmental regulations in the use and disposal of these materials,[60] and such materials would not be used in sufficient strength or quantity to create a substantial risk to human or environmental health. Compliance with existing regulations would ensure that the proposed Project would not create a significant hazard to the public or the environment associated with the routine transport,

[60] The United States Environmental Protection Agency regulates "small-quantity generators" (SQGs) of hazardous wastes, which are defined as facilities that generate more than 100 kilograms (kg) (approximately 220 pounds [lbs]), but less than 1,000 kg (2,200 lbs), of hazardous waste per month.

use, or disposal of hazardous materials by ensuring these materials are properly handled during operation of the proposed Project. This impact would be less than significant.

During construction of proposed park improvements, hazardous materials (e.g., fuel, oils, and paints) would be routinely transported, stored, and used at the Project site. These materials are typical of materials delivered to construction sites. Transport and use of hazardous materials would be subject to all applicable State and federal laws, such as the Hazardous Materials Transportation Act, the Resource Conservation and Recovery Act, the California Hazardous Materials Management Act, the California Health and Safety Code, and CCR Title 8 and Title 22.

Because the proposed Project would result in soil disturbance greater than 1 acre, management of hazardous materials during construction activities would be subject to the requirements of the Stormwater Construction General Permit (described in detail under Section 4.10, Hydrology and Water Quality), which requires preparation and implementation of a SWPPP that includes hazardous materials storage requirements. For example, construction site operators must store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed). Compliance with existing regulations would ensure that the proposed Project would not create a significant hazard to the public or the environment associated with the routine transport, use, or disposal of hazardous materials by ensuring these materials are properly handled during construction of the proposed Project. This impact would be less than significant.

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? ***(Less Than Significant Impact)***

There are two main ways that the public and/or the environment could be affected by the release of hazardous materials from the Project site, including: (1) exposing workers and/or the public to potentially contaminated soil and groundwater during construction and/or operation of the Project; or (2) exposing workers and/or the public to hazardous building materials (e.g., lead paint, asbestos) during demolition of existing structures.

As described above, small quantities of common hazardous materials would be used at the Project site during construction and operation of the proposed Project. Improper use, storage, or handling could result in a release of hazardous materials into the environment, which could pose a risk to construction workers and the public. However, the City would be required to comply with existing government regulations in the use and disposal of these materials, and such materials would not be used in sufficient strength or quantity to create a substantial risk to human or environmental health.

The Project site is surrounded by residential uses to the north and wetland areas to the south and west with the existing Van Buskirk Community Center on the eastern border. As described further below in Section 4.9.d, there are no known hazardous materials sites located in proximity to the Project site that would represent a significant risk to public health or safety (e.g., on-site storage, leaking tanks, or an approaching groundwater contamination plume). Therefore, it is unlikely that the soil and groundwater are contaminated with significant toxic or hazardous materials that would be released during construction. Additionally, compliance with the regulations described previously

in Section 4.9.a would ensure that the proposed Project would not create a significant hazard to the public or the environment through accident conditions involving the release of hazardous materials into the environment during the transport, use, or disposal of hazardous materials by ensuring that these materials are properly handled during construction of the proposed Project. Therefore, this impact would be less than significant.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? ***(Less Than Significant Impact)***

There are two existing schools within 0.25 mile of the Project site: KIPP Stockton Elementary and Middle School, located at 742 Dallas Avenue approximately 0.18 mile north, and Taylor Leadership Academy/Taylor Skills School, located at 1101 Lever Boulevard approximately 0.33 mile north of the Project site. A new school, KIPP High School, is opening soon just north of the Project site on Houston Avenue. The next closest school to the Project site is Apostolic Tabernacle Church/Christian Academy, located at 2222 Lever Boulevard approximately 0.4 mile north of the Project site. The proposed Project would not include any land uses that would generate hazardous emissions or handle significant quantities of hazardous or acutely hazardous materials beyond existing conditions. In addition, the City would be required to comply with all applicable local, State, and federal regulations and standards related to hazardous emissions and materials. Compliance with regulatory requirements would ensure that impacts associated with the emission or handling of hazardous materials within 0.25 mile of an existing or proposed school would be less than significant.

d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? ***(Less Than Significant Impact)***

Government Code Section 65962.5 requires CalEPA to develop, at least annually, an updated list of hazardous materials release sites known as the Cortese List. The Project site is listed in the SWRCB GeoTracker database[61] as "Van Buskirk Golf Course" due to a leaking underground storage tank (LUST) associated with the former maintenance shop at the golf course. The Project site is therefore included on lists of hazardous materials release sites compiled pursuant to Government Code Section 65962.5.

The Van Buskirk Golf Course was listed for diesel contamination with potential to impact an aquifer used for drinking water supply. Site investigation and corrective action for the underground storage tanks were completed. Therefore, the cleanup status is completed with the case closed as of April 13, 2004, indicating that regulatory requirements for response actions, such as site assessment and remediation, have either been completed or were not necessary and therefore potential migration of residual contaminants in groundwater beneath the Project site does not likely pose a risk to human health and the environment.

[61] SWRCB. 2022. Geotracker Database. Website: https://geotracker.waterboards.ca.gov/ (accessed April 2025).

In addition, a total of eight properties with recognized environmental conditions or historical recognized environmental conditions were identified within 1 mile of the Project site, as detailed in Table 4.G, based on a review of the SWRCB GeoTracker database,[62] the Department of Toxic Substances Control's (DTSC) EnviroStor database,[63] and the Hazardous Waste and Substances Sites (Cortese) List.[64]

Table 4.G: Hazardous Materials Database Search

Property	REC[1]	Historical Recognized Environmental Condition	Location Relative to the Project Site	Status of the Property
3rd Elementary School – West Ranch Site at Carolyn Weston Boulevard	-	DTSC approved the PEA. Based on the information presented in the PEA, neither an actual potential release of hazardous material nor the presence of naturally occurring hazardous material indicated the site poses a threat to human health or the environment under any land use. Therefore, DTSC concurred that no further environmental investigation or cleanup was required at this site, and approved the PEA.	Approximately 3,095 feet south of the Project site.	Closed – No further action as of 6/6/2021.
California Tank Lines, Inc., at 3105 El Dorado Street	-	Site screening completed. In 1987, an on-site spill resulted in soil contamination, including copper, nickel and chromium. The RWQCB issued a Cleanup and Abatement Order to remediate the soil. Over 200 tons of soil were removed.	Approximately 5,097 feet east of the Project site.	Refer to RWQCB as of 9/28/1995.
John Taylor Fertilizer at 1819 South Argonaut Street	-	Contamination of other groundwater (uses other than drinking water). Facility identified a food and agriculture list for PCOs.	Approximately 4,886 feet north of the Project site.	Open – Verification monitoring as of 7/3/2024.
Oxychem Stockton at 1904 Charter Way	-	Contamination of other groundwater (uses other than drinking water). Information indicates a release of 1,2,3-TCP, nitrate, other chlorinated hydrocarbons, other insecticides, pesticides, fumigants, herbicides, and other inorganics	Approximately 4,213 feet north of the Project site.	Open – Remediation as of 3/8/2024.

62 SWRCB. 2022. Geotracker Database. Website: https://geotracker.waterboards.ca.gov/ (accessed April 2025).

63 California Department of Toxic Substances Control (DTSC). 2022. EnviroStar Database Website: https://www.envirostor.dtsc.ca.gov/public/ (accessed April 2025).

64 California Environmental Protection Agency (Cal/EPA). 2020. Cortese List Data Resources. Website: calepa.ca.gov/sitecleanup/corteselist/ (accessed April 2025).

Table 4.G: Hazardous Materials Database Search

Property	REC[1]	Historical Recognized Environmental Condition	Location Relative to the Project Site	Status of the Property
New Holland Ford - Stockton at 2150 Charter Way	-	Benzene contamination of aquifer used for drinking water supply.	Approximately 4,410 feet north of the Project site.	Completed – Case closed as of 3/1/1994. A closure letter or other formal closure decision document has been issued for the site.
Barnes Trucking at 1817 Fresno Avenue South	-	Diesel and gasoline contamination of aquifer used for drinking water supply.	Approximately 4,225 feet north of the Project site.	Open – Site assessment as of 9/30/2019.
PureGro/Unocal at 1904 Charter Way West	-	Diesel contamination of aquifer used for drinking water supply.	Approximately 4,720 feet north of the Project site.	Completed – Case closed as of 1/2/1997. A closure letter or other formal closure decision document has been issued for the site.
Vito Trucking at 1789 Charter Way West	-	Gasoline contamination of soil.	Approximately 5,196 feet north of the Project site.	Completed – Case closed as of 1/2/1997. A closure letter or other formal closure decision document has been issued for the site.

Sources: SWRCB (2022); DTSC (2022).
[1] Recognized Environmental Condition
DTSC = California Department of Toxic Substances Control
PCO = pest control operator
PEA = Preliminary Endangerment Assessment
RWQCB = Regional Water Quality Control Board
SWRCB = State Water Resources Control Board
TCP = trichloropropane

None of these properties are on or adjacent to the Project site or have any activities or materials that would represent a significant risk to public health or safety on the Project site due to distance to the Project site and the intervening development. Therefore, the proposed Project would not create a significant hazard to the public or the environment as a result of being located on a list of hazardous materials site compiled pursuant to Government Code Section 65962.5. Impacts would be less than significant.

e. Would the project be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? ***(Less Than Significant Impact)***

There are no airports within 2 miles of the Project site. There is one airport within San Joaquin County, Stockton Metropolitan Airport, which is approximately 2.8 miles southeast of the Project

site. However, the Project site is located within the Airport Influence Area (Zone 8) for the Stockton Municipal Airport.[65] According to the Airport Land Use Compatibility Plan Update for the Stockton Municipal Airport, there are no limits on the nonresidential density intensity within this zone; however, hazards to flight (e.g., tall objects), visual and electronic forms of interference, and land use development that may cause the attraction of birds or other wildlife hazards to increase are prohibited. The proposed Project would not include construction of any tall structures or installation of any other flight hazards. Therefore, the proposed Project would not result in a safety hazard for people residing or working in the Project area. This impact would be less than significant.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ***(Less Than Significant Impact)***

The City of Stockton Fire Department (SFD) coordinates the City's preparedness efforts to mitigate, plan for, respond to and recover from disasters. The Project site is served by Fire Station 1, located at 1818 Fresno Avenue. In addition, the San Joaquin County Office of Emergency Services coordinates countywide emergency response efforts, including the preparation and implementation of the San Joaquin County Emergency Operations Plan (EOP)[66] and the San Joaquin County Local Hazard Mitigation Plan.[67] However, the EOP does not address specific responses, scenarios, hazards, or threats within Stockton. In addition, the EOP does not indicate the emergency evacuation routes within San Joaquin County.

The proposed Project would not alter or block adjacent roadways, and implementation of the proposed Project would not be expected to impair the function of nearby roadways that might be used for evacuation during an emergency. In addition, operation of the proposed Project would not cause permanent alterations to vehicle circulation routes and patterns or impede public access or travel upon public rights-of-way. Prior to approval of final maps and improvement plans for any development project within Stockton, plan review and approval by the SFD is required. Proposed ingress/egress for the park would be required to meet State and local standards regarding turning radius, road width, and emergency vehicle access. Adherence to the emergency access measures required by the City would ensure that impacts related to implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan would be less than significant.

[65] Coffman Associates, Inc. 2016. *Airport Land Use Compatibility Plan Update for Stockton Metropolitan Airport*. May. (Amended February 2018).

[66] San Joaquin County Office of Emergency Services. 2022. *Emergency Operations Plan*. Website: https://www.sjgov.org/docs/default-source/office-of-emergency-services-documents/emergency-plans/2022-sjc-emergency-operations-plan.pdf (accessed April 2025).

[67] County of San Joaquin. 2023. *San Joaquin County Local Hazard Mitigation Plan.* Website: https://www.sjgov.org/docs/default-source/office-of-emergency-services-documents/lhmp/documents/2022-lhmp-10.18.22-version.pdf?sfvrsn=b7a69798_5 (accessed April 2025).

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? ***(Less Than Significant Impact)***

The Project site is not located within or adjacent to an area identified by CAL FIRE as a community at risk for wildland fire.[68] Therefore, the proposed Project would not expose people or structures to a significant loss, injury, or death involving wildland fires. This impact would be considered less than significant.

[68] California Department of Forestry and Fire Protection (CAL FIRE). 2019. Communities at Risk from Wildfire. Website: https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/calfire-website/what-we-do/fire-resource-assessment-program---frap/pdf-maps/communities-at-risk-wildfire-2015.pdf?rev=d7d7e04f0a614ccc8fcbb6d0d13155cf&hash=1C1247791C7C22C80FBA6F6156F69175 (accessed April 2025).

4.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i. Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. Impede or redirect flood flows?	☐	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? ***(Less Than Significant Impact)***

The SWRCB and nine Regional Water Quality Control Boards (RWQCBs) regulate the quality of surface water and groundwater bodies throughout California. In Stockton, the Central Valley RWQCB is responsible for implementation of the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan).[69] The Basin Plan establishes beneficial water uses for waterways and water bodies in the Sacramento and San Joaquin river basins. Section 303(d) of the CWA requires that states identify water bodies, including bays, rivers, streams, creeks, and coastal areas, that do not meet water quality standards and the pollutants that are causing the impairment. Total Maximum Daily Loads (TMDLs) describe the maximum amount of a pollutant that a water body can receive while still meeting established water quality standards. A TMDL implementation plan establishes limits for pollutant discharges into impaired water bodies.

[69] California Regional Water Quality Control Board (RWQCB), Central Valley Region. 1975. *The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region, Fifth Edition, the Sacramento River Basin and the San Joaquin River Basin.* July. Revised February 2019 with Approved Amendments.

The Project site was previously developed as the Van Buskirk Municipal Golf Course and consists of approximately 125 acres of turf and landscaped areas associated with the former golf course, five ponds (totaling 11.25 acres), and approximately 3 acres developed with parking area and walkways associated with the former golf course. The majority of the Project site consists of nonnative annual grassland, and a total of 977 mature trees, consisting of 35 species, were recorded within the Project site's urban forest. The existing topography of the Project site is relatively flat, with elevations of approximately 50 feet amsl. Low-lying wetlands consisting of four of the five ponds are located within the western section of the Project site, while the fifth pond is isolated in the eastern section of the Project site. The Project site is bounded by a levee along Walker Slough, French Camp Slough, and the San Joaquin River, which are located directly adjacent to the western and southern Project site boundaries. The levee (including the area from the water's edge to the levee's inward foot slope) is not included in the Project site. Under existing conditions, stormwater at the Project site infiltrates the Project site, then sheet flows either to one of the five ponds located within the Project site, or to the west or south to discharge into Walker Slough, French Camp Slough, or the San Joaquin River. Walker Slough and French Camp Slough both discharge into the San Joaquin River. The San Joaquin River travels northwest and ultimately discharges to Suisun Bay via the Sacramento–San Joaquin River Delta. The SWRCB Surface Water Quality Assessment 2024 Integrated Report for Clean Water Act Sections 303(d) and 305(b) lists Walker Slough as impaired for indicator bacteria and French Camp Slough as impaired for indicator bacteria, dissolved oxygen, toxicity, and pesticides (chlorpyrifos, bifenthrin, and pyrethroids). The San Joaquin River is listed as impaired for pesticides (group A pesticides, imidacloprid, toxaphene, dichlorodiphenyl-dichloroethylene [DDE], dichlorodiphenyltrichloroethane [DDT], and diuron), mercury, water temperature, and toxicity.[70] TDMLs have been adopted for chlorpyrifos for French Camp Slough and indicator bacteria for Walker Slough.

Runoff water quality is regulated by the National Pollution Discharge Elimination System (NPDES) Program (established through the CWA). The NPDES Program objective is to control and reduce pollutant discharges to surface water bodies. Compliance with NPDES permits is mandated by State and federal statutes and regulations. Locally, the NPDES Program is administered by the Central Valley RWQCB.

Construction activities are subject to the SWRCB's NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, Order No. 2022-0057-DWQ, NPDES No. CAS000002 (Construction General Permit).[71] Any construction activity, including grading, that would result in the disturbance of 1 acre or more would require compliance with SWRCB's Construction General Permit, which requires preparation of a SWPPP and implementation of Construction BMPs during construction activities. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain

[70] SWRCB. 2024. 2024 California Integrated Report (Clean Water Act Section 303(d) List and 305(b) Report). December. Website: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.waterboards.ca.gov%2Fwater_issues%2Fprograms%2Ftmdl%2F2023_2024state_ir_reports%2Fapx-a-2024-303d-list-final.xlsx&wdOrigin=BROWSELINK (accessed April 2025).

[71] SWRCB. 2022a. National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, Order No. 2022-0057-DWQ, NPDES No. CAS000002. September 8. Effective September 1, 2023.

sediment on site, and Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters.

The Central Valley RWQCB adopted the NPDES Permit and Waste Discharge Requirements General Permit for Discharges from Municipal Separate Storm Sewer Systems, Order No. R5-2016-0040, NPDES No. CAS0085324 (Region-wide MS4 Permit) on June 23, 2016.[72] On November 1, 2016, the City of Stockton submitted a Notice of Intent (NOI) to obtain coverage under the Region-wide MS4 Permit. After review of the NOI, the Central Valley RWQCB determined that the City qualifies for coverage under the Region-wide MS4 Permit, and the City became a co-permittee under the Central Valley RWQCB's Region-wide MS4 Permit, Order No. R5-2016-0040-002, NPDES No. CAS0085324.[73]

The Region-wide MS4 Permit focuses on identifying outcomes to be achieved by specific actions instead of focusing on identifying actions to be implemented. To achieve this goal, the Region-wide MS4 Permit requires permittees to develop and implement a Stormwater Management Plan (SWMP) with the goal of addressing the rate and volume of runoff as well as reducing the discharge of pollutants to the maximum extent practicable. In addition, permittees shall regulate development through the following: site design measures, source control measures, low-impact development (LID) design standards, hydromodification measures, operation and maintenance of storm water control measures, and post-construction BMPs. Additionally, the Region-wide MS4 Permit requires ongoing water quality monitoring and corrective actions if water quality thresholds are not maintained.

As required by the Region-wide MS4 Permit, the City prepared its SWMP in April 2009, [74] which describes the strategy for controlling the discharge of pollutants from the municipal storm drain system to the maximum extent practicable. In 2020 the City prepared a Stormwater Quality Control Criteria Plan (SWQCCP),[75] which updated the 2009 SWMP and provides clear development standards to use in the selection and implementation of appropriate control measures, emphasizes LID-based strategies, and provides maintenance procedures to ensure long-term pollutant control. The SWQCCP was updated in March 2025 and reflects the most recent Region-wide MS4 Permit requirements and statewide trash control requirements.

Construction. The proposed Project would entail development of a park on a 192.71-acre portion of the former golf course, which is anticipated to occur in phases depending on available funds. Phase 1 includes development of recreational amenities in the eastern portion of the park, extending west from the existing community center to the existing utility line easement. Subsequent phases would

[72] California RWQCB, Central Valley Region. 2016. Order R5-2016-0040, NPDES No. CAS0085324 National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements General Permit for Discharges from Municipal Separate Storm Sewer Systems. June 23.

[73] Central Valley RWQCB. 2016. Notice of Applicability; General Permit for Discharges from Municipal Separate Storm Sewer Systems, Order R5-2016-0040. November 30.

[74] Larry Walker Associates. 2009. *City of Stockton National Pollutant Discharge Elimination System Municipal Stormwater Program Stormwater Management Plan.* April.

[75] Larry Walker Associates. 2020. *City of Stockton and County of San Joaquin Stormwater Quality Control Criteria Plan.* August. Revised March 2025.

include park facilities and associated improvements for the central and western portions of the park and are currently conceptual.

Pollutants of concern during construction include pathogens, nutrients (phosphorous and nitrogen), sediment, metals, oil and grease, trash/debris, pesticides/herbicides, and organic compounds. Each of these pollutants, on its own or in combination with other pollutants, can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction. Any of these pollutants has the potential to be transported via stormwater runoff into receiving waters (i.e., Walker Slough, French Camp Slough, San Joaquin River, Sacramento–San Joaquin River Delta, and Suisun Bay).

Construction of the proposed Project is anticipated to disturb the entire 192.71-acre Project site. Because Project construction would disturb greater than 1 acre of soil, the proposed Project would be subject to the requirements of the Construction General Permit. The proposed Project would also be required to comply with the City's Municipal Code Chapter 13.16, which requires compliance with applicable NPDES permit requirements. As required by the Construction General Permit and the City's Municipal Code, the construction contractor would be required to prepare a SWPPP and implement construction BMPs detailed in the SWPPP during construction activities. Construction BMPs would include, but not be limited to, erosion and sediment control (designed to minimize erosion and retain sediment on site) and good housekeeping practices to prevent spills, leaks, and discharge of construction debris and waste into receiving waters.

According to geotechnical borings performed at the Project site by Kleinfelder-Stantec,[76] the depth to groundwater at the Project site ranges from 2.4 to 7 feet below ground surface (bgs). Excavation at the Project site during construction of the proposed Project is anticipated to extend to a maximum depth of 10 feet bgs for construction of the proposed skate park. Therefore, groundwater dewatering would likely be required during Project construction. Groundwater dewatering activities could affect surface water quality through the discharge of polluted groundwater to surface waterbodies. Groundwater dewatering activities would be required to comply with the Central Valley RWQCB's Waste Discharge Requirements Limited Threat Discharges to Surface Water, Order No. R5-2022-0006-02, NPDES No. CAG995002 (Groundwater Discharge Permit). In compliance with the requirements of the Groundwater Discharge Permit, groundwater would be tested and treated (if required) prior to discharge to surface water. Should groundwater dewatering be required during construction activities, compliance with the Groundwater Discharge Permit would ensure that the proposed Project would not adversely impact groundwater quality.

With adherence to the Construction General Permit and City regulations (including preparation of a SWPPP and implementation of Construction BMPs) and the Groundwater Discharge Permit, (including testing and treating stormwater [if required] prior to discharge to surface water), impacts

[76] Kleinfelder-Stantec. 2023. *USACE Lower San Joaquin Phase E San Joaquin River, French Camp Slough, Duck Creek Study Area, Geotechnical Data Report, Stockton, California.* November.

associated with the violation of water quality standards or waste discharge requirements during Project construction would be less than significant.

Operation. As previously discussed, the City is a co-permittee under the Central Valley RWQCB's Region-wide MS4 Permit. In compliance with the Region-wide MS4 Permit, the City prepared a SWQCCP, which requires implementation of site design, source control, and volume reduction measures and LID and treatment control BMPs for priority projects. The proposed Project is considered a priority project because it involves the development of more than 25 parking spaces that would be exposed to urban runoff and would create more than 5,000 square feet of impervious surface area on an already developed site. Compliance with the Region-wide MS4 Permit and the City's SWQCCP is achieved through City Municipal Code Chapter 13.20, which requires preparation of a Project-specific Stormwater Quality Control Plan (SWQCP) for all priority projects that incorporates stormwater pollution control measures to minimize stormwater quality impacts that may occur after the Project is complete. In addition, Chapter 13.20 requires preparation and implementation of a Maintenance Plan to ensure that the controls incorporated into the Project are operated and maintained as originally intended and to ensure the effectiveness of the controls. As required by the Region-wide MS4 Permit, City Municipal Code Chapter 13.20, and the SWQCCP, the City would be required to prepare a Final SWQCP for the proposed Project that specifies the site design, source control, and volume reduction measures and LID and treatment control BMPs that would be implemented to capture, treat, and reduce pollutants of concern in stormwater runoff. In addition, the City would be required to comply with Chapter 13.20 of the City's Municipal Code, which requires the preparation and implementation of a Maintenance Plan to ensure that the controls detailed in the Final SWQCP are operated and maintained as intended.

As discussed in Section 2.3.1.5, Utilities and Stormwater Management, all stormwater would be treated on site via bioretention basins and swales that would be integrated into the landscape. Stormwater would be directed to bioretention basins and swales, which would treat stormwater before it infiltrates the Project site. Infiltration of stormwater could have the potential to affect groundwater quality. As discussed above, the proposed Project would include site design, source control, and volume reduction measures and LID and treatment control BMPs, such as catch basins and curb inlets with storm filters to capture trash and debris, in order to reduce pollutants of concern in stormwater prior to it entering the bioretention basins and infiltrating the soil. Furthermore, when stormwater is infiltrated, soil and plants absorb and filter pollutants and reduce the potential for pollutants of concern to reach groundwater. A Final SWQCP would be prepared in compliance with the Region-wide MS4 Permit prior to or during final design, which would ensure that the proposed Project design would adequately target pollutants of concern in stormwater runoff before it infiltrates the soil.

With adherence to applicable regulatory requirements, which require preparation of a Final SWQCP to address pollutants of concern in stormwater runoff, and preparation and implementation of a Maintenance Plan to ensure that the controls detailed in the Final SWQCP are operated and maintained as intended, potential impacts associated with the violation of water quality standards or waste discharge requirements during operation of the proposed Project would be less than significant.

Overall, because the proposed Project would be required to comply with existing regulations, including the Construction General Permit, SWQCP, and SMC requirements, the proposed Project would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality during construction or operation. Impacts would be less than significant.

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? ***(Less Than Significant Impact)***

The Project site is located within the boundaries of the San Joaquin Valley Groundwater Basin, Eastern San Joaquin Subbasin, which underlies the city.[77] The Eastern San Joaquin Subbasin is bounded by the Modesto Subbasin to the south, the Delta-Mendota Subbasin to the southwest, the Tracy Subbasin on the west, and the Solano, South American, and Cosumnes subbasins on the northwest and north. The Solano and South American subbasins are subbasins of the Sacramento Valley Groundwater Basin. The San Joaquin River, Stanislaus River, Calaveras River, and Mokelumne River are the main tributary streams in the subbasin.[78]

The estimated groundwater storage capacity of the Eastern San Joaquin Subbasin is 42,400,000 acre-feet based on a total aquifer material volume of 579,900,000 acre-feet. This estimate was based on a study area that encompassed approximately 586,000 acres. Natural recharge to the basin is primarily from infiltration of runoff from the San Joaquin River, Stanislaus River, Calaveras River, and Mokelumne River.[79] According to the California Water Service Company Stockton District's (Cal Water) 2020 Urban Water Management Plan (UWMP),[80] Cal Water has multiple sources of water available for its use, including purchased treated water from the Stockton East Water District, and groundwater from the Eastern San Joaquin Subbasin. Cal Water generally relies on treated surface water year-round for its primary supply, but this is supplemented with groundwater to meet increased water demands primarily in the summer months or during dry years, when available surface water supplies may be limited.

Construction. As previously discussed, the depth to groundwater at the Project site ranges from 2.4 to 7 feet bgs. Excavation at the Project site during construction of the proposed Project is anticipated to extend to a maximum depth of 10 feet bgs for construction of the proposed skate park. Therefore, groundwater dewatering would likely be required during Project construction. However, groundwater dewatering would be localized and temporary, and the volume of groundwater removed would not be substantial. In addition, extracted groundwater would be discharged to Walker Slough, French Camp Slough, or the San Joaquin River following testing and treatment (if

77 California Department of Water Resources. n.d.-b. Groundwater Basin Boundary Assessment Tool. Website: https://gis.water.ca.gov/app/bbat/ (accessed April 2025).

78 California Department of Water Resources. 2006. *San Joaquin Valley Groundwater Basin,* Eastern San Joaquin Subbasin Bulletin 118. January 20.

79 Ibid.

80 California Water Service Company (Cal Water). 2021. *2020 Urban Water Management Plan Stockton District.* June. Website: https://www.calwater.com/docs/uwmp2020/STK_2020_UWMP_FINAL.pdf (accessed April 2025).

necessary), which would facilitate recharge to the Eastern San Joaquin Subbasin. Therefore, construction impacts related to depletion of groundwater supplies or interference with groundwater recharge would be less than significant.

Operation. Currently, the Project site is developed as the Van Buskirk Municipal Golf Course and consists of approximately 125 acres of turf and landscaped areas associated with the former golf course, five ponds (totaling 11.25 acres), and approximately 3 acres of parking area, buildings, and walkways associated with the former golf course. Implementation of the proposed Project would further develop the Project site with recreational amenities, including sports courts, a skate park, a bike pump track, and associated improvements, which would increase impervious surface area at the Project site. This increase in impervious surface area would decrease on-site infiltration. However, as described above, the proposed Project would include bioretention basins and swales to collect, treat, and infiltrate stormwater at the Project site in accordance with the Region-wide MS4 Permit. Therefore, development of the proposed Project would not substantially decrease the amount of stormwater that infiltrates the Project site as compared to existing conditions.

As discussed above, the Project site is located within the boundaries of the San Joaquin Valley Groundwater Basin, Eastern San Joaquin Subbasin, which provides supplemented groundwater to meet increased water demands for Stockton, primarily in the summer months or during dry years, when available surface water supplies may be limited. As provided in Cal Water's UWMP, Cal Water does not expect any water supply shortages in future years, even in a drought, as determined by a drought risk assessment that showed that even in 5 consecutive dry years, Cal Water has enough supply to meet customer demands. Cal Water also has an aggressive and comprehensive water conservation program and can put measures in place to reduce demand in response to water shortages, if necessary. Because the proposed Project is consistent with the current land use and zoning designations for the site, development of the project would be considered consistent with the growth assumptions utilized to estimate the Cal Water's projected water demands. Thus, the Project's associated increase in water demand would have been accounted for in the Cal Water UWMP. Because Cal Water has sufficient water supplies to meet current and future development within its service area, the proposed Project's water demand would not deplete groundwater supplies.

The Eastern San Joaquin Subbasin is also identified by the California Department of Water Resources as a high-priority basin[81]; therefore, a Groundwater Sustainability Agency (GSA) has been established and a Groundwater Sustainability Plan (GSP) has been prepared for the basin. According to Cal Water's UWMP, Cal Water has partnered with other users through the GWA to manage the groundwater basin. The GSP prepared for the Eastern San Joaquin Subbasin also identified 23 projects for potential development, along with management actions, that either replace groundwater use or supplement groundwater supplies to meet current and future water demands. The list of 23 potential projects included in the GSP represent a variety of project types, including direct and in-lieu recharge, intrabasin water transfers, demand conservation, water recycling, and

[81] California Department of Water Resources. n.d.-c. SGMA Basin Prioritization Dashboard. Website: https://gis.water.ca.gov/app/bp-dashboard/final/ (accessed April 2025).

stormwater reuse, to be undertaken by the member agencies.[82] Implementation of the projects and management actions provided in the GSP would ensure the sustainable management of the subbasin. In addition, implementation of the proposed Project would not preclude implementation of the projects and management actions provided in the GSP.

As outlined in Section 2.3.1.5, the City is considering installing an onsite well to provide irrigation water for the proposed Project. Installation of a new well would require a permit from the San Joaquin County Environmental Health Department, which regulates the location, construction, repair and destruction of water supply, monitoring and geophysical wells and borings in order to prevent groundwater contamination and safety hazards. In accordance with California Water Code Section 13801, the City would be required to provide information related to the depth and capacity of the proposed well, pumping rate, extraction volume, water table depth and recharge area as part of the permitting process. This information would be considered by the San Joaquin County Environmental Health Department and publicly disclosed prior to issuance of a well permit. Compliance with the San Joaquin County's well permit process would ensure that the construction and operation of the well, if proposed, would not affect groundwater or surface water quality.

Irrigation for the proposed Project is anticipated to result in annual water demand of approximately 119.3 acre-feet per year (28.3 acre-feet per year for Phase 1). As discussed above, because the proposed Project is consistent with the current land use and zoning designations for the site, development of the Project would be considered consistent with the growth assumptions utilized to estimate the Cal Water's projected water demands. Thus, the project's associated increase in water demand would have been accounted for in the Cal Water UWMP. Because Cal Water has sufficient water supplies to meet current and future development within its service area, the proposed Project's water demand would not deplete groundwater supplies. Further, as outlined above, implementation of the proposed Project would not preclude implementation of the projects and management actions provided in the GSP, which would offset potential groundwater withdrawals.

Therefore, operational impacts related to a decrease in groundwater supplies or interference with groundwater recharge in a manner that may impede sustainable groundwater management would be less than significant.

Overall, implementation of the proposed Project would not deplete groundwater supplies or interfere with groundwater recharge during construction or operation such that the proposed Project may impede sustainable groundwater management. Impacts associated with groundwater supply and recharge would be less than significant.

[82] Cal Water. 2021. *2020 Urban Water Management Plan Stockton District.* June. Website: https://www.calwater.com/docs/uwmp2020/STK_2020_UWMP_FINAL.pdf (accessed April 2025).

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site; ***(Less Than Significant)***

Under existing conditions, stormwater at the Project site either infiltrates the Project site, sheet flows to one of the five ponds located within the Project site, or sheet flows west or south to discharge into Walker Slough, French Camp Slough, or the San Joaquin River. Upon development of the proposed Project, stormwater would be collected via catch basin and inlets and directed to bioretention basins and swales, which would treat stormwater before it infiltrates the Project site. The bioretention basins and swales would capture and retain the required design capture volume (DCV) for the Project site. The DCV is the volume of stormwater runoff that must be captured and treated by stormwater BMPs.

Construction. During construction activities, soil would be exposed and disturbed, drainage patterns would be temporarily altered, and there would be increased potential for soil erosion and siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. As discussed above, the City would be required to obtain coverage under the Construction General Permit, which requires preparation of a SWPPP. The SWPPP would detail Erosion Control and Sediment Control BMPs to be implemented during construction to minimize erosion and retain sediment on site. Compliance with the Construction General Permit, which requires preparation of a SWPPP and implementation of Erosion Control and Sediment Control BMPs, would ensure that construction impacts related to substantial soil erosion or the loss of topsoil would be less than significant.

Operation. Implementation of the proposed Project would increase the amount of impervious surface area on the Project site due to the construction of recreational amenities, including sports courts, a skate park, a bike pump track, and associated improvements. An increase in impervious surface area increases the rate and volume of runoff during a storm, which can more effectively transport sediments to receiving waters. However, the impervious surface areas on the Project site would not be prone to on-site erosion or siltation because there would be no exposed soil. The remaining pervious surfaces on the Project site would be landscaped with vegetation that would stabilize the soil and promote infiltration, thereby minimizing on-site erosion and siltation. Furthermore, the proposed Project would be required to comply with the Municipal Regional Permit (MRP) and SMC regulations, which require the preparation of a Final SWQCP for the proposed Project that specifies the site design, source control, and volume reduction measures, and LID and treatment control BMPs that would be implemented to capture, treat, and reduce pollutants of concern in stormwater runoff, and preparation and implementation of a Maintenance Plan to ensure that the controls detailed in the Final SWQCP are operated and maintained as intended. Compliance with these regulatory requirements would ensure that operational impacts related to on-site or off-site erosion or siltation would be less than significant.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; ***(Less Than Significant)***

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map No. 06077C0470F (effective October 16, 2009),[83] the Project site is located within Zone X, Area with Reduced Flood Risk Due to Levee.

Construction. As discussed above, Project construction would comply with the requirements of the Construction General Permit and the City's Municipal Code, which require preparation of a SWPPP that would specify Construction BMPs to control and direct on-site surface runoff to ensure that Project construction does not increase the rate or amount of surface runoff or impede or redirect flood flows in manner that would result in on-site or off-site flooding. With implementation of a SWPPP and associated Construction BMPs, construction impacts related to a substantial increase in the rate or amount of surface runoff or impeding or redirecting flood flows in a manner that would result in on-site or off-site flooding would be less than significant.

Operation. As previously discussed, implementation of the proposed Project would increase the total impervious surface area at the Project site, which would increase stormwater runoff and could potentially result in flooding. However, as discussed above, the proposed LID BMPs (bioretention basins) would capture and treat stormwater runoff consistent with the requirements of the Region-wide MS4 Permit. In addition, the majority of the Project site would remain pervious, similar to existing conditions. Compliance with the Region-wide MS4 Permit would ensure that operational activities would not result in a substantial increase in the rate or amount of surface runoff or impede or redirect flood flows in a manner that would result in on- or off-site flooding, and impacts would be less than significant.

Overall, with adherence to existing regulatory requirements, the proposed Project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site or significantly impede or redirect flood flows. Impacts would be less than significant.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or ***(Less Than Significant)***

Construction. As discussed above, Project construction would comply with the requirements of the Construction General Permit and the City's Municipal Code, which require preparation of a SWPPP that would specify Construction BMPs to control and direct on-site surface runoff to ensure that stormwater runoff from the construction site does not exceed the capacity of the stormwater drainage system and does not discharge polluted runoff during construction activities. With adherence to existing regulatory requirements, construction impacts related to exceeding the capacity of the stormwater drainage system or additional polluted runoff would be less than significant.

[83] Federal Emergency Management Agency (FEMA). 2009. Flood Insurance Rate Map No. 06077C0470F. October 16.

Operation. As previously discussed, the Project site is undeveloped and stormwater at the Project site either infiltrates the Project site, sheet flows to one of the five ponds within the Project site, or sheet flows west or south to discharge into Walker Slough, French Camp Slough, or the San Joaquin River. With implementation of the proposed Project, stormwater at the Project site would be directed to bioretention basins and swales, which would treat stormwater before it infiltrates the Project site. The bioretention basins and swales would capture and retain the required DCV for the Project site. The DCV is the volume of stormwater runoff that must be captured and treated by stormwater BMPs. Overflows from the bioretention basins would be discharged to Walker Slough, French Camp Slough, or the San Joaquin River at a rate consistent with the pre-Project conditions, similar to existing conditions and consistent with the Region-wide MS4 Permit. As such, the proposed Project would not connect City-operated stormwater drainage systems and would therefore not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems. In addition, the proposed Project would implement operational BMPs, including the proposed bioretention basins and swales, to reduce pollutants of concern in stormwater runoff in compliance with the Region-wide MS4 Permit. With adherence to existing regulatory requirements, operational impacts related to the creation or contribution of stormwater runoff that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff would be less than significant.

Overall, with adherence to existing regulatory requirements, the proposed Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts would be less than significant.

iv. Impede or redirect flood flows? ***(Less Than Significant)***

Please refer to Section 4.10.c.ii. This impact would be less than significant.

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation? ***(Less Than Significant)***

Flooding. As discussed above, the Project site is located within Zone X, Area with Reduced Flood Risk Due to Levee. During construction, BMPs would be implemented to ensure that during a rain event, pollutants would be retained on site and would be prevented from reaching downstream receiving waters in accordance with the Construction General Permit and SMC. In addition, additional BMPs would be required, consistent with the Groundwater Discharge Permit, to ensure that floodwaters would not impact the groundwater being pulled and disposed during construction groundwater dewatering.

During operation, the proposed Project would generally maintain the existing drainage pattern of the Project site, and development would include catch basins and inlets with storm filters, bioretention basins, and swales that would ensure that pollutants would be treated and prevented from reaching downstream receiving waters, consistent with the requirements of the Region-wide MS4 Permit. Compliance with the Region-wide MS4 Permit, would ensure the proposed Project would not result in the release of pollutants due to flooding during operation. In addition, the Project site would remain predominantly pervious, similar to existing conditions, proposed improvements on the

Project site would not include any new habitable structures, and uses at the Project site would generally generate the same type of pollutants of concern during operation as existing conditions. Therefore, implementation of the proposed Project would not result in a greater risk of release of pollutants due to Project inundation from flooding compared to existing conditions.

In addition, according to the California Department of Water Resources, Division of Safety of Dams, the Project site is not located within a dam inundation area.[84] Therefore, the proposed Project would not result in the release of pollutants due to flooding caused by a dam failure.

Tsunami. The Project site is over 67 miles east of the Pacific Ocean and is separated by several mountain ranges. Based on the distance from the Pacific Ocean and the presence of an intervening mountain range, the Project site would not be susceptible to inundation from a tsunami, and there is no risk of a release of pollutants from the Project site.

Seiches. Seiches are oscillations in enclosed bodies of water (e.g., a bay, lake, or harbor) that are caused by a number of factors, most often wind or seismic activity. Seiches go up and down or oscillate and do not progress forward like standard ocean waves. The nearest sizeable, enclosed body of water to the Project site is the Clinton Court Forebay, approximately 14 miles southwest of the Project site. Given the distance of the nearest large standing body of water from the Project site, there is no risk of a release of pollutants from the Project site due to seiche-related flooding.

With adherence to existing regulatory requirements (including the development of bioretention basins, swales, and associated on-site stormwater infrastructure at the Project site that would treat stormwater and address the volume and rate of stormwater flows), and because the Project site is not within a tsunami or seiche zone, implementation of the proposed Project would not result in the release of pollutants from a flood, dam inundation, tsunami, or seiche. Impacts would be less than significant.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? ***(Less Than Significant)***

The Project is within the jurisdiction of the Central Valley RWQCB, which has adopted a Basin Plan[85] that designates beneficial uses for all surface and groundwater within its jurisdiction and establishes the water quality objectives and standards necessary to protect those beneficial uses. As previously discussed, the Project would comply with existing NPDES permit requirements, including the Construction General Permit, Groundwater Discharge Permit, and Region-wide MS4 Permit, and would implement construction and operational BMPs to reduce pollutants of concern in stormwater runoff. Compliance with these regulatory requirements would ensure that the proposed Project would not degrade or alter water quality, which would cause the receiving waters to exceed the

[84] California Department of Water Resources. n.d.-a. Dam Breach Inundation Map Web Publisher. Division of Safety Dams. Website: https://fmds.water.ca.gov/webgis/?appid=dam_prototype_v2 (accessed April 2025).

[85] California RWQCB, Central Valley Region. 1975. *The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region,* Fifth Edition, the Sacramento River Basin and the San Joaquin River Basin. July. Revised February 2019 with Approved Amendments.

water quality objectives or impair the beneficial use of receiving waters. As such, the proposed Project would not result in water quality impacts that would conflict with the Basin Plan. Construction and operational impacts related to a conflict with the Basin Plan would be less than significant.

The Sustainable Groundwater Management Act (SGMA) was enacted in September 2014. SGMA requires governments and water agencies of high- and medium-priority basins to halt overdraft of groundwater basins. SGMA requires the formation of local GSAs, which are required to adopt GSPs to manage the sustainability of the groundwater basins. The Project site is located within the San Joaquin Valley Groundwater Basin, Eastern San Joaquin Subbasin, which identified by the Department of Water Resources as a high-priority basin[86]

The City of Stockton is a recognized GSA pursuant to the SGMA and a member of the Eastern San Joaquin Groundwater Authority (GWA), a joint powers authority that consists of 16 GSAs that overlie the subbasin and is responsible for the management of the GSP. In 2019, GWA completed the Eastern San Joaquin Groundwater Subbasin GSP to achieve groundwater sustainability in the subbasin by 2040. In general, the GSP shows that groundwater elevations have declined since the 1950s. Water quality issues were detected on the west side of the subbasin, some of which are from wells underlying the city. As discussed above, the GSP prepared for the Eastern San Joaquin Subbasin also identified 23 projects for potential development, along with management actions, that either replace groundwater use or supplement groundwater supplies to meet current and future water demands. The list of 23 potential projects included in the GSP represents a variety of project types, including direct and in-lieu recharge, intra-basin water transfers, demand conservation, water recycling, and stormwater reuse, to be undertaken by the member agencies. Implementation of the projects and management actions provided in the GSP would ensure sustainable management of the subbasin. In addition, implementation of the proposed Project would not preclude implementation of the projects and management actions provided in the GSP.

As previously discussed, the depth to groundwater at the Project site ranges from 2.4 to 7 feet bgs. Excavation at the Project site during construction of the proposed Project is anticipated to extend to a maximum depth of 10 feet bgs for construction of the proposed skate park. Therefore, groundwater dewatering would likely be required during Project construction. However, groundwater dewatering would be localized and temporary, and the volume of groundwater removed would not be substantial. In addition, extracted groundwater would be discharged to Walker Slough, French Camp Slough, or the San Joaquin River following testing and treatment (if necessary), which would facilitate recharge to the Eastern San Joaquin Subbasin. Therefore, construction impacts related to depletion of groundwater supplies or interference with groundwater recharge would be less than significant.

In addition, although implementation of the proposed Project would increase water use, which would be partially obtained from groundwater, Cal Water's UWMP indicates Cal Water does not expect any water supply shortages in future years, even in a drought. A drought risk assessment showed that even in 5 consecutive dry years, Cal Water has enough supply to meet customer

[86] California Department of Water Resources. n.d.-c. SGMA Basin Prioritization Dashboard. Website: https://gis.water.ca.gov/app/bp-dashboard/final/ (accessed April 2025).

demands. Cal Water also has the ability to put measures in place to reduce demand in response to water shortages, if necessary. Further, the proposed Project would include bioretention basins and swales to collect, treat, and filter stormwater at the Project site in accordance with the Region-wide MS4 Permit. Therefore, the proposed Project would continue to facilitate groundwater infiltration and recharge at the Project site.

For these reasons, the proposed Project would not conflict with or obstruct the implementation of a sustainable groundwater management plan. Therefore, with adherence to existing regulatory requirements**,** construction and operational impacts related to conflict with, or obstruction of, water quality control plans or sustainable groundwater management plans would be less than significant.

4.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

*a. Would the project physically divide an established community? **(No Impact)***

The physical division of an established community typically refers to the construction of a feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying areas. For instance, the construction of an interstate highway through an existing community may constrain travel from one side of the community to another; similarly, such construction may also impair travel to areas outside the community.

The Project site was previously developed as a golf course and is surrounded by residential neighborhoods, commercial uses, recreational uses, waterways (e.g., Walker Slough and French Camp Slough) and undeveloped land. The proposed Project would result in the construction of new recreational facilities, multi-use fields, and other active (e.g., basketball courts and a play area) and passive (e.g., community garden and trails/paths) recreation facilities. With implementation of Phase 1, access to the Project site would be via an existing road/driveway, with a new park entry proposed at the intersection of Houston Avenue and Georgia Avenue and another on Houston Avenue east of Georgia Avenue. Subsequent phases would include expansion of the existing parking area/entry at the intersection of Houston Avenue and Fresno Avenue and development of a new parking area/entry in the western portion of the park near West 8th Street. However, the proposed Project would not construct a physical feature or remove any means of access that would impair mobility within an existing community. Instead, implementation of the proposed Project would provide an important recreation resource as well as bicycle and pedestrian pathways to enhance activity within the park and provide connectivity to adjacent neighborhoods. Therefore, the proposed Project would not result in the physical division of an established community or adversely affect the continuity of land use in the vicinity, and no impact would occur.

*b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? **(Less Than Significant Impact)***

The Project site is within a suburban area in Stockton. The Project site encompasses a 192.71-acre property that was previously developed as a golf course. The site is surrounded by residential neighborhoods, commercial uses, recreational uses, waterways (e.g., Walker Slough and French Camp Slough), and undeveloped land.

The Project site is located within the City of Stockton and is subject to the land use and zoning designations of the *Envision Stockton 2040 General Plan* (2018) and relevant portions of the City of Stockton Municipal Code Zoning Regulations Title 16 (2008, as amended through 2025). Additionally, the Project site is located within the Secondary Zone of the Delta Plan.[87]

Following is an evaluation of the proposed Project's consistency with the applicable goals and policies of the General Plan and Zoning Ordinance. In reviewing this section, it is important to understand that the determination of whether a project is consistent with a specific policy can be subjective and that consistency determinations are best made with a broad understanding of the often-competing policy objectives in a planning document. As a result, policy consistency determinations are ultimately made by the local decision-making body. As previously discussed, the City is the lead agency for environmental review. Therefore, the City Council would determine the proposed Project's consistency with the City's applicable plans and policies. The analysis in this chapter is intended to provide decision makers with a list of the goals and policies that are pertinent to the proposed Project and the Project site, as well as a recommendation regarding whether or not the proposed Project would directly conflict with relevant planning directives. These recommendations are intended to supplement decision makers' own understanding of the various policy considerations. A conflict with an applicable policy is not itself a significant impact unless it results in a significant environmental impact, as described below.

Per *CEQA Guidelines,* policy conflicts do not, in and of themselves, constitute significant environmental impacts. Policy conflicts are considered to be environmental impacts only when they would result in direct physical impacts or where those conflicts relate to avoiding or mitigating environmental impacts. As such, associated physical environmental impacts are discussed in this Initial Study under specific topical sections.

General Plan. The City's General Plan designates the site as Parks and Recreation (PR). The PR land use designation provides for City and County parks, golf courses, marinas, community centers, public and quasi-public uses, and other similar and compatible uses.

The proposed Project would be consistent with the following applicable General Plan goals and policies as discussed below.

Goal LU-3: Authentic Neighborhoods. Protect and preserve the authentic qualities of Stockton's neighborhoods and historic districts.

> ***Policy LU-3.2.*** Retain narrower roadways and reallocate right-of-way space to preserve street trees and mature landscaping and enhance the pedestrian and bicycle network within and adjacent to residential neighborhoods.
>
> ***Policy LU-3.3.*** Maintain or expand the currently available amount of public park and open space area in each neighborhood.

[87] Delta Stewardship Council. 2013. *Delta Plan.* Website: https://www.deltacouncil.ca.gov/delta-plan/ (accessed February 2025).

Goal LU-5: Protected Resources. Protect, maintain, and restore natural and cultural resources.

Policy LU-5.1. Integrate nature into the city and maintain Stockton's urban forest.

Policy LU-5.2. Protect natural resource areas, fish and wildlife habitat, scenic areas, open space areas, agricultural lands, parks, and other cultural/historic resources from encroachment or destruction by incompatible development.

Policy LU-5.3. Define discrete and clear city edges that preserve agriculture, open space, and scenic views.

Policy LU-5.4. Require water and energy conservation and efficiency in both new construction and retrofits.

Goal TR-2: Active Community. Provide an integrated transportation system that enables safe and efficient movement of people and goods for all modes of travel.

Policy TR-2.1. Develop safe and interconnected bicycle and pedestrian facilities, including along "complete" streets that target multiple travel modes.

Goal SAF-1: Safe Community. Create a safe and welcoming environment in all areas of the city at all times of day.

Policy SAF-1.2. Reduce community violence and crime by fostering community connectivity, creating a sense of place, and encouraging social interactions between residents, employees, and business owners.

Policy SAF-1.3. Ensure that City-managed spaces and facilities support a feeling of safety for users.

Goal CH-1: Healthy People. Support the ability of the entire community to maintain healthy lifestyles.

Policy CH-1.1. Maintain walking and wheeling facilities and parks that are safe and accessible in all areas of Stockton.

Policy CH-1.3. Encourage activities that support local agriculture, such as farmers' markets, urban farming and community gardening.

Goal CH-2: Restored Communities. Restore disadvantaged communities to help them become more vibrant and cohesive neighborhoods with high-quality affordable housing, a range of employment options, enhanced social and health services, and active public spaces.

Policy CH-2.1. Prioritize maintenance of streets and improvement of sidewalks, parks, and other infrastructure in areas of the city that historically have been comparatively underserved by public facilities, including implementation of complete streets where needed, especially in conjunction with infrastructure maintenance and improvement projects.

Goal CH-5: Sustainability Leadership. Exhibit leadership in sustainability for the Central Valley and beyond.

> ***Policy CH-5.1.*** Accommodate a changing climate through adaptation, mitigation, and resiliency planning and projects.

The proposed Project would include redevelopment of the existing green space with a mix of fields, facilities, spaces for sports and learning, and other recreational activities, and would serve community needs and provide opportunities for increased physical activity and social interaction. Additionally, the proposed Project would be limited to low-impact development/habitat restoration in the western portion of the park, which would support the City's goals to preserve and protect its natural resources. The proposed Project would be compatible with the mix and intensity of uses within the vicinity of the site, which generally consist of commercial, residential, and recreational uses, and would include improved bicycle and pedestrian access within the site that would provide connections to the surrounding neighborhood. As such, the proposed Project would be consistent with the applicable goals and policies of the City of Stockton General Plan.

Zoning Ordinance. The Project site is within the Public Facilities (PF) zoning district. The PF district is intended for application to areas appropriate for a variety of public and quasi-public land uses, including facilities and lands owned by the City, County, State, or federal governments, as well as religious facilities. The PF zoning district is consistent with the Parks and Recreation land use designation of the City's General Plan. The proposed Project would include the redevelopment of the former golf course as a park, which is a permitted use under the City's zoning ordinance. Site plan review is required for new construction or for a change to a more intensive use. Further, the proposed Project would contribute to implementing the City of Stockton General Plan goals and policies related to the provision of parks and recreation facilities.

Delta Plan. The Delta Plan, adopted by the Delta Stewardship Council on May 16, 2013, is a comprehensive long-term management plan for the Sacramento-San Joaquin River Delta. The Delta Plan includes rules and recommendations that support the State's goals for the Delta to: (1) improve water supply; (2) protect and restore a vibrant and healthy Delta ecosystem; and (3) preserve, protect, and enhance the unique agricultural, cultural, and recreational characteristics of the Delta. The 14 regulatory policies in the Delta Plan are enforceable through regulatory authority included in the Delta Reform Act, enacted as part of Senate Bill X7. These policies include a requirement for Delta Plan consistency findings for "covered actions." The Delta Plan covers the Legal Delta and Suisun Marsh, an area west of the central part of the Legal Delta.

Delta Plan Policy DP P1 requires that any new residential, commercial, or industrial development must be limited to areas designated for development in city or county general plans as of the date of the Delta Plan's adoption (May 16, 2013), as reflected in Appendices 6 and 7 of the Delta Plan regulations. Because the proposed Project is consistent with the City's General Plan, the proposed Project is consistent with this key Delta Plan policy. As described throughout this Initial Study, the proposed Project would not reduce water supply, would include restoration/mitigation to enhance the site's natural resources, and would provide a new recreational amenity for the community. Therefore, the proposed Project would be consistent with the policies outlined in the Delta Plan.

Project impacts are less than significant or limited to the short-term construction phase of the Project described in relevant sections of this Initial Study. With the mitigation measures contained in this Initial Study, the proposed Project is consistent with all the relevant regulations and policies contained in these documents. No additional mitigation measures would be required. The proposed Project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. This impact would be less than significant.

4.12 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

*a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? **(No Impact)***

Minerals are any naturally occurring chemical element or compound, or groups of elements and compounds, formed from inorganic processes and organic substances, including, but not limited to, coal, peat, and oil-bearing rock, but excluding geothermal resources, natural gas, and petroleum. Rock, sand, gravel, and earth are also considered minerals by the DOC when extracted by surface mining operations. The Project site is located in a developed, suburban area of Stockton and is not within a designated mineral resource zone as defined by the California Surface Mining and Reclamation Act of 1975 (SMARA).[88] Additionally, according to the DOC's Division of Mine Reclamation, there are no active mines in Stockton.[89] The nearest mines in San Joaquin County occur in the cities of Lathrop and Manteca and include the open sand pits located approximately 8.6 and 10.25 miles southeast of the Project site, respectively.[90] Therefore, the proposed Project would not result in the loss of availability of a known mineral resource of value to the region or residents of the State, and there would be no impact related to the availability of mineral resources.

*b. Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? **(No Impact)***

Please refer to Section 4.12.a. The proposed Project would not result in the loss of availability of any known locally important mineral resource recovery site. Therefore, no impact related to the availability of a mineral resources recovery site would occur.

88 California Department of Conservation (DOC). n.d.-a. California Geological Survey, *SMARA Mineral Land Classification Special Report 199.* Website: https://www.conservation.ca.gov/cgs/Documents/Publications/SMARA-Publications-California-a11y.pdf (accessed March 2025).

89 DOC. n.d.-d. Division of Mine Reclamation, *Mines Online Mapper.* Website: https://maps.conservation.ca.gov/mol/index.html (accessed March 2025).

90 Ibid.

4.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a tenfold increase in acoustic energy, while 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA), and this scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements which better represent how humans are more sensitive to sound at night.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq}, the community noise equivalent level (CNEL), and the day-night average level (L_{dn}) based on A-weighted decibels. CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and L_{dn} are within 1 dBA of each other and are normally

exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

Regulatory Framework. A project would result in a significant noise effect if it would substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of applicable regulatory agencies, including, as appropriate, the City of Stockton.

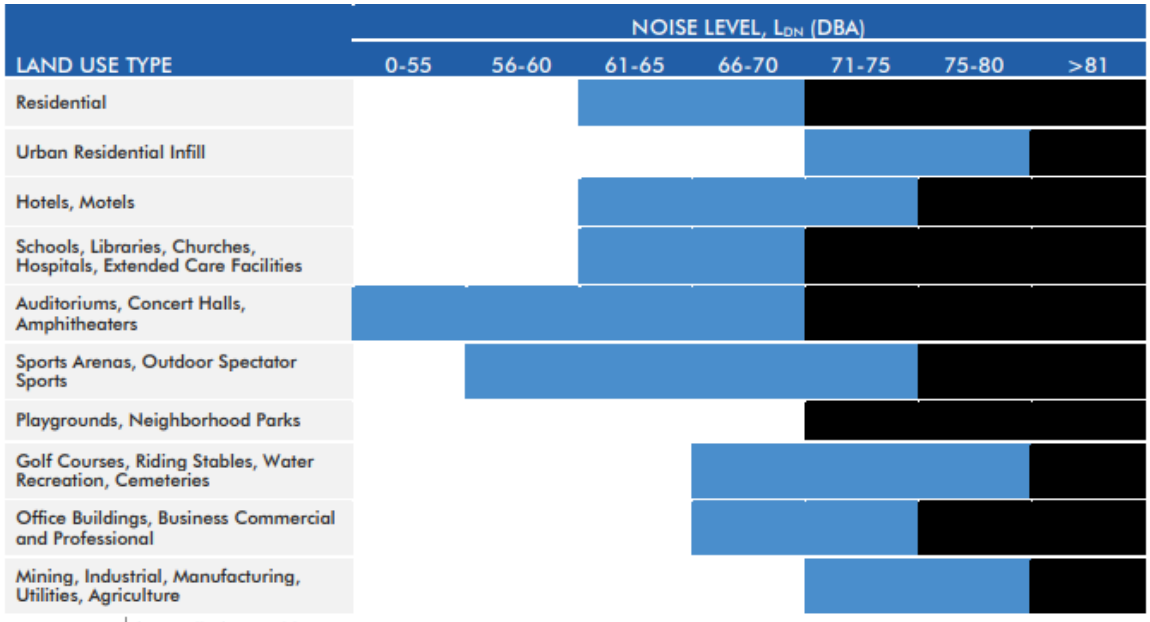
City of Stockton. The City of Stockton General Plan addresses noise. The General Plan contains goals and policies for noise control and abatement in the city. The goals and policies address noise in relation to land use planning, the noise environment, transportation noise, construction and industrial noise, population and housing noise, and public health and safety. General noise goals for Stockton aim to attain a healthier and quieter environment for all citizens while maintaining a reasonable level of economic progress and development.

The City has established land use compatibility guidelines for determining acceptable noise levels for specified land uses as shown in Table 4.H. The land use compatibility guidelines are intended to be an advisory resource when considering changes in land use and policies, such as zoning modifications. For residential uses, the normally acceptable allowable noise exposure is 60 dBA L_{dn}. For playgrounds and neighborhood parks, such as the project, the normally acceptable allowable noise exposure is 70 dBA L_{dn}. The City addresses noise impacts in Chapter 16.60, Noise Standards, of the Municipal Code. Section 16.60.020, Activities exempt from noise regulations, exempts activities conducted on parks and playgrounds and school grounds, between 7:00 a.m. and 10:00 p.m., except for additional hours that may be granted by the City Manager.

Section 16.60.030, Activities deemed violations of this chapter, prohibits construction noise, including operating or causing the operation of tools or equipment on private property used in alteration, construction, demolition, drilling, or repair work between the hours of 10:00 p.m. and 7:00 a.m., so that the sound creates a noise disturbance across a residential property line, except for emergency work of public service utilities.

Section 16.60.040, Standards, sets noise limits for land use-related projects that will create new noise sources or expand existing noise sources, and shall be required to mitigate their noise levels so that the resulting noise (1) does not adversely impact noise-sensitive land uses; and (2) does not exceed the standards specified in Table 4.I.

Table 4.H: Maximum Allowable Noise Exposure By Land Use



Notes: If existing noise standards are currently exceeded, a proposed project shall not incrementally increase noise levels by more than 3 dBA. Urban residential infill applies to residential uses in the Greater Downtown.

Table 4.I: Land Use Related Noise Standard

Noise Level Descriptor	Outdoor Activity Areas	
	Day (7:00 a.m. to 10:00 p.m.)	Night (10:00 p.m. to 7:00 a.m.)
Hourly equivalent sound level (L_{eq}), dB	55	45
Maximum sound level (L_{max}), dB	75	65

Source: City of Stockton (2024).

Notes:

[1] The noise standard shall be applied at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards shall be applied on the receiving side of noise barriers or other property line noise mitigation measures.

[2] Each of the noise level standards specified shall be decreased by five for impulse noise, simple-tone noise, or noise consisting primarily of speech or music.

dB = decibels

Leq = equivalent continuous sound level

Lmax = maximum instantaneous noise level

Federal Transit Administration. Because the City does not have construction noise level limits, construction noise was assessed using criteria from the *Transit Noise and Vibration Impact Assessment Manual.*[91] Table 4.J shows the FTA's Detailed Analysist Construction Noise Criteria based on the composite noise levels per construction phase.

Table 4.J: Detailed Assessment Construction Noise Criteria

Land Use	Daytime 1-hour L_{eq} (dBA)
Residential	80
Commercial	85
Industrial	90

Source: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).
dBA = A-weighted decibels
L_{eq} = equivalent continuous sound level

California Department of Transportation. Vibration standards included in the *California Department of Transportation (Caltrans) Transportation and Construction Vibration Guidance Manual*[92] (Caltrans Manual) are used in this analysis for groundborne vibration impacts on human annoyance and building damage. The criteria for environmental impact from groundborne vibration are based on the maximum levels for a single event and the root-mean-square (RMS) vibration level. Table 4.K provides the criteria for assessing the potential for interference or annoyance from vibration levels in a building.

Table 4.K: Vibration Criteria for Annoyance Assessment

Human Response	Vibration Level (RMS in/sec)
Barely perceptible	0.01
Distinctly perceptible	0.04
Strongly perceptible	0.10
Severe	0.40

Source: *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020).
Caltrans = California Department of Transportation
in/sec = inches per second RMS = root-mean-square

Table 4.L lists the potential vibration building damage criteria associated with construction activities, as suggested in the Caltrans Manual. Caltrans' guidelines show that a vibration level of up to 0.5 inch per second (in/sec) in peak particle velocity (PPV) is considered safe for newer residential structures and modern industrial or commercial buildings and would not result in any construction vibration damage.

91 Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual FTA Report No. 0123*. September.

92 California Department of Transportation (Caltrans). 2020. *Transportation and Construction Vibration Guidance Manual*. April.

Table 4.L: Construction Vibration Damage Criteria

Structure/Condition	PPV (in/sec)
Extremely fragile historic buildings, ruins, ancient monuments	0.08
Fragile buildings	0.10
Historic and some old buildings	0.25
Older residential structures	0.30
New residential structures	0.50
Modern industrial/commercial buildings	0.50

Source: Table 19, *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020).
Caltrans = California Department of Transportation
in/sec = inches per second
PPV = peak particle velocity

Existing Noise Environment. Certain land uses are considered more sensitive to noise than others. Examples of these include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The Project site is generally surrounded by residential uses. The closest sensitive receptors are the residences located north, approximately 30 feet from the Project site boundary.

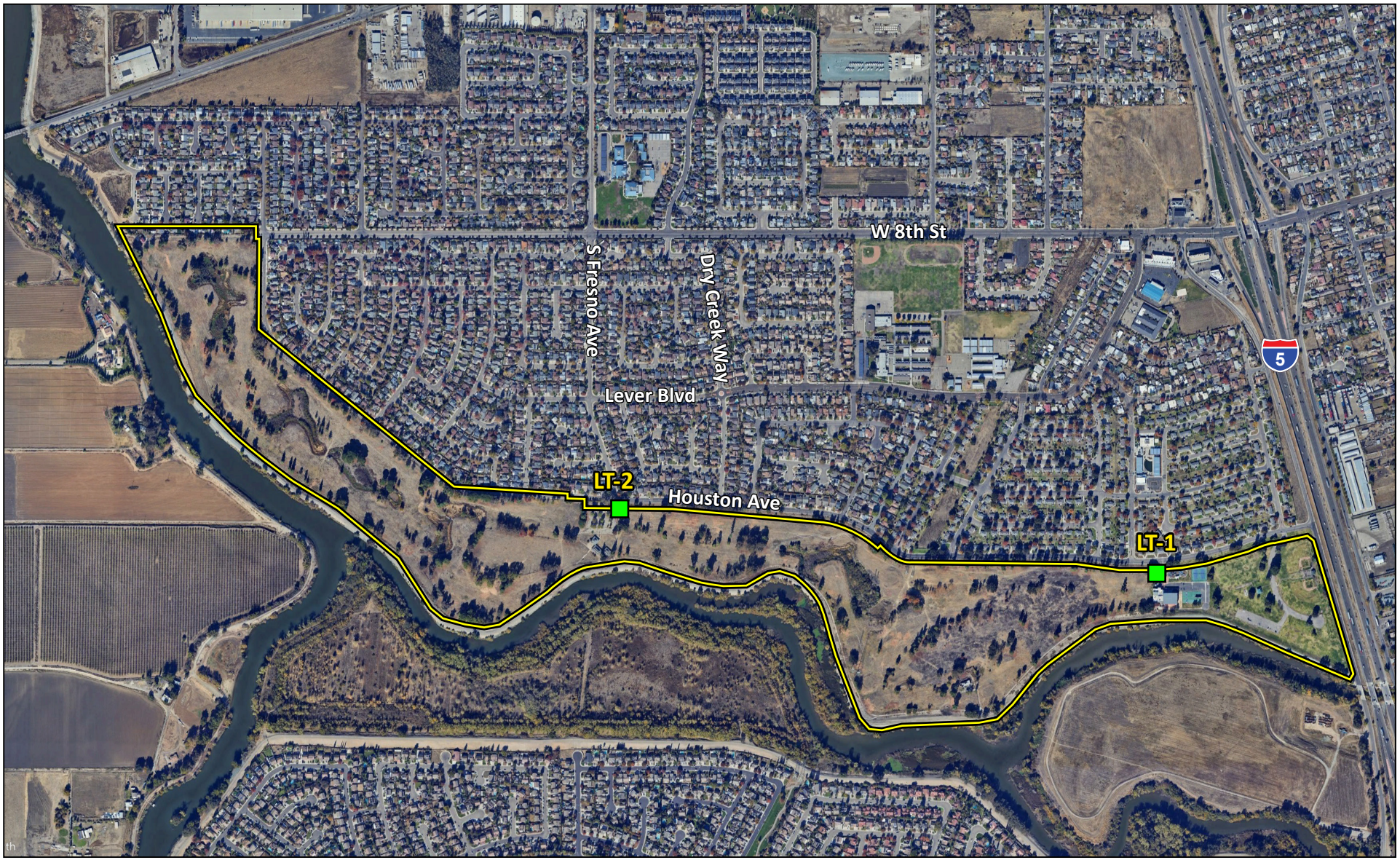
Existing noise sources at the Project site are primarily associated with traffic on surrounding roadways, including I-5 and Houston Avenue.

To assess existing noise levels, LSA conducted two long-term noise measurements in the vicinity of the Project site. The long-term (24-hour) noise level measurements were conducted on April 22 and 23, 2025, using two Larson Davis Spark 706RC Dosimeters. Table 4.M provides a summary of the measured hourly noise levels and calculated L_{dn} level from the long-term noise level measurements. Noise measurement sheets are provided in Appendix C. Figure 4-2 shows the long-term monitoring locations.

Table 4.M: Long-Term 24-Hour Ambient Noise Monitoring Results

Location		Daytime Noise Levels[1] (dBA L_{eq})	Nighttime Noise Levels[2] (dBA L_{eq})	Daily Noise Levels (dBA L_{dn})
LT-1	734 Houston Avenue, Stockton, CA 95206. In a tree, approximately 53 feet south of the Houston Avenue centerline and 1,240 feet west of Manthey Road.	57.2–62.2	50.5–58.0	62.4
LT-2	2772 South Fresno Avenue, Stockton, CA 95206. In a tree, approximately 23 feet south of the Houston Avenue centerline and 4,170 feet southeast of SR-4.	55.2–61.6	48.3–57.8	61.6

Source: Compiled by LSA (2025).
Note: Noise measurements were conducted from April 22 to April 23, 2025, starting at 3:00 p.m.
[1] Daytime Noise Levels = noise levels during the hours from 7:00 a.m. to 10:00 p.m.
[2] Nighttime Noise Levels = noise levels during the hours from 10:00 p.m. to 7:00 a.m.
dBA = A-weighted decibels
ft = foot/feet
L_{dn} = day-night average sound level
L_{eq} = equivalent continuous sound level
SR = State Route



LSA

FIGURE 4-2

LEGEND

Project Site Boundary

LT-X Long-term Noise Monitoring Location

N

0 450 900

FEET

SOURCE: Google Earth 2025

Van Buskirk Park Revitalization Project

Noise Monitoring Locations

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a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? ***(Less Than Significant with Mitigation Incorporated)***

Construction-Period Impacts. Construction of the proposed Project could include construction activities that would result in a temporary increase in ambient noise levels in the Project site vicinity. Maximum construction noise levels would be short-term, generally intermittent depending on the construction phase, and variable depending on receiver distance from the active construction zone. The duration of noise impacts generally would be from 1 day to several days, depending on the phase of construction. Project construction would occur for approximately 18 months. The level and types of noise impacts that would occur during construction are described below.

Short-term noise impacts would occur during paving and site preparation activities. Table 4.N lists maximum noise levels recommended for noise impact assessments for typical construction equipment, based on a distance of 50 feet between the equipment and a noise receptor. Construction-related short-term noise levels would be higher than existing ambient noise levels currently in the Project area but would no longer occur once construction of the Project is completed.

Two types of short-term noise impacts could occur during construction of the proposed Project. The first type involves construction crew commutes and the transport of construction equipment and materials to the site for the proposed Project, which would incrementally increase noise levels on roads leading to the site. As shown in Table 4.N, there would be a relatively high single-event noise exposure potential at a maximum level of 84 dBA maximum instantaneous noise level (L_{max}) with trucks passing from 50 feet.

The second type of short-term noise impact is related to noise generated during demolition, site preparation, grading, construction, paving, and architectural coating on the Project site. Construction is performed in discrete steps, or phases, each with its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Average maximum noise levels range up to 91 dBA L_{max} at 50 feet during the noisiest construction phases. The site preparation and grading phases tend to generate the highest noise levels because earthmoving machinery is the noisiest construction equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

Table 4.N: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor (%)	Maximum Noise Level (L_{max}) at 50 Feet[1]
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Impact Pile Drivers	20	95
Jackhammers	20	85
Pick-up Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Welder	40	73

Source: Roadway Construction Noise Model (FHWA 2006).
Note: Noise levels reported in this table are rounded to the nearest whole number.
[1] Maximum noise levels were developed based on Spec 721.560 from the CA/T program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.
CA/T = Central Artery/Tunnel
FHWA = Federal Highway Administration
L_{max} = maximum instantaneous sound level

As identified above, the Project site is generally surrounded by residential uses. The closest sensitive receptors during Phase 1 include the residences located north of the Project site approximately 730 feet from the center of Project site. The 730-foot distance would decrease the noise level by approximately 23 dBA compared to the noise level measured at 50 feet (88 dBA L_{eq}) from the construction activity. The closest sensitive receptors during proposed subsequent phases include the residences located north of the Project site approximately 530 feet from the center of the Project site. The 530-foot distance would decrease the noise level by approximately 20 dBA compared to the noise level measured at 50 feet (88 dBA L_{eq}) from the construction activity.

Therefore, the closest off-site receptors may be subject to short-term construction noise levels of 65 dBA L_{eq} and 68 dBA L_{eq} during Phase 1 and subsequent phases, respectively, when construction is occurring at the center of the Project site. These predicted noise levels would only occur when all construction equipment is operating simultaneously; therefore, the noise levels are assumed to be rather conservative in nature. While construction-related short-term noise levels have the potential to be higher than existing ambient noise levels in the Project area under existing conditions, the noise impacts would no longer occur once Project construction is completed.

Table 4.O shows the nearest sensitive uses to the Project site, their distance from the center of construction activities, and composite noise levels expected during construction. These noise level projections do not consider intervening topography or barriers.

Table 4.O: Potential Construction Noise Impacts at Nearest Receptor

Receptor (Location)	Composite Noise Level (dBA L_{eq}) at 50 ft[1]	Phase 1		Subsequent Phases	
		Distance (ft)	Composite Noise Level (dBA L_{eq})	Distance (ft)	Composite Noise Level (dBA L_{eq})
Residential Use (North)	88	730	65	530	68
Residential Use (South)		1,180	61	1.390	60

Source: Compiled by LSA (2025).

[1] The composite construction noise level represents the site preparation and grading phases, which are expected to result in the greatest noise levels compared to other phases.

dBA L_{eq} = average A-weighted hourly noise level

ft = foot/feet

Compliance with the allowed construction hours in the City's Noise Ordinance would ensure that construction noise does not disturb residents during typical sleeping hours or during hours when ambient noise levels are likely to be lower (i.e., at night). In addition, the proposed Project would implement several best practices for reducing construction noise, including, but not limited to, maximizing the distance between noise sources and sensitive receptors during construction activities, equipping construction equipment with properly operating and maintained noise mufflers, and establishing a noise disturbance coordinator for the proposed Project. These best practices are included in Mitigation Measure NOI-1, provided below. With the incorporation of Mitigation Measure NOI-1, all feasible and reasonable measures to reduce construction noise would be implemented, and a less than significant impact would occur.

Mitigation MeasureNOI-1

Construction Noise and Vibration. Prior to the issuance of grading permits, the City of Stockton (City) Director of Community Development Department, or designee, shall verify that grading and construction plans include the following requirements:

- Ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved.
- Construction equipment, fixed or mobile, shall be equipped with properly operating and maintained noise mufflers consistent with manufacturers' standards.
- Construction staging areas shall be located away from off-site sensitive uses during the later phases of Project development.
- The construction contractor shall place all stationary construction equipment so that emitted noise is directed away

from sensitive receptors nearest the Project site whenever feasible.

- The construction contractor shall use on-site electrical sources to power equipment rather than diesel generators where feasible.

- A sign, legible at a distance of 50 feet, shall also be posted at the construction site. All notices and the signs shall indicate the dates and duration of construction activities, as well as provide a telephone number for the "noise disturbance coordinator."

- A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler) and shall be required to implement reasonable measures to reduce noise levels. All signs posted at the construction site shall list the telephone number for the disturbance coordinator.

Operational Noise Impacts. The Project's potential to generate long-term noise impacts from both traffic and stationary noise sources is discussed below.

Traffic Noise Impact. Motor vehicles with their distinctive noise characteristics are the dominant noise source in the Project vicinity. The amount of noise varies according to many factors, such as traffic volume, vehicle mix (percentage of cars and trucks), average traffic speed, and distance from the observer. Implementation of the proposed Project would result in new daily trips on local roadways in the Project site vicinity. A characteristic of sound is that a doubling of a noise source is required in order to result in a perceptible (3 dBA or greater) increase in the resulting noise level.

Trip generation rates for the Project were based on the trip generation analysis, which indicates that the Project would generate approximately 575 net new trips. The adjacent Houston Avenue, according to the City's General Plan, is considered a collector street; collector streets typically carry up to 10,000 vehicles per day. Project trips would represent a small increase in noise level (up to approximately 0.2 dBA CNEL) based on the following equation:

$$Change\ in\ (dBA) = 10 * \log_{10}\left(\frac{Current\ Volume}{\text{Future Volume}}\right)$$

Therefore, Project daily trips would not result in a perceptible noise increase along any roadway segment in the Project vicinity, and impacts associated with traffic noise would be less than significant.

Stationary Noise Impact. The proposed Project would renovate the land currently not in use, which could result in an increase in ambient noise levels in the vicinity of the Project area associated with outdoor play and parking lot noise. Implementation of Phase 1 of the proposed Project could result in the shifting of noise levels in the vicinity of the Project site associated with proposed recreational improvements, including the additional basketball courts, a skate park, a community garden, a splash pad, and others. Implementation of subsequent phases of the proposed Project could result in a similar shift in noise levels in the vicinity of the Project site with implementation of proposed improvements, including the event lawn, event staging area, community building, and pickleball courts. The potential noise impacts associated with these proposed facilities are described below.

Community Building. It is expected that the proposed community building would install heating, ventilation, and air conditioning (HVAC) equipment. It is expected that the equipment installed would comply with the City's noise standards of 55 dBA L_{eq}. The specific design of on-site mechanical equipment associated with the proposed structure has not yet been determined. However, mechanical equipment systems would typically be shielded from direct public exposure and usually housed on rooftops, within equipment rooms, or within exterior enclosures. The use of building mechanical systems is typically intermittent, would likely be limited to the daytime hours of operation, and would be largely masked by ambient traffic noise levels.

Outdoor Facilities. The proposed uses are expected to be similar to those of the existing community center. Any instances in which noise levels generated would result in a disturbance, the City's Municipal Code would be utilized to minimize the operational impacts classified as nuisance issues. Additionally, typical activities at the event lawn and multipurpose lawn/fields are not expected to generate excessive noise levels and would only occur during daytime hours. The closest outdoor facility (the event Lawn/Group Gathering) would be approximately 400 feet from the closest sensitive receptor (residences to the north). To achieve compliance with the City's threshold of 55 dBA L_{eq} at nearby sensitive receptors, noise levels at the outdoor patios and amphitheater should not exceed 65 dBA at 50 feet.

Pickleball Activities. The proposed Project would generate noise from pickleball activities. The closest off-site uses are the single-family residences approximately 200 feet north of the acoustical center of the pickleball courts. The reduction of noise levels from pickleball activities would be provided primarily by distance attenuation to off-site uses.

Assuming each court is hosting a doubles game, with each court generating an average noise level of 64.9 dBA L_{eq} at 25 feet, based on measurements conducted by LSA for a similar pickleball project, pickleball activity noise levels are estimated to approach 63 dBA L_{eq} at the residential uses approximately 200 feet away from the acoustical center of the pickleball courts. This noise level would exceed the City's exterior daytime (7:00 a.m. to 10:00 p.m.) noise standards of 55 dBA L_{eq}. Because the design of the proposed pickleball courts is not yet known, Mitigation Measure NOI-2 would be required to ensure that the future design of the pickleball courts includes a noise barrier to reduce the noise levels generated during pickleball activities to a less than significant level.

Mitigation Measure NOI-2 As part of the final design for the subsequent phase(s) of development, the City of Stockton (City) shall require installation of a noise barrier along the northern and eastern boundaries of the proposed pickleball courts. The noise barrier may consist of any solid material, without gaps or holes, that meets a minimum density of 4 pounds/square foot, or is sound rated and has a minimum Sound Transmission Class (STC) rating of 25. The noise barrier shall provide noise reduction sufficient to ensure that noise levels at the nearest residential uses would not exceed the City's exterior daytime noise standard of 55 A-weighted decibels (dBA) equivalent continuous sound level (L_{eq}).

With implementation of Mitigation Measure NOI-2, which requires installation of a noise barrier around the pickleball courts, potential long-term noise levels associated with implementation of the proposed Project would be less than significant with mitigation incorporated.

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels? ***(Less Than Significant Impact)***

Vibration refers to groundborne noise and perceptible motion. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. Vibration energy propagates from a source, through intervening soil and rock layers, to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by the occupants as the motion of building surfaces, rattling of items on shelves or hanging on walls, or as a low-frequency rumbling noise. The rumbling noise is caused by the vibrating walls, floors, and ceilings radiating sound waves. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 dB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of groundborne vibration are construction activities (e.g., pavement breaking, operating heavy-duty earthmoving equipment), rail activity, and occasional traffic on rough roads. In general, groundborne vibration from standard construction practices is only a potential issue when within 25 feet of sensitive uses. Groundborne vibration levels from construction activities very rarely reach levels that can damage structures; however, these levels are perceptible near the active construction site. With the exception of older buildings built prior to the 1950s or buildings of historic significance, potential structural damage from heavy construction activities rarely occurs. When roadways are smooth, vibration from traffic (even heavy trucks) is rarely perceptible.

The roadways surrounding the Project area, including Houston Avenue, are paved, smooth, and unlikely to cause significant groundborne vibration. In addition, the rubber tires and suspension systems of buses and other on-road vehicles make it unusual for on-road vehicles to cause groundborne noise or vibration problems. It is, therefore, assumed that no such vehicular vibration impacts would occur, and no vibration impact analysis of on-road vehicles is necessary.

The following vibration impact analysis discusses the level of human annoyance using vibration levels in RMS and assesses the potential for structural damages using vibration levels in PPV (in/sec) because vibration levels calculated in RMS are best for characterizing human response to building vibration, while vibration level in PPV is best used to characterize potential for damage.

Construction Vibration. Construction of the proposed Project could result in the generation of groundborne vibration. Table 4.P shows the PPV and RMS values at 25 feet from a construction vibration source. As shown in Table 4.P, bulldozers and other heavy-tracked construction equipment (except for pile drivers and vibratory rollers) generate approximately 0.089 PPV (in/sec) or 0.062 RMS (in/sec) of groundborne vibration when measured at 25 feet, based on the *Transit Noise and Vibration Impact Assessment.*[93] At this level, groundborne vibration would result in potential annoyance to residents and workers but would not cause any damage to the buildings. Construction vibration, similar to vibration from other sources, would not have any significant effects on outdoor activities (e.g., those outside of residences and commercial/office buildings in the Project vicinity). Outdoor site preparation for the proposed Project is expected to include the use of bulldozers and loaded trucks. The greatest levels of vibration are anticipated to occur during the site preparation phase. All other phases are expected to result in lower vibration levels.

Table 4.P: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L_V at 25 feet	
	PPV (in/sec)	RMS (in/sec)[1]
Pile Driver (Impact), Typical	0.644	0.451
Pile Driver (Sonic), Typical	0.170	0.119
Vibratory Roller	0.210	0.147
Hoe Ram	0.089	0.062
Large Bulldozer	0.089	**0.062**
Caisson Drilling	0.089	0.062
Loaded Trucks	0.076	**0.053**
Jackhammer	0.035	0.025
Small Bulldozer	0.003	0.002

Sources: *Transit Noise and Vibration Impact Assessment* (FTA 2018).
[1] RMS vibration velocity is 70 percent of maximum PPV.
Caltrans = California Department of Transportation
ft = foot/feet
in/sec = inches per second
PPV = peak particle velocity
RMS = root-mean-square

The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the Project boundary (assuming the construction equipment would be used at or near the Project boundary) because vibration impacts occur normally within the buildings. The formula for vibration transmission is provided below. The material dampening coefficient, "n," ranges between 1.1 and 1.5 depending on soil type and distance from equipment.

$$PPV_{equip} = PPV_{ref} \times (25/D)^n$$

[93] Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual FTA Report No. 0123*. September.

The reference distance for potential vibration annoyance impacts at nearest receptors is associated with the average condition, identified by the distance from the center of construction activities to surrounding uses, while the reference distance for potential construction vibration damage impacts at the nearest receptor is associated with the peak condition, identified by the distance from the perimeter of construction activities to surrounding structures. Tables 4.Q and 4.R provide the estimated construction vibration levels for the nearest receptors to the project site.

Table 4.Q: Potential Construction Vibration Annoyance Impacts at Nearest Receptor

Receptor (Location)	Reference Vibration Level (RMS) at 25 ft[1]	Phase 1		Subsequent Phases	
		Distance (ft)[2]	Vibration Level (RMS)	Distance (ft)[2]	Vibration Level (RMS)
Residential Use (North)	0.062	730	0.002	530	0.002
Residential Use (South)		1,180	0.001	1,390	0.001

Source: Compiled by LSA (2025).

[1] The reference vibration level is associated with a large bulldozer, which is expected to be representative of the heavy equipment used during construction.

[2] The assessment distance is associated with the average condition, identified by the distance from the center of construction activities to surrounding uses.

ft = foot/feet

RMS = root-mean-square

Table 4.R: Potential Construction Vibration Damage Impacts at Nearest Receptor

Receptor (Location)	Reference Vibration Level (PPV) at 25 ft[1]	Phase 1		Subsequent Phases	
		Distance (ft)[2]	Vibration Level (PPV)	Distance (ft)[2]	Vibration Level (PPV)
Residential Use (North)	0.089	70	0.019	70	0.019
Residential Use (South)		440	0.001	1,000	<0.001

Source: Compiled by LSA (2025).

[1] The reference vibration level is associated with a large bulldozer, which is expected to be representative of the heavy equipment used during construction.

[2] The assessment distance is associated with the peak condition, identified by the distance from the perimeter of construction activities to surrounding structures.

ft = foot/feet

PPV = peak particle velocity

Based on the information provided in Table 4.Q, vibration levels at the closest residential uses to the north are expected to approach 0.002 RMS during Phase 1 and subsequent phases, which is below the 0.04 RMS threshold for annoyance. Project construction would not result in vibration levels that would typically result in human annoyance. Therefore, this level of groundborne vibration would be less than significant for human annoyance.

Based on the information provided in Table 4.R, vibration levels during Phase 1 are expected to approach 0.019 PPV at the closest residential uses to the north. This vibration level would not exceed the 0.5 in/sec PPV threshold considered safe for newer residential structures and modern industrial or commercial buildings, which would result in a less than significant impact. Vibration

levels at all other buildings would be lower. Therefore, construction would not result in any vibration damage, and impacts would be less than significant.

c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?* ***(Less Than Significant Impact)***

The closest airport to the Project site is Stockton Metropolitan Airport, which is located approximately 2.8 miles southeast of the Project site. Based on Figure 4-2 of the City's General Plan, the Project site is located within the Airport Influence Area (Zone 8) for Stockton Municipal Airport. According to the Airport Land Use Compatibility Plan Update for Stockton Municipal Airport,[94] there are no limits on the non-residential density intensity within this zone. Although aircraft-related noise is occasionally audible on the Project site, the site does not lie within the 60 dBA CNEL noise contours of Stockton Municipal Airport. Therefore, the proposed Project would not expose people residing or working in the Project area to excessive noise levels due to the proximity of a public airport. This impact would be less than significant.

[94] Coffman Associates, Inc. 2016. *Airport Land Use Compatibility Plan Update for Stockton Metropolitan Airport*. May. (Amended February 2018).

4.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? ***(No Impact)***

The proposed Project would renovate the former golf course for use as park. Existing City park staff or their hired maintenance contractors would operate and maintain park facilities. No increase in employment is anticipated as a result of Project implementation. No new housing, commercial, or industrial space would be developed as part of the proposed Project. The proposed Project would not result in the conversion of adjacent land uses or provide access to previously inaccessible areas. It would not provide additional major infrastructure or increase the capacity of the existing water system. Therefore, the proposed Project would not directly or indirectly induce substantial population growth. No impact would occur.

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? ***(No Impact)***

The Project site was previously developed as a golf course, and no permanent housing is located on the Project site. As such, development of the proposed Project would not remove existing housing, necessitating the construction of replacement housing elsewhere. Therefore, no impact would occur.

4.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☒	☐
v. Other public facilities?	☐	☐	☐	☒

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

The following section addresses the proposed Project's potential effects on: fire service, police service, schools, parks, and other public facilities. Impacts to public services would occur if the proposed Project would increase demand for services such that new or expanded facilities would be required, and construction or operation of these new facilities would cause environmental impacts.

*i. Fire protection? **(Less Than Significant Impact)***

The SFD provides fire protection and life safety services to the Project site. The SFD continuously operates 13 fire stations housing 13 engine companies and 4 truck companies. Each fire station has one fire engine. The truck companies are located at Stations 2, 3, 4, and 7. In addition, the Training Division, and Communications Division are located at the central fire station, Station 2. The Hazardous Material (HazMat) Team is staffed by Station 3, and the Urban Search and Rescue Team is staffed by Station 2. The SFD is currently staffed with 196 sworn firefighters and 46 civilian staff. The SFD responded to 42,613 calls for service in 2023, approximately 42 percent of which were for emergency medical services.[95] Primary service to the Project site would be provided by Fire Stations 1 and 5, located approximately 0.73 mile north of the Project site at 1818 South Fresno Avenue and approximately 1 mile southeast of the Project site at 3499 Manthey Road, respectively.

[95] City of Stockton. 2023. *City of Stockton Annual Comprehensive Financial Report FY 2022-23*. Website: https://cms3.revize.com/revize/stockton/Documents/Government/Budget%20And%20Financial%20Reports/Financial%20Reports/ACFR/2023_ACFR.pdf (accessed March 2025).

Although the proposed Project would renovate a former golf course, the golf course has been closed since 2019, and no activity or use is currently occurring at the Project site. As a result, implementation of the proposed Project, which would include development of new recreation facilities, would result in an increase in the daytime population at the Project site and incrementally increase the demand for emergency fire service and emergency medical services compared to existing conditions. However, as noted in Section 4.17.1.d, the proposed Project would have adequate emergency access.

The SFD would continue providing services to the Project site and would not require additional firefighters to serve the proposed Project. Because proposed improvements would be for recreation and would not include housing units or other structures, the incremental increase in demand for fire protection services would not be significant and would not exceed the physical and financial capabilities of the SFD. The proposed Project would not result in a significant impact on the physical environment due to the incremental increase in demand for fire protection and life safety services, and the potential increase in demand for services is not expected to adversely affect existing response times to the site or within the city. Therefore, construction and operation of the proposed Project would have a less than significant impact on fire protection and safety services and facilities.

ii. Police protection? ***(Less Than Significant Impact)***

The Stockton Police Department (SPD) provides police protection to the Project area and Project site. The SPD headquarters are located at 22 East Market Street, approximately 2.4 miles northeast of the Project site. SPD currently employs 400 sworn police officers. With a current population of 320,804,[96] existing staffing levels are approximately 1 sworn officer per 800 residents.

The proposed Project would redevelop the former golf course site as a park to serve the surrounding residential neighborhood. Although the proposed Project would renovate the former golf course, the golf course has been closed since 2019, and no activity or use is currently occurring at the Project site. As a result, implementation of the proposed Project, which would include development of new recreation facilities, would result in an increase in the daytime population at the Project site and incrementally increase the demand for police protection compared to existing conditions. However, visitors to the site are anticipated to be those who generally reside within walking distance of the Project site or come primarily from the local neighborhood. Because proposed improvements would be for recreation and would not include housing units or other structures, the incremental increase in demand for police protection services would not be significant and would not exceed the physical and financial capabilities of the Police Department, resulting in the need for new or expanded police protection services. SPD would continue to provide services to the Project site and would not require additional officers to serve the Project site. In addition, provision of the proposed park would enhance the quality of life for the community, which promotes community cohesion and reduces crime. Therefore, the proposed Project would not result in a substantial adverse impact associated with the provision of additional police facilities or services, and impacts to police services represent a less than significant impact.

[96] United States Census Bureau. *City of Stockton Quick Facts.* Website: https://www.census.gov/quickfacts/fact/table/stocktoncitycalifornia/POP010220 (accessed March 2025).

iii. Schools? ***(No Impact)***

The proposed Project does not include the construction of any new residential uses. As described in Section 4.14.1.a, the proposed Project would not substantially induce housing or population growth, either directly or indirectly, within the city. Therefore, the proposed Project would not result in an increase in the number of school-age children in the area. As such, the proposed Project would not increase demand for schools, and no impact would occur.

iv. Parks? ***(Less Than Significant Impact)***

Implementation of the proposed Project would improve the site as a park to serve the adjacent residential development. As previously stated, 72 percent of Stockton residents live in areas with less than 3 acres of parkland per 1,000 residents. Additionally, 55 percent of residents in the Conway neighborhood and nearby neighborhoods lack access to a vehicle, further limiting their ability to reach recreational spaces.[97] The proposed Project would serve an existing demand for park uses for residents of Stockton. The proposed Project would have a beneficial impact, as use at other existing neighborhood and regional parks or other recreational facilities could be reduced with provision of the proposed park improvements. Therefore, the proposed Project would not result in substantial adverse physical impacts associated with new parks or the need for new parks, which could cause environmental impacts. This impact would be less than significant.

v. Other public facilities? ***(No Impact)***

As noted above, the proposed Project does not include the construction of any new residential uses and would not substantially induce housing or population growth, either directly or indirectly, within the city. Therefore, the proposed Project would not result in increased demand for other public facilities, such as libraries or community centers. This impact would be less than significant.

[97] California Department of Parks and Recreation. Parks for All Californians – Community Fact Finder. Website: https://www.parksforcalifornia.org/methods/#community_factfinder (accessed March 2025).

4.16 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? ***(Less Than Significant Impact)***

The proposed Project would redevelop the Project site as a community park. As described in Section 4.15.a.iv, the proposed Project would serve an existing demand for park uses for residents of Stockton. The proposed Project would have a beneficial impact, as use at other existing neighborhood and community parks or other recreational facilities could be reduced with provision of the proposed park improvements. As such, the proposed Project would have a beneficial impact to existing recreational facilities, as use at other existing neighborhood and regional parks or other recreational facilities may be reduced with the provision of park improvements at the Project site. Therefore, this impact would be less than significant.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? ***(Less Than Significant Impact)***

The proposed Project would improve the Project site for use as a community park, including recreational facilities such as a multipurpose lawn, a skate park, a pump track, basketball courts, a community garden, an event space, and biking/pedestrian trails. Potential adverse effects on the environment related to the development of the proposed Project have been evaluated in this IS/MND. Implementation of the mitigation measures contained in this IS/MND would reduce potential impacts to less than significant.

4.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b. Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	☐	☐	☒	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d. Result in inadequate emergency access?	☐	☐	☒	☐

a. Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? ***(Less Than Significant Impact)***

The proposed Project would include redevelopment of the former golf course with a park, including various recreation facilities. Vehicle access to the park would continue to be provided via Houston Avenue, with new park entrances proposed at the intersection of Houston Avenue, along Houston Avenue east of Georgia Avenue and at the intersection of Houston Avenue and Colorado Avenue. The existing Community Center entrance on Houston Avenue would remain and would provide access to the improvements proposed as part of Phase 1. Parking is currently provided at the existing Van Buskirk Community Center. As part of Phase 1, parking capacity would be expanded by 176 parking stalls at two new parking areas in the eastern portion of the park: (1) a new parking lot off of Houston Avenue adjacent to the existing Van Buskirk Community Center and (2) a new parking lot at the new park entrance at the intersection of Houston Avenue and Georgia Avenue. The existing parking capacity would be further expanded as part of subsequent phases of development.

Trip Generation. The Project site was most recently used as a golf course. The proposed Project would redevelop the golf course into park space to serve the adjacent neighborhood. Trip generation rates provided in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, Eleventh Edition, identify vehicle trips associated with various land uses based on surveys of similar sites around the country. Some of the park elements have potential to generate travel demand at a higher rate than typical park space. The trip generation calculation applies rates for the Phase 2 pickleball courts and dog park based on trip generation surveys of similar uses conducted by LSA. Trip generation rates for the Phase 1 skate park also reference surveys of similar uses. The total trip generation potential applying higher trip generation rates for these amenities is displayed in Table 4.S. As shown in the table, the trip generation for the Project's first phase is less than the traffic previously generated by the golf course. Upon build out of the master plan, however, the proposed Project has the potential to generate 48 more trips in the AM peak hour and 87 more trips in the PM peak hour.

Table 4.S: Trip Generation Summary

Land Use (Land Use Code)	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates									
Park (411)[1]		Acre	0.78	0.01	0.01	0.02	0.06	0.05	0.11
Golf Course (430)[1]		Acre	3.74	0.14	0.05	0.19	0.10	0.18	0.28
Recreational Community Center (495)[1]		TSF	28.82	1.26	0.65	1.91	1.18	1.32	2.50
Pickleball Courts[2]		Court	44.78	3.74	1.90	5.64	2.44	1.66	4.10
Dog Park[2]		Park	243	10	5	15	15	9	24
Skate Park[3]		TSF	9.14	0.16	0.14	0.30	0.63	0.73	1.36
Trip Generation									
Phase 1									
Public Park	192.71	Acre	150	2	2	4	11	10	21
Skate Park	30.500	TSF	279	5	4	9	19	22	41
Total Phase 1			*429*	*7*	*6*	*13*	*30*	*32*	*62*
Phase 2									
Golf Training Center	25.6	Acre	96	4	1	5	2	5	7
Community Event Center	11.730	TSF	338	15	7	22	14	15	29
Pickleball Courts	6	Court	269	23	11	34	15	10	25
Dog Park	1	Park	243	10	5	15	15	9	24
Total Phase 2			*946*	*52*	*24*	*76*	*46*	*39*	*85*
Total Proposed Project			**1,375**	**59**	**30**	**89**	**76**	**71**	**147**
Existing Entitled Trip Generation									
Golf Course	214	Acre	800	30	11	41	21	39	60
Net Trip Generation			**575**	**29**	**19**	**48**	**55**	**32**	**87**

Source: LSA Associates, Inc. (2025).

[1] Trip rates referenced from the ITE *Trip Generation Manual*, 11th Edition.

[2] Trip rates based on surveys of similar land uses by LSA.

[3] Trip rates referenced from surveys of similar uses as published in *Center Avenue Skate Park Traffic Analysis* (Austin-Fouse Associates, 2011).

ADT = average daily trips

Emp = employee

ITE = Institute of Transportation Engineers

TSF = thousand square feet

Vehicular Access and Circulation. On December 28, 2018, the California Office of Administrative Law and the OPR cleared and adopted the revised *State CEQA Guidelines* Section 15064.3. Among the changes to the guidelines was the removal of vehicle delay and level of service (LOS) as the sole basis of determining environmental impacts under CEQA. With implementation of the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on vehicle miles traveled (VMT). On July 1, 2020, the provisions of *State CEQA Guidelines* §15064.3 became effective statewide. The discussion of the Project's consistency with *State CEQA Guidelines* §15064.3 is discussed under Section 4.17.b, below.

The *City of Stockton Transportation Impact Analysis Guidelines*[98] does not provide a daily or peak-hour traffic volume threshold for requiring a local transportation analysis. The guidelines instead define a potential study area as intersections in the Project vicinity that are known to currently operate at LOS D or worse where the Project would add 10 or more peak-hour trips per lane to any movement.

Upon full completion of the master plan, the proposed Project would stretch from 8th Street to existing Van Buskirk Park adjacent to Manthey Road. Along this section, a total of 16 roadways provide points of access between the adjacent neighborhood and the Project site. Given the trip generation calculated in Table 4.D and the number of potential points of access to the Project site, it is unlikely that the proposed Project would add 10 or more trips per lane to any single movement at an intersection in the Project vicinity that currently operates at LOS D or worse. As such, no intersections would be included in the study area of a local transportation analysis. Therefore, operation of the proposed Project would not conflict with a policy related to the roadway system. This impact would be less than significant.

Pedestrian Facilities. Pedestrian facilities in the Project area consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. The Project is expected to increase the number of pedestrians using the sidewalks and crosswalks. Existing sidewalks are provided along both sides of Houston Avenue along the entire length of the Project site. The overall network of sidewalks and crosswalks in the vicinity of the Project site has adequate connectivity and provides pedestrians with safe routes to nearby destinations. The Project would not remove any pedestrian facilities, nor would it conflict with any adopted plans or policies for new pedestrian facilities. In addition, the proposed Project would include development of a linear park with a Class I multi-use path along the northern park boundary parallel to Houston Avenue. The Project would also construct additional bike and pedestrian paths to enhance activity within the park and provide connectivity to adjacent neighborhoods.

The proposed Project is not anticipated to eliminate off-site pedestrian facilities, create hazardous conditions for pedestrians by changing off-site geometric features or introducing incompatible vehicle types to the roadway system, or conflict with any existing or planned pedestrian facilities. Therefore, impacts to pedestrian facilities would be less than significant.

Bicycle Facilities. According to the *City of Stockton Bicycle Master Plan*,[99] there are no existing bicycle facilities in the immediate vicinity of the Project site; however, a bicycle path is proposed along the southern boundary of the project site, along the existing levee. The proposed Project design would not eliminate bicycle facilities that connect to the area circulation system and would not conflict with existing or planned bicycle facilities, nor would it create a hazardous condition for bicyclists by changing off-site geometric features or introducing incompatible vehicle types to the

98 City of Stockton. 2023. *City of Stockton Transportation Impact Analysis Guidelines.* May 2. Website: https://cms3.revize.com/revize/stockton/Documents/Business/Planning%20&%20Engineering/Transportation/Adopted_TIA_Guidelines.pdf (accessed April 2025).

99 Fehr & Peers. 2017. *City of Stockton Bicycle Master Plan.* December. Website: https://cms3.revize.com/revize/stockton/Documents/Services/Public%20Works/Projects%20&%20Studies/Bicycle%20Master%20Plan/Bicycle_Master_Plan_2017-12-05%20(1).pdf (accessed April 2025).

roadway system. As described above, the proposed Project would include development of a linear park with a Class I multi-use path along the northern park boundary parallel to Houston Avenue. The Project would also construct additional bike and pedestrian paths to enhance activity within the park and to provide connectivity to adjacent neighborhoods. In addition, the proposed Project would include provision of on-site bicycle parking as part of proposed parking expansion. Therefore, impacts to bicycle facilities would be less than significant.

Transit Service. The San Joaquin Regional Transit District (San Joaquin RTD) provides public transit service adjacent to the Project study area. The San Joaquin RTD provides public transit services in the Stockton metropolitan area, as well as intercity and rural transit services countywide. The San Joaquin RTD operates several routes in the vicinity of the Project site: Route 515 (weekdays), Route 315 (weekdays), and Route 49 (weekdays and weekends). Route 515 has a frequency of approximately 30 minutes and runs from 5:38 a.m. to 7:55 p.m. on weekdays. Route 315 runs one service during the morning (7:51 a.m.) and one during the afternoon (3:45 p.m.) on weekdays only. Route 49 has a frequency of approximately 30 minutes and runs from 5:46 a.m. to 10:12 p.m. on weekdays and has a frequency of 60 minutes and runs from 8:00 a.m. to 6:26 p.m. on weekends. Currently, the bus stops nearest the Project site are located along Houston Avenue west of Dry Creek Road. Bus stops are also located on Level Avenue north of the Project site.

While the proposed Project could generate new demand for the public transit services and facilities that serve the area, transit system and transit vehicle capacities are not expected to be exceeded, and the proposed Project is not in conflict with existing or planned public transit facilities. Therefore, impacts to public transit would be less than significant.

For the reasons outlined above, the proposed Project would not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. This impact would be less than significant.

b. Would the project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)? ***(Less Than Significant Impact)***

State CEQA Guidelines Section 15064.3, subdivision (b), seeks to evaluate a project's potential impact related to its VMT. In May 2023, the City of Stockton adopted the *City of Stockton Transportation Impact Analysis Guidelines,* [100] which includes VMT metrics, thresholds, and screening criteria for evaluating a project's VMT impact. Based on the City's thresholds and screening criteria, a project can be screened out for a formal VMT analysis if certain criteria are met that would signify that a project would be presumed to result in a less than significant impact with respect to VMT. A project's impact on VMT is considered less than significant and should not require further VMT analysis if the project meets at least one of the following criteria:

[100] City of Stockton. 2023. *City of Stockton Transportation Impact Analysis Guidelines.* May 2. Website: https://cms3.revize.com/revize/stockton/Documents/Business/Planning%20&%20Engineering/Transportation/Adopted_TIA_Guidelines.pdf (accessed April 2025).

- **Transit Priority Areas (TPAs):** Projects located within a 0.5-mile walkshed around major transit stops[101] (i.e., Downtown Altamont Corridor Express [ACE] Station and Amtrak Station) or within a 0.25-mile walkshed around stops on high-quality transit corridors[102] (i.e., Hammer Lane and Pacific Avenue) in Stockton. However, TPA screening will only apply if the project meets any of the following criteria:
    - The project has a FAR of 0.75 or more;
    - The total square footage is 500,000 square feet or less;
    - The proposed parking does not exceed the minimum required by the Zoning Code or applicable plan;
    - The project is consistent with the City's General Plan, applicable Specific Plan, or applicable Sustainable Communities Strategy (as determined by the lead agency, with input from SJCOG);
    - Existing on-site affordable residential units are maintained or increased; and
    - Less than significant levels of VMT are projected through project-specific or location-specific information.
- **Affordable Housing:** 100 percent restricted affordable residential projects in infill locations (i.e., development within unused and underutilized lands within existing development patterns) and near transit (i.e., is within 0.5 mile of a transit stop).
- **Small Projects:** Projects defined as generating 110 or fewer average daily vehicle trips, absent substantial evidence indicating that a project would generate a potentially significant level of VMT. Examples of projects that may generate less than 110 average daily vehicle trips include:
    - ~10 units of single-family residential
    - ~15 units of multifamily residential
    - ~10,000 square feet of office
    - ~15,000 square feet of industrial
- **Locally Serving Public Facility:** Locally serving public facilities that encompass government, civic, cultural, health, and infrastructure uses and activities that contribute to and support community needs. Locally serving public facilities include police stations, fire stations, passive parks (parks designed for use in an informal way and typically less developed), branch libraries, community centers, public utilities, and neighborhood public schools. This exemption would not apply to

[101] "Major transit stop" is defined in PRC Section 21064.3 as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency-of-service interval of 15 minutes or less during the morning and afternoon peak commute periods.

[102] "High-quality transit corridor" is defined in PRC Section 21155 as a corridor with fixed-route bus service with service intervals no longer than 15 minutes during peak commute hours.

charter schools, private schools, colleges/universities, hospitals, or other quasi-public uses that are privately operated.

- **Neighborhood-Serving Retail Project:** Neighborhood-serving retail projects that are less than 50,000 square feet, that serve the immediate neighborhoods, and that may have a similar use within 3 miles. Examples include dry cleaners, coffee shops, convenience markets, tutoring centers, and daycare centers.[103]Retail uses with a drive-through component would not be required to prepare a VMT assessment unless part of a larger project that exceeds 50,000 square feet, unless that use is not considered locally serving. Other analysis may be required for projects with a drive-through component. Retail projects less than 50,000 square feet that are expected to have a regional customer base may be required to conduct a VMT assessment.

- **Low-VMT Area:** A project within a TAZ that generates VMT at a rate at least 15 percent lower than the most recently established baseline VMT level.

The proposed Project would construct a new park to serve Stockton residents. The proposed Project therefore qualifies as a local-serving public facility and would meet the City's VMT screening criteria based on this type of community-serving facility.

Additionally, the OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* describes how locally serving projects can redistribute trips and reduce regional VMT by facilitating residents to choose a closer option and shorten trip length. Many of the visitors to the proposed Project are likely to reside in the adjacent neighborhood and could make walking or biking trips to the proposed Project. Other visitors may consider the proposed Project a better option than similar amenities located farther from their residences.

As described above, the proposed Project would be a locally serving park facility presenting an intervening option allowing visitors to shorten vehicle trips. Therefore, in accordance with the Technical Advisory and the *City of Stockton Transportation Impact Analysis Guidelines*, impacts related to *CEQA Guidelines* Section 15064.3, subdivision (b), can be assumed to be less than significant.

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? ***(Less Than Significant Impact)***

As described above, vehicle access to the Project site would continue to be provided via Houston Avenue, with new park entrances proposed at the intersection of Houston Avenue and Georgia Avenue, on Houston Avenue east of Georgia Avenue and at the intersection of Houston Avenue and Colorado Avenue. The existing entry for the Van Buskirk Community Center would remain and provide access to the expanded park. The existing parking capacity would be expanded with the expansion of existing parking facilities and the creation of new parking areas.

[103] Daycare centers 7,500 sf or less would apply to the screening criteria.

The proposed Project would not change the existing layout of Houston Avenue. Existing access points would be used where possible, and new driveways would be constructed consistent with City design standards, with signing and striping consistent with the California Manual on Uniform Traffic Control Devices (MUTCD).[104] Based on review of the conceptual site plan, the location of proposed parking lot driveways would meet the sight distance requirements between vehicles turning into and out of the driveways and the vehicles, bicyclists, and pedestrians moving along these streets. Therefore, the Project would not create a hazard due to a geometric design feature or dangerous intersection.

The proposed Project would redevelop a former golf course with a park adjacent to an existing residential neighborhood, as well as the existing Van Buskirk Community Center and park. Therefore, the proposed Project and travel modes to the proposed Project (including pedestrian, bicycle, and automobile) would be compatible with the existing use of the site and existing infrastructure. Therefore, the proposed Project would result in a less than significant impact related to hazards associated with a design feature or incompatible uses.

d. Would the project result in inadequate emergency access? ***(Less Than Significant Impact)***

The proposed Project would not alter the existing transportation network or emergency access routes. Emergency vehicle access to the Project site would continue to be provided via Houston Avenue. Therefore, the Project's impact would be less than significant.

Factors such as the number of access points, roadway width, and proximity to fire stations determine whether a site provides sufficient emergency access. The proposed Project would not alter the existing transportation network or emergency access routes. Emergency vehicle access to the Project site would continue to be provided via Houston Avenue. As described above, in addition to the existing access points that would be retained, new access driveways would be constructed to provide additional vehicular access, including emergency vehicle access. The design, construction, and maintenance of Project site access locations and on-site roads would be in compliance with the City's Municipal Code and would be required to meet all emergency access standards. Consistent with City requirements, the Stockton Fire Department would review the proposed site plan and would provide input on final design in relation to emergency access prior to issuance of a building permit. Thus, the Project's impacts to emergency vehicle access would be less than significant.

[104] California State Transportation Agency and California Department of Transportation. 2014. *California Manual on Uniform Traffic Control Devices, Revision 7.* March.

4.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or	☐	☒	☐	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or ***(Less Than Significant with Mitigation Incorporated)***

Enacted in 2014 and codified in part in Public Resources Code (PRC) Section 21080.3.1, AB 52 (Gatto) amended CEQA to require tribal cultural resources to be considered as potentially significant cultural resources under the CEQA environmental review process. The procedures under AB 52 offer tribes an opportunity to take an active role in the CEQA process in order to protect tribal cultural resources. Pursuant to AB 52, if a Native American identifies tribal cultural resources within a project site, the Native American shall contact the local lead agency.

On February 18, 2025, AB 52 consultation letters were sent to all Native American contacts who had formally requested notification. Follow-up with nonrespondents was conducted via email on March 17, 2025. Four tribes responded, and the communications are summarized below. To date, tribal consultation is still ongoing.

- On March 3, 2025, Katherine Perez, Nototomne Cultural Preservation Officer of the Northern Valley Yokut Tribe, responded, requesting consultation, tribal monitoring, cultural reports, and the right to review/approve any archaeological testing. As described in Section 4.5, Cultural Resources, a representative of the Northern Valley Yokut Tribe was present for the archaeological field survey and the auger testing conducted at the project site.

- On March 14, 2025, the Cultural Resources Department of the Wilton Rancheria (no individual's name in email) responded, indicating that the Project area is within ancestral territory, but the tribe currently has no comments.

- On March 15, 2025, Richard Massiatt, Executive Director of the Muwekma Ohlone Tribe of the San Francisco Bay Area, responded, requesting consultation and offering monitoring and burial recovery services.

- On March 17, 2025, Lucy Gill, Cultural Resource Manager for the Confederated Villages of Lisjan Nation (CVLN), responded, requesting consultation, records search results, report, and specific information on ground disturbance. The documents requested by the tribe were provided.

- On April 16, 2025, the City had an official consultation meeting with Chairwoman Gould (CVLN) and other members of the tribal staff.

- On June 10, 2025, the City had a call with Katherine Perez, Nototomne Cultural Preservation Officer of the Northern Valley Yokut Tribe to discuss the proposed tribal mitigation measures. On June 13, Ms. Perez provided input on the proposed measures. Her input has been incorporated into the measures provided below.

- On June 18, 2025, the City had a virtual consultation meeting with Chairwoman Gould (CVLN) and other members of the tribal staff to discuss the results of the auger testing and the potential tribal mitigation measures. Following the meeting, CVLN provided their standard mitigation measures, which have been incorporated into the measures provided below.

As discussed in Section 4.5, Cultural Resources, cultural resources have been previously documented within the Project site; however, no resources were identified during the field survey or the follow-up extended phase, including subsurface testing conducted within the Phase 1 area. Previously identified resources within the Project site were determined to not be listed or eligible for listing in the California Register or in a local register of historical resources as defined in PRC Section 5020.1(k).

As described above, the City received email responses to the request for consultation from four tribal representatives. As part of the consultation, tribal representatives did not provide substantial evidence of any tribal cultural resources occurring on the Project site. However, given the presence of previously identified resources within and in proximity to the Project site and the site's position in the landscape along an existing watercourse, the Project site is considered sensitive for precontact archaeological resources. The overall archaeological sensitivity of the Project area is lessened by past land uses that included years of mowing and earthmoving activities associated with development of the former golf course (which may have impacted previously extant precontact and historic-period

archaeological resources). The depth of these landscape modifications in the Project area is not known. Beneath the zone of disturbance, however, intact buried archaeological resources may remain. Therefore, there is a possibility that the proposed Project could impact as-yet-unrecorded subsurface resources on the Project site that could be eligible for listing in the California Register or in a local register of historical resources as defined in PRC Section 5020.1(k).

Implementation of Mitigation Measures TCR-1 through TCR-3, in addition to Mitigation Measures CUL-1a through CUL-1c would satisfy the agreement between the City and tribal representatives under AB 52 and reduce potential impacts from the proposed Project to a less than significant level.

Mitigation Measure TCR-1 **Native American Monitoring.** Prior to ground-disturbing activities, tribal monitor(s) from the Confederated Villages of Lisjan Nation (CVLN), the Northern Valley Yokuts Tribe, and the Muwekma Ohlone Tribe shall be retained. Native American monitoring by a representative of the North Valley Yokuts Tribe, CVLN, and the Muwekma Ohlone Tribe shall be required during all ground disturbing activities associated with project implementation. Monitoring procedures shall follow the Cultural Resources Management Plan prepared under Mitigation Measure CUL-1a. Tribal monitor(s) shall have the authority to halt and redirect work should any archeological or tribal cultural resources be identified during monitoring. If archaeological or tribal cultural resources are encountered during ground-disturbing activities, work within 100 feet of the find must halt and the find be evaluated for listing in the California Register of Historic Resources (California Register) and National Register of Historic Places (National Register). Monitoring may be reduced or halted at the discretion of the tribal monitor(s), in consultation with the lead agency, if site conditions indicate there is little likelihood of encountering intact deposits (e.g., encountering bedrock, sediments being excavated are fill, or negative findings for 50 percent of ground disturbance). If monitoring is reduced to spot checking, spot checking shall occur when ground-disturbing activities moves to a new location within the Project site and when ground disturbance will extend to depths not previously reached (unless those depths are within bedrock).

Mitigation Measure TCR-2 **Unanticipated Discovery of Tribal Cultural Resources.** If cultural resources of Native American origin are identified during grading or excavation of the proposed Project, all ground-disturbing activities within 100 feet must cease until a qualified professional archaeologist (either an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archeology or an archaeologist supervised by such an archaeologist) has evaluated the nature and significance of the find as a cultural resource, and the City of Stockton (City) representative has consulted a representative

from the CVLN, the Northern Valley Yokuts Tribe, and the Muwekma Ohlone Tribe. The archaeologist will stake the area of discovery, placing stakes no more than 10 feet apart, forming a circle with a radius of no less than 100 feet from the point of discovery. If the City, in consultation with the consulting tribe(s), determines the resource is a Tribal Cultural Resource and thus significant under the California Environmental Quality Act (CEQA) and/or to the tribe(s), the entity shall retain a qualified archeologist and a tribal monitor, at the applicant's expense, to prepare and implement a mitigation plan, in accordance with State guidelines and in consultation with the consulting tribe(s). The mitigation plan shall include avoidance of the resource or, if avoidance of the resource is feasible, shall outline appropriate treatment of the resource in coordination with the consulting tribe(s) and, if applicable, the qualified archaeologist. Examples of appropriate mitigation for the tribal cultural resources include, but are not limited to, protecting the cultural character and integrity of the resources, protecting traditional use of the resources, protecting the confidentiality of the resources, or heritage recovery. Curation of Tribal cultural resources is not considered to be appropriate or respectful and materials shall not be permanently curated unless specifically requested by the Tribes. Any Tribal cultural resources discovered as part of the proposed Project shall be recorded in the Sacred Lands File maintained by the Native American Heritage Commission. The City and its contractor(s) shall not photograph, publicize, post, or share information about any discovered Tribal cultural resources.

Mitigation Measure TCR-3

Halt Work/Coroners Evaluation/Impact to Previously Undiscovered Human Remains. If human remains are encountered during construction and ground disturbing activities, the City or the City's contractor must redirect all work within 100 feet of the remains and immediately contact the County Coroner, the City of Stockton, and a qualified professional archaeologist (either an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archeology or an archaeologist supervised by such an archaeologist) to assess the situation. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification. The NAHC will identify a Native American Most Likely Descendent (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and any associated funerary objects. The archaeologist shall recover scientifically valuable information, as appropriate and in accordance with the recommendations of the MLD. Upon completion of the archaeologist's assessment, a report must be prepared documenting

methods and results, as well as recommendations regarding the treatment of the human remains and any associated archaeological materials. The report must be submitted to the City, the Project proponent, the Central California Information Center (CCAIC) and the consulting tribe. Tribal representatives will rebury the Native American human remains and associated funerary objects with the appropriate dignity either in accordance with the recommendations of the MLD, if available, or in the Project vicinity at a location selected in consultation with the tribe, the professional archaeologist, and the City, where the reburial would be accessible to tribal members in perpetuity and would not be subject to further disturbance. The discovery and reburial is to be kept confidential and secure to prevent any further disturbance.

In the event that previously unidentified archaeological resources are discovered by the tribal monitor, implementation of Mitigation Measures TCR-3 and TCR-4, and Mitigation Measure CULT-1 (as detailed in Section 4.5, Cultural Resources), as well as compliance with Section 7050.5 of the California Health and Safety Code and PRC Section 5097.98, would reduce the potential construction-period discovery of previously unidentified subsurface deposits and human remains that may be of tribal origin to a less than significant level. With implementation of Mitigation Measures CULT-1, TRC-1, TCR-2, and TCR-3, impacts to tribal cultural resources would be less than significant with mitigation incorporated.

ii. *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.* ***(Less Than Significant with Mitigation Incorporated)***

Please refer to Section 4.18.b. There is a possibility that the proposed Project could impact as-yet-unrecorded, subsurface deposits on the Project site that could be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In the event that previously unidentified archaeological resources are discovered by the tribal monitor, implementation of Mitigation Measures TCR-3, TCR-4, and CUL-1 (as detailed in Section 4.5, Cultural Resources) and compliance with Section 7050.5 of the California Health and Safety Code and PRC Section 5097.98 would reduce the potential construction-period discovery of previously unidentified subsurface deposits and human remains that may be of tribal origin to a less than significant level. With incorporation of Mitigation Measures CUL-1, TRC-1, TCR-2, TCR-3, and TCR-4, impacts to tribal cultural resources would be less than significant.

4.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? ***(Less Than Significant Impact)***

A variety of local and regional purveyors in this area provide and maintain utility and service system facilities associated with electricity, water, stormwater, wastewater, solid waste, and communications. These existing services and potential impacts to these services are discussed below.

Wastewater. The City provides wastewater collection and treatment for properties within Stockton. The City's sewer system includes approximately 1,000 miles of gravity sewers and force mains (pressure pipelines) ranging from less than 6 inches to 84 inches in diameter, as well as 35 sewer pump stations. The sewer system generally flows from the north, east, and south to the Stockton Regional Wastewater Control Facility (RWCF), where it is treated and discharged to the San Joaquin River.

The proposed Project would include new sanitary sewer connections to convey sewage to the existing 6-inch-diameter and 8-inch-diameter sewer mains in Houston Avenue. The new sanitary sewer lateral would be constructed in accordance with City standards and would not cause significant environmental effects.

Water. Cal Water supplies water to central Stockton, including the Project site. Cal Water supplies consist of purchased water and groundwater. Cal Water purchases water from the Stockton East

Water District (SEWD), which obtains supplies from the New Hogan Reservoir on the Calaveras River and the New Melones Reservoir on the Stanislaus River. Raw purchased water is treated at SEWD's treatment plant on the eastern boundary of Stockton, with a capacity of 60 million gallons per day (mgd). According to its 2020 UWMP,[105] Cal Water has multiple sources of water available for its use, including purchased treated water from the Stockton East Water District, and groundwater from the Eastern San Joaquin Subbasin. Cal Water generally relies on treated surface water year-round for its primary supply, but this is supplemented with groundwater to meet increased water demands primarily in the summer months or during dry years, when available surface water supplies may be limited.

The proposed Project would include the installation of drinking fountains, restrooms, and new recreational facilities. Existing utilities are located under and along Houston Avenue adjacent to the Project site, and the park's needs for water would be served by new water lines that would connect to existing utilities under Houston Avenue. The new water line would be constructed in conformance with City standards, and its construction would not cause significant environmental effects. In addition, some of the landscaped areas may require irrigation. Irrigation water would be pumped from the San Joaquin River via the existing on-site pump system that served irrigation needs for the former golf course. Alternatively, the City may install an onsite well to provide irrigation water.

As discussed in Section 4.19.b, below, the proposed Project would not substantially increase demand for water and would therefore not exceed the capacity of existing water treatment facilities. The proposed Project would not require the construction of new water treatment facilities or the expansion of existing facilities other than those already planned. Therefore, the impact of the proposed Project on water infrastructure would be less than significant.

Stormwater. The proposed Project would be designed in compliance with NPDES regulations, the MRP, the SWQCCP, and other State and local requirements. All stormwater would be treated on site via bioretention basins and swales that would be integrated into the landscape. As described in Section 4.10, a Stormwater Quality Control Plan would be required by the City of Stockton Municipal Utilities Department as part of the permitting process for the proposed Project. Stormwater would be directed to bioretention basins and swales, which would treat stormwater before it infiltrates the Project site, as required for hydromodification requirements. With full build out of the proposed Project, approximately 28.23 acres (1,229,692 square feet) of the Project site (6.65 acres as part of Phase 1 and 21.57 acres as part of the subsequent phases) would be covered by impervious surfaces. The proposed Project would include a total of approximately 28.37 acres (1,235,700 square feet) of bioretention that would be used for stormwater control, including the existing ponds associated with the former golf course and new bioretention facilities to be installed as part of the proposed Project.

As discussed in Section 4.10, Hydrology and Water Quality, implementation of appropriate source control, site design, and stormwater treatment measures, in compliance with the MRP and City Municipal Code, would ensure that post-Project runoff does not exceed estimated pre-Project rates

[105] California Water Service Company (Cal Water). 2021. *2020 Urban Water Management Plan Stockton District.* June. Website: https://www.calwater.com/docs/uwmp2020/STK_2020_UWMP_FINAL.pdf (accessed April 2025).

and durations. Therefore, the proposed Project would not require the construction of any new or expanded stormwater infrastructure beyond that which was already analyzed as part of the proposed Project, and this impact would be less than significant.

Electricity. The Project site is currently served by electrical and telecommunications infrastructure. The proposed Project would connect directly to existing telecommunication and electricity infrastructure.

The proposed Project would connect to existing utility services within or adjacent to the Project site. The relocation or reconstruction of new or expanded water, wastewater system, stormwater drainage, or telecommunications facilities would not be required. Impacts would be less than significant.

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? ***(Less Than Significant Impact)***

The Cal Water updated its UWMP in 2021. According to the UWMP, water demand within the Cal Water was 23,539 acre-feet per year (AFY) on average between 2016 and 2020. Taking into account historical water use, expected population increase and other growth, climatic variability, and other assumptions, water demand within the district is projected to increase to 23,733 AFY by 2025, then decrease to 23,517 AFY by 2045, a change of approximately 0.1 percent compared to the 2016–2020 average. In dry-year periods, water demands are expected to be somewhat higher, potentially up to 24,776 AFY by 2025 during an extended 5-year drought.[106] In addition, the UWMP indicates that the Cal Water expects the available supplies to be sufficient to meet projected demands in all hydrologic conditions, including a 5-year drought period, and considering the impacts of climate change.[107]

The proposed Project would increase water demand at the Project site due to the construction of drinking fountains, restrooms, and other recreation facilities (e.g., community garden and event center). Operation of Phase 1 of the proposed Project is anticipated to generate water demand of approximately 1,223,755 gallons per year (gpy) (3.76 AFY) of water. This represents a negligible portion (approximately 0.015 percent) of the average daily water demand within the entire Cal Water service area for the years 2025 and 2045. Development of the subsequent phases would result in a similar demand for additional water service. Because the proposed Project is consistent with the current land use and zoning designations for the site, development of the Project would be considered consistent with the growth assumptions utilized to estimate Cal Water's projected water demands. Thus, the Project's associated increase in water demand would have been accounted for in the UWMP.

Proposed landscaping would be largely native species or drought-tolerant species for water conservation; however, some of the landscaped areas would require irrigation. Approximately 24.92

[106] California Water Service Company (Cal Water). 2021. *2020 Urban Water Management Plan Stockton District.* June. Website: https://www.calwater.com/docs/uwmp2020/STK_2020_UWMP_FINAL.pdf (accessed April 2025).

[107] Ibid.

acres of the Project site (6.19 acres for Phase 1 and 18.73 for the subsequent phases) would be irrigated. Irrigation water would be pumped from the San Joaquin River via the existing pump system established for the former golf course. Irrigation for the proposed Project is anticipated to result in annual water demand of approximately 119.3 acre-feet per year (28.3 acre-feet per year for Phase 1). The City maintains an existing water entitlement to pump water from the San Joaquin River via the existing pump system, and irrigation for the proposed Project would not exceed the City's existing entitlement. With the development of the proposed Project, the area to be irrigated would be reduced compared to the irrigation area associated with the former golf course.

Alternatively, the City may install an onsite well to provide irrigation water. As described in Section 4.10, Hydrology and Water Quality, installation of a new well would require a permit from the San Joaquin County Environmental Health Department. In addition, because the proposed Project is consistent with the current land use and zoning designations for the site, development of the Project would be considered consistent with the growth assumptions utilized to estimate Cal Water's projected water demands. Thus, the project's associated increase in water demand would have been accounted for in the Cal Water UWMP, which considers both surface and groundwater supply. Because Cal Water has sufficient water supplies to meet current and future development within its service area, the potential water demand associated with installation of a new well would not deplete groundwater supplies. Further, implementation of the proposed Project would not preclude implementation of the projects and management actions provided in the GSP, which would offset potential groundwater withdrawals.

As described above, Cal Water's water supplies are estimated to be sufficient during the planning period (through 2045) in normal and during a 5-year drought period. Therefore, Cal Water would have adequate water supply to provide water service to the proposed Project. In addition, the Project's design would be required to adhere to CBC standards for water conservation (e.g., low-flow plumbing fixtures). With compliance with the CBC, the proposed Project would have a less than significant impact on water supply in normal, dry, and multiple dry years. This impact is less than significant.

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? ***(Less Than Significant Impact)***

The Stockton RWCF consists of a main treatment plant with a permitted capacity of 55 mgd. The tertiary treatment plant includes approximately 630 acres of oxidation ponds, an engineered wetland, disinfection facilities, and a river outfall discharge system. A major upgrade to the RWCF is currently in design that will improve the headworks and secondary treatment system as part of a long-term plan to address rehabilitation and replacement needs while improving treatment reliability and providing capacity to accommodate growth.[108]

[108] Placeworks. 2018. *Envision Stockton 2040 General Plan Update and Utility Master Plan Supplements Draft EIR.* June. Website: https://cms3.revize.com/revize/stockton/Documents/Business/Planning%20&%20Engineering/General%20Plan/EnvisionStockton2040GP_Draft.pdf (accessed April 2025).

The proposed Project would generate additional wastewater flows into the RWCF. However, the proposed Project is consistent with the land use and zoning designations for the site. As such, the Project is consistent with what is anticipated for build out under the City's General Plan and would have been included in the capacity calculations for the RWCF. The proposed Project would result in typical wastewater discharges that would not require new methods or equipment for treatment that are not currently permitted for the RWCF, which would serve the proposed Project.

Phase 1 of the proposed Project is estimated to produce approximately 1,101,380 gallons of wastewater per year (3,017 gallons per day [gpd]).[109] This represents a negligible portion (approximately 0.005 percent) of the RWCF's permitted capacity of 55 mgd. The subsequent phases are anticipated to result in similar rates of wastewater generation. The increase in wastewater as a result of the proposed Project would not be considered an adverse impact to the plant's current capacity because of the relatively small increase in demand and the remaining available capacity of the wastewater treatment plant. As such, wastewater generated from the proposed Project would not cause the RWCF to violate any wastewater treatment requirements, and this impact would be less than significant.

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? ***(Less Than Significant Impact)***

Solid waste and recycling collection service in Stockton is conducted by two providers, Republic Services and Waste Management, under contract to the City. Solid waste from Stockton is taken to the Forward Landfill in Manteca or the North County Landfill in Lodi. During inclement weather, occasional loads are taken to the Lovelace Material Recovery Facility in Manteca. Solid waste from the Lovelace facility is disposed of at Foothill Landfill in Linden. Construction and demolition material and some commercial loads are processed at the East Stockton Transfer Station. Residuals from the East Stockton Transfer Station are disposed at Forward Landfill.[110]

The Forward Landfill has a maximum daily permitted throughput of 8,668 tons per day and a remaining capacity of approximately 59.2 million cubic yards.[111] The North County Landfill has a maximum daily permitted throughput of 825 tons per day and a remaining capacity of approximately

[109] In the absence of an official wastewater generation rate, wastewater can be reasonably assumed to be 90 percent of water use. 1,223,755 gallons of water use per year * 0.9 = 1,101,380. 1,101,380/365 gpy = 3,017 gpd.

[110] Placeworks. 2018. *Envision Stockton 2040 General Plan Update and Utility Master Plan Supplements Draft EIR.* June. Website: https://cms3.revize.com/revize/stockton/Documents/Business/Planning%20&%20Engineering/General%20Plan/EnvisionStockton2040GP_Draft.pdf (accessed April 2025).

[111] California Department of Resources Recycling and Recovery (CalRecycle). 2025a. Facility/Site Summary Details: Forward Landfill, Inc. (39-AA-0015). Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1434?siteID=3106 (accessed April 2025).

41.2 million cubic yards.[112] The Foothill Landfill has a maximum daily permitted throughput of 1,500 tons per day and a remaining capacity of approximately 138 million cubic yards.[113]

Operation of the proposed Project is not anticipated to generate a significant amount of solid waste. Users of the proposed park and other recreation facilities at the Project site would dispose of garbage, but not in amounts that would greatly exceed average per-capita garbage generation rates. In addition, recycling receptacles would be located throughout the park, allowing the proposed Project to be in full compliance with waste diversion goals mandated by the California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939). Solid waste disposal off site would comply with all local, State, and federal requirements. Therefore, the proposed Project would be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs, and this impact would be less than significant.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste? ***(Less Than Significant Impact)***

The California Integrated Waste Management Act reorganized solid waste disposal planning within the State of California. The legislation required every county to adopt a Countywide Integrated Waste Management Plan (CoIWMP) describing local waste diversion and disposal conditions, as well as to create programs to meet State goals for diverting waste from landfills. A mandatory diversion goal was established diverting 25 percent of waste from landfills by 1995 and 50 percent by 2000, maintaining 50 percent thereafter.

There are 50 solid waste diversion programs in Stockton, including: composting; facility recovery, such as transfer stations; household hazardous waste collection and education programs; recycling; source reduction programs, including business waste reduction programs; special waste materials, such as tires and concrete/asphalt/rubble; and waste to energy. Compliance with the solid waste diversion requirement in AB 939 is measured in part by comparing actual disposal rates to target rates; actual rates at or below target rates are consistent with AB 939. For 2023, the latest year for which data are available, target disposal rates for the City of Stockton were 6.9 pounds per day (ppd) per resident and 21.0 ppd per employee, and actual rates were 6.7 ppd per resident and 20 ppd per employee; thus, disposal rates in 2023 were consistent with AB 939.[114]

As described above, the proposed Project would comply with all federal, State, and local statutes and regulations related to solid wastes, including waste diversion programs. This impact would be less than significant. Please refer to Section 4.19.d.

[112] CalRecycle. 2025b. Facility/Site Summary Details: North County Landfill & Recycling Center (39-AA-0022). Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1448?siteID=3113 (accessed April 2025).

[113] CalRecycle. 2025c. Facility/Site Summary Details: Foothill Sanitary Landfill (39-AA-0004). Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1424?siteID=3097 (accessed April 2025).

[114] CalRecycle. 2025d. Countywide, Regionwide, and Statewide Jurisdiction Diversion/Disposal Progress Report. Website: https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/slcp/capacityplanning/recycling/JurisdictionDiversionDetail?year=2023&jurisdictionID=517 (accessed April 2025).

4.20 WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan? ***(Less Than Significant Impact)***

The Project site is not located in a State Responsibility Area (SRA) for fire hazards, as mapped by CAL FIRE.[115] Additionally, as noted in Section 4.9, Hazards and Hazardous Materials, the Project site is not within an area identified by CAL FIRE as a community at risk for wildland fire.[116]

As previously discussed in Section 4.9.g, the proposed Project would not alter or block adjacent roadways, and implementation of the proposed Project would not be expected to impair the function of nearby roads that might be used for evacuation during an emergency. In addition, the operation of the proposed Project would not cause permanent alterations to vehicle circulation routes and patterns, or impede public access or travel on public rights-of-way. Therefore, the proposed Project would not interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

[115] CAL FIRE. 2025. Fire Hazard Severity Zones Viewer. Website: https://experience.arcgis.com/experience/5065c998b4b0462f9ec3c6c226c610a9/page/Compare-old-and-new-LRA-FHSZ (accessed April 2025).

[116] CAL FIRE. 2019. Communities at Risk from Wildfire. Website: https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/calfire-website/what-we-do/fire-resource-assessment-program---frap/pdf-maps/communities-at-risk-wildfire-2015.pdf?rev=d7d7e04f0a614ccc8fcbb6d0d13155cf&hash=1C1247791C7C22C80FBA6F6156F69175 (accessed April 2025).

b. Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? ***(Less Than Significant Impact)***

As described in Section 4.7, Geology and Soils, the Project site is relatively flat, with elevations of approximately 50 feet amsl. Especially in summer, winds in the valley most frequently blow from the northwest.

The proposed Project would consist of redevelopment of a former golf course into a park adjacent to an existing residential neighborhood. As noted in Section 3.9, Hazards and Hazardous Materials, the proposed Project does not involve construction of residential or commercial structures or any other structures for human occupation (Section 3.9.g), and people would use the park for a limited duration. The operation of the proposed Project would be consistent with surrounding residential uses and allowable zoning for the Project site.

Construction of the proposed Project would involve the use of some flammable materials, such as gasoline, diesel fuel, hydraulic oils, paints, solvents, or other wastes. During construction, there would be increased human activity and ignition sources, including equipment that could create sparks, be a source of heat, or leak flammable materials on the Project site. However, all construction equipment is required to have fire suppression equipment (such as a fire extinguisher) on board or at the work site, secondary containment would be required for fuel-powered equipment, and a spill kit would be required to be kept on site during construction for use in case of any leaks or spills of flammable materials. These existing requirements would reduce the potential exacerbation of wildfire risks related to construction activities.

Additionally, the Project would be required to comply with the California Fire Code (Section 15.12.010 of the SMC) and the CBC, which call for the installation, maintenance, and ongoing inspection of fire protection systems under the direction of the local fire chief. Prior to approval of improvement plans for any development project within Stockton, plan review and approval by the SFD would be required.

Compliance with these existing regulatory requirements would ensure that the proposed Project would not exacerbate wildfire risks and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant.

c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? ***(Less Than Significant Impact)***

As noted above, the proposed Project would include development of a park within an existing residential neighborhood. Associated improvements would include access improvements and utility connections. Utility connections/lines would be constructed in conformance with City standards as detailed in Section 4.19, Utilities and Service Systems. The Project does not propose the installation or maintenance of any other associated infrastructure (such as roads, fuel breaks, emergency water

sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment, and impacts would be less than significant.

d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? ***(Less Than Significant Impact)***

The Project site is generally level and is not located within an SRA for fire service or a Very High Fire Hazard Severity Zone. As noted in Section 2.0, Project Description, the proposed Project would include environmental mitigation to the wetlands at the northern and western portions of the park to improve the safety of the neighborhoods in the event of flooding. Therefore, the proposed Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. This impact would be less than significant.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? ***(Less Than Significant with Mitigation Incorporated)***

Implementation of the mitigation measures recommended in this Initial Study would ensure that the construction and operation of the proposed Project would not substantially degrade the quality of the environment; reduce the habitat, population, or range of a plant or animal species; or eliminate important examples of California history or prehistory.

As discussed in Section 4.4, Biological Resources, because of the sensitivity of some of the special-status wildlife species known to occur in the area and/or the potential presence of some of the species on or immediately adjacent to the Project site, potential impacts to 10 special-status wildlife species (including monarch butterfly, VELB, western bumble bee, Crotch's bumble bee, burrowing owl, Swainson's hawk, tricolored blackbird, nesting birds, northwestern pond turtle, and bats) were evaluated. Implementation of Mitigation Measures BIO-1 through BIO-9 would reduce potential impacts to these special-status species to a less than significant level. The proposed Project would result in less than significant impacts related to riparian habitat, wetlands, wildlife corridors, policies to protect biological resources, and consistency with the SJCHCP.

As discussed in Section 4.5, Cultural Resources, the built environment resources documented within and adjacent to the Project area have been evaluated for significance as a historical resource and were found to be not eligible, either individually or as a group, for inclusion on the California

Register. Therefore, these resources do not qualify as a historical resource for the purposes of CEQA as defined in PRC Section 21084.1, as defined in PRC Section 5020.1(k), or deemed significant pursuant to criteria set forth in PRC Section 5024.1(g). However, the results of the records search indicate a significant Native American presence in the vicinity of the Project site. Additionally, the Project site is bounded by a water source, which is an area that should be considered sensitive for prehistoric resources. Therefore, despite the disturbance associated with the former golf course use, there is a possibility that the proposed Project could impact as-yet-unrecorded subsurface deposits on the Project site. However, implementation of Mitigation Measure CUL-1a, which requires preparation and implementation of a Cultural Resources Management Plan; Mitigation Measure CUL-1b, which requires worker awareness training be conducted for all construction personnel on site during ground disturbance; and Mitigation Measure CUL-1c, which details processes to follow should an archaeological deposit be encountered during Project subsurface construction activities, would reduce impacts to known, unknown, or potential cultural resources that may be located within the Project site to less than significant levels. Furthermore, as discussed in Section 4.18, Tribal Cultural Resources, during tribal consultation, tribal representative requested that all ground-disturbing activities be monitored by a tribal monitor(s) and any resources discovered be treated in accordance with tribal protocols. As such, Mitigation Measures TCR-1 through TCR-3 are prescribed to reduce impacts to previously unknown tribal cultural resources that may be located within the Project site to less than significant levels. Additionally, the Project applicant is required to comply with CCR Section 15064.5(e), California Health and Safety Code Section 7050.5, and PRC Section 5097.98 as a matter of policy in the event human remains are encountered at any time. Adherence to Mitigation Measures CUL-1a through CUL-1c and TCR-1 through TRC-3, as well as regulations governing human remains, would reduce potential impacts to cultural resources to less than significant.

In addition, although no paleontological resources or unique geological features are known to exist within or near the Project site, the proposed Project would require ground disturbance below ground surface. Therefore, the possibility of accidental discovery of paleontological resources during Project construction cannot be discounted. Implementation of Mitigation Measure GEO-1, which details processes to follow should paleontological resources be encountered during Project subsurface construction activities, would reduce potential impacts to paleontological resources to a less than significant level.

As such, implementation of the proposed Project would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. Impacts would be less than significant with mitigation incorporated.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? ***(Less Than Significant with Mitigation Incorporated)***

Section 15065(a)(3) of the *State CEQA Guidelines* states that a project's cumulative impacts are the possible environmental effects that may be cumulatively considerable when considered with other reasonably foreseeable projects. Cumulatively considerable impacts occur when the incremental effects of a particular project or program are significant when viewed in connection with the effects of other past, current, or reasonably foreseeable future projects. Section 15355 of the *State CEQA Guidelines* defines a cumulative impact as an impact that is created as a result of the combination of the project evaluated in the CEQA document together with other projects causing related impacts.

The proposed Project is located within the boundaries of the former golf course facility. The proposed Project's impacts would be individually limited and not cumulatively considerable. The potentially significant impacts that can be reduced to a less than significant level with implementation of recommended mitigation measures include the topics of biological resources, cultural resources, geology and soils, noise, and tribal cultural resources. These impacts would primarily be related to construction-period activities, would be temporary in nature, and would not substantially contribute to any potential cumulative impacts associated with these topics. For the topic of biological resources, implementation of Mitigation Measures BIO-1 through BIO-9 would ensure that impacts to special-status species, (including monarch butterfly, VELB, western bumble bee, Crotch's bumble bee, burrowing owl, Swainson's hawk, tricolored blackbird, nesting birds, northwestern pond turtle, and bats) are reduced to a less than significant level. For the topic of cultural resources, potentially significant impacts to archaeological and cultural resources would be reduced to less than significant levels with implementation of Mitigation Measures CUL-1 through CUL-3**.** For the topic of geology and soils, potentially significant impacts to paleontological resources would be reduced to less than significant levels with implementation of Mitigation Measure GEO-1**.** For the topic of noise, potentially significant impacts associated with construction and operational noise would be reduced to less than significant levels with implementation of Mitigation Measures NOI-1 and NOI-2, respectively. For the topic of tribal cultural resources, potential impacts to tribal cultural resources would be reduced to less than significant levels with implementation of Mitigation Measures TCR-1 through TCR-3.

For the topics of aesthetics, agricultural and forestry resources, air quality, energy, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, transportation, utilities and service systems, and wildfire, the Project would have no impacts or less than significant impacts and, therefore, would not substantially contribute to any potential cumulative impacts for these topics. All environmental impacts that could occur as a result of the proposed Project would be reduced to a less than significant level through the implementation of the mitigation measures recommended in this document.

Implementation of these measures would ensure that the impacts of the Project would be below established thresholds of significance and that these impacts would not combine with the impacts of

other cumulative projects to result in a cumulatively considerable impact on the environment as a result of Project development.

The impacts relevant to the proposed Project are localized and confined to the immediate Project area. Given that the potential Project-related impacts would be less than significant and limited to a confined location and there are no identified future projects scheduled for development within the project area, implementation of the proposed Project would not result in impacts that are cumulatively considerable when evaluated with the impacts of other current projects or the effects of probable future projects.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? ***(No Impact)***

The proposed Project includes redevelopment of the former golf course as a community park to serve nearby residents. Enhancing Van Buskirk Park would provide much-needed recreational opportunities and create a valuable open space resource for the surrounding neighborhoods, resulting in a beneficial effect. As demonstrated throughout this environmental document, impacts associated with the proposed Project, including those that may have a direct or indirect adverse effect on humans, can be reduced to less than significant through Project-specific mitigation or regulatory compliance measures. The proposed Project would not result in environmental effects that would cause a substantial direct or indirect adverse effect on human beings. No impact would occur.

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5.0 LIST OF PREPARERS

5.1 LSA ASSOCIATES, INC.

Theresa Wallace, AICP, Principal in Charge
Shanna Guiler, AICP, Associate, Project Manager
Carlina Rose, Environmental Planner
Lauren Peachey, Environmental Planner
JT Stephens, Principal/Noise Specialist
Moe Abushanab, Noise Engineer
Dana Kwan, Noise Analyst
Jessica Coria, Associate/Director of Air Quality and Climate Change Services
Cara Cunningham, Associate/Air Quality Specialist
Steve Kohlmann, Associate/Wildlife Biologist
Rory Goodwin, Associate/Archaeologist
Michael Hibma, Associate/Architectural Historian
Arthur Black, Principal/Mobility

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APPENDIX A

CALEEMOD RESULTS

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1.1. Basic Project Information

Data Field	Value
Project Name	Van Buskirk Park Revitalization Project
Construction Start Date	6/1/2026
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	23.4
Location	1740 Houston Ave, Stockton, CA 95206, USA
County	San Joaquin
City	Stockton
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2024
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
City Park	186	Acre	186	0.00	4,050	4,050	—	—

Other Asphalt Surfaces	295	1000sqft	6.77	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-6	Use Diesel Particulate Filters

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.41	48.9	36.3	0.06	1.36	7.81	8.93	1.23	3.97	4.99	—	6,780	6,780	0.27	0.06	6,805
Mit.	1.41	48.9	36.3	0.06	0.20	7.81	7.98	0.18	3.97	4.13	—	6,780	6,780	0.27	0.06	6,805
% Reduced	—	—	—	—	85%	—	11%	85%	—	17%	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.75	18.9	14.3	0.02	0.69	0.13	0.70	0.64	0.03	0.64	—	2,397	2,397	0.10	0.02	2,405
Mit.	5.75	18.9	14.3	0.02	0.10	0.13	0.21	0.10	0.03	0.11	—	2,397	2,397	0.10	0.02	2,405
% Reduced	—	—	—	—	85%	—	70%	85%	—	83%	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.87	11.7	8.76	0.01	0.39	0.66	1.03	0.37	0.29	0.63	—	1,592	1,592	0.06	0.02	1,598
Mit.	0.87	11.7	8.76	0.01	0.06	0.66	0.71	0.06	0.29	0.34	—	1,592	1,592	0.06	0.02	1,598

% Reduced	—	—	—	—	85%	—	31%	85%	—	46%	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.16	2.14	1.60	< 0.005	0.07	0.12	0.19	0.07	0.05	0.11	—	264	264	0.01	< 0.005	265
Mit.	0.16	2.14	1.60	< 0.005	0.01	0.12	0.13	0.01	0.05	0.06	—	264	264	0.01	< 0.005	265
% Reduced	—	—	—	—	85%	—	31%	85%	—	46%	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.41	48.9	36.3	0.06	1.36	7.81	8.93	1.23	3.97	4.99	—	6,780	6,780	0.27	0.06	6,805
2027	1.15	18.9	14.3	0.02	0.69	0.13	0.70	0.64	0.03	0.64	—	2,397	2,397	0.10	0.02	2,405
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.62	18.9	14.3	0.02	0.69	0.00	0.69	0.64	0.00	0.64	—	2,397	2,397	0.10	0.02	2,405
2027	5.75	18.9	14.3	0.02	0.69	0.13	0.70	0.64	0.03	0.64	—	2,397	2,397	0.10	0.02	2,405
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.36	11.7	8.76	0.01	0.37	0.66	1.03	0.34	0.29	0.63	—	1,592	1,592	0.06	0.02	1,598
2027	0.87	10.5	8.08	0.01	0.39	0.01	0.40	0.37	< 0.005	0.37	—	1,332	1,332	0.05	0.01	1,337
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.07	2.14	1.60	< 0.005	0.07	0.12	0.19	0.06	0.05	0.11	—	264	264	0.01	< 0.005	265
2027	0.16	1.92	1.47	< 0.005	0.07	< 0.005	0.07	0.07	< 0.005	0.07	—	221	221	0.01	< 0.005	221

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.41	48.9	36.3	0.06	0.20	7.81	7.98	0.18	3.97	4.13	—	6,780	6,780	0.27	0.06	6,805
2027	1.15	18.9	14.3	0.02	0.10	0.13	0.21	0.10	0.03	0.11	—	2,397	2,397	0.10	0.02	2,405
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.62	18.9	14.3	0.02	0.10	0.00	0.10	0.10	0.00	0.10	—	2,397	2,397	0.10	0.02	2,405
2027	5.75	18.9	14.3	0.02	0.10	0.13	0.21	0.10	0.03	0.11	—	2,397	2,397	0.10	0.02	2,405
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.36	11.7	8.76	0.01	0.06	0.66	0.71	0.05	0.29	0.34	—	1,592	1,592	0.06	0.02	1,598
2027	0.87	10.5	8.08	0.01	0.06	0.01	0.07	0.06	< 0.005	0.06	—	1,332	1,332	0.05	0.01	1,337
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.07	2.14	1.60	< 0.005	0.01	0.12	0.13	0.01	0.05	0.06	—	264	264	0.01	< 0.005	265
2027	0.16	1.92	1.47	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	221	221	0.01	< 0.005	221

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.59	1.65	15.2	0.04	0.03	2.97	3.00	0.03	0.76	0.78	8.62	3,582	3,591	1.01	0.17	3,677
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	2.42	1.91	13.7	0.03	0.03	2.97	3.00	0.03	0.76	0.78	8.62	3,326	3,335	1.03	0.18	3,415
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.42	1.80	13.5	0.03	0.03	2.93	2.96	0.03	0.75	0.77	8.62	3,386	3,395	1.02	0.17	3,477
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.44	0.33	2.46	0.01	0.01	0.53	0.54	< 0.005	0.14	0.14	1.43	561	562	0.17	0.03	576

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.11	1.65	15.2	0.04	0.03	2.97	3.00	0.03	0.76	0.78	—	3,582	3,582	0.15	0.17	3,647
Area	0.48	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	0.12
Waste	—	—	—	—	—	—	—	—	—	—	8.62	0.00	8.62	0.86	0.00	30.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	2.59	1.65	15.2	0.04	0.03	2.97	3.00	0.03	0.76	0.78	8.62	3,582	3,591	1.01	0.17	3,677
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.93	1.91	13.7	0.03	0.03	2.97	3.00	0.03	0.76	0.78	—	3,326	3,326	0.17	0.18	3,385
Area	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	0.12
Waste	—	—	—	—	—	—	—	—	—	—	8.62	0.00	8.62	0.86	0.00	30.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00

Total	2.42	1.91	13.7	0.03	0.03	2.97	3.00	0.03	0.76	0.78	8.62	3,326	3,335	1.03	0.18	3,415
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.94	1.80	13.5	0.03	0.03	2.93	2.96	0.03	0.75	0.77	—	3,386	3,386	0.16	0.17	3,447
Area	0.48	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	0.12
Waste	—	—	—	—	—	—	—	—	—	—	8.62	0.00	8.62	0.86	0.00	30.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	2.42	1.80	13.5	0.03	0.03	2.93	2.96	0.03	0.75	0.77	8.62	3,386	3,395	1.02	0.17	3,477
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.35	0.33	2.46	0.01	0.01	0.53	0.54	< 0.005	0.14	0.14	—	561	561	0.03	0.03	571
Area	0.09	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.02	0.02	< 0.005	< 0.005	0.02
Waste	—	—	—	—	—	—	—	—	—	—	1.43	0.00	1.43	0.14	0.00	4.99
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	0.44	0.33	2.46	0.01	0.01	0.53	0.54	< 0.005	0.14	0.14	1.43	561	562	0.17	0.03	576

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.11	1.65	15.2	0.04	0.03	2.97	3.00	0.03	0.76	0.78	—	3,582	3,582	0.15	0.17	3,647
Area	0.48	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	0.12

Waste	—	—	—	—	—	—	—	—	—	—	8.62	0.00	8.62	0.86	0.00	30.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	2.59	1.65	15.2	0.04	0.03	2.97	3.00	0.03	0.76	0.78	8.62	3,582	3,591	1.01	0.17	3,677
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.93	1.91	13.7	0.03	0.03	2.97	3.00	0.03	0.76	0.78	—	3,326	3,326	0.17	0.18	3,385
Area	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	0.12
Waste	—	—	—	—	—	—	—	—	—	—	8.62	0.00	8.62	0.86	0.00	30.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	2.42	1.91	13.7	0.03	0.03	2.97	3.00	0.03	0.76	0.78	8.62	3,326	3,335	1.03	0.18	3,415
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.94	1.80	13.5	0.03	0.03	2.93	2.96	0.03	0.75	0.77	—	3,386	3,386	0.16	0.17	3,447
Area	0.48	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	0.12
Waste	—	—	—	—	—	—	—	—	—	—	8.62	0.00	8.62	0.86	0.00	30.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	2.42	1.80	13.5	0.03	0.03	2.93	2.96	0.03	0.75	0.77	8.62	3,386	3,395	1.02	0.17	3,477
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.35	0.33	2.46	0.01	0.01	0.53	0.54	< 0.005	0.14	0.14	—	561	561	0.03	0.03	571
Area	0.09	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.02	0.02	< 0.005	< 0.005	0.02
Waste	—	—	—	—	—	—	—	—	—	—	1.43	0.00	1.43	0.14	0.00	4.99
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00

Total	0.44	0.33	2.46	0.01	0.01	0.53	0.54	< 0.005	0.14	0.14	1.43	561	562	0.17	0.03	576

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	24.9	18.2	0.03	0.79	—	0.79	0.71	—	0.71	—	3,427	3,427	0.14	0.03	3,438
Demolition	—	—	—	—	—	0.09	0.09	—	0.01	0.01	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	2.05	1.49	< 0.005	0.06	—	0.06	0.06	—	0.06	—	282	282	0.01	< 0.005	283
Demolition	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.37	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	46.6	46.6	< 0.005	< 0.005	46.8
Demolition	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.72	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	136	136	< 0.005	< 0.005	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.12	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	105	105	< 0.005	0.02	110
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	10.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.65	8.65	< 0.005	< 0.005	9.07
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	1.74
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	1.50

3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	24.9	18.2	0.03	0.12	—	0.12	0.11	—	0.11	—	3,427	3,427	0.14	0.03	3,438

Demolitio	—	—	—	—	—	0.09	0.09	—	0.01	0.01	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	2.05	1.49	< 0.005	0.01	—	0.01	0.01	—	0.01	—	282	282	0.01	< 0.005	283
Demolitio n	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.37	0.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.6	46.6	< 0.005	< 0.005	46.8
Demolitio n	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.72	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	136	136	< 0.005	< 0.005	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.12	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	105	105	< 0.005	0.02	110
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	10.5

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.65	8.65	< 0.005	< 0.005	9.07
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	1.74
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	1.50

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	39.9	28.3	0.05	1.12	—	1.12	1.02	—	1.02	—	5,298	5,298	0.21	0.04	5,316
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.64	1.16	< 0.005	0.05	—	0.05	0.04	—	0.04	—	218	218	0.01	< 0.005	218
Dust From Material Movement	—	—	—	—	—	0.32	0.32	—	0.16	0.16	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.30	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	36.0	36.0	< 0.005	< 0.005	36.2
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.04	0.84	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	158	158	< 0.005	0.01	161
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.03	6.03	< 0.005	< 0.005	6.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.00	1.00	< 0.005	< 0.005	1.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	39.9	28.3	0.05	0.17	—	0.17	0.15	—	0.15	—	5,298	5,298	0.21	0.04	5,316
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.64	1.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	218	218	0.01	< 0.005	218
Dust From Material Movement	—	—	—	—	—	0.32	0.32	—	0.16	0.16	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.30	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.0	36.0	< 0.005	< 0.005	36.2
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.04	0.84	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	158	158	< 0.005	0.01	161
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.03	6.03	< 0.005	< 0.005	6.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.00	1.00	< 0.005	< 0.005	1.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	48.8	35.3	0.06	1.36	—	1.36	1.23	—	1.23	—	6,599	6,599	0.27	0.05	6,621

Dust From Material Movement	—	—	—	—	—	3.67	3.67	—	1.44	1.44	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	4.01	2.91	0.01	0.11	—	0.11	0.10	—	0.10	—	542	542	0.02	< 0.005	544
Dust From Material Movement	—	—	—	—	—	0.30	0.30	—	0.12	0.12	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.73	0.53	< 0.005	0.02	—	0.02	0.02	—	0.02	—	89.8	89.8	< 0.005	< 0.005	90.1
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.05	0.96	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	181	181	< 0.005	0.01	184
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	14.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.28	2.28	< 0.005	< 0.005	2.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	48.8	35.3	0.06	0.20	—	0.20	0.18	—	0.18	—	6,599	6,599	0.27	0.05	6,621
Dust From Material Movement	—	—	—	—	—	3.67	3.67	—	1.44	1.44	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.11	4.01	2.91	0.01	0.02	—	0.02	0.02	—	0.02	—	542	542	0.02	< 0.005	544
Dust From Material Movement	—	—	—	—	—	0.30	0.30	—	0.12	0.12	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.73	0.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	89.8	89.8	< 0.005	< 0.005	90.1
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.05	0.96	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	181	181	< 0.005	0.01	184
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	14.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.28	2.28	< 0.005	< 0.005	2.32

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	4.03	3.05	< 0.005	0.15	—	0.15	0.14	—	0.14	—	511	511	0.02	< 0.005	513
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.73	0.56	< 0.005	0.03	—	0.03	0.02	—	0.02	—	84.7	84.7	< 0.005	< 0.005	85.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.10	—	0.10	0.10	—	0.10	—	2,397	2,397	0.10	0.02	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.10	—	0.10	0.10	—	0.10	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	4.03	3.05	< 0.005	0.02	—	0.02	0.02	—	0.02	—	511	511	0.02	< 0.005	513
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.73	0.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	84.7	84.7	< 0.005	< 0.005	85.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	9.34	7.08	0.01	0.34	—	0.34	0.32	—	0.32	—	1,187	1,187	0.05	0.01	1,191

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	1.71	1.29	< 0.005	0.06	—	0.06	0.06	—	0.06	—	196	196	0.01	< 0.005	197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.10	—	0.10	0.10	—	0.10	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.10	—	0.10	0.10	—	0.10	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	9.34	7.08	0.01	0.05	—	0.05	0.05	—	0.05	—	1,187	1,187	0.05	0.01	1,191
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	1.71	1.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	196	196	0.01	< 0.005	197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	13.3	10.6	0.01	0.58	—	0.58	0.54	—	0.54	—	1,511	1,511	0.06	0.01	1,516
Paving	0.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	13.3	10.6	0.01	0.58	—	0.58	0.54	—	0.54	—	1,511	1,511	0.06	0.01	1,516
Paving	0.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.09	0.87	< 0.005	0.05	—	0.05	0.04	—	0.04	—	124	124	0.01	< 0.005	125
Paving	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.20	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	20.6	20.6	< 0.005	< 0.005	20.6
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.03	0.67	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	134	134	< 0.005	< 0.005	136
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.53	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	121	121	< 0.005	0.01	123
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.2	10.2	< 0.005	< 0.005	10.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.69	1.69	< 0.005	< 0.005	1.71
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.12. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	13.3	10.6	0.01	0.09	—	0.09	0.08	—	0.08	—	1,511	1,511	0.06	0.01	1,516
Paving	0.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	13.3	10.6	0.01	0.09	—	0.09	0.08	—	0.08	—	1,511	1,511	0.06	0.01	1,516
Paving	0.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.09	0.87	< 0.005	0.01	—	0.01	0.01	—	0.01	—	124	124	0.01	< 0.005	125
Paving	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.20	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.6	20.6	< 0.005	< 0.005	20.6
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.03	0.67	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	134	134	< 0.005	< 0.005	136
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.53	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	121	121	< 0.005	0.01	123
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.2	10.2	< 0.005	< 0.005	10.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.69	1.69	< 0.005	< 0.005	1.71
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	—	134	134	0.01	< 0.005	134
Architectural Coatings	5.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	11.0	11.0	< 0.005	< 0.005	11.0
Architectural Coatings	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.82	1.82	< 0.005	< 0.005	1.82

Architect Coatings	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.14. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	134
Architectural Coatings	5.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.09	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	11.0
Architectural Coatings	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.82	1.82	< 0.005	< 0.005	1.82
Architectural Coatings	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	2.11	1.65	15.2	0.04	0.03	2.97	3.00	0.03	0.76	0.78	—	3,582	3,582	0.15	0.17	3,647
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	2.11	1.65	15.2	0.04	0.03	2.97	3.00	0.03	0.76	0.78	—	3,582	3,582	0.15	0.17	3,647
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	1.93	1.91	13.7	0.03	0.03	2.97	3.00	0.03	0.76	0.78	—	3,326	3,326	0.17	0.18	3,385

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	1.93	1.91	13.7	0.03	0.03	2.97	3.00	0.03	0.76	0.78	—	3,326	3,326	0.17	0.18	3,385
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.35	0.33	2.46	0.01	0.01	0.53	0.54	< 0.005	0.14	0.14	—	561	561	0.03	0.03	571
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.35	0.33	2.46	0.01	0.01	0.53	0.54	< 0.005	0.14	0.14	—	561	561	0.03	0.03	571

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	2.11	1.65	15.2	0.04	0.03	2.97	3.00	0.03	0.76	0.78	—	3,582	3,582	0.15	0.17	3,647
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	2.11	1.65	15.2	0.04	0.03	2.97	3.00	0.03	0.76	0.78	—	3,582	3,582	0.15	0.17	3,647
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	1.93	1.91	13.7	0.03	0.03	2.97	3.00	0.03	0.76	0.78	—	3,326	3,326	0.17	0.18	3,385
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	1.93	1.91	13.7	0.03	0.03	2.97	3.00	0.03	0.76	0.78	—	3,326	3,326	0.17	0.18	3,385
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.35	0.33	2.46	0.01	0.01	0.53	0.54	< 0.005	0.14	0.14	—	561	561	0.03	0.03	571

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.35	0.33	2.46	0.01	0.01	0.53	0.54	< 0.005	0.14	0.14	—	561	561	0.03	0.03	571

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.48	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.09	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscap Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.48	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consume r Products	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consume r Products	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscap e Equipme nt	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.09	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	0.12
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	0.12
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	0.12
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	0.12
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.02	0.02	< 0.005	< 0.005	0.02
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.02	0.02	< 0.005	< 0.005	0.02

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	0.12
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	0.12

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	0.12
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	0.12
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.02	0.02	< 0.005	< 0.005	0.02
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.02	0.02	< 0.005	< 0.005	0.02

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	8.62	0.00	8.62	0.86	0.00	30.2
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	8.62	0.00	8.62	0.86	0.00	30.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	8.62	0.00	8.62	0.86	0.00	30.2

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	8.62	0.00	8.62	0.86	0.00	30.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	1.43	0.00	1.43	0.14	0.00	4.99
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	1.43	0.00	1.43	0.14	0.00	4.99

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	8.62	0.00	8.62	0.86	0.00	30.2
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	8.62	0.00	8.62	0.86	0.00	30.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	8.62	0.00	8.62	0.86	0.00	30.2
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	8.62	0.00	8.62	0.86	0.00	30.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	1.43	0.00	1.43	0.14	0.00	4.99

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	1.43	0.00	1.43	0.14	0.00	4.99

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	6/1/2026	7/10/2026	5.00	30.0	—
Site Preparation	Site Preparation	7/13/2026	7/31/2026	5.00	15.0	—
Grading	Grading	8/3/2026	9/11/2026	5.00	30.0	—
Building Construction	Building Construction	9/14/2026	9/10/2027	5.00	260	—

Paving	Paving	9/13/2027	10/22/2027	5.00	30.0	—
Architectural Coating	Architectural Coating	10/25/2027	12/3/2027	5.00	30.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Tier 2	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Tier 2	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Tier 2	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 2	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 2	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Tier 2	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Tier 2	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Tier 2	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 2	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 2	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	1.53	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	0.00	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	11.9	LDA,LDT1,LDT2

Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	1.53	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	0.00	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2

Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	28,719	9,573	17,694

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	4,000	—

Site Preparation	—	—	22.5	0.00	—
Grading	40,000	40,000	90.0	0.00	—
Paving	0.00	0.00	0.00	0.00	6.77

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
City Park	0.00	0%
Other Asphalt Surfaces	6.77	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
City Park	575	575	575	209,712	4,177	4,177	4,177	1,524,543
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
City Park	575	575	575	209,712	4,177	4,177	4,177	1,524,543
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	28,719	9,573	17,694

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
City Park	0.00	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
City Park	0.00	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
City Park	0.00	126,324
Other Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
City Park	0.00	126,324
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
City Park	16.0	—
Other Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
City Park	16.0	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	The proposed project would develop a community park on a 192.71-acre portion of the Van Buskirk Golf Course. Phase 1 would include restrooms (276 SF) and a greenhouse (420 SF) and Phase 2 would include restrooms (2,200 SF), a Golf Training Center (3,900 SF) and Community Center (12,350 SF). Assuming half of the park would be landscaped.
Construction: Construction Phases	Construction of Phase 1 would occur over an approximately 18-month period and is anticipated to begin in June 2026. Construction of subsequent phases would depend on available funding. However, for the purposes of this Initial Study, the environmental analysis assumes that all of these recommended facilities would be constructed in a single phase.
Construction: Off-Road Equipment	Assuming the use of Tier 2 construction equipment.
Construction: Trips and VMT	The project would cut/fill approximately 40,000 cubic yards of soil, which would be balanced onsite.

Operations: Vehicle Data	Trip rate is based on the proposed project's trip generation (575 net new daily trips).

APPENDIX B

HRA MODEL OUTPUT

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Construction MEI (Sensitive) - Cancer Risk (in a Million) HARP Rec #: 57 X: 649236.78 Y: 4198290.97			
T2	T2L3	T4i	T4f
3.81	0.57	0.53	0.26
MEI (Sensitive) - Chronic Hazard Index HARP Rec #: 57 X: 649236.78 Y: 4198290.97			
T2	T2L3	T4i	T4f
2.71E-03	4.06E-04	3.73E-04	1.98E-04
MEI (Sensitive) - Acute Hazard Index HARP Rec #: NA X: NA Y: NA			
T2	T2L3	T4i	T4f
0.00E+00	0.00E+00	0.00E+00	0.00E+00
MEI (Sensitive) - PM 2.5 HARP Rec #: 1 X: 0 Y: 0			
T2	T2L3	T4i	T4f
0.000	0.000	0.000	0.000

Construction MEI (Worker) - Cancer Risk (in a Million) HARP Rec #: 582 X: 649681.31 Y: 4198168.45			
T2	T2L3	T4i	T4f
0.21	0.03	0.03	0.01
MEI (Worker) - Chronic Hazard Index HARP Rec #: 582 X: 649681.31 Y: 4198168.45			
T2	T2L3	T4i	T4f
8.51E-03	1.28E-03	1.17E-03	6.23E-04
MEI (Worker) - Acute Hazard Index HARP Rec #: NA X: NA Y: NA			
T2	T2L3	T4i	T4f
0.00E+00	0.00E+00	0.00E+00	0.00E+00
MEI (Worker) - PM 2.5 HARP Rec #: 1 X: 0 Y: 0			
T2	T2L3	T4i	T4f
0.000	0.000	0.000	0.000

Construction MEI (School) - Cancer Risk (in a Million) HARP Rec #: 35 X: 649214.18 Y: 4198665.32			
T2	T2L3	T4i	T4f
0.09	0.01	0.01	0.01
MEI (School) - Chronic Hazard Index HARP Rec #: 35 X: 649214.18 Y: 4198665.32			
T2	T2L3	T4i	T4f
1.39E-04	2.09E-05	1.92E-05	1.02E-05
MEI (School) - Acute Hazard Index HARP Rec #: NA X: NA Y: NA			
T2	T2L3	T4i	T4f
0.00E+00	0.00E+00	0.00E+00	0.00E+00
MEI (School) - PM 2.5 HARP Rec #: 1 X: 0 Y: 0			
T2	T2L3	T4i	T4f
0.0000	0.0000	0.0000	0.0000

EXHIBIT 1

Description	Receptor Type	Model Type	UTM X	UTM Y	Latitude	Longitude
Construction	Sensitive	Cancer Risk	649236.78	4198290.97	37.91993608	-121.3021185
Construction	Sensitive	Chronic HI	649236.78	4198290.97	37.91993608	-121.3021185
Construction	Sensitive	Acute HI	0	0		
Construction	Sensitive	PM 2.5	0.00	0.00		
Construction	School	Cancer Risk	649214.18	4198665.32	37.92331233	-121.302298
Construction	School	Chronic HI	649214.18	4198665.32	37.92331233	-121.302298
Construction	School	Acute HI	0	0		
Construction	School	PM 2.5	0.00	0.00		
Construction	Worker	Cancer Risk	649681.31	4198168.45	37.91875923	-121.2970885
Construction	Worker	Chronic HI	649681.31	4198168.45	37.91875923	-121.2970885

General AERMOD Input Parameters			
Project Boundary			
	Based on site plan		
Project Elevation Data			
	Source	**Lakes Environmental**	
	Link	http://www.webgis.com/terraindata.html	
	Evel Data Descr.	**7.5 min DEM**	
Project Receptor Grid			
	Telescoping Grid	Spacing (m)	Distance (m)
	Grid 1	**25**	**100**
	Grid 2	**50**	**200**
	Grid 3	**100**	**400**
	Grid 4	**200**	**800**
	Comments	**Receptors on roads or parking lot areas have been removed.**	
Meteorological Dataset			
	Location	**Stockton Arpt**	
	Provided By	**SJVAPCD**	
	Years	**2020 - 2024**	
	Elevation (m)	**8**	
	Link		
Construction Modeling Specific Inputs			
AERMOD Input Options			
	Regulatory Options	**Default**	
	Pollutant Type	**Other**	
	Averaging Period	**Period & Hourly**	
	Dispersion Coefficient	**Urban**	
	County	**Stockton, Ca**	
	Urban Grouping / Pop	**Y**	**319,543**
	# of Worker Receptors	**2,945**	
	# of Sensitive Receptors		
	# of School Receptors		
Construction Area Parameters			
	Source Type	**Polygon Area**	
	Project Area (m^2)	**169646.4**	
	Ht. of Source (m)	**3.048**	

General HARP Input Parameters		
Construction		
School Receptors		
School Scenario Parameters		
	Class Grade	**K-12**
	Starting Age	**4**
	Age Range	**4 Year Old - 5 Years Old**
	Receptor Type	**Individual Resident**
	Assessment Type	**Cancer / Chronic / Acute**
	Exposure Duration	**1**
	Intake Rate	**OEHHA Derived Method**
	Comments	**Each year of construction is modeled separately and the impact to each receptor is summed to estimate the total exposure from construction emissions. Additionally, the starting age is increased for each year of construction.**
School Pathway Parameters		
	Pathways	**Mandatory Minimum Pathways**
	Deposition Rate	**0.02**
	TAH < 16 yrs	**N**
	TAH ≥ 16 yrs	**N**
Sensitive Receptors		
Sensitive Scenario Parameters		
	Starting Age	**3rd Trimester**
	Age Range	**3rd Trimester - 1 Year**
	Receptor Type	**Individual Resident**
	Assessment Type	**Cancer / Chronic / Acute**
	Exposure Duration	**1**
	Intake Rate	**OEHHA Derived Method**
	Comments	**Each year of construction is modeled separately and the impact to each receptor is summed to estimate the total exposure from construction emissions. Additionally, the starting age is increased for each year of construction.**
Sensitive Pathway Parameters		
	Pathways	**Mandatory minimum Pathways**
	Deposition Rate	**0.02**
	TAH < 16 yrs	**Y**
	TAH ≥ 16 yrs	**Y**
Worker Receptors		
Worker Scenario Parameters		
	Starting Age	**16**
	Age Range	**16 - 17**
	Receptor Type	**Worker**
	Assessment Type	**Cancer / Chronic / Acute**
	Exposure Duration	**1**
	Intake Rate	**OEHHA Derived Method**

	Comments	**Each year of construction is modeled separately and the impact to each receptor is summed to estimate the total exposure from construction emissions. Additionally, the starting age is increased for each year of construction.**
Worker Pathway Parameters		
	Pathways	**OEHHA minimum Pathways**
	Deposition Rate	**0.02**
	TAH < 16 yrs	**N**
	TAH ≥ 16 yrs	**N**

EXHIBIT 1

			T2		61	T2L3			T4i			T4f		
					3.81E-06			5.72E-07			5.35E-07			2.64E-07
					4198290.97									
			Yr 1	Yr 2	Total	Yr 1	Yr 2	Total	Yr 1	Yr 2	Total	Yr 1	Yr 2	Total
1	649114.1	4198289.7	1.71E-06	1.68E-06	3.39E-06	2.57E-07	2.52E-07	5.09E-07	2.51E-07	2.25E-07	4.76E-07	1.33E-07	1.02E-07	2.35E-07
2	649113.41	4198314.69	1.26E-06	1.24E-06	2.50E-06	1.89E-07	1.86E-07	3.76E-07	1.85E-07	1.66E-07	3.51E-07	9.84E-08	7.52E-08	1.74E-07
3	649112.71	4198339.68	9.99E-07	9.83E-07	1.98E-06	1.50E-07	1.47E-07	2.98E-07	1.47E-07	1.31E-07	2.78E-07	7.80E-08	5.96E-08	1.38E-07
4	649112.02	4198364.67	8.23E-07	8.10E-07	1.63E-06	1.24E-07	1.22E-07	2.45E-07	1.21E-07	1.08E-07	2.29E-07	6.43E-08	4.91E-08	1.13E-07
5	649110.63	4198414.65	5.97E-07	5.87E-07	1.18E-06	8.97E-08	8.81E-08	1.78E-07	8.77E-08	7.85E-08	1.66E-07	4.66E-08	3.56E-08	8.22E-08
6	649109.24	4198464.63	4.56E-07	4.49E-07	9.04E-07	6.85E-08	6.73E-08	1.36E-07	6.70E-08	6.00E-08	1.27E-07	3.56E-08	2.72E-08	6.28E-08
7	649107.84	4198514.61	3.59E-07	3.54E-07	7.13E-07	5.40E-08	5.30E-08	1.07E-07	5.28E-08	4.73E-08	1.00E-07	2.81E-08	2.14E-08	4.95E-08
8	649106.45	4198564.59	2.89E-07	2.85E-07	5.74E-07	4.35E-08	4.27E-08	8.63E-08	4.26E-08	3.81E-08	8.07E-08	2.26E-08	1.73E-08	3.99E-08
9	649103.67	4198664.56	1.97E-07	1.94E-07	3.91E-07	2.96E-08	2.91E-08	5.87E-08	2.89E-08	2.59E-08	5.48E-08	1.54E-08	1.17E-08	2.71E-08
10	649100.89	4198764.52	1.40E-07	1.38E-07	2.78E-07	2.10E-08	2.07E-08	4.17E-08	2.06E-08	1.84E-08	3.90E-08	1.09E-08	8.35E-09	1.93E-08
11	649098.11	4198864.48	1.03E-07	1.02E-07	2.05E-07	1.55E-08	1.52E-08	3.08E-08	1.52E-08	1.36E-08	2.88E-08	8.06E-09	6.16E-09	1.42E-08
12	649095.32	4198964.44	7.86E-08	7.74E-08	1.56E-07	1.18E-08	1.16E-08	2.34E-08	1.16E-08	1.03E-08	2.19E-08	6.14E-09	4.69E-09	1.08E-08
13	649089.76	4199164.36	4.97E-08	4.89E-08	9.86E-08	7.47E-09	7.33E-09	1.48E-08	7.30E-09	6.54E-09	1.38E-08	3.88E-09	2.96E-09	6.84E-09
14	649084.19	4199364.28	3.43E-08	3.38E-08	6.81E-08	5.16E-09	5.07E-09	1.02E-08	5.05E-09	4.52E-09	9.56E-09	2.68E-09	2.05E-09	4.73E-09
15	649078.63	4199564.21	2.53E-08	2.50E-08	5.03E-08	3.81E-09	3.74E-09	7.55E-09	3.73E-09	3.34E-09	7.06E-09	1.98E-09	1.51E-09	3.49E-09
16	649073.06	4199764.13	1.97E-08	1.94E-08	3.90E-08	2.96E-09	2.90E-09	5.86E-09	2.89E-09	2.59E-09	5.48E-09	1.54E-09	1.17E-09	2.71E-09
17	649150.61	4198290.16	1.82E-06	1.79E-06	3.61E-06	2.74E-07	2.69E-07	5.42E-07	2.67E-07	2.39E-07	5.07E-07	1.42E-07	1.09E-07	2.51E-07
18	649193.6	4198290.27	1.90E-06	1.87E-06	3.76E-06	2.85E-07	2.80E-07	5.65E-07	2.79E-07	2.49E-07	5.28E-07	1.48E-07	1.13E-07	2.61E-07
19	649150.55	4198315.16	1.31E-06	1.29E-06	2.60E-06	1.97E-07	1.93E-07	3.90E-07	1.92E-07	1.72E-07	3.64E-07	1.02E-07	7.80E-08	1.80E-07
20	649193.54	4198315.27	1.35E-06	1.32E-06	2.67E-06	2.02E-07	1.99E-07	4.01E-07	1.98E-07	1.77E-07	3.75E-07	1.05E-07	8.03E-08	1.85E-07
21	649150.48	4198340.16	1.02E-06	1.01E-06	2.03E-06	1.54E-07	1.51E-07	3.04E-07	1.50E-07	1.34E-07	2.85E-07	7.98E-08	6.10E-08	1.41E-07
22	649193.48	4198340.27	1.04E-06	1.02E-06	2.06E-06	1.56E-07	1.53E-07	3.10E-07	1.53E-07	1.37E-07	2.89E-07	8.11E-08	6.20E-08	1.43E-07
23	649150.42	4198365.16	8.33E-07	8.20E-07	1.65E-06	1.25E-07	1.23E-07	2.48E-07	1.23E-07	1.10E-07	2.32E-07	6.51E-08	4.97E-08	1.15E-07
24	649193.42	4198365.27	8.39E-07	8.26E-07	1.66E-06	1.26E-07	1.24E-07	2.50E-07	1.23E-07	1.10E-07	2.34E-07	6.55E-08	5.01E-08	1.16E-07
25	649150.3	4198415.16	5.95E-07	5.86E-07	1.18E-06	8.95E-08	8.79E-08	1.77E-07	8.75E-08	7.83E-08	1.66E-07	4.65E-08	3.55E-08	8.20E-08
26	649193.3	4198415.27	5.90E-07	5.81E-07	1.17E-06	8.87E-08	8.71E-08	1.76E-07	8.67E-08	7.76E-08	1.64E-07	4.61E-08	3.52E-08	8.13E-08
27	649150.18	4198465.16	4.49E-07	4.42E-07	8.91E-07	6.75E-08	6.63E-08	1.34E-07	6.60E-08	5.91E-08	1.25E-07	3.51E-08	2.68E-08	6.19E-08
28	649193.17	4198465.27	4.40E-07	4.33E-07	8.72E-07	6.61E-08	6.49E-08	1.31E-07	6.46E-08	5.79E-08	1.22E-07	3.43E-08	2.62E-08	6.06E-08
29	649150.06	4198515.16	3.50E-07	3.45E-07	6.95E-07	5.27E-08	5.17E-08	1.04E-07	5.15E-08	4.61E-08	9.76E-08	2.74E-08	2.09E-08	4.83E-08
30	649193.05	4198515.27	3.40E-07	3.34E-07	6.74E-07	5.11E-08	5.01E-08	1.01E-07	4.99E-08	4.47E-08	9.46E-08	2.65E-08	2.03E-08	4.68E-08
31	649149.93	4198565.16	2.80E-07	2.75E-07	5.55E-07	4.21E-08	4.13E-08	8.34E-08	4.11E-08	3.68E-08	7.79E-08	2.18E-08	1.67E-08	3.85E-08
32	649192.93	4198565.27	2.69E-07	2.64E-07	5.33E-07	4.04E-08	3.97E-08	8.00E-08	3.95E-08	3.53E-08	7.48E-08	2.10E-08	1.60E-08	3.70E-08
33	649128.19	4198665.11	1.92E-07	1.89E-07	3.80E-07	2.88E-08	2.83E-08	5.71E-08	2.82E-08	2.52E-08	5.34E-08	1.50E-08	1.14E-08	2.64E-08
34	649171.19	4198665.21	1.82E-07	1.79E-07	3.61E-07	2.74E-08	2.69E-08	5.42E-08	2.67E-08	2.39E-08	5.07E-08	1.42E-08	1.09E-08	2.51E-08
35	649214.18	4198665.32	1.71E-07	1.69E-07	3.40E-07	2.58E-08	2.53E-08	5.11E-08	2.52E-08	2.26E-08	4.78E-08	1.34E-08	1.02E-08	2.36E-08
36	649127.95	4198765.11	1.35E-07	1.33E-07	2.68E-07	2.03E-08	1.99E-08	4.02E-08	1.98E-08	1.78E-08	3.76E-08	1.05E-08	8.05E-09	1.86E-08
37	649170.94	4198765.21	1.27E-07	1.25E-07	2.52E-07	1.91E-08	1.87E-08	3.78E-08	1.86E-08	1.67E-08	3.53E-08	9.91E-09	7.57E-09	1.75E-08
38	649213.94	4198765.32	1.18E-07	1.17E-07	2.35E-07	1.78E-08	1.75E-08	3.53E-08	1.74E-08	1.56E-08	3.30E-08	9.26E-09	7.07E-09	1.63E-08
39	649127.7	4198865.11	9.87E-08	9.72E-08	1.96E-07	1.48E-08	1.46E-08	2.94E-08	1.45E-08	1.30E-08	2.75E-08	7.71E-09	5.89E-09	1.36E-08
40	649170.7	4198865.21	9.23E-08	9.08E-08	1.83E-07	1.39E-08	1.36E-08	2.75E-08	1.36E-08	1.21E-08	2.57E-08	7.21E-09	5.51E-09	1.27E-08
41	649213.69	4198865.32	8.59E-08	8.45E-08	1.70E-07	1.29E-08	1.27E-08	2.56E-08	1.26E-08	1.13E-08	2.39E-08	6.71E-09	5.12E-09	1.18E-08
42	649127.46	4198965.11	7.47E-08	7.36E-08	1.48E-07	1.12E-08	1.10E-08	2.23E-08	1.10E-08	9.83E-09	2.08E-08	5.84E-09	4.46E-09	1.03E-08
43	649170.46	4198965.21	6.97E-08	6.86E-08	1.38E-07	1.05E-08	1.03E-08	2.08E-08	1.03E-08	9.18E-09	1.94E-08	5.45E-09	4.16E-09	9.61E-09
44	649213.45	4198965.32	6.49E-08	6.39E-08	1.29E-07	9.75E-09	9.58E-09	1.93E-08	9.54E-09	8.54E-09	1.81E-08	5.07E-09	3.87E-09	8.94E-09
45	649115.55	4199164.93	4.77E-08	4.69E-08	9.46E-08	7.17E-09	7.04E-09	1.42E-08	7.01E-09	6.28E-09	1.33E-08	3.72E-09	2.85E-09	6.57E-09
46	649148.47	4199165.16	4.53E-08	4.46E-08	8.99E-08	6.81E-09	6.69E-09	1.35E-08	6.66E-09	5.96E-09	1.26E-08	3.54E-09	2.70E-09	6.24E-09
47	649191.46	4199165.26	4.23E-08	4.17E-08	8.40E-08	6.36E-09	6.25E-09	1.26E-08	6.22E-09	5.57E-09	1.18E-08	3.31E-09	2.53E-09	5.83E-09
48	649112.52	4199364.9	3.29E-08	3.24E-08	6.53E-08	4.95E-09	4.86E-09	9.80E-09	4.84E-09	4.33E-09	9.17E-09	2.57E-09	1.96E-09	4.53E-09
49	649147.98	4199365.16	3.12E-08	3.08E-08	6.20E-08	4.70E-09	4.61E-09	9.31E-09	4.59E-09	4.11E-09	8.70E-09	2.44E-09	1.86E-09	4.30E-09
50	649190.98	4199365.26	2.94E-08	2.89E-08	5.83E-08	4.42E-09	4.34E-09	8.75E-09	4.32E-09	3.86E-09	8.18E-09	2.29E-09	1.75E-09	4.05E-09
51	649109.5	4199564.86	2.43E-08	2.39E-08	4.82E-08	3.65E-09	3.59E-09	7.24E-09	3.57E-09	3.20E-09	6.77E-09	1.90E-09	1.45E-09	3.35E-09
52	649147.49	4199565.16	2.31E-08	2.27E-08	4.58E-08	3.47E-09	3.41E-09	6.88E-09	3.40E-09	3.04E-09	6.44E-09	1.80E-09	1.38E-09	3.18E-09
53	649190.49	4199565.26	2.19E-08	2.15E-08	4.34E-08	3.29E-09	3.23E-09	6.51E-09	3.21E-09	2.88E-09	6.09E-09	1.71E-09	1.30E-09	3.01E-09
54	649106.47	4199764.82	1.89E-08	1.86E-08	3.75E-08	2.84E-09	2.79E-09	5.63E-09	2.78E-09	2.48E-09	5.26E-09	1.47E-09	1.13E-09	2.60E-09
55	649147	4199765.16	1.80E-08	1.77E-08	3.57E-08	2.70E-09	2.65E-09	5.36E-09	2.64E-09	2.37E-09	5.01E-09	1.40E-09	1.07E-09	2.48E-09
56	649190	4199765.26	1.71E-08	1.69E-08	3.40E-08	2.57E-09	2.53E-09	5.10E-09	2.52E-09	2.25E-09	4.77E-09	1.34E-09	1.02E-09	2.36E-09
57	649236.78	4198290.97	1.92E-06	1.89E-06	3.81E-06	2.89E-07	2.83E-07	5.72E-07	2.82E-07	2.53E-07	5.35E-07	1.50E-07	1.15E-07	2.64E-07
58	649281.5	4198292.28	1.91E-06	1.88E-06	3.79E-06	2.87E-07	2.82E-07	5.68E-07	2.80E-07	2.51E-07	5.32E-07	1.49E-07	1.14E-07	2.63E-07
59	649236.05	4198315.96	1.36E-06	1.34E-06	2.70E-06	2.04E-07	2.01E-07	4.05E-07	2.00E-07	1.79E-07	3.79E-07	1.06E-07	8.12E-08	1.87E-07
60	649280.76	4198317.27	1.35E-06	1.33E-06	2.68E-06	2.03E-07	1.99E-07	4.03E-07	1.99E-07	1.78E-07	3.76E-07	1.06E-07	8.06E-08	1.86E-07
61	649235.31	4198340.95	1.04E-06	1.03E-06	2.07E-06	1.57E-07	1.54E-07	3.11E-07	1.53E-07	1.37E-07	2.90E-07	8.14E-08	6.22E-08	1.44E-07
62	649280.03	4198342.26	1.03E-06	1.01E-06	2.05E-06	1.55E-07	1.52E-07	3.07E-07	1.52E-07	1.36E-07	2.87E-07	8.05E-08	6.15E-08	1.42E-07
63	649234.58	4198365.93	8.35E-07	8.22E-07	1.66E-06	1.26E-07	1.23E-07	2.49E-07	1.23E-07	1.10E-07	2.33E-07	6.52E-08	4.98E-08	1.15E-07
64	649279.29	4198367.25	8.21E-07	8.08E-07	1.63E-06	1.23E-07	1.21E-07	2.45E-07	1.21E-07	1.08E-07	2.29E-07	6.41E-08	4.90E-08	1.13E-07
65	649233.11	4198415.91	5.79E-07	5.70E-07	1.15E-06	8.71E-08	8.55E-08	1.73E-07	8.52E-08	7.62E-08	1.61E-07	4.52E-08	3.46E-08	7.98E-08
66	649277.82	4198417.23	5.62E-07	5.53E-07	1.12E-06	8.45E-08	8.30E-08	1.67E-07	8.26E-08	7.39E-08	1.57E-07	4.39E-08	3.35E-08	7.74E-08
67	649231.64	4198465.89	4.27E-07	4.21E-07	8.48E-07	6.43E-08	6.31E-08	1.27E-07	6.28E-08	5.63E-08	1.19E-07	3.34E-08	2.55E-08	5.89E-08
68	649276.35	4198467.21	4.09E-07	4.03E-07	8.12E-07	6.16E-08	6.04E-08	1.22E-07	6.02E-08	5.39E-08	1.14E-07	3.20E-08	2.44E-08	5.64E-08
69	649230.17	4198515.87	3.28E-07	3.22E-07	6.50E-07	4.93E-08	4.84E-08	9.76E-08	4.82E-08	4.31E-08	9.13E-08	2.56E-08	1.95E-08	4.51E-08
70	649274.88	4198517.18	3.10E-07	3.05E-07	6.16E-07	4.66E-08	4.58E-08	9.24E-08	4.56E-08	4.08E-08	8.64E-08	2.42E-08	1.85E-08	4.27E-08
71	649228.7	4198565.85	2.58E-07	2.54E-07	5.11E-07	3.87E-08	3.80E-08	7.67E-08	3.79E-08	3.39E-08	7.18E-08	2.01E-08	1.54E-08	3.55E-08
72	649273.41	4198567.16	2.42E-07	2.38E-07	4.79E-07	3.63E-08	3.57E-08	7.20E-08	3.55E-08	3.18E-08	6.73E-08	1.89E-08	1.44E-08	3.33E-08

73	649248.12	4198666.46	1.62E-07	1.60E-07	3.22E-07	2.44E-08	2.39E-08	4.83E-08	2.38E-08	2.13E-08	4.52E-08	1.27E-08	9.67E-09	2.23E-08
74	649292.83	4198667.78	1.50E-07	1.47E-07	2.97E-07	2.25E-08	2.21E-08	4.46E-08	2.20E-08	1.97E-08	4.17E-08	1.17E-08	8.92E-09	2.06E-08
75	649245.18	4198766.42	1.12E-07	1.10E-07	2.22E-07	1.68E-08	1.65E-08	3.34E-08	1.65E-08	1.47E-08	3.12E-08	8.75E-09	6.68E-09	1.54E-08
76	649289.89	4198767.73	1.03E-07	1.01E-07	2.04E-07	1.55E-08	1.52E-08	3.07E-08	1.51E-08	1.35E-08	2.87E-08	8.04E-09	6.14E-09	1.42E-08
77	649242.24	4198866.38	8.15E-08	8.02E-08	1.62E-07	1.23E-08	1.20E-08	2.43E-08	1.20E-08	1.07E-08	2.27E-08	6.36E-09	4.86E-09	1.12E-08
78	649286.95	4198867.69	7.49E-08	7.38E-08	1.49E-07	1.13E-08	1.11E-08	2.23E-08	1.10E-08	9.86E-09	2.09E-08	5.85E-09	4.47E-09	1.03E-08
79	649239.3	4198966.33	6.19E-08	6.10E-08	1.23E-07	9.31E-09	9.14E-09	1.84E-08	9.10E-09	8.15E-09	1.73E-08	4.84E-09	3.69E-09	8.53E-09
80	649284.01	4198967.65	5.71E-08	5.62E-08	1.13E-07	8.59E-09	8.44E-09	1.70E-08	8.40E-09	7.52E-09	1.59E-08	4.46E-09	3.41E-09	7.87E-09
81	649233.42	4199166.25	3.96E-08	3.89E-08	7.85E-08	5.95E-09	5.84E-09	1.18E-08	5.82E-09	5.21E-09	1.10E-08	3.09E-09	2.36E-09	5.45E-09
82	649278.13	4199167.56	3.68E-08	3.63E-08	7.31E-08	5.54E-09	5.44E-09	1.10E-08	5.42E-09	4.85E-09	1.03E-08	2.88E-09	2.20E-09	5.08E-09
83	649227.54	4199366.16	2.79E-08	2.74E-08	5.53E-08	4.19E-09	4.11E-09	8.30E-09	4.10E-09	3.67E-09	7.76E-09	2.18E-09	1.66E-09	3.84E-09
84	649272.25	4199367.47	2.62E-08	2.58E-08	5.20E-08	3.94E-09	3.87E-09	7.80E-09	3.85E-09	3.45E-09	7.30E-09	2.05E-09	1.56E-09	3.61E-09
85	649221.66	4199566.07	2.10E-08	2.07E-08	4.17E-08	3.16E-09	3.10E-09	6.26E-09	3.09E-09	2.77E-09	5.86E-09	1.64E-09	1.25E-09	2.90E-09
86	649266.38	4199567.39	1.99E-08	1.96E-08	3.95E-08	2.99E-09	2.94E-09	5.93E-09	2.93E-09	2.62E-09	5.55E-09	1.56E-09	1.19E-09	2.74E-09
87	649215.78	4199765.99	1.66E-08	1.64E-08	3.30E-08	2.50E-09	2.46E-09	4.96E-09	2.45E-09	2.19E-09	4.64E-09	1.30E-09	9.93E-10	2.29E-09
88	649260.5	4199767.3	1.59E-08	1.56E-08	3.15E-08	2.39E-09	2.35E-09	4.73E-09	2.34E-09	2.09E-09	4.43E-09	1.24E-09	9.48E-10	2.19E-09
89	649304.06	4198292.94	1.90E-06	1.87E-06	3.77E-06	2.86E-07	2.80E-07	5.66E-07	2.79E-07	2.50E-07	5.29E-07	1.48E-07	1.13E-07	2.62E-07
90	649347.16	4198293.85	1.88E-06	1.85E-06	3.74E-06	2.83E-07	2.78E-07	5.61E-07	2.77E-07	2.48E-07	5.25E-07	1.47E-07	1.12E-07	2.60E-07
91	649390.25	4198294.76	1.86E-06	1.83E-06	3.69E-06	2.79E-07	2.74E-07	5.54E-07	2.73E-07	2.45E-07	5.18E-07	1.45E-07	1.11E-07	2.56E-07
92	649303.53	4198317.94	1.34E-06	1.32E-06	2.66E-06	2.02E-07	1.98E-07	4.00E-07	1.97E-07	1.77E-07	3.74E-07	1.05E-07	8.01E-08	1.85E-07
93	649346.63	4198318.85	1.32E-06	1.30E-06	2.63E-06	1.99E-07	1.95E-07	3.95E-07	1.95E-07	1.74E-07	3.69E-07	1.03E-07	7.90E-08	1.82E-07
94	649389.72	4198319.76	1.30E-06	1.28E-06	2.57E-06	1.95E-07	1.91E-07	3.86E-07	1.91E-07	1.71E-07	3.61E-07	1.01E-07	7.73E-08	1.79E-07
95	649303.01	4198342.93	1.02E-06	1.01E-06	2.03E-06	1.54E-07	1.51E-07	3.04E-07	1.50E-07	1.34E-07	2.85E-07	7.98E-08	6.10E-08	1.41E-07
96	649346.1	4198343.84	1.00E-06	9.86E-07	1.99E-06	1.51E-07	1.48E-07	2.98E-07	1.47E-07	1.32E-07	2.79E-07	7.82E-08	5.98E-08	1.38E-07
97	649389.2	4198344.75	9.73E-07	9.58E-07	1.93E-06	1.46E-07	1.44E-07	2.90E-07	1.43E-07	1.28E-07	2.71E-07	7.60E-08	5.81E-08	1.34E-07
98	649302.48	4198367.93	8.11E-07	7.98E-07	1.61E-06	1.22E-07	1.20E-07	2.42E-07	1.19E-07	1.07E-07	2.26E-07	6.33E-08	4.84E-08	1.12E-07
99	649345.57	4198368.84	7.90E-07	7.78E-07	1.57E-06	1.19E-07	1.17E-07	2.35E-07	1.16E-07	1.04E-07	2.20E-07	6.17E-08	4.71E-08	1.09E-07
100	649388.67	4198369.75	7.62E-07	7.50E-07	1.51E-06	1.15E-07	1.12E-07	2.27E-07	1.12E-07	1.00E-07	2.12E-07	5.95E-08	4.55E-08	1.05E-07
101	649301.42	4198417.92	5.51E-07	5.43E-07	1.09E-06	8.29E-08	8.14E-08	1.64E-07	8.10E-08	7.25E-08	1.54E-07	4.31E-08	3.29E-08	7.60E-08
102	649344.52	4198418.83	5.30E-07	5.22E-07	1.05E-06	7.97E-08	7.83E-08	1.58E-07	7.79E-08	6.98E-08	1.48E-07	4.14E-08	3.16E-08	7.30E-08
103	649387.61	4198419.74	5.04E-07	4.96E-07	1.00E-06	7.58E-08	7.44E-08	1.50E-07	7.41E-08	6.63E-08	1.40E-07	3.94E-08	3.01E-08	6.94E-08
104	649300.37	4198467.91	3.99E-07	3.92E-07	7.91E-07	5.99E-08	5.89E-08	1.19E-07	5.86E-08	5.25E-08	1.11E-07	3.11E-08	2.38E-08	5.49E-08
105	649343.46	4198468.82	3.78E-07	3.72E-07	7.51E-07	5.69E-08	5.58E-08	1.13E-07	5.56E-08	4.98E-08	1.05E-07	2.95E-08	2.26E-08	5.21E-08
106	649386.56	4198469.73	3.55E-07	3.49E-07	7.04E-07	5.33E-08	5.24E-08	1.06E-07	5.22E-08	4.67E-08	9.89E-08	2.77E-08	2.12E-08	4.89E-08
107	649299.31	4198517.89	3.00E-07	2.95E-07	5.95E-07	4.51E-08	4.43E-08	8.94E-08	4.41E-08	3.95E-08	8.36E-08	2.34E-08	1.79E-08	4.13E-08
108	649342.41	4198518.8	2.81E-07	2.77E-07	5.58E-07	4.23E-08	4.15E-08	8.38E-08	4.13E-08	3.70E-08	7.83E-08	2.20E-08	1.68E-08	3.87E-08
109	649385.5	4198519.71	2.61E-07	2.57E-07	5.17E-07	3.92E-08	3.85E-08	7.77E-08	3.83E-08	3.43E-08	7.26E-08	2.04E-08	1.56E-08	3.59E-08
110	649298.26	4198567.88	2.32E-07	2.29E-07	4.61E-07	3.49E-08	3.43E-08	6.92E-08	3.41E-08	3.06E-08	6.47E-08	1.81E-08	1.39E-08	3.20E-08
111	649341.35	4198568.79	2.16E-07	2.12E-07	4.28E-07	3.24E-08	3.18E-08	6.42E-08	3.17E-08	2.84E-08	6.01E-08	1.68E-08	1.29E-08	2.97E-08
112	649384.45	4198569.7	1.98E-07	1.95E-07	3.94E-07	2.98E-08	2.93E-08	5.91E-08	2.92E-08	2.61E-08	5.53E-08	1.55E-08	1.18E-08	2.73E-08
113	649317.69	4198668.32	1.43E-07	1.40E-07	2.83E-07	2.14E-08	2.11E-08	4.25E-08	2.10E-08	1.88E-08	3.97E-08	1.11E-08	8.51E-09	1.97E-08
114	649360.79	4198669.23	1.31E-07	1.29E-07	2.59E-07	1.97E-08	1.93E-08	3.89E-08	1.92E-08	1.72E-08	3.64E-08	1.02E-08	7.80E-09	1.80E-08
115	649315.58	4198768.29	9.79E-08	9.64E-08	1.94E-07	1.47E-08	1.44E-08	2.92E-08	1.44E-08	1.29E-08	2.73E-08	7.65E-09	5.84E-09	1.35E-08
116	649358.68	4198769.2	8.98E-08	8.84E-08	1.78E-07	1.35E-08	1.33E-08	2.67E-08	1.32E-08	1.18E-08	2.50E-08	7.01E-09	5.36E-09	1.24E-08
117	649313.47	4198868.27	7.13E-08	7.02E-08	1.41E-07	1.07E-08	1.05E-08	2.12E-08	1.05E-08	9.38E-09	1.99E-08	5.57E-09	4.25E-09	9.82E-09
118	649356.57	4198869.18	6.57E-08	6.47E-08	1.30E-07	9.88E-09	9.70E-09	1.96E-08	9.66E-09	8.65E-09	1.83E-08	5.13E-09	3.92E-09	9.05E-09
119	649311.36	4198968.25	5.44E-08	5.36E-08	1.08E-07	8.18E-09	8.04E-09	1.62E-08	8.00E-09	7.16E-09	1.52E-08	4.25E-09	3.25E-09	7.50E-09
120	649354.45	4198969.16	5.05E-08	4.97E-08	1.00E-07	7.59E-09	7.45E-09	1.50E-08	7.42E-09	6.64E-09	1.41E-08	3.94E-09	3.01E-09	6.95E-09
121	649307.14	4199168.2	3.52E-08	3.47E-08	6.99E-08	5.30E-09	5.20E-09	1.05E-08	5.18E-09	4.64E-09	9.82E-09	2.75E-09	2.10E-09	4.86E-09
122	649350.23	4199169.11	3.31E-08	3.26E-08	6.57E-08	4.97E-09	4.88E-09	9.86E-09	4.86E-09	4.35E-09	9.22E-09	2.58E-09	1.97E-09	4.56E-09
123	649302.91	4199368.16	2.52E-08	2.48E-08	5.00E-08	3.79E-09	3.72E-09	7.50E-09	3.70E-09	3.31E-09	7.02E-09	1.97E-09	1.50E-09	3.47E-09
124	649346.01	4199369.07	2.39E-08	2.35E-08	4.74E-08	3.59E-09	3.53E-09	7.12E-09	3.51E-09	3.14E-09	6.66E-09	1.87E-09	1.43E-09	3.29E-09
125	649298.69	4199568.12	1.92E-08	1.89E-08	3.81E-08	2.89E-09	2.84E-09	5.73E-09	2.83E-09	2.53E-09	5.36E-09	1.50E-09	1.15E-09	2.65E-09
126	649341.79	4199569.03	1.84E-08	1.81E-08	3.65E-08	2.77E-09	2.72E-09	5.48E-09	2.71E-09	2.42E-09	5.13E-09	1.44E-09	1.10E-09	2.54E-09
127	649294.47	4199768.07	1.54E-08	1.51E-08	3.05E-08	2.31E-09	2.27E-09	4.59E-09	2.26E-09	2.03E-09	4.29E-09	1.20E-09	9.18E-10	2.12E-09
128	649337.57	4199768.98	1.48E-08	1.46E-08	2.94E-08	2.23E-09	2.19E-09	4.42E-09	2.18E-09	1.95E-09	4.13E-09	1.16E-09	8.85E-10	2.04E-09
129	649425.95	4198294.63	1.86E-06	1.83E-06	3.68E-06	2.79E-07	2.74E-07	5.53E-07	2.73E-07	2.44E-07	5.17E-07	1.45E-07	1.11E-07	2.56E-07
130	649426.05	4198319.63	1.28E-06	1.26E-06	2.54E-06	1.92E-07	1.89E-07	3.81E-07	1.88E-07	1.68E-07	3.56E-07	9.99E-08	7.63E-08	1.76E-07
131	649426.15	4198344.63	9.50E-07	9.35E-07	1.88E-06	1.43E-07	1.40E-07	2.83E-07	1.40E-07	1.25E-07	2.65E-07	7.42E-08	5.67E-08	1.31E-07
132	649426.25	4198369.63	7.36E-07	7.25E-07	1.46E-06	1.11E-07	1.09E-07	2.19E-07	1.08E-07	9.69E-08	2.05E-07	5.75E-08	4.40E-08	1.01E-07
133	649426.45	4198419.63	4.79E-07	4.71E-07	9.50E-07	7.20E-08	7.07E-08	1.43E-07	7.04E-08	6.30E-08	1.33E-07	3.74E-08	2.86E-08	6.60E-08
134	649409.11	4198469.7	3.42E-07	3.37E-07	6.79E-07	5.15E-08	5.06E-08	1.02E-07	5.03E-08	4.51E-08	9.54E-08	2.67E-08	2.04E-08	4.72E-08
135	649444.18	4198469.56	3.21E-07	3.17E-07	6.38E-07	4.83E-08	4.75E-08	9.58E-08	4.73E-08	4.23E-08	8.96E-08	2.51E-08	1.92E-08	4.43E-08
136	649409.31	4198519.7	2.50E-07	2.46E-07	4.95E-07	3.75E-08	3.69E-08	7.44E-08	3.67E-08	3.29E-08	6.96E-08	1.95E-08	1.49E-08	3.44E-08
137	649444.38	4198519.56	2.33E-07	2.29E-07	4.62E-07	3.50E-08	3.44E-08	6.94E-08	3.42E-08	3.06E-08	6.49E-08	1.82E-08	1.39E-08	3.21E-08
138	649409.51	4198569.7	1.89E-07	1.86E-07	3.74E-07	2.84E-08	2.79E-08	5.62E-08	2.77E-08	2.48E-08	5.26E-08	1.47E-08	1.13E-08	2.60E-08
139	649444.58	4198569.56	1.75E-07	1.73E-07	3.48E-07	2.64E-08	2.59E-08	5.23E-08	2.58E-08	2.31E-08	4.89E-08	1.37E-08	1.05E-08	2.42E-08
140	649392.38	4198669.77	1.22E-07	1.20E-07	2.43E-07	1.84E-08	1.81E-08	3.64E-08	1.80E-08	1.61E-08	3.41E-08	9.55E-09	7.30E-09	1.68E-08
141	649427.44	4198669.63	1.14E-07	1.12E-07	2.26E-07	1.71E-08	1.68E-08	3.39E-08	1.67E-08	1.50E-08	3.17E-08	8.88E-09	6.78E-09	1.57E-08
142	649392.78	4198769.77	8.38E-08	8.25E-08	1.66E-07	1.26E-08	1.24E-08	2.50E-08	1.23E-08	1.10E-08	2.33E-08	6.54E-09	5.00E-09	1.15E-08
143	649427.84	4198769.63	7.82E-08	7.70E-08	1.55E-07	1.18E-08	1.15E-08	2.33E-08	1.15E-08	1.03E-08	2.18E-08	6.11E-09	4.67E-09	1.08E-08
144	649393.18	4198869.77	6.14E-08	6.04E-08	1.22E-07	9.23E-09	9.06E-09	1.83E-08	9.02E-09	8.07E-09	1.71E-08	4.79E-09	3.66E-09	8.45E-09
145	649428.24	4198869.63	5.77E-08	5.68E-08	1.14E-07	8.67E-09	8.51E-09	1.72E-08	8.48E-09	7.59E-09	1.61E-08	4.50E-09	3.44E-09	7.94E-09
146	649384.79	4198969.69	4.79E-08	4.72E-08	9.51E-08	7.21E-09	7.08E-09	1.43E-08	7.05E-09	6.31E-09	1.34E-08	3.74E-09	2.86E-09	6.61E-09
147	649411.11	4198969.69	4.60E-08	4.52E-08	9.12E-08	6.91E-09	6.78E-09	1.37E-08	6.76E-09	6.05E-09	1.28E-08	3.59E-09	2.74E-09	6.33E-09
148	649446.17	4198969.55	4.36E-08	4.29E-08	8.64E-08	6.55E-09	6.43E-09	1.30E-08	6.40E-09	5.73E-09	1.21E-08	3.40E-09	2.60E-09	6.00E-09

149	649383.08	4199169.67	3.16E-08	3.11E-08	6.28E-08	4.76E-09	4.67E-09	9.42E-09	4.65E-09	4.16E-09	8.81E-09	2.47E-09	1.89E-09	4.36E-09
150	649411.91	4199169.69	3.05E-08	3.00E-08	6.05E-08	4.59E-09	4.50E-09	9.09E-09	4.48E-09	4.01E-09	8.50E-09	2.38E-09	1.82E-09	4.20E-09
151	649446.97	4199169.55	2.93E-08	2.88E-08	5.81E-08	4.40E-09	4.32E-09	8.73E-09	4.31E-09	3.85E-09	8.16E-09	2.29E-09	1.75E-09	4.04E-09
152	649381.36	4199369.64	2.30E-08	2.26E-08	4.56E-08	3.45E-09	3.39E-09	6.85E-09	3.38E-09	3.02E-09	6.40E-09	1.79E-09	1.37E-09	3.17E-09
153	649412.7	4199369.69	2.23E-08	2.19E-08	4.42E-08	3.35E-09	3.29E-09	6.64E-09	3.27E-09	2.93E-09	6.20E-09	1.74E-09	1.33E-09	3.07E-09
154	649447.77	4199369.55	2.16E-08	2.12E-08	4.28E-08	3.24E-09	3.19E-09	6.43E-09	3.17E-09	2.84E-09	6.01E-09	1.69E-09	1.29E-09	2.97E-09
155	649379.65	4199569.62	1.78E-08	1.75E-08	3.53E-08	2.67E-09	2.63E-09	5.30E-09	2.62E-09	2.34E-09	4.96E-09	1.39E-09	1.06E-09	2.45E-09
156	649413.5	4199569.69	1.73E-08	1.70E-08	3.43E-08	2.60E-09	2.56E-09	5.16E-09	2.54E-09	2.28E-09	4.82E-09	1.35E-09	1.03E-09	2.38E-09
157	649448.57	4199569.55	1.69E-08	1.66E-08	3.35E-08	2.54E-09	2.49E-09	5.03E-09	2.48E-09	2.22E-09	4.71E-09	1.32E-09	1.01E-09	2.33E-09
158	649384.22	4199769.65	1.43E-08	1.41E-08	2.84E-08	2.15E-09	2.12E-09	4.27E-09	2.11E-09	1.89E-09	3.99E-09	1.12E-09	8.55E-10	1.97E-09
159	649414.3	4199769.69	1.41E-08	1.38E-08	2.79E-08	2.11E-09	2.08E-09	4.19E-09	2.07E-09	1.85E-09	3.92E-09	1.10E-09	8.39E-10	1.94E-09
160	649449.37	4199769.55	1.38E-08	1.36E-08	2.73E-08	2.07E-09	2.03E-09	4.10E-09	2.02E-09	1.81E-09	3.84E-09	1.08E-09	8.22E-10	1.90E-09
161	649467.04	4198295.55	1.81E-06	1.78E-06	3.59E-06	2.72E-07	2.67E-07	5.38E-07	2.66E-07	2.38E-07	5.03E-07	1.41E-07	1.08E-07	2.49E-07
162	649491.72	4198296.57	1.74E-06	1.71E-06	3.46E-06	2.62E-07	2.57E-07	5.19E-07	2.56E-07	2.29E-07	4.85E-07	1.36E-07	1.04E-07	2.40E-07
163	649466.01	4198320.53	1.23E-06	1.21E-06	2.43E-06	1.84E-07	1.81E-07	3.66E-07	1.80E-07	1.61E-07	3.42E-07	9.58E-08	7.32E-08	1.69E-07
164	649490.7	4198321.55	1.17E-06	1.16E-06	2.33E-06	1.76E-07	1.73E-07	3.50E-07	1.73E-07	1.54E-07	3.27E-07	9.17E-08	7.00E-08	1.62E-07
165	649464.98	4198345.51	9.02E-07	8.88E-07	1.79E-06	1.36E-07	1.33E-07	2.69E-07	1.33E-07	1.19E-07	2.51E-07	7.05E-08	5.38E-08	1.24E-07
166	649489.67	4198346.53	8.58E-07	8.45E-07	1.70E-06	1.29E-07	1.27E-07	2.56E-07	1.26E-07	1.13E-07	2.39E-07	6.71E-08	5.12E-08	1.18E-07
167	649463.96	4198370.49	6.95E-07	6.84E-07	1.38E-06	1.04E-07	1.03E-07	2.07E-07	1.02E-07	9.14E-08	1.94E-07	5.43E-08	4.15E-08	9.57E-08
168	649488.64	4198371.51	6.58E-07	6.48E-07	1.31E-06	9.90E-08	9.72E-08	1.96E-07	9.68E-08	8.66E-08	1.83E-07	5.14E-08	3.93E-08	9.07E-08
169	649461.9	4198420.45	4.48E-07	4.41E-07	8.88E-07	6.73E-08	6.61E-08	1.33E-07	6.58E-08	5.89E-08	1.25E-07	3.50E-08	2.67E-08	6.17E-08
170	649486.59	4198421.46	4.22E-07	4.15E-07	8.37E-07	6.34E-08	6.23E-08	1.26E-07	6.20E-08	5.55E-08	1.18E-07	3.29E-08	2.52E-08	5.81E-08
171	649484.53	4198471.42	2.91E-07	2.86E-07	5.77E-07	4.37E-08	4.29E-08	8.67E-08	4.28E-08	3.83E-08	8.10E-08	2.27E-08	1.74E-08	4.01E-08
172	649482.48	4198521.38	2.11E-07	2.08E-07	4.20E-07	3.18E-08	3.12E-08	6.30E-08	3.11E-08	2.78E-08	5.89E-08	1.65E-08	1.26E-08	2.91E-08
173	649480.42	4198571.34	1.60E-07	1.58E-07	3.18E-07	2.41E-08	2.37E-08	4.78E-08	2.36E-08	2.11E-08	4.47E-08	1.25E-08	9.57E-09	2.21E-08
174	649451.63	4198670.24	1.08E-07	1.06E-07	2.14E-07	1.62E-08	1.59E-08	3.21E-08	1.58E-08	1.42E-08	3.00E-08	8.41E-09	6.43E-09	1.48E-08
175	649476.32	4198671.25	1.02E-07	1.00E-07	2.02E-07	1.53E-08	1.50E-08	3.03E-08	1.50E-08	1.34E-08	2.84E-08	7.96E-09	6.08E-09	1.40E-08
176	649472.21	4198771.17	7.14E-08	7.03E-08	1.42E-07	1.07E-08	1.05E-08	2.13E-08	1.05E-08	9.40E-09	1.99E-08	5.58E-09	4.26E-09	9.84E-09
177	649468.1	4198871.08	5.37E-08	5.28E-08	1.06E-07	8.07E-09	7.92E-09	1.60E-08	7.89E-09	7.06E-09	1.50E-08	4.19E-09	3.20E-09	7.39E-09
178	649509.26	4198471.37	2.74E-07	2.70E-07	5.44E-07	4.12E-08	4.04E-08	8.16E-08	4.03E-08	3.60E-08	7.63E-08	2.14E-08	1.63E-08	3.77E-08
179	649510	4198521.36	1.98E-07	1.95E-07	3.93E-07	2.98E-08	2.92E-08	5.90E-08	2.91E-08	2.61E-08	5.52E-08	1.55E-08	1.18E-08	2.73E-08
180	649510.73	4198571.36	1.50E-07	1.47E-07	2.97E-07	2.25E-08	2.21E-08	4.46E-08	2.20E-08	1.97E-08	4.17E-08	1.17E-08	8.93E-09	2.06E-08
181	649512.21	4198671.35	9.46E-08	9.32E-08	1.88E-07	1.42E-08	1.40E-08	2.82E-08	1.39E-08	1.25E-08	2.64E-08	7.39E-09	5.65E-09	1.30E-08
182	649500.12	4198771.54	6.78E-08	6.68E-08	1.35E-07	1.02E-08	1.00E-08	2.02E-08	9.97E-09	8.92E-09	1.89E-08	5.30E-09	4.05E-09	9.34E-09
183	649501.6	4198871.52	5.08E-08	5.00E-08	1.01E-07	7.64E-09	7.50E-09	1.51E-08	7.47E-09	6.69E-09	1.42E-08	3.97E-09	3.03E-09	7.00E-09
184	649490.05	4198971.34	4.08E-08	4.01E-08	8.09E-08	6.13E-09	6.02E-09	1.21E-08	5.99E-09	5.36E-09	1.14E-08	3.18E-09	2.43E-09	5.62E-09
185	649516.63	4198971.31	3.94E-08	3.88E-08	7.82E-08	5.92E-09	5.81E-09	1.17E-08	5.79E-09	5.18E-09	1.10E-08	3.08E-09	2.35E-09	5.43E-09
186	649493.46	4199171.33	2.78E-08	2.74E-08	5.52E-08	4.18E-09	4.11E-09	8.29E-09	4.09E-09	3.66E-09	7.75E-09	2.17E-09	1.66E-09	3.83E-09
187	649519.58	4199171.29	2.71E-08	2.67E-08	5.38E-08	4.08E-09	4.01E-09	8.09E-09	3.99E-09	3.57E-09	7.56E-09	2.12E-09	1.62E-09	3.74E-09
188	649496.69	4199371.31	2.07E-08	2.04E-08	4.11E-08	3.11E-09	3.06E-09	6.17E-09	3.04E-09	2.73E-09	5.77E-09	1.62E-09	1.24E-09	2.85E-09
189	649472.12	4199370.98	2.11E-08	2.08E-08	4.19E-08	3.17E-09	3.12E-09	6.29E-09	3.10E-09	2.78E-09	5.88E-09	1.65E-09	1.26E-09	2.91E-09
190	649522.53	4199371.27	2.03E-08	2.00E-08	4.04E-08	3.06E-09	3.00E-09	6.06E-09	2.99E-09	2.68E-09	5.67E-09	1.59E-09	1.21E-09	2.80E-09
191	649499.83	4199571.29	1.63E-08	1.61E-08	3.24E-08	2.46E-09	2.41E-09	4.87E-09	2.40E-09	2.15E-09	4.55E-09	1.28E-09	9.75E-10	2.25E-09
192	649475.63	4199570.97	1.66E-08	1.63E-08	3.29E-08	2.49E-09	2.45E-09	4.94E-09	2.44E-09	2.18E-09	4.62E-09	1.29E-09	9.89E-10	2.28E-09
193	649525.48	4199571.25	1.61E-08	1.59E-08	3.20E-08	2.42E-09	2.38E-09	4.80E-09	2.37E-09	2.12E-09	4.49E-09	1.26E-09	9.61E-10	2.22E-09
194	649502.91	4199771.27	1.34E-08	1.32E-08	2.66E-08	2.01E-09	1.98E-09	3.99E-09	1.97E-09	1.76E-09	3.73E-09	1.05E-09	8.00E-10	1.85E-09
195	649478.98	4199770.95	1.35E-08	1.33E-08	2.69E-08	2.04E-09	2.00E-09	4.04E-09	1.99E-09	1.78E-09	3.77E-09	1.06E-09	8.08E-10	1.87E-09
196	649528.43	4199771.23	1.32E-08	1.30E-08	2.63E-08	1.99E-09	1.96E-09	3.95E-09	1.95E-09	1.74E-09	3.69E-09	1.03E-09	7.91E-10	1.83E-09
197	649519.56	4198295.26	1.71E-06	1.68E-06	3.39E-06	2.57E-07	2.53E-07	5.10E-07	2.52E-07	2.25E-07	4.77E-07	1.34E-07	1.02E-07	2.36E-07
198	649521.88	4198320.15	1.13E-06	1.11E-06	2.25E-06	1.70E-07	1.67E-07	3.37E-07	1.66E-07	1.49E-07	3.15E-07	8.84E-08	6.75E-08	1.56E-07
199	649513.29	4198346.06	8.24E-07	8.12E-07	1.64E-06	1.24E-07	1.22E-07	2.46E-07	1.21E-07	1.09E-07	2.30E-07	6.44E-08	4.92E-08	1.14E-07
200	649515.61	4198370.96	6.25E-07	6.15E-07	1.24E-06	9.40E-08	9.22E-08	1.86E-07	9.19E-08	8.22E-08	1.74E-07	4.88E-08	3.73E-08	8.61E-08
201	649514.39	4198421.06	3.96E-07	3.90E-07	7.86E-07	5.95E-08	5.84E-08	1.18E-07	5.82E-08	5.21E-08	1.10E-07	3.09E-08	2.36E-08	5.45E-08
202	649535.83	4198469.5	2.59E-07	2.55E-07	5.13E-07	3.89E-08	3.82E-08	7.71E-08	3.80E-08	3.41E-08	7.21E-08	2.02E-08	1.54E-08	3.57E-08
203	649540.48	4198519.29	1.86E-07	1.83E-07	3.69E-07	2.80E-08	2.74E-08	5.54E-08	2.73E-08	2.45E-08	5.18E-08	1.45E-08	1.11E-08	2.56E-08
204	649534.21	4198570.09	1.43E-07	1.41E-07	2.83E-07	2.15E-08	2.11E-08	4.26E-08	2.10E-08	1.88E-08	3.98E-08	1.12E-08	8.52E-09	1.97E-08
205	649543.51	4198669.66	8.98E-08	8.84E-08	1.78E-07	1.35E-08	1.33E-08	2.68E-08	1.32E-08	1.18E-08	2.50E-08	7.01E-09	5.36E-09	1.24E-08
206	649543.03	4198769.75	6.35E-08	6.25E-08	1.26E-07	9.55E-09	9.37E-09	1.89E-08	9.34E-09	8.36E-09	1.77E-08	4.96E-09	3.79E-09	8.75E-09
207	649552.72	4198869.3	4.76E-08	4.68E-08	9.44E-08	7.15E-09	7.02E-09	1.42E-08	6.99E-09	6.26E-09	1.33E-08	3.72E-09	2.84E-09	6.55E-09
208	649524.55	4198870.82	4.92E-08	4.85E-08	9.77E-08	7.40E-09	7.27E-09	1.47E-08	7.24E-09	6.48E-09	1.37E-08	3.84E-09	2.94E-09	6.78E-09
209	649562.28	4198968.85	3.75E-08	3.70E-08	7.45E-08	5.64E-09	5.54E-09	1.12E-08	5.52E-09	4.94E-09	1.05E-08	2.93E-09	2.24E-09	5.17E-09
210	649579.95	4199168.03	2.60E-08	2.55E-08	5.15E-08	3.90E-09	3.83E-09	7.73E-09	3.82E-09	3.42E-09	7.23E-09	2.03E-09	1.55E-09	3.58E-09
211	649549.77	4199169.66	2.65E-08	2.61E-08	5.26E-08	3.99E-09	3.91E-09	7.90E-09	3.90E-09	3.49E-09	7.39E-09	2.07E-09	1.58E-09	3.65E-09
212	649597.85	4199367.2	1.95E-08	1.92E-08	3.88E-08	2.94E-09	2.89E-09	5.83E-09	2.87E-09	2.57E-09	5.45E-09	1.53E-09	1.17E-09	2.69E-09
213	649565.57	4199368.95	1.99E-08	1.96E-08	3.94E-08	2.99E-09	2.93E-09	5.92E-09	2.92E-09	2.61E-09	5.54E-09	1.55E-09	1.19E-09	2.74E-09
214	649617.04	4199566.31	1.55E-08	1.53E-08	3.09E-08	2.34E-09	2.30E-09	4.63E-09	2.29E-09	2.05E-09	4.33E-09	1.21E-09	9.28E-10	2.14E-09
215	649586.52	4199567.95	1.57E-08	1.55E-08	3.12E-08	2.36E-09	2.32E-09	4.68E-09	2.31E-09	2.07E-09	4.38E-09	1.23E-09	9.37E-10	2.16E-09
216	649556	4199569.6	1.59E-08	1.57E-08	3.16E-08	2.39E-09	2.35E-09	4.74E-09	2.34E-09	2.09E-09	4.43E-09	1.24E-09	9.49E-10	2.19E-09
217	649635.14	4199765.47	1.28E-08	1.26E-08	2.55E-08	1.93E-09	1.90E-09	3.83E-09	1.89E-09	1.69E-09	3.58E-09	1.00E-09	7.66E-10	1.77E-09
218	649603.13	4199767.19	1.29E-08	1.27E-08	2.57E-08	1.95E-09	1.91E-09	3.86E-09	1.90E-09	1.70E-09	3.61E-09	1.01E-09	7.72E-10	1.78E-09
219	649571.12	4199768.92	1.31E-08	1.29E-08	2.59E-08	1.96E-09	1.93E-09	3.89E-09	1.92E-09	1.72E-09	3.64E-09	1.02E-09	7.80E-10	1.80E-09
220	649545.05	4198342.25	8.01E-07	7.88E-07	1.59E-06	1.20E-07	1.18E-07	2.39E-07	1.18E-07	1.05E-07	2.23E-07	6.25E-08	4.78E-08	1.10E-07
221	649548.45	4198367.02	5.98E-07	5.88E-07	1.19E-06	8.99E-08	8.82E-08	1.78E-07	8.79E-08	7.87E-08	1.67E-07	4.67E-08	3.57E-08	8.24E-08
222	649537.66	4198418.97	3.78E-07	3.72E-07	7.51E-07	5.69E-08	5.58E-08	1.13E-07	5.56E-08	4.98E-08	1.05E-07	2.95E-08	2.26E-08	5.21E-08
223	649562.07	4198466.09	2.46E-07	2.42E-07	4.89E-07	3.70E-08	3.63E-08	7.34E-08	3.62E-08	3.24E-08	6.86E-08	1.92E-08	1.47E-08	3.39E-08
224	649568.88	4198515.62	1.77E-07	1.74E-07	3.51E-07	2.66E-08	2.61E-08	5.27E-08	2.60E-08	2.33E-08	4.93E-08	1.38E-08	1.06E-08	2.44E-08

225	649558.1	4198567.57	1.37E-07	1.35E-07	2.72E-07	2.06E-08	2.03E-08	4.09E-08	2.02E-08	1.81E-08	3.82E-08	1.07E-08	8.19E-09	1.89E-08
226	649571.72	4198666.64	8.65E-08	8.52E-08	1.72E-07	1.30E-08	1.28E-08	2.58E-08	1.27E-08	1.14E-08	2.41E-08	6.76E-09	5.16E-09	1.19E-08
227	649574.54	4198766.96	6.12E-08	6.02E-08	1.21E-07	9.20E-09	9.03E-09	1.82E-08	8.99E-09	8.05E-09	1.70E-08	4.78E-09	3.65E-09	8.43E-09
228	649602.94	4198763.29	5.97E-08	5.88E-08	1.18E-07	8.97E-09	8.81E-09	1.78E-08	8.78E-09	7.85E-09	1.66E-08	4.66E-09	3.56E-09	8.22E-09
229	649586	4198866.27	4.60E-08	4.53E-08	9.13E-08	6.92E-09	6.79E-09	1.37E-08	6.77E-09	6.06E-09	1.28E-08	3.60E-09	2.75E-09	6.34E-09
230	649616.56	4198862.36	4.50E-08	4.43E-08	8.93E-08	6.77E-09	6.65E-09	1.34E-08	6.62E-09	5.92E-09	1.25E-08	3.52E-09	2.69E-09	6.20E-09
231	649597.46	4198965.59	3.65E-08	3.59E-08	7.24E-08	5.48E-09	5.38E-09	1.09E-08	5.36E-09	4.80E-09	1.02E-08	2.85E-09	2.18E-09	5.03E-09
232	649630.18	4198961.43	3.57E-08	3.52E-08	7.09E-08	5.37E-09	5.27E-09	1.06E-08	5.25E-09	4.70E-09	9.95E-09	2.79E-09	2.13E-09	4.92E-09
233	649626.86	4199163.48	2.53E-08	2.49E-08	5.01E-08	3.80E-09	3.73E-09	7.53E-09	3.72E-09	3.33E-09	7.04E-09	1.97E-09	1.51E-09	3.48E-09
234	649657.43	4199159.56	2.49E-08	2.45E-08	4.94E-08	3.75E-09	3.68E-09	7.43E-09	3.66E-09	3.28E-09	6.94E-09	1.95E-09	1.49E-09	3.43E-09
235	649651.22	4199361.95	1.92E-08	1.89E-08	3.80E-08	2.88E-09	2.83E-09	5.71E-09	2.82E-09	2.52E-09	5.34E-09	1.50E-09	1.14E-09	2.64E-09
236	649684.67	4199357.7	1.89E-08	1.87E-08	3.76E-08	2.85E-09	2.80E-09	5.65E-09	2.79E-09	2.49E-09	5.28E-09	1.48E-09	1.13E-09	2.61E-09
237	649680.27	4199559.87	1.53E-08	1.50E-08	3.03E-08	2.30E-09	2.26E-09	4.55E-09	2.25E-09	2.01E-09	4.26E-09	1.19E-09	9.12E-10	2.11E-09
238	649652.18	4199563.11	1.54E-08	1.51E-08	3.05E-08	2.31E-09	2.27E-09	4.59E-09	2.26E-09	2.03E-09	4.29E-09	1.20E-09	9.18E-10	2.12E-09
239	649711.91	4199555.83	1.52E-08	1.49E-08	3.01E-08	2.28E-09	2.24E-09	4.52E-09	2.23E-09	2.00E-09	4.23E-09	1.19E-09	9.06E-10	2.09E-09
240	649705.35	4199758.26	1.27E-08	1.25E-08	2.51E-08	1.91E-09	1.87E-09	3.78E-09	1.86E-09	1.67E-09	3.53E-09	9.90E-10	7.56E-10	1.75E-09
241	649672.94	4199762	1.27E-08	1.25E-08	2.53E-08	1.92E-09	1.88E-09	3.80E-09	1.87E-09	1.68E-09	3.55E-09	9.95E-10	7.60E-10	1.76E-09
242	649739.16	4199753.97	1.26E-08	1.24E-08	2.50E-08	1.89E-09	1.86E-09	3.75E-09	1.85E-09	1.66E-09	3.51E-09	9.84E-10	7.52E-10	1.74E-09
243	649553.97	4198290.85	1.73E-06	1.70E-06	3.43E-06	2.60E-07	2.55E-07	5.15E-07	2.54E-07	2.27E-07	4.82E-07	1.35E-07	1.03E-07	2.38E-07
244	649556.92	4198315.68	1.11E-06	1.10E-06	2.21E-06	1.68E-07	1.65E-07	3.32E-07	1.64E-07	1.47E-07	3.11E-07	8.71E-08	6.65E-08	1.54E-07
245	649576.07	4198338.58	7.65E-07	7.53E-07	1.52E-06	1.15E-07	1.13E-07	2.28E-07	1.12E-07	1.01E-07	2.13E-07	5.97E-08	4.56E-08	1.05E-07
246	649579.02	4198363.4	5.64E-07	5.55E-07	1.12E-06	8.48E-08	8.32E-08	1.68E-07	8.29E-08	7.42E-08	1.57E-07	4.40E-08	3.36E-08	7.77E-08
247	649568.73	4198414.98	3.56E-07	3.50E-07	7.06E-07	5.35E-08	5.25E-08	1.06E-07	5.23E-08	4.68E-08	9.92E-08	2.78E-08	2.12E-08	4.90E-08
248	649590.82	4198462.7	2.32E-07	2.28E-07	4.60E-07	3.49E-08	3.42E-08	6.91E-08	3.41E-08	3.05E-08	6.46E-08	1.81E-08	1.38E-08	3.20E-08
249	649596.73	4198512.35	1.69E-07	1.66E-07	3.34E-07	2.53E-08	2.49E-08	5.02E-08	2.48E-08	2.22E-08	4.70E-08	1.32E-08	1.01E-08	2.32E-08
250	649586.44	4198563.93	1.32E-07	1.30E-07	2.61E-07	1.98E-08	1.94E-08	3.92E-08	1.93E-08	1.73E-08	3.67E-08	1.03E-08	7.85E-09	1.81E-08
251	649598.25	4198663.23	8.41E-08	8.28E-08	1.67E-07	1.27E-08	1.24E-08	2.51E-08	1.24E-08	1.11E-08	2.34E-08	6.57E-09	5.02E-09	1.16E-08
252	649626.24	4198760.6	5.86E-08	5.77E-08	1.16E-07	8.82E-09	8.66E-09	1.75E-08	8.62E-09	7.72E-09	1.63E-08	4.58E-09	3.50E-09	8.08E-09
253	649584.87	4198287.46	1.70E-06	1.68E-06	3.38E-06	2.56E-07	2.52E-07	5.08E-07	2.51E-07	2.24E-07	4.75E-07	1.33E-07	1.02E-07	2.35E-07
254	649587.35	4198312.34	1.07E-06	1.06E-06	2.13E-06	1.61E-07	1.58E-07	3.20E-07	1.58E-07	1.41E-07	2.99E-07	8.38E-08	6.40E-08	1.48E-07
255	649605.01	4198335.7	7.12E-07	7.01E-07	1.41E-06	1.07E-07	1.05E-07	2.12E-07	1.05E-07	9.38E-08	1.99E-07	5.57E-08	4.25E-08	9.82E-08
256	649607.49	4198360.58	5.21E-07	5.13E-07	1.03E-06	7.84E-08	7.70E-08	1.55E-07	7.67E-08	6.86E-08	1.45E-07	4.07E-08	3.11E-08	7.18E-08
257	649597.29	4198411.84	3.32E-07	3.27E-07	6.59E-07	4.99E-08	4.90E-08	9.90E-08	4.88E-08	4.37E-08	9.25E-08	2.59E-08	1.98E-08	4.58E-08
258	649617.43	4198460.08	2.19E-07	2.16E-07	4.35E-07	3.29E-08	3.23E-08	6.53E-08	3.22E-08	2.88E-08	6.10E-08	1.71E-08	1.31E-08	3.02E-08
259	649622.4	4198509.83	1.61E-07	1.59E-07	3.20E-07	2.42E-08	2.38E-08	4.80E-08	2.37E-08	2.12E-08	4.49E-08	1.26E-08	9.62E-09	2.22E-08
260	649612.19	4198561.1	1.27E-07	1.25E-07	2.52E-07	1.91E-08	1.87E-08	3.78E-08	1.87E-08	1.67E-08	3.54E-08	9.91E-09	7.57E-09	1.75E-08
261	649622.12	4198660.61	8.22E-08	8.10E-08	1.63E-07	1.24E-08	1.21E-08	2.45E-08	1.21E-08	1.08E-08	2.29E-08	6.42E-09	4.91E-09	1.13E-08
262	649641.99	4198859.62	4.43E-08	4.36E-08	8.79E-08	6.66E-09	6.54E-09	1.32E-08	6.51E-09	5.83E-09	1.23E-08	3.46E-09	2.64E-09	6.10E-09
263	649667.1	4198957.61	3.50E-08	3.45E-08	6.94E-08	5.26E-09	5.17E-09	1.04E-08	5.14E-09	4.61E-09	9.75E-09	2.73E-09	2.09E-09	4.82E-09
264	649686.97	4199156.62	2.46E-08	2.42E-08	4.88E-08	3.70E-09	3.63E-09	7.33E-09	3.62E-09	3.24E-09	6.85E-09	1.92E-09	1.47E-09	3.39E-09
265	649616.02	4198286.57	1.56E-06	1.54E-06	3.10E-06	2.35E-07	2.30E-07	4.65E-07	2.29E-07	2.05E-07	4.35E-07	1.22E-07	9.31E-08	2.15E-07
266	649615.36	4198311.56	9.73E-07	9.58E-07	1.93E-06	1.46E-07	1.44E-07	2.90E-07	1.43E-07	1.28E-07	2.71E-07	7.60E-08	5.81E-08	1.34E-07
267	649633.82	4198337.05	6.11E-07	6.02E-07	1.21E-06	9.19E-08	9.02E-08	1.82E-07	8.99E-08	8.04E-08	1.70E-07	4.77E-08	3.65E-08	8.42E-08
268	649633.16	4198362.05	4.59E-07	4.52E-07	9.10E-07	6.90E-08	6.77E-08	1.37E-07	6.74E-08	6.04E-08	1.28E-07	3.58E-08	2.74E-08	6.32E-08
269	649631.84	4198412.03	2.94E-07	2.90E-07	5.84E-07	4.43E-08	4.35E-08	8.78E-08	4.33E-08	3.88E-08	8.20E-08	2.30E-08	1.76E-08	4.06E-08
270	649655.51	4198287.28	1.24E-06	1.22E-06	2.47E-06	1.87E-07	1.83E-07	3.70E-07	1.83E-07	1.64E-07	3.46E-07	9.71E-08	7.42E-08	1.71E-07
271	649695.43	4198287.69	8.69E-07	8.55E-07	1.72E-06	1.31E-07	1.28E-07	2.59E-07	1.28E-07	1.14E-07	2.42E-07	6.79E-08	5.19E-08	1.20E-07
272	649655.25	4198312.28	7.69E-07	7.57E-07	1.53E-06	1.16E-07	1.14E-07	2.29E-07	1.13E-07	1.01E-07	2.14E-07	6.01E-08	4.59E-08	1.06E-07
273	649695.17	4198312.69	5.96E-07	5.86E-07	1.18E-06	8.96E-08	8.79E-08	1.77E-07	8.76E-08	7.84E-08	1.66E-07	4.65E-08	3.55E-08	8.21E-08
274	649674.96	4198337.48	4.91E-07	4.83E-07	9.74E-07	7.38E-08	7.25E-08	1.46E-07	7.22E-08	6.46E-08	1.37E-07	3.84E-08	2.93E-08	6.77E-08
275	649674.7	4198362.48	3.83E-07	3.77E-07	7.60E-07	5.76E-08	5.65E-08	1.14E-07	5.63E-08	5.04E-08	1.07E-07	2.99E-08	2.28E-08	5.27E-08
276	649674.19	4198412.48	2.58E-07	2.54E-07	5.12E-07	3.88E-08	3.81E-08	7.69E-08	3.79E-08	3.40E-08	7.19E-08	2.02E-08	1.54E-08	3.56E-08
277	649653.72	4198462.27	1.97E-07	1.94E-07	3.91E-07	2.96E-08	2.91E-08	5.87E-08	2.90E-08	2.59E-08	5.49E-08	1.54E-08	1.18E-08	2.72E-08
278	649693.64	4198462.68	1.81E-07	1.78E-07	3.59E-07	2.72E-08	2.67E-08	5.39E-08	2.66E-08	2.38E-08	5.04E-08	1.41E-08	1.08E-08	2.49E-08
279	649653.21	4198512.27	1.50E-07	1.47E-07	2.97E-07	2.25E-08	2.21E-08	4.46E-08	2.20E-08	1.97E-08	4.17E-08	1.17E-08	8.93E-09	2.06E-08
280	649693.13	4198512.68	1.40E-07	1.38E-07	2.78E-07	2.10E-08	2.07E-08	4.17E-08	2.06E-08	1.84E-08	3.90E-08	1.09E-08	8.35E-09	1.93E-08
281	649652.7	4198562.27	1.18E-07	1.16E-07	2.34E-07	1.77E-08	1.74E-08	3.52E-08	1.73E-08	1.55E-08	3.29E-08	9.21E-09	7.04E-09	1.63E-08
282	649692.62	4198562.67	1.12E-07	1.10E-07	2.21E-07	1.68E-08	1.65E-08	3.33E-08	1.64E-08	1.47E-08	3.11E-08	8.72E-09	6.66E-09	1.54E-08
283	649651.69	4198662.26	7.90E-08	7.77E-08	1.57E-07	1.19E-08	1.17E-08	2.35E-08	1.16E-08	1.04E-08	2.20E-08	6.17E-09	4.71E-09	1.09E-08
284	649691.61	4198662.67	7.59E-08	7.47E-08	1.51E-07	1.14E-08	1.12E-08	2.26E-08	1.12E-08	9.98E-09	2.11E-08	5.93E-09	4.53E-09	1.05E-08
285	649650.67	4198762.26	5.70E-08	5.61E-08	1.13E-07	8.57E-09	8.42E-09	1.70E-08	8.38E-09	7.50E-09	1.59E-08	4.45E-09	3.40E-09	7.85E-09
286	649690.59	4198762.66	5.52E-08	5.43E-08	1.09E-07	8.30E-09	8.14E-09	1.64E-08	8.11E-09	7.26E-09	1.54E-08	4.31E-09	3.29E-09	7.60E-09
287	649669.61	4198862.46	4.30E-08	4.24E-08	8.54E-08	6.47E-09	6.35E-09	1.28E-08	6.33E-09	5.66E-09	1.20E-08	3.36E-09	2.57E-09	5.93E-09
288	649624.59	4199362.02	1.94E-08	1.91E-08	3.85E-08	2.92E-09	2.86E-09	5.78E-09	2.85E-09	2.55E-09	5.41E-09	1.52E-09	1.16E-09	2.67E-09
289	649720.65	4198263.97	1.14E-06	1.13E-06	2.27E-06	1.72E-07	1.69E-07	3.41E-07	1.68E-07	1.51E-07	3.19E-07	8.94E-08	6.83E-08	1.58E-07
290	649722.91	4198219.73	2.52E-06	2.48E-06	4.99E-06	3.78E-07	3.71E-07	7.50E-07	3.70E-07	3.31E-07	7.01E-07	1.97E-07	1.50E-07	3.47E-07
291	649737.78	4198282.18	7.11E-07	7.00E-07	1.41E-06	1.07E-07	1.05E-07	2.12E-07	1.05E-07	9.36E-08	1.98E-07	5.56E-08	4.25E-08	9.80E-08
292	649746.74	4198243.12	1.19E-06	1.17E-06	2.36E-06	1.79E-07	1.76E-07	3.54E-07	1.75E-07	1.57E-07	3.31E-07	9.29E-08	7.10E-08	1.64E-07
293	649762.74	4198283.45	5.94E-07	5.85E-07	1.18E-06	8.94E-08	8.77E-08	1.77E-07	8.74E-08	7.82E-08	1.66E-07	4.64E-08	3.55E-08	8.19E-08
294	649729.68	4198324.11	4.49E-07	4.42E-07	8.91E-07	6.75E-08	6.63E-08	1.34E-07	6.60E-08	5.91E-08	1.25E-07	3.51E-08	2.68E-08	6.19E-08
295	649771.71	4198244.4	8.73E-07	8.59E-07	1.73E-06	1.31E-07	1.29E-07	2.60E-07	1.28E-07	1.15E-07	2.43E-07	6.82E-08	5.21E-08	1.20E-07
296	649787.71	4198284.73	5.06E-07	4.98E-07	1.00E-06	7.60E-08	7.46E-08	1.51E-07	7.43E-08	6.65E-08	1.41E-07	3.95E-08	3.02E-08	6.97E-08
297	649772.03	4198318.6	4.00E-07	3.94E-07	7.94E-07	6.01E-08	5.90E-08	1.19E-07	5.88E-08	5.26E-08	1.11E-07	3.12E-08	2.39E-08	5.51E-08
298	649746.81	4198342.32	3.58E-07	3.52E-07	7.10E-07	5.38E-08	5.28E-08	1.07E-07	5.26E-08	4.71E-08	9.97E-08	2.79E-08	2.13E-08	4.93E-08
299	649712.04	4198355.9	3.56E-07	3.51E-07	7.07E-07	5.36E-08	5.26E-08	1.06E-07	5.24E-08	4.69E-08	9.93E-08	2.78E-08	2.13E-08	4.91E-08
300	649796.68	4198245.67	6.89E-07	6.79E-07	1.37E-06	1.04E-07	1.02E-07	2.05E-07	1.01E-07	9.07E-08	1.92E-07	5.39E-08	4.11E-08	9.50E-08

301	649837.65	4198287.28	3.84E-07	3.78E-07	7.62E-07	5.77E-08	5.67E-08	1.14E-07	5.64E-08	5.05E-08	1.07E-07	3.00E-08	2.29E-08	5.29E-08
302	649821.97	4198321.15	3.23E-07	3.18E-07	6.40E-07	4.85E-08	4.76E-08	9.61E-08	4.74E-08	4.25E-08	8.99E-08	2.52E-08	1.93E-08	4.45E-08
303	649806.29	4198355.02	2.71E-07	2.67E-07	5.38E-07	4.07E-08	4.00E-08	8.07E-08	3.98E-08	3.57E-08	7.55E-08	2.12E-08	1.62E-08	3.73E-08
304	649781.07	4198378.74	2.49E-07	2.45E-07	4.94E-07	3.75E-08	3.68E-08	7.42E-08	3.66E-08	3.28E-08	6.94E-08	1.95E-08	1.49E-08	3.43E-08
305	649746.3	4198392.32	2.48E-07	2.44E-07	4.92E-07	3.73E-08	3.66E-08	7.39E-08	3.65E-08	3.26E-08	6.91E-08	1.94E-08	1.48E-08	3.42E-08
306	649711.53	4198405.89	2.46E-07	2.42E-07	4.88E-07	3.70E-08	3.63E-08	7.33E-08	3.61E-08	3.24E-08	6.85E-08	1.92E-08	1.47E-08	3.39E-08
307	649846.61	4198248.22	4.82E-07	4.74E-07	9.56E-07	7.25E-08	7.12E-08	1.44E-07	7.09E-08	6.34E-08	1.34E-07	3.76E-08	2.88E-08	6.64E-08
308	649886.46	4198292.25	3.03E-07	2.98E-07	6.00E-07	4.55E-08	4.47E-08	9.02E-08	4.45E-08	3.98E-08	8.43E-08	2.36E-08	1.81E-08	4.17E-08
309	649868.54	4198330.96	2.58E-07	2.54E-07	5.12E-07	3.88E-08	3.81E-08	7.69E-08	3.79E-08	3.39E-08	7.19E-08	2.01E-08	1.54E-08	3.55E-08
310	649850.62	4198369.67	2.19E-07	2.16E-07	4.35E-07	3.30E-08	3.24E-08	6.54E-08	3.23E-08	2.89E-08	6.11E-08	1.71E-08	1.31E-08	3.02E-08
311	649812.84	4198416.13	1.87E-07	1.84E-07	3.71E-07	2.81E-08	2.76E-08	5.58E-08	2.75E-08	2.46E-08	5.22E-08	1.46E-08	1.12E-08	2.58E-08
312	649773.11	4198431.65	1.86E-07	1.83E-07	3.69E-07	2.80E-08	2.75E-08	5.54E-08	2.73E-08	2.45E-08	5.18E-08	1.45E-08	1.11E-08	2.56E-08
313	649733.38	4198447.16	1.84E-07	1.81E-07	3.64E-07	2.76E-08	2.71E-08	5.47E-08	2.70E-08	2.42E-08	5.11E-08	1.43E-08	1.10E-08	2.53E-08
314	649896.55	4198250.77	3.66E-07	3.60E-07	7.27E-07	5.51E-08	5.41E-08	1.09E-07	5.38E-08	4.82E-08	1.02E-07	2.86E-08	2.19E-08	5.05E-08
315	649897.68	4198228.65	4.10E-07	4.03E-07	8.13E-07	6.16E-08	6.05E-08	1.22E-07	6.02E-08	5.39E-08	1.14E-07	3.20E-08	2.45E-08	5.65E-08
316	649936.64	4198294.26	2.50E-07	2.46E-07	4.95E-07	3.75E-08	3.68E-08	7.44E-08	3.67E-08	3.28E-08	6.95E-08	1.95E-08	1.49E-08	3.44E-08
317	649919.22	4198331.89	2.19E-07	2.16E-07	4.35E-07	3.30E-08	3.24E-08	6.54E-08	3.22E-08	2.89E-08	6.11E-08	1.71E-08	1.31E-08	3.02E-08
318	649901.8	4198369.53	1.92E-07	1.89E-07	3.81E-07	2.89E-08	2.83E-08	5.72E-08	2.82E-08	2.53E-08	5.35E-08	1.50E-08	1.15E-08	2.64E-08
319	649884.38	4198407.16	1.68E-07	1.65E-07	3.33E-07	2.53E-08	2.48E-08	5.01E-08	2.47E-08	2.21E-08	4.68E-08	1.31E-08	1.00E-08	2.31E-08
320	649847.65	4198452.34	1.47E-07	1.45E-07	2.93E-07	2.22E-08	2.18E-08	4.39E-08	2.17E-08	1.94E-08	4.11E-08	1.15E-08	8.80E-09	2.03E-08
321	649809.02	4198467.42	1.47E-07	1.44E-07	2.91E-07	2.20E-08	2.16E-08	4.37E-08	2.16E-08	1.93E-08	4.09E-08	1.15E-08	8.75E-09	2.02E-08
322	649770.39	4198482.51	1.45E-07	1.42E-07	2.87E-07	2.18E-08	2.14E-08	4.31E-08	2.13E-08	1.90E-08	4.03E-08	1.13E-08	8.64E-09	1.99E-08
323	649731.76	4198497.59	1.42E-07	1.40E-07	2.82E-07	2.14E-08	2.10E-08	4.24E-08	2.09E-08	1.87E-08	3.96E-08	1.11E-08	8.49E-09	1.96E-08
324	649946.48	4198253.32	2.92E-07	2.88E-07	5.80E-07	4.39E-08	4.31E-08	8.70E-08	4.29E-08	3.84E-08	8.14E-08	2.28E-08	1.74E-08	4.02E-08
325	649947.61	4198231.2	3.21E-07	3.16E-07	6.37E-07	4.83E-08	4.74E-08	9.57E-08	4.72E-08	4.23E-08	8.95E-08	2.51E-08	1.92E-08	4.42E-08
326	649986.74	4198296.47	2.10E-07	2.07E-07	4.17E-07	3.16E-08	3.10E-08	6.27E-08	3.09E-08	2.77E-08	5.86E-08	1.64E-08	1.25E-08	2.90E-08
327	649969.63	4198333.42	1.89E-07	1.86E-07	3.74E-07	2.84E-08	2.79E-08	5.62E-08	2.77E-08	2.48E-08	5.26E-08	1.47E-08	1.13E-08	2.60E-08
328	649952.53	4198370.37	1.68E-07	1.66E-07	3.34E-07	2.53E-08	2.48E-08	5.02E-08	2.47E-08	2.21E-08	4.69E-08	1.31E-08	1.00E-08	2.32E-08
329	649935.43	4198407.32	1.50E-07	1.48E-07	2.98E-07	2.26E-08	2.22E-08	4.48E-08	2.21E-08	1.98E-08	4.19E-08	1.17E-08	8.97E-09	2.07E-08
330	649918.32	4198444.27	1.34E-07	1.32E-07	2.67E-07	2.02E-08	1.98E-08	4.00E-08	1.98E-08	1.77E-08	3.74E-08	1.05E-08	8.02E-09	1.85E-08
331	649882.26	4198488.62	1.20E-07	1.18E-07	2.38E-07	1.81E-08	1.77E-08	3.58E-08	1.77E-08	1.58E-08	3.35E-08	9.38E-09	7.17E-09	1.66E-08
332	649844.33	4198503.43	1.19E-07	1.18E-07	2.37E-07	1.80E-08	1.76E-08	3.56E-08	1.76E-08	1.57E-08	3.33E-08	9.33E-09	7.13E-09	1.65E-08
333	649806.4	4198518.24	1.18E-07	1.16E-07	2.34E-07	1.77E-08	1.74E-08	3.52E-08	1.73E-08	1.55E-08	3.29E-08	9.21E-09	7.04E-09	1.63E-08
334	649768.48	4198533.05	1.16E-07	1.14E-07	2.30E-07	1.74E-08	1.71E-08	3.46E-08	1.70E-08	1.53E-08	3.23E-08	9.06E-09	6.92E-09	1.60E-08
335	649730.55	4198547.86	1.14E-07	1.12E-07	2.26E-07	1.71E-08	1.68E-08	3.39E-08	1.67E-08	1.50E-08	3.17E-08	8.88E-09	6.79E-09	1.57E-08
336	649996.42	4198255.88	2.41E-07	2.37E-07	4.77E-07	3.62E-08	3.55E-08	7.17E-08	3.54E-08	3.17E-08	6.70E-08	1.88E-08	1.44E-08	3.31E-08
337	650086.2	4198302.45	1.56E-07	1.54E-07	3.10E-07	2.35E-08	2.31E-08	4.66E-08	2.30E-08	2.06E-08	4.36E-08	1.22E-08	9.34E-09	2.16E-08
338	650068.28	4198341.16	1.43E-07	1.41E-07	2.84E-07	2.15E-08	2.12E-08	4.27E-08	2.11E-08	1.89E-08	3.99E-08	1.12E-08	8.55E-09	1.97E-08
339	650050.36	4198379.87	1.30E-07	1.28E-07	2.59E-07	1.96E-08	1.92E-08	3.88E-08	1.92E-08	1.71E-08	3.63E-08	1.02E-08	7.78E-09	1.80E-08
340	650032.45	4198418.58	1.18E-07	1.17E-07	2.35E-07	1.78E-08	1.75E-08	3.53E-08	1.74E-08	1.56E-08	3.30E-08	9.25E-09	7.06E-09	1.63E-08
341	650014.53	4198457.29	1.08E-07	1.06E-07	2.14E-07	1.62E-08	1.59E-08	3.21E-08	1.59E-08	1.42E-08	3.00E-08	8.42E-09	6.43E-09	1.49E-08
342	649996.61	4198495.99	9.84E-08	9.69E-08	1.95E-07	1.48E-08	1.45E-08	2.93E-08	1.45E-08	1.29E-08	2.74E-08	7.69E-09	5.87E-09	1.36E-08
343	649978.69	4198534.7	8.97E-08	8.83E-08	1.78E-07	1.35E-08	1.32E-08	2.67E-08	1.32E-08	1.18E-08	2.50E-08	7.01E-09	5.35E-09	1.24E-08
344	649949.87	4198561.82	8.56E-08	8.43E-08	1.70E-07	1.29E-08	1.26E-08	2.55E-08	1.26E-08	1.13E-08	2.38E-08	6.69E-09	5.11E-09	1.18E-08
345	649910.13	4198577.33	8.50E-08	8.37E-08	1.69E-07	1.28E-08	1.26E-08	2.53E-08	1.25E-08	1.12E-08	2.37E-08	6.64E-09	5.07E-09	1.17E-08
346	649870.4	4198592.85	8.38E-08	8.25E-08	1.66E-07	1.26E-08	1.24E-08	2.50E-08	1.23E-08	1.10E-08	2.33E-08	6.55E-09	5.00E-09	1.15E-08
347	649830.67	4198608.36	8.22E-08	8.09E-08	1.63E-07	1.24E-08	1.21E-08	2.45E-08	1.21E-08	1.08E-08	2.29E-08	6.42E-09	4.90E-09	1.13E-08
348	649790.94	4198623.88	8.03E-08	7.91E-08	1.59E-07	1.21E-08	1.19E-08	2.39E-08	1.18E-08	1.06E-08	2.24E-08	6.28E-09	4.79E-09	1.11E-08
349	649751.2	4198639.4	7.85E-08	7.73E-08	1.56E-07	1.18E-08	1.16E-08	2.34E-08	1.15E-08	1.03E-08	2.19E-08	6.13E-09	4.68E-09	1.08E-08
350	650096.29	4198260.98	1.74E-07	1.71E-07	3.45E-07	2.62E-08	2.57E-08	5.19E-08	2.56E-08	2.29E-08	4.85E-08	1.36E-08	1.04E-08	2.40E-08
351	650185.81	4198308.12	1.23E-07	1.21E-07	2.43E-07	1.84E-08	1.81E-08	3.65E-08	1.80E-08	1.61E-08	3.42E-08	9.58E-09	7.32E-09	1.69E-08
352	650167.36	4198347.97	1.14E-07	1.12E-07	2.26E-07	1.71E-08	1.68E-08	3.40E-08	1.68E-08	1.50E-08	3.18E-08	8.90E-09	6.80E-09	1.57E-08
353	650148.92	4198387.82	1.05E-07	1.04E-07	2.09E-07	1.58E-08	1.55E-08	3.14E-08	1.55E-08	1.38E-08	2.93E-08	8.22E-09	6.28E-09	1.45E-08
354	650130.47	4198427.66	9.69E-08	9.54E-08	1.92E-07	1.46E-08	1.43E-08	2.89E-08	1.42E-08	1.27E-08	2.70E-08	7.57E-09	5.78E-09	1.33E-08
355	650112.03	4198467.51	8.92E-08	8.79E-08	1.77E-07	1.34E-08	1.32E-08	2.66E-08	1.31E-08	1.17E-08	2.49E-08	6.97E-09	5.33E-09	1.23E-08
356	650093.58	4198507.36	8.25E-08	8.12E-08	1.64E-07	1.24E-08	1.22E-08	2.46E-08	1.21E-08	1.09E-08	2.30E-08	6.44E-09	4.92E-09	1.14E-08
357	650075.14	4198547.21	7.64E-08	7.52E-08	1.52E-07	1.15E-08	1.13E-08	2.28E-08	1.12E-08	1.01E-08	2.13E-08	5.97E-09	4.56E-09	1.05E-08
358	650056.69	4198587.05	7.07E-08	6.96E-08	1.40E-07	1.06E-08	1.04E-08	2.11E-08	1.04E-08	9.31E-09	1.97E-08	5.52E-09	4.22E-09	9.75E-09
359	650017.8	4198634.89	6.51E-08	6.41E-08	1.29E-07	9.80E-09	9.62E-09	1.94E-08	9.58E-09	8.57E-09	1.82E-08	5.09E-09	3.89E-09	8.98E-09
360	649976.89	4198650.86	6.45E-08	6.35E-08	1.28E-07	9.70E-09	9.53E-09	1.92E-08	9.49E-09	8.49E-09	1.80E-08	5.04E-09	3.85E-09	8.89E-09
361	649935.99	4198666.83	6.35E-08	6.25E-08	1.26E-07	9.55E-09	9.38E-09	1.89E-08	9.34E-09	8.36E-09	1.77E-08	4.96E-09	3.79E-09	8.75E-09
362	649895.09	4198682.8	6.23E-08	6.13E-08	1.24E-07	9.36E-09	9.19E-09	1.86E-08	9.15E-09	8.19E-09	1.73E-08	4.86E-09	3.72E-09	8.58E-09
363	649854.19	4198698.77	6.08E-08	5.98E-08	1.21E-07	9.14E-09	8.97E-09	1.81E-08	8.93E-09	8.00E-09	1.69E-08	4.75E-09	3.63E-09	8.37E-09
364	649813.29	4198714.75	5.92E-08	5.83E-08	1.17E-07	8.90E-09	8.74E-09	1.76E-08	8.70E-09	7.79E-09	1.65E-08	4.62E-09	3.53E-09	8.15E-09
365	649772.39	4198730.72	5.77E-08	5.68E-08	1.14E-07	8.67E-09	8.51E-09	1.72E-08	8.48E-09	7.59E-09	1.61E-08	4.50E-09	3.44E-09	7.94E-09
366	649731.49	4198746.69	5.63E-08	5.54E-08	1.12E-07	8.47E-09	8.31E-09	1.68E-08	8.28E-09	7.41E-09	1.57E-08	4.40E-09	3.36E-09	7.76E-09
367	650196.16	4198266.08	1.34E-07	1.32E-07	2.66E-07	2.01E-08	1.98E-08	3.99E-08	1.97E-08	1.76E-08	3.73E-08	1.05E-08	7.99E-09	1.85E-08
368	650285.94	4198312.66	9.97E-08	9.81E-08	1.98E-07	1.50E-08	1.47E-08	2.97E-08	1.47E-08	1.31E-08	2.78E-08	7.79E-09	5.95E-09	1.37E-08
369	650268.02	4198351.36	9.40E-08	9.25E-08	1.87E-07	1.41E-08	1.39E-08	2.80E-08	1.38E-08	1.24E-08	2.62E-08	7.34E-09	5.61E-09	1.30E-08
370	650250.1	4198390.07	8.81E-08	8.68E-08	1.75E-07	1.33E-08	1.30E-08	2.63E-08	1.30E-08	1.16E-08	2.46E-08	6.88E-09	5.26E-09	1.21E-08
371	650232.19	4198428.78	8.23E-08	8.10E-08	1.63E-07	1.24E-08	1.22E-08	2.45E-08	1.21E-08	1.08E-08	2.29E-08	6.43E-09	4.91E-09	1.13E-08
372	650214.27	4198467.49	7.68E-08	7.56E-08	1.52E-07	1.15E-08	1.13E-08	2.29E-08	1.13E-08	1.01E-08	2.14E-08	6.00E-09	4.58E-09	1.06E-08
373	650196.35	4198506.2	7.18E-08	7.06E-08	1.42E-07	1.08E-08	1.06E-08	2.14E-08	1.06E-08	9.44E-09	2.00E-08	5.61E-09	4.28E-09	9.89E-09
374	650178.43	4198544.91	6.72E-08	6.62E-08	1.33E-07	1.01E-08	9.93E-09	2.00E-08	9.89E-09	8.85E-09	1.87E-08	5.25E-09	4.01E-09	9.26E-09
375	650160.51	4198583.62	6.31E-08	6.22E-08	1.25E-07	9.50E-09	9.32E-09	1.88E-08	9.28E-09	8.31E-09	1.76E-08	4.93E-09	3.77E-09	8.70E-09
376	650142.6	4198622.32	5.94E-08	5.84E-08	1.18E-07	8.92E-09	8.76E-09	1.77E-08	8.73E-09	7.81E-09	1.65E-08	4.64E-09	3.54E-09	8.18E-09

377	650124.68	4198661.03	5.57E-08	5.48E-08	1.10E-07	8.37E-09	8.22E-09	1.66E-08	8.19E-09	7.33E-09	1.55E-08	4.35E-09	3.32E-09	7.67E-09
378	650086.89	4198707.5	5.19E-08	5.11E-08	1.03E-07	7.80E-09	7.66E-09	1.55E-08	7.63E-09	6.83E-09	1.45E-08	4.05E-09	3.10E-09	7.15E-09
379	650047.16	4198723.02	5.14E-08	5.06E-08	1.02E-07	7.73E-09	7.59E-09	1.53E-08	7.55E-09	6.76E-09	1.43E-08	4.01E-09	3.07E-09	7.08E-09
380	650007.43	4198738.53	5.06E-08	4.98E-08	1.00E-07	7.60E-09	7.46E-09	1.51E-08	7.43E-09	6.65E-09	1.41E-08	3.95E-09	3.02E-09	6.97E-09
381	649967.7	4198754.05	4.95E-08	4.88E-08	9.83E-08	7.45E-09	7.31E-09	1.48E-08	7.28E-09	6.52E-09	1.38E-08	3.87E-09	2.96E-09	6.82E-09
382	649927.96	4198769.56	4.83E-08	4.76E-08	9.59E-08	7.27E-09	7.14E-09	1.44E-08	7.11E-09	6.36E-09	1.35E-08	3.78E-09	2.88E-09	6.66E-09
383	649888.23	4198785.08	4.72E-08	4.64E-08	9.36E-08	7.09E-09	6.96E-09	1.41E-08	6.93E-09	6.21E-09	1.31E-08	3.68E-09	2.81E-09	6.50E-09
384	649848.5	4198800.6	4.60E-08	4.52E-08	9.12E-08	6.91E-09	6.78E-09	1.37E-08	6.76E-09	6.05E-09	1.28E-08	3.59E-09	2.74E-09	6.33E-09
385	649808.77	4198816.11	4.48E-08	4.41E-08	8.89E-08	6.74E-09	6.62E-09	1.34E-08	6.59E-09	5.90E-09	1.25E-08	3.50E-09	2.67E-09	6.17E-09
386	649769.03	4198831.63	4.38E-08	4.31E-08	8.69E-08	6.59E-09	6.47E-09	1.31E-08	6.44E-09	5.77E-09	1.22E-08	3.42E-09	2.61E-09	6.04E-09
387	649729.3	4198847.14	4.30E-08	4.23E-08	8.53E-08	6.47E-09	6.35E-09	1.28E-08	6.32E-09	5.66E-09	1.20E-08	3.36E-09	2.57E-09	5.92E-09
388	650296.03	4198271.18	1.07E-07	1.06E-07	2.13E-07	1.61E-08	1.58E-08	3.20E-08	1.58E-08	1.41E-08	2.99E-08	8.38E-09	6.41E-09	1.48E-08
389	650385.62	4198318.16	8.31E-08	8.18E-08	1.65E-07	1.25E-08	1.23E-08	2.48E-08	1.22E-08	1.09E-08	2.31E-08	6.49E-09	4.96E-09	1.14E-08
390	650367.33	4198357.68	7.89E-08	7.77E-08	1.57E-07	1.19E-08	1.17E-08	2.35E-08	1.16E-08	1.04E-08	2.20E-08	6.16E-09	4.71E-09	1.09E-08
391	650349.04	4198397.19	7.46E-08	7.35E-08	1.48E-07	1.12E-08	1.10E-08	2.22E-08	1.10E-08	9.82E-09	2.08E-08	5.83E-09	4.45E-09	1.03E-08
392	650330.75	4198436.71	7.03E-08	6.92E-08	1.39E-07	1.06E-08	1.04E-08	2.09E-08	1.03E-08	9.25E-09	1.96E-08	5.49E-09	4.19E-09	9.69E-09
393	650312.46	4198476.22	6.61E-08	6.51E-08	1.31E-07	9.94E-09	9.76E-09	1.97E-08	9.72E-09	8.70E-09	1.84E-08	5.16E-09	3.94E-09	9.11E-09
394	650294.17	4198515.74	6.21E-08	6.12E-08	1.23E-07	9.34E-09	9.17E-09	1.85E-08	9.14E-09	8.18E-09	1.73E-08	4.85E-09	3.71E-09	8.56E-09
395	650275.87	4198555.25	5.85E-08	5.76E-08	1.16E-07	8.80E-09	8.64E-09	1.74E-08	8.61E-09	7.70E-09	1.63E-08	4.57E-09	3.49E-09	8.07E-09
396	650257.58	4198594.77	5.53E-08	5.44E-08	1.10E-07	8.31E-09	8.16E-09	1.65E-08	8.13E-09	7.28E-09	1.54E-08	4.32E-09	3.30E-09	7.62E-09
397	650239.29	4198634.28	5.24E-08	5.15E-08	1.04E-07	7.87E-09	7.73E-09	1.56E-08	7.70E-09	6.89E-09	1.46E-08	4.09E-09	3.12E-09	7.21E-09
398	650221	4198673.8	4.96E-08	4.88E-08	9.85E-08	7.46E-09	7.33E-09	1.48E-08	7.30E-09	6.53E-09	1.38E-08	3.88E-09	2.96E-09	6.84E-09
399	650202.71	4198713.31	4.69E-08	4.62E-08	9.31E-08	7.06E-09	6.93E-09	1.40E-08	6.90E-09	6.18E-09	1.31E-08	3.67E-09	2.80E-09	6.47E-09
400	650184.42	4198752.83	4.42E-08	4.35E-08	8.78E-08	6.65E-09	6.53E-09	1.32E-08	6.50E-09	5.82E-09	1.23E-08	3.45E-09	2.64E-09	6.09E-09
401	650154.99	4198780.5	4.27E-08	4.21E-08	8.48E-08	6.42E-09	6.31E-09	1.27E-08	6.28E-09	5.62E-09	1.19E-08	3.34E-09	2.55E-09	5.89E-09
402	650114.43	4198796.34	4.22E-08	4.16E-08	8.38E-08	6.35E-09	6.24E-09	1.26E-08	6.21E-09	5.56E-09	1.18E-08	3.30E-09	2.52E-09	5.82E-09
403	650073.87	4198812.18	4.15E-08	4.09E-08	8.24E-08	6.24E-09	6.13E-09	1.24E-08	6.10E-09	5.46E-09	1.16E-08	3.24E-09	2.48E-09	5.72E-09
404	650033.31	4198828.02	4.06E-08	4.00E-08	8.06E-08	6.11E-09	6.00E-09	1.21E-08	5.97E-09	5.34E-09	1.13E-08	3.17E-09	2.42E-09	5.60E-09
405	649992.75	4198843.86	3.96E-08	3.90E-08	7.86E-08	5.95E-09	5.85E-09	1.18E-08	5.82E-09	5.21E-09	1.10E-08	3.09E-09	2.36E-09	5.46E-09
406	649952.19	4198859.7	3.86E-08	3.80E-08	7.65E-08	5.80E-09	5.69E-09	1.15E-08	5.67E-09	5.07E-09	1.07E-08	3.01E-09	2.30E-09	5.31E-09
407	649911.63	4198875.54	3.75E-08	3.69E-08	7.45E-08	5.64E-09	5.54E-09	1.12E-08	5.52E-09	4.94E-09	1.05E-08	2.93E-09	2.24E-09	5.17E-09
408	649871.07	4198891.38	3.66E-08	3.60E-08	7.26E-08	5.50E-09	5.40E-09	1.09E-08	5.38E-09	4.82E-09	1.02E-08	2.86E-09	2.18E-09	5.04E-09
409	649830.51	4198907.22	3.58E-08	3.53E-08	7.11E-08	5.38E-09	5.29E-09	1.07E-08	5.27E-09	4.71E-09	9.98E-09	2.80E-09	2.14E-09	4.93E-09
410	649789.95	4198923.06	3.51E-08	3.46E-08	6.97E-08	5.28E-09	5.19E-09	1.05E-08	5.16E-09	4.62E-09	9.79E-09	2.74E-09	2.10E-09	4.84E-09
411	649749.39	4198938.89	3.46E-08	3.41E-08	6.87E-08	5.20E-09	5.11E-09	1.03E-08	5.09E-09	4.55E-09	9.64E-09	2.70E-09	2.06E-09	4.77E-09
412	649708.83	4198954.73	3.42E-08	3.37E-08	6.80E-08	5.15E-09	5.06E-09	1.02E-08	5.03E-09	4.51E-09	9.54E-09	2.67E-09	2.04E-09	4.72E-09
413	650395.9	4198276.28	8.85E-08	8.72E-08	1.76E-07	1.33E-08	1.31E-08	2.64E-08	1.30E-08	1.17E-08	2.47E-08	6.92E-09	5.28E-09	1.22E-08
414	650397.03	4198254.16	9.21E-08	9.07E-08	1.83E-07	1.38E-08	1.36E-08	2.74E-08	1.35E-08	1.21E-08	2.57E-08	7.19E-09	5.50E-09	1.27E-08
415	650585.4	4198328.27	6.11E-08	6.02E-08	1.21E-07	9.19E-09	9.02E-09	1.82E-08	8.99E-09	8.04E-09	1.70E-08	4.77E-09	3.65E-09	8.42E-09
416	650567.2	4198367.61	5.88E-08	5.79E-08	1.17E-07	8.84E-09	8.68E-09	1.75E-08	8.64E-09	7.74E-09	1.64E-08	4.59E-09	3.51E-09	8.10E-09
417	650548.99	4198406.94	5.64E-08	5.55E-08	1.12E-07	8.48E-09	8.33E-09	1.68E-08	8.29E-09	7.42E-09	1.57E-08	4.41E-09	3.37E-09	7.77E-09
418	650530.78	4198446.27	5.39E-08	5.31E-08	1.07E-07	8.11E-09	7.96E-09	1.61E-08	7.93E-09	7.10E-09	1.50E-08	4.21E-09	3.22E-09	7.43E-09
419	650512.58	4198485.6	5.15E-08	5.07E-08	1.02E-07	7.74E-09	7.60E-09	1.53E-08	7.57E-09	6.77E-09	1.43E-08	4.02E-09	3.07E-09	7.09E-09
420	650494.37	4198524.94	4.90E-08	4.83E-08	9.73E-08	7.37E-09	7.24E-09	1.46E-08	7.21E-09	6.45E-09	1.37E-08	3.83E-09	2.93E-09	6.75E-09
421	650476.16	4198564.27	4.67E-08	4.59E-08	9.26E-08	7.02E-09	6.89E-09	1.39E-08	6.86E-09	6.14E-09	1.30E-08	3.65E-09	2.79E-09	6.43E-09
422	650457.96	4198603.6	4.45E-08	4.38E-08	8.83E-08	6.69E-09	6.57E-09	1.33E-08	6.54E-09	5.85E-09	1.24E-08	3.47E-09	2.65E-09	6.13E-09
423	650439.75	4198642.94	4.25E-08	4.18E-08	8.43E-08	6.39E-09	6.27E-09	1.27E-08	6.24E-09	5.59E-09	1.18E-08	3.32E-09	2.53E-09	5.85E-09
424	650421.54	4198682.27	4.06E-08	4.00E-08	8.07E-08	6.11E-09	6.00E-09	1.21E-08	5.98E-09	5.35E-09	1.13E-08	3.17E-09	2.43E-09	5.60E-09
425	650403.33	4198721.6	3.90E-08	3.84E-08	7.74E-08	5.86E-09	5.76E-09	1.16E-08	5.73E-09	5.13E-09	1.09E-08	3.05E-09	2.33E-09	5.37E-09
426	650385.13	4198760.94	3.74E-08	3.69E-08	7.43E-08	5.63E-09	5.53E-09	1.12E-08	5.50E-09	4.93E-09	1.04E-08	2.92E-09	2.23E-09	5.16E-09
427	650366.92	4198800.27	3.59E-08	3.54E-08	7.13E-08	5.40E-09	5.30E-09	1.07E-08	5.28E-09	4.73E-09	1.00E-08	2.81E-09	2.14E-09	4.95E-09
428	650348.71	4198839.6	3.44E-08	3.39E-08	6.82E-08	5.17E-09	5.08E-09	1.02E-08	5.06E-09	4.53E-09	9.58E-09	2.69E-09	2.05E-09	4.74E-09
429	650330.51	4198878.93	3.28E-08	3.23E-08	6.51E-08	4.93E-09	4.84E-09	9.78E-09	4.82E-09	4.32E-09	9.14E-09	2.56E-09	1.96E-09	4.52E-09
430	650292.11	4198926.15	3.10E-08	3.05E-08	6.15E-08	4.66E-09	4.58E-09	9.24E-09	4.56E-09	4.08E-09	8.64E-09	2.42E-09	1.85E-09	4.27E-09
431	650251.74	4198941.92	3.06E-08	3.01E-08	6.07E-08	4.60E-09	4.52E-09	9.12E-09	4.50E-09	4.03E-09	8.53E-09	2.39E-09	1.83E-09	4.22E-09
432	650211.37	4198957.68	3.01E-08	2.96E-08	5.96E-08	4.52E-09	4.44E-09	8.96E-09	4.42E-09	3.96E-09	8.37E-09	2.35E-09	1.79E-09	4.14E-09
433	650170.99	4198973.45	2.94E-08	2.90E-08	5.84E-08	4.42E-09	4.34E-09	8.76E-09	4.32E-09	3.87E-09	8.19E-09	2.30E-09	1.76E-09	4.05E-09
434	650130.62	4198989.22	2.87E-08	2.82E-08	5.69E-08	4.31E-09	4.23E-09	8.55E-09	4.22E-09	3.77E-09	7.99E-09	2.24E-09	1.71E-09	3.95E-09
435	650090.25	4199004.98	2.79E-08	2.75E-08	5.54E-08	4.20E-09	4.13E-09	8.33E-09	4.11E-09	3.68E-09	7.79E-09	2.18E-09	1.67E-09	3.85E-09
436	650049.87	4199020.75	2.72E-08	2.68E-08	5.40E-08	4.09E-09	4.02E-09	8.11E-09	4.00E-09	3.58E-09	7.58E-09	2.13E-09	1.62E-09	3.75E-09
437	650009.5	4199036.51	2.65E-08	2.61E-08	5.27E-08	3.99E-09	3.92E-09	7.91E-09	3.90E-09	3.49E-09	7.40E-09	2.07E-09	1.58E-09	3.66E-09
438	649969.13	4199052.28	2.60E-08	2.55E-08	5.15E-08	3.90E-09	3.83E-09	7.73E-09	3.82E-09	3.42E-09	7.23E-09	2.03E-09	1.55E-09	3.58E-09
439	649928.75	4199068.05	2.55E-08	2.51E-08	5.05E-08	3.83E-09	3.76E-09	7.58E-09	3.74E-09	3.35E-09	7.09E-09	1.99E-09	1.52E-09	3.51E-09
440	649888.38	4199083.81	2.51E-08	2.47E-08	4.97E-08	3.77E-09	3.70E-09	7.47E-09	3.68E-09	3.30E-09	6.98E-09	1.96E-09	1.50E-09	3.45E-09
441	649848.01	4199099.58	2.48E-08	2.44E-08	4.91E-08	3.72E-09	3.66E-09	7.38E-09	3.64E-09	3.26E-09	6.90E-09	1.93E-09	1.48E-09	3.41E-09
442	649807.63	4199115.34	2.46E-08	2.42E-08	4.87E-08	3.69E-09	3.63E-09	7.32E-09	3.61E-09	3.23E-09	6.84E-09	1.92E-09	1.47E-09	3.38E-09
443	649767.26	4199131.11	2.45E-08	2.41E-08	4.85E-08	3.68E-09	3.61E-09	7.29E-09	3.59E-09	3.22E-09	6.81E-09	1.91E-09	1.46E-09	3.37E-09
444	649726.89	4199146.88	2.44E-08	2.40E-08	4.84E-08	3.67E-09	3.60E-09	7.27E-09	3.58E-09	3.21E-09	6.79E-09	1.90E-09	1.46E-09	3.36E-09
445	650595.64	4198286.49	6.43E-08	6.33E-08	1.28E-07	9.66E-09	9.49E-09	1.91E-08	9.45E-09	8.46E-09	1.79E-08	5.02E-09	3.83E-09	8.85E-09
446	650785.17	4198338.42	4.75E-08	4.68E-08	9.43E-08	7.15E-09	7.02E-09	1.42E-08	6.99E-09	6.25E-09	1.32E-08	3.71E-09	2.84E-09	6.55E-09
447	650767.02	4198377.64	4.61E-08	4.54E-08	9.14E-08	6.93E-09	6.80E-09	1.37E-08	6.77E-09	6.06E-09	1.28E-08	3.60E-09	2.75E-09	6.35E-09
448	650748.86	4198416.86	4.46E-08	4.39E-08	8.85E-08	6.70E-09	6.58E-09	1.33E-08	6.55E-09	5.87E-09	1.24E-08	3.48E-09	2.66E-09	6.14E-09
449	650730.71	4198456.07	4.31E-08	4.24E-08	8.55E-08	6.48E-09	6.36E-09	1.28E-08	6.33E-09	5.67E-09	1.20E-08	3.36E-09	2.57E-09	5.93E-09
450	650712.56	4198495.29	4.15E-08	4.09E-08	8.24E-08	6.25E-09	6.13E-09	1.24E-08	6.11E-09	5.47E-09	1.16E-08	3.24E-09	2.48E-09	5.72E-09
451	650694.4	4198534.51	4.00E-08	3.94E-08	7.93E-08	6.01E-09	5.90E-09	1.19E-08	5.88E-09	5.26E-09	1.11E-08	3.12E-09	2.39E-09	5.51E-09
452	650676.25	4198573.73	3.84E-08	3.78E-08	7.62E-08	5.78E-09	5.67E-09	1.14E-08	5.65E-09	5.06E-09	1.07E-08	3.00E-09	2.29E-09	5.29E-09

453	650658.09	4198612.94	3.69E-08	3.63E-08	7.32E-08	5.55E-09	5.45E-09	1.10E-08	5.43E-09	4.86E-09	1.03E-08	2.88E-09	2.20E-09	5.09E-09
454	650639.94	4198652.16	3.54E-08	3.49E-08	7.03E-08	5.33E-09	5.23E-09	1.06E-08	5.21E-09	4.67E-09	9.88E-09	2.77E-09	2.12E-09	4.88E-09
455	650621.79	4198691.38	3.41E-08	3.36E-08	6.76E-08	5.12E-09	5.03E-09	1.02E-08	5.01E-09	4.49E-09	9.50E-09	2.66E-09	2.03E-09	4.70E-09
456	650603.63	4198730.6	3.28E-08	3.23E-08	6.52E-08	4.94E-09	4.85E-09	9.79E-09	4.83E-09	4.32E-09	9.15E-09	2.57E-09	1.96E-09	4.53E-09
457	650585.48	4198769.82	3.17E-08	3.12E-08	6.29E-08	4.77E-09	4.68E-09	9.45E-09	4.66E-09	4.17E-09	8.84E-09	2.48E-09	1.89E-09	4.37E-09
458	650567.32	4198809.03	3.07E-08	3.02E-08	6.09E-08	4.62E-09	4.53E-09	9.15E-09	4.51E-09	4.04E-09	8.55E-09	2.40E-09	1.83E-09	4.23E-09
459	650549.17	4198848.25	2.97E-08	2.93E-08	5.90E-08	4.47E-09	4.39E-09	8.86E-09	4.37E-09	3.91E-09	8.28E-09	2.32E-09	1.77E-09	4.09E-09
460	650531.02	4198887.47	2.88E-08	2.83E-08	5.71E-08	4.33E-09	4.25E-09	8.57E-09	4.23E-09	3.79E-09	8.02E-09	2.25E-09	1.72E-09	3.96E-09
461	650512.86	4198926.69	2.78E-08	2.74E-08	5.52E-08	4.18E-09	4.11E-09	8.29E-09	4.09E-09	3.66E-09	7.75E-09	2.17E-09	1.66E-09	3.83E-09
462	650494.71	4198965.91	2.68E-08	2.64E-08	5.32E-08	4.03E-09	3.96E-09	7.99E-09	3.94E-09	3.53E-09	7.48E-09	2.10E-09	1.60E-09	3.70E-09
463	650476.56	4199005.12	2.58E-08	2.54E-08	5.11E-08	3.87E-09	3.80E-09	7.68E-09	3.79E-09	3.39E-09	7.18E-09	2.01E-09	1.54E-09	3.55E-09
464	650458.4	4199044.34	2.47E-08	2.43E-08	4.90E-08	3.71E-09	3.64E-09	7.35E-09	3.63E-09	3.25E-09	6.87E-09	1.93E-09	1.47E-09	3.40E-09
465	650429.2	4199071.81	2.40E-08	2.36E-08	4.76E-08	3.60E-09	3.54E-09	7.14E-09	3.52E-09	3.16E-09	6.68E-09	1.87E-09	1.43E-09	3.30E-09
466	650388.94	4199087.53	2.36E-08	2.33E-08	4.69E-08	3.55E-09	3.49E-09	7.04E-09	3.47E-09	3.11E-09	6.58E-09	1.85E-09	1.41E-09	3.26E-09
467	650348.69	4199103.25	2.32E-08	2.29E-08	4.61E-08	3.49E-09	3.43E-09	6.92E-09	3.41E-09	3.05E-09	6.47E-09	1.81E-09	1.39E-09	3.20E-09
468	650308.43	4199118.97	2.27E-08	2.24E-08	4.51E-08	3.42E-09	3.35E-09	6.77E-09	3.34E-09	2.99E-09	6.33E-09	1.77E-09	1.36E-09	3.13E-09
469	650268.18	4199134.69	2.22E-08	2.18E-08	4.40E-08	3.34E-09	3.28E-09	6.61E-09	3.26E-09	2.92E-09	6.18E-09	1.73E-09	1.32E-09	3.06E-09
470	650227.92	4199150.41	2.16E-08	2.13E-08	4.29E-08	3.25E-09	3.20E-09	6.45E-09	3.18E-09	2.85E-09	6.03E-09	1.69E-09	1.29E-09	2.98E-09
471	650187.67	4199166.13	2.11E-08	2.08E-08	4.19E-08	3.17E-09	3.12E-09	6.29E-09	3.10E-09	2.78E-09	5.88E-09	1.65E-09	1.26E-09	2.91E-09
472	650147.41	4199181.85	2.06E-08	2.03E-08	4.09E-08	3.10E-09	3.04E-09	6.14E-09	3.03E-09	2.71E-09	5.74E-09	1.61E-09	1.23E-09	2.84E-09
473	650107.16	4199197.57	2.02E-08	1.98E-08	4.00E-08	3.03E-09	2.98E-09	6.01E-09	2.96E-09	2.65E-09	5.61E-09	1.57E-09	1.20E-09	2.78E-09
474	650066.9	4199213.29	1.98E-08	1.95E-08	3.92E-08	2.97E-09	2.92E-09	5.89E-09	2.91E-09	2.60E-09	5.51E-09	1.54E-09	1.18E-09	2.73E-09
475	650026.64	4199229.01	1.95E-08	1.92E-08	3.86E-08	2.93E-09	2.87E-09	5.80E-09	2.86E-09	2.56E-09	5.42E-09	1.52E-09	1.16E-09	2.68E-09
476	649986.39	4199244.73	1.92E-08	1.89E-08	3.81E-08	2.89E-09	2.84E-09	5.73E-09	2.83E-09	2.53E-09	5.36E-09	1.50E-09	1.15E-09	2.65E-09
477	649946.13	4199260.45	1.90E-08	1.88E-08	3.78E-08	2.86E-09	2.81E-09	5.68E-09	2.80E-09	2.51E-09	5.31E-09	1.49E-09	1.14E-09	2.62E-09
478	649905.88	4199276.17	1.89E-08	1.86E-08	3.76E-08	2.85E-09	2.80E-09	5.64E-09	2.78E-09	2.49E-09	5.28E-09	1.48E-09	1.13E-09	2.61E-09
479	649865.62	4199291.89	1.89E-08	1.86E-08	3.74E-08	2.84E-09	2.79E-09	5.62E-09	2.77E-09	2.48E-09	5.26E-09	1.47E-09	1.13E-09	2.60E-09
480	649825.37	4199307.61	1.88E-08	1.85E-08	3.74E-08	2.83E-09	2.78E-09	5.61E-09	2.77E-09	2.48E-09	5.25E-09	1.47E-09	1.12E-09	2.59E-09
481	649785.11	4199323.33	1.88E-08	1.85E-08	3.74E-08	2.83E-09	2.78E-09	5.61E-09	2.77E-09	2.48E-09	5.24E-09	1.47E-09	1.12E-09	2.59E-09
482	649744.86	4199339.05	1.88E-08	1.85E-08	3.74E-08	2.83E-09	2.78E-09	5.61E-09	2.77E-09	2.48E-09	5.25E-09	1.47E-09	1.12E-09	2.59E-09
483	650795.38	4198296.69	4.95E-08	4.88E-08	9.83E-08	7.45E-09	7.31E-09	1.48E-08	7.28E-09	6.52E-09	1.38E-08	3.87E-09	2.96E-09	6.82E-09
484	650984.72	4198349.03	3.84E-08	3.78E-08	7.63E-08	5.78E-09	5.67E-09	1.15E-08	5.65E-09	5.06E-09	1.07E-08	3.00E-09	2.29E-09	5.30E-09
485	650966.19	4198389.06	3.74E-08	3.68E-08	7.43E-08	5.63E-09	5.53E-09	1.12E-08	5.50E-09	4.93E-09	1.04E-08	2.92E-09	2.23E-09	5.16E-09
486	650947.66	4198429.08	3.64E-08	3.58E-08	7.22E-08	5.47E-09	5.37E-09	1.08E-08	5.35E-09	4.79E-09	1.01E-08	2.84E-09	2.17E-09	5.02E-09
487	650929.14	4198469.11	3.54E-08	3.48E-08	7.02E-08	5.32E-09	5.22E-09	1.05E-08	5.20E-09	4.65E-09	9.85E-09	2.76E-09	2.11E-09	4.87E-09
488	650910.61	4198509.14	3.43E-08	3.38E-08	6.81E-08	5.16E-09	5.07E-09	1.02E-08	5.05E-09	4.52E-09	9.56E-09	2.68E-09	2.05E-09	4.73E-09
489	650892.08	4198549.17	3.33E-08	3.28E-08	6.60E-08	5.00E-09	4.91E-09	9.92E-09	4.89E-09	4.38E-09	9.27E-09	2.60E-09	1.99E-09	4.59E-09
490	650873.55	4198589.2	3.22E-08	3.17E-08	6.39E-08	4.84E-09	4.75E-09	9.60E-09	4.74E-09	4.24E-09	8.97E-09	2.52E-09	1.92E-09	4.44E-09
491	650855.02	4198629.23	3.11E-08	3.06E-08	6.18E-08	4.68E-09	4.60E-09	9.28E-09	4.58E-09	4.10E-09	8.67E-09	2.43E-09	1.86E-09	4.29E-09
492	650836.49	4198669.25	3.01E-08	2.96E-08	5.96E-08	4.52E-09	4.44E-09	8.96E-09	4.42E-09	3.96E-09	8.37E-09	2.35E-09	1.79E-09	4.14E-09
493	650817.96	4198709.28	2.90E-08	2.86E-08	5.76E-08	4.36E-09	4.28E-09	8.65E-09	4.27E-09	3.82E-09	8.08E-09	2.27E-09	1.73E-09	4.00E-09
494	650799.43	4198749.31	2.80E-08	2.76E-08	5.56E-08	4.21E-09	4.14E-09	8.35E-09	4.12E-09	3.69E-09	7.81E-09	2.19E-09	1.67E-09	3.86E-09
495	650780.9	4198789.34	2.71E-08	2.67E-08	5.38E-08	4.08E-09	4.01E-09	8.09E-09	3.99E-09	3.57E-09	7.56E-09	2.12E-09	1.62E-09	3.74E-09
496	650762.38	4198829.37	2.63E-08	2.59E-08	5.22E-08	3.96E-09	3.89E-09	7.84E-09	3.87E-09	3.46E-09	7.33E-09	2.06E-09	1.57E-09	3.63E-09
497	650743.85	4198869.4	2.56E-08	2.52E-08	5.08E-08	3.85E-09	3.78E-09	7.62E-09	3.76E-09	3.37E-09	7.13E-09	2.00E-09	1.53E-09	3.52E-09
498	650725.32	4198909.42	2.49E-08	2.45E-08	4.94E-08	3.74E-09	3.68E-09	7.42E-09	3.66E-09	3.28E-09	6.94E-09	1.94E-09	1.49E-09	3.43E-09
499	650706.79	4198949.45	2.42E-08	2.39E-08	4.81E-08	3.65E-09	3.58E-09	7.23E-09	3.56E-09	3.19E-09	6.76E-09	1.89E-09	1.45E-09	3.34E-09
500	650688.26	4198989.48	2.36E-08	2.32E-08	4.68E-08	3.55E-09	3.48E-09	7.03E-09	3.47E-09	3.11E-09	6.58E-09	1.84E-09	1.41E-09	3.25E-09
501	650669.73	4199029.51	2.29E-08	2.26E-08	4.55E-08	3.45E-09	3.39E-09	6.84E-09	3.37E-09	3.02E-09	6.39E-09	1.79E-09	1.37E-09	3.16E-09
502	650651.2	4199069.54	2.22E-08	2.19E-08	4.41E-08	3.34E-09	3.28E-09	6.63E-09	3.27E-09	2.93E-09	6.19E-09	1.74E-09	1.33E-09	3.06E-09
503	650632.67	4199109.56	2.15E-08	2.12E-08	4.27E-08	3.23E-09	3.17E-09	6.41E-09	3.16E-09	2.83E-09	5.99E-09	1.68E-09	1.28E-09	2.96E-09
504	650614.14	4199149.59	2.07E-08	2.04E-08	4.11E-08	3.11E-09	3.06E-09	6.17E-09	3.04E-09	2.73E-09	5.77E-09	1.62E-09	1.24E-09	2.85E-09
505	650595.62	4199189.62	1.99E-08	1.96E-08	3.94E-08	2.99E-09	2.93E-09	5.92E-09	2.92E-09	2.62E-09	5.54E-09	1.55E-09	1.19E-09	2.74E-09
506	650565.81	4199217.66	1.93E-08	1.90E-08	3.84E-08	2.91E-09	2.85E-09	5.76E-09	2.84E-09	2.54E-09	5.39E-09	1.51E-09	1.15E-09	2.66E-09
507	650524.72	4199233.7	1.90E-08	1.88E-08	3.78E-08	2.86E-09	2.81E-09	5.68E-09	2.80E-09	2.51E-09	5.31E-09	1.49E-09	1.14E-09	2.62E-09
508	650483.63	4199249.75	1.87E-08	1.84E-08	3.71E-08	2.81E-09	2.76E-09	5.58E-09	2.75E-09	2.46E-09	5.22E-09	1.46E-09	1.12E-09	2.58E-09
509	650442.55	4199265.79	1.83E-08	1.80E-08	3.64E-08	2.76E-09	2.71E-09	5.46E-09	2.70E-09	2.41E-09	5.11E-09	1.43E-09	1.09E-09	2.53E-09
510	650401.46	4199281.84	1.79E-08	1.76E-08	3.56E-08	2.69E-09	2.65E-09	5.34E-09	2.64E-09	2.36E-09	4.99E-09	1.40E-09	1.07E-09	2.47E-09
511	650360.37	4199297.88	1.75E-08	1.72E-08	3.47E-08	2.63E-09	2.58E-09	5.21E-09	2.57E-09	2.30E-09	4.87E-09	1.37E-09	1.04E-09	2.41E-09
512	650319.29	4199313.93	1.71E-08	1.68E-08	3.39E-08	2.57E-09	2.52E-09	5.09E-09	2.51E-09	2.25E-09	4.76E-09	1.33E-09	1.02E-09	2.35E-09
513	650278.2	4199329.97	1.67E-08	1.64E-08	3.31E-08	2.51E-09	2.46E-09	4.97E-09	2.45E-09	2.20E-09	4.65E-09	1.30E-09	9.96E-10	2.30E-09
514	650237.11	4199346.02	1.63E-08	1.61E-08	3.24E-08	2.46E-09	2.41E-09	4.87E-09	2.40E-09	2.15E-09	4.55E-09	1.28E-09	9.75E-10	2.25E-09
515	650196.02	4199362.06	1.60E-08	1.58E-08	3.18E-08	2.41E-09	2.37E-09	4.78E-09	2.36E-09	2.11E-09	4.47E-09	1.25E-09	9.57E-10	2.21E-09
516	650154.94	4199378.11	1.58E-08	1.55E-08	3.13E-08	2.37E-09	2.33E-09	4.70E-09	2.32E-09	2.08E-09	4.40E-09	1.23E-09	9.41E-10	2.17E-09
517	650113.85	4199394.15	1.56E-08	1.53E-08	3.09E-08	2.34E-09	2.30E-09	4.64E-09	2.29E-09	2.05E-09	4.34E-09	1.22E-09	9.30E-10	2.15E-09
518	650072.76	4199410.2	1.55E-08	1.52E-08	3.07E-08	2.32E-09	2.28E-09	4.61E-09	2.27E-09	2.03E-09	4.31E-09	1.21E-09	9.22E-10	2.13E-09
519	650031.68	4199426.24	1.54E-08	1.51E-08	3.05E-08	2.31E-09	2.27E-09	4.58E-09	2.26E-09	2.02E-09	4.28E-09	1.20E-09	9.17E-10	2.12E-09
520	649990.59	4199442.29	1.53E-08	1.51E-08	3.04E-08	2.30E-09	2.26E-09	4.56E-09	2.25E-09	2.01E-09	4.27E-09	1.20E-09	9.14E-10	2.11E-09
521	649949.5	4199458.33	1.53E-08	1.50E-08	3.03E-08	2.30E-09	2.26E-09	4.55E-09	2.25E-09	2.01E-09	4.26E-09	1.19E-09	9.12E-10	2.11E-09
522	649908.42	4199474.38	1.53E-08	1.50E-08	3.03E-08	2.30E-09	2.25E-09	4.55E-09	2.25E-09	2.01E-09	4.26E-09	1.19E-09	9.11E-10	2.10E-09
523	649867.33	4199490.42	1.53E-08	1.50E-08	3.03E-08	2.30E-09	2.25E-09	4.55E-09	2.25E-09	2.01E-09	4.26E-09	1.19E-09	9.11E-10	2.10E-09
524	649826.24	4199506.47	1.53E-08	1.50E-08	3.03E-08	2.30E-09	2.26E-09	4.55E-09	2.25E-09	2.01E-09	4.26E-09	1.19E-09	9.12E-10	2.11E-09
525	649785.15	4199522.51	1.53E-08	1.50E-08	3.03E-08	2.30E-09	2.26E-09	4.55E-09	2.25E-09	2.01E-09	4.26E-09	1.19E-09	9.12E-10	2.11E-09
526	649744.07	4199538.56	1.53E-08	1.50E-08	3.03E-08	2.30E-09	2.25E-09	4.55E-09	2.25E-09	2.01E-09	4.26E-09	1.19E-09	9.11E-10	2.10E-09
527	650995.12	4198306.89	3.98E-08	3.92E-08	7.90E-08	5.99E-09	5.88E-09	1.19E-08	5.86E-09	5.24E-09	1.11E-08	3.11E-09	2.38E-09	5.49E-09
528	651184.5	4198359.14	3.20E-08	3.15E-08	6.36E-08	4.82E-09	4.73E-09	9.55E-09	4.71E-09	4.22E-09	8.93E-09	2.50E-09	1.91E-09	4.41E-09

529	651166.06	4198398.99	3.13E-08	3.08E-08	6.21E-08	4.71E-09	4.62E-09	9.33E-09	4.60E-09	4.12E-09	8.72E-09	2.44E-09	1.87E-09	4.31E-09
530	651147.61	4198438.84	3.06E-08	3.01E-08	6.06E-08	4.59E-09	4.51E-09	9.11E-09	4.49E-09	4.02E-09	8.51E-09	2.39E-09	1.82E-09	4.21E-09
531	651129.17	4198478.68	2.98E-08	2.94E-08	5.92E-08	4.49E-09	4.40E-09	8.89E-09	4.39E-09	3.93E-09	8.31E-09	2.33E-09	1.78E-09	4.11E-09
532	651110.72	4198518.53	2.91E-08	2.87E-08	5.78E-08	4.38E-09	4.30E-09	8.68E-09	4.28E-09	3.83E-09	8.11E-09	2.27E-09	1.74E-09	4.01E-09
533	651092.28	4198558.38	2.84E-08	2.79E-08	5.63E-08	4.27E-09	4.19E-09	8.46E-09	4.17E-09	3.74E-09	7.91E-09	2.22E-09	1.69E-09	3.91E-09
534	651073.83	4198598.22	2.76E-08	2.72E-08	5.49E-08	4.16E-09	4.08E-09	8.24E-09	4.06E-09	3.64E-09	7.70E-09	2.16E-09	1.65E-09	3.81E-09
535	651055.39	4198638.07	2.69E-08	2.65E-08	5.34E-08	4.04E-09	3.97E-09	8.02E-09	3.95E-09	3.54E-09	7.49E-09	2.10E-09	1.61E-09	3.71E-09
536	651036.94	4198677.92	2.61E-08	2.57E-08	5.19E-08	3.93E-09	3.86E-09	7.79E-09	3.84E-09	3.44E-09	7.28E-09	2.04E-09	1.56E-09	3.60E-09
537	651018.5	4198717.77	2.54E-08	2.50E-08	5.03E-08	3.81E-09	3.74E-09	7.56E-09	3.73E-09	3.34E-09	7.07E-09	1.98E-09	1.51E-09	3.49E-09
538	651000.05	4198757.61	2.46E-08	2.42E-08	4.88E-08	3.70E-09	3.63E-09	7.33E-09	3.62E-09	3.24E-09	6.86E-09	1.92E-09	1.47E-09	3.39E-09
539	650981.61	4198797.46	2.39E-08	2.35E-08	4.74E-08	3.59E-09	3.52E-09	7.11E-09	3.51E-09	3.14E-09	6.65E-09	1.86E-09	1.42E-09	3.29E-09
540	650963.16	4198837.31	2.32E-08	2.28E-08	4.60E-08	3.49E-09	3.42E-09	6.91E-09	3.41E-09	3.05E-09	6.46E-09	1.81E-09	1.38E-09	3.20E-09
541	650944.72	4198877.15	2.26E-08	2.22E-08	4.48E-08	3.39E-09	3.33E-09	6.72E-09	3.32E-09	2.97E-09	6.29E-09	1.76E-09	1.35E-09	3.11E-09
542	650926.27	4198917	2.20E-08	2.17E-08	4.37E-08	3.31E-09	3.25E-09	6.56E-09	3.24E-09	2.90E-09	6.13E-09	1.72E-09	1.31E-09	3.03E-09
543	650907.83	4198956.85	2.15E-08	2.11E-08	4.26E-08	3.23E-09	3.17E-09	6.40E-09	3.16E-09	2.83E-09	5.99E-09	1.68E-09	1.28E-09	2.96E-09
544	650889.38	4198996.69	2.10E-08	2.07E-08	4.17E-08	3.16E-09	3.10E-09	6.26E-09	3.09E-09	2.77E-09	5.86E-09	1.64E-09	1.25E-09	2.90E-09
545	650870.94	4199036.54	2.06E-08	2.02E-08	4.08E-08	3.09E-09	3.04E-09	6.13E-09	3.02E-09	2.71E-09	5.73E-09	1.61E-09	1.23E-09	2.83E-09
546	650852.49	4199076.39	2.01E-08	1.98E-08	3.99E-08	3.02E-09	2.97E-09	5.99E-09	2.96E-09	2.65E-09	5.60E-09	1.57E-09	1.20E-09	2.77E-09
547	650834.05	4199116.24	1.96E-08	1.93E-08	3.90E-08	2.95E-09	2.90E-09	5.85E-09	2.89E-09	2.58E-09	5.47E-09	1.53E-09	1.17E-09	2.71E-09
548	650815.6	4199156.08	1.92E-08	1.89E-08	3.80E-08	2.88E-09	2.83E-09	5.71E-09	2.82E-09	2.52E-09	5.34E-09	1.50E-09	1.14E-09	2.64E-09
549	650797.16	4199195.93	1.86E-08	1.83E-08	3.70E-08	2.80E-09	2.75E-09	5.55E-09	2.74E-09	2.45E-09	5.19E-09	1.46E-09	1.11E-09	2.57E-09
550	650778.71	4199235.78	1.81E-08	1.78E-08	3.59E-08	2.72E-09	2.67E-09	5.39E-09	2.66E-09	2.38E-09	5.04E-09	1.41E-09	1.08E-09	2.49E-09
551	650760.27	4199275.62	1.75E-08	1.72E-08	3.47E-08	2.63E-09	2.58E-09	5.21E-09	2.57E-09	2.30E-09	4.87E-09	1.36E-09	1.04E-09	2.41E-09
552	650741.82	4199315.47	1.68E-08	1.66E-08	3.34E-08	2.53E-09	2.49E-09	5.02E-09	2.48E-09	2.22E-09	4.69E-09	1.32E-09	1.01E-09	2.32E-09
553	650702.93	4199363.3	1.61E-08	1.59E-08	3.20E-08	2.42E-09	2.38E-09	4.80E-09	2.37E-09	2.12E-09	4.49E-09	1.26E-09	9.61E-10	2.22E-09
554	650662.03	4199379.28	1.59E-08	1.56E-08	3.15E-08	2.39E-09	2.34E-09	4.73E-09	2.33E-09	2.09E-09	4.42E-09	1.24E-09	9.47E-10	2.19E-09
555	650621.12	4199395.25	1.56E-08	1.54E-08	3.09E-08	2.34E-09	2.30E-09	4.65E-09	2.29E-09	2.05E-09	4.34E-09	1.22E-09	9.31E-10	2.15E-09
556	650580.22	4199411.22	1.53E-08	1.50E-08	3.03E-08	2.30E-09	2.26E-09	4.55E-09	2.25E-09	2.01E-09	4.26E-09	1.19E-09	9.12E-10	2.11E-09
557	650539.32	4199427.19	1.50E-08	1.48E-08	2.97E-08	2.25E-09	2.21E-09	4.47E-09	2.20E-09	1.97E-09	4.18E-09	1.17E-09	8.94E-10	2.07E-09
558	650498.42	4199443.17	1.47E-08	1.44E-08	2.91E-08	2.20E-09	2.16E-09	4.37E-09	2.16E-09	1.93E-09	4.08E-09	1.15E-09	8.75E-10	2.02E-09
559	650457.52	4199459.14	1.43E-08	1.41E-08	2.85E-08	2.16E-09	2.12E-09	4.27E-09	2.11E-09	1.89E-09	4.00E-09	1.12E-09	8.56E-10	1.98E-09
560	650416.62	4199475.11	1.40E-08	1.38E-08	2.78E-08	2.11E-09	2.07E-09	4.18E-09	2.06E-09	1.85E-09	3.91E-09	1.10E-09	8.38E-10	1.93E-09
561	650375.72	4199491.08	1.37E-08	1.35E-08	2.73E-08	2.07E-09	2.03E-09	4.10E-09	2.02E-09	1.81E-09	3.83E-09	1.07E-09	8.21E-10	1.89E-09
562	650334.82	4199507.06	1.35E-08	1.33E-08	2.68E-08	2.03E-09	1.99E-09	4.02E-09	1.98E-09	1.78E-09	3.76E-09	1.05E-09	8.06E-10	1.86E-09
563	650293.92	4199523.03	1.33E-08	1.31E-08	2.64E-08	2.00E-09	1.96E-09	3.96E-09	1.95E-09	1.75E-09	3.70E-09	1.04E-09	7.93E-10	1.83E-09
564	650253.02	4199539	1.31E-08	1.29E-08	2.60E-08	1.97E-09	1.94E-09	3.91E-09	1.93E-09	1.73E-09	3.65E-09	1.02E-09	7.83E-10	1.81E-09
565	650212.11	4199554.97	1.30E-08	1.28E-08	2.58E-08	1.95E-09	1.92E-09	3.87E-09	1.91E-09	1.71E-09	3.62E-09	1.01E-09	7.74E-10	1.79E-09
566	650171.21	4199570.94	1.29E-08	1.27E-08	2.56E-08	1.94E-09	1.90E-09	3.84E-09	1.89E-09	1.70E-09	3.59E-09	1.01E-09	7.69E-10	1.78E-09
567	650130.31	4199586.92	1.28E-08	1.26E-08	2.55E-08	1.93E-09	1.89E-09	3.82E-09	1.89E-09	1.69E-09	3.57E-09	1.00E-09	7.66E-10	1.77E-09
568	650089.41	4199602.89	1.28E-08	1.26E-08	2.54E-08	1.93E-09	1.89E-09	3.82E-09	1.88E-09	1.69E-09	3.57E-09	1.00E-09	7.64E-10	1.76E-09
569	650048.51	4199618.86	1.28E-08	1.26E-08	2.54E-08	1.92E-09	1.89E-09	3.81E-09	1.88E-09	1.68E-09	3.56E-09	9.99E-10	7.64E-10	1.76E-09
570	650007.61	4199634.83	1.28E-08	1.26E-08	2.54E-08	1.93E-09	1.89E-09	3.82E-09	1.88E-09	1.69E-09	3.57E-09	1.00E-09	7.64E-10	1.76E-09
571	649966.71	4199650.81	1.28E-08	1.26E-08	2.54E-08	1.93E-09	1.89E-09	3.82E-09	1.88E-09	1.69E-09	3.57E-09	1.00E-09	7.65E-10	1.77E-09
572	649925.81	4199666.78	1.28E-08	1.26E-08	2.54E-08	1.93E-09	1.89E-09	3.82E-09	1.88E-09	1.69E-09	3.57E-09	1.00E-09	7.65E-10	1.77E-09
573	649884.91	4199682.75	1.28E-08	1.26E-08	2.55E-08	1.93E-09	1.89E-09	3.82E-09	1.89E-09	1.69E-09	3.57E-09	1.00E-09	7.66E-10	1.77E-09
574	649844	4199698.72	1.28E-08	1.26E-08	2.54E-08	1.93E-09	1.89E-09	3.82E-09	1.88E-09	1.69E-09	3.57E-09	1.00E-09	7.65E-10	1.77E-09
575	649803.1	4199714.7	1.28E-08	1.26E-08	2.54E-08	1.92E-09	1.89E-09	3.81E-09	1.88E-09	1.68E-09	3.56E-09	9.99E-10	7.64E-10	1.76E-09
576	649762.2	4199730.67	1.28E-08	1.26E-08	2.53E-08	1.92E-09	1.89E-09	3.81E-09	1.88E-09	1.68E-09	3.56E-09	9.98E-10	7.62E-10	1.76E-09
577	651194.86	4198317.1	3.31E-08	3.25E-08	6.56E-08	4.97E-09	4.88E-09	9.85E-09	4.86E-09	4.35E-09	9.21E-09	2.58E-09	1.97E-09	4.56E-09
578	649707	4198197.34	3.75E-06	3.70E-06	7.45E-06	5.64E-07	5.54E-07	1.12E-06	5.52E-07	4.94E-07	1.05E-06	2.93E-07	2.24E-07	5.17E-07
579	649681.31	4198193.45	5.90E-06	5.81E-06	1.17E-05	8.87E-07	8.71E-07	1.76E-06	8.67E-07	7.76E-07	1.64E-06	4.61E-07	3.52E-07	8.13E-07
580	649710.02	4198173.64	3.62E-06	3.57E-06	7.19E-06	5.45E-07	5.35E-07	1.08E-06	5.33E-07	4.77E-07	1.01E-06	2.83E-07	2.16E-07	4.99E-07
581	649738.75	4198196.34	2.13E-06	2.10E-06	4.24E-06	3.21E-07	3.15E-07	6.36E-07	3.14E-07	2.81E-07	5.95E-07	1.67E-07	1.27E-07	2.94E-07
582	649681.31	4198168.45	6.03E-06	5.94E-06	1.20E-05	9.07E-07	8.91E-07	1.80E-06	8.87E-07	7.94E-07	1.68E-06	4.71E-07	3.60E-07	8.31E-07
583	649711.53	4198149.28	3.39E-06	3.33E-06	6.72E-06	5.09E-07	5.00E-07	1.01E-06	4.98E-07	4.46E-07	9.43E-07	2.64E-07	2.02E-07	4.67E-07
584	649738.72	4198160.95	2.32E-06	2.29E-06	4.61E-06	3.49E-07	3.43E-07	6.92E-07	3.41E-07	3.06E-07	6.47E-07	1.81E-07	1.39E-07	3.20E-07
585	649757.44	4198180.66	1.74E-06	1.71E-06	3.45E-06	2.61E-07	2.57E-07	5.18E-07	2.56E-07	2.29E-07	4.84E-07	1.36E-07	1.04E-07	2.39E-07
586	649767.71	4198208.4	1.30E-06	1.28E-06	2.58E-06	1.95E-07	1.92E-07	3.87E-07	1.91E-07	1.71E-07	3.62E-07	1.01E-07	7.75E-08	1.79E-07
587	649681.31	4198143.45	5.04E-06	4.96E-06	1.00E-05	7.58E-07	7.44E-07	1.50E-06	7.41E-07	6.63E-07	1.40E-06	3.94E-07	3.01E-07	6.95E-07
588	649712.44	4198124.67	2.86E-06	2.81E-06	5.67E-06	4.29E-07	4.22E-07	8.51E-07	4.20E-07	3.76E-07	7.96E-07	2.23E-07	1.70E-07	3.94E-07
589	649741.44	4198137.12	2.20E-06	2.17E-06	4.37E-06	3.31E-07	3.25E-07	6.56E-07	3.23E-07	2.90E-07	6.13E-07	1.72E-07	1.31E-07	3.03E-07
590	649775.91	4198164.36	1.47E-06	1.45E-06	2.92E-06	2.21E-07	2.17E-07	4.38E-07	2.16E-07	1.93E-07	4.09E-07	1.15E-07	8.77E-08	2.02E-07
591	649786.86	4198193.96	1.14E-06	1.13E-06	2.27E-06	1.72E-07	1.69E-07	3.41E-07	1.68E-07	1.51E-07	3.19E-07	8.93E-08	6.83E-08	1.58E-07
592	649681.31	4198118.45	3.46E-06	3.41E-06	6.86E-06	5.20E-07	5.11E-07	1.03E-06	5.09E-07	4.55E-07	9.64E-07	2.70E-07	2.06E-07	4.77E-07
593	649711.53	4198074.28	2.02E-06	1.99E-06	4.02E-06	3.04E-07	2.99E-07	6.03E-07	2.98E-07	2.66E-07	5.64E-07	1.58E-07	1.21E-07	2.79E-07
594	649738.72	4198085.95	1.85E-06	1.82E-06	3.68E-06	2.79E-07	2.74E-07	5.52E-07	2.72E-07	2.44E-07	5.16E-07	1.45E-07	1.11E-07	2.55E-07
595	649765.9	4198097.62	1.60E-06	1.58E-06	3.18E-06	2.41E-07	2.36E-07	4.77E-07	2.35E-07	2.11E-07	4.46E-07	1.25E-07	9.55E-08	2.21E-07
596	649793.09	4198109.29	1.32E-06	1.30E-06	2.62E-06	1.99E-07	1.95E-07	3.94E-07	1.94E-07	1.74E-07	3.68E-07	1.03E-07	7.88E-08	1.82E-07
597	649811.81	4198129	1.12E-06	1.11E-06	2.23E-06	1.69E-07	1.66E-07	3.35E-07	1.65E-07	1.48E-07	3.13E-07	8.78E-08	6.71E-08	1.55E-07
598	649822.08	4198156.74	9.66E-07	9.51E-07	1.92E-06	1.45E-07	1.43E-07	2.88E-07	1.42E-07	1.27E-07	2.69E-07	7.55E-08	5.77E-08	1.33E-07
599	649832.34	4198184.49	7.90E-07	7.78E-07	1.57E-06	1.19E-07	1.17E-07	2.35E-07	1.16E-07	1.04E-07	2.20E-07	6.17E-08	4.71E-08	1.09E-07
600	649842.61	4198212.23	6.25E-07	6.16E-07	1.24E-06	9.40E-08	9.23E-08	1.86E-07	9.19E-08	8.23E-08	1.74E-07	4.89E-08	3.73E-08	8.62E-08
601	649681.31	4198068.45	2.23E-06	2.19E-06	4.42E-06	3.35E-07	3.29E-07	6.64E-07	3.28E-07	2.93E-07	6.21E-07	1.74E-07	1.33E-07	3.07E-07
602	649712.44	4198024.67	1.58E-06	1.56E-06	3.15E-06	2.38E-07	2.34E-07	4.72E-07	2.33E-07	2.09E-07	4.42E-07	1.24E-07	9.46E-08	2.18E-07
603	649741.44	4198037.12	1.49E-06	1.46E-06	2.95E-06	2.23E-07	2.19E-07	4.43E-07	2.18E-07	1.96E-07	4.14E-07	1.16E-07	8.87E-08	2.05E-07
604	649770.43	4198049.57	1.36E-06	1.34E-06	2.69E-06	2.04E-07	2.00E-07	4.04E-07	1.99E-07	1.79E-07	3.78E-07	1.06E-07	8.09E-08	1.87E-07

605	649799.43	4198062.01	1.20E-06	1.18E-06	2.37E-06	1.80E-07	1.76E-07	3.56E-07	1.76E-07	1.57E-07	3.33E-07	9.34E-08	7.13E-08	1.65E-07
606	649828.43	4198074.46	1.02E-06	1.00E-06	2.02E-06	1.53E-07	1.51E-07	3.04E-07	1.50E-07	1.34E-07	2.84E-07	7.96E-08	6.08E-08	1.40E-07
607	649848.4	4198095.48	8.95E-07	8.81E-07	1.78E-06	1.35E-07	1.32E-07	2.67E-07	1.32E-07	1.18E-07	2.49E-07	6.99E-08	5.34E-08	1.23E-07
608	649859.35	4198125.07	7.95E-07	7.83E-07	1.58E-06	1.20E-07	1.17E-07	2.37E-07	1.17E-07	1.05E-07	2.22E-07	6.21E-08	4.74E-08	1.10E-07
609	649870.3	4198154.67	6.77E-07	6.67E-07	1.34E-06	1.02E-07	1.00E-07	2.02E-07	9.96E-08	8.91E-08	1.89E-07	5.29E-08	4.04E-08	9.33E-08
610	649881.25	4198184.26	5.60E-07	5.51E-07	1.11E-06	8.42E-08	8.26E-08	1.67E-07	8.23E-08	7.37E-08	1.56E-07	4.37E-08	3.34E-08	7.71E-08
611	649681.31	4198018.45	1.73E-06	1.70E-06	3.43E-06	2.60E-07	2.55E-07	5.15E-07	2.54E-07	2.27E-07	4.81E-07	1.35E-07	1.03E-07	2.38E-07
612	649713.04	4197974.93	1.32E-06	1.30E-06	2.63E-06	1.99E-07	1.95E-07	3.95E-07	1.95E-07	1.74E-07	3.69E-07	1.03E-07	7.90E-08	1.82E-07
613	649743.25	4197987.9	1.25E-06	1.23E-06	2.47E-06	1.87E-07	1.84E-07	3.71E-07	1.83E-07	1.64E-07	3.47E-07	9.73E-08	7.43E-08	1.72E-07
614	649773.45	4198000.86	1.16E-06	1.14E-06	2.30E-06	1.74E-07	1.71E-07	3.45E-07	1.70E-07	1.52E-07	3.23E-07	9.05E-08	6.91E-08	1.60E-07
615	649803.66	4198013.83	1.06E-06	1.04E-06	2.10E-06	1.59E-07	1.56E-07	3.15E-07	1.56E-07	1.39E-07	2.95E-07	8.26E-08	6.31E-08	1.46E-07
616	649833.86	4198026.79	9.46E-07	9.31E-07	1.88E-06	1.42E-07	1.40E-07	2.82E-07	1.39E-07	1.24E-07	2.64E-07	7.39E-08	5.64E-08	1.30E-07
617	649864.07	4198039.76	8.24E-07	8.12E-07	1.64E-06	1.24E-07	1.22E-07	2.46E-07	1.21E-07	1.08E-07	2.30E-07	6.44E-08	4.92E-08	1.14E-07
618	649884.87	4198061.66	7.38E-07	7.27E-07	1.46E-06	1.11E-07	1.09E-07	2.20E-07	1.09E-07	9.72E-08	2.06E-07	5.77E-08	4.41E-08	1.02E-07
619	649896.28	4198092.48	6.71E-07	6.61E-07	1.33E-06	1.01E-07	9.91E-08	2.00E-07	9.87E-08	8.83E-08	1.87E-07	5.24E-08	4.01E-08	9.25E-08
620	649907.69	4198123.31	5.90E-07	5.81E-07	1.17E-06	8.87E-08	8.71E-08	1.76E-07	8.67E-08	7.76E-08	1.64E-07	4.61E-08	3.52E-08	8.13E-08
621	649919.1	4198154.14	5.04E-07	4.96E-07	1.00E-06	7.58E-08	7.44E-08	1.50E-07	7.41E-08	6.63E-08	1.40E-07	3.94E-08	3.01E-08	6.94E-08
622	649930.5	4198184.96	4.23E-07	4.16E-07	8.39E-07	6.36E-08	6.24E-08	1.26E-07	6.22E-08	5.57E-08	1.18E-07	3.30E-08	2.52E-08	5.83E-08
623	649681.31	4197968.45	1.44E-06	1.41E-06	2.85E-06	2.16E-07	2.12E-07	4.28E-07	2.11E-07	1.89E-07	4.00E-07	1.12E-07	8.57E-08	1.98E-07
624	649712.44	4197924.67	1.14E-06	1.12E-06	2.26E-06	1.71E-07	1.68E-07	3.39E-07	1.67E-07	1.50E-07	3.17E-07	8.89E-08	6.79E-08	1.57E-07
625	649741.44	4197937.12	1.08E-06	1.06E-06	2.14E-06	1.62E-07	1.59E-07	3.21E-07	1.58E-07	1.42E-07	3.00E-07	8.42E-08	6.43E-08	1.48E-07
626	649770.43	4197949.57	1.01E-06	9.98E-07	2.01E-06	1.52E-07	1.50E-07	3.02E-07	1.49E-07	1.33E-07	2.82E-07	7.92E-08	6.05E-08	1.40E-07
627	649799.43	4197962.01	9.48E-07	9.34E-07	1.88E-06	1.43E-07	1.40E-07	2.83E-07	1.39E-07	1.25E-07	2.64E-07	7.41E-08	5.66E-08	1.31E-07
628	649828.43	4197974.46	8.83E-07	8.69E-07	1.75E-06	1.33E-07	1.30E-07	2.63E-07	1.30E-07	1.16E-07	2.46E-07	6.90E-08	5.27E-08	1.22E-07
629	649857.42	4197986.91	8.07E-07	7.95E-07	1.60E-06	1.21E-07	1.19E-07	2.41E-07	1.19E-07	1.06E-07	2.25E-07	6.31E-08	4.82E-08	1.11E-07
630	649886.42	4197999.35	7.26E-07	7.15E-07	1.44E-06	1.09E-07	1.07E-07	2.16E-07	1.07E-07	9.55E-08	2.02E-07	5.67E-08	4.33E-08	1.00E-07
631	649920.89	4198026.6	6.26E-07	6.16E-07	1.24E-06	9.41E-08	9.24E-08	1.86E-07	9.20E-08	8.24E-08	1.74E-07	4.89E-08	3.73E-08	8.62E-08
632	649931.84	4198056.19	5.82E-07	5.73E-07	1.16E-06	8.76E-08	8.60E-08	1.74E-07	8.56E-08	7.67E-08	1.62E-07	4.55E-08	3.48E-08	8.03E-08
633	649942.79	4198085.79	5.29E-07	5.21E-07	1.05E-06	7.96E-08	7.81E-08	1.58E-07	7.78E-08	6.96E-08	1.47E-07	4.13E-08	3.16E-08	7.29E-08
634	649953.74	4198115.38	4.70E-07	4.63E-07	9.33E-07	7.07E-08	6.94E-08	1.40E-07	6.91E-08	6.19E-08	1.31E-07	3.67E-08	2.81E-08	6.48E-08
635	649964.7	4198144.97	4.11E-07	4.04E-07	8.15E-07	6.17E-08	6.06E-08	1.22E-07	6.04E-08	5.40E-08	1.14E-07	3.21E-08	2.45E-08	5.66E-08
636	649975.65	4198174.57	3.54E-07	3.49E-07	7.03E-07	5.33E-08	5.23E-08	1.06E-07	5.21E-08	4.67E-08	9.88E-08	2.77E-08	2.12E-08	4.88E-08
637	649986.6	4198204.16	3.04E-07	3.00E-07	6.04E-07	4.58E-08	4.49E-08	9.07E-08	4.48E-08	4.01E-08	8.48E-08	2.38E-08	1.82E-08	4.19E-08
638	649681.31	4197918.45	1.23E-06	1.21E-06	2.44E-06	1.85E-07	1.81E-07	3.66E-07	1.81E-07	1.62E-07	3.42E-07	9.60E-08	7.33E-08	1.69E-07
639	649713.2	4197825	8.43E-07	8.30E-07	1.67E-06	1.27E-07	1.24E-07	2.51E-07	1.24E-07	1.11E-07	2.35E-07	6.58E-08	5.03E-08	1.16E-07
640	649743.72	4197838.1	8.11E-07	7.99E-07	1.61E-06	1.22E-07	1.20E-07	2.42E-07	1.19E-07	1.07E-07	2.26E-07	6.34E-08	4.84E-08	1.12E-07
641	649774.25	4197851.2	7.78E-07	7.66E-07	1.54E-06	1.17E-07	1.15E-07	2.32E-07	1.14E-07	1.02E-07	2.17E-07	6.08E-08	4.64E-08	1.07E-07
642	649804.77	4197864.31	7.42E-07	7.30E-07	1.47E-06	1.12E-07	1.10E-07	2.21E-07	1.09E-07	9.76E-08	2.07E-07	5.79E-08	4.43E-08	1.02E-07
643	649835.29	4197877.41	7.04E-07	6.93E-07	1.40E-06	1.06E-07	1.04E-07	2.10E-07	1.04E-07	9.27E-08	1.96E-07	5.50E-08	4.20E-08	9.70E-08
644	649865.82	4197890.51	6.69E-07	6.58E-07	1.33E-06	1.01E-07	9.87E-08	1.99E-07	9.83E-08	8.80E-08	1.86E-07	5.22E-08	3.99E-08	9.22E-08
645	649896.34	4197903.61	6.29E-07	6.19E-07	1.25E-06	9.45E-08	9.28E-08	1.87E-07	9.24E-08	8.27E-08	1.75E-07	4.91E-08	3.75E-08	8.66E-08
646	649926.86	4197916.71	5.82E-07	5.73E-07	1.15E-06	8.75E-08	8.59E-08	1.73E-07	8.55E-08	7.65E-08	1.62E-07	4.54E-08	3.47E-08	8.01E-08
647	649957.39	4197929.82	5.31E-07	5.23E-07	1.05E-06	7.99E-08	7.84E-08	1.58E-07	7.81E-08	6.99E-08	1.48E-07	4.15E-08	3.17E-08	7.32E-08
648	649993.67	4197958.49	4.70E-07	4.63E-07	9.34E-07	7.07E-08	6.95E-08	1.40E-07	6.92E-08	6.19E-08	1.31E-07	3.68E-08	2.81E-08	6.48E-08
649	650005.2	4197989.64	4.46E-07	4.40E-07	8.86E-07	6.71E-08	6.59E-08	1.33E-07	6.56E-08	5.88E-08	1.24E-07	3.49E-08	2.66E-08	6.15E-08
650	650016.73	4198020.8	4.16E-07	4.10E-07	8.26E-07	6.26E-08	6.14E-08	1.24E-07	6.12E-08	5.48E-08	1.16E-07	3.25E-08	2.48E-08	5.73E-08
651	650028.25	4198051.95	3.82E-07	3.76E-07	7.57E-07	5.74E-08	5.63E-08	1.14E-07	5.61E-08	5.02E-08	1.06E-07	2.98E-08	2.28E-08	5.26E-08
652	650039.78	4198083.1	3.45E-07	3.39E-07	6.84E-07	5.18E-08	5.09E-08	1.03E-07	5.07E-08	4.54E-08	9.60E-08	2.69E-08	2.06E-08	4.75E-08
653	650051.31	4198114.25	3.08E-07	3.03E-07	6.10E-07	4.63E-08	4.54E-08	9.17E-08	4.52E-08	4.05E-08	8.57E-08	2.40E-08	1.84E-08	4.24E-08
654	650062.84	4198145.4	2.72E-07	2.68E-07	5.40E-07	4.09E-08	4.02E-08	8.11E-08	4.00E-08	3.58E-08	7.58E-08	2.13E-08	1.62E-08	3.75E-08
655	650074.36	4198176.55	2.40E-07	2.36E-07	4.76E-07	3.61E-08	3.54E-08	7.15E-08	3.53E-08	3.16E-08	6.68E-08	1.87E-08	1.43E-08	3.30E-08
656	650085.89	4198207.71	2.11E-07	2.08E-07	4.18E-07	3.17E-08	3.11E-08	6.28E-08	3.10E-08	2.77E-08	5.87E-08	1.65E-08	1.26E-08	2.90E-08
657	649681.31	4197818.45	8.95E-07	8.81E-07	1.78E-06	1.35E-07	1.32E-07	2.67E-07	1.32E-07	1.18E-07	2.49E-07	6.99E-08	5.34E-08	1.23E-07
658	649713.04	4197724.93	6.56E-07	6.46E-07	1.30E-06	9.87E-08	9.69E-08	1.96E-07	9.65E-08	8.64E-08	1.83E-07	5.13E-08	3.92E-08	9.04E-08
659	649743.25	4197737.9	6.46E-07	6.36E-07	1.28E-06	9.71E-08	9.54E-08	1.93E-07	9.50E-08	8.50E-08	1.80E-07	5.05E-08	3.86E-08	8.90E-08
660	649773.45	4197750.86	6.28E-07	6.18E-07	1.25E-06	9.44E-08	9.27E-08	1.87E-07	9.23E-08	8.26E-08	1.75E-07	4.90E-08	3.75E-08	8.65E-08
661	649803.66	4197763.83	6.09E-07	6.00E-07	1.21E-06	9.16E-08	8.99E-08	1.82E-07	8.96E-08	8.02E-08	1.70E-07	4.76E-08	3.64E-08	8.39E-08
662	649833.86	4197776.79	5.87E-07	5.78E-07	1.16E-06	8.82E-08	8.66E-08	1.75E-07	8.63E-08	7.72E-08	1.64E-07	4.58E-08	3.50E-08	8.09E-08
663	649864.07	4197789.76	5.59E-07	5.51E-07	1.11E-06	8.41E-08	8.26E-08	1.67E-07	8.22E-08	7.36E-08	1.56E-07	4.37E-08	3.34E-08	7.71E-08
664	649894.27	4197802.72	5.33E-07	5.24E-07	1.06E-06	8.01E-08	7.87E-08	1.59E-07	7.83E-08	7.01E-08	1.48E-07	4.16E-08	3.18E-08	7.34E-08
665	649924.48	4197815.69	5.06E-07	4.98E-07	1.00E-06	7.61E-08	7.47E-08	1.51E-07	7.44E-08	6.66E-08	1.41E-07	3.95E-08	3.02E-08	6.97E-08
666	649954.68	4197828.66	4.77E-07	4.70E-07	9.47E-07	7.17E-08	7.04E-08	1.42E-07	7.01E-08	6.28E-08	1.33E-07	3.73E-08	2.85E-08	6.57E-08
667	649984.89	4197841.62	4.49E-07	4.42E-07	8.91E-07	6.75E-08	6.63E-08	1.34E-07	6.60E-08	5.91E-08	1.25E-07	3.51E-08	2.68E-08	6.19E-08
668	650015.09	4197854.59	4.23E-07	4.17E-07	8.40E-07	6.36E-08	6.25E-08	1.26E-07	6.22E-08	5.57E-08	1.18E-07	3.31E-08	2.53E-08	5.83E-08
669	650045.3	4197867.55	3.92E-07	3.86E-07	7.78E-07	5.90E-08	5.79E-08	1.17E-07	5.77E-08	5.16E-08	1.09E-07	3.06E-08	2.34E-08	5.40E-08
670	650066.1	4197889.45	3.71E-07	3.65E-07	7.36E-07	5.57E-08	5.47E-08	1.10E-07	5.45E-08	4.88E-08	1.03E-07	2.90E-08	2.21E-08	5.11E-08
671	650077.51	4197920.27	3.57E-07	3.51E-07	7.08E-07	5.36E-08	5.27E-08	1.06E-07	5.24E-08	4.69E-08	9.94E-08	2.79E-08	2.13E-08	4.92E-08
672	650088.92	4197951.1	3.39E-07	3.34E-07	6.74E-07	5.10E-08	5.01E-08	1.01E-07	4.99E-08	4.47E-08	9.46E-08	2.65E-08	2.03E-08	4.68E-08
673	650100.33	4197981.93	3.19E-07	3.14E-07	6.33E-07	4.80E-08	4.71E-08	9.51E-08	4.69E-08	4.20E-08	8.89E-08	2.49E-08	1.90E-08	4.40E-08
674	650111.73	4198012.76	2.96E-07	2.92E-07	5.88E-07	4.46E-08	4.38E-08	8.84E-08	4.36E-08	3.90E-08	8.26E-08	2.32E-08	1.77E-08	4.09E-08
675	650123.14	4198043.58	2.72E-07	2.68E-07	5.41E-07	4.10E-08	4.02E-08	8.12E-08	4.01E-08	3.59E-08	7.59E-08	2.13E-08	1.63E-08	3.75E-08
676	650134.55	4198074.41	2.48E-07	2.45E-07	4.93E-07	3.74E-08	3.67E-08	7.40E-08	3.65E-08	3.27E-08	6.92E-08	1.94E-08	1.48E-08	3.42E-08
677	650145.96	4198105.24	2.25E-07	2.22E-07	4.47E-07	3.39E-08	3.33E-08	6.71E-08	3.31E-08	2.97E-08	6.28E-08	1.76E-08	1.34E-08	3.10E-08
678	650157.36	4198136.06	2.03E-07	2.00E-07	4.04E-07	3.06E-08	3.00E-08	6.06E-08	2.99E-08	2.68E-08	5.67E-08	1.59E-08	1.21E-08	2.80E-08
679	650168.77	4198166.89	1.83E-07	1.81E-07	3.64E-07	2.76E-08	2.71E-08	5.47E-08	2.70E-08	2.41E-08	5.11E-08	1.43E-08	1.09E-08	2.53E-08
680	650180.18	4198197.72	1.65E-07	1.63E-07	3.28E-07	2.49E-08	2.44E-08	4.93E-08	2.43E-08	2.18E-08	4.61E-08	1.29E-08	9.86E-09	2.28E-08

681	650191.59	4198228.55	1.49E-07	1.47E-07	2.95E-07	2.24E-08	2.20E-08	4.43E-08	2.19E-08	1.96E-08	4.15E-08	1.16E-08	8.88E-09	2.05E-08
682	649681.31	4197718.45	6.76E-07	6.66E-07	1.34E-06	1.02E-07	9.98E-08	2.02E-07	9.94E-08	8.90E-08	1.88E-07	5.28E-08	4.04E-08	9.32E-08
683	649712.94	4197624.89	4.80E-07	4.72E-07	9.52E-07	7.21E-08	7.08E-08	1.43E-07	7.05E-08	6.31E-08	1.34E-07	3.75E-08	2.86E-08	6.61E-08
684	649742.94	4197637.76	4.85E-07	4.77E-07	9.62E-07	7.29E-08	7.16E-08	1.44E-07	7.13E-08	6.38E-08	1.35E-07	3.79E-08	2.89E-08	6.68E-08
685	649772.93	4197650.64	4.86E-07	4.78E-07	9.64E-07	7.30E-08	7.17E-08	1.45E-07	7.14E-08	6.39E-08	1.35E-07	3.79E-08	2.90E-08	6.69E-08
686	649802.93	4197663.52	4.83E-07	4.76E-07	9.59E-07	7.27E-08	7.13E-08	1.44E-07	7.10E-08	6.36E-08	1.35E-07	3.77E-08	2.88E-08	6.66E-08
687	649832.93	4197676.39	4.77E-07	4.70E-07	9.47E-07	7.17E-08	7.04E-08	1.42E-07	7.02E-08	6.28E-08	1.33E-07	3.73E-08	2.85E-08	6.57E-08
688	649862.92	4197689.27	4.68E-07	4.61E-07	9.29E-07	7.04E-08	6.91E-08	1.40E-07	6.88E-08	6.16E-08	1.30E-07	3.66E-08	2.79E-08	6.45E-08
689	649892.92	4197702.14	4.56E-07	4.49E-07	9.04E-07	6.85E-08	6.73E-08	1.36E-07	6.70E-08	6.00E-08	1.27E-07	3.56E-08	2.72E-08	6.28E-08
690	649922.92	4197715.02	4.41E-07	4.35E-07	8.76E-07	6.64E-08	6.52E-08	1.32E-07	6.49E-08	5.81E-08	1.23E-07	3.45E-08	2.63E-08	6.08E-08
691	649952.91	4197727.89	4.24E-07	4.18E-07	8.42E-07	6.38E-08	6.27E-08	1.26E-07	6.24E-08	5.59E-08	1.18E-07	3.32E-08	2.53E-08	5.85E-08
692	649982.91	4197740.77	4.04E-07	3.98E-07	8.02E-07	6.08E-08	5.97E-08	1.21E-07	5.95E-08	5.32E-08	1.13E-07	3.16E-08	2.41E-08	5.57E-08
693	650012.91	4197753.65	3.83E-07	3.77E-07	7.60E-07	5.76E-08	5.66E-08	1.14E-07	5.63E-08	5.04E-08	1.07E-07	2.99E-08	2.29E-08	5.28E-08
694	650042.9	4197766.52	3.63E-07	3.57E-07	7.20E-07	5.46E-08	5.36E-08	1.08E-07	5.34E-08	4.78E-08	1.01E-07	2.84E-08	2.17E-08	5.00E-08
695	650072.9	4197779.4	3.43E-07	3.38E-07	6.80E-07	5.16E-08	5.06E-08	1.02E-07	5.04E-08	4.51E-08	9.55E-08	2.68E-08	2.05E-08	4.72E-08
696	650102.9	4197792.27	3.22E-07	3.17E-07	6.38E-07	4.84E-08	4.75E-08	9.59E-08	4.73E-08	4.23E-08	8.96E-08	2.51E-08	1.92E-08	4.43E-08
697	650138.56	4197820.46	3.00E-07	2.96E-07	5.96E-07	4.51E-08	4.43E-08	8.95E-08	4.41E-08	3.95E-08	8.36E-08	2.34E-08	1.79E-08	4.14E-08
698	650149.89	4197851.07	2.93E-07	2.88E-07	5.80E-07	4.40E-08	4.32E-08	8.72E-08	4.30E-08	3.85E-08	8.15E-08	2.28E-08	1.75E-08	4.03E-08
699	650161.21	4197881.69	2.82E-07	2.77E-07	5.59E-07	4.24E-08	4.16E-08	8.40E-08	4.14E-08	3.71E-08	7.85E-08	2.20E-08	1.68E-08	3.88E-08
700	650172.54	4197912.3	2.69E-07	2.65E-07	5.34E-07	4.05E-08	3.97E-08	8.02E-08	3.96E-08	3.54E-08	7.50E-08	2.10E-08	1.61E-08	3.71E-08
701	650183.87	4197942.92	2.55E-07	2.51E-07	5.06E-07	3.83E-08	3.76E-08	7.60E-08	3.75E-08	3.35E-08	7.10E-08	1.99E-08	1.52E-08	3.51E-08
702	650195.2	4197973.53	2.39E-07	2.36E-07	4.75E-07	3.60E-08	3.53E-08	7.13E-08	3.52E-08	3.15E-08	6.67E-08	1.87E-08	1.43E-08	3.30E-08
703	650206.53	4198004.14	2.23E-07	2.19E-07	4.42E-07	3.35E-08	3.29E-08	6.63E-08	3.27E-08	2.93E-08	6.20E-08	1.74E-08	1.33E-08	3.07E-08
704	650217.86	4198034.76	2.06E-07	2.03E-07	4.09E-07	3.10E-08	3.04E-08	6.14E-08	3.03E-08	2.71E-08	5.74E-08	1.61E-08	1.23E-08	2.84E-08
705	650229.19	4198065.37	1.90E-07	1.87E-07	3.77E-07	2.86E-08	2.80E-08	5.66E-08	2.79E-08	2.50E-08	5.29E-08	1.48E-08	1.13E-08	2.62E-08
706	650240.51	4198095.99	1.75E-07	1.72E-07	3.47E-07	2.63E-08	2.58E-08	5.20E-08	2.57E-08	2.30E-08	4.87E-08	1.36E-08	1.04E-08	2.41E-08
707	650251.84	4198126.6	1.60E-07	1.58E-07	3.18E-07	2.41E-08	2.36E-08	4.77E-08	2.35E-08	2.11E-08	4.46E-08	1.25E-08	9.56E-09	2.21E-08
708	650263.17	4198157.22	1.47E-07	1.44E-07	2.91E-07	2.21E-08	2.17E-08	4.37E-08	2.16E-08	1.93E-08	4.09E-08	1.15E-08	8.75E-09	2.02E-08
709	650274.5	4198187.83	1.34E-07	1.32E-07	2.66E-07	2.02E-08	1.98E-08	4.00E-08	1.97E-08	1.77E-08	3.74E-08	1.05E-08	8.01E-09	1.85E-08
710	650285.83	4198218.45	1.23E-07	1.21E-07	2.44E-07	1.85E-08	1.81E-08	3.66E-08	1.81E-08	1.62E-08	3.42E-08	9.59E-09	7.33E-09	1.69E-08
711	649681.31	4197618.45	4.82E-07	4.74E-07	9.56E-07	7.24E-08	7.11E-08	1.44E-07	7.08E-08	6.34E-08	1.34E-07	3.76E-08	2.87E-08	6.64E-08
712	649712.86	4197524.86	3.44E-07	3.38E-07	6.82E-07	5.17E-08	5.07E-08	1.02E-07	5.05E-08	4.52E-08	9.57E-08	2.68E-08	2.05E-08	4.73E-08
713	649742.71	4197537.67	3.55E-07	3.50E-07	7.05E-07	5.34E-08	5.24E-08	1.06E-07	5.22E-08	4.67E-08	9.89E-08	2.77E-08	2.12E-08	4.89E-08
714	649772.56	4197550.48	3.64E-07	3.58E-07	7.22E-07	5.47E-08	5.37E-08	1.08E-07	5.35E-08	4.79E-08	1.01E-07	2.84E-08	2.17E-08	5.01E-08
715	649802.41	4197563.29	3.69E-07	3.64E-07	7.33E-07	5.55E-08	5.45E-08	1.10E-07	5.43E-08	4.86E-08	1.03E-07	2.88E-08	2.20E-08	5.09E-08
716	649832.26	4197576.11	3.72E-07	3.66E-07	7.38E-07	5.60E-08	5.49E-08	1.11E-07	5.47E-08	4.90E-08	1.04E-07	2.91E-08	2.22E-08	5.13E-08
717	649862.11	4197588.92	3.73E-07	3.67E-07	7.39E-07	5.60E-08	5.50E-08	1.11E-07	5.48E-08	4.90E-08	1.04E-07	2.91E-08	2.22E-08	5.13E-08
718	649891.96	4197601.73	3.71E-07	3.65E-07	7.36E-07	5.57E-08	5.47E-08	1.10E-07	5.45E-08	4.88E-08	1.03E-07	2.90E-08	2.21E-08	5.11E-08
719	649921.81	4197614.55	3.66E-07	3.61E-07	7.27E-07	5.51E-08	5.41E-08	1.09E-07	5.39E-08	4.82E-08	1.02E-07	2.86E-08	2.19E-08	5.05E-08
720	649951.66	4197627.36	3.60E-07	3.55E-07	7.15E-07	5.42E-08	5.32E-08	1.07E-07	5.30E-08	4.74E-08	1.00E-07	2.81E-08	2.15E-08	4.96E-08
721	649981.51	4197640.17	3.52E-07	3.47E-07	6.99E-07	5.29E-08	5.20E-08	1.05E-07	5.18E-08	4.63E-08	9.81E-08	2.75E-08	2.10E-08	4.85E-08
722	650011.36	4197652.98	3.42E-07	3.37E-07	6.79E-07	5.14E-08	5.05E-08	1.02E-07	5.03E-08	4.50E-08	9.53E-08	2.67E-08	2.04E-08	4.71E-08
723	650041.21	4197665.8	3.30E-07	3.25E-07	6.55E-07	4.96E-08	4.87E-08	9.84E-08	4.85E-08	4.34E-08	9.20E-08	2.58E-08	1.97E-08	4.55E-08
724	650071.06	4197678.61	3.15E-07	3.11E-07	6.26E-07	4.74E-08	4.66E-08	9.40E-08	4.64E-08	4.15E-08	8.79E-08	2.46E-08	1.88E-08	4.35E-08
725	650100.91	4197691.42	3.01E-07	2.96E-07	5.97E-07	4.53E-08	4.44E-08	8.97E-08	4.43E-08	3.96E-08	8.39E-08	2.35E-08	1.80E-08	4.15E-08
726	650130.76	4197704.24	2.86E-07	2.82E-07	5.68E-07	4.30E-08	4.23E-08	8.53E-08	4.21E-08	3.77E-08	7.97E-08	2.24E-08	1.71E-08	3.94E-08
727	650160.61	4197717.05	2.71E-07	2.67E-07	5.39E-07	4.08E-08	4.01E-08	8.09E-08	3.99E-08	3.57E-08	7.56E-08	2.12E-08	1.62E-08	3.74E-08
728	650190.46	4197729.86	2.57E-07	2.53E-07	5.10E-07	3.86E-08	3.79E-08	7.66E-08	3.78E-08	3.38E-08	7.16E-08	2.01E-08	1.53E-08	3.54E-08
729	650211.02	4197751.5	2.48E-07	2.44E-07	4.91E-07	3.72E-08	3.65E-08	7.38E-08	3.64E-08	3.26E-08	6.90E-08	1.93E-08	1.48E-08	3.41E-08
730	650222.29	4197781.96	2.43E-07	2.39E-07	4.82E-07	3.65E-08	3.58E-08	7.23E-08	3.57E-08	3.20E-08	6.76E-08	1.90E-08	1.45E-08	3.35E-08
731	650233.57	4197812.43	2.37E-07	2.33E-07	4.70E-07	3.56E-08	3.50E-08	7.06E-08	3.48E-08	3.12E-08	6.60E-08	1.85E-08	1.41E-08	3.26E-08
732	650244.84	4197842.89	2.30E-07	2.26E-07	4.56E-07	3.45E-08	3.39E-08	6.84E-08	3.38E-08	3.02E-08	6.40E-08	1.79E-08	1.37E-08	3.16E-08
733	650256.11	4197873.36	2.20E-07	2.17E-07	4.37E-07	3.31E-08	3.25E-08	6.56E-08	3.24E-08	2.90E-08	6.14E-08	1.72E-08	1.31E-08	3.03E-08
734	650267.39	4197903.82	2.10E-07	2.06E-07	4.16E-07	3.15E-08	3.10E-08	6.25E-08	3.08E-08	2.76E-08	5.84E-08	1.64E-08	1.25E-08	2.89E-08
735	650278.66	4197934.29	1.98E-07	1.95E-07	3.94E-07	2.98E-08	2.93E-08	5.91E-08	2.92E-08	2.61E-08	5.53E-08	1.55E-08	1.18E-08	2.73E-08
736	650289.93	4197964.75	1.87E-07	1.84E-07	3.70E-07	2.81E-08	2.76E-08	5.56E-08	2.74E-08	2.46E-08	5.20E-08	1.46E-08	1.11E-08	2.57E-08
737	650301.21	4197995.21	1.75E-07	1.72E-07	3.47E-07	2.63E-08	2.58E-08	5.21E-08	2.57E-08	2.30E-08	4.87E-08	1.36E-08	1.04E-08	2.41E-08
738	650312.48	4198025.68	1.63E-07	1.60E-07	3.23E-07	2.45E-08	2.41E-08	4.85E-08	2.40E-08	2.14E-08	4.54E-08	1.27E-08	9.72E-09	2.24E-08
739	650323.75	4198056.14	1.51E-07	1.49E-07	3.00E-07	2.28E-08	2.24E-08	4.51E-08	2.23E-08	1.99E-08	4.22E-08	1.18E-08	9.04E-09	2.09E-08
740	650335.03	4198086.61	1.40E-07	1.38E-07	2.79E-07	2.11E-08	2.07E-08	4.19E-08	2.07E-08	1.85E-08	3.91E-08	1.10E-08	8.38E-09	1.94E-08
741	650346.3	4198117.07	1.30E-07	1.28E-07	2.58E-07	1.96E-08	1.92E-08	3.88E-08	1.91E-08	1.71E-08	3.63E-08	1.02E-08	7.77E-09	1.79E-08
742	650357.57	4198147.54	1.21E-07	1.19E-07	2.39E-07	1.81E-08	1.78E-08	3.59E-08	1.77E-08	1.59E-08	3.36E-08	9.42E-09	7.20E-09	1.66E-08
743	650368.85	4198178	1.12E-07	1.10E-07	2.21E-07	1.68E-08	1.65E-08	3.32E-08	1.64E-08	1.47E-08	3.11E-08	8.71E-09	6.66E-09	1.54E-08
744	650380.12	4198208.47	1.03E-07	1.02E-07	2.05E-07	1.55E-08	1.52E-08	3.08E-08	1.52E-08	1.36E-08	2.88E-08	8.07E-09	6.16E-09	1.42E-08
745	649681.31	4197518.45	3.38E-07	3.33E-07	6.72E-07	5.09E-08	5.00E-08	1.01E-07	4.98E-08	4.45E-08	9.43E-08	2.64E-08	2.02E-08	4.66E-08
746	649713.11	4197324.96	1.78E-07	1.76E-07	3.54E-07	2.68E-08	2.63E-08	5.31E-08	2.62E-08	2.35E-08	4.97E-08	1.39E-08	1.06E-08	2.46E-08
747	649743.46	4197337.99	1.89E-07	1.86E-07	3.75E-07	2.84E-08	2.79E-08	5.64E-08	2.78E-08	2.49E-08	5.27E-08	1.48E-08	1.13E-08	2.61E-08
748	649773.8	4197351.01	1.99E-07	1.96E-07	3.96E-07	3.00E-08	2.94E-08	5.94E-08	2.93E-08	2.62E-08	5.56E-08	1.56E-08	1.19E-08	2.75E-08
749	649804.15	4197364.04	2.09E-07	2.06E-07	4.14E-07	3.14E-08	3.08E-08	6.22E-08	3.07E-08	2.75E-08	5.82E-08	1.63E-08	1.25E-08	2.88E-08
750	649834.49	4197377.07	2.17E-07	2.14E-07	4.31E-07	3.26E-08	3.20E-08	6.47E-08	3.19E-08	2.86E-08	6.05E-08	1.70E-08	1.30E-08	2.99E-08
751	649864.84	4197390.09	2.24E-07	2.20E-07	4.44E-07	3.37E-08	3.31E-08	6.67E-08	3.29E-08	2.95E-08	6.24E-08	1.75E-08	1.34E-08	3.09E-08
752	649895.19	4197403.12	2.30E-07	2.26E-07	4.56E-07	3.45E-08	3.39E-08	6.84E-08	3.37E-08	3.02E-08	6.40E-08	1.79E-08	1.37E-08	3.16E-08
753	649925.53	4197416.14	2.34E-07	2.30E-07	4.64E-07	3.52E-08	3.45E-08	6.97E-08	3.44E-08	3.08E-08	6.52E-08	1.83E-08	1.40E-08	3.22E-08
754	649955.88	4197429.17	2.37E-07	2.33E-07	4.71E-07	3.57E-08	3.50E-08	7.07E-08	3.49E-08	3.12E-08	6.61E-08	1.85E-08	1.42E-08	3.27E-08
755	649986.22	4197442.19	2.39E-07	2.35E-07	4.74E-07	3.59E-08	3.53E-08	7.12E-08	3.51E-08	3.14E-08	6.66E-08	1.87E-08	1.43E-08	3.29E-08
756	650016.57	4197455.22	2.39E-07	2.36E-07	4.75E-07	3.60E-08	3.54E-08	7.14E-08	3.52E-08	3.15E-08	6.67E-08	1.87E-08	1.43E-08	3.30E-08

757	650046.91	4197468.24	2.39E-07	2.35E-07	4.74E-07	3.59E-08	3.53E-08	7.12E-08	3.51E-08	3.14E-08	6.66E-08	1.87E-08	1.43E-08	3.29E-08
758	650077.26	4197481.27	2.37E-07	2.34E-07	4.71E-07	3.57E-08	3.50E-08	7.07E-08	3.49E-08	3.12E-08	6.61E-08	1.85E-08	1.42E-08	3.27E-08
759	650107.6	4197494.3	2.34E-07	2.30E-07	4.65E-07	3.52E-08	3.46E-08	6.98E-08	3.44E-08	3.08E-08	6.52E-08	1.83E-08	1.40E-08	3.23E-08
760	650137.95	4197507.32	2.30E-07	2.26E-07	4.56E-07	3.46E-08	3.40E-08	6.85E-08	3.38E-08	3.03E-08	6.41E-08	1.80E-08	1.37E-08	3.17E-08
761	650168.3	4197520.35	2.25E-07	2.21E-07	4.46E-07	3.38E-08	3.32E-08	6.70E-08	3.31E-08	2.96E-08	6.26E-08	1.76E-08	1.34E-08	3.10E-08
762	650198.64	4197533.37	2.19E-07	2.16E-07	4.34E-07	3.29E-08	3.23E-08	6.52E-08	3.22E-08	2.88E-08	6.10E-08	1.71E-08	1.31E-08	3.02E-08
763	650228.99	4197546.4	2.12E-07	2.09E-07	4.21E-07	3.19E-08	3.13E-08	6.32E-08	3.12E-08	2.79E-08	5.91E-08	1.66E-08	1.27E-08	2.92E-08
764	650259.33	4197559.42	2.05E-07	2.02E-07	4.06E-07	3.08E-08	3.02E-08	6.10E-08	3.01E-08	2.69E-08	5.70E-08	1.60E-08	1.22E-08	2.82E-08
765	650289.68	4197572.45	1.97E-07	1.94E-07	3.91E-07	2.96E-08	2.91E-08	5.87E-08	2.90E-08	2.59E-08	5.49E-08	1.54E-08	1.18E-08	2.72E-08
766	650320.02	4197585.47	1.89E-07	1.86E-07	3.76E-07	2.85E-08	2.79E-08	5.64E-08	2.78E-08	2.49E-08	5.27E-08	1.48E-08	1.13E-08	2.61E-08
767	650356.1	4197613.99	1.80E-07	1.78E-07	3.58E-07	2.71E-08	2.66E-08	5.38E-08	2.65E-08	2.38E-08	5.03E-08	1.41E-08	1.08E-08	2.49E-08
768	650367.56	4197644.96	1.79E-07	1.76E-07	3.54E-07	2.68E-08	2.64E-08	5.32E-08	2.62E-08	2.35E-08	4.97E-08	1.39E-08	1.07E-08	2.46E-08
769	650379.02	4197675.93	1.76E-07	1.73E-07	3.49E-07	2.64E-08	2.59E-08	5.23E-08	2.58E-08	2.31E-08	4.89E-08	1.37E-08	1.05E-08	2.42E-08
770	650390.48	4197706.9	1.72E-07	1.69E-07	3.41E-07	2.58E-08	2.54E-08	5.12E-08	2.53E-08	2.26E-08	4.79E-08	1.34E-08	1.03E-08	2.37E-08
771	650401.94	4197737.87	1.67E-07	1.65E-07	3.32E-07	2.52E-08	2.47E-08	4.99E-08	2.46E-08	2.20E-08	4.66E-08	1.31E-08	9.98E-09	2.31E-08
772	650413.4	4197768.84	1.62E-07	1.60E-07	3.22E-07	2.44E-08	2.39E-08	4.83E-08	2.38E-08	2.13E-08	4.52E-08	1.27E-08	9.67E-09	2.23E-08
773	650424.86	4197799.81	1.56E-07	1.54E-07	3.10E-07	2.35E-08	2.31E-08	4.66E-08	2.30E-08	2.06E-08	4.35E-08	1.22E-08	9.32E-09	2.15E-08
774	650436.32	4197830.78	1.50E-07	1.48E-07	2.97E-07	2.25E-08	2.21E-08	4.47E-08	2.20E-08	1.97E-08	4.18E-08	1.17E-08	8.94E-09	2.06E-08
775	650447.78	4197861.75	1.43E-07	1.41E-07	2.84E-07	2.15E-08	2.11E-08	4.27E-08	2.10E-08	1.88E-08	3.99E-08	1.12E-08	8.54E-09	1.97E-08
776	650459.24	4197892.72	1.36E-07	1.34E-07	2.70E-07	2.05E-08	2.01E-08	4.06E-08	2.00E-08	1.79E-08	3.79E-08	1.06E-08	8.13E-09	1.88E-08
777	650470.7	4197923.69	1.29E-07	1.27E-07	2.56E-07	1.94E-08	1.91E-08	3.85E-08	1.90E-08	1.70E-08	3.60E-08	1.01E-08	7.70E-09	1.78E-08
778	650482.16	4197954.66	1.22E-07	1.20E-07	2.42E-07	1.84E-08	1.80E-08	3.64E-08	1.79E-08	1.61E-08	3.40E-08	9.53E-09	7.28E-09	1.68E-08
779	650493.62	4197985.63	1.15E-07	1.13E-07	2.28E-07	1.73E-08	1.70E-08	3.43E-08	1.69E-08	1.52E-08	3.21E-08	8.99E-09	6.87E-09	1.59E-08
780	650505.08	4198016.6	1.08E-07	1.07E-07	2.15E-07	1.63E-08	1.60E-08	3.23E-08	1.60E-08	1.43E-08	3.02E-08	8.47E-09	6.47E-09	1.49E-08
781	650516.54	4198047.57	1.02E-07	1.00E-07	2.03E-07	1.53E-08	1.51E-08	3.04E-08	1.50E-08	1.34E-08	2.84E-08	7.97E-09	6.09E-09	1.41E-08
782	650528.01	4198078.54	9.60E-08	9.45E-08	1.91E-07	1.44E-08	1.42E-08	2.86E-08	1.41E-08	1.26E-08	2.68E-08	7.50E-09	5.73E-09	1.32E-08
783	650539.47	4198109.51	9.03E-08	8.89E-08	1.79E-07	1.36E-08	1.33E-08	2.69E-08	1.33E-08	1.19E-08	2.52E-08	7.05E-09	5.39E-09	1.24E-08
784	650550.93	4198140.48	8.49E-08	8.36E-08	1.68E-07	1.28E-08	1.25E-08	2.53E-08	1.25E-08	1.12E-08	2.37E-08	6.63E-09	5.07E-09	1.17E-08
785	650562.39	4198171.46	7.98E-08	7.86E-08	1.58E-07	1.20E-08	1.18E-08	2.38E-08	1.17E-08	1.05E-08	2.22E-08	6.23E-09	4.76E-09	1.10E-08
786	650573.85	4198202.43	7.50E-08	7.39E-08	1.49E-07	1.13E-08	1.11E-08	2.24E-08	1.10E-08	9.87E-09	2.09E-08	5.86E-09	4.48E-09	1.03E-08
787	650585.31	4198233.4	7.05E-08	6.94E-08	1.40E-07	1.06E-08	1.04E-08	2.10E-08	1.04E-08	9.28E-09	1.96E-08	5.51E-09	4.21E-09	9.72E-09
788	649681.31	4197318.45	1.70E-07	1.68E-07	3.38E-07	2.56E-08	2.52E-08	5.08E-08	2.50E-08	2.24E-08	4.75E-08	1.33E-08	1.02E-08	2.35E-08
789	649712.99	4197124.91	9.91E-08	9.76E-08	1.97E-07	1.49E-08	1.46E-08	2.95E-08	1.46E-08	1.30E-08	2.76E-08	7.74E-09	5.92E-09	1.37E-08
790	649743.08	4197137.82	1.06E-07	1.04E-07	2.10E-07	1.59E-08	1.56E-08	3.16E-08	1.56E-08	1.39E-08	2.95E-08	8.28E-09	6.32E-09	1.46E-08
791	649773.17	4197150.74	1.13E-07	1.11E-07	2.24E-07	1.70E-08	1.67E-08	3.36E-08	1.66E-08	1.49E-08	3.14E-08	8.82E-09	6.73E-09	1.56E-08
792	649803.26	4197163.66	1.20E-07	1.18E-07	2.38E-07	1.80E-08	1.77E-08	3.57E-08	1.76E-08	1.58E-08	3.34E-08	9.35E-09	7.14E-09	1.65E-08
793	649833.35	4197176.57	1.26E-07	1.24E-07	2.51E-07	1.90E-08	1.87E-08	3.77E-08	1.86E-08	1.66E-08	3.52E-08	9.88E-09	7.55E-09	1.74E-08
794	649863.44	4197189.49	1.33E-07	1.31E-07	2.64E-07	2.00E-08	1.96E-08	3.96E-08	1.96E-08	1.75E-08	3.71E-08	1.04E-08	7.94E-09	1.83E-08
795	649893.53	4197202.41	1.39E-07	1.37E-07	2.76E-07	2.09E-08	2.05E-08	4.15E-08	2.05E-08	1.83E-08	3.88E-08	1.09E-08	8.30E-09	1.92E-08
796	649923.62	4197215.32	1.45E-07	1.43E-07	2.87E-07	2.18E-08	2.14E-08	4.32E-08	2.13E-08	1.91E-08	4.04E-08	1.13E-08	8.64E-09	2.00E-08
797	649953.71	4197228.24	1.50E-07	1.48E-07	2.98E-07	2.26E-08	2.22E-08	4.47E-08	2.21E-08	1.98E-08	4.18E-08	1.17E-08	8.96E-09	2.07E-08
798	649983.8	4197241.16	1.55E-07	1.52E-07	3.07E-07	2.33E-08	2.28E-08	4.61E-08	2.27E-08	2.04E-08	4.31E-08	1.21E-08	9.23E-09	2.13E-08
799	650013.9	4197254.07	1.59E-07	1.56E-07	3.15E-07	2.39E-08	2.34E-08	4.73E-08	2.33E-08	2.09E-08	4.42E-08	1.24E-08	9.47E-09	2.19E-08
800	650043.99	4197266.99	1.62E-07	1.59E-07	3.21E-07	2.44E-08	2.39E-08	4.83E-08	2.38E-08	2.13E-08	4.51E-08	1.27E-08	9.67E-09	2.23E-08
801	650074.08	4197279.9	1.65E-07	1.62E-07	3.27E-07	2.47E-08	2.43E-08	4.90E-08	2.42E-08	2.17E-08	4.58E-08	1.29E-08	9.82E-09	2.27E-08
802	650104.17	4197292.82	1.66E-07	1.64E-07	3.30E-07	2.50E-08	2.46E-08	4.96E-08	2.45E-08	2.19E-08	4.64E-08	1.30E-08	9.93E-09	2.29E-08
803	650134.26	4197305.74	1.68E-07	1.65E-07	3.33E-07	2.52E-08	2.47E-08	4.99E-08	2.46E-08	2.21E-08	4.67E-08	1.31E-08	1.00E-08	2.31E-08
804	650164.35	4197318.65	1.68E-07	1.65E-07	3.33E-07	2.53E-08	2.48E-08	5.01E-08	2.47E-08	2.21E-08	4.68E-08	1.31E-08	1.00E-08	2.31E-08
805	650194.44	4197331.57	1.68E-07	1.65E-07	3.33E-07	2.52E-08	2.48E-08	5.00E-08	2.47E-08	2.21E-08	4.67E-08	1.31E-08	1.00E-08	2.31E-08
806	650224.53	4197344.49	1.67E-07	1.64E-07	3.31E-07	2.51E-08	2.46E-08	4.97E-08	2.45E-08	2.20E-08	4.65E-08	1.30E-08	9.96E-09	2.30E-08
807	650254.62	4197357.4	1.65E-07	1.63E-07	3.28E-07	2.49E-08	2.44E-08	4.93E-08	2.43E-08	2.18E-08	4.61E-08	1.29E-08	9.86E-09	2.28E-08
808	650284.71	4197370.32	1.63E-07	1.61E-07	3.24E-07	2.45E-08	2.41E-08	4.86E-08	2.40E-08	2.15E-08	4.55E-08	1.27E-08	9.74E-09	2.25E-08
809	650314.81	4197383.24	1.60E-07	1.58E-07	3.18E-07	2.41E-08	2.37E-08	4.78E-08	2.36E-08	2.11E-08	4.47E-08	1.25E-08	9.56E-09	2.21E-08
810	650344.9	4197396.15	1.57E-07	1.55E-07	3.12E-07	2.36E-08	2.32E-08	4.68E-08	2.31E-08	2.07E-08	4.38E-08	1.23E-08	9.38E-09	2.17E-08
811	650374.99	4197409.07	1.54E-07	1.51E-07	3.05E-07	2.31E-08	2.27E-08	4.58E-08	2.26E-08	2.02E-08	4.28E-08	1.20E-08	9.16E-09	2.12E-08
812	650405.08	4197421.98	1.50E-07	1.47E-07	2.97E-07	2.25E-08	2.21E-08	4.46E-08	2.20E-08	1.97E-08	4.17E-08	1.17E-08	8.93E-09	2.06E-08
813	650435.17	4197434.9	1.46E-07	1.43E-07	2.89E-07	2.19E-08	2.15E-08	4.34E-08	2.14E-08	1.92E-08	4.06E-08	1.14E-08	8.69E-09	2.01E-08
814	650465.26	4197447.82	1.41E-07	1.39E-07	2.80E-07	2.12E-08	2.09E-08	4.21E-08	2.08E-08	1.86E-08	3.94E-08	1.10E-08	8.43E-09	1.95E-08
815	650501.03	4197476.09	1.37E-07	1.35E-07	2.71E-07	2.06E-08	2.02E-08	4.08E-08	2.01E-08	1.80E-08	3.81E-08	1.07E-08	8.16E-09	1.88E-08
816	650512.4	4197506.8	1.36E-07	1.34E-07	2.70E-07	2.05E-08	2.01E-08	4.06E-08	2.00E-08	1.79E-08	3.80E-08	1.06E-08	8.13E-09	1.88E-08
817	650523.76	4197537.51	1.35E-07	1.33E-07	2.68E-07	2.03E-08	2.00E-08	4.03E-08	1.99E-08	1.78E-08	3.77E-08	1.06E-08	8.07E-09	1.86E-08
818	650535.13	4197568.22	1.34E-07	1.32E-07	2.65E-07	2.01E-08	1.97E-08	3.98E-08	1.97E-08	1.76E-08	3.72E-08	1.04E-08	7.98E-09	1.84E-08
819	650546.49	4197598.93	1.32E-07	1.30E-07	2.61E-07	1.98E-08	1.94E-08	3.92E-08	1.93E-08	1.73E-08	3.67E-08	1.03E-08	7.85E-09	1.81E-08
820	650557.86	4197629.64	1.29E-07	1.27E-07	2.56E-07	1.94E-08	1.91E-08	3.85E-08	1.90E-08	1.70E-08	3.60E-08	1.01E-08	7.71E-09	1.78E-08
821	650569.22	4197660.35	1.26E-07	1.24E-07	2.50E-07	1.90E-08	1.86E-08	3.76E-08	1.86E-08	1.66E-08	3.52E-08	9.86E-09	7.53E-09	1.74E-08
822	650580.58	4197691.06	1.23E-07	1.21E-07	2.44E-07	1.85E-08	1.81E-08	3.66E-08	1.81E-08	1.62E-08	3.42E-08	9.59E-09	7.33E-09	1.69E-08
823	650591.95	4197721.78	1.19E-07	1.17E-07	2.36E-07	1.79E-08	1.76E-08	3.55E-08	1.75E-08	1.57E-08	3.32E-08	9.30E-09	7.10E-09	1.64E-08
824	650603.31	4197752.49	1.15E-07	1.13E-07	2.28E-07	1.73E-08	1.70E-08	3.43E-08	1.69E-08	1.51E-08	3.20E-08	8.98E-09	6.86E-09	1.58E-08
825	650614.68	4197783.2	1.11E-07	1.09E-07	2.20E-07	1.67E-08	1.64E-08	3.30E-08	1.63E-08	1.46E-08	3.09E-08	8.65E-09	6.61E-09	1.53E-08
826	650626.04	4197813.91	1.06E-07	1.05E-07	2.11E-07	1.60E-08	1.57E-08	3.17E-08	1.56E-08	1.40E-08	2.96E-08	8.31E-09	6.35E-09	1.47E-08
827	650637.41	4197844.62	1.02E-07	1.00E-07	2.02E-07	1.53E-08	1.50E-08	3.04E-08	1.50E-08	1.34E-08	2.84E-08	7.96E-09	6.08E-09	1.40E-08
828	650648.77	4197875.33	9.73E-08	9.58E-08	1.93E-07	1.46E-08	1.44E-08	2.90E-08	1.43E-08	1.28E-08	2.71E-08	7.60E-09	5.81E-09	1.34E-08
829	650660.14	4197906.04	9.29E-08	9.14E-08	1.84E-07	1.40E-08	1.37E-08	2.77E-08	1.37E-08	1.22E-08	2.59E-08	7.25E-09	5.54E-09	1.28E-08
830	650671.5	4197936.75	8.85E-08	8.71E-08	1.76E-07	1.33E-08	1.31E-08	2.64E-08	1.30E-08	1.16E-08	2.47E-08	6.91E-09	5.28E-09	1.22E-08
831	650682.86	4197967.46	8.42E-08	8.29E-08	1.67E-07	1.27E-08	1.24E-08	2.51E-08	1.24E-08	1.11E-08	2.35E-08	6.58E-09	5.03E-09	1.16E-08
832	650694.23	4197998.17	8.02E-08	7.89E-08	1.59E-07	1.21E-08	1.18E-08	2.39E-08	1.18E-08	1.05E-08	2.23E-08	6.26E-09	4.78E-09	1.10E-08

833	650705.59	4198028.88	7.63E-08	7.51E-08	1.51E-07	1.15E-08	1.13E-08	2.27E-08	1.12E-08	1.00E-08	2.12E-08	5.96E-09	4.55E-09	1.05E-08
834	650716.96	4198059.59	7.25E-08	7.14E-08	1.44E-07	1.09E-08	1.07E-08	2.16E-08	1.07E-08	9.54E-09	2.02E-08	5.66E-09	4.33E-09	9.99E-09
835	650728.32	4198090.31	6.90E-08	6.79E-08	1.37E-07	1.04E-08	1.02E-08	2.06E-08	1.01E-08	9.08E-09	1.92E-08	5.39E-09	4.12E-09	9.50E-09
836	650739.69	4198121.02	6.56E-08	6.45E-08	1.30E-07	9.86E-09	9.68E-09	1.95E-08	9.64E-09	8.63E-09	1.83E-08	5.12E-09	3.91E-09	9.03E-09
837	650751.05	4198151.73	6.23E-08	6.14E-08	1.24E-07	9.37E-09	9.20E-09	1.86E-08	9.16E-09	8.20E-09	1.74E-08	4.87E-09	3.72E-09	8.59E-09
838	650762.41	4198182.44	5.92E-08	5.83E-08	1.18E-07	8.91E-09	8.74E-09	1.77E-08	8.71E-09	7.79E-09	1.65E-08	4.63E-09	3.53E-09	8.16E-09
839	650773.78	4198213.15	5.63E-08	5.54E-08	1.12E-07	8.46E-09	8.31E-09	1.68E-08	8.28E-09	7.41E-09	1.57E-08	4.40E-09	3.36E-09	7.76E-09
840	650785.14	4198243.86	5.35E-08	5.27E-08	1.06E-07	8.04E-09	7.90E-09	1.59E-08	7.87E-09	7.04E-09	1.49E-08	4.18E-09	3.19E-09	7.37E-09
841	649681.31	4197118.45	9.39E-08	9.25E-08	1.86E-07	1.41E-08	1.39E-08	2.80E-08	1.38E-08	1.24E-08	2.62E-08	7.34E-09	5.61E-09	1.29E-08
842	649713.14	4196924.97	6.09E-08	5.99E-08	1.21E-07	9.15E-09	8.98E-09	1.81E-08	8.95E-09	8.01E-09	1.70E-08	4.75E-09	3.63E-09	8.39E-09
843	649743.54	4196938.02	6.48E-08	6.38E-08	1.29E-07	9.75E-09	9.57E-09	1.93E-08	9.53E-09	8.53E-09	1.81E-08	5.06E-09	3.87E-09	8.93E-09
844	649773.94	4196951.07	6.90E-08	6.79E-08	1.37E-07	1.04E-08	1.02E-08	2.06E-08	1.01E-08	9.08E-09	1.92E-08	5.39E-09	4.12E-09	9.51E-09
845	649804.34	4196964.12	7.34E-08	7.22E-08	1.46E-07	1.10E-08	1.08E-08	2.19E-08	1.08E-08	9.66E-09	2.04E-08	5.73E-09	4.38E-09	1.01E-08
846	649834.74	4196977.17	7.79E-08	7.67E-08	1.55E-07	1.17E-08	1.15E-08	2.32E-08	1.14E-08	1.02E-08	2.17E-08	6.08E-09	4.65E-09	1.07E-08
847	649865.14	4196990.22	8.24E-08	8.11E-08	1.63E-07	1.24E-08	1.22E-08	2.45E-08	1.21E-08	1.08E-08	2.30E-08	6.43E-09	4.92E-09	1.13E-08
848	649895.54	4197003.27	8.69E-08	8.55E-08	1.72E-07	1.31E-08	1.28E-08	2.59E-08	1.28E-08	1.14E-08	2.42E-08	6.79E-09	5.18E-09	1.20E-08
849	649925.94	4197016.32	9.13E-08	8.99E-08	1.81E-07	1.37E-08	1.35E-08	2.72E-08	1.34E-08	1.20E-08	2.54E-08	7.13E-09	5.45E-09	1.26E-08
850	649956.34	4197029.37	9.57E-08	9.42E-08	1.90E-07	1.44E-08	1.41E-08	2.85E-08	1.41E-08	1.26E-08	2.67E-08	7.48E-09	5.71E-09	1.32E-08
851	649986.74	4197042.41	9.99E-08	9.84E-08	1.98E-07	1.50E-08	1.48E-08	2.98E-08	1.47E-08	1.32E-08	2.78E-08	7.81E-09	5.96E-09	1.38E-08
852	650017.14	4197055.46	1.04E-07	1.02E-07	2.06E-07	1.56E-08	1.54E-08	3.10E-08	1.53E-08	1.37E-08	2.90E-08	8.12E-09	6.21E-09	1.43E-08
853	650047.54	4197068.51	1.08E-07	1.06E-07	2.14E-07	1.62E-08	1.59E-08	3.21E-08	1.59E-08	1.42E-08	3.00E-08	8.42E-09	6.44E-09	1.49E-08
854	650077.94	4197081.56	1.11E-07	1.10E-07	2.21E-07	1.67E-08	1.64E-08	3.32E-08	1.64E-08	1.47E-08	3.10E-08	8.70E-09	6.64E-09	1.53E-08
855	650108.34	4197094.61	1.14E-07	1.13E-07	2.27E-07	1.72E-08	1.69E-08	3.41E-08	1.68E-08	1.51E-08	3.19E-08	8.94E-09	6.83E-09	1.58E-08
856	650138.74	4197107.66	1.17E-07	1.15E-07	2.33E-07	1.76E-08	1.73E-08	3.49E-08	1.72E-08	1.54E-08	3.27E-08	9.16E-09	6.99E-09	1.62E-08
857	650169.14	4197120.71	1.20E-07	1.18E-07	2.37E-07	1.80E-08	1.76E-08	3.56E-08	1.76E-08	1.57E-08	3.33E-08	9.34E-09	7.13E-09	1.65E-08
858	650199.54	4197133.76	1.21E-07	1.20E-07	2.41E-07	1.83E-08	1.79E-08	3.62E-08	1.78E-08	1.60E-08	3.38E-08	9.48E-09	7.24E-09	1.67E-08
859	650229.94	4197146.81	1.23E-07	1.21E-07	2.44E-07	1.85E-08	1.81E-08	3.66E-08	1.81E-08	1.62E-08	3.42E-08	9.59E-09	7.33E-09	1.69E-08
860	650260.34	4197159.86	1.24E-07	1.22E-07	2.46E-07	1.86E-08	1.83E-08	3.69E-08	1.82E-08	1.63E-08	3.45E-08	9.67E-09	7.39E-09	1.71E-08
861	650290.74	4197172.9	1.25E-07	1.23E-07	2.47E-07	1.87E-08	1.84E-08	3.71E-08	1.83E-08	1.64E-08	3.47E-08	9.73E-09	7.43E-09	1.72E-08
862	650321.14	4197185.95	1.25E-07	1.23E-07	2.48E-07	1.88E-08	1.84E-08	3.72E-08	1.84E-08	1.64E-08	3.48E-08	9.75E-09	7.45E-09	1.72E-08
863	650351.54	4197199	1.25E-07	1.23E-07	2.47E-07	1.87E-08	1.84E-08	3.72E-08	1.83E-08	1.64E-08	3.47E-08	9.74E-09	7.44E-09	1.72E-08
864	650381.94	4197212.05	1.24E-07	1.22E-07	2.46E-07	1.87E-08	1.83E-08	3.70E-08	1.82E-08	1.63E-08	3.46E-08	9.69E-09	7.40E-09	1.71E-08
865	650412.34	4197225.1	1.23E-07	1.21E-07	2.44E-07	1.85E-08	1.82E-08	3.66E-08	1.81E-08	1.62E-08	3.43E-08	9.60E-09	7.34E-09	1.69E-08
866	650442.74	4197238.15	1.22E-07	1.20E-07	2.41E-07	1.83E-08	1.80E-08	3.63E-08	1.79E-08	1.60E-08	3.39E-08	9.50E-09	7.26E-09	1.68E-08
867	650473.14	4197251.2	1.20E-07	1.18E-07	2.38E-07	1.81E-08	1.77E-08	3.58E-08	1.77E-08	1.58E-08	3.35E-08	9.38E-09	7.17E-09	1.65E-08
868	650503.54	4197264.25	1.18E-07	1.16E-07	2.35E-07	1.78E-08	1.75E-08	3.52E-08	1.74E-08	1.56E-08	3.29E-08	9.23E-09	7.05E-09	1.63E-08
869	650533.94	4197277.3	1.16E-07	1.14E-07	2.30E-07	1.75E-08	1.71E-08	3.46E-08	1.71E-08	1.53E-08	3.24E-08	9.07E-09	6.93E-09	1.60E-08
870	650564.34	4197290.34	1.14E-07	1.12E-07	2.26E-07	1.71E-08	1.68E-08	3.39E-08	1.67E-08	1.50E-08	3.17E-08	8.89E-09	6.79E-09	1.57E-08
871	650594.74	4197303.39	1.11E-07	1.10E-07	2.21E-07	1.67E-08	1.64E-08	3.32E-08	1.64E-08	1.47E-08	3.10E-08	8.70E-09	6.65E-09	1.53E-08
872	650625.14	4197316.44	1.09E-07	1.07E-07	2.16E-07	1.63E-08	1.60E-08	3.24E-08	1.60E-08	1.43E-08	3.03E-08	8.49E-09	6.49E-09	1.50E-08
873	650646.08	4197338.48	1.07E-07	1.06E-07	2.13E-07	1.62E-08	1.59E-08	3.20E-08	1.58E-08	1.41E-08	3.00E-08	8.40E-09	6.41E-09	1.48E-08
874	650657.56	4197369.51	1.08E-07	1.06E-07	2.14E-07	1.62E-08	1.59E-08	3.21E-08	1.58E-08	1.42E-08	3.00E-08	8.41E-09	6.42E-09	1.48E-08
875	650669.04	4197400.53	1.07E-07	1.06E-07	2.13E-07	1.62E-08	1.59E-08	3.20E-08	1.58E-08	1.41E-08	2.99E-08	8.39E-09	6.41E-09	1.48E-08
876	650680.52	4197431.56	1.07E-07	1.05E-07	2.12E-07	1.61E-08	1.58E-08	3.19E-08	1.57E-08	1.41E-08	2.98E-08	8.35E-09	6.38E-09	1.47E-08
877	650692	4197462.58	1.06E-07	1.04E-07	2.10E-07	1.59E-08	1.57E-08	3.16E-08	1.56E-08	1.40E-08	2.95E-08	8.28E-09	6.33E-09	1.46E-08
878	650703.48	4197493.61	1.05E-07	1.03E-07	2.08E-07	1.58E-08	1.55E-08	3.12E-08	1.54E-08	1.38E-08	2.92E-08	8.19E-09	6.25E-09	1.44E-08
879	650714.96	4197524.64	1.03E-07	1.02E-07	2.05E-07	1.55E-08	1.52E-08	3.08E-08	1.52E-08	1.36E-08	2.88E-08	8.07E-09	6.16E-09	1.42E-08
880	650726.44	4197555.66	1.01E-07	9.98E-08	2.01E-07	1.53E-08	1.50E-08	3.02E-08	1.49E-08	1.33E-08	2.83E-08	7.92E-09	6.05E-09	1.40E-08
881	650737.92	4197586.69	9.93E-08	9.77E-08	1.97E-07	1.49E-08	1.47E-08	2.96E-08	1.46E-08	1.31E-08	2.77E-08	7.76E-09	5.92E-09	1.37E-08
882	650749.41	4197617.71	9.69E-08	9.54E-08	1.92E-07	1.46E-08	1.43E-08	2.89E-08	1.42E-08	1.28E-08	2.70E-08	7.57E-09	5.78E-09	1.34E-08
883	650760.89	4197648.74	9.43E-08	9.28E-08	1.87E-07	1.42E-08	1.39E-08	2.81E-08	1.39E-08	1.24E-08	2.63E-08	7.37E-09	5.63E-09	1.30E-08
884	650772.37	4197679.77	9.16E-08	9.02E-08	1.82E-07	1.38E-08	1.35E-08	2.73E-08	1.35E-08	1.21E-08	2.55E-08	7.15E-09	5.47E-09	1.26E-08
885	650783.85	4197710.79	8.86E-08	8.73E-08	1.76E-07	1.33E-08	1.31E-08	2.64E-08	1.30E-08	1.17E-08	2.47E-08	6.92E-09	5.29E-09	1.22E-08
886	650795.33	4197741.82	8.56E-08	8.42E-08	1.70E-07	1.29E-08	1.26E-08	2.55E-08	1.26E-08	1.13E-08	2.38E-08	6.68E-09	5.11E-09	1.18E-08
887	650806.81	4197772.84	8.24E-08	8.12E-08	1.64E-07	1.24E-08	1.22E-08	2.46E-08	1.21E-08	1.09E-08	2.30E-08	6.44E-09	4.92E-09	1.14E-08
888	650818.29	4197803.87	7.93E-08	7.81E-08	1.57E-07	1.19E-08	1.17E-08	2.36E-08	1.17E-08	1.04E-08	2.21E-08	6.20E-09	4.73E-09	1.09E-08
889	650829.77	4197834.9	7.62E-08	7.50E-08	1.51E-07	1.15E-08	1.12E-08	2.27E-08	1.12E-08	1.00E-08	2.12E-08	5.95E-09	4.55E-09	1.05E-08
890	650841.25	4197865.92	7.31E-08	7.20E-08	1.45E-07	1.10E-08	1.08E-08	2.18E-08	1.07E-08	9.62E-09	2.04E-08	5.71E-09	4.36E-09	1.01E-08
891	650852.73	4197896.95	7.01E-08	6.90E-08	1.39E-07	1.05E-08	1.03E-08	2.09E-08	1.03E-08	9.22E-09	1.95E-08	5.47E-09	4.18E-09	9.66E-09
892	650864.22	4197927.97	6.72E-08	6.61E-08	1.33E-07	1.01E-08	9.92E-09	2.00E-08	9.88E-09	8.84E-09	1.87E-08	5.25E-09	4.01E-09	9.25E-09
893	650875.7	4197959	6.44E-08	6.34E-08	1.28E-07	9.68E-09	9.50E-09	1.92E-08	9.46E-09	8.47E-09	1.79E-08	5.03E-09	3.84E-09	8.87E-09
894	650887.18	4197990.03	6.17E-08	6.07E-08	1.22E-07	9.27E-09	9.11E-09	1.84E-08	9.07E-09	8.12E-09	1.72E-08	4.82E-09	3.68E-09	8.50E-09
895	650898.66	4198021.05	5.91E-08	5.82E-08	1.17E-07	8.88E-09	8.72E-09	1.76E-08	8.69E-09	7.78E-09	1.65E-08	4.61E-09	3.53E-09	8.14E-09
896	650910.14	4198052.08	5.66E-08	5.57E-08	1.12E-07	8.51E-09	8.36E-09	1.69E-08	8.32E-09	7.45E-09	1.58E-08	4.42E-09	3.38E-09	7.80E-09
897	650921.62	4198083.1	5.42E-08	5.34E-08	1.08E-07	8.15E-09	8.00E-09	1.62E-08	7.97E-09	7.13E-09	1.51E-08	4.23E-09	3.23E-09	7.47E-09
898	650933.1	4198114.13	5.19E-08	5.11E-08	1.03E-07	7.80E-09	7.66E-09	1.55E-08	7.63E-09	6.83E-09	1.45E-08	4.05E-09	3.10E-09	7.15E-09
899	650944.58	4198145.16	4.97E-08	4.89E-08	9.86E-08	7.47E-09	7.33E-09	1.48E-08	7.30E-09	6.54E-09	1.38E-08	3.88E-09	2.96E-09	6.84E-09
900	650956.06	4198176.18	4.75E-08	4.68E-08	9.43E-08	7.15E-09	7.02E-09	1.42E-08	6.99E-09	6.26E-09	1.32E-08	3.71E-09	2.84E-09	6.55E-09
901	650967.54	4198207.21	4.55E-08	4.48E-08	9.03E-08	6.84E-09	6.72E-09	1.36E-08	6.69E-09	5.99E-09	1.27E-08	3.55E-09	2.71E-09	6.27E-09
902	650979.03	4198238.23	4.35E-08	4.28E-08	8.64E-08	6.54E-09	6.43E-09	1.30E-08	6.40E-09	5.73E-09	1.21E-08	3.40E-09	2.60E-09	6.00E-09
903	650990.51	4198269.26	4.16E-08	4.10E-08	8.26E-08	6.26E-09	6.15E-09	1.24E-08	6.12E-09	5.48E-09	1.16E-08	3.25E-09	2.49E-09	5.74E-09
904	649681.31	4196918.45	5.78E-08	5.69E-08	1.15E-07	8.69E-09	8.54E-09	1.72E-08	8.50E-09	7.61E-09	1.61E-08	4.52E-09	3.45E-09	7.97E-09
905	649713.04	4196724.93	4.12E-08	4.05E-08	8.17E-08	6.19E-09	6.08E-09	1.23E-08	6.05E-09	5.42E-09	1.15E-08	3.21E-09	2.46E-09	5.67E-09
906	649743.25	4196737.9	4.34E-08	4.27E-08	8.61E-08	6.53E-09	6.41E-09	1.29E-08	6.38E-09	5.71E-09	1.21E-08	3.39E-09	2.59E-09	5.98E-09
907	649773.45	4196750.86	4.58E-08	4.51E-08	9.10E-08	6.89E-09	6.77E-09	1.37E-08	6.74E-09	6.03E-09	1.28E-08	3.58E-09	2.74E-09	6.32E-09
908	649803.66	4196763.83	4.84E-08	4.77E-08	9.61E-08	7.28E-09	7.15E-09	1.44E-08	7.12E-09	6.37E-09	1.35E-08	3.78E-09	2.89E-09	6.67E-09

909	649833.86	4196776.79	5.11E-08	5.03E-08	1.01E-07	7.69E-09	7.55E-09	1.52E-08	7.52E-09	6.73E-09	1.42E-08	3.99E-09	3.05E-09	7.04E-09
910	649864.07	4196789.76	5.40E-08	5.31E-08	1.07E-07	8.11E-09	7.97E-09	1.61E-08	7.93E-09	7.10E-09	1.50E-08	4.22E-09	3.22E-09	7.44E-09
911	649894.27	4196802.72	5.69E-08	5.60E-08	1.13E-07	8.56E-09	8.40E-09	1.70E-08	8.37E-09	7.49E-09	1.59E-08	4.45E-09	3.40E-09	7.84E-09
912	649924.48	4196815.69	5.99E-08	5.90E-08	1.19E-07	9.01E-09	8.85E-09	1.79E-08	8.81E-09	7.89E-09	1.67E-08	4.68E-09	3.58E-09	8.26E-09
913	649954.68	4196828.66	6.30E-08	6.21E-08	1.25E-07	9.48E-09	9.31E-09	1.88E-08	9.27E-09	8.30E-09	1.76E-08	4.92E-09	3.76E-09	8.69E-09
914	649984.89	4196841.62	6.62E-08	6.51E-08	1.31E-07	9.95E-09	9.77E-09	1.97E-08	9.73E-09	8.71E-09	1.84E-08	5.17E-09	3.95E-09	9.12E-09
915	650015.09	4196854.59	6.93E-08	6.82E-08	1.37E-07	1.04E-08	1.02E-08	2.06E-08	1.02E-08	9.12E-09	1.93E-08	5.41E-09	4.13E-09	9.54E-09
916	650045.3	4196867.55	7.24E-08	7.13E-08	1.44E-07	1.09E-08	1.07E-08	2.16E-08	1.06E-08	9.53E-09	2.02E-08	5.65E-09	4.32E-09	9.97E-09
917	650075.5	4196880.52	7.55E-08	7.43E-08	1.50E-07	1.13E-08	1.11E-08	2.25E-08	1.11E-08	9.93E-09	2.10E-08	5.89E-09	4.50E-09	1.04E-08
918	650105.71	4196893.48	7.84E-08	7.72E-08	1.56E-07	1.18E-08	1.16E-08	2.34E-08	1.15E-08	1.03E-08	2.18E-08	6.12E-09	4.68E-09	1.08E-08
919	650135.91	4196906.45	8.12E-08	7.99E-08	1.61E-07	1.22E-08	1.20E-08	2.42E-08	1.19E-08	1.07E-08	2.26E-08	6.34E-09	4.84E-09	1.12E-08
920	650166.12	4196919.41	8.38E-08	8.25E-08	1.66E-07	1.26E-08	1.24E-08	2.50E-08	1.23E-08	1.10E-08	2.34E-08	6.55E-09	5.00E-09	1.15E-08
921	650196.32	4196932.38	8.62E-08	8.49E-08	1.71E-07	1.30E-08	1.27E-08	2.57E-08	1.27E-08	1.14E-08	2.40E-08	6.74E-09	5.15E-09	1.19E-08
922	650226.53	4196945.34	8.85E-08	8.71E-08	1.76E-07	1.33E-08	1.31E-08	2.64E-08	1.30E-08	1.16E-08	2.46E-08	6.91E-09	5.28E-09	1.22E-08
923	650256.73	4196958.31	9.05E-08	8.91E-08	1.80E-07	1.36E-08	1.34E-08	2.70E-08	1.33E-08	1.19E-08	2.52E-08	7.07E-09	5.40E-09	1.25E-08
924	650286.94	4196971.27	9.22E-08	9.08E-08	1.83E-07	1.39E-08	1.36E-08	2.75E-08	1.36E-08	1.21E-08	2.57E-08	7.20E-09	5.50E-09	1.27E-08
925	650317.14	4196984.24	9.36E-08	9.22E-08	1.86E-07	1.41E-08	1.38E-08	2.79E-08	1.38E-08	1.23E-08	2.61E-08	7.31E-09	5.59E-09	1.29E-08
926	650347.35	4196997.2	9.47E-08	9.33E-08	1.88E-07	1.42E-08	1.40E-08	2.82E-08	1.39E-08	1.25E-08	2.64E-08	7.40E-09	5.65E-09	1.31E-08
927	650377.55	4197010.17	9.58E-08	9.44E-08	1.90E-07	1.44E-08	1.42E-08	2.86E-08	1.41E-08	1.26E-08	2.67E-08	7.49E-09	5.72E-09	1.32E-08
928	650407.76	4197023.13	9.65E-08	9.50E-08	1.92E-07	1.45E-08	1.43E-08	2.88E-08	1.42E-08	1.27E-08	2.69E-08	7.54E-09	5.76E-09	1.33E-08
929	650437.96	4197036.1	9.69E-08	9.54E-08	1.92E-07	1.46E-08	1.43E-08	2.89E-08	1.43E-08	1.28E-08	2.70E-08	7.57E-09	5.79E-09	1.34E-08
930	650468.17	4197049.07	9.70E-08	9.55E-08	1.93E-07	1.46E-08	1.43E-08	2.89E-08	1.43E-08	1.28E-08	2.70E-08	7.58E-09	5.79E-09	1.34E-08
931	650498.37	4197062.03	9.69E-08	9.54E-08	1.92E-07	1.46E-08	1.43E-08	2.89E-08	1.42E-08	1.28E-08	2.70E-08	7.57E-09	5.78E-09	1.34E-08
932	650528.58	4197075	9.66E-08	9.51E-08	1.92E-07	1.45E-08	1.43E-08	2.88E-08	1.42E-08	1.27E-08	2.69E-08	7.55E-09	5.76E-09	1.33E-08
933	650558.78	4197087.96	9.61E-08	9.46E-08	1.91E-07	1.44E-08	1.42E-08	2.86E-08	1.41E-08	1.26E-08	2.68E-08	7.50E-09	5.73E-09	1.32E-08
934	650588.99	4197100.93	9.53E-08	9.39E-08	1.89E-07	1.43E-08	1.41E-08	2.84E-08	1.40E-08	1.25E-08	2.66E-08	7.45E-09	5.69E-09	1.31E-08
935	650619.19	4197113.89	9.44E-08	9.29E-08	1.87E-07	1.42E-08	1.39E-08	2.81E-08	1.39E-08	1.24E-08	2.63E-08	7.37E-09	5.63E-09	1.30E-08
936	650649.4	4197126.86	9.33E-08	9.19E-08	1.85E-07	1.40E-08	1.38E-08	2.78E-08	1.37E-08	1.23E-08	2.60E-08	7.29E-09	5.57E-09	1.29E-08
937	650679.6	4197139.82	9.20E-08	9.06E-08	1.83E-07	1.38E-08	1.36E-08	2.74E-08	1.35E-08	1.21E-08	2.56E-08	7.19E-09	5.49E-09	1.27E-08
938	650709.81	4197152.79	9.06E-08	8.92E-08	1.80E-07	1.36E-08	1.34E-08	2.70E-08	1.33E-08	1.19E-08	2.53E-08	7.08E-09	5.41E-09	1.25E-08
939	650740.01	4197165.75	8.91E-08	8.78E-08	1.77E-07	1.34E-08	1.32E-08	2.66E-08	1.31E-08	1.17E-08	2.48E-08	6.96E-09	5.32E-09	1.23E-08
940	650770.22	4197178.72	8.75E-08	8.62E-08	1.74E-07	1.32E-08	1.29E-08	2.61E-08	1.29E-08	1.15E-08	2.44E-08	6.84E-09	5.22E-09	1.21E-08
941	650791.02	4197200.61	8.70E-08	8.56E-08	1.73E-07	1.31E-08	1.28E-08	2.59E-08	1.28E-08	1.14E-08	2.42E-08	6.79E-09	5.19E-09	1.20E-08
942	650802.43	4197231.44	8.73E-08	8.60E-08	1.73E-07	1.31E-08	1.29E-08	2.60E-08	1.28E-08	1.15E-08	2.43E-08	6.82E-09	5.21E-09	1.20E-08
943	650813.84	4197262.27	8.75E-08	8.62E-08	1.74E-07	1.32E-08	1.29E-08	2.61E-08	1.29E-08	1.15E-08	2.44E-08	6.84E-09	5.22E-09	1.21E-08
944	650825.25	4197293.1	8.75E-08	8.61E-08	1.74E-07	1.32E-08	1.29E-08	2.61E-08	1.29E-08	1.15E-08	2.44E-08	6.83E-09	5.22E-09	1.21E-08
945	650836.65	4197323.92	8.72E-08	8.59E-08	1.73E-07	1.31E-08	1.29E-08	2.60E-08	1.28E-08	1.15E-08	2.43E-08	6.82E-09	5.21E-09	1.20E-08
946	650848.06	4197354.75	8.68E-08	8.54E-08	1.72E-07	1.30E-08	1.28E-08	2.59E-08	1.28E-08	1.14E-08	2.42E-08	6.78E-09	5.18E-09	1.20E-08
947	650859.47	4197385.58	8.61E-08	8.48E-08	1.71E-07	1.29E-08	1.27E-08	2.57E-08	1.27E-08	1.13E-08	2.40E-08	6.73E-09	5.14E-09	1.19E-08
948	650870.88	4197416.4	8.52E-08	8.39E-08	1.69E-07	1.28E-08	1.26E-08	2.54E-08	1.25E-08	1.12E-08	2.37E-08	6.65E-09	5.08E-09	1.17E-08
949	650882.28	4197447.23	8.41E-08	8.28E-08	1.67E-07	1.26E-08	1.24E-08	2.51E-08	1.24E-08	1.11E-08	2.34E-08	6.57E-09	5.02E-09	1.16E-08
950	650893.69	4197478.06	8.28E-08	8.15E-08	1.64E-07	1.24E-08	1.22E-08	2.47E-08	1.22E-08	1.09E-08	2.31E-08	6.46E-09	4.94E-09	1.14E-08
951	650905.1	4197508.89	8.12E-08	8.00E-08	1.61E-07	1.22E-08	1.20E-08	2.42E-08	1.19E-08	1.07E-08	2.26E-08	6.35E-09	4.85E-09	1.12E-08
952	650916.51	4197539.71	7.95E-08	7.83E-08	1.58E-07	1.20E-08	1.17E-08	2.37E-08	1.17E-08	1.05E-08	2.22E-08	6.21E-09	4.75E-09	1.10E-08
953	650927.91	4197570.54	7.77E-08	7.65E-08	1.54E-07	1.17E-08	1.15E-08	2.32E-08	1.14E-08	1.02E-08	2.16E-08	6.07E-09	4.64E-09	1.07E-08
954	650939.32	4197601.37	7.57E-08	7.45E-08	1.50E-07	1.14E-08	1.12E-08	2.26E-08	1.11E-08	9.97E-09	2.11E-08	5.91E-09	4.52E-09	1.04E-08
955	650950.73	4197632.19	7.36E-08	7.25E-08	1.46E-07	1.11E-08	1.09E-08	2.19E-08	1.08E-08	9.69E-09	2.05E-08	5.75E-09	4.39E-09	1.01E-08
956	650962.13	4197663.02	7.15E-08	7.04E-08	1.42E-07	1.07E-08	1.06E-08	2.13E-08	1.05E-08	9.41E-09	1.99E-08	5.58E-09	4.27E-09	9.85E-09
957	650973.54	4197693.85	6.93E-08	6.82E-08	1.37E-07	1.04E-08	1.02E-08	2.06E-08	1.02E-08	9.12E-09	1.93E-08	5.41E-09	4.13E-09	9.55E-09
958	650984.95	4197724.68	6.70E-08	6.60E-08	1.33E-07	1.01E-08	9.89E-09	2.00E-08	9.85E-09	8.82E-09	1.87E-08	5.24E-09	4.00E-09	9.23E-09
959	650996.36	4197755.5	6.47E-08	6.37E-08	1.28E-07	9.74E-09	9.56E-09	1.93E-08	9.52E-09	8.52E-09	1.80E-08	5.06E-09	3.86E-09	8.92E-09
960	651007.76	4197786.33	6.25E-08	6.15E-08	1.24E-07	9.40E-09	9.23E-09	1.86E-08	9.19E-09	8.22E-09	1.74E-08	4.88E-09	3.73E-09	8.61E-09
961	651019.17	4197817.16	6.03E-08	5.94E-08	1.20E-07	9.06E-09	8.90E-09	1.80E-08	8.86E-09	7.93E-09	1.68E-08	4.71E-09	3.60E-09	8.31E-09
962	651030.58	4197847.98	5.81E-08	5.72E-08	1.15E-07	8.74E-09	8.58E-09	1.73E-08	8.55E-09	7.65E-09	1.62E-08	4.54E-09	3.47E-09	8.01E-09
963	651041.99	4197878.81	5.60E-08	5.52E-08	1.11E-07	8.43E-09	8.27E-09	1.67E-08	8.24E-09	7.37E-09	1.56E-08	4.38E-09	3.34E-09	7.72E-09
964	651053.39	4197909.64	5.40E-08	5.32E-08	1.07E-07	8.12E-09	7.98E-09	1.61E-08	7.94E-09	7.11E-09	1.51E-08	4.22E-09	3.22E-09	7.44E-09
965	651064.8	4197940.47	5.21E-08	5.13E-08	1.03E-07	7.83E-09	7.69E-09	1.55E-08	7.65E-09	6.85E-09	1.45E-08	4.07E-09	3.11E-09	7.17E-09
966	651076.21	4197971.29	5.02E-08	4.94E-08	9.96E-08	7.55E-09	7.41E-09	1.50E-08	7.38E-09	6.60E-09	1.40E-08	3.92E-09	3.00E-09	6.92E-09
967	651087.62	4198002.12	4.84E-08	4.76E-08	9.60E-08	7.27E-09	7.14E-09	1.44E-08	7.11E-09	6.37E-09	1.35E-08	3.78E-09	2.89E-09	6.66E-09
968	651099.02	4198032.95	4.66E-08	4.59E-08	9.25E-08	7.01E-09	6.88E-09	1.39E-08	6.85E-09	6.13E-09	1.30E-08	3.64E-09	2.78E-09	6.42E-09
969	651110.43	4198063.77	4.49E-08	4.42E-08	8.91E-08	6.75E-09	6.63E-09	1.34E-08	6.60E-09	5.91E-09	1.25E-08	3.51E-09	2.68E-09	6.19E-09
970	651121.84	4198094.6	4.33E-08	4.26E-08	8.58E-08	6.51E-09	6.39E-09	1.29E-08	6.36E-09	5.69E-09	1.21E-08	3.38E-09	2.58E-09	5.96E-09
971	651133.25	4198125.43	4.16E-08	4.10E-08	8.26E-08	6.26E-09	6.15E-09	1.24E-08	6.12E-09	5.48E-09	1.16E-08	3.25E-09	2.49E-09	5.74E-09
972	651144.65	4198156.26	4.01E-08	3.95E-08	7.96E-08	6.03E-09	5.92E-09	1.19E-08	5.89E-09	5.28E-09	1.12E-08	3.13E-09	2.39E-09	5.52E-09
973	651156.06	4198187.08	3.86E-08	3.80E-08	7.66E-08	5.80E-09	5.70E-09	1.15E-08	5.67E-09	5.08E-09	1.08E-08	3.01E-09	2.30E-09	5.32E-09
974	651167.47	4198217.91	3.71E-08	3.66E-08	7.37E-08	5.58E-09	5.48E-09	1.11E-08	5.46E-09	4.89E-09	1.03E-08	2.90E-09	2.22E-09	5.12E-09
975	651178.88	4198248.74	3.57E-08	3.52E-08	7.09E-08	5.37E-09	5.27E-09	1.06E-08	5.25E-09	4.70E-09	9.95E-09	2.79E-09	2.13E-09	4.92E-09
976	651190.28	4198279.56	3.44E-08	3.38E-08	6.82E-08	5.17E-09	5.07E-09	1.02E-08	5.05E-09	4.52E-09	9.58E-09	2.68E-09	2.05E-09	4.74E-09
977	649681.31	4196718.45	3.94E-08	3.88E-08	7.82E-08	5.93E-09	5.82E-09	1.17E-08	5.80E-09	5.19E-09	1.10E-08	3.08E-09	2.35E-09	5.43E-09
978	649780.23	4198130.84	1.48E-06	1.45E-06	2.93E-06	2.22E-07	2.18E-07	4.40E-07	2.17E-07	1.94E-07	4.11E-07	1.15E-07	8.81E-08	2.03E-07
979	649931.29	4198215.35	3.70E-07	3.65E-07	7.35E-07	5.57E-08	5.47E-08	1.10E-07	5.45E-08	4.87E-08	1.03E-07	2.89E-08	2.21E-08	5.10E-08
980	649930.22	4198128.98	5.12E-07	5.05E-07	1.02E-06	7.71E-08	7.57E-08	1.53E-07	7.53E-08	6.74E-08	1.43E-07	4.00E-08	3.06E-08	7.06E-08
981	649980.22	4198128.36	4.00E-07	3.94E-07	7.94E-07	6.02E-08	5.91E-08	1.19E-07	5.89E-08	5.27E-08	1.12E-07	3.13E-08	2.39E-08	5.52E-08
982	650080.21	4198127.12	2.67E-07	2.63E-07	5.31E-07	4.02E-08	3.95E-08	7.97E-08	3.93E-08	3.52E-08	7.45E-08	2.09E-08	1.60E-08	3.68E-08
983	650180.47	4198147.48	1.86E-07	1.83E-07	3.68E-07	2.79E-08	2.74E-08	5.53E-08	2.73E-08	2.44E-08	5.17E-08	1.45E-08	1.11E-08	2.56E-08
984	650280.19	4198124.65	1.50E-07	1.47E-07	2.97E-07	2.25E-08	2.21E-08	4.46E-08	2.20E-08	1.97E-08	4.17E-08	1.17E-08	8.94E-09	2.06E-08

985	650380.45	4198145	1.15E-07	1.14E-07	2.29E-07	1.74E-08	1.70E-08	3.44E-08	1.70E-08	1.52E-08	3.22E-08	9.01E-09	6.89E-09	1.59E-08
986	650580.44	4198142.52	8.07E-08	7.95E-08	1.60E-07	1.21E-08	1.19E-08	2.41E-08	1.19E-08	1.06E-08	2.25E-08	6.30E-09	4.82E-09	1.11E-08
987	650780.69	4198161.64	5.93E-08	5.84E-08	1.18E-07	8.92E-09	8.75E-09	1.77E-08	8.72E-09	7.80E-09	1.65E-08	4.63E-09	3.54E-09	8.17E-09
988	650780.16	4198118.45	6.23E-08	6.13E-08	1.24E-07	9.37E-09	9.20E-09	1.86E-08	9.16E-09	8.20E-09	1.74E-08	4.87E-09	3.72E-09	8.58E-09
989	650980.94	4198180.75	4.61E-08	4.54E-08	9.14E-08	6.93E-09	6.80E-09	1.37E-08	6.78E-09	6.06E-09	1.28E-08	3.60E-09	2.75E-09	6.35E-09
990	650980.41	4198137.57	4.81E-08	4.74E-08	9.55E-08	7.24E-09	7.11E-09	1.43E-08	7.08E-09	6.33E-09	1.34E-08	3.76E-09	2.87E-09	6.63E-09
991	651181.19	4198199.87	3.73E-08	3.67E-08	7.40E-08	5.61E-09	5.51E-09	1.11E-08	5.48E-09	4.91E-09	1.04E-08	2.91E-09	2.23E-09	5.14E-09
992	651180.66	4198156.68	3.88E-08	3.82E-08	7.69E-08	5.83E-09	5.72E-09	1.16E-08	5.70E-09	5.10E-09	1.08E-08	3.03E-09	2.31E-09	5.34E-09
993	651180.12	4198113.5	4.03E-08	3.96E-08	7.99E-08	6.05E-09	5.94E-09	1.20E-08	5.92E-09	5.30E-09	1.12E-08	3.14E-09	2.40E-09	5.55E-09
994	649747.35	4198111.24	1.93E-06	1.90E-06	3.83E-06	2.90E-07	2.85E-07	5.75E-07	2.84E-07	2.54E-07	5.38E-07	1.51E-07	1.15E-07	2.66E-07
995	649744.82	4198059.93	1.60E-06	1.58E-06	3.18E-06	2.41E-07	2.36E-07	4.77E-07	2.35E-07	2.11E-07	4.46E-07	1.25E-07	9.55E-08	2.21E-07
996	649752.48	4198011.54	1.30E-06	1.28E-06	2.58E-06	1.95E-07	1.92E-07	3.87E-07	1.91E-07	1.71E-07	3.62E-07	1.02E-07	7.76E-08	1.79E-07
997	649781.21	4198025.9	1.20E-06	1.19E-06	2.39E-06	1.81E-07	1.78E-07	3.59E-07	1.77E-07	1.59E-07	3.36E-07	9.41E-08	7.19E-08	1.66E-07
998	649818.4	4198100.36	1.09E-06	1.08E-06	2.17E-06	1.64E-07	1.61E-07	3.26E-07	1.61E-07	1.44E-07	3.05E-07	8.54E-08	6.53E-08	1.51E-07
999	649809.4	4197987.78	9.74E-07	9.59E-07	1.93E-06	1.46E-07	1.44E-07	2.90E-07	1.43E-07	1.28E-07	2.71E-07	7.61E-08	5.81E-08	1.34E-07
1000	649853.93	4198063.25	8.75E-07	8.62E-07	1.74E-06	1.32E-07	1.29E-07	2.61E-07	1.29E-07	1.15E-07	2.44E-07	6.84E-08	5.22E-08	1.21E-07
1001	649714.28	4197887.99	1.01E-06	9.96E-07	2.01E-06	1.52E-07	1.49E-07	3.01E-07	1.49E-07	1.33E-07	2.82E-07	7.90E-08	6.04E-08	1.39E-07
1002	649742.44	4197902.08	9.69E-07	9.54E-07	1.92E-06	1.46E-07	1.43E-07	2.89E-07	1.42E-07	1.28E-07	2.70E-07	7.57E-08	5.78E-08	1.34E-07
1003	649770.61	4197916.16	9.22E-07	9.08E-07	1.83E-06	1.39E-07	1.36E-07	2.75E-07	1.36E-07	1.21E-07	2.57E-07	7.21E-08	5.51E-08	1.27E-07
1004	649798.77	4197930.24	8.76E-07	8.62E-07	1.74E-06	1.32E-07	1.29E-07	2.61E-07	1.29E-07	1.15E-07	2.44E-07	6.84E-08	5.23E-08	1.21E-07
1005	649826.93	4197944.32	8.33E-07	8.20E-07	1.65E-06	1.25E-07	1.23E-07	2.48E-07	1.23E-07	1.10E-07	2.32E-07	6.51E-08	4.97E-08	1.15E-07
1006	649855.1	4197958.41	7.80E-07	7.68E-07	1.55E-06	1.17E-07	1.15E-07	2.33E-07	1.15E-07	1.03E-07	2.17E-07	6.10E-08	4.66E-08	1.08E-07
1007	649891.55	4198031.4	7.18E-07	7.07E-07	1.43E-06	1.08E-07	1.06E-07	2.14E-07	1.06E-07	9.45E-08	2.00E-07	5.61E-08	4.29E-08	9.90E-08
1008	649907.02	4198070.44	6.51E-07	6.41E-07	1.29E-06	9.79E-08	9.61E-08	1.94E-07	9.57E-08	8.57E-08	1.81E-07	5.09E-08	3.89E-08	8.97E-08
1009	649918.62	4198099.71	5.85E-07	5.76E-07	1.16E-06	8.80E-08	8.64E-08	1.74E-07	8.60E-08	7.70E-08	1.63E-07	4.57E-08	3.49E-08	8.06E-08
1010	649843.88	4197900.58	7.22E-07	7.11E-07	1.43E-06	1.09E-07	1.07E-07	2.15E-07	1.06E-07	9.51E-08	2.01E-07	5.64E-08	4.31E-08	9.95E-08
1011	649872.61	4197914.94	6.87E-07	6.76E-07	1.36E-06	1.03E-07	1.01E-07	2.05E-07	1.01E-07	9.04E-08	1.91E-07	5.37E-08	4.10E-08	9.46E-08
1012	649905.28	4197939.26	6.40E-07	6.30E-07	1.27E-06	9.63E-08	9.45E-08	1.91E-07	9.41E-08	8.43E-08	1.78E-07	5.00E-08	3.82E-08	8.82E-08
1013	649917.11	4197969.12	6.29E-07	6.19E-07	1.25E-06	9.46E-08	9.28E-08	1.87E-07	9.25E-08	8.28E-08	1.75E-07	4.91E-08	3.75E-08	8.66E-08
1014	649928.94	4197998.97	6.06E-07	5.96E-07	1.20E-06	9.11E-08	8.94E-08	1.80E-07	8.90E-08	7.97E-08	1.69E-07	4.73E-08	3.61E-08	8.35E-08
1015	649927.74	4197838.07	5.18E-07	5.10E-07	1.03E-06	7.78E-08	7.64E-08	1.54E-07	7.61E-08	6.81E-08	1.44E-07	4.04E-08	3.09E-08	7.13E-08
1016	649956.12	4197852.25	4.89E-07	4.82E-07	9.71E-07	7.36E-08	7.22E-08	1.46E-07	7.19E-08	6.44E-08	1.36E-07	3.82E-08	2.92E-08	6.74E-08
1017	649978.93	4197871.54	4.72E-07	4.65E-07	9.37E-07	7.10E-08	6.97E-08	1.41E-07	6.94E-08	6.22E-08	1.32E-07	3.69E-08	2.82E-08	6.51E-08
1018	649990.61	4197901.03	4.69E-07	4.61E-07	9.30E-07	7.05E-08	6.92E-08	1.40E-07	6.89E-08	6.17E-08	1.31E-07	3.66E-08	2.80E-08	6.46E-08
1019	650002.3	4197930.52	4.56E-07	4.49E-07	9.05E-07	6.86E-08	6.73E-08	1.36E-07	6.70E-08	6.00E-08	1.27E-07	3.56E-08	2.72E-08	6.28E-08
1020	650017.88	4197969.84	4.30E-07	4.23E-07	8.53E-07	6.46E-08	6.34E-08	1.28E-07	6.32E-08	5.66E-08	1.20E-07	3.36E-08	2.56E-08	5.92E-08
1021	650029.57	4197999.33	4.04E-07	3.98E-07	8.02E-07	6.08E-08	5.97E-08	1.20E-07	5.94E-08	5.32E-08	1.13E-07	3.16E-08	2.41E-08	5.57E-08
1022	650041.25	4198028.82	3.75E-07	3.69E-07	7.43E-07	5.63E-08	5.53E-08	1.12E-07	5.51E-08	4.93E-08	1.04E-07	2.93E-08	2.23E-08	5.16E-08
1023	650052.94	4198058.31	3.43E-07	3.37E-07	6.80E-07	5.15E-08	5.06E-08	1.02E-07	5.04E-08	4.51E-08	9.55E-08	2.68E-08	2.04E-08	4.72E-08
1024	650064.63	4198087.8	3.10E-07	3.05E-07	6.15E-07	4.66E-08	4.58E-08	9.23E-08	4.56E-08	4.08E-08	8.63E-08	2.42E-08	1.85E-08	4.27E-08
1025	649961.68	4197750.59	4.28E-07	4.22E-07	8.50E-07	6.44E-08	6.32E-08	1.28E-07	6.30E-08	5.64E-08	1.19E-07	3.35E-08	2.56E-08	5.90E-08
1026	649990.69	4197765.1	4.08E-07	4.01E-07	8.09E-07	6.13E-08	6.02E-08	1.21E-07	5.99E-08	5.36E-08	1.14E-07	3.18E-08	2.43E-08	5.62E-08
1027	650019.71	4197779.61	3.88E-07	3.82E-07	7.69E-07	5.83E-08	5.72E-08	1.16E-07	5.70E-08	5.10E-08	1.08E-07	3.03E-08	2.31E-08	5.34E-08
1028	650052.71	4197804.17	3.68E-07	3.62E-07	7.30E-07	5.53E-08	5.43E-08	1.10E-07	5.41E-08	4.84E-08	1.02E-07	2.87E-08	2.19E-08	5.07E-08
1029	650064.66	4197834.33	3.66E-07	3.60E-07	7.26E-07	5.50E-08	5.40E-08	1.09E-07	5.38E-08	4.81E-08	1.02E-07	2.86E-08	2.18E-08	5.04E-08
1030	650076.62	4197864.49	3.58E-07	3.53E-07	7.11E-07	5.39E-08	5.29E-08	1.07E-07	5.27E-08	4.72E-08	9.98E-08	2.80E-08	2.14E-08	4.94E-08
1031	650088.57	4197894.66	3.46E-07	3.41E-07	6.87E-07	5.21E-08	5.11E-08	1.03E-07	5.09E-08	4.56E-08	9.65E-08	2.71E-08	2.07E-08	4.77E-08
1032	650100.52	4197924.82	3.31E-07	3.26E-07	6.58E-07	4.98E-08	4.89E-08	9.88E-08	4.87E-08	4.36E-08	9.23E-08	2.59E-08	1.98E-08	4.57E-08
1033	650112.47	4197954.98	3.14E-07	3.09E-07	6.23E-07	4.72E-08	4.63E-08	9.35E-08	4.61E-08	4.13E-08	8.74E-08	2.45E-08	1.87E-08	4.32E-08
1034	650124.42	4197985.14	2.94E-07	2.89E-07	5.83E-07	4.42E-08	4.34E-08	8.75E-08	4.32E-08	3.87E-08	8.18E-08	2.29E-08	1.75E-08	4.05E-08
1035	650136.38	4198015.3	2.72E-07	2.68E-07	5.40E-07	4.09E-08	4.02E-08	8.12E-08	4.00E-08	3.58E-08	7.59E-08	2.13E-08	1.63E-08	3.75E-08
1036	650148.33	4198045.46	2.50E-07	2.46E-07	4.97E-07	3.76E-08	3.69E-08	7.46E-08	3.68E-08	3.29E-08	6.97E-08	1.95E-08	1.49E-08	3.45E-08
1037	650160.28	4198075.62	2.28E-07	2.25E-07	4.53E-07	3.44E-08	3.37E-08	6.81E-08	3.36E-08	3.01E-08	6.37E-08	1.78E-08	1.36E-08	3.15E-08
1038	650172.23	4198105.78	2.08E-07	2.05E-07	4.12E-07	3.12E-08	3.07E-08	6.19E-08	3.05E-08	2.73E-08	5.79E-08	1.62E-08	1.24E-08	2.86E-08
1039	650074.55	4197702.59	3.20E-07	3.15E-07	6.35E-07	4.81E-08	4.73E-08	9.54E-08	4.71E-08	4.21E-08	8.92E-08	2.50E-08	1.91E-08	4.41E-08
1040	650103.27	4197716.95	3.05E-07	3.01E-07	6.06E-07	4.59E-08	4.51E-08	9.10E-08	4.49E-08	4.02E-08	8.51E-08	2.39E-08	1.82E-08	4.21E-08
1041	650126.37	4197736.48	2.95E-07	2.90E-07	5.85E-07	4.43E-08	4.35E-08	8.78E-08	4.33E-08	3.88E-08	8.21E-08	2.30E-08	1.76E-08	4.06E-08
1042	650138.2	4197766.34	2.93E-07	2.88E-07	5.80E-07	4.40E-08	4.32E-08	8.72E-08	4.30E-08	3.85E-08	8.15E-08	2.28E-08	1.75E-08	4.03E-08
1043	650150.03	4197796.2	2.89E-07	2.85E-07	5.74E-07	4.35E-08	4.27E-08	8.62E-08	4.25E-08	3.81E-08	8.06E-08	2.26E-08	1.73E-08	3.99E-08
1044	650161.87	4197826.06	2.83E-07	2.79E-07	5.62E-07	4.26E-08	4.18E-08	8.45E-08	4.17E-08	3.73E-08	7.90E-08	2.21E-08	1.69E-08	3.91E-08
1045	650173.7	4197855.92	2.74E-07	2.70E-07	5.44E-07	4.13E-08	4.05E-08	8.18E-08	4.03E-08	3.61E-08	7.64E-08	2.14E-08	1.64E-08	3.78E-08
1046	650185.53	4197885.78	2.63E-07	2.59E-07	5.22E-07	3.96E-08	3.89E-08	7.84E-08	3.87E-08	3.46E-08	7.33E-08	2.06E-08	1.57E-08	3.63E-08
1047	650197.37	4197915.63	2.51E-07	2.47E-07	4.97E-07	3.77E-08	3.70E-08	7.47E-08	3.68E-08	3.30E-08	6.98E-08	1.96E-08	1.49E-08	3.45E-08
1048	650209.2	4197945.49	2.37E-07	2.33E-07	4.70E-07	3.56E-08	3.49E-08	7.05E-08	3.48E-08	3.11E-08	6.59E-08	1.85E-08	1.41E-08	3.26E-08
1049	650221.03	4197975.35	2.22E-07	2.18E-07	4.40E-07	3.33E-08	3.27E-08	6.61E-08	3.26E-08	2.92E-08	6.18E-08	1.73E-08	1.32E-08	3.06E-08
1050	650232.86	4198005.21	2.06E-07	2.03E-07	4.09E-07	3.10E-08	3.04E-08	6.14E-08	3.03E-08	2.71E-08	5.74E-08	1.61E-08	1.23E-08	2.84E-08
1051	650244.7	4198035.07	1.91E-07	1.88E-07	3.80E-07	2.88E-08	2.83E-08	5.70E-08	2.81E-08	2.52E-08	5.33E-08	1.49E-08	1.14E-08	2.64E-08
1052	650256.53	4198064.93	1.77E-07	1.74E-07	3.51E-07	2.66E-08	2.61E-08	5.27E-08	2.60E-08	2.33E-08	4.93E-08	1.38E-08	1.06E-08	2.44E-08
1053	650268.36	4198094.79	1.63E-07	1.60E-07	3.23E-07	2.45E-08	2.40E-08	4.85E-08	2.39E-08	2.14E-08	4.54E-08	1.27E-08	9.72E-09	2.24E-08
1054	649758.97	4197440.35	2.61E-07	2.57E-07	5.17E-07	3.92E-08	3.85E-08	7.77E-08	3.83E-08	3.43E-08	7.26E-08	2.04E-08	1.56E-08	3.59E-08
1055	649788.12	4197454.92	2.72E-07	2.67E-07	5.39E-07	4.08E-08	4.01E-08	8.10E-08	3.99E-08	3.58E-08	7.57E-08	2.12E-08	1.62E-08	3.74E-08
1056	649817.26	4197469.49	2.81E-07	2.77E-07	5.58E-07	4.22E-08	4.15E-08	8.37E-08	4.13E-08	3.70E-08	7.83E-08	2.19E-08	1.68E-08	3.87E-08
1057	649846.4	4197484.07	2.89E-07	2.84E-07	5.73E-07	4.34E-08	4.26E-08	8.60E-08	4.24E-08	3.80E-08	8.04E-08	2.25E-08	1.72E-08	3.98E-08
1058	649875.55	4197498.64	2.94E-07	2.90E-07	5.84E-07	4.42E-08	4.34E-08	8.77E-08	4.33E-08	3.87E-08	8.20E-08	2.30E-08	1.76E-08	4.05E-08
1059	649904.69	4197513.21	2.98E-07	2.93E-07	5.91E-07	4.48E-08	4.40E-08	8.88E-08	4.38E-08	3.92E-08	8.30E-08	2.33E-08	1.78E-08	4.11E-08
1060	649933.83	4197527.78	3.00E-07	2.95E-07	5.95E-07	4.51E-08	4.43E-08	8.94E-08	4.41E-08	3.95E-08	8.36E-08	2.34E-08	1.79E-08	4.13E-08

1061	649962.98	4197542.36	3.01E-07	2.96E-07	5.97E-07	4.52E-08	4.44E-08	8.96E-08	4.42E-08	3.96E-08	8.38E-08	2.35E-08	1.79E-08	4.14E-08
1062	649992.12	4197556.93	2.99E-07	2.94E-07	5.93E-07	4.49E-08	4.41E-08	8.91E-08	4.39E-08	3.93E-08	8.33E-08	2.33E-08	1.78E-08	4.12E-08
1063	650021.26	4197571.5	2.96E-07	2.91E-07	5.86E-07	4.44E-08	4.36E-08	8.81E-08	4.34E-08	3.89E-08	8.23E-08	2.31E-08	1.76E-08	4.07E-08
1064	650050.41	4197586.07	2.91E-07	2.86E-07	5.77E-07	4.37E-08	4.29E-08	8.66E-08	4.27E-08	3.82E-08	8.10E-08	2.27E-08	1.73E-08	4.00E-08
1065	650079.55	4197600.65	2.84E-07	2.80E-07	5.64E-07	4.27E-08	4.19E-08	8.46E-08	4.18E-08	3.74E-08	7.91E-08	2.22E-08	1.70E-08	3.91E-08
1066	650108.69	4197615.22	2.76E-07	2.72E-07	5.48E-07	4.15E-08	4.08E-08	8.23E-08	4.06E-08	3.63E-08	7.69E-08	2.16E-08	1.65E-08	3.80E-08
1067	650137.84	4197629.79	2.66E-07	2.62E-07	5.27E-07	4.00E-08	3.92E-08	7.92E-08	3.91E-08	3.50E-08	7.41E-08	2.08E-08	1.59E-08	3.66E-08
1068	650166.98	4197644.36	2.55E-07	2.51E-07	5.06E-07	3.84E-08	3.77E-08	7.60E-08	3.75E-08	3.36E-08	7.11E-08	1.99E-08	1.52E-08	3.52E-08
1069	650200.12	4197669.03	2.44E-07	2.41E-07	4.85E-07	3.67E-08	3.61E-08	7.28E-08	3.59E-08	3.22E-08	6.81E-08	1.91E-08	1.46E-08	3.37E-08
1070	650212.13	4197699.33	2.43E-07	2.39E-07	4.82E-07	3.65E-08	3.59E-08	7.24E-08	3.57E-08	3.20E-08	6.77E-08	1.90E-08	1.45E-08	3.35E-08
1071	650224.13	4197729.62	2.39E-07	2.36E-07	4.75E-07	3.60E-08	3.54E-08	7.14E-08	3.52E-08	3.15E-08	6.67E-08	1.87E-08	1.43E-08	3.30E-08
1072	650236.14	4197759.91	2.35E-07	2.31E-07	4.66E-07	3.53E-08	3.47E-08	7.00E-08	3.45E-08	3.09E-08	6.54E-08	1.83E-08	1.40E-08	3.24E-08
1073	650248.14	4197790.2	2.29E-07	2.25E-07	4.54E-07	3.44E-08	3.38E-08	6.82E-08	3.37E-08	3.01E-08	6.38E-08	1.79E-08	1.37E-08	3.16E-08
1074	650260.14	4197820.49	2.23E-07	2.19E-07	4.42E-07	3.35E-08	3.29E-08	6.63E-08	3.27E-08	2.93E-08	6.20E-08	1.74E-08	1.33E-08	3.07E-08
1075	650272.15	4197850.78	2.14E-07	2.11E-07	4.25E-07	3.22E-08	3.16E-08	6.38E-08	3.15E-08	2.82E-08	5.97E-08	1.67E-08	1.28E-08	2.95E-08
1076	650284.15	4197881.08	2.04E-07	2.01E-07	4.06E-07	3.07E-08	3.02E-08	6.09E-08	3.00E-08	2.69E-08	5.69E-08	1.60E-08	1.22E-08	2.82E-08
1077	650296.16	4197911.37	1.94E-07	1.91E-07	3.85E-07	2.91E-08	2.86E-08	5.78E-08	2.85E-08	2.55E-08	5.40E-08	1.51E-08	1.16E-08	2.67E-08
1078	650308.16	4197941.66	1.83E-07	1.80E-07	3.63E-07	2.75E-08	2.70E-08	5.45E-08	2.69E-08	2.41E-08	5.09E-08	1.43E-08	1.09E-08	2.52E-08
1079	650320.17	4197971.95	1.72E-07	1.69E-07	3.41E-07	2.58E-08	2.53E-08	5.11E-08	2.52E-08	2.26E-08	4.78E-08	1.34E-08	1.02E-08	2.36E-08
1080	650332.17	4198002.24	1.60E-07	1.58E-07	3.18E-07	2.41E-08	2.37E-08	4.78E-08	2.36E-08	2.11E-08	4.47E-08	1.25E-08	9.57E-09	2.21E-08
1081	650344.17	4198032.53	1.49E-07	1.47E-07	2.97E-07	2.25E-08	2.21E-08	4.45E-08	2.20E-08	1.97E-08	4.16E-08	1.17E-08	8.92E-09	2.06E-08
1082	650356.18	4198062.83	1.39E-07	1.37E-07	2.76E-07	2.09E-08	2.05E-08	4.14E-08	2.04E-08	1.83E-08	3.87E-08	1.09E-08	8.29E-09	1.91E-08
1083	650368.18	4198093.12	1.29E-07	1.27E-07	2.56E-07	1.94E-08	1.91E-08	3.85E-08	1.90E-08	1.70E-08	3.60E-08	1.01E-08	7.70E-09	1.78E-08
1084	649778.72	4197241.33	1.45E-07	1.43E-07	2.88E-07	2.19E-08	2.15E-08	4.33E-08	2.14E-08	1.91E-08	4.05E-08	1.14E-08	8.68E-09	2.00E-08
1085	649807.93	4197255.94	1.54E-07	1.52E-07	3.06E-07	2.32E-08	2.27E-08	4.59E-08	2.26E-08	2.03E-08	4.29E-08	1.20E-08	9.19E-09	2.12E-08
1086	649837.15	4197270.55	1.62E-07	1.60E-07	3.22E-07	2.44E-08	2.40E-08	4.84E-08	2.39E-08	2.14E-08	4.52E-08	1.27E-08	9.69E-09	2.24E-08
1087	649866.36	4197285.16	1.70E-07	1.68E-07	3.38E-07	2.56E-08	2.51E-08	5.08E-08	2.50E-08	2.24E-08	4.75E-08	1.33E-08	1.02E-08	2.35E-08
1088	649895.57	4197299.77	1.77E-07	1.75E-07	3.52E-07	2.67E-08	2.62E-08	5.29E-08	2.61E-08	2.34E-08	4.94E-08	1.39E-08	1.06E-08	2.44E-08
1089	649924.79	4197314.37	1.84E-07	1.81E-07	3.65E-07	2.76E-08	2.71E-08	5.48E-08	2.70E-08	2.42E-08	5.12E-08	1.44E-08	1.10E-08	2.53E-08
1090	649954	4197328.98	1.89E-07	1.86E-07	3.76E-07	2.85E-08	2.80E-08	5.64E-08	2.78E-08	2.49E-08	5.28E-08	1.48E-08	1.13E-08	2.61E-08
1091	649983.21	4197343.59	1.94E-07	1.91E-07	3.85E-07	2.92E-08	2.86E-08	5.78E-08	2.85E-08	2.55E-08	5.40E-08	1.52E-08	1.16E-08	2.67E-08
1092	650012.43	4197358.2	1.98E-07	1.94E-07	3.92E-07	2.97E-08	2.92E-08	5.89E-08	2.90E-08	2.60E-08	5.50E-08	1.54E-08	1.18E-08	2.72E-08
1093	650041.64	4197372.8	2.00E-07	1.97E-07	3.97E-07	3.01E-08	2.96E-08	5.97E-08	2.94E-08	2.63E-08	5.58E-08	1.56E-08	1.19E-08	2.76E-08
1094	650070.86	4197387.41	2.02E-07	1.99E-07	4.01E-07	3.04E-08	2.98E-08	6.02E-08	2.97E-08	2.66E-08	5.63E-08	1.58E-08	1.21E-08	2.78E-08
1095	650100.07	4197402.02	2.03E-07	2.00E-07	4.02E-07	3.05E-08	2.99E-08	6.04E-08	2.98E-08	2.67E-08	5.65E-08	1.58E-08	1.21E-08	2.79E-08
1096	650129.28	4197416.63	2.03E-07	1.99E-07	4.02E-07	3.05E-08	2.99E-08	6.04E-08	2.98E-08	2.67E-08	5.64E-08	1.58E-08	1.21E-08	2.79E-08
1097	650158.5	4197431.24	2.01E-07	1.98E-07	4.00E-07	3.03E-08	2.97E-08	6.00E-08	2.96E-08	2.65E-08	5.61E-08	1.57E-08	1.20E-08	2.77E-08
1098	650187.71	4197445.84	1.99E-07	1.96E-07	3.95E-07	3.00E-08	2.94E-08	5.94E-08	2.93E-08	2.62E-08	5.55E-08	1.56E-08	1.19E-08	2.74E-08
1099	650216.92	4197460.45	1.96E-07	1.93E-07	3.89E-07	2.95E-08	2.90E-08	5.85E-08	2.89E-08	2.58E-08	5.47E-08	1.53E-08	1.17E-08	2.70E-08
1100	650246.14	4197475.06	1.93E-07	1.90E-07	3.82E-07	2.89E-08	2.84E-08	5.74E-08	2.83E-08	2.53E-08	5.36E-08	1.50E-08	1.15E-08	2.65E-08
1101	650275.35	4197489.67	1.88E-07	1.85E-07	3.73E-07	2.83E-08	2.78E-08	5.60E-08	2.76E-08	2.47E-08	5.24E-08	1.47E-08	1.12E-08	2.59E-08
1102	650304.57	4197504.28	1.83E-07	1.80E-07	3.63E-07	2.75E-08	2.70E-08	5.45E-08	2.69E-08	2.41E-08	5.10E-08	1.43E-08	1.09E-08	2.52E-08
1103	650333.78	4197518.88	1.77E-07	1.75E-07	3.52E-07	2.67E-08	2.62E-08	5.29E-08	2.61E-08	2.34E-08	4.94E-08	1.39E-08	1.06E-08	2.45E-08
1104	650351.54	4197544	1.76E-07	1.73E-07	3.49E-07	2.64E-08	2.59E-08	5.24E-08	2.58E-08	2.31E-08	4.90E-08	1.37E-08	1.05E-08	2.42E-08
1105	650363.57	4197574.36	1.75E-07	1.73E-07	3.48E-07	2.64E-08	2.59E-08	5.23E-08	2.58E-08	2.31E-08	4.89E-08	1.37E-08	1.05E-08	2.42E-08
1106	650379.62	4197614.85	1.73E-07	1.71E-07	3.44E-07	2.61E-08	2.56E-08	5.17E-08	2.55E-08	2.28E-08	4.83E-08	1.35E-08	1.04E-08	2.39E-08
1107	650391.65	4197645.21	1.71E-07	1.68E-07	3.39E-07	2.57E-08	2.53E-08	5.10E-08	2.51E-08	2.25E-08	4.77E-08	1.34E-08	1.02E-08	2.36E-08
1108	650403.68	4197675.58	1.68E-07	1.65E-07	3.33E-07	2.52E-08	2.48E-08	5.00E-08	2.47E-08	2.21E-08	4.68E-08	1.31E-08	1.00E-08	2.31E-08
1109	650415.72	4197705.94	1.64E-07	1.61E-07	3.25E-07	2.46E-08	2.42E-08	4.88E-08	2.41E-08	2.16E-08	4.57E-08	1.28E-08	9.78E-09	2.26E-08
1110	650427.75	4197736.31	1.59E-07	1.57E-07	3.16E-07	2.39E-08	2.35E-08	4.74E-08	2.34E-08	2.10E-08	4.44E-08	1.24E-08	9.50E-09	2.19E-08
1111	650439.78	4197766.67	1.54E-07	1.52E-07	3.06E-07	2.32E-08	2.27E-08	4.59E-08	2.26E-08	2.03E-08	4.29E-08	1.20E-08	9.19E-09	2.12E-08
1112	650451.82	4197797.04	1.48E-07	1.46E-07	2.94E-07	2.23E-08	2.19E-08	4.42E-08	2.18E-08	1.95E-08	4.13E-08	1.16E-08	8.84E-09	2.04E-08
1113	650463.85	4197827.4	1.42E-07	1.40E-07	2.82E-07	2.14E-08	2.10E-08	4.23E-08	2.09E-08	1.87E-08	3.96E-08	1.11E-08	8.48E-09	1.96E-08
1114	650475.88	4197857.77	1.36E-07	1.34E-07	2.69E-07	2.04E-08	2.00E-08	4.04E-08	1.99E-08	1.79E-08	3.78E-08	1.06E-08	8.09E-09	1.87E-08
1115	650487.92	4197888.13	1.29E-07	1.27E-07	2.56E-07	1.94E-08	1.91E-08	3.85E-08	1.90E-08	1.70E-08	3.60E-08	1.01E-08	7.70E-09	1.78E-08
1116	650499.95	4197918.5	1.22E-07	1.21E-07	2.43E-07	1.84E-08	1.81E-08	3.65E-08	1.80E-08	1.61E-08	3.41E-08	9.56E-09	7.31E-09	1.69E-08
1117	650511.98	4197948.86	1.16E-07	1.14E-07	2.30E-07	1.74E-08	1.71E-08	3.45E-08	1.70E-08	1.52E-08	3.23E-08	9.05E-09	6.91E-09	1.60E-08
1118	650524.02	4197979.23	1.09E-07	1.08E-07	2.17E-07	1.65E-08	1.62E-08	3.26E-08	1.61E-08	1.44E-08	3.05E-08	8.55E-09	6.53E-09	1.51E-08
1119	650536.05	4198009.59	1.03E-07	1.02E-07	2.05E-07	1.55E-08	1.52E-08	3.08E-08	1.52E-08	1.36E-08	2.88E-08	8.07E-09	6.16E-09	1.42E-08
1120	650548.08	4198039.96	9.73E-08	9.58E-08	1.93E-07	1.46E-08	1.44E-08	2.90E-08	1.43E-08	1.28E-08	2.71E-08	7.60E-09	5.81E-09	1.34E-08
1121	650560.12	4198070.32	9.18E-08	9.03E-08	1.82E-07	1.38E-08	1.35E-08	2.73E-08	1.35E-08	1.21E-08	2.56E-08	7.17E-09	5.48E-09	1.26E-08
1122	650572.15	4198100.69	8.65E-08	8.51E-08	1.72E-07	1.30E-08	1.28E-08	2.58E-08	1.27E-08	1.14E-08	2.41E-08	6.75E-09	5.16E-09	1.19E-08
1123	649798.45	4197042.32	8.77E-08	8.64E-08	1.74E-07	1.32E-08	1.30E-08	2.61E-08	1.29E-08	1.15E-08	2.44E-08	6.85E-09	5.24E-09	1.21E-08
1124	649827.71	4197056.95	9.33E-08	9.19E-08	1.85E-07	1.40E-08	1.38E-08	2.78E-08	1.37E-08	1.23E-08	2.60E-08	7.29E-09	5.57E-09	1.29E-08
1125	649856.97	4197071.58	9.90E-08	9.74E-08	1.96E-07	1.49E-08	1.46E-08	2.95E-08	1.46E-08	1.30E-08	2.76E-08	7.73E-09	5.91E-09	1.36E-08
1126	649886.23	4197086.21	1.05E-07	1.03E-07	2.08E-07	1.57E-08	1.54E-08	3.12E-08	1.54E-08	1.38E-08	2.91E-08	8.17E-09	6.24E-09	1.44E-08
1127	649915.49	4197100.84	1.10E-07	1.08E-07	2.19E-07	1.66E-08	1.63E-08	3.28E-08	1.62E-08	1.45E-08	3.07E-08	8.60E-09	6.57E-09	1.52E-08
1128	649944.75	4197115.47	1.15E-07	1.14E-07	2.29E-07	1.74E-08	1.70E-08	3.44E-08	1.70E-08	1.52E-08	3.22E-08	9.02E-09	6.89E-09	1.59E-08
1129	649974.01	4197130.1	1.21E-07	1.19E-07	2.39E-07	1.81E-08	1.78E-08	3.59E-08	1.77E-08	1.59E-08	3.36E-08	9.42E-09	7.20E-09	1.66E-08
1130	650003.26	4197144.73	1.25E-07	1.23E-07	2.49E-07	1.88E-08	1.85E-08	3.74E-08	1.84E-08	1.65E-08	3.49E-08	9.79E-09	7.48E-09	1.73E-08
1131	650032.52	4197159.36	1.30E-07	1.28E-07	2.58E-07	1.95E-08	1.92E-08	3.87E-08	1.91E-08	1.71E-08	3.62E-08	1.01E-08	7.75E-09	1.79E-08
1132	650061.78	4197173.99	1.34E-07	1.32E-07	2.65E-07	2.01E-08	1.98E-08	3.99E-08	1.97E-08	1.76E-08	3.73E-08	1.05E-08	7.98E-09	1.84E-08
1133	650091.04	4197188.62	1.37E-07	1.35E-07	2.72E-07	2.06E-08	2.03E-08	4.09E-08	2.02E-08	1.81E-08	3.82E-08	1.07E-08	8.19E-09	1.89E-08
1134	650120.3	4197203.25	1.40E-07	1.38E-07	2.78E-07	2.11E-08	2.07E-08	4.18E-08	2.06E-08	1.85E-08	3.91E-08	1.10E-08	8.37E-09	1.93E-08
1135	650149.56	4197217.88	1.43E-07	1.40E-07	2.83E-07	2.14E-08	2.11E-08	4.25E-08	2.10E-08	1.88E-08	3.97E-08	1.11E-08	8.51E-09	1.97E-08
1136	650178.82	4197232.51	1.44E-07	1.42E-07	2.87E-07	2.17E-08	2.13E-08	4.31E-08	2.12E-08	1.90E-08	4.03E-08	1.13E-08	8.62E-09	1.99E-08

1137	650208.08	4197247.14	1.46E-07	1.43E-07	2.89E-07	2.19E-08	2.15E-08	4.34E-08	2.14E-08	1.92E-08	4.06E-08	1.14E-08	8.70E-09	2.01E-08
1138	650237.34	4197261.77	1.46E-07	1.44E-07	2.90E-07	2.20E-08	2.16E-08	4.36E-08	2.15E-08	1.92E-08	4.08E-08	1.14E-08	8.73E-09	2.02E-08
1139	650266.59	4197276.4	1.46E-07	1.44E-07	2.90E-07	2.20E-08	2.16E-08	4.36E-08	2.15E-08	1.93E-08	4.08E-08	1.14E-08	8.74E-09	2.02E-08
1140	650295.85	4197291.03	1.46E-07	1.44E-07	2.90E-07	2.20E-08	2.16E-08	4.36E-08	2.15E-08	1.92E-08	4.07E-08	1.14E-08	8.72E-09	2.01E-08
1141	650325.11	4197305.66	1.45E-07	1.43E-07	2.88E-07	2.18E-08	2.14E-08	4.33E-08	2.14E-08	1.91E-08	4.05E-08	1.13E-08	8.67E-09	2.00E-08
1142	650354.37	4197320.29	1.44E-07	1.41E-07	2.85E-07	2.16E-08	2.12E-08	4.28E-08	2.11E-08	1.89E-08	4.00E-08	1.12E-08	8.57E-09	1.98E-08
1143	650383.63	4197334.92	1.42E-07	1.40E-07	2.81E-07	2.13E-08	2.09E-08	4.22E-08	2.08E-08	1.87E-08	3.95E-08	1.11E-08	8.46E-09	1.95E-08
1144	650412.89	4197349.55	1.39E-07	1.37E-07	2.77E-07	2.10E-08	2.06E-08	4.15E-08	2.05E-08	1.83E-08	3.88E-08	1.09E-08	8.32E-09	1.92E-08
1145	650442.15	4197364.18	1.37E-07	1.35E-07	2.72E-07	2.06E-08	2.02E-08	4.08E-08	2.01E-08	1.80E-08	3.81E-08	1.07E-08	8.17E-09	1.89E-08
1146	650471.41	4197378.81	1.34E-07	1.32E-07	2.66E-07	2.01E-08	1.98E-08	3.99E-08	1.97E-08	1.76E-08	3.73E-08	1.05E-08	7.99E-09	1.85E-08
1147	650494.93	4197398.71	1.32E-07	1.30E-07	2.62E-07	1.99E-08	1.95E-08	3.94E-08	1.94E-08	1.74E-08	3.68E-08	1.03E-08	7.88E-09	1.82E-08
1148	650506.98	4197429.12	1.33E-07	1.31E-07	2.63E-07	1.99E-08	1.96E-08	3.95E-08	1.95E-08	1.74E-08	3.69E-08	1.04E-08	7.91E-09	1.83E-08
1149	650519.03	4197459.53	1.33E-07	1.30E-07	2.63E-07	1.99E-08	1.96E-08	3.95E-08	1.95E-08	1.74E-08	3.69E-08	1.04E-08	7.91E-09	1.83E-08
1150	650531.09	4197489.94	1.32E-07	1.30E-07	2.62E-07	1.99E-08	1.95E-08	3.93E-08	1.94E-08	1.74E-08	3.68E-08	1.03E-08	7.88E-09	1.82E-08
1151	650543.14	4197520.35	1.31E-07	1.29E-07	2.60E-07	1.97E-08	1.93E-08	3.90E-08	1.93E-08	1.72E-08	3.65E-08	1.02E-08	7.82E-09	1.80E-08
1152	650555.19	4197550.77	1.29E-07	1.27E-07	2.57E-07	1.95E-08	1.91E-08	3.86E-08	1.90E-08	1.70E-08	3.61E-08	1.01E-08	7.73E-09	1.78E-08
1153	650567.24	4197581.18	1.27E-07	1.25E-07	2.53E-07	1.92E-08	1.88E-08	3.80E-08	1.87E-08	1.68E-08	3.55E-08	9.96E-09	7.61E-09	1.76E-08
1154	650579.29	4197611.59	1.25E-07	1.23E-07	2.48E-07	1.88E-08	1.85E-08	3.72E-08	1.84E-08	1.64E-08	3.48E-08	9.76E-09	7.46E-09	1.72E-08
1155	650591.34	4197642	1.22E-07	1.20E-07	2.42E-07	1.84E-08	1.80E-08	3.64E-08	1.80E-08	1.61E-08	3.40E-08	9.54E-09	7.29E-09	1.68E-08
1156	650603.4	4197672.41	1.19E-07	1.17E-07	2.36E-07	1.79E-08	1.76E-08	3.55E-08	1.75E-08	1.57E-08	3.31E-08	9.29E-09	7.10E-09	1.64E-08
1157	650615.45	4197702.82	1.15E-07	1.14E-07	2.29E-07	1.74E-08	1.70E-08	3.44E-08	1.70E-08	1.52E-08	3.22E-08	9.01E-09	6.89E-09	1.59E-08
1158	650627.5	4197733.24	1.12E-07	1.10E-07	2.21E-07	1.68E-08	1.65E-08	3.32E-08	1.64E-08	1.47E-08	3.11E-08	8.71E-09	6.66E-09	1.54E-08
1159	650639.55	4197763.65	1.08E-07	1.06E-07	2.13E-07	1.62E-08	1.59E-08	3.20E-08	1.58E-08	1.42E-08	3.00E-08	8.40E-09	6.42E-09	1.48E-08
1160	650651.6	4197794.06	1.03E-07	1.02E-07	2.05E-07	1.55E-08	1.53E-08	3.08E-08	1.52E-08	1.36E-08	2.88E-08	8.07E-09	6.17E-09	1.42E-08
1161	650663.66	4197824.47	9.91E-08	9.75E-08	1.97E-07	1.49E-08	1.46E-08	2.95E-08	1.46E-08	1.30E-08	2.76E-08	7.74E-09	5.91E-09	1.36E-08
1162	650675.71	4197854.88	9.47E-08	9.33E-08	1.88E-07	1.42E-08	1.40E-08	2.82E-08	1.39E-08	1.25E-08	2.64E-08	7.40E-09	5.65E-09	1.31E-08
1163	650687.76	4197885.3	9.05E-08	8.91E-08	1.80E-07	1.36E-08	1.34E-08	2.70E-08	1.33E-08	1.19E-08	2.52E-08	7.07E-09	5.40E-09	1.25E-08
1164	650699.81	4197915.71	8.63E-08	8.50E-08	1.71E-07	1.30E-08	1.27E-08	2.57E-08	1.27E-08	1.14E-08	2.40E-08	6.74E-09	5.15E-09	1.19E-08
1165	650711.86	4197946.12	8.22E-08	8.10E-08	1.63E-07	1.24E-08	1.21E-08	2.45E-08	1.21E-08	1.08E-08	2.29E-08	6.42E-09	4.91E-09	1.13E-08
1166	650723.91	4197976.53	7.83E-08	7.71E-08	1.55E-07	1.18E-08	1.16E-08	2.33E-08	1.15E-08	1.03E-08	2.18E-08	6.12E-09	4.67E-09	1.08E-08
1167	650735.97	4198006.94	7.46E-08	7.34E-08	1.48E-07	1.12E-08	1.10E-08	2.22E-08	1.10E-08	9.82E-09	2.08E-08	5.83E-09	4.45E-09	1.03E-08
1168	650748.02	4198037.36	7.10E-08	6.99E-08	1.41E-07	1.07E-08	1.05E-08	2.12E-08	1.04E-08	9.35E-09	1.98E-08	5.55E-09	4.24E-09	9.79E-09
1169	650760.07	4198067.77	6.76E-08	6.66E-08	1.34E-07	1.02E-08	9.98E-09	2.02E-08	9.94E-09	8.90E-09	1.88E-08	5.28E-09	4.04E-09	9.32E-09
1170	649818.18	4196843.3	5.74E-08	5.65E-08	1.14E-07	8.63E-09	8.47E-09	1.71E-08	8.43E-09	7.55E-09	1.60E-08	4.48E-09	3.42E-09	7.90E-09
1171	649847.47	4196857.94	6.08E-08	5.99E-08	1.21E-07	9.15E-09	8.98E-09	1.81E-08	8.94E-09	8.01E-09	1.69E-08	4.75E-09	3.63E-09	8.38E-09
1172	649876.76	4196872.59	6.44E-08	6.34E-08	1.28E-07	9.69E-09	9.51E-09	1.92E-08	9.47E-09	8.48E-09	1.80E-08	5.03E-09	3.85E-09	8.88E-09
1173	649906.05	4196887.23	6.81E-08	6.71E-08	1.35E-07	1.02E-08	1.01E-08	2.03E-08	1.00E-08	8.97E-09	1.90E-08	5.32E-09	4.07E-09	9.39E-09
1174	649935.34	4196901.88	7.19E-08	7.08E-08	1.43E-07	1.08E-08	1.06E-08	2.14E-08	1.06E-08	9.47E-09	2.00E-08	5.62E-09	4.29E-09	9.91E-09
1175	649964.63	4196916.53	7.57E-08	7.46E-08	1.50E-07	1.14E-08	1.12E-08	2.26E-08	1.11E-08	9.97E-09	2.11E-08	5.92E-09	4.52E-09	1.04E-08
1176	649993.92	4196931.17	7.95E-08	7.83E-08	1.58E-07	1.20E-08	1.17E-08	2.37E-08	1.17E-08	1.05E-08	2.22E-08	6.21E-09	4.75E-09	1.10E-08
1177	650023.21	4196945.82	8.33E-08	8.20E-08	1.65E-07	1.25E-08	1.23E-08	2.48E-08	1.22E-08	1.10E-08	2.32E-08	6.51E-09	4.97E-09	1.15E-08
1178	650052.5	4196960.46	8.70E-08	8.57E-08	1.73E-07	1.31E-08	1.28E-08	2.59E-08	1.28E-08	1.15E-08	2.42E-08	6.80E-09	5.19E-09	1.20E-08
1179	650081.79	4196975.11	9.06E-08	8.92E-08	1.80E-07	1.36E-08	1.34E-08	2.70E-08	1.33E-08	1.19E-08	2.52E-08	7.07E-09	5.41E-09	1.25E-08
1180	650111.08	4196989.76	9.39E-08	9.25E-08	1.86E-07	1.41E-08	1.39E-08	2.80E-08	1.38E-08	1.24E-08	2.62E-08	7.34E-09	5.61E-09	1.29E-08
1181	650140.37	4197004.4	9.71E-08	9.55E-08	1.93E-07	1.46E-08	1.43E-08	2.89E-08	1.43E-08	1.28E-08	2.70E-08	7.58E-09	5.79E-09	1.34E-08
1182	650169.67	4197019.05	9.99E-08	9.84E-08	1.98E-07	1.50E-08	1.48E-08	2.98E-08	1.47E-08	1.32E-08	2.78E-08	7.81E-09	5.96E-09	1.38E-08
1183	650198.96	4197033.69	1.02E-07	1.01E-07	2.03E-07	1.54E-08	1.51E-08	3.05E-08	1.51E-08	1.35E-08	2.86E-08	8.01E-09	6.12E-09	1.41E-08
1184	650228.25	4197048.34	1.05E-07	1.03E-07	2.08E-07	1.57E-08	1.55E-08	3.12E-08	1.54E-08	1.38E-08	2.92E-08	8.18E-09	6.25E-09	1.44E-08
1185	650257.54	4197062.99	1.07E-07	1.05E-07	2.12E-07	1.60E-08	1.57E-08	3.18E-08	1.57E-08	1.40E-08	2.97E-08	8.33E-09	6.37E-09	1.47E-08
1186	650286.83	4197077.63	1.08E-07	1.07E-07	2.15E-07	1.63E-08	1.60E-08	3.23E-08	1.59E-08	1.43E-08	3.02E-08	8.46E-09	6.46E-09	1.49E-08
1187	650316.12	4197092.28	1.10E-07	1.08E-07	2.18E-07	1.65E-08	1.62E-08	3.27E-08	1.61E-08	1.44E-08	3.05E-08	8.56E-09	6.54E-09	1.51E-08
1188	650345.41	4197106.92	1.11E-07	1.09E-07	2.20E-07	1.66E-08	1.63E-08	3.30E-08	1.63E-08	1.46E-08	3.08E-08	8.64E-09	6.60E-09	1.52E-08
1189	650374.7	4197121.57	1.11E-07	1.10E-07	2.21E-07	1.67E-08	1.64E-08	3.32E-08	1.64E-08	1.46E-08	3.10E-08	8.69E-09	6.64E-09	1.53E-08
1190	650403.99	4197136.22	1.12E-07	1.10E-07	2.21E-07	1.68E-08	1.65E-08	3.32E-08	1.64E-08	1.47E-08	3.11E-08	8.72E-09	6.66E-09	1.54E-08
1191	650433.28	4197150.86	1.11E-07	1.10E-07	2.21E-07	1.67E-08	1.64E-08	3.32E-08	1.64E-08	1.47E-08	3.10E-08	8.70E-09	6.65E-09	1.53E-08
1192	650462.57	4197165.51	1.11E-07	1.09E-07	2.20E-07	1.67E-08	1.64E-08	3.31E-08	1.63E-08	1.46E-08	3.09E-08	8.67E-09	6.62E-09	1.53E-08
1193	650491.86	4197180.15	1.10E-07	1.09E-07	2.19E-07	1.66E-08	1.63E-08	3.29E-08	1.62E-08	1.45E-08	3.07E-08	8.62E-09	6.58E-09	1.52E-08
1194	650521.15	4197194.8	1.09E-07	1.08E-07	2.17E-07	1.64E-08	1.61E-08	3.26E-08	1.61E-08	1.44E-08	3.05E-08	8.54E-09	6.53E-09	1.51E-08
1195	650550.44	4197209.45	1.08E-07	1.06E-07	2.15E-07	1.63E-08	1.60E-08	3.22E-08	1.59E-08	1.42E-08	3.01E-08	8.45E-09	6.45E-09	1.49E-08
1196	650579.73	4197224.09	1.07E-07	1.05E-07	2.12E-07	1.61E-08	1.58E-08	3.18E-08	1.57E-08	1.40E-08	2.97E-08	8.34E-09	6.37E-09	1.47E-08
1197	650609.02	4197238.74	1.05E-07	1.03E-07	2.09E-07	1.58E-08	1.55E-08	3.13E-08	1.55E-08	1.38E-08	2.93E-08	8.21E-09	6.27E-09	1.45E-08
1198	650642.33	4197263.53	1.04E-07	1.02E-07	2.05E-07	1.56E-08	1.53E-08	3.09E-08	1.52E-08	1.36E-08	2.88E-08	8.09E-09	6.18E-09	1.43E-08
1199	650654.39	4197293.98	1.04E-07	1.03E-07	2.07E-07	1.57E-08	1.54E-08	3.10E-08	1.53E-08	1.37E-08	2.90E-08	8.13E-09	6.21E-09	1.43E-08
1200	650666.46	4197324.42	1.04E-07	1.03E-07	2.07E-07	1.57E-08	1.54E-08	3.11E-08	1.54E-08	1.37E-08	2.91E-08	8.16E-09	6.23E-09	1.44E-08
1201	650678.52	4197354.87	1.04E-07	1.03E-07	2.07E-07	1.57E-08	1.54E-08	3.11E-08	1.54E-08	1.38E-08	2.91E-08	8.16E-09	6.24E-09	1.44E-08
1202	650690.59	4197385.31	1.04E-07	1.03E-07	2.07E-07	1.57E-08	1.54E-08	3.11E-08	1.53E-08	1.37E-08	2.90E-08	8.14E-09	6.22E-09	1.44E-08
1203	650702.65	4197415.75	1.04E-07	1.02E-07	2.06E-07	1.56E-08	1.53E-08	3.09E-08	1.52E-08	1.36E-08	2.89E-08	8.10E-09	6.19E-09	1.43E-08
1204	650714.72	4197446.2	1.03E-07	1.01E-07	2.04E-07	1.55E-08	1.52E-08	3.06E-08	1.51E-08	1.35E-08	2.86E-08	8.03E-09	6.13E-09	1.42E-08
1205	650726.78	4197476.64	1.02E-07	1.00E-07	2.02E-07	1.53E-08	1.50E-08	3.03E-08	1.49E-08	1.34E-08	2.83E-08	7.94E-09	6.06E-09	1.40E-08
1206	650738.85	4197507.09	1.00E-07	9.85E-08	1.99E-07	1.51E-08	1.48E-08	2.98E-08	1.47E-08	1.32E-08	2.79E-08	7.82E-09	5.97E-09	1.38E-08
1207	650750.91	4197537.53	9.83E-08	9.68E-08	1.95E-07	1.48E-08	1.45E-08	2.93E-08	1.45E-08	1.29E-08	2.74E-08	7.68E-09	5.87E-09	1.35E-08
1208	650762.98	4197567.98	9.63E-08	9.48E-08	1.91E-07	1.45E-08	1.42E-08	2.87E-08	1.42E-08	1.27E-08	2.68E-08	7.52E-09	5.75E-09	1.33E-08
1209	650775.04	4197598.42	9.40E-08	9.26E-08	1.87E-07	1.41E-08	1.39E-08	2.80E-08	1.38E-08	1.24E-08	2.62E-08	7.34E-09	5.61E-09	1.30E-08
1210	650787.11	4197628.87	9.15E-08	9.01E-08	1.82E-07	1.38E-08	1.35E-08	2.73E-08	1.35E-08	1.20E-08	2.55E-08	7.15E-09	5.46E-09	1.26E-08
1211	650799.17	4197659.31	8.89E-08	8.76E-08	1.77E-07	1.34E-08	1.31E-08	2.65E-08	1.31E-08	1.17E-08	2.48E-08	6.95E-09	5.31E-09	1.23E-08
1212	650811.23	4197689.75	8.62E-08	8.49E-08	1.71E-07	1.30E-08	1.27E-08	2.57E-08	1.27E-08	1.13E-08	2.40E-08	6.73E-09	5.14E-09	1.19E-08

1213	650823.3	4197720.2	8.33E-08	8.20E-08	1.65E-07	1.25E-08	1.23E-08	2.48E-08	1.22E-08	1.10E-08	2.32E-08	6.51E-09	4.97E-09	1.15E-08
1214	650835.36	4197750.64	8.04E-08	7.91E-08	1.59E-07	1.21E-08	1.19E-08	2.39E-08	1.18E-08	1.06E-08	2.24E-08	6.28E-09	4.80E-09	1.11E-08
1215	650847.43	4197781.09	7.74E-08	7.62E-08	1.54E-07	1.16E-08	1.14E-08	2.31E-08	1.14E-08	1.02E-08	2.16E-08	6.04E-09	4.62E-09	1.07E-08
1216	650859.49	4197811.53	7.44E-08	7.32E-08	1.48E-07	1.12E-08	1.10E-08	2.22E-08	1.09E-08	9.79E-09	2.07E-08	5.81E-09	4.44E-09	1.03E-08
1217	650871.56	4197841.98	7.15E-08	7.04E-08	1.42E-07	1.07E-08	1.06E-08	2.13E-08	1.05E-08	9.41E-09	1.99E-08	5.58E-09	4.27E-09	9.85E-09
1218	650883.62	4197872.42	6.86E-08	6.75E-08	1.36E-07	1.03E-08	1.01E-08	2.04E-08	1.01E-08	9.03E-09	1.91E-08	5.36E-09	4.09E-09	9.45E-09
1219	650895.69	4197902.87	6.58E-08	6.48E-08	1.31E-07	9.90E-09	9.72E-09	1.96E-08	9.68E-09	8.66E-09	1.83E-08	5.14E-09	3.93E-09	9.07E-09
1220	650907.75	4197933.31	6.31E-08	6.22E-08	1.25E-07	9.50E-09	9.32E-09	1.88E-08	9.28E-09	8.31E-09	1.76E-08	4.93E-09	3.77E-09	8.70E-09
1221	650919.82	4197963.75	6.06E-08	5.96E-08	1.20E-07	9.11E-09	8.94E-09	1.81E-08	8.91E-09	7.97E-09	1.69E-08	4.73E-09	3.62E-09	8.35E-09
1222	650931.88	4197994.2	5.81E-08	5.72E-08	1.15E-07	8.74E-09	8.58E-09	1.73E-08	8.54E-09	7.65E-09	1.62E-08	4.54E-09	3.47E-09	8.01E-09
1223	650943.95	4198024.64	5.57E-08	5.49E-08	1.11E-07	8.38E-09	8.23E-09	1.66E-08	8.19E-09	7.34E-09	1.55E-08	4.35E-09	3.33E-09	7.68E-09
1224	650956.01	4198055.09	5.35E-08	5.26E-08	1.06E-07	8.04E-09	7.89E-09	1.59E-08	7.86E-09	7.04E-09	1.49E-08	4.18E-09	3.19E-09	7.37E-09
1225	650968.08	4198085.53	5.13E-08	5.05E-08	1.02E-07	7.71E-09	7.57E-09	1.53E-08	7.54E-09	6.75E-09	1.43E-08	4.00E-09	3.06E-09	7.06E-09
1226	649837.91	4196644.28	4.05E-08	3.99E-08	8.04E-08	6.09E-09	5.98E-09	1.21E-08	5.95E-09	5.33E-09	1.13E-08	3.16E-09	2.42E-09	5.58E-09
1227	649867.22	4196658.93	4.27E-08	4.20E-08	8.47E-08	6.41E-09	6.30E-09	1.27E-08	6.27E-09	5.61E-09	1.19E-08	3.33E-09	2.55E-09	5.88E-09
1228	649896.54	4196673.59	4.50E-08	4.43E-08	8.92E-08	6.76E-09	6.64E-09	1.34E-08	6.61E-09	5.92E-09	1.25E-08	3.51E-09	2.68E-09	6.19E-09
1229	649925.85	4196688.25	4.74E-08	4.66E-08	9.40E-08	7.12E-09	6.99E-09	1.41E-08	6.96E-09	6.23E-09	1.32E-08	3.70E-09	2.83E-09	6.53E-09
1230	649955.16	4196702.91	4.99E-08	4.91E-08	9.89E-08	7.50E-09	7.36E-09	1.49E-08	7.33E-09	6.56E-09	1.39E-08	3.89E-09	2.98E-09	6.87E-09
1231	649984.48	4196717.56	5.24E-08	5.16E-08	1.04E-07	7.88E-09	7.74E-09	1.56E-08	7.71E-09	6.90E-09	1.46E-08	4.10E-09	3.13E-09	7.23E-09
1232	650013.79	4196732.22	5.51E-08	5.42E-08	1.09E-07	8.29E-09	8.13E-09	1.64E-08	8.10E-09	7.25E-09	1.54E-08	4.30E-09	3.29E-09	7.59E-09
1233	650043.1	4196746.88	5.78E-08	5.69E-08	1.15E-07	8.69E-09	8.53E-09	1.72E-08	8.50E-09	7.61E-09	1.61E-08	4.51E-09	3.45E-09	7.96E-09
1234	650072.42	4196761.53	6.05E-08	5.96E-08	1.20E-07	9.10E-09	8.94E-09	1.80E-08	8.90E-09	7.97E-09	1.69E-08	4.73E-09	3.61E-09	8.34E-09
1235	650101.73	4196776.19	6.33E-08	6.23E-08	1.26E-07	9.52E-09	9.34E-09	1.89E-08	9.31E-09	8.33E-09	1.76E-08	4.94E-09	3.78E-09	8.72E-09
1236	650131.04	4196790.85	6.60E-08	6.49E-08	1.31E-07	9.92E-09	9.74E-09	1.97E-08	9.70E-09	8.68E-09	1.84E-08	5.15E-09	3.94E-09	9.09E-09
1237	650160.36	4196805.51	6.86E-08	6.75E-08	1.36E-07	1.03E-08	1.01E-08	2.04E-08	1.01E-08	9.03E-09	1.91E-08	5.36E-09	4.09E-09	9.45E-09
1238	650189.67	4196820.16	7.11E-08	7.00E-08	1.41E-07	1.07E-08	1.05E-08	2.12E-08	1.05E-08	9.36E-09	1.98E-08	5.56E-09	4.25E-09	9.80E-09
1239	650218.98	4196834.82	7.36E-08	7.24E-08	1.46E-07	1.11E-08	1.09E-08	2.19E-08	1.08E-08	9.68E-09	2.05E-08	5.75E-09	4.39E-09	1.01E-08
1240	650248.29	4196849.48	7.59E-08	7.47E-08	1.51E-07	1.14E-08	1.12E-08	2.26E-08	1.12E-08	9.99E-09	2.11E-08	5.93E-09	4.53E-09	1.05E-08
1241	650277.61	4196864.14	7.80E-08	7.68E-08	1.55E-07	1.17E-08	1.15E-08	2.33E-08	1.15E-08	1.03E-08	2.17E-08	6.10E-09	4.66E-09	1.08E-08
1242	650306.92	4196878.79	8.00E-08	7.88E-08	1.59E-07	1.20E-08	1.18E-08	2.38E-08	1.18E-08	1.05E-08	2.23E-08	6.25E-09	4.77E-09	1.10E-08
1243	650336.23	4196893.45	8.18E-08	8.05E-08	1.62E-07	1.23E-08	1.21E-08	2.44E-08	1.20E-08	1.08E-08	2.28E-08	6.39E-09	4.88E-09	1.13E-08
1244	650365.55	4196908.11	8.34E-08	8.21E-08	1.65E-07	1.25E-08	1.23E-08	2.48E-08	1.23E-08	1.10E-08	2.32E-08	6.51E-09	4.98E-09	1.15E-08
1245	650394.86	4196922.77	8.47E-08	8.34E-08	1.68E-07	1.27E-08	1.25E-08	2.53E-08	1.25E-08	1.12E-08	2.36E-08	6.62E-09	5.06E-09	1.17E-08
1246	650424.17	4196937.42	8.57E-08	8.44E-08	1.70E-07	1.29E-08	1.27E-08	2.55E-08	1.26E-08	1.13E-08	2.39E-08	6.69E-09	5.11E-09	1.18E-08
1247	650453.49	4196952.08	8.68E-08	8.55E-08	1.72E-07	1.31E-08	1.28E-08	2.59E-08	1.28E-08	1.14E-08	2.42E-08	6.78E-09	5.18E-09	1.20E-08
1248	650482.8	4196966.74	8.75E-08	8.62E-08	1.74E-07	1.32E-08	1.29E-08	2.61E-08	1.29E-08	1.15E-08	2.44E-08	6.84E-09	5.22E-09	1.21E-08
1249	650512.11	4196981.4	8.80E-08	8.67E-08	1.75E-07	1.32E-08	1.30E-08	2.62E-08	1.29E-08	1.16E-08	2.45E-08	6.88E-09	5.25E-09	1.21E-08
1250	650541.43	4196996.05	8.82E-08	8.68E-08	1.75E-07	1.33E-08	1.30E-08	2.63E-08	1.30E-08	1.16E-08	2.46E-08	6.89E-09	5.26E-09	1.22E-08
1251	650570.74	4197010.71	8.83E-08	8.69E-08	1.75E-07	1.33E-08	1.30E-08	2.63E-08	1.30E-08	1.16E-08	2.46E-08	6.90E-09	5.27E-09	1.22E-08
1252	650600.05	4197025.37	8.82E-08	8.68E-08	1.75E-07	1.33E-08	1.30E-08	2.63E-08	1.30E-08	1.16E-08	2.46E-08	6.89E-09	5.26E-09	1.21E-08
1253	650629.37	4197040.03	8.78E-08	8.65E-08	1.74E-07	1.32E-08	1.30E-08	2.62E-08	1.29E-08	1.16E-08	2.45E-08	6.86E-09	5.24E-09	1.21E-08
1254	650658.68	4197054.68	8.73E-08	8.60E-08	1.73E-07	1.31E-08	1.29E-08	2.60E-08	1.28E-08	1.15E-08	2.43E-08	6.82E-09	5.21E-09	1.20E-08
1255	650687.99	4197069.34	8.66E-08	8.53E-08	1.72E-07	1.30E-08	1.28E-08	2.58E-08	1.27E-08	1.14E-08	2.41E-08	6.77E-09	5.17E-09	1.19E-08
1256	650717.31	4197084	8.58E-08	8.45E-08	1.70E-07	1.29E-08	1.27E-08	2.56E-08	1.26E-08	1.13E-08	2.39E-08	6.70E-09	5.12E-09	1.18E-08
1257	650746.62	4197098.66	8.49E-08	8.35E-08	1.68E-07	1.28E-08	1.25E-08	2.53E-08	1.25E-08	1.12E-08	2.36E-08	6.63E-09	5.06E-09	1.17E-08
1258	650775.93	4197113.31	8.38E-08	8.25E-08	1.66E-07	1.26E-08	1.24E-08	2.50E-08	1.23E-08	1.10E-08	2.33E-08	6.55E-09	5.00E-09	1.15E-08
1259	650793.75	4197138.51	8.39E-08	8.26E-08	1.66E-07	1.26E-08	1.24E-08	2.50E-08	1.23E-08	1.10E-08	2.34E-08	6.55E-09	5.01E-09	1.16E-08
1260	650805.83	4197168.98	8.45E-08	8.32E-08	1.68E-07	1.27E-08	1.25E-08	2.52E-08	1.24E-08	1.11E-08	2.35E-08	6.60E-09	5.04E-09	1.16E-08
1261	650817.9	4197199.45	8.49E-08	8.35E-08	1.68E-07	1.28E-08	1.25E-08	2.53E-08	1.25E-08	1.12E-08	2.36E-08	6.63E-09	5.06E-09	1.17E-08
1262	650829.97	4197229.92	8.51E-08	8.38E-08	1.69E-07	1.28E-08	1.26E-08	2.54E-08	1.25E-08	1.12E-08	2.37E-08	6.65E-09	5.08E-09	1.17E-08
1263	650842.05	4197260.39	8.51E-08	8.38E-08	1.69E-07	1.28E-08	1.26E-08	2.54E-08	1.25E-08	1.12E-08	2.37E-08	6.65E-09	5.08E-09	1.17E-08
1264	650854.12	4197290.85	8.49E-08	8.36E-08	1.69E-07	1.28E-08	1.25E-08	2.53E-08	1.25E-08	1.12E-08	2.37E-08	6.63E-09	5.07E-09	1.17E-08
1265	650866.2	4197321.32	8.46E-08	8.33E-08	1.68E-07	1.27E-08	1.25E-08	2.52E-08	1.24E-08	1.11E-08	2.36E-08	6.61E-09	5.05E-09	1.17E-08
1266	650878.27	4197351.79	8.40E-08	8.27E-08	1.67E-07	1.26E-08	1.24E-08	2.50E-08	1.23E-08	1.11E-08	2.34E-08	6.56E-09	5.01E-09	1.16E-08
1267	650890.35	4197382.26	8.32E-08	8.19E-08	1.65E-07	1.25E-08	1.23E-08	2.48E-08	1.22E-08	1.10E-08	2.32E-08	6.50E-09	4.97E-09	1.15E-08
1268	650902.42	4197412.73	8.22E-08	8.09E-08	1.63E-07	1.24E-08	1.21E-08	2.45E-08	1.21E-08	1.08E-08	2.29E-08	6.42E-09	4.91E-09	1.13E-08
1269	650914.49	4197443.2	8.10E-08	7.98E-08	1.61E-07	1.22E-08	1.20E-08	2.42E-08	1.19E-08	1.07E-08	2.26E-08	6.33E-09	4.84E-09	1.12E-08
1270	650926.57	4197473.66	7.97E-08	7.84E-08	1.58E-07	1.20E-08	1.18E-08	2.37E-08	1.17E-08	1.05E-08	2.22E-08	6.22E-09	4.75E-09	1.10E-08
1271	650938.64	4197504.13	7.81E-08	7.69E-08	1.55E-07	1.17E-08	1.15E-08	2.33E-08	1.15E-08	1.03E-08	2.18E-08	6.10E-09	4.66E-09	1.08E-08
1272	650950.72	4197534.6	7.64E-08	7.52E-08	1.52E-07	1.15E-08	1.13E-08	2.28E-08	1.12E-08	1.01E-08	2.13E-08	5.97E-09	4.56E-09	1.05E-08
1273	650962.79	4197565.07	7.46E-08	7.34E-08	1.48E-07	1.12E-08	1.10E-08	2.22E-08	1.10E-08	9.82E-09	2.08E-08	5.83E-09	4.45E-09	1.03E-08
1274	650974.86	4197595.54	7.26E-08	7.15E-08	1.44E-07	1.09E-08	1.07E-08	2.16E-08	1.07E-08	9.56E-09	2.02E-08	5.67E-09	4.34E-09	1.00E-08
1275	650986.94	4197626.01	7.06E-08	6.95E-08	1.40E-07	1.06E-08	1.04E-08	2.10E-08	1.04E-08	9.29E-09	1.97E-08	5.52E-09	4.21E-09	9.73E-09
1276	650999.01	4197656.47	6.86E-08	6.75E-08	1.36E-07	1.03E-08	1.01E-08	2.04E-08	1.01E-08	9.02E-09	1.91E-08	5.36E-09	4.09E-09	9.45E-09
1277	651011.09	4197686.94	6.64E-08	6.54E-08	1.32E-07	9.98E-09	9.80E-09	1.98E-08	9.76E-09	8.74E-09	1.85E-08	5.19E-09	3.96E-09	9.15E-09
1278	651023.16	4197717.41	6.42E-08	6.32E-08	1.27E-07	9.66E-09	9.48E-09	1.91E-08	9.44E-09	8.45E-09	1.79E-08	5.02E-09	3.83E-09	8.85E-09
1279	651035.24	4197747.88	6.21E-08	6.11E-08	1.23E-07	9.33E-09	9.16E-09	1.85E-08	9.12E-09	8.17E-09	1.73E-08	4.85E-09	3.70E-09	8.55E-09
1280	651047.31	4197778.35	5.99E-08	5.90E-08	1.19E-07	9.01E-09	8.85E-09	1.79E-08	8.81E-09	7.89E-09	1.67E-08	4.68E-09	3.58E-09	8.26E-09
1281	651059.38	4197808.82	5.78E-08	5.69E-08	1.15E-07	8.69E-09	8.54E-09	1.72E-08	8.50E-09	7.61E-09	1.61E-08	4.52E-09	3.45E-09	7.97E-09
1282	651071.46	4197839.28	5.58E-08	5.49E-08	1.11E-07	8.39E-09	8.24E-09	1.66E-08	8.20E-09	7.34E-09	1.55E-08	4.36E-09	3.33E-09	7.69E-09
1283	651083.53	4197869.75	5.38E-08	5.30E-08	1.07E-07	8.09E-09	7.94E-09	1.60E-08	7.91E-09	7.08E-09	1.50E-08	4.20E-09	3.21E-09	7.41E-09
1284	651095.61	4197900.22	5.19E-08	5.11E-08	1.03E-07	7.80E-09	7.66E-09	1.55E-08	7.63E-09	6.83E-09	1.45E-08	4.05E-09	3.10E-09	7.15E-09
1285	651107.68	4197930.69	5.01E-08	4.93E-08	9.93E-08	7.53E-09	7.39E-09	1.49E-08	7.36E-09	6.59E-09	1.39E-08	3.91E-09	2.99E-09	6.90E-09
1286	651119.75	4197961.16	4.83E-08	4.75E-08	9.58E-08	7.26E-09	7.13E-09	1.44E-08	7.10E-09	6.35E-09	1.35E-08	3.77E-09	2.88E-09	6.65E-09
1287	651131.83	4197991.63	4.66E-08	4.59E-08	9.24E-08	7.00E-09	6.88E-09	1.39E-08	6.85E-09	6.13E-09	1.30E-08	3.64E-09	2.78E-09	6.42E-09
1288	651143.9	4198022.09	4.49E-08	4.42E-08	8.91E-08	6.75E-09	6.63E-09	1.34E-08	6.60E-09	5.91E-09	1.25E-08	3.51E-09	2.68E-09	6.19E-09

1289	651155.98	4198052.56	4.33E-08	4.26E-08	8.60E-08	6.51E-09	6.40E-09	1.29E-08	6.37E-09	5.70E-09	1.21E-08	3.38E-09	2.59E-09	5.97E-09
1290	651168.05	4198083.03	4.18E-08	4.11E-08	8.29E-08	6.28E-09	6.17E-09	1.24E-08	6.14E-09	5.50E-09	1.16E-08	3.26E-09	2.49E-09	5.76E-09
1291	649653.67	4198103.07	3.33E-06	3.28E-06	6.60E-06	5.00E-07	4.91E-07	9.92E-07	4.89E-07	4.38E-07	9.27E-07	2.60E-07	1.99E-07	4.58E-07
1292	649614.17	4198096.53	3.71E-06	3.66E-06	7.37E-06	5.59E-07	5.48E-07	1.11E-06	5.46E-07	4.89E-07	1.04E-06	2.90E-07	2.22E-07	5.12E-07
1293	649574.67	4198090	4.30E-06	4.24E-06	8.54E-06	6.47E-07	6.35E-07	1.28E-06	6.33E-07	5.66E-07	1.20E-06	3.36E-07	2.57E-07	5.93E-07
1294	649657.75	4198078.4	2.63E-06	2.59E-06	5.21E-06	3.95E-07	3.88E-07	7.83E-07	3.86E-07	3.46E-07	7.32E-07	2.05E-07	1.57E-07	3.62E-07
1295	649618.25	4198071.87	2.95E-06	2.91E-06	5.86E-06	4.44E-07	4.36E-07	8.80E-07	4.34E-07	3.89E-07	8.23E-07	2.31E-07	1.76E-07	4.07E-07
1296	649578.75	4198065.33	3.41E-06	3.35E-06	6.76E-06	5.12E-07	5.03E-07	1.01E-06	5.01E-07	4.48E-07	9.49E-07	2.66E-07	2.03E-07	4.69E-07
1297	649661.83	4198053.74	2.20E-06	2.17E-06	4.37E-06	3.31E-07	3.25E-07	6.56E-07	3.24E-07	2.90E-07	6.14E-07	1.72E-07	1.31E-07	3.04E-07
1298	649622.33	4198047.2	2.48E-06	2.44E-06	4.92E-06	3.73E-07	3.66E-07	7.40E-07	3.65E-07	3.27E-07	6.91E-07	1.94E-07	1.48E-07	3.42E-07
1299	649582.83	4198040.67	2.85E-06	2.80E-06	5.65E-06	4.28E-07	4.20E-07	8.48E-07	4.18E-07	3.75E-07	7.93E-07	2.22E-07	1.70E-07	3.92E-07
1300	649646.16	4198025.81	2.03E-06	2.00E-06	4.02E-06	3.05E-07	2.99E-07	6.04E-07	2.98E-07	2.67E-07	5.65E-07	1.58E-07	1.21E-07	2.79E-07
1301	649606.66	4198019.27	2.29E-06	2.26E-06	4.55E-06	3.45E-07	3.39E-07	6.84E-07	3.37E-07	3.02E-07	6.39E-07	1.79E-07	1.37E-07	3.16E-07
1302	649654.33	4197976.48	1.61E-06	1.59E-06	3.20E-06	2.43E-07	2.38E-07	4.81E-07	2.37E-07	2.12E-07	4.50E-07	1.26E-07	9.64E-08	2.22E-07
1303	649614.83	4197969.94	1.81E-06	1.78E-06	3.59E-06	2.72E-07	2.67E-07	5.40E-07	2.66E-07	2.38E-07	5.04E-07	1.41E-07	1.08E-07	2.49E-07
1304	649642.74	4197923.88	1.41E-06	1.38E-06	2.79E-06	2.12E-07	2.08E-07	4.19E-07	2.07E-07	1.85E-07	3.92E-07	1.10E-07	8.40E-08	1.94E-07
1305	649603.24	4197917.34	1.56E-06	1.54E-06	3.10E-06	2.35E-07	2.31E-07	4.65E-07	2.30E-07	2.06E-07	4.35E-07	1.22E-07	9.32E-08	2.15E-07
1306	649690.4	4197881.09	1.06E-06	1.05E-06	2.11E-06	1.60E-07	1.57E-07	3.17E-07	1.57E-07	1.40E-07	2.97E-07	8.32E-08	6.35E-08	1.47E-07
1307	649650.9	4197874.55	1.17E-06	1.15E-06	2.33E-06	1.76E-07	1.73E-07	3.49E-07	1.72E-07	1.54E-07	3.26E-07	9.15E-08	6.99E-08	1.61E-07
1308	649611.4	4197868.01	1.28E-06	1.26E-06	2.54E-06	1.93E-07	1.89E-07	3.82E-07	1.89E-07	1.69E-07	3.57E-07	1.00E-07	7.65E-08	1.77E-07
1309	649659.06	4197825.22	9.63E-07	9.48E-07	1.91E-06	1.45E-07	1.42E-07	2.87E-07	1.42E-07	1.27E-07	2.68E-07	7.52E-08	5.74E-08	1.33E-07
1310	649619.56	4197818.68	1.04E-06	1.02E-06	2.06E-06	1.56E-07	1.53E-07	3.09E-07	1.53E-07	1.37E-07	2.89E-07	8.10E-08	6.19E-08	1.43E-07
1311	649655.64	4197723.29	7.14E-07	7.03E-07	1.42E-06	1.07E-07	1.05E-07	2.13E-07	1.05E-07	9.40E-08	1.99E-07	5.58E-08	4.26E-08	9.84E-08
1312	649652.21	4197621.37	4.96E-07	4.89E-07	9.85E-07	7.46E-08	7.33E-08	1.48E-07	7.30E-08	6.53E-08	1.38E-07	3.88E-08	2.96E-08	6.84E-08
1313	649724.36	4197430.59	2.52E-07	2.48E-07	4.99E-07	3.78E-08	3.72E-08	7.50E-08	3.70E-08	3.31E-08	7.01E-08	1.97E-08	1.50E-08	3.47E-08
1314	649684.86	4197424.05	2.43E-07	2.39E-07	4.82E-07	3.65E-08	3.59E-08	7.24E-08	3.57E-08	3.20E-08	6.77E-08	1.90E-08	1.45E-08	3.35E-08
1315	649757.01	4197233.27	1.40E-07	1.38E-07	2.78E-07	2.10E-08	2.07E-08	4.17E-08	2.06E-08	1.84E-08	3.90E-08	1.09E-08	8.35E-09	1.93E-08
1316	649717.51	4197226.73	1.33E-07	1.31E-07	2.63E-07	2.00E-08	1.96E-08	3.96E-08	1.95E-08	1.75E-08	3.70E-08	1.04E-08	7.92E-09	1.83E-08
1317	649848.91	4197045.76	9.25E-08	9.11E-08	1.84E-07	1.39E-08	1.37E-08	2.76E-08	1.36E-08	1.22E-08	2.58E-08	7.22E-09	5.52E-09	1.27E-08
1318	649769.91	4197032.68	8.32E-08	8.19E-08	1.65E-07	1.25E-08	1.23E-08	2.48E-08	1.22E-08	1.10E-08	2.32E-08	6.50E-09	4.97E-09	1.15E-08
1319	649881.56	4196848.44	6.16E-08	6.06E-08	1.22E-07	9.26E-09	9.09E-09	1.84E-08	9.06E-09	8.11E-09	1.72E-08	4.81E-09	3.68E-09	8.49E-09
1320	649782.81	4196832.1	5.41E-08	5.32E-08	1.07E-07	8.13E-09	7.98E-09	1.61E-08	7.95E-09	7.12E-09	1.51E-08	4.22E-09	3.23E-09	7.45E-09
1321	649914.21	4196651.12	4.39E-08	4.33E-08	8.72E-08	6.61E-09	6.49E-09	1.31E-08	6.46E-09	5.78E-09	1.22E-08	3.43E-09	2.62E-09	6.06E-09
1322	649815.46	4196634.78	3.90E-08	3.84E-08	7.75E-08	5.87E-09	5.76E-09	1.16E-08	5.74E-09	5.14E-09	1.09E-08	3.05E-09	2.33E-09	5.38E-09
1323	649936.39	4197077.26	1.05E-07	1.04E-07	2.09E-07	1.59E-08	1.56E-08	3.14E-08	1.55E-08	1.39E-08	2.94E-08	8.24E-09	6.29E-09	1.45E-08
1324	650002.9	4196888.65	7.35E-08	7.23E-08	1.46E-07	1.10E-08	1.08E-08	2.19E-08	1.08E-08	9.67E-09	2.05E-08	5.74E-09	4.38E-09	1.01E-08
1325	650069.41	4196700.03	5.42E-08	5.34E-08	1.08E-07	8.15E-09	8.01E-09	1.62E-08	7.97E-09	7.14E-09	1.51E-08	4.24E-09	3.24E-09	7.47E-09
1326	649546.46	4198075.06	4.47E-06	4.40E-06	8.88E-06	6.73E-07	6.61E-07	1.33E-06	6.58E-07	5.89E-07	1.25E-06	3.49E-07	2.67E-07	6.16E-07
1327	649558.72	4198053.27	3.48E-06	3.43E-06	6.91E-06	5.24E-07	5.14E-07	1.04E-06	5.12E-07	4.58E-07	9.71E-07	2.72E-07	2.08E-07	4.80E-07
1328	649583.22	4198009.68	2.42E-06	2.38E-06	4.80E-06	3.64E-07	3.57E-07	7.21E-07	3.56E-07	3.18E-07	6.74E-07	1.89E-07	1.44E-07	3.33E-07
1329	649705.01	4197848.71	9.19E-07	9.04E-07	1.82E-06	1.38E-07	1.36E-07	2.74E-07	1.35E-07	1.21E-07	2.56E-07	7.18E-08	5.48E-08	1.27E-07
1330	649999.08	4197325.72	1.86E-07	1.83E-07	3.68E-07	2.79E-08	2.74E-08	5.53E-08	2.73E-08	2.44E-08	5.17E-08	1.45E-08	1.11E-08	2.56E-08
1331	649975.32	4197312.36	1.81E-07	1.79E-07	3.60E-07	2.73E-08	2.68E-08	5.41E-08	2.67E-08	2.39E-08	5.06E-08	1.42E-08	1.08E-08	2.50E-08
1332	650097.1	4197151.39	1.28E-07	1.26E-07	2.53E-07	1.92E-08	1.89E-08	3.80E-08	1.88E-08	1.68E-08	3.56E-08	9.97E-09	7.62E-09	1.76E-08
1333	650073.34	4197138.03	1.24E-07	1.23E-07	2.47E-07	1.87E-08	1.84E-08	3.71E-08	1.83E-08	1.64E-08	3.47E-08	9.72E-09	7.43E-09	1.71E-08
1334	650195.13	4196977.06	9.31E-08	9.16E-08	1.85E-07	1.40E-08	1.37E-08	2.77E-08	1.37E-08	1.22E-08	2.59E-08	7.27E-09	5.55E-09	1.28E-08
1335	650171.37	4196963.7	9.07E-08	8.93E-08	1.80E-07	1.36E-08	1.34E-08	2.70E-08	1.33E-08	1.19E-08	2.53E-08	7.08E-09	5.41E-09	1.25E-08
1336	650293.15	4196802.73	7.11E-08	7.00E-08	1.41E-07	1.07E-08	1.05E-08	2.12E-08	1.05E-08	9.36E-09	1.98E-08	5.55E-09	4.24E-09	9.80E-09
1337	650269.39	4196789.37	6.93E-08	6.82E-08	1.37E-07	1.04E-08	1.02E-08	2.06E-08	1.02E-08	9.11E-09	1.93E-08	5.41E-09	4.13E-09	9.54E-09
1338	649520.12	4198056.91	4.57E-06	4.50E-06	9.06E-06	6.87E-07	6.74E-07	1.36E-06	6.72E-07	6.01E-07	1.27E-06	3.57E-07	2.73E-07	6.29E-07
1339	649534.23	4198036.28	3.57E-06	3.51E-06	7.08E-06	5.37E-07	5.27E-07	1.06E-06	5.25E-07	4.70E-07	9.94E-07	2.79E-07	2.13E-07	4.92E-07
1340	649562.46	4198025.3	2.88E-06	2.83E-06	5.71E-06	4.33E-07	4.25E-07	8.58E-07	4.23E-07	3.79E-07	8.02E-07	2.25E-07	1.72E-07	3.97E-07
1341	649534.25	4198005.99	2.98E-06	2.94E-06	5.92E-06	4.49E-07	4.40E-07	8.89E-07	4.39E-07	3.93E-07	8.31E-07	2.33E-07	1.78E-07	4.11E-07
1342	649562.47	4197995.02	2.47E-06	2.44E-06	4.91E-06	3.72E-07	3.65E-07	7.37E-07	3.64E-07	3.26E-07	6.89E-07	1.93E-07	1.48E-07	3.41E-07
1343	649590.71	4197953.75	1.86E-06	1.83E-06	3.69E-06	2.80E-07	2.75E-07	5.54E-07	2.74E-07	2.45E-07	5.18E-07	1.45E-07	1.11E-07	2.56E-07
1344	650155.42	4197189.05	1.35E-07	1.33E-07	2.68E-07	2.03E-08	2.00E-08	4.03E-08	1.99E-08	1.78E-08	3.77E-08	1.06E-08	8.07E-09	1.86E-08
1345	650127.21	4197169.75	1.32E-07	1.30E-07	2.61E-07	1.98E-08	1.94E-08	3.92E-08	1.93E-08	1.73E-08	3.67E-08	1.03E-08	7.85E-09	1.81E-08
1346	650268.37	4197024	1.00E-07	9.87E-08	1.99E-07	1.51E-08	1.48E-08	2.99E-08	1.47E-08	1.32E-08	2.79E-08	7.83E-09	5.98E-09	1.38E-08
1347	650240.16	4197004.69	9.75E-08	9.60E-08	1.93E-07	1.47E-08	1.44E-08	2.91E-08	1.43E-08	1.28E-08	2.72E-08	7.62E-09	5.82E-09	1.34E-08
1348	650381.32	4196858.95	7.76E-08	7.64E-08	1.54E-07	1.17E-08	1.15E-08	2.31E-08	1.14E-08	1.02E-08	2.16E-08	6.06E-09	4.63E-09	1.07E-08
1349	650353.11	4196839.64	7.55E-08	7.43E-08	1.50E-07	1.14E-08	1.11E-08	2.25E-08	1.11E-08	9.94E-09	2.10E-08	5.90E-09	4.51E-09	1.04E-08
1350	649490.86	4198035.96	4.73E-06	4.66E-06	9.39E-06	7.12E-07	6.99E-07	1.41E-06	6.96E-07	6.23E-07	1.32E-06	3.70E-07	2.83E-07	6.52E-07
1351	649505.79	4198015.9	3.70E-06	3.64E-06	7.34E-06	5.56E-07	5.46E-07	1.10E-06	5.44E-07	4.87E-07	1.03E-06	2.89E-07	2.21E-07	5.09E-07
1352	649504.75	4197983.97	3.09E-06	3.04E-06	6.13E-06	4.65E-07	4.56E-07	9.21E-07	4.54E-07	4.07E-07	8.61E-07	2.41E-07	1.84E-07	4.26E-07
1353	649535.64	4197975.79	2.55E-06	2.51E-06	5.06E-06	3.84E-07	3.77E-07	7.60E-07	3.75E-07	3.36E-07	7.11E-07	1.99E-07	1.52E-07	3.52E-07
1354	649565.5	4197935.69	1.90E-06	1.87E-06	3.78E-06	2.86E-07	2.81E-07	5.67E-07	2.80E-07	2.51E-07	5.31E-07	1.49E-07	1.14E-07	2.62E-07
1355	649595.35	4197895.58	1.48E-06	1.46E-06	2.94E-06	2.23E-07	2.19E-07	4.42E-07	2.18E-07	1.95E-07	4.13E-07	1.16E-07	8.84E-08	2.04E-07
1356	649609.25	4197843.59	1.18E-06	1.16E-06	2.34E-06	1.77E-07	1.74E-07	3.51E-07	1.73E-07	1.55E-07	3.28E-07	9.20E-08	7.03E-08	1.62E-07
1357	649639.1	4197803.48	9.40E-07	9.26E-07	1.87E-06	1.41E-07	1.39E-07	2.80E-07	1.38E-07	1.24E-07	2.62E-07	7.34E-08	5.61E-08	1.30E-07
1358	649461.92	4198012.66	4.89E-06	4.82E-06	9.71E-06	7.36E-07	7.23E-07	1.46E-06	7.20E-07	6.44E-07	1.36E-06	3.82E-07	2.92E-07	6.74E-07
1359	649478.34	4197993.82	3.81E-06	3.75E-06	7.56E-06	5.73E-07	5.62E-07	1.14E-06	5.60E-07	5.01E-07	1.06E-06	2.98E-07	2.27E-07	5.25E-07
1360	649480.29	4197962.35	3.14E-06	3.09E-06	6.23E-06	4.72E-07	4.63E-07	9.35E-07	4.61E-07	4.13E-07	8.74E-07	2.45E-07	1.87E-07	4.32E-07
1361	649511.19	4197956.12	2.60E-06	2.56E-06	5.16E-06	3.91E-07	3.84E-07	7.76E-07	3.83E-07	3.43E-07	7.25E-07	2.03E-07	1.55E-07	3.59E-07
1362	649544.04	4197918.43	1.91E-06	1.88E-06	3.79E-06	2.87E-07	2.82E-07	5.68E-07	2.80E-07	2.51E-07	5.32E-07	1.49E-07	1.14E-07	2.63E-07
1363	649576.9	4197880.74	1.49E-06	1.46E-06	2.95E-06	2.23E-07	2.19E-07	4.43E-07	2.18E-07	1.95E-07	4.14E-07	1.16E-07	8.86E-08	2.05E-07
1364	650314.11	4197064.11	1.05E-07	1.04E-07	2.09E-07	1.58E-08	1.55E-08	3.14E-08	1.55E-08	1.39E-08	2.93E-08	8.22E-09	6.28E-09	1.45E-08

1365	650445.51	4196913.33	8.27E-08	8.14E-08	1.64E-07	1.24E-08	1.22E-08	2.46E-08	1.22E-08	1.09E-08	2.30E-08	6.46E-09	4.94E-09	1.14E-08
1366	650416.55	4196888.09	8.05E-08	7.92E-08	1.60E-07	1.21E-08	1.19E-08	2.40E-08	1.18E-08	1.06E-08	2.24E-08	6.29E-09	4.80E-09	1.11E-08
1367	649435.44	4197986.05	4.94E-06	4.86E-06	9.80E-06	7.43E-07	7.29E-07	1.47E-06	7.26E-07	6.50E-07	1.38E-06	3.86E-07	2.95E-07	6.80E-07
1368	649406.73	4197953.38	4.84E-06	4.77E-06	9.61E-06	7.28E-07	7.15E-07	1.44E-06	7.12E-07	6.37E-07	1.35E-06	3.78E-07	2.89E-07	6.67E-07
1369	649378.02	4197920.71	4.63E-06	4.56E-06	9.19E-06	6.97E-07	6.84E-07	1.38E-06	6.81E-07	6.10E-07	1.29E-06	3.62E-07	2.76E-07	6.38E-07
1370	649454.22	4197969.55	3.82E-06	3.76E-06	7.59E-06	5.75E-07	5.64E-07	1.14E-06	5.62E-07	5.03E-07	1.07E-06	2.99E-07	2.28E-07	5.27E-07
1371	649425.51	4197936.88	3.73E-06	3.67E-06	7.39E-06	5.60E-07	5.50E-07	1.11E-06	5.48E-07	4.90E-07	1.04E-06	2.91E-07	2.22E-07	5.13E-07
1372	649396.8	4197904.21	3.51E-06	3.45E-06	6.96E-06	5.27E-07	5.18E-07	1.05E-06	5.16E-07	4.62E-07	9.77E-07	2.74E-07	2.09E-07	4.83E-07
1373	649458.64	4197936.71	3.06E-06	3.01E-06	6.08E-06	4.60E-07	4.52E-07	9.13E-07	4.50E-07	4.03E-07	8.53E-07	2.39E-07	1.83E-07	4.22E-07
1374	649429.94	4197904.04	2.92E-06	2.88E-06	5.80E-06	4.39E-07	4.31E-07	8.71E-07	4.30E-07	3.85E-07	8.14E-07	2.28E-07	1.74E-07	4.03E-07
1375	649401.23	4197871.37	2.63E-06	2.59E-06	5.22E-06	3.95E-07	3.88E-07	7.83E-07	3.86E-07	3.46E-07	7.32E-07	2.05E-07	1.57E-07	3.62E-07
1376	649491.78	4197936.55	2.59E-06	2.55E-06	5.14E-06	3.90E-07	3.83E-07	7.73E-07	3.81E-07	3.41E-07	7.22E-07	2.03E-07	1.55E-07	3.57E-07
1377	649463.07	4197903.88	2.49E-06	2.45E-06	4.94E-06	3.74E-07	3.67E-07	7.41E-07	3.66E-07	3.27E-07	6.93E-07	1.94E-07	1.48E-07	3.43E-07
1378	649434.36	4197871.21	2.31E-06	2.28E-06	4.59E-06	3.48E-07	3.41E-07	6.89E-07	3.40E-07	3.04E-07	6.44E-07	1.81E-07	1.38E-07	3.19E-07
1379	649514.98	4197887.21	1.83E-06	1.80E-06	3.63E-06	2.75E-07	2.70E-07	5.45E-07	2.69E-07	2.41E-07	5.10E-07	1.43E-07	1.09E-07	2.52E-07
1380	649486.28	4197854.54	1.70E-06	1.67E-06	3.36E-06	2.55E-07	2.50E-07	5.05E-07	2.49E-07	2.23E-07	4.72E-07	1.32E-07	1.01E-07	2.34E-07
1381	649457.57	4197821.87	1.53E-06	1.50E-06	3.03E-06	2.30E-07	2.25E-07	4.55E-07	2.24E-07	2.01E-07	4.25E-07	1.19E-07	9.11E-08	2.10E-07
1382	649552.54	4197854.21	1.44E-06	1.42E-06	2.86E-06	2.17E-07	2.13E-07	4.30E-07	2.12E-07	1.90E-07	4.02E-07	1.13E-07	8.61E-08	1.99E-07
1383	649523.84	4197821.54	1.34E-06	1.32E-06	2.65E-06	2.01E-07	1.97E-07	3.98E-07	1.97E-07	1.76E-07	3.72E-07	1.04E-07	7.98E-08	1.84E-07
1384	649495.13	4197788.87	1.19E-06	1.17E-06	2.36E-06	1.79E-07	1.75E-07	3.54E-07	1.75E-07	1.56E-07	3.31E-07	9.28E-08	7.09E-08	1.64E-07
1385	649590.1	4197821.2	1.13E-06	1.11E-06	2.24E-06	1.70E-07	1.67E-07	3.37E-07	1.66E-07	1.49E-07	3.15E-07	8.82E-08	6.74E-08	1.56E-07
1386	649561.4	4197788.53	1.05E-06	1.04E-06	2.09E-06	1.58E-07	1.55E-07	3.13E-07	1.55E-07	1.38E-07	2.93E-07	8.21E-08	6.28E-08	1.45E-07
1387	649532.69	4197755.86	9.66E-07	9.51E-07	1.92E-06	1.45E-07	1.43E-07	2.88E-07	1.42E-07	1.27E-07	2.69E-07	7.54E-08	5.76E-08	1.33E-07
1388	649613.31	4197771.86	8.94E-07	8.80E-07	1.77E-06	1.34E-07	1.32E-07	2.66E-07	1.31E-07	1.18E-07	2.49E-07	6.98E-08	5.33E-08	1.23E-07
1389	649584.6	4197739.19	8.32E-07	8.19E-07	1.65E-06	1.25E-07	1.23E-07	2.48E-07	1.22E-07	1.09E-07	2.32E-07	6.50E-08	4.96E-08	1.15E-07
1390	649674.08	4197689.52	6.20E-07	6.11E-07	1.23E-06	9.33E-08	9.16E-08	1.85E-07	9.12E-08	8.16E-08	1.73E-07	4.85E-08	3.70E-08	8.55E-08
1391	649645.37	4197656.85	5.69E-07	5.61E-07	1.13E-06	8.56E-08	8.41E-08	1.70E-07	8.37E-08	7.49E-08	1.59E-07	4.45E-08	3.40E-08	7.84E-08
1392	649806.61	4197688.85	5.12E-07	5.04E-07	1.02E-06	7.70E-08	7.56E-08	1.53E-07	7.53E-08	6.74E-08	1.43E-07	4.00E-08	3.06E-08	7.06E-08
1393	649734.84	4197607.18	4.45E-07	4.38E-07	8.82E-07	6.69E-08	6.57E-08	1.33E-07	6.54E-08	5.85E-08	1.24E-07	3.47E-08	2.65E-08	6.13E-08
1394	649881.73	4197622.85	3.94E-07	3.88E-07	7.81E-07	5.92E-08	5.81E-08	1.17E-07	5.79E-08	5.18E-08	1.10E-07	3.08E-08	2.35E-08	5.43E-08
1395	649809.97	4197541.17	3.45E-07	3.39E-07	6.84E-07	5.18E-08	5.09E-08	1.03E-07	5.07E-08	4.54E-08	9.61E-08	2.69E-08	2.06E-08	4.75E-08
1396	649885.09	4197475.17	2.76E-07	2.72E-07	5.47E-07	4.15E-08	4.07E-08	8.22E-08	4.06E-08	3.63E-08	7.69E-08	2.15E-08	1.65E-08	3.80E-08
1397	650107.09	4197424.83	2.10E-07	2.06E-07	4.16E-07	3.15E-08	3.09E-08	6.24E-08	3.08E-08	2.76E-08	5.84E-08	1.64E-08	1.25E-08	2.89E-08
1398	650035.33	4197343.15	1.90E-07	1.87E-07	3.76E-07	2.85E-08	2.80E-08	5.65E-08	2.79E-08	2.49E-08	5.28E-08	1.48E-08	1.13E-08	2.61E-08
1399	650185.57	4197211.14	1.39E-07	1.37E-07	2.76E-07	2.09E-08	2.05E-08	4.14E-08	2.04E-08	1.83E-08	3.87E-08	1.09E-08	8.29E-09	1.91E-08
1400	650407.57	4197160.8	1.15E-07	1.13E-07	2.28E-07	1.72E-08	1.69E-08	3.42E-08	1.69E-08	1.51E-08	3.20E-08	8.96E-09	6.84E-09	1.58E-08
1401	650335.81	4197079.12	1.07E-07	1.05E-07	2.12E-07	1.61E-08	1.58E-08	3.18E-08	1.57E-08	1.41E-08	2.98E-08	8.34E-09	6.37E-09	1.47E-08
1402	650557.81	4197028.78	9.06E-08	8.92E-08	1.80E-07	1.36E-08	1.34E-08	2.70E-08	1.33E-08	1.19E-08	2.52E-08	7.07E-09	5.40E-09	1.25E-08
1403	650471.69	4196930.77	8.41E-08	8.28E-08	1.67E-07	1.26E-08	1.24E-08	2.51E-08	1.24E-08	1.11E-08	2.34E-08	6.57E-09	5.02E-09	1.16E-08
1404	649362.13	4197902.77	4.34E-06	4.27E-06	8.61E-06	6.52E-07	6.40E-07	1.29E-06	6.38E-07	5.71E-07	1.21E-06	3.39E-07	2.59E-07	5.98E-07
1405	649379.36	4197884.66	3.24E-06	3.19E-06	6.44E-06	4.88E-07	4.79E-07	9.66E-07	4.77E-07	4.27E-07	9.04E-07	2.53E-07	1.94E-07	4.47E-07
1406	649381	4197851.71	2.37E-06	2.33E-06	4.70E-06	3.56E-07	3.50E-07	7.06E-07	3.48E-07	3.12E-07	6.60E-07	1.85E-07	1.41E-07	3.26E-07
1407	649413.84	4197848.45	2.11E-06	2.08E-06	4.19E-06	3.17E-07	3.12E-07	6.29E-07	3.10E-07	2.78E-07	5.88E-07	1.65E-07	1.26E-07	2.91E-07
1408	649432.71	4197797.38	1.39E-06	1.37E-06	2.76E-06	2.09E-07	2.05E-07	4.15E-07	2.05E-07	1.83E-07	3.88E-07	1.09E-07	8.31E-08	1.92E-07
1409	649467.19	4197761.17	1.05E-06	1.04E-06	2.09E-06	1.58E-07	1.55E-07	3.13E-07	1.55E-07	1.38E-07	2.93E-07	8.21E-08	6.27E-08	1.45E-07
1410	649501.66	4197724.95	8.61E-07	8.48E-07	1.71E-06	1.30E-07	1.27E-07	2.57E-07	1.27E-07	1.13E-07	2.40E-07	6.73E-08	5.14E-08	1.19E-07
1411	649560.99	4197713.22	7.71E-07	7.59E-07	1.53E-06	1.16E-07	1.14E-07	2.30E-07	1.13E-07	1.01E-07	2.15E-07	6.02E-08	4.60E-08	1.06E-07
1412	649536.13	4197688.74	7.04E-07	6.93E-07	1.40E-06	1.06E-07	1.04E-07	2.10E-07	1.04E-07	9.27E-08	1.96E-07	5.50E-08	4.20E-08	9.70E-08
1413	649620.68	4197631.16	5.25E-07	5.17E-07	1.04E-06	7.89E-08	7.75E-08	1.56E-07	7.71E-08	6.90E-08	1.46E-07	4.10E-08	3.13E-08	7.23E-08
1414	649699.92	4197569.43	4.02E-07	3.96E-07	7.98E-07	6.05E-08	5.94E-08	1.20E-07	5.91E-08	5.29E-08	1.12E-07	3.14E-08	2.40E-08	5.54E-08
1415	649674.03	4197543.88	3.71E-07	3.65E-07	7.36E-07	5.57E-08	5.47E-08	1.10E-07	5.45E-08	4.88E-08	1.03E-07	2.90E-08	2.21E-08	5.11E-08
1416	649770.92	4197499.14	3.11E-07	3.07E-07	6.18E-07	4.68E-08	4.60E-08	9.28E-08	4.58E-08	4.10E-08	8.68E-08	2.43E-08	1.86E-08	4.29E-08
1417	649742.98	4197471.45	2.87E-07	2.83E-07	5.70E-07	4.32E-08	4.24E-08	8.57E-08	4.23E-08	3.78E-08	8.01E-08	2.25E-08	1.72E-08	3.96E-08
1418	649841.93	4197428.86	2.49E-07	2.45E-07	4.95E-07	3.75E-08	3.68E-08	7.43E-08	3.67E-08	3.28E-08	6.95E-08	1.95E-08	1.49E-08	3.44E-08
1419	649811.93	4197399.02	2.31E-07	2.27E-07	4.58E-07	3.47E-08	3.40E-08	6.87E-08	3.39E-08	3.03E-08	6.43E-08	1.80E-08	1.38E-08	3.18E-08
1420	649979.31	4197283.46	1.70E-07	1.67E-07	3.37E-07	2.56E-08	2.51E-08	5.07E-08	2.50E-08	2.24E-08	4.74E-08	1.33E-08	1.01E-08	2.34E-08
1421	649949.82	4197254.16	1.59E-07	1.57E-07	3.16E-07	2.39E-08	2.35E-08	4.75E-08	2.34E-08	2.10E-08	4.44E-08	1.24E-08	9.51E-09	2.19E-08
1422	650116.9	4197138.28	1.24E-07	1.22E-07	2.47E-07	1.87E-08	1.83E-08	3.70E-08	1.83E-08	1.64E-08	3.46E-08	9.71E-09	7.42E-09	1.71E-08
1423	650087.72	4197109.3	1.18E-07	1.16E-07	2.33E-07	1.77E-08	1.74E-08	3.51E-08	1.73E-08	1.55E-08	3.28E-08	9.19E-09	7.02E-09	1.62E-08
1424	650294.71	4197034.95	1.01E-07	9.98E-08	2.01E-07	1.52E-08	1.50E-08	3.02E-08	1.49E-08	1.33E-08	2.82E-08	7.92E-09	6.05E-09	1.40E-08
1425	650241.22	4196979.29	9.36E-08	9.21E-08	1.86E-07	1.41E-08	1.38E-08	2.79E-08	1.38E-08	1.23E-08	2.61E-08	7.31E-09	5.58E-09	1.29E-08
1426	650405.56	4196861.95	7.78E-08	7.66E-08	1.54E-07	1.17E-08	1.15E-08	2.32E-08	1.14E-08	1.02E-08	2.17E-08	6.08E-09	4.64E-09	1.07E-08
1427	650379.11	4196834.42	7.50E-08	7.38E-08	1.49E-07	1.13E-08	1.11E-08	2.23E-08	1.10E-08	9.87E-09	2.09E-08	5.86E-09	4.47E-09	1.03E-08
1428	649338.57	4197882.82	3.81E-06	3.75E-06	7.56E-06	5.73E-07	5.63E-07	1.14E-06	5.60E-07	5.02E-07	1.06E-06	2.98E-07	2.27E-07	5.25E-07
1429	649347.85	4197859.6	2.77E-06	2.72E-06	5.49E-06	4.16E-07	4.08E-07	8.24E-07	4.07E-07	3.64E-07	7.71E-07	2.16E-07	1.65E-07	3.81E-07
1430	649357.13	4197836.39	2.13E-06	2.10E-06	4.24E-06	3.21E-07	3.15E-07	6.36E-07	3.14E-07	2.81E-07	5.95E-07	1.67E-07	1.27E-07	2.94E-07
1431	649382.32	4197823.39	1.84E-06	1.81E-06	3.65E-06	2.77E-07	2.72E-07	5.49E-07	2.71E-07	2.42E-07	5.13E-07	1.44E-07	1.10E-07	2.54E-07
1432	649347.85	4197805.76	1.61E-06	1.58E-06	3.19E-06	2.41E-07	2.37E-07	4.79E-07	2.36E-07	2.11E-07	4.47E-07	1.25E-07	9.58E-08	2.21E-07
1433	649400.89	4197776.96	1.26E-06	1.24E-06	2.50E-06	1.89E-07	1.86E-07	3.75E-07	1.85E-07	1.66E-07	3.51E-07	9.84E-08	7.52E-08	1.74E-07
1434	649366.41	4197759.33	1.10E-06	1.08E-06	2.18E-06	1.65E-07	1.62E-07	3.27E-07	1.62E-07	1.45E-07	3.06E-07	8.58E-08	6.56E-08	1.51E-07
1435	649419.45	4197730.53	9.13E-07	8.99E-07	1.81E-06	1.37E-07	1.35E-07	2.72E-07	1.34E-07	1.20E-07	2.54E-07	7.13E-08	5.45E-08	1.26E-07
1436	649384.97	4197712.9	7.96E-07	7.84E-07	1.58E-06	1.20E-07	1.18E-07	2.37E-07	1.17E-07	1.05E-07	2.22E-07	6.22E-08	4.75E-08	1.10E-07
1437	649438.01	4197684.11	6.88E-07	6.78E-07	1.37E-06	1.03E-07	1.02E-07	2.05E-07	1.01E-07	9.06E-08	1.92E-07	5.38E-08	4.11E-08	9.48E-08
1438	649469.83	4197704.53	7.81E-07	7.69E-07	1.55E-06	1.17E-07	1.15E-07	2.33E-07	1.15E-07	1.03E-07	2.18E-07	6.10E-08	4.66E-08	1.08E-07
1439	649403.53	4197666.47	6.00E-07	5.91E-07	1.19E-06	9.02E-08	8.86E-08	1.79E-07	8.82E-08	7.90E-08	1.67E-07	4.69E-08	3.58E-08	8.27E-08
1440	649456.57	4197637.68	5.34E-07	5.26E-07	1.06E-06	8.03E-08	7.88E-08	1.59E-07	7.85E-08	7.03E-08	1.49E-07	4.17E-08	3.19E-08	7.36E-08

1441	649488.39	4197658.1	6.07E-07	5.97E-07	1.20E-06	9.12E-08	8.96E-08	1.81E-07	8.92E-08	7.99E-08	1.69E-07	4.74E-08	3.62E-08	8.36E-08
1442	649422.1	4197620.05	4.66E-07	4.59E-07	9.25E-07	7.01E-08	6.88E-08	1.39E-07	6.85E-08	6.13E-08	1.30E-07	3.64E-08	2.78E-08	6.42E-08
1443	649493.69	4197544.82	3.44E-07	3.39E-07	6.83E-07	5.17E-08	5.08E-08	1.02E-07	5.06E-08	4.53E-08	9.58E-08	2.69E-08	2.05E-08	4.74E-08
1444	649525.52	4197565.25	3.90E-07	3.84E-07	7.74E-07	5.87E-08	5.76E-08	1.16E-07	5.74E-08	5.13E-08	1.09E-07	3.05E-08	2.33E-08	5.38E-08
1445	649557.34	4197585.67	4.36E-07	4.29E-07	8.64E-07	6.55E-08	6.43E-08	1.30E-07	6.40E-08	5.73E-08	1.21E-07	3.40E-08	2.60E-08	6.00E-08
1446	649589.17	4197606.1	4.78E-07	4.70E-07	9.48E-07	7.19E-08	7.05E-08	1.42E-07	7.03E-08	6.29E-08	1.33E-07	3.73E-08	2.85E-08	6.58E-08
1447	649459.22	4197527.19	3.02E-07	2.97E-07	5.99E-07	4.54E-08	4.46E-08	9.00E-08	4.44E-08	3.97E-08	8.41E-08	2.36E-08	1.80E-08	4.16E-08
1448	649530.81	4197451.97	2.38E-07	2.34E-07	4.72E-07	3.57E-08	3.51E-08	7.08E-08	3.49E-08	3.13E-08	6.62E-08	1.86E-08	1.42E-08	3.28E-08
1449	649562.64	4197472.39	2.68E-07	2.64E-07	5.32E-07	4.03E-08	3.96E-08	7.99E-08	3.94E-08	3.53E-08	7.47E-08	2.09E-08	1.60E-08	3.69E-08
1450	649594.46	4197492.82	2.99E-07	2.94E-07	5.93E-07	4.50E-08	4.42E-08	8.91E-08	4.40E-08	3.94E-08	8.33E-08	2.34E-08	1.78E-08	4.12E-08
1451	649626.29	4197513.24	3.29E-07	3.24E-07	6.54E-07	4.95E-08	4.86E-08	9.81E-08	4.84E-08	4.33E-08	9.18E-08	2.57E-08	1.97E-08	4.54E-08
1452	649496.34	4197434.34	2.10E-07	2.07E-07	4.17E-07	3.16E-08	3.11E-08	6.27E-08	3.09E-08	2.77E-08	5.86E-08	1.64E-08	1.26E-08	2.90E-08
1453	649567.93	4197359.11	1.74E-07	1.71E-07	3.44E-07	2.61E-08	2.56E-08	5.17E-08	2.55E-08	2.28E-08	4.84E-08	1.36E-08	1.04E-08	2.39E-08
1454	649599.76	4197379.54	1.94E-07	1.91E-07	3.86E-07	2.92E-08	2.87E-08	5.79E-08	2.86E-08	2.56E-08	5.42E-08	1.52E-08	1.16E-08	2.68E-08
1455	649631.59	4197399.96	2.16E-07	2.12E-07	4.28E-07	3.24E-08	3.18E-08	6.43E-08	3.17E-08	2.84E-08	6.01E-08	1.68E-08	1.29E-08	2.97E-08
1456	649711.15	4197451.02	2.68E-07	2.64E-07	5.33E-07	4.04E-08	3.96E-08	8.00E-08	3.95E-08	3.53E-08	7.48E-08	2.10E-08	1.60E-08	3.70E-08
1457	649533.46	4197341.48	1.55E-07	1.53E-07	3.08E-07	2.33E-08	2.29E-08	4.62E-08	2.28E-08	2.04E-08	4.32E-08	1.21E-08	9.25E-09	2.14E-08
1458	649605.06	4197266.26	1.32E-07	1.30E-07	2.62E-07	1.99E-08	1.95E-08	3.94E-08	1.94E-08	1.74E-08	3.68E-08	1.03E-08	7.89E-09	1.82E-08
1459	649636.88	4197286.68	1.47E-07	1.45E-07	2.91E-07	2.21E-08	2.17E-08	4.38E-08	2.16E-08	1.93E-08	4.09E-08	1.15E-08	8.76E-09	2.02E-08
1460	649780.1	4197378.59	2.17E-07	2.13E-07	4.30E-07	3.26E-08	3.20E-08	6.46E-08	3.19E-08	2.85E-08	6.04E-08	1.69E-08	1.29E-08	2.99E-08
1461	649570.58	4197248.63	1.19E-07	1.17E-07	2.36E-07	1.79E-08	1.76E-08	3.55E-08	1.75E-08	1.57E-08	3.32E-08	9.31E-09	7.11E-09	1.64E-08
1462	649679.3	4197080.55	8.47E-08	8.34E-08	1.68E-07	1.27E-08	1.25E-08	2.53E-08	1.25E-08	1.12E-08	2.36E-08	6.62E-09	5.06E-09	1.17E-08
1463	649711.13	4197100.98	9.28E-08	9.14E-08	1.84E-07	1.40E-08	1.37E-08	2.77E-08	1.36E-08	1.22E-08	2.59E-08	7.25E-09	5.54E-09	1.28E-08
1464	649902.08	4197223.52	1.47E-07	1.45E-07	2.92E-07	2.21E-08	2.17E-08	4.38E-08	2.16E-08	1.93E-08	4.10E-08	1.15E-08	8.77E-09	2.03E-08
1465	649644.83	4197062.92	7.75E-08	7.63E-08	1.54E-07	1.17E-08	1.14E-08	2.31E-08	1.14E-08	1.02E-08	2.16E-08	6.06E-09	4.63E-09	1.07E-08
1466	649754.3	4196895.33	5.98E-08	5.88E-08	1.19E-07	8.99E-09	8.82E-09	1.78E-08	8.79E-09	7.87E-09	1.67E-08	4.67E-09	3.57E-09	8.24E-09
1467	649787.64	4196916.72	6.49E-08	6.39E-08	1.29E-07	9.75E-09	9.58E-09	1.93E-08	9.54E-09	8.54E-09	1.81E-08	5.07E-09	3.87E-09	8.94E-09
1468	649820.98	4196938.12	7.04E-08	6.93E-08	1.40E-07	1.06E-08	1.04E-08	2.10E-08	1.03E-08	9.26E-09	1.96E-08	5.50E-09	4.20E-09	9.70E-09
1469	649854.33	4196959.52	7.61E-08	7.49E-08	1.51E-07	1.14E-08	1.12E-08	2.27E-08	1.12E-08	1.00E-08	2.12E-08	5.94E-09	4.54E-09	1.05E-08
1470	649887.67	4196980.92	8.21E-08	8.08E-08	1.63E-07	1.23E-08	1.21E-08	2.45E-08	1.21E-08	1.08E-08	2.29E-08	6.41E-09	4.90E-09	1.13E-08
1471	649719.07	4196877.21	5.53E-08	5.45E-08	1.10E-07	8.32E-09	8.17E-09	1.65E-08	8.14E-09	7.28E-09	1.54E-08	4.32E-09	3.30E-09	7.63E-09
1472	649828.42	4196709.54	4.49E-08	4.42E-08	8.91E-08	6.75E-09	6.63E-09	1.34E-08	6.60E-09	5.91E-09	1.25E-08	3.51E-09	2.68E-09	6.19E-09
1473	649861.52	4196730.78	4.82E-08	4.74E-08	9.56E-08	7.25E-09	7.11E-09	1.44E-08	7.08E-09	6.34E-09	1.34E-08	3.76E-09	2.88E-09	6.64E-09
1474	649894.62	4196752.02	5.17E-08	5.09E-08	1.03E-07	7.77E-09	7.63E-09	1.54E-08	7.60E-09	6.80E-09	1.44E-08	4.04E-09	3.08E-09	7.12E-09
1475	649927.72	4196773.26	5.54E-08	5.45E-08	1.10E-07	8.33E-09	8.18E-09	1.65E-08	8.15E-09	7.29E-09	1.54E-08	4.33E-09	3.31E-09	7.63E-09
1476	649960.82	4196794.51	5.93E-08	5.84E-08	1.18E-07	8.92E-09	8.76E-09	1.77E-08	8.72E-09	7.81E-09	1.65E-08	4.63E-09	3.54E-09	8.17E-09
1477	649993.92	4196815.75	6.34E-08	6.24E-08	1.26E-07	9.53E-09	9.35E-09	1.89E-08	9.32E-09	8.34E-09	1.77E-08	4.95E-09	3.78E-09	8.73E-09
1478	649793.31	4196691.5	4.21E-08	4.14E-08	8.35E-08	6.32E-09	6.21E-09	1.25E-08	6.18E-09	5.53E-09	1.17E-08	3.29E-09	2.51E-09	5.79E-09
1479	649902.58	4196523.78	3.54E-08	3.49E-08	7.03E-08	5.33E-09	5.23E-09	1.06E-08	5.21E-09	4.66E-09	9.87E-09	2.77E-09	2.11E-09	4.88E-09
1480	649935.5	4196544.9	3.77E-08	3.71E-08	7.47E-08	5.66E-09	5.56E-09	1.12E-08	5.54E-09	4.96E-09	1.05E-08	2.94E-09	2.25E-09	5.19E-09
1481	649968.43	4196566.03	4.00E-08	3.94E-08	7.94E-08	6.02E-09	5.91E-09	1.19E-08	5.89E-09	5.27E-09	1.12E-08	3.13E-09	2.39E-09	5.52E-09
1482	650001.35	4196587.16	4.26E-08	4.19E-08	8.45E-08	6.40E-09	6.28E-09	1.27E-08	6.26E-09	5.60E-09	1.19E-08	3.33E-09	2.54E-09	5.87E-09
1483	650034.27	4196608.29	4.52E-08	4.45E-08	8.98E-08	6.80E-09	6.68E-09	1.35E-08	6.65E-09	5.95E-09	1.26E-08	3.53E-09	2.70E-09	6.23E-09
1484	650067.2	4196629.42	4.80E-08	4.73E-08	9.54E-08	7.22E-09	7.09E-09	1.43E-08	7.06E-09	6.32E-09	1.34E-08	3.75E-09	2.87E-09	6.62E-09
1485	650100.12	4196650.55	5.10E-08	5.02E-08	1.01E-07	7.67E-09	7.53E-09	1.52E-08	7.50E-09	6.71E-09	1.42E-08	3.98E-09	3.04E-09	7.02E-09
1486	650133.05	4196671.68	5.39E-08	5.31E-08	1.07E-07	8.11E-09	7.96E-09	1.61E-08	7.93E-09	7.10E-09	1.50E-08	4.21E-09	3.22E-09	7.43E-09
1487	650165.97	4196692.8	5.69E-08	5.60E-08	1.13E-07	8.56E-09	8.40E-09	1.70E-08	8.37E-09	7.49E-09	1.59E-08	4.45E-09	3.40E-09	7.84E-09
1488	650198.89	4196713.93	5.99E-08	5.89E-08	1.19E-07	9.00E-09	8.84E-09	1.78E-08	8.80E-09	7.88E-09	1.67E-08	4.68E-09	3.57E-09	8.25E-09
1489	650231.82	4196735.06	6.28E-08	6.18E-08	1.25E-07	9.44E-09	9.27E-09	1.87E-08	9.23E-09	8.26E-09	1.75E-08	4.91E-09	3.75E-09	8.65E-09
1490	650264.74	4196756.19	6.57E-08	6.46E-08	1.30E-07	9.87E-09	9.69E-09	1.96E-08	9.65E-09	8.64E-09	1.83E-08	5.13E-09	3.92E-09	9.05E-09
1491	650297.66	4196777.32	6.84E-08	6.73E-08	1.36E-07	1.03E-08	1.01E-08	2.04E-08	1.01E-08	9.00E-09	1.91E-08	5.34E-09	4.08E-09	9.42E-09
1492	650330.59	4196798.45	7.10E-08	6.99E-08	1.41E-07	1.07E-08	1.05E-08	2.12E-08	1.04E-08	9.34E-09	1.98E-08	5.55E-09	4.24E-09	9.78E-09
1493	649867.56	4196505.79	3.35E-08	3.30E-08	6.64E-08	5.03E-09	4.94E-09	9.97E-09	4.92E-09	4.40E-09	9.33E-09	2.61E-09	2.00E-09	4.61E-09
1494	649315.97	4197874.17	3.53E-06	3.48E-06	7.01E-06	5.31E-07	5.21E-07	1.05E-06	5.19E-07	4.65E-07	9.84E-07	2.76E-07	2.11E-07	4.87E-07
1495	649321.22	4197849.72	2.53E-06	2.49E-06	5.03E-06	3.81E-07	3.74E-07	7.55E-07	3.73E-07	3.34E-07	7.06E-07	1.98E-07	1.51E-07	3.49E-07
1496	649326.46	4197825.28	1.93E-06	1.90E-06	3.84E-06	2.91E-07	2.86E-07	5.76E-07	2.84E-07	2.55E-07	5.39E-07	1.51E-07	1.15E-07	2.67E-07
1497	649310.92	4197796.37	1.45E-06	1.42E-06	2.87E-06	2.17E-07	2.13E-07	4.31E-07	2.13E-07	1.90E-07	4.03E-07	1.13E-07	8.63E-08	1.99E-07
1498	649342.19	4197751.95	1.02E-06	1.00E-06	2.02E-06	1.53E-07	1.50E-07	3.03E-07	1.50E-07	1.34E-07	2.84E-07	7.95E-08	6.07E-08	1.40E-07
1499	649352.68	4197703.06	7.15E-07	7.04E-07	1.42E-06	1.08E-07	1.06E-07	2.13E-07	1.05E-07	9.42E-08	1.99E-07	5.59E-08	4.27E-08	9.86E-08
1500	649363.17	4197654.17	5.23E-07	5.15E-07	1.04E-06	7.87E-08	7.73E-08	1.56E-07	7.69E-08	6.89E-08	1.46E-07	4.09E-08	3.12E-08	7.21E-08
1501	649389.8	4197610.2	4.19E-07	4.13E-07	8.32E-07	6.30E-08	6.19E-08	1.25E-07	6.16E-08	5.52E-08	1.17E-07	3.27E-08	2.50E-08	5.77E-08
1502	649352.87	4197600.82	3.69E-07	3.63E-07	7.32E-07	5.55E-08	5.45E-08	1.10E-07	5.43E-08	4.86E-08	1.03E-07	2.88E-08	2.20E-08	5.08E-08
1503	649410.78	4197512.43	2.58E-07	2.54E-07	5.13E-07	3.89E-08	3.82E-08	7.70E-08	3.80E-08	3.40E-08	7.20E-08	2.02E-08	1.54E-08	3.56E-08
1504	649373.84	4197503.05	2.29E-07	2.25E-07	4.54E-07	3.44E-08	3.38E-08	6.82E-08	3.36E-08	3.01E-08	6.37E-08	1.79E-08	1.37E-08	3.15E-08
1505	649435.79	4197415.88	1.75E-07	1.73E-07	3.48E-07	2.64E-08	2.59E-08	5.23E-08	2.58E-08	2.31E-08	4.89E-08	1.37E-08	1.05E-08	2.42E-08
1506	649394.82	4197405.27	1.55E-07	1.53E-07	3.08E-07	2.33E-08	2.29E-08	4.62E-08	2.28E-08	2.04E-08	4.32E-08	1.21E-08	9.25E-09	2.14E-08
1507	649455.96	4197317.86	1.25E-07	1.23E-07	2.48E-07	1.88E-08	1.85E-08	3.73E-08	1.84E-08	1.65E-08	3.49E-08	9.78E-09	7.47E-09	1.72E-08
1508	649494.71	4197329.67	1.40E-07	1.37E-07	2.77E-07	2.10E-08	2.06E-08	4.16E-08	2.05E-08	1.84E-08	3.89E-08	1.09E-08	8.33E-09	1.92E-08
1509	649415.79	4197307.5	1.12E-07	1.10E-07	2.23E-07	1.69E-08	1.66E-08	3.34E-08	1.65E-08	1.48E-08	3.13E-08	8.77E-09	6.70E-09	1.55E-08
1510	649476.4	4197219.92	9.41E-08	9.26E-08	1.87E-07	1.41E-08	1.39E-08	2.80E-08	1.38E-08	1.24E-08	2.62E-08	7.35E-09	5.62E-09	1.30E-08
1511	649514.07	4197231.41	1.04E-07	1.02E-07	2.05E-07	1.56E-08	1.53E-08	3.09E-08	1.52E-08	1.36E-08	2.89E-08	8.09E-09	6.18E-09	1.43E-08
1512	649436.77	4197209.72	8.55E-08	8.42E-08	1.70E-07	1.29E-08	1.26E-08	2.55E-08	1.26E-08	1.13E-08	2.38E-08	6.68E-09	5.11E-09	1.18E-08
1513	649517.67	4197024.17	5.97E-08	5.88E-08	1.18E-07	8.97E-09	8.81E-09	1.78E-08	8.78E-09	7.85E-09	1.66E-08	4.66E-09	3.56E-09	8.22E-09
1514	649554	4197035.24	6.43E-08	6.33E-08	1.28E-07	9.67E-09	9.49E-09	1.92E-08	9.45E-09	8.46E-09	1.79E-08	5.02E-09	3.84E-09	8.86E-09
1515	649590.33	4197046.31	6.92E-08	6.82E-08	1.37E-07	1.04E-08	1.02E-08	2.06E-08	1.02E-08	9.11E-09	1.93E-08	5.41E-09	4.13E-09	9.54E-09
1516	649478.72	4197014.17	5.55E-08	5.46E-08	1.10E-07	8.34E-09	8.19E-09	1.65E-08	8.15E-09	7.30E-09	1.55E-08	4.33E-09	3.31E-09	7.64E-09

1517	649561.19	4196829.09	4.23E-08	4.17E-08	8.40E-08	6.36E-09	6.25E-09	1.26E-08	6.22E-09	5.57E-09	1.18E-08	3.31E-09	2.53E-09	5.83E-09
1518	649600.66	4196841.12	4.51E-08	4.44E-08	8.96E-08	6.79E-09	6.67E-09	1.35E-08	6.64E-09	5.94E-09	1.26E-08	3.53E-09	2.69E-09	6.22E-09
1519	649640.13	4196853.15	4.82E-08	4.75E-08	9.57E-08	7.25E-09	7.12E-09	1.44E-08	7.09E-09	6.35E-09	1.34E-08	3.77E-09	2.88E-09	6.64E-09
1520	649679.6	4196865.18	5.16E-08	5.08E-08	1.02E-07	7.76E-09	7.62E-09	1.54E-08	7.59E-09	6.80E-09	1.44E-08	4.03E-09	3.08E-09	7.11E-09
1521	649520.67	4196818.62	3.98E-08	3.92E-08	7.91E-08	5.99E-09	5.88E-09	1.19E-08	5.86E-09	5.24E-09	1.11E-08	3.11E-09	2.38E-09	5.49E-09
1522	649602.49	4196633.35	3.21E-08	3.16E-08	6.37E-08	4.83E-09	4.74E-09	9.57E-09	4.72E-09	4.23E-09	8.95E-09	2.51E-09	1.92E-09	4.42E-09
1523	649640.66	4196644.98	3.38E-08	3.32E-08	6.70E-08	5.08E-09	4.98E-09	1.01E-08	4.96E-09	4.44E-09	9.41E-09	2.64E-09	2.02E-09	4.65E-09
1524	649678.82	4196656.61	3.56E-08	3.50E-08	7.06E-08	5.35E-09	5.25E-09	1.06E-08	5.23E-09	4.68E-09	9.91E-09	2.78E-09	2.12E-09	4.90E-09
1525	649716.99	4196668.24	3.76E-08	3.70E-08	7.45E-08	5.65E-09	5.55E-09	1.12E-08	5.52E-09	4.94E-09	1.05E-08	2.93E-09	2.24E-09	5.18E-09
1526	649755.15	4196679.87	3.97E-08	3.91E-08	7.88E-08	5.97E-09	5.86E-09	1.18E-08	5.84E-09	5.23E-09	1.11E-08	3.10E-09	2.37E-09	5.47E-09
1527	649562.62	4196623.07	3.06E-08	3.02E-08	6.08E-08	4.61E-09	4.52E-09	9.13E-09	4.50E-09	4.03E-09	8.53E-09	2.39E-09	1.83E-09	4.22E-09
1528	649645.54	4196438.13	2.57E-08	2.53E-08	5.10E-08	3.87E-09	3.80E-09	7.67E-09	3.78E-09	3.39E-09	7.17E-09	2.01E-09	1.54E-09	3.54E-09
1529	649685.91	4196450.43	2.69E-08	2.64E-08	5.33E-08	4.04E-09	3.97E-09	8.00E-09	3.95E-09	3.54E-09	7.48E-09	2.10E-09	1.60E-09	3.70E-09
1530	649726.28	4196462.73	2.81E-08	2.77E-08	5.58E-08	4.23E-09	4.15E-09	8.38E-09	4.13E-09	3.70E-09	7.83E-09	2.20E-09	1.68E-09	3.87E-09
1531	649766.64	4196475.04	2.95E-08	2.90E-08	5.85E-08	4.43E-09	4.35E-09	8.78E-09	4.33E-09	3.88E-09	8.21E-09	2.30E-09	1.76E-09	4.06E-09
1532	649807.01	4196487.34	3.10E-08	3.05E-08	6.15E-08	4.66E-09	4.57E-09	9.23E-09	4.55E-09	4.08E-09	8.63E-09	2.42E-09	1.85E-09	4.27E-09
1533	649604.57	4196427.52	2.47E-08	2.43E-08	4.91E-08	3.72E-09	3.65E-09	7.37E-09	3.64E-09	3.25E-09	6.89E-09	1.93E-09	1.48E-09	3.41E-09
1534	649291.07	4197869.18	3.31E-06	3.26E-06	6.56E-06	4.97E-07	4.88E-07	9.86E-07	4.86E-07	4.35E-07	9.22E-07	2.58E-07	1.97E-07	4.56E-07
1535	649292.2	4197844.2	2.36E-06	2.33E-06	4.69E-06	3.56E-07	3.49E-07	7.05E-07	3.48E-07	3.11E-07	6.59E-07	1.85E-07	1.41E-07	3.26E-07
1536	649293.34	4197819.23	1.79E-06	1.76E-06	3.55E-06	2.69E-07	2.64E-07	5.33E-07	2.63E-07	2.35E-07	4.98E-07	1.40E-07	1.07E-07	2.46E-07
1537	649278.14	4197793.51	1.35E-06	1.33E-06	2.69E-06	2.04E-07	2.00E-07	4.04E-07	1.99E-07	1.78E-07	3.77E-07	1.06E-07	8.09E-08	1.87E-07
1538	649309.07	4197745.9	9.27E-07	9.13E-07	1.84E-06	1.39E-07	1.37E-07	2.76E-07	1.36E-07	1.22E-07	2.58E-07	7.24E-08	5.53E-08	1.28E-07
1539	649280.4	4197743.56	8.63E-07	8.49E-07	1.71E-06	1.30E-07	1.27E-07	2.57E-07	1.27E-07	1.14E-07	2.40E-07	6.74E-08	5.15E-08	1.19E-07
1540	649309.96	4197695.77	6.29E-07	6.19E-07	1.25E-06	9.45E-08	9.28E-08	1.87E-07	9.24E-08	8.27E-08	1.75E-07	4.91E-08	3.75E-08	8.66E-08
1541	649282.66	4197693.62	5.80E-07	5.71E-07	1.15E-06	8.73E-08	8.57E-08	1.73E-07	8.53E-08	7.64E-08	1.62E-07	4.53E-08	3.46E-08	8.00E-08
1542	649314.96	4197646.17	4.49E-07	4.42E-07	8.91E-07	6.75E-08	6.63E-08	1.34E-07	6.60E-08	5.91E-08	1.25E-07	3.51E-08	2.68E-08	6.19E-08
1543	649284.93	4197643.67	4.09E-07	4.02E-07	8.11E-07	6.14E-08	6.03E-08	1.22E-07	6.01E-08	5.38E-08	1.14E-07	3.19E-08	2.44E-08	5.63E-08
1544	649315.86	4197596.05	3.29E-07	3.23E-07	6.52E-07	4.94E-08	4.85E-08	9.79E-08	4.83E-08	4.32E-08	9.16E-08	2.57E-08	1.96E-08	4.53E-08
1545	649287.19	4197593.72	3.00E-07	2.95E-07	5.95E-07	4.51E-08	4.43E-08	8.93E-08	4.41E-08	3.95E-08	8.35E-08	2.34E-08	1.79E-08	4.13E-08
1546	649321.21	4197496.26	1.96E-07	1.93E-07	3.88E-07	2.94E-08	2.89E-08	5.83E-08	2.88E-08	2.57E-08	5.45E-08	1.53E-08	1.17E-08	2.70E-08
1547	649347.52	4197499.65	2.12E-07	2.09E-07	4.21E-07	3.19E-08	3.13E-08	6.32E-08	3.12E-08	2.79E-08	5.91E-08	1.66E-08	1.26E-08	2.92E-08
1548	649291.72	4197493.82	1.79E-07	1.77E-07	3.56E-07	2.70E-08	2.65E-08	5.35E-08	2.64E-08	2.36E-08	5.00E-08	1.40E-08	1.07E-08	2.47E-08
1549	649326.28	4197396.43	1.29E-07	1.27E-07	2.57E-07	1.94E-08	1.91E-08	3.85E-08	1.90E-08	1.70E-08	3.60E-08	1.01E-08	7.72E-09	1.78E-08
1550	649353.7	4197399.97	1.39E-07	1.37E-07	2.76E-07	2.09E-08	2.05E-08	4.15E-08	2.05E-08	1.83E-08	3.88E-08	1.09E-08	8.30E-09	1.92E-08
1551	649296.24	4197393.92	1.20E-07	1.18E-07	2.38E-07	1.80E-08	1.77E-08	3.57E-08	1.76E-08	1.58E-08	3.34E-08	9.36E-09	7.15E-09	1.65E-08
1552	649331.2	4197296.58	9.25E-08	9.11E-08	1.84E-07	1.39E-08	1.37E-08	2.76E-08	1.36E-08	1.22E-08	2.58E-08	7.22E-09	5.52E-09	1.27E-08
1553	649359.4	4197300.22	9.86E-08	9.71E-08	1.96E-07	1.48E-08	1.46E-08	2.94E-08	1.45E-08	1.30E-08	2.75E-08	7.70E-09	5.88E-09	1.36E-08
1554	649387.59	4197303.86	1.05E-07	1.04E-07	2.09E-07	1.58E-08	1.55E-08	3.14E-08	1.55E-08	1.38E-08	2.93E-08	8.22E-09	6.28E-09	1.45E-08
1555	649300.77	4197294.03	8.68E-08	8.54E-08	1.72E-07	1.31E-08	1.28E-08	2.59E-08	1.28E-08	1.14E-08	2.42E-08	6.78E-09	5.18E-09	1.20E-08
1556	649336.02	4197196.72	7.02E-08	6.91E-08	1.39E-07	1.06E-08	1.04E-08	2.09E-08	1.03E-08	9.24E-09	1.96E-08	5.48E-09	4.19E-09	9.67E-09
1557	649364.81	4197200.44	7.42E-08	7.30E-08	1.47E-07	1.12E-08	1.09E-08	2.21E-08	1.09E-08	9.76E-09	2.07E-08	5.79E-09	4.43E-09	1.02E-08
1558	649393.59	4197204.15	7.85E-08	7.72E-08	1.56E-07	1.18E-08	1.16E-08	2.34E-08	1.15E-08	1.03E-08	2.19E-08	6.13E-09	4.68E-09	1.08E-08
1559	649305.3	4197194.13	6.65E-08	6.55E-08	1.32E-07	1.00E-08	9.82E-09	1.98E-08	9.78E-09	8.76E-09	1.85E-08	5.20E-09	3.97E-09	9.17E-09
1560	649345.49	4196996.98	4.56E-08	4.49E-08	9.06E-08	6.86E-09	6.74E-09	1.36E-08	6.71E-09	6.01E-09	1.27E-08	3.57E-09	2.72E-09	6.29E-09
1561	649375.09	4197000.8	4.76E-08	4.68E-08	9.44E-08	7.15E-09	7.02E-09	1.42E-08	6.99E-09	6.26E-09	1.33E-08	3.72E-09	2.84E-09	6.55E-09
1562	649404.7	4197004.62	4.96E-08	4.88E-08	9.84E-08	7.46E-09	7.32E-09	1.48E-08	7.29E-09	6.53E-09	1.38E-08	3.87E-09	2.96E-09	6.83E-09
1563	649434.31	4197008.44	5.18E-08	5.10E-08	1.03E-07	7.79E-09	7.65E-09	1.54E-08	7.62E-09	6.82E-09	1.44E-08	4.05E-09	3.09E-09	7.14E-09
1564	649314.35	4196994.33	4.39E-08	4.32E-08	8.71E-08	6.60E-09	6.48E-09	1.31E-08	6.45E-09	5.78E-09	1.22E-08	3.43E-09	2.62E-09	6.05E-09
1565	649354.81	4196797.22	3.30E-08	3.25E-08	6.55E-08	4.96E-09	4.87E-09	9.83E-09	4.85E-09	4.34E-09	9.19E-09	2.58E-09	1.97E-09	4.55E-09
1566	649384.97	4196801.11	3.41E-08	3.35E-08	6.76E-08	5.12E-09	5.03E-09	1.02E-08	5.01E-09	4.48E-09	9.49E-09	2.66E-09	2.03E-09	4.69E-09
1567	649415.12	4196805	3.52E-08	3.47E-08	6.99E-08	5.30E-09	5.20E-09	1.05E-08	5.18E-09	4.64E-09	9.81E-09	2.75E-09	2.10E-09	4.85E-09
1568	649445.28	4196808.89	3.64E-08	3.59E-08	7.23E-08	5.48E-09	5.38E-09	1.09E-08	5.36E-09	4.80E-09	1.02E-08	2.85E-09	2.17E-09	5.02E-09
1569	649475.44	4196812.78	3.77E-08	3.71E-08	7.49E-08	5.67E-09	5.57E-09	1.12E-08	5.55E-09	4.97E-09	1.05E-08	2.95E-09	2.25E-09	5.20E-09
1570	649323.41	4196794.54	3.20E-08	3.15E-08	6.35E-08	4.81E-09	4.72E-09	9.54E-09	4.71E-09	4.21E-09	8.92E-09	2.50E-09	1.91E-09	4.41E-09
1571	649364.06	4196597.45	2.55E-08	2.51E-08	5.06E-08	3.84E-09	3.77E-09	7.60E-09	3.75E-09	3.36E-09	7.11E-09	1.99E-09	1.52E-09	3.51E-09
1572	649394.61	4196601.39	2.62E-08	2.58E-08	5.20E-08	3.94E-09	3.87E-09	7.81E-09	3.85E-09	3.45E-09	7.30E-09	2.05E-09	1.56E-09	3.61E-09
1573	649425.16	4196605.34	2.69E-08	2.65E-08	5.34E-08	4.05E-09	3.98E-09	8.03E-09	3.96E-09	3.54E-09	7.50E-09	2.10E-09	1.61E-09	3.71E-09
1574	649455.7	4196609.28	2.77E-08	2.73E-08	5.50E-08	4.16E-09	4.09E-09	8.25E-09	4.07E-09	3.64E-09	7.72E-09	2.16E-09	1.65E-09	3.82E-09
1575	649486.25	4196613.22	2.85E-08	2.80E-08	5.65E-08	4.28E-09	4.20E-09	8.49E-09	4.19E-09	3.75E-09	7.93E-09	2.22E-09	1.70E-09	3.92E-09
1576	649516.8	4196617.16	2.93E-08	2.88E-08	5.81E-08	4.41E-09	4.33E-09	8.73E-09	4.31E-09	3.86E-09	8.16E-09	2.29E-09	1.75E-09	4.04E-09
1577	649332.46	4196594.74	2.49E-08	2.45E-08	4.93E-08	3.74E-09	3.67E-09	7.41E-09	3.66E-09	3.27E-09	6.93E-09	1.94E-09	1.48E-09	3.43E-09
1578	649373.26	4196397.68	2.07E-08	2.04E-08	4.10E-08	3.11E-09	3.05E-09	6.16E-09	3.04E-09	2.72E-09	5.76E-09	1.62E-09	1.23E-09	2.85E-09
1579	649404.1	4196401.66	2.12E-08	2.08E-08	4.20E-08	3.18E-09	3.13E-09	6.31E-09	3.11E-09	2.79E-09	5.90E-09	1.65E-09	1.26E-09	2.92E-09
1580	649434.95	4196405.63	2.17E-08	2.14E-08	4.30E-08	3.26E-09	3.20E-09	6.46E-09	3.19E-09	2.85E-09	6.04E-09	1.69E-09	1.29E-09	2.99E-09
1581	649465.79	4196409.61	2.22E-08	2.19E-08	4.41E-08	3.34E-09	3.28E-09	6.62E-09	3.27E-09	2.92E-09	6.19E-09	1.73E-09	1.33E-09	3.06E-09
1582	649496.63	4196413.59	2.27E-08	2.24E-08	4.51E-08	3.42E-09	3.36E-09	6.78E-09	3.34E-09	2.99E-09	6.34E-09	1.78E-09	1.36E-09	3.13E-09
1583	649527.47	4196417.57	2.33E-08	2.29E-08	4.62E-08	3.50E-09	3.44E-09	6.94E-09	3.42E-09	3.06E-09	6.49E-09	1.82E-09	1.39E-09	3.21E-09
1584	649558.31	4196421.55	2.38E-08	2.35E-08	4.73E-08	3.59E-09	3.52E-09	7.11E-09	3.51E-09	3.14E-09	6.64E-09	1.86E-09	1.42E-09	3.29E-09
1585	649341.51	4196394.95	2.02E-08	1.99E-08	4.01E-08	3.04E-09	2.98E-09	6.02E-09	2.97E-09	2.66E-09	5.63E-09	1.58E-09	1.21E-09	2.78E-09
1586	649255.93	4197868.05	3.21E-06	3.16E-06	6.38E-06	4.83E-07	4.74E-07	9.58E-07	4.73E-07	4.23E-07	8.95E-07	2.51E-07	1.92E-07	4.43E-07
1587	649256.44	4197843.05	2.28E-06	2.24E-06	4.52E-06	3.42E-07	3.36E-07	6.79E-07	3.35E-07	3.00E-07	6.35E-07	1.78E-07	1.36E-07	3.14E-07
1588	649256.95	4197818.06	1.70E-06	1.67E-06	3.37E-06	2.56E-07	2.51E-07	5.06E-07	2.50E-07	2.24E-07	4.73E-07	1.33E-07	1.01E-07	2.34E-07
1589	649239.26	4197792.69	1.26E-06	1.24E-06	2.49E-06	1.89E-07	1.86E-07	3.75E-07	1.85E-07	1.65E-07	3.50E-07	9.82E-08	7.50E-08	1.73E-07
1590	649240.28	4197742.7	7.76E-07	7.64E-07	1.54E-06	1.17E-07	1.15E-07	2.31E-07	1.14E-07	1.02E-07	2.16E-07	6.06E-08	4.63E-08	1.07E-07
1591	649259.49	4197693.08	5.42E-07	5.34E-07	1.08E-06	8.15E-08	8.00E-08	1.62E-07	7.97E-08	7.14E-08	1.51E-07	4.24E-08	3.24E-08	7.47E-08
1592	649260.5	4197643.09	3.79E-07	3.73E-07	7.51E-07	5.69E-08	5.59E-08	1.13E-07	5.57E-08	4.98E-08	1.05E-07	2.96E-08	2.26E-08	5.22E-08

1593	649261.52	4197593.1	2.77E-07	2.73E-07	5.49E-07	4.16E-08	4.09E-08	8.25E-08	4.07E-08	3.64E-08	7.71E-08	2.16E-08	1.65E-08	3.81E-08
1594	649263.55	4197493.12	1.66E-07	1.63E-07	3.29E-07	2.50E-08	2.45E-08	4.95E-08	2.44E-08	2.18E-08	4.62E-08	1.30E-08	9.90E-09	2.29E-08
1595	649265.59	4197393.14	1.12E-07	1.10E-07	2.22E-07	1.68E-08	1.65E-08	3.33E-08	1.64E-08	1.47E-08	3.11E-08	8.73E-09	6.67E-09	1.54E-08
1596	649267.62	4197293.16	8.16E-08	8.03E-08	1.62E-07	1.23E-08	1.20E-08	2.43E-08	1.20E-08	1.07E-08	2.27E-08	6.37E-09	4.87E-09	1.12E-08
1597	649269.66	4197193.18	6.30E-08	6.20E-08	1.25E-07	9.48E-09	9.30E-09	1.88E-08	9.26E-09	8.29E-09	1.76E-08	4.92E-09	3.76E-09	8.68E-09
1598	649273.72	4196993.23	4.20E-08	4.13E-08	8.33E-08	6.31E-09	6.20E-09	1.25E-08	6.17E-09	5.52E-09	1.17E-08	3.28E-09	2.50E-09	5.78E-09
1599	649295.98	4196793.64	3.12E-08	3.07E-08	6.19E-08	4.69E-09	4.61E-09	9.30E-09	4.59E-09	4.11E-09	8.70E-09	2.44E-09	1.86E-09	4.30E-09
1600	649259.6	4196792.9	3.03E-08	2.98E-08	6.01E-08	4.55E-09	4.47E-09	9.02E-09	4.45E-09	3.98E-09	8.43E-09	2.36E-09	1.81E-09	4.17E-09
1601	649300.05	4196593.68	2.42E-08	2.39E-08	4.81E-08	3.65E-09	3.58E-09	7.23E-09	3.56E-09	3.19E-09	6.76E-09	1.89E-09	1.45E-09	3.34E-09
1602	649263.67	4196592.94	2.36E-08	2.32E-08	4.69E-08	3.55E-09	3.49E-09	7.04E-09	3.47E-09	3.11E-09	6.58E-09	1.84E-09	1.41E-09	3.25E-09
1603	649316.58	4196394.13	1.99E-08	1.95E-08	3.94E-08	2.99E-09	2.93E-09	5.92E-09	2.92E-09	2.61E-09	5.53E-09	1.55E-09	1.18E-09	2.74E-09
1604	649285.92	4196393.35	1.94E-08	1.91E-08	3.86E-08	2.92E-09	2.87E-09	5.80E-09	2.86E-09	2.56E-09	5.42E-09	1.52E-09	1.16E-09	2.68E-09
1605	649211.22	4197869.2	3.22E-06	3.17E-06	6.38E-06	4.84E-07	4.75E-07	9.59E-07	4.73E-07	4.23E-07	8.96E-07	2.51E-07	1.92E-07	4.43E-07
1606	649209.72	4197844.24	2.21E-06	2.17E-06	4.38E-06	3.32E-07	3.26E-07	6.58E-07	3.25E-07	2.91E-07	6.15E-07	1.72E-07	1.32E-07	3.04E-07
1607	649232.71	4197817.81	1.64E-06	1.61E-06	3.25E-06	2.46E-07	2.42E-07	4.88E-07	2.41E-07	2.15E-07	4.56E-07	1.28E-07	9.76E-08	2.25E-07
1608	649208.21	4197819.29	1.59E-06	1.57E-06	3.16E-06	2.39E-07	2.35E-07	4.75E-07	2.34E-07	2.10E-07	4.44E-07	1.24E-07	9.50E-08	2.19E-07
1609	649206.7	4197794.33	1.18E-06	1.17E-06	2.35E-06	1.78E-07	1.75E-07	3.53E-07	1.74E-07	1.56E-07	3.30E-07	9.25E-08	7.06E-08	1.63E-07
1610	649203.69	4197744.42	6.99E-07	6.88E-07	1.39E-06	1.05E-07	1.03E-07	2.08E-07	1.03E-07	9.20E-08	1.95E-07	5.46E-08	4.17E-08	9.64E-08
1611	649225.17	4197693.03	4.85E-07	4.77E-07	9.62E-07	7.29E-08	7.16E-08	1.44E-07	7.13E-08	6.38E-08	1.35E-07	3.79E-08	2.89E-08	6.68E-08
1612	649200.67	4197694.51	4.47E-07	4.40E-07	8.87E-07	6.72E-08	6.60E-08	1.33E-07	6.57E-08	5.88E-08	1.25E-07	3.49E-08	2.67E-08	6.16E-08
1613	649222.16	4197643.12	3.33E-07	3.28E-07	6.61E-07	5.01E-08	4.91E-08	9.92E-08	4.89E-08	4.38E-08	9.28E-08	2.60E-08	1.99E-08	4.59E-08
1614	649197.66	4197644.6	3.07E-07	3.02E-07	6.09E-07	4.61E-08	4.53E-08	9.14E-08	4.51E-08	4.04E-08	8.55E-08	2.40E-08	1.83E-08	4.23E-08
1615	649219.14	4197593.22	2.42E-07	2.38E-07	4.79E-07	3.63E-08	3.57E-08	7.20E-08	3.55E-08	3.18E-08	6.73E-08	1.89E-08	1.44E-08	3.33E-08
1616	649194.64	4197594.7	2.24E-07	2.20E-07	4.44E-07	3.37E-08	3.30E-08	6.67E-08	3.29E-08	2.95E-08	6.24E-08	1.75E-08	1.34E-08	3.08E-08
1617	649229.24	4197493.08	1.51E-07	1.49E-07	3.00E-07	2.27E-08	2.23E-08	4.51E-08	2.22E-08	1.99E-08	4.22E-08	1.18E-08	9.03E-09	2.08E-08
1618	649188.61	4197494.88	1.37E-07	1.35E-07	2.71E-07	2.05E-08	2.02E-08	4.07E-08	2.01E-08	1.80E-08	3.81E-08	1.07E-08	8.16E-09	1.88E-08
1619	649227.24	4197393.18	1.03E-07	1.01E-07	2.04E-07	1.55E-08	1.52E-08	3.07E-08	1.51E-08	1.35E-08	2.87E-08	8.04E-09	6.14E-09	1.42E-08
1620	649182.58	4197395.06	9.44E-08	9.29E-08	1.87E-07	1.42E-08	1.39E-08	2.81E-08	1.39E-08	1.24E-08	2.63E-08	7.37E-09	5.63E-09	1.30E-08
1621	649225.24	4197293.28	7.59E-08	7.47E-08	1.51E-07	1.14E-08	1.12E-08	2.26E-08	1.12E-08	9.99E-09	2.12E-08	5.93E-09	4.53E-09	1.05E-08
1622	649201.05	4197293.76	7.30E-08	7.19E-08	1.45E-07	1.10E-08	1.08E-08	2.18E-08	1.07E-08	9.61E-09	2.03E-08	5.70E-09	4.36E-09	1.01E-08
1623	649176.55	4197295.24	7.05E-08	6.94E-08	1.40E-07	1.06E-08	1.04E-08	2.10E-08	1.04E-08	9.27E-09	1.96E-08	5.50E-09	4.20E-09	9.71E-09
1624	649213.84	4197193.57	5.84E-08	5.75E-08	1.16E-07	8.78E-09	8.62E-09	1.74E-08	8.58E-09	7.68E-09	1.63E-08	4.56E-09	3.48E-09	8.04E-09
1625	649170.52	4197195.42	5.53E-08	5.45E-08	1.10E-07	8.32E-09	8.17E-09	1.65E-08	8.13E-09	7.28E-09	1.54E-08	4.32E-09	3.30E-09	7.62E-09
1626	649207.15	4196993.82	3.93E-08	3.87E-08	7.80E-08	5.91E-09	5.80E-09	1.17E-08	5.78E-09	5.17E-09	1.09E-08	3.07E-09	2.34E-09	5.41E-09
1627	649231.34	4196993.34	4.02E-08	3.96E-08	7.98E-08	6.04E-09	5.94E-09	1.20E-08	5.91E-09	5.29E-09	1.12E-08	3.14E-09	2.40E-09	5.54E-09
1628	649182.96	4196994.31	3.84E-08	3.78E-08	7.62E-08	5.77E-09	5.67E-09	1.14E-08	5.65E-09	5.05E-09	1.07E-08	3.00E-09	2.29E-09	5.29E-09
1629	649158.46	4196995.79	3.76E-08	3.70E-08	7.46E-08	5.66E-09	5.55E-09	1.12E-08	5.53E-09	4.95E-09	1.05E-08	2.94E-09	2.24E-09	5.18E-09
1630	649193.08	4196794.23	2.87E-08	2.83E-08	5.70E-08	4.32E-09	4.24E-09	8.56E-09	4.23E-09	3.78E-09	8.01E-09	2.24E-09	1.72E-09	3.96E-09
1631	649146.4	4196796.15	2.78E-08	2.74E-08	5.52E-08	4.18E-09	4.11E-09	8.29E-09	4.09E-09	3.66E-09	7.75E-09	2.17E-09	1.66E-09	3.83E-09
1632	649179.81	4196594.62	2.23E-08	2.20E-08	4.43E-08	3.36E-09	3.30E-09	6.66E-09	3.28E-09	2.94E-09	6.22E-09	1.74E-09	1.33E-09	3.08E-09
1633	649221.74	4196593.78	2.29E-08	2.26E-08	4.55E-08	3.45E-09	3.39E-09	6.84E-09	3.37E-09	3.02E-09	6.39E-09	1.79E-09	1.37E-09	3.16E-09
1634	649134.34	4196596.52	2.18E-08	2.14E-08	4.32E-08	3.27E-09	3.22E-09	6.49E-09	3.20E-09	2.87E-09	6.07E-09	1.70E-09	1.30E-09	3.00E-09
1635	649170.97	4196394.92	1.82E-08	1.79E-08	3.60E-08	2.73E-09	2.68E-09	5.41E-09	2.67E-09	2.39E-09	5.06E-09	1.42E-09	1.08E-09	2.50E-09
1636	649195.16	4196394.43	1.84E-08	1.81E-08	3.65E-08	2.77E-09	2.72E-09	5.48E-09	2.71E-09	2.42E-09	5.13E-09	1.44E-09	1.10E-09	2.54E-09
1637	649219.35	4196393.95	1.87E-08	1.84E-08	3.70E-08	2.80E-09	2.75E-09	5.56E-09	2.74E-09	2.45E-09	5.20E-09	1.46E-09	1.11E-09	2.57E-09
1638	649243.54	4196393.46	1.89E-08	1.86E-08	3.76E-08	2.85E-09	2.79E-09	5.64E-09	2.78E-09	2.49E-09	5.27E-09	1.48E-09	1.13E-09	2.61E-09
1639	649146.78	4196395.4	1.79E-08	1.76E-08	3.56E-08	2.69E-09	2.65E-09	5.34E-09	2.64E-09	2.36E-09	4.99E-09	1.40E-09	1.07E-09	2.47E-09
1640	649122.28	4196396.88	1.77E-08	1.75E-08	3.52E-08	2.67E-09	2.62E-09	5.29E-09	2.61E-09	2.33E-09	4.94E-09	1.39E-09	1.06E-09	2.44E-09
1641	649168.83	4197867.14	3.02E-06	2.98E-06	6.00E-06	4.55E-07	4.47E-07	9.01E-07	4.45E-07	3.98E-07	8.43E-07	2.36E-07	1.81E-07	4.17E-07
1642	649146.35	4197865.02	2.83E-06	2.78E-06	5.61E-06	4.25E-07	4.17E-07	8.42E-07	4.16E-07	3.72E-07	7.87E-07	2.21E-07	1.69E-07	3.89E-07
1643	649123.86	4197862.9	2.58E-06	2.54E-06	5.13E-06	3.89E-07	3.82E-07	7.70E-07	3.80E-07	3.40E-07	7.20E-07	2.02E-07	1.54E-07	3.56E-07
1644	649101.38	4197860.77	2.28E-06	2.24E-06	4.52E-06	3.42E-07	3.36E-07	6.78E-07	3.35E-07	2.99E-07	6.34E-07	1.78E-07	1.36E-07	3.14E-07
1645	649078.89	4197858.65	1.87E-06	1.85E-06	3.72E-06	2.82E-07	2.77E-07	5.59E-07	2.76E-07	2.47E-07	5.22E-07	1.46E-07	1.12E-07	2.58E-07
1646	649056.4	4197856.53	1.38E-06	1.36E-06	2.75E-06	2.08E-07	2.04E-07	4.13E-07	2.04E-07	1.82E-07	3.86E-07	1.08E-07	8.26E-08	1.91E-07
1647	649033.92	4197854.41	9.31E-07	9.16E-07	1.85E-06	1.40E-07	1.37E-07	2.77E-07	1.37E-07	1.22E-07	2.59E-07	7.27E-08	5.55E-08	1.28E-07
1648	649171.18	4197842.25	2.01E-06	1.98E-06	4.00E-06	3.03E-07	2.97E-07	6.00E-07	2.96E-07	2.65E-07	5.61E-07	1.57E-07	1.20E-07	2.77E-07
1649	649148.69	4197840.13	1.84E-06	1.81E-06	3.65E-06	2.76E-07	2.71E-07	5.48E-07	2.70E-07	2.42E-07	5.12E-07	1.44E-07	1.10E-07	2.53E-07
1650	649126.21	4197838.01	1.63E-06	1.61E-06	3.24E-06	2.46E-07	2.41E-07	4.87E-07	2.40E-07	2.15E-07	4.55E-07	1.28E-07	9.75E-08	2.25E-07
1651	649103.72	4197835.89	1.39E-06	1.37E-06	2.76E-06	2.09E-07	2.06E-07	4.15E-07	2.05E-07	1.83E-07	3.88E-07	1.09E-07	8.31E-08	1.92E-07
1652	649081.24	4197833.76	1.12E-06	1.11E-06	2.23E-06	1.69E-07	1.66E-07	3.35E-07	1.65E-07	1.48E-07	3.13E-07	8.77E-08	6.70E-08	1.55E-07
1653	649058.75	4197831.64	8.56E-07	8.42E-07	1.70E-06	1.29E-07	1.26E-07	2.55E-07	1.26E-07	1.13E-07	2.38E-07	6.68E-08	5.11E-08	1.18E-07
1654	649036.27	4197829.52	6.39E-07	6.29E-07	1.27E-06	9.61E-08	9.44E-08	1.91E-07	9.40E-08	8.41E-08	1.78E-07	4.99E-08	3.82E-08	8.81E-08
1655	649173.53	4197817.36	1.42E-06	1.40E-06	2.83E-06	2.14E-07	2.10E-07	4.24E-07	2.09E-07	1.87E-07	3.97E-07	1.11E-07	8.50E-08	1.96E-07
1656	649151.04	4197815.24	1.28E-06	1.26E-06	2.53E-06	1.92E-07	1.89E-07	3.81E-07	1.88E-07	1.68E-07	3.56E-07	9.98E-08	7.62E-08	1.76E-07
1657	649128.56	4197813.12	1.11E-06	1.10E-06	2.21E-06	1.68E-07	1.65E-07	3.32E-07	1.64E-07	1.47E-07	3.11E-07	8.71E-08	6.65E-08	1.54E-07
1658	649106.07	4197811	9.40E-07	9.25E-07	1.86E-06	1.41E-07	1.39E-07	2.80E-07	1.38E-07	1.24E-07	2.62E-07	7.34E-08	5.61E-08	1.29E-07
1659	649083.59	4197808.87	7.65E-07	7.53E-07	1.52E-06	1.15E-07	1.13E-07	2.28E-07	1.12E-07	1.01E-07	2.13E-07	5.97E-08	4.56E-08	1.05E-07
1660	649061.1	4197806.75	6.07E-07	5.98E-07	1.21E-06	9.13E-08	8.97E-08	1.81E-07	8.93E-08	7.99E-08	1.69E-07	4.74E-08	3.63E-08	8.37E-08
1661	649038.61	4197804.63	4.84E-07	4.76E-07	9.60E-07	7.27E-08	7.14E-08	1.44E-07	7.11E-08	6.37E-08	1.35E-07	3.78E-08	2.89E-08	6.67E-08
1662	649175.88	4197792.47	1.05E-06	1.03E-06	2.08E-06	1.58E-07	1.55E-07	3.13E-07	1.54E-07	1.38E-07	2.92E-07	8.20E-08	6.26E-08	1.45E-07
1663	649153.39	4197790.35	9.31E-07	9.16E-07	1.85E-06	1.40E-07	1.37E-07	2.77E-07	1.37E-07	1.22E-07	2.59E-07	7.27E-08	5.55E-08	1.28E-07
1664	649130.91	4197788.23	8.06E-07	7.94E-07	1.60E-06	1.21E-07	1.19E-07	2.40E-07	1.19E-07	1.06E-07	2.25E-07	6.30E-08	4.81E-08	1.11E-07
1665	649108.42	4197786.11	6.82E-07	6.71E-07	1.35E-06	1.03E-07	1.01E-07	2.03E-07	1.00E-07	8.97E-08	1.90E-07	5.33E-08	4.07E-08	9.40E-08
1666	649085.93	4197783.98	5.65E-07	5.57E-07	1.12E-06	8.50E-08	8.35E-08	1.68E-07	8.31E-08	7.44E-08	1.58E-07	4.42E-08	3.37E-08	7.79E-08
1667	649063.45	4197781.86	4.65E-07	4.58E-07	9.23E-07	7.00E-08	6.87E-08	1.39E-07	6.84E-08	6.12E-08	1.30E-07	3.63E-08	2.78E-08	6.41E-08
1668	649040.96	4197779.74	3.86E-07	3.80E-07	7.66E-07	5.81E-08	5.70E-08	1.15E-07	5.68E-08	5.08E-08	1.08E-07	3.02E-08	2.30E-08	5.32E-08

1669	649180.57	4197742.69	6.27E-07	6.17E-07	1.24E-06	9.43E-08	9.26E-08	1.87E-07	9.22E-08	8.25E-08	1.75E-07	4.90E-08	3.74E-08	8.64E-08
1670	649158.09	4197740.57	5.53E-07	5.45E-07	1.10E-06	8.32E-08	8.17E-08	1.65E-07	8.14E-08	7.28E-08	1.54E-07	4.32E-08	3.30E-08	7.62E-08
1671	649135.6	4197738.45	4.82E-07	4.75E-07	9.57E-07	7.25E-08	7.12E-08	1.44E-07	7.09E-08	6.35E-08	1.34E-07	3.77E-08	2.88E-08	6.64E-08
1672	649113.12	4197736.33	4.16E-07	4.10E-07	8.26E-07	6.26E-08	6.15E-08	1.24E-07	6.12E-08	5.48E-08	1.16E-07	3.25E-08	2.48E-08	5.74E-08
1673	649090.63	4197734.21	3.58E-07	3.53E-07	7.11E-07	5.39E-08	5.29E-08	1.07E-07	5.27E-08	4.72E-08	9.98E-08	2.80E-08	2.14E-08	4.94E-08
1674	649068.14	4197732.08	3.10E-07	3.05E-07	6.14E-07	4.66E-08	4.57E-08	9.23E-08	4.55E-08	4.07E-08	8.63E-08	2.42E-08	1.85E-08	4.27E-08
1675	649045.66	4197729.96	2.70E-07	2.66E-07	5.36E-07	4.06E-08	3.98E-08	8.04E-08	3.97E-08	3.55E-08	7.52E-08	2.11E-08	1.61E-08	3.72E-08
1676	649162.78	4197690.79	3.69E-07	3.63E-07	7.31E-07	5.54E-08	5.44E-08	1.10E-07	5.42E-08	4.85E-08	1.03E-07	2.88E-08	2.20E-08	5.08E-08
1677	649140.3	4197688.67	3.26E-07	3.21E-07	6.48E-07	4.91E-08	4.82E-08	9.72E-08	4.80E-08	4.29E-08	9.09E-08	2.55E-08	1.95E-08	4.50E-08
1678	649117.81	4197686.55	2.88E-07	2.84E-07	5.72E-07	4.33E-08	4.26E-08	8.59E-08	4.24E-08	3.79E-08	8.03E-08	2.25E-08	1.72E-08	3.97E-08
1679	649095.33	4197684.43	2.55E-07	2.51E-07	5.07E-07	3.84E-08	3.77E-08	7.61E-08	3.75E-08	3.36E-08	7.11E-08	1.99E-08	1.52E-08	3.52E-08
1680	649072.84	4197682.31	2.27E-07	2.24E-07	4.51E-07	3.42E-08	3.35E-08	6.77E-08	3.34E-08	2.99E-08	6.33E-08	1.77E-08	1.36E-08	3.13E-08
1681	649050.36	4197680.18	2.04E-07	2.00E-07	4.04E-07	3.06E-08	3.00E-08	6.07E-08	2.99E-08	2.68E-08	5.67E-08	1.59E-08	1.21E-08	2.80E-08
1682	649167.48	4197641.01	2.66E-07	2.62E-07	5.28E-07	4.00E-08	3.93E-08	7.92E-08	3.91E-08	3.50E-08	7.41E-08	2.08E-08	1.59E-08	3.66E-08
1683	649144.99	4197638.89	2.39E-07	2.36E-07	4.75E-07	3.60E-08	3.53E-08	7.13E-08	3.52E-08	3.15E-08	6.67E-08	1.87E-08	1.43E-08	3.30E-08
1684	649122.51	4197636.77	2.16E-07	2.12E-07	4.28E-07	3.24E-08	3.18E-08	6.43E-08	3.17E-08	2.84E-08	6.01E-08	1.68E-08	1.29E-08	2.97E-08
1685	649100.02	4197634.65	1.95E-07	1.92E-07	3.87E-07	2.93E-08	2.88E-08	5.81E-08	2.87E-08	2.57E-08	5.43E-08	1.52E-08	1.16E-08	2.69E-08
1686	649077.54	4197632.53	1.77E-07	1.74E-07	3.51E-07	2.66E-08	2.61E-08	5.27E-08	2.60E-08	2.33E-08	4.93E-08	1.38E-08	1.06E-08	2.44E-08
1687	649055.05	4197630.41	1.61E-07	1.59E-07	3.20E-07	2.43E-08	2.38E-08	4.81E-08	2.37E-08	2.12E-08	4.49E-08	1.26E-08	9.63E-09	2.22E-08
1688	649172.18	4197591.23	2.03E-07	2.00E-07	4.03E-07	3.05E-08	3.00E-08	6.05E-08	2.98E-08	2.67E-08	5.65E-08	1.59E-08	1.21E-08	2.80E-08
1689	649149.69	4197589.11	1.85E-07	1.83E-07	3.68E-07	2.79E-08	2.74E-08	5.53E-08	2.73E-08	2.44E-08	5.17E-08	1.45E-08	1.11E-08	2.56E-08
1690	649127.21	4197586.99	1.70E-07	1.67E-07	3.37E-07	2.55E-08	2.51E-08	5.06E-08	2.50E-08	2.23E-08	4.73E-08	1.33E-08	1.01E-08	2.34E-08
1691	649104.72	4197584.87	1.56E-07	1.53E-07	3.09E-07	2.34E-08	2.30E-08	4.64E-08	2.29E-08	2.05E-08	4.34E-08	1.22E-08	9.30E-09	2.15E-08
1692	649082.23	4197582.75	1.43E-07	1.41E-07	2.85E-07	2.16E-08	2.12E-08	4.28E-08	2.11E-08	1.89E-08	4.00E-08	1.12E-08	8.56E-09	1.98E-08
1693	649059.75	4197580.63	1.32E-07	1.30E-07	2.63E-07	1.99E-08	1.96E-08	3.95E-08	1.95E-08	1.74E-08	3.69E-08	1.03E-08	7.91E-09	1.83E-08
1694	649159.08	4197489.55	1.24E-07	1.22E-07	2.46E-07	1.86E-08	1.83E-08	3.69E-08	1.82E-08	1.63E-08	3.45E-08	9.67E-09	7.39E-09	1.71E-08
1695	649136.6	4197487.43	1.16E-07	1.14E-07	2.30E-07	1.74E-08	1.71E-08	3.45E-08	1.70E-08	1.53E-08	3.23E-08	9.06E-09	6.92E-09	1.60E-08
1696	649114.11	4197485.31	1.09E-07	1.07E-07	2.16E-07	1.64E-08	1.61E-08	3.24E-08	1.60E-08	1.43E-08	3.03E-08	8.49E-09	6.49E-09	1.50E-08
1697	649091.63	4197483.19	1.02E-07	1.01E-07	2.03E-07	1.54E-08	1.51E-08	3.04E-08	1.50E-08	1.34E-08	2.85E-08	7.98E-09	6.10E-09	1.41E-08
1698	649069.14	4197481.07	9.61E-08	9.46E-08	1.91E-07	1.44E-08	1.42E-08	2.86E-08	1.41E-08	1.26E-08	2.68E-08	7.51E-09	5.73E-09	1.32E-08
1699	649145.99	4197387.87	8.59E-08	8.45E-08	1.70E-07	1.29E-08	1.27E-08	2.56E-08	1.26E-08	1.13E-08	2.39E-08	6.71E-09	5.12E-09	1.18E-08
1700	649123.51	4197385.75	8.17E-08	8.04E-08	1.62E-07	1.23E-08	1.21E-08	2.44E-08	1.20E-08	1.08E-08	2.28E-08	6.38E-09	4.88E-09	1.13E-08
1701	649101.02	4197383.63	7.78E-08	7.66E-08	1.54E-07	1.17E-08	1.15E-08	2.32E-08	1.14E-08	1.02E-08	2.17E-08	6.08E-09	4.64E-09	1.07E-08
1702	649078.53	4197381.51	7.41E-08	7.30E-08	1.47E-07	1.11E-08	1.09E-08	2.21E-08	1.09E-08	9.76E-09	2.07E-08	5.79E-09	4.43E-09	1.02E-08
1703	649132.9	4197286.2	6.43E-08	6.33E-08	1.28E-07	9.68E-09	9.50E-09	1.92E-08	9.46E-09	8.47E-09	1.79E-08	5.03E-09	3.84E-09	8.87E-09
1704	649110.41	4197284.07	6.19E-08	6.09E-08	1.23E-07	9.30E-09	9.13E-09	1.84E-08	9.10E-09	8.14E-09	1.72E-08	4.83E-09	3.69E-09	8.52E-09
1705	649087.93	4197281.95	5.95E-08	5.86E-08	1.18E-07	8.95E-09	8.79E-09	1.77E-08	8.75E-09	7.83E-09	1.66E-08	4.65E-09	3.55E-09	8.20E-09
1706	649142.29	4197186.64	5.24E-08	5.16E-08	1.04E-07	7.88E-09	7.73E-09	1.56E-08	7.70E-09	6.89E-09	1.46E-08	4.09E-09	3.13E-09	7.22E-09
1707	649119.81	4197184.52	5.07E-08	4.99E-08	1.01E-07	7.62E-09	7.49E-09	1.51E-08	7.45E-09	6.67E-09	1.41E-08	3.96E-09	3.03E-09	6.99E-09
1708	649097.32	4197182.39	4.91E-08	4.83E-08	9.74E-08	7.38E-09	7.25E-09	1.46E-08	7.22E-09	6.46E-09	1.37E-08	3.84E-09	2.93E-09	6.77E-09
1709	649116.11	4196983.28	3.55E-08	3.49E-08	7.04E-08	5.34E-09	5.24E-09	1.06E-08	5.22E-09	4.67E-09	9.89E-09	2.77E-09	2.12E-09	4.89E-09
1710	649224.83	4196792.65	2.94E-08	2.89E-08	5.83E-08	4.42E-09	4.34E-09	8.76E-09	4.32E-09	3.87E-09	8.19E-09	2.30E-09	1.75E-09	4.05E-09
1711	649153.68	4196585.05	2.17E-08	2.14E-08	4.32E-08	3.27E-09	3.21E-09	6.48E-09	3.20E-09	2.86E-09	6.06E-09	1.70E-09	1.30E-09	3.00E-09
1712	649015.78	4197805.24	4.03E-07	3.97E-07	8.00E-07	6.06E-08	5.95E-08	1.20E-07	5.93E-08	5.31E-08	1.12E-07	3.15E-08	2.41E-08	5.56E-08
1713	649013.98	4197780.31	3.24E-07	3.19E-07	6.42E-07	4.87E-08	4.78E-08	9.65E-08	4.76E-08	4.26E-08	9.02E-08	2.53E-08	1.93E-08	4.46E-08
1714	649020.78	4197729.69	2.38E-07	2.34E-07	4.72E-07	3.58E-08	3.51E-08	7.09E-08	3.50E-08	3.13E-08	6.62E-08	1.86E-08	1.42E-08	3.28E-08
1715	649025.48	4197679.91	1.84E-07	1.81E-07	3.64E-07	2.76E-08	2.71E-08	5.47E-08	2.70E-08	2.42E-08	5.12E-08	1.43E-08	1.10E-08	2.53E-08
1716	649023.95	4197630.06	1.45E-07	1.42E-07	2.87E-07	2.18E-08	2.14E-08	4.31E-08	2.13E-08	1.90E-08	4.03E-08	1.13E-08	8.63E-09	1.99E-08
1717	649019.94	4197580.19	1.17E-07	1.16E-07	2.33E-07	1.77E-08	1.73E-08	3.50E-08	1.73E-08	1.55E-08	3.27E-08	9.17E-09	7.01E-09	1.62E-08
1718	649012.28	4197480.44	8.39E-08	8.26E-08	1.67E-07	1.26E-08	1.24E-08	2.50E-08	1.23E-08	1.10E-08	2.34E-08	6.56E-09	5.01E-09	1.16E-08
1719	649040.71	4197480.75	8.97E-08	8.83E-08	1.78E-07	1.35E-08	1.32E-08	2.67E-08	1.32E-08	1.18E-08	2.50E-08	7.01E-09	5.35E-09	1.24E-08
1720	649005.97	4197380.71	6.46E-08	6.36E-08	1.28E-07	9.72E-09	9.54E-09	1.93E-08	9.50E-09	8.51E-09	1.80E-08	5.05E-09	3.86E-09	8.91E-09
1721	649037.07	4197381.05	6.85E-08	6.75E-08	1.36E-07	1.03E-08	1.01E-08	2.04E-08	1.01E-08	9.02E-09	1.91E-08	5.35E-09	4.09E-09	9.44E-09
1722	648998.36	4197280.96	5.20E-08	5.12E-08	1.03E-07	7.81E-09	7.67E-09	1.55E-08	7.64E-09	6.84E-09	1.45E-08	4.06E-09	3.10E-09	7.16E-09
1723	649028.22	4197281.29	5.43E-08	5.35E-08	1.08E-07	8.17E-09	8.02E-09	1.62E-08	7.99E-09	7.15E-09	1.51E-08	4.25E-09	3.24E-09	7.49E-09
1724	649058.07	4197281.62	5.69E-08	5.60E-08	1.13E-07	8.55E-09	8.40E-09	1.69E-08	8.36E-09	7.48E-09	1.58E-08	4.44E-09	3.39E-09	7.84E-09
1725	648990.89	4197181.22	4.31E-08	4.25E-08	8.56E-08	6.49E-09	6.37E-09	1.29E-08	6.34E-09	5.68E-09	1.20E-08	3.37E-09	2.57E-09	5.94E-09
1726	649019.92	4197181.54	4.47E-08	4.40E-08	8.86E-08	6.72E-09	6.59E-09	1.33E-08	6.57E-09	5.88E-09	1.24E-08	3.49E-09	2.67E-09	6.15E-09
1727	649048.94	4197181.86	4.63E-08	4.55E-08	9.18E-08	6.96E-09	6.83E-09	1.38E-08	6.80E-09	6.09E-09	1.29E-08	3.61E-09	2.76E-09	6.37E-09
1728	648976.79	4196981.74	3.17E-08	3.12E-08	6.28E-08	4.76E-09	4.67E-09	9.44E-09	4.66E-09	4.17E-09	8.82E-09	2.47E-09	1.89E-09	4.36E-09
1729	649006.64	4196982.07	3.24E-08	3.19E-08	6.43E-08	4.87E-09	4.78E-09	9.66E-09	4.76E-09	4.26E-09	9.03E-09	2.53E-09	1.93E-09	4.46E-09
1730	649036.49	4196982.4	3.32E-08	3.27E-08	6.58E-08	4.99E-09	4.90E-09	9.89E-09	4.88E-09	4.37E-09	9.24E-09	2.59E-09	1.98E-09	4.57E-09
1731	649066.35	4196982.73	3.40E-08	3.35E-08	6.75E-08	5.11E-09	5.02E-09	1.01E-08	5.00E-09	4.47E-09	9.47E-09	2.66E-09	2.03E-09	4.68E-09
1732	648962.58	4196782.26	2.46E-08	2.42E-08	4.88E-08	3.70E-09	3.63E-09	7.33E-09	3.62E-09	3.24E-09	6.85E-09	1.92E-09	1.47E-09	3.39E-09
1733	648992.99	4196782.6	2.50E-08	2.46E-08	4.95E-08	3.75E-09	3.69E-09	7.44E-09	3.67E-09	3.29E-09	6.96E-09	1.95E-09	1.49E-09	3.44E-09
1734	649023.4	4196782.93	2.54E-08	2.50E-08	5.03E-08	3.81E-09	3.74E-09	7.56E-09	3.73E-09	3.34E-09	7.07E-09	1.98E-09	1.51E-09	3.49E-09
1735	649053.81	4196783.27	2.58E-08	2.54E-08	5.12E-08	3.88E-09	3.81E-09	7.69E-09	3.79E-09	3.39E-09	7.19E-09	2.01E-09	1.54E-09	3.55E-09
1736	649084.21	4196783.6	2.63E-08	2.59E-08	5.21E-08	3.95E-09	3.88E-09	7.83E-09	3.86E-09	3.46E-09	7.32E-09	2.05E-09	1.57E-09	3.62E-09
1737	649114.62	4196783.94	2.68E-08	2.64E-08	5.32E-08	4.03E-09	3.96E-09	7.98E-09	3.94E-09	3.53E-09	7.47E-09	2.09E-09	1.60E-09	3.69E-09
1738	648948.33	4196582.78	1.99E-08	1.96E-08	3.94E-08	2.99E-09	2.93E-09	5.92E-09	2.92E-09	2.61E-09	5.54E-09	1.55E-09	1.19E-09	2.74E-09
1739	648979.13	4196583.12	2.01E-08	1.98E-08	3.98E-08	3.02E-09	2.96E-09	5.98E-09	2.95E-09	2.64E-09	5.59E-09	1.57E-09	1.20E-09	2.76E-09
1740	649009.93	4196583.46	2.03E-08	2.00E-08	4.02E-08	3.05E-09	2.99E-09	6.04E-09	2.98E-09	2.67E-09	5.65E-09	1.58E-09	1.21E-09	2.79E-09
1741	649040.74	4196583.8	2.05E-08	2.02E-08	4.07E-08	3.09E-09	3.03E-09	6.12E-09	3.02E-09	2.70E-09	5.72E-09	1.60E-09	1.23E-09	2.83E-09
1742	649071.54	4196584.14	2.08E-08	2.05E-08	4.13E-08	3.13E-09	3.07E-09	6.20E-09	3.06E-09	2.74E-09	5.80E-09	1.62E-09	1.24E-09	2.87E-09
1743	649102.34	4196584.48	2.11E-08	2.08E-08	4.19E-08	3.18E-09	3.12E-09	6.29E-09	3.11E-09	2.78E-09	5.88E-09	1.65E-09	1.26E-09	2.91E-09
1744	648934.04	4196383.3	1.65E-08	1.63E-08	3.28E-08	2.49E-09	2.44E-09	4.93E-09	2.43E-09	2.18E-09	4.61E-09	1.29E-09	9.87E-10	2.28E-09

1745	648965.14	4196383.64	1.66E-08	1.64E-08	3.30E-08	2.50E-09	2.46E-09	4.96E-09	2.45E-09	2.19E-09	4.64E-09	1.30E-09	9.93E-10	2.29E-09
1746	648996.24	4196383.99	1.68E-08	1.65E-08	3.33E-08	2.52E-09	2.47E-09	5.00E-09	2.46E-09	2.21E-09	4.67E-09	1.31E-09	1.00E-09	2.31E-09
1747	649027.34	4196384.33	1.69E-08	1.66E-08	3.36E-08	2.54E-09	2.50E-09	5.04E-09	2.49E-09	2.23E-09	4.71E-09	1.32E-09	1.01E-09	2.33E-09
1748	649058.44	4196384.67	1.71E-08	1.68E-08	3.39E-08	2.57E-09	2.52E-09	5.09E-09	2.51E-09	2.25E-09	4.76E-09	1.33E-09	1.02E-09	2.35E-09
1749	649089.53	4196385.02	1.73E-08	1.70E-08	3.43E-08	2.60E-09	2.55E-09	5.15E-09	2.54E-09	2.28E-09	4.82E-09	1.35E-09	1.03E-09	2.38E-09
1750	649004.46	4197859.53	6.53E-07	6.43E-07	1.30E-06	9.82E-08	9.64E-08	1.95E-07	9.60E-08	8.60E-08	1.82E-07	5.10E-08	3.90E-08	9.00E-08
1751	649010.82	4197831.62	5.02E-07	4.94E-07	9.95E-07	7.54E-08	7.40E-08	1.49E-07	7.37E-08	6.60E-08	1.40E-07	3.92E-08	2.99E-08	6.91E-08
1752	648987.36	4197812.54	3.48E-07	3.42E-07	6.90E-07	5.23E-08	5.13E-08	1.04E-07	5.11E-08	4.58E-08	9.69E-08	2.72E-08	2.08E-08	4.79E-08
1753	648986.97	4197786.08	2.86E-07	2.82E-07	5.68E-07	4.31E-08	4.23E-08	8.53E-08	4.21E-08	3.77E-08	7.98E-08	2.24E-08	1.71E-08	3.95E-08
1754	648977.97	4197737.36	2.04E-07	2.01E-07	4.05E-07	3.07E-08	3.02E-08	6.09E-08	3.00E-08	2.69E-08	5.69E-08	1.60E-08	1.22E-08	2.81E-08
1755	648960.48	4197690.46	1.52E-07	1.50E-07	3.02E-07	2.29E-08	2.24E-08	4.53E-08	2.24E-08	2.00E-08	4.24E-08	1.19E-08	9.07E-09	2.09E-08
1756	648983.63	4197685.52	1.61E-07	1.59E-07	3.20E-07	2.42E-08	2.38E-08	4.80E-08	2.37E-08	2.12E-08	4.49E-08	1.26E-08	9.62E-09	2.22E-08
1757	648944.11	4197643.32	1.19E-07	1.17E-07	2.37E-07	1.79E-08	1.76E-08	3.55E-08	1.75E-08	1.57E-08	3.32E-08	9.31E-09	7.11E-09	1.64E-08
1758	648969.43	4197637.91	1.26E-07	1.24E-07	2.50E-07	1.89E-08	1.86E-08	3.75E-08	1.85E-08	1.65E-08	3.50E-08	9.82E-09	7.50E-09	1.73E-08
1759	648994.75	4197632.5	1.33E-07	1.31E-07	2.64E-07	2.00E-08	1.96E-08	3.96E-08	1.96E-08	1.75E-08	3.71E-08	1.04E-08	7.94E-09	1.83E-08
1760	648926.67	4197596.41	9.66E-08	9.51E-08	1.92E-07	1.45E-08	1.43E-08	2.88E-08	1.42E-08	1.27E-08	2.69E-08	7.54E-09	5.76E-09	1.33E-08
1761	648950.97	4197591.22	1.01E-07	9.95E-08	2.00E-07	1.52E-08	1.49E-08	3.01E-08	1.49E-08	1.33E-08	2.81E-08	7.89E-09	6.03E-09	1.39E-08
1762	648975.28	4197586.02	1.06E-07	1.04E-07	2.10E-07	1.59E-08	1.56E-08	3.15E-08	1.56E-08	1.39E-08	2.95E-08	8.27E-09	6.31E-09	1.46E-08
1763	648892.67	4197502.4	6.85E-08	6.75E-08	1.36E-07	1.03E-08	1.01E-08	2.04E-08	1.01E-08	9.02E-09	1.91E-08	5.35E-09	4.09E-09	9.44E-09
1764	648917.6	4197497.07	7.13E-08	7.02E-08	1.41E-07	1.07E-08	1.05E-08	2.12E-08	1.05E-08	9.38E-09	1.99E-08	5.57E-09	4.25E-09	9.82E-09
1765	648942.54	4197491.74	7.41E-08	7.30E-08	1.47E-07	1.11E-08	1.09E-08	2.21E-08	1.09E-08	9.76E-09	2.07E-08	5.79E-09	4.42E-09	1.02E-08
1766	648967.47	4197486.41	7.72E-08	7.60E-08	1.53E-07	1.16E-08	1.14E-08	2.30E-08	1.13E-08	1.02E-08	2.15E-08	6.03E-09	4.60E-09	1.06E-08
1767	648858.6	4197408.4	5.22E-08	5.14E-08	1.04E-07	7.85E-09	7.71E-09	1.56E-08	7.68E-09	6.87E-09	1.46E-08	4.08E-09	3.12E-09	7.20E-09
1768	648883.92	4197402.99	5.42E-08	5.33E-08	1.07E-07	8.14E-09	8.00E-09	1.61E-08	7.96E-09	7.13E-09	1.51E-08	4.23E-09	3.23E-09	7.46E-09
1769	648909.24	4197397.58	5.61E-08	5.53E-08	1.11E-07	8.44E-09	8.29E-09	1.67E-08	8.26E-09	7.39E-09	1.56E-08	4.39E-09	3.35E-09	7.74E-09
1770	648934.56	4197392.17	5.82E-08	5.73E-08	1.15E-07	8.75E-09	8.59E-09	1.73E-08	8.55E-09	7.65E-09	1.62E-08	4.54E-09	3.47E-09	8.01E-09
1771	648959.88	4197386.76	6.02E-08	5.93E-08	1.19E-07	9.05E-09	8.89E-09	1.79E-08	8.85E-09	7.93E-09	1.68E-08	4.70E-09	3.59E-09	8.30E-09
1772	648824.06	4197314.5	4.18E-08	4.12E-08	8.30E-08	6.29E-09	6.18E-09	1.25E-08	6.15E-09	5.51E-09	1.17E-08	3.27E-09	2.50E-09	5.77E-09
1773	648848.37	4197309.31	4.32E-08	4.26E-08	8.58E-08	6.50E-09	6.38E-09	1.29E-08	6.36E-09	5.69E-09	1.20E-08	3.38E-09	2.58E-09	5.96E-09
1774	648872.68	4197304.11	4.46E-08	4.40E-08	8.86E-08	6.71E-09	6.59E-09	1.33E-08	6.56E-09	5.88E-09	1.24E-08	3.49E-09	2.66E-09	6.15E-09
1775	648896.99	4197298.92	4.60E-08	4.53E-08	9.14E-08	6.92E-09	6.80E-09	1.37E-08	6.77E-09	6.06E-09	1.28E-08	3.60E-09	2.75E-09	6.34E-09
1776	648921.29	4197293.72	4.74E-08	4.67E-08	9.40E-08	7.13E-09	7.00E-09	1.41E-08	6.97E-09	6.24E-09	1.32E-08	3.70E-09	2.83E-09	6.53E-09
1777	648945.6	4197288.53	4.87E-08	4.80E-08	9.67E-08	7.33E-09	7.19E-09	1.45E-08	7.16E-09	6.41E-09	1.36E-08	3.81E-09	2.91E-09	6.71E-09
1778	648969.91	4197283.34	5.01E-08	4.93E-08	9.93E-08	7.53E-09	7.39E-09	1.49E-08	7.36E-09	6.59E-09	1.39E-08	3.91E-09	2.99E-09	6.90E-09
1779	648789.98	4197220.51	3.48E-08	3.42E-08	6.90E-08	5.23E-09	5.13E-09	1.04E-08	5.11E-09	4.58E-09	9.69E-09	2.72E-09	2.08E-09	4.79E-09
1780	648814.64	4197215.24	3.59E-08	3.53E-08	7.12E-08	5.40E-09	5.30E-09	1.07E-08	5.28E-09	4.73E-09	1.00E-08	2.80E-09	2.14E-09	4.95E-09
1781	648839.3	4197209.97	3.70E-08	3.64E-08	7.34E-08	5.56E-09	5.46E-09	1.10E-08	5.44E-09	4.87E-09	1.03E-08	2.89E-09	2.21E-09	5.10E-09
1782	648863.96	4197204.7	3.81E-08	3.75E-08	7.56E-08	5.73E-09	5.62E-09	1.13E-08	5.60E-09	5.01E-09	1.06E-08	2.97E-09	2.27E-09	5.25E-09
1783	648888.62	4197199.43	3.91E-08	3.85E-08	7.76E-08	5.88E-09	5.77E-09	1.16E-08	5.75E-09	5.14E-09	1.09E-08	3.05E-09	2.33E-09	5.39E-09
1784	648913.28	4197194.16	4.01E-08	3.94E-08	7.95E-08	6.02E-09	5.92E-09	1.19E-08	5.89E-09	5.27E-09	1.12E-08	3.13E-09	2.39E-09	5.52E-09
1785	648937.94	4197188.89	4.10E-08	4.04E-08	8.13E-08	6.16E-09	6.05E-09	1.22E-08	6.03E-09	5.39E-09	1.14E-08	3.20E-09	2.45E-09	5.65E-09
1786	648962.6	4197183.62	4.19E-08	4.12E-08	8.31E-08	6.30E-09	6.18E-09	1.25E-08	6.16E-09	5.51E-09	1.17E-08	3.27E-09	2.50E-09	5.77E-09
1787	648721.73	4197032.54	2.59E-08	2.55E-08	5.14E-08	3.90E-09	3.82E-09	7.72E-09	3.81E-09	3.41E-09	7.22E-09	2.02E-09	1.55E-09	3.57E-09
1788	648746.88	4197027.16	2.67E-08	2.63E-08	5.29E-08	4.01E-09	3.94E-09	7.95E-09	3.92E-09	3.51E-09	7.43E-09	2.08E-09	1.59E-09	3.67E-09
1789	648772.03	4197021.79	2.74E-08	2.70E-08	5.44E-08	4.12E-09	4.04E-09	8.16E-09	4.03E-09	3.61E-09	7.63E-09	2.14E-09	1.63E-09	3.77E-09
1790	648797.17	4197016.41	2.81E-08	2.76E-08	5.57E-08	4.22E-09	4.15E-09	8.37E-09	4.13E-09	3.70E-09	7.82E-09	2.19E-09	1.68E-09	3.87E-09
1791	648822.32	4197011.04	2.87E-08	2.83E-08	5.70E-08	4.32E-09	4.24E-09	8.56E-09	4.22E-09	3.78E-09	8.00E-09	2.24E-09	1.71E-09	3.96E-09
1792	648847.47	4197005.67	2.93E-08	2.88E-08	5.81E-08	4.40E-09	4.32E-09	8.73E-09	4.31E-09	3.85E-09	8.16E-09	2.29E-09	1.75E-09	4.04E-09
1793	648872.61	4197000.29	2.98E-08	2.93E-08	5.92E-08	4.48E-09	4.40E-09	8.88E-09	4.38E-09	3.92E-09	8.31E-09	2.33E-09	1.78E-09	4.11E-09
1794	648897.76	4196994.92	3.03E-08	2.98E-08	6.01E-08	4.55E-09	4.47E-09	9.02E-09	4.45E-09	3.98E-09	8.44E-09	2.36E-09	1.81E-09	4.17E-09
1795	648922.91	4196989.55	3.07E-08	3.02E-08	6.09E-08	4.62E-09	4.53E-09	9.15E-09	4.51E-09	4.04E-09	8.55E-09	2.40E-09	1.83E-09	4.23E-09
1796	648948.05	4196984.17	3.11E-08	3.06E-08	6.17E-08	4.67E-09	4.59E-09	9.26E-09	4.57E-09	4.09E-09	8.66E-09	2.43E-09	1.85E-09	4.28E-09
1797	648653.44	4196844.57	2.06E-08	2.03E-08	4.08E-08	3.10E-09	3.04E-09	6.13E-09	3.03E-09	2.71E-09	5.74E-09	1.61E-09	1.23E-09	2.84E-09
1798	648678.9	4196839.13	2.11E-08	2.08E-08	4.19E-08	3.18E-09	3.12E-09	6.30E-09	3.11E-09	2.78E-09	5.89E-09	1.65E-09	1.26E-09	2.91E-09
1799	648704.37	4196833.69	2.16E-08	2.13E-08	4.29E-08	3.25E-09	3.20E-09	6.45E-09	3.18E-09	2.85E-09	6.03E-09	1.69E-09	1.29E-09	2.98E-09
1800	648729.83	4196828.25	2.21E-08	2.18E-08	4.39E-08	3.32E-09	3.26E-09	6.59E-09	3.25E-09	2.91E-09	6.16E-09	1.73E-09	1.32E-09	3.05E-09
1801	648755.3	4196822.81	2.25E-08	2.22E-08	4.47E-08	3.39E-09	3.33E-09	6.72E-09	3.31E-09	2.97E-09	6.28E-09	1.76E-09	1.35E-09	3.11E-09
1802	648780.77	4196817.36	2.29E-08	2.26E-08	4.55E-08	3.45E-09	3.38E-09	6.83E-09	3.37E-09	3.02E-09	6.39E-09	1.79E-09	1.37E-09	3.16E-09
1803	648806.23	4196811.92	2.32E-08	2.29E-08	4.61E-08	3.50E-09	3.43E-09	6.93E-09	3.42E-09	3.06E-09	6.48E-09	1.82E-09	1.39E-09	3.20E-09
1804	648831.7	4196806.48	2.35E-08	2.32E-08	4.67E-08	3.54E-09	3.48E-09	7.02E-09	3.46E-09	3.10E-09	6.56E-09	1.84E-09	1.40E-09	3.24E-09
1805	648857.16	4196801.04	2.38E-08	2.34E-08	4.72E-08	3.58E-09	3.51E-09	7.09E-09	3.50E-09	3.13E-09	6.63E-09	1.86E-09	1.42E-09	3.28E-09
1806	648882.63	4196795.6	2.40E-08	2.36E-08	4.76E-08	3.61E-09	3.54E-09	7.15E-09	3.53E-09	3.16E-09	6.68E-09	1.87E-09	1.43E-09	3.30E-09
1807	648908.09	4196790.16	2.42E-08	2.38E-08	4.80E-08	3.63E-09	3.57E-09	7.20E-09	3.55E-09	3.18E-09	6.73E-09	1.89E-09	1.44E-09	3.33E-09
1808	648933.56	4196784.71	2.43E-08	2.39E-08	4.83E-08	3.66E-09	3.59E-09	7.25E-09	3.57E-09	3.20E-09	6.77E-09	1.90E-09	1.45E-09	3.35E-09
1809	648584.9	4196656.66	1.70E-08	1.68E-08	3.38E-08	2.56E-09	2.52E-09	5.08E-09	2.51E-09	2.24E-09	4.75E-09	1.33E-09	1.02E-09	2.35E-09
1810	648609.98	4196651.3	1.74E-08	1.72E-08	3.46E-08	2.62E-09	2.57E-09	5.20E-09	2.56E-09	2.29E-09	4.86E-09	1.36E-09	1.04E-09	2.40E-09
1811	648635.06	4196645.94	1.78E-08	1.75E-08	3.53E-08	2.68E-09	2.63E-09	5.30E-09	2.62E-09	2.34E-09	4.96E-09	1.39E-09	1.06E-09	2.45E-09
1812	648660.14	4196640.58	1.81E-08	1.78E-08	3.60E-08	2.73E-09	2.68E-09	5.40E-09	2.67E-09	2.39E-09	5.05E-09	1.42E-09	1.08E-09	2.50E-09
1813	648685.22	4196635.23	1.84E-08	1.81E-08	3.66E-08	2.77E-09	2.72E-09	5.49E-09	2.71E-09	2.43E-09	5.14E-09	1.44E-09	1.10E-09	2.54E-09
1814	648710.3	4196629.87	1.87E-08	1.84E-08	3.71E-08	2.81E-09	2.76E-09	5.57E-09	2.75E-09	2.46E-09	5.21E-09	1.46E-09	1.12E-09	2.58E-09
1815	648735.38	4196624.51	1.89E-08	1.86E-08	3.76E-08	2.85E-09	2.80E-09	5.64E-09	2.78E-09	2.49E-09	5.28E-09	1.48E-09	1.13E-09	2.61E-09
1816	648760.46	4196619.15	1.91E-08	1.88E-08	3.80E-08	2.88E-09	2.83E-09	5.70E-09	2.81E-09	2.52E-09	5.33E-09	1.50E-09	1.14E-09	2.64E-09
1817	648785.54	4196613.79	1.93E-08	1.90E-08	3.83E-08	2.90E-09	2.85E-09	5.75E-09	2.84E-09	2.54E-09	5.38E-09	1.51E-09	1.15E-09	2.66E-09
1818	648810.62	4196608.43	1.94E-08	1.91E-08	3.86E-08	2.92E-09	2.87E-09	5.79E-09	2.86E-09	2.56E-09	5.42E-09	1.52E-09	1.16E-09	2.68E-09
1819	648835.7	4196603.07	1.95E-08	1.92E-08	3.88E-08	2.94E-09	2.88E-09	5.82E-09	2.87E-09	2.57E-09	5.44E-09	1.53E-09	1.17E-09	2.69E-09
1820	648860.78	4196597.71	1.96E-08	1.93E-08	3.89E-08	2.95E-09	2.90E-09	5.85E-09	2.88E-09	2.58E-09	5.47E-09	1.53E-09	1.17E-09	2.70E-09

1821	648885.86	4196592.35	1.97E-08	1.94E-08	3.90E-08	2.96E-09	2.90E-09	5.86E-09	2.89E-09	2.59E-09	5.48E-09	1.54E-09	1.17E-09	2.71E-09
1822	648910.94	4196586.99	1.97E-08	1.94E-08	3.92E-08	2.97E-09	2.91E-09	5.88E-09	2.90E-09	2.60E-09	5.50E-09	1.54E-09	1.18E-09	2.72E-09
1823	648516.58	4196468.71	1.45E-08	1.43E-08	2.88E-08	2.18E-09	2.14E-09	4.33E-09	2.14E-09	1.91E-09	4.05E-09	1.13E-09	8.67E-10	2.00E-09
1824	648541.9	4196463.3	1.48E-08	1.46E-08	2.94E-08	2.23E-09	2.19E-09	4.42E-09	2.18E-09	1.95E-09	4.13E-09	1.16E-09	8.84E-10	2.04E-09
1825	648567.22	4196457.89	1.51E-08	1.49E-08	2.99E-08	2.27E-09	2.23E-09	4.50E-09	2.22E-09	1.99E-09	4.20E-09	1.18E-09	9.01E-10	2.08E-09
1826	648592.54	4196452.47	1.53E-08	1.51E-08	3.04E-08	2.31E-09	2.26E-09	4.57E-09	2.26E-09	2.02E-09	4.27E-09	1.20E-09	9.16E-10	2.11E-09
1827	648617.86	4196447.06	1.56E-08	1.53E-08	3.09E-08	2.34E-09	2.30E-09	4.64E-09	2.29E-09	2.05E-09	4.34E-09	1.22E-09	9.29E-10	2.15E-09
1828	648643.19	4196441.65	1.58E-08	1.55E-08	3.13E-08	2.37E-09	2.33E-09	4.70E-09	2.32E-09	2.08E-09	4.40E-09	1.23E-09	9.41E-10	2.17E-09
1829	648668.51	4196436.24	1.59E-08	1.57E-08	3.16E-08	2.40E-09	2.35E-09	4.75E-09	2.34E-09	2.10E-09	4.44E-09	1.25E-09	9.52E-10	2.20E-09
1830	648693.83	4196430.83	1.61E-08	1.58E-08	3.19E-08	2.42E-09	2.38E-09	4.80E-09	2.37E-09	2.12E-09	4.48E-09	1.26E-09	9.60E-10	2.22E-09
1831	648719.15	4196425.42	1.62E-08	1.60E-08	3.22E-08	2.44E-09	2.39E-09	4.83E-09	2.38E-09	2.13E-09	4.52E-09	1.27E-09	9.68E-10	2.23E-09
1832	648744.47	4196420.01	1.63E-08	1.61E-08	3.24E-08	2.45E-09	2.41E-09	4.86E-09	2.40E-09	2.15E-09	4.54E-09	1.27E-09	9.73E-10	2.25E-09
1833	648769.79	4196414.6	1.64E-08	1.61E-08	3.25E-08	2.46E-09	2.42E-09	4.88E-09	2.41E-09	2.16E-09	4.56E-09	1.28E-09	9.77E-10	2.26E-09
1834	648795.11	4196409.19	1.64E-08	1.62E-08	3.26E-08	2.47E-09	2.43E-09	4.90E-09	2.42E-09	2.16E-09	4.58E-09	1.28E-09	9.81E-10	2.26E-09
1835	648820.43	4196403.78	1.65E-08	1.62E-08	3.27E-08	2.48E-09	2.43E-09	4.91E-09	2.42E-09	2.17E-09	4.59E-09	1.29E-09	9.83E-10	2.27E-09
1836	648845.75	4196398.36	1.65E-08	1.62E-08	3.27E-08	2.48E-09	2.43E-09	4.91E-09	2.42E-09	2.17E-09	4.59E-09	1.29E-09	9.83E-10	2.27E-09
1837	648871.08	4196392.95	1.65E-08	1.62E-08	3.27E-08	2.48E-09	2.43E-09	4.91E-09	2.42E-09	2.17E-09	4.59E-09	1.29E-09	9.83E-10	2.27E-09
1838	648896.4	4196387.54	1.65E-08	1.62E-08	3.27E-08	2.48E-09	2.43E-09	4.91E-09	2.42E-09	2.17E-09	4.59E-09	1.29E-09	9.83E-10	2.27E-09
1839	648989.09	4197839.11	4.42E-07	4.35E-07	8.77E-07	6.65E-08	6.52E-08	1.32E-07	6.50E-08	5.82E-08	1.23E-07	3.45E-08	2.64E-08	6.09E-08
1840	648965.18	4197795.2	2.69E-07	2.64E-07	5.33E-07	4.04E-08	3.96E-08	8.00E-08	3.95E-08	3.53E-08	7.48E-08	2.10E-08	1.60E-08	3.70E-08
1841	648948.08	4197748.22	1.90E-07	1.87E-07	3.78E-07	2.86E-08	2.81E-08	5.67E-08	2.80E-08	2.51E-08	5.30E-08	1.49E-08	1.14E-08	2.62E-08
1842	648924.16	4197704.31	1.43E-07	1.41E-07	2.83E-07	2.15E-08	2.11E-08	4.25E-08	2.10E-08	1.88E-08	3.98E-08	1.12E-08	8.52E-09	1.97E-08
1843	648900.24	4197660.4	1.12E-07	1.10E-07	2.23E-07	1.69E-08	1.66E-08	3.34E-08	1.65E-08	1.48E-08	3.12E-08	8.76E-09	6.69E-09	1.54E-08
1844	648920.69	4197651.17	1.15E-07	1.13E-07	2.28E-07	1.73E-08	1.69E-08	3.42E-08	1.69E-08	1.51E-08	3.20E-08	8.97E-09	6.85E-09	1.58E-08
1845	648877.69	4197615.87	9.11E-08	8.97E-08	1.81E-07	1.37E-08	1.34E-08	2.71E-08	1.34E-08	1.20E-08	2.54E-08	7.11E-09	5.44E-09	1.26E-08
1846	648902.23	4197604.8	9.34E-08	9.19E-08	1.85E-07	1.40E-08	1.38E-08	2.78E-08	1.37E-08	1.23E-08	2.60E-08	7.29E-09	5.57E-09	1.29E-08
1847	648829.47	4197528.23	6.42E-08	6.32E-08	1.27E-07	9.65E-09	9.48E-09	1.91E-08	9.44E-09	8.45E-09	1.79E-08	5.01E-09	3.83E-09	8.85E-09
1848	648852.84	4197517.69	6.55E-08	6.45E-08	1.30E-07	9.85E-09	9.68E-09	1.95E-08	9.64E-09	8.63E-09	1.83E-08	5.12E-09	3.91E-09	9.03E-09
1849	648781.42	4197440.51	4.83E-08	4.76E-08	9.59E-08	7.27E-09	7.13E-09	1.44E-08	7.10E-09	6.36E-09	1.35E-08	3.77E-09	2.88E-09	6.66E-09
1850	648804.14	4197430.26	4.93E-08	4.85E-08	9.78E-08	7.41E-09	7.28E-09	1.47E-08	7.25E-09	6.49E-09	1.37E-08	3.85E-09	2.94E-09	6.79E-09
1851	648826.85	4197420.01	5.04E-08	4.96E-08	9.99E-08	7.57E-09	7.43E-09	1.50E-08	7.40E-09	6.63E-09	1.40E-08	3.93E-09	3.01E-09	6.94E-09
1852	648734.19	4197352.42	3.81E-08	3.76E-08	7.57E-08	5.74E-09	5.63E-09	1.14E-08	5.61E-09	5.02E-09	1.06E-08	2.98E-09	2.28E-09	5.26E-09
1853	648758.73	4197341.35	3.90E-08	3.84E-08	7.74E-08	5.86E-09	5.76E-09	1.16E-08	5.73E-09	5.13E-09	1.09E-08	3.05E-09	2.33E-09	5.37E-09
1854	648783.26	4197330.28	4.00E-08	3.93E-08	7.93E-08	6.01E-09	5.90E-09	1.19E-08	5.87E-09	5.26E-09	1.11E-08	3.12E-09	2.38E-09	5.50E-09
1855	648686.13	4197264.7	3.12E-08	3.07E-08	6.19E-08	4.69E-09	4.60E-09	9.29E-09	4.58E-09	4.10E-09	8.69E-09	2.43E-09	1.86E-09	4.30E-09
1856	648709.99	4197253.94	3.19E-08	3.14E-08	6.33E-08	4.79E-09	4.71E-09	9.50E-09	4.69E-09	4.20E-09	8.88E-09	2.49E-09	1.90E-09	4.39E-09
1857	648733.84	4197243.18	3.27E-08	3.22E-08	6.48E-08	4.91E-09	4.82E-09	9.73E-09	4.80E-09	4.30E-09	9.10E-09	2.55E-09	1.95E-09	4.50E-09
1858	648757.69	4197232.41	3.35E-08	3.30E-08	6.65E-08	5.04E-09	4.95E-09	9.98E-09	4.93E-09	4.41E-09	9.34E-09	2.62E-09	2.00E-09	4.62E-09
1859	648590.7	4197088.96	2.25E-08	2.22E-08	4.47E-08	3.39E-09	3.32E-09	6.71E-09	3.31E-09	2.96E-09	6.27E-09	1.76E-09	1.34E-09	3.10E-09
1860	648615.23	4197077.89	2.31E-08	2.27E-08	4.58E-08	3.47E-09	3.40E-09	6.87E-09	3.39E-09	3.04E-09	6.43E-09	1.80E-09	1.38E-09	3.18E-09
1861	648639.77	4197066.82	2.37E-08	2.33E-08	4.70E-08	3.56E-09	3.50E-09	7.06E-09	3.48E-09	3.12E-09	6.60E-09	1.85E-09	1.41E-09	3.26E-09
1862	648664.3	4197055.75	2.43E-08	2.39E-08	4.83E-08	3.66E-09	3.59E-09	7.25E-09	3.58E-09	3.20E-09	6.78E-09	1.90E-09	1.45E-09	3.35E-09
1863	648688.84	4197044.68	2.50E-08	2.46E-08	4.96E-08	3.76E-09	3.69E-09	7.45E-09	3.67E-09	3.29E-09	6.96E-09	1.95E-09	1.49E-09	3.44E-09
1864	648495.18	4196913.26	1.75E-08	1.72E-08	3.47E-08	2.63E-09	2.58E-09	5.21E-09	2.57E-09	2.30E-09	4.87E-09	1.36E-09	1.04E-09	2.41E-09
1865	648520.17	4196901.98	1.79E-08	1.76E-08	3.55E-08	2.69E-09	2.64E-09	5.34E-09	2.63E-09	2.36E-09	4.99E-09	1.40E-09	1.07E-09	2.47E-09
1866	648545.16	4196890.71	1.84E-08	1.81E-08	3.65E-08	2.77E-09	2.71E-09	5.48E-09	2.70E-09	2.42E-09	5.12E-09	1.44E-09	1.10E-09	2.53E-09
1867	648570.15	4196879.43	1.89E-08	1.86E-08	3.75E-08	2.84E-09	2.79E-09	5.63E-09	2.78E-09	2.49E-09	5.27E-09	1.48E-09	1.13E-09	2.60E-09
1868	648595.14	4196868.15	1.94E-08	1.91E-08	3.85E-08	2.92E-09	2.86E-09	5.78E-09	2.85E-09	2.55E-09	5.41E-09	1.52E-09	1.16E-09	2.67E-09
1869	648620.13	4196856.88	1.99E-08	1.96E-08	3.95E-08	2.99E-09	2.94E-09	5.93E-09	2.93E-09	2.62E-09	5.55E-09	1.56E-09	1.19E-09	2.74E-09
1870	648399.63	4196737.57	1.42E-08	1.40E-08	2.82E-08	2.14E-09	2.10E-09	4.24E-09	2.09E-09	1.87E-09	3.96E-09	1.11E-09	8.49E-10	1.96E-09
1871	648424.94	4196726.15	1.46E-08	1.44E-08	2.90E-08	2.19E-09	2.15E-09	4.35E-09	2.15E-09	1.92E-09	4.07E-09	1.14E-09	8.71E-10	2.01E-09
1872	648450.25	4196714.73	1.50E-08	1.47E-08	2.97E-08	2.25E-09	2.21E-09	4.46E-09	2.20E-09	1.97E-09	4.17E-09	1.17E-09	8.93E-10	2.06E-09
1873	648475.57	4196703.3	1.54E-08	1.51E-08	3.05E-08	2.31E-09	2.27E-09	4.58E-09	2.26E-09	2.02E-09	4.28E-09	1.20E-09	9.17E-10	2.12E-09
1874	648500.88	4196691.88	1.58E-08	1.55E-08	3.13E-08	2.37E-09	2.33E-09	4.70E-09	2.32E-09	2.07E-09	4.39E-09	1.23E-09	9.41E-10	2.17E-09
1875	648526.19	4196680.46	1.62E-08	1.59E-08	3.21E-08	2.43E-09	2.39E-09	4.82E-09	2.38E-09	2.13E-09	4.50E-09	1.26E-09	9.64E-10	2.23E-09
1876	648551.51	4196669.04	1.65E-08	1.63E-08	3.28E-08	2.49E-09	2.44E-09	4.93E-09	2.43E-09	2.18E-09	4.61E-09	1.29E-09	9.87E-10	2.28E-09
1877	648303.7	4196562.05	1.20E-08	1.18E-08	2.38E-08	1.80E-09	1.77E-09	3.57E-09	1.76E-09	1.58E-09	3.34E-09	9.36E-10	7.15E-10	1.65E-09
1878	648328.24	4196550.98	1.23E-08	1.21E-08	2.43E-08	1.84E-09	1.81E-09	3.65E-09	1.80E-09	1.61E-09	3.42E-09	9.58E-10	7.32E-10	1.69E-09
1879	648352.77	4196539.91	1.26E-08	1.24E-08	2.49E-08	1.89E-09	1.85E-09	3.74E-09	1.85E-09	1.65E-09	3.50E-09	9.81E-10	7.49E-10	1.73E-09
1880	648377.31	4196528.84	1.29E-08	1.27E-08	2.55E-08	1.93E-09	1.90E-09	3.83E-09	1.89E-09	1.69E-09	3.58E-09	1.00E-09	7.68E-10	1.77E-09
1881	648401.84	4196517.77	1.32E-08	1.30E-08	2.61E-08	1.98E-09	1.94E-09	3.92E-09	1.94E-09	1.73E-09	3.67E-09	1.03E-09	7.86E-10	1.81E-09
1882	648426.37	4196506.7	1.35E-08	1.33E-08	2.67E-08	2.03E-09	1.99E-09	4.02E-09	1.98E-09	1.77E-09	3.75E-09	1.05E-09	8.04E-10	1.86E-09
1883	648450.91	4196495.62	1.38E-08	1.36E-08	2.73E-08	2.07E-09	2.03E-09	4.10E-09	2.02E-09	1.81E-09	3.84E-09	1.08E-09	8.22E-10	1.90E-09
1884	648475.44	4196484.55	1.41E-08	1.38E-08	2.79E-08	2.11E-09	2.08E-09	4.19E-09	2.07E-09	1.85E-09	3.92E-09	1.10E-09	8.39E-10	1.94E-09
1885	648979.04	4197876.56	5.84E-07	5.75E-07	1.16E-06	8.78E-08	8.62E-08	1.74E-07	8.58E-08	7.68E-08	1.63E-07	4.56E-08	3.48E-08	8.04E-08
1886	648962.88	4197857.48	4.14E-07	4.07E-07	8.21E-07	6.22E-08	6.11E-08	1.23E-07	6.08E-08	5.45E-08	1.15E-07	3.23E-08	2.47E-08	5.70E-08
1887	648962.67	4197825.92	3.25E-07	3.20E-07	6.44E-07	4.88E-08	4.79E-08	9.67E-08	4.77E-08	4.27E-08	9.05E-08	2.54E-08	1.94E-08	4.47E-08
1888	648940.22	4197811.15	2.58E-07	2.54E-07	5.12E-07	3.88E-08	3.81E-08	7.69E-08	3.79E-08	3.40E-08	7.19E-08	2.02E-08	1.54E-08	3.56E-08
1889	648916.31	4197767.24	1.83E-07	1.81E-07	3.64E-07	2.76E-08	2.71E-08	5.47E-08	2.70E-08	2.41E-08	5.11E-08	1.43E-08	1.09E-08	2.53E-08
1890	648898.27	4197781.16	1.82E-07	1.79E-07	3.61E-07	2.74E-08	2.69E-08	5.42E-08	2.68E-08	2.40E-08	5.07E-08	1.42E-08	1.09E-08	2.51E-08
1891	648884	4197729.08	1.39E-07	1.36E-07	2.75E-07	2.08E-08	2.05E-08	4.13E-08	2.04E-08	1.82E-08	3.86E-08	1.08E-08	8.27E-09	1.91E-08
1892	648865.96	4197743	1.38E-07	1.36E-07	2.74E-07	2.08E-08	2.04E-08	4.12E-08	2.03E-08	1.82E-08	3.85E-08	1.08E-08	8.25E-09	1.91E-08
1893	648851.69	4197690.92	1.10E-07	1.08E-07	2.17E-07	1.65E-08	1.62E-08	3.26E-08	1.61E-08	1.44E-08	3.05E-08	8.56E-09	6.54E-09	1.51E-08
1894	648876.87	4197673.67	1.10E-07	1.09E-07	2.19E-07	1.66E-08	1.63E-08	3.29E-08	1.62E-08	1.45E-08	3.07E-08	8.61E-09	6.58E-09	1.52E-08
1895	648833.65	4197704.84	1.10E-07	1.08E-07	2.18E-07	1.65E-08	1.62E-08	3.27E-08	1.61E-08	1.44E-08	3.06E-08	8.57E-09	6.55E-09	1.51E-08
1896	648821.06	4197651.61	8.94E-08	8.80E-08	1.77E-07	1.34E-08	1.32E-08	2.66E-08	1.31E-08	1.18E-08	2.49E-08	6.98E-09	5.33E-09	1.23E-08

1897	648841.2	4197637.81	8.95E-08	8.82E-08	1.78E-07	1.35E-08	1.32E-08	2.67E-08	1.32E-08	1.18E-08	2.50E-08	6.99E-09	5.34E-09	1.23E-08
1898	648801.34	4197666.68	8.99E-08	8.85E-08	1.78E-07	1.35E-08	1.33E-08	2.68E-08	1.32E-08	1.18E-08	2.50E-08	7.02E-09	5.36E-09	1.24E-08
1899	648755.97	4197575.62	6.37E-08	6.27E-08	1.26E-07	9.57E-09	9.40E-09	1.90E-08	9.36E-09	8.38E-09	1.77E-08	4.97E-09	3.80E-09	8.77E-09
1900	648775.15	4197562.48	6.34E-08	6.24E-08	1.26E-07	9.54E-09	9.36E-09	1.89E-08	9.33E-09	8.35E-09	1.77E-08	4.95E-09	3.79E-09	8.74E-09
1901	648794.33	4197549.34	6.34E-08	6.24E-08	1.26E-07	9.53E-09	9.36E-09	1.89E-08	9.32E-09	8.34E-09	1.77E-08	4.95E-09	3.78E-09	8.73E-09
1902	648736.73	4197590.36	6.43E-08	6.33E-08	1.28E-07	9.68E-09	9.50E-09	1.92E-08	9.46E-09	8.47E-09	1.79E-08	5.03E-09	3.84E-09	8.87E-09
1903	648691.09	4197499.48	4.83E-08	4.75E-08	9.58E-08	7.26E-09	7.13E-09	1.44E-08	7.10E-09	6.35E-09	1.35E-08	3.77E-09	2.88E-09	6.65E-09
1904	648709.73	4197486.7	4.79E-08	4.72E-08	9.51E-08	7.21E-09	7.08E-09	1.43E-08	7.05E-09	6.31E-09	1.34E-08	3.74E-09	2.86E-09	6.60E-09
1905	648737.71	4197467.54	4.77E-08	4.69E-08	9.46E-08	7.17E-09	7.04E-09	1.42E-08	7.01E-09	6.28E-09	1.33E-08	3.72E-09	2.85E-09	6.57E-09
1906	648672.11	4197514.04	4.90E-08	4.82E-08	9.72E-08	7.37E-09	7.23E-09	1.46E-08	7.20E-09	6.45E-09	1.36E-08	3.83E-09	2.92E-09	6.75E-09
1907	648627.22	4197422.65	3.82E-08	3.77E-08	7.59E-08	5.75E-09	5.65E-09	1.14E-08	5.62E-09	5.03E-09	1.07E-08	2.99E-09	2.28E-09	5.27E-09
1908	648647.36	4197408.85	3.78E-08	3.72E-08	7.51E-08	5.69E-09	5.59E-09	1.13E-08	5.56E-09	4.98E-09	1.05E-08	2.96E-09	2.26E-09	5.21E-09
1909	648667.5	4197395.05	3.76E-08	3.70E-08	7.46E-08	5.65E-09	5.55E-09	1.12E-08	5.53E-09	4.95E-09	1.05E-08	2.94E-09	2.24E-09	5.18E-09
1910	648687.64	4197381.26	3.75E-08	3.69E-08	7.44E-08	5.64E-09	5.54E-09	1.12E-08	5.51E-09	4.94E-09	1.05E-08	2.93E-09	2.24E-09	5.17E-09
1911	648707.78	4197367.46	3.76E-08	3.70E-08	7.46E-08	5.65E-09	5.55E-09	1.12E-08	5.53E-09	4.95E-09	1.05E-08	2.94E-09	2.24E-09	5.18E-09
1912	648607.5	4197437.72	3.89E-08	3.83E-08	7.72E-08	5.85E-09	5.75E-09	1.16E-08	5.72E-09	5.12E-09	1.08E-08	3.04E-09	2.32E-09	5.36E-09
1913	648562.32	4197346.52	3.13E-08	3.08E-08	6.21E-08	4.71E-09	4.62E-09	9.33E-09	4.60E-09	4.12E-09	8.72E-09	2.45E-09	1.87E-09	4.31E-09
1914	648581.9	4197333.1	3.09E-08	3.04E-08	6.14E-08	4.65E-09	4.57E-09	9.21E-09	4.55E-09	4.07E-09	8.62E-09	2.42E-09	1.85E-09	4.26E-09
1915	648601.48	4197319.69	3.07E-08	3.02E-08	6.08E-08	4.61E-09	4.53E-09	9.14E-09	4.51E-09	4.04E-09	8.54E-09	2.39E-09	1.83E-09	4.22E-09
1916	648621.06	4197306.28	3.05E-08	3.01E-08	6.06E-08	4.59E-09	4.51E-09	9.10E-09	4.49E-09	4.02E-09	8.50E-09	2.38E-09	1.82E-09	4.21E-09
1917	648640.64	4197292.86	3.05E-08	3.01E-08	6.06E-08	4.59E-09	4.51E-09	9.10E-09	4.49E-09	4.02E-09	8.51E-09	2.39E-09	1.82E-09	4.21E-09
1918	648660.22	4197279.45	3.07E-08	3.02E-08	6.09E-08	4.61E-09	4.53E-09	9.14E-09	4.51E-09	4.04E-09	8.55E-09	2.40E-09	1.83E-09	4.23E-09
1919	648542.88	4197361.4	3.19E-08	3.14E-08	6.33E-08	4.80E-09	4.71E-09	9.51E-09	4.69E-09	4.20E-09	8.89E-09	2.49E-09	1.90E-09	4.40E-09
1920	648433.37	4197193.69	2.25E-08	2.21E-08	4.46E-08	3.38E-09	3.32E-09	6.70E-09	3.31E-09	2.96E-09	6.27E-09	1.76E-09	1.34E-09	3.10E-09
1921	648453.51	4197179.89	2.22E-08	2.18E-08	4.40E-08	3.33E-09	3.27E-09	6.61E-09	3.26E-09	2.92E-09	6.18E-09	1.73E-09	1.32E-09	3.05E-09
1922	648473.65	4197166.09	2.19E-08	2.16E-08	4.35E-08	3.30E-09	3.24E-09	6.53E-09	3.22E-09	2.89E-09	6.11E-09	1.71E-09	1.31E-09	3.02E-09
1923	648493.79	4197152.29	2.18E-08	2.14E-08	4.32E-08	3.27E-09	3.22E-09	6.49E-09	3.20E-09	2.87E-09	6.07E-09	1.70E-09	1.30E-09	3.00E-09
1924	648513.93	4197138.5	2.17E-08	2.14E-08	4.32E-08	3.27E-09	3.21E-09	6.48E-09	3.20E-09	2.86E-09	6.06E-09	1.70E-09	1.30E-09	3.00E-09
1925	648534.07	4197124.7	2.18E-08	2.15E-08	4.33E-08	3.28E-09	3.22E-09	6.50E-09	3.21E-09	2.87E-09	6.07E-09	1.70E-09	1.30E-09	3.00E-09
1926	648554.21	4197110.9	2.20E-08	2.16E-08	4.36E-08	3.30E-09	3.24E-09	6.54E-09	3.23E-09	2.89E-09	6.12E-09	1.72E-09	1.31E-09	3.03E-09
1927	648413.65	4197208.75	2.29E-08	2.26E-08	4.55E-08	3.45E-09	3.39E-09	6.84E-09	3.37E-09	3.02E-09	6.39E-09	1.79E-09	1.37E-09	3.16E-09
1928	648304.33	4197040.92	1.73E-08	1.70E-08	3.42E-08	2.59E-09	2.55E-09	5.14E-09	2.54E-09	2.27E-09	4.81E-09	1.35E-09	1.03E-09	2.38E-09
1929	648324.84	4197026.86	1.70E-08	1.67E-08	3.37E-08	2.55E-09	2.51E-09	5.06E-09	2.50E-09	2.24E-09	4.73E-09	1.33E-09	1.01E-09	2.34E-09
1930	648345.35	4197012.81	1.68E-08	1.65E-08	3.33E-08	2.52E-09	2.48E-09	5.00E-09	2.47E-09	2.21E-09	4.68E-09	1.31E-09	1.00E-09	2.31E-09
1931	648365.86	4196998.76	1.67E-08	1.64E-08	3.31E-08	2.51E-09	2.46E-09	4.96E-09	2.45E-09	2.19E-09	4.64E-09	1.30E-09	9.94E-10	2.30E-09
1932	648386.38	4196984.71	1.66E-08	1.64E-08	3.30E-08	2.50E-09	2.45E-09	4.95E-09	2.44E-09	2.19E-09	4.63E-09	1.30E-09	9.92E-10	2.29E-09
1933	648406.89	4196970.65	1.66E-08	1.64E-08	3.30E-08	2.50E-09	2.45E-09	4.95E-09	2.44E-09	2.19E-09	4.63E-09	1.30E-09	9.92E-10	2.29E-09
1934	648427.4	4196956.6	1.67E-08	1.65E-08	3.32E-08	2.51E-09	2.47E-09	4.98E-09	2.46E-09	2.20E-09	4.66E-09	1.31E-09	9.98E-10	2.30E-09
1935	648447.91	4196942.55	1.69E-08	1.66E-08	3.35E-08	2.54E-09	2.49E-09	5.03E-09	2.48E-09	2.22E-09	4.70E-09	1.32E-09	1.01E-09	2.33E-09
1936	648468.43	4196928.5	1.71E-08	1.68E-08	3.39E-08	2.57E-09	2.52E-09	5.09E-09	2.51E-09	2.25E-09	4.76E-09	1.33E-09	1.02E-09	2.35E-09
1937	648284.42	4197056.11	1.76E-08	1.73E-08	3.49E-08	2.65E-09	2.60E-09	5.25E-09	2.59E-09	2.32E-09	4.91E-09	1.38E-09	1.05E-09	2.43E-09
1938	648175.23	4196888.18	1.38E-08	1.36E-08	2.75E-08	2.08E-09	2.04E-09	4.12E-09	2.03E-09	1.82E-09	3.86E-09	1.08E-09	8.26E-10	1.91E-09
1939	648196.01	4196873.95	1.36E-08	1.34E-08	2.71E-08	2.05E-09	2.01E-09	4.06E-09	2.00E-09	1.79E-09	3.80E-09	1.07E-09	8.14E-10	1.88E-09
1940	648216.79	4196859.71	1.35E-08	1.33E-08	2.67E-08	2.03E-09	1.99E-09	4.02E-09	1.98E-09	1.77E-09	3.75E-09	1.05E-09	8.04E-10	1.86E-09
1941	648237.56	4196845.48	1.34E-08	1.32E-08	2.65E-08	2.01E-09	1.97E-09	3.99E-09	1.97E-09	1.76E-09	3.73E-09	1.04E-09	7.98E-10	1.84E-09
1942	648258.34	4196831.24	1.33E-08	1.31E-08	2.64E-08	2.00E-09	1.97E-09	3.97E-09	1.96E-09	1.75E-09	3.71E-09	1.04E-09	7.95E-10	1.83E-09
1943	648279.12	4196817.01	1.33E-08	1.31E-08	2.64E-08	2.00E-09	1.97E-09	3.97E-09	1.96E-09	1.75E-09	3.71E-09	1.04E-09	7.95E-10	1.83E-09
1944	648299.9	4196802.77	1.34E-08	1.32E-08	2.65E-08	2.01E-09	1.97E-09	3.98E-09	1.96E-09	1.76E-09	3.72E-09	1.04E-09	7.97E-10	1.84E-09
1945	648320.68	4196788.54	1.35E-08	1.33E-08	2.67E-08	2.02E-09	1.99E-09	4.01E-09	1.98E-09	1.77E-09	3.75E-09	1.05E-09	8.04E-10	1.86E-09
1946	648341.46	4196774.3	1.36E-08	1.34E-08	2.70E-08	2.05E-09	2.01E-09	4.06E-09	2.00E-09	1.79E-09	3.79E-09	1.06E-09	8.12E-10	1.88E-09
1947	648362.24	4196760.07	1.38E-08	1.36E-08	2.74E-08	2.07E-09	2.04E-09	4.11E-09	2.03E-09	1.82E-09	3.84E-09	1.08E-09	8.23E-10	1.90E-09
1948	648155.19	4196903.47	1.41E-08	1.39E-08	2.80E-08	2.12E-09	2.08E-09	4.21E-09	2.08E-09	1.86E-09	3.93E-09	1.10E-09	8.42E-10	1.94E-09
1949	648045.68	4196735.76	1.15E-08	1.13E-08	2.28E-08	1.73E-09	1.70E-09	3.42E-09	1.69E-09	1.51E-09	3.20E-09	8.97E-10	6.85E-10	1.58E-09
1950	648065.82	4196721.96	1.13E-08	1.12E-08	2.25E-08	1.70E-09	1.67E-09	3.38E-09	1.67E-09	1.49E-09	3.16E-09	8.85E-10	6.76E-10	1.56E-09
1951	648085.96	4196708.17	1.12E-08	1.10E-08	2.22E-08	1.68E-09	1.65E-09	3.34E-09	1.65E-09	1.47E-09	3.12E-09	8.75E-10	6.69E-10	1.54E-09
1952	648106.1	4196694.37	1.11E-08	1.09E-08	2.20E-08	1.67E-09	1.64E-09	3.31E-09	1.63E-09	1.46E-09	3.10E-09	8.68E-10	6.63E-10	1.53E-09
1953	648126.24	4196680.57	1.11E-08	1.09E-08	2.20E-08	1.66E-09	1.63E-09	3.30E-09	1.63E-09	1.46E-09	3.08E-09	8.64E-10	6.60E-10	1.52E-09
1954	648146.38	4196666.78	1.10E-08	1.09E-08	2.19E-08	1.66E-09	1.63E-09	3.29E-09	1.62E-09	1.45E-09	3.08E-09	8.63E-10	6.59E-10	1.52E-09
1955	648166.52	4196652.98	1.11E-08	1.09E-08	2.20E-08	1.66E-09	1.63E-09	3.30E-09	1.63E-09	1.46E-09	3.08E-09	8.64E-10	6.60E-10	1.52E-09
1956	648186.65	4196639.18	1.11E-08	1.09E-08	2.20E-08	1.67E-09	1.64E-09	3.31E-09	1.63E-09	1.46E-09	3.10E-09	8.68E-10	6.63E-10	1.53E-09
1957	648206.79	4196625.38	1.12E-08	1.10E-08	2.22E-08	1.68E-09	1.65E-09	3.34E-09	1.65E-09	1.47E-09	3.12E-09	8.75E-10	6.69E-10	1.54E-09
1958	648226.93	4196611.59	1.13E-08	1.11E-08	2.25E-08	1.70E-09	1.67E-09	3.37E-09	1.66E-09	1.49E-09	3.15E-09	8.84E-10	6.75E-10	1.56E-09
1959	648247.07	4196597.79	1.15E-08	1.13E-08	2.27E-08	1.72E-09	1.69E-09	3.42E-09	1.69E-09	1.51E-09	3.19E-09	8.95E-10	6.84E-10	1.58E-09
1960	648267.21	4196583.99	1.16E-08	1.14E-08	2.31E-08	1.75E-09	1.72E-09	3.46E-09	1.71E-09	1.53E-09	3.24E-09	9.08E-10	6.94E-10	1.60E-09
1961	648025.96	4196750.83	1.17E-08	1.15E-08	2.32E-08	1.76E-09	1.72E-09	3.48E-09	1.72E-09	1.54E-09	3.25E-09	9.12E-10	6.97E-10	1.61E-09
1962	648964.28	4197898.07	6.11E-07	6.01E-07	1.21E-06	9.18E-08	9.01E-08	1.82E-07	8.98E-08	8.04E-08	1.70E-07	4.77E-08	3.64E-08	8.41E-08
1963	648943.03	4197884.91	4.31E-07	4.25E-07	8.56E-07	6.48E-08	6.37E-08	1.29E-07	6.34E-08	5.67E-08	1.20E-07	3.37E-08	2.57E-08	5.94E-08
1964	648939.07	4197847.28	3.21E-07	3.16E-07	6.37E-07	4.82E-08	4.74E-08	9.56E-08	4.72E-08	4.22E-08	8.94E-08	2.51E-08	1.91E-08	4.42E-08
1965	648921.77	4197871.76	3.32E-07	3.27E-07	6.59E-07	4.99E-08	4.90E-08	9.89E-08	4.88E-08	4.37E-08	9.25E-08	2.59E-08	1.98E-08	4.57E-08
1966	648920.37	4197831.16	2.60E-07	2.56E-07	5.15E-07	3.90E-08	3.83E-08	7.74E-08	3.82E-08	3.42E-08	7.24E-08	2.03E-08	1.55E-08	3.58E-08
1967	648900.51	4197858.6	2.69E-07	2.65E-07	5.33E-07	4.04E-08	3.97E-08	8.01E-08	3.95E-08	3.54E-08	7.49E-08	2.10E-08	1.60E-08	3.70E-08
1968	648877.85	4197804.85	1.86E-07	1.84E-07	3.70E-07	2.80E-08	2.75E-08	5.55E-08	2.74E-08	2.45E-08	5.19E-08	1.46E-08	1.11E-08	2.57E-08
1969	648858	4197832.28	1.93E-07	1.90E-07	3.82E-07	2.90E-08	2.84E-08	5.74E-08	2.83E-08	2.54E-08	5.37E-08	1.51E-08	1.15E-08	2.66E-08
1970	648835.34	4197778.53	1.44E-07	1.42E-07	2.85E-07	2.16E-08	2.12E-08	4.28E-08	2.11E-08	1.89E-08	4.01E-08	1.12E-08	8.58E-09	1.98E-08
1971	648815.48	4197805.97	1.49E-07	1.46E-07	2.95E-07	2.24E-08	2.19E-08	4.43E-08	2.19E-08	1.96E-08	4.14E-08	1.16E-08	8.87E-09	2.05E-08
1972	648792.82	4197752.22	1.16E-07	1.14E-07	2.30E-07	1.75E-08	1.71E-08	3.46E-08	1.71E-08	1.53E-08	3.24E-08	9.07E-09	6.93E-09	1.60E-08

1973	648813.24	4197728.53	1.13E-07	1.11E-07	2.24E-07	1.70E-08	1.67E-08	3.37E-08	1.66E-08	1.49E-08	3.15E-08	8.83E-09	6.75E-09	1.56E-08
1974	648772.97	4197779.65	1.20E-07	1.18E-07	2.38E-07	1.81E-08	1.77E-08	3.58E-08	1.77E-08	1.58E-08	3.35E-08	9.38E-09	7.17E-09	1.65E-08
1975	648750.31	4197725.9	9.69E-08	9.54E-08	1.92E-07	1.46E-08	1.43E-08	2.89E-08	1.42E-08	1.28E-08	2.70E-08	7.57E-09	5.78E-09	1.34E-08
1976	648770.72	4197702.21	9.42E-08	9.27E-08	1.87E-07	1.42E-08	1.39E-08	2.81E-08	1.39E-08	1.24E-08	2.63E-08	7.36E-09	5.62E-09	1.30E-08
1977	648730.45	4197753.33	1.00E-07	9.86E-08	1.99E-07	1.51E-08	1.48E-08	2.98E-08	1.47E-08	1.32E-08	2.79E-08	7.82E-09	5.98E-09	1.38E-08
1978	648666.74	4197671.58	7.19E-08	7.08E-08	1.43E-07	1.08E-08	1.06E-08	2.14E-08	1.06E-08	9.47E-09	2.00E-08	5.62E-09	4.29E-09	9.91E-09
1979	648690.07	4197644.5	6.96E-08	6.85E-08	1.38E-07	1.05E-08	1.03E-08	2.07E-08	1.02E-08	9.16E-09	1.94E-08	5.44E-09	4.15E-09	9.59E-09
1980	648713.4	4197617.43	6.70E-08	6.59E-08	1.33E-07	1.01E-08	9.89E-09	2.00E-08	9.85E-09	8.81E-09	1.87E-08	5.23E-09	4.00E-09	9.23E-09
1981	648645.42	4197700.7	7.42E-08	7.30E-08	1.47E-07	1.12E-08	1.10E-08	2.21E-08	1.09E-08	9.76E-09	2.07E-08	5.79E-09	4.43E-09	1.02E-08
1982	648581.39	4197619.32	5.67E-08	5.59E-08	1.13E-07	8.53E-09	8.38E-09	1.69E-08	8.34E-09	7.47E-09	1.58E-08	4.43E-09	3.39E-09	7.82E-09
1983	648604.07	4197593	5.51E-08	5.43E-08	1.09E-07	8.29E-09	8.14E-09	1.64E-08	8.11E-09	7.26E-09	1.54E-08	4.31E-09	3.29E-09	7.60E-09
1984	648626.75	4197566.68	5.32E-08	5.24E-08	1.06E-07	8.00E-09	7.85E-09	1.58E-08	7.82E-09	7.00E-09	1.48E-08	4.15E-09	3.17E-09	7.33E-09
1985	648649.43	4197540.36	5.10E-08	5.03E-08	1.01E-07	7.68E-09	7.54E-09	1.52E-08	7.51E-09	6.72E-09	1.42E-08	3.99E-09	3.05E-09	7.03E-09
1986	648560.4	4197648.07	5.82E-08	5.73E-08	1.16E-07	8.76E-09	8.60E-09	1.74E-08	8.56E-09	7.66E-09	1.62E-08	4.55E-09	3.47E-09	8.02E-09
1987	648496.15	4197566.93	4.65E-08	4.58E-08	9.23E-08	7.00E-09	6.87E-09	1.39E-08	6.84E-09	6.12E-09	1.30E-08	3.63E-09	2.78E-09	6.41E-09
1988	648518.42	4197541.09	4.54E-08	4.47E-08	9.01E-08	6.83E-09	6.71E-09	1.35E-08	6.68E-09	5.98E-09	1.27E-08	3.55E-09	2.71E-09	6.26E-09
1989	648540.69	4197515.24	4.40E-08	4.33E-08	8.73E-08	6.61E-09	6.49E-09	1.31E-08	6.47E-09	5.79E-09	1.23E-08	3.44E-09	2.63E-09	6.06E-09
1990	648562.96	4197489.4	4.23E-08	4.17E-08	8.40E-08	6.36E-09	6.25E-09	1.26E-08	6.22E-09	5.57E-09	1.18E-08	3.31E-09	2.53E-09	5.83E-09
1991	648585.23	4197463.56	4.06E-08	3.99E-08	8.05E-08	6.10E-09	5.99E-09	1.21E-08	5.97E-09	5.34E-09	1.13E-08	3.17E-09	2.42E-09	5.59E-09
1992	648475.37	4197595.44	4.75E-08	4.68E-08	9.43E-08	7.14E-09	7.01E-09	1.42E-08	6.98E-09	6.25E-09	1.32E-08	3.71E-09	2.83E-09	6.55E-09
1993	648411.9	4197513.4	3.92E-08	3.86E-08	7.78E-08	5.89E-09	5.79E-09	1.17E-08	5.76E-09	5.16E-09	1.09E-08	3.06E-09	2.34E-09	5.40E-09
1994	648435.71	4197485.76	3.83E-08	3.77E-08	7.61E-08	5.76E-09	5.66E-09	1.14E-08	5.64E-09	5.05E-09	1.07E-08	2.99E-09	2.29E-09	5.28E-09
1995	648459.53	4197458.13	3.72E-08	3.66E-08	7.38E-08	5.59E-09	5.49E-09	1.11E-08	5.46E-09	4.89E-09	1.04E-08	2.90E-09	2.22E-09	5.12E-09
1996	648483.34	4197430.49	3.57E-08	3.52E-08	7.09E-08	5.37E-09	5.28E-09	1.06E-08	5.25E-09	4.70E-09	9.96E-09	2.79E-09	2.13E-09	4.92E-09
1997	648507.16	4197402.85	3.42E-08	3.36E-08	6.78E-08	5.14E-09	5.05E-09	1.02E-08	5.02E-09	4.50E-09	9.52E-09	2.67E-09	2.04E-09	4.71E-09
1998	648390.34	4197542.81	3.99E-08	3.92E-08	7.91E-08	5.99E-09	5.88E-09	1.19E-08	5.86E-09	5.25E-09	1.11E-08	3.11E-09	2.38E-09	5.49E-09
1999	648241.41	4197408.63	2.95E-08	2.90E-08	5.85E-08	4.43E-09	4.35E-09	8.79E-09	4.34E-09	3.88E-09	8.22E-09	2.30E-09	1.76E-09	4.06E-09
2000	648264.38	4197381.98	2.91E-08	2.87E-08	5.78E-08	4.38E-09	4.30E-09	8.67E-09	4.28E-09	3.83E-09	8.11E-09	2.27E-09	1.74E-09	4.01E-09
2001	648287.34	4197355.33	2.85E-08	2.80E-08	5.65E-08	4.28E-09	4.21E-09	8.49E-09	4.19E-09	3.75E-09	7.94E-09	2.23E-09	1.70E-09	3.93E-09
2002	648310.31	4197328.68	2.77E-08	2.72E-08	5.49E-08	4.16E-09	4.09E-09	8.25E-09	4.07E-09	3.64E-09	7.71E-09	2.16E-09	1.65E-09	3.81E-09
2003	648333.27	4197302.03	2.67E-08	2.63E-08	5.30E-08	4.01E-09	3.94E-09	7.95E-09	3.92E-09	3.51E-09	7.44E-09	2.08E-09	1.59E-09	3.68E-09
2004	648356.24	4197275.38	2.56E-08	2.52E-08	5.08E-08	3.85E-09	3.78E-09	7.63E-09	3.76E-09	3.37E-09	7.13E-09	2.00E-09	1.53E-09	3.53E-09
2005	648379.2	4197248.73	2.45E-08	2.41E-08	4.86E-08	3.68E-09	3.62E-09	7.30E-09	3.60E-09	3.22E-09	6.83E-09	1.91E-09	1.46E-09	3.38E-09
2006	648220.28	4197437.54	2.98E-08	2.93E-08	5.91E-08	4.48E-09	4.40E-09	8.87E-09	4.38E-09	3.92E-09	8.30E-09	2.33E-09	1.78E-09	4.10E-09
2007	648071.69	4197302.98	2.34E-08	2.30E-08	4.64E-08	3.52E-09	3.45E-09	6.97E-09	3.44E-09	3.08E-09	6.51E-09	1.83E-09	1.40E-09	3.22E-09
2008	648095.33	4197275.55	2.32E-08	2.28E-08	4.60E-08	3.49E-09	3.43E-09	6.91E-09	3.41E-09	3.05E-09	6.46E-09	1.81E-09	1.38E-09	3.20E-09
2009	648118.96	4197248.12	2.28E-08	2.25E-08	4.53E-08	3.44E-09	3.37E-09	6.81E-09	3.36E-09	3.01E-09	6.37E-09	1.78E-09	1.36E-09	3.15E-09
2010	648142.6	4197220.69	2.23E-08	2.20E-08	4.43E-08	3.36E-09	3.30E-09	6.66E-09	3.28E-09	2.94E-09	6.22E-09	1.74E-09	1.33E-09	3.08E-09
2011	648166.24	4197193.26	2.17E-08	2.13E-08	4.30E-08	3.26E-09	3.20E-09	6.46E-09	3.19E-09	2.85E-09	6.04E-09	1.69E-09	1.29E-09	2.99E-09
2012	648189.87	4197165.83	2.09E-08	2.06E-08	4.15E-08	3.14E-09	3.08E-09	6.23E-09	3.07E-09	2.75E-09	5.82E-09	1.63E-09	1.25E-09	2.88E-09
2013	648213.51	4197138.4	2.00E-08	1.97E-08	3.98E-08	3.01E-09	2.96E-09	5.97E-09	2.95E-09	2.64E-09	5.58E-09	1.57E-09	1.20E-09	2.76E-09
2014	648237.15	4197110.97	1.92E-08	1.89E-08	3.80E-08	2.88E-09	2.83E-09	5.71E-09	2.82E-09	2.52E-09	5.34E-09	1.50E-09	1.14E-09	2.64E-09
2015	648260.78	4197083.54	1.84E-08	1.81E-08	3.64E-08	2.76E-09	2.71E-09	5.47E-09	2.70E-09	2.42E-09	5.11E-09	1.43E-09	1.10E-09	2.53E-09
2016	648050.22	4197332.28	2.35E-08	2.31E-08	4.66E-08	3.53E-09	3.47E-09	7.00E-09	3.45E-09	3.09E-09	6.54E-09	1.83E-09	1.40E-09	3.24E-09
2017	647901.35	4197198.04	1.92E-08	1.89E-08	3.81E-08	2.89E-09	2.84E-09	5.73E-09	2.83E-09	2.53E-09	5.36E-09	1.50E-09	1.15E-09	2.65E-09
2018	647924.43	4197171.26	1.92E-08	1.89E-08	3.80E-08	2.88E-09	2.83E-09	5.71E-09	2.82E-09	2.52E-09	5.34E-09	1.50E-09	1.14E-09	2.64E-09
2019	647947.5	4197144.48	1.90E-08	1.87E-08	3.77E-08	2.86E-09	2.80E-09	5.66E-09	2.79E-09	2.50E-09	5.29E-09	1.48E-09	1.13E-09	2.62E-09
2020	647970.58	4197117.7	1.87E-08	1.84E-08	3.71E-08	2.81E-09	2.76E-09	5.57E-09	2.75E-09	2.46E-09	5.21E-09	1.46E-09	1.12E-09	2.58E-09
2021	647993.66	4197090.92	1.83E-08	1.80E-08	3.63E-08	2.75E-09	2.70E-09	5.45E-09	2.69E-09	2.41E-09	5.10E-09	1.43E-09	1.09E-09	2.52E-09
2022	648016.73	4197064.14	1.78E-08	1.75E-08	3.53E-08	2.67E-09	2.62E-09	5.30E-09	2.61E-09	2.34E-09	4.95E-09	1.39E-09	1.06E-09	2.45E-09
2023	648039.81	4197037.37	1.72E-08	1.69E-08	3.41E-08	2.59E-09	2.54E-09	5.12E-09	2.53E-09	2.26E-09	4.79E-09	1.34E-09	1.03E-09	2.37E-09
2024	648062.88	4197010.59	1.66E-08	1.63E-08	3.29E-08	2.49E-09	2.44E-09	4.93E-09	2.43E-09	2.18E-09	4.61E-09	1.29E-09	9.88E-10	2.28E-09
2025	648085.96	4196983.81	1.59E-08	1.57E-08	3.16E-08	2.39E-09	2.35E-09	4.74E-09	2.34E-09	2.09E-09	4.43E-09	1.24E-09	9.49E-10	2.19E-09
2026	648109.04	4196957.03	1.53E-08	1.50E-08	3.03E-08	2.29E-09	2.25E-09	4.55E-09	2.24E-09	2.01E-09	4.25E-09	1.19E-09	9.11E-10	2.10E-09
2027	648132.11	4196930.25	1.46E-08	1.44E-08	2.91E-08	2.20E-09	2.16E-09	4.36E-09	2.15E-09	1.93E-09	4.08E-09	1.14E-09	8.74E-10	2.02E-09
2028	647880.17	4197227.02	1.92E-08	1.89E-08	3.82E-08	2.89E-09	2.84E-09	5.73E-09	2.83E-09	2.53E-09	5.36E-09	1.50E-09	1.15E-09	2.65E-09
2029	647731.53	4197092.5	1.62E-08	1.60E-08	3.22E-08	2.44E-09	2.39E-09	4.83E-09	2.38E-09	2.13E-09	4.52E-09	1.27E-09	9.68E-10	2.23E-09
2030	647755.09	4197065.16	1.62E-08	1.60E-08	3.22E-08	2.44E-09	2.39E-09	4.83E-09	2.38E-09	2.13E-09	4.52E-09	1.27E-09	9.68E-10	2.23E-09
2031	647778.64	4197037.83	1.61E-08	1.59E-08	3.20E-08	2.43E-09	2.38E-09	4.81E-09	2.37E-09	2.12E-09	4.50E-09	1.26E-09	9.63E-10	2.22E-09
2032	647802.2	4197010.5	1.60E-08	1.57E-08	3.17E-08	2.40E-09	2.36E-09	4.75E-09	2.35E-09	2.10E-09	4.45E-09	1.25E-09	9.52E-10	2.20E-09
2033	647825.75	4196983.16	1.57E-08	1.54E-08	3.11E-08	2.36E-09	2.32E-09	4.67E-09	2.31E-09	2.06E-09	4.37E-09	1.23E-09	9.36E-10	2.16E-09
2034	647849.3	4196955.83	1.53E-08	1.51E-08	3.04E-08	2.31E-09	2.26E-09	4.57E-09	2.25E-09	2.02E-09	4.27E-09	1.20E-09	9.15E-10	2.11E-09
2035	647872.86	4196928.5	1.49E-08	1.47E-08	2.96E-08	2.24E-09	2.20E-09	4.44E-09	2.19E-09	1.96E-09	4.15E-09	1.16E-09	8.89E-10	2.05E-09
2036	647896.41	4196901.16	1.44E-08	1.42E-08	2.86E-08	2.17E-09	2.13E-09	4.29E-09	2.12E-09	1.90E-09	4.01E-09	1.13E-09	8.60E-10	1.99E-09
2037	647919.97	4196873.83	1.39E-08	1.37E-08	2.76E-08	2.09E-09	2.05E-09	4.14E-09	2.04E-09	1.83E-09	3.87E-09	1.09E-09	8.29E-10	1.91E-09
2038	647943.52	4196846.5	1.34E-08	1.32E-08	2.65E-08	2.01E-09	1.97E-09	3.98E-09	1.96E-09	1.76E-09	3.72E-09	1.04E-09	7.97E-10	1.84E-09
2039	647967.07	4196819.16	1.28E-08	1.26E-08	2.55E-08	1.93E-09	1.89E-09	3.82E-09	1.89E-09	1.69E-09	3.57E-09	1.00E-09	7.66E-10	1.77E-09
2040	647990.63	4196791.83	1.23E-08	1.21E-08	2.45E-08	1.86E-09	1.82E-09	3.68E-09	1.81E-09	1.62E-09	3.44E-09	9.64E-10	7.36E-10	1.70E-09
2041	647710.11	4197121.75	1.62E-08	1.59E-08	3.21E-08	2.43E-09	2.39E-09	4.82E-09	2.38E-09	2.13E-09	4.51E-09	1.26E-09	9.66E-10	2.23E-09
2042	648953.49	4197923.54	6.83E-07	6.73E-07	1.36E-06	1.03E-07	1.01E-07	2.04E-07	1.00E-07	8.99E-08	1.90E-07	5.34E-08	4.08E-08	9.42E-08
2043	648944.58	4197945.32	7.37E-07	7.25E-07	1.46E-06	1.11E-07	1.09E-07	2.20E-07	1.08E-07	9.69E-08	2.05E-07	5.75E-08	4.40E-08	1.02E-07
2044	648935.67	4197967.1	7.71E-07	7.59E-07	1.53E-06	1.16E-07	1.14E-07	2.30E-07	1.13E-07	1.01E-07	2.15E-07	6.02E-08	4.60E-08	1.06E-07
2045	648930.35	4197914.08	4.75E-07	4.68E-07	9.44E-07	7.15E-08	7.02E-08	1.42E-07	6.99E-08	6.26E-08	1.32E-07	3.71E-08	2.84E-08	6.55E-08
2046	648921.44	4197935.86	5.08E-07	5.00E-07	1.01E-06	7.63E-08	7.50E-08	1.51E-07	7.46E-08	6.68E-08	1.41E-07	3.97E-08	3.03E-08	7.00E-08
2047	648912.53	4197957.64	5.33E-07	5.25E-07	1.06E-06	8.01E-08	7.87E-08	1.59E-07	7.84E-08	7.01E-08	1.49E-07	4.16E-08	3.18E-08	7.34E-08
2048	648907.21	4197904.61	3.63E-07	3.57E-07	7.20E-07	5.46E-08	5.36E-08	1.08E-07	5.34E-08	4.78E-08	1.01E-07	2.84E-08	2.17E-08	5.00E-08

2049	648898.3	4197926.39	3.84E-07	3.78E-07	7.62E-07	5.77E-08	5.67E-08	1.14E-07	5.65E-08	5.05E-08	1.07E-07	3.00E-08	2.29E-08	5.29E-08
2050	648889.39	4197948.17	4.02E-07	3.96E-07	7.98E-07	6.04E-08	5.93E-08	1.20E-07	5.91E-08	5.29E-08	1.12E-07	3.14E-08	2.40E-08	5.54E-08
2051	648884.08	4197895.15	2.93E-07	2.88E-07	5.81E-07	4.40E-08	4.32E-08	8.72E-08	4.30E-08	3.85E-08	8.15E-08	2.29E-08	1.75E-08	4.03E-08
2052	648875.17	4197916.93	3.07E-07	3.02E-07	6.10E-07	4.62E-08	4.54E-08	9.16E-08	4.52E-08	4.04E-08	8.56E-08	2.40E-08	1.83E-08	4.23E-08
2053	648866.26	4197938.71	3.20E-07	3.15E-07	6.35E-07	4.81E-08	4.73E-08	9.54E-08	4.71E-08	4.21E-08	8.92E-08	2.50E-08	1.91E-08	4.41E-08
2054	648846.71	4197854.44	2.00E-07	1.97E-07	3.98E-07	3.01E-08	2.96E-08	5.97E-08	2.95E-08	2.64E-08	5.58E-08	1.57E-08	1.20E-08	2.76E-08
2055	648837.8	4197876.22	2.09E-07	2.06E-07	4.15E-07	3.14E-08	3.09E-08	6.23E-08	3.07E-08	2.75E-08	5.83E-08	1.63E-08	1.25E-08	2.88E-08
2056	648828.89	4197898	2.17E-07	2.14E-07	4.31E-07	3.26E-08	3.20E-08	6.47E-08	3.19E-08	2.86E-08	6.05E-08	1.70E-08	1.30E-08	2.99E-08
2057	648819.98	4197919.78	2.24E-07	2.21E-07	4.45E-07	3.37E-08	3.31E-08	6.68E-08	3.29E-08	2.95E-08	6.24E-08	1.75E-08	1.34E-08	3.09E-08
2058	648800.43	4197835.5	1.56E-07	1.53E-07	3.09E-07	2.34E-08	2.30E-08	4.64E-08	2.29E-08	2.05E-08	4.34E-08	1.22E-08	9.29E-09	2.14E-08
2059	648791.52	4197857.28	1.61E-07	1.59E-07	3.20E-07	2.42E-08	2.38E-08	4.80E-08	2.37E-08	2.12E-08	4.49E-08	1.26E-08	9.61E-09	2.22E-08
2060	648782.61	4197879.06	1.66E-07	1.63E-07	3.29E-07	2.49E-08	2.45E-08	4.94E-08	2.44E-08	2.18E-08	4.62E-08	1.30E-08	9.90E-09	2.29E-08
2061	648773.7	4197900.84	1.70E-07	1.67E-07	3.37E-07	2.56E-08	2.51E-08	5.07E-08	2.50E-08	2.24E-08	4.74E-08	1.33E-08	1.01E-08	2.34E-08
2062	648754.15	4197816.57	1.26E-07	1.24E-07	2.51E-07	1.90E-08	1.87E-08	3.77E-08	1.86E-08	1.66E-08	3.52E-08	9.87E-09	7.54E-09	1.74E-08
2063	648745.24	4197838.35	1.30E-07	1.28E-07	2.58E-07	1.95E-08	1.92E-08	3.87E-08	1.91E-08	1.71E-08	3.62E-08	1.02E-08	7.76E-09	1.79E-08
2064	648736.33	4197860.13	1.33E-07	1.31E-07	2.64E-07	2.00E-08	1.96E-08	3.96E-08	1.96E-08	1.75E-08	3.71E-08	1.04E-08	7.94E-09	1.83E-08
2065	648727.42	4197881.91	1.36E-07	1.33E-07	2.69E-07	2.04E-08	2.00E-08	4.04E-08	1.99E-08	1.78E-08	3.78E-08	1.06E-08	8.09E-09	1.87E-08
2066	648715.4	4197782.87	1.04E-07	1.02E-07	2.07E-07	1.56E-08	1.54E-08	3.10E-08	1.53E-08	1.37E-08	2.90E-08	8.13E-09	6.21E-09	1.43E-08
2067	648698.97	4197819.42	1.08E-07	1.06E-07	2.15E-07	1.63E-08	1.60E-08	3.22E-08	1.59E-08	1.42E-08	3.01E-08	8.45E-09	6.45E-09	1.49E-08
2068	648690.06	4197841.2	1.10E-07	1.08E-07	2.19E-07	1.66E-08	1.63E-08	3.28E-08	1.62E-08	1.45E-08	3.07E-08	8.60E-09	6.57E-09	1.52E-08
2069	648681.15	4197862.98	1.12E-07	1.10E-07	2.22E-07	1.68E-08	1.65E-08	3.33E-08	1.64E-08	1.47E-08	3.11E-08	8.73E-09	6.67E-09	1.54E-08
2070	648625.36	4197740.09	7.73E-08	7.61E-08	1.53E-07	1.16E-08	1.14E-08	2.30E-08	1.14E-08	1.02E-08	2.15E-08	6.04E-09	4.61E-09	1.07E-08
2071	648606.41	4197781.56	7.97E-08	7.84E-08	1.58E-07	1.20E-08	1.18E-08	2.37E-08	1.17E-08	1.05E-08	2.22E-08	6.22E-09	4.75E-09	1.10E-08
2072	648597.5	4197803.34	8.06E-08	7.94E-08	1.60E-07	1.21E-08	1.19E-08	2.40E-08	1.19E-08	1.06E-08	2.25E-08	6.30E-09	4.81E-09	1.11E-08
2073	648588.59	4197825.12	8.14E-08	8.01E-08	1.62E-07	1.22E-08	1.20E-08	2.43E-08	1.20E-08	1.07E-08	2.27E-08	6.36E-09	4.86E-09	1.12E-08
2074	648532.17	4197703.45	6.08E-08	5.99E-08	1.21E-07	9.15E-09	8.98E-09	1.81E-08	8.94E-09	8.01E-09	1.69E-08	4.75E-09	3.63E-09	8.38E-09
2075	648513.86	4197743.69	6.21E-08	6.11E-08	1.23E-07	9.33E-09	9.16E-09	1.85E-08	9.13E-09	8.17E-09	1.73E-08	4.85E-09	3.70E-09	8.55E-09
2076	648504.95	4197765.47	6.26E-08	6.16E-08	1.24E-07	9.41E-09	9.24E-09	1.87E-08	9.20E-09	8.24E-09	1.74E-08	4.89E-09	3.74E-09	8.63E-09
2077	648496.04	4197787.25	6.30E-08	6.20E-08	1.25E-07	9.48E-09	9.31E-09	1.88E-08	9.27E-09	8.29E-09	1.76E-08	4.92E-09	3.76E-09	8.68E-09
2078	648439.24	4197666.33	4.95E-08	4.88E-08	9.83E-08	7.45E-09	7.31E-09	1.48E-08	7.28E-09	6.52E-09	1.38E-08	3.87E-09	2.96E-09	6.82E-09
2079	648457.3	4197630.88	4.87E-08	4.80E-08	9.67E-08	7.33E-09	7.19E-09	1.45E-08	7.16E-09	6.41E-09	1.36E-08	3.81E-09	2.91E-09	6.71E-09
2080	648421.3	4197705.83	5.02E-08	4.95E-08	9.97E-08	7.55E-09	7.42E-09	1.50E-08	7.39E-09	6.61E-09	1.40E-08	3.92E-09	3.00E-09	6.92E-09
2081	648412.39	4197727.61	5.06E-08	4.98E-08	1.00E-07	7.60E-09	7.47E-09	1.51E-08	7.44E-09	6.66E-09	1.41E-08	3.95E-09	3.02E-09	6.97E-09
2082	648403.48	4197749.39	5.08E-08	5.01E-08	1.01E-07	7.65E-09	7.51E-09	1.52E-08	7.48E-09	6.69E-09	1.42E-08	3.97E-09	3.03E-09	7.01E-09
2083	648348.19	4197625.51	4.13E-08	4.07E-08	8.20E-08	6.22E-09	6.10E-09	1.23E-08	6.08E-09	5.44E-09	1.15E-08	3.23E-09	2.47E-09	5.70E-09
2084	648358.73	4197604.84	4.11E-08	4.05E-08	8.16E-08	6.18E-09	6.07E-09	1.22E-08	6.04E-09	5.41E-09	1.15E-08	3.21E-09	2.45E-09	5.66E-09
2085	648369.27	4197584.16	4.08E-08	4.01E-08	8.09E-08	6.13E-09	6.02E-09	1.22E-08	6.00E-09	5.37E-09	1.14E-08	3.19E-09	2.43E-09	5.62E-09
2086	648379.8	4197563.48	4.04E-08	3.97E-08	8.01E-08	6.07E-09	5.96E-09	1.20E-08	5.94E-09	5.31E-09	1.12E-08	3.15E-09	2.41E-09	5.56E-09
2087	648337.66	4197646.19	4.15E-08	4.09E-08	8.24E-08	6.25E-09	6.13E-09	1.24E-08	6.11E-09	5.47E-09	1.16E-08	3.24E-09	2.48E-09	5.72E-09
2088	648328.75	4197667.97	4.18E-08	4.12E-08	8.30E-08	6.29E-09	6.17E-09	1.25E-08	6.15E-09	5.50E-09	1.17E-08	3.27E-09	2.50E-09	5.76E-09
2089	648319.84	4197689.75	4.21E-08	4.14E-08	8.35E-08	6.32E-09	6.21E-09	1.25E-08	6.18E-09	5.53E-09	1.17E-08	3.29E-09	2.51E-09	5.79E-09
2090	648310.93	4197711.53	4.23E-08	4.16E-08	8.39E-08	6.36E-09	6.24E-09	1.26E-08	6.22E-09	5.56E-09	1.18E-08	3.30E-09	2.52E-09	5.82E-09
2091	648162.22	4197551.47	3.05E-08	3.01E-08	6.06E-08	4.59E-09	4.51E-09	9.10E-09	4.49E-09	4.02E-09	8.50E-09	2.38E-09	1.82E-09	4.21E-09
2092	648181.58	4197513.5	3.04E-08	2.99E-08	6.03E-08	4.57E-09	4.48E-09	9.05E-09	4.47E-09	4.00E-09	8.46E-09	2.37E-09	1.81E-09	4.19E-09
2093	648200.93	4197475.52	3.01E-08	2.97E-08	5.98E-08	4.53E-09	4.45E-09	8.98E-09	4.43E-09	3.97E-09	8.40E-09	2.35E-09	1.80E-09	4.15E-09
2094	648143.64	4197592.24	3.08E-08	3.03E-08	6.10E-08	4.62E-09	4.54E-09	9.16E-09	4.52E-09	4.05E-09	8.57E-09	2.40E-09	1.84E-09	4.24E-09
2095	648134.73	4197614.02	3.09E-08	3.04E-08	6.14E-08	4.65E-09	4.57E-09	9.21E-09	4.55E-09	4.07E-09	8.62E-09	2.42E-09	1.85E-09	4.26E-09
2096	648125.82	4197635.8	3.11E-08	3.06E-08	6.17E-08	4.67E-09	4.59E-09	9.26E-09	4.57E-09	4.09E-09	8.66E-09	2.43E-09	1.85E-09	4.28E-09
2097	647977.79	4197474.43	2.38E-08	2.34E-08	4.71E-08	3.57E-09	3.51E-09	7.08E-09	3.49E-09	3.13E-09	6.62E-09	1.86E-09	1.42E-09	3.27E-09
2098	647988.13	4197454.12	2.37E-08	2.34E-08	4.71E-08	3.57E-09	3.50E-09	7.07E-09	3.49E-09	3.12E-09	6.61E-09	1.85E-09	1.42E-09	3.27E-09
2099	647998.48	4197433.81	2.37E-08	2.33E-08	4.71E-08	3.57E-09	3.50E-09	7.07E-09	3.49E-09	3.12E-09	6.61E-09	1.85E-09	1.42E-09	3.27E-09
2100	648008.83	4197413.51	2.37E-08	2.33E-08	4.70E-08	3.56E-09	3.50E-09	7.06E-09	3.48E-09	3.12E-09	6.60E-09	1.85E-09	1.41E-09	3.26E-09
2101	648019.18	4197393.2	2.37E-08	2.33E-08	4.70E-08	3.56E-09	3.50E-09	7.06E-09	3.48E-09	3.12E-09	6.60E-09	1.85E-09	1.41E-09	3.26E-09
2102	648029.53	4197372.89	2.36E-08	2.33E-08	4.69E-08	3.56E-09	3.49E-09	7.05E-09	3.48E-09	3.11E-09	6.59E-09	1.85E-09	1.41E-09	3.26E-09
2103	648039.87	4197352.59	2.36E-08	2.32E-08	4.68E-08	3.54E-09	3.48E-09	7.03E-09	3.47E-09	3.10E-09	6.57E-09	1.84E-09	1.41E-09	3.25E-09
2104	647967.44	4197494.73	2.38E-08	2.34E-08	4.72E-08	3.58E-09	3.51E-09	7.09E-09	3.50E-09	3.13E-09	6.63E-09	1.86E-09	1.42E-09	3.28E-09
2105	647958.53	4197516.51	2.39E-08	2.36E-08	4.75E-08	3.60E-09	3.53E-09	7.13E-09	3.52E-09	3.15E-09	6.67E-09	1.87E-09	1.43E-09	3.30E-09
2106	647949.62	4197538.29	2.41E-08	2.37E-08	4.78E-08	3.62E-09	3.55E-09	7.17E-09	3.54E-09	3.17E-09	6.71E-09	1.88E-09	1.44E-09	3.32E-09
2107	647940.71	4197560.07	2.42E-08	2.38E-08	4.80E-08	3.64E-09	3.57E-09	7.22E-09	3.56E-09	3.19E-09	6.75E-09	1.89E-09	1.44E-09	3.34E-09
2108	647792.11	4197399.81	1.92E-08	1.89E-08	3.81E-08	2.89E-09	2.84E-09	5.73E-09	2.83E-09	2.53E-09	5.36E-09	1.50E-09	1.15E-09	2.65E-09
2109	647811.68	4197361.41	1.92E-08	1.89E-08	3.81E-08	2.88E-09	2.83E-09	5.72E-09	2.82E-09	2.52E-09	5.35E-09	1.50E-09	1.14E-09	2.64E-09
2110	647831.25	4197323.01	1.92E-08	1.89E-08	3.81E-08	2.89E-09	2.84E-09	5.72E-09	2.82E-09	2.53E-09	5.35E-09	1.50E-09	1.15E-09	2.65E-09
2111	647850.81	4197284.61	1.93E-08	1.90E-08	3.82E-08	2.90E-09	2.84E-09	5.74E-09	2.83E-09	2.53E-09	5.36E-09	1.50E-09	1.15E-09	2.65E-09
2112	647773.42	4197440.79	1.94E-08	1.91E-08	3.84E-08	2.91E-09	2.86E-09	5.77E-09	2.85E-09	2.55E-09	5.39E-09	1.51E-09	1.16E-09	2.67E-09
2113	647764.51	4197462.57	1.95E-08	1.92E-08	3.86E-08	2.93E-09	2.87E-09	5.80E-09	2.86E-09	2.56E-09	5.42E-09	1.52E-09	1.16E-09	2.68E-09
2114	647755.6	4197484.35	1.96E-08	1.93E-08	3.89E-08	2.95E-09	2.89E-09	5.84E-09	2.88E-09	2.58E-09	5.46E-09	1.53E-09	1.17E-09	2.70E-09
2115	647607.48	4197323.14	1.60E-08	1.57E-08	3.17E-08	2.40E-09	2.36E-09	4.76E-09	2.35E-09	2.10E-09	4.45E-09	1.25E-09	9.54E-10	2.20E-09
2116	647628.01	4197282.86	1.60E-08	1.57E-08	3.17E-08	2.40E-09	2.36E-09	4.75E-09	2.35E-09	2.10E-09	4.45E-09	1.25E-09	9.52E-10	2.20E-09
2117	647638.27	4197262.73	1.60E-08	1.57E-08	3.17E-08	2.40E-09	2.36E-09	4.76E-09	2.35E-09	2.10E-09	4.45E-09	1.25E-09	9.53E-10	2.20E-09
2118	647648.53	4197242.59	1.60E-08	1.57E-08	3.17E-08	2.40E-09	2.36E-09	4.76E-09	2.35E-09	2.10E-09	4.46E-09	1.25E-09	9.54E-10	2.20E-09
2119	647669.06	4197202.31	1.61E-08	1.58E-08	3.19E-08	2.42E-09	2.37E-09	4.79E-09	2.36E-09	2.11E-09	4.48E-09	1.26E-09	9.59E-10	2.21E-09
2120	647679.32	4197182.17	1.61E-08	1.59E-08	3.20E-08	2.42E-09	2.38E-09	4.80E-09	2.37E-09	2.12E-09	4.49E-09	1.26E-09	9.62E-10	2.22E-09
2121	647597.22	4197343.28	1.60E-08	1.58E-08	3.18E-08	2.41E-09	2.37E-09	4.78E-09	2.36E-09	2.11E-09	4.46E-09	1.25E-09	9.56E-10	2.21E-09
2122	647588.31	4197365.06	1.61E-08	1.59E-08	3.20E-08	2.42E-09	2.38E-09	4.80E-09	2.37E-09	2.12E-09	4.49E-09	1.26E-09	9.62E-10	2.22E-09
2123	647579.4	4197386.84	1.62E-08	1.60E-08	3.22E-08	2.44E-09	2.39E-09	4.83E-09	2.38E-09	2.13E-09	4.52E-09	1.27E-09	9.68E-10	2.23E-09
2124	647570.49	4197408.62	1.63E-08	1.61E-08	3.24E-08	2.46E-09	2.41E-09	4.87E-09	2.40E-09	2.15E-09	4.55E-09	1.28E-09	9.75E-10	2.25E-09

2125	648948.01	4198010.21	1.29E-06	1.27E-06	2.55E-06	1.93E-07	1.90E-07	3.83E-07	1.89E-07	1.69E-07	3.58E-07	1.00E-07	7.67E-08	1.77E-07
2126	648959.43	4198032.4	1.64E-06	1.61E-06	3.25E-06	2.46E-07	2.42E-07	4.88E-07	2.41E-07	2.16E-07	4.56E-07	1.28E-07	9.77E-08	2.26E-07
2127	648970.85	4198054.59	1.82E-06	1.80E-06	3.62E-06	2.74E-07	2.69E-07	5.44E-07	2.68E-07	2.40E-07	5.08E-07	1.43E-07	1.09E-07	2.51E-07
2128	648982.28	4198076.79	1.93E-06	1.90E-06	3.84E-06	2.91E-07	2.86E-07	5.77E-07	2.84E-07	2.55E-07	5.39E-07	1.51E-07	1.15E-07	2.67E-07
2129	648993.7	4198098.98	2.01E-06	1.98E-06	3.99E-06	3.02E-07	2.96E-07	5.98E-07	2.95E-07	2.64E-07	5.60E-07	1.57E-07	1.20E-07	2.77E-07
2130	649005.12	4198121.17	2.06E-06	2.03E-06	4.09E-06	3.10E-07	3.04E-07	6.14E-07	3.03E-07	2.71E-07	5.74E-07	1.61E-07	1.23E-07	2.84E-07
2131	649016.55	4198143.37	2.10E-06	2.06E-06	4.16E-06	3.15E-07	3.09E-07	6.24E-07	3.08E-07	2.76E-07	5.84E-07	1.64E-07	1.25E-07	2.89E-07
2132	649027.97	4198165.56	2.12E-06	2.08E-06	4.20E-06	3.18E-07	3.12E-07	6.30E-07	3.11E-07	2.78E-07	5.89E-07	1.65E-07	1.26E-07	2.91E-07
2133	649039.4	4198187.76	2.12E-06	2.09E-06	4.21E-06	3.19E-07	3.13E-07	6.32E-07	3.12E-07	2.79E-07	5.91E-07	1.66E-07	1.27E-07	2.92E-07
2134	649050.82	4198209.95	2.11E-06	2.07E-06	4.18E-06	3.17E-07	3.11E-07	6.27E-07	3.10E-07	2.77E-07	5.87E-07	1.64E-07	1.26E-07	2.90E-07
2135	649062.24	4198232.14	2.06E-06	2.03E-06	4.10E-06	3.10E-07	3.05E-07	6.15E-07	3.03E-07	2.72E-07	5.75E-07	1.61E-07	1.23E-07	2.84E-07
2136	649073.67	4198254.34	1.97E-06	1.94E-06	3.92E-06	2.97E-07	2.91E-07	5.88E-07	2.90E-07	2.60E-07	5.50E-07	1.54E-07	1.18E-07	2.72E-07
2137	649085.09	4198276.53	1.77E-06	1.74E-06	3.52E-06	2.66E-07	2.62E-07	5.28E-07	2.61E-07	2.33E-07	4.94E-07	1.38E-07	1.06E-07	2.44E-07
2138	648914.35	4197999.45	6.93E-07	6.83E-07	1.38E-06	1.04E-07	1.02E-07	2.07E-07	1.02E-07	9.13E-08	1.93E-07	5.42E-08	4.14E-08	9.56E-08
2139	648925.78	4198021.65	8.97E-07	8.83E-07	1.78E-06	1.35E-07	1.32E-07	2.67E-07	1.32E-07	1.18E-07	2.50E-07	7.00E-08	5.35E-08	1.24E-07
2140	648937.2	4198043.84	1.11E-06	1.09E-06	2.20E-06	1.66E-07	1.63E-07	3.30E-07	1.63E-07	1.46E-07	3.08E-07	8.65E-08	6.61E-08	1.53E-07
2141	648948.63	4198066.03	1.26E-06	1.24E-06	2.51E-06	1.90E-07	1.87E-07	3.77E-07	1.86E-07	1.66E-07	3.52E-07	9.88E-08	7.54E-08	1.74E-07
2142	648960.05	4198088.23	1.37E-06	1.35E-06	2.71E-06	2.06E-07	2.02E-07	4.08E-07	2.01E-07	1.80E-07	3.81E-07	1.07E-07	8.16E-08	1.88E-07
2143	648971.47	4198110.42	1.44E-06	1.42E-06	2.86E-06	2.16E-07	2.12E-07	4.29E-07	2.12E-07	1.89E-07	4.01E-07	1.12E-07	8.59E-08	1.98E-07
2144	648982.9	4198132.62	1.49E-06	1.47E-06	2.96E-06	2.24E-07	2.20E-07	4.44E-07	2.19E-07	1.96E-07	4.15E-07	1.16E-07	8.89E-08	2.05E-07
2145	648994.32	4198154.81	1.52E-06	1.50E-06	3.02E-06	2.29E-07	2.25E-07	4.54E-07	2.24E-07	2.01E-07	4.25E-07	1.19E-07	9.09E-08	2.10E-07
2146	649005.74	4198177	1.54E-06	1.52E-06	3.07E-06	2.32E-07	2.28E-07	4.60E-07	2.27E-07	2.03E-07	4.30E-07	1.21E-07	9.22E-08	2.13E-07
2147	649017.17	4198199.2	1.55E-06	1.53E-06	3.08E-06	2.33E-07	2.29E-07	4.63E-07	2.28E-07	2.04E-07	4.33E-07	1.21E-07	9.27E-08	2.14E-07
2148	649028.59	4198221.39	1.55E-06	1.52E-06	3.07E-06	2.32E-07	2.28E-07	4.61E-07	2.27E-07	2.03E-07	4.31E-07	1.21E-07	9.22E-08	2.13E-07
2149	649040.02	4198243.59	1.52E-06	1.50E-06	3.01E-06	2.28E-07	2.24E-07	4.53E-07	2.23E-07	2.00E-07	4.23E-07	1.19E-07	9.07E-08	2.09E-07
2150	649051.44	4198265.78	1.46E-06	1.44E-06	2.90E-06	2.20E-07	2.16E-07	4.36E-07	2.15E-07	1.92E-07	4.07E-07	1.14E-07	8.73E-08	2.01E-07
2151	649062.86	4198287.97	1.36E-06	1.33E-06	2.69E-06	2.04E-07	2.00E-07	4.04E-07	1.99E-07	1.78E-07	3.78E-07	1.06E-07	8.09E-08	1.87E-07
2152	648891.21	4197989.99	5.06E-07	4.98E-07	1.00E-06	7.60E-08	7.46E-08	1.51E-07	7.43E-08	6.65E-08	1.41E-07	3.95E-08	3.02E-08	6.97E-08
2153	648903.55	4198033.09	6.89E-07	6.78E-07	1.37E-06	1.04E-07	1.02E-07	2.05E-07	1.01E-07	9.06E-08	1.92E-07	5.38E-08	4.11E-08	9.49E-08
2154	648914.97	4198055.28	8.27E-07	8.14E-07	1.64E-06	1.24E-07	1.22E-07	2.46E-07	1.22E-07	1.09E-07	2.30E-07	6.46E-08	4.93E-08	1.14E-07
2155	648926.4	4198077.48	9.48E-07	9.33E-07	1.88E-06	1.42E-07	1.40E-07	2.82E-07	1.39E-07	1.25E-07	2.64E-07	7.40E-08	5.66E-08	1.31E-07
2156	648937.82	4198099.67	1.04E-06	1.02E-06	2.06E-06	1.56E-07	1.53E-07	3.10E-07	1.53E-07	1.37E-07	2.90E-07	8.12E-08	6.20E-08	1.43E-07
2157	648949.24	4198121.86	1.11E-06	1.09E-06	2.20E-06	1.66E-07	1.63E-07	3.30E-07	1.63E-07	1.46E-07	3.08E-07	8.64E-08	6.60E-08	1.52E-07
2158	648960.67	4198144.06	1.15E-06	1.14E-06	2.29E-06	1.74E-07	1.70E-07	3.44E-07	1.70E-07	1.52E-07	3.22E-07	9.02E-08	6.89E-08	1.59E-07
2159	648972.09	4198166.25	1.19E-06	1.17E-06	2.36E-06	1.79E-07	1.76E-07	3.54E-07	1.75E-07	1.56E-07	3.31E-07	9.29E-08	7.09E-08	1.64E-07
2160	648983.52	4198188.45	1.21E-06	1.19E-06	2.40E-06	1.82E-07	1.79E-07	3.61E-07	1.78E-07	1.59E-07	3.37E-07	9.46E-08	7.23E-08	1.67E-07
2161	648994.94	4198210.64	1.22E-06	1.20E-06	2.42E-06	1.84E-07	1.80E-07	3.64E-07	1.80E-07	1.61E-07	3.40E-07	9.54E-08	7.29E-08	1.68E-07
2162	649006.36	4198232.83	1.22E-06	1.20E-06	2.42E-06	1.83E-07	1.80E-07	3.64E-07	1.79E-07	1.61E-07	3.40E-07	9.53E-08	7.28E-08	1.68E-07
2163	649017.79	4198255.03	1.20E-06	1.18E-06	2.39E-06	1.81E-07	1.78E-07	3.59E-07	1.77E-07	1.58E-07	3.35E-07	9.40E-08	7.18E-08	1.66E-07
2164	649029.21	4198277.22	1.17E-06	1.15E-06	2.31E-06	1.75E-07	1.72E-07	3.48E-07	1.71E-07	1.53E-07	3.25E-07	9.11E-08	6.96E-08	1.61E-07
2165	649040.64	4198299.41	1.10E-06	1.08E-06	2.18E-06	1.65E-07	1.63E-07	3.28E-07	1.62E-07	1.45E-07	3.07E-07	8.60E-08	6.57E-08	1.52E-07
2166	648868.99	4198001.43	4.29E-07	4.23E-07	8.52E-07	6.46E-08	6.34E-08	1.28E-07	6.31E-08	5.65E-08	1.20E-07	3.35E-08	2.56E-08	5.92E-08
2167	648881.32	4198044.53	5.58E-07	5.49E-07	1.11E-06	8.39E-08	8.24E-08	1.66E-07	8.20E-08	7.34E-08	1.55E-07	4.36E-08	3.33E-08	7.69E-08
2168	648892.74	4198066.72	6.55E-07	6.45E-07	1.30E-06	9.86E-08	9.68E-08	1.95E-07	9.64E-08	8.63E-08	1.83E-07	5.12E-08	3.91E-08	9.03E-08
2169	648904.17	4198088.92	7.48E-07	7.36E-07	1.48E-06	1.12E-07	1.10E-07	2.23E-07	1.10E-07	9.84E-08	2.08E-07	5.84E-08	4.46E-08	1.03E-07
2170	648915.59	4198111.11	8.25E-07	8.13E-07	1.64E-06	1.24E-07	1.22E-07	2.46E-07	1.21E-07	1.09E-07	2.30E-07	6.45E-08	4.93E-08	1.14E-07
2171	648927.02	4198133.31	8.86E-07	8.72E-07	1.76E-06	1.33E-07	1.31E-07	2.64E-07	1.30E-07	1.17E-07	2.47E-07	6.92E-08	5.29E-08	1.22E-07
2172	648938.44	4198155.5	9.32E-07	9.18E-07	1.85E-06	1.40E-07	1.38E-07	2.78E-07	1.37E-07	1.23E-07	2.60E-07	7.28E-08	5.56E-08	1.28E-07
2173	648949.86	4198177.69	9.66E-07	9.51E-07	1.92E-06	1.45E-07	1.43E-07	2.88E-07	1.42E-07	1.27E-07	2.69E-07	7.54E-08	5.76E-08	1.33E-07
2174	648961.29	4198199.89	9.88E-07	9.73E-07	1.96E-06	1.49E-07	1.46E-07	2.95E-07	1.45E-07	1.30E-07	2.75E-07	7.72E-08	5.90E-08	1.36E-07
2175	648972.71	4198222.08	1.00E-06	9.86E-07	1.99E-06	1.51E-07	1.48E-07	2.98E-07	1.47E-07	1.32E-07	2.79E-07	7.82E-08	5.98E-08	1.38E-07
2176	648984.14	4198244.27	1.00E-06	9.88E-07	1.99E-06	1.51E-07	1.48E-07	2.99E-07	1.48E-07	1.32E-07	2.80E-07	7.84E-08	5.99E-08	1.38E-07
2177	648995.56	4198266.47	9.94E-07	9.78E-07	1.97E-06	1.49E-07	1.47E-07	2.96E-07	1.46E-07	1.31E-07	2.77E-07	7.76E-08	5.93E-08	1.37E-07
2178	649006.98	4198288.66	9.69E-07	9.54E-07	1.92E-06	1.46E-07	1.43E-07	2.89E-07	1.42E-07	1.28E-07	2.70E-07	7.57E-08	5.78E-08	1.34E-07
2179	649018.41	4198310.86	9.26E-07	9.11E-07	1.84E-06	1.39E-07	1.37E-07	2.76E-07	1.36E-07	1.22E-07	2.58E-07	7.23E-08	5.52E-08	1.28E-07
2180	648824.53	4198024.31	3.27E-07	3.22E-07	6.49E-07	4.92E-08	4.83E-08	9.75E-08	4.81E-08	4.31E-08	9.12E-08	2.56E-08	1.95E-08	4.51E-08
2181	648822.71	4197982.5	2.83E-07	2.79E-07	5.61E-07	4.25E-08	4.18E-08	8.43E-08	4.16E-08	3.72E-08	7.88E-08	2.21E-08	1.69E-08	3.90E-08
2182	648836.86	4198067.41	4.01E-07	3.95E-07	7.96E-07	6.03E-08	5.92E-08	1.19E-07	5.89E-08	5.28E-08	1.12E-07	3.13E-08	2.39E-08	5.52E-08
2183	648848.29	4198089.61	4.57E-07	4.50E-07	9.07E-07	6.87E-08	6.75E-08	1.36E-07	6.72E-08	6.01E-08	1.27E-07	3.57E-08	2.73E-08	6.30E-08
2184	648859.71	4198111.8	5.14E-07	5.06E-07	1.02E-06	7.73E-08	7.59E-08	1.53E-07	7.55E-08	6.76E-08	1.43E-07	4.01E-08	3.07E-08	7.08E-08
2185	648871.14	4198133.99	5.67E-07	5.58E-07	1.13E-06	8.53E-08	8.37E-08	1.69E-07	8.34E-08	7.46E-08	1.58E-07	4.43E-08	3.38E-08	7.81E-08
2186	648882.56	4198156.19	6.14E-07	6.04E-07	1.22E-06	9.23E-08	9.06E-08	1.83E-07	9.02E-08	8.08E-08	1.71E-07	4.79E-08	3.66E-08	8.46E-08
2187	648893.98	4198178.38	6.53E-07	6.42E-07	1.29E-06	9.81E-08	9.63E-08	1.94E-07	9.59E-08	8.59E-08	1.82E-07	5.10E-08	3.89E-08	8.99E-08
2188	648905.41	4198200.58	6.83E-07	6.73E-07	1.36E-06	1.03E-07	1.01E-07	2.04E-07	1.00E-07	8.99E-08	1.90E-07	5.34E-08	4.08E-08	9.42E-08
2189	648916.83	4198222.77	7.06E-07	6.95E-07	1.40E-06	1.06E-07	1.04E-07	2.10E-07	1.04E-07	9.29E-08	1.97E-07	5.52E-08	4.21E-08	9.73E-08
2190	648928.26	4198244.96	7.21E-07	7.10E-07	1.43E-06	1.08E-07	1.06E-07	2.15E-07	1.06E-07	9.49E-08	2.01E-07	5.63E-08	4.30E-08	9.94E-08
2191	648939.68	4198267.16	7.28E-07	7.17E-07	1.45E-06	1.10E-07	1.08E-07	2.17E-07	1.07E-07	9.59E-08	2.03E-07	5.69E-08	4.35E-08	1.00E-07
2192	648951.1	4198289.35	7.27E-07	7.16E-07	1.44E-06	1.09E-07	1.07E-07	2.17E-07	1.07E-07	9.57E-08	2.03E-07	5.68E-08	4.34E-08	1.00E-07
2193	648962.53	4198311.55	7.16E-07	7.05E-07	1.42E-06	1.08E-07	1.06E-07	2.13E-07	1.05E-07	9.42E-08	2.00E-07	5.59E-08	4.27E-08	9.87E-08
2194	648973.95	4198333.74	6.96E-07	6.85E-07	1.38E-06	1.05E-07	1.03E-07	2.07E-07	1.02E-07	9.15E-08	1.94E-07	5.43E-08	4.15E-08	9.59E-08
2195	648779.94	4198044.21	2.60E-07	2.56E-07	5.15E-07	3.90E-08	3.83E-08	7.74E-08	3.82E-08	3.42E-08	7.23E-08	2.03E-08	1.55E-08	3.58E-08
2196	648778.9	4198020.31	2.43E-07	2.39E-07	4.82E-07	3.65E-08	3.59E-08	7.24E-08	3.57E-08	3.20E-08	6.77E-08	1.90E-08	1.45E-08	3.35E-08
2197	648777.86	4197996.42	2.27E-07	2.23E-07	4.50E-07	3.41E-08	3.35E-08	6.75E-08	3.33E-08	2.98E-08	6.31E-08	1.77E-08	1.35E-08	3.12E-08
2198	648776.82	4197972.53	2.11E-07	2.08E-07	4.18E-07	3.17E-08	3.11E-08	6.28E-08	3.10E-08	2.77E-08	5.87E-08	1.65E-08	1.26E-08	2.90E-08
2199	648775.78	4197948.63	1.96E-07	1.93E-07	3.89E-07	2.95E-08	2.89E-08	5.84E-08	2.88E-08	2.58E-08	5.46E-08	1.53E-08	1.17E-08	2.70E-08
2200	648774.74	4197924.74	1.82E-07	1.80E-07	3.62E-07	2.74E-08	2.69E-08	5.44E-08	2.68E-08	2.40E-08	5.08E-08	1.43E-08	1.09E-08	2.51E-08

2201	648780.98	4198068.1	2.76E-07	2.72E-07	5.48E-07	4.15E-08	4.07E-08	8.22E-08	4.06E-08	3.63E-08	7.69E-08	2.16E-08	1.65E-08	3.80E-08
2202	648792.41	4198090.3	3.10E-07	3.05E-07	6.15E-07	4.66E-08	4.57E-08	9.23E-08	4.55E-08	4.08E-08	8.63E-08	2.42E-08	1.85E-08	4.27E-08
2203	648803.83	4198112.49	3.46E-07	3.41E-07	6.87E-07	5.20E-08	5.11E-08	1.03E-07	5.09E-08	4.55E-08	9.64E-08	2.70E-08	2.06E-08	4.77E-08
2204	648815.26	4198134.68	3.84E-07	3.78E-07	7.62E-07	5.77E-08	5.67E-08	1.14E-07	5.64E-08	5.05E-08	1.07E-07	3.00E-08	2.29E-08	5.29E-08
2205	648826.68	4198156.88	4.21E-07	4.14E-07	8.35E-07	6.33E-08	6.22E-08	1.25E-07	6.19E-08	5.54E-08	1.17E-07	3.29E-08	2.51E-08	5.80E-08
2206	648838.1	4198179.07	4.56E-07	4.49E-07	9.04E-07	6.85E-08	6.73E-08	1.36E-07	6.70E-08	6.00E-08	1.27E-07	3.56E-08	2.72E-08	6.28E-08
2207	648849.53	4198201.27	4.87E-07	4.79E-07	9.66E-07	7.32E-08	7.18E-08	1.45E-07	7.16E-08	6.40E-08	1.36E-07	3.80E-08	2.90E-08	6.71E-08
2208	648860.95	4198223.46	5.13E-07	5.05E-07	1.02E-06	7.71E-08	7.57E-08	1.53E-07	7.54E-08	6.75E-08	1.43E-07	4.01E-08	3.06E-08	7.07E-08
2209	648872.38	4198245.65	5.34E-07	5.25E-07	1.06E-06	8.02E-08	7.88E-08	1.59E-07	7.84E-08	7.02E-08	1.49E-07	4.17E-08	3.18E-08	7.35E-08
2210	648883.8	4198267.85	5.49E-07	5.40E-07	1.09E-06	8.25E-08	8.10E-08	1.63E-07	8.07E-08	7.22E-08	1.53E-07	4.29E-08	3.27E-08	7.56E-08
2211	648895.22	4198290.04	5.58E-07	5.49E-07	1.11E-06	8.39E-08	8.23E-08	1.66E-07	8.20E-08	7.34E-08	1.55E-07	4.36E-08	3.33E-08	7.69E-08
2212	648906.65	4198312.23	5.61E-07	5.52E-07	1.11E-06	8.43E-08	8.28E-08	1.67E-07	8.24E-08	7.38E-08	1.56E-07	4.38E-08	3.35E-08	7.73E-08
2213	648918.07	4198334.43	5.57E-07	5.49E-07	1.11E-06	8.38E-08	8.23E-08	1.66E-07	8.20E-08	7.34E-08	1.55E-07	4.35E-08	3.33E-08	7.68E-08
2214	648929.49	4198356.62	5.48E-07	5.39E-07	1.09E-06	8.24E-08	8.09E-08	1.63E-07	8.06E-08	7.21E-08	1.53E-07	4.28E-08	3.27E-08	7.55E-08
2215	648735.52	4198067.75	2.15E-07	2.12E-07	4.27E-07	3.24E-08	3.18E-08	6.42E-08	3.17E-08	2.83E-08	6.00E-08	1.68E-08	1.29E-08	2.97E-08
2216	648734.5	4198044.52	2.04E-07	2.01E-07	4.05E-07	3.07E-08	3.01E-08	6.08E-08	3.00E-08	2.68E-08	5.68E-08	1.59E-08	1.22E-08	2.81E-08
2217	648733.49	4198021.29	1.93E-07	1.90E-07	3.82E-07	2.90E-08	2.84E-08	5.74E-08	2.83E-08	2.53E-08	5.37E-08	1.50E-08	1.15E-08	2.65E-08
2218	648732.48	4197998.06	1.81E-07	1.79E-07	3.60E-07	2.73E-08	2.68E-08	5.41E-08	2.67E-08	2.39E-08	5.06E-08	1.42E-08	1.08E-08	2.50E-08
2219	648731.47	4197974.83	1.71E-07	1.68E-07	3.39E-07	2.57E-08	2.52E-08	5.09E-08	2.51E-08	2.25E-08	4.76E-08	1.33E-08	1.02E-08	2.35E-08
2220	648730.46	4197951.6	1.61E-07	1.58E-07	3.19E-07	2.42E-08	2.38E-08	4.80E-08	2.37E-08	2.12E-08	4.48E-08	1.26E-08	9.61E-09	2.22E-08
2221	648729.45	4197928.37	1.52E-07	1.49E-07	3.01E-07	2.28E-08	2.24E-08	4.52E-08	2.23E-08	2.00E-08	4.23E-08	1.19E-08	9.06E-09	2.09E-08
2222	648728.43	4197905.14	1.43E-07	1.41E-07	2.84E-07	2.16E-08	2.12E-08	4.27E-08	2.11E-08	1.89E-08	3.99E-08	1.12E-08	8.55E-09	1.97E-08
2223	648736.53	4198090.99	2.27E-07	2.23E-07	4.50E-07	3.41E-08	3.35E-08	6.75E-08	3.33E-08	2.98E-08	6.32E-08	1.77E-08	1.35E-08	3.12E-08
2224	648747.95	4198113.18	2.50E-07	2.46E-07	4.97E-07	3.76E-08	3.70E-08	7.46E-08	3.68E-08	3.29E-08	6.97E-08	1.96E-08	1.49E-08	3.45E-08
2225	648759.38	4198135.37	2.76E-07	2.71E-07	5.47E-07	4.15E-08	4.07E-08	8.22E-08	4.05E-08	3.63E-08	7.68E-08	2.15E-08	1.65E-08	3.80E-08
2226	648770.8	4198157.57	3.02E-07	2.98E-07	6.00E-07	4.55E-08	4.46E-08	9.01E-08	4.45E-08	3.98E-08	8.43E-08	2.36E-08	1.80E-08	4.17E-08
2227	648782.22	4198179.76	3.29E-07	3.24E-07	6.53E-07	4.95E-08	4.86E-08	9.81E-08	4.84E-08	4.33E-08	9.17E-08	2.57E-08	1.97E-08	4.54E-08
2228	648793.65	4198201.95	3.55E-07	3.50E-07	7.05E-07	5.34E-08	5.25E-08	1.06E-07	5.22E-08	4.68E-08	9.90E-08	2.78E-08	2.12E-08	4.90E-08
2229	648805.07	4198224.15	3.79E-07	3.73E-07	7.53E-07	5.70E-08	5.60E-08	1.13E-07	5.58E-08	4.99E-08	1.06E-07	2.96E-08	2.26E-08	5.23E-08
2230	648816.5	4198246.34	4.01E-07	3.94E-07	7.95E-07	6.02E-08	5.91E-08	1.19E-07	5.89E-08	5.27E-08	1.12E-07	3.13E-08	2.39E-08	5.52E-08
2231	648827.92	4198268.54	4.18E-07	4.12E-07	8.30E-07	6.29E-08	6.18E-08	1.25E-07	6.15E-08	5.50E-08	1.17E-07	3.27E-08	2.50E-08	5.76E-08
2232	648839.34	4198290.73	4.32E-07	4.25E-07	8.57E-07	6.50E-08	6.38E-08	1.29E-07	6.35E-08	5.69E-08	1.20E-07	3.37E-08	2.58E-08	5.95E-08
2233	648850.77	4198312.92	4.42E-07	4.35E-07	8.76E-07	6.64E-08	6.52E-08	1.32E-07	6.49E-08	5.81E-08	1.23E-07	3.45E-08	2.64E-08	6.09E-08
2234	648862.19	4198335.12	4.47E-07	4.40E-07	8.87E-07	6.72E-08	6.60E-08	1.33E-07	6.57E-08	5.88E-08	1.25E-07	3.49E-08	2.67E-08	6.16E-08
2235	648873.61	4198357.31	4.48E-07	4.41E-07	8.88E-07	6.73E-08	6.61E-08	1.33E-07	6.58E-08	5.89E-08	1.25E-07	3.50E-08	2.67E-08	6.17E-08
2236	648885.04	4198379.51	4.44E-07	4.37E-07	8.81E-07	6.68E-08	6.56E-08	1.32E-07	6.53E-08	5.84E-08	1.24E-07	3.47E-08	2.65E-08	6.12E-08
2237	648691.08	4198091.06	1.83E-07	1.80E-07	3.63E-07	2.75E-08	2.70E-08	5.45E-08	2.69E-08	2.41E-08	5.10E-08	1.43E-08	1.09E-08	2.52E-08
2238	648690.09	4198068.25	1.75E-07	1.72E-07	3.47E-07	2.63E-08	2.58E-08	5.20E-08	2.57E-08	2.30E-08	4.87E-08	1.36E-08	1.04E-08	2.41E-08
2239	648689.09	4198045.44	1.66E-07	1.64E-07	3.30E-07	2.50E-08	2.45E-08	4.95E-08	2.44E-08	2.19E-08	4.63E-08	1.30E-08	9.92E-09	2.29E-08
2240	648688.1	4198022.64	1.58E-07	1.56E-07	3.13E-07	2.38E-08	2.33E-08	4.71E-08	2.32E-08	2.08E-08	4.40E-08	1.23E-08	9.43E-09	2.18E-08
2241	648687.11	4197999.83	1.50E-07	1.48E-07	2.98E-07	2.25E-08	2.21E-08	4.47E-08	2.20E-08	1.97E-08	4.18E-08	1.17E-08	8.95E-09	2.07E-08
2242	648686.11	4197977.02	1.42E-07	1.40E-07	2.82E-07	2.14E-08	2.10E-08	4.24E-08	2.09E-08	1.87E-08	3.97E-08	1.11E-08	8.50E-09	1.96E-08
2243	648685.12	4197954.21	1.35E-07	1.33E-07	2.68E-07	2.03E-08	2.00E-08	4.03E-08	1.99E-08	1.78E-08	3.77E-08	1.06E-08	8.07E-09	1.86E-08
2244	648684.13	4197931.4	1.29E-07	1.27E-07	2.55E-07	1.93E-08	1.90E-08	3.83E-08	1.89E-08	1.69E-08	3.59E-08	1.01E-08	7.68E-09	1.77E-08
2245	648683.13	4197908.6	1.23E-07	1.21E-07	2.43E-07	1.84E-08	1.81E-08	3.65E-08	1.80E-08	1.61E-08	3.42E-08	9.58E-09	7.32E-09	1.69E-08
2246	648682.14	4197885.79	1.17E-07	1.15E-07	2.32E-07	1.76E-08	1.73E-08	3.49E-08	1.72E-08	1.54E-08	3.26E-08	9.14E-09	6.98E-09	1.61E-08
2247	648692.07	4198113.87	1.91E-07	1.88E-07	3.80E-07	2.88E-08	2.82E-08	5.70E-08	2.81E-08	2.52E-08	5.33E-08	1.49E-08	1.14E-08	2.64E-08
2248	648703.5	4198136.06	2.09E-07	2.06E-07	4.14E-07	3.14E-08	3.08E-08	6.22E-08	3.07E-08	2.75E-08	5.82E-08	1.63E-08	1.25E-08	2.88E-08
2249	648714.92	4198158.26	2.28E-07	2.24E-07	4.52E-07	3.42E-08	3.36E-08	6.78E-08	3.35E-08	2.99E-08	6.34E-08	1.78E-08	1.36E-08	3.14E-08
2250	648726.34	4198180.45	2.47E-07	2.43E-07	4.91E-07	3.72E-08	3.65E-08	7.37E-08	3.63E-08	3.25E-08	6.89E-08	1.93E-08	1.48E-08	3.41E-08
2251	648737.77	4198202.64	2.67E-07	2.63E-07	5.30E-07	4.02E-08	3.95E-08	7.96E-08	3.93E-08	3.52E-08	7.45E-08	2.09E-08	1.59E-08	3.68E-08
2252	648749.19	4198224.84	2.87E-07	2.83E-07	5.69E-07	4.31E-08	4.24E-08	8.55E-08	4.22E-08	3.78E-08	8.00E-08	2.24E-08	1.71E-08	3.95E-08
2253	648760.61	4198247.03	3.06E-07	3.01E-07	6.06E-07	4.60E-08	4.51E-08	9.11E-08	4.49E-08	4.02E-08	8.52E-08	2.39E-08	1.82E-08	4.21E-08
2254	648772.04	4198269.23	3.23E-07	3.18E-07	6.40E-07	4.85E-08	4.76E-08	9.61E-08	4.74E-08	4.25E-08	8.99E-08	2.52E-08	1.93E-08	4.45E-08
2255	648783.46	4198291.42	3.37E-07	3.32E-07	6.69E-07	5.07E-08	4.98E-08	1.01E-07	4.96E-08	4.44E-08	9.40E-08	2.63E-08	2.01E-08	4.65E-08
2256	648794.89	4198313.61	3.49E-07	3.44E-07	6.93E-07	5.25E-08	5.16E-08	1.04E-07	5.14E-08	4.60E-08	9.73E-08	2.73E-08	2.08E-08	4.81E-08
2257	648806.31	4198335.81	3.58E-07	3.53E-07	7.11E-07	5.39E-08	5.29E-08	1.07E-07	5.27E-08	4.72E-08	9.99E-08	2.80E-08	2.14E-08	4.94E-08
2258	648817.73	4198358	3.64E-07	3.59E-07	7.23E-07	5.48E-08	5.38E-08	1.09E-07	5.36E-08	4.80E-08	1.02E-07	2.85E-08	2.18E-08	5.02E-08
2259	648829.16	4198380.19	3.67E-07	3.62E-07	7.29E-07	5.52E-08	5.42E-08	1.09E-07	5.40E-08	4.83E-08	1.02E-07	2.87E-08	2.19E-08	5.06E-08
2260	648840.58	4198402.39	3.67E-07	3.61E-07	7.29E-07	5.52E-08	5.42E-08	1.09E-07	5.40E-08	4.83E-08	1.02E-07	2.87E-08	2.19E-08	5.06E-08
2261	648602.12	4198135.74	1.39E-07	1.37E-07	2.76E-07	2.09E-08	2.05E-08	4.14E-08	2.04E-08	1.83E-08	3.87E-08	1.09E-08	8.30E-09	1.92E-08
2262	648601.08	4198111.85	1.34E-07	1.31E-07	2.65E-07	2.01E-08	1.97E-08	3.98E-08	1.96E-08	1.76E-08	3.72E-08	1.04E-08	7.97E-09	1.84E-08
2263	648600.04	4198087.95	1.28E-07	1.26E-07	2.54E-07	1.92E-08	1.89E-08	3.81E-08	1.88E-08	1.68E-08	3.57E-08	1.00E-08	7.64E-09	1.76E-08
2264	648599	4198064.06	1.23E-07	1.21E-07	2.43E-07	1.84E-08	1.81E-08	3.65E-08	1.80E-08	1.61E-08	3.41E-08	9.57E-09	7.31E-09	1.69E-08
2265	648597.96	4198040.16	1.17E-07	1.15E-07	2.32E-07	1.76E-08	1.73E-08	3.49E-08	1.72E-08	1.54E-08	3.26E-08	9.15E-09	6.99E-09	1.61E-08
2266	648596.92	4198016.27	1.12E-07	1.10E-07	2.22E-07	1.68E-08	1.65E-08	3.34E-08	1.65E-08	1.47E-08	3.12E-08	8.75E-09	6.68E-09	1.54E-08
2267	648595.88	4197992.38	1.07E-07	1.05E-07	2.12E-07	1.61E-08	1.58E-08	3.19E-08	1.57E-08	1.41E-08	2.98E-08	8.36E-09	6.39E-09	1.47E-08
2268	648594.83	4197968.48	1.02E-07	1.01E-07	2.03E-07	1.54E-08	1.51E-08	3.05E-08	1.51E-08	1.35E-08	2.85E-08	8.00E-09	6.11E-09	1.41E-08
2269	648593.79	4197944.59	9.82E-08	9.67E-08	1.95E-07	1.48E-08	1.45E-08	2.93E-08	1.44E-08	1.29E-08	2.74E-08	7.67E-09	5.86E-09	1.35E-08
2270	648592.75	4197920.69	9.43E-08	9.28E-08	1.87E-07	1.42E-08	1.39E-08	2.81E-08	1.39E-08	1.24E-08	2.63E-08	7.36E-09	5.63E-09	1.30E-08
2271	648591.71	4197896.8	9.07E-08	8.93E-08	1.80E-07	1.36E-08	1.34E-08	2.70E-08	1.33E-08	1.19E-08	2.53E-08	7.09E-09	5.41E-09	1.25E-08
2272	648590.67	4197872.91	8.74E-08	8.61E-08	1.73E-07	1.31E-08	1.29E-08	2.60E-08	1.29E-08	1.15E-08	2.44E-08	6.83E-09	5.22E-09	1.20E-08
2273	648589.63	4197849.01	8.43E-08	8.30E-08	1.67E-07	1.27E-08	1.25E-08	2.51E-08	1.24E-08	1.11E-08	2.35E-08	6.59E-09	5.03E-09	1.16E-08
2274	648603.16	4198159.63	1.44E-07	1.42E-07	2.87E-07	2.17E-08	2.13E-08	4.31E-08	2.12E-08	1.90E-08	4.03E-08	1.13E-08	8.62E-09	1.99E-08
2275	648614.58	4198181.83	1.55E-07	1.53E-07	3.08E-07	2.33E-08	2.29E-08	4.62E-08	2.28E-08	2.04E-08	4.32E-08	1.21E-08	9.26E-09	2.14E-08
2276	648626.01	4198204.02	1.66E-07	1.64E-07	3.30E-07	2.50E-08	2.45E-08	4.96E-08	2.44E-08	2.19E-08	4.63E-08	1.30E-08	9.92E-09	2.29E-08

2277	648637.43	4198226.22	1.78E-07	1.75E-07	3.53E-07	2.67E-08	2.63E-08	5.30E-08	2.62E-08	2.34E-08	4.96E-08	1.39E-08	1.06E-08	2.45E-08
2278	648648.85	4198248.41	1.90E-07	1.87E-07	3.77E-07	2.85E-08	2.80E-08	5.66E-08	2.79E-08	2.50E-08	5.29E-08	1.48E-08	1.13E-08	2.61E-08
2279	648660.28	4198270.6	2.02E-07	1.98E-07	4.00E-07	3.03E-08	2.98E-08	6.01E-08	2.96E-08	2.65E-08	5.62E-08	1.57E-08	1.20E-08	2.78E-08
2280	648671.7	4198292.8	2.13E-07	2.10E-07	4.23E-07	3.20E-08	3.15E-08	6.35E-08	3.13E-08	2.80E-08	5.94E-08	1.66E-08	1.27E-08	2.94E-08
2281	648683.13	4198314.99	2.24E-07	2.21E-07	4.45E-07	3.37E-08	3.31E-08	6.68E-08	3.29E-08	2.95E-08	6.24E-08	1.75E-08	1.34E-08	3.09E-08
2282	648694.55	4198337.19	2.34E-07	2.30E-07	4.64E-07	3.52E-08	3.45E-08	6.97E-08	3.44E-08	3.08E-08	6.52E-08	1.83E-08	1.40E-08	3.22E-08
2283	648705.97	4198359.38	2.43E-07	2.39E-07	4.81E-07	3.65E-08	3.58E-08	7.23E-08	3.57E-08	3.19E-08	6.76E-08	1.90E-08	1.45E-08	3.34E-08
2284	648717.4	4198381.57	2.50E-07	2.46E-07	4.96E-07	3.76E-08	3.69E-08	7.45E-08	3.68E-08	3.29E-08	6.96E-08	1.95E-08	1.49E-08	3.44E-08
2285	648728.82	4198403.77	2.56E-07	2.52E-07	5.07E-07	3.85E-08	3.78E-08	7.62E-08	3.76E-08	3.37E-08	7.13E-08	2.00E-08	1.53E-08	3.52E-08
2286	648740.25	4198425.96	2.60E-07	2.56E-07	5.16E-07	3.91E-08	3.84E-08	7.75E-08	3.82E-08	3.42E-08	7.24E-08	2.03E-08	1.55E-08	3.58E-08
2287	648751.67	4198448.15	2.62E-07	2.58E-07	5.21E-07	3.95E-08	3.87E-08	7.82E-08	3.86E-08	3.45E-08	7.31E-08	2.05E-08	1.57E-08	3.62E-08
2288	648513.18	4198180.8	1.11E-07	1.10E-07	2.21E-07	1.67E-08	1.64E-08	3.32E-08	1.64E-08	1.46E-08	3.10E-08	8.69E-09	6.64E-09	1.53E-08
2289	648512.1	4198156.21	1.07E-07	1.06E-07	2.13E-07	1.62E-08	1.59E-08	3.20E-08	1.58E-08	1.41E-08	2.99E-08	8.39E-09	6.41E-09	1.48E-08
2290	648511.03	4198131.61	1.03E-07	1.02E-07	2.05E-07	1.56E-08	1.53E-08	3.08E-08	1.52E-08	1.36E-08	2.88E-08	8.08E-09	6.18E-09	1.43E-08
2291	648509.96	4198107.01	9.96E-08	9.80E-08	1.98E-07	1.50E-08	1.47E-08	2.97E-08	1.46E-08	1.31E-08	2.77E-08	7.78E-09	5.94E-09	1.37E-08
2292	648508.89	4198082.42	9.57E-08	9.42E-08	1.90E-07	1.44E-08	1.41E-08	2.85E-08	1.41E-08	1.26E-08	2.67E-08	7.47E-09	5.71E-09	1.32E-08
2293	648507.82	4198057.82	9.19E-08	9.04E-08	1.82E-07	1.38E-08	1.36E-08	2.74E-08	1.35E-08	1.21E-08	2.56E-08	7.18E-09	5.48E-09	1.27E-08
2294	648506.75	4198033.22	8.82E-08	8.68E-08	1.75E-07	1.33E-08	1.30E-08	2.63E-08	1.30E-08	1.16E-08	2.46E-08	6.89E-09	5.26E-09	1.22E-08
2295	648505.68	4198008.63	8.48E-08	8.34E-08	1.68E-07	1.27E-08	1.25E-08	2.53E-08	1.25E-08	1.12E-08	2.36E-08	6.62E-09	5.06E-09	1.17E-08
2296	648504.61	4197984.03	8.15E-08	8.02E-08	1.62E-07	1.23E-08	1.20E-08	2.43E-08	1.20E-08	1.07E-08	2.27E-08	6.37E-09	4.86E-09	1.12E-08
2297	648503.53	4197959.43	7.85E-08	7.73E-08	1.56E-07	1.18E-08	1.16E-08	2.34E-08	1.15E-08	1.03E-08	2.19E-08	6.13E-09	4.68E-09	1.08E-08
2298	648502.46	4197934.83	7.57E-08	7.45E-08	1.50E-07	1.14E-08	1.12E-08	2.26E-08	1.11E-08	9.97E-09	2.11E-08	5.91E-09	4.52E-09	1.04E-08
2299	648501.39	4197910.24	7.32E-08	7.21E-08	1.45E-07	1.10E-08	1.08E-08	2.18E-08	1.08E-08	9.63E-09	2.04E-08	5.72E-09	4.37E-09	1.01E-08
2300	648500.32	4197885.64	7.09E-08	6.98E-08	1.41E-07	1.07E-08	1.05E-08	2.11E-08	1.04E-08	9.33E-09	1.98E-08	5.54E-09	4.23E-09	9.77E-09
2301	648499.25	4197861.04	6.88E-08	6.77E-08	1.36E-07	1.03E-08	1.02E-08	2.05E-08	1.01E-08	9.05E-09	1.92E-08	5.37E-09	4.10E-09	9.47E-09
2302	648498.18	4197836.45	6.68E-08	6.57E-08	1.33E-07	1.00E-08	9.86E-09	1.99E-08	9.82E-09	8.79E-09	1.86E-08	5.22E-09	3.99E-09	9.20E-09
2303	648497.11	4197811.85	6.49E-08	6.39E-08	1.29E-07	9.76E-09	9.58E-09	1.93E-08	9.54E-09	8.54E-09	1.81E-08	5.07E-09	3.87E-09	8.94E-09
2304	648514.25	4198205.4	1.15E-07	1.13E-07	2.28E-07	1.73E-08	1.70E-08	3.43E-08	1.69E-08	1.51E-08	3.20E-08	8.98E-09	6.86E-09	1.58E-08
2305	648525.67	4198227.59	1.22E-07	1.20E-07	2.42E-07	1.83E-08	1.80E-08	3.63E-08	1.79E-08	1.60E-08	3.40E-08	9.52E-09	7.28E-09	1.68E-08
2306	648537.09	4198249.79	1.29E-07	1.27E-07	2.56E-07	1.94E-08	1.91E-08	3.85E-08	1.90E-08	1.70E-08	3.60E-08	1.01E-08	7.71E-09	1.78E-08
2307	648548.52	4198271.98	1.37E-07	1.34E-07	2.71E-07	2.05E-08	2.02E-08	4.07E-08	2.01E-08	1.80E-08	3.80E-08	1.07E-08	8.15E-09	1.88E-08
2308	648559.94	4198294.18	1.44E-07	1.42E-07	2.86E-07	2.17E-08	2.13E-08	4.29E-08	2.12E-08	1.90E-08	4.01E-08	1.12E-08	8.59E-09	1.98E-08
2309	648571.37	4198316.37	1.52E-07	1.49E-07	3.01E-07	2.28E-08	2.24E-08	4.52E-08	2.23E-08	1.99E-08	4.22E-08	1.18E-08	9.04E-09	2.09E-08
2310	648582.79	4198338.56	1.59E-07	1.57E-07	3.15E-07	2.39E-08	2.35E-08	4.74E-08	2.34E-08	2.09E-08	4.43E-08	1.24E-08	9.49E-09	2.19E-08
2311	648594.21	4198360.76	1.66E-07	1.64E-07	3.30E-07	2.50E-08	2.45E-08	4.95E-08	2.44E-08	2.19E-08	4.63E-08	1.30E-08	9.92E-09	2.29E-08
2312	648605.64	4198382.95	1.73E-07	1.70E-07	3.43E-07	2.60E-08	2.55E-08	5.15E-08	2.54E-08	2.28E-08	4.82E-08	1.35E-08	1.03E-08	2.38E-08
2313	648617.06	4198405.14	1.79E-07	1.76E-07	3.56E-07	2.69E-08	2.65E-08	5.34E-08	2.63E-08	2.36E-08	4.99E-08	1.40E-08	1.07E-08	2.47E-08
2314	648628.48	4198427.34	1.85E-07	1.82E-07	3.67E-07	2.78E-08	2.73E-08	5.51E-08	2.72E-08	2.43E-08	5.15E-08	1.44E-08	1.10E-08	2.55E-08
2315	648639.91	4198449.53	1.90E-07	1.87E-07	3.76E-07	2.85E-08	2.80E-08	5.65E-08	2.79E-08	2.50E-08	5.28E-08	1.48E-08	1.13E-08	2.61E-08
2316	648651.33	4198471.73	1.94E-07	1.91E-07	3.84E-07	2.91E-08	2.86E-08	5.77E-08	2.85E-08	2.55E-08	5.39E-08	1.51E-08	1.15E-08	2.67E-08
2317	648662.76	4198493.92	1.97E-07	1.94E-07	3.90E-07	2.96E-08	2.90E-08	5.86E-08	2.89E-08	2.59E-08	5.48E-08	1.54E-08	1.17E-08	2.71E-08
2318	648424.29	4198227.27	9.22E-08	9.08E-08	1.83E-07	1.39E-08	1.36E-08	2.75E-08	1.36E-08	1.21E-08	2.57E-08	7.21E-09	5.50E-09	1.27E-08
2319	648423.25	4198203.38	8.97E-08	8.83E-08	1.78E-07	1.35E-08	1.32E-08	2.67E-08	1.32E-08	1.18E-08	2.50E-08	7.00E-09	5.35E-09	1.24E-08
2320	648422.21	4198179.48	8.70E-08	8.56E-08	1.73E-07	1.31E-08	1.28E-08	2.59E-08	1.28E-08	1.14E-08	2.42E-08	6.79E-09	5.19E-09	1.20E-08
2321	648421.17	4198155.59	8.42E-08	8.29E-08	1.67E-07	1.27E-08	1.24E-08	2.51E-08	1.24E-08	1.11E-08	2.35E-08	6.58E-09	5.03E-09	1.16E-08
2322	648420.13	4198131.7	8.14E-08	8.01E-08	1.62E-07	1.22E-08	1.20E-08	2.43E-08	1.20E-08	1.07E-08	2.27E-08	6.36E-09	4.86E-09	1.12E-08
2323	648419.09	4198107.8	7.86E-08	7.74E-08	1.56E-07	1.18E-08	1.16E-08	2.34E-08	1.16E-08	1.03E-08	2.19E-08	6.14E-09	4.69E-09	1.08E-08
2324	648418.05	4198083.91	7.59E-08	7.47E-08	1.51E-07	1.14E-08	1.12E-08	2.26E-08	1.12E-08	9.98E-09	2.11E-08	5.93E-09	4.53E-09	1.05E-08
2325	648417.01	4198060.01	7.32E-08	7.21E-08	1.45E-07	1.10E-08	1.08E-08	2.18E-08	1.08E-08	9.64E-09	2.04E-08	5.72E-09	4.37E-09	1.01E-08
2326	648415.97	4198036.12	7.07E-08	6.96E-08	1.40E-07	1.06E-08	1.04E-08	2.11E-08	1.04E-08	9.30E-09	1.97E-08	5.52E-09	4.22E-09	9.74E-09
2327	648414.93	4198012.23	6.83E-08	6.72E-08	1.36E-07	1.03E-08	1.01E-08	2.04E-08	1.00E-08	8.99E-09	1.90E-08	5.34E-09	4.08E-09	9.41E-09
2328	648413.89	4197988.33	6.61E-08	6.50E-08	1.31E-07	9.93E-09	9.75E-09	1.97E-08	9.71E-09	8.69E-09	1.84E-08	5.16E-09	3.94E-09	9.10E-09
2329	648412.85	4197964.44	6.40E-08	6.30E-08	1.27E-07	9.62E-09	9.45E-09	1.91E-08	9.41E-09	8.42E-09	1.78E-08	5.00E-09	3.82E-09	8.82E-09
2330	648411.81	4197940.54	6.21E-08	6.11E-08	1.23E-07	9.33E-09	9.16E-09	1.85E-08	9.13E-09	8.17E-09	1.73E-08	4.85E-09	3.70E-09	8.55E-09
2331	648410.77	4197916.65	6.03E-08	5.94E-08	1.20E-07	9.07E-09	8.91E-09	1.80E-08	8.87E-09	7.94E-09	1.68E-08	4.71E-09	3.60E-09	8.31E-09
2332	648409.73	4197892.75	5.87E-08	5.78E-08	1.17E-07	8.83E-09	8.67E-09	1.75E-08	8.63E-09	7.73E-09	1.64E-08	4.59E-09	3.50E-09	8.09E-09
2333	648408.68	4197868.86	5.72E-08	5.63E-08	1.14E-07	8.61E-09	8.45E-09	1.71E-08	8.42E-09	7.53E-09	1.59E-08	4.47E-09	3.42E-09	7.89E-09
2334	648407.64	4197844.97	5.59E-08	5.50E-08	1.11E-07	8.40E-09	8.25E-09	1.67E-08	8.21E-09	7.35E-09	1.56E-08	4.36E-09	3.33E-09	7.70E-09
2335	648406.6	4197821.07	5.46E-08	5.37E-08	1.08E-07	8.20E-09	8.06E-09	1.63E-08	8.02E-09	7.18E-09	1.52E-08	4.26E-09	3.26E-09	7.52E-09
2336	648405.56	4197797.18	5.33E-08	5.25E-08	1.06E-07	8.02E-09	7.87E-09	1.59E-08	7.84E-09	7.02E-09	1.49E-08	4.16E-09	3.18E-09	7.35E-09
2337	648404.52	4197773.28	5.21E-08	5.13E-08	1.03E-07	7.83E-09	7.69E-09	1.55E-08	7.66E-09	6.85E-09	1.45E-08	4.07E-09	3.11E-09	7.18E-09
2338	648425.33	4198251.17	9.47E-08	9.32E-08	1.88E-07	1.42E-08	1.40E-08	2.82E-08	1.39E-08	1.25E-08	2.64E-08	7.40E-09	5.65E-09	1.30E-08
2339	648436.76	4198273.36	9.94E-08	9.79E-08	1.97E-07	1.50E-08	1.47E-08	2.96E-08	1.46E-08	1.31E-08	2.77E-08	7.77E-09	5.93E-09	1.37E-08
2340	648448.18	4198295.55	1.04E-07	1.03E-07	2.07E-07	1.57E-08	1.54E-08	3.11E-08	1.53E-08	1.37E-08	2.91E-08	8.15E-09	6.22E-09	1.44E-08
2341	648459.61	4198317.75	1.09E-07	1.08E-07	2.17E-07	1.64E-08	1.61E-08	3.25E-08	1.61E-08	1.44E-08	3.04E-08	8.53E-09	6.52E-09	1.51E-08
2342	648471.03	4198339.94	1.14E-07	1.12E-07	2.27E-07	1.72E-08	1.69E-08	3.40E-08	1.68E-08	1.50E-08	3.18E-08	8.92E-09	6.82E-09	1.57E-08
2343	648482.45	4198362.14	1.19E-07	1.17E-07	2.37E-07	1.79E-08	1.76E-08	3.55E-08	1.75E-08	1.57E-08	3.32E-08	9.32E-09	7.12E-09	1.64E-08
2344	648493.88	4198384.33	1.24E-07	1.22E-07	2.47E-07	1.87E-08	1.84E-08	3.70E-08	1.83E-08	1.64E-08	3.46E-08	9.71E-09	7.42E-09	1.71E-08
2345	648505.3	4198406.52	1.29E-07	1.27E-07	2.57E-07	1.94E-08	1.91E-08	3.85E-08	1.90E-08	1.70E-08	3.60E-08	1.01E-08	7.71E-09	1.78E-08
2346	648516.72	4198428.72	1.34E-07	1.32E-07	2.66E-07	2.02E-08	1.98E-08	3.99E-08	1.97E-08	1.76E-08	3.74E-08	1.05E-08	8.00E-09	1.85E-08
2347	648528.15	4198450.91	1.39E-07	1.36E-07	2.75E-07	2.08E-08	2.05E-08	4.13E-08	2.04E-08	1.82E-08	3.86E-08	1.08E-08	8.27E-09	1.91E-08
2348	648539.57	4198473.1	1.43E-07	1.41E-07	2.83E-07	2.15E-08	2.11E-08	4.26E-08	2.10E-08	1.88E-08	3.98E-08	1.12E-08	8.52E-09	1.97E-08
2349	648551	4198495.3	1.47E-07	1.44E-07	2.91E-07	2.21E-08	2.17E-08	4.37E-08	2.16E-08	1.93E-08	4.09E-08	1.15E-08	8.75E-09	2.02E-08
2350	648562.42	4198517.49	1.50E-07	1.48E-07	2.98E-07	2.26E-08	2.21E-08	4.47E-08	2.21E-08	1.97E-08	4.18E-08	1.17E-08	8.95E-09	2.07E-08
2351	648573.84	4198539.69	1.53E-07	1.50E-07	3.03E-07	2.30E-08	2.26E-08	4.56E-08	2.25E-08	2.01E-08	4.26E-08	1.19E-08	9.12E-09	2.11E-08
2352	648335.36	4198272.54	7.81E-08	7.69E-08	1.55E-07	1.17E-08	1.15E-08	2.33E-08	1.15E-08	1.03E-08	2.18E-08	6.10E-09	4.66E-09	1.08E-08

2353	648334.3	4198248.15	7.63E-08	7.51E-08	1.51E-07	1.15E-08	1.13E-08	2.27E-08	1.12E-08	1.00E-08	2.13E-08	5.96E-09	4.55E-09	1.05E-08
2354	648333.23	4198223.76	7.44E-08	7.32E-08	1.48E-07	1.12E-08	1.10E-08	2.22E-08	1.09E-08	9.79E-09	2.07E-08	5.81E-09	4.44E-09	1.02E-08
2355	648332.17	4198199.36	7.23E-08	7.12E-08	1.43E-07	1.09E-08	1.07E-08	2.15E-08	1.06E-08	9.52E-09	2.01E-08	5.65E-09	4.32E-09	9.96E-09
2356	648331.11	4198174.97	7.02E-08	6.91E-08	1.39E-07	1.06E-08	1.04E-08	2.09E-08	1.03E-08	9.24E-09	1.96E-08	5.48E-09	4.19E-09	9.67E-09
2357	648330.05	4198150.58	6.80E-08	6.69E-08	1.35E-07	1.02E-08	1.00E-08	2.03E-08	1.00E-08	8.95E-09	1.89E-08	5.31E-09	4.06E-09	9.37E-09
2358	648328.99	4198126.19	6.58E-08	6.48E-08	1.31E-07	9.90E-09	9.72E-09	1.96E-08	9.68E-09	8.66E-09	1.83E-08	5.14E-09	3.93E-09	9.07E-09
2359	648327.92	4198101.8	6.37E-08	6.27E-08	1.26E-07	9.57E-09	9.40E-09	1.90E-08	9.36E-09	8.38E-09	1.77E-08	4.97E-09	3.80E-09	8.77E-09
2360	648326.86	4198077.41	6.16E-08	6.06E-08	1.22E-07	9.26E-09	9.09E-09	1.83E-08	9.05E-09	8.10E-09	1.72E-08	4.81E-09	3.67E-09	8.48E-09
2361	648325.8	4198053.01	5.96E-08	5.86E-08	1.18E-07	8.96E-09	8.79E-09	1.77E-08	8.76E-09	7.84E-09	1.66E-08	4.65E-09	3.55E-09	8.21E-09
2362	648324.74	4198028.62	5.77E-08	5.68E-08	1.14E-07	8.67E-09	8.51E-09	1.72E-08	8.48E-09	7.59E-09	1.61E-08	4.50E-09	3.44E-09	7.95E-09
2363	648323.67	4198004.23	5.59E-08	5.50E-08	1.11E-07	8.40E-09	8.25E-09	1.67E-08	8.22E-09	7.36E-09	1.56E-08	4.37E-09	3.34E-09	7.70E-09
2364	648322.61	4197979.84	5.43E-08	5.34E-08	1.08E-07	8.16E-09	8.01E-09	1.62E-08	7.98E-09	7.14E-09	1.51E-08	4.24E-09	3.24E-09	7.48E-09
2365	648321.55	4197955.45	5.28E-08	5.19E-08	1.05E-07	7.93E-09	7.79E-09	1.57E-08	7.76E-09	6.94E-09	1.47E-08	4.12E-09	3.15E-09	7.27E-09
2366	648320.49	4197931.05	5.14E-08	5.06E-08	1.02E-07	7.73E-09	7.59E-09	1.53E-08	7.55E-09	6.76E-09	1.43E-08	4.01E-09	3.07E-09	7.08E-09
2367	648319.43	4197906.66	5.01E-08	4.94E-08	9.95E-08	7.54E-09	7.40E-09	1.49E-08	7.37E-09	6.60E-09	1.40E-08	3.92E-09	2.99E-09	6.91E-09
2368	648318.36	4197882.27	4.90E-08	4.82E-08	9.72E-08	7.37E-09	7.23E-09	1.46E-08	7.20E-09	6.45E-09	1.36E-08	3.83E-09	2.92E-09	6.75E-09
2369	648317.3	4197857.88	4.79E-08	4.72E-08	9.51E-08	7.20E-09	7.07E-09	1.43E-08	7.04E-09	6.31E-09	1.34E-08	3.74E-09	2.86E-09	6.60E-09
2370	648316.24	4197833.49	4.69E-08	4.62E-08	9.31E-08	7.06E-09	6.93E-09	1.40E-08	6.90E-09	6.18E-09	1.31E-08	3.67E-09	2.80E-09	6.47E-09
2371	648315.18	4197809.09	4.60E-08	4.53E-08	9.12E-08	6.91E-09	6.79E-09	1.37E-08	6.76E-09	6.05E-09	1.28E-08	3.59E-09	2.74E-09	6.33E-09
2372	648314.11	4197784.7	4.50E-08	4.43E-08	8.94E-08	6.77E-09	6.65E-09	1.34E-08	6.62E-09	5.93E-09	1.25E-08	3.52E-09	2.69E-09	6.21E-09
2373	648313.05	4197760.31	4.41E-08	4.34E-08	8.75E-08	6.63E-09	6.51E-09	1.31E-08	6.49E-09	5.81E-09	1.23E-08	3.45E-09	2.63E-09	6.08E-09
2374	648311.99	4197735.92	4.32E-08	4.25E-08	8.57E-08	6.49E-09	6.38E-09	1.29E-08	6.35E-09	5.68E-09	1.20E-08	3.37E-09	2.58E-09	5.95E-09
2375	648336.42	4198296.93	7.98E-08	7.86E-08	1.58E-07	1.20E-08	1.18E-08	2.38E-08	1.17E-08	1.05E-08	2.22E-08	6.24E-09	4.76E-09	1.10E-08
2376	648347.84	4198319.13	8.32E-08	8.19E-08	1.65E-07	1.25E-08	1.23E-08	2.48E-08	1.22E-08	1.09E-08	2.32E-08	6.50E-09	4.96E-09	1.15E-08
2377	648359.27	4198341.32	8.66E-08	8.52E-08	1.72E-07	1.30E-08	1.28E-08	2.58E-08	1.27E-08	1.14E-08	2.41E-08	6.76E-09	5.17E-09	1.19E-08
2378	648370.69	4198363.51	9.00E-08	8.86E-08	1.79E-07	1.35E-08	1.33E-08	2.68E-08	1.32E-08	1.18E-08	2.51E-08	7.03E-09	5.37E-09	1.24E-08
2379	648382.12	4198385.71	9.35E-08	9.21E-08	1.86E-07	1.41E-08	1.38E-08	2.79E-08	1.38E-08	1.23E-08	2.61E-08	7.31E-09	5.58E-09	1.29E-08
2380	648393.54	4198407.9	9.71E-08	9.56E-08	1.93E-07	1.46E-08	1.43E-08	2.89E-08	1.43E-08	1.28E-08	2.70E-08	7.58E-09	5.79E-09	1.34E-08
2381	648404.96	4198430.1	1.01E-07	9.91E-08	2.00E-07	1.51E-08	1.49E-08	3.00E-08	1.48E-08	1.32E-08	2.80E-08	7.86E-09	6.01E-09	1.39E-08
2382	648416.39	4198452.29	1.04E-07	1.03E-07	2.07E-07	1.57E-08	1.54E-08	3.10E-08	1.53E-08	1.37E-08	2.90E-08	8.14E-09	6.22E-09	1.44E-08
2383	648427.81	4198474.48	1.08E-07	1.06E-07	2.14E-07	1.62E-08	1.59E-08	3.21E-08	1.58E-08	1.42E-08	3.00E-08	8.41E-09	6.42E-09	1.48E-08
2384	648439.24	4198496.68	1.11E-07	1.09E-07	2.20E-07	1.67E-08	1.64E-08	3.31E-08	1.63E-08	1.46E-08	3.09E-08	8.67E-09	6.63E-09	1.53E-08
2385	648450.66	4198518.87	1.14E-07	1.12E-07	2.27E-07	1.72E-08	1.69E-08	3.40E-08	1.68E-08	1.50E-08	3.18E-08	8.92E-09	6.82E-09	1.57E-08
2386	648462.08	4198541.06	1.17E-07	1.15E-07	2.33E-07	1.76E-08	1.73E-08	3.49E-08	1.72E-08	1.54E-08	3.27E-08	9.16E-09	7.00E-09	1.62E-08
2387	648473.51	4198563.26	1.20E-07	1.18E-07	2.38E-07	1.81E-08	1.77E-08	3.58E-08	1.76E-08	1.58E-08	3.34E-08	9.38E-09	7.16E-09	1.65E-08
2388	648484.93	4198585.45	1.23E-07	1.21E-07	2.43E-07	1.84E-08	1.81E-08	3.65E-08	1.80E-08	1.61E-08	3.41E-08	9.57E-09	7.31E-09	1.69E-08
2389	648157.54	4198364.19	5.87E-08	5.78E-08	1.17E-07	8.83E-09	8.67E-09	1.75E-08	8.64E-09	7.73E-09	1.64E-08	4.59E-09	3.51E-09	8.10E-09
2390	648156.48	4198339.91	5.79E-08	5.70E-08	1.15E-07	8.70E-09	8.54E-09	1.72E-08	8.51E-09	7.61E-09	1.61E-08	4.52E-09	3.45E-09	7.97E-09
2391	648155.42	4198315.63	5.69E-08	5.60E-08	1.13E-07	8.55E-09	8.40E-09	1.70E-08	8.36E-09	7.49E-09	1.59E-08	4.44E-09	3.39E-09	7.84E-09
2392	648154.37	4198291.35	5.58E-08	5.50E-08	1.11E-07	8.40E-09	8.24E-09	1.66E-08	8.21E-09	7.35E-09	1.56E-08	4.36E-09	3.33E-09	7.69E-09
2393	648153.31	4198267.07	5.47E-08	5.39E-08	1.09E-07	8.23E-09	8.08E-09	1.63E-08	8.04E-09	7.20E-09	1.52E-08	4.27E-09	3.27E-09	7.54E-09
2394	648152.25	4198242.79	5.35E-08	5.27E-08	1.06E-07	8.05E-09	7.90E-09	1.59E-08	7.87E-09	7.04E-09	1.49E-08	4.18E-09	3.19E-09	7.37E-09
2395	648151.19	4198218.51	5.23E-08	5.14E-08	1.04E-07	7.86E-09	7.71E-09	1.56E-08	7.68E-09	6.88E-09	1.46E-08	4.08E-09	3.12E-09	7.20E-09
2396	648150.14	4198194.23	5.09E-08	5.01E-08	1.01E-07	7.66E-09	7.52E-09	1.52E-08	7.49E-09	6.70E-09	1.42E-08	3.98E-09	3.04E-09	7.02E-09
2397	648149.08	4198169.95	4.96E-08	4.88E-08	9.84E-08	7.45E-09	7.32E-09	1.48E-08	7.29E-09	6.52E-09	1.38E-08	3.87E-09	2.96E-09	6.83E-09
2398	648148.02	4198145.67	4.82E-08	4.74E-08	9.56E-08	7.25E-09	7.12E-09	1.44E-08	7.09E-09	6.34E-09	1.34E-08	3.76E-09	2.88E-09	6.64E-09
2399	648146.96	4198121.39	4.68E-08	4.61E-08	9.29E-08	7.04E-09	6.91E-09	1.40E-08	6.88E-09	6.16E-09	1.30E-08	3.66E-09	2.79E-09	6.45E-09
2400	648145.91	4198097.11	4.55E-08	4.48E-08	9.03E-08	6.84E-09	6.71E-09	1.36E-08	6.69E-09	5.99E-09	1.27E-08	3.55E-09	2.71E-09	6.27E-09
2401	648144.85	4198072.83	4.42E-08	4.35E-08	8.77E-08	6.64E-09	6.52E-09	1.32E-08	6.50E-09	5.81E-09	1.23E-08	3.45E-09	2.64E-09	6.09E-09
2402	648143.79	4198048.55	4.29E-08	4.23E-08	8.52E-08	6.46E-09	6.34E-09	1.28E-08	6.31E-09	5.65E-09	1.20E-08	3.35E-09	2.56E-09	5.92E-09
2403	648142.74	4198024.27	4.18E-08	4.11E-08	8.29E-08	6.28E-09	6.17E-09	1.25E-08	6.14E-09	5.50E-09	1.16E-08	3.26E-09	2.49E-09	5.76E-09
2404	648141.68	4197999.99	4.07E-08	4.01E-08	8.08E-08	6.12E-09	6.01E-09	1.21E-08	5.99E-09	5.36E-09	1.13E-08	3.18E-09	2.43E-09	5.61E-09
2405	648140.62	4197975.71	3.97E-08	3.91E-08	7.89E-08	5.98E-09	5.87E-09	1.18E-08	5.84E-09	5.23E-09	1.11E-08	3.10E-09	2.37E-09	5.48E-09
2406	648139.56	4197951.43	3.89E-08	3.83E-08	7.71E-08	5.84E-09	5.74E-09	1.16E-08	5.71E-09	5.11E-09	1.08E-08	3.04E-09	2.32E-09	5.35E-09
2407	648138.51	4197927.15	3.81E-08	3.75E-08	7.55E-08	5.72E-09	5.62E-09	1.13E-08	5.60E-09	5.01E-09	1.06E-08	2.97E-09	2.27E-09	5.24E-09
2408	648137.45	4197902.87	3.73E-08	3.68E-08	7.41E-08	5.62E-09	5.51E-09	1.11E-08	5.49E-09	4.92E-09	1.04E-08	2.92E-09	2.23E-09	5.15E-09
2409	648136.39	4197878.6	3.67E-08	3.61E-08	7.28E-08	5.52E-09	5.42E-09	1.09E-08	5.40E-09	4.83E-09	1.02E-08	2.87E-09	2.19E-09	5.06E-09
2410	648135.33	4197854.32	3.61E-08	3.55E-08	7.17E-08	5.43E-09	5.33E-09	1.08E-08	5.31E-09	4.75E-09	1.01E-08	2.82E-09	2.15E-09	4.98E-09
2411	648134.28	4197830.04	3.56E-08	3.50E-08	7.06E-08	5.35E-09	5.25E-09	1.06E-08	5.23E-09	4.68E-09	9.91E-09	2.78E-09	2.12E-09	4.90E-09
2412	648133.22	4197805.76	3.50E-08	3.45E-08	6.95E-08	5.27E-09	5.17E-09	1.04E-08	5.15E-09	4.61E-09	9.76E-09	2.74E-09	2.09E-09	4.83E-09
2413	648132.16	4197781.48	3.45E-08	3.40E-08	6.84E-08	5.19E-09	5.09E-09	1.03E-08	5.07E-09	4.54E-09	9.61E-09	2.69E-09	2.06E-09	4.75E-09
2414	648131.1	4197757.2	3.40E-08	3.34E-08	6.74E-08	5.11E-09	5.01E-09	1.01E-08	4.99E-09	4.47E-09	9.46E-09	2.65E-09	2.03E-09	4.68E-09
2415	648130.05	4197732.92	3.34E-08	3.29E-08	6.63E-08	5.02E-09	4.93E-09	9.96E-09	4.91E-09	4.40E-09	9.31E-09	2.61E-09	1.99E-09	4.60E-09
2416	648128.99	4197708.64	3.28E-08	3.23E-08	6.52E-08	4.94E-09	4.85E-09	9.79E-09	4.83E-09	4.32E-09	9.15E-09	2.57E-09	1.96E-09	4.53E-09
2417	648127.93	4197684.36	3.23E-08	3.18E-08	6.40E-08	4.85E-09	4.76E-09	9.61E-09	4.74E-09	4.25E-09	8.99E-09	2.52E-09	1.93E-09	4.45E-09
2418	648126.88	4197660.08	3.17E-08	3.12E-08	6.29E-08	4.76E-09	4.68E-09	9.44E-09	4.66E-09	4.17E-09	8.82E-09	2.47E-09	1.89E-09	4.36E-09
2419	648158.6	4198388.46	5.96E-08	5.86E-08	1.18E-07	8.96E-09	8.79E-09	1.78E-08	8.76E-09	7.84E-09	1.66E-08	4.65E-09	3.55E-09	8.21E-09
2420	648170.02	4198410.66	6.14E-08	6.04E-08	1.22E-07	9.23E-09	9.06E-09	1.83E-08	9.03E-09	8.08E-09	1.71E-08	4.80E-09	3.66E-09	8.46E-09
2421	648181.44	4198432.85	6.32E-08	6.23E-08	1.26E-07	9.51E-09	9.34E-09	1.88E-08	9.30E-09	8.32E-09	1.76E-08	4.94E-09	3.77E-09	8.71E-09
2422	648192.87	4198455.05	6.51E-08	6.41E-08	1.29E-07	9.79E-09	9.61E-09	1.94E-08	9.57E-09	8.57E-09	1.81E-08	5.09E-09	3.89E-09	8.97E-09
2423	648204.29	4198477.24	6.70E-08	6.60E-08	1.33E-07	1.01E-08	9.90E-09	2.00E-08	9.86E-09	8.82E-09	1.87E-08	5.24E-09	4.00E-09	9.24E-09
2424	648215.71	4198499.43	6.90E-08	6.79E-08	1.37E-07	1.04E-08	1.02E-08	2.06E-08	1.01E-08	9.08E-09	1.92E-08	5.39E-09	4.12E-09	9.50E-09
2425	648227.14	4198521.63	7.09E-08	6.98E-08	1.41E-07	1.07E-08	1.05E-08	2.11E-08	1.04E-08	9.34E-09	1.98E-08	5.54E-09	4.23E-09	9.78E-09
2426	648238.56	4198543.82	7.29E-08	7.18E-08	1.45E-07	1.10E-08	1.08E-08	2.17E-08	1.07E-08	9.60E-09	2.03E-08	5.70E-09	4.35E-09	1.01E-08
2427	648249.99	4198566.02	7.49E-08	7.38E-08	1.49E-07	1.13E-08	1.11E-08	2.23E-08	1.10E-08	9.86E-09	2.09E-08	5.85E-09	4.47E-09	1.03E-08
2428	648261.41	4198588.21	7.69E-08	7.57E-08	1.53E-07	1.16E-08	1.14E-08	2.29E-08	1.13E-08	1.01E-08	2.14E-08	6.01E-09	4.59E-09	1.06E-08

2429	648272.83	4198610.4	7.89E-08	7.77E-08	1.57E-07	1.19E-08	1.17E-08	2.35E-08	1.16E-08	1.04E-08	2.20E-08	6.16E-09	4.71E-09	1.09E-08
2430	648284.26	4198632.6	8.08E-08	7.96E-08	1.60E-07	1.22E-08	1.19E-08	2.41E-08	1.19E-08	1.06E-08	2.25E-08	6.31E-09	4.82E-09	1.11E-08
2431	648295.68	4198654.79	8.27E-08	8.14E-08	1.64E-07	1.24E-08	1.22E-08	2.46E-08	1.22E-08	1.09E-08	2.30E-08	6.46E-09	4.94E-09	1.14E-08
2432	648307.11	4198676.98	8.45E-08	8.32E-08	1.68E-07	1.27E-08	1.25E-08	2.52E-08	1.24E-08	1.11E-08	2.35E-08	6.60E-09	5.04E-09	1.16E-08
2433	647979.69	4198455.13	4.61E-08	4.54E-08	9.15E-08	6.94E-09	6.81E-09	1.37E-08	6.78E-09	6.07E-09	1.29E-08	3.60E-09	2.75E-09	6.36E-09
2434	647978.6	4198430.27	4.56E-08	4.49E-08	9.06E-08	6.86E-09	6.74E-09	1.36E-08	6.71E-09	6.01E-09	1.27E-08	3.56E-09	2.72E-09	6.29E-09
2435	647977.52	4198405.41	4.51E-08	4.44E-08	8.95E-08	6.78E-09	6.66E-09	1.34E-08	6.63E-09	5.94E-09	1.26E-08	3.52E-09	2.69E-09	6.22E-09
2436	647976.44	4198380.55	4.45E-08	4.39E-08	8.84E-08	6.70E-09	6.58E-09	1.33E-08	6.55E-09	5.86E-09	1.24E-08	3.48E-09	2.66E-09	6.14E-09
2437	647975.36	4198355.68	4.39E-08	4.33E-08	8.72E-08	6.61E-09	6.49E-09	1.31E-08	6.46E-09	5.78E-09	1.22E-08	3.43E-09	2.62E-09	6.05E-09
2438	647974.27	4198330.82	4.33E-08	4.26E-08	8.58E-08	6.51E-09	6.39E-09	1.29E-08	6.36E-09	5.69E-09	1.21E-08	3.38E-09	2.58E-09	5.96E-09
2439	647973.19	4198305.96	4.25E-08	4.19E-08	8.44E-08	6.40E-09	6.28E-09	1.27E-08	6.26E-09	5.60E-09	1.19E-08	3.32E-09	2.54E-09	5.86E-09
2440	647972.11	4198281.09	4.18E-08	4.11E-08	8.29E-08	6.28E-09	6.17E-09	1.24E-08	6.14E-09	5.50E-09	1.16E-08	3.26E-09	2.49E-09	5.76E-09
2441	647971.03	4198256.23	4.09E-08	4.03E-08	8.12E-08	6.16E-09	6.04E-09	1.22E-08	6.02E-09	5.39E-09	1.14E-08	3.20E-09	2.44E-09	5.64E-09
2442	647969.94	4198231.37	4.01E-08	3.95E-08	7.95E-08	6.03E-09	5.92E-09	1.19E-08	5.89E-09	5.27E-09	1.12E-08	3.13E-09	2.39E-09	5.52E-09
2443	647968.86	4198206.51	3.92E-08	3.86E-08	7.77E-08	5.89E-09	5.78E-09	1.17E-08	5.76E-09	5.15E-09	1.09E-08	3.06E-09	2.34E-09	5.40E-09
2444	647967.78	4198181.64	3.82E-08	3.76E-08	7.59E-08	5.75E-09	5.64E-09	1.14E-08	5.62E-09	5.03E-09	1.07E-08	2.99E-09	2.28E-09	5.27E-09
2445	647966.69	4198156.78	3.73E-08	3.67E-08	7.39E-08	5.60E-09	5.50E-09	1.11E-08	5.48E-09	4.90E-09	1.04E-08	2.91E-09	2.22E-09	5.13E-09
2446	647965.61	4198131.92	3.63E-08	3.57E-08	7.20E-08	5.46E-09	5.36E-09	1.08E-08	5.34E-09	4.78E-09	1.01E-08	2.84E-09	2.17E-09	5.00E-09
2447	647964.53	4198107.06	3.53E-08	3.48E-08	7.01E-08	5.31E-09	5.22E-09	1.05E-08	5.20E-09	4.65E-09	9.85E-09	2.76E-09	2.11E-09	4.87E-09
2448	647963.45	4198082.19	3.44E-08	3.39E-08	6.83E-08	5.17E-09	5.08E-09	1.03E-08	5.06E-09	4.53E-09	9.59E-09	2.69E-09	2.05E-09	4.74E-09
2449	647962.36	4198057.33	3.35E-08	3.30E-08	6.65E-08	5.04E-09	4.95E-09	9.99E-09	4.93E-09	4.41E-09	9.34E-09	2.62E-09	2.00E-09	4.62E-09
2450	647961.28	4198032.47	3.27E-08	3.22E-08	6.49E-08	4.91E-09	4.83E-09	9.74E-09	4.81E-09	4.30E-09	9.11E-09	2.55E-09	1.95E-09	4.50E-09
2451	647960.2	4198007.6	3.19E-08	3.14E-08	6.33E-08	4.80E-09	4.71E-09	9.51E-09	4.69E-09	4.20E-09	8.89E-09	2.49E-09	1.90E-09	4.40E-09
2452	647959.12	4197982.74	3.12E-08	3.07E-08	6.19E-08	4.69E-09	4.61E-09	9.30E-09	4.59E-09	4.11E-09	8.69E-09	2.44E-09	1.86E-09	4.30E-09
2453	647958.03	4197957.88	3.06E-08	3.01E-08	6.06E-08	4.59E-09	4.51E-09	9.11E-09	4.49E-09	4.02E-09	8.51E-09	2.39E-09	1.82E-09	4.21E-09
2454	647956.95	4197933.02	3.00E-08	2.95E-08	5.95E-08	4.51E-09	4.43E-09	8.94E-09	4.41E-09	3.95E-09	8.36E-09	2.34E-09	1.79E-09	4.13E-09
2455	647955.87	4197908.15	2.95E-08	2.90E-08	5.85E-08	4.44E-09	4.36E-09	8.79E-09	4.34E-09	3.88E-09	8.22E-09	2.30E-09	1.76E-09	4.06E-09
2456	647954.78	4197883.29	2.91E-08	2.86E-08	5.77E-08	4.37E-09	4.29E-09	8.66E-09	4.27E-09	3.83E-09	8.10E-09	2.27E-09	1.73E-09	4.01E-09
2457	647953.7	4197858.43	2.87E-08	2.82E-08	5.69E-08	4.31E-09	4.24E-09	8.55E-09	4.22E-09	3.78E-09	7.99E-09	2.24E-09	1.71E-09	3.95E-09
2458	647952.62	4197833.56	2.84E-08	2.79E-08	5.63E-08	4.26E-09	4.19E-09	8.45E-09	4.17E-09	3.73E-09	7.90E-09	2.21E-09	1.69E-09	3.91E-09
2459	647951.54	4197808.7	2.80E-08	2.76E-08	5.56E-08	4.22E-09	4.14E-09	8.35E-09	4.12E-09	3.69E-09	7.81E-09	2.19E-09	1.67E-09	3.86E-09
2460	647950.45	4197783.84	2.77E-08	2.73E-08	5.50E-08	4.17E-09	4.09E-09	8.26E-09	4.08E-09	3.65E-09	7.73E-09	2.17E-09	1.65E-09	3.82E-09
2461	647949.37	4197758.98	2.74E-08	2.70E-08	5.44E-08	4.12E-09	4.05E-09	8.17E-09	4.03E-09	3.61E-09	7.64E-09	2.14E-09	1.64E-09	3.78E-09
2462	647948.29	4197734.11	2.71E-08	2.67E-08	5.37E-08	4.07E-09	4.00E-09	8.07E-09	3.98E-09	3.56E-09	7.54E-09	2.12E-09	1.62E-09	3.73E-09
2463	647947.2	4197709.25	2.67E-08	2.63E-08	5.30E-08	4.02E-09	3.95E-09	7.96E-09	3.93E-09	3.52E-09	7.45E-09	2.09E-09	1.59E-09	3.68E-09
2464	647946.12	4197684.39	2.63E-08	2.59E-08	5.23E-08	3.96E-09	3.89E-09	7.85E-09	3.87E-09	3.47E-09	7.34E-09	2.06E-09	1.57E-09	3.63E-09
2465	647945.04	4197659.52	2.59E-08	2.55E-08	5.15E-08	3.90E-09	3.83E-09	7.73E-09	3.81E-09	3.41E-09	7.23E-09	2.03E-09	1.55E-09	3.57E-09
2466	647943.96	4197634.66	2.55E-08	2.51E-08	5.06E-08	3.84E-09	3.77E-09	7.61E-09	3.75E-09	3.36E-09	7.11E-09	1.99E-09	1.52E-09	3.52E-09
2467	647942.87	4197609.8	2.51E-08	2.47E-08	4.98E-08	3.77E-09	3.70E-09	7.48E-09	3.69E-09	3.30E-09	6.99E-09	1.96E-09	1.50E-09	3.46E-09
2468	647941.79	4197584.94	2.46E-08	2.43E-08	4.89E-08	3.71E-09	3.64E-09	7.34E-09	3.62E-09	3.24E-09	6.87E-09	1.93E-09	1.47E-09	3.40E-09
2469	647980.77	4198480	4.66E-08	4.59E-08	9.24E-08	7.00E-09	6.88E-09	1.39E-08	6.85E-09	6.13E-09	1.30E-08	3.64E-09	2.78E-09	6.42E-09
2470	647992.19	4198502.19	4.77E-08	4.69E-08	9.46E-08	7.17E-09	7.04E-09	1.42E-08	7.01E-09	6.28E-09	1.33E-08	3.72E-09	2.85E-09	6.57E-09
2471	648003.62	4198524.38	4.88E-08	4.80E-08	9.68E-08	7.34E-09	7.20E-09	1.45E-08	7.17E-09	6.42E-09	1.36E-08	3.81E-09	2.91E-09	6.72E-09
2472	648015.04	4198546.58	4.99E-08	4.92E-08	9.91E-08	7.51E-09	7.37E-09	1.49E-08	7.34E-09	6.57E-09	1.39E-08	3.90E-09	2.98E-09	6.88E-09
2473	648026.47	4198568.77	5.11E-08	5.03E-08	1.01E-07	7.68E-09	7.55E-09	1.52E-08	7.51E-09	6.73E-09	1.42E-08	3.99E-09	3.05E-09	7.04E-09
2474	648037.89	4198590.97	5.23E-08	5.15E-08	1.04E-07	7.86E-09	7.72E-09	1.56E-08	7.69E-09	6.88E-09	1.46E-08	4.08E-09	3.12E-09	7.21E-09
2475	648049.31	4198613.16	5.35E-08	5.27E-08	1.06E-07	8.05E-09	7.90E-09	1.59E-08	7.87E-09	7.04E-09	1.49E-08	4.18E-09	3.19E-09	7.37E-09
2476	648060.74	4198635.35	5.47E-08	5.39E-08	1.09E-07	8.23E-09	8.08E-09	1.63E-08	8.05E-09	7.21E-09	1.53E-08	4.28E-09	3.27E-09	7.54E-09
2477	648072.16	4198657.55	5.60E-08	5.51E-08	1.11E-07	8.42E-09	8.27E-09	1.67E-08	8.24E-09	7.37E-09	1.56E-08	4.38E-09	3.34E-09	7.72E-09
2478	648083.58	4198679.74	5.73E-08	5.64E-08	1.14E-07	8.62E-09	8.46E-09	1.71E-08	8.42E-09	7.54E-09	1.60E-08	4.48E-09	3.42E-09	7.89E-09
2479	648095.01	4198701.94	5.86E-08	5.77E-08	1.16E-07	8.81E-09	8.65E-09	1.75E-08	8.61E-09	7.71E-09	1.63E-08	4.58E-09	3.50E-09	8.07E-09
2480	648106.43	4198724.13	5.99E-08	5.90E-08	1.19E-07	9.01E-09	8.84E-09	1.78E-08	8.81E-09	7.88E-09	1.67E-08	4.68E-09	3.57E-09	8.25E-09
2481	648117.86	4198746.32	6.12E-08	6.02E-08	1.21E-07	9.20E-09	9.03E-09	1.82E-08	8.99E-09	8.05E-09	1.70E-08	4.78E-09	3.65E-09	8.43E-09
2482	648129.28	4198768.52	6.24E-08	6.15E-08	1.24E-07	9.39E-09	9.22E-09	1.86E-08	9.18E-09	8.22E-09	1.74E-08	4.88E-09	3.73E-09	8.60E-09
2483	647801.87	4198546.82	3.74E-08	3.68E-08	7.43E-08	5.63E-09	5.53E-09	1.12E-08	5.50E-09	4.93E-09	1.04E-08	2.92E-09	2.23E-09	5.16E-09
2484	647800.79	4198522.11	3.72E-08	3.66E-08	7.37E-08	5.59E-09	5.49E-09	1.11E-08	5.46E-09	4.89E-09	1.04E-08	2.90E-09	2.22E-09	5.12E-09
2485	647799.72	4198497.4	3.69E-08	3.63E-08	7.31E-08	5.54E-09	5.44E-09	1.10E-08	5.42E-09	4.85E-09	1.03E-08	2.88E-09	2.20E-09	5.08E-09
2486	647798.64	4198472.69	3.65E-08	3.60E-08	7.25E-08	5.49E-09	5.39E-09	1.09E-08	5.37E-09	4.81E-09	1.02E-08	2.85E-09	2.18E-09	5.03E-09
2487	647797.56	4198447.99	3.62E-08	3.56E-08	7.18E-08	5.44E-09	5.34E-09	1.08E-08	5.32E-09	4.76E-09	1.01E-08	2.83E-09	2.16E-09	4.99E-09
2488	647796.49	4198423.28	3.58E-08	3.53E-08	7.11E-08	5.39E-09	5.29E-09	1.07E-08	5.27E-09	4.71E-09	9.98E-09	2.80E-09	2.14E-09	4.94E-09
2489	647795.41	4198398.57	3.54E-08	3.49E-08	7.03E-08	5.33E-09	5.23E-09	1.06E-08	5.21E-09	4.66E-09	9.87E-09	2.77E-09	2.11E-09	4.88E-09
2490	647794.34	4198373.86	3.50E-08	3.45E-08	6.94E-08	5.26E-09	5.17E-09	1.04E-08	5.14E-09	4.61E-09	9.75E-09	2.73E-09	2.09E-09	4.82E-09
2491	647793.26	4198349.15	3.45E-08	3.40E-08	6.85E-08	5.19E-09	5.10E-09	1.03E-08	5.08E-09	4.54E-09	9.62E-09	2.70E-09	2.06E-09	4.76E-09
2492	647792.18	4198324.44	3.40E-08	3.35E-08	6.75E-08	5.12E-09	5.02E-09	1.01E-08	5.00E-09	4.48E-09	9.48E-09	2.66E-09	2.03E-09	4.69E-09
2493	647791.11	4198299.73	3.35E-08	3.30E-08	6.64E-08	5.03E-09	4.94E-09	9.98E-09	4.92E-09	4.41E-09	9.33E-09	2.62E-09	2.00E-09	4.61E-09
2494	647790.03	4198275.02	3.29E-08	3.24E-08	6.53E-08	4.95E-09	4.86E-09	9.81E-09	4.84E-09	4.33E-09	9.17E-09	2.57E-09	1.96E-09	4.53E-09
2495	647788.96	4198250.32	3.23E-08	3.18E-08	6.41E-08	4.86E-09	4.77E-09	9.63E-09	4.75E-09	4.25E-09	9.00E-09	2.52E-09	1.93E-09	4.45E-09
2496	647787.88	4198225.61	3.17E-08	3.12E-08	6.29E-08	4.76E-09	4.68E-09	9.44E-09	4.66E-09	4.17E-09	8.82E-09	2.47E-09	1.89E-09	4.36E-09
2497	647786.8	4198200.9	3.10E-08	3.05E-08	6.15E-08	4.66E-09	4.58E-09	9.24E-09	4.56E-09	4.08E-09	8.64E-09	2.42E-09	1.85E-09	4.27E-09
2498	647785.73	4198176.19	3.03E-08	2.99E-08	6.02E-08	4.56E-09	4.48E-09	9.04E-09	4.46E-09	3.99E-09	8.45E-09	2.37E-09	1.81E-09	4.18E-09
2499	647784.65	4198151.48	2.96E-08	2.92E-08	5.88E-08	4.46E-09	4.38E-09	8.84E-09	4.36E-09	3.90E-09	8.26E-09	2.32E-09	1.77E-09	4.09E-09
2500	647783.58	4198126.77	2.90E-08	2.85E-08	5.75E-08	4.35E-09	4.27E-09	8.63E-09	4.26E-09	3.81E-09	8.07E-09	2.26E-09	1.73E-09	3.99E-09
2501	647782.5	4198102.06	2.83E-08	2.78E-08	5.61E-08	4.25E-09	4.17E-09	8.42E-09	4.16E-09	3.72E-09	7.87E-09	2.21E-09	1.69E-09	3.89E-09
2502	647781.42	4198077.36	2.76E-08	2.72E-08	5.48E-08	4.15E-09	4.07E-09	8.22E-09	4.06E-09	3.63E-09	7.69E-09	2.16E-09	1.65E-09	3.80E-09
2503	647780.35	4198052.65	2.69E-08	2.65E-08	5.35E-08	4.05E-09	3.98E-09	8.03E-09	3.96E-09	3.55E-09	7.51E-09	2.10E-09	1.61E-09	3.71E-09
2504	647779.27	4198027.94	2.63E-08	2.59E-08	5.22E-08	3.96E-09	3.89E-09	7.85E-09	3.87E-09	3.46E-09	7.34E-09	2.06E-09	1.57E-09	3.63E-09

2505	647778.2	4198003.23	2.58E-08	2.54E-08	5.11E-08	3.87E-09	3.80E-09	7.68E-09	3.79E-09	3.39E-09	7.18E-09	2.01E-09	1.54E-09	3.55E-09
2506	647777.12	4197978.52	2.52E-08	2.49E-08	5.01E-08	3.80E-09	3.73E-09	7.52E-09	3.71E-09	3.32E-09	7.03E-09	1.97E-09	1.51E-09	3.48E-09
2507	647776.04	4197953.81	2.48E-08	2.44E-08	4.92E-08	3.73E-09	3.66E-09	7.38E-09	3.64E-09	3.26E-09	6.90E-09	1.94E-09	1.48E-09	3.41E-09
2508	647774.97	4197929.1	2.44E-08	2.40E-08	4.84E-08	3.67E-09	3.60E-09	7.27E-09	3.58E-09	3.21E-09	6.79E-09	1.90E-09	1.46E-09	3.36E-09
2509	647773.89	4197904.39	2.40E-08	2.37E-08	4.77E-08	3.61E-09	3.55E-09	7.16E-09	3.53E-09	3.16E-09	6.70E-09	1.88E-09	1.43E-09	3.31E-09
2510	647772.82	4197879.69	2.37E-08	2.34E-08	4.71E-08	3.57E-09	3.50E-09	7.07E-09	3.49E-09	3.12E-09	6.61E-09	1.85E-09	1.42E-09	3.27E-09
2511	647771.74	4197854.98	2.35E-08	2.31E-08	4.66E-08	3.53E-09	3.47E-09	6.99E-09	3.45E-09	3.09E-09	6.54E-09	1.83E-09	1.40E-09	3.23E-09
2512	647770.66	4197830.27	2.33E-08	2.29E-08	4.62E-08	3.50E-09	3.43E-09	6.93E-09	3.42E-09	3.06E-09	6.48E-09	1.82E-09	1.39E-09	3.20E-09
2513	647769.59	4197805.56	2.31E-08	2.27E-08	4.58E-08	3.47E-09	3.40E-09	6.87E-09	3.39E-09	3.04E-09	6.43E-09	1.80E-09	1.38E-09	3.18E-09
2514	647768.51	4197780.85	2.29E-08	2.25E-08	4.54E-08	3.44E-09	3.38E-09	6.82E-09	3.36E-09	3.01E-09	6.38E-09	1.79E-09	1.37E-09	3.15E-09
2515	647767.44	4197756.14	2.27E-08	2.23E-08	4.50E-08	3.41E-09	3.35E-09	6.76E-09	3.34E-09	2.99E-09	6.32E-09	1.77E-09	1.35E-09	3.13E-09
2516	647766.36	4197731.43	2.25E-08	2.22E-08	4.47E-08	3.39E-09	3.32E-09	6.71E-09	3.31E-09	2.96E-09	6.27E-09	1.76E-09	1.34E-09	3.10E-09
2517	647765.28	4197706.73	2.23E-08	2.20E-08	4.43E-08	3.36E-09	3.30E-09	6.65E-09	3.28E-09	2.94E-09	6.22E-09	1.74E-09	1.33E-09	3.08E-09
2518	647764.21	4197682.02	2.21E-08	2.18E-08	4.39E-08	3.32E-09	3.26E-09	6.58E-09	3.25E-09	2.91E-09	6.16E-09	1.73E-09	1.32E-09	3.04E-09
2519	647763.13	4197657.31	2.18E-08	2.15E-08	4.34E-08	3.29E-09	3.23E-09	6.51E-09	3.21E-09	2.88E-09	6.09E-09	1.71E-09	1.30E-09	3.01E-09
2520	647762.06	4197632.6	2.16E-08	2.12E-08	4.28E-08	3.24E-09	3.19E-09	6.43E-09	3.17E-09	2.84E-09	6.01E-09	1.69E-09	1.29E-09	2.97E-09
2521	647760.98	4197607.89	2.13E-08	2.09E-08	4.22E-08	3.20E-09	3.14E-09	6.34E-09	3.13E-09	2.80E-09	5.93E-09	1.66E-09	1.27E-09	2.93E-09
2522	647759.9	4197583.18	2.10E-08	2.06E-08	4.16E-08	3.15E-09	3.09E-09	6.25E-09	3.08E-09	2.76E-09	5.84E-09	1.64E-09	1.25E-09	2.89E-09
2523	647758.83	4197558.47	2.06E-08	2.03E-08	4.09E-08	3.10E-09	3.04E-09	6.14E-09	3.03E-09	2.71E-09	5.74E-09	1.61E-09	1.23E-09	2.84E-09
2524	647757.75	4197533.76	2.03E-08	2.00E-08	4.02E-08	3.05E-09	2.99E-09	6.04E-09	2.98E-09	2.67E-09	5.65E-09	1.58E-09	1.21E-09	2.79E-09
2525	647756.68	4197509.06	1.99E-08	1.96E-08	3.96E-08	3.00E-09	2.94E-09	5.94E-09	2.93E-09	2.62E-09	5.55E-09	1.56E-09	1.19E-09	2.75E-09
2526	647802.94	4198571.53	3.77E-08	3.71E-08	7.48E-08	5.67E-09	5.56E-09	1.12E-08	5.54E-09	4.96E-09	1.05E-08	2.94E-09	2.25E-09	5.19E-09
2527	647814.37	4198593.72	3.84E-08	3.78E-08	7.62E-08	5.78E-09	5.67E-09	1.14E-08	5.65E-09	5.06E-09	1.07E-08	3.00E-09	2.29E-09	5.29E-09
2528	647825.79	4198615.92	3.91E-08	3.85E-08	7.77E-08	5.89E-09	5.78E-09	1.17E-08	5.76E-09	5.15E-09	1.09E-08	3.06E-09	2.34E-09	5.39E-09
2529	647837.22	4198638.11	3.99E-08	3.93E-08	7.92E-08	6.00E-09	5.89E-09	1.19E-08	5.87E-09	5.25E-09	1.11E-08	3.12E-09	2.38E-09	5.50E-09
2530	647848.64	4198660.3	4.07E-08	4.00E-08	8.07E-08	6.11E-09	6.00E-09	1.21E-08	5.98E-09	5.35E-09	1.13E-08	3.18E-09	2.43E-09	5.60E-09
2531	647860.06	4198682.5	4.15E-08	4.08E-08	8.23E-08	6.23E-09	6.12E-09	1.24E-08	6.09E-09	5.46E-09	1.16E-08	3.24E-09	2.47E-09	5.71E-09
2532	647871.49	4198704.69	4.23E-08	4.16E-08	8.39E-08	6.35E-09	6.24E-09	1.26E-08	6.21E-09	5.56E-09	1.18E-08	3.30E-09	2.52E-09	5.82E-09
2533	647882.91	4198726.89	4.31E-08	4.24E-08	8.55E-08	6.48E-09	6.36E-09	1.28E-08	6.34E-09	5.67E-09	1.20E-08	3.37E-09	2.57E-09	5.94E-09
2534	647894.34	4198749.08	4.40E-08	4.33E-08	8.72E-08	6.61E-09	6.49E-09	1.31E-08	6.46E-09	5.78E-09	1.22E-08	3.43E-09	2.62E-09	6.06E-09
2535	647905.76	4198771.27	4.48E-08	4.41E-08	8.90E-08	6.74E-09	6.62E-09	1.34E-08	6.59E-09	5.90E-09	1.25E-08	3.50E-09	2.68E-09	6.18E-09
2536	647917.18	4198793.47	4.57E-08	4.50E-08	9.08E-08	6.88E-09	6.75E-09	1.36E-08	6.73E-09	6.02E-09	1.27E-08	3.57E-09	2.73E-09	6.30E-09
2537	647928.61	4198815.66	4.66E-08	4.59E-08	9.26E-08	7.01E-09	6.89E-09	1.39E-08	6.86E-09	6.14E-09	1.30E-08	3.64E-09	2.78E-09	6.43E-09
2538	647940.03	4198837.85	4.76E-08	4.68E-08	9.44E-08	7.15E-09	7.02E-09	1.42E-08	6.99E-09	6.26E-09	1.33E-08	3.72E-09	2.84E-09	6.55E-09
2539	647951.45	4198860.05	4.85E-08	4.77E-08	9.62E-08	7.29E-09	7.16E-09	1.45E-08	7.13E-09	6.38E-09	1.35E-08	3.79E-09	2.89E-09	6.68E-09
2540	647624.05	4198638.46	3.11E-08	3.07E-08	6.18E-08	4.68E-09	4.60E-09	9.28E-09	4.58E-09	4.10E-09	8.68E-09	2.43E-09	1.86E-09	4.29E-09
2541	647622.98	4198613.87	3.10E-08	3.05E-08	6.15E-08	4.66E-09	4.57E-09	9.23E-09	4.55E-09	4.08E-09	8.63E-09	2.42E-09	1.85E-09	4.27E-09
2542	647621.91	4198589.27	3.08E-08	3.03E-08	6.11E-08	4.63E-09	4.55E-09	9.18E-09	4.53E-09	4.05E-09	8.58E-09	2.41E-09	1.84E-09	4.25E-09
2543	647620.83	4198564.67	3.06E-08	3.01E-08	6.08E-08	4.60E-09	4.52E-09	9.12E-09	4.50E-09	4.03E-09	8.53E-09	2.39E-09	1.83E-09	4.22E-09
2544	647619.76	4198540.08	3.04E-08	2.99E-08	6.03E-08	4.57E-09	4.49E-09	9.06E-09	4.47E-09	4.00E-09	8.47E-09	2.38E-09	1.81E-09	4.19E-09
2545	647618.69	4198515.48	3.02E-08	2.97E-08	5.99E-08	4.54E-09	4.46E-09	9.00E-09	4.44E-09	3.97E-09	8.41E-09	2.36E-09	1.80E-09	4.16E-09
2546	647617.62	4198490.88	3.00E-08	2.95E-08	5.94E-08	4.50E-09	4.42E-09	8.93E-09	4.40E-09	3.94E-09	8.35E-09	2.34E-09	1.79E-09	4.13E-09
2547	647616.55	4198466.29	2.97E-08	2.92E-08	5.89E-08	4.47E-09	4.39E-09	8.85E-09	4.37E-09	3.91E-09	8.28E-09	2.32E-09	1.77E-09	4.09E-09
2548	647615.48	4198441.69	2.94E-08	2.90E-08	5.84E-08	4.42E-09	4.34E-09	8.77E-09	4.33E-09	3.87E-09	8.20E-09	2.30E-09	1.76E-09	4.05E-09
2549	647614.41	4198417.09	2.91E-08	2.87E-08	5.78E-08	4.38E-09	4.30E-09	8.67E-09	4.28E-09	3.83E-09	8.11E-09	2.27E-09	1.74E-09	4.01E-09
2550	647613.34	4198392.5	2.88E-08	2.83E-08	5.71E-08	4.33E-09	4.25E-09	8.58E-09	4.23E-09	3.79E-09	8.02E-09	2.25E-09	1.72E-09	3.97E-09
2551	647612.27	4198367.9	2.85E-08	2.80E-08	5.65E-08	4.28E-09	4.20E-09	8.48E-09	4.18E-09	3.74E-09	7.93E-09	2.22E-09	1.70E-09	3.92E-09
2552	647611.19	4198343.3	2.81E-08	2.77E-08	5.58E-08	4.23E-09	4.15E-09	8.37E-09	4.13E-09	3.70E-09	7.83E-09	2.20E-09	1.68E-09	3.87E-09
2553	647610.12	4198318.7	2.77E-08	2.73E-08	5.50E-08	4.17E-09	4.09E-09	8.26E-09	4.08E-09	3.65E-09	7.73E-09	2.17E-09	1.65E-09	3.82E-09
2554	647609.05	4198294.11	2.73E-08	2.69E-08	5.42E-08	4.11E-09	4.03E-09	8.14E-09	4.02E-09	3.60E-09	7.61E-09	2.13E-09	1.63E-09	3.76E-09
2555	647607.98	4198269.51	2.69E-08	2.65E-08	5.34E-08	4.04E-09	3.97E-09	8.01E-09	3.95E-09	3.54E-09	7.49E-09	2.10E-09	1.60E-09	3.70E-09
2556	647606.91	4198244.91	2.64E-08	2.60E-08	5.24E-08	3.97E-09	3.90E-09	7.88E-09	3.89E-09	3.48E-09	7.36E-09	2.06E-09	1.58E-09	3.64E-09
2557	647605.84	4198220.32	2.59E-08	2.55E-08	5.15E-08	3.90E-09	3.83E-09	7.73E-09	3.81E-09	3.41E-09	7.23E-09	2.03E-09	1.55E-09	3.57E-09
2558	647604.77	4198195.72	2.55E-08	2.51E-08	5.05E-08	3.83E-09	3.76E-09	7.58E-09	3.74E-09	3.35E-09	7.09E-09	1.99E-09	1.52E-09	3.51E-09
2559	647603.7	4198171.12	2.49E-08	2.46E-08	4.95E-08	3.75E-09	3.68E-09	7.43E-09	3.67E-09	3.28E-09	6.95E-09	1.95E-09	1.49E-09	3.44E-09
2560	647602.62	4198146.53	2.44E-08	2.40E-08	4.84E-08	3.67E-09	3.60E-09	7.27E-09	3.59E-09	3.21E-09	6.80E-09	1.91E-09	1.46E-09	3.36E-09
2561	647601.55	4198121.93	2.39E-08	2.35E-08	4.73E-08	3.59E-09	3.52E-09	7.11E-09	3.51E-09	3.14E-09	6.65E-09	1.86E-09	1.42E-09	3.29E-09
2562	647600.48	4198097.33	2.33E-08	2.30E-08	4.63E-08	3.51E-09	3.45E-09	6.95E-09	3.43E-09	3.07E-09	6.50E-09	1.82E-09	1.39E-09	3.22E-09
2563	647599.41	4198072.74	2.28E-08	2.25E-08	4.53E-08	3.43E-09	3.37E-09	6.80E-09	3.36E-09	3.00E-09	6.36E-09	1.78E-09	1.36E-09	3.15E-09
2564	647598.34	4198048.14	2.23E-08	2.20E-08	4.43E-08	3.36E-09	3.30E-09	6.66E-09	3.28E-09	2.94E-09	6.22E-09	1.74E-09	1.33E-09	3.08E-09
2565	647597.27	4198023.54	2.19E-08	2.15E-08	4.34E-08	3.29E-09	3.23E-09	6.52E-09	3.22E-09	2.88E-09	6.09E-09	1.71E-09	1.31E-09	3.01E-09
2566	647596.2	4197998.95	2.14E-08	2.11E-08	4.25E-08	3.22E-09	3.16E-09	6.39E-09	3.15E-09	2.82E-09	5.97E-09	1.67E-09	1.28E-09	2.95E-09
2567	647595.13	4197974.35	2.11E-08	2.07E-08	4.18E-08	3.17E-09	3.11E-09	6.28E-09	3.10E-09	2.77E-09	5.87E-09	1.65E-09	1.26E-09	2.90E-09
2568	647594.06	4197949.75	2.07E-08	2.04E-08	4.11E-08	3.11E-09	3.06E-09	6.17E-09	3.04E-09	2.72E-09	5.77E-09	1.62E-09	1.24E-09	2.85E-09
2569	647592.98	4197925.15	2.04E-08	2.01E-08	4.05E-08	3.07E-09	3.01E-09	6.08E-09	3.00E-09	2.68E-09	5.68E-09	1.59E-09	1.22E-09	2.81E-09
2570	647591.91	4197900.56	2.01E-08	1.98E-08	3.99E-08	3.03E-09	2.97E-09	6.00E-09	2.96E-09	2.65E-09	5.61E-09	1.57E-09	1.20E-09	2.77E-09
2571	647590.84	4197875.96	1.99E-08	1.96E-08	3.95E-08	2.99E-09	2.94E-09	5.93E-09	2.92E-09	2.62E-09	5.54E-09	1.55E-09	1.19E-09	2.74E-09
2572	647589.77	4197851.36	1.97E-08	1.94E-08	3.91E-08	2.96E-09	2.91E-09	5.87E-09	2.90E-09	2.59E-09	5.49E-09	1.54E-09	1.18E-09	2.72E-09
2573	647588.7	4197826.77	1.95E-08	1.92E-08	3.88E-08	2.94E-09	2.89E-09	5.83E-09	2.87E-09	2.57E-09	5.45E-09	1.53E-09	1.17E-09	2.69E-09
2574	647587.63	4197802.17	1.94E-08	1.91E-08	3.85E-08	2.92E-09	2.87E-09	5.79E-09	2.86E-09	2.56E-09	5.41E-09	1.52E-09	1.16E-09	2.68E-09
2575	647586.56	4197777.57	1.93E-08	1.90E-08	3.83E-08	2.90E-09	2.85E-09	5.75E-09	2.84E-09	2.54E-09	5.38E-09	1.51E-09	1.15E-09	2.66E-09
2576	647585.49	4197752.98	1.92E-08	1.89E-08	3.81E-08	2.89E-09	2.84E-09	5.72E-09	2.82E-09	2.53E-09	5.35E-09	1.50E-09	1.15E-09	2.65E-09
2577	647584.41	4197728.38	1.91E-08	1.88E-08	3.79E-08	2.87E-09	2.82E-09	5.69E-09	2.81E-09	2.51E-09	5.32E-09	1.49E-09	1.14E-09	2.63E-09
2578	647583.34	4197703.78	1.90E-08	1.87E-08	3.77E-08	2.86E-09	2.81E-09	5.66E-09	2.79E-09	2.50E-09	5.29E-09	1.48E-09	1.13E-09	2.62E-09
2579	647582.27	4197679.19	1.89E-08	1.86E-08	3.75E-08	2.84E-09	2.79E-09	5.63E-09	2.78E-09	2.48E-09	5.26E-09	1.47E-09	1.13E-09	2.60E-09
2580	647581.2	4197654.59	1.87E-08	1.85E-08	3.72E-08	2.82E-09	2.77E-09	5.59E-09	2.76E-09	2.47E-09	5.22E-09	1.46E-09	1.12E-09	2.58E-09

2581	647580.13	4197629.99	1.86E-08	1.83E-08	3.69E-08	2.79E-09	2.74E-09	5.53E-09	2.73E-09	2.44E-09	5.17E-09	1.45E-09	1.11E-09	2.56E-09
2582	647579.06	4197605.4	1.84E-08	1.81E-08	3.65E-08	2.77E-09	2.71E-09	5.48E-09	2.70E-09	2.42E-09	5.12E-09	1.44E-09	1.10E-09	2.53E-09
2583	647577.99	4197580.8	1.82E-08	1.79E-08	3.61E-08	2.73E-09	2.68E-09	5.42E-09	2.67E-09	2.39E-09	5.07E-09	1.42E-09	1.09E-09	2.51E-09
2584	647576.92	4197556.2	1.79E-08	1.77E-08	3.56E-08	2.70E-09	2.65E-09	5.35E-09	2.64E-09	2.36E-09	5.00E-09	1.40E-09	1.07E-09	2.47E-09
2585	647575.85	4197531.61	1.77E-08	1.74E-08	3.51E-08	2.66E-09	2.61E-09	5.27E-09	2.60E-09	2.33E-09	4.93E-09	1.38E-09	1.06E-09	2.44E-09
2586	647574.77	4197507.01	1.74E-08	1.72E-08	3.46E-08	2.62E-09	2.57E-09	5.20E-09	2.56E-09	2.29E-09	4.86E-09	1.36E-09	1.04E-09	2.40E-09
2587	647573.7	4197482.41	1.72E-08	1.69E-08	3.41E-08	2.58E-09	2.53E-09	5.11E-09	2.52E-09	2.26E-09	4.78E-09	1.34E-09	1.02E-09	2.36E-09
2588	647572.63	4197457.81	1.69E-08	1.66E-08	3.35E-08	2.54E-09	2.49E-09	5.03E-09	2.48E-09	2.22E-09	4.70E-09	1.32E-09	1.01E-09	2.33E-09
2589	647571.56	4197433.22	1.66E-08	1.63E-08	3.29E-08	2.50E-09	2.45E-09	4.95E-09	2.44E-09	2.19E-09	4.63E-09	1.30E-09	9.91E-10	2.29E-09
2590	647625.12	4198663.06	3.13E-08	3.08E-08	6.22E-08	4.71E-09	4.62E-09	9.33E-09	4.60E-09	4.12E-09	8.73E-09	2.45E-09	1.87E-09	4.32E-09
2591	647636.54	4198685.25	3.18E-08	3.13E-08	6.31E-08	4.78E-09	4.70E-09	9.48E-09	4.68E-09	4.19E-09	8.86E-09	2.48E-09	1.90E-09	4.38E-09
2592	647647.97	4198707.45	3.23E-08	3.18E-08	6.41E-08	4.86E-09	4.77E-09	9.63E-09	4.75E-09	4.25E-09	9.01E-09	2.52E-09	1.93E-09	4.45E-09
2593	647659.39	4198729.64	3.28E-08	3.23E-08	6.52E-08	4.94E-09	4.85E-09	9.79E-09	4.83E-09	4.32E-09	9.15E-09	2.57E-09	1.96E-09	4.53E-09
2594	647670.81	4198751.84	3.34E-08	3.29E-08	6.62E-08	5.02E-09	4.93E-09	9.95E-09	4.91E-09	4.39E-09	9.30E-09	2.61E-09	1.99E-09	4.60E-09
2595	647682.24	4198774.03	3.39E-08	3.34E-08	6.73E-08	5.10E-09	5.01E-09	1.01E-08	4.99E-09	4.47E-09	9.46E-09	2.65E-09	2.03E-09	4.68E-09
2596	647693.66	4198796.22	3.45E-08	3.40E-08	6.85E-08	5.19E-09	5.09E-09	1.03E-08	5.07E-09	4.54E-09	9.61E-09	2.70E-09	2.06E-09	4.75E-09
2597	647705.09	4198818.42	3.51E-08	3.46E-08	6.97E-08	5.28E-09	5.18E-09	1.05E-08	5.16E-09	4.62E-09	9.78E-09	2.74E-09	2.10E-09	4.84E-09
2598	647716.51	4198840.61	3.57E-08	3.52E-08	7.09E-08	5.37E-09	5.27E-09	1.06E-08	5.25E-09	4.70E-09	9.95E-09	2.79E-09	2.13E-09	4.92E-09
2599	647727.93	4198862.81	3.64E-08	3.58E-08	7.22E-08	5.47E-09	5.37E-09	1.08E-08	5.35E-09	4.78E-09	1.01E-08	2.84E-09	2.17E-09	5.01E-09
2600	647739.36	4198885	3.70E-08	3.64E-08	7.35E-08	5.57E-09	5.47E-09	1.10E-08	5.44E-09	4.87E-09	1.03E-08	2.89E-09	2.21E-09	5.10E-09
2601	647750.78	4198907.19	3.77E-08	3.71E-08	7.48E-08	5.67E-09	5.56E-09	1.12E-08	5.54E-09	4.96E-09	1.05E-08	2.94E-09	2.25E-09	5.19E-09
2602	647762.21	4198929.39	3.84E-08	3.78E-08	7.62E-08	5.77E-09	5.67E-09	1.14E-08	5.64E-09	5.05E-09	1.07E-08	3.00E-09	2.29E-09	5.29E-09
2603	647773.63	4198951.58	3.91E-08	3.85E-08	7.75E-08	5.88E-09	5.77E-09	1.16E-08	5.75E-09	5.14E-09	1.09E-08	3.05E-09	2.33E-09	5.38E-09
2604	649091.08	4198311.15	1.25E-06	1.23E-06	2.48E-06	1.88E-07	1.84E-07	3.72E-07	1.84E-07	1.64E-07	3.48E-07	9.75E-08	7.45E-08	1.72E-07
2605	649089.76	4198337.15	9.91E-07	9.75E-07	1.97E-06	1.49E-07	1.46E-07	2.95E-07	1.46E-07	1.30E-07	2.76E-07	7.74E-08	5.91E-08	1.37E-07
2606	649069.07	4198328.11	1.02E-06	1.00E-06	2.02E-06	1.53E-07	1.50E-07	3.03E-07	1.49E-07	1.34E-07	2.83E-07	7.94E-08	6.06E-08	1.40E-07
2607	649088.45	4198363.16	8.16E-07	8.04E-07	1.62E-06	1.23E-07	1.20E-07	2.43E-07	1.20E-07	1.07E-07	2.27E-07	6.38E-08	4.87E-08	1.12E-07
2608	649067.76	4198354.11	8.43E-07	8.30E-07	1.67E-06	1.27E-07	1.24E-07	2.51E-07	1.24E-07	1.11E-07	2.35E-07	6.58E-08	5.03E-08	1.16E-07
2609	649046.84	4198344.4	8.55E-07	8.42E-07	1.70E-06	1.29E-07	1.26E-07	2.55E-07	1.26E-07	1.13E-07	2.38E-07	6.68E-08	5.10E-08	1.18E-07
2610	649079.28	4198412.31	5.99E-07	5.89E-07	1.19E-06	9.00E-08	8.84E-08	1.78E-07	8.80E-08	7.88E-08	1.67E-07	4.68E-08	3.57E-08	8.25E-08
2611	649058.4	4198403.18	6.20E-07	6.10E-07	1.23E-06	9.32E-08	9.15E-08	1.85E-07	9.11E-08	8.16E-08	1.73E-07	4.84E-08	3.70E-08	8.54E-08
2612	649037.53	4198394.06	6.34E-07	6.24E-07	1.26E-06	9.53E-08	9.36E-08	1.89E-07	9.32E-08	8.34E-08	1.77E-07	4.95E-08	3.78E-08	8.73E-08
2613	649016.98	4198384.5	6.40E-07	6.30E-07	1.27E-06	9.62E-08	9.45E-08	1.91E-07	9.41E-08	8.42E-08	1.78E-07	5.00E-08	3.82E-08	8.82E-08
2614	649002.25	4198367.12	6.69E-07	6.58E-07	1.33E-06	1.01E-07	9.87E-08	1.99E-07	9.83E-08	8.80E-08	1.86E-07	5.22E-08	3.99E-08	9.22E-08
2615	649070.12	4198461.46	4.63E-07	4.56E-07	9.18E-07	6.96E-08	6.83E-08	1.38E-07	6.80E-08	6.09E-08	1.29E-07	3.61E-08	2.76E-08	6.38E-08
2616	649049.29	4198452.36	4.80E-07	4.72E-07	9.52E-07	7.21E-08	7.08E-08	1.43E-07	7.05E-08	6.31E-08	1.34E-07	3.75E-08	2.86E-08	6.61E-08
2617	649028.46	4198443.25	4.93E-07	4.86E-07	9.79E-07	7.42E-08	7.28E-08	1.47E-07	7.25E-08	6.49E-08	1.37E-07	3.85E-08	2.94E-08	6.80E-08
2618	649007.63	4198434.15	5.02E-07	4.94E-07	9.96E-07	7.55E-08	7.41E-08	1.50E-07	7.38E-08	6.60E-08	1.40E-07	3.92E-08	3.00E-08	6.92E-08
2619	648987.13	4198424.61	5.06E-07	4.98E-07	1.00E-06	7.61E-08	7.47E-08	1.51E-07	7.44E-08	6.66E-08	1.41E-07	3.95E-08	3.02E-08	6.97E-08
2620	648972.04	4198406.82	5.26E-07	5.18E-07	1.04E-06	7.91E-08	7.76E-08	1.57E-07	7.73E-08	6.92E-08	1.47E-07	4.11E-08	3.14E-08	7.25E-08
2621	648957.34	4198389.48	5.39E-07	5.31E-07	1.07E-06	8.11E-08	7.96E-08	1.61E-07	7.93E-08	7.10E-08	1.50E-07	4.21E-08	3.22E-08	7.43E-08
2622	649060.95	4198510.62	3.70E-07	3.64E-07	7.34E-07	5.56E-08	5.46E-08	1.10E-07	5.44E-08	4.87E-08	1.03E-07	2.89E-08	2.21E-08	5.10E-08
2623	649040.15	4198501.52	3.84E-07	3.78E-07	7.62E-07	5.77E-08	5.67E-08	1.14E-07	5.64E-08	5.05E-08	1.07E-07	3.00E-08	2.29E-08	5.29E-08
2624	649019.35	4198492.43	3.96E-07	3.90E-07	7.86E-07	5.95E-08	5.85E-08	1.18E-07	5.82E-08	5.21E-08	1.10E-07	3.09E-08	2.36E-08	5.46E-08
2625	648998.55	4198483.34	4.05E-07	3.99E-07	8.04E-07	6.09E-08	5.98E-08	1.21E-07	5.96E-08	5.33E-08	1.13E-07	3.16E-08	2.42E-08	5.58E-08
2626	648977.75	4198474.25	4.11E-07	4.05E-07	8.15E-07	6.18E-08	6.07E-08	1.22E-07	6.04E-08	5.41E-08	1.14E-07	3.21E-08	2.45E-08	5.66E-08
2627	648957.27	4198464.72	4.14E-07	4.07E-07	8.21E-07	6.22E-08	6.11E-08	1.23E-07	6.08E-08	5.44E-08	1.15E-07	3.23E-08	2.47E-08	5.70E-08
2628	648942.21	4198446.95	4.28E-07	4.21E-07	8.49E-07	6.44E-08	6.32E-08	1.28E-07	6.29E-08	5.63E-08	1.19E-07	3.34E-08	2.55E-08	5.90E-08
2629	648927.53	4198429.63	4.38E-07	4.32E-07	8.70E-07	6.59E-08	6.47E-08	1.31E-07	6.44E-08	5.77E-08	1.22E-07	3.42E-08	2.62E-08	6.04E-08
2630	648912.46	4198411.86	4.44E-07	4.38E-07	8.82E-07	6.68E-08	6.56E-08	1.32E-07	6.54E-08	5.85E-08	1.24E-07	3.47E-08	2.65E-08	6.12E-08
2631	649051.79	4198559.77	3.03E-07	2.98E-07	6.00E-07	4.55E-08	4.47E-08	9.02E-08	4.45E-08	3.98E-08	8.43E-08	2.36E-08	1.81E-08	4.17E-08
2632	649030.91	4198550.64	3.15E-07	3.10E-07	6.24E-07	4.73E-08	4.64E-08	9.37E-08	4.62E-08	4.14E-08	8.76E-08	2.46E-08	1.88E-08	4.33E-08
2633	649010.04	4198541.52	3.25E-07	3.20E-07	6.45E-07	4.89E-08	4.80E-08	9.69E-08	4.78E-08	4.28E-08	9.06E-08	2.54E-08	1.94E-08	4.48E-08
2634	648989.16	4198532.39	3.34E-07	3.29E-07	6.63E-07	5.02E-08	4.93E-08	9.95E-08	4.91E-08	4.40E-08	9.31E-08	2.61E-08	1.99E-08	4.60E-08
2635	648968.29	4198523.27	3.41E-07	3.35E-07	6.76E-07	5.12E-08	5.03E-08	1.02E-07	5.01E-08	4.48E-08	9.49E-08	2.66E-08	2.03E-08	4.69E-08
2636	648947.42	4198514.14	3.45E-07	3.39E-07	6.84E-07	5.18E-08	5.09E-08	1.03E-07	5.07E-08	4.54E-08	9.60E-08	2.69E-08	2.06E-08	4.75E-08
2637	648927.03	4198504.37	3.47E-07	3.41E-07	6.88E-07	5.22E-08	5.12E-08	1.03E-07	5.10E-08	4.56E-08	9.66E-08	2.71E-08	2.07E-08	4.78E-08
2638	648912.3	4198486.99	3.57E-07	3.52E-07	7.09E-07	5.37E-08	5.28E-08	1.07E-07	5.25E-08	4.70E-08	9.96E-08	2.79E-08	2.13E-08	4.92E-08
2639	648897.57	4198469.61	3.65E-07	3.60E-07	7.25E-07	5.49E-08	5.39E-08	1.09E-07	5.37E-08	4.81E-08	1.02E-07	2.85E-08	2.18E-08	5.03E-08
2640	648882.84	4198452.24	3.70E-07	3.64E-07	7.35E-07	5.57E-08	5.47E-08	1.10E-07	5.44E-08	4.87E-08	1.03E-07	2.89E-08	2.21E-08	5.10E-08
2641	648867.72	4198434.4	3.72E-07	3.66E-07	7.38E-07	5.59E-08	5.49E-08	1.11E-07	5.47E-08	4.90E-08	1.04E-07	2.91E-08	2.22E-08	5.13E-08
2642	649033.46	4198658.07	2.13E-07	2.10E-07	4.22E-07	3.20E-08	3.14E-08	6.34E-08	3.13E-08	2.80E-08	5.93E-08	1.66E-08	1.27E-08	2.93E-08
2643	649012.63	4198648.97	2.22E-07	2.18E-07	4.40E-07	3.33E-08	3.27E-08	6.61E-08	3.26E-08	2.92E-08	6.18E-08	1.73E-08	1.32E-08	3.06E-08
2644	648991.8	4198639.87	2.30E-07	2.26E-07	4.56E-07	3.46E-08	3.40E-08	6.85E-08	3.38E-08	3.03E-08	6.41E-08	1.80E-08	1.37E-08	3.17E-08
2645	648970.98	4198630.76	2.37E-07	2.34E-07	4.71E-07	3.57E-08	3.51E-08	7.08E-08	3.49E-08	3.12E-08	6.62E-08	1.85E-08	1.42E-08	3.27E-08
2646	648950.15	4198621.66	2.44E-07	2.40E-07	4.84E-07	3.67E-08	3.60E-08	7.27E-08	3.58E-08	3.21E-08	6.79E-08	1.90E-08	1.45E-08	3.36E-08
2647	648929.32	4198612.55	2.49E-07	2.45E-07	4.94E-07	3.74E-08	3.68E-08	7.42E-08	3.66E-08	3.28E-08	6.94E-08	1.94E-08	1.49E-08	3.43E-08
2648	648908.49	4198603.45	2.53E-07	2.49E-07	5.01E-07	3.80E-08	3.73E-08	7.53E-08	3.72E-08	3.33E-08	7.04E-08	1.97E-08	1.51E-08	3.48E-08
2649	648887.66	4198594.34	2.55E-07	2.51E-07	5.06E-07	3.83E-08	3.76E-08	7.60E-08	3.75E-08	3.35E-08	7.10E-08	1.99E-08	1.52E-08	3.51E-08
2650	648867.32	4198584.59	2.56E-07	2.52E-07	5.08E-07	3.85E-08	3.78E-08	7.63E-08	3.77E-08	3.37E-08	7.14E-08	2.00E-08	1.53E-08	3.53E-08
2651	648852.62	4198567.25	2.63E-07	2.59E-07	5.21E-07	3.95E-08	3.88E-08	7.83E-08	3.86E-08	3.46E-08	7.32E-08	2.05E-08	1.57E-08	3.62E-08
2652	648837.54	4198549.45	2.68E-07	2.64E-07	5.31E-07	4.03E-08	3.95E-08	7.98E-08	3.94E-08	3.52E-08	7.46E-08	2.09E-08	1.60E-08	3.69E-08
2653	648822.84	4198532.11	2.71E-07	2.67E-07	5.38E-07	4.07E-08	4.00E-08	8.08E-08	3.98E-08	3.57E-08	7.55E-08	2.12E-08	1.62E-08	3.73E-08
2654	648807.75	4198514.32	2.73E-07	2.68E-07	5.41E-07	4.10E-08	4.02E-08	8.12E-08	4.01E-08	3.59E-08	7.59E-08	2.13E-08	1.63E-08	3.76E-08
2655	648793.06	4198496.98	2.72E-07	2.68E-07	5.40E-07	4.09E-08	4.02E-08	8.11E-08	4.00E-08	3.58E-08	7.59E-08	2.13E-08	1.62E-08	3.75E-08
2656	648778.36	4198479.64	2.70E-07	2.66E-07	5.36E-07	4.06E-08	3.99E-08	8.05E-08	3.97E-08	3.56E-08	7.53E-08	2.11E-08	1.61E-08	3.72E-08

2657	649015.13	4198756.38	1.57E-07	1.55E-07	3.11E-07	2.36E-08	2.32E-08	4.68E-08	2.31E-08	2.07E-08	4.37E-08	1.23E-08	9.37E-09	2.16E-08
2658	648994.27	4198747.26	1.64E-07	1.61E-07	3.25E-07	2.46E-08	2.42E-08	4.88E-08	2.41E-08	2.16E-08	4.56E-08	1.28E-08	9.78E-09	2.26E-08
2659	648973.42	4198738.15	1.70E-07	1.68E-07	3.38E-07	2.56E-08	2.52E-08	5.08E-08	2.50E-08	2.24E-08	4.75E-08	1.33E-08	1.02E-08	2.35E-08
2660	648952.56	4198729.03	1.76E-07	1.74E-07	3.50E-07	2.65E-08	2.61E-08	5.26E-08	2.59E-08	2.32E-08	4.92E-08	1.38E-08	1.05E-08	2.43E-08
2661	648931.71	4198719.91	1.82E-07	1.79E-07	3.61E-07	2.74E-08	2.69E-08	5.42E-08	2.68E-08	2.40E-08	5.07E-08	1.42E-08	1.09E-08	2.51E-08
2662	648910.85	4198710.8	1.87E-07	1.84E-07	3.71E-07	2.81E-08	2.76E-08	5.57E-08	2.75E-08	2.46E-08	5.21E-08	1.46E-08	1.12E-08	2.57E-08
2663	648890	4198701.68	1.91E-07	1.88E-07	3.79E-07	2.87E-08	2.82E-08	5.69E-08	2.81E-08	2.51E-08	5.32E-08	1.49E-08	1.14E-08	2.63E-08
2664	648869.14	4198692.56	1.94E-07	1.91E-07	3.85E-07	2.92E-08	2.87E-08	5.79E-08	2.85E-08	2.56E-08	5.41E-08	1.52E-08	1.16E-08	2.68E-08
2665	648848.29	4198683.45	1.96E-07	1.93E-07	3.90E-07	2.95E-08	2.90E-08	5.86E-08	2.89E-08	2.59E-08	5.47E-08	1.53E-08	1.17E-08	2.71E-08
2666	648827.43	4198674.33	1.98E-07	1.95E-07	3.93E-07	2.97E-08	2.92E-08	5.90E-08	2.91E-08	2.60E-08	5.51E-08	1.55E-08	1.18E-08	2.73E-08
2667	648807.22	4198664.35	1.99E-07	1.96E-07	3.94E-07	2.99E-08	2.93E-08	5.92E-08	2.92E-08	2.62E-08	5.54E-08	1.55E-08	1.19E-08	2.74E-08
2668	648792.5	4198646.98	2.03E-07	2.00E-07	4.03E-07	3.05E-08	3.00E-08	6.05E-08	2.98E-08	2.67E-08	5.66E-08	1.59E-08	1.21E-08	2.80E-08
2669	648777.79	4198629.62	2.06E-07	2.03E-07	4.10E-07	3.10E-08	3.05E-08	6.15E-08	3.03E-08	2.72E-08	5.75E-08	1.61E-08	1.23E-08	2.84E-08
2670	648763.07	4198612.26	2.09E-07	2.05E-07	4.14E-07	3.14E-08	3.08E-08	6.22E-08	3.07E-08	2.75E-08	5.82E-08	1.63E-08	1.25E-08	2.88E-08
2671	648748.35	4198594.9	2.10E-07	2.07E-07	4.17E-07	3.16E-08	3.10E-08	6.26E-08	3.09E-08	2.76E-08	5.85E-08	1.64E-08	1.25E-08	2.89E-08
2672	648733.63	4198577.53	2.10E-07	2.07E-07	4.17E-07	3.16E-08	3.10E-08	6.26E-08	3.09E-08	2.77E-08	5.86E-08	1.64E-08	1.25E-08	2.90E-08
2673	648718.92	4198560.17	2.09E-07	2.06E-07	4.15E-07	3.15E-08	3.09E-08	6.23E-08	3.08E-08	2.75E-08	5.83E-08	1.63E-08	1.25E-08	2.88E-08
2674	648704.2	4198542.81	2.07E-07	2.04E-07	4.11E-07	3.12E-08	3.06E-08	6.18E-08	3.05E-08	2.73E-08	5.77E-08	1.62E-08	1.24E-08	2.86E-08
2675	648689.48	4198525.45	2.04E-07	2.01E-07	4.05E-07	3.07E-08	3.02E-08	6.09E-08	3.00E-08	2.69E-08	5.69E-08	1.60E-08	1.22E-08	2.81E-08
2676	648996.8	4198854.69	1.20E-07	1.18E-07	2.38E-07	1.80E-08	1.77E-08	3.57E-08	1.76E-08	1.58E-08	3.34E-08	9.36E-09	7.15E-09	1.65E-08
2677	648975.93	4198845.56	1.25E-07	1.23E-07	2.49E-07	1.88E-08	1.85E-08	3.73E-08	1.84E-08	1.65E-08	3.49E-08	9.78E-09	7.48E-09	1.73E-08
2678	648955.05	4198836.44	1.30E-07	1.28E-07	2.59E-07	1.96E-08	1.93E-08	3.89E-08	1.92E-08	1.72E-08	3.64E-08	1.02E-08	7.79E-09	1.80E-08
2679	648934.18	4198827.31	1.35E-07	1.33E-07	2.69E-07	2.04E-08	2.00E-08	4.04E-08	1.99E-08	1.78E-08	3.77E-08	1.06E-08	8.08E-09	1.87E-08
2680	648913.31	4198818.19	1.40E-07	1.38E-07	2.78E-07	2.11E-08	2.07E-08	4.17E-08	2.06E-08	1.84E-08	3.90E-08	1.09E-08	8.36E-09	1.93E-08
2681	648892.43	4198809.06	1.44E-07	1.42E-07	2.87E-07	2.17E-08	2.13E-08	4.30E-08	2.12E-08	1.90E-08	4.02E-08	1.13E-08	8.62E-09	1.99E-08
2682	648871.56	4198799.94	1.48E-07	1.46E-07	2.94E-07	2.23E-08	2.19E-08	4.42E-08	2.18E-08	1.95E-08	4.13E-08	1.16E-08	8.84E-09	2.04E-08
2683	648850.68	4198790.81	1.52E-07	1.49E-07	3.01E-07	2.28E-08	2.24E-08	4.52E-08	2.23E-08	1.99E-08	4.22E-08	1.18E-08	9.04E-09	2.09E-08
2684	648829.81	4198781.69	1.54E-07	1.52E-07	3.06E-07	2.32E-08	2.28E-08	4.60E-08	2.27E-08	2.03E-08	4.30E-08	1.21E-08	9.21E-09	2.13E-08
2685	648808.94	4198772.56	1.56E-07	1.54E-07	3.10E-07	2.35E-08	2.31E-08	4.66E-08	2.30E-08	2.06E-08	4.36E-08	1.22E-08	9.34E-09	2.16E-08
2686	648788.06	4198763.44	1.58E-07	1.56E-07	3.14E-07	2.38E-08	2.33E-08	4.71E-08	2.32E-08	2.08E-08	4.40E-08	1.23E-08	9.43E-09	2.18E-08
2687	648767.19	4198754.31	1.59E-07	1.56E-07	3.15E-07	2.39E-08	2.35E-08	4.74E-08	2.34E-08	2.09E-08	4.43E-08	1.24E-08	9.48E-09	2.19E-08
2688	648747.12	4198744.1	1.60E-07	1.57E-07	3.17E-07	2.40E-08	2.36E-08	4.76E-08	2.35E-08	2.10E-08	4.45E-08	1.25E-08	9.52E-09	2.20E-08
2689	648732.39	4198726.73	1.63E-07	1.60E-07	3.23E-07	2.45E-08	2.40E-08	4.85E-08	2.39E-08	2.14E-08	4.53E-08	1.27E-08	9.71E-09	2.24E-08
2690	648717.27	4198708.89	1.65E-07	1.63E-07	3.28E-07	2.48E-08	2.44E-08	4.92E-08	2.43E-08	2.17E-08	4.60E-08	1.29E-08	9.85E-09	2.27E-08
2691	648702.54	4198691.51	1.67E-07	1.64E-07	3.31E-07	2.51E-08	2.46E-08	4.97E-08	2.45E-08	2.20E-08	4.65E-08	1.30E-08	9.96E-09	2.30E-08
2692	648687.81	4198674.14	1.68E-07	1.65E-07	3.33E-07	2.52E-08	2.48E-08	5.00E-08	2.47E-08	2.21E-08	4.68E-08	1.31E-08	1.00E-08	2.31E-08
2693	648673.08	4198656.76	1.68E-07	1.66E-07	3.34E-07	2.53E-08	2.48E-08	5.01E-08	2.47E-08	2.21E-08	4.69E-08	1.31E-08	1.00E-08	2.32E-08
2694	648658.35	4198639.38	1.68E-07	1.65E-07	3.33E-07	2.52E-08	2.48E-08	5.00E-08	2.47E-08	2.21E-08	4.68E-08	1.31E-08	1.00E-08	2.31E-08
2695	648643.62	4198622	1.67E-07	1.64E-07	3.31E-07	2.51E-08	2.46E-08	4.97E-08	2.45E-08	2.19E-08	4.64E-08	1.30E-08	9.95E-09	2.30E-08
2696	648628.89	4198604.62	1.65E-07	1.62E-07	3.27E-07	2.48E-08	2.43E-08	4.91E-08	2.42E-08	2.17E-08	4.59E-08	1.29E-08	9.84E-09	2.27E-08
2697	648614.16	4198587.25	1.62E-07	1.60E-07	3.22E-07	2.44E-08	2.40E-08	4.84E-08	2.39E-08	2.14E-08	4.53E-08	1.27E-08	9.69E-09	2.24E-08
2698	648599.43	4198569.87	1.59E-07	1.57E-07	3.16E-07	2.40E-08	2.35E-08	4.75E-08	2.34E-08	2.10E-08	4.44E-08	1.24E-08	9.51E-09	2.20E-08
2699	648978.47	4198952.99	9.43E-08	9.28E-08	1.87E-07	1.42E-08	1.39E-08	2.81E-08	1.39E-08	1.24E-08	2.63E-08	7.37E-09	5.63E-09	1.30E-08
2700	648957.59	4198943.86	9.85E-08	9.70E-08	1.96E-07	1.48E-08	1.45E-08	2.94E-08	1.45E-08	1.30E-08	2.75E-08	7.70E-09	5.88E-09	1.36E-08
2701	648936.7	4198934.73	1.03E-07	1.01E-07	2.04E-07	1.54E-08	1.52E-08	3.06E-08	1.51E-08	1.35E-08	2.86E-08	8.02E-09	6.13E-09	1.41E-08
2702	648915.81	4198925.6	1.07E-07	1.05E-07	2.12E-07	1.60E-08	1.58E-08	3.18E-08	1.57E-08	1.40E-08	2.97E-08	8.34E-09	6.37E-09	1.47E-08
2703	648894.92	4198916.47	1.11E-07	1.09E-07	2.19E-07	1.66E-08	1.63E-08	3.30E-08	1.63E-08	1.46E-08	3.08E-08	8.64E-09	6.60E-09	1.52E-08
2704	648874.04	4198907.34	1.14E-07	1.12E-07	2.27E-07	1.72E-08	1.69E-08	3.40E-08	1.68E-08	1.50E-08	3.18E-08	8.92E-09	6.82E-09	1.57E-08
2705	648853.15	4198898.21	1.18E-07	1.16E-07	2.33E-07	1.77E-08	1.74E-08	3.50E-08	1.73E-08	1.55E-08	3.28E-08	9.19E-09	7.02E-09	1.62E-08
2706	648832.26	4198889.08	1.21E-07	1.19E-07	2.39E-07	1.81E-08	1.78E-08	3.60E-08	1.77E-08	1.59E-08	3.36E-08	9.43E-09	7.20E-09	1.66E-08
2707	648811.38	4198879.95	1.23E-07	1.21E-07	2.45E-07	1.86E-08	1.82E-08	3.68E-08	1.81E-08	1.62E-08	3.44E-08	9.64E-09	7.36E-09	1.70E-08
2708	648790.49	4198870.82	1.26E-07	1.24E-07	2.50E-07	1.89E-08	1.86E-08	3.75E-08	1.85E-08	1.65E-08	3.50E-08	9.82E-09	7.50E-09	1.73E-08
2709	648769.6	4198861.69	1.28E-07	1.26E-07	2.53E-07	1.92E-08	1.89E-08	3.81E-08	1.88E-08	1.68E-08	3.56E-08	9.97E-09	7.62E-09	1.76E-08
2710	648748.71	4198852.56	1.29E-07	1.27E-07	2.56E-07	1.94E-08	1.91E-08	3.85E-08	1.90E-08	1.70E-08	3.60E-08	1.01E-08	7.71E-09	1.78E-08
2711	648727.83	4198843.43	1.30E-07	1.28E-07	2.59E-07	1.96E-08	1.92E-08	3.88E-08	1.92E-08	1.71E-08	3.63E-08	1.02E-08	7.78E-09	1.80E-08
2712	648706.94	4198834.3	1.31E-07	1.29E-07	2.60E-07	1.97E-08	1.93E-08	3.90E-08	1.93E-08	1.72E-08	3.65E-08	1.02E-08	7.82E-09	1.80E-08
2713	648687.02	4198823.86	1.32E-07	1.30E-07	2.61E-07	1.98E-08	1.94E-08	3.92E-08	1.93E-08	1.73E-08	3.67E-08	1.03E-08	7.85E-09	1.81E-08
2714	648672.28	4198806.47	1.34E-07	1.32E-07	2.66E-07	2.01E-08	1.98E-08	3.99E-08	1.97E-08	1.76E-08	3.73E-08	1.05E-08	7.99E-09	1.84E-08
2715	648657.54	4198789.08	1.36E-07	1.34E-07	2.69E-07	2.04E-08	2.00E-08	4.04E-08	2.00E-08	1.79E-08	3.78E-08	1.06E-08	8.10E-09	1.87E-08
2716	648642.8	4198771.7	1.37E-07	1.35E-07	2.72E-07	2.06E-08	2.02E-08	4.09E-08	2.02E-08	1.80E-08	3.82E-08	1.07E-08	8.18E-09	1.89E-08
2717	648628.06	4198754.31	1.38E-07	1.36E-07	2.74E-07	2.08E-08	2.04E-08	4.11E-08	2.03E-08	1.82E-08	3.85E-08	1.08E-08	8.24E-09	1.90E-08
2718	648613.32	4198736.92	1.38E-07	1.36E-07	2.75E-07	2.08E-08	2.04E-08	4.13E-08	2.04E-08	1.82E-08	3.86E-08	1.08E-08	8.26E-09	1.91E-08
2719	648598.58	4198719.53	1.38E-07	1.36E-07	2.75E-07	2.08E-08	2.04E-08	4.12E-08	2.03E-08	1.82E-08	3.86E-08	1.08E-08	8.26E-09	1.91E-08
2720	648583.84	4198702.14	1.38E-07	1.36E-07	2.73E-07	2.07E-08	2.03E-08	4.11E-08	2.03E-08	1.81E-08	3.84E-08	1.08E-08	8.22E-09	1.90E-08
2721	648569.1	4198684.75	1.37E-07	1.35E-07	2.71E-07	2.06E-08	2.02E-08	4.07E-08	2.01E-08	1.80E-08	3.81E-08	1.07E-08	8.16E-09	1.88E-08
2722	648554.36	4198667.36	1.35E-07	1.33E-07	2.68E-07	2.03E-08	1.99E-08	4.03E-08	1.99E-08	1.78E-08	3.76E-08	1.06E-08	8.06E-09	1.86E-08
2723	648539.62	4198649.97	1.33E-07	1.31E-07	2.64E-07	2.00E-08	1.97E-08	3.97E-08	1.96E-08	1.75E-08	3.71E-08	1.04E-08	7.94E-09	1.83E-08
2724	648524.88	4198632.59	1.31E-07	1.29E-07	2.59E-07	1.97E-08	1.93E-08	3.89E-08	1.92E-08	1.72E-08	3.64E-08	1.02E-08	7.80E-09	1.80E-08
2725	648510.14	4198615.2	1.28E-07	1.26E-07	2.54E-07	1.92E-08	1.89E-08	3.81E-08	1.88E-08	1.68E-08	3.56E-08	9.99E-09	7.64E-09	1.76E-08
2726	648941.82	4199149.6	6.27E-08	6.17E-08	1.24E-07	9.42E-09	9.25E-09	1.87E-08	9.21E-09	8.25E-09	1.75E-08	4.89E-09	3.74E-09	8.63E-09
2727	648920.94	4199140.48	6.54E-08	6.43E-08	1.30E-07	9.83E-09	9.65E-09	1.95E-08	9.61E-09	8.60E-09	1.82E-08	5.11E-09	3.90E-09	9.01E-09
2728	648900.07	4199131.35	6.81E-08	6.70E-08	1.35E-07	1.02E-08	1.00E-08	2.03E-08	1.00E-08	8.96E-09	1.90E-08	5.32E-09	4.06E-09	9.38E-09
2729	648879.19	4199122.23	7.07E-08	6.96E-08	1.40E-07	1.06E-08	1.04E-08	2.11E-08	1.04E-08	9.30E-09	1.97E-08	5.52E-09	4.22E-09	9.74E-09
2730	648858.32	4199113.11	7.33E-08	7.22E-08	1.45E-07	1.10E-08	1.08E-08	2.18E-08	1.08E-08	9.65E-09	2.04E-08	5.73E-09	4.38E-09	1.01E-08
2731	648837.45	4199103.98	7.59E-08	7.47E-08	1.51E-07	1.14E-08	1.12E-08	2.26E-08	1.12E-08	9.98E-09	2.11E-08	5.93E-09	4.53E-09	1.05E-08
2732	648816.57	4199094.86	7.83E-08	7.71E-08	1.55E-07	1.18E-08	1.16E-08	2.33E-08	1.15E-08	1.03E-08	2.18E-08	6.12E-09	4.67E-09	1.08E-08

2733	648795.7	4199085.73	8.06E-08	7.94E-08	1.60E-07	1.21E-08	1.19E-08	2.40E-08	1.19E-08	1.06E-08	2.25E-08	6.30E-09	4.81E-09	1.11E-08
2734	648774.83	4199076.61	8.28E-08	8.15E-08	1.64E-07	1.25E-08	1.22E-08	2.47E-08	1.22E-08	1.09E-08	2.31E-08	6.47E-09	4.94E-09	1.14E-08
2735	648753.95	4199067.48	8.48E-08	8.35E-08	1.68E-07	1.28E-08	1.25E-08	2.53E-08	1.25E-08	1.12E-08	2.36E-08	6.63E-09	5.06E-09	1.17E-08
2736	648733.08	4199058.36	8.67E-08	8.54E-08	1.72E-07	1.30E-08	1.28E-08	2.58E-08	1.27E-08	1.14E-08	2.42E-08	6.77E-09	5.18E-09	1.19E-08
2737	648712.2	4199049.23	8.84E-08	8.70E-08	1.75E-07	1.33E-08	1.31E-08	2.63E-08	1.30E-08	1.16E-08	2.46E-08	6.91E-09	5.28E-09	1.22E-08
2738	648691.33	4199040.11	8.99E-08	8.85E-08	1.78E-07	1.35E-08	1.33E-08	2.68E-08	1.32E-08	1.18E-08	2.51E-08	7.02E-09	5.37E-09	1.24E-08
2739	648670.46	4199030.98	9.12E-08	8.98E-08	1.81E-07	1.37E-08	1.35E-08	2.72E-08	1.34E-08	1.20E-08	2.54E-08	7.13E-09	5.44E-09	1.26E-08
2740	648649.58	4199021.86	9.23E-08	9.09E-08	1.83E-07	1.39E-08	1.36E-08	2.75E-08	1.36E-08	1.21E-08	2.57E-08	7.21E-09	5.51E-09	1.27E-08
2741	648628.71	4199012.73	9.32E-08	9.18E-08	1.85E-07	1.40E-08	1.38E-08	2.78E-08	1.37E-08	1.23E-08	2.60E-08	7.28E-09	5.56E-09	1.28E-08
2742	648607.83	4199003.61	9.39E-08	9.24E-08	1.86E-07	1.41E-08	1.39E-08	2.80E-08	1.38E-08	1.24E-08	2.62E-08	7.33E-09	5.60E-09	1.29E-08
2743	648586.96	4198994.48	9.43E-08	9.28E-08	1.87E-07	1.42E-08	1.39E-08	2.81E-08	1.39E-08	1.24E-08	2.63E-08	7.37E-09	5.63E-09	1.30E-08
2744	648566.83	4198983.38	9.48E-08	9.33E-08	1.88E-07	1.43E-08	1.40E-08	2.83E-08	1.39E-08	1.25E-08	2.64E-08	7.41E-09	5.66E-09	1.31E-08
2745	648552.1	4198966	9.62E-08	9.48E-08	1.91E-07	1.45E-08	1.42E-08	2.87E-08	1.42E-08	1.27E-08	2.68E-08	7.52E-09	5.74E-09	1.33E-08
2746	648537.37	4198948.63	9.75E-08	9.59E-08	1.93E-07	1.47E-08	1.44E-08	2.90E-08	1.43E-08	1.28E-08	2.72E-08	7.61E-09	5.82E-09	1.34E-08
2747	648522.64	4198931.25	9.84E-08	9.69E-08	1.95E-07	1.48E-08	1.45E-08	2.93E-08	1.45E-08	1.30E-08	2.74E-08	7.69E-09	5.88E-09	1.36E-08
2748	648507.52	4198913.41	9.92E-08	9.77E-08	1.97E-07	1.49E-08	1.46E-08	2.96E-08	1.46E-08	1.31E-08	2.76E-08	7.75E-09	5.92E-09	1.37E-08
2749	648492.79	4198896.04	9.97E-08	9.81E-08	1.98E-07	1.50E-08	1.47E-08	2.97E-08	1.47E-08	1.31E-08	2.78E-08	7.79E-09	5.95E-09	1.37E-08
2750	648478.06	4198878.66	9.99E-08	9.83E-08	1.98E-07	1.50E-08	1.47E-08	2.98E-08	1.47E-08	1.31E-08	2.78E-08	7.80E-09	5.96E-09	1.38E-08
2751	648463.33	4198861.28	9.98E-08	9.82E-08	1.98E-07	1.50E-08	1.47E-08	2.97E-08	1.47E-08	1.31E-08	2.78E-08	7.79E-09	5.95E-09	1.37E-08
2752	648448.6	4198843.9	9.94E-08	9.79E-08	1.97E-07	1.50E-08	1.47E-08	2.96E-08	1.46E-08	1.31E-08	2.77E-08	7.77E-09	5.93E-09	1.37E-08
2753	648433.87	4198826.53	9.88E-08	9.73E-08	1.96E-07	1.49E-08	1.46E-08	2.94E-08	1.45E-08	1.30E-08	2.75E-08	7.72E-09	5.90E-09	1.36E-08
2754	648419.14	4198809.15	9.79E-08	9.64E-08	1.94E-07	1.47E-08	1.45E-08	2.92E-08	1.44E-08	1.29E-08	2.73E-08	7.65E-09	5.84E-09	1.35E-08
2755	648404.41	4198791.77	9.67E-08	9.52E-08	1.92E-07	1.45E-08	1.43E-08	2.88E-08	1.42E-08	1.27E-08	2.70E-08	7.56E-09	5.77E-09	1.33E-08
2756	648389.67	4198774.39	9.54E-08	9.39E-08	1.89E-07	1.43E-08	1.41E-08	2.84E-08	1.40E-08	1.25E-08	2.66E-08	7.45E-09	5.69E-09	1.31E-08
2757	648374.94	4198757.01	9.38E-08	9.23E-08	1.86E-07	1.41E-08	1.38E-08	2.79E-08	1.38E-08	1.23E-08	2.61E-08	7.32E-09	5.60E-09	1.29E-08
2758	648360.21	4198739.64	9.20E-08	9.06E-08	1.83E-07	1.38E-08	1.36E-08	2.74E-08	1.35E-08	1.21E-08	2.56E-08	7.19E-09	5.49E-09	1.27E-08
2759	648345.1	4198721.8	9.00E-08	8.86E-08	1.79E-07	1.35E-08	1.33E-08	2.68E-08	1.32E-08	1.18E-08	2.51E-08	7.03E-09	5.37E-09	1.24E-08
2760	648330.36	4198704.42	8.79E-08	8.66E-08	1.74E-07	1.32E-08	1.30E-08	2.62E-08	1.29E-08	1.16E-08	2.45E-08	6.87E-09	5.25E-09	1.21E-08
2761	648905.16	4199346.22	4.49E-08	4.42E-08	8.91E-08	6.75E-09	6.63E-09	1.34E-08	6.60E-09	5.91E-09	1.25E-08	3.51E-09	2.68E-09	6.19E-09
2762	648884.27	4199337.08	4.67E-08	4.60E-08	9.27E-08	7.02E-09	6.90E-09	1.39E-08	6.87E-09	6.15E-09	1.30E-08	3.65E-09	2.79E-09	6.44E-09
2763	648863.38	4199327.95	4.85E-08	4.78E-08	9.63E-08	7.29E-09	7.16E-09	1.45E-08	7.13E-09	6.38E-09	1.35E-08	3.79E-09	2.90E-09	6.68E-09
2764	648842.49	4199318.82	5.03E-08	4.95E-08	9.99E-08	7.57E-09	7.43E-09	1.50E-08	7.40E-09	6.62E-09	1.40E-08	3.93E-09	3.00E-09	6.93E-09
2765	648821.6	4199309.69	5.21E-08	5.13E-08	1.03E-07	7.83E-09	7.69E-09	1.55E-08	7.66E-09	6.86E-09	1.45E-08	4.07E-09	3.11E-09	7.18E-09
2766	648800.71	4199300.56	5.39E-08	5.30E-08	1.07E-07	8.10E-09	7.95E-09	1.61E-08	7.92E-09	7.09E-09	1.50E-08	4.21E-09	3.21E-09	7.42E-09
2767	648779.82	4199291.42	5.56E-08	5.47E-08	1.10E-07	8.36E-09	8.21E-09	1.66E-08	8.17E-09	7.32E-09	1.55E-08	4.34E-09	3.32E-09	7.66E-09
2768	648758.92	4199282.29	5.73E-08	5.64E-08	1.14E-07	8.61E-09	8.45E-09	1.71E-08	8.42E-09	7.54E-09	1.60E-08	4.47E-09	3.42E-09	7.89E-09
2769	648738.03	4199273.16	5.89E-08	5.80E-08	1.17E-07	8.85E-09	8.69E-09	1.75E-08	8.66E-09	7.75E-09	1.64E-08	4.60E-09	3.51E-09	8.11E-09
2770	648717.14	4199264.03	6.04E-08	5.95E-08	1.20E-07	9.09E-09	8.92E-09	1.80E-08	8.89E-09	7.95E-09	1.68E-08	4.72E-09	3.61E-09	8.33E-09
2771	648696.25	4199254.9	6.19E-08	6.10E-08	1.23E-07	9.31E-09	9.14E-09	1.85E-08	9.11E-09	8.15E-09	1.73E-08	4.84E-09	3.70E-09	8.53E-09
2772	648675.36	4199245.76	6.33E-08	6.24E-08	1.26E-07	9.52E-09	9.35E-09	1.89E-08	9.31E-09	8.34E-09	1.76E-08	4.95E-09	3.78E-09	8.73E-09
2773	648654.47	4199236.63	6.47E-08	6.36E-08	1.28E-07	9.72E-09	9.55E-09	1.93E-08	9.51E-09	8.51E-09	1.80E-08	5.05E-09	3.86E-09	8.91E-09
2774	648633.58	4199227.5	6.59E-08	6.49E-08	1.31E-07	9.91E-09	9.73E-09	1.96E-08	9.69E-09	8.67E-09	1.84E-08	5.15E-09	3.93E-09	9.08E-09
2775	648612.69	4199218.37	6.70E-08	6.60E-08	1.33E-07	1.01E-08	9.89E-09	2.00E-08	9.85E-09	8.82E-09	1.87E-08	5.23E-09	4.00E-09	9.23E-09
2776	648591.8	4199209.24	6.80E-08	6.70E-08	1.35E-07	1.02E-08	1.00E-08	2.03E-08	1.00E-08	8.95E-09	1.90E-08	5.31E-09	4.06E-09	9.37E-09
2777	648570.91	4199200.1	6.89E-08	6.79E-08	1.37E-07	1.04E-08	1.02E-08	2.05E-08	1.01E-08	9.07E-09	1.92E-08	5.39E-09	4.11E-09	9.50E-09
2778	648550.02	4199190.97	6.98E-08	6.87E-08	1.38E-07	1.05E-08	1.03E-08	2.08E-08	1.03E-08	9.18E-09	1.94E-08	5.45E-09	4.16E-09	9.61E-09
2779	648529.13	4199181.84	7.05E-08	6.94E-08	1.40E-07	1.06E-08	1.04E-08	2.10E-08	1.04E-08	9.27E-09	1.96E-08	5.50E-09	4.20E-09	9.71E-09
2780	648508.24	4199172.71	7.10E-08	6.99E-08	1.41E-07	1.07E-08	1.05E-08	2.12E-08	1.04E-08	9.35E-09	1.98E-08	5.55E-09	4.24E-09	9.79E-09
2781	648487.35	4199163.58	7.15E-08	7.04E-08	1.42E-07	1.07E-08	1.06E-08	2.13E-08	1.05E-08	9.41E-09	1.99E-08	5.58E-09	4.27E-09	9.85E-09
2782	648466.45	4199154.44	7.18E-08	7.07E-08	1.43E-07	1.08E-08	1.06E-08	2.14E-08	1.06E-08	9.45E-09	2.00E-08	5.61E-09	4.29E-09	9.90E-09
2783	648446.63	4199142.9	7.23E-08	7.12E-08	1.43E-07	1.09E-08	1.07E-08	2.15E-08	1.06E-08	9.51E-09	2.01E-08	5.65E-09	4.31E-09	9.96E-09
2784	648431.89	4199125.51	7.33E-08	7.22E-08	1.45E-07	1.10E-08	1.08E-08	2.18E-08	1.08E-08	9.65E-09	2.04E-08	5.73E-09	4.37E-09	1.01E-08
2785	648417.15	4199108.11	7.42E-08	7.30E-08	1.47E-07	1.12E-08	1.10E-08	2.21E-08	1.09E-08	9.76E-09	2.07E-08	5.79E-09	4.43E-09	1.02E-08
2786	648402.4	4199090.72	7.49E-08	7.38E-08	1.49E-07	1.13E-08	1.11E-08	2.23E-08	1.10E-08	9.86E-09	2.09E-08	5.85E-09	4.47E-09	1.03E-08
2787	648387.27	4199072.87	7.56E-08	7.44E-08	1.50E-07	1.14E-08	1.12E-08	2.25E-08	1.11E-08	9.94E-09	2.11E-08	5.90E-09	4.51E-09	1.04E-08
2788	648372.53	4199055.48	7.60E-08	7.48E-08	1.51E-07	1.14E-08	1.12E-08	2.27E-08	1.12E-08	1.00E-08	2.12E-08	5.94E-09	4.54E-09	1.05E-08
2789	648357.79	4199038.09	7.63E-08	7.51E-08	1.51E-07	1.15E-08	1.13E-08	2.27E-08	1.12E-08	1.00E-08	2.13E-08	5.96E-09	4.55E-09	1.05E-08
2790	648343.05	4199020.7	7.64E-08	7.53E-08	1.52E-07	1.15E-08	1.13E-08	2.28E-08	1.12E-08	1.01E-08	2.13E-08	5.97E-09	4.56E-09	1.05E-08
2791	648328.3	4199003.31	7.64E-08	7.52E-08	1.52E-07	1.15E-08	1.13E-08	2.28E-08	1.12E-08	1.01E-08	2.13E-08	5.97E-09	4.56E-09	1.05E-08
2792	648313.56	4198985.91	7.62E-08	7.50E-08	1.51E-07	1.15E-08	1.12E-08	2.27E-08	1.12E-08	1.00E-08	2.12E-08	5.95E-09	4.55E-09	1.05E-08
2793	648298.82	4198968.52	7.58E-08	7.46E-08	1.50E-07	1.14E-08	1.12E-08	2.26E-08	1.11E-08	9.98E-09	2.11E-08	5.92E-09	4.52E-09	1.04E-08
2794	648284.08	4198951.13	7.53E-08	7.41E-08	1.49E-07	1.13E-08	1.11E-08	2.24E-08	1.11E-08	9.91E-09	2.10E-08	5.88E-09	4.49E-09	1.04E-08
2795	648269.33	4198933.74	7.46E-08	7.34E-08	1.48E-07	1.12E-08	1.10E-08	2.22E-08	1.10E-08	9.82E-09	2.08E-08	5.83E-09	4.45E-09	1.03E-08
2796	648254.59	4198916.35	7.37E-08	7.26E-08	1.46E-07	1.11E-08	1.09E-08	2.20E-08	1.08E-08	9.70E-09	2.05E-08	5.76E-09	4.40E-09	1.02E-08
2797	648239.85	4198898.96	7.27E-08	7.16E-08	1.44E-07	1.09E-08	1.07E-08	2.17E-08	1.07E-08	9.57E-09	2.03E-08	5.68E-09	4.34E-09	1.00E-08
2798	648225.11	4198881.56	7.16E-08	7.05E-08	1.42E-07	1.08E-08	1.06E-08	2.13E-08	1.05E-08	9.43E-09	2.00E-08	5.60E-09	4.28E-09	9.87E-09
2799	648210.36	4198864.17	7.04E-08	6.93E-08	1.40E-07	1.06E-08	1.04E-08	2.10E-08	1.04E-08	9.27E-09	1.96E-08	5.50E-09	4.20E-09	9.70E-09
2800	648195.62	4198846.78	6.91E-08	6.80E-08	1.37E-07	1.04E-08	1.02E-08	2.06E-08	1.02E-08	9.09E-09	1.93E-08	5.40E-09	4.12E-09	9.52E-09
2801	648180.88	4198829.39	6.77E-08	6.66E-08	1.34E-07	1.02E-08	1.00E-08	2.02E-08	9.95E-09	8.91E-09	1.89E-08	5.29E-09	4.04E-09	9.33E-09
2802	648166.14	4198812	6.62E-08	6.52E-08	1.31E-07	9.96E-09	9.78E-09	1.97E-08	9.74E-09	8.72E-09	1.85E-08	5.17E-09	3.95E-09	9.13E-09
2803	648151.39	4198794.6	6.47E-08	6.37E-08	1.28E-07	9.73E-09	9.56E-09	1.93E-08	9.52E-09	8.52E-09	1.80E-08	5.06E-09	3.86E-09	8.92E-09
2804	648868.5	4199542.83	3.41E-08	3.36E-08	6.77E-08	5.13E-09	5.03E-09	1.02E-08	5.01E-09	4.49E-09	9.50E-09	2.66E-09	2.03E-09	4.70E-09
2805	648847.62	4199533.7	3.53E-08	3.48E-08	7.01E-08	5.31E-09	5.22E-09	1.05E-08	5.20E-09	4.65E-09	9.85E-09	2.76E-09	2.11E-09	4.87E-09
2806	648826.74	4199524.57	3.66E-08	3.60E-08	7.26E-08	5.50E-09	5.40E-09	1.09E-08	5.38E-09	4.82E-09	1.02E-08	2.86E-09	2.18E-09	5.04E-09
2807	648805.86	4199515.44	3.79E-08	3.73E-08	7.51E-08	5.69E-09	5.59E-09	1.13E-08	5.57E-09	4.98E-09	1.05E-08	2.96E-09	2.26E-09	5.22E-09
2808	648784.98	4199506.32	3.91E-08	3.85E-08	7.76E-08	5.88E-09	5.77E-09	1.17E-08	5.75E-09	5.15E-09	1.09E-08	3.06E-09	2.33E-09	5.39E-09

2809	648764.1	4199497.19	4.04E-08	3.97E-08	8.01E-08	6.07E-09	5.96E-09	1.20E-08	5.93E-09	5.31E-09	1.12E-08	3.15E-09	2.41E-09	5.56E-09
2810	648743.22	4199488.06	4.16E-08	4.09E-08	8.25E-08	6.25E-09	6.14E-09	1.24E-08	6.11E-09	5.47E-09	1.16E-08	3.25E-09	2.48E-09	5.73E-09
2811	648722.34	4199478.93	4.28E-08	4.21E-08	8.49E-08	6.44E-09	6.32E-09	1.28E-08	6.29E-09	5.63E-09	1.19E-08	3.34E-09	2.55E-09	5.90E-09
2812	648701.46	4199469.81	4.40E-08	4.33E-08	8.73E-08	6.62E-09	6.50E-09	1.31E-08	6.47E-09	5.79E-09	1.23E-08	3.44E-09	2.63E-09	6.06E-09
2813	648680.57	4199460.68	4.52E-08	4.45E-08	8.96E-08	6.79E-09	6.67E-09	1.35E-08	6.64E-09	5.94E-09	1.26E-08	3.53E-09	2.70E-09	6.22E-09
2814	648659.69	4199451.55	4.63E-08	4.56E-08	9.19E-08	6.96E-09	6.83E-09	1.38E-08	6.81E-09	6.09E-09	1.29E-08	3.62E-09	2.76E-09	6.38E-09
2815	648638.81	4199442.42	4.74E-08	4.66E-08	9.40E-08	7.12E-09	6.99E-09	1.41E-08	6.96E-09	6.23E-09	1.32E-08	3.70E-09	2.83E-09	6.53E-09
2816	648617.93	4199433.29	4.84E-08	4.77E-08	9.61E-08	7.28E-09	7.15E-09	1.44E-08	7.12E-09	6.37E-09	1.35E-08	3.78E-09	2.89E-09	6.67E-09
2817	648597.05	4199424.17	4.94E-08	4.86E-08	9.81E-08	7.43E-09	7.30E-09	1.47E-08	7.27E-09	6.50E-09	1.38E-08	3.86E-09	2.95E-09	6.81E-09
2818	648576.17	4199415.04	5.04E-08	4.96E-08	1.00E-07	7.57E-09	7.44E-09	1.50E-08	7.41E-09	6.63E-09	1.40E-08	3.93E-09	3.01E-09	6.94E-09
2819	648555.29	4199405.91	5.13E-08	5.05E-08	1.02E-07	7.71E-09	7.57E-09	1.53E-08	7.54E-09	6.75E-09	1.43E-08	4.00E-09	3.06E-09	7.06E-09
2820	648534.41	4199396.78	5.21E-08	5.13E-08	1.03E-07	7.84E-09	7.69E-09	1.55E-08	7.66E-09	6.86E-09	1.45E-08	4.07E-09	3.11E-09	7.18E-09
2821	648513.53	4199387.66	5.29E-08	5.21E-08	1.05E-07	7.96E-09	7.81E-09	1.58E-08	7.78E-09	6.96E-09	1.47E-08	4.13E-09	3.16E-09	7.29E-09
2822	648492.65	4199378.53	5.36E-08	5.28E-08	1.06E-07	8.06E-09	7.92E-09	1.60E-08	7.89E-09	7.06E-09	1.49E-08	4.19E-09	3.20E-09	7.39E-09
2823	648471.76	4199369.4	5.43E-08	5.35E-08	1.08E-07	8.17E-09	8.02E-09	1.62E-08	7.99E-09	7.15E-09	1.51E-08	4.24E-09	3.24E-09	7.48E-09
2824	648450.88	4199360.27	5.49E-08	5.41E-08	1.09E-07	8.26E-09	8.11E-09	1.64E-08	8.08E-09	7.23E-09	1.53E-08	4.29E-09	3.28E-09	7.57E-09
2825	648430	4199351.15	5.55E-08	5.46E-08	1.10E-07	8.34E-09	8.19E-09	1.65E-08	8.16E-09	7.30E-09	1.55E-08	4.33E-09	3.31E-09	7.64E-09
2826	648409.12	4199342.02	5.60E-08	5.51E-08	1.11E-07	8.42E-09	8.26E-09	1.67E-08	8.23E-09	7.37E-09	1.56E-08	4.37E-09	3.34E-09	7.71E-09
2827	648388.24	4199332.89	5.64E-08	5.55E-08	1.12E-07	8.48E-09	8.32E-09	1.68E-08	8.29E-09	7.42E-09	1.57E-08	4.40E-09	3.36E-09	7.77E-09
2828	648367.36	4199323.76	5.67E-08	5.58E-08	1.13E-07	8.53E-09	8.37E-09	1.69E-08	8.34E-09	7.46E-09	1.58E-08	4.43E-09	3.38E-09	7.81E-09
2829	648346.48	4199314.63	5.70E-08	5.61E-08	1.13E-07	8.57E-09	8.41E-09	1.70E-08	8.38E-09	7.50E-09	1.59E-08	4.45E-09	3.40E-09	7.85E-09
2830	648326.83	4199302.88	5.74E-08	5.65E-08	1.14E-07	8.63E-09	8.47E-09	1.71E-08	8.44E-09	7.55E-09	1.60E-08	4.48E-09	3.42E-09	7.91E-09
2831	648312.09	4199285.49	5.81E-08	5.72E-08	1.15E-07	8.74E-09	8.58E-09	1.73E-08	8.55E-09	7.65E-09	1.62E-08	4.54E-09	3.47E-09	8.01E-09
2832	648297.35	4199268.11	5.88E-08	5.79E-08	1.17E-07	8.84E-09	8.68E-09	1.75E-08	8.65E-09	7.74E-09	1.64E-08	4.59E-09	3.51E-09	8.10E-09
2833	648282.62	4199250.72	5.94E-08	5.85E-08	1.18E-07	8.93E-09	8.77E-09	1.77E-08	8.74E-09	7.82E-09	1.66E-08	4.64E-09	3.55E-09	8.19E-09
2834	648267.88	4199233.34	5.99E-08	5.90E-08	1.19E-07	9.01E-09	8.85E-09	1.79E-08	8.81E-09	7.89E-09	1.67E-08	4.68E-09	3.58E-09	8.26E-09
2835	648253.15	4199215.96	6.04E-08	5.94E-08	1.20E-07	9.08E-09	8.91E-09	1.80E-08	8.87E-09	7.94E-09	1.68E-08	4.71E-09	3.60E-09	8.32E-09
2836	648238.41	4199198.57	6.07E-08	5.97E-08	1.20E-07	9.12E-09	8.96E-09	1.81E-08	8.92E-09	7.98E-09	1.69E-08	4.74E-09	3.62E-09	8.36E-09
2837	648223.68	4199181.19	6.09E-08	5.99E-08	1.21E-07	9.16E-09	8.99E-09	1.81E-08	8.95E-09	8.01E-09	1.70E-08	4.76E-09	3.63E-09	8.39E-09
2838	648208.94	4199163.81	6.10E-08	6.01E-08	1.21E-07	9.17E-09	9.01E-09	1.82E-08	8.97E-09	8.03E-09	1.70E-08	4.77E-09	3.64E-09	8.41E-09
2839	648194.21	4199146.42	6.10E-08	6.01E-08	1.21E-07	9.17E-09	9.01E-09	1.82E-08	8.97E-09	8.03E-09	1.70E-08	4.77E-09	3.64E-09	8.41E-09
2840	648179.47	4199129.04	6.09E-08	6.00E-08	1.21E-07	9.16E-09	8.99E-09	1.81E-08	8.95E-09	8.01E-09	1.70E-08	4.76E-09	3.63E-09	8.39E-09
2841	648164.73	4199111.66	6.07E-08	5.97E-08	1.20E-07	9.12E-09	8.96E-09	1.81E-08	8.92E-09	7.99E-09	1.69E-08	4.74E-09	3.62E-09	8.36E-09
2842	648150	4199094.27	6.04E-08	5.94E-08	1.20E-07	9.08E-09	8.91E-09	1.80E-08	8.87E-09	7.94E-09	1.68E-08	4.71E-09	3.60E-09	8.32E-09
2843	648135.26	4199076.89	5.99E-08	5.90E-08	1.19E-07	9.01E-09	8.85E-09	1.79E-08	8.81E-09	7.89E-09	1.67E-08	4.68E-09	3.58E-09	8.26E-09
2844	648120.53	4199059.5	5.94E-08	5.85E-08	1.18E-07	8.93E-09	8.77E-09	1.77E-08	8.73E-09	7.82E-09	1.65E-08	4.64E-09	3.54E-09	8.18E-09
2845	648105.79	4199042.12	5.88E-08	5.78E-08	1.17E-07	8.84E-09	8.68E-09	1.75E-08	8.64E-09	7.73E-09	1.64E-08	4.59E-09	3.51E-09	8.10E-09
2846	648091.06	4199024.74	5.80E-08	5.71E-08	1.15E-07	8.73E-09	8.57E-09	1.73E-08	8.53E-09	7.64E-09	1.62E-08	4.53E-09	3.46E-09	8.00E-09
2847	648076.32	4199007.35	5.72E-08	5.63E-08	1.14E-07	8.61E-09	8.45E-09	1.71E-08	8.42E-09	7.53E-09	1.59E-08	4.47E-09	3.42E-09	7.89E-09
2848	648061.58	4198989.97	5.64E-08	5.55E-08	1.12E-07	8.48E-09	8.32E-09	1.68E-08	8.29E-09	7.42E-09	1.57E-08	4.40E-09	3.36E-09	7.77E-09
2849	648046.85	4198972.59	5.54E-08	5.46E-08	1.10E-07	8.33E-09	8.18E-09	1.65E-08	8.15E-09	7.29E-09	1.54E-08	4.33E-09	3.31E-09	7.64E-09
2850	648032.11	4198955.2	5.44E-08	5.36E-08	1.08E-07	8.19E-09	8.04E-09	1.62E-08	8.00E-09	7.16E-09	1.52E-08	4.25E-09	3.25E-09	7.50E-09
2851	648017.38	4198937.82	5.34E-08	5.26E-08	1.06E-07	8.03E-09	7.88E-09	1.59E-08	7.85E-09	7.03E-09	1.49E-08	4.17E-09	3.19E-09	7.36E-09
2852	648002.64	4198920.43	5.23E-08	5.15E-08	1.04E-07	7.87E-09	7.73E-09	1.56E-08	7.69E-09	6.89E-09	1.46E-08	4.09E-09	3.12E-09	7.21E-09
2853	647987.91	4198903.05	5.12E-08	5.04E-08	1.02E-07	7.70E-09	7.56E-09	1.53E-08	7.53E-09	6.74E-09	1.43E-08	4.00E-09	3.06E-09	7.06E-09
2854	647973.17	4198885.67	5.01E-08	4.94E-08	9.95E-08	7.54E-09	7.40E-09	1.49E-08	7.37E-09	6.60E-09	1.40E-08	3.92E-09	2.99E-09	6.91E-09
2855	648831.85	4199739.44	2.70E-08	2.66E-08	5.36E-08	4.06E-09	3.99E-09	8.05E-09	3.97E-09	3.56E-09	7.53E-09	2.11E-09	1.61E-09	3.72E-09
2856	648810.95	4199730.31	2.79E-08	2.75E-08	5.54E-08	4.20E-09	4.12E-09	8.32E-09	4.11E-09	3.68E-09	7.78E-09	2.18E-09	1.67E-09	3.85E-09
2857	648790.06	4199721.17	2.88E-08	2.84E-08	5.72E-08	4.34E-09	4.26E-09	8.59E-09	4.24E-09	3.80E-09	8.04E-09	2.25E-09	1.72E-09	3.97E-09
2858	648769.17	4199712.04	2.97E-08	2.93E-08	5.90E-08	4.47E-09	4.39E-09	8.87E-09	4.37E-09	3.92E-09	8.29E-09	2.32E-09	1.78E-09	4.10E-09
2859	648748.28	4199702.91	3.07E-08	3.02E-08	6.09E-08	4.61E-09	4.53E-09	9.14E-09	4.51E-09	4.04E-09	8.55E-09	2.40E-09	1.83E-09	4.23E-09
2860	648727.38	4199693.78	3.16E-08	3.11E-08	6.27E-08	4.75E-09	4.66E-09	9.41E-09	4.64E-09	4.16E-09	8.80E-09	2.47E-09	1.88E-09	4.35E-09
2861	648706.49	4199684.64	3.25E-08	3.20E-08	6.45E-08	4.89E-09	4.80E-09	9.68E-09	4.78E-09	4.28E-09	9.05E-09	2.54E-09	1.94E-09	4.48E-09
2862	648685.6	4199675.51	3.34E-08	3.29E-08	6.62E-08	5.02E-09	4.93E-09	9.95E-09	4.91E-09	4.39E-09	9.30E-09	2.61E-09	1.99E-09	4.60E-09
2863	648664.71	4199666.38	3.43E-08	3.37E-08	6.80E-08	5.15E-09	5.06E-09	1.02E-08	5.04E-09	4.51E-09	9.55E-09	2.68E-09	2.04E-09	4.72E-09
2864	648643.81	4199657.25	3.51E-08	3.46E-08	6.97E-08	5.28E-09	5.19E-09	1.05E-08	5.17E-09	4.62E-09	9.79E-09	2.74E-09	2.10E-09	4.84E-09
2865	648622.92	4199648.11	3.60E-08	3.54E-08	7.14E-08	5.41E-09	5.31E-09	1.07E-08	5.29E-09	4.74E-09	1.00E-08	2.81E-09	2.15E-09	4.96E-09
2866	648602.03	4199638.98	3.68E-08	3.63E-08	7.31E-08	5.54E-09	5.44E-09	1.10E-08	5.41E-09	4.85E-09	1.03E-08	2.88E-09	2.20E-09	5.07E-09
2867	648581.14	4199629.85	3.76E-08	3.70E-08	7.47E-08	5.66E-09	5.56E-09	1.12E-08	5.53E-09	4.95E-09	1.05E-08	2.94E-09	2.25E-09	5.19E-09
2868	648560.25	4199620.71	3.84E-08	3.78E-08	7.63E-08	5.78E-09	5.67E-09	1.15E-08	5.65E-09	5.06E-09	1.07E-08	3.00E-09	2.29E-09	5.29E-09
2869	648539.35	4199611.58	3.92E-08	3.86E-08	7.77E-08	5.89E-09	5.78E-09	1.17E-08	5.76E-09	5.16E-09	1.09E-08	3.06E-09	2.34E-09	5.40E-09
2870	648518.46	4199602.45	3.99E-08	3.93E-08	7.92E-08	6.00E-09	5.89E-09	1.19E-08	5.87E-09	5.25E-09	1.11E-08	3.12E-09	2.38E-09	5.50E-09
2871	648497.57	4199593.32	4.06E-08	4.00E-08	8.06E-08	6.11E-09	6.00E-09	1.21E-08	5.97E-09	5.35E-09	1.13E-08	3.17E-09	2.42E-09	5.60E-09
2872	648476.68	4199584.18	4.13E-08	4.07E-08	8.19E-08	6.21E-09	6.10E-09	1.23E-08	6.07E-09	5.43E-09	1.15E-08	3.23E-09	2.46E-09	5.69E-09
2873	648455.78	4199575.05	4.19E-08	4.13E-08	8.32E-08	6.30E-09	6.19E-09	1.25E-08	6.16E-09	5.52E-09	1.17E-08	3.28E-09	2.50E-09	5.78E-09
2874	648434.89	4199565.92	4.25E-08	4.19E-08	8.44E-08	6.40E-09	6.28E-09	1.27E-08	6.26E-09	5.60E-09	1.19E-08	3.32E-09	2.54E-09	5.86E-09
2875	648414	4199556.79	4.31E-08	4.25E-08	8.56E-08	6.48E-09	6.37E-09	1.29E-08	6.34E-09	5.68E-09	1.20E-08	3.37E-09	2.57E-09	5.94E-09
2876	648393.11	4199547.65	4.37E-08	4.30E-08	8.67E-08	6.57E-09	6.45E-09	1.30E-08	6.42E-09	5.75E-09	1.22E-08	3.41E-09	2.61E-09	6.02E-09
2877	648372.21	4199538.52	4.42E-08	4.35E-08	8.77E-08	6.64E-09	6.52E-09	1.32E-08	6.49E-09	5.81E-09	1.23E-08	3.45E-09	2.64E-09	6.09E-09
2878	648351.32	4199529.39	4.46E-08	4.40E-08	8.86E-08	6.71E-09	6.59E-09	1.33E-08	6.56E-09	5.88E-09	1.24E-08	3.49E-09	2.66E-09	6.15E-09
2879	648330.43	4199520.25	4.51E-08	4.44E-08	8.95E-08	6.78E-09	6.66E-09	1.34E-08	6.63E-09	5.93E-09	1.26E-08	3.52E-09	2.69E-09	6.21E-09
2880	648309.54	4199511.12	4.55E-08	4.48E-08	9.03E-08	6.84E-09	6.72E-09	1.36E-08	6.69E-09	5.99E-09	1.27E-08	3.55E-09	2.71E-09	6.27E-09
2881	648288.64	4199501.99	4.58E-08	4.51E-08	9.10E-08	6.89E-09	6.77E-09	1.37E-08	6.74E-09	6.03E-09	1.28E-08	3.58E-09	2.74E-09	6.32E-09
2882	648267.75	4199492.86	4.62E-08	4.54E-08	9.16E-08	6.94E-09	6.82E-09	1.38E-08	6.79E-09	6.08E-09	1.29E-08	3.61E-09	2.75E-09	6.36E-09
2883	648246.86	4199483.72	4.64E-08	4.57E-08	9.21E-08	6.98E-09	6.86E-09	1.38E-08	6.83E-09	6.11E-09	1.29E-08	3.63E-09	2.77E-09	6.40E-09
2884	648225.97	4199474.59	4.66E-08	4.59E-08	9.26E-08	7.01E-09	6.89E-09	1.39E-08	6.86E-09	6.14E-09	1.30E-08	3.64E-09	2.78E-09	6.43E-09

2885	648206.63	4199462.39	4.70E-08	4.63E-08	9.33E-08	7.07E-09	6.94E-09	1.40E-08	6.91E-09	6.18E-09	1.31E-08	3.67E-09	2.80E-09	6.48E-09
2886	648191.88	4199445	4.76E-08	4.68E-08	9.44E-08	7.15E-09	7.02E-09	1.42E-08	7.00E-09	6.26E-09	1.33E-08	3.72E-09	2.84E-09	6.56E-09
2887	648177.14	4199427.61	4.81E-08	4.74E-08	9.55E-08	7.24E-09	7.10E-09	1.43E-08	7.07E-09	6.33E-09	1.34E-08	3.76E-09	2.87E-09	6.63E-09
2888	648162.4	4199410.21	4.86E-08	4.78E-08	9.64E-08	7.31E-09	7.17E-09	1.45E-08	7.14E-09	6.40E-09	1.35E-08	3.80E-09	2.90E-09	6.70E-09
2889	648147.65	4199392.82	4.90E-08	4.83E-08	9.73E-08	7.37E-09	7.24E-09	1.46E-08	7.21E-09	6.45E-09	1.37E-08	3.83E-09	2.93E-09	6.76E-09
2890	648132.91	4199375.43	4.94E-08	4.86E-08	9.80E-08	7.43E-09	7.29E-09	1.47E-08	7.26E-09	6.50E-09	1.38E-08	3.86E-09	2.95E-09	6.81E-09
2891	648118.17	4199358.03	4.97E-08	4.89E-08	9.86E-08	7.47E-09	7.34E-09	1.48E-08	7.31E-09	6.54E-09	1.38E-08	3.88E-09	2.97E-09	6.85E-09
2892	648103.42	4199340.64	4.99E-08	4.92E-08	9.91E-08	7.51E-09	7.37E-09	1.49E-08	7.34E-09	6.57E-09	1.39E-08	3.90E-09	2.98E-09	6.88E-09
2893	648088.68	4199323.25	5.01E-08	4.93E-08	9.94E-08	7.53E-09	7.40E-09	1.49E-08	7.37E-09	6.59E-09	1.40E-08	3.91E-09	2.99E-09	6.90E-09
2894	648073.94	4199305.85	5.02E-08	4.94E-08	9.96E-08	7.55E-09	7.41E-09	1.50E-08	7.38E-09	6.61E-09	1.40E-08	3.92E-09	3.00E-09	6.92E-09
2895	648059.19	4199288.46	5.02E-08	4.95E-08	9.97E-08	7.55E-09	7.42E-09	1.50E-08	7.39E-09	6.61E-09	1.40E-08	3.92E-09	3.00E-09	6.92E-09
2896	648044.45	4199271.07	5.02E-08	4.94E-08	9.96E-08	7.55E-09	7.41E-09	1.50E-08	7.38E-09	6.60E-09	1.40E-08	3.92E-09	3.00E-09	6.92E-09
2897	648029.7	4199253.67	5.01E-08	4.93E-08	9.93E-08	7.53E-09	7.39E-09	1.49E-08	7.36E-09	6.59E-09	1.39E-08	3.91E-09	2.99E-09	6.90E-09
2898	648014.96	4199236.28	4.99E-08	4.91E-08	9.89E-08	7.50E-09	7.36E-09	1.49E-08	7.33E-09	6.56E-09	1.39E-08	3.89E-09	2.98E-09	6.87E-09
2899	648000.22	4199218.89	4.96E-08	4.88E-08	9.84E-08	7.45E-09	7.32E-09	1.48E-08	7.29E-09	6.52E-09	1.38E-08	3.87E-09	2.96E-09	6.83E-09
2900	647985.47	4199201.49	4.92E-08	4.85E-08	9.77E-08	7.40E-09	7.27E-09	1.47E-08	7.24E-09	6.48E-09	1.37E-08	3.85E-09	2.94E-09	6.78E-09
2901	647970.73	4199184.1	4.88E-08	4.81E-08	9.69E-08	7.34E-09	7.21E-09	1.45E-08	7.18E-09	6.42E-09	1.36E-08	3.81E-09	2.91E-09	6.73E-09
2902	647955.99	4199166.71	4.83E-08	4.76E-08	9.59E-08	7.27E-09	7.14E-09	1.44E-08	7.11E-09	6.36E-09	1.35E-08	3.78E-09	2.88E-09	6.66E-09
2903	647941.24	4199149.31	4.78E-08	4.70E-08	9.48E-08	7.19E-09	7.06E-09	1.42E-08	7.03E-09	6.29E-09	1.33E-08	3.73E-09	2.85E-09	6.58E-09
2904	647926.5	4199131.92	4.72E-08	4.65E-08	9.37E-08	7.10E-09	6.97E-09	1.41E-08	6.94E-09	6.21E-09	1.32E-08	3.69E-09	2.82E-09	6.50E-09
2905	647911.75	4199114.53	4.65E-08	4.58E-08	9.23E-08	7.00E-09	6.87E-09	1.39E-08	6.84E-09	6.12E-09	1.30E-08	3.64E-09	2.78E-09	6.41E-09
2906	647897.01	4199097.13	4.58E-08	4.51E-08	9.10E-08	6.89E-09	6.77E-09	1.37E-08	6.74E-09	6.03E-09	1.28E-08	3.58E-09	2.74E-09	6.32E-09
2907	647882.27	4199079.74	4.51E-08	4.44E-08	8.95E-08	6.78E-09	6.66E-09	1.34E-08	6.63E-09	5.94E-09	1.26E-08	3.52E-09	2.69E-09	6.21E-09
2908	647867.52	4199062.35	4.43E-08	4.36E-08	8.80E-08	6.67E-09	6.54E-09	1.32E-08	6.52E-09	5.83E-09	1.24E-08	3.46E-09	2.65E-09	6.11E-09
2909	647852.78	4199044.95	4.35E-08	4.29E-08	8.64E-08	6.55E-09	6.43E-09	1.30E-08	6.40E-09	5.73E-09	1.21E-08	3.40E-09	2.60E-09	6.00E-09
2910	647838.04	4199027.56	4.27E-08	4.21E-08	8.48E-08	6.42E-09	6.31E-09	1.27E-08	6.28E-09	5.62E-09	1.19E-08	3.34E-09	2.55E-09	5.89E-09
2911	647823.29	4199010.17	4.19E-08	4.12E-08	8.31E-08	6.30E-09	6.18E-09	1.25E-08	6.16E-09	5.51E-09	1.17E-08	3.27E-09	2.50E-09	5.77E-09
2912	647808.55	4198992.78	4.11E-08	4.04E-08	8.15E-08	6.17E-09	6.06E-09	1.22E-08	6.04E-09	5.40E-09	1.14E-08	3.21E-09	2.45E-09	5.66E-09
2913	647793.81	4198975.38	4.02E-08	3.96E-08	7.98E-08	6.05E-09	5.94E-09	1.20E-08	5.91E-09	5.29E-09	1.12E-08	3.14E-09	2.40E-09	5.54E-09
2914	649078.35	4198561.56	2.98E-07	2.93E-07	5.91E-07	4.47E-08	4.39E-08	8.87E-08	4.38E-08	3.92E-08	8.29E-08	2.32E-08	1.78E-08	4.10E-08
2915	649075.27	4198660.73	2.05E-07	2.02E-07	4.06E-07	3.08E-08	3.02E-08	6.10E-08	3.01E-08	2.69E-08	5.71E-08	1.60E-08	1.22E-08	2.82E-08
2916	649076.48	4198760.15	1.46E-07	1.44E-07	2.90E-07	2.20E-08	2.16E-08	4.35E-08	2.15E-08	1.92E-08	4.07E-08	1.14E-08	8.72E-09	2.01E-08
2917	649049.72	4198758.63	1.51E-07	1.49E-07	3.00E-07	2.27E-08	2.23E-08	4.50E-08	2.22E-08	1.99E-08	4.21E-08	1.18E-08	9.02E-09	2.08E-08
2918	649070.89	4198859.17	1.09E-07	1.07E-07	2.16E-07	1.64E-08	1.61E-08	3.24E-08	1.60E-08	1.43E-08	3.03E-08	8.50E-09	6.49E-09	1.50E-08
2919	649044.36	4198857.67	1.13E-07	1.11E-07	2.24E-07	1.70E-08	1.67E-08	3.36E-08	1.66E-08	1.49E-08	3.15E-08	8.82E-09	6.74E-09	1.56E-08
2920	649068.59	4198958.39	8.31E-08	8.18E-08	1.65E-07	1.25E-08	1.23E-08	2.48E-08	1.22E-08	1.09E-08	2.31E-08	6.49E-09	4.96E-09	1.14E-08
2921	649041.21	4198956.84	8.66E-08	8.52E-08	1.72E-07	1.30E-08	1.28E-08	2.58E-08	1.27E-08	1.14E-08	2.41E-08	6.76E-09	5.17E-09	1.19E-08
2922	649013.83	4198955.28	9.00E-08	8.86E-08	1.79E-07	1.35E-08	1.33E-08	2.68E-08	1.32E-08	1.18E-08	2.51E-08	7.03E-09	5.37E-09	1.24E-08
2923	649064.08	4199156.83	5.24E-08	5.16E-08	1.04E-07	7.88E-09	7.74E-09	1.56E-08	7.71E-09	6.90E-09	1.46E-08	4.10E-09	3.13E-09	7.23E-09
2924	649037.17	4199155.3	5.47E-08	5.39E-08	1.09E-07	8.23E-09	8.08E-09	1.63E-08	8.04E-09	7.20E-09	1.52E-08	4.27E-09	3.26E-09	7.54E-09
2925	649010.25	4199153.77	5.70E-08	5.61E-08	1.13E-07	8.57E-09	8.41E-09	1.70E-08	8.38E-09	7.50E-09	1.59E-08	4.45E-09	3.40E-09	7.85E-09
2926	648983.33	4199152.24	5.92E-08	5.83E-08	1.18E-07	8.91E-09	8.75E-09	1.77E-08	8.71E-09	7.80E-09	1.65E-08	4.63E-09	3.54E-09	8.16E-09
2927	649063.17	4199355.46	3.59E-08	3.54E-08	7.13E-08	5.40E-09	5.30E-09	1.07E-08	5.28E-09	4.73E-09	1.00E-08	2.81E-09	2.14E-09	4.95E-09
2928	649035.89	4199353.92	3.74E-08	3.69E-08	7.43E-08	5.63E-09	5.53E-09	1.12E-08	5.50E-09	4.93E-09	1.04E-08	2.92E-09	2.23E-09	5.16E-09
2929	649008.61	4199352.37	3.90E-08	3.84E-08	7.74E-08	5.86E-09	5.76E-09	1.16E-08	5.73E-09	5.13E-09	1.09E-08	3.05E-09	2.33E-09	5.37E-09
2930	648981.33	4199350.82	4.06E-08	3.99E-08	8.05E-08	6.10E-09	5.99E-09	1.21E-08	5.96E-09	5.34E-09	1.13E-08	3.17E-09	2.42E-09	5.59E-09
2931	648954.04	4199349.27	4.21E-08	4.15E-08	8.36E-08	6.34E-09	6.22E-09	1.26E-08	6.20E-09	5.55E-09	1.17E-08	3.29E-09	2.51E-09	5.81E-09
2932	649055.54	4199553.72	2.65E-08	2.61E-08	5.27E-08	3.99E-09	3.92E-09	7.91E-09	3.90E-09	3.49E-09	7.40E-09	2.07E-09	1.58E-09	3.66E-09
2933	649028	4199552.16	2.76E-08	2.72E-08	5.48E-08	4.15E-09	4.08E-09	8.23E-09	4.06E-09	3.63E-09	7.69E-09	2.16E-09	1.65E-09	3.80E-09
2934	649000.46	4199550.6	2.87E-08	2.83E-08	5.70E-08	4.32E-09	4.24E-09	8.55E-09	4.22E-09	3.78E-09	8.00E-09	2.24E-09	1.71E-09	3.96E-09
2935	648972.92	4199549.04	2.98E-08	2.94E-08	5.92E-08	4.48E-09	4.40E-09	8.89E-09	4.38E-09	3.92E-09	8.31E-09	2.33E-09	1.78E-09	4.11E-09
2936	648945.38	4199547.47	3.09E-08	3.05E-08	6.14E-08	4.65E-09	4.57E-09	9.22E-09	4.55E-09	4.07E-09	8.62E-09	2.42E-09	1.85E-09	4.26E-09
2937	648917.84	4199545.91	3.21E-08	3.16E-08	6.37E-08	4.82E-09	4.74E-09	9.56E-09	4.72E-09	4.22E-09	8.94E-09	2.51E-09	1.91E-09	4.42E-09
2938	649050.89	4199752.15	2.05E-08	2.02E-08	4.07E-08	3.09E-09	3.03E-09	6.12E-09	3.02E-09	2.70E-09	5.72E-09	1.60E-09	1.23E-09	2.83E-09
2939	649023.65	4199750.61	2.13E-08	2.09E-08	4.22E-08	3.20E-09	3.14E-09	6.34E-09	3.13E-09	2.80E-09	5.93E-09	1.66E-09	1.27E-09	2.93E-09
2940	648996.41	4199749.06	2.21E-08	2.17E-08	4.38E-08	3.32E-09	3.26E-09	6.57E-09	3.24E-09	2.90E-09	6.14E-09	1.72E-09	1.32E-09	3.04E-09
2941	648969.18	4199747.52	2.29E-08	2.25E-08	4.54E-08	3.44E-09	3.37E-09	6.81E-09	3.36E-09	3.01E-09	6.37E-09	1.79E-09	1.36E-09	3.15E-09
2942	648941.94	4199745.97	2.37E-08	2.33E-08	4.70E-08	3.56E-09	3.50E-09	7.06E-09	3.48E-09	3.12E-09	6.60E-09	1.85E-09	1.41E-09	3.26E-09
2943	648914.7	4199744.43	2.45E-08	2.41E-08	4.86E-08	3.68E-09	3.62E-09	7.30E-09	3.60E-09	3.22E-09	6.83E-09	1.91E-09	1.46E-09	3.38E-09
2944	648887.46	4199742.88	2.53E-08	2.49E-08	5.03E-08	3.81E-09	3.74E-09	7.55E-09	3.72E-09	3.33E-09	7.06E-09	1.98E-09	1.51E-09	3.49E-09
2945	648860.22	4199741.34	2.62E-08	2.58E-08	5.19E-08	3.93E-09	3.86E-09	7.79E-09	3.85E-09	3.44E-09	7.29E-09	2.04E-09	1.56E-09	3.60E-09

EXHIBIT 1

			T2		T2L3		T4i		T4f	
			57	649236.78						
			2.54E-03	2.71E-03	3.82E-04	4.06E-04	3.73E-04	3.62E-04	1.98E-04	1.64E-04
			Yr 1	Yr 2	Yr 1	Yr 2	Yr 1	Yr 2	Yr 1	Yr 2
1	649114.1	4198289.7	2.26E-03	2.41E-03	3.40E-04	3.61E-04	3.32E-04	3.22E-04	1.76E-04	1.46E-04
2	649113.41	4198314.69	1.67E-03	1.78E-03	2.51E-04	2.67E-04	2.45E-04	2.38E-04	1.30E-04	1.08E-04
3	649112.71	4198339.68	1.32E-03	1.41E-03	1.99E-04	2.11E-04	1.94E-04	1.88E-04	1.03E-04	8.54E-05
4	649112.02	4198364.67	1.09E-03	1.16E-03	1.64E-04	1.74E-04	1.60E-04	1.55E-04	8.51E-05	7.04E-05
5	649110.63	4198414.65	7.89E-04	8.42E-04	1.19E-04	1.26E-04	1.16E-04	1.13E-04	6.17E-05	5.10E-05
6	649109.24	4198464.63	6.03E-04	6.43E-04	9.06E-05	9.64E-05	8.86E-05	8.59E-05	4.71E-05	3.89E-05
7	649107.84	4198514.61	4.75E-04	5.07E-04	7.14E-05	7.60E-05	6.99E-05	6.77E-05	3.71E-05	3.07E-05
8	649106.45	4198564.59	3.83E-04	4.08E-04	5.76E-05	6.12E-05	5.63E-05	5.46E-05	2.99E-05	2.47E-05
9	649103.67	4198664.56	2.60E-04	2.78E-04	3.92E-05	4.16E-05	3.83E-05	3.71E-05	2.03E-05	1.68E-05
10	649100.89	4198764.52	1.85E-04	1.97E-04	2.78E-05	2.96E-05	2.72E-05	2.64E-05	1.45E-05	1.20E-05
11	649098.11	4198864.48	1.37E-04	1.46E-04	2.05E-05	2.18E-05	2.01E-05	1.95E-05	1.07E-05	8.82E-06
12	649095.32	4198964.44	1.04E-04	1.11E-04	1.56E-05	1.66E-05	1.53E-05	1.48E-05	8.13E-06	6.72E-06
13	649089.76	4199164.36	6.57E-05	7.00E-05	9.88E-06	1.05E-05	9.66E-06	9.36E-06	5.13E-06	4.25E-06
14	649084.19	4199364.28	4.54E-05	4.84E-05	6.83E-06	7.26E-06	6.68E-06	6.47E-06	3.55E-06	2.93E-06
15	649078.63	4199564.21	3.35E-05	3.58E-05	5.04E-06	5.36E-06	4.93E-06	4.78E-06	2.62E-06	2.17E-06
16	649073.06	4199764.13	2.60E-05	2.77E-05	3.91E-06	4.16E-06	3.83E-06	3.71E-06	2.03E-06	1.68E-06
17	649150.61	4198290.16	2.41E-03	2.57E-03	3.62E-04	3.85E-04	3.54E-04	3.43E-04	1.88E-04	1.56E-04
18	649193.6	4198290.27	2.51E-03	2.67E-03	3.77E-04	4.01E-04	3.69E-04	3.57E-04	1.96E-04	1.62E-04
19	649150.55	4198315.16	1.73E-03	1.84E-03	2.60E-04	2.77E-04	2.54E-04	2.47E-04	1.35E-04	1.12E-04
20	649193.54	4198315.27	1.78E-03	1.90E-03	2.68E-04	2.85E-04	2.62E-04	2.54E-04	1.39E-04	1.15E-04
21	649150.48	4198340.16	1.35E-03	1.44E-03	2.03E-04	2.16E-04	1.99E-04	1.93E-04	1.06E-04	8.73E-05
22	649193.48	4198340.27	1.37E-03	1.47E-03	2.07E-04	2.20E-04	2.02E-04	1.96E-04	1.07E-04	8.88E-05
23	649150.42	4198365.16	1.10E-03	1.18E-03	1.66E-04	1.76E-04	1.62E-04	1.57E-04	8.61E-05	7.12E-05
24	649193.42	4198365.27	1.11E-03	1.18E-03	1.67E-04	1.77E-04	1.63E-04	1.58E-04	8.67E-05	7.17E-05
25	649150.3	4198415.16	7.87E-04	8.39E-04	1.18E-04	1.26E-04	1.16E-04	1.12E-04	6.15E-05	5.09E-05
26	649193.3	4198415.27	7.80E-04	8.32E-04	1.17E-04	1.25E-04	1.15E-04	1.11E-04	6.09E-05	5.04E-05
27	649150.18	4198465.16	5.94E-04	6.33E-04	8.93E-05	9.50E-05	8.74E-05	8.47E-05	4.64E-05	3.84E-05
28	649193.17	4198465.27	5.82E-04	6.20E-04	8.75E-05	9.30E-05	8.55E-05	8.29E-05	4.54E-05	3.76E-05
29	649150.06	4198515.16	4.64E-04	4.94E-04	6.97E-05	7.41E-05	6.82E-05	6.61E-05	3.62E-05	3.00E-05
30	649193.05	4198515.27	4.49E-04	4.79E-04	6.75E-05	7.18E-05	6.60E-05	6.40E-05	3.51E-05	2.90E-05
31	649149.93	4198565.16	3.70E-04	3.94E-04	5.56E-05	5.92E-05	5.44E-05	5.27E-05	2.89E-05	2.39E-05
32	649192.93	4198565.27	3.55E-04	3.79E-04	5.34E-05	5.68E-05	5.22E-05	5.06E-05	2.78E-05	2.30E-05
33	649128.19	4198665.11	2.53E-04	2.70E-04	3.81E-05	4.05E-05	3.73E-05	3.61E-05	1.98E-05	1.64E-05
34	649171.19	4198665.21	2.41E-04	2.57E-04	3.62E-05	3.85E-05	3.54E-05	3.43E-05	1.88E-05	1.56E-05
35	649214.18	4198665.32	2.27E-04	2.42E-04	3.41E-05	3.63E-05	3.34E-05	3.23E-05	1.77E-05	1.47E-05
36	649127.95	4198765.11	1.78E-04	1.90E-04	2.68E-05	2.85E-05	2.62E-05	2.54E-05	1.39E-05	1.15E-05
37	649170.94	4198765.21	1.68E-04	1.79E-04	2.52E-05	2.68E-05	2.47E-05	2.39E-05	1.31E-05	1.08E-05
38	649213.94	4198765.32	1.57E-04	1.67E-04	2.36E-05	2.51E-05	2.30E-05	2.23E-05	1.22E-05	1.01E-05
39	649127.7	4198865.11	1.31E-04	1.39E-04	1.96E-05	2.09E-05	1.92E-05	1.86E-05	1.02E-05	8.44E-06
40	649170.7	4198865.21	1.22E-04	1.30E-04	1.84E-05	1.95E-05	1.79E-05	1.74E-05	9.53E-06	7.89E-06
41	649213.69	4198865.32	1.14E-04	1.21E-04	1.71E-05	1.82E-05	1.67E-05	1.62E-05	8.87E-06	7.34E-06
42	649127.46	4198965.11	9.89E-05	1.05E-04	1.49E-05	1.58E-05	1.45E-05	1.41E-05	7.72E-06	6.39E-06
43	649170.46	4198965.21	9.22E-05	9.83E-05	1.39E-05	1.47E-05	1.36E-05	1.31E-05	7.21E-06	5.96E-06
44	649213.45	4198965.32	8.58E-05	9.15E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.70E-06	5.55E-06
45	649115.55	4199164.93	6.31E-05	6.73E-05	9.49E-06	1.01E-05	9.28E-06	8.99E-06	4.93E-06	4.08E-06
46	649148.47	4199165.16	5.99E-05	6.39E-05	9.01E-06	9.58E-06	8.81E-06	8.54E-06	4.68E-06	3.87E-06
47	649191.46	4199165.26	5.60E-05	5.97E-05	8.42E-06	8.95E-06	8.23E-06	7.98E-06	4.37E-06	3.62E-06
48	649112.52	4199364.9	4.35E-05	4.64E-05	6.55E-06	6.96E-06	6.40E-06	6.20E-06	3.40E-06	2.81E-06
49	649147.98	4199365.16	4.13E-05	4.41E-05	6.21E-06	6.61E-06	6.08E-06	5.89E-06	3.23E-06	2.67E-06
50	649190.98	4199365.26	3.88E-05	4.14E-05	5.84E-06	6.21E-06	5.71E-06	5.54E-06	3.03E-06	2.51E-06
51	649109.5	4199564.86	3.21E-05	3.43E-05	4.83E-06	5.14E-06	4.73E-06	4.58E-06	2.51E-06	2.08E-06
52	649147.49	4199565.16	3.06E-05	3.26E-05	4.60E-06	4.89E-06	4.49E-06	4.35E-06	2.39E-06	1.97E-06
53	649190.49	4199565.26	2.89E-05	3.08E-05	4.35E-06	4.62E-06	4.25E-06	4.12E-06	2.26E-06	1.87E-06

54	649106.47	4199764.82	2.50E-05	2.66E-05	3.76E-06	3.99E-06	3.67E-06	3.56E-06	1.95E-06	1.61E-06
55	649147	4199765.16	2.38E-05	2.54E-05	3.58E-06	3.80E-06	3.50E-06	3.39E-06	1.86E-06	1.54E-06
56	649190	4199765.26	2.26E-05	2.41E-05	3.40E-06	3.62E-06	3.33E-06	3.23E-06	1.77E-06	1.46E-06
57	649236.78	4198290.97	2.54E-03	2.71E-03	3.82E-04	4.06E-04	3.73E-04	3.62E-04	1.98E-04	1.64E-04
58	649281.5	4198292.28	2.52E-03	2.69E-03	3.80E-04	4.03E-04	3.71E-04	3.60E-04	1.97E-04	1.63E-04
59	649236.05	4198315.96	1.80E-03	1.92E-03	2.71E-04	2.88E-04	2.65E-04	2.56E-04	1.41E-04	1.16E-04
60	649280.76	4198317.27	1.79E-03	1.91E-03	2.69E-04	2.86E-04	2.63E-04	2.55E-04	1.40E-04	1.15E-04
61	649235.31	4198340.95	1.38E-03	1.47E-03	2.07E-04	2.20E-04	2.03E-04	1.97E-04	1.08E-04	8.91E-05
62	649280.03	4198342.26	1.36E-03	1.45E-03	2.05E-04	2.18E-04	2.00E-04	1.94E-04	1.07E-04	8.81E-05
63	649234.58	4198365.93	1.10E-03	1.18E-03	1.66E-04	1.77E-04	1.62E-04	1.57E-04	8.63E-05	7.14E-05
64	649279.29	4198367.25	1.09E-03	1.16E-03	1.63E-04	1.74E-04	1.60E-04	1.55E-04	8.48E-05	7.02E-05
65	649233.11	4198415.91	7.66E-04	8.17E-04	1.15E-04	1.23E-04	1.13E-04	1.09E-04	5.99E-05	4.95E-05
66	649277.82	4198417.23	7.43E-04	7.92E-04	1.12E-04	1.19E-04	1.09E-04	1.06E-04	5.81E-05	4.80E-05
67	649231.64	4198465.89	5.66E-04	6.03E-04	8.50E-05	9.04E-05	8.31E-05	8.06E-05	4.42E-05	3.65E-05
68	649276.35	4198467.21	5.42E-04	5.77E-04	8.14E-05	8.66E-05	7.96E-05	7.72E-05	4.23E-05	3.50E-05
69	649230.17	4198515.87	4.33E-04	4.62E-04	6.52E-05	6.93E-05	6.37E-05	6.18E-05	3.38E-05	2.80E-05
70	649274.88	4198517.18	4.10E-04	4.37E-04	6.17E-05	6.56E-05	6.03E-05	5.85E-05	3.21E-05	2.65E-05
71	649228.7	4198565.85	3.41E-04	3.63E-04	5.12E-05	5.45E-05	5.01E-05	4.86E-05	2.66E-05	2.20E-05
72	649273.41	4198567.16	3.20E-04	3.41E-04	4.81E-05	5.11E-05	4.70E-05	4.56E-05	2.50E-05	2.07E-05
73	649248.12	4198666.46	2.14E-04	2.29E-04	3.23E-05	3.43E-05	3.15E-05	3.06E-05	1.68E-05	1.39E-05
74	649292.83	4198667.78	1.98E-04	2.11E-04	2.98E-05	3.16E-05	2.91E-05	2.82E-05	1.55E-05	1.28E-05
75	649245.18	4198766.42	1.48E-04	1.58E-04	2.23E-05	2.37E-05	2.18E-05	2.11E-05	1.16E-05	9.57E-06
76	649289.89	4198767.73	1.36E-04	1.45E-04	2.05E-05	2.18E-05	2.00E-05	1.94E-05	1.06E-05	8.80E-06
77	649242.24	4198866.38	1.08E-04	1.15E-04	1.62E-05	1.72E-05	1.58E-05	1.54E-05	8.42E-06	6.97E-06
78	649286.95	4198867.69	9.91E-05	1.06E-04	1.49E-05	1.58E-05	1.46E-05	1.41E-05	7.74E-06	6.41E-06
79	649239.3	4198966.33	8.19E-05	8.73E-05	1.23E-05	1.31E-05	1.20E-05	1.17E-05	6.40E-06	5.29E-06
80	649284.01	4198967.65	7.56E-05	8.06E-05	1.14E-05	1.21E-05	1.11E-05	1.08E-05	5.90E-06	4.88E-06
81	649233.42	4199166.25	5.23E-05	5.58E-05	7.87E-06	8.37E-06	7.69E-06	7.46E-06	4.09E-06	3.38E-06
82	649278.13	4199167.56	4.87E-05	5.20E-05	7.33E-06	7.79E-06	7.17E-06	6.94E-06	3.81E-06	3.15E-06
83	649227.54	4199366.16	3.69E-05	3.93E-05	5.54E-06	5.89E-06	5.42E-06	5.25E-06	2.88E-06	2.38E-06
84	649272.25	4199367.47	3.47E-05	3.69E-05	5.21E-06	5.54E-06	5.09E-06	4.94E-06	2.71E-06	2.24E-06
85	649221.66	4199566.07	2.78E-05	2.96E-05	4.18E-06	4.44E-06	4.09E-06	3.96E-06	2.17E-06	1.80E-06
86	649266.38	4199567.39	2.63E-05	2.81E-05	3.96E-06	4.21E-06	3.87E-06	3.75E-06	2.06E-06	1.70E-06
87	649215.78	4199765.99	2.20E-05	2.35E-05	3.31E-06	3.52E-06	3.24E-06	3.14E-06	1.72E-06	1.42E-06
88	649260.5	4199767.3	2.10E-05	2.24E-05	3.16E-06	3.36E-06	3.09E-06	3.00E-06	1.64E-06	1.36E-06
89	649304.06	4198292.94	2.51E-03	2.68E-03	3.78E-04	4.02E-04	3.69E-04	3.58E-04	1.96E-04	1.62E-04
90	649347.16	4198293.85	2.49E-03	2.66E-03	3.75E-04	3.98E-04	3.66E-04	3.55E-04	1.95E-04	1.61E-04
91	649390.25	4198294.76	2.46E-03	2.62E-03	3.70E-04	3.93E-04	3.61E-04	3.50E-04	1.92E-04	1.59E-04
92	649303.53	4198317.94	1.78E-03	1.89E-03	2.67E-04	2.84E-04	2.61E-04	2.53E-04	1.39E-04	1.15E-04
93	649346.63	4198318.85	1.75E-03	1.87E-03	2.63E-04	2.80E-04	2.58E-04	2.50E-04	1.37E-04	1.13E-04
94	649389.72	4198319.76	1.71E-03	1.83E-03	2.58E-04	2.74E-04	2.52E-04	2.44E-04	1.34E-04	1.11E-04
95	649303.01	4198342.93	1.35E-03	1.44E-03	2.03E-04	2.16E-04	1.99E-04	1.93E-04	1.06E-04	8.73E-05
96	649346.1	4198343.84	1.32E-03	1.41E-03	1.99E-04	2.12E-04	1.95E-04	1.89E-04	1.03E-04	8.56E-05
97	649389.2	4198344.75	1.29E-03	1.37E-03	1.94E-04	2.06E-04	1.89E-04	1.83E-04	1.01E-04	8.32E-05
98	649302.48	4198367.93	1.07E-03	1.14E-03	1.61E-04	1.72E-04	1.58E-04	1.53E-04	8.38E-05	6.93E-05
99	649345.57	4198368.84	1.05E-03	1.11E-03	1.57E-04	1.67E-04	1.54E-04	1.49E-04	8.16E-05	6.75E-05
100	649388.67	4198369.75	1.01E-03	1.07E-03	1.52E-04	1.61E-04	1.48E-04	1.44E-04	7.87E-05	6.51E-05
101	649301.42	4198417.92	7.29E-04	7.77E-04	1.10E-04	1.17E-04	1.07E-04	1.04E-04	5.70E-05	4.71E-05
102	649344.52	4198418.83	7.01E-04	7.48E-04	1.05E-04	1.12E-04	1.03E-04	9.99E-05	5.48E-05	4.53E-05
103	649387.61	4198419.74	6.67E-04	7.11E-04	1.00E-04	1.07E-04	9.80E-05	9.50E-05	5.21E-05	4.31E-05
104	649300.37	4198467.91	5.27E-04	5.62E-04	7.93E-05	8.43E-05	7.75E-05	7.52E-05	4.12E-05	3.41E-05
105	649343.46	4198468.82	5.00E-04	5.33E-04	7.52E-05	8.00E-05	7.36E-05	7.13E-05	3.91E-05	3.23E-05
106	649386.56	4198469.73	4.69E-04	5.00E-04	7.06E-05	7.50E-05	6.90E-05	6.69E-05	3.67E-05	3.03E-05
107	649299.31	4198517.89	3.97E-04	4.23E-04	5.97E-05	6.34E-05	5.83E-05	5.65E-05	3.10E-05	2.56E-05
108	649342.41	4198518.8	3.72E-04	3.96E-04	5.59E-05	5.95E-05	5.47E-05	5.30E-05	2.91E-05	2.40E-05
109	649385.5	4198519.71	3.45E-04	3.68E-04	5.19E-05	5.51E-05	5.07E-05	4.92E-05	2.69E-05	2.23E-05
110	649298.26	4198567.88	3.07E-04	3.28E-04	4.62E-05	4.91E-05	4.52E-05	4.38E-05	2.40E-05	1.99E-05

111	649341.35	4198568.79	2.85E-04	3.04E-04	4.29E-05	4.56E-05	4.19E-05	4.06E-05	2.23E-05	1.84E-05
112	649384.45	4198569.7	2.62E-04	2.80E-04	3.95E-05	4.19E-05	3.86E-05	3.74E-05	2.05E-05	1.70E-05
113	649317.69	4198668.32	1.89E-04	2.01E-04	2.84E-05	3.02E-05	2.77E-05	2.69E-05	1.47E-05	1.22E-05
114	649360.79	4198669.23	1.73E-04	1.84E-04	2.60E-05	2.76E-05	2.54E-05	2.46E-05	1.35E-05	1.12E-05
115	649315.58	4198768.29	1.29E-04	1.38E-04	1.95E-05	2.07E-05	1.90E-05	1.85E-05	1.01E-05	8.37E-06
116	649358.68	4198769.2	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.69E-05	9.28E-06	7.67E-06
117	649313.47	4198868.27	9.43E-05	1.01E-04	1.42E-05	1.51E-05	1.39E-05	1.34E-05	7.37E-06	6.09E-06
118	649356.57	4198869.18	8.69E-05	9.27E-05	1.31E-05	1.39E-05	1.28E-05	1.24E-05	6.79E-06	5.62E-06
119	649311.36	4198968.25	7.20E-05	7.68E-05	1.08E-05	1.15E-05	1.06E-05	1.03E-05	5.62E-06	4.65E-06
120	649354.45	4198969.16	6.68E-05	7.12E-05	1.00E-05	1.07E-05	9.82E-06	9.52E-06	5.22E-06	4.31E-06
121	649307.14	4199168.2	4.66E-05	4.97E-05	7.01E-06	7.45E-06	6.86E-06	6.64E-06	3.64E-06	3.01E-06
122	649350.23	4199169.11	4.38E-05	4.67E-05	6.58E-06	7.00E-06	6.44E-06	6.24E-06	3.42E-06	2.83E-06
123	649302.91	4199368.16	3.33E-05	3.55E-05	5.01E-06	5.33E-06	4.90E-06	4.75E-06	2.60E-06	2.15E-06
124	649346.01	4199369.07	3.16E-05	3.37E-05	4.75E-06	5.05E-06	4.65E-06	4.50E-06	2.47E-06	2.04E-06
125	649298.69	4199568.12	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
126	649341.79	4199569.03	2.43E-05	2.60E-05	3.66E-06	3.89E-06	3.58E-06	3.47E-06	1.90E-06	1.57E-06
127	649294.47	4199768.07	2.04E-05	2.17E-05	3.06E-06	3.25E-06	2.99E-06	2.90E-06	1.59E-06	1.32E-06
128	649337.57	4199768.98	1.96E-05	2.09E-05	2.95E-06	3.14E-06	2.88E-06	2.80E-06	1.53E-06	1.27E-06
129	649425.95	4198294.63	2.46E-03	2.62E-03	3.69E-04	3.93E-04	3.61E-04	3.50E-04	1.92E-04	1.59E-04
130	649426.05	4198319.63	1.69E-03	1.80E-03	2.54E-04	2.70E-04	2.49E-04	2.41E-04	1.32E-04	1.09E-04
131	649426.15	4198344.63	1.26E-03	1.34E-03	1.89E-04	2.01E-04	1.85E-04	1.79E-04	9.81E-05	8.12E-05
132	649426.25	4198369.63	9.74E-04	1.04E-03	1.47E-04	1.56E-04	1.43E-04	1.39E-04	7.61E-05	6.30E-05
133	649426.45	4198419.63	6.33E-04	6.75E-04	9.52E-05	1.01E-04	9.31E-05	9.03E-05	4.95E-05	4.09E-05
134	649409.11	4198469.7	4.53E-04	4.83E-04	6.81E-05	7.24E-05	6.66E-05	6.46E-05	3.54E-05	2.93E-05
135	649444.18	4198469.56	4.25E-04	4.53E-04	6.40E-05	6.80E-05	6.25E-05	6.06E-05	3.32E-05	2.75E-05
136	649409.31	4198519.7	3.30E-04	3.52E-04	4.97E-05	5.28E-05	4.86E-05	4.71E-05	2.58E-05	2.13E-05
137	649444.38	4198519.56	3.08E-04	3.28E-04	4.63E-05	4.92E-05	4.53E-05	4.39E-05	2.41E-05	1.99E-05
138	649409.51	4198569.7	2.50E-04	2.66E-04	3.75E-05	3.99E-05	3.67E-05	3.56E-05	1.95E-05	1.61E-05
139	649444.58	4198569.56	2.32E-04	2.47E-04	3.49E-05	3.71E-05	3.41E-05	3.31E-05	1.81E-05	1.50E-05
140	649392.38	4198669.77	1.62E-04	1.72E-04	2.43E-05	2.59E-05	2.38E-05	2.31E-05	1.26E-05	1.05E-05
141	649427.44	4198669.63	1.50E-04	1.60E-04	2.26E-05	2.40E-05	2.21E-05	2.14E-05	1.17E-05	9.72E-06
142	649392.78	4198769.77	1.11E-04	1.18E-04	1.67E-05	1.77E-05	1.63E-05	1.58E-05	8.66E-06	7.16E-06
143	649427.84	4198769.63	1.03E-04	1.10E-04	1.56E-05	1.65E-05	1.52E-05	1.47E-05	8.08E-06	6.68E-06
144	649393.18	4198869.77	8.12E-05	8.65E-05	1.22E-05	1.30E-05	1.19E-05	1.16E-05	6.34E-06	5.25E-06
145	649428.24	4198869.63	7.63E-05	8.13E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.96E-06	4.93E-06
146	649384.79	4198969.69	6.34E-05	6.76E-05	9.54E-06	1.01E-05	9.32E-06	9.04E-06	4.95E-06	4.10E-06
147	649411.11	4198969.69	6.08E-05	6.48E-05	9.14E-06	9.72E-06	8.94E-06	8.66E-06	4.75E-06	3.93E-06
148	649446.17	4198969.55	5.76E-05	6.14E-05	8.67E-06	9.21E-06	8.47E-06	8.21E-06	4.50E-06	3.72E-06
149	649383.08	4199169.67	4.18E-05	4.46E-05	6.29E-06	6.69E-06	6.15E-06	5.96E-06	3.27E-06	2.70E-06
150	649411.91	4199169.69	4.04E-05	4.30E-05	6.07E-06	6.45E-06	5.93E-06	5.75E-06	3.15E-06	2.61E-06
151	649446.97	4199169.55	3.87E-05	4.13E-05	5.83E-06	6.19E-06	5.70E-06	5.52E-06	3.03E-06	2.50E-06
152	649381.36	4199369.64	3.04E-05	3.24E-05	4.57E-06	4.86E-06	4.47E-06	4.33E-06	2.37E-06	1.96E-06
153	649412.7	4199369.69	2.95E-05	3.14E-05	4.43E-06	4.71E-06	4.33E-06	4.20E-06	2.30E-06	1.90E-06
154	649447.77	4199369.55	2.85E-05	3.04E-05	4.29E-06	4.56E-06	4.20E-06	4.07E-06	2.23E-06	1.84E-06
155	649379.65	4199569.62	2.35E-05	2.51E-05	3.54E-06	3.76E-06	3.46E-06	3.35E-06	1.84E-06	1.52E-06
156	649413.5	4199569.69	2.29E-05	2.44E-05	3.44E-06	3.66E-06	3.37E-06	3.26E-06	1.79E-06	1.48E-06
157	649448.57	4199569.55	2.23E-05	2.38E-05	3.36E-06	3.57E-06	3.29E-06	3.18E-06	1.75E-06	1.44E-06
158	649384.22	4199769.65	1.90E-05	2.02E-05	2.85E-06	3.03E-06	2.79E-06	2.70E-06	1.48E-06	1.23E-06
159	649414.3	4199769.69	1.86E-05	1.98E-05	2.80E-06	2.97E-06	2.73E-06	2.65E-06	1.45E-06	1.20E-06
160	649449.37	4199769.55	1.82E-05	1.94E-05	2.74E-06	2.91E-06	2.68E-06	2.60E-06	1.42E-06	1.18E-06
161	649467.04	4198295.55	2.39E-03	2.55E-03	3.59E-04	3.82E-04	3.51E-04	3.41E-04	1.87E-04	1.54E-04
162	649491.72	4198296.57	2.30E-03	2.46E-03	3.46E-04	3.68E-04	3.39E-04	3.28E-04	1.80E-04	1.49E-04
163	649466.01	4198320.53	1.62E-03	1.73E-03	2.44E-04	2.59E-04	2.39E-04	2.31E-04	1.27E-04	1.05E-04
164	649490.7	4198321.55	1.55E-03	1.66E-03	2.33E-04	2.48E-04	2.28E-04	2.21E-04	1.21E-04	1.00E-04
165	649464.98	4198345.51	1.19E-03	1.27E-03	1.79E-04	1.91E-04	1.75E-04	1.70E-04	9.32E-05	7.71E-05
166	649489.67	4198346.53	1.14E-03	1.21E-03	1.71E-04	1.82E-04	1.67E-04	1.62E-04	8.87E-05	7.34E-05
167	649463.96	4198370.49	9.19E-04	9.80E-04	1.38E-04	1.47E-04	1.35E-04	1.31E-04	7.18E-05	5.94E-05

168	649488.64	4198371.51	8.71E-04	9.28E-04	1.31E-04	1.39E-04	1.28E-04	1.24E-04	6.80E-05	5.63E-05
169	649461.9	4198420.45	5.92E-04	6.31E-04	8.90E-05	9.47E-05	8.71E-05	8.44E-05	4.62E-05	3.83E-05
170	649486.59	4198421.46	5.58E-04	5.95E-04	8.39E-05	8.92E-05	8.20E-05	7.95E-05	4.36E-05	3.61E-05
171	649484.53	4198471.42	3.85E-04	4.10E-04	5.79E-05	6.15E-05	5.66E-05	5.48E-05	3.01E-05	2.49E-05
172	649482.48	4198521.38	2.80E-04	2.98E-04	4.21E-05	4.47E-05	4.11E-05	3.99E-05	2.19E-05	1.81E-05
173	649480.42	4198571.34	2.12E-04	2.26E-04	3.19E-05	3.39E-05	3.12E-05	3.02E-05	1.66E-05	1.37E-05
174	649451.63	4198670.24	1.43E-04	1.52E-04	2.14E-05	2.28E-05	2.10E-05	2.03E-05	1.11E-05	9.21E-06
175	649476.32	4198671.25	1.35E-04	1.44E-04	2.03E-05	2.15E-05	1.98E-05	1.92E-05	1.05E-05	8.71E-06
176	649472.21	4198771.17	9.45E-05	1.01E-04	1.42E-05	1.51E-05	1.39E-05	1.35E-05	7.38E-06	6.11E-06
177	649468.1	4198871.08	7.10E-05	7.57E-05	1.07E-05	1.13E-05	1.04E-05	1.01E-05	5.55E-06	4.59E-06
178	649509.26	4198471.37	3.62E-04	3.86E-04	5.45E-05	5.79E-05	5.33E-05	5.16E-05	2.83E-05	2.34E-05
179	649510	4198521.36	2.62E-04	2.79E-04	3.94E-05	4.19E-05	3.85E-05	3.73E-05	2.05E-05	1.69E-05
180	649510.73	4198571.36	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.91E-05	2.82E-05	1.55E-05	1.28E-05
181	649512.21	4198671.35	1.25E-04	1.33E-04	1.88E-05	2.00E-05	1.84E-05	1.78E-05	9.78E-06	8.09E-06
182	649500.12	4198771.54	8.97E-05	9.56E-05	1.35E-05	1.43E-05	1.32E-05	1.28E-05	7.01E-06	5.80E-06
183	649501.6	4198871.52	6.72E-05	7.17E-05	1.01E-05	1.07E-05	9.89E-06	9.58E-06	5.25E-06	4.35E-06
184	649490.05	4198971.34	5.39E-05	5.75E-05	8.11E-06	8.62E-06	7.93E-06	7.68E-06	4.21E-06	3.48E-06
185	649516.63	4198971.31	5.21E-05	5.55E-05	7.83E-06	8.33E-06	7.66E-06	7.43E-06	4.07E-06	3.37E-06
186	649493.46	4199171.33	3.68E-05	3.92E-05	5.53E-06	5.88E-06	5.41E-06	5.24E-06	2.87E-06	2.38E-06
187	649519.58	4199171.29	3.59E-05	3.83E-05	5.40E-06	5.74E-06	5.28E-06	5.12E-06	2.80E-06	2.32E-06
188	649496.69	4199371.31	2.74E-05	2.92E-05	4.12E-06	4.38E-06	4.03E-06	3.90E-06	2.14E-06	1.77E-06
189	649472.12	4199370.98	2.79E-05	2.98E-05	4.20E-06	4.46E-06	4.11E-06	3.98E-06	2.18E-06	1.80E-06
190	649522.53	4199371.27	2.69E-05	2.87E-05	4.05E-06	4.30E-06	3.96E-06	3.84E-06	2.10E-06	1.74E-06
191	649499.83	4199571.29	2.16E-05	2.30E-05	3.25E-06	3.45E-06	3.18E-06	3.08E-06	1.69E-06	1.40E-06
192	649475.63	4199570.97	2.19E-05	2.34E-05	3.30E-06	3.50E-06	3.22E-06	3.12E-06	1.71E-06	1.42E-06
193	649525.48	4199571.25	2.13E-05	2.27E-05	3.20E-06	3.41E-06	3.13E-06	3.04E-06	1.66E-06	1.38E-06
194	649502.91	4199771.27	1.77E-05	1.89E-05	2.67E-06	2.83E-06	2.61E-06	2.53E-06	1.38E-06	1.15E-06
195	649478.98	4199770.95	1.79E-05	1.91E-05	2.69E-06	2.86E-06	2.63E-06	2.55E-06	1.40E-06	1.16E-06
196	649528.43	4199771.23	1.75E-05	1.87E-05	2.64E-06	2.80E-06	2.58E-06	2.50E-06	1.37E-06	1.13E-06
197	649519.56	4198295.26	2.26E-03	2.41E-03	3.40E-04	3.62E-04	3.33E-04	3.23E-04	1.77E-04	1.46E-04
198	649521.88	4198320.15	1.50E-03	1.60E-03	2.25E-04	2.39E-04	2.20E-04	2.13E-04	1.17E-04	9.68E-05
199	649513.29	4198346.06	1.09E-03	1.16E-03	1.64E-04	1.74E-04	1.60E-04	1.55E-04	8.52E-05	7.05E-05
200	649515.61	4198370.96	8.27E-04	8.81E-04	1.24E-04	1.32E-04	1.22E-04	1.18E-04	6.46E-05	5.34E-05
201	649514.39	4198421.06	5.24E-04	5.58E-04	7.88E-05	8.37E-05	7.70E-05	7.46E-05	4.09E-05	3.38E-05
202	649535.83	4198469.5	3.42E-04	3.65E-04	5.15E-05	5.47E-05	5.03E-05	4.88E-05	2.67E-05	2.21E-05
203	649540.48	4198519.29	2.46E-04	2.62E-04	3.70E-05	3.93E-05	3.62E-05	3.51E-05	1.92E-05	1.59E-05
204	649534.21	4198570.09	1.89E-04	2.01E-04	2.84E-05	3.02E-05	2.78E-05	2.69E-05	1.48E-05	1.22E-05
205	649543.51	4198669.66	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.69E-05	9.28E-06	7.68E-06
206	649543.03	4198769.75	8.40E-05	8.95E-05	1.26E-05	1.34E-05	1.24E-05	1.20E-05	6.56E-06	5.43E-06
207	649552.72	4198869.3	6.29E-05	6.71E-05	9.46E-06	1.01E-05	9.25E-06	8.97E-06	4.92E-06	4.07E-06
208	649524.55	4198870.82	6.51E-05	6.94E-05	9.79E-06	1.04E-05	9.57E-06	9.28E-06	5.09E-06	4.21E-06
209	649562.28	4198968.85	4.97E-05	5.29E-05	7.47E-06	7.94E-06	7.30E-06	7.08E-06	3.88E-06	3.21E-06
210	649579.95	4199168.03	3.43E-05	3.66E-05	5.16E-06	5.49E-06	5.05E-06	4.89E-06	2.68E-06	2.22E-06
211	649549.77	4199169.66	3.51E-05	3.74E-05	5.27E-06	5.61E-06	5.16E-06	5.00E-06	2.74E-06	2.27E-06
212	649597.85	4199367.2	2.59E-05	2.76E-05	3.89E-06	4.13E-06	3.80E-06	3.69E-06	2.02E-06	1.67E-06
213	649565.57	4199368.95	2.63E-05	2.80E-05	3.95E-06	4.20E-06	3.86E-06	3.75E-06	2.05E-06	1.70E-06
214	649617.04	4199566.31	2.06E-05	2.19E-05	3.09E-06	3.29E-06	3.02E-06	2.93E-06	1.61E-06	1.33E-06
215	649586.52	4199567.95	2.08E-05	2.22E-05	3.12E-06	3.32E-06	3.06E-06	2.96E-06	1.62E-06	1.34E-06
216	649556	4199569.6	2.10E-05	2.24E-05	3.16E-06	3.36E-06	3.09E-06	3.00E-06	1.64E-06	1.36E-06
217	649635.14	4199765.47	1.70E-05	1.81E-05	2.55E-06	2.72E-06	2.50E-06	2.42E-06	1.33E-06	1.10E-06
218	649603.13	4199767.19	1.71E-05	1.83E-05	2.57E-06	2.74E-06	2.52E-06	2.44E-06	1.34E-06	1.11E-06
219	649571.12	4199768.92	1.73E-05	1.84E-05	2.60E-06	2.76E-06	2.54E-06	2.46E-06	1.35E-06	1.12E-06
220	649545.05	4198342.25	1.06E-03	1.13E-03	1.59E-04	1.69E-04	1.56E-04	1.51E-04	8.27E-05	6.84E-05
221	649548.45	4198367.02	7.91E-04	8.43E-04	1.19E-04	1.26E-04	1.16E-04	1.13E-04	6.18E-05	5.11E-05
222	649537.66	4198418.97	5.00E-04	5.33E-04	7.52E-05	8.00E-05	7.36E-05	7.13E-05	3.91E-05	3.23E-05
223	649562.07	4198466.09	3.26E-04	3.47E-04	4.90E-05	5.21E-05	4.79E-05	4.64E-05	2.54E-05	2.10E-05
224	649568.88	4198515.62	2.34E-04	2.50E-04	3.52E-05	3.74E-05	3.44E-05	3.34E-05	1.83E-05	1.51E-05

225	649558.1	4198567.57	1.81E-04	1.93E-04	2.73E-05	2.90E-05	2.67E-05	2.59E-05	1.42E-05	1.17E-05
226	649571.72	4198666.64	1.14E-04	1.22E-04	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.94E-06	7.40E-06
227	649574.54	4198766.96	8.09E-05	8.63E-05	1.22E-05	1.29E-05	1.19E-05	1.15E-05	6.32E-06	5.23E-06
228	649602.94	4198763.29	7.90E-05	8.42E-05	1.19E-05	1.26E-05	1.16E-05	1.13E-05	6.17E-06	5.10E-06
229	649586	4198866.27	6.09E-05	6.49E-05	9.16E-06	9.73E-06	8.95E-06	8.68E-06	4.76E-06	3.93E-06
230	649616.56	4198862.36	5.96E-05	6.35E-05	8.95E-06	9.52E-06	8.76E-06	8.49E-06	4.65E-06	3.85E-06
231	649597.46	4198965.59	4.83E-05	5.14E-05	7.26E-06	7.71E-06	7.09E-06	6.88E-06	3.77E-06	3.12E-06
232	649630.18	4198961.43	4.73E-05	5.04E-05	7.11E-06	7.55E-06	6.95E-06	6.73E-06	3.69E-06	3.05E-06
233	649626.86	4199163.48	3.34E-05	3.56E-05	5.03E-06	5.34E-06	4.92E-06	4.76E-06	2.61E-06	2.16E-06
234	649657.43	4199159.56	3.30E-05	3.51E-05	4.96E-06	5.27E-06	4.85E-06	4.70E-06	2.58E-06	2.13E-06
235	649651.22	4199361.95	2.53E-05	2.70E-05	3.81E-06	4.05E-06	3.73E-06	3.61E-06	1.98E-06	1.64E-06
236	649684.67	4199357.7	2.51E-05	2.67E-05	3.77E-06	4.01E-06	3.69E-06	3.57E-06	1.96E-06	1.62E-06
237	649680.27	4199559.87	2.02E-05	2.16E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
238	649652.18	4199563.11	2.04E-05	2.17E-05	3.06E-06	3.25E-06	2.99E-06	2.90E-06	1.59E-06	1.32E-06
239	649711.91	4199555.83	2.01E-05	2.14E-05	3.02E-06	3.21E-06	2.95E-06	2.86E-06	1.57E-06	1.30E-06
240	649705.35	4199758.26	1.68E-05	1.79E-05	2.52E-06	2.68E-06	2.46E-06	2.39E-06	1.31E-06	1.08E-06
241	649672.94	4199762	1.69E-05	1.80E-05	2.53E-06	2.69E-06	2.48E-06	2.40E-06	1.32E-06	1.09E-06
242	649739.16	4199753.97	1.67E-05	1.78E-05	2.51E-06	2.67E-06	2.45E-06	2.38E-06	1.30E-06	1.08E-06
243	649553.97	4198290.85	2.29E-03	2.44E-03	3.44E-04	3.66E-04	3.36E-04	3.26E-04	1.79E-04	1.48E-04
244	649556.92	4198315.68	1.47E-03	1.57E-03	2.22E-04	2.36E-04	2.17E-04	2.10E-04	1.15E-04	9.53E-05
245	649576.07	4198338.58	1.01E-03	1.08E-03	1.52E-04	1.62E-04	1.49E-04	1.44E-04	7.90E-05	6.54E-05
246	649579.02	4198363.4	7.46E-04	7.95E-04	1.12E-04	1.19E-04	1.10E-04	1.06E-04	5.83E-05	4.82E-05
247	649568.73	4198414.98	4.71E-04	5.02E-04	7.08E-05	7.53E-05	6.92E-05	6.71E-05	3.68E-05	3.04E-05
248	649590.82	4198462.7	3.07E-04	3.27E-04	4.61E-05	4.91E-05	4.51E-05	4.37E-05	2.40E-05	1.98E-05
249	649596.73	4198512.35	2.23E-04	2.38E-04	3.35E-05	3.56E-05	3.28E-05	3.18E-05	1.74E-05	1.44E-05
250	649586.44	4198563.93	1.74E-04	1.86E-04	2.62E-05	2.78E-05	2.56E-05	2.48E-05	1.36E-05	1.12E-05
251	649598.25	4198663.23	1.11E-04	1.19E-04	1.67E-05	1.78E-05	1.64E-05	1.59E-05	8.70E-06	7.19E-06
252	649626.24	4198760.6	7.76E-05	8.27E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.06E-06	5.01E-06
253	649584.87	4198287.46	2.26E-03	2.40E-03	3.39E-04	3.61E-04	3.32E-04	3.21E-04	1.76E-04	1.46E-04
254	649587.35	4198312.34	1.42E-03	1.51E-03	2.13E-04	2.27E-04	2.09E-04	2.02E-04	1.11E-04	9.17E-05
255	649605.01	4198335.7	9.43E-04	1.00E-03	1.42E-04	1.51E-04	1.39E-04	1.34E-04	7.36E-05	6.09E-05
256	649607.49	4198360.58	6.90E-04	7.35E-04	1.04E-04	1.10E-04	1.01E-04	9.83E-05	5.39E-05	4.46E-05
257	649597.29	4198411.84	4.39E-04	4.68E-04	6.61E-05	7.02E-05	6.46E-05	6.26E-05	3.43E-05	2.84E-05
258	649617.43	4198460.08	2.90E-04	3.09E-04	4.36E-05	4.63E-05	4.26E-05	4.13E-05	2.26E-05	1.87E-05
259	649622.4	4198509.83	2.13E-04	2.27E-04	3.21E-05	3.41E-05	3.14E-05	3.04E-05	1.67E-05	1.38E-05
260	649612.19	4198561.1	1.68E-04	1.79E-04	2.52E-05	2.68E-05	2.47E-05	2.39E-05	1.31E-05	1.08E-05
261	649622.12	4198660.61	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.50E-06	7.03E-06
262	649641.99	4198859.62	5.86E-05	6.24E-05	8.81E-06	9.36E-06	8.61E-06	8.35E-06	4.58E-06	3.79E-06
263	649667.1	4198957.61	4.63E-05	4.94E-05	6.96E-06	7.40E-06	6.81E-06	6.60E-06	3.62E-06	2.99E-06
264	649686.97	4199156.62	3.25E-05	3.47E-05	4.89E-06	5.20E-06	4.78E-06	4.64E-06	2.54E-06	2.10E-06
265	649616.02	4198286.57	2.06E-03	2.20E-03	3.10E-04	3.30E-04	3.04E-04	2.94E-04	1.61E-04	1.33E-04
266	649615.36	4198311.56	1.29E-03	1.37E-03	1.94E-04	2.06E-04	1.89E-04	1.84E-04	1.01E-04	8.32E-05
267	649633.82	4198337.05	8.09E-04	8.62E-04	1.22E-04	1.29E-04	1.19E-04	1.15E-04	6.32E-05	5.22E-05
268	649633.16	4198362.05	6.07E-04	6.47E-04	9.13E-05	9.70E-05	8.92E-05	8.65E-05	4.74E-05	3.92E-05
269	649631.84	4198412.03	3.90E-04	4.15E-04	5.86E-05	6.23E-05	5.73E-05	5.55E-05	3.04E-05	2.52E-05
270	649655.51	4198287.28	1.64E-03	1.75E-03	2.47E-04	2.63E-04	2.42E-04	2.34E-04	1.28E-04	1.06E-04
271	649695.43	4198287.69	1.15E-03	1.23E-03	1.73E-04	1.84E-04	1.69E-04	1.64E-04	8.98E-05	7.43E-05
272	649655.25	4198312.28	1.02E-03	1.08E-03	1.53E-04	1.63E-04	1.50E-04	1.45E-04	7.95E-05	6.58E-05
273	649695.17	4198312.69	7.88E-04	8.40E-04	1.18E-04	1.26E-04	1.16E-04	1.12E-04	6.15E-05	5.09E-05
274	649674.96	4198337.48	6.50E-04	6.93E-04	9.77E-05	1.04E-04	9.55E-05	9.26E-05	5.07E-05	4.20E-05
275	649674.7	4198362.48	5.06E-04	5.40E-04	7.61E-05	8.10E-05	7.45E-05	7.22E-05	3.96E-05	3.27E-05
276	649674.19	4198412.48	3.41E-04	3.64E-04	5.13E-05	5.46E-05	5.02E-05	4.86E-05	2.67E-05	2.21E-05
277	649653.72	4198462.27	2.61E-04	2.78E-04	3.92E-05	4.17E-05	3.83E-05	3.72E-05	2.04E-05	1.68E-05
278	649693.64	4198462.68	2.39E-04	2.55E-04	3.60E-05	3.83E-05	3.52E-05	3.41E-05	1.87E-05	1.55E-05
279	649653.21	4198512.27	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.91E-05	2.82E-05	1.55E-05	1.28E-05
280	649693.13	4198512.68	1.85E-04	1.97E-04	2.78E-05	2.96E-05	2.72E-05	2.64E-05	1.45E-05	1.20E-05
281	649652.7	4198562.27	1.56E-04	1.66E-04	2.35E-05	2.49E-05	2.29E-05	2.22E-05	1.22E-05	1.01E-05

282	649692.62	4198562.67	1.48E-04	1.57E-04	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.54E-06
283	649651.69	4198662.26	1.04E-04	1.11E-04	1.57E-05	1.67E-05	1.54E-05	1.49E-05	8.16E-06	6.75E-06
284	649691.61	4198662.67	1.00E-04	1.07E-04	1.51E-05	1.60E-05	1.48E-05	1.43E-05	7.84E-06	6.49E-06
285	649650.67	4198762.26	7.54E-05	8.04E-05	1.13E-05	1.21E-05	1.11E-05	1.07E-05	5.89E-06	4.87E-06
286	649690.59	4198762.66	7.30E-05	7.78E-05	1.10E-05	1.17E-05	1.07E-05	1.04E-05	5.70E-06	4.72E-06
287	649669.61	4198862.46	5.69E-05	6.07E-05	8.56E-06	9.10E-06	8.37E-06	8.11E-06	4.45E-06	3.68E-06
288	649624.59	4199362.02	2.57E-05	2.74E-05	3.86E-06	4.10E-06	3.77E-06	3.66E-06	2.01E-06	1.66E-06
289	649720.65	4198263.97	1.51E-03	1.61E-03	2.28E-04	2.42E-04	2.23E-04	2.16E-04	1.18E-04	9.78E-05
290	649722.91	4198219.73	3.33E-03	3.55E-03	5.01E-04	5.32E-04	4.89E-04	4.74E-04	2.60E-04	2.15E-04
291	649737.78	4198282.18	9.41E-04	1.00E-03	1.42E-04	1.50E-04	1.38E-04	1.34E-04	7.35E-05	6.08E-05
292	649746.74	4198243.12	1.57E-03	1.68E-03	2.37E-04	2.52E-04	2.31E-04	2.24E-04	1.23E-04	1.02E-04
293	649762.74	4198283.45	7.86E-04	8.38E-04	1.18E-04	1.26E-04	1.16E-04	1.12E-04	6.14E-05	5.08E-05
294	649729.68	4198324.11	5.94E-04	6.33E-04	8.93E-05	9.50E-05	8.73E-05	8.46E-05	4.64E-05	3.84E-05
295	649771.71	4198244.4	1.15E-03	1.23E-03	1.74E-04	1.85E-04	1.70E-04	1.65E-04	9.02E-05	7.46E-05
296	649787.71	4198284.73	6.69E-04	7.13E-04	1.01E-04	1.07E-04	9.83E-05	9.53E-05	5.22E-05	4.32E-05
297	649772.03	4198318.6	5.29E-04	5.64E-04	7.96E-05	8.46E-05	7.78E-05	7.54E-05	4.13E-05	3.42E-05
298	649746.81	4198342.32	4.73E-04	5.04E-04	7.12E-05	7.57E-05	6.96E-05	6.74E-05	3.70E-05	3.06E-05
299	649712.04	4198355.9	4.71E-04	5.02E-04	7.09E-05	7.54E-05	6.93E-05	6.72E-05	3.68E-05	3.05E-05
300	649796.68	4198245.67	9.12E-04	9.72E-04	1.37E-04	1.46E-04	1.34E-04	1.30E-04	7.13E-05	5.89E-05
301	649837.65	4198287.28	5.08E-04	5.41E-04	7.64E-05	8.12E-05	7.47E-05	7.24E-05	3.97E-05	3.28E-05
302	649821.97	4198321.15	4.27E-04	4.55E-04	6.42E-05	6.82E-05	6.28E-05	6.08E-05	3.33E-05	2.76E-05
303	649806.29	4198355.02	3.58E-04	3.82E-04	5.39E-05	5.73E-05	5.27E-05	5.11E-05	2.80E-05	2.32E-05
304	649781.07	4198378.74	3.30E-04	3.51E-04	4.96E-05	5.27E-05	4.85E-05	4.70E-05	2.57E-05	2.13E-05
305	649746.3	4198392.32	3.28E-04	3.50E-04	4.93E-05	5.25E-05	4.82E-05	4.68E-05	2.56E-05	2.12E-05
306	649711.53	4198405.89	3.25E-04	3.47E-04	4.89E-05	5.20E-05	4.78E-05	4.63E-05	2.54E-05	2.10E-05
307	649846.61	4198248.22	6.38E-04	6.80E-04	9.59E-05	1.02E-04	9.38E-05	9.09E-05	4.98E-05	4.12E-05
308	649886.46	4198292.25	4.00E-04	4.27E-04	6.02E-05	6.40E-05	5.88E-05	5.70E-05	3.13E-05	2.59E-05
309	649868.54	4198330.96	3.41E-04	3.64E-04	5.13E-05	5.46E-05	5.02E-05	4.86E-05	2.67E-05	2.21E-05
310	649850.62	4198369.67	2.90E-04	3.09E-04	4.36E-05	4.64E-05	4.27E-05	4.14E-05	2.27E-05	1.88E-05
311	649812.84	4198416.13	2.48E-04	2.64E-04	3.72E-05	3.96E-05	3.64E-05	3.53E-05	1.93E-05	1.60E-05
312	649773.11	4198431.65	2.46E-04	2.62E-04	3.70E-05	3.93E-05	3.62E-05	3.51E-05	1.92E-05	1.59E-05
313	649733.38	4198447.16	2.43E-04	2.59E-04	3.65E-05	3.88E-05	3.57E-05	3.46E-05	1.90E-05	1.57E-05
314	649896.55	4198250.77	4.84E-04	5.16E-04	7.28E-05	7.74E-05	7.12E-05	6.90E-05	3.78E-05	3.13E-05
315	649897.68	4198228.65	5.42E-04	5.78E-04	8.15E-05	8.67E-05	7.97E-05	7.73E-05	4.23E-05	3.50E-05
316	649936.64	4198294.26	3.30E-04	3.52E-04	4.96E-05	5.28E-05	4.85E-05	4.70E-05	2.58E-05	2.13E-05
317	649919.22	4198331.89	2.90E-04	3.09E-04	4.36E-05	4.64E-05	4.27E-05	4.14E-05	2.27E-05	1.88E-05
318	649901.8	4198369.53	2.54E-04	2.71E-04	3.82E-05	4.06E-05	3.73E-05	3.62E-05	1.98E-05	1.64E-05
319	649884.38	4198407.16	2.22E-04	2.37E-04	3.34E-05	3.55E-05	3.27E-05	3.17E-05	1.74E-05	1.44E-05
320	649847.65	4198452.34	1.95E-04	2.08E-04	2.93E-05	3.12E-05	2.87E-05	2.78E-05	1.52E-05	1.26E-05
321	649809.02	4198467.42	1.94E-04	2.07E-04	2.92E-05	3.10E-05	2.85E-05	2.76E-05	1.52E-05	1.25E-05
322	649770.39	4198482.51	1.91E-04	2.04E-04	2.88E-05	3.06E-05	2.81E-05	2.73E-05	1.50E-05	1.24E-05
323	649731.76	4198497.59	1.88E-04	2.01E-04	2.83E-05	3.01E-05	2.77E-05	2.68E-05	1.47E-05	1.22E-05
324	649946.48	4198253.32	3.86E-04	4.12E-04	5.81E-05	6.18E-05	5.68E-05	5.51E-05	3.02E-05	2.50E-05
325	649947.61	4198231.2	4.25E-04	4.53E-04	6.39E-05	6.79E-05	6.25E-05	6.05E-05	3.32E-05	2.74E-05
326	649986.74	4198296.47	2.78E-04	2.97E-04	4.18E-05	4.45E-05	4.09E-05	3.96E-05	2.17E-05	1.80E-05
327	649969.63	4198333.42	2.50E-04	2.66E-04	3.75E-05	3.99E-05	3.67E-05	3.56E-05	1.95E-05	1.61E-05
328	649952.53	4198370.37	2.23E-04	2.37E-04	3.35E-05	3.56E-05	3.27E-05	3.17E-05	1.74E-05	1.44E-05
329	649935.43	4198407.32	1.99E-04	2.12E-04	2.99E-05	3.18E-05	2.92E-05	2.83E-05	1.55E-05	1.28E-05
330	649918.32	4198444.27	1.78E-04	1.90E-04	2.67E-05	2.84E-05	2.61E-05	2.53E-05	1.39E-05	1.15E-05
331	649882.26	4198488.62	1.59E-04	1.69E-04	2.39E-05	2.54E-05	2.34E-05	2.27E-05	1.24E-05	1.03E-05
332	649844.33	4198503.43	1.58E-04	1.68E-04	2.38E-05	2.53E-05	2.32E-05	2.25E-05	1.23E-05	1.02E-05
333	649806.4	4198518.24	1.56E-04	1.66E-04	2.35E-05	2.49E-05	2.29E-05	2.22E-05	1.22E-05	1.01E-05
334	649768.48	4198533.05	1.53E-04	1.64E-04	2.31E-05	2.45E-05	2.26E-05	2.19E-05	1.20E-05	9.91E-06
335	649730.55	4198547.86	1.50E-04	1.60E-04	2.26E-05	2.40E-05	2.21E-05	2.14E-05	1.18E-05	9.72E-06
336	649996.42	4198255.88	3.18E-04	3.39E-04	4.78E-05	5.09E-05	4.68E-05	4.53E-05	2.49E-05	2.06E-05
337	650086.2	4198302.45	2.07E-04	2.21E-04	3.11E-05	3.31E-05	3.04E-05	2.95E-05	1.62E-05	1.34E-05
338	650068.28	4198341.16	1.90E-04	2.02E-04	2.85E-05	3.03E-05	2.79E-05	2.70E-05	1.48E-05	1.22E-05

339	650050.36	4198379.87	1.72E-04	1.84E-04	2.59E-05	2.76E-05	2.53E-05	2.46E-05	1.35E-05	1.11E-05
340	650032.45	4198418.58	1.57E-04	1.67E-04	2.35E-05	2.50E-05	2.30E-05	2.23E-05	1.22E-05	1.01E-05
341	650014.53	4198457.29	1.43E-04	1.52E-04	2.14E-05	2.28E-05	2.10E-05	2.03E-05	1.11E-05	9.22E-06
342	649996.61	4198495.99	1.30E-04	1.39E-04	1.96E-05	2.08E-05	1.91E-05	1.86E-05	1.02E-05	8.41E-06
343	649978.69	4198534.7	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.69E-05	9.27E-06	7.67E-06
344	649949.87	4198561.82	1.13E-04	1.21E-04	1.70E-05	1.81E-05	1.66E-05	1.61E-05	8.85E-06	7.32E-06
345	649910.13	4198577.33	1.13E-04	1.20E-04	1.69E-05	1.80E-05	1.65E-05	1.60E-05	8.79E-06	7.27E-06
346	649870.4	4198592.85	1.11E-04	1.18E-04	1.67E-05	1.77E-05	1.63E-05	1.58E-05	8.66E-06	7.16E-06
347	649830.67	4198608.36	1.09E-04	1.16E-04	1.63E-05	1.74E-05	1.60E-05	1.55E-05	8.49E-06	7.03E-06
348	649790.94	4198623.88	1.06E-04	1.13E-04	1.60E-05	1.70E-05	1.56E-05	1.51E-05	8.30E-06	6.87E-06
349	649751.2	4198639.4	1.04E-04	1.11E-04	1.56E-05	1.66E-05	1.53E-05	1.48E-05	8.11E-06	6.71E-06
350	650096.29	4198260.98	2.30E-04	2.45E-04	3.46E-05	3.68E-05	3.39E-05	3.28E-05	1.80E-05	1.49E-05
351	650185.81	4198308.12	1.62E-04	1.73E-04	2.44E-05	2.59E-05	2.39E-05	2.31E-05	1.27E-05	1.05E-05
352	650167.36	4198347.97	1.51E-04	1.61E-04	2.27E-05	2.41E-05	2.22E-05	2.15E-05	1.18E-05	9.75E-06
353	650148.92	4198387.82	1.39E-04	1.48E-04	2.09E-05	2.23E-05	2.05E-05	1.98E-05	1.09E-05	9.00E-06
354	650130.47	4198427.66	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.88E-05	1.83E-05	1.00E-05	8.28E-06
355	650112.03	4198467.51	1.18E-04	1.26E-04	1.78E-05	1.89E-05	1.74E-05	1.68E-05	9.22E-06	7.63E-06
356	650093.58	4198507.36	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.52E-06	7.05E-06
357	650075.14	4198547.21	1.01E-04	1.08E-04	1.52E-05	1.62E-05	1.49E-05	1.44E-05	7.90E-06	6.53E-06
358	650056.69	4198587.05	9.36E-05	9.97E-05	1.41E-05	1.50E-05	1.38E-05	1.33E-05	7.31E-06	6.05E-06
359	650017.8	4198634.89	8.62E-05	9.19E-05	1.30E-05	1.38E-05	1.27E-05	1.23E-05	6.73E-06	5.57E-06
360	649976.89	4198650.86	8.54E-05	9.10E-05	1.28E-05	1.36E-05	1.26E-05	1.22E-05	6.67E-06	5.52E-06
361	649935.99	4198666.83	8.40E-05	8.96E-05	1.26E-05	1.34E-05	1.24E-05	1.20E-05	6.57E-06	5.43E-06
362	649895.09	4198682.8	8.24E-05	8.78E-05	1.24E-05	1.32E-05	1.21E-05	1.17E-05	6.43E-06	5.32E-06
363	649854.19	4198698.77	8.04E-05	8.57E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.28E-06	5.19E-06
364	649813.29	4198714.75	7.83E-05	8.35E-05	1.18E-05	1.25E-05	1.15E-05	1.12E-05	6.12E-06	5.06E-06
365	649772.39	4198730.72	7.63E-05	8.13E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.96E-06	4.93E-06
366	649731.49	4198746.69	7.45E-05	7.94E-05	1.12E-05	1.19E-05	1.10E-05	1.06E-05	5.82E-06	4.81E-06
367	650196.16	4198266.08	1.77E-04	1.89E-04	2.66E-05	2.83E-05	2.61E-05	2.52E-05	1.38E-05	1.14E-05
368	650285.94	4198312.66	1.32E-04	1.41E-04	1.98E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.52E-06
369	650268.02	4198351.36	1.24E-04	1.33E-04	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.71E-06	8.04E-06
370	650250.1	4198390.07	1.17E-04	1.24E-04	1.75E-05	1.86E-05	1.71E-05	1.66E-05	9.11E-06	7.53E-06
371	650232.19	4198428.78	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.51E-06	7.04E-06
372	650214.27	4198467.49	1.02E-04	1.08E-04	1.53E-05	1.62E-05	1.49E-05	1.45E-05	7.94E-06	6.57E-06
373	650196.35	4198506.2	9.49E-05	1.01E-04	1.43E-05	1.52E-05	1.40E-05	1.35E-05	7.42E-06	6.14E-06
374	650178.43	4198544.91	8.89E-05	9.48E-05	1.34E-05	1.42E-05	1.31E-05	1.27E-05	6.95E-06	5.75E-06
375	650160.51	4198583.62	8.35E-05	8.91E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.53E-06	5.40E-06
376	650142.6	4198622.32	7.85E-05	8.37E-05	1.18E-05	1.26E-05	1.15E-05	1.12E-05	6.13E-06	5.07E-06
377	650124.68	4198661.03	7.37E-05	7.85E-05	1.11E-05	1.18E-05	1.08E-05	1.05E-05	5.75E-06	4.76E-06
378	650086.89	4198707.5	6.87E-05	7.32E-05	1.03E-05	1.10E-05	1.01E-05	9.79E-06	5.36E-06	4.44E-06
379	650047.16	4198723.02	6.80E-05	7.25E-05	1.02E-05	1.09E-05	9.99E-06	9.69E-06	5.31E-06	4.39E-06
380	650007.43	4198738.53	6.69E-05	7.13E-05	1.01E-05	1.07E-05	9.84E-06	9.53E-06	5.23E-06	4.32E-06
381	649967.7	4198754.05	6.55E-05	6.99E-05	9.85E-06	1.05E-05	9.63E-06	9.34E-06	5.12E-06	4.23E-06
382	649927.96	4198769.56	6.39E-05	6.82E-05	9.62E-06	1.02E-05	9.40E-06	9.11E-06	5.00E-06	4.13E-06
383	649888.23	4198785.08	6.24E-05	6.65E-05	9.38E-06	9.97E-06	9.17E-06	8.89E-06	4.87E-06	4.03E-06
384	649848.5	4198800.6	6.08E-05	6.48E-05	9.14E-06	9.72E-06	8.94E-06	8.66E-06	4.75E-06	3.93E-06
385	649808.77	4198816.11	5.93E-05	6.32E-05	8.91E-06	9.48E-06	8.72E-06	8.45E-06	4.63E-06	3.83E-06
386	649769.03	4198831.63	5.80E-05	6.18E-05	8.71E-06	9.27E-06	8.52E-06	8.26E-06	4.53E-06	3.75E-06
387	649729.3	4198847.14	5.69E-05	6.06E-05	8.55E-06	9.09E-06	8.36E-06	8.11E-06	4.44E-06	3.68E-06
388	650296.03	4198271.18	1.42E-04	1.51E-04	2.14E-05	2.27E-05	2.09E-05	2.02E-05	1.11E-05	9.18E-06
389	650385.62	4198318.16	1.10E-04	1.17E-04	1.65E-05	1.76E-05	1.62E-05	1.57E-05	8.58E-06	7.10E-06
390	650367.33	4198357.68	1.04E-04	1.11E-04	1.57E-05	1.67E-05	1.54E-05	1.49E-05	8.16E-06	6.75E-06
391	650349.04	4198397.19	9.87E-05	1.05E-04	1.48E-05	1.58E-05	1.45E-05	1.41E-05	7.71E-06	6.38E-06
392	650330.75	4198436.71	9.30E-05	9.91E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.26E-06	6.01E-06
393	650312.46	4198476.22	8.74E-05	9.32E-05	1.31E-05	1.40E-05	1.29E-05	1.25E-05	6.83E-06	5.65E-06
394	650294.17	4198515.74	8.22E-05	8.76E-05	1.24E-05	1.31E-05	1.21E-05	1.17E-05	6.42E-06	5.31E-06
395	650275.87	4198555.25	7.74E-05	8.26E-05	1.16E-05	1.24E-05	1.14E-05	1.10E-05	6.05E-06	5.00E-06

396	650257.58	4198594.77	7.32E-05	7.80E-05	1.10E-05	1.17E-05	1.08E-05	1.04E-05	5.71E-06	4.73E-06
397	650239.29	4198634.28	6.93E-05	7.38E-05	1.04E-05	1.11E-05	1.02E-05	9.87E-06	5.41E-06	4.48E-06
398	650221	4198673.8	6.56E-05	7.00E-05	9.87E-06	1.05E-05	9.65E-06	9.35E-06	5.13E-06	4.24E-06
399	650202.71	4198713.31	6.21E-05	6.62E-05	9.34E-06	9.93E-06	9.13E-06	8.85E-06	4.85E-06	4.01E-06
400	650184.42	4198752.83	5.85E-05	6.24E-05	8.80E-06	9.35E-06	8.60E-06	8.34E-06	4.57E-06	3.78E-06
401	650154.99	4198780.5	5.65E-05	6.02E-05	8.50E-06	9.03E-06	8.31E-06	8.05E-06	4.41E-06	3.65E-06
402	650114.43	4198796.34	5.59E-05	5.96E-05	8.40E-06	8.93E-06	8.22E-06	7.96E-06	4.37E-06	3.61E-06
403	650073.87	4198812.18	5.49E-05	5.85E-05	8.26E-06	8.78E-06	8.07E-06	7.83E-06	4.29E-06	3.55E-06
404	650033.31	4198828.02	5.37E-05	5.73E-05	8.08E-06	8.59E-06	7.90E-06	7.66E-06	4.20E-06	3.47E-06
405	649992.75	4198843.86	5.24E-05	5.58E-05	7.88E-06	8.38E-06	7.70E-06	7.47E-06	4.09E-06	3.39E-06
406	649952.19	4198859.7	5.10E-05	5.44E-05	7.67E-06	8.15E-06	7.50E-06	7.27E-06	3.98E-06	3.30E-06
407	649911.63	4198875.54	4.97E-05	5.29E-05	7.47E-06	7.94E-06	7.30E-06	7.08E-06	3.88E-06	3.21E-06
408	649871.07	4198891.38	4.84E-05	5.16E-05	7.28E-06	7.74E-06	7.12E-06	6.90E-06	3.78E-06	3.13E-06
409	649830.51	4198907.22	4.74E-05	5.05E-05	7.12E-06	7.57E-06	6.97E-06	6.75E-06	3.70E-06	3.06E-06
410	649789.95	4198923.06	4.65E-05	4.95E-05	6.99E-06	7.43E-06	6.83E-06	6.62E-06	3.63E-06	3.00E-06
411	649749.39	4198938.89	4.58E-05	4.88E-05	6.88E-06	7.32E-06	6.73E-06	6.52E-06	3.58E-06	2.96E-06
412	649708.83	4198954.73	4.53E-05	4.83E-05	6.81E-06	7.24E-06	6.66E-06	6.46E-06	3.54E-06	2.93E-06
413	650395.9	4198276.28	1.17E-04	1.25E-04	1.76E-05	1.87E-05	1.72E-05	1.67E-05	9.15E-06	7.57E-06
414	650397.03	4198254.16	1.22E-04	1.30E-04	1.83E-05	1.95E-05	1.79E-05	1.74E-05	9.52E-06	7.87E-06
415	650585.4	4198328.27	8.09E-05	8.62E-05	1.22E-05	1.29E-05	1.19E-05	1.15E-05	6.32E-06	5.23E-06
416	650567.2	4198367.61	7.78E-05	8.29E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.08E-06	5.03E-06
417	650548.99	4198406.94	7.46E-05	7.95E-05	1.12E-05	1.19E-05	1.10E-05	1.06E-05	5.83E-06	4.82E-06
418	650530.78	4198446.27	7.14E-05	7.61E-05	1.07E-05	1.14E-05	1.05E-05	1.02E-05	5.57E-06	4.61E-06
419	650512.58	4198485.6	6.81E-05	7.26E-05	1.02E-05	1.09E-05	1.00E-05	9.70E-06	5.32E-06	4.40E-06
420	650494.37	4198524.94	6.48E-05	6.91E-05	9.75E-06	1.04E-05	9.53E-06	9.24E-06	5.07E-06	4.19E-06
421	650476.16	4198564.27	6.17E-05	6.58E-05	9.28E-06	9.87E-06	9.08E-06	8.80E-06	4.82E-06	3.99E-06
422	650457.96	4198603.6	5.88E-05	6.27E-05	8.85E-06	9.41E-06	8.65E-06	8.39E-06	4.60E-06	3.80E-06
423	650439.75	4198642.94	5.62E-05	5.99E-05	8.45E-06	8.98E-06	8.26E-06	8.01E-06	4.39E-06	3.63E-06
424	650421.54	4198682.27	5.38E-05	5.73E-05	8.09E-06	8.60E-06	7.91E-06	7.66E-06	4.20E-06	3.47E-06
425	650403.33	4198721.6	5.16E-05	5.50E-05	7.76E-06	8.25E-06	7.59E-06	7.35E-06	4.03E-06	3.33E-06
426	650385.13	4198760.94	4.95E-05	5.28E-05	7.45E-06	7.92E-06	7.28E-06	7.06E-06	3.87E-06	3.20E-06
427	650366.92	4198800.27	4.75E-05	5.07E-05	7.15E-06	7.60E-06	6.99E-06	6.77E-06	3.71E-06	3.07E-06
428	650348.71	4198839.6	4.55E-05	4.85E-05	6.84E-06	7.27E-06	6.69E-06	6.48E-06	3.55E-06	2.94E-06
429	650330.51	4198878.93	4.34E-05	4.63E-05	6.53E-06	6.94E-06	6.38E-06	6.19E-06	3.39E-06	2.80E-06
430	650292.11	4198926.15	4.10E-05	4.37E-05	6.17E-06	6.56E-06	6.03E-06	5.84E-06	3.20E-06	2.65E-06
431	650251.74	4198941.92	4.05E-05	4.32E-05	6.09E-06	6.47E-06	5.95E-06	5.77E-06	3.16E-06	2.62E-06
432	650211.37	4198957.68	3.98E-05	4.24E-05	5.98E-06	6.36E-06	5.85E-06	5.67E-06	3.11E-06	2.57E-06
433	650170.99	4198973.45	3.89E-05	4.15E-05	5.85E-06	6.22E-06	5.72E-06	5.54E-06	3.04E-06	2.51E-06
434	650130.62	4198989.22	3.79E-05	4.05E-05	5.71E-06	6.07E-06	5.58E-06	5.41E-06	2.96E-06	2.45E-06
435	650090.25	4199004.98	3.70E-05	3.94E-05	5.56E-06	5.91E-06	5.44E-06	5.27E-06	2.89E-06	2.39E-06
436	650049.87	4199020.75	3.60E-05	3.84E-05	5.41E-06	5.76E-06	5.29E-06	5.13E-06	2.81E-06	2.33E-06
437	650009.5	4199036.51	3.51E-05	3.74E-05	5.28E-06	5.61E-06	5.16E-06	5.00E-06	2.74E-06	2.27E-06
438	649969.13	4199052.28	3.43E-05	3.66E-05	5.16E-06	5.49E-06	5.05E-06	4.89E-06	2.68E-06	2.22E-06
439	649928.75	4199068.05	3.37E-05	3.59E-05	5.06E-06	5.38E-06	4.95E-06	4.80E-06	2.63E-06	2.18E-06
440	649888.38	4199083.81	3.31E-05	3.53E-05	4.98E-06	5.30E-06	4.87E-06	4.72E-06	2.59E-06	2.14E-06
441	649848.01	4199099.58	3.28E-05	3.49E-05	4.93E-06	5.24E-06	4.82E-06	4.67E-06	2.56E-06	2.12E-06
442	649807.63	4199115.34	3.25E-05	3.46E-05	4.89E-06	5.20E-06	4.78E-06	4.63E-06	2.54E-06	2.10E-06
443	649767.26	4199131.11	3.23E-05	3.45E-05	4.86E-06	5.17E-06	4.76E-06	4.61E-06	2.53E-06	2.09E-06
444	649726.89	4199146.88	3.23E-05	3.44E-05	4.85E-06	5.16E-06	4.74E-06	4.60E-06	2.52E-06	2.08E-06
445	650595.64	4198286.49	8.50E-05	9.06E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.64E-06	5.49E-06
446	650785.17	4198338.42	6.29E-05	6.70E-05	9.45E-06	1.01E-05	9.24E-06	8.96E-06	4.91E-06	4.06E-06
447	650767.02	4198377.64	6.10E-05	6.50E-05	9.17E-06	9.74E-06	8.96E-06	8.69E-06	4.76E-06	3.94E-06
448	650748.86	4198416.86	5.90E-05	6.29E-05	8.87E-06	9.43E-06	8.67E-06	8.40E-06	4.61E-06	3.81E-06
449	650730.71	4198456.07	5.70E-05	6.07E-05	8.57E-06	9.11E-06	8.38E-06	8.12E-06	4.45E-06	3.68E-06
450	650712.56	4198495.29	5.49E-05	5.86E-05	8.26E-06	8.78E-06	8.08E-06	7.83E-06	4.29E-06	3.55E-06
451	650694.4	4198534.51	5.29E-05	5.64E-05	7.95E-06	8.45E-06	7.78E-06	7.54E-06	4.13E-06	3.42E-06
452	650676.25	4198573.73	5.08E-05	5.42E-05	7.64E-06	8.13E-06	7.47E-06	7.24E-06	3.97E-06	3.28E-06

453	650658.09	4198612.94	4.88E-05	5.20E-05	7.34E-06	7.81E-06	7.18E-06	6.96E-06	3.81E-06	3.15E-06
454	650639.94	4198652.16	4.69E-05	5.00E-05	7.05E-06	7.50E-06	6.90E-06	6.68E-06	3.66E-06	3.03E-06
455	650621.79	4198691.38	4.51E-05	4.81E-05	6.78E-06	7.21E-06	6.63E-06	6.43E-06	3.52E-06	2.91E-06
456	650603.63	4198730.6	4.35E-05	4.63E-05	6.53E-06	6.95E-06	6.39E-06	6.19E-06	3.39E-06	2.81E-06
457	650585.48	4198769.82	4.20E-05	4.47E-05	6.31E-06	6.71E-06	6.17E-06	5.98E-06	3.28E-06	2.71E-06
458	650567.32	4198809.03	4.06E-05	4.33E-05	6.11E-06	6.49E-06	5.97E-06	5.79E-06	3.17E-06	2.62E-06
459	650549.17	4198848.25	3.93E-05	4.19E-05	5.91E-06	6.29E-06	5.78E-06	5.60E-06	3.07E-06	2.54E-06
460	650531.02	4198887.47	3.81E-05	4.06E-05	5.72E-06	6.09E-06	5.60E-06	5.42E-06	2.97E-06	2.46E-06
461	650512.86	4198926.69	3.68E-05	3.92E-05	5.53E-06	5.88E-06	5.41E-06	5.24E-06	2.87E-06	2.38E-06
462	650494.71	4198965.91	3.55E-05	3.78E-05	5.34E-06	5.67E-06	5.22E-06	5.06E-06	2.77E-06	2.29E-06
463	650476.56	4199005.12	3.41E-05	3.63E-05	5.13E-06	5.45E-06	5.01E-06	4.86E-06	2.66E-06	2.20E-06
464	650458.4	4199044.34	3.26E-05	3.48E-05	4.91E-06	5.22E-06	4.80E-06	4.65E-06	2.55E-06	2.11E-06
465	650429.2	4199071.81	3.17E-05	3.38E-05	4.77E-06	5.07E-06	4.66E-06	4.52E-06	2.48E-06	2.05E-06
466	650388.94	4199087.53	3.13E-05	3.33E-05	4.70E-06	5.00E-06	4.60E-06	4.46E-06	2.44E-06	2.02E-06
467	650348.69	4199103.25	3.07E-05	3.27E-05	4.62E-06	4.91E-06	4.52E-06	4.38E-06	2.40E-06	1.98E-06
468	650308.43	4199118.97	3.01E-05	3.20E-05	4.52E-06	4.81E-06	4.42E-06	4.28E-06	2.35E-06	1.94E-06
469	650268.18	4199134.69	2.94E-05	3.13E-05	4.41E-06	4.69E-06	4.32E-06	4.18E-06	2.29E-06	1.90E-06
470	650227.92	4199150.41	2.86E-05	3.05E-05	4.31E-06	4.58E-06	4.21E-06	4.08E-06	2.24E-06	1.85E-06
471	650187.67	4199166.13	2.79E-05	2.98E-05	4.20E-06	4.46E-06	4.11E-06	3.98E-06	2.18E-06	1.80E-06
472	650147.41	4199181.85	2.73E-05	2.91E-05	4.10E-06	4.36E-06	4.01E-06	3.89E-06	2.13E-06	1.76E-06
473	650107.16	4199197.57	2.67E-05	2.84E-05	4.01E-06	4.26E-06	3.92E-06	3.80E-06	2.08E-06	1.72E-06
474	650066.9	4199213.29	2.62E-05	2.79E-05	3.93E-06	4.18E-06	3.85E-06	3.73E-06	2.04E-06	1.69E-06
475	650026.64	4199229.01	2.57E-05	2.74E-05	3.87E-06	4.12E-06	3.79E-06	3.67E-06	2.01E-06	1.66E-06
476	649986.39	4199244.73	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
477	649946.13	4199260.45	2.52E-05	2.69E-05	3.79E-06	4.03E-06	3.71E-06	3.59E-06	1.97E-06	1.63E-06
478	649905.88	4199276.17	2.51E-05	2.67E-05	3.77E-06	4.00E-06	3.68E-06	3.57E-06	1.96E-06	1.62E-06
479	649865.62	4199291.89	2.50E-05	2.66E-05	3.75E-06	3.99E-06	3.67E-06	3.56E-06	1.95E-06	1.61E-06
480	649825.37	4199307.61	2.49E-05	2.66E-05	3.75E-06	3.98E-06	3.66E-06	3.55E-06	1.95E-06	1.61E-06
481	649785.11	4199323.33	2.49E-05	2.65E-05	3.74E-06	3.98E-06	3.66E-06	3.55E-06	1.95E-06	1.61E-06
482	649744.86	4199339.05	2.49E-05	2.66E-05	3.75E-06	3.98E-06	3.66E-06	3.55E-06	1.95E-06	1.61E-06
483	650795.38	4198296.69	6.55E-05	6.99E-05	9.85E-06	1.05E-05	9.63E-06	9.34E-06	5.12E-06	4.23E-06
484	650984.72	4198349.03	5.09E-05	5.42E-05	7.65E-06	8.13E-06	7.48E-06	7.25E-06	3.97E-06	3.29E-06
485	650966.19	4198389.06	4.95E-05	5.28E-05	7.45E-06	7.92E-06	7.28E-06	7.06E-06	3.87E-06	3.20E-06
486	650947.66	4198429.08	4.82E-05	5.13E-05	7.24E-06	7.70E-06	7.08E-06	6.86E-06	3.76E-06	3.11E-06
487	650929.14	4198469.11	4.68E-05	4.99E-05	7.04E-06	7.48E-06	6.88E-06	6.67E-06	3.66E-06	3.02E-06
488	650910.61	4198509.14	4.54E-05	4.84E-05	6.83E-06	7.26E-06	6.68E-06	6.47E-06	3.55E-06	2.93E-06
489	650892.08	4198549.17	4.40E-05	4.69E-05	6.62E-06	7.04E-06	6.47E-06	6.27E-06	3.44E-06	2.84E-06
490	650873.55	4198589.2	4.26E-05	4.54E-05	6.41E-06	6.81E-06	6.26E-06	6.07E-06	3.33E-06	2.75E-06
491	650855.02	4198629.23	4.12E-05	4.39E-05	6.19E-06	6.58E-06	6.05E-06	5.87E-06	3.22E-06	2.66E-06
492	650836.49	4198669.25	3.98E-05	4.24E-05	5.98E-06	6.36E-06	5.85E-06	5.67E-06	3.11E-06	2.57E-06
493	650817.96	4198709.28	3.84E-05	4.09E-05	5.77E-06	6.14E-06	5.64E-06	5.47E-06	3.00E-06	2.48E-06
494	650799.43	4198749.31	3.71E-05	3.95E-05	5.57E-06	5.93E-06	5.45E-06	5.28E-06	2.90E-06	2.40E-06
495	650780.9	4198789.34	3.59E-05	3.83E-05	5.40E-06	5.74E-06	5.28E-06	5.12E-06	2.80E-06	2.32E-06
496	650762.38	4198829.37	3.48E-05	3.71E-05	5.24E-06	5.57E-06	5.12E-06	4.96E-06	2.72E-06	2.25E-06
497	650743.85	4198869.4	3.38E-05	3.61E-05	5.09E-06	5.41E-06	4.98E-06	4.82E-06	2.64E-06	2.19E-06
498	650725.32	4198909.42	3.29E-05	3.51E-05	4.95E-06	5.27E-06	4.84E-06	4.69E-06	2.57E-06	2.13E-06
499	650706.79	4198949.45	3.21E-05	3.42E-05	4.82E-06	5.13E-06	4.72E-06	4.57E-06	2.51E-06	2.07E-06
500	650688.26	4198989.48	3.12E-05	3.33E-05	4.69E-06	4.99E-06	4.59E-06	4.45E-06	2.44E-06	2.02E-06
501	650669.73	4199029.51	3.03E-05	3.24E-05	4.56E-06	4.85E-06	4.46E-06	4.32E-06	2.37E-06	1.96E-06
502	650651.2	4199069.54	2.94E-05	3.14E-05	4.42E-06	4.70E-06	4.32E-06	4.19E-06	2.30E-06	1.90E-06
503	650632.67	4199109.56	2.84E-05	3.03E-05	4.28E-06	4.55E-06	4.18E-06	4.05E-06	2.22E-06	1.84E-06
504	650614.14	4199149.59	2.74E-05	2.92E-05	4.12E-06	4.38E-06	4.03E-06	3.90E-06	2.14E-06	1.77E-06
505	650595.62	4199189.62	2.63E-05	2.80E-05	3.95E-06	4.20E-06	3.87E-06	3.75E-06	2.05E-06	1.70E-06
506	650565.81	4199217.66	2.56E-05	2.73E-05	3.85E-06	4.09E-06	3.76E-06	3.64E-06	2.00E-06	1.65E-06
507	650524.72	4199233.7	2.52E-05	2.69E-05	3.79E-06	4.03E-06	3.71E-06	3.59E-06	1.97E-06	1.63E-06
508	650483.63	4199249.75	2.48E-05	2.64E-05	3.72E-06	3.96E-06	3.64E-06	3.53E-06	1.93E-06	1.60E-06
509	650442.55	4199265.79	2.43E-05	2.59E-05	3.65E-06	3.88E-06	3.57E-06	3.46E-06	1.89E-06	1.57E-06

510	650401.46	4199281.84	2.37E-05	2.53E-05	3.57E-06	3.79E-06	3.49E-06	3.38E-06	1.85E-06	1.53E-06
511	650360.37	4199297.88	2.31E-05	2.47E-05	3.48E-06	3.70E-06	3.40E-06	3.30E-06	1.81E-06	1.50E-06
512	650319.29	4199313.93	2.26E-05	2.41E-05	3.40E-06	3.61E-06	3.32E-06	3.22E-06	1.77E-06	1.46E-06
513	650278.2	4199329.97	2.21E-05	2.35E-05	3.32E-06	3.53E-06	3.25E-06	3.15E-06	1.72E-06	1.43E-06
514	650237.11	4199346.02	2.16E-05	2.30E-05	3.25E-06	3.45E-06	3.18E-06	3.08E-06	1.69E-06	1.40E-06
515	650196.02	4199362.06	2.12E-05	2.26E-05	3.19E-06	3.39E-06	3.12E-06	3.02E-06	1.66E-06	1.37E-06
516	650154.94	4199378.11	2.09E-05	2.22E-05	3.14E-06	3.34E-06	3.07E-06	2.97E-06	1.63E-06	1.35E-06
517	650113.85	4199394.15	2.06E-05	2.20E-05	3.10E-06	3.30E-06	3.03E-06	2.94E-06	1.61E-06	1.33E-06
518	650072.76	4199410.2	2.04E-05	2.18E-05	3.07E-06	3.27E-06	3.01E-06	2.91E-06	1.60E-06	1.32E-06
519	650031.68	4199426.24	2.03E-05	2.17E-05	3.06E-06	3.25E-06	2.99E-06	2.90E-06	1.59E-06	1.31E-06
520	649990.59	4199442.29	2.03E-05	2.16E-05	3.05E-06	3.24E-06	2.98E-06	2.89E-06	1.58E-06	1.31E-06
521	649949.5	4199458.33	2.02E-05	2.16E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
522	649908.42	4199474.38	2.02E-05	2.15E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
523	649867.33	4199490.42	2.02E-05	2.15E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
524	649826.24	4199506.47	2.02E-05	2.16E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
525	649785.15	4199522.51	2.02E-05	2.16E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
526	649744.07	4199538.56	2.02E-05	2.15E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
527	650995.12	4198306.89	5.27E-05	5.62E-05	7.92E-06	8.42E-06	7.75E-06	7.51E-06	4.12E-06	3.40E-06
528	651184.5	4198359.14	4.24E-05	4.52E-05	6.37E-06	6.78E-06	6.23E-06	6.04E-06	3.31E-06	2.74E-06
529	651166.06	4198398.99	4.14E-05	4.41E-05	6.23E-06	6.62E-06	6.09E-06	5.90E-06	3.23E-06	2.68E-06
530	651147.61	4198438.84	4.04E-05	4.31E-05	6.08E-06	6.46E-06	5.94E-06	5.76E-06	3.16E-06	2.61E-06
531	651129.17	4198478.68	3.95E-05	4.21E-05	5.93E-06	6.31E-06	5.80E-06	5.62E-06	3.08E-06	2.55E-06
532	651110.72	4198518.53	3.85E-05	4.11E-05	5.79E-06	6.16E-06	5.66E-06	5.49E-06	3.01E-06	2.49E-06
533	651092.28	4198558.38	3.76E-05	4.00E-05	5.65E-06	6.00E-06	5.52E-06	5.35E-06	2.93E-06	2.43E-06
534	651073.83	4198598.22	3.66E-05	3.90E-05	5.50E-06	5.85E-06	5.38E-06	5.21E-06	2.86E-06	2.36E-06
535	651055.39	4198638.07	3.56E-05	3.79E-05	5.35E-06	5.69E-06	5.23E-06	5.07E-06	2.78E-06	2.30E-06
536	651036.94	4198677.92	3.46E-05	3.69E-05	5.20E-06	5.53E-06	5.08E-06	4.93E-06	2.70E-06	2.23E-06
537	651018.5	4198717.77	3.36E-05	3.58E-05	5.05E-06	5.36E-06	4.93E-06	4.78E-06	2.62E-06	2.17E-06
538	651000.05	4198757.61	3.26E-05	3.47E-05	4.90E-06	5.20E-06	4.79E-06	4.64E-06	2.54E-06	2.10E-06
539	650981.61	4198797.46	3.16E-05	3.37E-05	4.75E-06	5.05E-06	4.64E-06	4.50E-06	2.47E-06	2.04E-06
540	650963.16	4198837.31	3.07E-05	3.27E-05	4.61E-06	4.90E-06	4.51E-06	4.37E-06	2.40E-06	1.98E-06
541	650944.72	4198877.15	2.99E-05	3.18E-05	4.49E-06	4.77E-06	4.39E-06	4.25E-06	2.33E-06	1.93E-06
542	650926.27	4198917	2.91E-05	3.10E-05	4.38E-06	4.65E-06	4.28E-06	4.15E-06	2.27E-06	1.88E-06
543	650907.83	4198956.85	2.84E-05	3.03E-05	4.27E-06	4.54E-06	4.18E-06	4.05E-06	2.22E-06	1.84E-06
544	650889.38	4198996.69	2.78E-05	2.96E-05	4.18E-06	4.44E-06	4.09E-06	3.96E-06	2.17E-06	1.80E-06
545	650870.94	4199036.54	2.72E-05	2.90E-05	4.09E-06	4.35E-06	4.00E-06	3.88E-06	2.12E-06	1.76E-06
546	650852.49	4199076.39	2.66E-05	2.84E-05	4.00E-06	4.25E-06	3.91E-06	3.79E-06	2.08E-06	1.72E-06
547	650834.05	4199116.24	2.60E-05	2.77E-05	3.91E-06	4.15E-06	3.82E-06	3.70E-06	2.03E-06	1.68E-06
548	650815.6	4199156.08	2.53E-05	2.70E-05	3.81E-06	4.05E-06	3.73E-06	3.61E-06	1.98E-06	1.64E-06
549	650797.16	4199195.93	2.46E-05	2.63E-05	3.71E-06	3.94E-06	3.62E-06	3.51E-06	1.93E-06	1.59E-06
550	650778.71	4199235.78	2.39E-05	2.55E-05	3.59E-06	3.82E-06	3.52E-06	3.41E-06	1.87E-06	1.54E-06
551	650760.27	4199275.62	2.31E-05	2.46E-05	3.48E-06	3.69E-06	3.40E-06	3.29E-06	1.81E-06	1.49E-06
552	650741.82	4199315.47	2.23E-05	2.38E-05	3.35E-06	3.56E-06	3.28E-06	3.18E-06	1.74E-06	1.44E-06
553	650702.93	4199363.3	2.13E-05	2.27E-05	3.20E-06	3.41E-06	3.13E-06	3.04E-06	1.66E-06	1.38E-06
554	650662.03	4199379.28	2.10E-05	2.24E-05	3.16E-06	3.36E-06	3.09E-06	2.99E-06	1.64E-06	1.36E-06
555	650621.12	4199395.25	2.06E-05	2.20E-05	3.10E-06	3.30E-06	3.03E-06	2.94E-06	1.61E-06	1.33E-06
556	650580.22	4199411.22	2.02E-05	2.16E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
557	650539.32	4199427.19	1.98E-05	2.11E-05	2.98E-06	3.17E-06	2.92E-06	2.83E-06	1.55E-06	1.28E-06
558	650498.42	4199443.17	1.94E-05	2.07E-05	2.92E-06	3.10E-06	2.85E-06	2.76E-06	1.51E-06	1.25E-06
559	650457.52	4199459.14	1.90E-05	2.02E-05	2.85E-06	3.03E-06	2.79E-06	2.70E-06	1.48E-06	1.23E-06
560	650416.62	4199475.11	1.86E-05	1.98E-05	2.79E-06	2.97E-06	2.73E-06	2.65E-06	1.45E-06	1.20E-06
561	650375.72	4199491.08	1.82E-05	1.94E-05	2.74E-06	2.91E-06	2.67E-06	2.59E-06	1.42E-06	1.18E-06
562	650334.82	4199507.06	1.79E-05	1.90E-05	2.69E-06	2.86E-06	2.63E-06	2.55E-06	1.40E-06	1.15E-06
563	650293.92	4199523.03	1.76E-05	1.87E-05	2.64E-06	2.81E-06	2.58E-06	2.50E-06	1.37E-06	1.14E-06
564	650253.02	4199539	1.73E-05	1.85E-05	2.61E-06	2.77E-06	2.55E-06	2.47E-06	1.36E-06	1.12E-06
565	650212.11	4199554.97	1.72E-05	1.83E-05	2.58E-06	2.74E-06	2.52E-06	2.45E-06	1.34E-06	1.11E-06
566	650171.21	4199570.94	1.70E-05	1.82E-05	2.56E-06	2.73E-06	2.51E-06	2.43E-06	1.33E-06	1.10E-06

567	650130.31	4199586.92	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.50E-06	2.42E-06	1.33E-06	1.10E-06
568	650089.41	4199602.89	1.69E-05	1.81E-05	2.55E-06	2.71E-06	2.49E-06	2.41E-06	1.32E-06	1.09E-06
569	650048.51	4199618.86	1.69E-05	1.80E-05	2.55E-06	2.71E-06	2.49E-06	2.41E-06	1.32E-06	1.09E-06
570	650007.61	4199634.83	1.69E-05	1.81E-05	2.55E-06	2.71E-06	2.49E-06	2.41E-06	1.32E-06	1.09E-06
571	649966.71	4199650.81	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.49E-06	2.42E-06	1.32E-06	1.10E-06
572	649925.81	4199666.78	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.49E-06	2.42E-06	1.32E-06	1.10E-06
573	649884.91	4199682.75	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.50E-06	2.42E-06	1.33E-06	1.10E-06
574	649844	4199698.72	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.49E-06	2.42E-06	1.32E-06	1.10E-06
575	649803.1	4199714.7	1.69E-05	1.80E-05	2.55E-06	2.71E-06	2.49E-06	2.41E-06	1.32E-06	1.09E-06
576	649762.2	4199730.67	1.69E-05	1.80E-05	2.54E-06	2.70E-06	2.48E-06	2.41E-06	1.32E-06	1.09E-06
577	651194.86	4198317.1	4.37E-05	4.66E-05	6.58E-06	6.99E-06	6.43E-06	6.23E-06	3.42E-06	2.83E-06
578	649707	4198197.34	4.97E-03	5.29E-03	7.47E-04	7.94E-04	7.30E-04	7.08E-04	3.88E-04	3.21E-04
579	649681.31	4198193.45	7.80E-03	8.32E-03	1.17E-03	1.25E-03	1.15E-03	1.11E-03	6.10E-04	5.04E-04
580	649710.02	4198173.64	4.79E-03	5.11E-03	7.21E-04	7.66E-04	7.05E-04	6.83E-04	3.74E-04	3.10E-04
581	649738.75	4198196.34	2.82E-03	3.01E-03	4.25E-04	4.52E-04	4.15E-04	4.02E-04	2.21E-04	1.83E-04
582	649681.31	4198168.45	7.98E-03	8.51E-03	1.20E-03	1.28E-03	1.17E-03	1.14E-03	6.23E-04	5.16E-04
583	649711.53	4198149.28	4.48E-03	4.78E-03	6.74E-04	7.16E-04	6.59E-04	6.38E-04	3.50E-04	2.89E-04
584	649738.72	4198160.95	3.07E-03	3.27E-03	4.62E-04	4.91E-04	4.52E-04	4.38E-04	2.40E-04	1.99E-04
585	649757.44	4198180.66	2.30E-03	2.45E-03	3.46E-04	3.68E-04	3.38E-04	3.28E-04	1.80E-04	1.49E-04
586	649767.71	4198208.4	1.72E-03	1.83E-03	2.58E-04	2.75E-04	2.53E-04	2.45E-04	1.34E-04	1.11E-04
587	649681.31	4198143.45	6.67E-03	7.11E-03	1.00E-03	1.07E-03	9.81E-04	9.50E-04	5.21E-04	4.31E-04
588	649712.44	4198124.67	3.78E-03	4.03E-03	5.68E-04	6.04E-04	5.56E-04	5.38E-04	2.95E-04	2.44E-04
589	649741.44	4198137.12	2.91E-03	3.10E-03	4.38E-04	4.65E-04	4.28E-04	4.15E-04	2.27E-04	1.88E-04
590	649775.91	4198164.36	1.94E-03	2.07E-03	2.92E-04	3.11E-04	2.86E-04	2.77E-04	1.52E-04	1.26E-04
591	649786.86	4198193.96	1.51E-03	1.61E-03	2.28E-04	2.42E-04	2.23E-04	2.16E-04	1.18E-04	9.78E-05
592	649681.31	4198118.45	4.58E-03	4.88E-03	6.88E-04	7.32E-04	6.73E-04	6.52E-04	3.57E-04	2.96E-04
593	649711.53	4198074.28	2.68E-03	2.85E-03	4.03E-04	4.28E-04	3.94E-04	3.82E-04	2.09E-04	1.73E-04
594	649738.72	4198085.95	2.45E-03	2.61E-03	3.69E-04	3.92E-04	3.60E-04	3.49E-04	1.91E-04	1.58E-04
595	649765.9	4198097.62	2.12E-03	2.26E-03	3.18E-04	3.39E-04	3.11E-04	3.02E-04	1.65E-04	1.37E-04
596	649793.09	4198109.29	1.75E-03	1.86E-03	2.63E-04	2.79E-04	2.57E-04	2.49E-04	1.36E-04	1.13E-04
597	649811.81	4198129	1.49E-03	1.59E-03	2.24E-04	2.38E-04	2.19E-04	2.12E-04	1.16E-04	9.61E-05
598	649822.08	4198156.74	1.28E-03	1.36E-03	1.92E-04	2.04E-04	1.88E-04	1.82E-04	9.99E-05	8.26E-05
599	649832.34	4198184.49	1.04E-03	1.11E-03	1.57E-04	1.67E-04	1.54E-04	1.49E-04	8.16E-05	6.75E-05
600	649842.61	4198212.23	8.27E-04	8.82E-04	1.24E-04	1.32E-04	1.22E-04	1.18E-04	6.46E-05	5.35E-05
601	649681.31	4198068.45	2.95E-03	3.14E-03	4.43E-04	4.71E-04	4.34E-04	4.20E-04	2.30E-04	1.91E-04
602	649712.44	4198024.67	2.10E-03	2.24E-03	3.15E-04	3.35E-04	3.08E-04	2.99E-04	1.64E-04	1.35E-04
603	649741.44	4198037.12	1.97E-03	2.10E-03	2.96E-04	3.14E-04	2.89E-04	2.80E-04	1.54E-04	1.27E-04
604	649770.43	4198049.57	1.79E-03	1.91E-03	2.70E-04	2.87E-04	2.64E-04	2.56E-04	1.40E-04	1.16E-04
605	649799.43	4198062.01	1.58E-03	1.69E-03	2.38E-04	2.53E-04	2.32E-04	2.25E-04	1.24E-04	1.02E-04
606	649828.43	4198074.46	1.35E-03	1.44E-03	2.03E-04	2.16E-04	1.98E-04	1.92E-04	1.05E-04	8.72E-05
607	649848.4	4198095.48	1.18E-03	1.26E-03	1.78E-04	1.89E-04	1.74E-04	1.69E-04	9.25E-05	7.65E-05
608	649859.35	4198125.07	1.05E-03	1.12E-03	1.58E-04	1.68E-04	1.55E-04	1.50E-04	8.22E-05	6.80E-05
609	649870.3	4198154.67	8.96E-04	9.55E-04	1.35E-04	1.43E-04	1.32E-04	1.28E-04	7.00E-05	5.79E-05
610	649881.25	4198184.26	7.40E-04	7.89E-04	1.11E-04	1.18E-04	1.09E-04	1.06E-04	5.78E-05	4.78E-05
611	649681.31	4198018.45	2.29E-03	2.44E-03	3.44E-04	3.65E-04	3.36E-04	3.26E-04	1.79E-04	1.48E-04
612	649713.04	4197974.93	1.75E-03	1.87E-03	2.63E-04	2.80E-04	2.58E-04	2.50E-04	1.37E-04	1.13E-04
613	649743.25	4197987.9	1.65E-03	1.76E-03	2.48E-04	2.63E-04	2.42E-04	2.35E-04	1.29E-04	1.06E-04
614	649773.45	4198000.86	1.53E-03	1.63E-03	2.30E-04	2.45E-04	2.25E-04	2.18E-04	1.20E-04	9.90E-05
615	649803.66	4198013.83	1.40E-03	1.49E-03	2.10E-04	2.24E-04	2.06E-04	1.99E-04	1.09E-04	9.05E-05
616	649833.86	4198026.79	1.25E-03	1.33E-03	1.88E-04	2.00E-04	1.84E-04	1.78E-04	9.77E-05	8.09E-05
617	649864.07	4198039.76	1.09E-03	1.16E-03	1.64E-04	1.74E-04	1.60E-04	1.55E-04	8.52E-05	7.05E-05
618	649884.87	4198061.66	9.77E-04	1.04E-03	1.47E-04	1.56E-04	1.44E-04	1.39E-04	7.63E-05	6.31E-05
619	649896.28	4198092.48	8.88E-04	9.47E-04	1.34E-04	1.42E-04	1.31E-04	1.27E-04	6.94E-05	5.74E-05
620	649907.69	4198123.31	7.80E-04	8.32E-04	1.17E-04	1.25E-04	1.15E-04	1.11E-04	6.10E-05	5.04E-05
621	649919.1	4198154.14	6.67E-04	7.11E-04	1.00E-04	1.07E-04	9.80E-05	9.50E-05	5.21E-05	4.31E-05
622	649930.5	4198184.96	5.59E-04	5.96E-04	8.41E-05	8.94E-05	8.23E-05	7.97E-05	4.37E-05	3.62E-05
623	649681.31	4197968.45	1.90E-03	2.03E-03	2.86E-04	3.04E-04	2.79E-04	2.71E-04	1.48E-04	1.23E-04

624	649712.44	4197924.67	1.51E-03	1.61E-03	2.26E-04	2.41E-04	2.21E-04	2.15E-04	1.18E-04	9.73E-05
625	649741.44	4197937.12	1.43E-03	1.52E-03	2.14E-04	2.28E-04	2.10E-04	2.03E-04	1.11E-04	9.21E-05
626	649770.43	4197949.57	1.34E-03	1.43E-03	2.02E-04	2.14E-04	1.97E-04	1.91E-04	1.05E-04	8.67E-05
627	649799.43	4197962.01	1.25E-03	1.34E-03	1.89E-04	2.01E-04	1.84E-04	1.79E-04	9.80E-05	8.11E-05
628	649828.43	4197974.46	1.17E-03	1.25E-03	1.76E-04	1.87E-04	1.72E-04	1.66E-04	9.12E-05	7.55E-05
629	649857.42	4197986.91	1.07E-03	1.14E-03	1.61E-04	1.71E-04	1.57E-04	1.52E-04	8.34E-05	6.90E-05
630	649886.42	4197999.35	9.60E-04	1.02E-03	1.44E-04	1.54E-04	1.41E-04	1.37E-04	7.50E-05	6.21E-05
631	649920.89	4198026.6	8.28E-04	8.82E-04	1.24E-04	1.32E-04	1.22E-04	1.18E-04	6.47E-05	5.35E-05
632	649931.84	4198056.19	7.71E-04	8.22E-04	1.16E-04	1.23E-04	1.13E-04	1.10E-04	6.02E-05	4.98E-05
633	649942.79	4198085.79	7.00E-04	7.46E-04	1.05E-04	1.12E-04	1.03E-04	9.98E-05	5.47E-05	4.52E-05
634	649953.74	4198115.38	6.22E-04	6.63E-04	9.35E-05	9.94E-05	9.15E-05	8.86E-05	4.86E-05	4.02E-05
635	649964.7	4198144.97	5.43E-04	5.79E-04	8.17E-05	8.68E-05	7.99E-05	7.74E-05	4.24E-05	3.51E-05
636	649975.65	4198174.57	4.69E-04	5.00E-04	7.05E-05	7.50E-05	6.90E-05	6.68E-05	3.66E-05	3.03E-05
637	649986.6	4198204.16	4.03E-04	4.29E-04	6.06E-05	6.44E-05	5.92E-05	5.74E-05	3.15E-05	2.60E-05
638	649681.31	4197918.45	1.63E-03	1.73E-03	2.44E-04	2.60E-04	2.39E-04	2.32E-04	1.27E-04	1.05E-04
639	649713.2	4197825	1.11E-03	1.19E-03	1.68E-04	1.78E-04	1.64E-04	1.59E-04	8.71E-05	7.20E-05
640	649743.72	4197838.1	1.07E-03	1.14E-03	1.61E-04	1.72E-04	1.58E-04	1.53E-04	8.38E-05	6.93E-05
641	649774.25	4197851.2	1.03E-03	1.10E-03	1.55E-04	1.65E-04	1.51E-04	1.47E-04	8.04E-05	6.65E-05
642	649804.77	4197864.31	9.81E-04	1.05E-03	1.48E-04	1.57E-04	1.44E-04	1.40E-04	7.67E-05	6.34E-05
643	649835.29	4197877.41	9.32E-04	9.93E-04	1.40E-04	1.49E-04	1.37E-04	1.33E-04	7.28E-05	6.02E-05
644	649865.82	4197890.51	8.85E-04	9.43E-04	1.33E-04	1.41E-04	1.30E-04	1.26E-04	6.91E-05	5.72E-05
645	649896.34	4197903.61	8.32E-04	8.87E-04	1.25E-04	1.33E-04	1.22E-04	1.19E-04	6.50E-05	5.37E-05
646	649926.86	4197916.71	7.70E-04	8.20E-04	1.16E-04	1.23E-04	1.13E-04	1.10E-04	6.01E-05	4.97E-05
647	649957.39	4197929.82	7.03E-04	7.49E-04	1.06E-04	1.12E-04	1.03E-04	1.00E-04	5.49E-05	4.54E-05
648	649993.67	4197958.49	6.22E-04	6.64E-04	9.36E-05	9.95E-05	9.15E-05	8.87E-05	4.86E-05	4.02E-05
649	650005.2	4197989.64	5.91E-04	6.30E-04	8.88E-05	9.44E-05	8.68E-05	8.42E-05	4.61E-05	3.82E-05
650	650016.73	4198020.8	5.51E-04	5.87E-04	8.28E-05	8.80E-05	8.10E-05	7.85E-05	4.30E-05	3.56E-05
651	650028.25	4198051.95	5.05E-04	5.38E-04	7.59E-05	8.07E-05	7.42E-05	7.19E-05	3.94E-05	3.26E-05
652	650039.78	4198083.1	4.56E-04	4.86E-04	6.86E-05	7.29E-05	6.70E-05	6.50E-05	3.56E-05	2.95E-05
653	650051.31	4198114.25	4.07E-04	4.34E-04	6.12E-05	6.51E-05	5.98E-05	5.80E-05	3.18E-05	2.63E-05
654	650062.84	4198145.4	3.60E-04	3.84E-04	5.41E-05	5.76E-05	5.29E-05	5.13E-05	2.81E-05	2.33E-05
655	650074.36	4198176.55	3.17E-04	3.38E-04	4.77E-05	5.07E-05	4.66E-05	4.52E-05	2.48E-05	2.05E-05
656	650085.89	4198207.71	2.79E-04	2.97E-04	4.19E-05	4.46E-05	4.10E-05	3.97E-05	2.18E-05	1.80E-05
657	649681.31	4197818.45	1.18E-03	1.26E-03	1.78E-04	1.89E-04	1.74E-04	1.69E-04	9.25E-05	7.65E-05
658	649713.04	4197724.93	8.68E-04	9.25E-04	1.31E-04	1.39E-04	1.28E-04	1.24E-04	6.78E-05	5.61E-05
659	649743.25	4197737.9	8.55E-04	9.11E-04	1.29E-04	1.37E-04	1.26E-04	1.22E-04	6.68E-05	5.52E-05
660	649773.45	4197750.86	8.30E-04	8.85E-04	1.25E-04	1.33E-04	1.22E-04	1.18E-04	6.49E-05	5.37E-05
661	649803.66	4197763.83	8.06E-04	8.59E-04	1.21E-04	1.29E-04	1.19E-04	1.15E-04	6.30E-05	5.21E-05
662	649833.86	4197776.79	7.76E-04	8.28E-04	1.17E-04	1.24E-04	1.14E-04	1.11E-04	6.06E-05	5.02E-05
663	649864.07	4197789.76	7.40E-04	7.89E-04	1.11E-04	1.18E-04	1.09E-04	1.05E-04	5.78E-05	4.78E-05
664	649894.27	4197802.72	7.05E-04	7.51E-04	1.06E-04	1.13E-04	1.04E-04	1.00E-04	5.51E-05	4.55E-05
665	649924.48	4197815.69	6.69E-04	7.14E-04	1.01E-04	1.07E-04	9.84E-05	9.54E-05	5.23E-05	4.33E-05
666	649954.68	4197828.66	6.31E-04	6.73E-04	9.49E-05	1.01E-04	9.28E-05	8.99E-05	4.93E-05	4.08E-05
667	649984.89	4197841.62	5.94E-04	6.33E-04	8.94E-05	9.50E-05	8.74E-05	8.47E-05	4.64E-05	3.84E-05
668	650015.09	4197854.59	5.60E-04	5.97E-04	8.42E-05	8.95E-05	8.23E-05	7.98E-05	4.37E-05	3.62E-05
669	650045.3	4197867.55	5.19E-04	5.53E-04	7.80E-05	8.30E-05	7.63E-05	7.40E-05	4.05E-05	3.35E-05
670	650066.1	4197889.45	4.90E-04	5.23E-04	7.37E-05	7.84E-05	7.21E-05	6.99E-05	3.83E-05	3.17E-05
671	650077.51	4197920.27	4.72E-04	5.03E-04	7.10E-05	7.54E-05	6.94E-05	6.73E-05	3.69E-05	3.05E-05
672	650088.92	4197951.1	4.49E-04	4.79E-04	6.75E-05	7.18E-05	6.60E-05	6.40E-05	3.51E-05	2.90E-05
673	650100.33	4197981.93	4.22E-04	4.50E-04	6.35E-05	6.75E-05	6.21E-05	6.01E-05	3.30E-05	2.73E-05
674	650111.73	4198012.76	3.92E-04	4.18E-04	5.90E-05	6.27E-05	5.77E-05	5.59E-05	3.06E-05	2.53E-05
675	650123.14	4198043.58	3.60E-04	3.84E-04	5.42E-05	5.76E-05	5.30E-05	5.14E-05	2.82E-05	2.33E-05
676	650134.55	4198074.41	3.29E-04	3.50E-04	4.94E-05	5.25E-05	4.83E-05	4.68E-05	2.57E-05	2.12E-05
677	650145.96	4198105.24	2.98E-04	3.18E-04	4.48E-05	4.77E-05	4.38E-05	4.25E-05	2.33E-05	1.93E-05
678	650157.36	4198136.06	2.69E-04	2.87E-04	4.05E-05	4.30E-05	3.96E-05	3.83E-05	2.10E-05	1.74E-05
679	650168.77	4198166.89	2.43E-04	2.59E-04	3.65E-05	3.88E-05	3.57E-05	3.46E-05	1.90E-05	1.57E-05
680	650180.18	4198197.72	2.19E-04	2.33E-04	3.29E-05	3.50E-05	3.22E-05	3.12E-05	1.71E-05	1.41E-05

681	650191.59	4198228.55	1.97E-04	2.10E-04	2.96E-05	3.15E-05	2.89E-05	2.81E-05	1.54E-05	1.27E-05
682	649681.31	4197718.45	8.95E-04	9.54E-04	1.35E-04	1.43E-04	1.32E-04	1.28E-04	6.99E-05	5.78E-05
683	649712.94	4197624.89	6.35E-04	6.76E-04	9.54E-05	1.01E-04	9.33E-05	9.04E-05	4.96E-05	4.10E-05
684	649742.94	4197637.76	6.41E-04	6.84E-04	9.64E-05	1.03E-04	9.43E-05	9.14E-05	5.01E-05	4.14E-05
685	649772.93	4197650.64	6.43E-04	6.85E-04	9.66E-05	1.03E-04	9.45E-05	9.16E-05	5.02E-05	4.15E-05
686	649802.93	4197663.52	6.39E-04	6.81E-04	9.61E-05	1.02E-04	9.40E-05	9.11E-05	4.99E-05	4.13E-05
687	649832.93	4197676.39	6.31E-04	6.73E-04	9.49E-05	1.01E-04	9.28E-05	9.00E-05	4.93E-05	4.08E-05
688	649862.92	4197689.27	6.19E-04	6.60E-04	9.31E-05	9.90E-05	9.11E-05	8.83E-05	4.84E-05	4.00E-05
689	649892.92	4197702.14	6.03E-04	6.43E-04	9.06E-05	9.64E-05	8.86E-05	8.59E-05	4.71E-05	3.90E-05
690	649922.92	4197715.02	5.84E-04	6.23E-04	8.78E-05	9.34E-05	8.59E-05	8.32E-05	4.56E-05	3.77E-05
691	649952.91	4197727.89	5.62E-04	5.99E-04	8.44E-05	8.98E-05	8.26E-05	8.00E-05	4.39E-05	3.63E-05
692	649982.91	4197740.77	5.35E-04	5.70E-04	8.04E-05	8.55E-05	7.87E-05	7.62E-05	4.18E-05	3.46E-05
693	650012.91	4197753.65	5.07E-04	5.40E-04	7.62E-05	8.10E-05	7.45E-05	7.22E-05	3.96E-05	3.28E-05
694	650042.9	4197766.52	4.80E-04	5.12E-04	7.22E-05	7.68E-05	7.06E-05	6.85E-05	3.75E-05	3.10E-05
695	650072.9	4197779.4	4.54E-04	4.84E-04	6.82E-05	7.25E-05	6.67E-05	6.46E-05	3.54E-05	2.93E-05
696	650102.9	4197792.27	4.26E-04	4.54E-04	6.40E-05	6.80E-05	6.26E-05	6.07E-05	3.32E-05	2.75E-05
697	650138.56	4197820.46	3.97E-04	4.23E-04	5.97E-05	6.35E-05	5.84E-05	5.66E-05	3.10E-05	2.57E-05
698	650149.89	4197851.07	3.87E-04	4.13E-04	5.82E-05	6.19E-05	5.69E-05	5.51E-05	3.02E-05	2.50E-05
699	650161.21	4197881.69	3.73E-04	3.97E-04	5.61E-05	5.96E-05	5.48E-05	5.31E-05	2.91E-05	2.41E-05
700	650172.54	4197912.3	3.56E-04	3.80E-04	5.36E-05	5.69E-05	5.24E-05	5.08E-05	2.78E-05	2.30E-05
701	650183.87	4197942.92	3.37E-04	3.60E-04	5.07E-05	5.39E-05	4.96E-05	4.81E-05	2.63E-05	2.18E-05
702	650195.2	4197973.53	3.17E-04	3.38E-04	4.76E-05	5.06E-05	4.66E-05	4.51E-05	2.47E-05	2.05E-05
703	650206.53	4198004.14	2.94E-04	3.14E-04	4.43E-05	4.71E-05	4.33E-05	4.20E-05	2.30E-05	1.90E-05
704	650217.86	4198034.76	2.73E-04	2.91E-04	4.10E-05	4.36E-05	4.01E-05	3.88E-05	2.13E-05	1.76E-05
705	650229.19	4198065.37	2.51E-04	2.68E-04	3.78E-05	4.02E-05	3.69E-05	3.58E-05	1.96E-05	1.62E-05
706	650240.51	4198095.99	2.31E-04	2.46E-04	3.47E-05	3.69E-05	3.40E-05	3.29E-05	1.80E-05	1.49E-05
707	650251.84	4198126.6	2.12E-04	2.26E-04	3.19E-05	3.39E-05	3.12E-05	3.02E-05	1.65E-05	1.37E-05
708	650263.17	4198157.22	1.94E-04	2.07E-04	2.92E-05	3.10E-05	2.85E-05	2.76E-05	1.52E-05	1.25E-05
709	650274.5	4198187.83	1.77E-04	1.89E-04	2.67E-05	2.84E-05	2.61E-05	2.53E-05	1.39E-05	1.15E-05
710	650285.83	4198218.45	1.62E-04	1.73E-04	2.44E-05	2.60E-05	2.39E-05	2.32E-05	1.27E-05	1.05E-05
711	649681.31	4197618.45	6.37E-04	6.79E-04	9.58E-05	1.02E-04	9.37E-05	9.08E-05	4.98E-05	4.12E-05
712	649712.86	4197524.86	4.55E-04	4.85E-04	6.84E-05	7.27E-05	6.68E-05	6.48E-05	3.55E-05	2.94E-05
713	649742.71	4197537.67	4.70E-04	5.01E-04	7.06E-05	7.51E-05	6.91E-05	6.70E-05	3.67E-05	3.04E-05
714	649772.56	4197550.48	4.81E-04	5.13E-04	7.24E-05	7.69E-05	7.08E-05	6.86E-05	3.76E-05	3.11E-05
715	649802.41	4197563.29	4.89E-04	5.21E-04	7.35E-05	7.81E-05	7.18E-05	6.96E-05	3.82E-05	3.16E-05
716	649832.26	4197576.11	4.92E-04	5.25E-04	7.40E-05	7.87E-05	7.24E-05	7.02E-05	3.85E-05	3.18E-05
717	649862.11	4197588.92	4.93E-04	5.25E-04	7.41E-05	7.88E-05	7.25E-05	7.02E-05	3.85E-05	3.19E-05
718	649891.96	4197601.73	4.90E-04	5.23E-04	7.37E-05	7.84E-05	7.21E-05	6.99E-05	3.83E-05	3.17E-05
719	649921.81	4197614.55	4.85E-04	5.17E-04	7.29E-05	7.75E-05	7.13E-05	6.91E-05	3.79E-05	3.13E-05
720	649951.66	4197627.36	4.77E-04	5.08E-04	7.17E-05	7.62E-05	7.01E-05	6.79E-05	3.72E-05	3.08E-05
721	649981.51	4197640.17	4.66E-04	4.96E-04	7.00E-05	7.45E-05	6.85E-05	6.64E-05	3.64E-05	3.01E-05
722	650011.36	4197652.98	4.53E-04	4.82E-04	6.81E-05	7.24E-05	6.65E-05	6.45E-05	3.54E-05	2.92E-05
723	650041.21	4197665.8	4.37E-04	4.66E-04	6.57E-05	6.98E-05	6.42E-05	6.22E-05	3.41E-05	2.82E-05
724	650071.06	4197678.61	4.17E-04	4.45E-04	6.28E-05	6.67E-05	6.14E-05	5.95E-05	3.26E-05	2.70E-05
725	650100.91	4197691.42	3.98E-04	4.24E-04	5.99E-05	6.37E-05	5.85E-05	5.67E-05	3.11E-05	2.57E-05
726	650130.76	4197704.24	3.79E-04	4.04E-04	5.69E-05	6.05E-05	5.57E-05	5.40E-05	2.96E-05	2.45E-05
727	650160.61	4197717.05	3.59E-04	3.83E-04	5.40E-05	5.74E-05	5.28E-05	5.12E-05	2.81E-05	2.32E-05
728	650190.46	4197729.86	3.40E-04	3.62E-04	5.11E-05	5.43E-05	5.00E-05	4.84E-05	2.66E-05	2.20E-05
729	650211.02	4197751.5	3.28E-04	3.49E-04	4.92E-05	5.24E-05	4.82E-05	4.67E-05	2.56E-05	2.12E-05
730	650222.29	4197781.96	3.21E-04	3.42E-04	4.83E-05	5.13E-05	4.72E-05	4.58E-05	2.51E-05	2.08E-05
731	650233.57	4197812.43	3.13E-04	3.34E-04	4.71E-05	5.01E-05	4.61E-05	4.47E-05	2.45E-05	2.02E-05
732	650244.84	4197842.89	3.04E-04	3.24E-04	4.57E-05	4.86E-05	4.47E-05	4.33E-05	2.37E-05	1.96E-05
733	650256.11	4197873.36	2.91E-04	3.11E-04	4.38E-05	4.66E-05	4.28E-05	4.15E-05	2.28E-05	1.88E-05
734	650267.39	4197903.82	2.77E-04	2.96E-04	4.17E-05	4.43E-05	4.08E-05	3.95E-05	2.17E-05	1.79E-05
735	650278.66	4197934.29	2.62E-04	2.80E-04	3.95E-05	4.20E-05	3.86E-05	3.74E-05	2.05E-05	1.70E-05
736	650289.93	4197964.75	2.47E-04	2.63E-04	3.71E-05	3.95E-05	3.63E-05	3.52E-05	1.93E-05	1.60E-05
737	650301.21	4197995.21	2.31E-04	2.46E-04	3.48E-05	3.70E-05	3.40E-05	3.29E-05	1.81E-05	1.49E-05

738	650312.48	4198025.68	2.16E-04	2.30E-04	3.24E-05	3.45E-05	3.17E-05	3.07E-05	1.68E-05	1.39E-05
739	650323.75	4198056.14	2.00E-04	2.14E-04	3.01E-05	3.20E-05	2.95E-05	2.85E-05	1.56E-05	1.29E-05
740	650335.03	4198086.61	1.86E-04	1.98E-04	2.79E-05	2.97E-05	2.73E-05	2.65E-05	1.45E-05	1.20E-05
741	650346.3	4198117.07	1.72E-04	1.84E-04	2.59E-05	2.75E-05	2.53E-05	2.46E-05	1.35E-05	1.11E-05
742	650357.57	4198147.54	1.60E-04	1.70E-04	2.40E-05	2.55E-05	2.35E-05	2.27E-05	1.25E-05	1.03E-05
743	650368.85	4198178	1.48E-04	1.57E-04	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.53E-06
744	650380.12	4198208.47	1.37E-04	1.46E-04	2.05E-05	2.18E-05	2.01E-05	1.95E-05	1.07E-05	8.83E-06
745	649681.31	4197518.45	4.48E-04	4.77E-04	6.73E-05	7.16E-05	6.58E-05	6.38E-05	3.50E-05	2.89E-05
746	649713.11	4197324.96	2.36E-04	2.52E-04	3.55E-05	3.77E-05	3.47E-05	3.36E-05	1.84E-05	1.52E-05
747	649743.46	4197337.99	2.50E-04	2.67E-04	3.76E-05	4.00E-05	3.68E-05	3.57E-05	1.96E-05	1.62E-05
748	649773.8	4197351.01	2.64E-04	2.81E-04	3.97E-05	4.22E-05	3.88E-05	3.76E-05	2.06E-05	1.70E-05
749	649804.15	4197364.04	2.76E-04	2.95E-04	4.16E-05	4.42E-05	4.06E-05	3.94E-05	2.16E-05	1.79E-05
750	649834.49	4197377.07	2.87E-04	3.06E-04	4.32E-05	4.59E-05	4.22E-05	4.09E-05	2.24E-05	1.86E-05
751	649864.84	4197390.09	2.96E-04	3.16E-04	4.45E-05	4.74E-05	4.36E-05	4.22E-05	2.31E-05	1.91E-05
752	649895.19	4197403.12	3.04E-04	3.24E-04	4.57E-05	4.85E-05	4.47E-05	4.33E-05	2.37E-05	1.96E-05
753	649925.53	4197416.14	3.10E-04	3.30E-04	4.65E-05	4.95E-05	4.55E-05	4.41E-05	2.42E-05	2.00E-05
754	649955.88	4197429.17	3.14E-04	3.34E-04	4.72E-05	5.02E-05	4.61E-05	4.47E-05	2.45E-05	2.03E-05
755	649986.22	4197442.19	3.16E-04	3.37E-04	4.75E-05	5.05E-05	4.65E-05	4.51E-05	2.47E-05	2.04E-05
756	650016.57	4197455.22	3.17E-04	3.38E-04	4.76E-05	5.06E-05	4.66E-05	4.51E-05	2.47E-05	2.05E-05
757	650046.91	4197468.24	3.16E-04	3.37E-04	4.75E-05	5.05E-05	4.65E-05	4.50E-05	2.47E-05	2.04E-05
758	650077.26	4197481.27	3.14E-04	3.35E-04	4.72E-05	5.02E-05	4.61E-05	4.47E-05	2.45E-05	2.03E-05
759	650107.6	4197494.3	3.10E-04	3.30E-04	4.66E-05	4.95E-05	4.55E-05	4.41E-05	2.42E-05	2.00E-05
760	650137.95	4197507.32	3.04E-04	3.24E-04	4.58E-05	4.86E-05	4.47E-05	4.34E-05	2.38E-05	1.97E-05
761	650168.3	4197520.35	2.97E-04	3.17E-04	4.47E-05	4.76E-05	4.37E-05	4.24E-05	2.32E-05	1.92E-05
762	650198.64	4197533.37	2.90E-04	3.09E-04	4.35E-05	4.63E-05	4.26E-05	4.13E-05	2.26E-05	1.87E-05
763	650228.99	4197546.4	2.81E-04	2.99E-04	4.22E-05	4.49E-05	4.13E-05	4.00E-05	2.19E-05	1.81E-05
764	650259.33	4197559.42	2.71E-04	2.89E-04	4.07E-05	4.33E-05	3.98E-05	3.86E-05	2.12E-05	1.75E-05
765	650289.68	4197572.45	2.61E-04	2.78E-04	3.92E-05	4.17E-05	3.83E-05	3.72E-05	2.04E-05	1.68E-05
766	650320.02	4197585.47	2.50E-04	2.67E-04	3.76E-05	4.00E-05	3.68E-05	3.57E-05	1.96E-05	1.62E-05
767	650356.1	4197613.99	2.39E-04	2.55E-04	3.59E-05	3.82E-05	3.51E-05	3.40E-05	1.87E-05	1.54E-05
768	650367.56	4197644.96	2.36E-04	2.52E-04	3.55E-05	3.78E-05	3.47E-05	3.37E-05	1.84E-05	1.53E-05
769	650379.02	4197675.93	2.32E-04	2.48E-04	3.49E-05	3.71E-05	3.42E-05	3.31E-05	1.81E-05	1.50E-05
770	650390.48	4197706.9	2.27E-04	2.42E-04	3.42E-05	3.63E-05	3.34E-05	3.24E-05	1.78E-05	1.47E-05
771	650401.94	4197737.87	2.21E-04	2.36E-04	3.33E-05	3.54E-05	3.25E-05	3.15E-05	1.73E-05	1.43E-05
772	650413.4	4197768.84	2.14E-04	2.29E-04	3.22E-05	3.43E-05	3.15E-05	3.06E-05	1.67E-05	1.39E-05
773	650424.86	4197799.81	2.07E-04	2.20E-04	3.11E-05	3.30E-05	3.04E-05	2.95E-05	1.61E-05	1.34E-05
774	650436.32	4197830.78	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.92E-05	2.83E-05	1.55E-05	1.28E-05
775	650447.78	4197861.75	1.89E-04	2.02E-04	2.85E-05	3.03E-05	2.78E-05	2.70E-05	1.48E-05	1.22E-05
776	650459.24	4197892.72	1.80E-04	1.92E-04	2.71E-05	2.88E-05	2.65E-05	2.57E-05	1.41E-05	1.16E-05
777	650470.7	4197923.69	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.43E-05	1.33E-05	1.10E-05
778	650482.16	4197954.66	1.61E-04	1.72E-04	2.43E-05	2.58E-05	2.37E-05	2.30E-05	1.26E-05	1.04E-05
779	650493.62	4197985.63	1.52E-04	1.62E-04	2.29E-05	2.44E-05	2.24E-05	2.17E-05	1.19E-05	9.84E-06
780	650505.08	4198016.6	1.44E-04	1.53E-04	2.16E-05	2.29E-05	2.11E-05	2.05E-05	1.12E-05	9.27E-06
781	650516.54	4198047.57	1.35E-04	1.44E-04	2.03E-05	2.16E-05	1.99E-05	1.92E-05	1.05E-05	8.73E-06
782	650528.01	4198078.54	1.27E-04	1.35E-04	1.91E-05	2.03E-05	1.87E-05	1.81E-05	9.92E-06	8.21E-06
783	650539.47	4198109.51	1.19E-04	1.27E-04	1.80E-05	1.91E-05	1.76E-05	1.70E-05	9.33E-06	7.72E-06
784	650550.93	4198140.48	1.12E-04	1.20E-04	1.69E-05	1.80E-05	1.65E-05	1.60E-05	8.77E-06	7.26E-06
785	650562.39	4198171.46	1.06E-04	1.13E-04	1.59E-05	1.69E-05	1.55E-05	1.50E-05	8.25E-06	6.82E-06
786	650573.85	4198202.43	9.93E-05	1.06E-04	1.49E-05	1.59E-05	1.46E-05	1.41E-05	7.75E-06	6.41E-06
787	650585.31	4198233.4	9.33E-05	9.95E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.29E-06	6.03E-06
788	649681.31	4197318.45	2.25E-04	2.40E-04	3.39E-05	3.60E-05	3.31E-05	3.21E-05	1.76E-05	1.46E-05
789	649712.99	4197124.91	1.31E-04	1.40E-04	1.97E-05	2.10E-05	1.93E-05	1.87E-05	1.02E-05	8.48E-06
790	649743.08	4197137.82	1.40E-04	1.49E-04	2.11E-05	2.24E-05	2.06E-05	2.00E-05	1.10E-05	9.06E-06
791	649773.17	4197150.74	1.49E-04	1.59E-04	2.25E-05	2.39E-05	2.20E-05	2.13E-05	1.17E-05	9.65E-06
792	649803.26	4197163.66	1.58E-04	1.69E-04	2.38E-05	2.53E-05	2.33E-05	2.26E-05	1.24E-05	1.02E-05
793	649833.35	4197176.57	1.67E-04	1.78E-04	2.52E-05	2.67E-05	2.46E-05	2.38E-05	1.31E-05	1.08E-05
794	649863.44	4197189.49	1.76E-04	1.88E-04	2.65E-05	2.81E-05	2.59E-05	2.51E-05	1.37E-05	1.14E-05

795	649893.53	4197202.41	1.84E-04	1.96E-04	2.77E-05	2.94E-05	2.71E-05	2.62E-05	1.44E-05	1.19E-05
796	649923.62	4197215.32	1.92E-04	2.04E-04	2.88E-05	3.06E-05	2.82E-05	2.73E-05	1.50E-05	1.24E-05
797	649953.71	4197228.24	1.99E-04	2.12E-04	2.99E-05	3.17E-05	2.92E-05	2.83E-05	1.55E-05	1.28E-05
798	649983.8	4197241.16	2.05E-04	2.18E-04	3.08E-05	3.27E-05	3.01E-05	2.92E-05	1.60E-05	1.32E-05
799	650013.9	4197254.07	2.10E-04	2.24E-04	3.16E-05	3.36E-05	3.09E-05	2.99E-05	1.64E-05	1.36E-05
800	650043.99	4197266.99	2.14E-04	2.28E-04	3.22E-05	3.43E-05	3.15E-05	3.05E-05	1.67E-05	1.38E-05
801	650074.08	4197279.9	2.18E-04	2.32E-04	3.27E-05	3.48E-05	3.20E-05	3.10E-05	1.70E-05	1.41E-05
802	650104.17	4197292.82	2.20E-04	2.35E-04	3.31E-05	3.52E-05	3.24E-05	3.14E-05	1.72E-05	1.42E-05
803	650134.26	4197305.74	2.22E-04	2.36E-04	3.33E-05	3.54E-05	3.26E-05	3.16E-05	1.73E-05	1.43E-05
804	650164.35	4197318.65	2.22E-04	2.37E-04	3.34E-05	3.55E-05	3.27E-05	3.17E-05	1.74E-05	1.44E-05
805	650194.44	4197331.57	2.22E-04	2.37E-04	3.34E-05	3.55E-05	3.26E-05	3.16E-05	1.73E-05	1.43E-05
806	650224.53	4197344.49	2.21E-04	2.35E-04	3.32E-05	3.53E-05	3.25E-05	3.15E-05	1.72E-05	1.43E-05
807	650254.62	4197357.4	2.19E-04	2.33E-04	3.29E-05	3.50E-05	3.22E-05	3.12E-05	1.71E-05	1.41E-05
808	650284.71	4197370.32	2.16E-04	2.30E-04	3.25E-05	3.45E-05	3.17E-05	3.08E-05	1.69E-05	1.39E-05
809	650314.81	4197383.24	2.12E-04	2.26E-04	3.19E-05	3.39E-05	3.12E-05	3.02E-05	1.66E-05	1.37E-05
810	650344.9	4197396.15	2.08E-04	2.22E-04	3.13E-05	3.32E-05	3.06E-05	2.96E-05	1.62E-05	1.34E-05
811	650374.99	4197409.07	2.03E-04	2.17E-04	3.05E-05	3.25E-05	2.99E-05	2.89E-05	1.59E-05	1.31E-05
812	650405.08	4197421.98	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.91E-05	2.82E-05	1.55E-05	1.28E-05
813	650435.17	4197434.9	1.93E-04	2.05E-04	2.90E-05	3.08E-05	2.83E-05	2.75E-05	1.50E-05	1.25E-05
814	650465.26	4197447.82	1.87E-04	1.99E-04	2.81E-05	2.99E-05	2.75E-05	2.66E-05	1.46E-05	1.21E-05
815	650501.03	4197476.09	1.81E-04	1.93E-04	2.72E-05	2.89E-05	2.66E-05	2.58E-05	1.41E-05	1.17E-05
816	650512.4	4197506.8	1.80E-04	1.92E-04	2.71E-05	2.88E-05	2.65E-05	2.57E-05	1.41E-05	1.17E-05
817	650523.76	4197537.51	1.79E-04	1.91E-04	2.69E-05	2.86E-05	2.63E-05	2.55E-05	1.40E-05	1.16E-05
818	650535.13	4197568.22	1.77E-04	1.89E-04	2.66E-05	2.83E-05	2.60E-05	2.52E-05	1.38E-05	1.14E-05
819	650546.49	4197598.93	1.74E-04	1.86E-04	2.62E-05	2.78E-05	2.56E-05	2.48E-05	1.36E-05	1.13E-05
820	650557.86	4197629.64	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.43E-05	1.33E-05	1.10E-05
821	650569.22	4197660.35	1.67E-04	1.78E-04	2.51E-05	2.67E-05	2.45E-05	2.38E-05	1.30E-05	1.08E-05
822	650580.58	4197691.06	1.62E-04	1.73E-04	2.44E-05	2.60E-05	2.39E-05	2.31E-05	1.27E-05	1.05E-05
823	650591.95	4197721.78	1.58E-04	1.68E-04	2.37E-05	2.52E-05	2.32E-05	2.24E-05	1.23E-05	1.02E-05
824	650603.31	4197752.49	1.52E-04	1.62E-04	2.29E-05	2.43E-05	2.24E-05	2.17E-05	1.19E-05	9.83E-06
825	650614.68	4197783.2	1.47E-04	1.56E-04	2.20E-05	2.34E-05	2.15E-05	2.09E-05	1.14E-05	9.47E-06
826	650626.04	4197813.91	1.41E-04	1.50E-04	2.12E-05	2.25E-05	2.07E-05	2.01E-05	1.10E-05	9.09E-06
827	650637.41	4197844.62	1.35E-04	1.44E-04	2.03E-05	2.15E-05	1.98E-05	1.92E-05	1.05E-05	8.71E-06
828	650648.77	4197875.33	1.29E-04	1.37E-04	1.94E-05	2.06E-05	1.89E-05	1.84E-05	1.01E-05	8.32E-06
829	650660.14	4197906.04	1.23E-04	1.31E-04	1.85E-05	1.96E-05	1.81E-05	1.75E-05	9.60E-06	7.94E-06
830	650671.5	4197936.75	1.17E-04	1.25E-04	1.76E-05	1.87E-05	1.72E-05	1.67E-05	9.14E-06	7.56E-06
831	650682.86	4197967.46	1.11E-04	1.19E-04	1.68E-05	1.78E-05	1.64E-05	1.59E-05	8.71E-06	7.20E-06
832	650694.23	4197998.17	1.06E-04	1.13E-04	1.59E-05	1.70E-05	1.56E-05	1.51E-05	8.28E-06	6.85E-06
833	650705.59	4198028.88	1.01E-04	1.08E-04	1.52E-05	1.61E-05	1.48E-05	1.44E-05	7.88E-06	6.52E-06
834	650716.96	4198059.59	9.59E-05	1.02E-04	1.44E-05	1.53E-05	1.41E-05	1.37E-05	7.49E-06	6.20E-06
835	650728.32	4198090.31	9.12E-05	9.73E-05	1.37E-05	1.46E-05	1.34E-05	1.30E-05	7.13E-06	5.90E-06
836	650739.69	4198121.02	8.67E-05	9.25E-05	1.30E-05	1.39E-05	1.28E-05	1.24E-05	6.78E-06	5.61E-06
837	650751.05	4198151.73	8.25E-05	8.79E-05	1.24E-05	1.32E-05	1.21E-05	1.17E-05	6.44E-06	5.33E-06
838	650762.41	4198182.44	7.84E-05	8.35E-05	1.18E-05	1.25E-05	1.15E-05	1.12E-05	6.12E-06	5.06E-06
839	650773.78	4198213.15	7.45E-05	7.94E-05	1.12E-05	1.19E-05	1.10E-05	1.06E-05	5.82E-06	4.81E-06
840	650785.14	4198243.86	7.08E-05	7.54E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.53E-06	4.57E-06
841	649681.31	4197118.45	1.24E-04	1.32E-04	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.71E-06	8.03E-06
842	649713.14	4196924.97	8.05E-05	8.58E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.29E-06	5.20E-06
843	649743.54	4196938.02	8.58E-05	9.14E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.70E-06	5.54E-06
844	649773.94	4196951.07	9.13E-05	9.73E-05	1.37E-05	1.46E-05	1.34E-05	1.30E-05	7.13E-06	5.90E-06
845	649804.34	4196964.12	9.71E-05	1.04E-04	1.46E-05	1.55E-05	1.43E-05	1.38E-05	7.58E-06	6.27E-06
846	649834.74	4196977.17	1.03E-04	1.10E-04	1.55E-05	1.65E-05	1.51E-05	1.47E-05	8.05E-06	6.66E-06
847	649865.14	4196990.22	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.51E-06	7.04E-06
848	649895.54	4197003.27	1.15E-04	1.23E-04	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.98E-06	7.43E-06
849	649925.94	4197016.32	1.21E-04	1.29E-04	1.82E-05	1.93E-05	1.78E-05	1.72E-05	9.44E-06	7.81E-06
850	649956.34	4197029.37	1.27E-04	1.35E-04	1.90E-05	2.02E-05	1.86E-05	1.80E-05	9.89E-06	8.18E-06
851	649986.74	4197042.41	1.32E-04	1.41E-04	1.99E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.54E-06

852	650017.14	4197055.46	1.38E-04	1.47E-04	2.07E-05	2.20E-05	2.02E-05	1.96E-05	1.07E-05	8.89E-06
853	650047.54	4197068.51	1.43E-04	1.52E-04	2.15E-05	2.28E-05	2.10E-05	2.03E-05	1.11E-05	9.22E-06
854	650077.94	4197081.56	1.47E-04	1.57E-04	2.21E-05	2.35E-05	2.17E-05	2.10E-05	1.15E-05	9.52E-06
855	650108.34	4197094.61	1.51E-04	1.61E-04	2.28E-05	2.42E-05	2.23E-05	2.16E-05	1.18E-05	9.79E-06
856	650138.74	4197107.66	1.55E-04	1.65E-04	2.33E-05	2.48E-05	2.28E-05	2.21E-05	1.21E-05	1.00E-05
857	650169.14	4197120.71	1.58E-04	1.69E-04	2.38E-05	2.53E-05	2.33E-05	2.25E-05	1.24E-05	1.02E-05
858	650199.54	4197133.76	1.61E-04	1.71E-04	2.41E-05	2.57E-05	2.36E-05	2.29E-05	1.25E-05	1.04E-05
859	650229.94	4197146.81	1.62E-04	1.73E-04	2.44E-05	2.60E-05	2.39E-05	2.32E-05	1.27E-05	1.05E-05
860	650260.34	4197159.86	1.64E-04	1.75E-04	2.46E-05	2.62E-05	2.41E-05	2.34E-05	1.28E-05	1.06E-05
861	650290.74	4197172.9	1.65E-04	1.76E-04	2.48E-05	2.63E-05	2.42E-05	2.35E-05	1.29E-05	1.06E-05
862	650321.14	4197185.95	1.65E-04	1.76E-04	2.48E-05	2.64E-05	2.43E-05	2.35E-05	1.29E-05	1.07E-05
863	650351.54	4197199	1.65E-04	1.76E-04	2.48E-05	2.64E-05	2.43E-05	2.35E-05	1.29E-05	1.07E-05
864	650381.94	4197212.05	1.64E-04	1.75E-04	2.47E-05	2.62E-05	2.41E-05	2.34E-05	1.28E-05	1.06E-05
865	650412.34	4197225.1	1.63E-04	1.73E-04	2.45E-05	2.60E-05	2.39E-05	2.32E-05	1.27E-05	1.05E-05
866	650442.74	4197238.15	1.61E-04	1.72E-04	2.42E-05	2.57E-05	2.37E-05	2.29E-05	1.26E-05	1.04E-05
867	650473.14	4197251.2	1.59E-04	1.69E-04	2.39E-05	2.54E-05	2.34E-05	2.26E-05	1.24E-05	1.03E-05
868	650503.54	4197264.25	1.56E-04	1.67E-04	2.35E-05	2.50E-05	2.30E-05	2.23E-05	1.22E-05	1.01E-05
869	650533.94	4197277.3	1.54E-04	1.64E-04	2.31E-05	2.46E-05	2.26E-05	2.19E-05	1.20E-05	9.93E-06
870	650564.34	4197290.34	1.51E-04	1.61E-04	2.26E-05	2.41E-05	2.21E-05	2.15E-05	1.18E-05	9.73E-06
871	650594.74	4197303.39	1.47E-04	1.57E-04	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.52E-06
872	650625.14	4197316.44	1.44E-04	1.53E-04	2.16E-05	2.30E-05	2.11E-05	2.05E-05	1.12E-05	9.29E-06
873	650646.08	4197338.48	1.42E-04	1.52E-04	2.14E-05	2.27E-05	2.09E-05	2.03E-05	1.11E-05	9.19E-06
874	650657.56	4197369.51	1.42E-04	1.52E-04	2.14E-05	2.28E-05	2.09E-05	2.03E-05	1.11E-05	9.20E-06
875	650669.04	4197400.53	1.42E-04	1.52E-04	2.14E-05	2.27E-05	2.09E-05	2.03E-05	1.11E-05	9.19E-06
876	650680.52	4197431.56	1.41E-04	1.51E-04	2.13E-05	2.26E-05	2.08E-05	2.02E-05	1.10E-05	9.14E-06
877	650692	4197462.58	1.40E-04	1.50E-04	2.11E-05	2.24E-05	2.06E-05	2.00E-05	1.10E-05	9.06E-06
878	650703.48	4197493.61	1.39E-04	1.48E-04	2.09E-05	2.22E-05	2.04E-05	1.98E-05	1.08E-05	8.96E-06
879	650714.96	4197524.64	1.37E-04	1.46E-04	2.05E-05	2.18E-05	2.01E-05	1.95E-05	1.07E-05	8.83E-06
880	650726.44	4197555.66	1.34E-04	1.43E-04	2.02E-05	2.15E-05	1.97E-05	1.91E-05	1.05E-05	8.67E-06
881	650737.92	4197586.69	1.31E-04	1.40E-04	1.98E-05	2.10E-05	1.93E-05	1.87E-05	1.03E-05	8.49E-06
882	650749.41	4197617.71	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.88E-05	1.83E-05	1.00E-05	8.28E-06
883	650760.89	4197648.74	1.25E-04	1.33E-04	1.88E-05	1.99E-05	1.83E-05	1.78E-05	9.74E-06	8.06E-06
884	650772.37	4197679.77	1.21E-04	1.29E-04	1.82E-05	1.94E-05	1.78E-05	1.73E-05	9.46E-06	7.83E-06
885	650783.85	4197710.79	1.17E-04	1.25E-04	1.76E-05	1.87E-05	1.72E-05	1.67E-05	9.16E-06	7.58E-06
886	650795.33	4197741.82	1.13E-04	1.21E-04	1.70E-05	1.81E-05	1.66E-05	1.61E-05	8.84E-06	7.32E-06
887	650806.81	4197772.84	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.52E-06	7.05E-06
888	650818.29	4197803.87	1.05E-04	1.12E-04	1.58E-05	1.68E-05	1.54E-05	1.50E-05	8.20E-06	6.78E-06
889	650829.77	4197834.9	1.01E-04	1.07E-04	1.52E-05	1.61E-05	1.48E-05	1.44E-05	7.87E-06	6.51E-06
890	650841.25	4197865.92	9.67E-05	1.03E-04	1.45E-05	1.55E-05	1.42E-05	1.38E-05	7.55E-06	6.25E-06
891	650852.73	4197896.95	9.27E-05	9.88E-05	1.39E-05	1.48E-05	1.36E-05	1.32E-05	7.24E-06	5.99E-06
892	650864.22	4197927.97	8.89E-05	9.47E-05	1.34E-05	1.42E-05	1.31E-05	1.27E-05	6.94E-06	5.74E-06
893	650875.7	4197959	8.52E-05	9.08E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.65E-06	5.50E-06
894	650887.18	4197990.03	8.16E-05	8.70E-05	1.23E-05	1.30E-05	1.20E-05	1.16E-05	6.37E-06	5.27E-06
895	650898.66	4198021.05	7.82E-05	8.33E-05	1.18E-05	1.25E-05	1.15E-05	1.11E-05	6.11E-06	5.05E-06
896	650910.14	4198052.08	7.49E-05	7.98E-05	1.13E-05	1.20E-05	1.10E-05	1.07E-05	5.85E-06	4.84E-06
897	650921.62	4198083.1	7.17E-05	7.64E-05	1.08E-05	1.15E-05	1.05E-05	1.02E-05	5.60E-06	4.63E-06
898	650933.1	4198114.13	6.87E-05	7.32E-05	1.03E-05	1.10E-05	1.01E-05	9.78E-06	5.36E-06	4.44E-06
899	650944.58	4198145.16	6.57E-05	7.01E-05	9.88E-06	1.05E-05	9.66E-06	9.37E-06	5.13E-06	4.25E-06
900	650956.06	4198176.18	6.29E-05	6.70E-05	9.46E-06	1.01E-05	9.25E-06	8.96E-06	4.91E-06	4.06E-06
901	650967.54	4198207.21	6.02E-05	6.42E-05	9.05E-06	9.62E-06	8.85E-06	8.58E-06	4.70E-06	3.89E-06
902	650979.03	4198238.23	5.76E-05	6.14E-05	8.66E-06	9.21E-06	8.47E-06	8.21E-06	4.50E-06	3.72E-06
903	650990.51	4198269.26	5.51E-05	5.87E-05	8.28E-06	8.81E-06	8.10E-06	7.85E-06	4.30E-06	3.56E-06
904	649681.31	4196918.45	7.65E-05	8.15E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.98E-06	4.94E-06
905	649713.04	4196724.93	5.45E-05	5.80E-05	8.19E-06	8.70E-06	8.01E-06	7.76E-06	4.25E-06	3.52E-06
906	649743.25	4196737.9	5.74E-05	6.12E-05	8.64E-06	9.18E-06	8.44E-06	8.18E-06	4.49E-06	3.71E-06
907	649773.45	4196750.86	6.06E-05	6.46E-05	9.12E-06	9.69E-06	8.92E-06	8.64E-06	4.74E-06	3.92E-06
908	649803.66	4196763.83	6.40E-05	6.83E-05	9.63E-06	1.02E-05	9.42E-06	9.13E-06	5.00E-06	4.14E-06

909	649833.86	4196776.79	6.76E-05	7.21E-05	1.02E-05	1.08E-05	9.94E-06	9.64E-06	5.28E-06	4.37E-06
910	649864.07	4196789.76	7.14E-05	7.61E-05	1.07E-05	1.14E-05	1.05E-05	1.02E-05	5.58E-06	4.61E-06
911	649894.27	4196802.72	7.53E-05	8.03E-05	1.13E-05	1.20E-05	1.11E-05	1.07E-05	5.88E-06	4.87E-06
912	649924.48	4196815.69	7.93E-05	8.45E-05	1.19E-05	1.27E-05	1.17E-05	1.13E-05	6.19E-06	5.12E-06
913	649954.68	4196828.66	8.34E-05	8.89E-05	1.25E-05	1.33E-05	1.23E-05	1.19E-05	6.51E-06	5.39E-06
914	649984.89	4196841.62	8.75E-05	9.33E-05	1.32E-05	1.40E-05	1.29E-05	1.25E-05	6.84E-06	5.66E-06
915	650015.09	4196854.59	9.16E-05	9.77E-05	1.38E-05	1.47E-05	1.35E-05	1.31E-05	7.16E-06	5.92E-06
916	650045.3	4196867.55	9.58E-05	1.02E-04	1.44E-05	1.53E-05	1.41E-05	1.36E-05	7.48E-06	6.19E-06
917	650075.5	4196880.52	9.98E-05	1.06E-04	1.50E-05	1.60E-05	1.47E-05	1.42E-05	7.80E-06	6.45E-06
918	650105.71	4196893.48	1.04E-04	1.11E-04	1.56E-05	1.66E-05	1.52E-05	1.48E-05	8.10E-06	6.70E-06
919	650135.91	4196906.45	1.07E-04	1.14E-04	1.61E-05	1.72E-05	1.58E-05	1.53E-05	8.39E-06	6.94E-06
920	650166.12	4196919.41	1.11E-04	1.18E-04	1.67E-05	1.77E-05	1.63E-05	1.58E-05	8.66E-06	7.17E-06
921	650196.32	4196932.38	1.14E-04	1.22E-04	1.72E-05	1.82E-05	1.68E-05	1.63E-05	8.91E-06	7.37E-06
922	650226.53	4196945.34	1.17E-04	1.25E-04	1.76E-05	1.87E-05	1.72E-05	1.67E-05	9.14E-06	7.56E-06
923	650256.73	4196958.31	1.20E-04	1.28E-04	1.80E-05	1.91E-05	1.76E-05	1.71E-05	9.35E-06	7.73E-06
924	650286.94	4196971.27	1.22E-04	1.30E-04	1.83E-05	1.95E-05	1.79E-05	1.74E-05	9.53E-06	7.88E-06
925	650317.14	4196984.24	1.24E-04	1.32E-04	1.86E-05	1.98E-05	1.82E-05	1.76E-05	9.67E-06	8.00E-06
926	650347.35	4196997.2	1.25E-04	1.34E-04	1.88E-05	2.00E-05	1.84E-05	1.79E-05	9.79E-06	8.10E-06
927	650377.55	4197010.17	1.27E-04	1.35E-04	1.91E-05	2.03E-05	1.86E-05	1.81E-05	9.91E-06	8.19E-06
928	650407.76	4197023.13	1.28E-04	1.36E-04	1.92E-05	2.04E-05	1.88E-05	1.82E-05	9.98E-06	8.25E-06
929	650437.96	4197036.1	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.89E-05	1.83E-05	1.00E-05	8.29E-06
930	650468.17	4197049.07	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.89E-05	1.83E-05	1.00E-05	8.30E-06
931	650498.37	4197062.03	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.88E-05	1.83E-05	1.00E-05	8.28E-06
932	650528.58	4197075	1.28E-04	1.36E-04	1.92E-05	2.04E-05	1.88E-05	1.82E-05	9.98E-06	8.26E-06
933	650558.78	4197087.96	1.27E-04	1.35E-04	1.91E-05	2.03E-05	1.87E-05	1.81E-05	9.93E-06	8.21E-06
934	650588.99	4197100.93	1.26E-04	1.34E-04	1.90E-05	2.02E-05	1.85E-05	1.80E-05	9.85E-06	8.15E-06
935	650619.19	4197113.89	1.25E-04	1.33E-04	1.88E-05	2.00E-05	1.84E-05	1.78E-05	9.76E-06	8.07E-06
936	650649.4	4197126.86	1.23E-04	1.32E-04	1.86E-05	1.97E-05	1.82E-05	1.76E-05	9.64E-06	7.98E-06
937	650679.6	4197139.82	1.22E-04	1.30E-04	1.83E-05	1.95E-05	1.79E-05	1.74E-05	9.51E-06	7.87E-06
938	650709.81	4197152.79	1.20E-04	1.28E-04	1.80E-05	1.92E-05	1.76E-05	1.71E-05	9.37E-06	7.75E-06
939	650740.01	4197165.75	1.18E-04	1.26E-04	1.77E-05	1.89E-05	1.73E-05	1.68E-05	9.21E-06	7.62E-06
940	650770.22	4197178.72	1.16E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.05E-06	7.48E-06
941	650791.02	4197200.61	1.15E-04	1.23E-04	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.99E-06	7.43E-06
942	650802.43	4197231.44	1.16E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.03E-06	7.47E-06
943	650813.84	4197262.27	1.16E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.05E-06	7.48E-06
944	650825.25	4197293.1	1.16E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.04E-06	7.48E-06
945	650836.65	4197323.92	1.15E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.64E-05	9.02E-06	7.46E-06
946	650848.06	4197354.75	1.15E-04	1.22E-04	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.97E-06	7.42E-06
947	650859.47	4197385.58	1.14E-04	1.21E-04	1.71E-05	1.82E-05	1.67E-05	1.62E-05	8.90E-06	7.36E-06
948	650870.88	4197416.4	1.13E-04	1.20E-04	1.69E-05	1.80E-05	1.66E-05	1.61E-05	8.80E-06	7.28E-06
949	650882.28	4197447.23	1.11E-04	1.19E-04	1.67E-05	1.78E-05	1.64E-05	1.59E-05	8.69E-06	7.19E-06
950	650893.69	4197478.06	1.09E-04	1.17E-04	1.65E-05	1.75E-05	1.61E-05	1.56E-05	8.55E-06	7.08E-06
951	650905.1	4197508.89	1.07E-04	1.15E-04	1.62E-05	1.72E-05	1.58E-05	1.53E-05	8.40E-06	6.95E-06
952	650916.51	4197539.71	1.05E-04	1.12E-04	1.58E-05	1.68E-05	1.55E-05	1.50E-05	8.22E-06	6.80E-06
953	650927.91	4197570.54	1.03E-04	1.10E-04	1.55E-05	1.64E-05	1.51E-05	1.46E-05	8.03E-06	6.64E-06
954	650939.32	4197601.37	1.00E-04	1.07E-04	1.51E-05	1.60E-05	1.47E-05	1.43E-05	7.82E-06	6.47E-06
955	650950.73	4197632.19	9.74E-05	1.04E-04	1.46E-05	1.56E-05	1.43E-05	1.39E-05	7.61E-06	6.29E-06
956	650962.13	4197663.02	9.46E-05	1.01E-04	1.42E-05	1.51E-05	1.39E-05	1.35E-05	7.39E-06	6.11E-06
957	650973.54	4197693.85	9.17E-05	9.77E-05	1.38E-05	1.47E-05	1.35E-05	1.31E-05	7.16E-06	5.92E-06
958	650984.95	4197724.68	8.87E-05	9.45E-05	1.33E-05	1.42E-05	1.30E-05	1.26E-05	6.93E-06	5.73E-06
959	650996.36	4197755.5	8.57E-05	9.13E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.69E-06	5.54E-06
960	651007.76	4197786.33	8.27E-05	8.81E-05	1.24E-05	1.32E-05	1.22E-05	1.18E-05	6.46E-06	5.34E-06
961	651019.17	4197817.16	7.98E-05	8.50E-05	1.20E-05	1.28E-05	1.17E-05	1.14E-05	6.23E-06	5.15E-06
962	651030.58	4197847.98	7.69E-05	8.20E-05	1.16E-05	1.23E-05	1.13E-05	1.10E-05	6.01E-06	4.97E-06
963	651041.99	4197878.81	7.41E-05	7.90E-05	1.11E-05	1.19E-05	1.09E-05	1.06E-05	5.79E-06	4.79E-06
964	651053.39	4197909.64	7.15E-05	7.62E-05	1.07E-05	1.14E-05	1.05E-05	1.02E-05	5.58E-06	4.62E-06
965	651064.8	4197940.47	6.89E-05	7.34E-05	1.04E-05	1.10E-05	1.01E-05	9.82E-06	5.38E-06	4.45E-06

966	651076.21	4197971.29	6.64E-05	7.08E-05	9.98E-06	1.06E-05	9.76E-06	9.46E-06	5.19E-06	4.29E-06
967	651087.62	4198002.12	6.40E-05	6.82E-05	9.62E-06	1.02E-05	9.41E-06	9.12E-06	5.00E-06	4.14E-06
968	651099.02	4198032.95	6.17E-05	6.57E-05	9.27E-06	9.86E-06	9.07E-06	8.79E-06	4.82E-06	3.99E-06
969	651110.43	4198063.77	5.94E-05	6.33E-05	8.93E-06	9.50E-06	8.74E-06	8.47E-06	4.64E-06	3.84E-06
970	651121.84	4198094.6	5.72E-05	6.10E-05	8.61E-06	9.15E-06	8.42E-06	8.16E-06	4.47E-06	3.70E-06
971	651133.25	4198125.43	5.51E-05	5.87E-05	8.28E-06	8.81E-06	8.10E-06	7.85E-06	4.30E-06	3.56E-06
972	651144.65	4198156.26	5.30E-05	5.65E-05	7.98E-06	8.48E-06	7.80E-06	7.56E-06	4.14E-06	3.43E-06
973	651156.06	4198187.08	5.11E-05	5.44E-05	7.68E-06	8.16E-06	7.51E-06	7.27E-06	3.99E-06	3.30E-06
974	651167.47	4198217.91	4.91E-05	5.24E-05	7.39E-06	7.85E-06	7.22E-06	7.00E-06	3.84E-06	3.17E-06
975	651178.88	4198248.74	4.73E-05	5.04E-05	7.11E-06	7.55E-06	6.95E-06	6.73E-06	3.69E-06	3.05E-06
976	651190.28	4198279.56	4.55E-05	4.85E-05	6.84E-06	7.27E-06	6.69E-06	6.48E-06	3.55E-06	2.94E-06
977	649681.31	4196718.45	5.22E-05	5.56E-05	7.84E-06	8.34E-06	7.67E-06	7.43E-06	4.07E-06	3.37E-06
978	649780.23	4198130.84	1.95E-03	2.08E-03	2.94E-04	3.12E-04	2.87E-04	2.78E-04	1.53E-04	1.26E-04
979	649931.29	4198215.35	4.90E-04	5.22E-04	7.37E-05	7.83E-05	7.21E-05	6.98E-05	3.83E-05	3.17E-05
980	649930.22	4198128.98	6.78E-04	7.23E-04	1.02E-04	1.08E-04	9.97E-05	9.66E-05	5.30E-05	4.38E-05
981	649980.22	4198128.36	5.30E-04	5.65E-04	7.96E-05	8.47E-05	7.79E-05	7.55E-05	4.14E-05	3.42E-05
982	650080.21	4198127.12	3.54E-04	3.77E-04	5.32E-05	5.66E-05	5.20E-05	5.04E-05	2.76E-05	2.29E-05
983	650180.47	4198147.48	2.46E-04	2.62E-04	3.69E-05	3.93E-05	3.61E-05	3.50E-05	1.92E-05	1.59E-05
984	650280.19	4198124.65	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.91E-05	2.82E-05	1.55E-05	1.28E-05
985	650380.45	4198145	1.53E-04	1.63E-04	2.30E-05	2.44E-05	2.24E-05	2.18E-05	1.19E-05	9.87E-06
986	650580.44	4198142.52	1.07E-04	1.14E-04	1.61E-05	1.71E-05	1.57E-05	1.52E-05	8.34E-06	6.90E-06
987	650780.69	4198161.64	7.84E-05	8.36E-05	1.18E-05	1.25E-05	1.15E-05	1.12E-05	6.13E-06	5.07E-06
988	650780.16	4198118.45	8.24E-05	8.78E-05	1.24E-05	1.32E-05	1.21E-05	1.17E-05	6.44E-06	5.33E-06
989	650980.94	4198180.75	6.10E-05	6.50E-05	9.17E-06	9.75E-06	8.96E-06	8.69E-06	4.76E-06	3.94E-06
990	650980.41	4198137.57	6.37E-05	6.79E-05	9.57E-06	1.02E-05	9.36E-06	9.07E-06	4.97E-06	4.11E-06
991	651181.19	4198199.87	4.93E-05	5.26E-05	7.42E-06	7.89E-06	7.25E-06	7.03E-06	3.85E-06	3.19E-06
992	651180.66	4198156.68	5.13E-05	5.47E-05	7.71E-06	8.20E-06	7.54E-06	7.31E-06	4.01E-06	3.31E-06
993	651180.12	4198113.5	5.33E-05	5.68E-05	8.01E-06	8.51E-06	7.83E-06	7.59E-06	4.16E-06	3.44E-06
994	649747.35	4198111.24	2.55E-03	2.72E-03	3.84E-04	4.08E-04	3.75E-04	3.64E-04	1.99E-04	1.65E-04
995	649744.82	4198059.93	2.12E-03	2.26E-03	3.18E-04	3.38E-04	3.11E-04	3.02E-04	1.65E-04	1.37E-04
996	649752.48	4198011.54	1.72E-03	1.83E-03	2.59E-04	2.75E-04	2.53E-04	2.45E-04	1.34E-04	1.11E-04
997	649781.21	4198025.9	1.59E-03	1.70E-03	2.40E-04	2.55E-04	2.34E-04	2.27E-04	1.25E-04	1.03E-04
998	649818.4	4198100.36	1.45E-03	1.54E-03	2.18E-04	2.31E-04	2.13E-04	2.06E-04	1.13E-04	9.35E-05
999	649809.4	4197987.78	1.29E-03	1.37E-03	1.94E-04	2.06E-04	1.89E-04	1.84E-04	1.01E-04	8.33E-05
1000	649853.93	4198063.25	1.16E-03	1.23E-03	1.74E-04	1.85E-04	1.70E-04	1.65E-04	9.05E-05	7.48E-05
1001	649714.28	4197887.99	1.34E-03	1.43E-03	2.01E-04	2.14E-04	1.97E-04	1.91E-04	1.05E-04	8.65E-05
1002	649742.44	4197902.08	1.28E-03	1.37E-03	1.93E-04	2.05E-04	1.88E-04	1.83E-04	1.00E-04	8.28E-05
1003	649770.61	4197916.16	1.22E-03	1.30E-03	1.84E-04	1.95E-04	1.79E-04	1.74E-04	9.53E-05	7.89E-05
1004	649798.77	4197930.24	1.16E-03	1.23E-03	1.74E-04	1.85E-04	1.70E-04	1.65E-04	9.05E-05	7.49E-05
1005	649826.93	4197944.32	1.10E-03	1.18E-03	1.66E-04	1.76E-04	1.62E-04	1.57E-04	8.61E-05	7.12E-05
1006	649855.1	4197958.41	1.03E-03	1.10E-03	1.55E-04	1.65E-04	1.52E-04	1.47E-04	8.06E-05	6.67E-05
1007	649891.55	4198031.4	9.50E-04	1.01E-03	1.43E-04	1.52E-04	1.40E-04	1.35E-04	7.42E-05	6.14E-05
1008	649907.02	4198070.44	8.61E-04	9.18E-04	1.30E-04	1.38E-04	1.27E-04	1.23E-04	6.73E-05	5.57E-05
1009	649918.62	4198099.71	7.74E-04	8.25E-04	1.16E-04	1.24E-04	1.14E-04	1.10E-04	6.05E-05	5.00E-05
1010	649843.88	4197900.58	9.56E-04	1.02E-03	1.44E-04	1.53E-04	1.41E-04	1.36E-04	7.46E-05	6.18E-05
1011	649872.61	4197914.94	9.09E-04	9.69E-04	1.37E-04	1.45E-04	1.34E-04	1.29E-04	7.10E-05	5.87E-05
1012	649905.28	4197939.26	8.47E-04	9.03E-04	1.27E-04	1.35E-04	1.25E-04	1.21E-04	6.62E-05	5.47E-05
1013	649917.11	4197969.12	8.32E-04	8.87E-04	1.25E-04	1.33E-04	1.22E-04	1.19E-04	6.50E-05	5.38E-05
1014	649928.94	4197998.97	8.01E-04	8.54E-04	1.20E-04	1.28E-04	1.18E-04	1.14E-04	6.26E-05	5.18E-05
1015	649927.74	4197838.07	6.85E-04	7.30E-04	1.03E-04	1.09E-04	1.01E-04	9.76E-05	5.35E-05	4.43E-05
1016	649956.12	4197852.25	6.47E-04	6.90E-04	9.73E-05	1.03E-04	9.51E-05	9.22E-05	5.06E-05	4.18E-05
1017	649978.93	4197871.54	6.25E-04	6.66E-04	9.40E-05	9.99E-05	9.19E-05	8.91E-05	4.88E-05	4.04E-05
1018	649990.61	4197901.03	6.20E-04	6.61E-04	9.32E-05	9.91E-05	9.12E-05	8.83E-05	4.84E-05	4.01E-05
1019	650002.3	4197930.52	6.03E-04	6.43E-04	9.07E-05	9.64E-05	8.87E-05	8.60E-05	4.71E-05	3.90E-05
1020	650017.88	4197969.84	5.69E-04	6.06E-04	8.55E-05	9.09E-05	8.36E-05	8.10E-05	4.44E-05	3.67E-05
1021	650029.57	4197999.33	5.35E-04	5.70E-04	8.04E-05	8.55E-05	7.86E-05	7.62E-05	4.18E-05	3.45E-05
1022	650041.25	4198028.82	4.95E-04	5.28E-04	7.45E-05	7.92E-05	7.29E-05	7.06E-05	3.87E-05	3.20E-05

1023	650052.94	4198058.31	4.53E-04	4.83E-04	6.82E-05	7.25E-05	6.66E-05	6.46E-05	3.54E-05	2.93E-05
1024	650064.63	4198087.8	4.10E-04	4.37E-04	6.16E-05	6.55E-05	6.03E-05	5.84E-05	3.20E-05	2.65E-05
1025	649961.68	4197750.59	5.67E-04	6.04E-04	8.52E-05	9.06E-05	8.33E-05	8.07E-05	4.43E-05	3.66E-05
1026	649990.69	4197765.1	5.39E-04	5.75E-04	8.11E-05	8.62E-05	7.93E-05	7.68E-05	4.21E-05	3.48E-05
1027	650019.71	4197779.61	5.13E-04	5.47E-04	7.71E-05	8.20E-05	7.54E-05	7.31E-05	4.01E-05	3.31E-05
1028	650052.71	4197804.17	4.86E-04	5.18E-04	7.31E-05	7.78E-05	7.15E-05	6.93E-05	3.80E-05	3.14E-05
1029	650064.66	4197834.33	4.84E-04	5.16E-04	7.28E-05	7.74E-05	7.11E-05	6.90E-05	3.78E-05	3.13E-05
1030	650076.62	4197864.49	4.74E-04	5.05E-04	7.13E-05	7.58E-05	6.97E-05	6.76E-05	3.70E-05	3.06E-05
1031	650088.57	4197894.66	4.58E-04	4.89E-04	6.89E-05	7.33E-05	6.74E-05	6.53E-05	3.58E-05	2.96E-05
1032	650100.52	4197924.82	4.38E-04	4.67E-04	6.59E-05	7.01E-05	6.45E-05	6.25E-05	3.43E-05	2.83E-05
1033	650112.47	4197954.98	4.15E-04	4.42E-04	6.24E-05	6.63E-05	6.10E-05	5.91E-05	3.24E-05	2.68E-05
1034	650124.42	4197985.14	3.89E-04	4.14E-04	5.84E-05	6.21E-05	5.71E-05	5.54E-05	3.04E-05	2.51E-05
1035	650136.38	4198015.3	3.60E-04	3.84E-04	5.42E-05	5.76E-05	5.30E-05	5.13E-05	2.81E-05	2.33E-05
1036	650148.33	4198045.46	3.31E-04	3.53E-04	4.98E-05	5.29E-05	4.87E-05	4.72E-05	2.59E-05	2.14E-05
1037	650160.28	4198075.62	3.02E-04	3.22E-04	4.55E-05	4.83E-05	4.44E-05	4.31E-05	2.36E-05	1.95E-05
1038	650172.23	4198105.78	2.75E-04	2.93E-04	4.13E-05	4.39E-05	4.04E-05	3.92E-05	2.15E-05	1.78E-05
1039	650074.55	4197702.59	4.24E-04	4.52E-04	6.37E-05	6.77E-05	6.23E-05	6.04E-05	3.31E-05	2.74E-05
1040	650103.27	4197716.95	4.04E-04	4.31E-04	6.08E-05	6.46E-05	5.94E-05	5.76E-05	3.16E-05	2.61E-05
1041	650126.37	4197736.48	3.90E-04	4.16E-04	5.86E-05	6.23E-05	5.73E-05	5.56E-05	3.05E-05	2.52E-05
1042	650138.2	4197766.34	3.87E-04	4.13E-04	5.82E-05	6.19E-05	5.69E-05	5.52E-05	3.02E-05	2.50E-05
1043	650150.03	4197796.2	3.83E-04	4.08E-04	5.76E-05	6.12E-05	5.63E-05	5.46E-05	2.99E-05	2.47E-05
1044	650161.87	4197826.06	3.75E-04	4.00E-04	5.64E-05	5.99E-05	5.51E-05	5.34E-05	2.93E-05	2.42E-05
1045	650173.7	4197855.92	3.63E-04	3.87E-04	5.46E-05	5.80E-05	5.34E-05	5.17E-05	2.84E-05	2.35E-05
1046	650185.53	4197885.78	3.48E-04	3.71E-04	5.24E-05	5.57E-05	5.12E-05	4.96E-05	2.72E-05	2.25E-05
1047	650197.37	4197915.63	3.31E-04	3.53E-04	4.98E-05	5.30E-05	4.87E-05	4.72E-05	2.59E-05	2.14E-05
1048	650209.2	4197945.49	3.13E-04	3.34E-04	4.71E-05	5.00E-05	4.60E-05	4.46E-05	2.45E-05	2.02E-05
1049	650221.03	4197975.35	2.93E-04	3.13E-04	4.41E-05	4.69E-05	4.31E-05	4.18E-05	2.29E-05	1.90E-05
1050	650232.86	4198005.21	2.73E-04	2.91E-04	4.10E-05	4.36E-05	4.01E-05	3.88E-05	2.13E-05	1.76E-05
1051	650244.7	4198035.07	2.53E-04	2.70E-04	3.81E-05	4.05E-05	3.72E-05	3.61E-05	1.98E-05	1.64E-05
1052	650256.53	4198064.93	2.34E-04	2.49E-04	3.52E-05	3.74E-05	3.44E-05	3.33E-05	1.83E-05	1.51E-05
1053	650268.36	4198094.79	2.15E-04	2.30E-04	3.24E-05	3.44E-05	3.17E-05	3.07E-05	1.68E-05	1.39E-05
1054	649758.97	4197440.35	3.45E-04	3.68E-04	5.18E-05	5.51E-05	5.07E-05	4.91E-05	2.69E-05	2.23E-05
1055	649788.12	4197454.92	3.59E-04	3.83E-04	5.40E-05	5.75E-05	5.28E-05	5.12E-05	2.81E-05	2.32E-05
1056	649817.26	4197469.49	3.72E-04	3.96E-04	5.59E-05	5.94E-05	5.47E-05	5.30E-05	2.90E-05	2.40E-05
1057	649846.4	4197484.07	3.82E-04	4.07E-04	5.74E-05	6.10E-05	5.61E-05	5.44E-05	2.98E-05	2.47E-05
1058	649875.55	4197498.64	3.89E-04	4.15E-04	5.85E-05	6.22E-05	5.72E-05	5.55E-05	3.04E-05	2.52E-05
1059	649904.69	4197513.21	3.94E-04	4.20E-04	5.93E-05	6.30E-05	5.80E-05	5.62E-05	3.08E-05	2.55E-05
1060	649933.83	4197527.78	3.97E-04	4.23E-04	5.97E-05	6.34E-05	5.83E-05	5.66E-05	3.10E-05	2.56E-05
1061	649962.98	4197542.36	3.98E-04	4.24E-04	5.98E-05	6.36E-05	5.85E-05	5.67E-05	3.11E-05	2.57E-05
1062	649992.12	4197556.93	3.95E-04	4.22E-04	5.95E-05	6.32E-05	5.81E-05	5.63E-05	3.09E-05	2.56E-05
1063	650021.26	4197571.5	3.91E-04	4.17E-04	5.88E-05	6.25E-05	5.75E-05	5.57E-05	3.05E-05	2.53E-05
1064	650050.41	4197586.07	3.84E-04	4.10E-04	5.78E-05	6.15E-05	5.65E-05	5.48E-05	3.00E-05	2.48E-05
1065	650079.55	4197600.65	3.76E-04	4.01E-04	5.65E-05	6.01E-05	5.53E-05	5.36E-05	2.94E-05	2.43E-05
1066	650108.69	4197615.22	3.65E-04	3.89E-04	5.49E-05	5.84E-05	5.37E-05	5.21E-05	2.85E-05	2.36E-05
1067	650137.84	4197629.79	3.52E-04	3.75E-04	5.29E-05	5.62E-05	5.17E-05	5.01E-05	2.75E-05	2.27E-05
1068	650166.98	4197644.36	3.38E-04	3.60E-04	5.08E-05	5.40E-05	4.96E-05	4.81E-05	2.64E-05	2.18E-05
1069	650200.12	4197669.03	3.23E-04	3.45E-04	4.86E-05	5.17E-05	4.75E-05	4.61E-05	2.53E-05	2.09E-05
1070	650212.13	4197699.33	3.21E-04	3.43E-04	4.83E-05	5.14E-05	4.72E-05	4.58E-05	2.51E-05	2.08E-05
1071	650224.13	4197729.62	3.17E-04	3.38E-04	4.76E-05	5.06E-05	4.66E-05	4.51E-05	2.47E-05	2.05E-05
1072	650236.14	4197759.91	3.11E-04	3.31E-04	4.67E-05	4.97E-05	4.57E-05	4.43E-05	2.43E-05	2.01E-05
1073	650248.14	4197790.2	3.03E-04	3.23E-04	4.56E-05	4.84E-05	4.45E-05	4.32E-05	2.37E-05	1.96E-05
1074	650260.14	4197820.49	2.95E-04	3.14E-04	4.43E-05	4.71E-05	4.33E-05	4.20E-05	2.30E-05	1.90E-05
1075	650272.15	4197850.78	2.83E-04	3.02E-04	4.26E-05	4.53E-05	4.16E-05	4.04E-05	2.21E-05	1.83E-05
1076	650284.15	4197881.08	2.70E-04	2.88E-04	4.07E-05	4.32E-05	3.98E-05	3.85E-05	2.11E-05	1.75E-05
1077	650296.16	4197911.37	2.56E-04	2.73E-04	3.86E-05	4.10E-05	3.77E-05	3.65E-05	2.00E-05	1.66E-05
1078	650308.16	4197941.66	2.42E-04	2.58E-04	3.64E-05	3.87E-05	3.56E-05	3.45E-05	1.89E-05	1.56E-05
1079	650320.17	4197971.95	2.27E-04	2.42E-04	3.41E-05	3.63E-05	3.34E-05	3.24E-05	1.77E-05	1.47E-05

1080	650332.17	4198002.24	2.12E-04	2.26E-04	3.19E-05	3.39E-05	3.12E-05	3.02E-05	1.66E-05	1.37E-05
1081	650344.17	4198032.53	1.98E-04	2.11E-04	2.97E-05	3.16E-05	2.91E-05	2.82E-05	1.54E-05	1.28E-05
1082	650356.18	4198062.83	1.84E-04	1.96E-04	2.76E-05	2.94E-05	2.70E-05	2.62E-05	1.44E-05	1.19E-05
1083	650368.18	4198093.12	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.43E-05	1.33E-05	1.10E-05
1084	649778.72	4197241.33	1.92E-04	2.05E-04	2.89E-05	3.07E-05	2.83E-05	2.74E-05	1.50E-05	1.24E-05
1085	649807.93	4197255.94	2.04E-04	2.17E-04	3.06E-05	3.26E-05	3.00E-05	2.90E-05	1.59E-05	1.32E-05
1086	649837.15	4197270.55	2.15E-04	2.29E-04	3.23E-05	3.43E-05	3.16E-05	3.06E-05	1.68E-05	1.39E-05
1087	649866.36	4197285.16	2.25E-04	2.40E-04	3.39E-05	3.60E-05	3.31E-05	3.21E-05	1.76E-05	1.46E-05
1088	649895.57	4197299.77	2.35E-04	2.50E-04	3.53E-05	3.75E-05	3.45E-05	3.35E-05	1.83E-05	1.52E-05
1089	649924.79	4197314.37	2.43E-04	2.59E-04	3.66E-05	3.89E-05	3.58E-05	3.47E-05	1.90E-05	1.57E-05
1090	649954	4197328.98	2.51E-04	2.67E-04	3.77E-05	4.00E-05	3.68E-05	3.57E-05	1.96E-05	1.62E-05
1091	649983.21	4197343.59	2.57E-04	2.74E-04	3.86E-05	4.10E-05	3.77E-05	3.66E-05	2.00E-05	1.66E-05
1092	650012.43	4197358.2	2.61E-04	2.79E-04	3.93E-05	4.18E-05	3.84E-05	3.72E-05	2.04E-05	1.69E-05
1093	650041.64	4197372.8	2.65E-04	2.82E-04	3.98E-05	4.23E-05	3.89E-05	3.77E-05	2.07E-05	1.71E-05
1094	650070.86	4197387.41	2.67E-04	2.85E-04	4.02E-05	4.27E-05	3.93E-05	3.81E-05	2.09E-05	1.73E-05
1095	650100.07	4197402.02	2.68E-04	2.86E-04	4.03E-05	4.29E-05	3.95E-05	3.82E-05	2.10E-05	1.73E-05
1096	650129.28	4197416.63	2.68E-04	2.86E-04	4.03E-05	4.28E-05	3.94E-05	3.82E-05	2.09E-05	1.73E-05
1097	650158.5	4197431.24	2.66E-04	2.84E-04	4.01E-05	4.26E-05	3.92E-05	3.80E-05	2.08E-05	1.72E-05
1098	650187.71	4197445.84	2.64E-04	2.81E-04	3.96E-05	4.21E-05	3.87E-05	3.76E-05	2.06E-05	1.70E-05
1099	650216.92	4197460.45	2.60E-04	2.77E-04	3.90E-05	4.15E-05	3.82E-05	3.70E-05	2.03E-05	1.68E-05
1100	650246.14	4197475.06	2.55E-04	2.71E-04	3.83E-05	4.07E-05	3.74E-05	3.63E-05	1.99E-05	1.65E-05
1101	650275.35	4197489.67	2.49E-04	2.65E-04	3.74E-05	3.98E-05	3.66E-05	3.55E-05	1.94E-05	1.61E-05
1102	650304.57	4197504.28	2.42E-04	2.58E-04	3.64E-05	3.87E-05	3.56E-05	3.45E-05	1.89E-05	1.56E-05
1103	650333.78	4197518.88	2.35E-04	2.50E-04	3.53E-05	3.75E-05	3.45E-05	3.35E-05	1.83E-05	1.52E-05
1104	650351.54	4197544	2.33E-04	2.48E-04	3.50E-05	3.72E-05	3.42E-05	3.31E-05	1.82E-05	1.50E-05
1105	650363.57	4197574.36	2.32E-04	2.47E-04	3.49E-05	3.71E-05	3.41E-05	3.31E-05	1.81E-05	1.50E-05
1106	650379.62	4197614.85	2.29E-04	2.45E-04	3.45E-05	3.67E-05	3.37E-05	3.27E-05	1.79E-05	1.48E-05
1107	650391.65	4197645.21	2.26E-04	2.41E-04	3.40E-05	3.62E-05	3.33E-05	3.22E-05	1.77E-05	1.46E-05
1108	650403.68	4197675.58	2.22E-04	2.37E-04	3.34E-05	3.55E-05	3.26E-05	3.16E-05	1.73E-05	1.43E-05
1109	650415.72	4197705.94	2.17E-04	2.31E-04	3.26E-05	3.47E-05	3.19E-05	3.09E-05	1.69E-05	1.40E-05
1110	650427.75	4197736.31	2.11E-04	2.25E-04	3.17E-05	3.37E-05	3.10E-05	3.00E-05	1.65E-05	1.36E-05
1111	650439.78	4197766.67	2.04E-04	2.17E-04	3.06E-05	3.26E-05	2.99E-05	2.90E-05	1.59E-05	1.32E-05
1112	650451.82	4197797.04	1.96E-04	2.09E-04	2.95E-05	3.13E-05	2.88E-05	2.79E-05	1.53E-05	1.27E-05
1113	650463.85	4197827.4	1.88E-04	2.00E-04	2.83E-05	3.00E-05	2.76E-05	2.68E-05	1.47E-05	1.21E-05
1114	650475.88	4197857.77	1.79E-04	1.91E-04	2.70E-05	2.87E-05	2.64E-05	2.56E-05	1.40E-05	1.16E-05
1115	650487.92	4197888.13	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.43E-05	1.33E-05	1.10E-05
1116	650499.95	4197918.5	1.62E-04	1.73E-04	2.44E-05	2.59E-05	2.38E-05	2.31E-05	1.27E-05	1.05E-05
1117	650511.98	4197948.86	1.53E-04	1.63E-04	2.30E-05	2.45E-05	2.25E-05	2.18E-05	1.20E-05	9.90E-06
1118	650524.02	4197979.23	1.45E-04	1.54E-04	2.18E-05	2.31E-05	2.13E-05	2.06E-05	1.13E-05	9.36E-06
1119	650536.05	4198009.59	1.37E-04	1.46E-04	2.05E-05	2.18E-05	2.01E-05	1.95E-05	1.07E-05	8.83E-06
1120	650548.08	4198039.96	1.29E-04	1.37E-04	1.94E-05	2.06E-05	1.89E-05	1.84E-05	1.01E-05	8.32E-06
1121	650560.12	4198070.32	1.21E-04	1.29E-04	1.83E-05	1.94E-05	1.78E-05	1.73E-05	9.48E-06	7.84E-06
1122	650572.15	4198100.69	1.14E-04	1.22E-04	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.93E-06	7.39E-06
1123	649798.45	4197042.32	1.16E-04	1.24E-04	1.75E-05	1.86E-05	1.71E-05	1.65E-05	9.07E-06	7.50E-06
1124	649827.71	4197056.95	1.23E-04	1.32E-04	1.86E-05	1.97E-05	1.82E-05	1.76E-05	9.65E-06	7.98E-06
1125	649856.97	4197071.58	1.31E-04	1.40E-04	1.97E-05	2.09E-05	1.93E-05	1.87E-05	1.02E-05	8.46E-06
1126	649886.23	4197086.21	1.38E-04	1.48E-04	2.08E-05	2.21E-05	2.03E-05	1.97E-05	1.08E-05	8.94E-06
1127	649915.49	4197100.84	1.46E-04	1.55E-04	2.19E-05	2.33E-05	2.14E-05	2.08E-05	1.14E-05	9.42E-06
1128	649944.75	4197115.47	1.53E-04	1.63E-04	2.30E-05	2.44E-05	2.25E-05	2.18E-05	1.19E-05	9.87E-06
1129	649974.01	4197130.1	1.60E-04	1.70E-04	2.40E-05	2.55E-05	2.35E-05	2.27E-05	1.25E-05	1.03E-05
1130	650003.26	4197144.73	1.66E-04	1.77E-04	2.49E-05	2.65E-05	2.44E-05	2.36E-05	1.30E-05	1.07E-05
1131	650032.52	4197159.36	1.72E-04	1.83E-04	2.58E-05	2.75E-05	2.53E-05	2.45E-05	1.34E-05	1.11E-05
1132	650061.78	4197173.99	1.77E-04	1.89E-04	2.66E-05	2.83E-05	2.60E-05	2.52E-05	1.38E-05	1.14E-05
1133	650091.04	4197188.62	1.82E-04	1.94E-04	2.73E-05	2.90E-05	2.67E-05	2.59E-05	1.42E-05	1.17E-05
1134	650120.3	4197203.25	1.86E-04	1.98E-04	2.79E-05	2.97E-05	2.73E-05	2.64E-05	1.45E-05	1.20E-05
1135	650149.56	4197217.88	1.89E-04	2.01E-04	2.84E-05	3.02E-05	2.77E-05	2.69E-05	1.47E-05	1.22E-05
1136	650178.82	4197232.51	1.91E-04	2.04E-04	2.87E-05	3.06E-05	2.81E-05	2.72E-05	1.49E-05	1.24E-05

1137	650208.08	4197247.14	1.93E-04	2.05E-04	2.90E-05	3.08E-05	2.83E-05	2.75E-05	1.51E-05	1.25E-05
1138	650237.34	4197261.77	1.93E-04	2.06E-04	2.91E-05	3.09E-05	2.84E-05	2.76E-05	1.51E-05	1.25E-05
1139	650266.59	4197276.4	1.94E-04	2.06E-04	2.91E-05	3.10E-05	2.85E-05	2.76E-05	1.51E-05	1.25E-05
1140	650295.85	4197291.03	1.93E-04	2.06E-04	2.91E-05	3.09E-05	2.84E-05	2.76E-05	1.51E-05	1.25E-05
1141	650325.11	4197305.66	1.92E-04	2.05E-04	2.89E-05	3.07E-05	2.83E-05	2.74E-05	1.50E-05	1.24E-05
1142	650354.37	4197320.29	1.90E-04	2.03E-04	2.86E-05	3.04E-05	2.79E-05	2.71E-05	1.48E-05	1.23E-05
1143	650383.63	4197334.92	1.88E-04	2.00E-04	2.82E-05	3.00E-05	2.76E-05	2.67E-05	1.46E-05	1.21E-05
1144	650412.89	4197349.55	1.84E-04	1.97E-04	2.77E-05	2.95E-05	2.71E-05	2.63E-05	1.44E-05	1.19E-05
1145	650442.15	4197364.18	1.81E-04	1.93E-04	2.72E-05	2.89E-05	2.66E-05	2.58E-05	1.41E-05	1.17E-05
1146	650471.41	4197378.81	1.77E-04	1.89E-04	2.66E-05	2.83E-05	2.61E-05	2.53E-05	1.38E-05	1.15E-05
1147	650494.93	4197398.71	1.75E-04	1.86E-04	2.63E-05	2.79E-05	2.57E-05	2.49E-05	1.37E-05	1.13E-05
1148	650506.98	4197429.12	1.75E-04	1.87E-04	2.64E-05	2.80E-05	2.58E-05	2.50E-05	1.37E-05	1.13E-05
1149	650519.03	4197459.53	1.75E-04	1.87E-04	2.64E-05	2.80E-05	2.58E-05	2.50E-05	1.37E-05	1.13E-05
1150	650531.09	4197489.94	1.75E-04	1.86E-04	2.63E-05	2.79E-05	2.57E-05	2.49E-05	1.36E-05	1.13E-05
1151	650543.14	4197520.35	1.73E-04	1.85E-04	2.61E-05	2.77E-05	2.55E-05	2.47E-05	1.35E-05	1.12E-05
1152	650555.19	4197550.77	1.71E-04	1.83E-04	2.58E-05	2.74E-05	2.52E-05	2.44E-05	1.34E-05	1.11E-05
1153	650567.24	4197581.18	1.69E-04	1.80E-04	2.54E-05	2.70E-05	2.48E-05	2.40E-05	1.32E-05	1.09E-05
1154	650579.29	4197611.59	1.65E-04	1.76E-04	2.49E-05	2.64E-05	2.43E-05	2.36E-05	1.29E-05	1.07E-05
1155	650591.34	4197642	1.62E-04	1.72E-04	2.43E-05	2.58E-05	2.38E-05	2.30E-05	1.26E-05	1.04E-05
1156	650603.4	4197672.41	1.57E-04	1.68E-04	2.37E-05	2.52E-05	2.31E-05	2.24E-05	1.23E-05	1.02E-05
1157	650615.45	4197702.82	1.53E-04	1.63E-04	2.30E-05	2.44E-05	2.24E-05	2.18E-05	1.19E-05	9.87E-06
1158	650627.5	4197733.24	1.48E-04	1.57E-04	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.54E-06
1159	650639.55	4197763.65	1.42E-04	1.52E-04	2.14E-05	2.27E-05	2.09E-05	2.03E-05	1.11E-05	9.19E-06
1160	650651.6	4197794.06	1.37E-04	1.46E-04	2.06E-05	2.19E-05	2.01E-05	1.95E-05	1.07E-05	8.83E-06
1161	650663.66	4197824.47	1.31E-04	1.40E-04	1.97E-05	2.10E-05	1.93E-05	1.87E-05	1.02E-05	8.47E-06
1162	650675.71	4197854.88	1.25E-04	1.34E-04	1.88E-05	2.00E-05	1.84E-05	1.79E-05	9.79E-06	8.10E-06
1163	650687.76	4197885.3	1.20E-04	1.28E-04	1.80E-05	1.91E-05	1.76E-05	1.71E-05	9.35E-06	7.74E-06
1164	650699.81	4197915.71	1.14E-04	1.22E-04	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.92E-06	7.38E-06
1165	650711.86	4197946.12	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.50E-06	7.03E-06
1166	650723.91	4197976.53	1.04E-04	1.10E-04	1.56E-05	1.66E-05	1.52E-05	1.48E-05	8.10E-06	6.70E-06
1167	650735.97	4198006.94	9.87E-05	1.05E-04	1.48E-05	1.58E-05	1.45E-05	1.41E-05	7.71E-06	6.38E-06
1168	650748.02	4198037.36	9.40E-05	1.00E-04	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.34E-06	6.07E-06
1169	650760.07	4198067.77	8.95E-05	9.54E-05	1.35E-05	1.43E-05	1.32E-05	1.27E-05	6.99E-06	5.78E-06
1170	649818.18	4196843.3	7.59E-05	8.09E-05	1.14E-05	1.21E-05	1.12E-05	1.08E-05	5.93E-06	4.90E-06
1171	649847.47	4196857.94	8.05E-05	8.58E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.29E-06	5.20E-06
1172	649876.76	4196872.59	8.52E-05	9.09E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.66E-06	5.51E-06
1173	649906.05	4196887.23	9.02E-05	9.61E-05	1.36E-05	1.44E-05	1.33E-05	1.28E-05	7.04E-06	5.83E-06
1174	649935.34	4196901.88	9.51E-05	1.01E-04	1.43E-05	1.52E-05	1.40E-05	1.36E-05	7.43E-06	6.15E-06
1175	649964.63	4196916.53	1.00E-04	1.07E-04	1.51E-05	1.60E-05	1.47E-05	1.43E-05	7.83E-06	6.48E-06
1176	649993.92	4196931.17	1.05E-04	1.12E-04	1.58E-05	1.68E-05	1.55E-05	1.50E-05	8.22E-06	6.80E-06
1177	650023.21	4196945.82	1.10E-04	1.17E-04	1.66E-05	1.76E-05	1.62E-05	1.57E-05	8.61E-06	7.12E-06
1178	650052.5	4196960.46	1.15E-04	1.23E-04	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.99E-06	7.44E-06
1179	650081.79	4196975.11	1.20E-04	1.28E-04	1.80E-05	1.92E-05	1.76E-05	1.71E-05	9.36E-06	7.74E-06
1180	650111.08	4196989.76	1.24E-04	1.32E-04	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.71E-06	8.03E-06
1181	650140.37	4197004.4	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.89E-05	1.83E-05	1.00E-05	8.30E-06
1182	650169.67	4197019.05	1.32E-04	1.41E-04	1.99E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.54E-06
1183	650198.96	4197033.69	1.36E-04	1.45E-04	2.04E-05	2.17E-05	1.99E-05	1.93E-05	1.06E-05	8.76E-06
1184	650228.25	4197048.34	1.39E-04	1.48E-04	2.08E-05	2.21E-05	2.04E-05	1.97E-05	1.08E-05	8.95E-06
1185	650257.54	4197062.99	1.41E-04	1.50E-04	2.12E-05	2.26E-05	2.08E-05	2.01E-05	1.10E-05	9.12E-06
1186	650286.83	4197077.63	1.43E-04	1.53E-04	2.15E-05	2.29E-05	2.11E-05	2.04E-05	1.12E-05	9.26E-06
1187	650316.12	4197092.28	1.45E-04	1.55E-04	2.18E-05	2.32E-05	2.13E-05	2.07E-05	1.13E-05	9.37E-06
1188	650345.41	4197106.92	1.46E-04	1.56E-04	2.20E-05	2.34E-05	2.15E-05	2.09E-05	1.14E-05	9.46E-06
1189	650374.7	4197121.57	1.47E-04	1.57E-04	2.21E-05	2.35E-05	2.17E-05	2.10E-05	1.15E-05	9.52E-06
1190	650403.99	4197136.22	1.48E-04	1.57E-04	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.54E-06
1191	650433.28	4197150.86	1.47E-04	1.57E-04	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.52E-06
1192	650462.57	4197165.51	1.47E-04	1.57E-04	2.21E-05	2.35E-05	2.16E-05	2.09E-05	1.15E-05	9.49E-06
1193	650491.86	4197180.15	1.46E-04	1.56E-04	2.19E-05	2.33E-05	2.15E-05	2.08E-05	1.14E-05	9.43E-06

1194	650521.15	4197194.8	1.45E-04	1.54E-04	2.18E-05	2.31E-05	2.13E-05	2.06E-05	1.13E-05	9.35E-06
1195	650550.44	4197209.45	1.43E-04	1.53E-04	2.15E-05	2.29E-05	2.10E-05	2.04E-05	1.12E-05	9.25E-06
1196	650579.73	4197224.09	1.41E-04	1.51E-04	2.12E-05	2.26E-05	2.08E-05	2.01E-05	1.10E-05	9.13E-06
1197	650609.02	4197238.74	1.39E-04	1.48E-04	2.09E-05	2.22E-05	2.04E-05	1.98E-05	1.09E-05	8.99E-06
1198	650642.33	4197263.53	1.37E-04	1.46E-04	2.06E-05	2.19E-05	2.01E-05	1.95E-05	1.07E-05	8.85E-06
1199	650654.39	4197293.98	1.38E-04	1.47E-04	2.07E-05	2.20E-05	2.03E-05	1.96E-05	1.08E-05	8.90E-06
1200	650666.46	4197324.42	1.38E-04	1.47E-04	2.08E-05	2.21E-05	2.03E-05	1.97E-05	1.08E-05	8.93E-06
1201	650678.52	4197354.87	1.38E-04	1.47E-04	2.08E-05	2.21E-05	2.03E-05	1.97E-05	1.08E-05	8.93E-06
1202	650690.59	4197385.31	1.38E-04	1.47E-04	2.07E-05	2.20E-05	2.03E-05	1.97E-05	1.08E-05	8.91E-06
1203	650702.65	4197415.75	1.37E-04	1.46E-04	2.06E-05	2.19E-05	2.02E-05	1.95E-05	1.07E-05	8.86E-06
1204	650714.72	4197446.2	1.36E-04	1.45E-04	2.04E-05	2.17E-05	2.00E-05	1.94E-05	1.06E-05	8.79E-06
1205	650726.78	4197476.64	1.34E-04	1.43E-04	2.02E-05	2.15E-05	1.98E-05	1.92E-05	1.05E-05	8.69E-06
1206	650738.85	4197507.09	1.32E-04	1.41E-04	1.99E-05	2.12E-05	1.95E-05	1.89E-05	1.03E-05	8.56E-06
1207	650750.91	4197537.53	1.30E-04	1.39E-04	1.96E-05	2.08E-05	1.91E-05	1.85E-05	1.02E-05	8.41E-06
1208	650762.98	4197567.98	1.27E-04	1.36E-04	1.92E-05	2.04E-05	1.87E-05	1.82E-05	9.95E-06	8.23E-06
1209	650775.04	4197598.42	1.24E-04	1.33E-04	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.72E-06	8.04E-06
1210	650787.11	4197628.87	1.21E-04	1.29E-04	1.82E-05	1.94E-05	1.78E-05	1.73E-05	9.46E-06	7.83E-06
1211	650799.17	4197659.31	1.18E-04	1.25E-04	1.77E-05	1.88E-05	1.73E-05	1.68E-05	9.19E-06	7.60E-06
1212	650811.23	4197689.75	1.14E-04	1.22E-04	1.71E-05	1.82E-05	1.68E-05	1.63E-05	8.91E-06	7.37E-06
1213	650823.3	4197720.2	1.10E-04	1.17E-04	1.66E-05	1.76E-05	1.62E-05	1.57E-05	8.61E-06	7.12E-06
1214	650835.36	4197750.64	1.06E-04	1.13E-04	1.60E-05	1.70E-05	1.56E-05	1.52E-05	8.30E-06	6.87E-06
1215	650847.43	4197781.09	1.02E-04	1.09E-04	1.54E-05	1.64E-05	1.51E-05	1.46E-05	8.00E-06	6.62E-06
1216	650859.49	4197811.53	9.84E-05	1.05E-04	1.48E-05	1.57E-05	1.45E-05	1.40E-05	7.69E-06	6.36E-06
1217	650871.56	4197841.98	9.46E-05	1.01E-04	1.42E-05	1.51E-05	1.39E-05	1.35E-05	7.39E-06	6.11E-06
1218	650883.62	4197872.42	9.08E-05	9.68E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.09E-06	5.87E-06
1219	650895.69	4197902.87	8.71E-05	9.28E-05	1.31E-05	1.39E-05	1.28E-05	1.24E-05	6.80E-06	5.63E-06
1220	650907.75	4197933.31	8.35E-05	8.91E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.53E-06	5.40E-06
1221	650919.82	4197963.75	8.01E-05	8.54E-05	1.21E-05	1.28E-05	1.18E-05	1.14E-05	6.26E-06	5.18E-06
1222	650931.88	4197994.2	7.69E-05	8.20E-05	1.16E-05	1.23E-05	1.13E-05	1.10E-05	6.01E-06	4.97E-06
1223	650943.95	4198024.64	7.37E-05	7.86E-05	1.11E-05	1.18E-05	1.08E-05	1.05E-05	5.76E-06	4.77E-06
1224	650956.01	4198055.09	7.07E-05	7.54E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.53E-06	4.57E-06
1225	650968.08	4198085.53	6.78E-05	7.23E-05	1.02E-05	1.08E-05	9.97E-06	9.67E-06	5.30E-06	4.38E-06
1226	649837.91	4196644.28	5.36E-05	5.71E-05	8.06E-06	8.57E-06	7.88E-06	7.64E-06	4.19E-06	3.46E-06
1227	649867.22	4196658.93	5.64E-05	6.02E-05	8.49E-06	9.02E-06	8.30E-06	8.04E-06	4.41E-06	3.65E-06
1228	649896.54	4196673.59	5.95E-05	6.34E-05	8.94E-06	9.51E-06	8.74E-06	8.48E-06	4.65E-06	3.84E-06
1229	649925.85	4196688.25	6.27E-05	6.68E-05	9.42E-06	1.00E-05	9.21E-06	8.93E-06	4.89E-06	4.05E-06
1230	649955.16	4196702.91	6.60E-05	7.03E-05	9.92E-06	1.05E-05	9.70E-06	9.40E-06	5.15E-06	4.26E-06
1231	649984.48	4196717.56	6.94E-05	7.40E-05	1.04E-05	1.11E-05	1.02E-05	9.89E-06	5.42E-06	4.48E-06
1232	650013.79	4196732.22	7.29E-05	7.77E-05	1.10E-05	1.17E-05	1.07E-05	1.04E-05	5.69E-06	4.71E-06
1233	650043.1	4196746.88	7.65E-05	8.15E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.97E-06	4.94E-06
1234	650072.42	4196761.53	8.01E-05	8.54E-05	1.20E-05	1.28E-05	1.18E-05	1.14E-05	6.25E-06	5.17E-06
1235	650101.73	4196776.19	8.37E-05	8.93E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.54E-06	5.41E-06
1236	650131.04	4196790.85	8.73E-05	9.30E-05	1.31E-05	1.40E-05	1.28E-05	1.24E-05	6.82E-06	5.64E-06
1237	650160.36	4196805.51	9.08E-05	9.67E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.09E-06	5.86E-06
1238	650189.67	4196820.16	9.41E-05	1.00E-04	1.42E-05	1.50E-05	1.38E-05	1.34E-05	7.35E-06	6.08E-06
1239	650218.98	4196834.82	9.73E-05	1.04E-04	1.46E-05	1.56E-05	1.43E-05	1.39E-05	7.60E-06	6.29E-06
1240	650248.29	4196849.48	1.00E-04	1.07E-04	1.51E-05	1.61E-05	1.48E-05	1.43E-05	7.84E-06	6.49E-06
1241	650277.61	4196864.14	1.03E-04	1.10E-04	1.55E-05	1.65E-05	1.52E-05	1.47E-05	8.06E-06	6.67E-06
1242	650306.92	4196878.79	1.06E-04	1.13E-04	1.59E-05	1.69E-05	1.56E-05	1.51E-05	8.27E-06	6.84E-06
1243	650336.23	4196893.45	1.08E-04	1.15E-04	1.63E-05	1.73E-05	1.59E-05	1.54E-05	8.45E-06	6.99E-06
1244	650365.55	4196908.11	1.10E-04	1.18E-04	1.66E-05	1.76E-05	1.62E-05	1.57E-05	8.62E-06	7.13E-06
1245	650394.86	4196922.77	1.12E-04	1.20E-04	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.76E-06	7.24E-06
1246	650424.17	4196937.42	1.13E-04	1.21E-04	1.70E-05	1.81E-05	1.67E-05	1.62E-05	8.86E-06	7.33E-06
1247	650453.49	4196952.08	1.15E-04	1.22E-04	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.97E-06	7.42E-06
1248	650482.8	4196966.74	1.16E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.05E-06	7.48E-06
1249	650512.11	4196981.4	1.16E-04	1.24E-04	1.75E-05	1.86E-05	1.71E-05	1.66E-05	9.10E-06	7.53E-06
1250	650541.43	4196996.05	1.17E-04	1.24E-04	1.75E-05	1.87E-05	1.72E-05	1.66E-05	9.12E-06	7.54E-06

1251	650570.74	4197010.71	1.17E-04	1.25E-04	1.76E-05	1.87E-05	1.72E-05	1.66E-05	9.12E-06	7.55E-06
1252	650600.05	4197025.37	1.17E-04	1.24E-04	1.75E-05	1.86E-05	1.71E-05	1.66E-05	9.11E-06	7.54E-06
1253	650629.37	4197040.03	1.16E-04	1.24E-04	1.75E-05	1.86E-05	1.71E-05	1.66E-05	9.08E-06	7.51E-06
1254	650658.68	4197054.68	1.16E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.03E-06	7.47E-06
1255	650687.99	4197069.34	1.15E-04	1.22E-04	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.95E-06	7.41E-06
1256	650717.31	4197084	1.14E-04	1.21E-04	1.71E-05	1.81E-05	1.67E-05	1.62E-05	8.87E-06	7.34E-06
1257	650746.62	4197098.66	1.12E-04	1.20E-04	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.77E-06	7.25E-06
1258	650775.93	4197113.31	1.11E-04	1.18E-04	1.67E-05	1.77E-05	1.63E-05	1.58E-05	8.66E-06	7.16E-06
1259	650793.75	4197138.51	1.11E-04	1.18E-04	1.67E-05	1.77E-05	1.63E-05	1.58E-05	8.67E-06	7.17E-06
1260	650805.83	4197168.98	1.12E-04	1.19E-04	1.68E-05	1.79E-05	1.64E-05	1.59E-05	8.73E-06	7.22E-06
1261	650817.9	4197199.45	1.12E-04	1.20E-04	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.77E-06	7.25E-06
1262	650829.97	4197229.92	1.13E-04	1.20E-04	1.69E-05	1.80E-05	1.66E-05	1.60E-05	8.79E-06	7.27E-06
1263	650842.05	4197260.39	1.13E-04	1.20E-04	1.69E-05	1.80E-05	1.66E-05	1.60E-05	8.80E-06	7.28E-06
1264	650854.12	4197290.85	1.12E-04	1.20E-04	1.69E-05	1.80E-05	1.65E-05	1.60E-05	8.78E-06	7.26E-06
1265	650866.2	4197321.32	1.12E-04	1.19E-04	1.68E-05	1.79E-05	1.65E-05	1.59E-05	8.74E-06	7.23E-06
1266	650878.27	4197351.79	1.11E-04	1.18E-04	1.67E-05	1.78E-05	1.63E-05	1.58E-05	8.68E-06	7.18E-06
1267	650890.35	4197382.26	1.10E-04	1.17E-04	1.66E-05	1.76E-05	1.62E-05	1.57E-05	8.60E-06	7.11E-06
1268	650902.42	4197412.73	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.50E-06	7.03E-06
1269	650914.49	4197443.2	1.07E-04	1.14E-04	1.61E-05	1.71E-05	1.58E-05	1.53E-05	8.37E-06	6.93E-06
1270	650926.57	4197473.66	1.05E-04	1.12E-04	1.59E-05	1.69E-05	1.55E-05	1.50E-05	8.23E-06	6.81E-06
1271	650938.64	4197504.13	1.03E-04	1.10E-04	1.55E-05	1.65E-05	1.52E-05	1.47E-05	8.07E-06	6.68E-06
1272	650950.72	4197534.6	1.01E-04	1.08E-04	1.52E-05	1.62E-05	1.49E-05	1.44E-05	7.90E-06	6.53E-06
1273	650962.79	4197565.07	9.87E-05	1.05E-04	1.48E-05	1.58E-05	1.45E-05	1.41E-05	7.71E-06	6.38E-06
1274	650974.86	4197595.54	9.61E-05	1.02E-04	1.45E-05	1.54E-05	1.41E-05	1.37E-05	7.51E-06	6.21E-06
1275	650986.94	4197626.01	9.34E-05	9.96E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.30E-06	6.04E-06
1276	650999.01	4197656.47	9.07E-05	9.67E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.09E-06	5.86E-06
1277	651011.09	4197686.94	8.79E-05	9.37E-05	1.32E-05	1.40E-05	1.29E-05	1.25E-05	6.86E-06	5.68E-06
1278	651023.16	4197717.41	8.50E-05	9.06E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.64E-06	5.49E-06
1279	651035.24	4197747.88	8.21E-05	8.75E-05	1.23E-05	1.31E-05	1.21E-05	1.17E-05	6.41E-06	5.31E-06
1280	651047.31	4197778.35	7.93E-05	8.45E-05	1.19E-05	1.27E-05	1.17E-05	1.13E-05	6.19E-06	5.12E-06
1281	651059.38	4197808.82	7.65E-05	8.15E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.98E-06	4.94E-06
1282	651071.46	4197839.28	7.38E-05	7.87E-05	1.11E-05	1.18E-05	1.09E-05	1.05E-05	5.76E-06	4.77E-06
1283	651083.53	4197869.75	7.12E-05	7.59E-05	1.07E-05	1.14E-05	1.05E-05	1.01E-05	5.56E-06	4.60E-06
1284	651095.61	4197900.22	6.87E-05	7.32E-05	1.03E-05	1.10E-05	1.01E-05	9.78E-06	5.36E-06	4.44E-06
1285	651107.68	4197930.69	6.62E-05	7.06E-05	9.96E-06	1.06E-05	9.74E-06	9.44E-06	5.17E-06	4.28E-06
1286	651119.75	4197961.16	6.39E-05	6.81E-05	9.61E-06	1.02E-05	9.39E-06	9.10E-06	4.99E-06	4.13E-06
1287	651131.83	4197991.63	6.16E-05	6.57E-05	9.27E-06	9.85E-06	9.06E-06	8.78E-06	4.81E-06	3.98E-06
1288	651143.9	4198022.09	5.94E-05	6.34E-05	8.94E-06	9.50E-06	8.74E-06	8.47E-06	4.64E-06	3.84E-06
1289	651155.98	4198052.56	5.73E-05	6.11E-05	8.62E-06	9.16E-06	8.43E-06	8.17E-06	4.48E-06	3.70E-06
1290	651168.05	4198083.03	5.53E-05	5.89E-05	8.31E-06	8.83E-06	8.13E-06	7.88E-06	4.32E-06	3.57E-06
1291	649653.67	4198103.07	4.40E-03	4.69E-03	6.62E-04	7.04E-04	6.47E-04	6.27E-04	3.44E-04	2.84E-04
1292	649614.17	4198096.53	4.91E-03	5.24E-03	7.39E-04	7.86E-04	7.23E-04	7.00E-04	3.84E-04	3.18E-04
1293	649574.67	4198090	5.69E-03	6.07E-03	8.56E-04	9.10E-04	8.37E-04	8.11E-04	4.45E-04	3.68E-04
1294	649657.75	4198078.4	3.47E-03	3.70E-03	5.22E-04	5.55E-04	5.11E-04	4.95E-04	2.71E-04	2.25E-04
1295	649618.25	4198071.87	3.91E-03	4.16E-03	5.87E-04	6.25E-04	5.74E-04	5.57E-04	3.05E-04	2.52E-04
1296	649578.75	4198065.33	4.51E-03	4.80E-03	6.77E-04	7.20E-04	6.62E-04	6.42E-04	3.52E-04	2.91E-04
1297	649661.83	4198053.74	2.91E-03	3.11E-03	4.38E-04	4.66E-04	4.28E-04	4.15E-04	2.28E-04	1.88E-04
1298	649622.33	4198047.2	3.28E-03	3.50E-03	4.94E-04	5.25E-04	4.83E-04	4.68E-04	2.56E-04	2.12E-04
1299	649582.83	4198040.67	3.77E-03	4.01E-03	5.66E-04	6.02E-04	5.54E-04	5.37E-04	2.94E-04	2.43E-04
1300	649646.16	4198025.81	2.68E-03	2.86E-03	4.03E-04	4.29E-04	3.94E-04	3.82E-04	2.10E-04	1.73E-04
1301	649606.66	4198019.27	3.04E-03	3.24E-03	4.56E-04	4.85E-04	4.46E-04	4.33E-04	2.37E-04	1.96E-04
1302	649654.33	4197976.48	2.14E-03	2.28E-03	3.21E-04	3.42E-04	3.14E-04	3.04E-04	1.67E-04	1.38E-04
1303	649614.83	4197969.94	2.40E-03	2.55E-03	3.60E-04	3.83E-04	3.52E-04	3.41E-04	1.87E-04	1.55E-04
1304	649642.74	4197923.88	1.86E-03	1.98E-03	2.80E-04	2.98E-04	2.74E-04	2.65E-04	1.45E-04	1.20E-04
1305	649603.24	4197917.34	2.07E-03	2.20E-03	3.11E-04	3.30E-04	3.04E-04	2.94E-04	1.61E-04	1.34E-04
1306	649690.4	4197881.09	1.41E-03	1.50E-03	2.12E-04	2.25E-04	2.07E-04	2.01E-04	1.10E-04	9.10E-05
1307	649650.9	4197874.55	1.55E-03	1.65E-03	2.33E-04	2.48E-04	2.28E-04	2.21E-04	1.21E-04	1.00E-04

1308	649611.4	4197868.01	1.70E-03	1.81E-03	2.55E-04	2.71E-04	2.49E-04	2.42E-04	1.33E-04	1.10E-04
1309	649659.06	4197825.22	1.27E-03	1.36E-03	1.91E-04	2.04E-04	1.87E-04	1.81E-04	9.95E-05	8.23E-05
1310	649619.56	4197818.68	1.37E-03	1.46E-03	2.06E-04	2.19E-04	2.02E-04	1.96E-04	1.07E-04	8.87E-05
1311	649655.64	4197723.29	9.45E-04	1.01E-03	1.42E-04	1.51E-04	1.39E-04	1.35E-04	7.38E-05	6.11E-05
1312	649652.21	4197621.37	6.57E-04	7.00E-04	9.88E-05	1.05E-04	9.66E-05	9.36E-05	5.13E-05	4.24E-05
1313	649724.36	4197430.59	3.33E-04	3.55E-04	5.01E-05	5.32E-05	4.90E-05	4.75E-05	2.60E-05	2.15E-05
1314	649684.86	4197424.05	3.21E-04	3.43E-04	4.83E-05	5.14E-05	4.73E-05	4.58E-05	2.51E-05	2.08E-05
1315	649757.01	4197233.27	1.85E-04	1.97E-04	2.78E-05	2.96E-05	2.72E-05	2.64E-05	1.45E-05	1.20E-05
1316	649717.51	4197226.73	1.76E-04	1.87E-04	2.64E-05	2.81E-05	2.58E-05	2.50E-05	1.37E-05	1.13E-05
1317	649848.91	4197045.76	1.22E-04	1.30E-04	1.84E-05	1.96E-05	1.80E-05	1.74E-05	9.56E-06	7.91E-06
1318	649769.91	4197032.68	1.10E-04	1.17E-04	1.66E-05	1.76E-05	1.62E-05	1.57E-05	8.60E-06	7.11E-06
1319	649881.56	4196848.44	8.15E-05	8.69E-05	1.23E-05	1.30E-05	1.20E-05	1.16E-05	6.37E-06	5.27E-06
1320	649782.81	4196832.1	7.15E-05	7.63E-05	1.08E-05	1.14E-05	1.05E-05	1.02E-05	5.59E-06	4.62E-06
1321	649914.21	4196651.12	5.81E-05	6.20E-05	8.74E-06	9.29E-06	8.55E-06	8.28E-06	4.54E-06	3.76E-06
1322	649815.46	4196634.78	5.16E-05	5.50E-05	7.76E-06	8.25E-06	7.59E-06	7.36E-06	4.03E-06	3.34E-06
1323	649936.39	4197077.26	1.40E-04	1.49E-04	2.10E-05	2.23E-05	2.05E-05	1.99E-05	1.09E-05	9.02E-06
1324	650002.9	4196888.65	9.72E-05	1.04E-04	1.46E-05	1.55E-05	1.43E-05	1.38E-05	7.59E-06	6.28E-06
1325	650069.41	4196700.03	7.17E-05	7.65E-05	1.08E-05	1.15E-05	1.05E-05	1.02E-05	5.60E-06	4.64E-06
1326	649546.46	4198075.06	5.92E-03	6.31E-03	8.90E-04	9.46E-04	8.70E-04	8.43E-04	4.62E-04	3.82E-04
1327	649558.72	4198053.27	4.61E-03	4.91E-03	6.93E-04	7.37E-04	6.78E-04	6.57E-04	3.60E-04	2.98E-04
1328	649583.22	4198009.68	3.20E-03	3.41E-03	4.81E-04	5.12E-04	4.71E-04	4.56E-04	2.50E-04	2.07E-04
1329	649705.01	4197848.71	1.22E-03	1.30E-03	1.83E-04	1.94E-04	1.79E-04	1.73E-04	9.49E-05	7.85E-05
1330	649999.08	4197325.72	2.46E-04	2.62E-04	3.69E-05	3.92E-05	3.61E-05	3.50E-05	1.92E-05	1.59E-05
1331	649975.32	4197312.36	2.40E-04	2.56E-04	3.61E-05	3.84E-05	3.53E-05	3.42E-05	1.88E-05	1.55E-05
1332	650097.1	4197151.39	1.69E-04	1.80E-04	2.54E-05	2.70E-05	2.48E-05	2.41E-05	1.32E-05	1.09E-05
1333	650073.34	4197138.03	1.65E-04	1.76E-04	2.48E-05	2.63E-05	2.42E-05	2.35E-05	1.29E-05	1.06E-05
1334	650195.13	4196977.06	1.23E-04	1.31E-04	1.85E-05	1.97E-05	1.81E-05	1.75E-05	9.62E-06	7.96E-06
1335	650171.37	4196963.7	1.20E-04	1.28E-04	1.80E-05	1.92E-05	1.76E-05	1.71E-05	9.37E-06	7.75E-06
1336	650293.15	4196802.73	9.41E-05	1.00E-04	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.35E-06	6.08E-06
1337	650269.39	4196789.37	9.16E-05	9.77E-05	1.38E-05	1.46E-05	1.35E-05	1.31E-05	7.16E-06	5.92E-06
1338	649520.12	4198056.91	6.04E-03	6.44E-03	9.09E-04	9.66E-04	8.89E-04	8.61E-04	4.72E-04	3.91E-04
1339	649534.23	4198036.28	4.72E-03	5.03E-03	7.10E-04	7.55E-04	6.94E-04	6.73E-04	3.69E-04	3.05E-04
1340	649562.46	4198025.3	3.81E-03	4.06E-03	5.73E-04	6.09E-04	5.60E-04	5.43E-04	2.98E-04	2.46E-04
1341	649534.25	4198005.99	3.95E-03	4.21E-03	5.93E-04	6.31E-04	5.80E-04	5.62E-04	3.08E-04	2.55E-04
1342	649562.47	4197995.02	3.27E-03	3.49E-03	4.92E-04	5.23E-04	4.81E-04	4.66E-04	2.56E-04	2.11E-04
1343	649590.71	4197953.75	2.46E-03	2.62E-03	3.70E-04	3.93E-04	3.62E-04	3.51E-04	1.92E-04	1.59E-04
1344	650155.42	4197189.05	1.79E-04	1.91E-04	2.69E-05	2.86E-05	2.63E-05	2.55E-05	1.40E-05	1.16E-05
1345	650127.21	4197169.75	1.74E-04	1.86E-04	2.62E-05	2.78E-05	2.56E-05	2.48E-05	1.36E-05	1.12E-05
1346	650268.37	4197024	1.33E-04	1.41E-04	1.99E-05	2.12E-05	1.95E-05	1.89E-05	1.04E-05	8.57E-06
1347	650240.16	4197004.69	1.29E-04	1.38E-04	1.94E-05	2.06E-05	1.90E-05	1.84E-05	1.01E-05	8.34E-06
1348	650381.32	4196858.95	1.03E-04	1.09E-04	1.54E-05	1.64E-05	1.51E-05	1.46E-05	8.02E-06	6.63E-06
1349	650353.11	4196839.64	9.99E-05	1.07E-04	1.50E-05	1.60E-05	1.47E-05	1.42E-05	7.80E-06	6.46E-06
1350	649490.86	4198035.96	6.26E-03	6.68E-03	9.42E-04	1.00E-03	9.21E-04	8.92E-04	4.89E-04	4.05E-04
1351	649505.79	4198015.9	4.89E-03	5.21E-03	7.35E-04	7.82E-04	7.19E-04	6.97E-04	3.82E-04	3.16E-04
1352	649504.75	4197983.97	4.09E-03	4.36E-03	6.15E-04	6.53E-04	6.01E-04	5.82E-04	3.19E-04	2.64E-04
1353	649535.64	4197975.79	3.38E-03	3.60E-03	5.08E-04	5.40E-04	4.96E-04	4.81E-04	2.64E-04	2.18E-04
1354	649565.5	4197935.69	2.52E-03	2.69E-03	3.79E-04	4.03E-04	3.70E-04	3.59E-04	1.97E-04	1.63E-04
1355	649595.35	4197895.58	1.96E-03	2.09E-03	2.95E-04	3.13E-04	2.88E-04	2.79E-04	1.53E-04	1.27E-04
1356	649609.25	4197843.59	1.56E-03	1.66E-03	2.34E-04	2.49E-04	2.29E-04	2.22E-04	1.22E-04	1.01E-04
1357	649639.1	4197803.48	1.24E-03	1.33E-03	1.87E-04	1.99E-04	1.83E-04	1.77E-04	9.72E-05	8.04E-05
1358	649461.92	4198012.66	6.48E-03	6.90E-03	9.74E-04	1.04E-03	9.52E-04	9.23E-04	5.06E-04	4.18E-04
1359	649478.34	4197993.82	5.04E-03	5.37E-03	7.58E-04	8.06E-04	7.41E-04	7.18E-04	3.94E-04	3.26E-04
1360	649480.29	4197962.35	4.15E-03	4.43E-03	6.24E-04	6.64E-04	6.10E-04	5.92E-04	3.24E-04	2.68E-04
1361	649511.19	4197956.12	3.44E-03	3.67E-03	5.18E-04	5.50E-04	5.06E-04	4.91E-04	2.69E-04	2.22E-04
1362	649544.04	4197918.43	2.52E-03	2.69E-03	3.80E-04	4.03E-04	3.71E-04	3.60E-04	1.97E-04	1.63E-04
1363	649576.9	4197880.74	1.96E-03	2.09E-03	2.95E-04	3.14E-04	2.89E-04	2.80E-04	1.53E-04	1.27E-04
1364	650314.11	4197064.11	1.39E-04	1.48E-04	2.09E-05	2.23E-05	2.05E-05	1.99E-05	1.09E-05	9.00E-06

1365	650445.51	4196913.33	1.09E-04	1.17E-04	1.65E-05	1.75E-05	1.61E-05	1.56E-05	8.55E-06	7.07E-06
1366	650416.55	4196888.09	1.06E-04	1.13E-04	1.60E-05	1.70E-05	1.57E-05	1.52E-05	8.32E-06	6.88E-06
1367	649435.44	4197986.05	6.53E-03	6.96E-03	9.82E-04	1.04E-03	9.61E-04	9.31E-04	5.10E-04	4.22E-04
1368	649406.73	4197953.38	6.41E-03	6.83E-03	9.64E-04	1.02E-03	9.42E-04	9.13E-04	5.01E-04	4.14E-04
1369	649378.02	4197920.71	6.13E-03	6.53E-03	9.21E-04	9.80E-04	9.01E-04	8.73E-04	4.79E-04	3.96E-04
1370	649454.22	4197969.55	5.06E-03	5.39E-03	7.61E-04	8.09E-04	7.44E-04	7.21E-04	3.95E-04	3.27E-04
1371	649425.51	4197936.88	4.93E-03	5.25E-03	7.41E-04	7.88E-04	7.25E-04	7.02E-04	3.85E-04	3.19E-04
1372	649396.8	4197904.21	4.64E-03	4.95E-03	6.98E-04	7.42E-04	6.82E-04	6.61E-04	3.62E-04	3.00E-04
1373	649458.64	4197936.71	4.05E-03	4.32E-03	6.09E-04	6.48E-04	5.96E-04	5.77E-04	3.16E-04	2.62E-04
1374	649429.94	4197904.04	3.87E-03	4.12E-03	5.81E-04	6.18E-04	5.68E-04	5.51E-04	3.02E-04	2.50E-04
1375	649401.23	4197871.37	3.48E-03	3.71E-03	5.23E-04	5.56E-04	5.11E-04	4.95E-04	2.72E-04	2.25E-04
1376	649491.78	4197936.55	3.43E-03	3.66E-03	5.16E-04	5.48E-04	5.04E-04	4.89E-04	2.68E-04	2.22E-04
1377	649463.07	4197903.88	3.29E-03	3.51E-03	4.95E-04	5.26E-04	4.84E-04	4.69E-04	2.57E-04	2.13E-04
1378	649434.36	4197871.21	3.06E-03	3.26E-03	4.60E-04	4.89E-04	4.50E-04	4.36E-04	2.39E-04	1.98E-04
1379	649514.98	4197887.21	2.42E-03	2.58E-03	3.64E-04	3.87E-04	3.56E-04	3.45E-04	1.89E-04	1.56E-04
1380	649486.28	4197854.54	2.24E-03	2.39E-03	3.37E-04	3.59E-04	3.30E-04	3.20E-04	1.75E-04	1.45E-04
1381	649457.57	4197821.87	2.02E-03	2.15E-03	3.04E-04	3.23E-04	2.97E-04	2.88E-04	1.58E-04	1.31E-04
1382	649552.54	4197854.21	1.91E-03	2.04E-03	2.87E-04	3.05E-04	2.81E-04	2.72E-04	1.49E-04	1.23E-04
1383	649523.84	4197821.54	1.77E-03	1.89E-03	2.66E-04	2.83E-04	2.60E-04	2.52E-04	1.38E-04	1.14E-04
1384	649495.13	4197788.87	1.57E-03	1.67E-03	2.36E-04	2.51E-04	2.31E-04	2.24E-04	1.23E-04	1.02E-04
1385	649590.1	4197821.2	1.49E-03	1.59E-03	2.25E-04	2.39E-04	2.20E-04	2.13E-04	1.17E-04	9.65E-05
1386	649561.4	4197788.53	1.39E-03	1.48E-03	2.09E-04	2.22E-04	2.05E-04	1.98E-04	1.09E-04	8.99E-05
1387	649532.69	4197755.86	1.28E-03	1.36E-03	1.92E-04	2.04E-04	1.88E-04	1.82E-04	9.98E-05	8.26E-05
1388	649613.31	4197771.86	1.18E-03	1.26E-03	1.78E-04	1.89E-04	1.74E-04	1.68E-04	9.23E-05	7.64E-05
1389	649584.6	4197739.19	1.10E-03	1.17E-03	1.65E-04	1.76E-04	1.62E-04	1.57E-04	8.60E-05	7.11E-05
1390	649674.08	4197689.52	8.21E-04	8.75E-04	1.23E-04	1.31E-04	1.21E-04	1.17E-04	6.41E-05	5.30E-05
1391	649645.37	4197656.85	7.53E-04	8.03E-04	1.13E-04	1.20E-04	1.11E-04	1.07E-04	5.88E-05	4.87E-05
1392	649806.61	4197688.85	6.77E-04	7.22E-04	1.02E-04	1.08E-04	9.96E-05	9.65E-05	5.29E-05	4.38E-05
1393	649734.84	4197607.18	5.88E-04	6.27E-04	8.85E-05	9.41E-05	8.65E-05	8.38E-05	4.60E-05	3.80E-05
1394	649881.73	4197622.85	5.21E-04	5.55E-04	7.83E-05	8.33E-05	7.66E-05	7.42E-05	4.07E-05	3.37E-05
1395	649809.97	4197541.17	4.56E-04	4.86E-04	6.86E-05	7.29E-05	6.71E-05	6.50E-05	3.56E-05	2.95E-05
1396	649885.09	4197475.17	3.65E-04	3.89E-04	5.49E-05	5.83E-05	5.37E-05	5.20E-05	2.85E-05	2.36E-05
1397	650107.09	4197424.83	2.77E-04	2.95E-04	4.17E-05	4.43E-05	4.08E-05	3.95E-05	2.17E-05	1.79E-05
1398	650035.33	4197343.15	2.51E-04	2.67E-04	3.77E-05	4.01E-05	3.69E-05	3.57E-05	1.96E-05	1.62E-05
1399	650185.57	4197211.14	1.84E-04	1.96E-04	2.76E-05	2.94E-05	2.70E-05	2.62E-05	1.44E-05	1.19E-05
1400	650407.57	4197160.8	1.52E-04	1.62E-04	2.28E-05	2.43E-05	2.23E-05	2.16E-05	1.19E-05	9.80E-06
1401	650335.81	4197079.12	1.41E-04	1.51E-04	2.12E-05	2.26E-05	2.08E-05	2.01E-05	1.10E-05	9.13E-06
1402	650557.81	4197028.78	1.20E-04	1.28E-04	1.80E-05	1.92E-05	1.76E-05	1.71E-05	9.36E-06	7.74E-06
1403	650471.69	4196930.77	1.11E-04	1.19E-04	1.67E-05	1.78E-05	1.64E-05	1.59E-05	8.69E-06	7.19E-06
1404	649362.13	4197902.77	5.74E-03	6.12E-03	8.63E-04	9.17E-04	8.44E-04	8.18E-04	4.48E-04	3.71E-04
1405	649379.36	4197884.66	4.29E-03	4.57E-03	6.45E-04	6.86E-04	6.31E-04	6.11E-04	3.35E-04	2.77E-04
1406	649381	4197851.71	3.13E-03	3.34E-03	4.71E-04	5.01E-04	4.61E-04	4.46E-04	2.45E-04	2.02E-04
1407	649413.84	4197848.45	2.79E-03	2.98E-03	4.20E-04	4.46E-04	4.10E-04	3.98E-04	2.18E-04	1.80E-04
1408	649432.71	4197797.38	1.84E-03	1.96E-03	2.77E-04	2.94E-04	2.71E-04	2.62E-04	1.44E-04	1.19E-04
1409	649467.19	4197761.17	1.39E-03	1.48E-03	2.09E-04	2.22E-04	2.05E-04	1.98E-04	1.09E-04	8.99E-05
1410	649501.66	4197724.95	1.14E-03	1.21E-03	1.71E-04	1.82E-04	1.68E-04	1.62E-04	8.90E-05	7.36E-05
1411	649560.99	4197713.22	1.02E-03	1.09E-03	1.53E-04	1.63E-04	1.50E-04	1.45E-04	7.97E-05	6.59E-05
1412	649536.13	4197688.74	9.32E-04	9.93E-04	1.40E-04	1.49E-04	1.37E-04	1.33E-04	7.28E-05	6.02E-05
1413	649620.68	4197631.16	6.94E-04	7.40E-04	1.04E-04	1.11E-04	1.02E-04	9.89E-05	5.42E-05	4.49E-05
1414	649699.92	4197569.43	5.32E-04	5.67E-04	8.00E-05	8.51E-05	7.82E-05	7.58E-05	4.16E-05	3.44E-05
1415	649674.03	4197543.88	4.90E-04	5.23E-04	7.38E-05	7.84E-05	7.21E-05	6.99E-05	3.83E-05	3.17E-05
1416	649770.92	4197499.14	4.12E-04	4.39E-04	6.19E-05	6.59E-05	6.06E-05	5.87E-05	3.22E-05	2.66E-05
1417	649742.98	4197471.45	3.80E-04	4.05E-04	5.72E-05	6.08E-05	5.59E-05	5.42E-05	2.97E-05	2.46E-05
1418	649841.93	4197428.86	3.30E-04	3.52E-04	4.96E-05	5.27E-05	4.85E-05	4.70E-05	2.58E-05	2.13E-05
1419	649811.93	4197399.02	3.05E-04	3.25E-04	4.59E-05	4.88E-05	4.49E-05	4.35E-05	2.38E-05	1.97E-05
1420	649979.31	4197283.46	2.25E-04	2.40E-04	3.38E-05	3.60E-05	3.31E-05	3.21E-05	1.76E-05	1.45E-05
1421	649949.82	4197254.16	2.11E-04	2.25E-04	3.17E-05	3.37E-05	3.10E-05	3.00E-05	1.65E-05	1.36E-05

1422	650116.9	4197138.28	1.64E-04	1.75E-04	2.47E-05	2.63E-05	2.42E-05	2.34E-05	1.28E-05	1.06E-05
1423	650087.72	4197109.3	1.56E-04	1.66E-04	2.34E-05	2.49E-05	2.29E-05	2.22E-05	1.22E-05	1.01E-05
1424	650294.71	4197034.95	1.34E-04	1.43E-04	2.02E-05	2.14E-05	1.97E-05	1.91E-05	1.05E-05	8.66E-06
1425	650241.22	4196979.29	1.24E-04	1.32E-04	1.86E-05	1.98E-05	1.82E-05	1.76E-05	9.67E-06	8.00E-06
1426	650405.56	4196861.95	1.03E-04	1.10E-04	1.55E-05	1.65E-05	1.51E-05	1.47E-05	8.04E-06	6.65E-06
1427	650379.11	4196834.42	9.92E-05	1.06E-04	1.49E-05	1.59E-05	1.46E-05	1.41E-05	7.75E-06	6.41E-06
1428	649338.57	4197882.82	5.04E-03	5.38E-03	7.58E-04	8.06E-04	7.41E-04	7.19E-04	3.94E-04	3.26E-04
1429	649347.85	4197859.6	3.66E-03	3.90E-03	5.50E-04	5.85E-04	5.38E-04	5.22E-04	2.86E-04	2.36E-04
1430	649357.13	4197836.39	2.82E-03	3.01E-03	4.25E-04	4.52E-04	4.15E-04	4.02E-04	2.21E-04	1.83E-04
1431	649382.32	4197823.39	2.44E-03	2.60E-03	3.66E-04	3.89E-04	3.58E-04	3.47E-04	1.90E-04	1.57E-04
1432	649347.85	4197805.76	2.12E-03	2.27E-03	3.20E-04	3.40E-04	3.12E-04	3.03E-04	1.66E-04	1.37E-04
1433	649400.89	4197776.96	1.67E-03	1.78E-03	2.51E-04	2.66E-04	2.45E-04	2.38E-04	1.30E-04	1.08E-04
1434	649366.41	4197759.33	1.45E-03	1.55E-03	2.19E-04	2.32E-04	2.14E-04	2.07E-04	1.14E-04	9.39E-05
1435	649419.45	4197730.53	1.21E-03	1.29E-03	1.82E-04	1.93E-04	1.78E-04	1.72E-04	9.44E-05	7.81E-05
1436	649384.97	4197712.9	1.05E-03	1.12E-03	1.58E-04	1.68E-04	1.55E-04	1.50E-04	8.23E-05	6.81E-05
1437	649438.01	4197684.11	9.11E-04	9.71E-04	1.37E-04	1.46E-04	1.34E-04	1.30E-04	7.11E-05	5.88E-05
1438	649469.83	4197704.53	1.03E-03	1.10E-03	1.55E-04	1.65E-04	1.52E-04	1.47E-04	8.07E-05	6.68E-05
1439	649403.53	4197666.47	7.94E-04	8.46E-04	1.19E-04	1.27E-04	1.17E-04	1.13E-04	6.20E-05	5.13E-05
1440	649456.57	4197637.68	7.07E-04	7.53E-04	1.06E-04	1.13E-04	1.04E-04	1.01E-04	5.52E-05	4.57E-05
1441	649488.39	4197658.1	8.03E-04	8.56E-04	1.21E-04	1.28E-04	1.18E-04	1.14E-04	6.27E-05	5.19E-05
1442	649422.1	4197620.05	6.17E-04	6.57E-04	9.27E-05	9.86E-05	9.07E-05	8.79E-05	4.82E-05	3.99E-05
1443	649493.69	4197544.82	4.55E-04	4.85E-04	6.84E-05	7.27E-05	6.69E-05	6.48E-05	3.55E-05	2.94E-05
1444	649525.52	4197565.25	5.16E-04	5.50E-04	7.76E-05	8.25E-05	7.59E-05	7.36E-05	4.03E-05	3.34E-05
1445	649557.34	4197585.67	5.76E-04	6.14E-04	8.66E-05	9.21E-05	8.47E-05	8.21E-05	4.50E-05	3.72E-05
1446	649589.17	4197606.1	6.32E-04	6.74E-04	9.51E-05	1.01E-04	9.30E-05	9.01E-05	4.94E-05	4.09E-05
1447	649459.22	4197527.19	3.99E-04	4.26E-04	6.01E-05	6.38E-05	5.87E-05	5.69E-05	3.12E-05	2.58E-05
1448	649530.81	4197451.97	3.14E-04	3.35E-04	4.73E-05	5.03E-05	4.62E-05	4.48E-05	2.46E-05	2.03E-05
1449	649562.64	4197472.39	3.55E-04	3.78E-04	5.33E-05	5.67E-05	5.22E-05	5.06E-05	2.77E-05	2.29E-05
1450	649594.46	4197492.82	3.96E-04	4.22E-04	5.95E-05	6.33E-05	5.82E-05	5.64E-05	3.09E-05	2.56E-05
1451	649626.29	4197513.24	4.36E-04	4.64E-04	6.55E-05	6.97E-05	6.41E-05	6.21E-05	3.40E-05	2.82E-05
1452	649496.34	4197434.34	2.78E-04	2.97E-04	4.18E-05	4.45E-05	4.09E-05	3.97E-05	2.17E-05	1.80E-05
1453	649567.93	4197359.11	2.30E-04	2.45E-04	3.45E-05	3.67E-05	3.38E-05	3.27E-05	1.79E-05	1.48E-05
1454	649599.76	4197379.54	2.57E-04	2.74E-04	3.87E-05	4.11E-05	3.78E-05	3.66E-05	2.01E-05	1.66E-05
1455	649631.59	4197399.96	2.85E-04	3.04E-04	4.29E-05	4.56E-05	4.20E-05	4.07E-05	2.23E-05	1.84E-05
1456	649711.15	4197451.02	3.55E-04	3.79E-04	5.34E-05	5.68E-05	5.22E-05	5.06E-05	2.77E-05	2.30E-05
1457	649533.46	4197341.48	2.05E-04	2.19E-04	3.08E-05	3.28E-05	3.02E-05	2.92E-05	1.60E-05	1.33E-05
1458	649605.06	4197266.26	1.75E-04	1.86E-04	2.63E-05	2.80E-05	2.57E-05	2.49E-05	1.37E-05	1.13E-05
1459	649636.88	4197286.68	1.94E-04	2.07E-04	2.92E-05	3.11E-05	2.86E-05	2.77E-05	1.52E-05	1.26E-05
1460	649780.1	4197378.59	2.87E-04	3.06E-04	4.31E-05	4.59E-05	4.22E-05	4.09E-05	2.24E-05	1.85E-05
1461	649570.58	4197248.63	1.58E-04	1.68E-04	2.37E-05	2.52E-05	2.32E-05	2.25E-05	1.23E-05	1.02E-05
1462	649679.3	4197080.55	1.12E-04	1.20E-04	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.76E-06	7.24E-06
1463	649711.13	4197100.98	1.23E-04	1.31E-04	1.85E-05	1.96E-05	1.81E-05	1.75E-05	9.59E-06	7.94E-06
1464	649902.08	4197223.52	1.94E-04	2.07E-04	2.92E-05	3.11E-05	2.86E-05	2.77E-05	1.52E-05	1.26E-05
1465	649644.83	4197062.92	1.03E-04	1.09E-04	1.54E-05	1.64E-05	1.51E-05	1.46E-05	8.01E-06	6.63E-06
1466	649754.3	4196895.33	7.91E-05	8.43E-05	1.19E-05	1.26E-05	1.16E-05	1.13E-05	6.18E-06	5.11E-06
1467	649787.64	4196916.72	8.58E-05	9.15E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.70E-06	5.55E-06
1468	649820.98	4196938.12	9.31E-05	9.92E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.27E-06	6.02E-06
1469	649854.33	4196959.52	1.01E-04	1.07E-04	1.51E-05	1.61E-05	1.48E-05	1.43E-05	7.86E-06	6.51E-06
1470	649887.67	4196980.92	1.09E-04	1.16E-04	1.63E-05	1.74E-05	1.60E-05	1.55E-05	8.48E-06	7.02E-06
1471	649719.07	4196877.21	7.32E-05	7.80E-05	1.10E-05	1.17E-05	1.08E-05	1.04E-05	5.72E-06	4.73E-06
1472	649828.42	4196709.54	5.94E-05	6.33E-05	8.93E-06	9.50E-06	8.74E-06	8.47E-06	4.64E-06	3.84E-06
1473	649861.52	4196730.78	6.37E-05	6.80E-05	9.59E-06	1.02E-05	9.37E-06	9.08E-06	4.98E-06	4.12E-06
1474	649894.62	4196752.02	6.84E-05	7.29E-05	1.03E-05	1.09E-05	1.01E-05	9.74E-06	5.34E-06	4.42E-06
1475	649927.72	4196773.26	7.33E-05	7.81E-05	1.10E-05	1.17E-05	1.08E-05	1.04E-05	5.73E-06	4.74E-06
1476	649960.82	4196794.51	7.85E-05	8.36E-05	1.18E-05	1.25E-05	1.15E-05	1.12E-05	6.13E-06	5.07E-06
1477	649993.92	4196815.75	8.38E-05	8.94E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.55E-06	5.42E-06
1478	649793.31	4196691.5	5.56E-05	5.93E-05	8.37E-06	8.89E-06	8.18E-06	7.93E-06	4.35E-06	3.60E-06

1479	649902.58	4196523.78	4.69E-05	5.00E-05	7.05E-06	7.49E-06	6.89E-06	6.68E-06	3.66E-06	3.03E-06
1480	649935.5	4196544.9	4.98E-05	5.31E-05	7.49E-06	7.96E-06	7.32E-06	7.10E-06	3.89E-06	3.22E-06
1481	649968.43	4196566.03	5.30E-05	5.65E-05	7.96E-06	8.47E-06	7.79E-06	7.55E-06	4.14E-06	3.42E-06
1482	650001.35	4196587.16	5.63E-05	6.00E-05	8.47E-06	9.00E-06	8.28E-06	8.03E-06	4.40E-06	3.64E-06
1483	650034.27	4196608.29	5.99E-05	6.38E-05	9.00E-06	9.57E-06	8.80E-06	8.53E-06	4.68E-06	3.87E-06
1484	650067.2	4196629.42	6.36E-05	6.78E-05	9.56E-06	1.02E-05	9.35E-06	9.06E-06	4.97E-06	4.11E-06
1485	650100.12	4196650.55	6.74E-05	7.19E-05	1.01E-05	1.08E-05	9.92E-06	9.61E-06	5.27E-06	4.36E-06
1486	650133.05	4196671.68	7.14E-05	7.61E-05	1.07E-05	1.14E-05	1.05E-05	1.02E-05	5.57E-06	4.61E-06
1487	650165.97	4196692.8	7.53E-05	8.03E-05	1.13E-05	1.20E-05	1.11E-05	1.07E-05	5.88E-06	4.87E-06
1488	650198.89	4196713.93	7.92E-05	8.44E-05	1.19E-05	1.27E-05	1.16E-05	1.13E-05	6.19E-06	5.12E-06
1489	650231.82	4196735.06	8.31E-05	8.86E-05	1.25E-05	1.33E-05	1.22E-05	1.18E-05	6.49E-06	5.37E-06
1490	650264.74	4196756.19	8.69E-05	9.26E-05	1.31E-05	1.39E-05	1.28E-05	1.24E-05	6.78E-06	5.61E-06
1491	650297.66	4196777.32	9.05E-05	9.65E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.07E-06	5.85E-06
1492	650330.59	4196798.45	9.39E-05	1.00E-04	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.34E-06	6.07E-06
1493	649867.56	4196505.79	4.43E-05	4.72E-05	6.66E-06	7.08E-06	6.51E-06	6.31E-06	3.46E-06	2.86E-06
1494	649315.97	4197874.17	4.67E-03	4.98E-03	7.02E-04	7.47E-04	6.87E-04	6.66E-04	3.65E-04	3.02E-04
1495	649321.22	4197849.72	3.35E-03	3.57E-03	5.04E-04	5.36E-04	4.93E-04	4.78E-04	2.62E-04	2.17E-04
1496	649326.46	4197825.28	2.56E-03	2.73E-03	3.85E-04	4.09E-04	3.76E-04	3.65E-04	2.00E-04	1.65E-04
1497	649310.92	4197796.37	1.91E-03	2.04E-03	2.88E-04	3.06E-04	2.81E-04	2.73E-04	1.49E-04	1.24E-04
1498	649342.19	4197751.95	1.35E-03	1.44E-03	2.02E-04	2.15E-04	1.98E-04	1.92E-04	1.05E-04	8.70E-05
1499	649352.68	4197703.06	9.47E-04	1.01E-03	1.42E-04	1.51E-04	1.39E-04	1.35E-04	7.39E-05	6.12E-05
1500	649363.17	4197654.17	6.92E-04	7.38E-04	1.04E-04	1.11E-04	1.02E-04	9.87E-05	5.41E-05	4.47E-05
1501	649389.8	4197610.2	5.54E-04	5.91E-04	8.34E-05	8.86E-05	8.15E-05	7.90E-05	4.33E-05	3.58E-05
1502	649352.87	4197600.82	4.88E-04	5.20E-04	7.34E-05	7.80E-05	7.18E-05	6.96E-05	3.81E-05	3.15E-05
1503	649410.78	4197512.43	3.42E-04	3.64E-04	5.14E-05	5.47E-05	5.03E-05	4.87E-05	2.67E-05	2.21E-05
1504	649373.84	4197503.05	3.03E-04	3.23E-04	4.55E-05	4.84E-05	4.45E-05	4.31E-05	2.36E-05	1.96E-05
1505	649435.79	4197415.88	2.32E-04	2.47E-04	3.49E-05	3.71E-05	3.41E-05	3.31E-05	1.81E-05	1.50E-05
1506	649394.82	4197405.27	2.05E-04	2.19E-04	3.08E-05	3.28E-05	3.01E-05	2.92E-05	1.60E-05	1.32E-05
1507	649455.96	4197317.86	1.66E-04	1.77E-04	2.49E-05	2.65E-05	2.43E-05	2.36E-05	1.29E-05	1.07E-05
1508	649494.71	4197329.67	1.85E-04	1.97E-04	2.78E-05	2.95E-05	2.72E-05	2.63E-05	1.44E-05	1.19E-05
1509	649415.79	4197307.5	1.48E-04	1.58E-04	2.23E-05	2.37E-05	2.18E-05	2.12E-05	1.16E-05	9.60E-06
1510	649476.4	4197219.92	1.24E-04	1.33E-04	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.72E-06	8.04E-06
1511	649514.07	4197231.41	1.37E-04	1.46E-04	2.06E-05	2.19E-05	2.01E-05	1.95E-05	1.07E-05	8.85E-06
1512	649436.77	4197209.72	1.13E-04	1.21E-04	1.70E-05	1.81E-05	1.66E-05	1.61E-05	8.84E-06	7.31E-06
1513	649517.67	4197024.17	7.90E-05	8.42E-05	1.19E-05	1.26E-05	1.16E-05	1.13E-05	6.17E-06	5.10E-06
1514	649554	4197035.24	8.50E-05	9.07E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.64E-06	5.50E-06
1515	649590.33	4197046.31	9.16E-05	9.76E-05	1.38E-05	1.46E-05	1.35E-05	1.31E-05	7.15E-06	5.92E-06
1516	649478.72	4197014.17	7.34E-05	7.82E-05	1.10E-05	1.17E-05	1.08E-05	1.05E-05	5.73E-06	4.74E-06
1517	649561.19	4196829.09	5.60E-05	5.97E-05	8.42E-06	8.95E-06	8.23E-06	7.98E-06	4.37E-06	3.62E-06
1518	649600.66	4196841.12	5.97E-05	6.37E-05	8.98E-06	9.55E-06	8.78E-06	8.51E-06	4.67E-06	3.86E-06
1519	649640.13	4196853.15	6.38E-05	6.80E-05	9.59E-06	1.02E-05	9.38E-06	9.09E-06	4.98E-06	4.12E-06
1520	649679.6	4196865.18	6.83E-05	7.28E-05	1.03E-05	1.09E-05	1.00E-05	9.73E-06	5.34E-06	4.41E-06
1521	649520.67	4196818.62	5.27E-05	5.62E-05	7.93E-06	8.43E-06	7.75E-06	7.51E-06	4.12E-06	3.41E-06
1522	649602.49	4196633.35	4.25E-05	4.53E-05	6.39E-06	6.79E-06	6.25E-06	6.05E-06	3.32E-06	2.74E-06
1523	649640.66	4196644.98	4.47E-05	4.76E-05	6.72E-06	7.14E-06	6.57E-06	6.37E-06	3.49E-06	2.89E-06
1524	649678.82	4196656.61	4.71E-05	5.02E-05	7.08E-06	7.52E-06	6.92E-06	6.71E-06	3.68E-06	3.04E-06
1525	649716.99	4196668.24	4.97E-05	5.30E-05	7.47E-06	7.94E-06	7.31E-06	7.08E-06	3.88E-06	3.21E-06
1526	649755.15	4196679.87	5.26E-05	5.60E-05	7.90E-06	8.40E-06	7.73E-06	7.49E-06	4.11E-06	3.40E-06
1527	649562.62	4196623.07	4.05E-05	4.32E-05	6.09E-06	6.48E-06	5.96E-06	5.77E-06	3.17E-06	2.62E-06
1528	649645.54	4196438.13	3.40E-05	3.63E-05	5.12E-06	5.44E-06	5.00E-06	4.85E-06	2.66E-06	2.20E-06
1529	649685.91	4196450.43	3.55E-05	3.79E-05	5.34E-06	5.68E-06	5.23E-06	5.06E-06	2.78E-06	2.30E-06
1530	649726.28	4196462.73	3.72E-05	3.96E-05	5.59E-06	5.95E-06	5.47E-06	5.30E-06	2.91E-06	2.40E-06
1531	649766.64	4196475.04	3.90E-05	4.16E-05	5.86E-06	6.23E-06	5.73E-06	5.56E-06	3.05E-06	2.52E-06
1532	649807.01	4196487.34	4.10E-05	4.37E-05	6.16E-06	6.55E-06	6.03E-06	5.84E-06	3.20E-06	2.65E-06
1533	649604.57	4196427.52	3.27E-05	3.49E-05	4.92E-06	5.23E-06	4.81E-06	4.66E-06	2.56E-06	2.11E-06
1534	649291.07	4197869.18	4.38E-03	4.66E-03	6.58E-04	6.99E-04	6.43E-04	6.24E-04	3.42E-04	2.83E-04
1535	649292.2	4197844.2	3.13E-03	3.34E-03	4.70E-04	5.00E-04	4.60E-04	4.46E-04	2.44E-04	2.02E-04

1536	649293.34	4197819.23	2.36E-03	2.52E-03	3.56E-04	3.78E-04	3.48E-04	3.37E-04	1.85E-04	1.53E-04
1537	649278.14	4197793.51	1.79E-03	1.91E-03	2.70E-04	2.87E-04	2.64E-04	2.55E-04	1.40E-04	1.16E-04
1538	649309.07	4197745.9	1.23E-03	1.31E-03	1.84E-04	1.96E-04	1.80E-04	1.75E-04	9.58E-05	7.93E-05
1539	649280.4	4197743.56	1.14E-03	1.22E-03	1.72E-04	1.82E-04	1.68E-04	1.63E-04	8.91E-05	7.37E-05
1540	649309.96	4197695.77	8.32E-04	8.87E-04	1.25E-04	1.33E-04	1.22E-04	1.19E-04	6.50E-05	5.37E-05
1541	649282.66	4197693.62	7.68E-04	8.18E-04	1.15E-04	1.23E-04	1.13E-04	1.09E-04	6.00E-05	4.96E-05
1542	649314.96	4197646.17	5.94E-04	6.34E-04	8.94E-05	9.50E-05	8.74E-05	8.47E-05	4.64E-05	3.84E-05
1543	649284.93	4197643.67	5.41E-04	5.76E-04	8.13E-05	8.64E-05	7.95E-05	7.70E-05	4.22E-05	3.49E-05
1544	649315.86	4197596.05	4.35E-04	4.63E-04	6.54E-05	6.95E-05	6.39E-05	6.19E-05	3.40E-05	2.81E-05
1545	649287.19	4197593.72	3.97E-04	4.23E-04	5.96E-05	6.34E-05	5.83E-05	5.65E-05	3.10E-05	2.56E-05
1546	649321.21	4197496.26	2.59E-04	2.76E-04	3.89E-05	4.14E-05	3.81E-05	3.69E-05	2.02E-05	1.67E-05
1547	649347.52	4197499.65	2.80E-04	2.99E-04	4.22E-05	4.48E-05	4.12E-05	4.00E-05	2.19E-05	1.81E-05
1548	649291.72	4197493.82	2.37E-04	2.53E-04	3.57E-05	3.79E-05	3.49E-05	3.38E-05	1.85E-05	1.53E-05
1549	649326.28	4197396.43	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.44E-05	1.34E-05	1.11E-05
1550	649353.7	4197399.97	1.84E-04	1.96E-04	2.77E-05	2.94E-05	2.71E-05	2.62E-05	1.44E-05	1.19E-05
1551	649296.24	4197393.92	1.59E-04	1.69E-04	2.39E-05	2.54E-05	2.33E-05	2.26E-05	1.24E-05	1.02E-05
1552	649331.2	4197296.58	1.22E-04	1.30E-04	1.84E-05	1.96E-05	1.80E-05	1.74E-05	9.56E-06	7.91E-06
1553	649359.4	4197300.22	1.30E-04	1.39E-04	1.96E-05	2.09E-05	1.92E-05	1.86E-05	1.02E-05	8.43E-06
1554	649387.59	4197303.86	1.39E-04	1.48E-04	2.09E-05	2.23E-05	2.05E-05	1.98E-05	1.09E-05	8.99E-06
1555	649300.77	4197294.03	1.15E-04	1.22E-04	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.97E-06	7.42E-06
1556	649336.02	4197196.72	9.29E-05	9.90E-05	1.40E-05	1.48E-05	1.37E-05	1.32E-05	7.25E-06	6.00E-06
1557	649364.81	4197200.44	9.81E-05	1.05E-04	1.48E-05	1.57E-05	1.44E-05	1.40E-05	7.66E-06	6.34E-06
1558	649393.59	4197204.15	1.04E-04	1.11E-04	1.56E-05	1.66E-05	1.53E-05	1.48E-05	8.11E-06	6.71E-06
1559	649305.3	4197194.13	8.80E-05	9.38E-05	1.32E-05	1.41E-05	1.29E-05	1.25E-05	6.88E-06	5.69E-06
1560	649345.49	4196996.98	6.04E-05	6.44E-05	9.08E-06	9.65E-06	8.88E-06	8.61E-06	4.72E-06	3.90E-06
1561	649375.09	4197000.8	6.29E-05	6.71E-05	9.46E-06	1.01E-05	9.25E-06	8.97E-06	4.92E-06	4.07E-06
1562	649404.7	4197004.62	6.56E-05	6.99E-05	9.86E-06	1.05E-05	9.65E-06	9.35E-06	5.12E-06	4.24E-06
1563	649434.31	4197008.44	6.85E-05	7.31E-05	1.03E-05	1.10E-05	1.01E-05	9.77E-06	5.35E-06	4.43E-06
1564	649314.35	4196994.33	5.81E-05	6.19E-05	8.73E-06	9.28E-06	8.54E-06	8.28E-06	4.54E-06	3.75E-06
1565	649354.81	4196797.22	4.36E-05	4.65E-05	6.56E-06	6.98E-06	6.42E-06	6.22E-06	3.41E-06	2.82E-06
1566	649384.97	4196801.11	4.51E-05	4.81E-05	6.78E-06	7.21E-06	6.63E-06	6.42E-06	3.52E-06	2.91E-06
1567	649415.12	4196805	4.66E-05	4.97E-05	7.01E-06	7.45E-06	6.85E-06	6.64E-06	3.64E-06	3.01E-06
1568	649445.28	4196808.89	4.82E-05	5.14E-05	7.25E-06	7.71E-06	7.09E-06	6.87E-06	3.77E-06	3.12E-06
1569	649475.44	4196812.78	4.99E-05	5.32E-05	7.51E-06	7.98E-06	7.34E-06	7.11E-06	3.90E-06	3.23E-06
1570	649323.41	4196794.54	4.23E-05	4.51E-05	6.37E-06	6.77E-06	6.23E-06	6.03E-06	3.31E-06	2.74E-06
1571	649364.06	4196597.45	3.37E-05	3.60E-05	5.07E-06	5.39E-06	4.96E-06	4.81E-06	2.64E-06	2.18E-06
1572	649394.61	4196601.39	3.47E-05	3.70E-05	5.21E-06	5.54E-06	5.10E-06	4.94E-06	2.71E-06	2.24E-06
1573	649425.16	4196605.34	3.56E-05	3.80E-05	5.36E-06	5.70E-06	5.24E-06	5.08E-06	2.78E-06	2.30E-06
1574	649455.7	4196609.28	3.66E-05	3.91E-05	5.51E-06	5.86E-06	5.39E-06	5.22E-06	2.86E-06	2.37E-06
1575	649486.25	4196613.22	3.77E-05	4.02E-05	5.67E-06	6.02E-06	5.54E-06	5.37E-06	2.94E-06	2.43E-06
1576	649516.8	4196617.16	3.88E-05	4.13E-05	5.83E-06	6.20E-06	5.70E-06	5.52E-06	3.03E-06	2.50E-06
1577	649332.46	4196594.74	3.29E-05	3.51E-05	4.95E-06	5.26E-06	4.84E-06	4.69E-06	2.57E-06	2.13E-06
1578	649373.26	4196397.68	2.74E-05	2.92E-05	4.11E-06	4.37E-06	4.02E-06	3.90E-06	2.14E-06	1.77E-06
1579	649404.1	4196401.66	2.80E-05	2.99E-05	4.21E-06	4.48E-06	4.12E-06	3.99E-06	2.19E-06	1.81E-06
1580	649434.95	4196405.63	2.87E-05	3.06E-05	4.31E-06	4.59E-06	4.22E-06	4.09E-06	2.24E-06	1.85E-06
1581	649465.79	4196409.61	2.94E-05	3.13E-05	4.42E-06	4.70E-06	4.32E-06	4.19E-06	2.30E-06	1.90E-06
1582	649496.63	4196413.59	3.01E-05	3.21E-05	4.52E-06	4.81E-06	4.42E-06	4.29E-06	2.35E-06	1.94E-06
1583	649527.47	4196417.57	3.08E-05	3.28E-05	4.63E-06	4.92E-06	4.53E-06	4.39E-06	2.41E-06	1.99E-06
1584	649558.31	4196421.55	3.16E-05	3.36E-05	4.74E-06	5.04E-06	4.64E-06	4.50E-06	2.46E-06	2.04E-06
1585	649341.51	4196394.95	2.67E-05	2.85E-05	4.02E-06	4.27E-06	3.93E-06	3.81E-06	2.09E-06	1.73E-06
1586	649255.93	4197868.05	4.25E-03	4.53E-03	6.39E-04	6.80E-04	6.25E-04	6.06E-04	3.32E-04	2.75E-04
1587	649256.44	4197843.05	3.01E-03	3.21E-03	4.53E-04	4.82E-04	4.43E-04	4.29E-04	2.35E-04	1.95E-04
1588	649256.95	4197818.06	2.25E-03	2.40E-03	3.38E-04	3.59E-04	3.31E-04	3.20E-04	1.76E-04	1.45E-04
1589	649239.26	4197792.69	1.66E-03	1.77E-03	2.50E-04	2.66E-04	2.44E-04	2.37E-04	1.30E-04	1.07E-04
1590	649240.28	4197742.7	1.03E-03	1.09E-03	1.54E-04	1.64E-04	1.51E-04	1.46E-04	8.02E-05	6.63E-05
1591	649259.49	4197693.08	7.17E-04	7.65E-04	1.08E-04	1.15E-04	1.05E-04	1.02E-04	5.60E-05	4.64E-05
1592	649260.5	4197643.09	5.01E-04	5.34E-04	7.53E-05	8.01E-05	7.36E-05	7.14E-05	3.91E-05	3.24E-05

1593	649261.52	4197593.1	3.66E-04	3.90E-04	5.51E-05	5.85E-05	5.38E-05	5.22E-05	2.86E-05	2.37E-05
1594	649263.55	4197493.12	2.20E-04	2.34E-04	3.30E-05	3.51E-05	3.23E-05	3.13E-05	1.72E-05	1.42E-05
1595	649265.59	4197393.14	1.48E-04	1.58E-04	2.22E-05	2.36E-05	2.17E-05	2.11E-05	1.16E-05	9.56E-06
1596	649267.62	4197293.16	1.08E-04	1.15E-04	1.62E-05	1.73E-05	1.59E-05	1.54E-05	8.43E-06	6.98E-06
1597	649269.66	4197193.18	8.34E-05	8.89E-05	1.25E-05	1.33E-05	1.23E-05	1.19E-05	6.51E-06	5.39E-06
1598	649273.72	4196993.23	5.55E-05	5.92E-05	8.35E-06	8.88E-06	8.16E-06	7.91E-06	4.34E-06	3.59E-06
1599	649295.98	4196793.64	4.13E-05	4.40E-05	6.21E-06	6.60E-06	6.07E-06	5.89E-06	3.23E-06	2.67E-06
1600	649259.6	4196792.9	4.00E-05	4.27E-05	6.02E-06	6.40E-06	5.89E-06	5.71E-06	3.13E-06	2.59E-06
1601	649300.05	4196593.68	3.21E-05	3.42E-05	4.82E-06	5.13E-06	4.72E-06	4.57E-06	2.51E-06	2.07E-06
1602	649263.67	4196592.94	3.12E-05	3.33E-05	4.70E-06	4.99E-06	4.59E-06	4.45E-06	2.44E-06	2.02E-06
1603	649316.58	4196394.13	2.63E-05	2.80E-05	3.95E-06	4.20E-06	3.86E-06	3.74E-06	2.05E-06	1.70E-06
1604	649285.92	4196393.35	2.57E-05	2.74E-05	3.87E-06	4.11E-06	3.78E-06	3.67E-06	2.01E-06	1.66E-06
1605	649211.22	4197869.2	4.26E-03	4.54E-03	6.40E-04	6.80E-04	6.26E-04	6.06E-04	3.32E-04	2.75E-04
1606	649209.72	4197844.24	2.92E-03	3.11E-03	4.39E-04	4.67E-04	4.29E-04	4.16E-04	2.28E-04	1.89E-04
1607	649232.71	4197817.81	2.16E-03	2.31E-03	3.25E-04	3.46E-04	3.18E-04	3.08E-04	1.69E-04	1.40E-04
1608	649208.21	4197819.29	2.11E-03	2.25E-03	3.17E-04	3.37E-04	3.10E-04	3.00E-04	1.65E-04	1.36E-04
1609	649206.7	4197794.33	1.57E-03	1.67E-03	2.35E-04	2.50E-04	2.30E-04	2.23E-04	1.22E-04	1.01E-04
1610	649203.69	4197744.42	9.25E-04	9.86E-04	1.39E-04	1.48E-04	1.36E-04	1.32E-04	7.23E-05	5.98E-05
1611	649225.17	4197693.03	6.41E-04	6.84E-04	9.64E-05	1.03E-04	9.43E-05	9.14E-05	5.01E-05	4.14E-05
1612	649200.67	4197694.51	5.91E-04	6.31E-04	8.89E-05	9.46E-05	8.70E-05	8.43E-05	4.62E-05	3.82E-05
1613	649222.16	4197643.12	4.40E-04	4.69E-04	6.62E-05	7.04E-05	6.48E-05	6.28E-05	3.44E-05	2.85E-05
1614	649197.66	4197644.6	4.06E-04	4.33E-04	6.10E-05	6.49E-05	5.97E-05	5.78E-05	3.17E-05	2.62E-05
1615	649219.14	4197593.22	3.20E-04	3.41E-04	4.80E-05	5.11E-05	4.70E-05	4.55E-05	2.50E-05	2.06E-05
1616	649194.64	4197594.7	2.96E-04	3.16E-04	4.45E-05	4.73E-05	4.35E-05	4.22E-05	2.31E-05	1.91E-05
1617	649229.24	4197493.08	2.00E-04	2.13E-04	3.01E-05	3.20E-05	2.94E-05	2.85E-05	1.56E-05	1.29E-05
1618	649188.61	4197494.88	1.81E-04	1.93E-04	2.72E-05	2.89E-05	2.66E-05	2.58E-05	1.41E-05	1.17E-05
1619	649227.24	4197393.18	1.36E-04	1.45E-04	2.05E-05	2.18E-05	2.00E-05	1.94E-05	1.06E-05	8.80E-06
1620	649182.58	4197395.06	1.25E-04	1.33E-04	1.88E-05	2.00E-05	1.84E-05	1.78E-05	9.76E-06	8.07E-06
1621	649225.24	4197293.28	1.00E-04	1.07E-04	1.51E-05	1.61E-05	1.48E-05	1.43E-05	7.85E-06	6.49E-06
1622	649201.05	4197293.76	9.66E-05	1.03E-04	1.45E-05	1.54E-05	1.42E-05	1.38E-05	7.55E-06	6.24E-06
1623	649176.55	4197295.24	9.32E-05	9.94E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.28E-06	6.02E-06
1624	649213.84	4197193.57	7.72E-05	8.23E-05	1.16E-05	1.23E-05	1.14E-05	1.10E-05	6.03E-06	4.99E-06
1625	649170.52	4197195.42	7.32E-05	7.80E-05	1.10E-05	1.17E-05	1.08E-05	1.04E-05	5.72E-06	4.73E-06
1626	649207.15	4196993.82	5.20E-05	5.54E-05	7.81E-06	8.31E-06	7.64E-06	7.41E-06	4.06E-06	3.36E-06
1627	649231.34	4196993.34	5.32E-05	5.67E-05	8.00E-06	8.50E-06	7.82E-06	7.58E-06	4.15E-06	3.44E-06
1628	649182.96	4196994.31	5.08E-05	5.42E-05	7.64E-06	8.12E-06	7.47E-06	7.24E-06	3.97E-06	3.28E-06
1629	649158.46	4196995.79	4.98E-05	5.30E-05	7.48E-06	7.95E-06	7.32E-06	7.09E-06	3.89E-06	3.22E-06
1630	649193.08	4196794.23	3.80E-05	4.05E-05	5.72E-06	6.08E-06	5.59E-06	5.42E-06	2.97E-06	2.46E-06
1631	649146.4	4196796.15	3.68E-05	3.92E-05	5.54E-06	5.89E-06	5.41E-06	5.25E-06	2.88E-06	2.38E-06
1632	649179.81	4196594.62	2.95E-05	3.15E-05	4.44E-06	4.72E-06	4.34E-06	4.21E-06	2.31E-06	1.91E-06
1633	649221.74	4196593.78	3.04E-05	3.24E-05	4.57E-06	4.85E-06	4.46E-06	4.33E-06	2.37E-06	1.96E-06
1634	649134.34	4196596.52	2.88E-05	3.07E-05	4.33E-06	4.61E-06	4.24E-06	4.11E-06	2.25E-06	1.86E-06
1635	649170.97	4196394.92	2.40E-05	2.56E-05	3.61E-06	3.84E-06	3.53E-06	3.42E-06	1.88E-06	1.55E-06
1636	649195.16	4196394.43	2.43E-05	2.60E-05	3.66E-06	3.89E-06	3.58E-06	3.47E-06	1.90E-06	1.57E-06
1637	649219.35	4196393.95	2.47E-05	2.63E-05	3.71E-06	3.94E-06	3.63E-06	3.52E-06	1.93E-06	1.59E-06
1638	649243.54	4196393.46	2.50E-05	2.67E-05	3.76E-06	4.00E-06	3.68E-06	3.57E-06	1.96E-06	1.62E-06
1639	649146.78	4196395.4	2.37E-05	2.53E-05	3.57E-06	3.79E-06	3.49E-06	3.38E-06	1.85E-06	1.53E-06
1640	649122.28	4196396.88	2.35E-05	2.50E-05	3.53E-06	3.75E-06	3.45E-06	3.34E-06	1.83E-06	1.52E-06
1641	649168.83	4197867.14	4.00E-03	4.27E-03	6.02E-04	6.40E-04	5.88E-04	5.70E-04	3.13E-04	2.59E-04
1642	649146.35	4197865.02	3.74E-03	3.99E-03	5.62E-04	5.98E-04	5.50E-04	5.33E-04	2.92E-04	2.42E-04
1643	649123.86	4197862.9	3.42E-03	3.64E-03	5.14E-04	5.47E-04	5.03E-04	4.87E-04	2.67E-04	2.21E-04
1644	649101.38	4197860.77	3.01E-03	3.21E-03	4.53E-04	4.81E-04	4.43E-04	4.29E-04	2.35E-04	1.95E-04
1645	649078.89	4197858.65	2.48E-03	2.64E-03	3.73E-04	3.96E-04	3.65E-04	3.53E-04	1.94E-04	1.60E-04
1646	649056.4	4197856.53	1.83E-03	1.95E-03	2.75E-04	2.93E-04	2.69E-04	2.61E-04	1.43E-04	1.18E-04
1647	649033.92	4197854.41	1.23E-03	1.31E-03	1.85E-04	1.97E-04	1.81E-04	1.75E-04	9.62E-05	7.96E-05
1648	649171.18	4197842.25	2.66E-03	2.84E-03	4.01E-04	4.26E-04	3.92E-04	3.80E-04	2.08E-04	1.72E-04
1649	649148.69	4197840.13	2.43E-03	2.59E-03	3.66E-04	3.89E-04	3.58E-04	3.47E-04	1.90E-04	1.57E-04

1650	649126.21	4197838.01	2.16E-03	2.30E-03	3.25E-04	3.45E-04	3.18E-04	3.08E-04	1.69E-04	1.40E-04
1651	649103.72	4197835.89	1.84E-03	1.96E-03	2.77E-04	2.94E-04	2.71E-04	2.62E-04	1.44E-04	1.19E-04
1652	649081.24	4197833.76	1.49E-03	1.58E-03	2.23E-04	2.37E-04	2.18E-04	2.12E-04	1.16E-04	9.60E-05
1653	649058.75	4197831.64	1.13E-03	1.21E-03	1.70E-04	1.81E-04	1.66E-04	1.61E-04	8.84E-05	7.32E-05
1654	649036.27	4197829.52	8.46E-04	9.02E-04	1.27E-04	1.35E-04	1.24E-04	1.21E-04	6.61E-05	5.47E-05
1655	649173.53	4197817.36	1.88E-03	2.01E-03	2.83E-04	3.01E-04	2.77E-04	2.68E-04	1.47E-04	1.22E-04
1656	649151.04	4197815.24	1.69E-03	1.80E-03	2.54E-04	2.70E-04	2.48E-04	2.41E-04	1.32E-04	1.09E-04
1657	649128.56	4197813.12	1.47E-03	1.57E-03	2.22E-04	2.36E-04	2.17E-04	2.10E-04	1.15E-04	9.53E-05
1658	649106.07	4197811	1.24E-03	1.33E-03	1.87E-04	1.99E-04	1.83E-04	1.77E-04	9.71E-05	8.03E-05
1659	649083.59	4197808.87	1.01E-03	1.08E-03	1.52E-04	1.62E-04	1.49E-04	1.44E-04	7.90E-05	6.54E-05
1660	649061.1	4197806.75	8.04E-04	8.57E-04	1.21E-04	1.28E-04	1.18E-04	1.15E-04	6.28E-05	5.19E-05
1661	649038.61	4197804.63	6.40E-04	6.82E-04	9.62E-05	1.02E-04	9.41E-05	9.12E-05	5.00E-05	4.14E-05
1662	649175.88	4197792.47	1.39E-03	1.48E-03	2.09E-04	2.22E-04	2.04E-04	1.98E-04	1.08E-04	8.97E-05
1663	649153.39	4197790.35	1.23E-03	1.31E-03	1.85E-04	1.97E-04	1.81E-04	1.75E-04	9.62E-05	7.96E-05
1664	649130.91	4197788.23	1.07E-03	1.14E-03	1.60E-04	1.71E-04	1.57E-04	1.52E-04	8.33E-05	6.89E-05
1665	649108.42	4197786.11	9.02E-04	9.62E-04	1.36E-04	1.44E-04	1.33E-04	1.29E-04	7.05E-05	5.83E-05
1666	649085.93	4197783.98	7.48E-04	7.97E-04	1.12E-04	1.20E-04	1.10E-04	1.07E-04	5.84E-05	4.83E-05
1667	649063.45	4197781.86	6.16E-04	6.56E-04	9.26E-05	9.84E-05	9.05E-05	8.77E-05	4.81E-05	3.98E-05
1668	649040.96	4197779.74	5.11E-04	5.45E-04	7.68E-05	8.17E-05	7.51E-05	7.28E-05	3.99E-05	3.30E-05
1669	649180.57	4197742.69	8.29E-04	8.84E-04	1.25E-04	1.33E-04	1.22E-04	1.18E-04	6.48E-05	5.36E-05
1670	649158.09	4197740.57	7.32E-04	7.80E-04	1.10E-04	1.17E-04	1.08E-04	1.04E-04	5.72E-05	4.73E-05
1671	649135.6	4197738.45	6.38E-04	6.80E-04	9.59E-05	1.02E-04	9.38E-05	9.09E-05	4.98E-05	4.12E-05
1672	649113.12	4197736.33	5.51E-04	5.87E-04	8.28E-05	8.81E-05	8.10E-05	7.85E-05	4.30E-05	3.56E-05
1673	649090.63	4197734.21	4.74E-04	5.05E-04	7.13E-05	7.58E-05	6.97E-05	6.76E-05	3.70E-05	3.06E-05
1674	649068.14	4197732.08	4.10E-04	4.37E-04	6.16E-05	6.55E-05	6.02E-05	5.84E-05	3.20E-05	2.65E-05
1675	649045.66	4197729.96	3.57E-04	3.81E-04	5.37E-05	5.71E-05	5.25E-05	5.09E-05	2.79E-05	2.31E-05
1676	649162.78	4197690.79	4.88E-04	5.20E-04	7.33E-05	7.80E-05	7.17E-05	6.95E-05	3.81E-05	3.15E-05
1677	649140.3	4197688.67	4.32E-04	4.60E-04	6.49E-05	6.90E-05	6.35E-05	6.15E-05	3.37E-05	2.79E-05
1678	649117.81	4197686.55	3.81E-04	4.07E-04	5.74E-05	6.10E-05	5.61E-05	5.44E-05	2.98E-05	2.46E-05
1679	649095.33	4197684.43	3.38E-04	3.60E-04	5.08E-05	5.40E-05	4.97E-05	4.81E-05	2.64E-05	2.18E-05
1680	649072.84	4197682.31	3.01E-04	3.20E-04	4.52E-05	4.80E-05	4.42E-05	4.28E-05	2.35E-05	1.94E-05
1681	649050.36	4197680.18	2.69E-04	2.87E-04	4.05E-05	4.30E-05	3.96E-05	3.84E-05	2.10E-05	1.74E-05
1682	649167.48	4197641.01	3.52E-04	3.75E-04	5.29E-05	5.62E-05	5.17E-05	5.01E-05	2.75E-05	2.27E-05
1683	649144.99	4197638.89	3.17E-04	3.38E-04	4.76E-05	5.06E-05	4.66E-05	4.51E-05	2.47E-05	2.05E-05
1684	649122.51	4197636.77	2.85E-04	3.04E-04	4.29E-05	4.56E-05	4.20E-05	4.07E-05	2.23E-05	1.84E-05
1685	649100.02	4197634.65	2.58E-04	2.75E-04	3.88E-05	4.12E-05	3.79E-05	3.67E-05	2.01E-05	1.67E-05
1686	649077.54	4197632.53	2.34E-04	2.49E-04	3.52E-05	3.74E-05	3.44E-05	3.34E-05	1.83E-05	1.51E-05
1687	649055.05	4197630.41	2.13E-04	2.28E-04	3.21E-05	3.41E-05	3.14E-05	3.04E-05	1.67E-05	1.38E-05
1688	649172.18	4197591.23	2.69E-04	2.86E-04	4.04E-05	4.29E-05	3.95E-05	3.83E-05	2.10E-05	1.74E-05
1689	649149.69	4197589.11	2.45E-04	2.62E-04	3.69E-05	3.92E-05	3.61E-05	3.50E-05	1.92E-05	1.59E-05
1690	649127.21	4197586.99	2.25E-04	2.39E-04	3.38E-05	3.59E-05	3.30E-05	3.20E-05	1.75E-05	1.45E-05
1691	649104.72	4197584.87	2.06E-04	2.20E-04	3.10E-05	3.30E-05	3.03E-05	2.94E-05	1.61E-05	1.33E-05
1692	649082.23	4197582.75	1.90E-04	2.02E-04	2.85E-05	3.03E-05	2.79E-05	2.70E-05	1.48E-05	1.23E-05
1693	649059.75	4197580.63	1.75E-04	1.87E-04	2.64E-05	2.80E-05	2.58E-05	2.50E-05	1.37E-05	1.13E-05
1694	649159.08	4197489.55	1.64E-04	1.75E-04	2.46E-05	2.62E-05	2.41E-05	2.33E-05	1.28E-05	1.06E-05
1695	649136.6	4197487.43	1.53E-04	1.64E-04	2.31E-05	2.45E-05	2.26E-05	2.19E-05	1.20E-05	9.91E-06
1696	649114.11	4197485.31	1.44E-04	1.53E-04	2.16E-05	2.30E-05	2.12E-05	2.05E-05	1.12E-05	9.30E-06
1697	649091.63	4197483.19	1.35E-04	1.44E-04	2.03E-05	2.16E-05	1.99E-05	1.93E-05	1.06E-05	8.73E-06
1698	649069.14	4197481.07	1.27E-04	1.36E-04	1.91E-05	2.03E-05	1.87E-05	1.81E-05	9.93E-06	8.22E-06
1699	649145.99	4197387.87	1.14E-04	1.21E-04	1.71E-05	1.82E-05	1.67E-05	1.62E-05	8.87E-06	7.34E-06
1700	649123.51	4197385.75	1.08E-04	1.15E-04	1.63E-05	1.73E-05	1.59E-05	1.54E-05	8.44E-06	6.99E-06
1701	649101.02	4197383.63	1.03E-04	1.10E-04	1.55E-05	1.65E-05	1.51E-05	1.47E-05	8.04E-06	6.65E-06
1702	649078.53	4197381.51	9.81E-05	1.05E-04	1.48E-05	1.57E-05	1.44E-05	1.40E-05	7.66E-06	6.34E-06
1703	649132.9	4197286.2	8.51E-05	9.07E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.65E-06	5.50E-06
1704	649110.41	4197284.07	8.18E-05	8.73E-05	1.23E-05	1.31E-05	1.20E-05	1.17E-05	6.39E-06	5.29E-06
1705	649087.93	4197281.95	7.87E-05	8.39E-05	1.18E-05	1.26E-05	1.16E-05	1.12E-05	6.15E-06	5.09E-06
1706	649142.29	4197186.64	6.93E-05	7.39E-05	1.04E-05	1.11E-05	1.02E-05	9.88E-06	5.41E-06	4.48E-06

1707	649119.81	4197184.52	6.71E-05	7.15E-05	1.01E-05	1.07E-05	9.86E-06	9.56E-06	5.24E-06	4.33E-06
1708	649097.32	4197182.39	6.50E-05	6.93E-05	9.77E-06	1.04E-05	9.55E-06	9.26E-06	5.07E-06	4.20E-06
1709	649116.11	4196983.28	4.69E-05	5.00E-05	7.06E-06	7.50E-06	6.90E-06	6.69E-06	3.67E-06	3.03E-06
1710	649224.83	4196792.65	3.89E-05	4.15E-05	5.85E-06	6.22E-06	5.72E-06	5.54E-06	3.04E-06	2.51E-06
1711	649153.68	4196585.05	2.88E-05	3.07E-05	4.33E-06	4.60E-06	4.23E-06	4.10E-06	2.25E-06	1.86E-06
1712	649015.78	4197805.24	5.34E-04	5.69E-04	8.02E-05	8.53E-05	7.85E-05	7.60E-05	4.17E-05	3.45E-05
1713	649013.98	4197780.31	4.28E-04	4.57E-04	6.44E-05	6.85E-05	6.30E-05	6.10E-05	3.35E-05	2.77E-05
1714	649020.78	4197729.69	3.15E-04	3.35E-04	4.73E-05	5.03E-05	4.63E-05	4.48E-05	2.46E-05	2.03E-05
1715	649025.48	4197679.91	2.43E-04	2.59E-04	3.65E-05	3.88E-05	3.57E-05	3.46E-05	1.90E-05	1.57E-05
1716	649023.95	4197630.06	1.91E-04	2.04E-04	2.88E-05	3.06E-05	2.81E-05	2.73E-05	1.50E-05	1.24E-05
1717	649019.94	4197580.19	1.55E-04	1.66E-04	2.34E-05	2.48E-05	2.28E-05	2.21E-05	1.21E-05	1.00E-05
1718	649012.28	4197480.44	1.11E-04	1.18E-04	1.67E-05	1.78E-05	1.63E-05	1.58E-05	8.67E-06	7.18E-06
1719	649040.71	4197480.75	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.69E-05	9.27E-06	7.67E-06
1720	649005.97	4197380.71	8.55E-05	9.12E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.68E-06	5.53E-06
1721	649037.07	4197381.05	9.07E-05	9.66E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.08E-06	5.86E-06
1722	648998.36	4197280.96	6.88E-05	7.33E-05	1.03E-05	1.10E-05	1.01E-05	9.80E-06	5.37E-06	4.44E-06
1723	649028.22	4197281.29	7.19E-05	7.67E-05	1.08E-05	1.15E-05	1.06E-05	1.02E-05	5.62E-06	4.65E-06
1724	649058.07	4197281.62	7.52E-05	8.02E-05	1.13E-05	1.20E-05	1.11E-05	1.07E-05	5.88E-06	4.86E-06
1725	648990.89	4197181.22	5.71E-05	6.08E-05	8.58E-06	9.12E-06	8.39E-06	8.13E-06	4.46E-06	3.69E-06
1726	649019.92	4197181.54	5.91E-05	6.30E-05	8.88E-06	9.45E-06	8.69E-06	8.42E-06	4.62E-06	3.82E-06
1727	649048.94	4197181.86	6.12E-05	6.52E-05	9.20E-06	9.78E-06	9.00E-06	8.72E-06	4.78E-06	3.96E-06
1728	648976.79	4196981.74	4.19E-05	4.47E-05	6.30E-06	6.70E-06	6.16E-06	5.97E-06	3.27E-06	2.71E-06
1729	649006.64	4196982.07	4.29E-05	4.57E-05	6.45E-06	6.85E-06	6.30E-06	6.11E-06	3.35E-06	2.77E-06
1730	649036.49	4196982.4	4.39E-05	4.68E-05	6.60E-06	7.02E-06	6.45E-06	6.25E-06	3.43E-06	2.84E-06
1731	649066.35	4196982.73	4.50E-05	4.79E-05	6.76E-06	7.19E-06	6.61E-06	6.41E-06	3.51E-06	2.91E-06
1732	648962.58	4196782.26	3.25E-05	3.47E-05	4.89E-06	5.20E-06	4.78E-06	4.64E-06	2.54E-06	2.10E-06
1733	648992.99	4196782.6	3.30E-05	3.52E-05	4.97E-06	5.28E-06	4.86E-06	4.71E-06	2.58E-06	2.13E-06
1734	649023.4	4196782.93	3.36E-05	3.58E-05	5.05E-06	5.36E-06	4.93E-06	4.78E-06	2.62E-06	2.17E-06
1735	649053.81	4196783.27	3.41E-05	3.64E-05	5.13E-06	5.46E-06	5.02E-06	4.86E-06	2.67E-06	2.21E-06
1736	649084.21	4196783.6	3.48E-05	3.71E-05	5.23E-06	5.56E-06	5.11E-06	4.95E-06	2.71E-06	2.25E-06
1737	649114.62	4196783.94	3.54E-05	3.78E-05	5.33E-06	5.67E-06	5.21E-06	5.05E-06	2.77E-06	2.29E-06
1738	648948.33	4196582.78	2.63E-05	2.80E-05	3.95E-06	4.20E-06	3.86E-06	3.75E-06	2.05E-06	1.70E-06
1739	648979.13	4196583.12	2.65E-05	2.83E-05	3.99E-06	4.24E-06	3.90E-06	3.78E-06	2.07E-06	1.72E-06
1740	649009.93	4196583.46	2.68E-05	2.86E-05	4.03E-06	4.29E-06	3.94E-06	3.82E-06	2.10E-06	1.73E-06
1741	649040.74	4196583.8	2.72E-05	2.90E-05	4.08E-06	4.34E-06	3.99E-06	3.87E-06	2.12E-06	1.75E-06
1742	649071.54	4196584.14	2.75E-05	2.93E-05	4.14E-06	4.40E-06	4.05E-06	3.92E-06	2.15E-06	1.78E-06
1743	649102.34	4196584.48	2.79E-05	2.98E-05	4.20E-06	4.47E-06	4.11E-06	3.98E-06	2.18E-06	1.81E-06
1744	648934.04	4196383.3	2.19E-05	2.33E-05	3.29E-06	3.50E-06	3.22E-06	3.12E-06	1.71E-06	1.41E-06
1745	648965.14	4196383.64	2.20E-05	2.35E-05	3.31E-06	3.52E-06	3.24E-06	3.14E-06	1.72E-06	1.42E-06
1746	648996.24	4196383.99	2.22E-05	2.36E-05	3.33E-06	3.55E-06	3.26E-06	3.16E-06	1.73E-06	1.43E-06
1747	649027.34	4196384.33	2.24E-05	2.39E-05	3.36E-06	3.58E-06	3.29E-06	3.19E-06	1.75E-06	1.45E-06
1748	649058.44	4196384.67	2.26E-05	2.41E-05	3.40E-06	3.61E-06	3.32E-06	3.22E-06	1.77E-06	1.46E-06
1749	649089.53	4196385.02	2.29E-05	2.44E-05	3.44E-06	3.66E-06	3.36E-06	3.26E-06	1.79E-06	1.48E-06
1750	649004.46	4197859.53	8.64E-04	9.21E-04	1.30E-04	1.38E-04	1.27E-04	1.23E-04	6.75E-05	5.58E-05
1751	649010.82	4197831.62	6.64E-04	7.07E-04	9.98E-05	1.06E-04	9.76E-05	9.46E-05	5.18E-05	4.29E-05
1752	648987.36	4197812.54	4.60E-04	4.90E-04	6.92E-05	7.36E-05	6.76E-05	6.56E-05	3.59E-05	2.97E-05
1753	648986.97	4197786.08	3.79E-04	4.04E-04	5.70E-05	6.06E-05	5.57E-05	5.40E-05	2.96E-05	2.45E-05
1754	648977.97	4197737.36	2.70E-04	2.88E-04	4.06E-05	4.32E-05	3.97E-05	3.85E-05	2.11E-05	1.75E-05
1755	648960.48	4197690.46	2.01E-04	2.14E-04	3.02E-05	3.22E-05	2.96E-05	2.87E-05	1.57E-05	1.30E-05
1756	648983.63	4197685.52	2.13E-04	2.27E-04	3.21E-05	3.41E-05	3.14E-05	3.04E-05	1.67E-05	1.38E-05
1757	648944.11	4197643.32	1.58E-04	1.68E-04	2.37E-05	2.52E-05	2.32E-05	2.25E-05	1.23E-05	1.02E-05
1758	648969.43	4197637.91	1.66E-04	1.77E-04	2.50E-05	2.66E-05	2.45E-05	2.37E-05	1.30E-05	1.08E-05
1759	648994.75	4197632.5	1.76E-04	1.88E-04	2.65E-05	2.81E-05	2.59E-05	2.51E-05	1.37E-05	1.14E-05
1760	648926.67	4197596.41	1.28E-04	1.36E-04	1.92E-05	2.04E-05	1.88E-05	1.82E-05	9.98E-06	8.26E-06
1761	648950.97	4197591.22	1.34E-04	1.42E-04	2.01E-05	2.14E-05	1.97E-05	1.90E-05	1.04E-05	8.64E-06
1762	648975.28	4197586.02	1.40E-04	1.49E-04	2.10E-05	2.24E-05	2.06E-05	1.99E-05	1.09E-05	9.05E-06
1763	648892.67	4197502.4	9.07E-05	9.67E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.08E-06	5.86E-06

1764	648917.6	4197497.07	9.43E-05	1.01E-04	1.42E-05	1.51E-05	1.39E-05	1.34E-05	7.36E-06	6.09E-06
1765	648942.54	4197491.74	9.81E-05	1.05E-04	1.47E-05	1.57E-05	1.44E-05	1.40E-05	7.66E-06	6.34E-06
1766	648967.47	4197486.41	1.02E-04	1.09E-04	1.53E-05	1.63E-05	1.50E-05	1.45E-05	7.97E-06	6.60E-06
1767	648858.6	4197408.4	6.91E-05	7.37E-05	1.04E-05	1.10E-05	1.02E-05	9.85E-06	5.40E-06	4.47E-06
1768	648883.92	4197402.99	7.17E-05	7.64E-05	1.08E-05	1.15E-05	1.05E-05	1.02E-05	5.60E-06	4.63E-06
1769	648909.24	4197397.58	7.43E-05	7.92E-05	1.12E-05	1.19E-05	1.09E-05	1.06E-05	5.80E-06	4.80E-06
1770	648934.56	4197392.17	7.69E-05	8.20E-05	1.16E-05	1.23E-05	1.13E-05	1.10E-05	6.01E-06	4.97E-06
1771	648959.88	4197386.76	7.97E-05	8.49E-05	1.20E-05	1.27E-05	1.17E-05	1.14E-05	6.22E-06	5.15E-06
1772	648824.06	4197314.5	5.54E-05	5.90E-05	8.32E-06	8.85E-06	8.14E-06	7.89E-06	4.32E-06	3.58E-06
1773	648848.37	4197309.31	5.72E-05	6.10E-05	8.60E-06	9.14E-06	8.41E-06	8.15E-06	4.47E-06	3.70E-06
1774	648872.68	4197304.11	5.91E-05	6.30E-05	8.88E-06	9.44E-06	8.69E-06	8.42E-06	4.61E-06	3.82E-06
1775	648896.99	4197298.92	6.09E-05	6.49E-05	9.16E-06	9.74E-06	8.95E-06	8.68E-06	4.76E-06	3.94E-06
1776	648921.29	4197293.72	6.27E-05	6.68E-05	9.43E-06	1.00E-05	9.22E-06	8.93E-06	4.90E-06	4.05E-06
1777	648945.6	4197288.53	6.45E-05	6.87E-05	9.69E-06	1.03E-05	9.48E-06	9.19E-06	5.04E-06	4.17E-06
1778	648969.91	4197283.34	6.62E-05	7.06E-05	9.96E-06	1.06E-05	9.74E-06	9.44E-06	5.17E-06	4.28E-06
1779	648789.98	4197220.51	4.60E-05	4.90E-05	6.92E-06	7.36E-06	6.76E-06	6.56E-06	3.59E-06	2.97E-06
1780	648814.64	4197215.24	4.75E-05	5.06E-05	7.14E-06	7.59E-06	6.98E-06	6.77E-06	3.71E-06	3.07E-06
1781	648839.3	4197209.97	4.90E-05	5.22E-05	7.36E-06	7.83E-06	7.20E-06	6.98E-06	3.82E-06	3.16E-06
1782	648863.96	4197204.7	5.04E-05	5.37E-05	7.57E-06	8.05E-06	7.41E-06	7.18E-06	3.93E-06	3.26E-06
1783	648888.62	4197199.43	5.17E-05	5.51E-05	7.78E-06	8.27E-06	7.60E-06	7.37E-06	4.04E-06	3.34E-06
1784	648913.28	4197194.16	5.30E-05	5.65E-05	7.97E-06	8.47E-06	7.79E-06	7.55E-06	4.14E-06	3.43E-06
1785	648937.94	4197188.89	5.42E-05	5.78E-05	8.15E-06	8.67E-06	7.97E-06	7.73E-06	4.24E-06	3.50E-06
1786	648962.6	4197183.62	5.54E-05	5.91E-05	8.33E-06	8.86E-06	8.15E-06	7.89E-06	4.33E-06	3.58E-06
1787	648721.73	4197032.54	3.43E-05	3.65E-05	5.15E-06	5.48E-06	5.04E-06	4.88E-06	2.68E-06	2.21E-06
1788	648746.88	4197027.16	3.53E-05	3.76E-05	5.31E-06	5.64E-06	5.19E-06	5.03E-06	2.76E-06	2.28E-06
1789	648772.03	4197021.79	3.62E-05	3.86E-05	5.45E-06	5.79E-06	5.33E-06	5.17E-06	2.83E-06	2.34E-06
1790	648797.17	4197016.41	3.71E-05	3.96E-05	5.59E-06	5.94E-06	5.46E-06	5.29E-06	2.90E-06	2.40E-06
1791	648822.32	4197011.04	3.80E-05	4.05E-05	5.71E-06	6.07E-06	5.59E-06	5.41E-06	2.97E-06	2.45E-06
1792	648847.47	4197005.67	3.87E-05	4.13E-05	5.83E-06	6.19E-06	5.70E-06	5.52E-06	3.03E-06	2.50E-06
1793	648872.61	4197000.29	3.94E-05	4.20E-05	5.93E-06	6.30E-06	5.80E-06	5.62E-06	3.08E-06	2.55E-06
1794	648897.76	4196994.92	4.01E-05	4.27E-05	6.02E-06	6.40E-06	5.89E-06	5.71E-06	3.13E-06	2.59E-06
1795	648922.91	4196989.55	4.06E-05	4.33E-05	6.11E-06	6.49E-06	5.97E-06	5.79E-06	3.17E-06	2.62E-06
1796	648948.05	4196984.17	4.11E-05	4.38E-05	6.18E-06	6.57E-06	6.05E-06	5.86E-06	3.21E-06	2.66E-06
1797	648653.44	4196844.57	2.72E-05	2.90E-05	4.09E-06	4.35E-06	4.00E-06	3.88E-06	2.13E-06	1.76E-06
1798	648678.9	4196839.13	2.80E-05	2.98E-05	4.20E-06	4.47E-06	4.11E-06	3.98E-06	2.18E-06	1.81E-06
1799	648704.37	4196833.69	2.86E-05	3.05E-05	4.31E-06	4.58E-06	4.21E-06	4.08E-06	2.24E-06	1.85E-06
1800	648729.83	4196828.25	2.92E-05	3.12E-05	4.40E-06	4.68E-06	4.30E-06	4.17E-06	2.28E-06	1.89E-06
1801	648755.3	4196822.81	2.98E-05	3.18E-05	4.48E-06	4.77E-06	4.38E-06	4.25E-06	2.33E-06	1.93E-06
1802	648780.77	4196817.36	3.03E-05	3.23E-05	4.56E-06	4.85E-06	4.46E-06	4.32E-06	2.37E-06	1.96E-06
1803	648806.23	4196811.92	3.08E-05	3.28E-05	4.62E-06	4.92E-06	4.52E-06	4.38E-06	2.40E-06	1.99E-06
1804	648831.7	4196806.48	3.11E-05	3.32E-05	4.68E-06	4.98E-06	4.58E-06	4.44E-06	2.43E-06	2.01E-06
1805	648857.16	4196801.04	3.15E-05	3.35E-05	4.73E-06	5.03E-06	4.63E-06	4.48E-06	2.46E-06	2.03E-06
1806	648882.63	4196795.6	3.17E-05	3.38E-05	4.77E-06	5.07E-06	4.67E-06	4.52E-06	2.48E-06	2.05E-06
1807	648908.09	4196790.16	3.20E-05	3.41E-05	4.81E-06	5.11E-06	4.70E-06	4.56E-06	2.50E-06	2.07E-06
1808	648933.56	4196784.71	3.22E-05	3.43E-05	4.84E-06	5.14E-06	4.73E-06	4.58E-06	2.51E-06	2.08E-06
1809	648584.9	4196656.66	2.26E-05	2.40E-05	3.39E-06	3.61E-06	3.32E-06	3.21E-06	1.76E-06	1.46E-06
1810	648609.98	4196651.3	2.31E-05	2.46E-05	3.47E-06	3.69E-06	3.39E-06	3.29E-06	1.80E-06	1.49E-06
1811	648635.06	4196645.94	2.35E-05	2.51E-05	3.54E-06	3.76E-06	3.46E-06	3.36E-06	1.84E-06	1.52E-06
1812	648660.14	4196640.58	2.40E-05	2.56E-05	3.61E-06	3.83E-06	3.53E-06	3.42E-06	1.87E-06	1.55E-06
1813	648685.22	4196635.23	2.44E-05	2.60E-05	3.67E-06	3.90E-06	3.59E-06	3.48E-06	1.91E-06	1.58E-06
1814	648710.3	4196629.87	2.48E-05	2.64E-05	3.72E-06	3.96E-06	3.64E-06	3.53E-06	1.93E-06	1.60E-06
1815	648735.38	4196624.51	2.51E-05	2.67E-05	3.77E-06	4.00E-06	3.68E-06	3.57E-06	1.96E-06	1.62E-06
1816	648760.46	4196619.15	2.53E-05	2.70E-05	3.81E-06	4.05E-06	3.72E-06	3.61E-06	1.98E-06	1.64E-06
1817	648785.54	4196613.79	2.55E-05	2.72E-05	3.84E-06	4.08E-06	3.75E-06	3.64E-06	1.99E-06	1.65E-06
1818	648810.62	4196608.43	2.57E-05	2.74E-05	3.87E-06	4.11E-06	3.78E-06	3.66E-06	2.01E-06	1.66E-06
1819	648835.7	4196603.07	2.58E-05	2.76E-05	3.89E-06	4.13E-06	3.80E-06	3.68E-06	2.02E-06	1.67E-06
1820	648860.78	4196597.71	2.60E-05	2.77E-05	3.90E-06	4.15E-06	3.82E-06	3.70E-06	2.03E-06	1.68E-06

1821	648885.86	4196592.35	2.60E-05	2.77E-05	3.91E-06	4.16E-06	3.83E-06	3.71E-06	2.03E-06	1.68E-06
1822	648910.94	4196586.99	2.61E-05	2.78E-05	3.93E-06	4.17E-06	3.84E-06	3.72E-06	2.04E-06	1.69E-06
1823	648516.58	4196468.71	1.92E-05	2.05E-05	2.89E-06	3.07E-06	2.82E-06	2.74E-06	1.50E-06	1.24E-06
1824	648541.9	4196463.3	1.96E-05	2.09E-05	2.95E-06	3.13E-06	2.88E-06	2.79E-06	1.53E-06	1.27E-06
1825	648567.22	4196457.89	2.00E-05	2.13E-05	3.00E-06	3.19E-06	2.94E-06	2.85E-06	1.56E-06	1.29E-06
1826	648592.54	4196452.47	2.03E-05	2.16E-05	3.05E-06	3.24E-06	2.98E-06	2.89E-06	1.59E-06	1.31E-06
1827	648617.86	4196447.06	2.06E-05	2.20E-05	3.10E-06	3.29E-06	3.03E-06	2.94E-06	1.61E-06	1.33E-06
1828	648643.19	4196441.65	2.09E-05	2.22E-05	3.14E-06	3.34E-06	3.07E-06	2.97E-06	1.63E-06	1.35E-06
1829	648668.51	4196436.24	2.11E-05	2.25E-05	3.17E-06	3.37E-06	3.10E-06	3.01E-06	1.65E-06	1.36E-06
1830	648693.83	4196430.83	2.13E-05	2.27E-05	3.20E-06	3.40E-06	3.13E-06	3.03E-06	1.66E-06	1.38E-06
1831	648719.15	4196425.42	2.15E-05	2.29E-05	3.23E-06	3.43E-06	3.15E-06	3.06E-06	1.68E-06	1.39E-06
1832	648744.47	4196420.01	2.16E-05	2.30E-05	3.24E-06	3.45E-06	3.17E-06	3.07E-06	1.69E-06	1.39E-06
1833	648769.79	4196414.6	2.17E-05	2.31E-05	3.26E-06	3.46E-06	3.19E-06	3.09E-06	1.69E-06	1.40E-06
1834	648795.11	4196409.19	2.17E-05	2.32E-05	3.27E-06	3.48E-06	3.20E-06	3.10E-06	1.70E-06	1.40E-06
1835	648820.43	4196403.78	2.18E-05	2.32E-05	3.28E-06	3.48E-06	3.20E-06	3.10E-06	1.70E-06	1.41E-06
1836	648845.75	4196398.36	2.18E-05	2.32E-05	3.28E-06	3.49E-06	3.21E-06	3.11E-06	1.70E-06	1.41E-06
1837	648871.08	4196392.95	2.18E-05	2.32E-05	3.28E-06	3.49E-06	3.21E-06	3.11E-06	1.70E-06	1.41E-06
1838	648896.4	4196387.54	2.18E-05	2.32E-05	3.28E-06	3.49E-06	3.21E-06	3.11E-06	1.70E-06	1.41E-06
1839	648989.09	4197839.11	5.85E-04	6.23E-04	8.79E-05	9.35E-05	8.60E-05	8.33E-05	4.57E-05	3.78E-05
1840	648965.18	4197795.2	3.55E-04	3.79E-04	5.34E-05	5.68E-05	5.22E-05	5.06E-05	2.78E-05	2.30E-05
1841	648948.08	4197748.22	2.52E-04	2.69E-04	3.79E-05	4.03E-05	3.70E-05	3.59E-05	1.97E-05	1.63E-05
1842	648924.16	4197704.31	1.89E-04	2.01E-04	2.84E-05	3.02E-05	2.78E-05	2.69E-05	1.48E-05	1.22E-05
1843	648900.24	4197660.4	1.48E-04	1.58E-04	2.23E-05	2.37E-05	2.18E-05	2.11E-05	1.16E-05	9.59E-06
1844	648920.69	4197651.17	1.52E-04	1.62E-04	2.28E-05	2.43E-05	2.23E-05	2.16E-05	1.19E-05	9.81E-06
1845	648877.69	4197615.87	1.21E-04	1.28E-04	1.81E-05	1.93E-05	1.77E-05	1.72E-05	9.41E-06	7.79E-06
1846	648902.23	4197604.8	1.24E-04	1.32E-04	1.86E-05	1.98E-05	1.82E-05	1.76E-05	9.65E-06	7.98E-06
1847	648829.47	4197528.23	8.49E-05	9.05E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.63E-06	5.49E-06
1848	648852.84	4197517.69	8.67E-05	9.24E-05	1.30E-05	1.39E-05	1.27E-05	1.24E-05	6.77E-06	5.60E-06
1849	648781.42	4197440.51	6.39E-05	6.81E-05	9.61E-06	1.02E-05	9.40E-06	9.11E-06	4.99E-06	4.13E-06
1850	648804.14	4197430.26	6.52E-05	6.95E-05	9.80E-06	1.04E-05	9.59E-06	9.29E-06	5.09E-06	4.21E-06
1851	648826.85	4197420.01	6.66E-05	7.10E-05	1.00E-05	1.07E-05	9.80E-06	9.49E-06	5.20E-06	4.31E-06
1852	648734.19	4197352.42	5.05E-05	5.38E-05	7.59E-06	8.07E-06	7.42E-06	7.19E-06	3.94E-06	3.26E-06
1853	648758.73	4197341.35	5.16E-05	5.50E-05	7.76E-06	8.25E-06	7.59E-06	7.35E-06	4.03E-06	3.33E-06
1854	648783.26	4197330.28	5.29E-05	5.63E-05	7.95E-06	8.45E-06	7.77E-06	7.53E-06	4.13E-06	3.42E-06
1855	648686.13	4197264.7	4.12E-05	4.40E-05	6.20E-06	6.59E-06	6.06E-06	5.88E-06	3.22E-06	2.67E-06
1856	648709.99	4197253.94	4.22E-05	4.50E-05	6.34E-06	6.74E-06	6.20E-06	6.01E-06	3.29E-06	2.73E-06
1857	648733.84	4197243.18	4.32E-05	4.61E-05	6.50E-06	6.91E-06	6.35E-06	6.16E-06	3.38E-06	2.79E-06
1858	648757.69	4197232.41	4.43E-05	4.73E-05	6.67E-06	7.09E-06	6.52E-06	6.32E-06	3.46E-06	2.86E-06
1859	648590.7	4197088.96	2.98E-05	3.18E-05	4.48E-06	4.76E-06	4.38E-06	4.25E-06	2.33E-06	1.93E-06
1860	648615.23	4197077.89	3.05E-05	3.25E-05	4.59E-06	4.88E-06	4.49E-06	4.35E-06	2.38E-06	1.97E-06
1861	648639.77	4197066.82	3.13E-05	3.34E-05	4.71E-06	5.01E-06	4.61E-06	4.46E-06	2.45E-06	2.02E-06
1862	648664.3	4197055.75	3.22E-05	3.43E-05	4.84E-06	5.14E-06	4.73E-06	4.59E-06	2.51E-06	2.08E-06
1863	648688.84	4197044.68	3.31E-05	3.52E-05	4.97E-06	5.28E-06	4.86E-06	4.71E-06	2.58E-06	2.14E-06
1864	648495.18	4196913.26	2.31E-05	2.46E-05	3.48E-06	3.69E-06	3.40E-06	3.29E-06	1.81E-06	1.49E-06
1865	648520.17	4196901.98	2.37E-05	2.53E-05	3.56E-06	3.79E-06	3.48E-06	3.38E-06	1.85E-06	1.53E-06
1866	648545.16	4196890.71	2.43E-05	2.59E-05	3.66E-06	3.89E-06	3.58E-06	3.47E-06	1.90E-06	1.57E-06
1867	648570.15	4196879.43	2.50E-05	2.67E-05	3.76E-06	4.00E-06	3.68E-06	3.56E-06	1.95E-06	1.62E-06
1868	648595.14	4196868.15	2.57E-05	2.74E-05	3.86E-06	4.10E-06	3.77E-06	3.66E-06	2.01E-06	1.66E-06
1869	648620.13	4196856.88	2.63E-05	2.81E-05	3.96E-06	4.21E-06	3.87E-06	3.75E-06	2.06E-06	1.70E-06
1870	648399.63	4196737.57	1.88E-05	2.01E-05	2.83E-06	3.01E-06	2.77E-06	2.68E-06	1.47E-06	1.22E-06
1871	648424.94	4196726.15	1.93E-05	2.06E-05	2.90E-06	3.09E-06	2.84E-06	2.75E-06	1.51E-06	1.25E-06
1872	648450.25	4196714.73	1.98E-05	2.11E-05	2.98E-06	3.17E-06	2.91E-06	2.82E-06	1.55E-06	1.28E-06
1873	648475.57	4196703.3	2.03E-05	2.17E-05	3.06E-06	3.25E-06	2.99E-06	2.90E-06	1.59E-06	1.31E-06
1874	648500.88	4196691.88	2.09E-05	2.22E-05	3.14E-06	3.33E-06	3.07E-06	2.97E-06	1.63E-06	1.35E-06
1875	648526.19	4196680.46	2.14E-05	2.28E-05	3.21E-06	3.42E-06	3.14E-06	3.05E-06	1.67E-06	1.38E-06
1876	648551.51	4196669.04	2.19E-05	2.33E-05	3.29E-06	3.50E-06	3.22E-06	3.12E-06	1.71E-06	1.41E-06
1877	648303.7	4196562.05	1.59E-05	1.69E-05	2.38E-06	2.54E-06	2.33E-06	2.26E-06	1.24E-06	1.02E-06

1878	648328.24	4196550.98	1.62E-05	1.73E-05	2.44E-06	2.59E-06	2.38E-06	2.31E-06	1.27E-06	1.05E-06
1879	648352.77	4196539.91	1.66E-05	1.77E-05	2.50E-06	2.66E-06	2.44E-06	2.37E-06	1.30E-06	1.07E-06
1880	648377.31	4196528.84	1.70E-05	1.81E-05	2.56E-06	2.72E-06	2.50E-06	2.42E-06	1.33E-06	1.10E-06
1881	648401.84	4196517.77	1.74E-05	1.86E-05	2.62E-06	2.79E-06	2.56E-06	2.48E-06	1.36E-06	1.13E-06
1882	648426.37	4196506.7	1.78E-05	1.90E-05	2.68E-06	2.85E-06	2.62E-06	2.54E-06	1.39E-06	1.15E-06
1883	648450.91	4196495.62	1.82E-05	1.94E-05	2.74E-06	2.91E-06	2.68E-06	2.60E-06	1.42E-06	1.18E-06
1884	648475.44	4196484.55	1.86E-05	1.98E-05	2.80E-06	2.97E-06	2.73E-06	2.65E-06	1.45E-06	1.20E-06
1885	648979.04	4197876.56	7.72E-04	8.23E-04	1.16E-04	1.23E-04	1.14E-04	1.10E-04	6.03E-05	4.99E-05
1886	648962.88	4197857.48	5.47E-04	5.84E-04	8.23E-05	8.75E-05	8.05E-05	7.80E-05	4.28E-05	3.54E-05
1887	648962.67	4197825.92	4.29E-04	4.58E-04	6.46E-05	6.87E-05	6.31E-05	6.12E-05	3.35E-05	2.78E-05
1888	648940.22	4197811.15	3.41E-04	3.64E-04	5.13E-05	5.46E-05	5.02E-05	4.87E-05	2.67E-05	2.21E-05
1889	648916.31	4197767.24	2.43E-04	2.59E-04	3.65E-05	3.88E-05	3.57E-05	3.46E-05	1.90E-05	1.57E-05
1890	648898.27	4197781.16	2.41E-04	2.57E-04	3.62E-05	3.85E-05	3.54E-05	3.43E-05	1.88E-05	1.56E-05
1891	648884	4197729.08	1.83E-04	1.95E-04	2.76E-05	2.93E-05	2.70E-05	2.61E-05	1.43E-05	1.18E-05
1892	648865.96	4197743	1.83E-04	1.95E-04	2.75E-05	2.92E-05	2.69E-05	2.61E-05	1.43E-05	1.18E-05
1893	648851.69	4197690.92	1.45E-04	1.54E-04	2.18E-05	2.32E-05	2.13E-05	2.06E-05	1.13E-05	9.36E-06
1894	648876.87	4197673.67	1.46E-04	1.55E-04	2.19E-05	2.33E-05	2.14E-05	2.08E-05	1.14E-05	9.43E-06
1895	648833.65	4197704.84	1.45E-04	1.55E-04	2.18E-05	2.32E-05	2.13E-05	2.07E-05	1.13E-05	9.38E-06
1896	648821.06	4197651.61	1.18E-04	1.26E-04	1.78E-05	1.89E-05	1.74E-05	1.69E-05	9.24E-06	7.64E-06
1897	648841.2	4197637.81	1.18E-04	1.26E-04	1.78E-05	1.89E-05	1.74E-05	1.69E-05	9.25E-06	7.66E-06
1898	648801.34	4197666.68	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.69E-05	9.29E-06	7.68E-06
1899	648755.97	4197575.62	8.42E-05	8.98E-05	1.27E-05	1.35E-05	1.24E-05	1.20E-05	6.58E-06	5.44E-06
1900	648775.15	4197562.48	8.39E-05	8.94E-05	1.26E-05	1.34E-05	1.23E-05	1.20E-05	6.55E-06	5.42E-06
1901	648794.33	4197549.34	8.38E-05	8.94E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.55E-06	5.42E-06
1902	648736.73	4197590.36	8.51E-05	9.07E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.65E-06	5.50E-06
1903	648691.09	4197499.48	6.39E-05	6.81E-05	9.61E-06	1.02E-05	9.39E-06	9.10E-06	4.99E-06	4.13E-06
1904	648709.73	4197486.7	6.34E-05	6.76E-05	9.53E-06	1.01E-05	9.32E-06	9.04E-06	4.95E-06	4.10E-06
1905	648737.71	4197467.54	6.31E-05	6.73E-05	9.49E-06	1.01E-05	9.28E-06	8.99E-06	4.93E-06	4.08E-06
1906	648672.11	4197514.04	6.48E-05	6.91E-05	9.74E-06	1.04E-05	9.53E-06	9.23E-06	5.06E-06	4.19E-06
1907	648627.22	4197422.65	5.06E-05	5.39E-05	7.61E-06	8.09E-06	7.44E-06	7.21E-06	3.95E-06	3.27E-06
1908	648647.36	4197408.85	5.01E-05	5.34E-05	7.53E-06	8.00E-06	7.36E-06	7.13E-06	3.91E-06	3.23E-06
1909	648667.5	4197395.05	4.97E-05	5.30E-05	7.48E-06	7.95E-06	7.31E-06	7.09E-06	3.88E-06	3.21E-06
1910	648687.64	4197381.26	4.96E-05	5.29E-05	7.46E-06	7.93E-06	7.30E-06	7.07E-06	3.88E-06	3.21E-06
1911	648707.78	4197367.46	4.97E-05	5.30E-05	7.48E-06	7.95E-06	7.31E-06	7.09E-06	3.89E-06	3.21E-06
1912	648607.5	4197437.72	5.15E-05	5.49E-05	7.74E-06	8.23E-06	7.57E-06	7.34E-06	4.02E-06	3.33E-06
1913	648562.32	4197346.52	4.14E-05	4.42E-05	6.23E-06	6.62E-06	6.09E-06	5.90E-06	3.24E-06	2.68E-06
1914	648581.9	4197333.1	4.09E-05	4.36E-05	6.15E-06	6.54E-06	6.01E-06	5.83E-06	3.20E-06	2.64E-06
1915	648601.48	4197319.69	4.06E-05	4.32E-05	6.10E-06	6.48E-06	5.96E-06	5.78E-06	3.17E-06	2.62E-06
1916	648621.06	4197306.28	4.04E-05	4.30E-05	6.07E-06	6.46E-06	5.94E-06	5.75E-06	3.15E-06	2.61E-06
1917	648640.64	4197292.86	4.04E-05	4.31E-05	6.07E-06	6.46E-06	5.94E-06	5.76E-06	3.16E-06	2.61E-06
1918	648660.22	4197279.45	4.06E-05	4.33E-05	6.10E-06	6.49E-06	5.97E-06	5.78E-06	3.17E-06	2.62E-06
1919	648542.88	4197361.4	4.22E-05	4.50E-05	6.35E-06	6.75E-06	6.21E-06	6.02E-06	3.30E-06	2.73E-06
1920	648433.37	4197193.69	2.98E-05	3.17E-05	4.48E-06	4.76E-06	4.38E-06	4.24E-06	2.32E-06	1.92E-06
1921	648453.51	4197179.89	2.93E-05	3.13E-05	4.41E-06	4.69E-06	4.31E-06	4.18E-06	2.29E-06	1.89E-06
1922	648473.65	4197166.09	2.90E-05	3.09E-05	4.36E-06	4.64E-06	4.27E-06	4.13E-06	2.27E-06	1.87E-06
1923	648493.79	4197152.29	2.88E-05	3.07E-05	4.33E-06	4.61E-06	4.24E-06	4.11E-06	2.25E-06	1.86E-06
1924	648513.93	4197138.5	2.88E-05	3.07E-05	4.33E-06	4.60E-06	4.23E-06	4.10E-06	2.25E-06	1.86E-06
1925	648534.07	4197124.7	2.88E-05	3.07E-05	4.34E-06	4.61E-06	4.24E-06	4.11E-06	2.25E-06	1.86E-06
1926	648554.21	4197110.9	2.91E-05	3.10E-05	4.37E-06	4.64E-06	4.27E-06	4.14E-06	2.27E-06	1.88E-06
1927	648413.65	4197208.75	3.04E-05	3.24E-05	4.57E-06	4.85E-06	4.46E-06	4.33E-06	2.37E-06	1.96E-06
1928	648304.33	4197040.92	2.28E-05	2.43E-05	3.43E-06	3.65E-06	3.36E-06	3.25E-06	1.78E-06	1.47E-06
1929	648324.84	4197026.86	2.25E-05	2.40E-05	3.38E-06	3.59E-06	3.30E-06	3.20E-06	1.76E-06	1.45E-06
1930	648345.35	4197012.81	2.22E-05	2.37E-05	3.34E-06	3.55E-06	3.27E-06	3.16E-06	1.73E-06	1.44E-06
1931	648365.86	4196998.76	2.20E-05	2.35E-05	3.31E-06	3.52E-06	3.24E-06	3.14E-06	1.72E-06	1.42E-06
1932	648386.38	4196984.71	2.20E-05	2.34E-05	3.31E-06	3.51E-06	3.23E-06	3.13E-06	1.72E-06	1.42E-06
1933	648406.89	4196970.65	2.20E-05	2.34E-05	3.31E-06	3.52E-06	3.23E-06	3.13E-06	1.72E-06	1.42E-06
1934	648427.4	4196956.6	2.21E-05	2.36E-05	3.33E-06	3.54E-06	3.25E-06	3.15E-06	1.73E-06	1.43E-06

1935	648447.91	4196942.55	2.23E-05	2.38E-05	3.36E-06	3.57E-06	3.28E-06	3.18E-06	1.74E-06	1.44E-06
1936	648468.43	4196928.5	2.26E-05	2.41E-05	3.40E-06	3.61E-06	3.32E-06	3.22E-06	1.77E-06	1.46E-06
1937	648284.42	4197056.11	2.33E-05	2.48E-05	3.50E-06	3.72E-06	3.42E-06	3.32E-06	1.82E-06	1.51E-06
1938	648175.23	4196888.18	1.83E-05	1.95E-05	2.75E-06	2.93E-06	2.69E-06	2.61E-06	1.43E-06	1.18E-06
1939	648196.01	4196873.95	1.80E-05	1.92E-05	2.71E-06	2.88E-06	2.65E-06	2.57E-06	1.41E-06	1.17E-06
1940	648216.79	4196859.71	1.78E-05	1.90E-05	2.68E-06	2.85E-06	2.62E-06	2.54E-06	1.39E-06	1.15E-06
1941	648237.56	4196845.48	1.77E-05	1.89E-05	2.66E-06	2.83E-06	2.60E-06	2.52E-06	1.38E-06	1.14E-06
1942	648258.34	4196831.24	1.76E-05	1.88E-05	2.65E-06	2.82E-06	2.59E-06	2.51E-06	1.38E-06	1.14E-06
1943	648279.12	4196817.01	1.76E-05	1.88E-05	2.65E-06	2.82E-06	2.59E-06	2.51E-06	1.38E-06	1.14E-06
1944	648299.9	4196802.77	1.77E-05	1.88E-05	2.66E-06	2.83E-06	2.60E-06	2.52E-06	1.38E-06	1.14E-06
1945	648320.68	4196788.54	1.78E-05	1.90E-05	2.68E-06	2.85E-06	2.62E-06	2.54E-06	1.39E-06	1.15E-06
1946	648341.46	4196774.3	1.80E-05	1.92E-05	2.71E-06	2.88E-06	2.65E-06	2.57E-06	1.41E-06	1.16E-06
1947	648362.24	4196760.07	1.83E-05	1.95E-05	2.74E-06	2.92E-06	2.68E-06	2.60E-06	1.43E-06	1.18E-06
1948	648155.19	4196903.47	1.87E-05	1.99E-05	2.81E-06	2.98E-06	2.75E-06	2.66E-06	1.46E-06	1.21E-06
1949	648045.68	4196735.76	1.52E-05	1.62E-05	2.29E-06	2.43E-06	2.23E-06	2.17E-06	1.19E-06	9.82E-07
1950	648065.82	4196721.96	1.50E-05	1.60E-05	2.25E-06	2.40E-06	2.20E-06	2.14E-06	1.17E-06	9.68E-07
1951	648085.96	4196708.17	1.48E-05	1.58E-05	2.23E-06	2.37E-06	2.18E-06	2.11E-06	1.16E-06	9.58E-07
1952	648106.1	4196694.37	1.47E-05	1.57E-05	2.21E-06	2.35E-06	2.16E-06	2.09E-06	1.15E-06	9.50E-07
1953	648126.24	4196680.57	1.46E-05	1.56E-05	2.20E-06	2.34E-06	2.15E-06	2.09E-06	1.14E-06	9.46E-07
1954	648146.38	4196666.78	1.46E-05	1.56E-05	2.20E-06	2.34E-06	2.15E-06	2.08E-06	1.14E-06	9.44E-07
1955	648166.52	4196652.98	1.46E-05	1.56E-05	2.20E-06	2.34E-06	2.15E-06	2.09E-06	1.14E-06	9.46E-07
1956	648186.65	4196639.18	1.47E-05	1.57E-05	2.21E-06	2.35E-06	2.16E-06	2.09E-06	1.15E-06	9.50E-07
1957	648206.79	4196625.38	1.48E-05	1.58E-05	2.23E-06	2.37E-06	2.18E-06	2.11E-06	1.16E-06	9.58E-07
1958	648226.93	4196611.59	1.50E-05	1.60E-05	2.25E-06	2.39E-06	2.20E-06	2.13E-06	1.17E-06	9.67E-07
1959	648247.07	4196597.79	1.52E-05	1.62E-05	2.28E-06	2.42E-06	2.23E-06	2.16E-06	1.18E-06	9.80E-07
1960	648267.21	4196583.99	1.54E-05	1.64E-05	2.31E-06	2.46E-06	2.26E-06	2.19E-06	1.20E-06	9.94E-07
1961	648025.96	4196750.83	1.55E-05	1.65E-05	2.32E-06	2.47E-06	2.27E-06	2.20E-06	1.21E-06	9.99E-07
1962	648964.28	4197898.07	8.08E-04	8.61E-04	1.21E-04	1.29E-04	1.19E-04	1.15E-04	6.31E-05	5.22E-05
1963	648943.03	4197884.91	5.70E-04	6.08E-04	8.58E-05	9.12E-05	8.39E-05	8.13E-05	4.46E-05	3.69E-05
1964	648939.07	4197847.28	4.24E-04	4.52E-04	6.38E-05	6.78E-05	6.24E-05	6.05E-05	3.31E-05	2.74E-05
1965	648921.77	4197871.76	4.39E-04	4.68E-04	6.60E-05	7.02E-05	6.46E-05	6.26E-05	3.43E-05	2.84E-05
1966	648920.37	4197831.16	3.44E-04	3.66E-04	5.17E-05	5.49E-05	5.05E-05	4.90E-05	2.68E-05	2.22E-05
1967	648900.51	4197858.6	3.56E-04	3.79E-04	5.35E-05	5.68E-05	5.23E-05	5.07E-05	2.78E-05	2.30E-05
1968	648877.85	4197804.85	2.47E-04	2.63E-04	3.71E-05	3.94E-05	3.63E-05	3.51E-05	1.93E-05	1.59E-05
1969	648858	4197832.28	2.55E-04	2.72E-04	3.83E-05	4.08E-05	3.75E-05	3.63E-05	1.99E-05	1.65E-05
1970	648835.34	4197778.53	1.90E-04	2.03E-04	2.86E-05	3.04E-05	2.80E-05	2.71E-05	1.49E-05	1.23E-05
1971	648815.48	4197805.97	1.97E-04	2.10E-04	2.96E-05	3.14E-05	2.89E-05	2.80E-05	1.54E-05	1.27E-05
1972	648792.82	4197752.22	1.54E-04	1.64E-04	2.31E-05	2.46E-05	2.26E-05	2.19E-05	1.20E-05	9.93E-06
1973	648813.24	4197728.53	1.50E-04	1.59E-04	2.25E-05	2.39E-05	2.20E-05	2.13E-05	1.17E-05	9.66E-06
1974	648772.97	4197779.65	1.59E-04	1.69E-04	2.39E-05	2.54E-05	2.34E-05	2.26E-05	1.24E-05	1.03E-05
1975	648750.31	4197725.9	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.88E-05	1.83E-05	1.00E-05	8.28E-06
1976	648770.72	4197702.21	1.25E-04	1.33E-04	1.87E-05	1.99E-05	1.83E-05	1.78E-05	9.74E-06	8.05E-06
1977	648730.45	4197753.33	1.32E-04	1.41E-04	1.99E-05	2.12E-05	1.95E-05	1.89E-05	1.03E-05	8.56E-06
1978	648666.74	4197671.58	9.51E-05	1.01E-04	1.43E-05	1.52E-05	1.40E-05	1.36E-05	7.43E-06	6.15E-06
1979	648690.07	4197644.5	9.21E-05	9.82E-05	1.38E-05	1.47E-05	1.35E-05	1.31E-05	7.19E-06	5.95E-06
1980	648713.4	4197617.43	8.86E-05	9.45E-05	1.33E-05	1.42E-05	1.30E-05	1.26E-05	6.92E-06	5.73E-06
1981	648645.42	4197700.7	9.81E-05	1.05E-04	1.48E-05	1.57E-05	1.44E-05	1.40E-05	7.67E-06	6.34E-06
1982	648581.39	4197619.32	7.51E-05	8.00E-05	1.13E-05	1.20E-05	1.10E-05	1.07E-05	5.86E-06	4.85E-06
1983	648604.07	4197593	7.29E-05	7.78E-05	1.10E-05	1.17E-05	1.07E-05	1.04E-05	5.70E-06	4.71E-06
1984	648626.75	4197566.68	7.04E-05	7.50E-05	1.06E-05	1.12E-05	1.03E-05	1.00E-05	5.50E-06	4.55E-06
1985	648649.43	4197540.36	6.75E-05	7.20E-05	1.02E-05	1.08E-05	9.93E-06	9.62E-06	5.28E-06	4.36E-06
1986	648560.4	4197648.07	7.70E-05	8.21E-05	1.16E-05	1.23E-05	1.13E-05	1.10E-05	6.02E-06	4.98E-06
1987	648496.15	4197566.93	6.16E-05	6.56E-05	9.26E-06	9.84E-06	9.05E-06	8.77E-06	4.81E-06	3.98E-06
1988	648518.42	4197541.09	6.01E-05	6.41E-05	9.04E-06	9.61E-06	8.84E-06	8.56E-06	4.69E-06	3.88E-06
1989	648540.69	4197515.24	5.82E-05	6.20E-05	8.75E-06	9.30E-06	8.56E-06	8.29E-06	4.55E-06	3.76E-06
1990	648562.96	4197489.4	5.60E-05	5.97E-05	8.42E-06	8.95E-06	8.23E-06	7.98E-06	4.37E-06	3.62E-06
1991	648585.23	4197463.56	5.37E-05	5.72E-05	8.07E-06	8.58E-06	7.89E-06	7.65E-06	4.19E-06	3.47E-06

1992	648475.37	4197595.44	6.28E-05	6.70E-05	9.45E-06	1.00E-05	9.24E-06	8.96E-06	4.91E-06	4.06E-06
1993	648411.9	4197513.4	5.18E-05	5.53E-05	7.80E-06	8.29E-06	7.62E-06	7.39E-06	4.05E-06	3.35E-06
1994	648435.71	4197485.76	5.07E-05	5.41E-05	7.63E-06	8.11E-06	7.46E-06	7.23E-06	3.96E-06	3.28E-06
1995	648459.53	4197458.13	4.92E-05	5.24E-05	7.39E-06	7.86E-06	7.23E-06	7.01E-06	3.84E-06	3.18E-06
1996	648483.34	4197430.49	4.73E-05	5.04E-05	7.11E-06	7.56E-06	6.95E-06	6.74E-06	3.69E-06	3.05E-06
1997	648507.16	4197402.85	4.52E-05	4.82E-05	6.80E-06	7.23E-06	6.65E-06	6.44E-06	3.53E-06	2.92E-06
1998	648390.34	4197542.81	5.27E-05	5.62E-05	7.93E-06	8.43E-06	7.75E-06	7.52E-06	4.12E-06	3.41E-06
1999	648241.41	4197408.63	3.90E-05	4.16E-05	5.87E-06	6.24E-06	5.74E-06	5.56E-06	3.05E-06	2.52E-06
2000	648264.38	4197381.98	3.85E-05	4.10E-05	5.79E-06	6.16E-06	5.66E-06	5.49E-06	3.01E-06	2.49E-06
2001	648287.34	4197355.33	3.77E-05	4.02E-05	5.67E-06	6.03E-06	5.54E-06	5.37E-06	2.94E-06	2.44E-06
2002	648310.31	4197328.68	3.66E-05	3.90E-05	5.50E-06	5.85E-06	5.38E-06	5.22E-06	2.86E-06	2.37E-06
2003	648333.27	4197302.03	3.53E-05	3.76E-05	5.31E-06	5.65E-06	5.19E-06	5.03E-06	2.76E-06	2.28E-06
2004	648356.24	4197275.38	3.39E-05	3.61E-05	5.09E-06	5.41E-06	4.98E-06	4.83E-06	2.65E-06	2.19E-06
2005	648379.2	4197248.73	3.24E-05	3.45E-05	4.87E-06	5.18E-06	4.77E-06	4.62E-06	2.53E-06	2.09E-06
2006	648220.28	4197437.54	3.94E-05	4.20E-05	5.92E-06	6.30E-06	5.79E-06	5.61E-06	3.08E-06	2.55E-06
2007	648071.69	4197302.98	3.09E-05	3.30E-05	4.65E-06	4.95E-06	4.55E-06	4.41E-06	2.42E-06	2.00E-06
2008	648095.33	4197275.55	3.07E-05	3.27E-05	4.62E-06	4.91E-06	4.51E-06	4.37E-06	2.40E-06	1.98E-06
2009	648118.96	4197248.12	3.02E-05	3.22E-05	4.55E-06	4.83E-06	4.44E-06	4.31E-06	2.36E-06	1.95E-06
2010	648142.6	4197220.69	2.95E-05	3.15E-05	4.44E-06	4.72E-06	4.34E-06	4.21E-06	2.31E-06	1.91E-06
2011	648166.24	4197193.26	2.87E-05	3.06E-05	4.31E-06	4.58E-06	4.21E-06	4.08E-06	2.24E-06	1.85E-06
2012	648189.87	4197165.83	2.76E-05	2.95E-05	4.16E-06	4.42E-06	4.06E-06	3.94E-06	2.16E-06	1.79E-06
2013	648213.51	4197138.4	2.65E-05	2.83E-05	3.99E-06	4.24E-06	3.90E-06	3.78E-06	2.07E-06	1.71E-06
2014	648237.15	4197110.97	2.54E-05	2.70E-05	3.81E-06	4.06E-06	3.73E-06	3.62E-06	1.98E-06	1.64E-06
2015	648260.78	4197083.54	2.43E-05	2.59E-05	3.65E-06	3.88E-06	3.57E-06	3.46E-06	1.90E-06	1.57E-06
2016	648050.22	4197332.28	3.11E-05	3.31E-05	4.67E-06	4.97E-06	4.57E-06	4.43E-06	2.43E-06	2.01E-06
2017	647901.35	4197198.04	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
2018	647924.43	4197171.26	2.54E-05	2.70E-05	3.81E-06	4.05E-06	3.73E-06	3.61E-06	1.98E-06	1.64E-06
2019	647947.5	4197144.48	2.51E-05	2.68E-05	3.78E-06	4.02E-06	3.69E-06	3.58E-06	1.96E-06	1.62E-06
2020	647970.58	4197117.7	2.47E-05	2.64E-05	3.72E-06	3.95E-06	3.64E-06	3.52E-06	1.93E-06	1.60E-06
2021	647993.66	4197090.92	2.42E-05	2.58E-05	3.64E-06	3.87E-06	3.56E-06	3.45E-06	1.89E-06	1.56E-06
2022	648016.73	4197064.14	2.35E-05	2.51E-05	3.54E-06	3.76E-06	3.46E-06	3.35E-06	1.84E-06	1.52E-06
2023	648039.81	4197037.37	2.27E-05	2.43E-05	3.42E-06	3.64E-06	3.34E-06	3.24E-06	1.78E-06	1.47E-06
2024	648062.88	4197010.59	2.19E-05	2.34E-05	3.29E-06	3.50E-06	3.22E-06	3.12E-06	1.71E-06	1.42E-06
2025	648085.96	4196983.81	2.10E-05	2.24E-05	3.16E-06	3.36E-06	3.09E-06	3.00E-06	1.64E-06	1.36E-06
2026	648109.04	4196957.03	2.02E-05	2.15E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.30E-06
2027	648132.11	4196930.25	1.94E-05	2.07E-05	2.91E-06	3.10E-06	2.85E-06	2.76E-06	1.51E-06	1.25E-06
2028	647880.17	4197227.02	2.54E-05	2.71E-05	3.83E-06	4.07E-06	3.74E-06	3.63E-06	1.99E-06	1.64E-06
2029	647731.53	4197092.5	2.15E-05	2.29E-05	3.23E-06	3.43E-06	3.15E-06	3.06E-06	1.68E-06	1.39E-06
2030	647755.09	4197065.16	2.15E-05	2.29E-05	3.23E-06	3.43E-06	3.15E-06	3.06E-06	1.68E-06	1.39E-06
2031	647778.64	4197037.83	2.14E-05	2.28E-05	3.21E-06	3.41E-06	3.14E-06	3.04E-06	1.67E-06	1.38E-06
2032	647802.2	4197010.5	2.11E-05	2.25E-05	3.17E-06	3.37E-06	3.10E-06	3.01E-06	1.65E-06	1.36E-06
2033	647825.75	4196983.16	2.07E-05	2.21E-05	3.12E-06	3.32E-06	3.05E-06	2.96E-06	1.62E-06	1.34E-06
2034	647849.3	4196955.83	2.03E-05	2.16E-05	3.05E-06	3.24E-06	2.98E-06	2.89E-06	1.58E-06	1.31E-06
2035	647872.86	4196928.5	1.97E-05	2.10E-05	2.96E-06	3.15E-06	2.90E-06	2.81E-06	1.54E-06	1.27E-06
2036	647896.41	4196901.16	1.91E-05	2.03E-05	2.87E-06	3.05E-06	2.80E-06	2.72E-06	1.49E-06	1.23E-06
2037	647919.97	4196873.83	1.84E-05	1.96E-05	2.76E-06	2.94E-06	2.70E-06	2.62E-06	1.44E-06	1.19E-06
2038	647943.52	4196846.5	1.77E-05	1.88E-05	2.66E-06	2.83E-06	2.60E-06	2.52E-06	1.38E-06	1.14E-06
2039	647967.07	4196819.16	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.50E-06	2.42E-06	1.33E-06	1.10E-06
2040	647990.63	4196791.83	1.63E-05	1.74E-05	2.45E-06	2.61E-06	2.40E-06	2.33E-06	1.28E-06	1.05E-06
2041	647710.11	4197121.75	2.14E-05	2.28E-05	3.22E-06	3.42E-06	3.15E-06	3.05E-06	1.67E-06	1.38E-06
2042	648953.49	4197923.54	9.04E-04	9.64E-04	1.36E-04	1.45E-04	1.33E-04	1.29E-04	7.06E-05	5.84E-05
2043	648944.58	4197945.32	9.75E-04	1.04E-03	1.47E-04	1.56E-04	1.43E-04	1.39E-04	7.61E-05	6.30E-05
2044	648935.67	4197967.1	1.02E-03	1.09E-03	1.53E-04	1.63E-04	1.50E-04	1.45E-04	7.96E-05	6.59E-05
2045	648930.35	4197914.08	6.29E-04	6.71E-04	9.46E-05	1.01E-04	9.25E-05	8.96E-05	4.91E-05	4.07E-05
2046	648921.44	4197935.86	6.72E-04	7.16E-04	1.01E-04	1.07E-04	9.88E-05	9.57E-05	5.25E-05	4.34E-05
2047	648912.53	4197957.64	7.05E-04	7.52E-04	1.06E-04	1.13E-04	1.04E-04	1.00E-04	5.51E-05	4.56E-05
2048	648907.21	4197904.61	4.80E-04	5.12E-04	7.22E-05	7.68E-05	7.06E-05	6.84E-05	3.75E-05	3.10E-05

2049	648898.3	4197926.39	5.08E-04	5.42E-04	7.64E-05	8.12E-05	7.47E-05	7.24E-05	3.97E-05	3.28E-05
2050	648889.39	4197948.17	5.32E-04	5.67E-04	8.00E-05	8.50E-05	7.82E-05	7.58E-05	4.15E-05	3.44E-05
2051	648884.08	4197895.15	3.87E-04	4.13E-04	5.82E-05	6.19E-05	5.69E-05	5.52E-05	3.02E-05	2.50E-05
2052	648875.17	4197916.93	4.06E-04	4.33E-04	6.11E-05	6.50E-05	5.98E-05	5.79E-05	3.18E-05	2.63E-05
2053	648866.26	4197938.71	4.23E-04	4.51E-04	6.37E-05	6.77E-05	6.23E-05	6.03E-05	3.31E-05	2.74E-05
2054	648846.71	4197854.44	2.65E-04	2.83E-04	3.99E-05	4.24E-05	3.90E-05	3.78E-05	2.07E-05	1.71E-05
2055	648837.8	4197876.22	2.77E-04	2.95E-04	4.16E-05	4.42E-05	4.07E-05	3.94E-05	2.16E-05	1.79E-05
2056	648828.89	4197898	2.87E-04	3.06E-04	4.32E-05	4.59E-05	4.22E-05	4.09E-05	2.24E-05	1.86E-05
2057	648819.98	4197919.78	2.96E-04	3.16E-04	4.46E-05	4.74E-05	4.36E-05	4.22E-05	2.32E-05	1.92E-05
2058	648800.43	4197835.5	2.06E-04	2.20E-04	3.10E-05	3.29E-05	3.03E-05	2.93E-05	1.61E-05	1.33E-05
2059	648791.52	4197857.28	2.13E-04	2.27E-04	3.21E-05	3.41E-05	3.13E-05	3.04E-05	1.67E-05	1.38E-05
2060	648782.61	4197879.06	2.19E-04	2.34E-04	3.30E-05	3.51E-05	3.23E-05	3.13E-05	1.71E-05	1.42E-05
2061	648773.7	4197900.84	2.25E-04	2.40E-04	3.38E-05	3.59E-05	3.31E-05	3.20E-05	1.76E-05	1.45E-05
2062	648754.15	4197816.57	1.67E-04	1.78E-04	2.51E-05	2.67E-05	2.46E-05	2.38E-05	1.31E-05	1.08E-05
2063	648745.24	4197838.35	1.72E-04	1.83E-04	2.59E-05	2.75E-05	2.53E-05	2.45E-05	1.34E-05	1.11E-05
2064	648736.33	4197860.13	1.76E-04	1.88E-04	2.65E-05	2.81E-05	2.59E-05	2.51E-05	1.37E-05	1.14E-05
2065	648727.42	4197881.91	1.79E-04	1.91E-04	2.70E-05	2.87E-05	2.64E-05	2.55E-05	1.40E-05	1.16E-05
2066	648715.4	4197782.87	1.38E-04	1.47E-04	2.07E-05	2.20E-05	2.02E-05	1.96E-05	1.08E-05	8.90E-06
2067	648698.97	4197819.42	1.43E-04	1.53E-04	2.15E-05	2.29E-05	2.10E-05	2.04E-05	1.12E-05	9.25E-06
2068	648690.06	4197841.2	1.46E-04	1.55E-04	2.19E-05	2.33E-05	2.14E-05	2.08E-05	1.14E-05	9.42E-06
2069	648681.15	4197862.98	1.48E-04	1.58E-04	2.22E-05	2.36E-05	2.17E-05	2.11E-05	1.15E-05	9.55E-06
2070	648625.36	4197740.09	1.02E-04	1.09E-04	1.54E-05	1.63E-05	1.50E-05	1.46E-05	7.99E-06	6.61E-06
2071	648606.41	4197781.56	1.05E-04	1.12E-04	1.58E-05	1.68E-05	1.55E-05	1.50E-05	8.23E-06	6.81E-06
2072	648597.5	4197803.34	1.07E-04	1.14E-04	1.60E-05	1.71E-05	1.57E-05	1.52E-05	8.33E-06	6.89E-06
2073	648588.59	4197825.12	1.08E-04	1.15E-04	1.62E-05	1.72E-05	1.58E-05	1.53E-05	8.41E-06	6.96E-06
2074	648532.17	4197703.45	8.05E-05	8.58E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.29E-06	5.20E-06
2075	648513.86	4197743.69	8.21E-05	8.75E-05	1.23E-05	1.31E-05	1.21E-05	1.17E-05	6.41E-06	5.31E-06
2076	648504.95	4197765.47	8.28E-05	8.83E-05	1.25E-05	1.32E-05	1.22E-05	1.18E-05	6.47E-06	5.35E-06
2077	648496.04	4197787.25	8.34E-05	8.89E-05	1.25E-05	1.33E-05	1.23E-05	1.19E-05	6.51E-06	5.39E-06
2078	648439.24	4197666.33	6.55E-05	6.99E-05	9.85E-06	1.05E-05	9.63E-06	9.34E-06	5.12E-06	4.23E-06
2079	648457.3	4197630.88	6.45E-05	6.87E-05	9.69E-06	1.03E-05	9.48E-06	9.19E-06	5.03E-06	4.17E-06
2080	648421.3	4197705.83	6.65E-05	7.08E-05	9.99E-06	1.06E-05	9.77E-06	9.47E-06	5.19E-06	4.29E-06
2081	648412.39	4197727.61	6.69E-05	7.13E-05	1.01E-05	1.07E-05	9.84E-06	9.53E-06	5.23E-06	4.32E-06
2082	648403.48	4197749.39	6.73E-05	7.17E-05	1.01E-05	1.08E-05	9.89E-06	9.59E-06	5.25E-06	4.35E-06
2083	648348.19	4197625.51	5.47E-05	5.83E-05	8.22E-06	8.74E-06	8.04E-06	7.79E-06	4.27E-06	3.53E-06
2084	648358.73	4197604.84	5.44E-05	5.80E-05	8.18E-06	8.69E-06	7.99E-06	7.75E-06	4.25E-06	3.51E-06
2085	648369.27	4197584.16	5.40E-05	5.75E-05	8.11E-06	8.63E-06	7.93E-06	7.69E-06	4.21E-06	3.49E-06
2086	648379.8	4197563.48	5.34E-05	5.69E-05	8.03E-06	8.54E-06	7.85E-06	7.61E-06	4.17E-06	3.45E-06
2087	648337.66	4197646.19	5.49E-05	5.86E-05	8.26E-06	8.78E-06	8.08E-06	7.83E-06	4.29E-06	3.55E-06
2088	648328.75	4197667.97	5.53E-05	5.90E-05	8.32E-06	8.84E-06	8.13E-06	7.88E-06	4.32E-06	3.58E-06
2089	648319.84	4197689.75	5.56E-05	5.93E-05	8.37E-06	8.89E-06	8.18E-06	7.93E-06	4.35E-06	3.60E-06
2090	648310.93	4197711.53	5.59E-05	5.96E-05	8.41E-06	8.94E-06	8.22E-06	7.97E-06	4.37E-06	3.61E-06
2091	648162.22	4197551.47	4.04E-05	4.30E-05	6.07E-06	6.46E-06	5.94E-06	5.75E-06	3.15E-06	2.61E-06
2092	648181.58	4197513.5	4.02E-05	4.28E-05	6.04E-06	6.42E-06	5.91E-06	5.73E-06	3.14E-06	2.60E-06
2093	648200.93	4197475.52	3.99E-05	4.25E-05	6.00E-06	6.38E-06	5.86E-06	5.68E-06	3.12E-06	2.58E-06
2094	648143.64	4197592.24	4.07E-05	4.34E-05	6.12E-06	6.50E-06	5.98E-06	5.80E-06	3.18E-06	2.63E-06
2095	648134.73	4197614.02	4.09E-05	4.36E-05	6.15E-06	6.54E-06	6.01E-06	5.83E-06	3.20E-06	2.64E-06
2096	648125.82	4197635.8	4.11E-05	4.38E-05	6.18E-06	6.57E-06	6.05E-06	5.86E-06	3.21E-06	2.66E-06
2097	647977.79	4197474.43	3.14E-05	3.35E-05	4.73E-06	5.02E-06	4.62E-06	4.48E-06	2.46E-06	2.03E-06
2098	647988.13	4197454.12	3.14E-05	3.35E-05	4.72E-06	5.02E-06	4.62E-06	4.47E-06	2.45E-06	2.03E-06
2099	647998.48	4197433.81	3.14E-05	3.34E-05	4.72E-06	5.01E-06	4.61E-06	4.47E-06	2.45E-06	2.03E-06
2100	648008.83	4197413.51	3.13E-05	3.34E-05	4.71E-06	5.01E-06	4.61E-06	4.47E-06	2.45E-06	2.03E-06
2101	648019.18	4197393.2	3.13E-05	3.34E-05	4.71E-06	5.01E-06	4.61E-06	4.46E-06	2.45E-06	2.02E-06
2102	648029.53	4197372.89	3.13E-05	3.33E-05	4.70E-06	5.00E-06	4.60E-06	4.46E-06	2.44E-06	2.02E-06
2103	648039.87	4197352.59	3.12E-05	3.32E-05	4.69E-06	4.99E-06	4.59E-06	4.44E-06	2.44E-06	2.02E-06
2104	647967.44	4197494.73	3.15E-05	3.36E-05	4.74E-06	5.03E-06	4.63E-06	4.49E-06	2.46E-06	2.03E-06
2105	647958.53	4197516.51	3.17E-05	3.37E-05	4.76E-06	5.06E-06	4.65E-06	4.51E-06	2.47E-06	2.05E-06

2106	647949.62	4197538.29	3.18E-05	3.39E-05	4.79E-06	5.09E-06	4.68E-06	4.54E-06	2.49E-06	2.06E-06
2107	647940.71	4197560.07	3.20E-05	3.41E-05	4.82E-06	5.12E-06	4.71E-06	4.56E-06	2.50E-06	2.07E-06
2108	647792.11	4197399.81	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
2109	647811.68	4197361.41	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.73E-06	3.62E-06	1.98E-06	1.64E-06
2110	647831.25	4197323.01	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
2111	647850.81	4197284.61	2.55E-05	2.72E-05	3.83E-06	4.07E-06	3.75E-06	3.63E-06	1.99E-06	1.65E-06
2112	647773.42	4197440.79	2.56E-05	2.73E-05	3.85E-06	4.09E-06	3.77E-06	3.65E-06	2.00E-06	1.65E-06
2113	647764.51	4197462.57	2.58E-05	2.75E-05	3.87E-06	4.12E-06	3.79E-06	3.67E-06	2.01E-06	1.66E-06
2114	647755.6	4197484.35	2.59E-05	2.77E-05	3.90E-06	4.15E-06	3.81E-06	3.70E-06	2.03E-06	1.68E-06
2115	647607.48	4197323.14	2.11E-05	2.25E-05	3.18E-06	3.38E-06	3.11E-06	3.01E-06	1.65E-06	1.37E-06
2116	647628.01	4197282.86	2.11E-05	2.25E-05	3.17E-06	3.37E-06	3.10E-06	3.01E-06	1.65E-06	1.36E-06
2117	647638.27	4197262.73	2.11E-05	2.25E-05	3.18E-06	3.38E-06	3.11E-06	3.01E-06	1.65E-06	1.37E-06
2118	647648.53	4197242.59	2.12E-05	2.26E-05	3.18E-06	3.38E-06	3.11E-06	3.01E-06	1.65E-06	1.37E-06
2119	647669.06	4197202.31	2.13E-05	2.27E-05	3.20E-06	3.40E-06	3.13E-06	3.03E-06	1.66E-06	1.37E-06
2120	647679.32	4197182.17	2.13E-05	2.27E-05	3.21E-06	3.41E-06	3.13E-06	3.04E-06	1.67E-06	1.38E-06
2121	647597.22	4197343.28	2.12E-05	2.26E-05	3.19E-06	3.39E-06	3.12E-06	3.02E-06	1.66E-06	1.37E-06
2122	647588.31	4197365.06	2.13E-05	2.27E-05	3.21E-06	3.41E-06	3.13E-06	3.04E-06	1.67E-06	1.38E-06
2123	647579.4	4197386.84	2.15E-05	2.29E-05	3.23E-06	3.43E-06	3.15E-06	3.06E-06	1.68E-06	1.39E-06
2124	647570.49	4197408.62	2.16E-05	2.30E-05	3.25E-06	3.46E-06	3.18E-06	3.08E-06	1.69E-06	1.40E-06
2125	648948.01	4198010.21	1.70E-03	1.81E-03	2.56E-04	2.72E-04	2.50E-04	2.42E-04	1.33E-04	1.10E-04
2126	648959.43	4198032.4	2.17E-03	2.31E-03	3.26E-04	3.46E-04	3.19E-04	3.09E-04	1.69E-04	1.40E-04
2127	648970.85	4198054.59	2.41E-03	2.57E-03	3.63E-04	3.86E-04	3.55E-04	3.44E-04	1.89E-04	1.56E-04
2128	648982.28	4198076.79	2.56E-03	2.73E-03	3.85E-04	4.09E-04	3.76E-04	3.65E-04	2.00E-04	1.65E-04
2129	648993.7	4198098.98	2.66E-03	2.83E-03	4.00E-04	4.25E-04	3.91E-04	3.79E-04	2.08E-04	1.72E-04
2130	649005.12	4198121.17	2.73E-03	2.91E-03	4.10E-04	4.36E-04	4.01E-04	3.88E-04	2.13E-04	1.76E-04
2131	649016.55	4198143.37	2.77E-03	2.95E-03	4.17E-04	4.43E-04	4.08E-04	3.95E-04	2.17E-04	1.79E-04
2132	649027.97	4198165.56	2.80E-03	2.98E-03	4.21E-04	4.47E-04	4.11E-04	3.99E-04	2.19E-04	1.81E-04
2133	649039.4	4198187.76	2.80E-03	2.99E-03	4.22E-04	4.48E-04	4.12E-04	4.00E-04	2.19E-04	1.81E-04
2134	649050.82	4198209.95	2.79E-03	2.97E-03	4.19E-04	4.45E-04	4.10E-04	3.97E-04	2.18E-04	1.80E-04
2135	649062.24	4198232.14	2.73E-03	2.91E-03	4.11E-04	4.36E-04	4.01E-04	3.89E-04	2.13E-04	1.76E-04
2136	649073.67	4198254.34	2.61E-03	2.78E-03	3.93E-04	4.17E-04	3.84E-04	3.72E-04	2.04E-04	1.69E-04
2137	649085.09	4198276.53	2.34E-03	2.50E-03	3.52E-04	3.75E-04	3.45E-04	3.34E-04	1.83E-04	1.51E-04
2138	648914.35	4197999.45	9.17E-04	9.78E-04	1.38E-04	1.47E-04	1.35E-04	1.31E-04	7.17E-05	5.93E-05
2139	648925.78	4198021.65	1.19E-03	1.26E-03	1.78E-04	1.90E-04	1.74E-04	1.69E-04	9.27E-05	7.67E-05
2140	648937.2	4198043.84	1.46E-03	1.56E-03	2.20E-04	2.34E-04	2.15E-04	2.09E-04	1.14E-04	9.46E-05
2141	648948.63	4198066.03	1.67E-03	1.78E-03	2.52E-04	2.67E-04	2.46E-04	2.38E-04	1.31E-04	1.08E-04
2142	648960.05	4198088.23	1.81E-03	1.93E-03	2.72E-04	2.89E-04	2.66E-04	2.58E-04	1.41E-04	1.17E-04
2143	648971.47	4198110.42	1.90E-03	2.03E-03	2.86E-04	3.04E-04	2.80E-04	2.71E-04	1.49E-04	1.23E-04
2144	648982.9	4198132.62	1.97E-03	2.10E-03	2.96E-04	3.15E-04	2.90E-04	2.81E-04	1.54E-04	1.27E-04
2145	648994.32	4198154.81	2.02E-03	2.15E-03	3.03E-04	3.22E-04	2.96E-04	2.87E-04	1.57E-04	1.30E-04
2146	649005.74	4198177	2.04E-03	2.18E-03	3.07E-04	3.27E-04	3.01E-04	2.91E-04	1.60E-04	1.32E-04
2147	649017.17	4198199.2	2.05E-03	2.19E-03	3.09E-04	3.28E-04	3.02E-04	2.93E-04	1.60E-04	1.33E-04
2148	649028.59	4198221.39	2.04E-03	2.18E-03	3.07E-04	3.27E-04	3.01E-04	2.91E-04	1.60E-04	1.32E-04
2149	649040.02	4198243.59	2.01E-03	2.14E-03	3.02E-04	3.21E-04	2.95E-04	2.86E-04	1.57E-04	1.30E-04
2150	649051.44	4198265.78	1.93E-03	2.06E-03	2.91E-04	3.09E-04	2.84E-04	2.76E-04	1.51E-04	1.25E-04
2151	649062.86	4198287.97	1.79E-03	1.91E-03	2.70E-04	2.87E-04	2.64E-04	2.55E-04	1.40E-04	1.16E-04
2152	648891.21	4197989.99	6.69E-04	7.13E-04	1.01E-04	1.07E-04	9.83E-05	9.53E-05	5.22E-05	4.32E-05
2153	648903.55	4198033.09	9.11E-04	9.71E-04	1.37E-04	1.46E-04	1.34E-04	1.30E-04	7.12E-05	5.89E-05
2154	648914.97	4198055.28	1.09E-03	1.17E-03	1.64E-04	1.75E-04	1.61E-04	1.56E-04	8.54E-05	7.07E-05
2155	648926.4	4198077.48	1.25E-03	1.34E-03	1.89E-04	2.00E-04	1.84E-04	1.79E-04	9.79E-05	8.10E-05
2156	648937.82	4198099.67	1.38E-03	1.47E-03	2.07E-04	2.20E-04	2.02E-04	1.96E-04	1.07E-04	8.89E-05
2157	648949.24	4198121.86	1.46E-03	1.56E-03	2.20E-04	2.34E-04	2.15E-04	2.09E-04	1.14E-04	9.46E-05
2158	648960.67	4198144.06	1.53E-03	1.63E-03	2.30E-04	2.44E-04	2.25E-04	2.18E-04	1.19E-04	9.87E-05
2159	648972.09	4198166.25	1.57E-03	1.68E-03	2.37E-04	2.51E-04	2.31E-04	2.24E-04	1.23E-04	1.02E-04
2160	648983.52	4198188.45	1.60E-03	1.71E-03	2.41E-04	2.56E-04	2.36E-04	2.28E-04	1.25E-04	1.04E-04
2161	648994.94	4198210.64	1.62E-03	1.72E-03	2.43E-04	2.58E-04	2.38E-04	2.30E-04	1.26E-04	1.04E-04
2162	649006.36	4198232.83	1.61E-03	1.72E-03	2.43E-04	2.58E-04	2.37E-04	2.30E-04	1.26E-04	1.04E-04

2163	649017.79	4198255.03	1.59E-03	1.70E-03	2.39E-04	2.55E-04	2.34E-04	2.27E-04	1.24E-04	1.03E-04
2164	649029.21	4198277.22	1.54E-03	1.64E-03	2.32E-04	2.47E-04	2.27E-04	2.20E-04	1.21E-04	9.97E-05
2165	649040.64	4198299.41	1.46E-03	1.55E-03	2.19E-04	2.33E-04	2.14E-04	2.08E-04	1.14E-04	9.41E-05
2166	648868.99	4198001.43	5.68E-04	6.06E-04	8.54E-05	9.08E-05	8.35E-05	8.10E-05	4.44E-05	3.67E-05
2167	648881.32	4198044.53	7.38E-04	7.87E-04	1.11E-04	1.18E-04	1.09E-04	1.05E-04	5.77E-05	4.77E-05
2168	648892.74	4198066.72	8.67E-04	9.24E-04	1.30E-04	1.39E-04	1.27E-04	1.24E-04	6.77E-05	5.60E-05
2169	648904.17	4198088.92	9.89E-04	1.05E-03	1.49E-04	1.58E-04	1.45E-04	1.41E-04	7.73E-05	6.39E-05
2170	648915.59	4198111.11	1.09E-03	1.16E-03	1.64E-04	1.75E-04	1.61E-04	1.56E-04	8.53E-05	7.06E-05
2171	648927.02	4198133.31	1.17E-03	1.25E-03	1.76E-04	1.87E-04	1.72E-04	1.67E-04	9.16E-05	7.58E-05
2172	648938.44	4198155.5	1.23E-03	1.31E-03	1.85E-04	1.97E-04	1.81E-04	1.76E-04	9.63E-05	7.97E-05
2173	648949.86	4198177.69	1.28E-03	1.36E-03	1.92E-04	2.04E-04	1.88E-04	1.82E-04	9.98E-05	8.26E-05
2174	648961.29	4198199.89	1.31E-03	1.39E-03	1.97E-04	2.09E-04	1.92E-04	1.86E-04	1.02E-04	8.45E-05
2175	648972.71	4198222.08	1.32E-03	1.41E-03	1.99E-04	2.12E-04	1.95E-04	1.89E-04	1.03E-04	8.56E-05
2176	648984.14	4198244.27	1.33E-03	1.42E-03	2.00E-04	2.12E-04	1.95E-04	1.89E-04	1.04E-04	8.58E-05
2177	648995.56	4198266.47	1.31E-03	1.40E-03	1.98E-04	2.10E-04	1.93E-04	1.87E-04	1.03E-04	8.50E-05
2178	649006.98	4198288.66	1.28E-03	1.37E-03	1.93E-04	2.05E-04	1.88E-04	1.83E-04	1.00E-04	8.28E-05
2179	649018.41	4198310.86	1.22E-03	1.31E-03	1.84E-04	1.96E-04	1.80E-04	1.75E-04	9.57E-05	7.91E-05
2180	648824.53	4198024.31	4.33E-04	4.61E-04	6.51E-05	6.92E-05	6.36E-05	6.17E-05	3.38E-05	2.80E-05
2181	648822.71	4197982.5	3.74E-04	3.99E-04	5.63E-05	5.98E-05	5.50E-05	5.33E-05	2.92E-05	2.42E-05
2182	648836.86	4198067.41	5.30E-04	5.65E-04	7.98E-05	8.48E-05	7.80E-05	7.56E-05	4.14E-05	3.43E-05
2183	648848.29	4198089.61	6.05E-04	6.45E-04	9.09E-05	9.67E-05	8.89E-05	8.62E-05	4.72E-05	3.91E-05
2184	648859.71	4198111.8	6.80E-04	7.25E-04	1.02E-04	1.09E-04	9.99E-05	9.69E-05	5.31E-05	4.39E-05
2185	648871.14	4198133.99	7.50E-04	8.00E-04	1.13E-04	1.20E-04	1.10E-04	1.07E-04	5.86E-05	4.85E-05
2186	648882.56	4198156.19	8.12E-04	8.66E-04	1.22E-04	1.30E-04	1.19E-04	1.16E-04	6.34E-05	5.25E-05
2187	648893.98	4198178.38	8.63E-04	9.20E-04	1.30E-04	1.38E-04	1.27E-04	1.23E-04	6.74E-05	5.58E-05
2188	648905.41	4198200.58	9.04E-04	9.64E-04	1.36E-04	1.45E-04	1.33E-04	1.29E-04	7.06E-05	5.84E-05
2189	648916.83	4198222.77	9.34E-04	9.96E-04	1.40E-04	1.49E-04	1.37E-04	1.33E-04	7.30E-05	6.04E-05
2190	648928.26	4198244.96	9.54E-04	1.02E-03	1.44E-04	1.53E-04	1.40E-04	1.36E-04	7.45E-05	6.17E-05
2191	648939.68	4198267.16	9.64E-04	1.03E-03	1.45E-04	1.54E-04	1.42E-04	1.37E-04	7.53E-05	6.23E-05
2192	648951.1	4198289.35	9.62E-04	1.03E-03	1.45E-04	1.54E-04	1.41E-04	1.37E-04	7.51E-05	6.21E-05
2193	648962.53	4198311.55	9.47E-04	1.01E-03	1.42E-04	1.51E-04	1.39E-04	1.35E-04	7.40E-05	6.12E-05
2194	648973.95	4198333.74	9.20E-04	9.81E-04	1.38E-04	1.47E-04	1.35E-04	1.31E-04	7.19E-05	5.95E-05
2195	648779.94	4198044.21	3.44E-04	3.66E-04	5.17E-05	5.49E-05	5.05E-05	4.90E-05	2.68E-05	2.22E-05
2196	648778.9	4198020.31	3.22E-04	3.43E-04	4.83E-05	5.14E-05	4.73E-05	4.58E-05	2.51E-05	2.08E-05
2197	648777.86	4197996.42	3.00E-04	3.20E-04	4.51E-05	4.79E-05	4.41E-05	4.27E-05	2.34E-05	1.94E-05
2198	648776.82	4197972.53	2.79E-04	2.97E-04	4.19E-05	4.46E-05	4.10E-05	3.97E-05	2.18E-05	1.80E-05
2199	648775.78	4197948.63	2.59E-04	2.76E-04	3.90E-05	4.15E-05	3.81E-05	3.70E-05	2.03E-05	1.68E-05
2200	648774.74	4197924.74	2.41E-04	2.57E-04	3.63E-05	3.86E-05	3.55E-05	3.44E-05	1.89E-05	1.56E-05
2201	648780.98	4198068.1	3.65E-04	3.89E-04	5.49E-05	5.84E-05	5.37E-05	5.20E-05	2.85E-05	2.36E-05
2202	648792.41	4198090.3	4.10E-04	4.37E-04	6.16E-05	6.55E-05	6.02E-05	5.84E-05	3.20E-05	2.65E-05
2203	648803.83	4198112.49	4.58E-04	4.88E-04	6.88E-05	7.32E-05	6.73E-05	6.52E-05	3.58E-05	2.96E-05
2204	648815.26	4198134.68	5.08E-04	5.41E-04	7.63E-05	8.12E-05	7.47E-05	7.24E-05	3.97E-05	3.28E-05
2205	648826.68	4198156.88	5.57E-04	5.94E-04	8.37E-05	8.90E-05	8.19E-05	7.94E-05	4.35E-05	3.60E-05
2206	648838.1	4198179.07	6.03E-04	6.43E-04	9.07E-05	9.64E-05	8.87E-05	8.59E-05	4.71E-05	3.90E-05
2207	648849.53	4198201.27	6.44E-04	6.86E-04	9.68E-05	1.03E-04	9.47E-05	9.18E-05	5.03E-05	4.16E-05
2208	648860.95	4198223.46	6.78E-04	7.23E-04	1.02E-04	1.08E-04	9.97E-05	9.67E-05	5.30E-05	4.38E-05
2209	648872.38	4198245.65	7.06E-04	7.53E-04	1.06E-04	1.13E-04	1.04E-04	1.01E-04	5.51E-05	4.56E-05
2210	648883.8	4198267.85	7.26E-04	7.74E-04	1.09E-04	1.16E-04	1.07E-04	1.03E-04	5.67E-05	4.69E-05
2211	648895.22	4198290.04	7.38E-04	7.87E-04	1.11E-04	1.18E-04	1.08E-04	1.05E-04	5.76E-05	4.77E-05
2212	648906.65	4198312.23	7.42E-04	7.91E-04	1.12E-04	1.19E-04	1.09E-04	1.06E-04	5.79E-05	4.79E-05
2213	648918.07	4198334.43	7.37E-04	7.86E-04	1.11E-04	1.18E-04	1.08E-04	1.05E-04	5.76E-05	4.77E-05
2214	648929.49	4198356.62	7.25E-04	7.73E-04	1.09E-04	1.16E-04	1.07E-04	1.03E-04	5.66E-05	4.68E-05
2215	648735.52	4198067.75	2.85E-04	3.04E-04	4.28E-05	4.56E-05	4.19E-05	4.06E-05	2.23E-05	1.84E-05
2216	648734.5	4198044.52	2.70E-04	2.88E-04	4.06E-05	4.31E-05	3.97E-05	3.85E-05	2.11E-05	1.74E-05
2217	648733.49	4198021.29	2.55E-04	2.72E-04	3.83E-05	4.07E-05	3.75E-05	3.63E-05	1.99E-05	1.65E-05
2218	648732.48	4197998.06	2.40E-04	2.56E-04	3.61E-05	3.84E-05	3.53E-05	3.42E-05	1.88E-05	1.55E-05
2219	648731.47	4197974.83	2.26E-04	2.41E-04	3.40E-05	3.61E-05	3.32E-05	3.22E-05	1.77E-05	1.46E-05

2220	648730.46	4197951.6	2.13E-04	2.27E-04	3.20E-05	3.40E-05	3.13E-05	3.03E-05	1.66E-05	1.38E-05
2221	648729.45	4197928.37	2.01E-04	2.14E-04	3.02E-05	3.21E-05	2.95E-05	2.86E-05	1.57E-05	1.30E-05
2222	648728.43	4197905.14	1.90E-04	2.02E-04	2.85E-05	3.03E-05	2.79E-05	2.70E-05	1.48E-05	1.23E-05
2223	648736.53	4198090.99	3.00E-04	3.20E-04	4.51E-05	4.79E-05	4.41E-05	4.27E-05	2.34E-05	1.94E-05
2224	648747.95	4198113.18	3.31E-04	3.53E-04	4.98E-05	5.29E-05	4.87E-05	4.72E-05	2.59E-05	2.14E-05
2225	648759.38	4198135.37	3.65E-04	3.89E-04	5.49E-05	5.83E-05	5.36E-05	5.20E-05	2.85E-05	2.36E-05
2226	648770.8	4198157.57	4.00E-04	4.26E-04	6.02E-05	6.40E-05	5.88E-05	5.70E-05	3.12E-05	2.59E-05
2227	648782.22	4198179.76	4.36E-04	4.64E-04	6.55E-05	6.96E-05	6.40E-05	6.21E-05	3.40E-05	2.82E-05
2228	648793.65	4198201.95	4.70E-04	5.01E-04	7.07E-05	7.51E-05	6.91E-05	6.70E-05	3.67E-05	3.04E-05
2229	648805.07	4198224.15	5.02E-04	5.35E-04	7.55E-05	8.02E-05	7.38E-05	7.15E-05	3.92E-05	3.24E-05
2230	648816.5	4198246.34	5.30E-04	5.65E-04	7.97E-05	8.47E-05	7.79E-05	7.55E-05	4.14E-05	3.42E-05
2231	648827.92	4198268.54	5.53E-04	5.90E-04	8.32E-05	8.85E-05	8.14E-05	7.89E-05	4.32E-05	3.58E-05
2232	648839.34	4198290.73	5.72E-04	6.09E-04	8.60E-05	9.14E-05	8.40E-05	8.15E-05	4.47E-05	3.69E-05
2233	648850.77	4198312.92	5.84E-04	6.23E-04	8.79E-05	9.34E-05	8.59E-05	8.33E-05	4.56E-05	3.78E-05
2234	648862.19	4198335.12	5.91E-04	6.30E-04	8.89E-05	9.45E-05	8.69E-05	8.42E-05	4.62E-05	3.82E-05
2235	648873.61	4198357.31	5.92E-04	6.31E-04	8.90E-05	9.47E-05	8.71E-05	8.44E-05	4.63E-05	3.83E-05
2236	648885.04	4198379.51	5.88E-04	6.26E-04	8.83E-05	9.39E-05	8.64E-05	8.37E-05	4.59E-05	3.80E-05
2237	648691.08	4198091.06	2.42E-04	2.58E-04	3.64E-05	3.87E-05	3.56E-05	3.45E-05	1.89E-05	1.56E-05
2238	648690.09	4198068.25	2.31E-04	2.46E-04	3.47E-05	3.69E-05	3.40E-05	3.29E-05	1.80E-05	1.49E-05
2239	648689.09	4198045.44	2.20E-04	2.34E-04	3.31E-05	3.52E-05	3.23E-05	3.13E-05	1.72E-05	1.42E-05
2240	648688.1	4198022.64	2.09E-04	2.23E-04	3.14E-05	3.34E-05	3.07E-05	2.98E-05	1.63E-05	1.35E-05
2241	648687.11	4197999.83	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.92E-05	2.83E-05	1.55E-05	1.28E-05
2242	648686.11	4197977.02	1.88E-04	2.01E-04	2.83E-05	3.01E-05	2.77E-05	2.68E-05	1.47E-05	1.22E-05
2243	648685.12	4197954.21	1.79E-04	1.91E-04	2.69E-05	2.86E-05	2.63E-05	2.55E-05	1.40E-05	1.16E-05
2244	648684.13	4197931.4	1.70E-04	1.81E-04	2.56E-05	2.72E-05	2.50E-05	2.43E-05	1.33E-05	1.10E-05
2245	648683.13	4197908.6	1.62E-04	1.73E-04	2.44E-05	2.59E-05	2.39E-05	2.31E-05	1.27E-05	1.05E-05
2246	648682.14	4197885.79	1.55E-04	1.65E-04	2.33E-05	2.47E-05	2.28E-05	2.21E-05	1.21E-05	1.00E-05
2247	648692.07	4198113.87	2.53E-04	2.70E-04	3.81E-05	4.05E-05	3.72E-05	3.61E-05	1.98E-05	1.64E-05
2248	648703.5	4198136.06	2.76E-04	2.95E-04	4.15E-05	4.42E-05	4.06E-05	3.94E-05	2.16E-05	1.79E-05
2249	648714.92	4198158.26	3.01E-04	3.21E-04	4.53E-05	4.81E-05	4.43E-05	4.29E-05	2.35E-05	1.95E-05
2250	648726.34	4198180.45	3.27E-04	3.49E-04	4.92E-05	5.23E-05	4.81E-05	4.66E-05	2.55E-05	2.11E-05
2251	648737.77	4198202.64	3.54E-04	3.77E-04	5.32E-05	5.65E-05	5.20E-05	5.04E-05	2.76E-05	2.28E-05
2252	648749.19	4198224.84	3.80E-04	4.05E-04	5.71E-05	6.07E-05	5.58E-05	5.41E-05	2.97E-05	2.45E-05
2253	648760.61	4198247.03	4.04E-04	4.31E-04	6.08E-05	6.46E-05	5.94E-05	5.76E-05	3.16E-05	2.61E-05
2254	648772.04	4198269.23	4.27E-04	4.55E-04	6.42E-05	6.82E-05	6.28E-05	6.08E-05	3.33E-05	2.76E-05
2255	648783.46	4198291.42	4.46E-04	4.76E-04	6.71E-05	7.13E-05	6.56E-05	6.36E-05	3.49E-05	2.88E-05
2256	648794.89	4198313.61	4.62E-04	4.93E-04	6.95E-05	7.39E-05	6.80E-05	6.59E-05	3.61E-05	2.99E-05
2257	648806.31	4198335.81	4.74E-04	5.06E-04	7.13E-05	7.58E-05	6.97E-05	6.76E-05	3.70E-05	3.06E-05
2258	648817.73	4198358	4.82E-04	5.14E-04	7.25E-05	7.71E-05	7.09E-05	6.87E-05	3.77E-05	3.12E-05
2259	648829.16	4198380.19	4.86E-04	5.18E-04	7.31E-05	7.77E-05	7.15E-05	6.93E-05	3.80E-05	3.14E-05
2260	648840.58	4198402.39	4.86E-04	5.18E-04	7.30E-05	7.77E-05	7.14E-05	6.92E-05	3.79E-05	3.14E-05
2261	648602.12	4198135.74	1.84E-04	1.96E-04	2.77E-05	2.94E-05	2.70E-05	2.62E-05	1.44E-05	1.19E-05
2262	648601.08	4198111.85	1.77E-04	1.88E-04	2.66E-05	2.82E-05	2.60E-05	2.52E-05	1.38E-05	1.14E-05
2263	648600.04	4198087.95	1.69E-04	1.81E-04	2.55E-05	2.71E-05	2.49E-05	2.41E-05	1.32E-05	1.09E-05
2264	648599	4198064.06	1.62E-04	1.73E-04	2.44E-05	2.59E-05	2.38E-05	2.31E-05	1.27E-05	1.05E-05
2265	648597.96	4198040.16	1.55E-04	1.65E-04	2.33E-05	2.48E-05	2.28E-05	2.21E-05	1.21E-05	1.00E-05
2266	648596.92	4198016.27	1.48E-04	1.58E-04	2.23E-05	2.37E-05	2.18E-05	2.11E-05	1.16E-05	9.57E-06
2267	648595.88	4197992.38	1.42E-04	1.51E-04	2.13E-05	2.26E-05	2.08E-05	2.02E-05	1.11E-05	9.15E-06
2268	648594.83	4197968.48	1.36E-04	1.44E-04	2.04E-05	2.17E-05	1.99E-05	1.93E-05	1.06E-05	8.76E-06
2269	648593.79	4197944.59	1.30E-04	1.38E-04	1.95E-05	2.08E-05	1.91E-05	1.85E-05	1.01E-05	8.39E-06
2270	648592.75	4197920.69	1.25E-04	1.33E-04	1.88E-05	1.99E-05	1.83E-05	1.78E-05	9.74E-06	8.06E-06
2271	648591.71	4197896.8	1.20E-04	1.28E-04	1.80E-05	1.92E-05	1.76E-05	1.71E-05	9.37E-06	7.76E-06
2272	648590.67	4197872.91	1.16E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.03E-06	7.47E-06
2273	648589.63	4197849.01	1.12E-04	1.19E-04	1.68E-05	1.78E-05	1.64E-05	1.59E-05	8.72E-06	7.21E-06
2274	648603.16	4198159.63	1.91E-04	2.04E-04	2.87E-05	3.06E-05	2.81E-05	2.72E-05	1.49E-05	1.24E-05
2275	648614.58	4198181.83	2.05E-04	2.19E-04	3.09E-05	3.28E-05	3.02E-05	2.92E-05	1.60E-05	1.33E-05
2276	648626.01	4198204.02	2.20E-04	2.35E-04	3.31E-05	3.52E-05	3.23E-05	3.13E-05	1.72E-05	1.42E-05

2277	648637.43	4198226.22	2.35E-04	2.51E-04	3.54E-05	3.76E-05	3.46E-05	3.35E-05	1.84E-05	1.52E-05
2278	648648.85	4198248.41	2.51E-04	2.68E-04	3.78E-05	4.01E-05	3.69E-05	3.58E-05	1.96E-05	1.62E-05
2279	648660.28	4198270.6	2.67E-04	2.84E-04	4.01E-05	4.26E-05	3.92E-05	3.80E-05	2.08E-05	1.72E-05
2280	648671.7	4198292.8	2.82E-04	3.01E-04	4.24E-05	4.51E-05	4.15E-05	4.02E-05	2.20E-05	1.82E-05
2281	648683.13	4198314.99	2.96E-04	3.16E-04	4.46E-05	4.74E-05	4.36E-05	4.22E-05	2.31E-05	1.91E-05
2282	648694.55	4198337.19	3.09E-04	3.30E-04	4.65E-05	4.95E-05	4.55E-05	4.41E-05	2.42E-05	2.00E-05
2283	648705.97	4198359.38	3.21E-04	3.42E-04	4.83E-05	5.13E-05	4.72E-05	4.57E-05	2.51E-05	2.07E-05
2284	648717.4	4198381.57	3.31E-04	3.53E-04	4.97E-05	5.29E-05	4.86E-05	4.71E-05	2.58E-05	2.14E-05
2285	648728.82	4198403.77	3.38E-04	3.61E-04	5.09E-05	5.41E-05	4.97E-05	4.82E-05	2.64E-05	2.19E-05
2286	648740.25	4198425.96	3.44E-04	3.67E-04	5.17E-05	5.50E-05	5.06E-05	4.90E-05	2.69E-05	2.22E-05
2287	648751.67	4198448.15	3.47E-04	3.70E-04	5.22E-05	5.55E-05	5.10E-05	4.95E-05	2.71E-05	2.24E-05
2288	648513.18	4198180.8	1.47E-04	1.57E-04	2.21E-05	2.35E-05	2.16E-05	2.10E-05	1.15E-05	9.51E-06
2289	648512.1	4198156.21	1.42E-04	1.51E-04	2.14E-05	2.27E-05	2.09E-05	2.03E-05	1.11E-05	9.18E-06
2290	648511.03	4198131.61	1.37E-04	1.46E-04	2.06E-05	2.19E-05	2.01E-05	1.95E-05	1.07E-05	8.85E-06
2291	648509.96	4198107.01	1.32E-04	1.40E-04	1.98E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.51E-06
2292	648508.89	4198082.42	1.27E-04	1.35E-04	1.90E-05	2.02E-05	1.86E-05	1.80E-05	9.89E-06	8.18E-06
2293	648507.82	4198057.82	1.22E-04	1.30E-04	1.83E-05	1.94E-05	1.79E-05	1.73E-05	9.49E-06	7.85E-06
2294	648506.75	4198033.22	1.17E-04	1.24E-04	1.75E-05	1.87E-05	1.72E-05	1.66E-05	9.12E-06	7.54E-06
2295	648505.68	4198008.63	1.12E-04	1.20E-04	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.76E-06	7.25E-06
2296	648504.61	4197984.03	1.08E-04	1.15E-04	1.62E-05	1.72E-05	1.59E-05	1.54E-05	8.42E-06	6.97E-06
2297	648503.53	4197959.43	1.04E-04	1.11E-04	1.56E-05	1.66E-05	1.53E-05	1.48E-05	8.11E-06	6.71E-06
2298	648502.46	4197934.83	1.00E-04	1.07E-04	1.51E-05	1.60E-05	1.47E-05	1.43E-05	7.82E-06	6.47E-06
2299	648501.39	4197910.24	9.68E-05	1.03E-04	1.46E-05	1.55E-05	1.42E-05	1.38E-05	7.56E-06	6.26E-06
2300	648500.32	4197885.64	9.38E-05	1.00E-04	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.33E-06	6.06E-06
2301	648499.25	4197861.04	9.10E-05	9.70E-05	1.37E-05	1.45E-05	1.34E-05	1.30E-05	7.11E-06	5.88E-06
2302	648498.18	4197836.45	8.83E-05	9.42E-05	1.33E-05	1.41E-05	1.30E-05	1.26E-05	6.90E-06	5.71E-06
2303	648497.11	4197811.85	8.58E-05	9.15E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.71E-06	5.55E-06
2304	648514.25	4198205.4	1.52E-04	1.62E-04	2.29E-05	2.43E-05	2.24E-05	2.17E-05	1.19E-05	9.83E-06
2305	648525.67	4198227.59	1.61E-04	1.72E-04	2.43E-05	2.58E-05	2.37E-05	2.30E-05	1.26E-05	1.04E-05
2306	648537.09	4198249.79	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.43E-05	1.33E-05	1.10E-05
2307	648548.52	4198271.98	1.81E-04	1.93E-04	2.72E-05	2.89E-05	2.66E-05	2.57E-05	1.41E-05	1.17E-05
2308	648559.94	4198294.18	1.91E-04	2.03E-04	2.86E-05	3.05E-05	2.80E-05	2.72E-05	1.49E-05	1.23E-05
2309	648571.37	4198316.37	2.01E-04	2.14E-04	3.01E-05	3.21E-05	2.95E-05	2.86E-05	1.57E-05	1.30E-05
2310	648582.79	4198338.56	2.10E-04	2.24E-04	3.16E-05	3.36E-05	3.09E-05	3.00E-05	1.64E-05	1.36E-05
2311	648594.21	4198360.76	2.20E-04	2.34E-04	3.31E-05	3.51E-05	3.23E-05	3.13E-05	1.72E-05	1.42E-05
2312	648605.64	4198382.95	2.29E-04	2.44E-04	3.44E-05	3.66E-05	3.36E-05	3.26E-05	1.79E-05	1.48E-05
2313	648617.06	4198405.14	2.37E-04	2.53E-04	3.57E-05	3.79E-05	3.49E-05	3.38E-05	1.85E-05	1.53E-05
2314	648628.48	4198427.34	2.44E-04	2.61E-04	3.68E-05	3.91E-05	3.59E-05	3.48E-05	1.91E-05	1.58E-05
2315	648639.91	4198449.53	2.51E-04	2.67E-04	3.77E-05	4.01E-05	3.69E-05	3.57E-05	1.96E-05	1.62E-05
2316	648651.33	4198471.73	2.56E-04	2.73E-04	3.85E-05	4.09E-05	3.76E-05	3.65E-05	2.00E-05	1.65E-05
2317	648662.76	4198493.92	2.60E-04	2.77E-04	3.91E-05	4.16E-05	3.82E-05	3.71E-05	2.03E-05	1.68E-05
2318	648424.29	4198227.27	1.22E-04	1.30E-04	1.83E-05	1.95E-05	1.79E-05	1.74E-05	9.53E-06	7.89E-06
2319	648423.25	4198203.38	1.19E-04	1.26E-04	1.78E-05	1.90E-05	1.74E-05	1.69E-05	9.27E-06	7.67E-06
2320	648422.21	4198179.48	1.15E-04	1.23E-04	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.99E-06	7.44E-06
2321	648421.17	4198155.59	1.11E-04	1.19E-04	1.68E-05	1.78E-05	1.64E-05	1.59E-05	8.70E-06	7.20E-06
2322	648420.13	4198131.7	1.08E-04	1.15E-04	1.62E-05	1.72E-05	1.58E-05	1.53E-05	8.41E-06	6.96E-06
2323	648419.09	4198107.8	1.04E-04	1.11E-04	1.56E-05	1.66E-05	1.53E-05	1.48E-05	8.12E-06	6.72E-06
2324	648418.05	4198083.91	1.00E-04	1.07E-04	1.51E-05	1.60E-05	1.48E-05	1.43E-05	7.84E-06	6.49E-06
2325	648417.01	4198060.01	9.69E-05	1.03E-04	1.46E-05	1.55E-05	1.42E-05	1.38E-05	7.57E-06	6.26E-06
2326	648415.97	4198036.12	9.35E-05	9.97E-05	1.41E-05	1.50E-05	1.38E-05	1.33E-05	7.31E-06	6.04E-06
2327	648414.93	4198012.23	9.04E-05	9.63E-05	1.36E-05	1.44E-05	1.33E-05	1.29E-05	7.06E-06	5.84E-06
2328	648413.89	4197988.33	8.74E-05	9.32E-05	1.31E-05	1.40E-05	1.29E-05	1.25E-05	6.83E-06	5.65E-06
2329	648412.85	4197964.44	8.46E-05	9.02E-05	1.27E-05	1.35E-05	1.24E-05	1.21E-05	6.61E-06	5.47E-06
2330	648411.81	4197940.54	8.21E-05	8.75E-05	1.23E-05	1.31E-05	1.21E-05	1.17E-05	6.41E-06	5.31E-06
2331	648410.77	4197916.65	7.98E-05	8.51E-05	1.20E-05	1.28E-05	1.17E-05	1.14E-05	6.23E-06	5.16E-06
2332	648409.73	4197892.75	7.77E-05	8.28E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.07E-06	5.02E-06
2333	648408.68	4197868.86	7.57E-05	8.07E-05	1.14E-05	1.21E-05	1.11E-05	1.08E-05	5.92E-06	4.89E-06

2334	648407.64	4197844.97	7.39E-05	7.88E-05	1.11E-05	1.18E-05	1.09E-05	1.05E-05	5.77E-06	4.78E-06
2335	648406.6	4197821.07	7.22E-05	7.70E-05	1.09E-05	1.15E-05	1.06E-05	1.03E-05	5.64E-06	4.66E-06
2336	648405.56	4197797.18	7.05E-05	7.52E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.51E-06	4.56E-06
2337	648404.52	4197773.28	6.89E-05	7.34E-05	1.04E-05	1.10E-05	1.01E-05	9.82E-06	5.38E-06	4.45E-06
2338	648425.33	4198251.17	1.25E-04	1.34E-04	1.88E-05	2.00E-05	1.84E-05	1.79E-05	9.79E-06	8.10E-06
2339	648436.76	4198273.36	1.32E-04	1.40E-04	1.98E-05	2.10E-05	1.93E-05	1.87E-05	1.03E-05	8.50E-06
2340	648448.18	4198295.55	1.38E-04	1.47E-04	2.07E-05	2.21E-05	2.03E-05	1.97E-05	1.08E-05	8.92E-06
2341	648459.61	4198317.75	1.45E-04	1.54E-04	2.17E-05	2.31E-05	2.12E-05	2.06E-05	1.13E-05	9.34E-06
2342	648471.03	4198339.94	1.51E-04	1.61E-04	2.27E-05	2.42E-05	2.22E-05	2.15E-05	1.18E-05	9.77E-06
2343	648482.45	4198362.14	1.58E-04	1.68E-04	2.37E-05	2.52E-05	2.32E-05	2.25E-05	1.23E-05	1.02E-05
2344	648493.88	4198384.33	1.64E-04	1.75E-04	2.47E-05	2.63E-05	2.42E-05	2.34E-05	1.28E-05	1.06E-05
2345	648505.3	4198406.52	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.44E-05	1.34E-05	1.11E-05
2346	648516.72	4198428.72	1.77E-04	1.89E-04	2.67E-05	2.84E-05	2.61E-05	2.53E-05	1.39E-05	1.15E-05
2347	648528.15	4198450.91	1.83E-04	1.95E-04	2.76E-05	2.93E-05	2.70E-05	2.61E-05	1.43E-05	1.18E-05
2348	648539.57	4198473.1	1.89E-04	2.01E-04	2.84E-05	3.02E-05	2.78E-05	2.69E-05	1.48E-05	1.22E-05
2349	648551	4198495.3	1.94E-04	2.07E-04	2.92E-05	3.10E-05	2.85E-05	2.76E-05	1.52E-05	1.25E-05
2350	648562.42	4198517.49	1.98E-04	2.12E-04	2.98E-05	3.17E-05	2.92E-05	2.83E-05	1.55E-05	1.28E-05
2351	648573.84	4198539.69	2.02E-04	2.16E-04	3.04E-05	3.23E-05	2.97E-05	2.88E-05	1.58E-05	1.31E-05
2352	648335.36	4198272.54	1.03E-04	1.10E-04	1.55E-05	1.65E-05	1.52E-05	1.47E-05	8.07E-06	6.68E-06
2353	648334.3	4198248.15	1.01E-04	1.08E-04	1.52E-05	1.61E-05	1.48E-05	1.44E-05	7.89E-06	6.52E-06
2354	648333.23	4198223.76	9.84E-05	1.05E-04	1.48E-05	1.57E-05	1.45E-05	1.40E-05	7.69E-06	6.36E-06
2355	648332.17	4198199.36	9.57E-05	1.02E-04	1.44E-05	1.53E-05	1.41E-05	1.36E-05	7.47E-06	6.18E-06
2356	648331.11	4198174.97	9.28E-05	9.90E-05	1.40E-05	1.48E-05	1.37E-05	1.32E-05	7.25E-06	6.00E-06
2357	648330.05	4198150.58	9.00E-05	9.59E-05	1.35E-05	1.44E-05	1.32E-05	1.28E-05	7.03E-06	5.81E-06
2358	648328.99	4198126.19	8.71E-05	9.28E-05	1.31E-05	1.39E-05	1.28E-05	1.24E-05	6.80E-06	5.63E-06
2359	648327.92	4198101.8	8.42E-05	8.98E-05	1.27E-05	1.35E-05	1.24E-05	1.20E-05	6.58E-06	5.44E-06
2360	648326.86	4198077.41	8.15E-05	8.68E-05	1.22E-05	1.30E-05	1.20E-05	1.16E-05	6.36E-06	5.26E-06
2361	648325.8	4198053.01	7.88E-05	8.40E-05	1.18E-05	1.26E-05	1.16E-05	1.12E-05	6.16E-06	5.09E-06
2362	648324.74	4198028.62	7.63E-05	8.13E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.96E-06	4.93E-06
2363	648323.67	4198004.23	7.39E-05	7.88E-05	1.11E-05	1.18E-05	1.09E-05	1.05E-05	5.78E-06	4.78E-06
2364	648322.61	4197979.84	7.18E-05	7.65E-05	1.08E-05	1.15E-05	1.06E-05	1.02E-05	5.61E-06	4.64E-06
2365	648321.55	4197955.45	6.98E-05	7.44E-05	1.05E-05	1.12E-05	1.03E-05	9.95E-06	5.45E-06	4.51E-06
2366	648320.49	4197931.05	6.80E-05	7.25E-05	1.02E-05	1.09E-05	9.99E-06	9.69E-06	5.31E-06	4.39E-06
2367	648319.43	4197906.66	6.63E-05	7.07E-05	9.97E-06	1.06E-05	9.75E-06	9.45E-06	5.18E-06	4.29E-06
2368	648318.36	4197882.27	6.48E-05	6.91E-05	9.74E-06	1.04E-05	9.53E-06	9.23E-06	5.06E-06	4.19E-06
2369	648317.3	4197857.88	6.34E-05	6.76E-05	9.53E-06	1.01E-05	9.32E-06	9.03E-06	4.95E-06	4.10E-06
2370	648316.24	4197833.49	6.21E-05	6.62E-05	9.33E-06	9.92E-06	9.13E-06	8.85E-06	4.85E-06	4.01E-06
2371	648315.18	4197809.09	6.08E-05	6.48E-05	9.14E-06	9.72E-06	8.94E-06	8.67E-06	4.75E-06	3.93E-06
2372	648314.11	4197784.7	5.96E-05	6.35E-05	8.96E-06	9.52E-06	8.76E-06	8.49E-06	4.65E-06	3.85E-06
2373	648313.05	4197760.31	5.84E-05	6.22E-05	8.78E-06	9.33E-06	8.58E-06	8.32E-06	4.56E-06	3.77E-06
2374	648311.99	4197735.92	5.71E-05	6.09E-05	8.59E-06	9.14E-06	8.40E-06	8.14E-06	4.46E-06	3.69E-06
2375	648336.42	4198296.93	1.06E-04	1.13E-04	1.59E-05	1.69E-05	1.55E-05	1.50E-05	8.25E-06	6.82E-06
2376	648347.84	4198319.13	1.10E-04	1.17E-04	1.65E-05	1.76E-05	1.62E-05	1.57E-05	8.60E-06	7.11E-06
2377	648359.27	4198341.32	1.15E-04	1.22E-04	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.95E-06	7.40E-06
2378	648370.69	4198363.51	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.70E-05	9.30E-06	7.70E-06
2379	648382.12	4198385.71	1.24E-04	1.32E-04	1.86E-05	1.98E-05	1.82E-05	1.76E-05	9.67E-06	8.00E-06
2380	648393.54	4198407.9	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.89E-05	1.83E-05	1.00E-05	8.30E-06
2381	648404.96	4198430.1	1.33E-04	1.42E-04	2.00E-05	2.13E-05	1.96E-05	1.90E-05	1.04E-05	8.60E-06
2382	648416.39	4198452.29	1.38E-04	1.47E-04	2.07E-05	2.20E-05	2.03E-05	1.96E-05	1.08E-05	8.90E-06
2383	648427.81	4198474.48	1.42E-04	1.52E-04	2.14E-05	2.28E-05	2.09E-05	2.03E-05	1.11E-05	9.20E-06
2384	648439.24	4198496.68	1.47E-04	1.57E-04	2.21E-05	2.35E-05	2.16E-05	2.09E-05	1.15E-05	9.49E-06
2385	648450.66	4198518.87	1.51E-04	1.61E-04	2.27E-05	2.42E-05	2.22E-05	2.15E-05	1.18E-05	9.77E-06
2386	648462.08	4198541.06	1.55E-04	1.65E-04	2.33E-05	2.48E-05	2.28E-05	2.21E-05	1.21E-05	1.00E-05
2387	648473.51	4198563.26	1.59E-04	1.69E-04	2.39E-05	2.54E-05	2.34E-05	2.26E-05	1.24E-05	1.03E-05
2388	648484.93	4198585.45	1.62E-04	1.73E-04	2.44E-05	2.59E-05	2.38E-05	2.31E-05	1.27E-05	1.05E-05
2389	648157.54	4198364.19	7.77E-05	8.29E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.07E-06	5.02E-06
2390	648156.48	4198339.91	7.65E-05	8.16E-05	1.15E-05	1.22E-05	1.13E-05	1.09E-05	5.98E-06	4.95E-06

2391	648155.42	4198315.63	7.53E-05	8.02E-05	1.13E-05	1.20E-05	1.11E-05	1.07E-05	5.88E-06	4.86E-06
2392	648154.37	4198291.35	7.39E-05	7.88E-05	1.11E-05	1.18E-05	1.09E-05	1.05E-05	5.77E-06	4.77E-06
2393	648153.31	4198267.07	7.24E-05	7.72E-05	1.09E-05	1.16E-05	1.06E-05	1.03E-05	5.65E-06	4.68E-06
2394	648152.25	4198242.79	7.08E-05	7.55E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.53E-06	4.58E-06
2395	648151.19	4198218.51	6.91E-05	7.37E-05	1.04E-05	1.11E-05	1.02E-05	9.85E-06	5.40E-06	4.47E-06
2396	648150.14	4198194.23	6.74E-05	7.18E-05	1.01E-05	1.08E-05	9.91E-06	9.60E-06	5.26E-06	4.35E-06
2397	648149.08	4198169.95	6.56E-05	6.99E-05	9.86E-06	1.05E-05	9.64E-06	9.35E-06	5.12E-06	4.24E-06
2398	648148.02	4198145.67	6.38E-05	6.80E-05	9.59E-06	1.02E-05	9.38E-06	9.09E-06	4.98E-06	4.12E-06
2399	648146.96	4198121.39	6.19E-05	6.60E-05	9.31E-06	9.90E-06	9.11E-06	8.83E-06	4.84E-06	4.00E-06
2400	648145.91	4198097.11	6.02E-05	6.41E-05	9.05E-06	9.62E-06	8.85E-06	8.57E-06	4.70E-06	3.89E-06
2401	648144.85	4198072.83	5.85E-05	6.23E-05	8.79E-06	9.34E-06	8.59E-06	8.33E-06	4.57E-06	3.78E-06
2402	648143.79	4198048.55	5.68E-05	6.06E-05	8.54E-06	9.08E-06	8.35E-06	8.10E-06	4.44E-06	3.67E-06
2403	648142.74	4198024.27	5.53E-05	5.89E-05	8.31E-06	8.84E-06	8.13E-06	7.88E-06	4.32E-06	3.57E-06
2404	648141.68	4197999.99	5.39E-05	5.74E-05	8.10E-06	8.61E-06	7.92E-06	7.68E-06	4.21E-06	3.48E-06
2405	648140.62	4197975.71	5.26E-05	5.61E-05	7.91E-06	8.41E-06	7.73E-06	7.49E-06	4.11E-06	3.40E-06
2406	648139.56	4197951.43	5.14E-05	5.48E-05	7.73E-06	8.22E-06	7.56E-06	7.33E-06	4.02E-06	3.32E-06
2407	648138.51	4197927.15	5.04E-05	5.37E-05	7.57E-06	8.05E-06	7.40E-06	7.18E-06	3.93E-06	3.25E-06
2408	648137.45	4197902.87	4.94E-05	5.27E-05	7.43E-06	7.90E-06	7.26E-06	7.04E-06	3.86E-06	3.19E-06
2409	648136.39	4197878.6	4.86E-05	5.18E-05	7.30E-06	7.76E-06	7.14E-06	6.92E-06	3.79E-06	3.14E-06
2410	648135.33	4197854.32	4.78E-05	5.09E-05	7.18E-06	7.64E-06	7.02E-06	6.81E-06	3.73E-06	3.09E-06
2411	648134.28	4197830.04	4.70E-05	5.02E-05	7.07E-06	7.52E-06	6.92E-06	6.70E-06	3.68E-06	3.04E-06
2412	648133.22	4197805.76	4.63E-05	4.94E-05	6.97E-06	7.41E-06	6.81E-06	6.60E-06	3.62E-06	2.99E-06
2413	648132.16	4197781.48	4.56E-05	4.86E-05	6.86E-06	7.30E-06	6.71E-06	6.50E-06	3.56E-06	2.95E-06
2414	648131.1	4197757.2	4.49E-05	4.79E-05	6.76E-06	7.18E-06	6.61E-06	6.40E-06	3.51E-06	2.90E-06
2415	648130.05	4197732.92	4.42E-05	4.71E-05	6.65E-06	7.07E-06	6.50E-06	6.30E-06	3.45E-06	2.86E-06
2416	648128.99	4197708.64	4.35E-05	4.63E-05	6.53E-06	6.95E-06	6.39E-06	6.19E-06	3.39E-06	2.81E-06
2417	648127.93	4197684.36	4.27E-05	4.55E-05	6.42E-06	6.82E-06	6.28E-06	6.08E-06	3.33E-06	2.76E-06
2418	648126.88	4197660.08	4.19E-05	4.47E-05	6.30E-06	6.70E-06	6.16E-06	5.97E-06	3.27E-06	2.71E-06
2419	648158.6	4198388.46	7.88E-05	8.40E-05	1.19E-05	1.26E-05	1.16E-05	1.12E-05	6.16E-06	5.09E-06
2420	648170.02	4198410.66	8.12E-05	8.66E-05	1.22E-05	1.30E-05	1.19E-05	1.16E-05	6.35E-06	5.25E-06
2421	648181.44	4198432.85	8.37E-05	8.92E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.54E-06	5.41E-06
2422	648192.87	4198455.05	8.62E-05	9.18E-05	1.30E-05	1.38E-05	1.27E-05	1.23E-05	6.73E-06	5.57E-06
2423	648204.29	4198477.24	8.87E-05	9.45E-05	1.33E-05	1.42E-05	1.30E-05	1.26E-05	6.93E-06	5.73E-06
2424	648215.71	4198499.43	9.13E-05	9.73E-05	1.37E-05	1.46E-05	1.34E-05	1.30E-05	7.13E-06	5.90E-06
2425	648227.14	4198521.63	9.39E-05	1.00E-04	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.33E-06	6.06E-06
2426	648238.56	4198543.82	9.65E-05	1.03E-04	1.45E-05	1.54E-05	1.42E-05	1.38E-05	7.54E-06	6.24E-06
2427	648249.99	4198566.02	9.92E-05	1.06E-04	1.49E-05	1.59E-05	1.46E-05	1.41E-05	7.75E-06	6.41E-06
2428	648261.41	4198588.21	1.02E-04	1.09E-04	1.53E-05	1.63E-05	1.50E-05	1.45E-05	7.95E-06	6.58E-06
2429	648272.83	4198610.4	1.04E-04	1.11E-04	1.57E-05	1.67E-05	1.54E-05	1.49E-05	8.16E-06	6.75E-06
2430	648284.26	4198632.6	1.07E-04	1.14E-04	1.61E-05	1.71E-05	1.57E-05	1.52E-05	8.35E-06	6.91E-06
2431	648295.68	4198654.79	1.09E-04	1.17E-04	1.65E-05	1.75E-05	1.61E-05	1.56E-05	8.55E-06	7.07E-06
2432	648307.11	4198676.98	1.12E-04	1.19E-04	1.68E-05	1.79E-05	1.64E-05	1.59E-05	8.73E-06	7.22E-06
2433	647979.69	4198455.13	6.10E-05	6.51E-05	9.18E-06	9.76E-06	8.97E-06	8.70E-06	4.77E-06	3.94E-06
2434	647978.6	4198430.27	6.04E-05	6.44E-05	9.08E-06	9.65E-06	8.88E-06	8.60E-06	4.72E-06	3.90E-06
2435	647977.52	4198405.41	5.97E-05	6.36E-05	8.98E-06	9.54E-06	8.78E-06	8.51E-06	4.66E-06	3.86E-06
2436	647976.44	4198380.55	5.89E-05	6.28E-05	8.86E-06	9.42E-06	8.67E-06	8.40E-06	4.60E-06	3.81E-06
2437	647975.36	4198355.68	5.81E-05	6.20E-05	8.74E-06	9.29E-06	8.55E-06	8.28E-06	4.54E-06	3.76E-06
2438	647974.27	4198330.82	5.72E-05	6.10E-05	8.61E-06	9.15E-06	8.42E-06	8.16E-06	4.47E-06	3.70E-06
2439	647973.19	4198305.96	5.63E-05	6.00E-05	8.46E-06	9.00E-06	8.28E-06	8.02E-06	4.40E-06	3.64E-06
2440	647972.11	4198281.09	5.53E-05	5.89E-05	8.31E-06	8.83E-06	8.13E-06	7.88E-06	4.32E-06	3.57E-06
2441	647971.03	4198256.23	5.42E-05	5.77E-05	8.14E-06	8.66E-06	7.96E-06	7.72E-06	4.23E-06	3.50E-06
2442	647969.94	4198231.37	5.30E-05	5.65E-05	7.97E-06	8.48E-06	7.80E-06	7.56E-06	4.14E-06	3.43E-06
2443	647968.86	4198206.51	5.18E-05	5.52E-05	7.79E-06	8.28E-06	7.62E-06	7.38E-06	4.05E-06	3.35E-06
2444	647967.78	4198181.64	5.06E-05	5.39E-05	7.60E-06	8.08E-06	7.44E-06	7.21E-06	3.95E-06	3.27E-06
2445	647966.69	4198156.78	4.93E-05	5.25E-05	7.41E-06	7.88E-06	7.25E-06	7.02E-06	3.85E-06	3.19E-06
2446	647965.61	4198131.92	4.80E-05	5.12E-05	7.22E-06	7.68E-06	7.06E-06	6.84E-06	3.75E-06	3.10E-06
2447	647964.53	4198107.06	4.68E-05	4.98E-05	7.03E-06	7.48E-06	6.88E-06	6.66E-06	3.65E-06	3.02E-06

2448	647963.45	4198082.19	4.55E-05	4.85E-05	6.85E-06	7.28E-06	6.69E-06	6.49E-06	3.56E-06	2.94E-06
2449	647962.36	4198057.33	4.44E-05	4.73E-05	6.67E-06	7.09E-06	6.52E-06	6.32E-06	3.46E-06	2.87E-06
2450	647961.28	4198032.47	4.32E-05	4.61E-05	6.50E-06	6.91E-06	6.36E-06	6.16E-06	3.38E-06	2.79E-06
2451	647960.2	4198007.6	4.22E-05	4.50E-05	6.35E-06	6.75E-06	6.21E-06	6.01E-06	3.30E-06	2.73E-06
2452	647959.12	4197982.74	4.13E-05	4.40E-05	6.21E-06	6.60E-06	6.07E-06	5.88E-06	3.22E-06	2.67E-06
2453	647958.03	4197957.88	4.04E-05	4.31E-05	6.08E-06	6.46E-06	5.94E-06	5.76E-06	3.16E-06	2.61E-06
2454	647956.95	4197933.02	3.97E-05	4.23E-05	5.97E-06	6.35E-06	5.84E-06	5.66E-06	3.10E-06	2.56E-06
2455	647955.87	4197908.15	3.90E-05	4.16E-05	5.87E-06	6.24E-06	5.74E-06	5.56E-06	3.05E-06	2.52E-06
2456	647954.78	4197883.29	3.85E-05	4.10E-05	5.78E-06	6.15E-06	5.65E-06	5.48E-06	3.00E-06	2.49E-06
2457	647953.7	4197858.43	3.80E-05	4.05E-05	5.71E-06	6.07E-06	5.58E-06	5.41E-06	2.97E-06	2.45E-06
2458	647952.62	4197833.56	3.75E-05	4.00E-05	5.64E-06	6.00E-06	5.52E-06	5.35E-06	2.93E-06	2.42E-06
2459	647951.54	4197808.7	3.71E-05	3.95E-05	5.58E-06	5.93E-06	5.45E-06	5.29E-06	2.90E-06	2.40E-06
2460	647950.45	4197783.84	3.67E-05	3.91E-05	5.52E-06	5.86E-06	5.39E-06	5.23E-06	2.87E-06	2.37E-06
2461	647949.37	4197758.98	3.63E-05	3.87E-05	5.45E-06	5.80E-06	5.33E-06	5.17E-06	2.83E-06	2.34E-06
2462	647948.29	4197734.11	3.58E-05	3.82E-05	5.39E-06	5.73E-06	5.27E-06	5.11E-06	2.80E-06	2.31E-06
2463	647947.2	4197709.25	3.54E-05	3.77E-05	5.32E-06	5.65E-06	5.20E-06	5.04E-06	2.76E-06	2.28E-06
2464	647946.12	4197684.39	3.49E-05	3.72E-05	5.24E-06	5.57E-06	5.13E-06	4.97E-06	2.72E-06	2.25E-06
2465	647945.04	4197659.52	3.43E-05	3.66E-05	5.16E-06	5.49E-06	5.05E-06	4.89E-06	2.68E-06	2.22E-06
2466	647943.96	4197634.66	3.38E-05	3.60E-05	5.08E-06	5.40E-06	4.96E-06	4.81E-06	2.64E-06	2.18E-06
2467	647942.87	4197609.8	3.32E-05	3.54E-05	4.99E-06	5.31E-06	4.88E-06	4.73E-06	2.59E-06	2.14E-06
2468	647941.79	4197584.94	3.26E-05	3.48E-05	4.90E-06	5.21E-06	4.79E-06	4.65E-06	2.55E-06	2.11E-06
2469	647980.77	4198480	6.16E-05	6.57E-05	9.27E-06	9.85E-06	9.06E-06	8.78E-06	4.81E-06	3.98E-06
2470	647992.19	4198502.19	6.31E-05	6.73E-05	9.49E-06	1.01E-05	9.28E-06	8.99E-06	4.93E-06	4.08E-06
2471	648003.62	4198524.38	6.46E-05	6.88E-05	9.71E-06	1.03E-05	9.49E-06	9.20E-06	5.04E-06	4.17E-06
2472	648015.04	4198546.58	6.61E-05	7.04E-05	9.93E-06	1.06E-05	9.71E-06	9.41E-06	5.16E-06	4.27E-06
2473	648026.47	4198568.77	6.76E-05	7.21E-05	1.02E-05	1.08E-05	9.94E-06	9.64E-06	5.28E-06	4.37E-06
2474	648037.89	4198590.97	6.92E-05	7.37E-05	1.04E-05	1.11E-05	1.02E-05	9.86E-06	5.40E-06	4.47E-06
2475	648049.31	4198613.16	7.08E-05	7.55E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.53E-06	4.57E-06
2476	648060.74	4198635.35	7.24E-05	7.72E-05	1.09E-05	1.16E-05	1.06E-05	1.03E-05	5.66E-06	4.68E-06
2477	648072.16	4198657.55	7.41E-05	7.90E-05	1.11E-05	1.18E-05	1.09E-05	1.06E-05	5.79E-06	4.79E-06
2478	648083.58	4198679.74	7.58E-05	8.08E-05	1.14E-05	1.21E-05	1.11E-05	1.08E-05	5.92E-06	4.90E-06
2479	648095.01	4198701.94	7.75E-05	8.26E-05	1.17E-05	1.24E-05	1.14E-05	1.10E-05	6.06E-06	5.01E-06
2480	648106.43	4198724.13	7.92E-05	8.45E-05	1.19E-05	1.27E-05	1.16E-05	1.13E-05	6.19E-06	5.12E-06
2481	648117.86	4198746.32	8.09E-05	8.63E-05	1.22E-05	1.29E-05	1.19E-05	1.15E-05	6.32E-06	5.23E-06
2482	648129.28	4198768.52	8.26E-05	8.81E-05	1.24E-05	1.32E-05	1.21E-05	1.18E-05	6.45E-06	5.34E-06
2483	647801.87	4198546.82	4.95E-05	5.28E-05	7.45E-06	7.92E-06	7.28E-06	7.06E-06	3.87E-06	3.20E-06
2484	647800.79	4198522.11	4.92E-05	5.24E-05	7.39E-06	7.86E-06	7.23E-06	7.00E-06	3.84E-06	3.18E-06
2485	647799.72	4198497.4	4.88E-05	5.20E-05	7.33E-06	7.80E-06	7.17E-06	6.95E-06	3.81E-06	3.15E-06
2486	647798.64	4198472.69	4.83E-05	5.15E-05	7.27E-06	7.73E-06	7.11E-06	6.89E-06	3.78E-06	3.12E-06
2487	647797.56	4198447.99	4.79E-05	5.11E-05	7.20E-06	7.66E-06	7.04E-06	6.82E-06	3.74E-06	3.09E-06
2488	647796.49	4198423.28	4.74E-05	5.05E-05	7.13E-06	7.58E-06	6.97E-06	6.75E-06	3.70E-06	3.06E-06
2489	647795.41	4198398.57	4.69E-05	5.00E-05	7.05E-06	7.49E-06	6.89E-06	6.68E-06	3.66E-06	3.03E-06
2490	647794.34	4198373.86	4.63E-05	4.94E-05	6.96E-06	7.40E-06	6.81E-06	6.60E-06	3.62E-06	2.99E-06
2491	647793.26	4198349.15	4.57E-05	4.87E-05	6.87E-06	7.30E-06	6.72E-06	6.51E-06	3.57E-06	2.95E-06
2492	647792.18	4198324.44	4.50E-05	4.80E-05	6.77E-06	7.20E-06	6.62E-06	6.42E-06	3.52E-06	2.91E-06
2493	647791.11	4198299.73	4.43E-05	4.72E-05	6.66E-06	7.08E-06	6.51E-06	6.31E-06	3.46E-06	2.86E-06
2494	647790.03	4198275.02	4.35E-05	4.64E-05	6.55E-06	6.96E-06	6.40E-06	6.21E-06	3.40E-06	2.81E-06
2495	647788.96	4198250.32	4.27E-05	4.56E-05	6.43E-06	6.83E-06	6.28E-06	6.09E-06	3.34E-06	2.76E-06
2496	647787.88	4198225.61	4.19E-05	4.47E-05	6.30E-06	6.70E-06	6.16E-06	5.97E-06	3.27E-06	2.71E-06
2497	647786.8	4198200.9	4.10E-05	4.37E-05	6.17E-06	6.56E-06	6.03E-06	5.85E-06	3.21E-06	2.65E-06
2498	647785.73	4198176.19	4.01E-05	4.28E-05	6.04E-06	6.42E-06	5.90E-06	5.72E-06	3.14E-06	2.59E-06
2499	647784.65	4198151.48	3.92E-05	4.18E-05	5.90E-06	6.27E-06	5.77E-06	5.59E-06	3.06E-06	2.53E-06
2500	647783.58	4198126.77	3.83E-05	4.08E-05	5.76E-06	6.12E-06	5.63E-06	5.46E-06	2.99E-06	2.48E-06
2501	647782.5	4198102.06	3.74E-05	3.99E-05	5.62E-06	5.98E-06	5.50E-06	5.33E-06	2.92E-06	2.42E-06
2502	647781.42	4198077.36	3.65E-05	3.89E-05	5.49E-06	5.84E-06	5.37E-06	5.20E-06	2.85E-06	2.36E-06
2503	647780.35	4198052.65	3.56E-05	3.80E-05	5.36E-06	5.70E-06	5.24E-06	5.08E-06	2.78E-06	2.30E-06
2504	647779.27	4198027.94	3.48E-05	3.71E-05	5.24E-06	5.57E-06	5.12E-06	4.96E-06	2.72E-06	2.25E-06

2505	647778.2	4198003.23	3.41E-05	3.63E-05	5.12E-06	5.45E-06	5.01E-06	4.86E-06	2.66E-06	2.20E-06
2506	647777.12	4197978.52	3.34E-05	3.56E-05	5.02E-06	5.34E-06	4.91E-06	4.76E-06	2.61E-06	2.16E-06
2507	647776.04	4197953.81	3.28E-05	3.49E-05	4.93E-06	5.24E-06	4.82E-06	4.67E-06	2.56E-06	2.12E-06
2508	647774.97	4197929.1	3.23E-05	3.44E-05	4.85E-06	5.16E-06	4.74E-06	4.60E-06	2.52E-06	2.08E-06
2509	647773.89	4197904.39	3.18E-05	3.39E-05	4.78E-06	5.08E-06	4.67E-06	4.53E-06	2.48E-06	2.05E-06
2510	647772.82	4197879.69	3.14E-05	3.35E-05	4.72E-06	5.02E-06	4.62E-06	4.47E-06	2.45E-06	2.03E-06
2511	647771.74	4197854.98	3.11E-05	3.31E-05	4.67E-06	4.96E-06	4.57E-06	4.43E-06	2.43E-06	2.01E-06
2512	647770.66	4197830.27	3.08E-05	3.28E-05	4.63E-06	4.92E-06	4.52E-06	4.38E-06	2.40E-06	1.99E-06
2513	647769.59	4197805.56	3.05E-05	3.25E-05	4.59E-06	4.88E-06	4.49E-06	4.35E-06	2.38E-06	1.97E-06
2514	647768.51	4197780.85	3.03E-05	3.23E-05	4.55E-06	4.84E-06	4.45E-06	4.31E-06	2.36E-06	1.96E-06
2515	647767.44	4197756.14	3.00E-05	3.20E-05	4.52E-06	4.80E-06	4.42E-06	4.28E-06	2.35E-06	1.94E-06
2516	647766.36	4197731.43	2.98E-05	3.18E-05	4.48E-06	4.76E-06	4.38E-06	4.25E-06	2.33E-06	1.93E-06
2517	647765.28	4197706.73	2.95E-05	3.15E-05	4.44E-06	4.72E-06	4.34E-06	4.21E-06	2.31E-06	1.91E-06
2518	647764.21	4197682.02	2.92E-05	3.12E-05	4.40E-06	4.67E-06	4.30E-06	4.17E-06	2.28E-06	1.89E-06
2519	647763.13	4197657.31	2.89E-05	3.08E-05	4.35E-06	4.62E-06	4.25E-06	4.12E-06	2.26E-06	1.87E-06
2520	647762.06	4197632.6	2.85E-05	3.04E-05	4.29E-06	4.56E-06	4.20E-06	4.07E-06	2.23E-06	1.84E-06
2521	647760.98	4197607.89	2.82E-05	3.00E-05	4.23E-06	4.50E-06	4.14E-06	4.01E-06	2.20E-06	1.82E-06
2522	647759.9	4197583.18	2.77E-05	2.96E-05	4.17E-06	4.43E-06	4.08E-06	3.95E-06	2.17E-06	1.79E-06
2523	647758.83	4197558.47	2.73E-05	2.91E-05	4.10E-06	4.36E-06	4.01E-06	3.89E-06	2.13E-06	1.76E-06
2524	647757.75	4197533.76	2.68E-05	2.86E-05	4.03E-06	4.29E-06	3.94E-06	3.82E-06	2.10E-06	1.73E-06
2525	647756.68	4197509.06	2.64E-05	2.81E-05	3.97E-06	4.22E-06	3.88E-06	3.76E-06	2.06E-06	1.70E-06
2526	647802.94	4198571.53	4.99E-05	5.32E-05	7.50E-06	7.97E-06	7.33E-06	7.11E-06	3.89E-06	3.22E-06
2527	647814.37	4198593.72	5.08E-05	5.42E-05	7.64E-06	8.13E-06	7.47E-06	7.24E-06	3.97E-06	3.28E-06
2528	647825.79	4198615.92	5.18E-05	5.52E-05	7.79E-06	8.28E-06	7.61E-06	7.38E-06	4.05E-06	3.35E-06
2529	647837.22	4198638.11	5.28E-05	5.63E-05	7.94E-06	8.44E-06	7.76E-06	7.52E-06	4.12E-06	3.41E-06
2530	647848.64	4198660.3	5.38E-05	5.73E-05	8.09E-06	8.60E-06	7.91E-06	7.67E-06	4.20E-06	3.48E-06
2531	647860.06	4198682.5	5.48E-05	5.85E-05	8.25E-06	8.77E-06	8.06E-06	7.82E-06	4.28E-06	3.54E-06
2532	647871.49	4198704.69	5.59E-05	5.96E-05	8.41E-06	8.94E-06	8.22E-06	7.97E-06	4.37E-06	3.61E-06
2533	647882.91	4198726.89	5.70E-05	6.08E-05	8.57E-06	9.12E-06	8.38E-06	8.13E-06	4.45E-06	3.68E-06
2534	647894.34	4198749.08	5.82E-05	6.20E-05	8.74E-06	9.30E-06	8.55E-06	8.29E-06	4.54E-06	3.76E-06
2535	647905.76	4198771.27	5.93E-05	6.32E-05	8.92E-06	9.48E-06	8.72E-06	8.45E-06	4.63E-06	3.83E-06
2536	647917.18	4198793.47	6.05E-05	6.45E-05	9.10E-06	9.67E-06	8.90E-06	8.62E-06	4.73E-06	3.91E-06
2537	647928.61	4198815.66	6.17E-05	6.58E-05	9.28E-06	9.87E-06	9.07E-06	8.80E-06	4.82E-06	3.99E-06
2538	647940.03	4198837.85	6.29E-05	6.71E-05	9.46E-06	1.01E-05	9.25E-06	8.97E-06	4.92E-06	4.07E-06
2539	647951.45	4198860.05	6.42E-05	6.84E-05	9.65E-06	1.03E-05	9.43E-06	9.14E-06	5.01E-06	4.15E-06
2540	647624.05	4198638.46	4.12E-05	4.39E-05	6.20E-06	6.59E-06	6.06E-06	5.87E-06	3.22E-06	2.66E-06
2541	647622.98	4198613.87	4.10E-05	4.37E-05	6.16E-06	6.55E-06	6.03E-06	5.84E-06	3.20E-06	2.65E-06
2542	647621.91	4198589.27	4.08E-05	4.34E-05	6.13E-06	6.52E-06	5.99E-06	5.81E-06	3.18E-06	2.63E-06
2543	647620.83	4198564.67	4.05E-05	4.32E-05	6.09E-06	6.48E-06	5.96E-06	5.77E-06	3.16E-06	2.62E-06
2544	647619.76	4198540.08	4.02E-05	4.29E-05	6.05E-06	6.43E-06	5.92E-06	5.73E-06	3.14E-06	2.60E-06
2545	647618.69	4198515.48	3.99E-05	4.26E-05	6.01E-06	6.39E-06	5.87E-06	5.69E-06	3.12E-06	2.58E-06
2546	647617.62	4198490.88	3.96E-05	4.22E-05	5.96E-06	6.34E-06	5.83E-06	5.65E-06	3.10E-06	2.56E-06
2547	647616.55	4198466.29	3.93E-05	4.19E-05	5.91E-06	6.28E-06	5.78E-06	5.60E-06	3.07E-06	2.54E-06
2548	647615.48	4198441.69	3.89E-05	4.15E-05	5.85E-06	6.22E-06	5.72E-06	5.55E-06	3.04E-06	2.52E-06
2549	647614.41	4198417.09	3.85E-05	4.10E-05	5.79E-06	6.16E-06	5.66E-06	5.49E-06	3.01E-06	2.49E-06
2550	647613.34	4198392.5	3.81E-05	4.06E-05	5.73E-06	6.09E-06	5.60E-06	5.43E-06	2.98E-06	2.46E-06
2551	647612.27	4198367.9	3.76E-05	4.01E-05	5.66E-06	6.02E-06	5.53E-06	5.36E-06	2.94E-06	2.43E-06
2552	647611.19	4198343.3	3.72E-05	3.96E-05	5.59E-06	5.94E-06	5.47E-06	5.30E-06	2.90E-06	2.40E-06
2553	647610.12	4198318.7	3.67E-05	3.91E-05	5.52E-06	5.86E-06	5.39E-06	5.23E-06	2.87E-06	2.37E-06
2554	647609.05	4198294.11	3.61E-05	3.85E-05	5.43E-06	5.78E-06	5.31E-06	5.15E-06	2.82E-06	2.34E-06
2555	647607.98	4198269.51	3.56E-05	3.79E-05	5.35E-06	5.69E-06	5.23E-06	5.07E-06	2.78E-06	2.30E-06
2556	647606.91	4198244.91	3.50E-05	3.73E-05	5.26E-06	5.59E-06	5.14E-06	4.98E-06	2.73E-06	2.26E-06
2557	647605.84	4198220.32	3.43E-05	3.66E-05	5.16E-06	5.49E-06	5.05E-06	4.89E-06	2.68E-06	2.22E-06
2558	647604.77	4198195.72	3.37E-05	3.59E-05	5.06E-06	5.38E-06	4.95E-06	4.80E-06	2.63E-06	2.18E-06
2559	647603.7	4198171.12	3.30E-05	3.52E-05	4.96E-06	5.27E-06	4.85E-06	4.70E-06	2.58E-06	2.13E-06
2560	647602.62	4198146.53	3.23E-05	3.44E-05	4.86E-06	5.16E-06	4.75E-06	4.60E-06	2.52E-06	2.09E-06
2561	647601.55	4198121.93	3.16E-05	3.37E-05	4.75E-06	5.05E-06	4.64E-06	4.50E-06	2.47E-06	2.04E-06

2562	647600.48	4198097.33	3.09E-05	3.29E-05	4.64E-06	4.94E-06	4.54E-06	4.40E-06	2.41E-06	2.00E-06
2563	647599.41	4198072.74	3.02E-05	3.22E-05	4.54E-06	4.83E-06	4.44E-06	4.30E-06	2.36E-06	1.95E-06
2564	647598.34	4198048.14	2.95E-05	3.15E-05	4.44E-06	4.72E-06	4.34E-06	4.21E-06	2.31E-06	1.91E-06
2565	647597.27	4198023.54	2.89E-05	3.08E-05	4.35E-06	4.63E-06	4.25E-06	4.12E-06	2.26E-06	1.87E-06
2566	647596.2	4197998.95	2.84E-05	3.02E-05	4.26E-06	4.53E-06	4.17E-06	4.04E-06	2.22E-06	1.83E-06
2567	647595.13	4197974.35	2.79E-05	2.97E-05	4.19E-06	4.45E-06	4.10E-06	3.97E-06	2.18E-06	1.80E-06
2568	647594.06	4197949.75	2.74E-05	2.92E-05	4.12E-06	4.38E-06	4.03E-06	3.90E-06	2.14E-06	1.77E-06
2569	647592.98	4197925.15	2.70E-05	2.88E-05	4.06E-06	4.31E-06	3.97E-06	3.84E-06	2.11E-06	1.74E-06
2570	647591.91	4197900.56	2.66E-05	2.84E-05	4.00E-06	4.25E-06	3.91E-06	3.79E-06	2.08E-06	1.72E-06
2571	647590.84	4197875.96	2.63E-05	2.81E-05	3.96E-06	4.21E-06	3.87E-06	3.75E-06	2.06E-06	1.70E-06
2572	647589.77	4197851.36	2.61E-05	2.78E-05	3.92E-06	4.17E-06	3.83E-06	3.72E-06	2.04E-06	1.68E-06
2573	647588.7	4197826.77	2.59E-05	2.76E-05	3.89E-06	4.13E-06	3.80E-06	3.69E-06	2.02E-06	1.67E-06
2574	647587.63	4197802.17	2.57E-05	2.74E-05	3.86E-06	4.11E-06	3.78E-06	3.66E-06	2.01E-06	1.66E-06
2575	647586.56	4197777.57	2.55E-05	2.72E-05	3.84E-06	4.08E-06	3.76E-06	3.64E-06	2.00E-06	1.65E-06
2576	647585.49	4197752.98	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
2577	647584.41	4197728.38	2.53E-05	2.69E-05	3.80E-06	4.04E-06	3.72E-06	3.60E-06	1.97E-06	1.63E-06
2578	647583.34	4197703.78	2.51E-05	2.68E-05	3.78E-06	4.02E-06	3.70E-06	3.58E-06	1.96E-06	1.62E-06
2579	647582.27	4197679.19	2.50E-05	2.66E-05	3.76E-06	3.99E-06	3.67E-06	3.56E-06	1.95E-06	1.61E-06
2580	647581.2	4197654.59	2.48E-05	2.64E-05	3.73E-06	3.96E-06	3.65E-06	3.53E-06	1.94E-06	1.60E-06
2581	647580.13	4197629.99	2.46E-05	2.62E-05	3.69E-06	3.93E-06	3.61E-06	3.50E-06	1.92E-06	1.59E-06
2582	647579.06	4197605.4	2.43E-05	2.59E-05	3.66E-06	3.89E-06	3.58E-06	3.47E-06	1.90E-06	1.57E-06
2583	647577.99	4197580.8	2.41E-05	2.56E-05	3.62E-06	3.85E-06	3.54E-06	3.43E-06	1.88E-06	1.55E-06
2584	647576.92	4197556.2	2.37E-05	2.53E-05	3.57E-06	3.80E-06	3.49E-06	3.38E-06	1.85E-06	1.53E-06
2585	647575.85	4197531.61	2.34E-05	2.50E-05	3.52E-06	3.74E-06	3.44E-06	3.34E-06	1.83E-06	1.51E-06
2586	647574.77	4197507.01	2.31E-05	2.46E-05	3.47E-06	3.69E-06	3.39E-06	3.29E-06	1.80E-06	1.49E-06
2587	647573.7	4197482.41	2.27E-05	2.42E-05	3.41E-06	3.63E-06	3.34E-06	3.24E-06	1.77E-06	1.47E-06
2588	647572.63	4197457.81	2.23E-05	2.38E-05	3.36E-06	3.57E-06	3.28E-06	3.18E-06	1.74E-06	1.44E-06
2589	647571.56	4197433.22	2.20E-05	2.34E-05	3.30E-06	3.51E-06	3.23E-06	3.13E-06	1.72E-06	1.42E-06
2590	647625.12	4198663.06	4.14E-05	4.42E-05	6.23E-06	6.62E-06	6.09E-06	5.90E-06	3.24E-06	2.68E-06
2591	647636.54	4198685.25	4.21E-05	4.49E-05	6.33E-06	6.73E-06	6.19E-06	6.00E-06	3.29E-06	2.72E-06
2592	647647.97	4198707.45	4.28E-05	4.56E-05	6.43E-06	6.84E-06	6.29E-06	6.09E-06	3.34E-06	2.76E-06
2593	647659.39	4198729.64	4.35E-05	4.63E-05	6.53E-06	6.95E-06	6.39E-06	6.19E-06	3.39E-06	2.81E-06
2594	647670.81	4198751.84	4.42E-05	4.71E-05	6.64E-06	7.06E-06	6.49E-06	6.29E-06	3.45E-06	2.85E-06
2595	647682.24	4198774.03	4.49E-05	4.79E-05	6.75E-06	7.18E-06	6.60E-06	6.40E-06	3.51E-06	2.90E-06
2596	647693.66	4198796.22	4.56E-05	4.87E-05	6.86E-06	7.30E-06	6.71E-06	6.51E-06	3.57E-06	2.95E-06
2597	647705.09	4198818.42	4.64E-05	4.95E-05	6.98E-06	7.43E-06	6.83E-06	6.62E-06	3.63E-06	3.00E-06
2598	647716.51	4198840.61	4.73E-05	5.04E-05	7.11E-06	7.55E-06	6.95E-06	6.73E-06	3.69E-06	3.05E-06
2599	647727.93	4198862.81	4.81E-05	5.13E-05	7.23E-06	7.69E-06	7.07E-06	6.85E-06	3.76E-06	3.11E-06
2600	647739.36	4198885	4.90E-05	5.22E-05	7.36E-06	7.83E-06	7.20E-06	6.98E-06	3.83E-06	3.16E-06
2601	647750.78	4198907.19	4.99E-05	5.32E-05	7.50E-06	7.97E-06	7.33E-06	7.11E-06	3.89E-06	3.22E-06
2602	647762.21	4198929.39	5.08E-05	5.41E-05	7.64E-06	8.12E-06	7.47E-06	7.24E-06	3.97E-06	3.28E-06
2603	647773.63	4198951.58	5.17E-05	5.51E-05	7.77E-06	8.26E-06	7.60E-06	7.37E-06	4.04E-06	3.34E-06
2604	649091.08	4198311.15	1.65E-03	1.76E-03	2.48E-04	2.64E-04	2.43E-04	2.35E-04	1.29E-04	1.07E-04
2605	649089.76	4198337.15	1.31E-03	1.40E-03	1.97E-04	2.10E-04	1.93E-04	1.87E-04	1.02E-04	8.47E-05
2606	649069.07	4198328.11	1.34E-03	1.43E-03	2.02E-04	2.15E-04	1.98E-04	1.92E-04	1.05E-04	8.69E-05
2607	649088.45	4198363.16	1.08E-03	1.15E-03	1.62E-04	1.73E-04	1.59E-04	1.54E-04	8.43E-05	6.98E-05
2608	649067.76	4198354.11	1.12E-03	1.19E-03	1.68E-04	1.78E-04	1.64E-04	1.59E-04	8.71E-05	7.21E-05
2609	649046.84	4198344.4	1.13E-03	1.21E-03	1.70E-04	1.81E-04	1.66E-04	1.61E-04	8.83E-05	7.31E-05
2610	649079.28	4198412.31	7.92E-04	8.44E-04	1.19E-04	1.27E-04	1.16E-04	1.13E-04	6.19E-05	5.12E-05
2611	649058.4	4198403.18	8.20E-04	8.74E-04	1.23E-04	1.31E-04	1.21E-04	1.17E-04	6.41E-05	5.30E-05
2612	649037.53	4198394.06	8.39E-04	8.94E-04	1.26E-04	1.34E-04	1.23E-04	1.19E-04	6.55E-05	5.42E-05
2613	649016.98	4198384.5	8.47E-04	9.03E-04	1.27E-04	1.35E-04	1.24E-04	1.21E-04	6.61E-05	5.47E-05
2614	649002.25	4198367.12	8.85E-04	9.43E-04	1.33E-04	1.41E-04	1.30E-04	1.26E-04	6.91E-05	5.72E-05
2615	649070.12	4198461.46	6.12E-04	6.53E-04	9.20E-05	9.79E-05	9.00E-05	8.72E-05	4.78E-05	3.96E-05
2616	649049.29	4198452.36	6.35E-04	6.77E-04	9.54E-05	1.01E-04	9.33E-05	9.05E-05	4.96E-05	4.10E-05
2617	649028.46	4198443.25	6.53E-04	6.96E-04	9.81E-05	1.04E-04	9.60E-05	9.30E-05	5.10E-05	4.22E-05
2618	649007.63	4198434.15	6.64E-04	7.08E-04	9.98E-05	1.06E-04	9.76E-05	9.46E-05	5.19E-05	4.29E-05

2619	648987.13	4198424.61	6.69E-04	7.13E-04	1.01E-04	1.07E-04	9.84E-05	9.54E-05	5.23E-05	4.32E-05
2620	648972.04	4198406.82	6.96E-04	7.42E-04	1.05E-04	1.11E-04	1.02E-04	9.91E-05	5.43E-05	4.50E-05
2621	648957.34	4198389.48	7.14E-04	7.61E-04	1.07E-04	1.14E-04	1.05E-04	1.02E-04	5.58E-05	4.61E-05
2622	649060.95	4198510.62	4.89E-04	5.22E-04	7.36E-05	7.82E-05	7.19E-05	6.97E-05	3.82E-05	3.16E-05
2623	649040.15	4198501.52	5.08E-04	5.41E-04	7.64E-05	8.12E-05	7.47E-05	7.24E-05	3.97E-05	3.28E-05
2624	649019.35	4198492.43	5.24E-04	5.58E-04	7.88E-05	8.37E-05	7.70E-05	7.47E-05	4.09E-05	3.39E-05
2625	648998.55	4198483.34	5.36E-04	5.71E-04	8.06E-05	8.57E-05	7.88E-05	7.64E-05	4.19E-05	3.46E-05
2626	648977.75	4198474.25	5.44E-04	5.80E-04	8.17E-05	8.69E-05	7.99E-05	7.75E-05	4.25E-05	3.51E-05
2627	648957.27	4198464.72	5.47E-04	5.83E-04	8.23E-05	8.75E-05	8.05E-05	7.80E-05	4.27E-05	3.54E-05
2628	648942.21	4198446.95	5.66E-04	6.04E-04	8.52E-05	9.05E-05	8.33E-05	8.07E-05	4.42E-05	3.66E-05
2629	648927.53	4198429.63	5.80E-04	6.18E-04	8.72E-05	9.27E-05	8.53E-05	8.26E-05	4.53E-05	3.75E-05
2630	648912.46	4198411.86	5.88E-04	6.27E-04	8.84E-05	9.40E-05	8.65E-05	8.38E-05	4.59E-05	3.80E-05
2631	649051.79	4198559.77	4.00E-04	4.27E-04	6.02E-05	6.40E-05	5.89E-05	5.70E-05	3.13E-05	2.59E-05
2632	649030.91	4198550.64	4.16E-04	4.44E-04	6.26E-05	6.65E-05	6.12E-05	5.93E-05	3.25E-05	2.69E-05
2633	649010.04	4198541.52	4.30E-04	4.59E-04	6.47E-05	6.88E-05	6.33E-05	6.13E-05	3.36E-05	2.78E-05
2634	648989.16	4198532.39	4.42E-04	4.71E-04	6.64E-05	7.06E-05	6.50E-05	6.30E-05	3.45E-05	2.86E-05
2635	648968.29	4198523.27	4.51E-04	4.80E-04	6.78E-05	7.20E-05	6.63E-05	6.42E-05	3.52E-05	2.91E-05
2636	648947.42	4198514.14	4.56E-04	4.86E-04	6.86E-05	7.29E-05	6.70E-05	6.50E-05	3.56E-05	2.95E-05
2637	648927.03	4198504.37	4.59E-04	4.89E-04	6.90E-05	7.34E-05	6.75E-05	6.54E-05	3.58E-05	2.97E-05
2638	648912.3	4198486.99	4.73E-04	5.04E-04	7.11E-05	7.56E-05	6.95E-05	6.74E-05	3.69E-05	3.06E-05
2639	648897.57	4198469.61	4.83E-04	5.15E-04	7.27E-05	7.73E-05	7.11E-05	6.89E-05	3.78E-05	3.12E-05
2640	648882.84	4198452.24	4.90E-04	5.22E-04	7.37E-05	7.83E-05	7.20E-05	6.98E-05	3.83E-05	3.17E-05
2641	648867.72	4198434.4	4.92E-04	5.25E-04	7.40E-05	7.87E-05	7.24E-05	7.01E-05	3.84E-05	3.18E-05
2642	649033.46	4198658.07	2.82E-04	3.00E-04	4.23E-05	4.50E-05	4.14E-05	4.01E-05	2.20E-05	1.82E-05
2643	649012.63	4198648.97	2.93E-04	3.13E-04	4.41E-05	4.69E-05	4.31E-05	4.18E-05	2.29E-05	1.90E-05
2644	648991.8	4198639.87	3.04E-04	3.24E-04	4.58E-05	4.86E-05	4.47E-05	4.34E-05	2.38E-05	1.97E-05
2645	648970.98	4198630.76	3.14E-04	3.35E-04	4.72E-05	5.02E-05	4.62E-05	4.48E-05	2.45E-05	2.03E-05
2646	648950.15	4198621.66	3.23E-04	3.44E-04	4.85E-05	5.16E-05	4.74E-05	4.60E-05	2.52E-05	2.08E-05
2647	648929.32	4198612.55	3.29E-04	3.51E-04	4.95E-05	5.27E-05	4.84E-05	4.69E-05	2.57E-05	2.13E-05
2648	648908.49	4198603.45	3.34E-04	3.56E-04	5.03E-05	5.34E-05	4.92E-05	4.76E-05	2.61E-05	2.16E-05
2649	648887.66	4198594.34	3.37E-04	3.60E-04	5.07E-05	5.39E-05	4.96E-05	4.81E-05	2.63E-05	2.18E-05
2650	648867.32	4198584.59	3.39E-04	3.61E-04	5.10E-05	5.42E-05	4.98E-05	4.83E-05	2.65E-05	2.19E-05
2651	648852.62	4198567.25	3.47E-04	3.70E-04	5.22E-05	5.55E-05	5.11E-05	4.95E-05	2.71E-05	2.25E-05
2652	648837.54	4198549.45	3.54E-04	3.78E-04	5.33E-05	5.66E-05	5.21E-05	5.05E-05	2.77E-05	2.29E-05
2653	648822.84	4198532.11	3.58E-04	3.82E-04	5.39E-05	5.73E-05	5.27E-05	5.11E-05	2.80E-05	2.32E-05
2654	648807.75	4198514.32	3.61E-04	3.84E-04	5.42E-05	5.76E-05	5.30E-05	5.14E-05	2.82E-05	2.33E-05
2655	648793.06	4198496.98	3.60E-04	3.84E-04	5.42E-05	5.76E-05	5.30E-05	5.13E-05	2.81E-05	2.33E-05
2656	648778.36	4198479.64	3.57E-04	3.81E-04	5.38E-05	5.71E-05	5.26E-05	5.09E-05	2.79E-05	2.31E-05
2657	649015.13	4198756.38	2.08E-04	2.21E-04	3.12E-05	3.32E-05	3.05E-05	2.96E-05	1.62E-05	1.34E-05
2658	648994.27	4198747.26	2.17E-04	2.31E-04	3.26E-05	3.46E-05	3.19E-05	3.09E-05	1.69E-05	1.40E-05
2659	648973.42	4198738.15	2.25E-04	2.40E-04	3.39E-05	3.60E-05	3.31E-05	3.21E-05	1.76E-05	1.46E-05
2660	648952.56	4198729.03	2.33E-04	2.49E-04	3.51E-05	3.73E-05	3.43E-05	3.33E-05	1.82E-05	1.51E-05
2661	648931.71	4198719.91	2.41E-04	2.57E-04	3.62E-05	3.85E-05	3.54E-05	3.43E-05	1.88E-05	1.56E-05
2662	648910.85	4198710.8	2.47E-04	2.64E-04	3.72E-05	3.95E-05	3.63E-05	3.52E-05	1.93E-05	1.60E-05
2663	648890	4198701.68	2.53E-04	2.69E-04	3.80E-05	4.04E-05	3.71E-05	3.60E-05	1.97E-05	1.63E-05
2664	648869.14	4198692.56	2.57E-04	2.74E-04	3.86E-05	4.11E-05	3.78E-05	3.66E-05	2.01E-05	1.66E-05
2665	648848.29	4198683.45	2.60E-04	2.77E-04	3.91E-05	4.16E-05	3.82E-05	3.70E-05	2.03E-05	1.68E-05
2666	648827.43	4198674.33	2.62E-04	2.79E-04	3.94E-05	4.18E-05	3.85E-05	3.73E-05	2.04E-05	1.69E-05
2667	648807.22	4198664.35	2.63E-04	2.80E-04	3.95E-05	4.20E-05	3.87E-05	3.75E-05	2.05E-05	1.70E-05
2668	648792.5	4198646.98	2.69E-04	2.86E-04	4.04E-05	4.29E-05	3.95E-05	3.83E-05	2.10E-05	1.74E-05
2669	648777.79	4198629.62	2.73E-04	2.91E-04	4.11E-05	4.36E-05	4.01E-05	3.89E-05	2.13E-05	1.76E-05
2670	648763.07	4198612.26	2.76E-04	2.94E-04	4.15E-05	4.41E-05	4.06E-05	3.93E-05	2.16E-05	1.78E-05
2671	648748.35	4198594.9	2.78E-04	2.96E-04	4.18E-05	4.44E-05	4.08E-05	3.96E-05	2.17E-05	1.80E-05
2672	648733.63	4198577.53	2.78E-04	2.96E-04	4.18E-05	4.44E-05	4.09E-05	3.96E-05	2.17E-05	1.80E-05
2673	648718.92	4198560.17	2.77E-04	2.95E-04	4.16E-05	4.43E-05	4.07E-05	3.94E-05	2.16E-05	1.79E-05
2674	648704.2	4198542.81	2.74E-04	2.92E-04	4.12E-05	4.38E-05	4.03E-05	3.91E-05	2.14E-05	1.77E-05
2675	648689.48	4198525.45	2.70E-04	2.88E-04	4.06E-05	4.32E-05	3.97E-05	3.85E-05	2.11E-05	1.75E-05

2676	648996.8	4198854.69	1.59E-04	1.69E-04	2.39E-05	2.54E-05	2.33E-05	2.26E-05	1.24E-05	1.02E-05
2677	648975.93	4198845.56	1.66E-04	1.77E-04	2.49E-05	2.65E-05	2.44E-05	2.36E-05	1.29E-05	1.07E-05
2678	648955.05	4198836.44	1.73E-04	1.84E-04	2.60E-05	2.76E-05	2.54E-05	2.46E-05	1.35E-05	1.12E-05
2679	648934.18	4198827.31	1.79E-04	1.91E-04	2.69E-05	2.86E-05	2.63E-05	2.55E-05	1.40E-05	1.16E-05
2680	648913.31	4198818.19	1.85E-04	1.98E-04	2.79E-05	2.96E-05	2.73E-05	2.64E-05	1.45E-05	1.20E-05
2681	648892.43	4198809.06	1.91E-04	2.04E-04	2.87E-05	3.05E-05	2.81E-05	2.72E-05	1.49E-05	1.23E-05
2682	648871.56	4198799.94	1.96E-04	2.09E-04	2.95E-05	3.13E-05	2.88E-05	2.79E-05	1.53E-05	1.27E-05
2683	648850.68	4198790.81	2.00E-04	2.14E-04	3.01E-05	3.20E-05	2.95E-05	2.86E-05	1.57E-05	1.30E-05
2684	648829.81	4198781.69	2.04E-04	2.18E-04	3.07E-05	3.26E-05	3.00E-05	2.91E-05	1.59E-05	1.32E-05
2685	648808.94	4198772.56	2.07E-04	2.21E-04	3.11E-05	3.31E-05	3.04E-05	2.95E-05	1.62E-05	1.34E-05
2686	648788.06	4198763.44	2.09E-04	2.23E-04	3.14E-05	3.34E-05	3.07E-05	2.98E-05	1.63E-05	1.35E-05
2687	648767.19	4198754.31	2.10E-04	2.24E-04	3.16E-05	3.36E-05	3.09E-05	3.00E-05	1.64E-05	1.36E-05
2688	648747.12	4198744.1	2.11E-04	2.25E-04	3.18E-05	3.38E-05	3.10E-05	3.01E-05	1.65E-05	1.36E-05
2689	648732.39	4198726.73	2.15E-04	2.29E-04	3.24E-05	3.44E-05	3.16E-05	3.07E-05	1.68E-05	1.39E-05
2690	648717.27	4198708.89	2.18E-04	2.33E-04	3.28E-05	3.49E-05	3.21E-05	3.11E-05	1.71E-05	1.41E-05
2691	648702.54	4198691.51	2.21E-04	2.35E-04	3.32E-05	3.53E-05	3.25E-05	3.15E-05	1.72E-05	1.43E-05
2692	648687.81	4198674.14	2.22E-04	2.37E-04	3.34E-05	3.55E-05	3.27E-05	3.17E-05	1.74E-05	1.44E-05
2693	648673.08	4198656.76	2.23E-04	2.37E-04	3.35E-05	3.56E-05	3.27E-05	3.17E-05	1.74E-05	1.44E-05
2694	648658.35	4198639.38	2.22E-04	2.37E-04	3.34E-05	3.55E-05	3.26E-05	3.16E-05	1.73E-05	1.43E-05
2695	648643.62	4198622	2.21E-04	2.35E-04	3.32E-05	3.53E-05	3.24E-05	3.14E-05	1.72E-05	1.42E-05
2696	648628.89	4198604.62	2.18E-04	2.33E-04	3.28E-05	3.49E-05	3.21E-05	3.11E-05	1.70E-05	1.41E-05
2697	648614.16	4198587.25	2.15E-04	2.29E-04	3.23E-05	3.43E-05	3.16E-05	3.06E-05	1.68E-05	1.39E-05
2698	648599.43	4198569.87	2.11E-04	2.25E-04	3.17E-05	3.37E-05	3.10E-05	3.00E-05	1.65E-05	1.36E-05
2699	648978.47	4198952.99	1.25E-04	1.33E-04	1.88E-05	1.99E-05	1.83E-05	1.78E-05	9.74E-06	8.06E-06
2700	648957.59	4198943.86	1.30E-04	1.39E-04	1.96E-05	2.08E-05	1.92E-05	1.86E-05	1.02E-05	8.42E-06
2701	648936.7	4198934.73	1.36E-04	1.45E-04	2.04E-05	2.17E-05	2.00E-05	1.94E-05	1.06E-05	8.78E-06
2702	648915.81	4198925.6	1.41E-04	1.51E-04	2.12E-05	2.26E-05	2.08E-05	2.01E-05	1.10E-05	9.12E-06
2703	648894.92	4198916.47	1.46E-04	1.56E-04	2.20E-05	2.34E-05	2.15E-05	2.08E-05	1.14E-05	9.45E-06
2704	648874.04	4198907.34	1.51E-04	1.61E-04	2.27E-05	2.42E-05	2.22E-05	2.15E-05	1.18E-05	9.77E-06
2705	648853.15	4198898.21	1.56E-04	1.66E-04	2.34E-05	2.49E-05	2.29E-05	2.22E-05	1.22E-05	1.01E-05
2706	648832.26	4198889.08	1.60E-04	1.70E-04	2.40E-05	2.55E-05	2.35E-05	2.27E-05	1.25E-05	1.03E-05
2707	648811.38	4198879.95	1.63E-04	1.74E-04	2.45E-05	2.61E-05	2.40E-05	2.33E-05	1.28E-05	1.05E-05
2708	648790.49	4198870.82	1.66E-04	1.77E-04	2.50E-05	2.66E-05	2.45E-05	2.37E-05	1.30E-05	1.07E-05
2709	648769.6	4198861.69	1.69E-04	1.80E-04	2.54E-05	2.70E-05	2.48E-05	2.41E-05	1.32E-05	1.09E-05
2710	648748.71	4198852.56	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.44E-05	1.34E-05	1.10E-05
2711	648727.83	4198843.43	1.72E-04	1.84E-04	2.59E-05	2.76E-05	2.53E-05	2.46E-05	1.35E-05	1.11E-05
2712	648706.94	4198834.3	1.73E-04	1.85E-04	2.61E-05	2.77E-05	2.55E-05	2.47E-05	1.35E-05	1.12E-05
2713	648687.02	4198823.86	1.74E-04	1.86E-04	2.62E-05	2.78E-05	2.56E-05	2.48E-05	1.36E-05	1.13E-05
2714	648672.28	4198806.47	1.77E-04	1.89E-04	2.66E-05	2.83E-05	2.60E-05	2.52E-05	1.38E-05	1.14E-05
2715	648657.54	4198789.08	1.80E-04	1.91E-04	2.70E-05	2.87E-05	2.64E-05	2.56E-05	1.40E-05	1.16E-05
2716	648642.8	4198771.7	1.81E-04	1.93E-04	2.73E-05	2.90E-05	2.67E-05	2.58E-05	1.42E-05	1.17E-05
2717	648628.06	4198754.31	1.83E-04	1.95E-04	2.75E-05	2.92E-05	2.68E-05	2.60E-05	1.43E-05	1.18E-05
2718	648613.32	4198736.92	1.83E-04	1.95E-04	2.75E-05	2.93E-05	2.69E-05	2.61E-05	1.43E-05	1.18E-05
2719	648598.58	4198719.53	1.83E-04	1.95E-04	2.75E-05	2.93E-05	2.69E-05	2.61E-05	1.43E-05	1.18E-05
2720	648583.84	4198702.14	1.82E-04	1.94E-04	2.74E-05	2.91E-05	2.68E-05	2.60E-05	1.42E-05	1.18E-05
2721	648569.1	4198684.75	1.81E-04	1.93E-04	2.72E-05	2.89E-05	2.66E-05	2.58E-05	1.41E-05	1.17E-05
2722	648554.36	4198667.36	1.79E-04	1.91E-04	2.69E-05	2.86E-05	2.63E-05	2.55E-05	1.40E-05	1.16E-05
2723	648539.62	4198649.97	1.76E-04	1.88E-04	2.65E-05	2.82E-05	2.59E-05	2.51E-05	1.38E-05	1.14E-05
2724	648524.88	4198632.59	1.73E-04	1.84E-04	2.60E-05	2.76E-05	2.54E-05	2.46E-05	1.35E-05	1.12E-05
2725	648510.14	4198615.2	1.69E-04	1.80E-04	2.55E-05	2.71E-05	2.49E-05	2.41E-05	1.32E-05	1.09E-05
2726	648941.82	4199149.6	8.29E-05	8.84E-05	1.25E-05	1.33E-05	1.22E-05	1.18E-05	6.48E-06	5.36E-06
2727	648920.94	4199140.48	8.65E-05	9.22E-05	1.30E-05	1.38E-05	1.27E-05	1.23E-05	6.75E-06	5.59E-06
2728	648900.07	4199131.35	9.00E-05	9.60E-05	1.35E-05	1.44E-05	1.32E-05	1.28E-05	7.03E-06	5.82E-06
2729	648879.19	4199122.23	9.35E-05	9.97E-05	1.41E-05	1.50E-05	1.38E-05	1.33E-05	7.31E-06	6.04E-06
2730	648858.32	4199113.11	9.70E-05	1.03E-04	1.46E-05	1.55E-05	1.43E-05	1.38E-05	7.58E-06	6.27E-06
2731	648837.45	4199103.98	1.00E-04	1.07E-04	1.51E-05	1.60E-05	1.48E-05	1.43E-05	7.84E-06	6.49E-06
2732	648816.57	4199094.86	1.04E-04	1.10E-04	1.56E-05	1.66E-05	1.52E-05	1.48E-05	8.09E-06	6.69E-06

2733	648795.7	4199085.73	1.07E-04	1.14E-04	1.60E-05	1.71E-05	1.57E-05	1.52E-05	8.33E-06	6.89E-06
2734	648774.83	4199076.61	1.10E-04	1.17E-04	1.65E-05	1.75E-05	1.61E-05	1.56E-05	8.56E-06	7.08E-06
2735	648753.95	4199067.48	1.12E-04	1.20E-04	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.77E-06	7.25E-06
2736	648733.08	4199058.36	1.15E-04	1.22E-04	1.73E-05	1.83E-05	1.69E-05	1.63E-05	8.96E-06	7.41E-06
2737	648712.2	4199049.23	1.17E-04	1.25E-04	1.76E-05	1.87E-05	1.72E-05	1.67E-05	9.14E-06	7.56E-06
2738	648691.33	4199040.11	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.70E-05	9.29E-06	7.69E-06
2739	648670.46	4199030.98	1.21E-04	1.29E-04	1.81E-05	1.93E-05	1.77E-05	1.72E-05	9.43E-06	7.80E-06
2740	648649.58	4199021.86	1.22E-04	1.30E-04	1.84E-05	1.95E-05	1.80E-05	1.74E-05	9.54E-06	7.89E-06
2741	648628.71	4199012.73	1.23E-04	1.31E-04	1.85E-05	1.97E-05	1.81E-05	1.76E-05	9.63E-06	7.97E-06
2742	648607.83	4199003.61	1.24E-04	1.32E-04	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.70E-06	8.02E-06
2743	648586.96	4198994.48	1.25E-04	1.33E-04	1.88E-05	1.99E-05	1.83E-05	1.78E-05	9.74E-06	8.06E-06
2744	648566.83	4198983.38	1.25E-04	1.34E-04	1.89E-05	2.01E-05	1.84E-05	1.79E-05	9.80E-06	8.11E-06
2745	648552.1	4198966	1.27E-04	1.36E-04	1.91E-05	2.04E-05	1.87E-05	1.81E-05	9.95E-06	8.23E-06
2746	648537.37	4198948.63	1.29E-04	1.37E-04	1.94E-05	2.06E-05	1.90E-05	1.84E-05	1.01E-05	8.33E-06
2747	648522.64	4198931.25	1.30E-04	1.39E-04	1.96E-05	2.08E-05	1.92E-05	1.86E-05	1.02E-05	8.42E-06
2748	648507.52	4198913.41	1.31E-04	1.40E-04	1.97E-05	2.10E-05	1.93E-05	1.87E-05	1.03E-05	8.48E-06
2749	648492.79	4198896.04	1.32E-04	1.41E-04	1.98E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.52E-06
2750	648478.06	4198878.66	1.32E-04	1.41E-04	1.99E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.54E-06
2751	648463.33	4198861.28	1.32E-04	1.41E-04	1.99E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.53E-06
2752	648448.6	4198843.9	1.32E-04	1.40E-04	1.98E-05	2.10E-05	1.93E-05	1.87E-05	1.03E-05	8.50E-06
2753	648433.87	4198826.53	1.31E-04	1.39E-04	1.97E-05	2.09E-05	1.92E-05	1.86E-05	1.02E-05	8.45E-06
2754	648419.14	4198809.15	1.30E-04	1.38E-04	1.95E-05	2.07E-05	1.90E-05	1.85E-05	1.01E-05	8.37E-06
2755	648404.41	4198791.77	1.28E-04	1.36E-04	1.92E-05	2.05E-05	1.88E-05	1.82E-05	1.00E-05	8.27E-06
2756	648389.67	4198774.39	1.26E-04	1.34E-04	1.90E-05	2.02E-05	1.85E-05	1.80E-05	9.86E-06	8.15E-06
2757	648374.94	4198757.01	1.24E-04	1.32E-04	1.87E-05	1.98E-05	1.82E-05	1.77E-05	9.69E-06	8.02E-06
2758	648360.21	4198739.64	1.22E-04	1.30E-04	1.83E-05	1.95E-05	1.79E-05	1.73E-05	9.51E-06	7.86E-06
2759	648345.1	4198721.8	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.70E-05	9.30E-06	7.69E-06
2760	648330.36	4198704.42	1.16E-04	1.24E-04	1.75E-05	1.86E-05	1.71E-05	1.66E-05	9.09E-06	7.52E-06
2761	648905.16	4199346.22	5.94E-05	6.34E-05	8.94E-06	9.50E-06	8.74E-06	8.47E-06	4.64E-06	3.84E-06
2762	648884.27	4199337.08	6.18E-05	6.59E-05	9.29E-06	9.88E-06	9.09E-06	8.81E-06	4.83E-06	3.99E-06
2763	648863.38	4199327.95	6.42E-05	6.84E-05	9.65E-06	1.03E-05	9.44E-06	9.15E-06	5.01E-06	4.15E-06
2764	648842.49	4199318.82	6.66E-05	7.10E-05	1.00E-05	1.06E-05	9.79E-06	9.49E-06	5.20E-06	4.30E-06
2765	648821.6	4199309.69	6.89E-05	7.35E-05	1.04E-05	1.10E-05	1.01E-05	9.82E-06	5.38E-06	4.45E-06
2766	648800.71	4199300.56	7.13E-05	7.60E-05	1.07E-05	1.14E-05	1.05E-05	1.02E-05	5.57E-06	4.60E-06
2767	648779.82	4199291.42	7.35E-05	7.84E-05	1.11E-05	1.18E-05	1.08E-05	1.05E-05	5.74E-06	4.75E-06
2768	648758.92	4199282.29	7.58E-05	8.08E-05	1.14E-05	1.21E-05	1.11E-05	1.08E-05	5.92E-06	4.90E-06
2769	648738.03	4199273.16	7.79E-05	8.31E-05	1.17E-05	1.25E-05	1.15E-05	1.11E-05	6.09E-06	5.03E-06
2770	648717.14	4199264.03	8.00E-05	8.52E-05	1.20E-05	1.28E-05	1.18E-05	1.14E-05	6.25E-06	5.17E-06
2771	648696.25	4199254.9	8.19E-05	8.73E-05	1.23E-05	1.31E-05	1.20E-05	1.17E-05	6.40E-06	5.29E-06
2772	648675.36	4199245.76	8.38E-05	8.93E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.55E-06	5.41E-06
2773	648654.47	4199236.63	8.55E-05	9.12E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.68E-06	5.53E-06
2774	648633.58	4199227.5	8.72E-05	9.29E-05	1.31E-05	1.39E-05	1.28E-05	1.24E-05	6.81E-06	5.63E-06
2775	648612.69	4199218.37	8.86E-05	9.45E-05	1.33E-05	1.42E-05	1.30E-05	1.26E-05	6.92E-06	5.73E-06
2776	648591.8	4199209.24	9.00E-05	9.59E-05	1.35E-05	1.44E-05	1.32E-05	1.28E-05	7.03E-06	5.82E-06
2777	648570.91	4199200.1	9.12E-05	9.72E-05	1.37E-05	1.46E-05	1.34E-05	1.30E-05	7.13E-06	5.89E-06
2778	648550.02	4199190.97	9.23E-05	9.84E-05	1.39E-05	1.48E-05	1.36E-05	1.32E-05	7.21E-06	5.96E-06
2779	648529.13	4199181.84	9.32E-05	9.94E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.28E-06	6.02E-06
2780	648508.24	4199172.71	9.40E-05	1.00E-04	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.34E-06	6.07E-06
2781	648487.35	4199163.58	9.46E-05	1.01E-04	1.42E-05	1.51E-05	1.39E-05	1.35E-05	7.39E-06	6.11E-06
2782	648466.45	4199154.44	9.50E-05	1.01E-04	1.43E-05	1.52E-05	1.40E-05	1.35E-05	7.42E-06	6.14E-06
2783	648446.63	4199142.9	9.56E-05	1.02E-04	1.44E-05	1.53E-05	1.41E-05	1.36E-05	7.47E-06	6.18E-06
2784	648431.89	4199125.51	9.70E-05	1.03E-04	1.46E-05	1.55E-05	1.43E-05	1.38E-05	7.57E-06	6.27E-06
2785	648417.15	4199108.11	9.81E-05	1.05E-04	1.48E-05	1.57E-05	1.44E-05	1.40E-05	7.67E-06	6.34E-06
2786	648402.4	4199090.72	9.91E-05	1.06E-04	1.49E-05	1.58E-05	1.46E-05	1.41E-05	7.74E-06	6.41E-06
2787	648387.27	4199072.87	1.00E-04	1.07E-04	1.50E-05	1.60E-05	1.47E-05	1.42E-05	7.81E-06	6.46E-06
2788	648372.53	4199055.48	1.01E-04	1.07E-04	1.51E-05	1.61E-05	1.48E-05	1.43E-05	7.86E-06	6.50E-06
2789	648357.79	4199038.09	1.01E-04	1.08E-04	1.52E-05	1.61E-05	1.48E-05	1.44E-05	7.89E-06	6.52E-06

2790	648343.05	4199020.7	1.01E-04	1.08E-04	1.52E-05	1.62E-05	1.49E-05	1.44E-05	7.90E-06	6.54E-06
2791	648328.3	4199003.31	1.01E-04	1.08E-04	1.52E-05	1.62E-05	1.49E-05	1.44E-05	7.90E-06	6.53E-06
2792	648313.56	4198985.91	1.01E-04	1.07E-04	1.52E-05	1.61E-05	1.48E-05	1.44E-05	7.87E-06	6.51E-06
2793	648298.82	4198968.52	1.00E-04	1.07E-04	1.51E-05	1.60E-05	1.47E-05	1.43E-05	7.84E-06	6.48E-06
2794	648284.08	4198951.13	9.96E-05	1.06E-04	1.50E-05	1.59E-05	1.46E-05	1.42E-05	7.78E-06	6.44E-06
2795	648269.33	4198933.74	9.87E-05	1.05E-04	1.48E-05	1.58E-05	1.45E-05	1.41E-05	7.71E-06	6.38E-06
2796	648254.59	4198916.35	9.75E-05	1.04E-04	1.47E-05	1.56E-05	1.43E-05	1.39E-05	7.62E-06	6.30E-06
2797	648239.85	4198898.96	9.62E-05	1.03E-04	1.45E-05	1.54E-05	1.42E-05	1.37E-05	7.52E-06	6.22E-06
2798	648225.11	4198881.56	9.48E-05	1.01E-04	1.43E-05	1.52E-05	1.39E-05	1.35E-05	7.40E-06	6.12E-06
2799	648210.36	4198864.17	9.31E-05	9.93E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.28E-06	6.02E-06
2800	648195.62	4198846.78	9.14E-05	9.74E-05	1.37E-05	1.46E-05	1.34E-05	1.30E-05	7.14E-06	5.91E-06
2801	648180.88	4198829.39	8.96E-05	9.55E-05	1.35E-05	1.43E-05	1.32E-05	1.28E-05	7.00E-06	5.79E-06
2802	648166.14	4198812	8.76E-05	9.34E-05	1.32E-05	1.40E-05	1.29E-05	1.25E-05	6.84E-06	5.66E-06
2803	648151.39	4198794.6	8.56E-05	9.13E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.69E-06	5.53E-06
2804	648868.5	4199542.83	4.51E-05	4.81E-05	6.78E-06	7.21E-06	6.63E-06	6.43E-06	3.52E-06	2.91E-06
2805	648847.62	4199533.7	4.68E-05	4.98E-05	7.03E-06	7.48E-06	6.88E-06	6.66E-06	3.65E-06	3.02E-06
2806	648826.74	4199524.57	4.84E-05	5.16E-05	7.28E-06	7.74E-06	7.12E-06	6.90E-06	3.78E-06	3.13E-06
2807	648805.86	4199515.44	5.01E-05	5.34E-05	7.53E-06	8.01E-06	7.36E-06	7.14E-06	3.91E-06	3.24E-06
2808	648784.98	4199506.32	5.17E-05	5.52E-05	7.78E-06	8.27E-06	7.61E-06	7.37E-06	4.04E-06	3.34E-06
2809	648764.1	4199497.19	5.34E-05	5.69E-05	8.03E-06	8.54E-06	7.85E-06	7.61E-06	4.17E-06	3.45E-06
2810	648743.22	4199488.06	5.50E-05	5.87E-05	8.27E-06	8.80E-06	8.09E-06	7.84E-06	4.30E-06	3.56E-06
2811	648722.34	4199478.93	5.66E-05	6.04E-05	8.52E-06	9.05E-06	8.33E-06	8.07E-06	4.42E-06	3.66E-06
2812	648701.46	4199469.81	5.82E-05	6.21E-05	8.75E-06	9.31E-06	8.56E-06	8.30E-06	4.55E-06	3.76E-06
2813	648680.57	4199460.68	5.97E-05	6.37E-05	8.98E-06	9.55E-06	8.78E-06	8.51E-06	4.67E-06	3.86E-06
2814	648659.69	4199451.55	6.12E-05	6.53E-05	9.21E-06	9.79E-06	9.00E-06	8.73E-06	4.78E-06	3.96E-06
2815	648638.81	4199442.42	6.27E-05	6.68E-05	9.42E-06	1.00E-05	9.21E-06	8.93E-06	4.90E-06	4.05E-06
2816	648617.93	4199433.29	6.40E-05	6.83E-05	9.63E-06	1.02E-05	9.42E-06	9.13E-06	5.00E-06	4.14E-06
2817	648597.05	4199424.17	6.54E-05	6.97E-05	9.83E-06	1.05E-05	9.61E-06	9.32E-06	5.11E-06	4.22E-06
2818	648576.17	4199415.04	6.66E-05	7.10E-05	1.00E-05	1.07E-05	9.80E-06	9.50E-06	5.21E-06	4.31E-06
2819	648555.29	4199405.91	6.78E-05	7.23E-05	1.02E-05	1.08E-05	9.97E-06	9.67E-06	5.30E-06	4.38E-06
2820	648534.41	4199396.78	6.89E-05	7.35E-05	1.04E-05	1.10E-05	1.01E-05	9.82E-06	5.39E-06	4.45E-06
2821	648513.53	4199387.66	7.00E-05	7.46E-05	1.05E-05	1.12E-05	1.03E-05	9.97E-06	5.47E-06	4.52E-06
2822	648492.65	4199378.53	7.10E-05	7.56E-05	1.07E-05	1.13E-05	1.04E-05	1.01E-05	5.54E-06	4.59E-06
2823	648471.76	4199369.4	7.19E-05	7.66E-05	1.08E-05	1.15E-05	1.06E-05	1.02E-05	5.61E-06	4.64E-06
2824	648450.88	4199360.27	7.27E-05	7.75E-05	1.09E-05	1.16E-05	1.07E-05	1.04E-05	5.68E-06	4.70E-06
2825	648430	4199351.15	7.34E-05	7.82E-05	1.10E-05	1.17E-05	1.08E-05	1.05E-05	5.73E-06	4.74E-06
2826	648409.12	4199342.02	7.40E-05	7.89E-05	1.11E-05	1.18E-05	1.09E-05	1.06E-05	5.78E-06	4.78E-06
2827	648388.24	4199332.89	7.46E-05	7.95E-05	1.12E-05	1.19E-05	1.10E-05	1.06E-05	5.83E-06	4.82E-06
2828	648367.36	4199323.76	7.50E-05	8.00E-05	1.13E-05	1.20E-05	1.10E-05	1.07E-05	5.86E-06	4.85E-06
2829	648346.48	4199314.63	7.54E-05	8.04E-05	1.13E-05	1.21E-05	1.11E-05	1.07E-05	5.89E-06	4.87E-06
2830	648326.83	4199302.88	7.59E-05	8.09E-05	1.14E-05	1.21E-05	1.12E-05	1.08E-05	5.93E-06	4.91E-06
2831	648312.09	4199285.49	7.69E-05	8.20E-05	1.16E-05	1.23E-05	1.13E-05	1.10E-05	6.01E-06	4.97E-06
2832	648297.35	4199268.11	7.78E-05	8.30E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.08E-06	5.03E-06
2833	648282.62	4199250.72	7.86E-05	8.38E-05	1.18E-05	1.26E-05	1.16E-05	1.12E-05	6.14E-06	5.08E-06
2834	648267.88	4199233.34	7.93E-05	8.45E-05	1.19E-05	1.27E-05	1.17E-05	1.13E-05	6.19E-06	5.12E-06
2835	648253.15	4199215.96	7.98E-05	8.51E-05	1.20E-05	1.28E-05	1.17E-05	1.14E-05	6.24E-06	5.16E-06
2836	648238.41	4199198.57	8.03E-05	8.56E-05	1.21E-05	1.28E-05	1.18E-05	1.14E-05	6.27E-06	5.19E-06
2837	648223.68	4199181.19	8.06E-05	8.59E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.29E-06	5.21E-06
2838	648208.94	4199163.81	8.07E-05	8.60E-05	1.21E-05	1.29E-05	1.19E-05	1.15E-05	6.30E-06	5.22E-06
2839	648194.21	4199146.42	8.07E-05	8.60E-05	1.21E-05	1.29E-05	1.19E-05	1.15E-05	6.31E-06	5.22E-06
2840	648179.47	4199129.04	8.06E-05	8.59E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.29E-06	5.21E-06
2841	648164.73	4199111.66	8.03E-05	8.56E-05	1.21E-05	1.28E-05	1.18E-05	1.14E-05	6.27E-06	5.19E-06
2842	648150	4199094.27	7.98E-05	8.51E-05	1.20E-05	1.28E-05	1.17E-05	1.14E-05	6.24E-06	5.16E-06
2843	648135.26	4199076.89	7.93E-05	8.45E-05	1.19E-05	1.27E-05	1.17E-05	1.13E-05	6.19E-06	5.12E-06
2844	648120.53	4199059.5	7.86E-05	8.38E-05	1.18E-05	1.26E-05	1.16E-05	1.12E-05	6.14E-06	5.08E-06
2845	648105.79	4199042.12	7.77E-05	8.29E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.07E-06	5.02E-06
2846	648091.06	4199024.74	7.68E-05	8.19E-05	1.15E-05	1.23E-05	1.13E-05	1.09E-05	6.00E-06	4.96E-06

2847	648076.32	4199007.35	7.57E-05	8.07E-05	1.14E-05	1.21E-05	1.11E-05	1.08E-05	5.92E-06	4.89E-06
2848	648061.58	4198989.97	7.46E-05	7.95E-05	1.12E-05	1.19E-05	1.10E-05	1.06E-05	5.83E-06	4.82E-06
2849	648046.85	4198972.59	7.33E-05	7.82E-05	1.10E-05	1.17E-05	1.08E-05	1.05E-05	5.73E-06	4.74E-06
2850	648032.11	4198955.2	7.20E-05	7.68E-05	1.08E-05	1.15E-05	1.06E-05	1.03E-05	5.63E-06	4.65E-06
2851	648017.38	4198937.82	7.07E-05	7.53E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.52E-06	4.57E-06
2852	648002.64	4198920.43	6.92E-05	7.38E-05	1.04E-05	1.11E-05	1.02E-05	9.87E-06	5.41E-06	4.47E-06
2853	647987.91	4198903.05	6.78E-05	7.23E-05	1.02E-05	1.08E-05	9.97E-06	9.66E-06	5.29E-06	4.38E-06
2854	647973.17	4198885.67	6.63E-05	7.07E-05	9.97E-06	1.06E-05	9.75E-06	9.45E-06	5.18E-06	4.29E-06
2855	648831.85	4199739.44	3.57E-05	3.81E-05	5.38E-06	5.72E-06	5.26E-06	5.09E-06	2.79E-06	2.31E-06
2856	648810.95	4199730.31	3.70E-05	3.94E-05	5.56E-06	5.91E-06	5.43E-06	5.27E-06	2.89E-06	2.39E-06
2857	648790.06	4199721.17	3.82E-05	4.07E-05	5.74E-06	6.10E-06	5.61E-06	5.44E-06	2.98E-06	2.47E-06
2858	648769.17	4199712.04	3.94E-05	4.20E-05	5.92E-06	6.29E-06	5.79E-06	5.61E-06	3.07E-06	2.54E-06
2859	648748.28	4199702.91	4.06E-05	4.33E-05	6.10E-06	6.49E-06	5.97E-06	5.78E-06	3.17E-06	2.62E-06
2860	648727.38	4199693.78	4.18E-05	4.45E-05	6.28E-06	6.68E-06	6.14E-06	5.95E-06	3.26E-06	2.70E-06
2861	648706.49	4199684.64	4.30E-05	4.58E-05	6.46E-06	6.87E-06	6.32E-06	6.13E-06	3.36E-06	2.78E-06
2862	648685.6	4199675.51	4.42E-05	4.71E-05	6.64E-06	7.06E-06	6.49E-06	6.29E-06	3.45E-06	2.85E-06
2863	648664.71	4199666.38	4.53E-05	4.83E-05	6.82E-06	7.25E-06	6.67E-06	6.46E-06	3.54E-06	2.93E-06
2864	648643.81	4199657.25	4.65E-05	4.96E-05	6.99E-06	7.43E-06	6.84E-06	6.63E-06	3.63E-06	3.00E-06
2865	648622.92	4199648.11	4.76E-05	5.08E-05	7.16E-06	7.61E-06	7.00E-06	6.79E-06	3.72E-06	3.08E-06
2866	648602.03	4199638.98	4.87E-05	5.19E-05	7.33E-06	7.79E-06	7.16E-06	6.94E-06	3.81E-06	3.15E-06
2867	648581.14	4199629.85	4.98E-05	5.31E-05	7.49E-06	7.96E-06	7.32E-06	7.09E-06	3.89E-06	3.22E-06
2868	648560.25	4199620.71	5.08E-05	5.42E-05	7.64E-06	8.13E-06	7.47E-06	7.24E-06	3.97E-06	3.29E-06
2869	648539.35	4199611.58	5.18E-05	5.53E-05	7.79E-06	8.29E-06	7.62E-06	7.39E-06	4.05E-06	3.35E-06
2870	648518.46	4199602.45	5.28E-05	5.63E-05	7.94E-06	8.44E-06	7.76E-06	7.53E-06	4.13E-06	3.41E-06
2871	648497.57	4199593.32	5.37E-05	5.73E-05	8.08E-06	8.59E-06	7.90E-06	7.66E-06	4.20E-06	3.47E-06
2872	648476.68	4199584.18	5.46E-05	5.82E-05	8.21E-06	8.73E-06	8.03E-06	7.79E-06	4.27E-06	3.53E-06
2873	648455.78	4199575.05	5.55E-05	5.91E-05	8.34E-06	8.87E-06	8.16E-06	7.91E-06	4.33E-06	3.58E-06
2874	648434.89	4199565.92	5.63E-05	6.00E-05	8.46E-06	9.00E-06	8.28E-06	8.02E-06	4.40E-06	3.64E-06
2875	648414	4199556.79	5.71E-05	6.08E-05	8.58E-06	9.12E-06	8.39E-06	8.13E-06	4.46E-06	3.69E-06
2876	648393.11	4199547.65	5.78E-05	6.16E-05	8.69E-06	9.24E-06	8.49E-06	8.23E-06	4.51E-06	3.73E-06
2877	648372.21	4199538.52	5.84E-05	6.23E-05	8.79E-06	9.34E-06	8.59E-06	8.33E-06	4.56E-06	3.78E-06
2878	648351.32	4199529.39	5.91E-05	6.30E-05	8.88E-06	9.44E-06	8.69E-06	8.42E-06	4.61E-06	3.82E-06
2879	648330.43	4199520.25	5.97E-05	6.36E-05	8.97E-06	9.54E-06	8.77E-06	8.50E-06	4.66E-06	3.86E-06
2880	648309.54	4199511.12	6.02E-05	6.42E-05	9.05E-06	9.62E-06	8.85E-06	8.58E-06	4.70E-06	3.89E-06
2881	648288.64	4199501.99	6.06E-05	6.47E-05	9.12E-06	9.70E-06	8.92E-06	8.64E-06	4.74E-06	3.92E-06
2882	648267.75	4199492.86	6.11E-05	6.51E-05	9.18E-06	9.76E-06	8.98E-06	8.70E-06	4.77E-06	3.95E-06
2883	648246.86	4199483.72	6.14E-05	6.55E-05	9.24E-06	9.82E-06	9.03E-06	8.75E-06	4.80E-06	3.97E-06
2884	648225.97	4199474.59	6.17E-05	6.58E-05	9.28E-06	9.87E-06	9.07E-06	8.80E-06	4.82E-06	3.99E-06
2885	648206.63	4199462.39	6.22E-05	6.63E-05	9.35E-06	9.94E-06	9.14E-06	8.86E-06	4.86E-06	4.02E-06
2886	648191.88	4199445	6.30E-05	6.71E-05	9.47E-06	1.01E-05	9.26E-06	8.97E-06	4.92E-06	4.07E-06
2887	648177.14	4199427.61	6.37E-05	6.79E-05	9.57E-06	1.02E-05	9.36E-06	9.07E-06	4.97E-06	4.11E-06
2888	648162.4	4199410.21	6.43E-05	6.85E-05	9.67E-06	1.03E-05	9.45E-06	9.16E-06	5.02E-06	4.15E-06
2889	648147.65	4199392.82	6.49E-05	6.91E-05	9.75E-06	1.04E-05	9.54E-06	9.24E-06	5.07E-06	4.19E-06
2890	648132.91	4199375.43	6.53E-05	6.97E-05	9.83E-06	1.04E-05	9.61E-06	9.31E-06	5.10E-06	4.22E-06
2891	648118.17	4199358.03	6.57E-05	7.01E-05	9.89E-06	1.05E-05	9.67E-06	9.37E-06	5.14E-06	4.25E-06
2892	648103.42	4199340.64	6.61E-05	7.04E-05	9.93E-06	1.06E-05	9.71E-06	9.41E-06	5.16E-06	4.27E-06
2893	648088.68	4199323.25	6.63E-05	7.07E-05	9.97E-06	1.06E-05	9.75E-06	9.45E-06	5.18E-06	4.28E-06
2894	648073.94	4199305.85	6.64E-05	7.08E-05	9.99E-06	1.06E-05	9.77E-06	9.47E-06	5.19E-06	4.29E-06
2895	648059.19	4199288.46	6.65E-05	7.08E-05	9.99E-06	1.06E-05	9.77E-06	9.47E-06	5.19E-06	4.29E-06
2896	648044.45	4199271.07	6.64E-05	7.08E-05	9.98E-06	1.06E-05	9.76E-06	9.46E-06	5.19E-06	4.29E-06
2897	648029.7	4199253.67	6.62E-05	7.06E-05	9.96E-06	1.06E-05	9.74E-06	9.44E-06	5.17E-06	4.28E-06
2898	648014.96	4199236.28	6.60E-05	7.03E-05	9.92E-06	1.05E-05	9.70E-06	9.40E-06	5.15E-06	4.26E-06
2899	648000.22	4199218.89	6.56E-05	6.99E-05	9.86E-06	1.05E-05	9.64E-06	9.35E-06	5.12E-06	4.24E-06
2900	647985.47	4199201.49	6.51E-05	6.94E-05	9.79E-06	1.04E-05	9.58E-06	9.28E-06	5.09E-06	4.21E-06
2901	647970.73	4199184.1	6.46E-05	6.88E-05	9.71E-06	1.03E-05	9.49E-06	9.20E-06	5.04E-06	4.17E-06
2902	647955.99	4199166.71	6.39E-05	6.82E-05	9.62E-06	1.02E-05	9.40E-06	9.11E-06	5.00E-06	4.13E-06
2903	647941.24	4199149.31	6.32E-05	6.74E-05	9.51E-06	1.01E-05	9.30E-06	9.01E-06	4.94E-06	4.09E-06

2904	647926.5	4199131.92	6.24E-05	6.66E-05	9.39E-06	9.98E-06	9.18E-06	8.90E-06	4.88E-06	4.03E-06
2905	647911.75	4199114.53	6.16E-05	6.56E-05	9.26E-06	9.84E-06	9.05E-06	8.77E-06	4.81E-06	3.98E-06
2906	647897.01	4199097.13	6.06E-05	6.47E-05	9.12E-06	9.70E-06	8.92E-06	8.64E-06	4.74E-06	3.92E-06
2907	647882.27	4199079.74	5.97E-05	6.36E-05	8.97E-06	9.54E-06	8.77E-06	8.50E-06	4.66E-06	3.86E-06
2908	647867.52	4199062.35	5.86E-05	6.25E-05	8.82E-06	9.38E-06	8.62E-06	8.36E-06	4.58E-06	3.79E-06
2909	647852.78	4199044.95	5.76E-05	6.14E-05	8.66E-06	9.21E-06	8.47E-06	8.21E-06	4.50E-06	3.72E-06
2910	647838.04	4199027.56	5.65E-05	6.02E-05	8.50E-06	9.03E-06	8.31E-06	8.05E-06	4.41E-06	3.65E-06
2911	647823.29	4199010.17	5.54E-05	5.91E-05	8.33E-06	8.86E-06	8.15E-06	7.90E-06	4.33E-06	3.58E-06
2912	647808.55	4198992.78	5.43E-05	5.79E-05	8.17E-06	8.68E-06	7.99E-06	7.74E-06	4.24E-06	3.51E-06
2913	647793.81	4198975.38	5.32E-05	5.67E-05	8.00E-06	8.51E-06	7.82E-06	7.58E-06	4.16E-06	3.44E-06
2914	649078.35	4198561.56	3.94E-04	4.20E-04	5.92E-05	6.29E-05	5.79E-05	5.61E-05	3.08E-05	2.54E-05
2915	649075.27	4198660.73	2.71E-04	2.89E-04	4.07E-05	4.33E-05	3.98E-05	3.86E-05	2.12E-05	1.75E-05
2916	649076.48	4198760.15	1.93E-04	2.06E-04	2.91E-05	3.09E-05	2.84E-05	2.75E-05	1.51E-05	1.25E-05
2917	649049.72	4198758.63	2.00E-04	2.13E-04	3.01E-05	3.20E-05	2.94E-05	2.85E-05	1.56E-05	1.29E-05
2918	649070.89	4198859.17	1.44E-04	1.53E-04	2.16E-05	2.30E-05	2.12E-05	2.05E-05	1.12E-05	9.30E-06
2919	649044.36	4198857.67	1.49E-04	1.59E-04	2.25E-05	2.39E-05	2.20E-05	2.13E-05	1.17E-05	9.65E-06
2920	649068.59	4198958.39	1.10E-04	1.17E-04	1.65E-05	1.76E-05	1.62E-05	1.57E-05	8.58E-06	7.10E-06
2921	649041.21	4198956.84	1.15E-04	1.22E-04	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.95E-06	7.40E-06
2922	649013.83	4198955.28	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.70E-05	9.30E-06	7.70E-06
2923	649064.08	4199156.83	6.94E-05	7.40E-05	1.04E-05	1.11E-05	1.02E-05	9.89E-06	5.42E-06	4.48E-06
2924	649037.17	4199155.3	7.24E-05	7.71E-05	1.09E-05	1.16E-05	1.06E-05	1.03E-05	5.65E-06	4.68E-06
2925	649010.25	4199153.77	7.54E-05	8.04E-05	1.13E-05	1.21E-05	1.11E-05	1.07E-05	5.89E-06	4.87E-06
2926	648983.33	4199152.24	7.84E-05	8.35E-05	1.18E-05	1.25E-05	1.15E-05	1.12E-05	6.12E-06	5.06E-06
2927	649063.17	4199355.46	4.75E-05	5.07E-05	7.14E-06	7.60E-06	6.99E-06	6.77E-06	3.71E-06	3.07E-06
2928	649035.89	4199353.92	4.95E-05	5.28E-05	7.45E-06	7.92E-06	7.28E-06	7.06E-06	3.87E-06	3.20E-06
2929	649008.61	4199352.37	5.16E-05	5.50E-05	7.76E-06	8.25E-06	7.58E-06	7.35E-06	4.03E-06	3.33E-06
2930	648981.33	4199350.82	5.37E-05	5.72E-05	8.07E-06	8.58E-06	7.89E-06	7.65E-06	4.19E-06	3.47E-06
2931	648954.04	4199349.27	5.57E-05	5.94E-05	8.38E-06	8.91E-06	8.20E-06	7.94E-06	4.35E-06	3.60E-06
2932	649055.54	4199553.72	3.51E-05	3.74E-05	5.28E-06	5.61E-06	5.16E-06	5.00E-06	2.74E-06	2.27E-06
2933	649028	4199552.16	3.65E-05	3.89E-05	5.49E-06	5.84E-06	5.37E-06	5.21E-06	2.85E-06	2.36E-06
2934	649000.46	4199550.6	3.80E-05	4.05E-05	5.71E-06	6.07E-06	5.58E-06	5.41E-06	2.97E-06	2.45E-06
2935	648972.92	4199549.04	3.94E-05	4.21E-05	5.93E-06	6.31E-06	5.80E-06	5.62E-06	3.08E-06	2.55E-06
2936	648945.38	4199547.47	4.09E-05	4.36E-05	6.16E-06	6.54E-06	6.02E-06	5.83E-06	3.20E-06	2.65E-06
2937	648917.84	4199545.91	4.24E-05	4.52E-05	6.38E-06	6.79E-06	6.24E-06	6.05E-06	3.32E-06	2.74E-06
2938	649050.89	4199752.15	2.72E-05	2.90E-05	4.08E-06	4.34E-06	3.99E-06	3.87E-06	2.12E-06	1.75E-06
2939	649023.65	4199750.61	2.82E-05	3.00E-05	4.23E-06	4.50E-06	4.14E-06	4.01E-06	2.20E-06	1.82E-06
2940	648996.41	4199749.06	2.92E-05	3.11E-05	4.39E-06	4.66E-06	4.29E-06	4.16E-06	2.28E-06	1.89E-06
2941	648969.18	4199747.52	3.02E-05	3.22E-05	4.55E-06	4.83E-06	4.45E-06	4.31E-06	2.36E-06	1.95E-06
2942	648941.94	4199745.97	3.13E-05	3.34E-05	4.71E-06	5.01E-06	4.61E-06	4.46E-06	2.45E-06	2.02E-06
2943	648914.7	4199744.43	3.24E-05	3.45E-05	4.87E-06	5.18E-06	4.77E-06	4.62E-06	2.53E-06	2.09E-06
2944	648887.46	4199742.88	3.35E-05	3.57E-05	5.04E-06	5.36E-06	4.93E-06	4.77E-06	2.62E-06	2.17E-06
2945	648860.22	4199741.34	3.46E-05	3.69E-05	5.20E-06	5.53E-06	5.09E-06	4.93E-06	2.70E-06	2.24E-06

EXHIBIT 1

			T2			T2L3			T4i			T4f		
			582	649681.31										
					2.13E-07			3.20E-08			2.98E-08			1.47E-08
			Yr 1	Yr 2	Total	Yr 1	Yr 2	Total	Yr 1	Yr 2	Total	Yr 1	Yr 2	Total
1	649114.1	4198290	2.92E-08	3.11E-08	6.03E-08	4.39E-09	4.66E-09	9.05E-09	4.29E-09	4.16E-09	8.45E-09	2.28E-09	1.89E-09	4.16E-09
2	649113.4	4198315	2.15E-08	2.30E-08	4.45E-08	3.24E-09	3.44E-09	6.68E-09	3.17E-09	3.07E-09	6.23E-09	1.68E-09	1.39E-09	3.07E-09
3	649112.7	4198340	1.71E-08	1.82E-08	3.53E-08	2.57E-09	2.73E-09	5.30E-09	2.51E-09	2.43E-09	4.94E-09	1.33E-09	1.10E-09	2.44E-09
4	649112	4198365	1.41E-08	1.50E-08	2.91E-08	2.12E-09	2.25E-09	4.36E-09	2.07E-09	2.00E-09	4.07E-09	1.10E-09	9.09E-10	2.01E-09
5	649110.6	4198415	1.02E-08	1.09E-08	2.11E-08	1.53E-09	1.63E-09	3.16E-09	1.50E-09	1.45E-09	2.95E-09	7.96E-10	6.59E-10	1.46E-09
6	649109.2	4198465	7.78E-09	8.30E-09	1.61E-08	1.17E-09	1.24E-09	2.42E-09	1.14E-09	1.11E-09	2.25E-09	6.08E-10	5.03E-10	1.11E-09
7	649107.8	4198515	6.14E-09	6.54E-09	1.27E-08	9.23E-10	9.81E-10	1.90E-09	9.02E-10	8.75E-10	1.78E-09	4.79E-10	3.97E-10	8.76E-10
8	649106.5	4198565	4.95E-09	5.27E-09	1.02E-08	7.44E-10	7.91E-10	1.53E-09	7.27E-10	7.05E-10	1.43E-09	3.86E-10	3.20E-10	7.06E-10
9	649103.7	4198665	3.36E-09	3.59E-09	6.95E-09	5.06E-10	5.38E-10	1.04E-09	4.95E-10	4.79E-10	9.74E-10	2.63E-10	2.17E-10	4.80E-10
10	649100.9	4198765	2.39E-09	2.55E-09	4.94E-09	3.60E-10	3.82E-10	7.42E-10	3.52E-10	3.41E-10	6.93E-10	1.87E-10	1.55E-10	3.41E-10
11	649098.1	4198864	1.76E-09	1.88E-09	3.64E-09	2.65E-10	2.82E-10	5.47E-10	2.59E-10	2.51E-10	5.11E-10	1.38E-10	1.14E-10	2.52E-10
12	649095.3	4198964	1.34E-09	1.43E-09	2.78E-09	2.02E-10	2.15E-10	4.17E-10	1.98E-10	1.91E-10	3.89E-10	1.05E-10	8.68E-11	1.92E-10
13	649089.8	4199164	8.49E-10	9.05E-10	1.75E-09	1.28E-10	1.36E-10	2.63E-10	1.25E-10	1.21E-10	2.46E-10	6.63E-11	5.48E-11	1.21E-10
14	649084.2	4199364	5.86E-10	6.25E-10	1.21E-09	8.82E-11	9.38E-11	1.82E-10	8.62E-11	8.36E-11	1.70E-10	4.58E-11	3.79E-11	8.37E-11
15	649078.6	4199564	4.33E-10	4.62E-10	8.95E-10	6.51E-11	6.92E-11	1.34E-10	6.37E-11	6.17E-11	1.25E-10	3.38E-11	2.80E-11	6.18E-11
16	649073.1	4199764	3.36E-10	3.58E-10	6.95E-10	5.06E-11	5.37E-11	1.04E-10	4.94E-11	4.79E-11	9.73E-11	2.63E-11	2.17E-11	4.80E-11
17	649150.6	4198290	3.11E-08	3.31E-08	6.42E-08	4.67E-09	4.97E-09	9.64E-09	4.57E-09	4.43E-09	9.00E-09	2.43E-09	2.01E-09	4.44E-09
18	649193.6	4198290	3.24E-08	3.45E-08	6.69E-08	4.87E-09	5.18E-09	1.00E-08	4.76E-09	4.62E-09	9.38E-09	2.53E-09	2.09E-09	4.62E-09
19	649150.6	4198315	2.23E-08	2.38E-08	4.62E-08	3.36E-09	3.57E-09	6.93E-09	3.29E-09	3.18E-09	6.47E-09	1.75E-09	1.44E-09	3.19E-09
20	649193.5	4198315	2.30E-08	2.45E-08	4.75E-08	3.46E-09	3.68E-09	7.13E-09	3.38E-09	3.28E-09	6.66E-09	1.80E-09	1.49E-09	3.28E-09
21	649150.5	4198340	1.75E-08	1.86E-08	3.61E-08	2.63E-09	2.79E-09	5.42E-09	2.57E-09	2.49E-09	5.05E-09	1.36E-09	1.13E-09	2.49E-09
22	649193.5	4198340	1.78E-08	1.89E-08	3.67E-08	2.67E-09	2.84E-09	5.51E-09	2.61E-09	2.53E-09	5.14E-09	1.39E-09	1.15E-09	2.53E-09
23	649150.4	4198365	1.42E-08	1.52E-08	2.94E-08	2.14E-09	2.28E-09	4.42E-09	2.09E-09	2.03E-09	4.12E-09	1.11E-09	9.20E-10	2.03E-09
24	649193.4	4198365	1.43E-08	1.53E-08	2.96E-08	2.16E-09	2.29E-09	4.45E-09	2.11E-09	2.04E-09	4.15E-09	1.12E-09	9.26E-10	2.05E-09
25	649150.3	4198415	1.02E-08	1.08E-08	2.10E-08	1.53E-09	1.63E-09	3.16E-09	1.50E-09	1.45E-09	2.94E-09	7.94E-10	6.57E-10	1.45E-09
26	649193.3	4198415	1.01E-08	1.07E-08	2.08E-08	1.52E-09	1.61E-09	3.13E-09	1.48E-09	1.44E-09	2.92E-09	7.87E-10	6.51E-10	1.44E-09
27	649150.2	4198465	7.67E-09	8.18E-09	1.59E-08	1.15E-09	1.23E-09	2.38E-09	1.13E-09	1.09E-09	2.22E-09	5.99E-10	4.96E-10	1.10E-09
28	649193.2	4198465	7.51E-09	8.01E-09	1.55E-08	1.13E-09	1.20E-09	2.33E-09	1.10E-09	1.07E-09	2.18E-09	5.87E-10	4.85E-10	1.07E-09
29	649150.1	4198515	5.99E-09	6.38E-09	1.24E-08	9.00E-10	9.57E-10	1.86E-09	8.80E-10	8.53E-10	1.73E-09	4.68E-10	3.87E-10	8.55E-10
30	649193.1	4198515	5.80E-09	6.18E-09	1.20E-08	8.72E-10	9.28E-10	1.80E-09	8.53E-10	8.27E-10	1.68E-09	4.53E-10	3.75E-10	8.28E-10
31	649149.9	4198565	4.78E-09	5.09E-09	9.87E-09	7.19E-10	7.64E-10	1.48E-09	7.03E-10	6.81E-10	1.38E-09	3.73E-10	3.09E-10	6.82E-10
32	649192.9	4198565	4.59E-09	4.89E-09	9.48E-09	6.90E-10	7.34E-10	1.42E-09	6.75E-10	6.54E-10	1.33E-09	3.59E-10	2.97E-10	6.55E-10
33	649128.2	4198665	3.27E-09	3.49E-09	6.76E-09	4.92E-10	5.23E-10	1.02E-09	4.81E-10	4.66E-10	9.48E-10	2.56E-10	2.11E-10	4.67E-10
34	649171.2	4198665	3.11E-09	3.31E-09	6.42E-09	4.67E-10	4.97E-10	9.64E-10	4.57E-10	4.43E-10	9.00E-10	2.43E-10	2.01E-10	4.44E-10
35	649214.2	4198665	2.93E-09	3.12E-09	6.05E-09	4.41E-10	4.68E-10	9.09E-10	4.31E-10	4.18E-10	8.48E-10	2.29E-10	1.89E-10	4.18E-10
36	649128	4198765	2.30E-09	2.46E-09	4.76E-09	3.47E-10	3.68E-10	7.15E-10	3.39E-10	3.28E-10	6.67E-10	1.80E-10	1.49E-10	3.29E-10
37	649170.9	4198765	2.17E-09	2.31E-09	4.48E-09	3.26E-10	3.46E-10	6.72E-10	3.19E-10	3.09E-10	6.27E-10	1.69E-10	1.40E-10	3.09E-10
38	649213.9	4198765	2.02E-09	2.16E-09	4.18E-09	3.04E-10	3.24E-10	6.28E-10	2.98E-10	2.89E-10	5.86E-10	1.58E-10	1.31E-10	2.89E-10
39	649127.7	4198865	1.69E-09	1.80E-09	3.48E-09	2.54E-10	2.70E-10	5.23E-10	2.48E-10	2.40E-10	4.88E-10	1.32E-10	1.09E-10	2.41E-10
40	649170.7	4198865	1.58E-09	1.68E-09	3.26E-09	2.37E-10	2.52E-10	4.89E-10	2.32E-10	2.25E-10	4.56E-10	1.23E-10	1.02E-10	2.25E-10
41	649213.7	4198865	1.47E-09	1.56E-09	3.03E-09	2.21E-10	2.35E-10	4.55E-10	2.16E-10	2.09E-10	4.25E-10	1.15E-10	9.48E-11	2.09E-10
42	649127.5	4198965	1.28E-09	1.36E-09	2.64E-09	1.92E-10	2.04E-10	3.96E-10	1.88E-10	1.82E-10	3.70E-10	9.97E-11	8.25E-11	1.82E-10
43	649170.5	4198965	1.19E-09	1.27E-09	2.46E-09	1.79E-10	1.90E-10	3.70E-10	1.75E-10	1.70E-10	3.45E-10	9.31E-11	7.70E-11	1.70E-10
44	649213.5	4198965	1.11E-09	1.18E-09	2.29E-09	1.67E-10	1.77E-10	3.44E-10	1.63E-10	1.58E-10	3.21E-10	8.66E-11	7.16E-11	1.58E-10
45	649115.6	4199165	8.15E-10	8.69E-10	1.68E-09	1.23E-10	1.30E-10	2.53E-10	1.20E-10	1.16E-10	2.36E-10	6.36E-11	5.27E-11	1.16E-10
46	649148.5	4199165	7.74E-10	8.25E-10	1.60E-09	1.16E-10	1.24E-10	2.40E-10	1.14E-10	1.10E-10	2.24E-10	6.04E-11	5.00E-11	1.10E-10
47	649191.5	4199165	7.23E-10	7.71E-10	1.49E-09	1.09E-10	1.16E-10	2.24E-10	1.06E-10	1.03E-10	2.09E-10	5.65E-11	4.67E-11	1.03E-10
48	649112.5	4199365	5.62E-10	5.99E-10	1.16E-09	8.45E-11	8.99E-11	1.74E-10	8.27E-11	8.01E-11	1.63E-10	4.39E-11	3.63E-11	8.02E-11
49	649148	4199365	5.34E-10	5.69E-10	1.10E-09	8.03E-11	8.53E-11	1.66E-10	7.85E-11	7.61E-11	1.55E-10	4.17E-11	3.45E-11	7.62E-11
50	649191	4199365	5.02E-10	5.35E-10	1.04E-09	7.54E-11	8.02E-11	1.56E-10	7.38E-11	7.15E-11	1.45E-10	3.92E-11	3.24E-11	7.16E-11
51	649109.5	4199565	4.15E-10	4.42E-10	8.58E-10	6.24E-11	6.64E-11	1.29E-10	6.10E-11	5.92E-11	1.20E-10	3.24E-11	2.68E-11	5.92E-11
52	649147.5	4199565	3.95E-10	4.21E-10	8.15E-10	5.93E-11	6.31E-11	1.22E-10	5.80E-11	5.62E-11	1.14E-10	3.08E-11	2.55E-11	5.63E-11
53	649190.5	4199565	3.74E-10	3.98E-10	7.72E-10	5.62E-11	5.97E-11	1.16E-10	5.49E-11	5.32E-11	1.08E-10	2.92E-11	2.41E-11	5.33E-11
54	649106.5	4199765	3.23E-10	3.44E-10	6.66E-10	4.85E-11	5.16E-11	1.00E-10	4.74E-11	4.60E-11	9.34E-11	2.52E-11	2.08E-11	4.60E-11
55	649147	4199765	3.07E-10	3.28E-10	6.35E-10	4.62E-11	4.91E-11	9.53E-11	4.52E-11	4.38E-11	8.90E-11	2.40E-11	1.99E-11	4.39E-11
56	649190	4199765	2.92E-10	3.12E-10	6.04E-10	4.40E-11	4.68E-11	9.07E-11	4.30E-11	4.17E-11	8.47E-11	2.28E-11	1.89E-11	4.17E-11
57	649236.8	4198291	3.28E-08	3.50E-08	6.78E-08	4.93E-09	5.24E-09	1.02E-08	4.82E-09	4.67E-09	9.50E-09	2.56E-09	2.12E-09	4.68E-09
58	649281.5	4198292	3.26E-08	3.48E-08	6.73E-08	4.90E-09	5.21E-09	1.01E-08	4.79E-09	4.65E-09	9.44E-09	2.55E-09	2.11E-09	4.65E-09
59	649236.1	4198316	2.32E-08	2.48E-08	4.80E-08	3.49E-09	3.71E-09	7.21E-09	3.42E-09	3.31E-09	6.73E-09	1.82E-09	1.50E-09	3.32E-09
60	649280.8	4198317	2.31E-08	2.46E-08	4.77E-08	3.47E-09	3.69E-09	7.16E-09	3.39E-09	3.29E-09	6.68E-09	1.80E-09	1.49E-09	3.30E-09
61	649235.3	4198341	1.78E-08	1.90E-08	3.68E-08	2.68E-09	2.85E-09	5.53E-09	2.62E-09	2.54E-09	5.16E-09	1.39E-09	1.15E-09	2.54E-09
62	649280	4198342	1.76E-08	1.88E-08	3.64E-08	2.65E-09	2.82E-09	5.46E-09	2.59E-09	2.51E-09	5.10E-09	1.38E-09	1.14E-09	2.51E-09
63	649234.6	4198366	1.43E-08	1.52E-08	2.95E-08	2.15E-09	2.28E-09	4.43E-09	2.10E-09	2.03E-09	4.13E-09	1.11E-09	9.22E-10	2.04E-09
64	649279.3	4198367	1.40E-08	1.50E-08	2.90E-08	2.11E-09	2.24E-09	4.35E-09	2.06E-09	2.00E-09	4.06E-09	1.10E-09	9.06E-10	2.00E-09
65	649233.1	4198416	9.90E-09	1.06E-08	2.04E-08	1.49E-09	1.58E-09	3.07E-09	1.46E-09	1.41E-09	2.87E-09	7.73E-10	6.40E-10	1.41E-09
66	649277.8	4198417	9.60E-09	1.02E-08	1.98E-08	1.44E-09	1.53E-09	2.98E-09	1.41E-09	1.37E-09	2.78E-09	7.50E-10	6.20E-10	1.37E-09
67	649231.6	4198466	7.30E-09	7.79E-09	1.51E-08	1.10E-09	1.17E-09	2.27E-09	1.07E-09	1.04E-09	2.11E-09	5.71E-10	4.72E-10	1.04E-09
68	649276.4	4198467	7.00E-09	7.46E-09	1.45E-08	1.05E-09	1.12E-09	2.17E-09	1.03E-09	9.97E-10	2.03E-09	5.46E-10	4.52E-10	9.98E-10
69	649230.2	4198516	5.60E-09	5.97E-09	1.16E-08	8.42E-10	8.95E-10	1.74E-09	8.23E-10	7.98E-10	1.62E-09	4.37E-10	3.62E-10	7.99E-10
70	649274.9	4198517	5.30E-09	5.65E-09	1.10E-08	7.97E-10	8.47E-10	1.64E-09	7.79E-10	7.55E-10	1.53E-09	4.14E-10	3.43E-10	7.57E-10
71	649228.7	4198566	4.40E-09	4.69E-09	9.09E-09	6.62E-10	7.03E-10	1.37E-09	6.47E-10	6.27E-10	1.27E-09	3.44E-10	2.84E-10	6.28E-10
72	649273.4	4198567	4.13E-09	4.40E-09	8.53E-09	6.21E-10	6.60E-10	1.28E-09	6.07E-10	5.88E-10	1.20E-09	3.23E-10	2.67E-10	5.89E-10

73	649248.1	4198666	2.77E-09	2.95E-09	5.72E-09	4.17E-10	4.43E-10	8.59E-10	4.07E-10	3.95E-10	8.02E-10	2.16E-10	1.79E-10	3.95E-10
74	649292.8	4198668	2.56E-09	2.72E-09	5.28E-09	3.84E-10	4.09E-10	7.93E-10	3.76E-10	3.64E-10	7.40E-10	2.00E-10	1.65E-10	3.65E-10
75	649245.2	4198766	1.91E-09	2.04E-09	3.95E-09	2.88E-10	3.06E-10	5.94E-10	2.81E-10	2.73E-10	5.54E-10	1.49E-10	1.24E-10	2.73E-10
76	649289.9	4198768	1.76E-09	1.87E-09	3.63E-09	2.64E-10	2.81E-10	5.45E-10	2.59E-10	2.51E-10	5.09E-10	1.37E-10	1.14E-10	2.51E-10
77	649242.2	4198866	1.39E-09	1.48E-09	2.88E-09	2.09E-10	2.23E-10	4.32E-10	2.05E-10	1.98E-10	4.03E-10	1.09E-10	9.00E-11	1.99E-10
78	649287	4198868	1.28E-09	1.37E-09	2.65E-09	1.93E-10	2.05E-10	3.97E-10	1.88E-10	1.82E-10	3.71E-10	1.00E-10	8.27E-11	1.83E-10
79	649239.3	4198966	1.06E-09	1.13E-09	2.19E-09	1.59E-10	1.69E-10	3.28E-10	1.56E-10	1.51E-10	3.06E-10	8.26E-11	6.84E-11	1.51E-10
80	649284	4198968	9.76E-10	1.04E-09	2.02E-09	1.47E-10	1.56E-10	3.03E-10	1.44E-10	1.39E-10	2.83E-10	7.63E-11	6.31E-11	1.39E-10
81	649233.4	4199166	6.76E-10	7.20E-10	1.40E-09	1.02E-10	1.08E-10	2.10E-10	9.94E-11	9.63E-11	1.96E-10	5.28E-11	4.37E-11	9.65E-11
82	649278.1	4199168	6.29E-10	6.71E-10	1.30E-09	9.46E-11	1.01E-10	1.95E-10	9.25E-11	8.97E-11	1.82E-10	4.92E-11	4.07E-11	8.98E-11
83	649227.5	4199366	4.76E-10	5.08E-10	9.84E-10	7.16E-11	7.61E-11	1.48E-10	7.00E-11	6.78E-11	1.38E-10	3.72E-11	3.08E-11	6.80E-11
84	649272.3	4199367	4.48E-10	4.77E-10	9.25E-10	6.73E-11	7.15E-11	1.39E-10	6.58E-11	6.38E-11	1.30E-10	3.50E-11	2.89E-11	6.39E-11
85	649221.7	4199566	3.59E-10	3.83E-10	7.42E-10	5.40E-11	5.74E-11	1.11E-10	5.28E-11	5.12E-11	1.04E-10	2.81E-11	2.32E-11	5.13E-11
86	649266.4	4199567	3.40E-10	3.63E-10	7.03E-10	5.12E-11	5.44E-11	1.06E-10	5.00E-11	4.85E-11	9.85E-11	2.66E-11	2.20E-11	4.86E-11
87	649215.8	4199766	2.84E-10	3.03E-10	5.87E-10	4.28E-11	4.54E-11	8.82E-11	4.18E-11	4.05E-11	8.23E-11	2.22E-11	1.84E-11	4.06E-11
88	649260.5	4199767	2.71E-10	2.89E-10	5.61E-10	4.08E-11	4.34E-11	8.42E-11	3.99E-11	3.87E-11	7.86E-11	2.12E-11	1.75E-11	3.87E-11
89	649304.1	4198293	3.24E-08	3.46E-08	6.70E-08	4.88E-09	5.19E-09	1.01E-08	4.77E-09	4.62E-09	9.40E-09	2.53E-09	2.10E-09	4.63E-09
90	649347.2	4198294	3.22E-08	3.43E-08	6.65E-08	4.84E-09	5.15E-09	9.99E-09	4.73E-09	4.59E-09	9.32E-09	2.51E-09	2.08E-09	4.59E-09
91	649390.3	4198295	3.18E-08	3.39E-08	6.56E-08	4.77E-09	5.08E-09	9.85E-09	4.67E-09	4.53E-09	9.19E-09	2.48E-09	2.05E-09	4.53E-09
92	649303.5	4198318	2.29E-08	2.45E-08	4.74E-08	3.45E-09	3.67E-09	7.12E-09	3.37E-09	3.27E-09	6.64E-09	1.79E-09	1.48E-09	3.27E-09
93	649346.6	4198319	2.26E-08	2.41E-08	4.67E-08	3.40E-09	3.62E-09	7.02E-09	3.33E-09	3.22E-09	6.55E-09	1.77E-09	1.46E-09	3.23E-09
94	649389.7	4198320	2.21E-08	2.36E-08	4.58E-08	3.33E-09	3.54E-09	6.87E-09	3.26E-09	3.16E-09	6.41E-09	1.73E-09	1.43E-09	3.16E-09
95	649303	4198343	1.75E-08	1.86E-08	3.61E-08	2.62E-09	2.79E-09	5.42E-09	2.57E-09	2.49E-09	5.05E-09	1.36E-09	1.13E-09	2.49E-09
96	649346.1	4198344	1.71E-08	1.82E-08	3.54E-08	2.57E-09	2.74E-09	5.31E-09	2.52E-09	2.44E-09	4.95E-09	1.34E-09	1.11E-09	2.44E-09
97	649389.2	4198345	1.66E-08	1.77E-08	3.43E-08	2.50E-09	2.66E-09	5.16E-09	2.44E-09	2.37E-09	4.81E-09	1.30E-09	1.07E-09	2.37E-09
98	649302.5	4198368	1.39E-08	1.48E-08	2.86E-08	2.08E-09	2.22E-09	4.30E-09	2.04E-09	1.97E-09	4.01E-09	1.08E-09	8.95E-10	1.98E-09
99	649345.6	4198369	1.35E-08	1.44E-08	2.79E-08	2.03E-09	2.16E-09	4.19E-09	1.98E-09	1.92E-09	3.91E-09	1.05E-09	8.72E-10	1.93E-09
100	649388.7	4198370	1.30E-08	1.39E-08	2.69E-08	1.96E-09	2.08E-09	4.04E-09	1.91E-09	1.86E-09	3.77E-09	1.02E-09	8.41E-10	1.86E-09
101	649301.4	4198418	9.42E-09	1.00E-08	1.95E-08	1.42E-09	1.51E-09	2.92E-09	1.38E-09	1.34E-09	2.73E-09	7.36E-10	6.09E-10	1.34E-09
102	649344.5	4198419	9.06E-09	9.65E-09	1.87E-08	1.36E-09	1.45E-09	2.81E-09	1.33E-09	1.29E-09	2.62E-09	7.07E-10	5.85E-10	1.29E-09
103	649387.6	4198420	8.61E-09	9.18E-09	1.78E-08	1.29E-09	1.38E-09	2.67E-09	1.27E-09	1.23E-09	2.49E-09	6.73E-10	5.56E-10	1.23E-09
104	649300.4	4198468	6.81E-09	7.26E-09	1.41E-08	1.02E-09	1.09E-09	2.11E-09	1.00E-09	9.71E-10	1.97E-09	5.32E-10	4.40E-10	9.72E-10
105	649343.5	4198469	6.46E-09	6.89E-09	1.34E-08	9.72E-10	1.03E-09	2.00E-09	9.50E-10	9.21E-10	1.87E-09	5.05E-10	4.18E-10	9.22E-10
106	649386.6	4198470	6.06E-09	6.46E-09	1.25E-08	9.12E-10	9.69E-10	1.88E-09	8.91E-10	8.64E-10	1.76E-09	4.74E-10	3.92E-10	8.65E-10
107	649299.3	4198518	5.13E-09	5.46E-09	1.06E-08	7.71E-10	8.19E-10	1.59E-09	7.54E-10	7.30E-10	1.48E-09	4.00E-10	3.31E-10	7.32E-10
108	649342.4	4198519	4.80E-09	5.12E-09	9.92E-09	7.22E-10	7.68E-10	1.49E-09	7.06E-10	6.85E-10	1.39E-09	3.75E-10	3.10E-10	6.86E-10
109	649385.5	4198520	4.46E-09	4.75E-09	9.20E-09	6.70E-10	7.12E-10	1.38E-09	6.55E-10	6.35E-10	1.29E-09	3.48E-10	2.88E-10	6.36E-10
110	649298.3	4198568	3.97E-09	4.23E-09	8.20E-09	5.97E-10	6.34E-10	1.23E-09	5.83E-10	5.65E-10	1.15E-09	3.10E-10	2.56E-10	5.66E-10
111	649341.4	4198569	3.68E-09	3.93E-09	7.61E-09	5.54E-10	5.89E-10	1.14E-09	5.42E-10	5.25E-10	1.07E-09	2.88E-10	2.38E-10	5.26E-10
112	649384.5	4198570	3.39E-09	3.61E-09	7.00E-09	5.10E-10	5.42E-10	1.05E-09	4.98E-10	4.83E-10	9.81E-10	2.65E-10	2.19E-10	4.84E-10
113	649317.7	4198668	2.44E-09	2.60E-09	5.03E-09	3.66E-10	3.90E-10	7.56E-10	3.58E-10	3.47E-10	7.06E-10	1.90E-10	1.57E-10	3.48E-10
114	649360.8	4198669	2.23E-09	2.38E-09	4.61E-09	3.36E-10	3.57E-10	6.93E-10	3.28E-10	3.18E-10	6.47E-10	1.74E-10	1.44E-10	3.19E-10
115	649315.6	4198768	1.67E-09	1.78E-09	3.46E-09	2.51E-10	2.67E-10	5.19E-10	2.46E-10	2.38E-10	4.84E-10	1.31E-10	1.08E-10	2.39E-10
116	649358.7	4198769	1.53E-09	1.64E-09	3.17E-09	2.31E-10	2.45E-10	4.76E-10	2.26E-10	2.19E-10	4.44E-10	1.20E-10	9.91E-11	2.19E-10
117	649313.5	4198868	1.22E-09	1.30E-09	2.52E-09	1.83E-10	1.95E-10	3.78E-10	1.79E-10	1.74E-10	3.53E-10	9.51E-11	7.87E-11	1.74E-10
118	649356.6	4198869	1.12E-09	1.20E-09	2.32E-09	1.69E-10	1.79E-10	3.48E-10	1.65E-10	1.60E-10	3.25E-10	8.77E-11	7.25E-11	1.60E-10
119	649311.4	4198968	9.30E-10	9.91E-10	1.92E-09	1.40E-10	1.49E-10	2.89E-10	1.37E-10	1.33E-10	2.69E-10	7.27E-11	6.01E-11	1.33E-10
120	649354.5	4198969	8.62E-10	9.19E-10	1.78E-09	1.30E-10	1.38E-10	2.68E-10	1.27E-10	1.23E-10	2.50E-10	6.74E-11	5.57E-11	1.23E-10
121	649307.1	4199168	6.02E-10	6.42E-10	1.24E-09	9.06E-11	9.63E-11	1.87E-10	8.85E-11	8.58E-11	1.74E-10	4.70E-11	3.89E-11	8.60E-11
122	649350.2	4199169	5.65E-10	6.03E-10	1.17E-09	8.50E-11	9.04E-11	1.75E-10	8.31E-11	8.06E-11	1.64E-10	4.42E-11	3.65E-11	8.07E-11
123	649302.9	4199368	4.30E-10	4.59E-10	8.89E-10	6.47E-11	6.88E-11	1.33E-10	6.33E-11	6.13E-11	1.25E-10	3.36E-11	2.78E-11	6.14E-11
124	649346	4199369	4.08E-10	4.35E-10	8.44E-10	6.14E-11	6.53E-11	1.27E-10	6.00E-11	5.82E-11	1.18E-10	3.19E-11	2.64E-11	5.83E-11
125	649298.7	4199568	3.28E-10	3.50E-10	6.79E-10	4.94E-11	5.25E-11	1.02E-10	4.83E-11	4.68E-11	9.51E-11	2.57E-11	2.12E-11	4.69E-11
126	649341.8	4199569	3.14E-10	3.35E-10	6.50E-10	4.73E-11	5.03E-11	9.75E-11	4.62E-11	4.48E-11	9.10E-11	2.46E-11	2.03E-11	4.49E-11
127	649294.5	4199768	2.63E-10	2.80E-10	5.43E-10	3.95E-11	4.20E-11	8.16E-11	3.87E-11	3.75E-11	7.61E-11	2.05E-11	1.70E-11	3.75E-11
128	649337.6	4199769	2.53E-10	2.70E-10	5.24E-10	3.81E-11	4.05E-11	7.86E-11	3.73E-11	3.61E-11	7.34E-11	1.98E-11	1.64E-11	3.62E-11
129	649426	4198295	3.17E-08	3.38E-08	6.56E-08	4.77E-09	5.07E-09	9.84E-09	4.67E-09	4.52E-09	9.19E-09	2.48E-09	2.05E-09	4.53E-09
130	649426.1	4198320	2.18E-08	2.33E-08	4.51E-08	3.29E-09	3.49E-09	6.78E-09	3.21E-09	3.11E-09	6.33E-09	1.71E-09	1.41E-09	3.12E-09
131	649426.2	4198345	1.62E-08	1.73E-08	3.35E-08	2.44E-09	2.59E-09	5.03E-09	2.39E-09	2.31E-09	4.70E-09	1.27E-09	1.05E-09	2.32E-09
132	649426.3	4198370	1.26E-08	1.34E-08	2.60E-08	1.89E-09	2.01E-09	3.90E-09	1.85E-09	1.79E-09	3.64E-09	9.83E-10	8.13E-10	1.80E-09
133	649426.5	4198420	8.18E-09	8.72E-09	1.69E-08	1.23E-09	1.31E-09	2.54E-09	1.20E-09	1.17E-09	2.37E-09	6.39E-10	5.29E-10	1.17E-09
134	649409.1	4198470	5.85E-09	6.24E-09	1.21E-08	8.80E-10	9.35E-10	1.82E-09	8.60E-10	8.34E-10	1.69E-09	4.57E-10	3.78E-10	8.35E-10
135	649444.2	4198470	5.49E-09	5.86E-09	1.13E-08	8.26E-10	8.78E-10	1.70E-09	8.08E-10	7.83E-10	1.59E-09	4.29E-10	3.55E-10	7.84E-10
136	649409.3	4198520	4.27E-09	4.55E-09	8.81E-09	6.41E-10	6.82E-10	1.32E-09	6.27E-10	6.08E-10	1.24E-09	3.33E-10	2.76E-10	6.09E-10
137	649444.4	4198520	3.98E-09	4.24E-09	8.22E-09	5.98E-10	6.36E-10	1.23E-09	5.85E-10	5.67E-10	1.15E-09	3.11E-10	2.57E-10	5.68E-10
138	649409.5	4198570	3.22E-09	3.44E-09	6.66E-09	4.85E-10	5.15E-10	1.00E-09	4.74E-10	4.59E-10	9.33E-10	2.52E-10	2.08E-10	4.60E-10
139	649444.6	4198570	3.00E-09	3.19E-09	6.19E-09	4.51E-10	4.79E-10	9.30E-10	4.41E-10	4.27E-10	8.67E-10	2.34E-10	1.94E-10	4.28E-10
140	649392.4	4198670	2.09E-09	2.23E-09	4.32E-09	3.14E-10	3.34E-10	6.48E-10	3.07E-10	2.98E-10	6.05E-10	1.63E-10	1.35E-10	2.98E-10
141	649427.4	4198670	1.94E-09	2.07E-09	4.01E-09	2.92E-10	3.10E-10	6.03E-10	2.86E-10	2.77E-10	5.62E-10	1.52E-10	1.26E-10	2.77E-10
142	649392.8	4198770	1.43E-09	1.53E-09	2.96E-09	2.15E-10	2.29E-10	4.44E-10	2.10E-10	2.04E-10	4.14E-10	1.12E-10	9.25E-11	2.04E-10
143	649427.8	4198770	1.34E-09	1.42E-09	2.76E-09	2.01E-10	2.14E-10	4.14E-10	1.96E-10	1.90E-10	3.87E-10	1.04E-10	8.63E-11	1.91E-10
144	649393.2	4198870	1.05E-09	1.12E-09	2.17E-09	1.58E-10	1.68E-10	3.25E-10	1.54E-10	1.49E-10	3.04E-10	8.19E-11	6.77E-11	1.50E-10
145	649428.2	4198870	9.85E-10	1.05E-09	2.04E-09	1.48E-10	1.58E-10	3.06E-10	1.45E-10	1.40E-10	2.85E-10	7.70E-11	6.37E-11	1.41E-10
146	649384.8	4198970	8.19E-10	8.73E-10	1.69E-09	1.23E-10	1.31E-10	2.54E-10	1.20E-10	1.17E-10	2.37E-10	6.40E-11	5.29E-11	1.17E-10
147	649411.1	4198970	7.85E-10	8.37E-10	1.62E-09	1.18E-10	1.26E-10	2.44E-10	1.15E-10	1.12E-10	2.27E-10	6.13E-11	5.07E-11	1.12E-10
148	649446.2	4198970	7.44E-10	7.93E-10	1.54E-09	1.12E-10	1.19E-10	2.31E-10	1.09E-10	1.06E-10	2.15E-10	5.81E-11	4.81E-11	1.06E-10

149	649383.1	4199170	5.40E-10	5.76E-10	1.12E-09	8.13E-11	8.64E-11	1.68E-10	7.95E-11	7.70E-11	1.56E-10	4.22E-11	3.49E-11	7.71E-11
150	649411.9	4199170	5.21E-10	5.56E-10	1.08E-09	7.84E-11	8.33E-11	1.62E-10	7.66E-11	7.43E-11	1.51E-10	4.07E-11	3.37E-11	7.44E-11
151	649447	4199170	5.00E-10	5.33E-10	1.03E-09	7.52E-11	8.00E-11	1.55E-10	7.36E-11	7.13E-11	1.45E-10	3.91E-11	3.23E-11	7.14E-11
152	649381.4	4199370	3.93E-10	4.18E-10	8.11E-10	5.90E-11	6.28E-11	1.22E-10	5.77E-11	5.59E-11	1.14E-10	3.07E-11	2.54E-11	5.60E-11
153	649412.7	4199370	3.80E-10	4.06E-10	7.86E-10	5.72E-11	6.08E-11	1.18E-10	5.59E-11	5.42E-11	1.10E-10	2.97E-11	2.46E-11	5.43E-11
154	649447.8	4199370	3.69E-10	3.93E-10	7.62E-10	5.54E-11	5.89E-11	1.14E-10	5.42E-11	5.25E-11	1.07E-10	2.88E-11	2.38E-11	5.26E-11
155	649379.7	4199570	3.04E-10	3.24E-10	6.28E-10	4.57E-11	4.86E-11	9.43E-11	4.47E-11	4.33E-11	8.80E-11	2.37E-11	1.96E-11	4.34E-11
156	649413.5	4199570	2.96E-10	3.15E-10	6.11E-10	4.45E-11	4.73E-11	9.18E-11	4.35E-11	4.21E-11	8.56E-11	2.31E-11	1.91E-11	4.22E-11
157	649448.6	4199570	2.89E-10	3.08E-10	5.96E-10	4.34E-11	4.61E-11	8.95E-11	4.24E-11	4.11E-11	8.36E-11	2.25E-11	1.86E-11	4.12E-11
158	649384.2	4199770	2.45E-10	2.61E-10	5.06E-10	3.68E-11	3.91E-11	7.60E-11	3.60E-11	3.49E-11	7.09E-11	1.91E-11	1.58E-11	3.49E-11
159	649414.3	4199770	2.40E-10	2.56E-10	4.96E-10	3.61E-11	3.84E-11	7.45E-11	3.53E-11	3.42E-11	6.95E-11	1.88E-11	1.55E-11	3.43E-11
160	649449.4	4199770	2.35E-10	2.51E-10	4.86E-10	3.54E-11	3.76E-11	7.30E-11	3.46E-11	3.35E-11	6.81E-11	1.84E-11	1.52E-11	3.36E-11
161	649467	4198296	3.09E-08	3.29E-08	6.38E-08	4.64E-09	4.94E-09	9.58E-09	4.54E-09	4.40E-09	8.94E-09	2.41E-09	1.99E-09	4.41E-09
162	649491.7	4198297	2.98E-08	3.17E-08	6.15E-08	4.48E-09	4.76E-09	9.23E-09	4.38E-09	4.24E-09	8.62E-09	2.32E-09	1.92E-09	4.25E-09
163	649466	4198321	2.10E-08	2.24E-08	4.33E-08	3.15E-09	3.35E-09	6.50E-09	3.08E-09	2.99E-09	6.07E-09	1.64E-09	1.35E-09	2.99E-09
164	649490.7	4198322	2.01E-08	2.14E-08	4.14E-08	3.02E-09	3.21E-09	6.22E-09	2.95E-09	2.86E-09	5.81E-09	1.57E-09	1.30E-09	2.86E-09
165	649465	4198346	1.54E-08	1.64E-08	3.18E-08	2.32E-09	2.46E-09	4.78E-09	2.27E-09	2.20E-09	4.46E-09	1.20E-09	9.96E-10	2.20E-09
166	649489.7	4198347	1.47E-08	1.56E-08	3.03E-08	2.21E-09	2.34E-09	4.55E-09	2.16E-09	2.09E-09	4.25E-09	1.15E-09	9.48E-10	2.09E-09
167	649464	4198370	1.19E-08	1.27E-08	2.45E-08	1.78E-09	1.90E-09	3.68E-09	1.75E-09	1.69E-09	3.44E-09	9.27E-10	7.67E-10	1.69E-09
168	649488.6	4198372	1.12E-08	1.20E-08	2.32E-08	1.69E-09	1.80E-09	3.49E-09	1.65E-09	1.60E-09	3.26E-09	8.79E-10	7.27E-10	1.61E-09
169	649461.9	4198420	7.65E-09	8.15E-09	1.58E-08	1.15E-09	1.22E-09	2.37E-09	1.12E-09	1.09E-09	2.21E-09	5.97E-10	4.94E-10	1.09E-09
170	649486.6	4198421	7.21E-09	7.68E-09	1.49E-08	1.08E-09	1.15E-09	2.24E-09	1.06E-09	1.03E-09	2.09E-09	5.63E-10	4.66E-10	1.03E-09
171	649484.5	4198471	4.97E-09	5.30E-09	1.03E-08	7.47E-10	7.95E-10	1.54E-09	7.31E-10	7.08E-10	1.44E-09	3.88E-10	3.21E-10	7.09E-10
172	649482.5	4198521	3.61E-09	3.85E-09	7.47E-09	5.43E-10	5.78E-10	1.12E-09	5.31E-10	5.15E-10	1.05E-09	2.82E-10	2.34E-10	5.16E-10
173	649480.4	4198571	2.74E-09	2.92E-09	5.66E-09	4.12E-10	4.38E-10	8.50E-10	4.03E-10	3.91E-10	7.93E-10	2.14E-10	1.77E-10	3.91E-10
174	649451.6	4198670	1.84E-09	1.96E-09	3.80E-09	2.77E-10	2.94E-10	5.71E-10	2.71E-10	2.62E-10	5.33E-10	1.44E-10	1.19E-10	2.63E-10
175	649476.3	4198671	1.74E-09	1.86E-09	3.60E-09	2.62E-10	2.78E-10	5.40E-10	2.56E-10	2.48E-10	5.04E-10	1.36E-10	1.12E-10	2.48E-10
176	649472.2	4198771	1.22E-09	1.30E-09	2.52E-09	1.84E-10	1.95E-10	3.79E-10	1.79E-10	1.74E-10	3.53E-10	9.53E-11	7.89E-11	1.74E-10
177	649468.1	4198871	9.17E-10	9.77E-10	1.89E-09	1.38E-10	1.47E-10	2.84E-10	1.35E-10	1.31E-10	2.65E-10	7.16E-11	5.92E-11	1.31E-10
178	649509.3	4198471	4.68E-09	4.99E-09	9.67E-09	7.04E-10	7.48E-10	1.45E-09	6.88E-10	6.67E-10	1.36E-09	3.66E-10	3.02E-10	6.68E-10
179	649510	4198521	3.38E-09	3.61E-09	6.99E-09	5.09E-10	5.41E-10	1.05E-09	4.98E-10	4.82E-10	9.80E-10	2.64E-10	2.19E-10	4.83E-10
180	649510.7	4198571	2.56E-09	2.73E-09	5.28E-09	3.85E-10	4.09E-10	7.93E-10	3.76E-10	3.64E-10	7.40E-10	2.00E-10	1.65E-10	3.65E-10
181	649512.2	4198671	1.62E-09	1.72E-09	3.34E-09	2.43E-10	2.59E-10	5.02E-10	2.38E-10	2.30E-10	4.68E-10	1.26E-10	1.05E-10	2.31E-10
182	649500.1	4198772	1.16E-09	1.24E-09	2.39E-09	1.74E-10	1.85E-10	3.59E-10	1.70E-10	1.65E-10	3.35E-10	9.05E-11	7.49E-11	1.65E-10
183	649501.6	4198872	8.68E-10	9.26E-10	1.79E-09	1.31E-10	1.39E-10	2.69E-10	1.28E-10	1.24E-10	2.51E-10	6.78E-11	5.61E-11	1.24E-10
184	649490.1	4198971	6.96E-10	7.42E-10	1.44E-09	1.05E-10	1.11E-10	2.16E-10	1.02E-10	9.93E-11	2.02E-10	5.44E-11	4.50E-11	9.94E-11
185	649516.6	4198971	6.73E-10	7.17E-10	1.39E-09	1.01E-10	1.08E-10	2.09E-10	9.89E-11	9.59E-11	1.95E-10	5.26E-11	4.35E-11	9.61E-11
186	649493.5	4199171	4.75E-10	5.07E-10	9.82E-10	7.14E-11	7.60E-11	1.47E-10	6.99E-11	6.77E-11	1.38E-10	3.71E-11	3.07E-11	6.78E-11
187	649519.6	4199171	4.64E-10	4.94E-10	9.58E-10	6.97E-11	7.41E-11	1.44E-10	6.82E-11	6.61E-11	1.34E-10	3.62E-11	3.00E-11	6.62E-11
188	649496.7	4199371	3.54E-10	3.77E-10	7.31E-10	5.32E-11	5.66E-11	1.10E-10	5.20E-11	5.04E-11	1.02E-10	2.76E-11	2.29E-11	5.05E-11
189	649472.1	4199371	3.61E-10	3.84E-10	7.45E-10	5.42E-11	5.77E-11	1.12E-10	5.30E-11	5.14E-11	1.04E-10	2.82E-11	2.33E-11	5.15E-11
190	649522.5	4199371	3.48E-10	3.71E-10	7.18E-10	5.23E-11	5.56E-11	1.08E-10	5.11E-11	4.95E-11	1.01E-10	2.72E-11	2.25E-11	4.96E-11
191	649499.8	4199571	2.79E-10	2.97E-10	5.77E-10	4.20E-11	4.46E-11	8.66E-11	4.10E-11	3.98E-11	8.08E-11	2.18E-11	1.80E-11	3.98E-11
192	649475.6	4199571	2.83E-10	3.02E-10	5.85E-10	4.26E-11	4.53E-11	8.78E-11	4.16E-11	4.03E-11	8.20E-11	2.21E-11	1.83E-11	4.04E-11
193	649525.5	4199571	2.75E-10	2.93E-10	5.69E-10	4.14E-11	4.40E-11	8.54E-11	4.05E-11	3.92E-11	7.97E-11	2.15E-11	1.78E-11	3.93E-11
194	649502.9	4199771	2.29E-10	2.44E-10	4.73E-10	3.44E-11	3.66E-11	7.10E-11	3.37E-11	3.26E-11	6.63E-11	1.79E-11	1.48E-11	3.27E-11
195	649479	4199771	2.31E-10	2.47E-10	4.78E-10	3.48E-11	3.70E-11	7.18E-11	3.40E-11	3.30E-11	6.70E-11	1.81E-11	1.50E-11	3.30E-11
196	649528.4	4199771	2.26E-10	2.41E-10	4.68E-10	3.40E-11	3.62E-11	7.02E-11	3.33E-11	3.23E-11	6.55E-11	1.77E-11	1.46E-11	3.23E-11
197	649519.6	4198295	2.92E-08	3.12E-08	6.04E-08	4.40E-09	4.67E-09	9.07E-09	4.30E-09	4.17E-09	8.46E-09	2.28E-09	1.89E-09	4.17E-09
198	649521.9	4198320	1.93E-08	2.06E-08	4.00E-08	2.91E-09	3.09E-09	6.00E-09	2.84E-09	2.76E-09	5.60E-09	1.51E-09	1.25E-09	2.76E-09
199	649513.3	4198346	1.41E-08	1.50E-08	2.91E-08	2.12E-09	2.25E-09	4.37E-09	2.07E-09	2.01E-09	4.08E-09	1.10E-09	9.10E-10	2.01E-09
200	649515.6	4198371	1.07E-08	1.14E-08	2.21E-08	1.61E-09	1.71E-09	3.31E-09	1.57E-09	1.52E-09	3.09E-09	8.34E-10	6.90E-10	1.52E-09
201	649514.4	4198421	6.76E-09	7.21E-09	1.40E-08	1.02E-09	1.08E-09	2.10E-09	9.95E-10	9.64E-10	1.96E-09	5.28E-10	4.37E-10	9.66E-10
202	649535.8	4198470	4.42E-09	4.71E-09	9.13E-09	6.65E-10	7.07E-10	1.37E-09	6.50E-10	6.30E-10	1.28E-09	3.45E-10	2.86E-10	6.31E-10
203	649540.5	4198519	3.18E-09	3.39E-09	6.56E-09	4.78E-10	5.08E-10	9.86E-10	4.67E-10	4.53E-10	9.20E-10	2.48E-10	2.05E-10	4.53E-10
204	649534.2	4198570	2.44E-09	2.60E-09	5.04E-09	3.67E-10	3.90E-10	7.57E-10	3.59E-10	3.48E-10	7.07E-10	1.91E-10	1.58E-10	3.48E-10
205	649543.5	4198670	1.53E-09	1.64E-09	3.17E-09	2.31E-10	2.45E-10	4.76E-10	2.26E-10	2.19E-10	4.44E-10	1.20E-10	9.92E-11	2.19E-10
206	649543	4198770	1.08E-09	1.16E-09	2.24E-09	1.63E-10	1.73E-10	3.37E-10	1.60E-10	1.55E-10	3.14E-10	8.47E-11	7.01E-11	1.55E-10
207	649552.7	4198869	8.13E-10	8.66E-10	1.68E-09	1.22E-10	1.30E-10	2.52E-10	1.19E-10	1.16E-10	2.35E-10	6.35E-11	5.25E-11	1.16E-10
208	649524.6	4198871	8.41E-10	8.97E-10	1.74E-09	1.26E-10	1.34E-10	2.61E-10	1.24E-10	1.20E-10	2.44E-10	6.57E-11	5.43E-11	1.20E-10
209	649562.3	4198969	6.41E-10	6.84E-10	1.33E-09	9.65E-11	1.03E-10	1.99E-10	9.43E-11	9.14E-11	1.86E-10	5.01E-11	4.15E-11	9.16E-11
210	649580	4199168	4.43E-10	4.73E-10	9.16E-10	6.67E-11	7.09E-11	1.38E-10	6.52E-11	6.32E-11	1.28E-10	3.46E-11	2.87E-11	6.33E-11
211	649549.8	4199170	4.53E-10	4.83E-10	9.36E-10	6.81E-11	7.24E-11	1.41E-10	6.66E-11	6.46E-11	1.31E-10	3.54E-11	2.93E-11	6.47E-11
212	649597.9	4199367	3.34E-10	3.56E-10	6.90E-10	5.02E-11	5.34E-11	1.04E-10	4.91E-11	4.76E-11	9.67E-11	2.61E-11	2.16E-11	4.77E-11
213	649565.6	4199369	3.39E-10	3.62E-10	7.01E-10	5.10E-11	5.43E-11	1.05E-10	4.99E-11	4.84E-11	9.83E-11	2.65E-11	2.19E-11	4.85E-11
214	649617	4199566	2.66E-10	2.83E-10	5.49E-10	3.99E-11	4.25E-11	8.24E-11	3.91E-11	3.79E-11	7.69E-11	2.08E-11	1.72E-11	3.79E-11
215	649586.5	4199568	2.68E-10	2.86E-10	5.54E-10	4.04E-11	4.29E-11	8.33E-11	3.95E-11	3.82E-11	7.77E-11	2.10E-11	1.73E-11	3.83E-11
216	649556	4199570	2.72E-10	2.90E-10	5.61E-10	4.09E-11	4.34E-11	8.43E-11	3.99E-11	3.87E-11	7.87E-11	2.12E-11	1.76E-11	3.88E-11
217	649635.1	4199765	2.19E-10	2.34E-10	4.53E-10	3.30E-11	3.51E-11	6.81E-11	3.23E-11	3.13E-11	6.35E-11	1.71E-11	1.42E-11	3.13E-11
218	649603.1	4199767	2.21E-10	2.36E-10	4.57E-10	3.33E-11	3.54E-11	6.86E-11	3.25E-11	3.15E-11	6.40E-11	1.73E-11	1.43E-11	3.16E-11
219	649571.1	4199769	2.23E-10	2.38E-10	4.61E-10	3.36E-11	3.57E-11	6.93E-11	3.28E-11	3.18E-11	6.46E-11	1.74E-11	1.44E-11	3.19E-11
220	649545.1	4198342	1.37E-08	1.46E-08	2.83E-08	2.06E-09	2.19E-09	4.24E-09	2.01E-09	1.95E-09	3.96E-09	1.07E-09	8.84E-10	1.95E-09
221	649548.5	4198367	1.02E-08	1.09E-08	2.11E-08	1.54E-09	1.63E-09	3.17E-09	1.50E-09	1.46E-09	2.96E-09	7.98E-10	6.60E-10	1.46E-09
222	649537.7	4198419	6.46E-09	6.89E-09	1.34E-08	9.72E-10	1.03E-09	2.01E-09	9.50E-10	9.21E-10	1.87E-09	5.05E-10	4.18E-10	9.23E-10
223	649562.1	4198466	4.21E-09	4.48E-09	8.69E-09	6.33E-10	6.73E-10	1.31E-09	6.19E-10	5.99E-10	1.22E-09	3.29E-10	2.72E-10	6.00E-10
224	649568.9	4198516	3.02E-09	3.22E-09	6.25E-09	4.55E-10	4.83E-10	9.38E-10	4.45E-10	4.31E-10	8.75E-10	2.36E-10	1.95E-10	4.32E-10

225	649558.1	4198568	2.34E-09	2.50E-09	4.84E-09	3.52E-10	3.75E-10	7.27E-10	3.45E-10	3.34E-10	6.79E-10	1.83E-10	1.51E-10	3.35E-10
226	649571.7	4198667	1.48E-09	1.58E-09	3.05E-09	2.22E-10	2.36E-10	4.59E-10	2.17E-10	2.11E-10	4.28E-10	1.16E-10	9.56E-11	2.11E-10
227	649574.5	4198767	1.05E-09	1.11E-09	2.16E-09	1.57E-10	1.67E-10	3.24E-10	1.54E-10	1.49E-10	3.03E-10	8.17E-11	6.75E-11	1.49E-10
228	649602.9	4198763	1.02E-09	1.09E-09	2.11E-09	1.53E-10	1.63E-10	3.16E-10	1.50E-10	1.45E-10	2.95E-10	7.97E-11	6.59E-11	1.46E-10
229	649586	4198866	7.86E-10	8.38E-10	1.62E-09	1.18E-10	1.26E-10	2.44E-10	1.16E-10	1.12E-10	2.28E-10	6.14E-11	5.08E-11	1.12E-10
230	649616.6	4198862	7.69E-10	8.20E-10	1.59E-09	1.16E-10	1.23E-10	2.39E-10	1.13E-10	1.10E-10	2.23E-10	6.01E-11	4.97E-11	1.10E-10
231	649597.5	4198966	6.23E-10	6.64E-10	1.29E-09	9.37E-11	9.96E-11	1.93E-10	9.16E-11	8.88E-11	1.80E-10	4.87E-11	4.03E-11	8.90E-11
232	649630.2	4198961	6.10E-10	6.51E-10	1.26E-09	9.18E-11	9.76E-11	1.89E-10	8.97E-11	8.70E-11	1.77E-10	4.77E-11	3.94E-11	8.71E-11
233	649626.9	4199163	4.32E-10	4.60E-10	8.92E-10	6.49E-11	6.90E-11	1.34E-10	6.35E-11	6.15E-11	1.25E-10	3.37E-11	2.79E-11	6.16E-11
234	649657.4	4199160	4.26E-10	4.54E-10	8.80E-10	6.40E-11	6.81E-11	1.32E-10	6.26E-11	6.07E-11	1.23E-10	3.33E-11	2.75E-11	6.08E-11
235	649651.2	4199362	3.27E-10	3.49E-10	6.76E-10	4.92E-11	5.23E-11	1.02E-10	4.81E-11	4.66E-11	9.48E-11	2.56E-11	2.11E-11	4.67E-11
236	649684.7	4199358	3.24E-10	3.45E-10	6.69E-10	4.87E-11	5.18E-11	1.00E-10	4.76E-11	4.61E-11	9.37E-11	2.53E-11	2.09E-11	4.62E-11
237	649680.3	4199560	2.61E-10	2.78E-10	5.40E-10	3.93E-11	4.18E-11	8.10E-11	3.84E-11	3.72E-11	7.56E-11	2.04E-11	1.69E-11	3.73E-11
238	649652.2	4199563	2.63E-10	2.80E-10	5.43E-10	3.95E-11	4.20E-11	8.16E-11	3.87E-11	3.75E-11	7.61E-11	2.05E-11	1.70E-11	3.75E-11
239	649711.9	4199556	2.59E-10	2.77E-10	5.36E-10	3.90E-11	4.15E-11	8.05E-11	3.81E-11	3.70E-11	7.51E-11	2.03E-11	1.68E-11	3.70E-11
240	649705.4	4199758	2.16E-10	2.31E-10	4.47E-10	3.26E-11	3.46E-11	6.72E-11	3.18E-11	3.08E-11	6.27E-11	1.69E-11	1.40E-11	3.09E-11
241	649672.9	4199762	2.18E-10	2.32E-10	4.50E-10	3.27E-11	3.48E-11	6.75E-11	3.20E-11	3.10E-11	6.30E-11	1.70E-11	1.41E-11	3.11E-11
242	649739.2	4199754	2.15E-10	2.30E-10	4.45E-10	3.24E-11	3.44E-11	6.68E-11	3.17E-11	3.07E-11	6.23E-11	1.68E-11	1.39E-11	3.07E-11
243	649554	4198291	2.95E-08	3.15E-08	6.10E-08	4.44E-09	4.72E-09	9.16E-09	4.34E-09	4.21E-09	8.55E-09	2.31E-09	1.91E-09	4.22E-09
244	649556.9	4198316	1.90E-08	2.03E-08	3.93E-08	2.86E-09	3.04E-09	5.91E-09	2.80E-09	2.71E-09	5.51E-09	1.49E-09	1.23E-09	2.72E-09
245	649576.1	4198339	1.31E-08	1.39E-08	2.70E-08	1.97E-09	2.09E-09	4.05E-09	1.92E-09	1.86E-09	3.78E-09	1.02E-09	8.45E-10	1.87E-09
246	649579	4198363	9.63E-09	1.03E-08	1.99E-08	1.45E-09	1.54E-09	2.99E-09	1.42E-09	1.37E-09	2.79E-09	7.53E-10	6.23E-10	1.38E-09
247	649568.7	4198415	6.08E-09	6.48E-09	1.26E-08	9.15E-10	9.72E-10	1.89E-09	8.94E-10	8.67E-10	1.76E-09	4.75E-10	3.93E-10	8.68E-10
248	649590.8	4198463	3.96E-09	4.23E-09	8.19E-09	5.96E-10	6.34E-10	1.23E-09	5.83E-10	5.65E-10	1.15E-09	3.10E-10	2.56E-10	5.66E-10
249	649596.7	4198512	2.88E-09	3.07E-09	5.95E-09	4.33E-10	4.60E-10	8.93E-10	4.23E-10	4.10E-10	8.34E-10	2.25E-10	1.86E-10	4.11E-10
250	649586.4	4198564	2.25E-09	2.40E-09	4.64E-09	3.38E-10	3.59E-10	6.97E-10	3.31E-10	3.20E-10	6.51E-10	1.76E-10	1.45E-10	3.21E-10
251	649598.3	4198663	1.44E-09	1.53E-09	2.97E-09	2.16E-10	2.30E-10	4.46E-10	2.11E-10	2.05E-10	4.16E-10	1.12E-10	9.29E-11	2.05E-10
252	649626.2	4198761	1.00E-09	1.07E-09	2.07E-09	1.51E-10	1.60E-10	3.11E-10	1.47E-10	1.43E-10	2.90E-10	7.83E-11	6.47E-11	1.43E-10
253	649584.9	4198287	2.91E-08	3.11E-08	6.02E-08	4.38E-09	4.66E-09	9.04E-09	4.28E-09	4.15E-09	8.43E-09	2.28E-09	1.88E-09	4.16E-09
254	649587.4	4198312	1.83E-08	1.95E-08	3.79E-08	2.76E-09	2.93E-09	5.68E-09	2.69E-09	2.61E-09	5.30E-09	1.43E-09	1.18E-09	2.62E-09
255	649605	4198336	1.22E-08	1.30E-08	2.52E-08	1.83E-09	1.95E-09	3.78E-09	1.79E-09	1.74E-09	3.53E-09	9.51E-10	7.87E-10	1.74E-09
256	649607.5	4198361	8.91E-09	9.50E-09	1.84E-08	1.34E-09	1.42E-09	2.76E-09	1.31E-09	1.27E-09	2.58E-09	6.96E-10	5.76E-10	1.27E-09
257	649597.3	4198412	5.67E-09	6.05E-09	1.17E-08	8.53E-10	9.07E-10	1.76E-09	8.34E-10	8.09E-10	1.64E-09	4.43E-10	3.67E-10	8.10E-10
258	649617.4	4198460	3.74E-09	3.99E-09	7.73E-09	5.63E-10	5.98E-10	1.16E-09	5.50E-10	5.33E-10	1.08E-09	2.92E-10	2.42E-10	5.34E-10
259	649622.4	4198510	2.76E-09	2.94E-09	5.69E-09	4.14E-10	4.40E-10	8.55E-10	4.05E-10	3.93E-10	7.98E-10	2.15E-10	1.78E-10	3.93E-10
260	649612.2	4198561	2.17E-09	2.31E-09	4.48E-09	3.26E-10	3.47E-10	6.73E-10	3.19E-10	3.09E-10	6.28E-10	1.69E-10	1.40E-10	3.09E-10
261	649622.1	4198661	1.41E-09	1.50E-09	2.90E-09	2.11E-10	2.25E-10	4.36E-10	2.07E-10	2.00E-10	4.07E-10	1.10E-10	9.08E-11	2.01E-10
262	649642	4198860	7.57E-10	8.06E-10	1.56E-09	1.14E-10	1.21E-10	2.35E-10	1.11E-10	1.08E-10	2.19E-10	5.91E-11	4.89E-11	1.08E-10
263	649667.1	4198958	5.98E-10	6.37E-10	1.24E-09	8.99E-11	9.56E-11	1.86E-10	8.79E-11	8.52E-11	1.73E-10	4.67E-11	3.86E-11	8.53E-11
264	649687	4199157	4.20E-10	4.48E-10	8.68E-10	6.32E-11	6.72E-11	1.30E-10	6.18E-11	5.99E-11	1.22E-10	3.28E-11	2.71E-11	6.00E-11
265	649616	4198287	2.67E-08	2.84E-08	5.51E-08	4.01E-09	4.26E-09	8.27E-09	3.92E-09	3.80E-09	7.72E-09	2.08E-09	1.72E-09	3.81E-09
266	649615.4	4198312	1.66E-08	1.77E-08	3.44E-08	2.50E-09	2.66E-09	5.16E-09	2.45E-09	2.37E-09	4.82E-09	1.30E-09	1.07E-09	2.37E-09
267	649633.8	4198337	1.04E-08	1.11E-08	2.16E-08	1.57E-09	1.67E-09	3.24E-09	1.54E-09	1.49E-09	3.02E-09	8.16E-10	6.75E-10	1.49E-09
268	649633.2	4198362	7.84E-09	8.36E-09	1.62E-08	1.18E-09	1.25E-09	2.43E-09	1.15E-09	1.12E-09	2.27E-09	6.12E-10	5.07E-10	1.12E-09
269	649631.8	4198412	5.03E-09	5.36E-09	1.04E-08	7.57E-10	8.04E-10	1.56E-09	7.40E-10	7.17E-10	1.46E-09	3.93E-10	3.25E-10	7.18E-10
270	649655.5	4198287	2.12E-08	2.26E-08	4.39E-08	3.19E-09	3.39E-09	6.59E-09	3.12E-09	3.03E-09	6.15E-09	1.66E-09	1.37E-09	3.03E-09
271	649695.4	4198288	1.48E-08	1.58E-08	3.07E-08	2.23E-09	2.37E-09	4.61E-09	2.18E-09	2.12E-09	4.30E-09	1.16E-09	9.59E-10	2.12E-09
272	649655.3	4198312	1.31E-08	1.40E-08	2.72E-08	1.98E-09	2.10E-09	4.08E-09	1.93E-09	1.87E-09	3.81E-09	1.03E-09	8.49E-10	1.88E-09
273	649695.2	4198313	1.02E-08	1.08E-08	2.10E-08	1.53E-09	1.63E-09	3.16E-09	1.50E-09	1.45E-09	2.95E-09	7.95E-10	6.58E-10	1.45E-09
274	649675	4198337	8.39E-09	8.94E-09	1.73E-08	1.26E-09	1.34E-09	2.60E-09	1.23E-09	1.20E-09	2.43E-09	6.55E-10	5.42E-10	1.20E-09
275	649674.7	4198362	6.54E-09	6.97E-09	1.35E-08	9.84E-10	1.05E-09	2.03E-09	9.62E-10	9.32E-10	1.89E-09	5.11E-10	4.23E-10	9.34E-10
276	649674.2	4198412	4.41E-09	4.70E-09	9.11E-09	6.63E-10	7.05E-10	1.37E-09	6.48E-10	6.28E-10	1.28E-09	3.44E-10	2.85E-10	6.29E-10
277	649653.7	4198462	3.37E-09	3.59E-09	6.96E-09	5.06E-10	5.38E-10	1.04E-09	4.95E-10	4.80E-10	9.75E-10	2.63E-10	2.18E-10	4.81E-10
278	649693.6	4198463	3.09E-09	3.30E-09	6.39E-09	4.65E-10	4.94E-10	9.60E-10	4.55E-10	4.41E-10	8.96E-10	2.42E-10	2.00E-10	4.41E-10
279	649653.2	4198512	2.56E-09	2.73E-09	5.29E-09	3.85E-10	4.09E-10	7.94E-10	3.76E-10	3.65E-10	7.41E-10	2.00E-10	1.65E-10	3.65E-10
280	649693.1	4198513	2.39E-09	2.55E-09	4.94E-09	3.60E-10	3.82E-10	7.42E-10	3.52E-10	3.41E-10	6.92E-10	1.87E-10	1.54E-10	3.41E-10
281	649652.7	4198562	2.02E-09	2.15E-09	4.16E-09	3.03E-10	3.22E-10	6.25E-10	2.96E-10	2.87E-10	5.84E-10	1.57E-10	1.30E-10	2.88E-10
282	649692.6	4198563	1.91E-09	2.03E-09	3.94E-09	2.87E-10	3.05E-10	5.92E-10	2.80E-10	2.72E-10	5.52E-10	1.49E-10	1.23E-10	2.72E-10
283	649651.7	4198662	1.35E-09	1.44E-09	2.79E-09	2.03E-10	2.16E-10	4.19E-10	1.98E-10	1.92E-10	3.91E-10	1.05E-10	8.72E-11	1.93E-10
284	649691.6	4198663	1.30E-09	1.38E-09	2.68E-09	1.95E-10	2.07E-10	4.02E-10	1.91E-10	1.85E-10	3.75E-10	1.01E-10	8.38E-11	1.85E-10
285	649650.7	4198762	9.74E-10	1.04E-09	2.01E-09	1.46E-10	1.56E-10	3.02E-10	1.43E-10	1.39E-10	2.82E-10	7.61E-11	6.29E-11	1.39E-10
286	649690.6	4198763	9.43E-10	1.00E-09	1.95E-09	1.42E-10	1.51E-10	2.92E-10	1.39E-10	1.34E-10	2.73E-10	7.36E-11	6.09E-11	1.35E-10
287	649669.6	4198862	7.35E-10	7.84E-10	1.52E-09	1.11E-10	1.18E-10	2.28E-10	1.08E-10	1.05E-10	2.13E-10	5.74E-11	4.75E-11	1.05E-10
288	649624.6	4199362	3.32E-10	3.53E-10	6.85E-10	4.99E-11	5.30E-11	1.03E-10	4.87E-11	4.72E-11	9.60E-11	2.59E-11	2.14E-11	4.73E-11
289	649720.7	4198264	1.95E-08	2.08E-08	4.04E-08	2.94E-09	3.12E-09	6.06E-09	2.87E-09	2.79E-09	5.66E-09	1.53E-09	1.26E-09	2.79E-09
290	649722.9	4198220	4.30E-08	4.58E-08	8.88E-08	6.47E-09	6.87E-09	1.33E-08	6.32E-09	6.13E-09	1.24E-08	3.36E-09	2.78E-09	6.14E-09
291	649737.8	4198282	1.22E-08	1.30E-08	2.51E-08	1.83E-09	1.94E-09	3.77E-09	1.79E-09	1.73E-09	3.52E-09	9.49E-10	7.85E-10	1.73E-09
292	649746.7	4198243	2.03E-08	2.17E-08	4.20E-08	3.06E-09	3.25E-09	6.31E-09	2.99E-09	2.90E-09	5.88E-09	1.59E-09	1.31E-09	2.90E-09
293	649762.7	4198283	1.02E-08	1.08E-08	2.10E-08	1.53E-09	1.62E-09	3.15E-09	1.49E-09	1.45E-09	2.94E-09	7.93E-10	6.56E-10	1.45E-09
294	649729.7	4198324	7.67E-09	8.18E-09	1.59E-08	1.15E-09	1.23E-09	2.38E-09	1.13E-09	1.09E-09	2.22E-09	5.99E-10	4.96E-10	1.10E-09
295	649771.7	4198244	1.49E-08	1.59E-08	3.08E-08	2.24E-09	2.38E-09	4.63E-09	2.19E-09	2.13E-09	4.32E-09	1.17E-09	9.64E-10	2.13E-09
296	649787.7	4198285	8.64E-09	9.21E-09	1.78E-08	1.30E-09	1.38E-09	2.68E-09	1.27E-09	1.23E-09	2.50E-09	6.75E-10	5.58E-10	1.23E-09
297	649772	4198319	6.83E-09	7.28E-09	1.41E-08	1.03E-09	1.09E-09	2.12E-09	1.00E-09	9.74E-10	1.98E-09	5.34E-10	4.42E-10	9.75E-10
298	649746.8	4198342	6.11E-09	6.52E-09	1.26E-08	9.19E-10	9.77E-10	1.90E-09	8.99E-10	8.71E-10	1.77E-09	4.77E-10	3.95E-10	8.72E-10
299	649712	4198356	6.09E-09	6.49E-09	1.26E-08	9.15E-10	9.73E-10	1.89E-09	8.95E-10	8.68E-10	1.76E-09	4.76E-10	3.93E-10	8.69E-10
300	649796.7	4198246	1.18E-08	1.26E-08	2.43E-08	1.77E-09	1.88E-09	3.65E-09	1.73E-09	1.68E-09	3.41E-09	9.20E-10	7.61E-10	1.68E-09

301	649837.7	4198287	6.56E-09	6.99E-09	1.36E-08	9.86E-10	1.05E-09	2.03E-09	9.64E-10	9.35E-10	1.90E-09	5.12E-10	4.24E-10	9.36E-10
302	649822	4198321	5.51E-09	5.88E-09	1.14E-08	8.29E-10	8.81E-10	1.71E-09	8.11E-10	7.86E-10	1.60E-09	4.31E-10	3.56E-10	7.87E-10
303	649806.3	4198355	4.63E-09	4.94E-09	9.57E-09	6.96E-10	7.40E-10	1.44E-09	6.81E-10	6.60E-10	1.34E-09	3.62E-10	2.99E-10	6.61E-10
304	649781.1	4198379	4.26E-09	4.54E-09	8.80E-09	6.40E-10	6.81E-10	1.32E-09	6.26E-10	6.07E-10	1.23E-09	3.33E-10	2.75E-10	6.08E-10
305	649746.3	4198392	4.24E-09	4.52E-09	8.76E-09	6.37E-10	6.77E-10	1.31E-09	6.23E-10	6.04E-10	1.23E-09	3.31E-10	2.74E-10	6.05E-10
306	649711.5	4198406	4.20E-09	4.48E-09	8.68E-09	6.32E-10	6.71E-10	1.30E-09	6.18E-10	5.99E-10	1.22E-09	3.28E-10	2.71E-10	6.00E-10
307	649846.6	4198248	8.24E-09	8.78E-09	1.70E-08	1.24E-09	1.32E-09	2.55E-09	1.21E-09	1.17E-09	2.38E-09	6.43E-10	5.32E-10	1.18E-09
308	649886.5	4198292	5.17E-09	5.51E-09	1.07E-08	7.77E-10	8.26E-10	1.60E-09	7.60E-10	7.37E-10	1.50E-09	4.04E-10	3.34E-10	7.38E-10
309	649868.5	4198331	4.41E-09	4.70E-09	9.11E-09	6.63E-10	7.05E-10	1.37E-09	6.48E-10	6.28E-10	1.28E-09	3.44E-10	2.85E-10	6.29E-10
310	649850.6	4198370	3.75E-09	4.00E-09	7.74E-09	5.64E-10	5.99E-10	1.16E-09	5.51E-10	5.34E-10	1.09E-09	2.93E-10	2.42E-10	5.35E-10
311	649812.8	4198416	3.20E-09	3.41E-09	6.61E-09	4.81E-10	5.11E-10	9.92E-10	4.70E-10	4.56E-10	9.26E-10	2.50E-10	2.07E-10	4.57E-10
312	649773.1	4198432	3.18E-09	3.39E-09	6.57E-09	4.78E-10	5.08E-10	9.86E-10	4.67E-10	4.53E-10	9.20E-10	2.48E-10	2.05E-10	4.54E-10
313	649733.4	4198447	3.14E-09	3.34E-09	6.48E-09	4.72E-10	5.01E-10	9.73E-10	4.61E-10	4.47E-10	9.08E-10	2.45E-10	2.03E-10	4.48E-10
314	649896.6	4198251	6.26E-09	6.67E-09	1.29E-08	9.41E-10	1.00E-09	1.94E-09	9.20E-10	8.92E-10	1.81E-09	4.89E-10	4.04E-10	8.93E-10
315	649897.7	4198229	7.00E-09	7.46E-09	1.45E-08	1.05E-09	1.12E-09	2.17E-09	1.03E-09	9.98E-10	2.03E-09	5.47E-10	4.52E-10	9.99E-10
316	649936.6	4198294	4.26E-09	4.55E-09	8.81E-09	6.41E-10	6.82E-10	1.32E-09	6.27E-10	6.08E-10	1.23E-09	3.33E-10	2.76E-10	6.09E-10
317	649919.2	4198332	3.75E-09	4.00E-09	7.74E-09	5.64E-10	5.99E-10	1.16E-09	5.51E-10	5.34E-10	1.09E-09	2.93E-10	2.42E-10	5.35E-10
318	649901.8	4198370	3.28E-09	3.49E-09	6.77E-09	4.93E-10	5.24E-10	1.02E-09	4.82E-10	4.67E-10	9.49E-10	2.56E-10	2.12E-10	4.68E-10
319	649884.4	4198407	2.87E-09	3.06E-09	5.93E-09	4.32E-10	4.59E-10	8.90E-10	4.22E-10	4.09E-10	8.31E-10	2.24E-10	1.85E-10	4.10E-10
320	649847.7	4198452	2.52E-09	2.69E-09	5.21E-09	3.79E-10	4.03E-10	7.82E-10	3.70E-10	3.59E-10	7.30E-10	1.97E-10	1.63E-10	3.60E-10
321	649809	4198467	2.51E-09	2.67E-09	5.18E-09	3.77E-10	4.01E-10	7.77E-10	3.68E-10	3.57E-10	7.25E-10	1.96E-10	1.62E-10	3.58E-10
322	649770.4	4198483	2.47E-09	2.64E-09	5.11E-09	3.72E-10	3.95E-10	7.67E-10	3.64E-10	3.52E-10	7.16E-10	1.93E-10	1.60E-10	3.53E-10
323	649731.8	4198498	2.43E-09	2.59E-09	5.02E-09	3.66E-10	3.89E-10	7.54E-10	3.57E-10	3.46E-10	7.04E-10	1.90E-10	1.57E-10	3.47E-10
324	649946.5	4198253	4.99E-09	5.32E-09	1.03E-08	7.50E-10	7.98E-10	1.55E-09	7.34E-10	7.11E-10	1.45E-09	3.90E-10	3.23E-10	7.12E-10
325	649947.6	4198231	5.49E-09	5.85E-09	1.13E-08	8.25E-10	8.77E-10	1.70E-09	8.07E-10	7.82E-10	1.59E-09	4.29E-10	3.55E-10	7.83E-10
326	649986.7	4198296	3.59E-09	3.83E-09	7.42E-09	5.40E-10	5.74E-10	1.11E-09	5.28E-10	5.12E-10	1.04E-09	2.81E-10	2.32E-10	5.13E-10
327	649969.6	4198333	3.22E-09	3.44E-09	6.66E-09	4.85E-10	5.15E-10	1.00E-09	4.74E-10	4.59E-10	9.33E-10	2.52E-10	2.08E-10	4.60E-10
328	649952.5	4198370	2.88E-09	3.07E-09	5.94E-09	4.32E-10	4.60E-10	8.92E-10	4.23E-10	4.10E-10	8.33E-10	2.25E-10	1.86E-10	4.10E-10
329	649935.4	4198407	2.57E-09	2.74E-09	5.30E-09	3.86E-10	4.10E-10	7.97E-10	3.78E-10	3.66E-10	7.43E-10	2.01E-10	1.66E-10	3.66E-10
330	649918.3	4198444	2.30E-09	2.45E-09	4.74E-09	3.45E-10	3.67E-10	7.12E-10	3.38E-10	3.27E-10	6.65E-10	1.79E-10	1.48E-10	3.28E-10
331	649882.3	4198489	2.05E-09	2.19E-09	4.24E-09	3.09E-10	3.28E-10	6.37E-10	3.02E-10	2.93E-10	5.94E-10	1.60E-10	1.33E-10	2.93E-10
332	649844.3	4198503	2.04E-09	2.18E-09	4.22E-09	3.07E-10	3.26E-10	6.33E-10	3.00E-10	2.91E-10	5.91E-10	1.59E-10	1.32E-10	2.91E-10
333	649806.4	4198518	2.02E-09	2.15E-09	4.16E-09	3.03E-10	3.22E-10	6.25E-10	2.96E-10	2.87E-10	5.84E-10	1.57E-10	1.30E-10	2.88E-10
334	649768.5	4198533	1.98E-09	2.11E-09	4.09E-09	2.98E-10	3.17E-10	6.15E-10	2.91E-10	2.82E-10	5.74E-10	1.55E-10	1.28E-10	2.83E-10
335	649730.6	4198548	1.94E-09	2.07E-09	4.01E-09	2.92E-10	3.11E-10	6.03E-10	2.86E-10	2.77E-10	5.63E-10	1.52E-10	1.26E-10	2.77E-10
336	649996.4	4198256	4.11E-09	4.38E-09	8.49E-09	6.18E-10	6.57E-10	1.28E-09	6.04E-10	5.86E-10	1.19E-09	3.21E-10	2.66E-10	5.87E-10
337	650086.2	4198302	2.67E-09	2.85E-09	5.52E-09	4.02E-10	4.27E-10	8.29E-10	3.93E-10	3.81E-10	7.74E-10	2.09E-10	1.73E-10	3.82E-10
338	650068.3	4198341	2.45E-09	2.61E-09	5.06E-09	3.68E-10	3.91E-10	7.60E-10	3.60E-10	3.49E-10	7.09E-10	1.91E-10	1.58E-10	3.49E-10
339	650050.4	4198380	2.23E-09	2.37E-09	4.60E-09	3.35E-10	3.56E-10	6.91E-10	3.27E-10	3.17E-10	6.45E-10	1.74E-10	1.44E-10	3.18E-10
340	650032.5	4198419	2.02E-09	2.16E-09	4.18E-09	3.04E-10	3.23E-10	6.28E-10	2.97E-10	2.88E-10	5.86E-10	1.58E-10	1.31E-10	2.89E-10
341	650014.5	4198457	1.84E-09	1.96E-09	3.81E-09	2.77E-10	2.95E-10	5.72E-10	2.71E-10	2.63E-10	5.33E-10	1.44E-10	1.19E-10	2.63E-10
342	649996.6	4198496	1.68E-09	1.79E-09	3.47E-09	2.53E-10	2.69E-10	5.22E-10	2.47E-10	2.40E-10	4.87E-10	1.31E-10	1.09E-10	2.40E-10
343	649978.7	4198535	1.53E-09	1.63E-09	3.17E-09	2.31E-10	2.45E-10	4.76E-10	2.25E-10	2.19E-10	4.44E-10	1.20E-10	9.91E-11	2.19E-10
344	649949.9	4198562	1.46E-09	1.56E-09	3.02E-09	2.20E-10	2.34E-10	4.54E-10	2.15E-10	2.08E-10	4.23E-10	1.14E-10	9.45E-11	2.09E-10
345	649910.1	4198577	1.45E-09	1.55E-09	3.00E-09	2.18E-10	2.32E-10	4.51E-10	2.14E-10	2.07E-10	4.21E-10	1.14E-10	9.39E-11	2.07E-10
346	649870.4	4198593	1.43E-09	1.53E-09	2.96E-09	2.15E-10	2.29E-10	4.44E-10	2.11E-10	2.04E-10	4.15E-10	1.12E-10	9.25E-11	2.04E-10
347	649830.7	4198608	1.40E-09	1.50E-09	2.90E-09	2.11E-10	2.24E-10	4.36E-10	2.06E-10	2.00E-10	4.07E-10	1.10E-10	9.07E-11	2.00E-10
348	649790.9	4198624	1.37E-09	1.46E-09	2.84E-09	2.06E-10	2.19E-10	4.26E-10	2.02E-10	1.96E-10	3.97E-10	1.07E-10	8.87E-11	1.96E-10
349	649751.2	4198639	1.34E-09	1.43E-09	2.77E-09	2.02E-10	2.14E-10	4.16E-10	1.97E-10	1.91E-10	3.88E-10	1.05E-10	8.67E-11	1.91E-10
350	650096.3	4198261	2.97E-09	3.17E-09	6.14E-09	4.47E-10	4.75E-10	9.23E-10	4.37E-10	4.24E-10	8.61E-10	2.32E-10	1.92E-10	4.24E-10
351	650185.8	4198308	2.10E-09	2.23E-09	4.33E-09	3.15E-10	3.35E-10	6.50E-10	3.08E-10	2.99E-10	6.07E-10	1.64E-10	1.35E-10	2.99E-10
352	650167.4	4198348	1.95E-09	2.08E-09	4.02E-09	2.93E-10	3.11E-10	6.04E-10	2.86E-10	2.78E-10	5.64E-10	1.52E-10	1.26E-10	2.78E-10
353	650148.9	4198388	1.80E-09	1.92E-09	3.71E-09	2.70E-10	2.87E-10	5.58E-10	2.64E-10	2.56E-10	5.21E-10	1.40E-10	1.16E-10	2.57E-10
354	650130.5	4198428	1.66E-09	1.76E-09	3.42E-09	2.49E-10	2.65E-10	5.13E-10	2.43E-10	2.36E-10	4.79E-10	1.29E-10	1.07E-10	2.36E-10
355	650112	4198468	1.52E-09	1.63E-09	3.15E-09	2.29E-10	2.44E-10	4.73E-10	2.24E-10	2.17E-10	4.42E-10	1.19E-10	9.85E-11	2.18E-10
356	650093.6	4198507	1.41E-09	1.50E-09	2.91E-09	2.12E-10	2.25E-10	4.37E-10	2.07E-10	2.01E-10	4.08E-10	1.10E-10	9.11E-11	2.01E-10
357	650075.1	4198547	1.31E-09	1.39E-09	2.70E-09	1.96E-10	2.09E-10	4.05E-10	1.92E-10	1.86E-10	3.78E-10	1.02E-10	8.44E-11	1.86E-10
358	650056.7	4198587	1.21E-09	1.29E-09	2.50E-09	1.82E-10	1.93E-10	3.75E-10	1.78E-10	1.72E-10	3.50E-10	9.44E-11	7.81E-11	1.72E-10
359	650017.8	4198635	1.11E-09	1.19E-09	2.30E-09	1.67E-10	1.78E-10	3.45E-10	1.64E-10	1.59E-10	3.22E-10	8.70E-11	7.19E-11	1.59E-10
360	649976.9	4198651	1.10E-09	1.18E-09	2.28E-09	1.66E-10	1.76E-10	3.42E-10	1.62E-10	1.57E-10	3.19E-10	8.61E-11	7.13E-11	1.57E-10
361	649936	4198667	1.09E-09	1.16E-09	2.24E-09	1.63E-10	1.74E-10	3.37E-10	1.60E-10	1.55E-10	3.14E-10	8.48E-11	7.01E-11	1.55E-10
362	649895.1	4198683	1.06E-09	1.13E-09	2.20E-09	1.60E-10	1.70E-10	3.30E-10	1.56E-10	1.52E-10	3.08E-10	8.31E-11	6.87E-11	1.52E-10
363	649854.2	4198699	1.04E-09	1.11E-09	2.15E-09	1.56E-10	1.66E-10	3.22E-10	1.53E-10	1.48E-10	3.01E-10	8.11E-11	6.71E-11	1.48E-10
364	649813.3	4198715	1.01E-09	1.08E-09	2.09E-09	1.52E-10	1.62E-10	3.14E-10	1.49E-10	1.44E-10	2.93E-10	7.90E-11	6.53E-11	1.44E-10
365	649772.4	4198731	9.85E-10	1.05E-09	2.04E-09	1.48E-10	1.58E-10	3.06E-10	1.45E-10	1.40E-10	2.85E-10	7.70E-11	6.37E-11	1.41E-10
366	649731.5	4198747	9.62E-10	1.03E-09	1.99E-09	1.45E-10	1.54E-10	2.98E-10	1.41E-10	1.37E-10	2.79E-10	7.52E-11	6.22E-11	1.37E-10
367	650196.2	4198266	2.29E-09	2.44E-09	4.73E-09	3.44E-10	3.66E-10	7.10E-10	3.36E-10	3.26E-10	6.63E-10	1.79E-10	1.48E-10	3.27E-10
368	650285.9	4198313	1.70E-09	1.82E-09	3.52E-09	2.56E-10	2.72E-10	5.28E-10	2.50E-10	2.43E-10	4.93E-10	1.33E-10	1.10E-10	2.43E-10
369	650268	4198351	1.61E-09	1.71E-09	3.32E-09	2.42E-10	2.57E-10	4.98E-10	2.36E-10	2.29E-10	4.65E-10	1.25E-10	1.04E-10	2.29E-10
370	650250.1	4198390	1.51E-09	1.61E-09	3.11E-09	2.26E-10	2.41E-10	4.67E-10	2.21E-10	2.15E-10	4.36E-10	1.18E-10	9.73E-11	2.15E-10
371	650232.2	4198429	1.41E-09	1.50E-09	2.91E-09	2.12E-10	2.25E-10	4.36E-10	2.07E-10	2.00E-10	4.07E-10	1.10E-10	9.09E-11	2.01E-10
372	650214.3	4198467	1.31E-09	1.40E-09	2.71E-09	1.97E-10	2.10E-10	4.07E-10	1.93E-10	1.87E-10	3.80E-10	1.03E-10	8.48E-11	1.87E-10
373	650196.4	4198506	1.23E-09	1.31E-09	2.53E-09	1.84E-10	1.96E-10	3.80E-10	1.80E-10	1.75E-10	3.55E-10	9.58E-11	7.92E-11	1.75E-10
374	650178.4	4198545	1.15E-09	1.22E-09	2.37E-09	1.73E-10	1.84E-10	3.56E-10	1.69E-10	1.64E-10	3.33E-10	8.97E-11	7.42E-11	1.64E-10
375	650160.5	4198584	1.08E-09	1.15E-09	2.23E-09	1.62E-10	1.73E-10	3.35E-10	1.59E-10	1.54E-10	3.12E-10	8.43E-11	6.97E-11	1.54E-10
376	650142.6	4198622	1.01E-09	1.08E-09	2.10E-09	1.53E-10	1.62E-10	3.15E-10	1.49E-10	1.45E-10	2.94E-10	7.92E-11	6.55E-11	1.45E-10

377	650124.7	4198661	9.51E-10	1.01E-09	1.97E-09	1.43E-10	1.52E-10	2.95E-10	1.40E-10	1.36E-10	2.75E-10	7.43E-11	6.15E-11	1.36E-10
378	650086.9	4198708	8.87E-10	9.45E-10	1.83E-09	1.33E-10	1.42E-10	2.75E-10	1.30E-10	1.26E-10	2.57E-10	6.93E-11	5.73E-11	1.27E-10
379	650047.2	4198723	8.78E-10	9.36E-10	1.81E-09	1.32E-10	1.40E-10	2.72E-10	1.29E-10	1.25E-10	2.54E-10	6.86E-11	5.67E-11	1.25E-10
380	650007.4	4198739	8.64E-10	9.21E-10	1.78E-09	1.30E-10	1.38E-10	2.68E-10	1.27E-10	1.23E-10	2.50E-10	6.75E-11	5.58E-11	1.23E-10
381	649967.7	4198754	8.46E-10	9.02E-10	1.75E-09	1.27E-10	1.35E-10	2.63E-10	1.24E-10	1.21E-10	2.45E-10	6.61E-11	5.47E-11	1.21E-10
382	649928	4198770	8.26E-10	8.80E-10	1.71E-09	1.24E-10	1.32E-10	2.56E-10	1.21E-10	1.18E-10	2.39E-10	6.45E-11	5.34E-11	1.18E-10
383	649888.2	4198785	8.06E-10	8.59E-10	1.66E-09	1.21E-10	1.29E-10	2.50E-10	1.18E-10	1.15E-10	2.33E-10	6.30E-11	5.21E-11	1.15E-10
384	649848.5	4198801	7.85E-10	8.37E-10	1.62E-09	1.18E-10	1.26E-10	2.44E-10	1.15E-10	1.12E-10	2.27E-10	6.13E-11	5.07E-11	1.12E-10
385	649808.8	4198816	7.66E-10	8.16E-10	1.58E-09	1.15E-10	1.22E-10	2.38E-10	1.13E-10	1.09E-10	2.22E-10	5.98E-11	4.95E-11	1.09E-10
386	649769	4198832	7.49E-10	7.98E-10	1.55E-09	1.13E-10	1.20E-10	2.32E-10	1.10E-10	1.07E-10	2.17E-10	5.85E-11	4.84E-11	1.07E-10
387	649729.3	4198847	7.35E-10	7.83E-10	1.52E-09	1.10E-10	1.17E-10	2.28E-10	1.08E-10	1.05E-10	2.13E-10	5.74E-11	4.75E-11	1.05E-10
388	650296	4198271	1.83E-09	1.95E-09	3.79E-09	2.76E-10	2.93E-10	5.69E-10	2.70E-10	2.61E-10	5.31E-10	1.43E-10	1.19E-10	2.62E-10
389	650385.6	4198318	1.42E-09	1.51E-09	2.93E-09	2.13E-10	2.27E-10	4.40E-10	2.09E-10	2.02E-10	4.11E-10	1.11E-10	9.17E-11	2.03E-10
390	650367.3	4198358	1.35E-09	1.44E-09	2.79E-09	2.03E-10	2.16E-10	4.18E-10	1.98E-10	1.92E-10	3.90E-10	1.05E-10	8.71E-11	1.92E-10
391	650349	4198397	1.28E-09	1.36E-09	2.63E-09	1.92E-10	2.04E-10	3.96E-10	1.87E-10	1.82E-10	3.69E-10	9.96E-11	8.24E-11	1.82E-10
392	650330.8	4198437	1.20E-09	1.28E-09	2.48E-09	1.81E-10	1.92E-10	3.73E-10	1.77E-10	1.71E-10	3.48E-10	9.38E-11	7.76E-11	1.71E-10
393	650312.5	4198476	1.13E-09	1.20E-09	2.33E-09	1.70E-10	1.81E-10	3.50E-10	1.66E-10	1.61E-10	3.27E-10	8.82E-11	7.30E-11	1.61E-10
394	650294.2	4198516	1.06E-09	1.13E-09	2.19E-09	1.60E-10	1.70E-10	3.29E-10	1.56E-10	1.51E-10	3.07E-10	8.29E-11	6.86E-11	1.52E-10
395	650275.9	4198555	1.00E-09	1.07E-09	2.07E-09	1.50E-10	1.60E-10	3.10E-10	1.47E-10	1.43E-10	2.90E-10	7.81E-11	6.46E-11	1.43E-10
396	650257.6	4198595	9.45E-10	1.01E-09	1.95E-09	1.42E-10	1.51E-10	2.93E-10	1.39E-10	1.35E-10	2.74E-10	7.38E-11	6.11E-11	1.35E-10
397	650239.3	4198634	8.95E-10	9.54E-10	1.85E-09	1.35E-10	1.43E-10	2.78E-10	1.32E-10	1.27E-10	2.59E-10	6.99E-11	5.78E-11	1.28E-10
398	650221	4198674	8.48E-10	9.04E-10	1.75E-09	1.27E-10	1.36E-10	2.63E-10	1.25E-10	1.21E-10	2.45E-10	6.62E-11	5.48E-11	1.21E-10
399	650202.7	4198713	8.02E-10	8.55E-10	1.66E-09	1.21E-10	1.28E-10	2.49E-10	1.18E-10	1.14E-10	2.32E-10	6.26E-11	5.18E-11	1.14E-10
400	650184.4	4198753	7.56E-10	8.06E-10	1.56E-09	1.14E-10	1.21E-10	2.34E-10	1.11E-10	1.08E-10	2.19E-10	5.90E-11	4.88E-11	1.08E-10
401	650155	4198781	7.30E-10	7.78E-10	1.51E-09	1.10E-10	1.17E-10	2.26E-10	1.07E-10	1.04E-10	2.11E-10	5.70E-11	4.72E-11	1.04E-10
402	650114.4	4198796	7.22E-10	7.69E-10	1.49E-09	1.09E-10	1.15E-10	2.24E-10	1.06E-10	1.03E-10	2.09E-10	5.64E-11	4.66E-11	1.03E-10
403	650073.9	4198812	7.09E-10	7.56E-10	1.47E-09	1.07E-10	1.13E-10	2.20E-10	1.04E-10	1.01E-10	2.05E-10	5.54E-11	4.58E-11	1.01E-10
404	650033.3	4198828	6.94E-10	7.40E-10	1.43E-09	1.04E-10	1.11E-10	2.15E-10	1.02E-10	9.89E-11	2.01E-10	5.42E-11	4.48E-11	9.91E-11
405	649992.8	4198844	6.77E-10	7.21E-10	1.40E-09	1.02E-10	1.08E-10	2.10E-10	9.95E-11	9.64E-11	1.96E-10	5.29E-11	4.37E-11	9.66E-11
406	649952.2	4198860	6.59E-10	7.02E-10	1.36E-09	9.91E-11	1.05E-10	2.04E-10	9.69E-11	9.39E-11	1.91E-10	5.15E-11	4.26E-11	9.40E-11
407	649911.6	4198876	6.41E-10	6.84E-10	1.32E-09	9.64E-11	1.03E-10	1.99E-10	9.43E-11	9.14E-11	1.86E-10	5.01E-11	4.14E-11	9.15E-11
408	649871.1	4198891	6.26E-10	6.67E-10	1.29E-09	9.41E-11	1.00E-10	1.94E-10	9.20E-11	8.91E-11	1.81E-10	4.89E-11	4.04E-11	8.93E-11
409	649830.5	4198907	6.12E-10	6.52E-10	1.26E-09	9.20E-11	9.78E-11	1.90E-10	9.00E-11	8.72E-11	1.77E-10	4.78E-11	3.95E-11	8.73E-11
410	649790	4198923	6.00E-10	6.40E-10	1.24E-09	9.03E-11	9.60E-11	1.86E-10	8.83E-11	8.55E-11	1.74E-10	4.69E-11	3.88E-11	8.57E-11
411	649749.4	4198939	5.91E-10	6.30E-10	1.22E-09	8.89E-11	9.45E-11	1.83E-10	8.69E-11	8.42E-11	1.71E-10	4.62E-11	3.82E-11	8.44E-11
412	649708.8	4198955	5.85E-10	6.24E-10	1.21E-09	8.80E-11	9.35E-11	1.82E-10	8.60E-11	8.34E-11	1.69E-10	4.57E-11	3.78E-11	8.35E-11
413	650395.9	4198276	1.51E-09	1.61E-09	3.13E-09	2.28E-10	2.42E-10	4.69E-10	2.22E-10	2.16E-10	4.38E-10	1.18E-10	9.78E-11	2.16E-10
414	650397	4198254	1.57E-09	1.68E-09	3.25E-09	2.37E-10	2.52E-10	4.88E-10	2.31E-10	2.24E-10	4.56E-10	1.23E-10	1.02E-10	2.25E-10
415	650585.4	4198328	1.04E-09	1.11E-09	2.16E-09	1.57E-10	1.67E-10	3.24E-10	1.54E-10	1.49E-10	3.02E-10	8.16E-11	6.75E-11	1.49E-10
416	650567.2	4198368	1.00E-09	1.07E-09	2.08E-09	1.51E-10	1.61E-10	3.12E-10	1.48E-10	1.43E-10	2.91E-10	7.85E-11	6.49E-11	1.43E-10
417	650549	4198407	9.64E-10	1.03E-09	1.99E-09	1.45E-10	1.54E-10	2.99E-10	1.42E-10	1.37E-10	2.79E-10	7.53E-11	6.23E-11	1.38E-10
418	650530.8	4198446	9.22E-10	9.83E-10	1.90E-09	1.39E-10	1.47E-10	2.86E-10	1.36E-10	1.31E-10	2.67E-10	7.20E-11	5.96E-11	1.32E-10
419	650512.6	4198486	8.79E-10	9.37E-10	1.82E-09	1.32E-10	1.41E-10	2.73E-10	1.29E-10	1.25E-10	2.55E-10	6.87E-11	5.68E-11	1.26E-10
420	650494.4	4198525	8.38E-10	8.93E-10	1.73E-09	1.26E-10	1.34E-10	2.60E-10	1.23E-10	1.19E-10	2.43E-10	6.54E-11	5.41E-11	1.20E-10
421	650476.2	4198564	7.98E-10	8.50E-10	1.65E-09	1.20E-10	1.27E-10	2.47E-10	1.17E-10	1.14E-10	2.31E-10	6.23E-11	5.15E-11	1.14E-10
422	650458	4198604	7.60E-10	8.10E-10	1.57E-09	1.14E-10	1.22E-10	2.36E-10	1.12E-10	1.08E-10	2.20E-10	5.94E-11	4.91E-11	1.08E-10
423	650439.8	4198643	7.26E-10	7.74E-10	1.50E-09	1.09E-10	1.16E-10	2.25E-10	1.07E-10	1.03E-10	2.10E-10	5.67E-11	4.69E-11	1.04E-10
424	650421.5	4198682	6.95E-10	7.40E-10	1.43E-09	1.04E-10	1.11E-10	2.15E-10	1.02E-10	9.90E-11	2.01E-10	5.43E-11	4.49E-11	9.91E-11
425	650403.3	4198722	6.66E-10	7.10E-10	1.38E-09	1.00E-10	1.07E-10	2.07E-10	9.80E-11	9.50E-11	1.93E-10	5.21E-11	4.31E-11	9.51E-11
426	650385.1	4198761	6.40E-10	6.82E-10	1.32E-09	9.62E-11	1.02E-10	1.98E-10	9.41E-11	9.12E-11	1.85E-10	5.00E-11	4.13E-11	9.13E-11
427	650366.9	4198800	6.14E-10	6.54E-10	1.27E-09	9.23E-11	9.81E-11	1.90E-10	9.03E-11	8.75E-11	1.78E-10	4.80E-11	3.97E-11	8.76E-11
428	650348.7	4198840	5.88E-10	6.26E-10	1.21E-09	8.84E-11	9.39E-11	1.82E-10	8.64E-11	8.37E-11	1.70E-10	4.59E-11	3.80E-11	8.39E-11
429	650330.5	4198879	5.61E-10	5.98E-10	1.16E-09	8.43E-11	8.96E-11	1.74E-10	8.24E-11	7.99E-11	1.62E-10	4.38E-11	3.62E-11	8.00E-11
430	650292.1	4198926	5.30E-10	5.65E-10	1.09E-09	7.97E-11	8.47E-11	1.64E-10	7.79E-11	7.55E-11	1.53E-10	4.14E-11	3.42E-11	7.56E-11
431	650251.7	4198942	5.23E-10	5.57E-10	1.08E-09	7.86E-11	8.36E-11	1.62E-10	7.69E-11	7.45E-11	1.51E-10	4.08E-11	3.38E-11	7.46E-11
432	650211.4	4198958	5.14E-10	5.48E-10	1.06E-09	7.72E-11	8.21E-11	1.59E-10	7.55E-11	7.32E-11	1.49E-10	4.01E-11	3.32E-11	7.33E-11
433	650171	4198973	5.03E-10	5.36E-10	1.04E-09	7.56E-11	8.03E-11	1.56E-10	7.39E-11	7.16E-11	1.46E-10	3.93E-11	3.25E-11	7.17E-11
434	650130.6	4198989	4.90E-10	5.22E-10	1.01E-09	7.37E-11	7.83E-11	1.52E-10	7.21E-11	6.98E-11	1.42E-10	3.83E-11	3.17E-11	7.00E-11
435	650090.3	4199005	4.77E-10	5.09E-10	9.86E-10	7.18E-11	7.63E-11	1.48E-10	7.02E-11	6.80E-11	1.38E-10	3.73E-11	3.09E-11	6.82E-11
436	650049.9	4199021	4.65E-10	4.96E-10	9.61E-10	6.99E-11	7.43E-11	1.44E-10	6.84E-11	6.63E-11	1.35E-10	3.63E-11	3.01E-11	6.64E-11
437	650009.5	4199037	4.54E-10	4.84E-10	9.37E-10	6.82E-11	7.25E-11	1.41E-10	6.67E-11	6.46E-11	1.31E-10	3.54E-11	2.93E-11	6.47E-11
438	649969.1	4199052	4.43E-10	4.73E-10	9.16E-10	6.67E-11	7.09E-11	1.38E-10	6.52E-11	6.32E-11	1.28E-10	3.46E-11	2.87E-11	6.33E-11
439	649928.8	4199068	4.35E-10	4.64E-10	8.99E-10	6.54E-11	6.95E-11	1.35E-10	6.39E-11	6.20E-11	1.26E-10	3.40E-11	2.81E-11	6.21E-11
440	649888.4	4199084	4.28E-10	4.56E-10	8.84E-10	6.44E-11	6.84E-11	1.33E-10	6.29E-11	6.10E-11	1.24E-10	3.34E-11	2.77E-11	6.11E-11
441	649848	4199100	4.23E-10	4.51E-10	8.74E-10	6.36E-11	6.76E-11	1.31E-10	6.22E-11	6.03E-11	1.22E-10	3.30E-11	2.73E-11	6.04E-11
442	649807.6	4199115	4.20E-10	4.47E-10	8.67E-10	6.31E-11	6.71E-11	1.30E-10	6.17E-11	5.98E-11	1.22E-10	3.28E-11	2.71E-11	5.99E-11
443	649767.3	4199131	4.18E-10	4.45E-10	8.63E-10	6.28E-11	6.68E-11	1.30E-10	6.14E-11	5.95E-11	1.21E-10	3.26E-11	2.70E-11	5.96E-11
444	649726.9	4199147	4.17E-10	4.44E-10	8.61E-10	6.27E-11	6.66E-11	1.29E-10	6.13E-11	5.94E-11	1.21E-10	3.25E-11	2.69E-11	5.95E-11
445	650595.6	4198286	1.10E-09	1.17E-09	2.27E-09	1.65E-10	1.76E-10	3.41E-10	1.61E-10	1.56E-10	3.18E-10	8.58E-11	7.09E-11	1.57E-10
446	650785.2	4198338	8.12E-10	8.66E-10	1.68E-09	1.22E-10	1.30E-10	2.52E-10	1.19E-10	1.16E-10	2.35E-10	6.34E-11	5.25E-11	1.16E-10
447	650767	4198378	7.87E-10	8.39E-10	1.63E-09	1.18E-10	1.26E-10	2.44E-10	1.16E-10	1.12E-10	2.28E-10	6.15E-11	5.09E-11	1.12E-10
448	650748.9	4198417	7.62E-10	8.12E-10	1.57E-09	1.15E-10	1.22E-10	2.36E-10	1.12E-10	1.09E-10	2.21E-10	5.95E-11	4.92E-11	1.09E-10
449	650730.7	4198456	7.36E-10	7.85E-10	1.52E-09	1.11E-10	1.18E-10	2.28E-10	1.08E-10	1.05E-10	2.13E-10	5.75E-11	4.76E-11	1.05E-10
450	650712.6	4198495	7.10E-10	7.57E-10	1.47E-09	1.07E-10	1.13E-10	2.20E-10	1.04E-10	1.01E-10	2.05E-10	5.54E-11	4.59E-11	1.01E-10
451	650694.4	4198535	6.83E-10	7.28E-10	1.41E-09	1.03E-10	1.09E-10	2.12E-10	1.00E-10	9.73E-11	1.98E-10	5.34E-11	4.41E-11	9.75E-11
452	650676.3	4198574	6.56E-10	7.00E-10	1.36E-09	9.87E-11	1.05E-10	2.04E-10	9.65E-11	9.35E-11	1.90E-10	5.13E-11	4.24E-11	9.37E-11

453	650658.1	4198613	6.31E-10	6.72E-10	1.30E-09	9.48E-11	1.01E-10	1.96E-10	9.27E-11	8.99E-11	1.83E-10	4.93E-11	4.07E-11	9.00E-11
454	650639.9	4198652	6.06E-10	6.46E-10	1.25E-09	9.11E-11	9.68E-11	1.88E-10	8.91E-11	8.63E-11	1.75E-10	4.73E-11	3.91E-11	8.65E-11
455	650621.8	4198691	5.82E-10	6.21E-10	1.20E-09	8.76E-11	9.31E-11	1.81E-10	8.56E-11	8.30E-11	1.69E-10	4.55E-11	3.76E-11	8.31E-11
456	650603.6	4198731	5.61E-10	5.98E-10	1.16E-09	8.44E-11	8.97E-11	1.74E-10	8.25E-11	8.00E-11	1.62E-10	4.38E-11	3.63E-11	8.01E-11
457	650585.5	4198770	5.42E-10	5.78E-10	1.12E-09	8.15E-11	8.66E-11	1.68E-10	7.97E-11	7.72E-11	1.57E-10	4.23E-11	3.50E-11	7.74E-11
458	650567.3	4198809	5.24E-10	5.59E-10	1.08E-09	7.89E-11	8.38E-11	1.63E-10	7.71E-11	7.47E-11	1.52E-10	4.10E-11	3.39E-11	7.49E-11
459	650549.2	4198848	5.08E-10	5.41E-10	1.05E-09	7.64E-11	8.12E-11	1.58E-10	7.47E-11	7.24E-11	1.47E-10	3.97E-11	3.28E-11	7.25E-11
460	650531	4198887	4.92E-10	5.24E-10	1.02E-09	7.39E-11	7.86E-11	1.53E-10	7.23E-11	7.01E-11	1.42E-10	3.84E-11	3.18E-11	7.02E-11
461	650512.9	4198927	4.75E-10	5.07E-10	9.82E-10	7.15E-11	7.60E-11	1.47E-10	6.99E-11	6.77E-11	1.38E-10	3.71E-11	3.07E-11	6.78E-11
462	650494.7	4198966	4.58E-10	4.89E-10	9.47E-10	6.89E-11	7.33E-11	1.42E-10	6.74E-11	6.53E-11	1.33E-10	3.58E-11	2.96E-11	6.54E-11
463	650476.6	4199005	4.40E-10	4.69E-10	9.10E-10	6.62E-11	7.04E-11	1.37E-10	6.47E-11	6.28E-11	1.27E-10	3.44E-11	2.85E-11	6.29E-11
464	650458.4	4199044	4.21E-10	4.49E-10	8.71E-10	6.34E-11	6.74E-11	1.31E-10	6.20E-11	6.01E-11	1.22E-10	3.29E-11	2.72E-11	6.02E-11
465	650429.2	4199072	4.10E-10	4.37E-10	8.46E-10	6.16E-11	6.55E-11	1.27E-10	6.02E-11	5.84E-11	1.19E-10	3.20E-11	2.65E-11	5.85E-11
466	650388.9	4199088	4.04E-10	4.30E-10	8.34E-10	6.07E-11	6.46E-11	1.25E-10	5.94E-11	5.75E-11	1.17E-10	3.15E-11	2.61E-11	5.76E-11
467	650348.7	4199103	3.97E-10	4.23E-10	8.19E-10	5.96E-11	6.34E-11	1.23E-10	5.83E-11	5.65E-11	1.15E-10	3.10E-11	2.56E-11	5.66E-11
468	650308.4	4199119	3.88E-10	4.14E-10	8.02E-10	5.84E-11	6.21E-11	1.20E-10	5.71E-11	5.53E-11	1.12E-10	3.03E-11	2.51E-11	5.54E-11
469	650268.2	4199135	3.79E-10	4.04E-10	7.83E-10	5.70E-11	6.06E-11	1.18E-10	5.57E-11	5.40E-11	1.10E-10	2.96E-11	2.45E-11	5.41E-11
470	650227.9	4199150	3.70E-10	3.94E-10	7.64E-10	5.56E-11	5.91E-11	1.15E-10	5.44E-11	5.27E-11	1.07E-10	2.89E-11	2.39E-11	5.28E-11
471	650187.7	4199166	3.61E-10	3.84E-10	7.45E-10	5.42E-11	5.77E-11	1.12E-10	5.30E-11	5.14E-11	1.04E-10	2.82E-11	2.33E-11	5.15E-11
472	650147.4	4199182	3.52E-10	3.75E-10	7.27E-10	5.29E-11	5.63E-11	1.09E-10	5.18E-11	5.02E-11	1.02E-10	2.75E-11	2.28E-11	5.03E-11
473	650107.2	4199198	3.44E-10	3.67E-10	7.11E-10	5.18E-11	5.50E-11	1.07E-10	5.06E-11	4.91E-11	9.97E-11	2.69E-11	2.23E-11	4.92E-11
474	650066.9	4199213	3.38E-10	3.60E-10	6.98E-10	5.08E-11	5.40E-11	1.05E-10	4.97E-11	4.82E-11	9.78E-11	2.64E-11	2.18E-11	4.82E-11
475	650026.6	4199229	3.32E-10	3.54E-10	6.87E-10	5.00E-11	5.32E-11	1.03E-10	4.89E-11	4.74E-11	9.63E-11	2.60E-11	2.15E-11	4.75E-11
476	649986.4	4199245	3.28E-10	3.50E-10	6.79E-10	4.94E-11	5.25E-11	1.02E-10	4.83E-11	4.68E-11	9.51E-11	2.57E-11	2.12E-11	4.69E-11
477	649946.1	4199260	3.26E-10	3.47E-10	6.72E-10	4.89E-11	5.20E-11	1.01E-10	4.79E-11	4.64E-11	9.42E-11	2.54E-11	2.10E-11	4.65E-11
478	649905.9	4199276	3.24E-10	3.45E-10	6.68E-10	4.87E-11	5.17E-11	1.00E-10	4.76E-11	4.61E-11	9.37E-11	2.53E-11	2.09E-11	4.62E-11
479	649865.6	4199292	3.22E-10	3.44E-10	6.66E-10	4.85E-11	5.15E-11	1.00E-10	4.74E-11	4.59E-11	9.33E-11	2.52E-11	2.08E-11	4.60E-11
480	649825.4	4199308	3.22E-10	3.43E-10	6.65E-10	4.84E-11	5.14E-11	9.98E-11	4.73E-11	4.59E-11	9.32E-11	2.51E-11	2.08E-11	4.59E-11
481	649785.1	4199323	3.22E-10	3.43E-10	6.64E-10	4.84E-11	5.14E-11	9.98E-11	4.73E-11	4.58E-11	9.31E-11	2.51E-11	2.08E-11	4.59E-11
482	649744.9	4199339	3.22E-10	3.43E-10	6.65E-10	4.84E-11	5.14E-11	9.98E-11	4.73E-11	4.59E-11	9.32E-11	2.51E-11	2.08E-11	4.59E-11
483	650795.4	4198297	8.46E-10	9.02E-10	1.75E-09	1.27E-10	1.35E-10	2.63E-10	1.24E-10	1.21E-10	2.45E-10	6.61E-11	5.47E-11	1.21E-10
484	650984.7	4198349	6.57E-10	7.00E-10	1.36E-09	9.88E-11	1.05E-10	2.04E-10	9.66E-11	9.36E-11	1.90E-10	5.13E-11	4.24E-11	9.38E-11
485	650966.2	4198389	6.40E-10	6.82E-10	1.32E-09	9.62E-11	1.02E-10	1.98E-10	9.40E-11	9.11E-11	1.85E-10	5.00E-11	4.13E-11	9.13E-11
486	650947.7	4198429	6.22E-10	6.63E-10	1.29E-09	9.35E-11	9.94E-11	1.93E-10	9.15E-11	8.86E-11	1.80E-10	4.86E-11	4.02E-11	8.88E-11
487	650929.1	4198469	6.04E-10	6.44E-10	1.25E-09	9.09E-11	9.66E-11	1.87E-10	8.89E-11	8.61E-11	1.75E-10	4.72E-11	3.91E-11	8.63E-11
488	650910.6	4198509	5.86E-10	6.25E-10	1.21E-09	8.82E-11	9.38E-11	1.82E-10	8.62E-11	8.36E-11	1.70E-10	4.58E-11	3.79E-11	8.37E-11
489	650892.1	4198549	5.69E-10	6.06E-10	1.17E-09	8.55E-11	9.09E-11	1.76E-10	8.36E-11	8.10E-11	1.65E-10	4.44E-11	3.67E-11	8.12E-11
490	650873.6	4198589	5.50E-10	5.87E-10	1.14E-09	8.28E-11	8.80E-11	1.71E-10	8.09E-11	7.84E-11	1.59E-10	4.30E-11	3.56E-11	7.86E-11
491	650855	4198629	5.32E-10	5.67E-10	1.10E-09	8.00E-11	8.50E-11	1.65E-10	7.82E-11	7.58E-11	1.54E-10	4.15E-11	3.44E-11	7.59E-11
492	650836.5	4198669	5.14E-10	5.48E-10	1.06E-09	7.72E-11	8.21E-11	1.59E-10	7.55E-11	7.32E-11	1.49E-10	4.01E-11	3.32E-11	7.33E-11
493	650818	4198709	4.96E-10	5.28E-10	1.02E-09	7.45E-11	7.93E-11	1.54E-10	7.29E-11	7.06E-11	1.44E-10	3.87E-11	3.20E-11	7.08E-11
494	650799.4	4198749	4.79E-10	5.10E-10	9.89E-10	7.20E-11	7.65E-11	1.49E-10	7.04E-11	6.82E-11	1.39E-10	3.74E-11	3.09E-11	6.83E-11
495	650780.9	4198789	4.64E-10	4.94E-10	9.58E-10	6.97E-11	7.41E-11	1.44E-10	6.82E-11	6.61E-11	1.34E-10	3.62E-11	3.00E-11	6.62E-11
496	650762.4	4198829	4.50E-10	4.79E-10	9.29E-10	6.76E-11	7.19E-11	1.40E-10	6.61E-11	6.41E-11	1.30E-10	3.51E-11	2.91E-11	6.42E-11
497	650743.9	4198869	4.37E-10	4.66E-10	9.03E-10	6.57E-11	6.99E-11	1.36E-10	6.43E-11	6.23E-11	1.27E-10	3.41E-11	2.82E-11	6.24E-11
498	650725.3	4198909	4.25E-10	4.53E-10	8.79E-10	6.40E-11	6.80E-11	1.32E-10	6.25E-11	6.06E-11	1.23E-10	3.32E-11	2.75E-11	6.07E-11
499	650706.8	4198949	4.14E-10	4.42E-10	8.56E-10	6.23E-11	6.62E-11	1.29E-10	6.09E-11	5.90E-11	1.20E-10	3.24E-11	2.68E-11	5.91E-11
500	650688.3	4198989	4.03E-10	4.30E-10	8.33E-10	6.06E-11	6.45E-11	1.25E-10	5.93E-11	5.75E-11	1.17E-10	3.15E-11	2.61E-11	5.76E-11
501	650669.7	4199030	3.92E-10	4.18E-10	8.10E-10	5.89E-11	6.27E-11	1.22E-10	5.76E-11	5.59E-11	1.13E-10	3.06E-11	2.53E-11	5.59E-11
502	650651.2	4199070	3.80E-10	4.05E-10	7.85E-10	5.71E-11	6.07E-11	1.18E-10	5.59E-11	5.41E-11	1.10E-10	2.97E-11	2.46E-11	5.42E-11
503	650632.7	4199110	3.67E-10	3.92E-10	7.59E-10	5.52E-11	5.87E-11	1.14E-10	5.40E-11	5.23E-11	1.06E-10	2.87E-11	2.37E-11	5.24E-11
504	650614.1	4199150	3.54E-10	3.77E-10	7.31E-10	5.32E-11	5.66E-11	1.10E-10	5.20E-11	5.04E-11	1.02E-10	2.76E-11	2.29E-11	5.05E-11
505	650595.6	4199190	3.40E-10	3.62E-10	7.02E-10	5.11E-11	5.43E-11	1.05E-10	4.99E-11	4.84E-11	9.84E-11	2.65E-11	2.20E-11	4.85E-11
506	650565.8	4199218	3.30E-10	3.52E-10	6.83E-10	4.97E-11	5.28E-11	1.02E-10	4.86E-11	4.71E-11	9.57E-11	2.58E-11	2.13E-11	4.72E-11
507	650524.7	4199234	3.26E-10	3.47E-10	6.72E-10	4.89E-11	5.20E-11	1.01E-10	4.79E-11	4.64E-11	9.42E-11	2.54E-11	2.10E-11	4.65E-11
508	650483.6	4199250	3.20E-10	3.41E-10	6.61E-10	4.81E-11	5.11E-11	9.92E-11	4.70E-11	4.56E-11	9.26E-11	2.50E-11	2.07E-11	4.57E-11
509	650442.6	4199266	3.13E-10	3.34E-10	6.47E-10	4.71E-11	5.01E-11	9.72E-11	4.61E-11	4.46E-11	9.07E-11	2.45E-11	2.02E-11	4.47E-11
510	650401.5	4199282	3.06E-10	3.26E-10	6.33E-10	4.61E-11	4.90E-11	9.50E-11	4.50E-11	4.36E-11	8.87E-11	2.39E-11	1.98E-11	4.37E-11
511	650360.4	4199298	2.99E-10	3.19E-10	6.17E-10	4.49E-11	4.78E-11	9.27E-11	4.39E-11	4.26E-11	8.65E-11	2.33E-11	1.93E-11	4.27E-11
512	650319.3	4199314	2.92E-10	3.11E-10	6.03E-10	4.39E-11	4.67E-11	9.06E-11	4.29E-11	4.16E-11	8.45E-11	2.28E-11	1.89E-11	4.17E-11
513	650278.2	4199330	2.85E-10	3.04E-10	5.89E-10	4.29E-11	4.56E-11	8.84E-11	4.19E-11	4.06E-11	8.25E-11	2.23E-11	1.84E-11	4.07E-11
514	650237.1	4199346	2.79E-10	2.97E-10	5.77E-10	4.20E-11	4.46E-11	8.66E-11	4.10E-11	3.98E-11	8.08E-11	2.18E-11	1.80E-11	3.98E-11
515	650196	4199362	2.74E-10	2.92E-10	5.66E-10	4.12E-11	4.38E-11	8.50E-11	4.03E-11	3.90E-11	7.93E-11	2.14E-11	1.77E-11	3.91E-11
516	650154.9	4199378	2.70E-10	2.87E-10	5.57E-10	4.05E-11	4.31E-11	8.36E-11	3.96E-11	3.84E-11	7.80E-11	2.11E-11	1.74E-11	3.85E-11
517	650113.9	4199394	2.66E-10	2.84E-10	5.50E-10	4.00E-11	4.26E-11	8.26E-11	3.91E-11	3.79E-11	7.71E-11	2.08E-11	1.72E-11	3.80E-11
518	650072.8	4199410	2.64E-10	2.82E-10	5.46E-10	3.97E-11	4.22E-11	8.19E-11	3.88E-11	3.76E-11	7.65E-11	2.06E-11	1.71E-11	3.77E-11
519	650031.7	4199426	2.63E-10	2.80E-10	5.42E-10	3.95E-11	4.20E-11	8.14E-11	3.86E-11	3.74E-11	7.60E-11	2.05E-11	1.70E-11	3.75E-11
520	649990.6	4199442	2.62E-10	2.79E-10	5.40E-10	3.93E-11	4.18E-11	8.11E-11	3.85E-11	3.73E-11	7.57E-11	2.04E-11	1.69E-11	3.73E-11
521	649949.5	4199458	2.61E-10	2.78E-10	5.40E-10	3.93E-11	4.18E-11	8.10E-11	3.84E-11	3.72E-11	7.56E-11	2.04E-11	1.69E-11	3.73E-11
522	649908.4	4199474	2.61E-10	2.78E-10	5.39E-10	3.92E-11	4.17E-11	8.10E-11	3.84E-11	3.72E-11	7.56E-11	2.04E-11	1.69E-11	3.73E-11
523	649867.3	4199490	2.61E-10	2.78E-10	5.39E-10	3.92E-11	4.17E-11	8.10E-11	3.84E-11	3.72E-11	7.56E-11	2.04E-11	1.69E-11	3.73E-11
524	649826.2	4199506	2.61E-10	2.78E-10	5.40E-10	3.93E-11	4.18E-11	8.10E-11	3.84E-11	3.72E-11	7.56E-11	2.04E-11	1.69E-11	3.73E-11
525	649785.2	4199523	2.61E-10	2.78E-10	5.40E-10	3.93E-11	4.18E-11	8.10E-11	3.84E-11	3.72E-11	7.56E-11	2.04E-11	1.69E-11	3.73E-11
526	649744.1	4199539	2.61E-10	2.78E-10	5.39E-10	3.92E-11	4.17E-11	8.10E-11	3.84E-11	3.72E-11	7.56E-11	2.04E-11	1.69E-11	3.73E-11
527	650995.1	4198307	6.81E-10	7.25E-10	1.41E-09	1.02E-10	1.09E-10	2.11E-10	1.00E-10	9.70E-11	1.97E-10	5.32E-11	4.40E-11	9.71E-11
528	651184.5	4198359	5.47E-10	5.84E-10	1.13E-09	8.23E-11	8.75E-11	1.70E-10	8.05E-11	7.80E-11	1.58E-10	4.28E-11	3.54E-11	7.81E-11

529	651166.1	4198399	5.35E-10	5.70E-10	1.10E-09	8.04E-11	8.55E-11	1.66E-10	7.86E-11	7.62E-11	1.55E-10	4.18E-11	3.46E-11	7.63E-11
530	651147.6	4198439	5.22E-10	5.57E-10	1.08E-09	7.85E-11	8.35E-11	1.62E-10	7.68E-11	7.44E-11	1.51E-10	4.08E-11	3.37E-11	7.45E-11
531	651129.2	4198479	5.10E-10	5.43E-10	1.05E-09	7.66E-11	8.15E-11	1.58E-10	7.49E-11	7.26E-11	1.48E-10	3.98E-11	3.29E-11	7.28E-11
532	651110.7	4198519	4.97E-10	5.30E-10	1.03E-09	7.48E-11	7.95E-11	1.54E-10	7.31E-11	7.09E-11	1.44E-10	3.89E-11	3.21E-11	7.10E-11
533	651092.3	4198558	4.85E-10	5.17E-10	1.00E-09	7.29E-11	7.75E-11	1.50E-10	7.13E-11	6.91E-11	1.40E-10	3.79E-11	3.13E-11	6.92E-11
534	651073.8	4198598	4.72E-10	5.04E-10	9.76E-10	7.10E-11	7.55E-11	1.47E-10	6.95E-11	6.73E-11	1.37E-10	3.69E-11	3.05E-11	6.74E-11
535	651055.4	4198638	4.60E-10	4.90E-10	9.50E-10	6.91E-11	7.35E-11	1.43E-10	6.76E-11	6.55E-11	1.33E-10	3.59E-11	2.97E-11	6.56E-11
536	651036.9	4198678	4.47E-10	4.76E-10	9.23E-10	6.71E-11	7.14E-11	1.39E-10	6.57E-11	6.36E-11	1.29E-10	3.49E-11	2.89E-11	6.37E-11
537	651018.5	4198718	4.33E-10	4.62E-10	8.95E-10	6.52E-11	6.93E-11	1.34E-10	6.37E-11	6.18E-11	1.25E-10	3.39E-11	2.80E-11	6.19E-11
538	651000.1	4198758	4.21E-10	4.48E-10	8.69E-10	6.32E-11	6.72E-11	1.30E-10	6.18E-11	5.99E-11	1.22E-10	3.28E-11	2.72E-11	6.00E-11
539	650981.6	4198797	4.08E-10	4.35E-10	8.43E-10	6.13E-11	6.52E-11	1.27E-10	6.00E-11	5.81E-11	1.18E-10	3.19E-11	2.64E-11	5.82E-11
540	650963.2	4198837	3.96E-10	4.22E-10	8.19E-10	5.96E-11	6.33E-11	1.23E-10	5.83E-11	5.65E-11	1.15E-10	3.10E-11	2.56E-11	5.66E-11
541	650944.7	4198877	3.86E-10	4.11E-10	7.97E-10	5.80E-11	6.16E-11	1.20E-10	5.67E-11	5.49E-11	1.12E-10	3.01E-11	2.49E-11	5.50E-11
542	650926.3	4198917	3.76E-10	4.01E-10	7.77E-10	5.65E-11	6.01E-11	1.17E-10	5.53E-11	5.36E-11	1.09E-10	2.94E-11	2.43E-11	5.37E-11
543	650907.8	4198957	3.67E-10	3.91E-10	7.58E-10	5.52E-11	5.87E-11	1.14E-10	5.40E-11	5.23E-11	1.06E-10	2.87E-11	2.37E-11	5.24E-11
544	650889.4	4198997	3.59E-10	3.83E-10	7.42E-10	5.40E-11	5.74E-11	1.11E-10	5.28E-11	5.12E-11	1.04E-10	2.81E-11	2.32E-11	5.13E-11
545	650870.9	4199037	3.51E-10	3.75E-10	7.26E-10	5.28E-11	5.62E-11	1.09E-10	5.17E-11	5.01E-11	1.02E-10	2.74E-11	2.27E-11	5.01E-11
546	650852.5	4199076	3.44E-10	3.66E-10	7.10E-10	5.17E-11	5.49E-11	1.07E-10	5.05E-11	4.90E-11	9.95E-11	2.68E-11	2.22E-11	4.90E-11
547	650834.1	4199116	3.36E-10	3.58E-10	6.93E-10	5.05E-11	5.37E-11	1.04E-10	4.93E-11	4.78E-11	9.72E-11	2.62E-11	2.17E-11	4.79E-11
548	650815.6	4199156	3.27E-10	3.49E-10	6.76E-10	4.92E-11	5.23E-11	1.02E-10	4.81E-11	4.66E-11	9.48E-11	2.56E-11	2.11E-11	4.67E-11
549	650797.2	4199196	3.18E-10	3.39E-10	6.58E-10	4.79E-11	5.09E-11	9.88E-11	4.68E-11	4.54E-11	9.22E-11	2.49E-11	2.06E-11	4.54E-11
550	650778.7	4199236	3.09E-10	3.29E-10	6.38E-10	4.64E-11	4.94E-11	9.58E-11	4.54E-11	4.40E-11	8.94E-11	2.41E-11	2.00E-11	4.41E-11
551	650760.3	4199276	2.98E-10	3.18E-10	6.17E-10	4.49E-11	4.77E-11	9.26E-11	4.39E-11	4.25E-11	8.64E-11	2.33E-11	1.93E-11	4.26E-11
552	650741.8	4199315	2.88E-10	3.07E-10	5.95E-10	4.33E-11	4.60E-11	8.93E-11	4.23E-11	4.10E-11	8.33E-11	2.25E-11	1.86E-11	4.11E-11
553	650702.9	4199363	2.75E-10	2.93E-10	5.69E-10	4.14E-11	4.40E-11	8.54E-11	4.05E-11	3.92E-11	7.97E-11	2.15E-11	1.78E-11	3.93E-11
554	650662	4199379	2.71E-10	2.89E-10	5.60E-10	4.08E-11	4.33E-11	8.41E-11	3.99E-11	3.86E-11	7.85E-11	2.12E-11	1.75E-11	3.87E-11
555	650621.1	4199395	2.66E-10	2.84E-10	5.50E-10	4.01E-11	4.26E-11	8.27E-11	3.92E-11	3.80E-11	7.71E-11	2.08E-11	1.72E-11	3.80E-11
556	650580.2	4199411	2.61E-10	2.78E-10	5.40E-10	3.93E-11	4.18E-11	8.10E-11	3.84E-11	3.72E-11	7.56E-11	2.04E-11	1.69E-11	3.73E-11
557	650539.3	4199427	2.56E-10	2.73E-10	5.29E-10	3.85E-11	4.09E-11	7.95E-11	3.77E-11	3.65E-11	7.42E-11	2.00E-11	1.66E-11	3.66E-11
558	650498.4	4199443	2.50E-10	2.67E-10	5.18E-10	3.77E-11	4.00E-11	7.77E-11	3.68E-11	3.57E-11	7.25E-11	1.96E-11	1.62E-11	3.58E-11
559	650457.5	4199459	2.45E-10	2.61E-10	5.06E-10	3.68E-11	3.92E-11	7.60E-11	3.60E-11	3.49E-11	7.10E-11	1.91E-11	1.58E-11	3.50E-11
560	650416.6	4199475	2.40E-10	2.56E-10	4.95E-10	3.61E-11	3.83E-11	7.44E-11	3.53E-11	3.42E-11	6.94E-11	1.87E-11	1.55E-11	3.42E-11
561	650375.7	4199491	2.35E-10	2.50E-10	4.85E-10	3.53E-11	3.76E-11	7.29E-11	3.45E-11	3.35E-11	6.80E-11	1.84E-11	1.52E-11	3.35E-11
562	650334.8	4199507	2.31E-10	2.46E-10	4.77E-10	3.47E-11	3.69E-11	7.16E-11	3.39E-11	3.29E-11	6.68E-11	1.80E-11	1.49E-11	3.29E-11
563	650293.9	4199523	2.27E-10	2.42E-10	4.69E-10	3.41E-11	3.63E-11	7.04E-11	3.34E-11	3.23E-11	6.57E-11	1.77E-11	1.47E-11	3.24E-11
564	650253	4199539	2.24E-10	2.39E-10	4.63E-10	3.37E-11	3.58E-11	6.95E-11	3.29E-11	3.19E-11	6.49E-11	1.75E-11	1.45E-11	3.20E-11
565	650212.1	4199555	2.22E-10	2.36E-10	4.58E-10	3.33E-11	3.54E-11	6.88E-11	3.26E-11	3.16E-11	6.42E-11	1.73E-11	1.43E-11	3.16E-11
566	650171.2	4199571	2.20E-10	2.35E-10	4.55E-10	3.31E-11	3.52E-11	6.83E-11	3.24E-11	3.14E-11	6.37E-11	1.72E-11	1.42E-11	3.14E-11
567	650130.3	4199587	2.19E-10	2.34E-10	4.53E-10	3.30E-11	3.50E-11	6.80E-11	3.22E-11	3.12E-11	6.35E-11	1.71E-11	1.42E-11	3.13E-11
568	650089.4	4199603	2.19E-10	2.33E-10	4.52E-10	3.29E-11	3.50E-11	6.79E-11	3.22E-11	3.12E-11	6.34E-11	1.71E-11	1.41E-11	3.12E-11
569	650048.5	4199619	2.19E-10	2.33E-10	4.52E-10	3.29E-11	3.49E-11	6.78E-11	3.21E-11	3.12E-11	6.33E-11	1.71E-11	1.41E-11	3.12E-11
570	650007.6	4199635	2.19E-10	2.33E-10	4.52E-10	3.29E-11	3.50E-11	6.79E-11	3.22E-11	3.12E-11	6.34E-11	1.71E-11	1.41E-11	3.12E-11
571	649966.7	4199651	2.19E-10	2.33E-10	4.52E-10	3.29E-11	3.50E-11	6.79E-11	3.22E-11	3.12E-11	6.34E-11	1.71E-11	1.42E-11	3.13E-11
572	649925.8	4199667	2.19E-10	2.33E-10	4.52E-10	3.29E-11	3.50E-11	6.79E-11	3.22E-11	3.12E-11	6.34E-11	1.71E-11	1.42E-11	3.13E-11
573	649884.9	4199683	2.19E-10	2.34E-10	4.53E-10	3.30E-11	3.50E-11	6.80E-11	3.22E-11	3.12E-11	6.35E-11	1.71E-11	1.42E-11	3.13E-11
574	649844	4199699	2.19E-10	2.33E-10	4.52E-10	3.29E-11	3.50E-11	6.79E-11	3.22E-11	3.12E-11	6.34E-11	1.71E-11	1.42E-11	3.13E-11
575	649803.1	4199715	2.19E-10	2.33E-10	4.52E-10	3.29E-11	3.49E-11	6.78E-11	3.21E-11	3.12E-11	6.33E-11	1.71E-11	1.41E-11	3.12E-11
576	649762.2	4199731	2.18E-10	2.33E-10	4.51E-10	3.28E-11	3.49E-11	6.77E-11	3.21E-11	3.11E-11	6.32E-11	1.70E-11	1.41E-11	3.11E-11
577	651194.9	4198317	5.65E-10	6.02E-10	1.17E-09	8.49E-11	9.03E-11	1.75E-10	8.31E-11	8.05E-11	1.64E-10	4.41E-11	3.65E-11	8.06E-11
578	649707	4198197	6.41E-08	6.84E-08	1.33E-07	9.65E-09	1.03E-08	1.99E-08	9.43E-09	9.14E-09	1.86E-08	5.01E-09	4.15E-09	9.16E-09
579	649681.3	4198193	1.01E-07	1.07E-07	2.08E-07	1.52E-08	1.61E-08	3.13E-08	1.48E-08	1.44E-08	2.92E-08	7.87E-09	6.51E-09	1.44E-08
580	649710	4198174	6.19E-08	6.60E-08	1.28E-07	9.31E-09	9.90E-09	1.92E-08	9.10E-09	8.82E-09	1.79E-08	4.84E-09	4.00E-09	8.84E-09
581	649738.8	4198196	3.65E-08	3.89E-08	7.54E-08	5.49E-09	5.83E-09	1.13E-08	5.36E-09	5.20E-09	1.06E-08	2.85E-09	2.36E-09	5.21E-09
582	649681.3	4198168	1.03E-07	1.10E-07	2.13E-07	1.55E-08	1.65E-08	3.20E-08	1.52E-08	1.47E-08	2.98E-08	8.05E-09	6.66E-09	1.47E-08
583	649711.5	4198149	5.79E-08	6.17E-08	1.20E-07	8.70E-09	9.25E-09	1.80E-08	8.51E-09	8.25E-09	1.68E-08	4.52E-09	3.74E-09	8.26E-09
584	649738.7	4198161	3.97E-08	4.23E-08	8.20E-08	5.97E-09	6.34E-09	1.23E-08	5.83E-09	5.65E-09	1.15E-08	3.10E-09	2.56E-09	5.66E-09
585	649757.4	4198181	2.97E-08	3.17E-08	6.14E-08	4.47E-09	4.75E-09	9.21E-09	4.37E-09	4.23E-09	8.60E-09	2.32E-09	1.92E-09	4.24E-09
586	649767.7	4198208	2.22E-08	2.36E-08	4.58E-08	3.34E-09	3.55E-09	6.88E-09	3.26E-09	3.16E-09	6.42E-09	1.73E-09	1.43E-09	3.17E-09
587	649681.3	4198143	8.61E-08	9.18E-08	1.78E-07	1.30E-08	1.38E-08	2.67E-08	1.27E-08	1.23E-08	2.49E-08	6.73E-09	5.57E-09	1.23E-08
588	649712.4	4198125	4.88E-08	5.20E-08	1.01E-07	7.34E-09	7.80E-09	1.51E-08	7.18E-09	6.95E-09	1.41E-08	3.81E-09	3.15E-09	6.97E-09
589	649741.4	4198137	3.76E-08	4.01E-08	7.77E-08	5.65E-09	6.01E-09	1.17E-08	5.53E-09	5.36E-09	1.09E-08	2.94E-09	2.43E-09	5.37E-09
590	649775.9	4198164	2.51E-08	2.68E-08	5.19E-08	3.78E-09	4.01E-09	7.79E-09	3.69E-09	3.58E-09	7.27E-09	1.96E-09	1.62E-09	3.58E-09
591	649786.9	4198194	1.95E-08	2.08E-08	4.04E-08	2.94E-09	3.12E-09	6.06E-09	2.87E-09	2.79E-09	5.66E-09	1.53E-09	1.26E-09	2.79E-09
592	649681.3	4198118	5.91E-08	6.30E-08	1.22E-07	8.89E-09	9.45E-09	1.83E-08	8.69E-09	8.42E-09	1.71E-08	4.62E-09	3.82E-09	8.44E-09
593	649711.5	4198074	3.46E-08	3.69E-08	7.14E-08	5.20E-09	5.53E-09	1.07E-08	5.08E-09	4.93E-09	1.00E-08	2.70E-09	2.23E-09	4.94E-09
594	649738.7	4198086	3.17E-08	3.38E-08	6.54E-08	4.76E-09	5.06E-09	9.82E-09	4.66E-09	4.51E-09	9.17E-09	2.47E-09	2.05E-09	4.52E-09
595	649765.9	4198098	2.74E-08	2.92E-08	5.65E-08	4.11E-09	4.37E-09	8.49E-09	4.02E-09	3.90E-09	7.92E-09	2.14E-09	1.77E-09	3.90E-09
596	649793.1	4198109	2.26E-08	2.41E-08	4.66E-08	3.39E-09	3.61E-09	7.00E-09	3.32E-09	3.22E-09	6.53E-09	1.76E-09	1.46E-09	3.22E-09
597	649811.8	4198129	1.92E-08	2.05E-08	3.97E-08	2.89E-09	3.07E-09	5.96E-09	2.83E-09	2.74E-09	5.56E-09	1.50E-09	1.24E-09	2.74E-09
598	649822.1	4198157	1.65E-08	1.76E-08	3.41E-08	2.48E-09	2.64E-09	5.12E-09	2.43E-09	2.35E-09	4.78E-09	1.29E-09	1.07E-09	2.36E-09
599	649832.3	4198184	1.35E-08	1.44E-08	2.79E-08	2.03E-09	2.16E-09	4.19E-09	1.98E-09	1.92E-09	3.91E-09	1.05E-09	8.72E-10	1.93E-09
600	649842.6	4198212	1.07E-08	1.14E-08	2.21E-08	1.61E-09	1.71E-09	3.32E-09	1.57E-09	1.52E-09	3.09E-09	8.35E-10	6.91E-10	1.53E-09
601	649681.3	4198068	3.81E-08	4.06E-08	7.87E-08	5.73E-09	6.09E-09	1.18E-08	5.60E-09	5.43E-09	1.10E-08	2.98E-09	2.46E-09	5.44E-09
602	649712.4	4198025	2.71E-08	2.89E-08	5.59E-08	4.07E-09	4.33E-09	8.40E-09	3.98E-09	3.86E-09	7.84E-09	2.12E-09	1.75E-09	3.87E-09
603	649741.4	4198037	2.54E-08	2.71E-08	5.25E-08	3.82E-09	4.06E-09	7.88E-09	3.73E-09	3.62E-09	7.35E-09	1.98E-09	1.64E-09	3.62E-09
604	649770.4	4198050	2.32E-08	2.47E-08	4.79E-08	3.48E-09	3.71E-09	7.19E-09	3.41E-09	3.30E-09	6.71E-09	1.81E-09	1.50E-09	3.31E-09

605	649799.4	4198062	2.04E-08	2.18E-08	4.22E-08	3.07E-09	3.26E-09	6.34E-09	3.00E-09	2.91E-09	5.91E-09	1.60E-09	1.32E-09	2.92E-09
606	649828.4	4198074	1.74E-08	1.86E-08	3.60E-08	2.62E-09	2.79E-09	5.40E-09	2.56E-09	2.48E-09	5.04E-09	1.36E-09	1.13E-09	2.49E-09
607	649848.4	4198095	1.53E-08	1.63E-08	3.16E-08	2.30E-09	2.44E-09	4.74E-09	2.25E-09	2.18E-09	4.43E-09	1.19E-09	9.88E-10	2.18E-09
608	649859.4	4198125	1.36E-08	1.45E-08	2.81E-08	2.04E-09	2.17E-09	4.21E-09	2.00E-09	1.94E-09	3.93E-09	1.06E-09	8.78E-10	1.94E-09
609	649870.3	4198155	1.16E-08	1.23E-08	2.39E-08	1.74E-09	1.85E-09	3.59E-09	1.70E-09	1.65E-09	3.35E-09	9.04E-10	7.48E-10	1.65E-09
610	649881.3	4198184	9.56E-09	1.02E-08	1.98E-08	1.44E-09	1.53E-09	2.97E-09	1.41E-09	1.36E-09	2.77E-09	7.47E-10	6.18E-10	1.37E-09
611	649681.3	4198018	2.95E-08	3.15E-08	6.10E-08	4.44E-09	4.72E-09	9.16E-09	4.34E-09	4.21E-09	8.55E-09	2.31E-09	1.91E-09	4.21E-09
612	649713	4197975	2.26E-08	2.41E-08	4.67E-08	3.40E-09	3.62E-09	7.02E-09	3.33E-09	3.22E-09	6.55E-09	1.77E-09	1.46E-09	3.23E-09
613	649743.3	4197988	2.13E-08	2.27E-08	4.40E-08	3.20E-09	3.40E-09	6.60E-09	3.13E-09	3.03E-09	6.16E-09	1.66E-09	1.38E-09	3.04E-09
614	649773.5	4198001	1.98E-08	2.11E-08	4.09E-08	2.98E-09	3.16E-09	6.14E-09	2.91E-09	2.82E-09	5.73E-09	1.55E-09	1.28E-09	2.82E-09
615	649803.7	4198014	1.81E-08	1.93E-08	3.74E-08	2.72E-09	2.89E-09	5.61E-09	2.66E-09	2.58E-09	5.23E-09	1.41E-09	1.17E-09	2.58E-09
616	649833.9	4198027	1.62E-08	1.72E-08	3.34E-08	2.43E-09	2.58E-09	5.01E-09	2.38E-09	2.30E-09	4.68E-09	1.26E-09	1.04E-09	2.31E-09
617	649864.1	4198040	1.41E-08	1.50E-08	2.91E-08	2.12E-09	2.25E-09	4.37E-09	2.07E-09	2.01E-09	4.08E-09	1.10E-09	9.10E-10	2.01E-09
618	649884.9	4198062	1.26E-08	1.34E-08	2.61E-08	1.90E-09	2.02E-09	3.91E-09	1.85E-09	1.80E-09	3.65E-09	9.85E-10	8.15E-10	1.80E-09
619	649896.3	4198092	1.15E-08	1.22E-08	2.37E-08	1.72E-09	1.83E-09	3.56E-09	1.69E-09	1.63E-09	3.32E-09	8.96E-10	7.41E-10	1.64E-09
620	649907.7	4198123	1.01E-08	1.07E-08	2.08E-08	1.52E-09	1.61E-09	3.13E-09	1.48E-09	1.44E-09	2.92E-09	7.87E-10	6.51E-10	1.44E-09
621	649919.1	4198154	8.61E-09	9.18E-09	1.78E-08	1.29E-09	1.38E-09	2.67E-09	1.27E-09	1.23E-09	2.49E-09	6.73E-10	5.56E-10	1.23E-09
622	649930.5	4198185	7.23E-09	7.70E-09	1.49E-08	1.09E-09	1.16E-09	2.24E-09	1.06E-09	1.03E-09	2.09E-09	5.64E-10	4.67E-10	1.03E-09
623	649681.3	4197968	2.45E-08	2.62E-08	5.07E-08	3.69E-09	3.92E-09	7.61E-09	3.61E-09	3.50E-09	7.11E-09	1.92E-09	1.59E-09	3.50E-09
624	649712.4	4197925	1.95E-08	2.07E-08	4.02E-08	2.93E-09	3.11E-09	6.03E-09	2.86E-09	2.77E-09	5.63E-09	1.52E-09	1.26E-09	2.78E-09
625	649741.4	4197937	1.84E-08	1.96E-08	3.80E-08	2.77E-09	2.94E-09	5.71E-09	2.71E-09	2.62E-09	5.33E-09	1.44E-09	1.19E-09	2.63E-09
626	649770.4	4197950	1.73E-08	1.85E-08	3.58E-08	2.60E-09	2.77E-09	5.37E-09	2.55E-09	2.47E-09	5.02E-09	1.35E-09	1.12E-09	2.47E-09
627	649799.4	4197962	1.62E-08	1.73E-08	3.35E-08	2.44E-09	2.59E-09	5.03E-09	2.38E-09	2.31E-09	4.69E-09	1.27E-09	1.05E-09	2.31E-09
628	649828.4	4197974	1.51E-08	1.61E-08	3.12E-08	2.27E-09	2.41E-09	4.68E-09	2.22E-09	2.15E-09	4.37E-09	1.18E-09	9.75E-10	2.15E-09
629	649857.4	4197987	1.38E-08	1.47E-08	2.85E-08	2.07E-09	2.21E-09	4.28E-09	2.03E-09	1.97E-09	3.99E-09	1.08E-09	8.92E-10	1.97E-09
630	649886.4	4197999	1.24E-08	1.32E-08	2.56E-08	1.87E-09	1.98E-09	3.85E-09	1.82E-09	1.77E-09	3.59E-09	9.69E-10	8.02E-10	1.77E-09
631	649920.9	4198027	1.07E-08	1.14E-08	2.21E-08	1.61E-09	1.71E-09	3.32E-09	1.57E-09	1.52E-09	3.10E-09	8.35E-10	6.91E-10	1.53E-09
632	649931.8	4198056	9.95E-09	1.06E-08	2.06E-08	1.50E-09	1.59E-09	3.09E-09	1.46E-09	1.42E-09	2.88E-09	7.78E-10	6.43E-10	1.42E-09
633	649942.8	4198086	9.04E-09	9.64E-09	1.87E-08	1.36E-09	1.45E-09	2.81E-09	1.33E-09	1.29E-09	2.62E-09	7.06E-10	5.84E-10	1.29E-09
634	649953.7	4198115	8.03E-09	8.56E-09	1.66E-08	1.21E-09	1.28E-09	2.49E-09	1.18E-09	1.14E-09	2.33E-09	6.28E-10	5.19E-10	1.15E-09
635	649964.7	4198145	7.02E-09	7.48E-09	1.45E-08	1.05E-09	1.12E-09	2.18E-09	1.03E-09	1.00E-09	2.03E-09	5.48E-10	4.53E-10	1.00E-09
636	649975.7	4198175	6.06E-09	6.46E-09	1.25E-08	9.11E-10	9.68E-10	1.88E-09	8.91E-10	8.63E-10	1.75E-09	4.73E-10	3.91E-10	8.65E-10
637	649986.6	4198204	5.20E-09	5.54E-09	1.07E-08	7.82E-10	8.32E-10	1.61E-09	7.65E-10	7.41E-10	1.51E-09	4.06E-10	3.36E-10	7.42E-10
638	649681.3	4197918	2.10E-08	2.24E-08	4.34E-08	3.16E-09	3.36E-09	6.51E-09	3.09E-09	2.99E-09	6.08E-09	1.64E-09	1.36E-09	3.00E-09
639	649713.2	4197825	1.44E-08	1.54E-08	2.98E-08	2.17E-09	2.30E-09	4.47E-09	2.12E-09	2.05E-09	4.17E-09	1.12E-09	9.31E-10	2.06E-09
640	649743.7	4197838	1.39E-08	1.48E-08	2.86E-08	2.08E-09	2.22E-09	4.30E-09	2.04E-09	1.98E-09	4.01E-09	1.08E-09	8.96E-10	1.98E-09
641	649774.3	4197851	1.33E-08	1.42E-08	2.75E-08	2.00E-09	2.12E-09	4.12E-09	1.95E-09	1.89E-09	3.85E-09	1.04E-09	8.59E-10	1.90E-09
642	649804.8	4197864	1.27E-08	1.35E-08	2.62E-08	1.91E-09	2.03E-09	3.93E-09	1.86E-09	1.81E-09	3.67E-09	9.90E-10	8.19E-10	1.81E-09
643	649835.3	4197877	1.20E-08	1.28E-08	2.49E-08	1.81E-09	1.92E-09	3.73E-09	1.77E-09	1.71E-09	3.48E-09	9.40E-10	7.78E-10	1.72E-09
644	649865.8	4197891	1.14E-08	1.22E-08	2.36E-08	1.72E-09	1.83E-09	3.55E-09	1.68E-09	1.63E-09	3.31E-09	8.93E-10	7.38E-10	1.63E-09
645	649896.3	4197904	1.07E-08	1.15E-08	2.22E-08	1.62E-09	1.72E-09	3.33E-09	1.58E-09	1.53E-09	3.11E-09	8.39E-10	6.94E-10	1.53E-09
646	649926.9	4197917	9.94E-09	1.06E-08	2.05E-08	1.49E-09	1.59E-09	3.08E-09	1.46E-09	1.42E-09	2.88E-09	7.76E-10	6.42E-10	1.42E-09
647	649957.4	4197930	9.08E-09	9.68E-09	1.88E-08	1.36E-09	1.45E-09	2.82E-09	1.33E-09	1.29E-09	2.63E-09	7.09E-10	5.87E-10	1.30E-09
648	649993.7	4197958	8.04E-09	8.57E-09	1.66E-08	1.21E-09	1.29E-09	2.49E-09	1.18E-09	1.15E-09	2.33E-09	6.28E-10	5.20E-10	1.15E-09
649	650005.2	4197990	7.63E-09	8.13E-09	1.58E-08	1.15E-09	1.22E-09	2.37E-09	1.12E-09	1.09E-09	2.21E-09	5.96E-10	4.93E-10	1.09E-09
650	650016.7	4198021	7.11E-09	7.58E-09	1.47E-08	1.07E-09	1.14E-09	2.21E-09	1.05E-09	1.01E-09	2.06E-09	5.56E-10	4.60E-10	1.02E-09
651	650028.3	4198052	6.52E-09	6.95E-09	1.35E-08	9.80E-10	1.04E-09	2.02E-09	9.59E-10	9.29E-10	1.89E-09	5.09E-10	4.21E-10	9.31E-10
652	650039.8	4198083	5.89E-09	6.28E-09	1.22E-08	8.85E-10	9.41E-10	1.83E-09	8.66E-10	8.39E-10	1.70E-09	4.60E-10	3.81E-10	8.41E-10
653	650051.3	4198114	5.26E-09	5.60E-09	1.09E-08	7.90E-10	8.40E-10	1.63E-09	7.73E-10	7.49E-10	1.52E-09	4.11E-10	3.40E-10	7.50E-10
654	650062.8	4198145	4.65E-09	4.96E-09	9.61E-09	6.99E-10	7.43E-10	1.44E-09	6.84E-10	6.63E-10	1.35E-09	3.63E-10	3.01E-10	6.64E-10
655	650074.4	4198177	4.10E-09	4.37E-09	8.46E-09	6.16E-10	6.55E-10	1.27E-09	6.02E-10	5.84E-10	1.19E-09	3.20E-10	2.65E-10	5.85E-10
656	650085.9	4198208	3.60E-09	3.84E-09	7.44E-09	5.42E-10	5.76E-10	1.12E-09	5.30E-10	5.13E-10	1.04E-09	2.81E-10	2.33E-10	5.14E-10
657	649681.3	4197818	1.53E-08	1.63E-08	3.16E-08	2.30E-09	2.44E-09	4.74E-09	2.25E-09	2.18E-09	4.43E-09	1.19E-09	9.88E-10	2.18E-09
658	649713	4197725	1.12E-08	1.20E-08	2.32E-08	1.69E-09	1.79E-09	3.48E-09	1.65E-09	1.60E-09	3.25E-09	8.76E-10	7.25E-10	1.60E-09
659	649743.3	4197738	1.10E-08	1.18E-08	2.28E-08	1.66E-09	1.76E-09	3.42E-09	1.62E-09	1.57E-09	3.20E-09	8.62E-10	7.13E-10	1.58E-09
660	649773.5	4197751	1.07E-08	1.14E-08	2.22E-08	1.61E-09	1.71E-09	3.33E-09	1.58E-09	1.53E-09	3.11E-09	8.38E-10	6.93E-10	1.53E-09
661	649803.7	4197764	1.04E-08	1.11E-08	2.15E-08	1.57E-09	1.66E-09	3.23E-09	1.53E-09	1.48E-09	3.01E-09	8.13E-10	6.73E-10	1.49E-09
662	649833.9	4197777	1.00E-08	1.07E-08	2.07E-08	1.51E-09	1.60E-09	3.11E-09	1.47E-09	1.43E-09	2.90E-09	7.83E-10	6.48E-10	1.43E-09
663	649864.1	4197790	9.56E-09	1.02E-08	1.97E-08	1.44E-09	1.53E-09	2.96E-09	1.40E-09	1.36E-09	2.77E-09	7.46E-10	6.17E-10	1.36E-09
664	649894.3	4197803	9.10E-09	9.70E-09	1.88E-08	1.37E-09	1.46E-09	2.82E-09	1.34E-09	1.30E-09	2.64E-09	7.11E-10	5.88E-10	1.30E-09
665	649924.5	4197816	8.64E-09	9.22E-09	1.79E-08	1.30E-09	1.38E-09	2.68E-09	1.27E-09	1.23E-09	2.50E-09	6.75E-10	5.59E-10	1.23E-09
666	649954.7	4197829	8.15E-09	8.69E-09	1.68E-08	1.23E-09	1.30E-09	2.53E-09	1.20E-09	1.16E-09	2.36E-09	6.37E-10	5.27E-10	1.16E-09
667	649984.9	4197842	7.67E-09	8.18E-09	1.59E-08	1.15E-09	1.23E-09	2.38E-09	1.13E-09	1.09E-09	2.22E-09	6.00E-10	4.96E-10	1.10E-09
668	650015.1	4197855	7.23E-09	7.71E-09	1.49E-08	1.09E-09	1.16E-09	2.24E-09	1.06E-09	1.03E-09	2.09E-09	5.65E-10	4.67E-10	1.03E-09
669	650045.3	4197868	6.70E-09	7.15E-09	1.38E-08	1.01E-09	1.07E-09	2.08E-09	9.85E-10	9.55E-10	1.94E-09	5.24E-10	4.33E-10	9.57E-10
670	650066.1	4197889	6.33E-09	6.75E-09	1.31E-08	9.52E-10	1.01E-09	1.96E-09	9.31E-10	9.03E-10	1.83E-09	4.95E-10	4.09E-10	9.04E-10
671	650077.5	4197920	6.10E-09	6.50E-09	1.26E-08	9.17E-10	9.74E-10	1.89E-09	8.96E-10	8.69E-10	1.76E-09	4.76E-10	3.94E-10	8.70E-10
672	650088.9	4197951	5.80E-09	6.18E-09	1.20E-08	8.72E-10	9.27E-10	1.80E-09	8.53E-10	8.27E-10	1.68E-09	4.53E-10	3.75E-10	8.28E-10
673	650100.3	4197982	5.45E-09	5.81E-09	1.13E-08	8.20E-10	8.71E-10	1.69E-09	8.02E-10	7.77E-10	1.58E-09	4.26E-10	3.52E-10	7.78E-10
674	650111.7	4198013	5.07E-09	5.40E-09	1.05E-08	7.62E-10	8.10E-10	1.57E-09	7.45E-10	7.22E-10	1.47E-09	3.96E-10	3.27E-10	7.23E-10
675	650123.1	4198044	4.66E-09	4.96E-09	9.62E-09	7.00E-10	7.44E-10	1.44E-09	6.85E-10	6.63E-10	1.35E-09	3.64E-10	3.01E-10	6.65E-10
676	650134.6	4198074	4.24E-09	4.52E-09	8.77E-09	6.38E-10	6.79E-10	1.32E-09	6.24E-10	6.05E-10	1.23E-09	3.32E-10	2.74E-10	6.06E-10
677	650146	4198105	3.85E-09	4.10E-09	7.95E-09	5.79E-10	6.15E-10	1.19E-09	5.66E-10	5.49E-10	1.11E-09	3.01E-10	2.49E-10	5.50E-10
678	650157.4	4198136	3.48E-09	3.70E-09	7.18E-09	5.23E-10	5.56E-10	1.08E-09	5.11E-10	4.95E-10	1.01E-09	2.71E-10	2.25E-10	4.96E-10
679	650168.8	4198167	3.14E-09	3.34E-09	6.48E-09	4.71E-10	5.01E-10	9.73E-10	4.61E-10	4.47E-10	9.08E-10	2.45E-10	2.03E-10	4.47E-10
680	650180.2	4198198	2.82E-09	3.01E-09	5.83E-09	4.25E-10	4.51E-10	8.76E-10	4.15E-10	4.02E-10	8.18E-10	2.21E-10	1.83E-10	4.03E-10

681	650191.6	4198229	2.54E-09	2.71E-09	5.25E-09	3.82E-10	4.06E-10	7.89E-10	3.74E-10	3.62E-10	7.36E-10	1.99E-10	1.64E-10	3.63E-10
682	649681.3	4197718	1.16E-08	1.23E-08	2.39E-08	1.74E-09	1.85E-09	3.59E-09	1.70E-09	1.65E-09	3.35E-09	9.03E-10	7.47E-10	1.65E-09
683	649712.9	4197625	8.20E-09	8.74E-09	1.69E-08	1.23E-09	1.31E-09	2.54E-09	1.21E-09	1.17E-09	2.37E-09	6.40E-10	5.30E-10	1.17E-09
684	649742.9	4197638	8.28E-09	8.83E-09	1.71E-08	1.25E-09	1.32E-09	2.57E-09	1.22E-09	1.18E-09	2.40E-09	6.47E-10	5.35E-10	1.18E-09
685	649772.9	4197651	8.30E-09	8.85E-09	1.71E-08	1.25E-09	1.33E-09	2.58E-09	1.22E-09	1.18E-09	2.40E-09	6.48E-10	5.36E-10	1.18E-09
686	649802.9	4197664	8.26E-09	8.80E-09	1.71E-08	1.24E-09	1.32E-09	2.56E-09	1.21E-09	1.18E-09	2.39E-09	6.45E-10	5.34E-10	1.18E-09
687	649832.9	4197676	8.15E-09	8.69E-09	1.68E-08	1.23E-09	1.30E-09	2.53E-09	1.20E-09	1.16E-09	2.36E-09	6.37E-10	5.27E-10	1.16E-09
688	649862.9	4197689	8.00E-09	8.53E-09	1.65E-08	1.20E-09	1.28E-09	2.48E-09	1.18E-09	1.14E-09	2.32E-09	6.25E-10	5.17E-10	1.14E-09
689	649892.9	4197702	7.79E-09	8.30E-09	1.61E-08	1.17E-09	1.24E-09	2.42E-09	1.14E-09	1.11E-09	2.25E-09	6.08E-10	5.03E-10	1.11E-09
690	649922.9	4197715	7.54E-09	8.04E-09	1.56E-08	1.13E-09	1.21E-09	2.34E-09	1.11E-09	1.07E-09	2.18E-09	5.89E-10	4.87E-10	1.08E-09
691	649952.9	4197728	7.25E-09	7.73E-09	1.50E-08	1.09E-09	1.16E-09	2.25E-09	1.07E-09	1.03E-09	2.10E-09	5.67E-10	4.69E-10	1.04E-09
692	649982.9	4197741	6.91E-09	7.37E-09	1.43E-08	1.04E-09	1.10E-09	2.14E-09	1.02E-09	9.85E-10	2.00E-09	5.40E-10	4.47E-10	9.86E-10
693	650012.9	4197754	6.55E-09	6.98E-09	1.35E-08	9.84E-10	1.05E-09	2.03E-09	9.63E-10	9.33E-10	1.90E-09	5.11E-10	4.23E-10	9.35E-10
694	650042.9	4197767	6.20E-09	6.61E-09	1.28E-08	9.33E-10	9.92E-10	1.92E-09	9.12E-10	8.84E-10	1.80E-09	4.85E-10	4.01E-10	8.86E-10
695	650072.9	4197779	5.86E-09	6.24E-09	1.21E-08	8.81E-10	9.37E-10	1.82E-09	8.61E-10	8.35E-10	1.70E-09	4.58E-10	3.79E-10	8.36E-10
696	650102.9	4197792	5.50E-09	5.86E-09	1.14E-08	8.27E-10	8.79E-10	1.71E-09	8.08E-10	7.83E-10	1.59E-09	4.29E-10	3.55E-10	7.85E-10
697	650138.6	4197820	5.13E-09	5.47E-09	1.06E-08	7.71E-10	8.20E-10	1.59E-09	7.54E-10	7.31E-10	1.49E-09	4.01E-10	3.31E-10	7.32E-10
698	650149.9	4197851	5.00E-09	5.33E-09	1.03E-08	7.52E-10	7.99E-10	1.55E-09	7.35E-10	7.12E-10	1.45E-09	3.90E-10	3.23E-10	7.13E-10
699	650161.2	4197882	4.82E-09	5.13E-09	9.95E-09	7.24E-10	7.70E-10	1.49E-09	7.08E-10	6.86E-10	1.39E-09	3.76E-10	3.11E-10	6.87E-10
700	650172.5	4197912	4.60E-09	4.90E-09	9.50E-09	6.92E-10	7.35E-10	1.43E-09	6.76E-10	6.56E-10	1.33E-09	3.59E-10	2.97E-10	6.57E-10
701	650183.9	4197943	4.36E-09	4.64E-09	9.00E-09	6.55E-10	6.96E-10	1.35E-09	6.40E-10	6.21E-10	1.26E-09	3.40E-10	2.81E-10	6.22E-10
702	650195.2	4197974	4.09E-09	4.36E-09	8.45E-09	6.15E-10	6.54E-10	1.27E-09	6.01E-10	5.83E-10	1.18E-09	3.19E-10	2.64E-10	5.84E-10
703	650206.5	4198004	3.80E-09	4.05E-09	7.86E-09	5.72E-10	6.08E-10	1.18E-09	5.59E-10	5.42E-10	1.10E-09	2.97E-10	2.46E-10	5.43E-10
704	650217.9	4198035	3.52E-09	3.75E-09	7.27E-09	5.29E-10	5.63E-10	1.09E-09	5.17E-10	5.02E-10	1.02E-09	2.75E-10	2.27E-10	5.02E-10
705	650229.2	4198065	3.25E-09	3.46E-09	6.71E-09	4.88E-10	5.19E-10	1.01E-09	4.77E-10	4.63E-10	9.40E-10	2.54E-10	2.10E-10	4.63E-10
706	650240.5	4198096	2.98E-09	3.18E-09	6.16E-09	4.49E-10	4.77E-10	9.26E-10	4.39E-10	4.25E-10	8.64E-10	2.33E-10	1.93E-10	4.26E-10
707	650251.8	4198127	2.74E-09	2.92E-09	5.65E-09	4.11E-10	4.37E-10	8.49E-10	4.02E-10	3.90E-10	7.92E-10	2.14E-10	1.77E-10	3.91E-10
708	650263.2	4198157	2.51E-09	2.67E-09	5.18E-09	3.77E-10	4.01E-10	7.77E-10	3.68E-10	3.57E-10	7.26E-10	1.96E-10	1.62E-10	3.58E-10
709	650274.5	4198188	2.29E-09	2.44E-09	4.74E-09	3.45E-10	3.66E-10	7.11E-10	3.37E-10	3.27E-10	6.64E-10	1.79E-10	1.48E-10	3.27E-10
710	650285.8	4198218	2.10E-09	2.24E-09	4.34E-09	3.16E-10	3.35E-10	6.51E-10	3.09E-10	2.99E-10	6.08E-10	1.64E-10	1.36E-10	3.00E-10
711	649681.3	4197618	8.23E-09	8.77E-09	1.70E-08	1.24E-09	1.32E-09	2.55E-09	1.21E-09	1.17E-09	2.38E-09	6.43E-10	5.32E-10	1.17E-09
712	649712.9	4197525	5.87E-09	6.26E-09	1.21E-08	8.83E-10	9.39E-10	1.82E-09	8.63E-10	8.37E-10	1.70E-09	4.59E-10	3.79E-10	8.38E-10
713	649742.7	4197538	6.07E-09	6.47E-09	1.25E-08	9.12E-10	9.70E-10	1.88E-09	8.92E-10	8.65E-10	1.76E-09	4.74E-10	3.92E-10	8.66E-10
714	649772.6	4197550	6.22E-09	6.63E-09	1.28E-08	9.35E-10	9.94E-10	1.93E-09	9.14E-10	8.86E-10	1.80E-09	4.85E-10	4.02E-10	8.87E-10
715	649802.4	4197563	6.31E-09	6.73E-09	1.30E-08	9.49E-10	1.01E-09	1.96E-09	9.28E-10	8.99E-10	1.83E-09	4.93E-10	4.08E-10	9.01E-10
716	649832.3	4197576	6.36E-09	6.78E-09	1.31E-08	9.56E-10	1.02E-09	1.97E-09	9.35E-10	9.06E-10	1.84E-09	4.97E-10	4.11E-10	9.08E-10
717	649862.1	4197589	6.37E-09	6.79E-09	1.32E-08	9.57E-10	1.02E-09	1.98E-09	9.36E-10	9.07E-10	1.84E-09	4.97E-10	4.11E-10	9.09E-10
718	649892	4197602	6.33E-09	6.75E-09	1.31E-08	9.52E-10	1.01E-09	1.96E-09	9.31E-10	9.03E-10	1.83E-09	4.95E-10	4.09E-10	9.04E-10
719	649921.8	4197615	6.26E-09	6.68E-09	1.29E-08	9.42E-10	1.00E-09	1.94E-09	9.21E-10	8.92E-10	1.81E-09	4.89E-10	4.05E-10	8.94E-10
720	649951.7	4197627	6.16E-09	6.56E-09	1.27E-08	9.26E-10	9.84E-10	1.91E-09	9.05E-10	8.77E-10	1.78E-09	4.81E-10	3.98E-10	8.79E-10
721	649981.5	4197640	6.02E-09	6.41E-09	1.24E-08	9.05E-10	9.62E-10	1.87E-09	8.84E-10	8.57E-10	1.74E-09	4.70E-10	3.89E-10	8.59E-10
722	650011.4	4197653	5.85E-09	6.23E-09	1.21E-08	8.79E-10	9.34E-10	1.81E-09	8.59E-10	8.33E-10	1.69E-09	4.57E-10	3.78E-10	8.34E-10
723	650041.2	4197666	5.64E-09	6.01E-09	1.17E-08	8.48E-10	9.02E-10	1.75E-09	8.29E-10	8.04E-10	1.63E-09	4.41E-10	3.65E-10	8.05E-10
724	650071.1	4197679	5.39E-09	5.75E-09	1.11E-08	8.11E-10	8.62E-10	1.67E-09	7.93E-10	7.68E-10	1.56E-09	4.21E-10	3.48E-10	7.69E-10
725	650100.9	4197691	5.14E-09	5.48E-09	1.06E-08	7.73E-10	8.22E-10	1.60E-09	7.56E-10	7.33E-10	1.49E-09	4.02E-10	3.32E-10	7.34E-10
726	650130.8	4197704	4.89E-09	5.21E-09	1.01E-08	7.35E-10	7.82E-10	1.52E-09	7.19E-10	6.97E-10	1.42E-09	3.82E-10	3.16E-10	6.98E-10
727	650160.6	4197717	4.64E-09	4.94E-09	9.58E-09	6.97E-10	7.41E-10	1.44E-09	6.82E-10	6.61E-10	1.34E-09	3.62E-10	3.00E-10	6.62E-10
728	650190.5	4197730	4.39E-09	4.68E-09	9.07E-09	6.60E-10	7.02E-10	1.36E-09	6.45E-10	6.26E-10	1.27E-09	3.43E-10	2.84E-10	6.27E-10
729	650211	4197752	4.23E-09	4.51E-09	8.74E-09	6.36E-10	6.76E-10	1.31E-09	6.22E-10	6.03E-10	1.22E-09	3.30E-10	2.73E-10	6.04E-10
730	650222.3	4197782	4.15E-09	4.42E-09	8.57E-09	6.24E-10	6.63E-10	1.29E-09	6.10E-10	5.91E-10	1.20E-09	3.24E-10	2.68E-10	5.92E-10
731	650233.6	4197812	4.05E-09	4.31E-09	8.36E-09	6.09E-10	6.47E-10	1.26E-09	5.95E-10	5.77E-10	1.17E-09	3.16E-10	2.62E-10	5.78E-10
732	650244.8	4197843	3.92E-09	4.18E-09	8.11E-09	5.90E-10	6.27E-10	1.22E-09	5.77E-10	5.59E-10	1.14E-09	3.06E-10	2.54E-10	5.60E-10
733	650256.1	4197873	3.76E-09	4.01E-09	7.77E-09	5.66E-10	6.01E-10	1.17E-09	5.53E-10	5.36E-10	1.09E-09	2.94E-10	2.43E-10	5.37E-10
734	650267.4	4197904	3.58E-09	3.82E-09	7.40E-09	5.39E-10	5.73E-10	1.11E-09	5.27E-10	5.11E-10	1.04E-09	2.80E-10	2.32E-10	5.11E-10
735	650278.7	4197934	3.39E-09	3.61E-09	7.00E-09	5.10E-10	5.42E-10	1.05E-09	4.98E-10	4.83E-10	9.82E-10	2.65E-10	2.19E-10	4.84E-10
736	650289.9	4197965	3.19E-09	3.40E-09	6.59E-09	4.80E-10	5.10E-10	9.89E-10	4.69E-10	4.54E-10	9.23E-10	2.49E-10	2.06E-10	4.55E-10
737	650301.2	4197995	2.99E-09	3.18E-09	6.17E-09	4.49E-10	4.77E-10	9.26E-10	4.39E-10	4.25E-10	8.64E-10	2.33E-10	1.93E-10	4.26E-10
738	650312.5	4198026	2.78E-09	2.97E-09	5.75E-09	4.19E-10	4.45E-10	8.64E-10	4.09E-10	3.97E-10	8.06E-10	2.17E-10	1.80E-10	3.97E-10
739	650323.8	4198056	2.59E-09	2.76E-09	5.35E-09	3.89E-10	4.14E-10	8.03E-10	3.80E-10	3.69E-10	7.49E-10	2.02E-10	1.67E-10	3.69E-10
740	650335	4198087	2.40E-09	2.56E-09	4.96E-09	3.61E-10	3.84E-10	7.45E-10	3.53E-10	3.42E-10	6.95E-10	1.88E-10	1.55E-10	3.43E-10
741	650346.3	4198117	2.23E-09	2.37E-09	4.60E-09	3.35E-10	3.56E-10	6.90E-10	3.27E-10	3.17E-10	6.44E-10	1.74E-10	1.44E-10	3.18E-10
742	650357.6	4198148	2.06E-09	2.20E-09	4.26E-09	3.10E-10	3.29E-10	6.39E-10	3.03E-10	2.94E-10	5.97E-10	1.61E-10	1.33E-10	2.94E-10
743	650368.9	4198178	1.91E-09	2.03E-09	3.94E-09	2.87E-10	3.05E-10	5.91E-10	2.80E-10	2.72E-10	5.52E-10	1.49E-10	1.23E-10	2.72E-10
744	650380.1	4198208	1.76E-09	1.88E-09	3.65E-09	2.65E-10	2.82E-10	5.48E-10	2.59E-10	2.52E-10	5.11E-10	1.38E-10	1.14E-10	2.52E-10
745	649681.3	4197518	5.78E-09	6.16E-09	1.19E-08	8.70E-10	9.24E-10	1.79E-09	8.50E-10	8.24E-10	1.67E-09	4.52E-10	3.74E-10	8.25E-10
746	649713.1	4197325	3.05E-09	3.25E-09	6.30E-09	4.58E-10	4.87E-10	9.45E-10	4.48E-10	4.34E-10	8.82E-10	2.38E-10	1.97E-10	4.35E-10
747	649743.5	4197338	3.23E-09	3.45E-09	6.68E-09	4.86E-10	5.17E-10	1.00E-09	4.75E-10	4.61E-10	9.36E-10	2.53E-10	2.09E-10	4.61E-10
748	649773.8	4197351	3.41E-09	3.63E-09	7.04E-09	5.12E-10	5.45E-10	1.06E-09	5.01E-10	4.86E-10	9.87E-10	2.66E-10	2.20E-10	4.86E-10
749	649804.2	4197364	3.57E-09	3.80E-09	7.37E-09	5.37E-10	5.71E-10	1.11E-09	5.25E-10	5.09E-10	1.03E-09	2.79E-10	2.31E-10	5.09E-10
750	649834.5	4197377	3.71E-09	3.95E-09	7.66E-09	5.58E-10	5.93E-10	1.15E-09	5.45E-10	5.29E-10	1.07E-09	2.90E-10	2.40E-10	5.29E-10
751	649864.8	4197390	3.83E-09	4.08E-09	7.90E-09	5.75E-10	6.12E-10	1.19E-09	5.63E-10	5.45E-10	1.11E-09	2.99E-10	2.47E-10	5.46E-10
752	649895.2	4197403	3.92E-09	4.18E-09	8.10E-09	5.90E-10	6.27E-10	1.22E-09	5.77E-10	5.59E-10	1.14E-09	3.06E-10	2.53E-10	5.60E-10
753	649925.5	4197416	4.00E-09	4.26E-09	8.26E-09	6.01E-10	6.39E-10	1.24E-09	5.88E-10	5.70E-10	1.16E-09	3.12E-10	2.58E-10	5.71E-10
754	649955.9	4197429	4.05E-09	4.32E-09	8.37E-09	6.09E-10	6.48E-10	1.26E-09	5.96E-10	5.77E-10	1.17E-09	3.17E-10	2.62E-10	5.78E-10
755	649986.2	4197442	4.08E-09	4.35E-09	8.44E-09	6.14E-10	6.53E-10	1.27E-09	6.00E-10	5.82E-10	1.18E-09	3.19E-10	2.64E-10	5.83E-10
756	650016.6	4197455	4.09E-09	4.36E-09	8.45E-09	6.15E-10	6.54E-10	1.27E-09	6.02E-10	5.83E-10	1.18E-09	3.20E-10	2.64E-10	5.84E-10

757	650046.9	4197468	4.08E-09	4.35E-09	8.43E-09	6.14E-10	6.53E-10	1.27E-09	6.00E-10	5.82E-10	1.18E-09	3.19E-10	2.64E-10	5.83E-10
758	650077.3	4197481	4.05E-09	4.32E-09	8.37E-09	6.09E-10	6.48E-10	1.26E-09	5.96E-10	5.78E-10	1.17E-09	3.17E-10	2.62E-10	5.79E-10
759	650107.6	4197494	4.00E-09	4.26E-09	8.27E-09	6.02E-10	6.40E-10	1.24E-09	5.88E-10	5.70E-10	1.16E-09	3.13E-10	2.59E-10	5.71E-10
760	650138	4197507	3.93E-09	4.19E-09	8.12E-09	5.91E-10	6.28E-10	1.22E-09	5.78E-10	5.60E-10	1.14E-09	3.07E-10	2.54E-10	5.61E-10
761	650168.3	4197520	3.84E-09	4.10E-09	7.94E-09	5.78E-10	6.14E-10	1.19E-09	5.65E-10	5.47E-10	1.11E-09	3.00E-10	2.48E-10	5.48E-10
762	650198.6	4197533	3.74E-09	3.99E-09	7.73E-09	5.62E-10	5.98E-10	1.16E-09	5.50E-10	5.33E-10	1.08E-09	2.92E-10	2.42E-10	5.34E-10
763	650229	4197546	3.62E-09	3.86E-09	7.49E-09	5.45E-10	5.79E-10	1.12E-09	5.33E-10	5.17E-10	1.05E-09	2.83E-10	2.34E-10	5.17E-10
764	650259.3	4197559	3.50E-09	3.73E-09	7.23E-09	5.26E-10	5.59E-10	1.09E-09	5.14E-10	4.98E-10	1.01E-09	2.73E-10	2.26E-10	4.99E-10
765	650289.7	4197572	3.37E-09	3.59E-09	6.96E-09	5.06E-10	5.38E-10	1.04E-09	4.95E-10	4.80E-10	9.75E-10	2.63E-10	2.18E-10	4.81E-10
766	650320	4197585	3.23E-09	3.45E-09	6.68E-09	4.86E-10	5.17E-10	1.00E-09	4.75E-10	4.61E-10	9.36E-10	2.53E-10	2.09E-10	4.62E-10
767	650356.1	4197614	3.08E-09	3.29E-09	6.37E-09	4.64E-10	4.93E-10	9.57E-10	4.53E-10	4.40E-10	8.93E-10	2.41E-10	1.99E-10	4.40E-10
768	650367.6	4197645	3.05E-09	3.25E-09	6.30E-09	4.59E-10	4.88E-10	9.46E-10	4.48E-10	4.35E-10	8.83E-10	2.38E-10	1.97E-10	4.35E-10
769	650379	4197676	3.00E-09	3.20E-09	6.20E-09	4.51E-10	4.80E-10	9.31E-10	4.41E-10	4.28E-10	8.69E-10	2.34E-10	1.94E-10	4.28E-10
770	650390.5	4197707	2.94E-09	3.13E-09	6.07E-09	4.42E-10	4.69E-10	9.11E-10	4.32E-10	4.18E-10	8.50E-10	2.29E-10	1.90E-10	4.19E-10
771	650401.9	4197738	2.86E-09	3.05E-09	5.91E-09	4.30E-10	4.57E-10	8.87E-10	4.20E-10	4.07E-10	8.28E-10	2.23E-10	1.85E-10	4.08E-10
772	650413.4	4197769	2.77E-09	2.95E-09	5.72E-09	4.16E-10	4.43E-10	8.59E-10	4.07E-10	3.95E-10	8.02E-10	2.16E-10	1.79E-10	3.95E-10
773	650424.9	4197800	2.67E-09	2.85E-09	5.51E-09	4.01E-10	4.27E-10	8.28E-10	3.92E-10	3.80E-10	7.73E-10	2.09E-10	1.72E-10	3.81E-10
774	650436.3	4197831	2.56E-09	2.73E-09	5.29E-09	3.85E-10	4.09E-10	7.94E-10	3.76E-10	3.65E-10	7.41E-10	2.00E-10	1.65E-10	3.65E-10
775	650447.8	4197862	2.45E-09	2.61E-09	5.05E-09	3.68E-10	3.91E-10	7.59E-10	3.60E-10	3.49E-10	7.08E-10	1.91E-10	1.58E-10	3.49E-10
776	650459.2	4197893	2.33E-09	2.48E-09	4.81E-09	3.50E-10	3.72E-10	7.22E-10	3.42E-10	3.32E-10	6.74E-10	1.82E-10	1.50E-10	3.32E-10
777	650470.7	4197924	2.21E-09	2.35E-09	4.56E-09	3.32E-10	3.53E-10	6.84E-10	3.24E-10	3.14E-10	6.39E-10	1.72E-10	1.43E-10	3.15E-10
778	650482.2	4197955	2.09E-09	2.22E-09	4.31E-09	3.14E-10	3.33E-10	6.47E-10	3.07E-10	2.97E-10	6.04E-10	1.63E-10	1.35E-10	2.98E-10
779	650493.6	4197986	1.97E-09	2.10E-09	4.06E-09	2.96E-10	3.15E-10	6.10E-10	2.89E-10	2.80E-10	5.70E-10	1.54E-10	1.27E-10	2.81E-10
780	650505.1	4198017	1.85E-09	1.98E-09	3.83E-09	2.79E-10	2.96E-10	5.75E-10	2.73E-10	2.64E-10	5.37E-10	1.45E-10	1.20E-10	2.65E-10
781	650516.5	4198048	1.74E-09	1.86E-09	3.60E-09	2.62E-10	2.79E-10	5.41E-10	2.56E-10	2.49E-10	5.05E-10	1.36E-10	1.13E-10	2.49E-10
782	650528	4198079	1.64E-09	1.75E-09	3.39E-09	2.47E-10	2.62E-10	5.09E-10	2.41E-10	2.34E-10	4.75E-10	1.28E-10	1.06E-10	2.34E-10
783	650539.5	4198110	1.54E-09	1.64E-09	3.19E-09	2.32E-10	2.47E-10	4.79E-10	2.27E-10	2.20E-10	4.47E-10	1.21E-10	9.97E-11	2.20E-10
784	650550.9	4198140	1.45E-09	1.55E-09	3.00E-09	2.18E-10	2.32E-10	4.50E-10	2.13E-10	2.07E-10	4.20E-10	1.13E-10	9.37E-11	2.07E-10
785	650562.4	4198171	1.36E-09	1.45E-09	2.82E-09	2.05E-10	2.18E-10	4.23E-10	2.01E-10	1.94E-10	3.95E-10	1.07E-10	8.81E-11	1.95E-10
786	650573.9	4198202	1.28E-09	1.37E-09	2.65E-09	1.93E-10	2.05E-10	3.98E-10	1.88E-10	1.83E-10	3.71E-10	1.00E-10	8.28E-11	1.83E-10
787	650585.3	4198233	1.21E-09	1.28E-09	2.49E-09	1.81E-10	1.93E-10	3.74E-10	1.77E-10	1.72E-10	3.49E-10	9.41E-11	7.79E-11	1.72E-10
788	649681.3	4197318	2.91E-09	3.10E-09	6.01E-09	4.38E-10	4.65E-10	9.03E-10	4.28E-10	4.15E-10	8.43E-10	2.27E-10	1.88E-10	4.16E-10
789	649713	4197125	1.69E-09	1.81E-09	3.50E-09	2.55E-10	2.71E-10	5.26E-10	2.49E-10	2.41E-10	4.91E-10	1.32E-10	1.09E-10	2.42E-10
790	649743.1	4197138	1.81E-09	1.93E-09	3.74E-09	2.72E-10	2.89E-10	5.62E-10	2.66E-10	2.58E-10	5.24E-10	1.41E-10	1.17E-10	2.58E-10
791	649773.2	4197151	1.93E-09	2.06E-09	3.98E-09	2.90E-10	3.08E-10	5.98E-10	2.84E-10	2.75E-10	5.58E-10	1.51E-10	1.25E-10	2.75E-10
792	649803.3	4197164	2.05E-09	2.18E-09	4.23E-09	3.08E-10	3.27E-10	6.35E-10	3.01E-10	2.91E-10	5.92E-10	1.60E-10	1.32E-10	2.92E-10
793	649833.4	4197177	2.16E-09	2.30E-09	4.46E-09	3.25E-10	3.45E-10	6.70E-10	3.18E-10	3.08E-10	6.26E-10	1.69E-10	1.40E-10	3.08E-10
794	649863.4	4197189	2.27E-09	2.42E-09	4.70E-09	3.42E-10	3.63E-10	7.05E-10	3.34E-10	3.24E-10	6.58E-10	1.78E-10	1.47E-10	3.24E-10
795	649893.5	4197202	2.38E-09	2.53E-09	4.91E-09	3.58E-10	3.80E-10	7.38E-10	3.50E-10	3.39E-10	6.88E-10	1.86E-10	1.54E-10	3.39E-10
796	649923.6	4197215	2.47E-09	2.64E-09	5.11E-09	3.72E-10	3.96E-10	7.68E-10	3.64E-10	3.53E-10	7.17E-10	1.93E-10	1.60E-10	3.53E-10
797	649953.7	4197228	2.56E-09	2.73E-09	5.30E-09	3.86E-10	4.10E-10	7.96E-10	3.77E-10	3.65E-10	7.43E-10	2.00E-10	1.66E-10	3.66E-10
798	649983.8	4197241	2.64E-09	2.82E-09	5.46E-09	3.97E-10	4.23E-10	8.20E-10	3.89E-10	3.77E-10	7.65E-10	2.06E-10	1.71E-10	3.77E-10
799	650013.9	4197254	2.71E-09	2.89E-09	5.60E-09	4.08E-10	4.33E-10	8.41E-10	3.99E-10	3.86E-10	7.85E-10	2.12E-10	1.75E-10	3.87E-10
800	650044	4197267	2.77E-09	2.95E-09	5.72E-09	4.16E-10	4.42E-10	8.59E-10	4.07E-10	3.94E-10	8.01E-10	2.16E-10	1.79E-10	3.95E-10
801	650074.1	4197280	2.81E-09	3.00E-09	5.81E-09	4.23E-10	4.49E-10	8.72E-10	4.13E-10	4.01E-10	8.14E-10	2.20E-10	1.82E-10	4.01E-10
802	650104.2	4197293	2.84E-09	3.03E-09	5.87E-09	4.28E-10	4.55E-10	8.82E-10	4.18E-10	4.05E-10	8.23E-10	2.22E-10	1.84E-10	4.06E-10
803	650134.3	4197306	2.86E-09	3.05E-09	5.92E-09	4.31E-10	4.58E-10	8.88E-10	4.21E-10	4.08E-10	8.29E-10	2.24E-10	1.85E-10	4.09E-10
804	650164.4	4197319	2.87E-09	3.06E-09	5.93E-09	4.32E-10	4.59E-10	8.91E-10	4.22E-10	4.09E-10	8.31E-10	2.24E-10	1.86E-10	4.10E-10
805	650194.4	4197332	2.87E-09	3.06E-09	5.92E-09	4.31E-10	4.58E-10	8.89E-10	4.21E-10	4.08E-10	8.30E-10	2.24E-10	1.85E-10	4.09E-10
806	650224.5	4197344	2.85E-09	3.04E-09	5.89E-09	4.29E-10	4.56E-10	8.84E-10	4.19E-10	4.06E-10	8.25E-10	2.23E-10	1.84E-10	4.07E-10
807	650254.6	4197357	2.82E-09	3.01E-09	5.83E-09	4.25E-10	4.51E-10	8.76E-10	4.15E-10	4.02E-10	8.18E-10	2.21E-10	1.83E-10	4.03E-10
808	650284.7	4197370	2.79E-09	2.97E-09	5.76E-09	4.19E-10	4.46E-10	8.65E-10	4.10E-10	3.97E-10	8.07E-10	2.18E-10	1.80E-10	3.98E-10
809	650314.8	4197383	2.74E-09	2.92E-09	5.66E-09	4.12E-10	4.38E-10	8.50E-10	4.03E-10	3.90E-10	7.93E-10	2.14E-10	1.77E-10	3.91E-10
810	650344.9	4197396	2.68E-09	2.86E-09	5.55E-09	4.04E-10	4.29E-10	8.33E-10	3.95E-10	3.83E-10	7.77E-10	2.10E-10	1.73E-10	3.83E-10
811	650375	4197409	2.62E-09	2.80E-09	5.42E-09	3.94E-10	4.19E-10	8.14E-10	3.86E-10	3.74E-10	7.60E-10	2.05E-10	1.70E-10	3.74E-10
812	650405.1	4197422	2.56E-09	2.73E-09	5.29E-09	3.85E-10	4.09E-10	7.94E-10	3.76E-10	3.65E-10	7.41E-10	2.00E-10	1.65E-10	3.65E-10
813	650435.2	4197435	2.49E-09	2.65E-09	5.14E-09	3.74E-10	3.98E-10	7.72E-10	3.66E-10	3.55E-10	7.20E-10	1.94E-10	1.61E-10	3.55E-10
814	650465.3	4197448	2.41E-09	2.57E-09	4.99E-09	3.63E-10	3.86E-10	7.49E-10	3.55E-10	3.44E-10	6.99E-10	1.89E-10	1.56E-10	3.45E-10
815	650501	4197476	2.34E-09	2.49E-09	4.83E-09	3.51E-10	3.74E-10	7.25E-10	3.44E-10	3.33E-10	6.77E-10	1.83E-10	1.51E-10	3.34E-10
816	650512.4	4197507	2.33E-09	2.48E-09	4.81E-09	3.50E-10	3.72E-10	7.22E-10	3.42E-10	3.32E-10	6.74E-10	1.82E-10	1.50E-10	3.32E-10
817	650523.8	4197538	2.31E-09	2.46E-09	4.77E-09	3.47E-10	3.69E-10	7.17E-10	3.40E-10	3.29E-10	6.69E-10	1.81E-10	1.49E-10	3.30E-10
818	650535.1	4197568	2.28E-09	2.44E-09	4.72E-09	3.43E-10	3.65E-10	7.09E-10	3.36E-10	3.26E-10	6.61E-10	1.78E-10	1.48E-10	3.26E-10
819	650546.5	4197599	2.25E-09	2.40E-09	4.65E-09	3.38E-10	3.59E-10	6.98E-10	3.31E-10	3.20E-10	6.51E-10	1.76E-10	1.45E-10	3.21E-10
820	650557.9	4197630	2.21E-09	2.35E-09	4.56E-09	3.32E-10	3.53E-10	6.84E-10	3.24E-10	3.14E-10	6.39E-10	1.72E-10	1.43E-10	3.15E-10
821	650569.2	4197660	2.16E-09	2.30E-09	4.45E-09	3.24E-10	3.45E-10	6.69E-10	3.17E-10	3.07E-10	6.24E-10	1.68E-10	1.39E-10	3.08E-10
822	650580.6	4197691	2.10E-09	2.24E-09	4.33E-09	3.15E-10	3.35E-10	6.51E-10	3.08E-10	2.99E-10	6.07E-10	1.64E-10	1.36E-10	2.99E-10
823	650592	4197722	2.03E-09	2.17E-09	4.20E-09	3.06E-10	3.25E-10	6.31E-10	2.99E-10	2.90E-10	5.89E-10	1.59E-10	1.31E-10	2.90E-10
824	650603.3	4197752	1.97E-09	2.10E-09	4.06E-09	2.96E-10	3.14E-10	6.10E-10	2.89E-10	2.80E-10	5.69E-10	1.54E-10	1.27E-10	2.81E-10
825	650614.7	4197783	1.89E-09	2.02E-09	3.91E-09	2.85E-10	3.03E-10	5.87E-10	2.78E-10	2.70E-10	5.48E-10	1.48E-10	1.22E-10	2.70E-10
826	650626	4197814	1.82E-09	1.94E-09	3.75E-09	2.73E-10	2.91E-10	5.64E-10	2.67E-10	2.59E-10	5.26E-10	1.42E-10	1.17E-10	2.59E-10
827	650637.4	4197845	1.74E-09	1.86E-09	3.60E-09	2.62E-10	2.78E-10	5.40E-10	2.56E-10	2.48E-10	5.04E-10	1.36E-10	1.12E-10	2.48E-10
828	650648.8	4197875	1.66E-09	1.77E-09	3.44E-09	2.50E-10	2.66E-10	5.16E-10	2.45E-10	2.37E-10	4.82E-10	1.30E-10	1.07E-10	2.37E-10
829	650660.1	4197906	1.59E-09	1.69E-09	3.28E-09	2.39E-10	2.54E-10	4.92E-10	2.33E-10	2.26E-10	4.59E-10	1.24E-10	1.03E-10	2.26E-10
830	650671.5	4197937	1.51E-09	1.61E-09	3.12E-09	2.27E-10	2.42E-10	4.69E-10	2.22E-10	2.15E-10	4.38E-10	1.18E-10	9.77E-11	2.16E-10
831	650682.9	4197967	1.44E-09	1.53E-09	2.97E-09	2.16E-10	2.30E-10	4.47E-10	2.12E-10	2.05E-10	4.17E-10	1.12E-10	9.30E-11	2.05E-10
832	650694.2	4197998	1.37E-09	1.46E-09	2.83E-09	2.06E-10	2.19E-10	4.25E-10	2.01E-10	1.95E-10	3.97E-10	1.07E-10	8.85E-11	1.95E-10

833	650705.6	4198029	1.30E-09	1.39E-09	2.69E-09	1.96E-10	2.08E-10	4.04E-10	1.92E-10	1.86E-10	3.77E-10	1.02E-10	8.42E-11	1.86E-10
834	650717	4198060	1.24E-09	1.32E-09	2.56E-09	1.86E-10	1.98E-10	3.84E-10	1.82E-10	1.77E-10	3.59E-10	9.68E-11	8.01E-11	1.77E-10
835	650728.3	4198090	1.18E-09	1.26E-09	2.43E-09	1.77E-10	1.88E-10	3.66E-10	1.73E-10	1.68E-10	3.41E-10	9.21E-11	7.62E-11	1.68E-10
836	650739.7	4198121	1.12E-09	1.19E-09	2.31E-09	1.68E-10	1.79E-10	3.48E-10	1.65E-10	1.60E-10	3.24E-10	8.75E-11	7.24E-11	1.60E-10
837	650751.1	4198152	1.06E-09	1.14E-09	2.20E-09	1.60E-10	1.70E-10	3.30E-10	1.57E-10	1.52E-10	3.08E-10	8.32E-11	6.88E-11	1.52E-10
838	650762.4	4198182	1.01E-09	1.08E-09	2.09E-09	1.52E-10	1.62E-10	3.14E-10	1.49E-10	1.44E-10	2.93E-10	7.91E-11	6.54E-11	1.44E-10
839	650773.8	4198213	9.62E-10	1.03E-09	1.99E-09	1.45E-10	1.54E-10	2.98E-10	1.41E-10	1.37E-10	2.79E-10	7.51E-11	6.22E-11	1.37E-10
840	650785.1	4198244	9.14E-10	9.74E-10	1.89E-09	1.37E-10	1.46E-10	2.84E-10	1.34E-10	1.30E-10	2.65E-10	7.14E-11	5.91E-11	1.30E-10
841	649681.3	4197118	1.60E-09	1.71E-09	3.32E-09	2.41E-10	2.57E-10	4.98E-10	2.36E-10	2.29E-10	4.65E-10	1.25E-10	1.04E-10	2.29E-10
842	649713.1	4196925	1.04E-09	1.11E-09	2.15E-09	1.56E-10	1.66E-10	3.23E-10	1.53E-10	1.48E-10	3.01E-10	8.12E-11	6.72E-11	1.48E-10
843	649743.5	4196938	1.11E-09	1.18E-09	2.29E-09	1.67E-10	1.77E-10	3.44E-10	1.63E-10	1.58E-10	3.21E-10	8.65E-11	7.16E-11	1.58E-10
844	649773.9	4196951	1.18E-09	1.26E-09	2.44E-09	1.77E-10	1.88E-10	3.66E-10	1.73E-10	1.68E-10	3.41E-10	9.21E-11	7.62E-11	1.68E-10
845	649804.3	4196964	1.25E-09	1.34E-09	2.59E-09	1.89E-10	2.00E-10	3.89E-10	1.84E-10	1.79E-10	3.63E-10	9.80E-11	8.10E-11	1.79E-10
846	649834.7	4196977	1.33E-09	1.42E-09	2.75E-09	2.00E-10	2.13E-10	4.13E-10	1.96E-10	1.90E-10	3.85E-10	1.04E-10	8.60E-11	1.90E-10
847	649865.1	4196990	1.41E-09	1.50E-09	2.91E-09	2.12E-10	2.25E-10	4.37E-10	2.07E-10	2.01E-10	4.08E-10	1.10E-10	9.10E-11	2.01E-10
848	649895.5	4197003	1.48E-09	1.58E-09	3.07E-09	2.23E-10	2.37E-10	4.60E-10	2.18E-10	2.12E-10	4.30E-10	1.16E-10	9.59E-11	2.12E-10
849	649925.9	4197016	1.56E-09	1.66E-09	3.22E-09	2.35E-10	2.49E-10	4.84E-10	2.29E-10	2.22E-10	4.52E-10	1.22E-10	1.01E-10	2.23E-10
850	649956.3	4197029	1.64E-09	1.74E-09	3.38E-09	2.46E-10	2.61E-10	5.07E-10	2.40E-10	2.33E-10	4.73E-10	1.28E-10	1.06E-10	2.33E-10
851	649986.7	4197042	1.71E-09	1.82E-09	3.53E-09	2.57E-10	2.73E-10	5.30E-10	2.51E-10	2.43E-10	4.94E-10	1.33E-10	1.10E-10	2.44E-10
852	650017.1	4197055	1.78E-09	1.89E-09	3.67E-09	2.67E-10	2.84E-10	5.51E-10	2.61E-10	2.53E-10	5.15E-10	1.39E-10	1.15E-10	2.54E-10
853	650047.5	4197069	1.84E-09	1.96E-09	3.81E-09	2.77E-10	2.95E-10	5.72E-10	2.71E-10	2.63E-10	5.34E-10	1.44E-10	1.19E-10	2.63E-10
854	650077.9	4197082	1.90E-09	2.03E-09	3.93E-09	2.86E-10	3.04E-10	5.90E-10	2.80E-10	2.71E-10	5.51E-10	1.49E-10	1.23E-10	2.72E-10
855	650108.3	4197095	1.96E-09	2.09E-09	4.04E-09	2.94E-10	3.13E-10	6.07E-10	2.88E-10	2.79E-10	5.66E-10	1.53E-10	1.26E-10	2.79E-10
856	650138.7	4197108	2.00E-09	2.14E-09	4.14E-09	3.01E-10	3.20E-10	6.21E-10	2.94E-10	2.85E-10	5.80E-10	1.56E-10	1.29E-10	2.86E-10
857	650169.1	4197121	2.04E-09	2.18E-09	4.22E-09	3.07E-10	3.27E-10	6.34E-10	3.00E-10	2.91E-10	5.91E-10	1.60E-10	1.32E-10	2.92E-10
858	650199.5	4197134	2.07E-09	2.21E-09	4.29E-09	3.12E-10	3.32E-10	6.44E-10	3.05E-10	2.96E-10	6.01E-10	1.62E-10	1.34E-10	2.96E-10
859	650229.9	4197147	2.10E-09	2.24E-09	4.34E-09	3.16E-10	3.35E-10	6.51E-10	3.09E-10	2.99E-10	6.08E-10	1.64E-10	1.36E-10	3.00E-10
860	650260.3	4197160	2.12E-09	2.26E-09	4.37E-09	3.18E-10	3.38E-10	6.57E-10	3.11E-10	3.02E-10	6.13E-10	1.65E-10	1.37E-10	3.02E-10
861	650290.7	4197173	2.13E-09	2.27E-09	4.40E-09	3.20E-10	3.40E-10	6.60E-10	3.13E-10	3.03E-10	6.16E-10	1.66E-10	1.38E-10	3.04E-10
862	650321.1	4197186	2.13E-09	2.27E-09	4.41E-09	3.21E-10	3.41E-10	6.62E-10	3.14E-10	3.04E-10	6.18E-10	1.67E-10	1.38E-10	3.05E-10
863	650351.5	4197199	2.13E-09	2.27E-09	4.40E-09	3.20E-10	3.41E-10	6.61E-10	3.13E-10	3.04E-10	6.17E-10	1.66E-10	1.38E-10	3.04E-10
864	650381.9	4197212	2.12E-09	2.26E-09	4.38E-09	3.19E-10	3.39E-10	6.58E-10	3.12E-10	3.02E-10	6.14E-10	1.66E-10	1.37E-10	3.03E-10
865	650412.3	4197225	2.10E-09	2.24E-09	4.34E-09	3.16E-10	3.36E-10	6.52E-10	3.09E-10	2.99E-10	6.08E-10	1.64E-10	1.36E-10	3.00E-10
866	650442.7	4197238	2.08E-09	2.22E-09	4.30E-09	3.13E-10	3.32E-10	6.45E-10	3.06E-10	2.96E-10	6.02E-10	1.62E-10	1.34E-10	2.97E-10
867	650473.1	4197251	2.05E-09	2.19E-09	4.24E-09	3.09E-10	3.28E-10	6.37E-10	3.02E-10	2.92E-10	5.94E-10	1.60E-10	1.33E-10	2.93E-10
868	650503.5	4197264	2.02E-09	2.15E-09	4.17E-09	3.04E-10	3.23E-10	6.27E-10	2.97E-10	2.88E-10	5.85E-10	1.58E-10	1.31E-10	2.88E-10
869	650533.9	4197277	1.98E-09	2.12E-09	4.10E-09	2.98E-10	3.17E-10	6.16E-10	2.92E-10	2.83E-10	5.75E-10	1.55E-10	1.28E-10	2.83E-10
870	650564.3	4197290	1.95E-09	2.07E-09	4.02E-09	2.93E-10	3.11E-10	6.04E-10	2.86E-10	2.77E-10	5.63E-10	1.52E-10	1.26E-10	2.78E-10
871	650594.7	4197303	1.90E-09	2.03E-09	3.93E-09	2.86E-10	3.04E-10	5.90E-10	2.80E-10	2.71E-10	5.51E-10	1.49E-10	1.23E-10	2.72E-10
872	650625.1	4197316	1.86E-09	1.98E-09	3.84E-09	2.79E-10	2.97E-10	5.76E-10	2.73E-10	2.65E-10	5.38E-10	1.45E-10	1.20E-10	2.65E-10
873	650646.1	4197338	1.84E-09	1.96E-09	3.79E-09	2.76E-10	2.94E-10	5.70E-10	2.70E-10	2.62E-10	5.32E-10	1.43E-10	1.19E-10	2.62E-10
874	650657.6	4197370	1.84E-09	1.96E-09	3.80E-09	2.77E-10	2.94E-10	5.71E-10	2.70E-10	2.62E-10	5.32E-10	1.44E-10	1.19E-10	2.63E-10
875	650669	4197401	1.84E-09	1.96E-09	3.79E-09	2.76E-10	2.93E-10	5.70E-10	2.70E-10	2.62E-10	5.32E-10	1.43E-10	1.19E-10	2.62E-10
876	650680.5	4197432	1.83E-09	1.95E-09	3.77E-09	2.75E-10	2.92E-10	5.67E-10	2.69E-10	2.60E-10	5.29E-10	1.43E-10	1.18E-10	2.61E-10
877	650692	4197463	1.81E-09	1.93E-09	3.74E-09	2.72E-10	2.90E-10	5.62E-10	2.66E-10	2.58E-10	5.25E-10	1.42E-10	1.17E-10	2.59E-10
878	650703.5	4197494	1.79E-09	1.91E-09	3.70E-09	2.69E-10	2.86E-10	5.56E-10	2.63E-10	2.55E-10	5.19E-10	1.40E-10	1.16E-10	2.56E-10
879	650715	4197525	1.76E-09	1.88E-09	3.65E-09	2.65E-10	2.82E-10	5.47E-10	2.59E-10	2.51E-10	5.11E-10	1.38E-10	1.14E-10	2.52E-10
880	650726.4	4197556	1.73E-09	1.85E-09	3.58E-09	2.61E-10	2.77E-10	5.38E-10	2.55E-10	2.47E-10	5.02E-10	1.35E-10	1.12E-10	2.47E-10
881	650737.9	4197587	1.70E-09	1.81E-09	3.51E-09	2.55E-10	2.71E-10	5.26E-10	2.49E-10	2.42E-10	4.91E-10	1.33E-10	1.10E-10	2.42E-10
882	650749.4	4197618	1.66E-09	1.77E-09	3.42E-09	2.49E-10	2.65E-10	5.14E-10	2.43E-10	2.36E-10	4.79E-10	1.29E-10	1.07E-10	2.36E-10
883	650760.9	4197649	1.61E-09	1.72E-09	3.33E-09	2.42E-10	2.58E-10	5.00E-10	2.37E-10	2.30E-10	4.66E-10	1.26E-10	1.04E-10	2.30E-10
884	650772.4	4197680	1.56E-09	1.67E-09	3.23E-09	2.35E-10	2.50E-10	4.85E-10	2.30E-10	2.23E-10	4.53E-10	1.22E-10	1.01E-10	2.23E-10
885	650783.9	4197711	1.51E-09	1.61E-09	3.13E-09	2.28E-10	2.42E-10	4.70E-10	2.23E-10	2.16E-10	4.39E-10	1.18E-10	9.79E-11	2.16E-10
886	650795.3	4197742	1.46E-09	1.56E-09	3.02E-09	2.20E-10	2.34E-10	4.54E-10	2.15E-10	2.08E-10	4.23E-10	1.14E-10	9.45E-11	2.09E-10
887	650806.8	4197773	1.41E-09	1.50E-09	2.91E-09	2.12E-10	2.25E-10	4.37E-10	2.07E-10	2.01E-10	4.08E-10	1.10E-10	9.10E-11	2.01E-10
888	650818.3	4197804	1.36E-09	1.44E-09	2.80E-09	2.04E-10	2.17E-10	4.20E-10	1.99E-10	1.93E-10	3.92E-10	1.06E-10	8.76E-11	1.93E-10
889	650829.8	4197835	1.30E-09	1.39E-09	2.69E-09	1.96E-10	2.08E-10	4.04E-10	1.91E-10	1.85E-10	3.77E-10	1.02E-10	8.41E-11	1.86E-10
890	650841.3	4197866	1.25E-09	1.33E-09	2.58E-09	1.88E-10	2.00E-10	3.87E-10	1.84E-10	1.78E-10	3.62E-10	9.76E-11	8.07E-11	1.78E-10
891	650852.7	4197897	1.20E-09	1.28E-09	2.47E-09	1.80E-10	1.91E-10	3.71E-10	1.76E-10	1.71E-10	3.47E-10	9.35E-11	7.74E-11	1.71E-10
892	650864.2	4197928	1.15E-09	1.22E-09	2.37E-09	1.73E-10	1.83E-10	3.56E-10	1.69E-10	1.64E-10	3.32E-10	8.97E-11	7.42E-11	1.64E-10
893	650875.7	4197959	1.10E-09	1.17E-09	2.27E-09	1.65E-10	1.76E-10	3.41E-10	1.62E-10	1.57E-10	3.18E-10	8.59E-11	7.11E-11	1.57E-10
894	650887.2	4197990	1.05E-09	1.12E-09	2.18E-09	1.58E-10	1.68E-10	3.27E-10	1.55E-10	1.50E-10	3.05E-10	8.23E-11	6.81E-11	1.50E-10
895	650898.7	4198021	1.01E-09	1.08E-09	2.09E-09	1.52E-10	1.61E-10	3.13E-10	1.48E-10	1.44E-10	2.92E-10	7.89E-11	6.52E-11	1.44E-10
896	650910.1	4198052	9.67E-10	1.03E-09	2.00E-09	1.45E-10	1.55E-10	3.00E-10	1.42E-10	1.38E-10	2.80E-10	7.56E-11	6.25E-11	1.38E-10
897	650921.6	4198083	9.26E-10	9.87E-10	1.91E-09	1.39E-10	1.48E-10	2.87E-10	1.36E-10	1.32E-10	2.68E-10	7.23E-11	5.99E-11	1.32E-10
898	650933.1	4198114	8.87E-10	9.45E-10	1.83E-09	1.33E-10	1.42E-10	2.75E-10	1.30E-10	1.26E-10	2.57E-10	6.93E-11	5.73E-11	1.27E-10
899	650944.6	4198145	8.49E-10	9.05E-10	1.75E-09	1.28E-10	1.36E-10	2.63E-10	1.25E-10	1.21E-10	2.46E-10	6.63E-11	5.49E-11	1.21E-10
900	650956.1	4198176	8.12E-10	8.66E-10	1.68E-09	1.22E-10	1.30E-10	2.52E-10	1.19E-10	1.16E-10	2.35E-10	6.35E-11	5.25E-11	1.16E-10
901	650967.5	4198207	7.77E-10	8.29E-10	1.61E-09	1.17E-10	1.24E-10	2.41E-10	1.14E-10	1.11E-10	2.25E-10	6.07E-11	5.02E-11	1.11E-10
902	650979	4198238	7.44E-10	7.93E-10	1.54E-09	1.12E-10	1.19E-10	2.31E-10	1.09E-10	1.06E-10	2.15E-10	5.81E-11	4.81E-11	1.06E-10
903	650990.5	4198269	7.12E-10	7.59E-10	1.47E-09	1.07E-10	1.14E-10	2.21E-10	1.05E-10	1.01E-10	2.06E-10	5.56E-11	4.60E-11	1.02E-10
904	649681.3	4196918	9.88E-10	1.05E-09	2.04E-09	1.49E-10	1.58E-10	3.07E-10	1.45E-10	1.41E-10	2.86E-10	7.72E-11	6.38E-11	1.41E-10
905	649713	4196725	7.03E-10	7.50E-10	1.45E-09	1.06E-10	1.12E-10	2.18E-10	1.03E-10	1.00E-10	2.04E-10	5.49E-11	4.54E-11	1.00E-10
906	649743.3	4196738	7.42E-10	7.91E-10	1.53E-09	1.12E-10	1.19E-10	2.30E-10	1.09E-10	1.06E-10	2.15E-10	5.79E-11	4.79E-11	1.06E-10
907	649773.5	4196751	7.83E-10	8.35E-10	1.62E-09	1.18E-10	1.25E-10	2.43E-10	1.15E-10	1.12E-10	2.27E-10	6.12E-11	5.06E-11	1.12E-10
908	649803.7	4196764	8.27E-10	8.82E-10	1.71E-09	1.24E-10	1.32E-10	2.57E-10	1.22E-10	1.18E-10	2.39E-10	6.46E-11	5.34E-11	1.18E-10

909	649833.9	4196777	8.74E-10	9.31E-10	1.80E-09	1.31E-10	1.40E-10	2.71E-10	1.28E-10	1.24E-10	2.53E-10	6.82E-11	5.64E-11	1.25E-10
910	649864.1	4196790	9.22E-10	9.83E-10	1.91E-09	1.39E-10	1.47E-10	2.86E-10	1.36E-10	1.31E-10	2.67E-10	7.20E-11	5.96E-11	1.32E-10
911	649894.3	4196803	9.72E-10	1.04E-09	2.01E-09	1.46E-10	1.55E-10	3.02E-10	1.43E-10	1.39E-10	2.82E-10	7.60E-11	6.28E-11	1.39E-10
912	649924.5	4196816	1.02E-09	1.09E-09	2.12E-09	1.54E-10	1.64E-10	3.18E-10	1.51E-10	1.46E-10	2.97E-10	8.00E-11	6.62E-11	1.46E-10
913	649954.7	4196829	1.08E-09	1.15E-09	2.23E-09	1.62E-10	1.72E-10	3.34E-10	1.58E-10	1.54E-10	3.12E-10	8.41E-11	6.96E-11	1.54E-10
914	649984.9	4196842	1.13E-09	1.21E-09	2.34E-09	1.70E-10	1.81E-10	3.51E-10	1.66E-10	1.61E-10	3.27E-10	8.83E-11	7.30E-11	1.61E-10
915	650015.1	4196855	1.18E-09	1.26E-09	2.45E-09	1.78E-10	1.89E-10	3.67E-10	1.74E-10	1.69E-10	3.43E-10	9.25E-11	7.65E-11	1.69E-10
916	650045.3	4196868	1.24E-09	1.32E-09	2.56E-09	1.86E-10	1.98E-10	3.84E-10	1.82E-10	1.76E-10	3.58E-10	9.66E-11	7.99E-11	1.77E-10
917	650075.5	4196881	1.29E-09	1.37E-09	2.66E-09	1.94E-10	2.06E-10	4.00E-10	1.90E-10	1.84E-10	3.73E-10	1.01E-10	8.33E-11	1.84E-10
918	650105.7	4196893	1.34E-09	1.43E-09	2.77E-09	2.01E-10	2.14E-10	4.15E-10	1.97E-10	1.91E-10	3.88E-10	1.05E-10	8.65E-11	1.91E-10
919	650135.9	4196906	1.39E-09	1.48E-09	2.87E-09	2.09E-10	2.22E-10	4.30E-10	2.04E-10	1.98E-10	4.02E-10	1.08E-10	8.96E-11	1.98E-10
920	650166.1	4196919	1.43E-09	1.53E-09	2.96E-09	2.15E-10	2.29E-10	4.44E-10	2.11E-10	2.04E-10	4.15E-10	1.12E-10	9.25E-11	2.04E-10
921	650196.3	4196932	1.47E-09	1.57E-09	3.04E-09	2.22E-10	2.36E-10	4.57E-10	2.17E-10	2.10E-10	4.27E-10	1.15E-10	9.52E-11	2.10E-10
922	650226.5	4196945	1.51E-09	1.61E-09	3.12E-09	2.27E-10	2.42E-10	4.69E-10	2.22E-10	2.15E-10	4.38E-10	1.18E-10	9.77E-11	2.16E-10
923	650256.7	4196958	1.55E-09	1.65E-09	3.19E-09	2.32E-10	2.47E-10	4.80E-10	2.27E-10	2.20E-10	4.48E-10	1.21E-10	9.99E-11	2.21E-10
924	650286.9	4196971	1.58E-09	1.68E-09	3.25E-09	2.37E-10	2.52E-10	4.89E-10	2.32E-10	2.25E-10	4.56E-10	1.23E-10	1.02E-10	2.25E-10
925	650317.1	4196984	1.60E-09	1.71E-09	3.30E-09	2.41E-10	2.56E-10	4.96E-10	2.35E-10	2.28E-10	4.63E-10	1.25E-10	1.03E-10	2.28E-10
926	650347.4	4196997	1.62E-09	1.73E-09	3.34E-09	2.43E-10	2.59E-10	5.02E-10	2.38E-10	2.31E-10	4.69E-10	1.26E-10	1.05E-10	2.31E-10
927	650377.6	4197010	1.64E-09	1.75E-09	3.38E-09	2.46E-10	2.62E-10	5.08E-10	2.41E-10	2.33E-10	4.74E-10	1.28E-10	1.06E-10	2.34E-10
928	650407.8	4197023	1.65E-09	1.76E-09	3.41E-09	2.48E-10	2.64E-10	5.12E-10	2.43E-10	2.35E-10	4.78E-10	1.29E-10	1.07E-10	2.35E-10
929	650438	4197036	1.66E-09	1.77E-09	3.42E-09	2.49E-10	2.65E-10	5.14E-10	2.44E-10	2.36E-10	4.80E-10	1.29E-10	1.07E-10	2.36E-10
930	650468.2	4197049	1.66E-09	1.77E-09	3.43E-09	2.49E-10	2.65E-10	5.14E-10	2.44E-10	2.36E-10	4.80E-10	1.30E-10	1.07E-10	2.37E-10
931	650498.4	4197062	1.66E-09	1.77E-09	3.42E-09	2.49E-10	2.65E-10	5.14E-10	2.43E-10	2.36E-10	4.79E-10	1.29E-10	1.07E-10	2.36E-10
932	650528.6	4197075	1.65E-09	1.76E-09	3.41E-09	2.48E-10	2.64E-10	5.12E-10	2.43E-10	2.35E-10	4.78E-10	1.29E-10	1.07E-10	2.36E-10
933	650558.8	4197088	1.64E-09	1.75E-09	3.39E-09	2.47E-10	2.62E-10	5.09E-10	2.41E-10	2.34E-10	4.75E-10	1.28E-10	1.06E-10	2.34E-10
934	650589	4197101	1.63E-09	1.74E-09	3.37E-09	2.45E-10	2.60E-10	5.05E-10	2.40E-10	2.32E-10	4.72E-10	1.27E-10	1.05E-10	2.33E-10
935	650619.2	4197114	1.61E-09	1.72E-09	3.33E-09	2.43E-10	2.58E-10	5.01E-10	2.37E-10	2.30E-10	4.67E-10	1.26E-10	1.04E-10	2.30E-10
936	650649.4	4197127	1.59E-09	1.70E-09	3.29E-09	2.40E-10	2.55E-10	4.95E-10	2.34E-10	2.27E-10	4.62E-10	1.25E-10	1.03E-10	2.28E-10
937	650679.6	4197140	1.57E-09	1.68E-09	3.25E-09	2.36E-10	2.51E-10	4.88E-10	2.31E-10	2.24E-10	4.55E-10	1.23E-10	1.02E-10	2.24E-10
938	650709.8	4197153	1.55E-09	1.65E-09	3.20E-09	2.33E-10	2.48E-10	4.80E-10	2.28E-10	2.21E-10	4.48E-10	1.21E-10	1.00E-10	2.21E-10
939	650740	4197166	1.52E-09	1.62E-09	3.15E-09	2.29E-10	2.43E-10	4.73E-10	2.24E-10	2.17E-10	4.41E-10	1.19E-10	9.84E-11	2.17E-10
940	650770.2	4197179	1.50E-09	1.59E-09	3.09E-09	2.25E-10	2.39E-10	4.64E-10	2.20E-10	2.13E-10	4.33E-10	1.17E-10	9.67E-11	2.14E-10
941	650791	4197201	1.49E-09	1.58E-09	3.07E-09	2.23E-10	2.38E-10	4.61E-10	2.18E-10	2.12E-10	4.30E-10	1.16E-10	9.60E-11	2.12E-10
942	650802.4	4197231	1.49E-09	1.59E-09	3.08E-09	2.24E-10	2.39E-10	4.63E-10	2.19E-10	2.13E-10	4.32E-10	1.17E-10	9.64E-11	2.13E-10
943	650813.8	4197262	1.50E-09	1.59E-09	3.09E-09	2.25E-10	2.39E-10	4.64E-10	2.20E-10	2.13E-10	4.33E-10	1.17E-10	9.66E-11	2.13E-10
944	650825.3	4197293	1.50E-09	1.59E-09	3.09E-09	2.25E-10	2.39E-10	4.64E-10	2.20E-10	2.13E-10	4.33E-10	1.17E-10	9.66E-11	2.13E-10
945	650836.7	4197324	1.49E-09	1.59E-09	3.08E-09	2.24E-10	2.38E-10	4.63E-10	2.19E-10	2.12E-10	4.32E-10	1.16E-10	9.63E-11	2.13E-10
946	650848.1	4197355	1.48E-09	1.58E-09	3.06E-09	2.23E-10	2.37E-10	4.60E-10	2.18E-10	2.11E-10	4.29E-10	1.16E-10	9.58E-11	2.12E-10
947	650859.5	4197386	1.47E-09	1.57E-09	3.04E-09	2.21E-10	2.35E-10	4.56E-10	2.16E-10	2.10E-10	4.26E-10	1.15E-10	9.51E-11	2.10E-10
948	650870.9	4197416	1.46E-09	1.55E-09	3.01E-09	2.19E-10	2.33E-10	4.52E-10	2.14E-10	2.07E-10	4.21E-10	1.14E-10	9.41E-11	2.08E-10
949	650882.3	4197447	1.44E-09	1.53E-09	2.97E-09	2.16E-10	2.30E-10	4.46E-10	2.11E-10	2.05E-10	4.16E-10	1.12E-10	9.28E-11	2.05E-10
950	650893.7	4197478	1.41E-09	1.51E-09	2.92E-09	2.13E-10	2.26E-10	4.39E-10	2.08E-10	2.02E-10	4.09E-10	1.10E-10	9.14E-11	2.02E-10
951	650905.1	4197509	1.39E-09	1.48E-09	2.87E-09	2.09E-10	2.22E-10	4.31E-10	2.04E-10	1.98E-10	4.02E-10	1.08E-10	8.97E-11	1.98E-10
952	650916.5	4197540	1.36E-09	1.45E-09	2.81E-09	2.04E-10	2.17E-10	4.22E-10	2.00E-10	1.94E-10	3.94E-10	1.06E-10	8.78E-11	1.94E-10
953	650927.9	4197571	1.33E-09	1.42E-09	2.74E-09	2.00E-10	2.12E-10	4.12E-10	1.95E-10	1.89E-10	3.84E-10	1.04E-10	8.58E-11	1.90E-10
954	650939.3	4197601	1.29E-09	1.38E-09	2.67E-09	1.95E-10	2.07E-10	4.01E-10	1.90E-10	1.84E-10	3.75E-10	1.01E-10	8.36E-11	1.85E-10
955	650950.7	4197632	1.26E-09	1.34E-09	2.60E-09	1.89E-10	2.01E-10	3.90E-10	1.85E-10	1.79E-10	3.64E-10	9.83E-11	8.13E-11	1.80E-10
956	650962.1	4197663	1.22E-09	1.30E-09	2.52E-09	1.84E-10	1.95E-10	3.79E-10	1.80E-10	1.74E-10	3.54E-10	9.54E-11	7.89E-11	1.74E-10
957	650973.5	4197694	1.18E-09	1.26E-09	2.45E-09	1.78E-10	1.89E-10	3.67E-10	1.74E-10	1.69E-10	3.43E-10	9.25E-11	7.65E-11	1.69E-10
958	650985	4197725	1.15E-09	1.22E-09	2.37E-09	1.72E-10	1.83E-10	3.55E-10	1.68E-10	1.63E-10	3.32E-10	8.95E-11	7.40E-11	1.63E-10
959	650996.4	4197756	1.11E-09	1.18E-09	2.29E-09	1.66E-10	1.77E-10	3.43E-10	1.63E-10	1.58E-10	3.20E-10	8.64E-11	7.15E-11	1.58E-10
960	651007.8	4197786	1.07E-09	1.14E-09	2.21E-09	1.61E-10	1.71E-10	3.31E-10	1.57E-10	1.52E-10	3.09E-10	8.34E-11	6.90E-11	1.52E-10
961	651019.2	4197817	1.03E-09	1.10E-09	2.13E-09	1.55E-10	1.65E-10	3.20E-10	1.51E-10	1.47E-10	2.98E-10	8.05E-11	6.66E-11	1.47E-10
962	651030.6	4197848	9.93E-10	1.06E-09	2.05E-09	1.49E-10	1.59E-10	3.08E-10	1.46E-10	1.42E-10	2.88E-10	7.76E-11	6.42E-11	1.42E-10
963	651042	4197879	9.57E-10	1.02E-09	1.98E-09	1.44E-10	1.53E-10	2.97E-10	1.41E-10	1.36E-10	2.77E-10	7.48E-11	6.19E-11	1.37E-10
964	651053.4	4197910	9.23E-10	9.84E-10	1.91E-09	1.39E-10	1.48E-10	2.86E-10	1.36E-10	1.32E-10	2.67E-10	7.21E-11	5.96E-11	1.32E-10
965	651064.8	4197940	8.90E-10	9.48E-10	1.84E-09	1.34E-10	1.42E-10	2.76E-10	1.31E-10	1.27E-10	2.58E-10	6.95E-11	5.75E-11	1.27E-10
966	651076.2	4197971	8.58E-10	9.14E-10	1.77E-09	1.29E-10	1.37E-10	2.66E-10	1.26E-10	1.22E-10	2.48E-10	6.70E-11	5.54E-11	1.22E-10
967	651087.6	4198002	8.26E-10	8.81E-10	1.71E-09	1.24E-10	1.32E-10	2.56E-10	1.22E-10	1.18E-10	2.39E-10	6.46E-11	5.34E-11	1.18E-10
968	651099	4198033	7.97E-10	8.49E-10	1.65E-09	1.20E-10	1.27E-10	2.47E-10	1.17E-10	1.14E-10	2.31E-10	6.22E-11	5.15E-11	1.14E-10
969	651110.4	4198064	7.67E-10	8.18E-10	1.59E-09	1.15E-10	1.23E-10	2.38E-10	1.13E-10	1.09E-10	2.22E-10	5.99E-11	4.96E-11	1.10E-10
970	651121.8	4198095	7.39E-10	7.88E-10	1.53E-09	1.11E-10	1.18E-10	2.29E-10	1.09E-10	1.05E-10	2.14E-10	5.77E-11	4.78E-11	1.06E-10
971	651133.3	4198125	7.12E-10	7.59E-10	1.47E-09	1.07E-10	1.14E-10	2.21E-10	1.05E-10	1.01E-10	2.06E-10	5.56E-11	4.60E-11	1.02E-10
972	651144.7	4198156	6.85E-10	7.30E-10	1.42E-09	1.03E-10	1.10E-10	2.13E-10	1.01E-10	9.76E-11	1.98E-10	5.35E-11	4.43E-11	9.78E-11
973	651156.1	4198187	6.59E-10	7.03E-10	1.36E-09	9.91E-11	1.05E-10	2.05E-10	9.69E-11	9.40E-11	1.91E-10	5.15E-11	4.26E-11	9.41E-11
974	651167.5	4198218	6.34E-10	6.76E-10	1.31E-09	9.54E-11	1.01E-10	1.97E-10	9.33E-11	9.04E-11	1.84E-10	4.96E-11	4.10E-11	9.06E-11
975	651178.9	4198249	6.10E-10	6.51E-10	1.26E-09	9.18E-11	9.76E-11	1.89E-10	8.97E-11	8.70E-11	1.77E-10	4.77E-11	3.94E-11	8.71E-11
976	651190.3	4198280	5.87E-10	6.26E-10	1.21E-09	8.83E-11	9.39E-11	1.82E-10	8.63E-11	8.37E-11	1.70E-10	4.59E-11	3.79E-11	8.38E-11
977	649681.3	4196718	6.74E-10	7.18E-10	1.39E-09	1.01E-10	1.08E-10	2.09E-10	9.91E-11	9.60E-11	1.95E-10	5.26E-11	4.35E-11	9.62E-11
978	649780.2	4198131	2.52E-08	2.69E-08	5.21E-08	3.79E-09	4.03E-09	7.83E-09	3.71E-09	3.60E-09	7.31E-09	1.97E-09	1.63E-09	3.60E-09
979	649931.3	4198215	6.33E-09	6.75E-09	1.31E-08	9.52E-10	1.01E-09	1.96E-09	9.31E-10	9.02E-10	1.83E-09	4.94E-10	4.09E-10	9.03E-10
980	649930.2	4198129	8.76E-09	9.34E-09	1.81E-08	1.32E-09	1.40E-09	2.72E-09	1.29E-09	1.25E-09	2.54E-09	6.84E-10	5.66E-10	1.25E-09
981	649980.2	4198128	6.84E-09	7.29E-09	1.41E-08	1.03E-09	1.09E-09	2.12E-09	1.01E-09	9.75E-10	1.98E-09	5.34E-10	4.42E-10	9.76E-10
982	650080.2	4198127	4.57E-09	4.87E-09	9.44E-09	6.87E-10	7.30E-10	1.42E-09	6.72E-10	6.51E-10	1.32E-09	3.57E-10	2.95E-10	6.52E-10
983	650180.5	4198147	3.17E-09	3.38E-09	6.55E-09	4.77E-10	5.07E-10	9.84E-10	4.66E-10	4.52E-10	9.19E-10	2.48E-10	2.05E-10	4.53E-10
984	650280.2	4198125	2.56E-09	2.73E-09	5.29E-09	3.85E-10	4.09E-10	7.94E-10	3.76E-10	3.65E-10	7.41E-10	2.00E-10	1.65E-10	3.65E-10

985	650380.5	4198145	1.97E-09	2.10E-09	4.07E-09	2.97E-10	3.15E-10	6.12E-10	2.90E-10	2.81E-10	5.71E-10	1.54E-10	1.27E-10	2.81E-10
986	650580.4	4198143	1.38E-09	1.47E-09	2.85E-09	2.07E-10	2.20E-10	4.28E-10	2.03E-10	1.97E-10	3.99E-10	1.08E-10	8.91E-11	1.97E-10
987	650780.7	4198162	1.01E-09	1.08E-09	2.09E-09	1.52E-10	1.62E-10	3.14E-10	1.49E-10	1.44E-10	2.93E-10	7.91E-11	6.55E-11	1.45E-10
988	650780.2	4198118	1.06E-09	1.13E-09	2.20E-09	1.60E-10	1.70E-10	3.30E-10	1.56E-10	1.52E-10	3.08E-10	8.31E-11	6.88E-11	1.52E-10
989	650980.9	4198181	7.87E-10	8.39E-10	1.63E-09	1.18E-10	1.26E-10	2.44E-10	1.16E-10	1.12E-10	2.28E-10	6.15E-11	5.09E-11	1.12E-10
990	650980.4	4198138	8.22E-10	8.77E-10	1.70E-09	1.24E-10	1.31E-10	2.55E-10	1.21E-10	1.17E-10	2.38E-10	6.42E-11	5.31E-11	1.17E-10
991	651181.2	4198200	6.37E-10	6.79E-10	1.32E-09	9.58E-11	1.02E-10	1.98E-10	9.37E-11	9.08E-11	1.84E-10	4.98E-11	4.12E-11	9.10E-11
992	651180.7	4198157	6.62E-10	7.06E-10	1.37E-09	9.96E-11	1.06E-10	2.06E-10	9.74E-11	9.44E-11	1.92E-10	5.17E-11	4.28E-11	9.46E-11
993	651180.1	4198114	6.88E-10	7.33E-10	1.42E-09	1.03E-10	1.10E-10	2.13E-10	1.01E-10	9.80E-11	1.99E-10	5.37E-11	4.45E-11	9.82E-11
994	649747.4	4198111	3.30E-08	3.51E-08	6.81E-08	4.96E-09	5.27E-09	1.02E-08	4.85E-09	4.70E-09	9.55E-09	2.58E-09	2.13E-09	4.71E-09
995	649744.8	4198060	2.73E-08	2.92E-08	5.65E-08	4.11E-09	4.37E-09	8.48E-09	4.02E-09	3.90E-09	7.92E-09	2.14E-09	1.77E-09	3.90E-09
996	649752.5	4198012	2.22E-08	2.37E-08	4.59E-08	3.34E-09	3.55E-09	6.89E-09	3.27E-09	3.17E-09	6.43E-09	1.74E-09	1.44E-09	3.17E-09
997	649781.2	4198026	2.06E-08	2.19E-08	4.25E-08	3.10E-09	3.29E-09	6.39E-09	3.03E-09	2.93E-09	5.96E-09	1.61E-09	1.33E-09	2.94E-09
998	649818.4	4198100	1.87E-08	1.99E-08	3.86E-08	2.81E-09	2.99E-09	5.80E-09	2.75E-09	2.66E-09	5.41E-09	1.46E-09	1.21E-09	2.67E-09
999	649809.4	4197988	1.66E-08	1.77E-08	3.44E-08	2.50E-09	2.66E-09	5.16E-09	2.45E-09	2.37E-09	4.82E-09	1.30E-09	1.08E-09	2.38E-09
1000	649853.9	4198063	1.50E-08	1.59E-08	3.09E-08	2.25E-09	2.39E-09	4.64E-09	2.20E-09	2.13E-09	4.33E-09	1.17E-09	9.67E-10	2.13E-09
1001	649714.3	4197888	1.73E-08	1.84E-08	3.57E-08	2.60E-09	2.76E-09	5.36E-09	2.54E-09	2.46E-09	5.00E-09	1.35E-09	1.12E-09	2.47E-09
1002	649742.4	4197902	1.66E-08	1.77E-08	3.42E-08	2.49E-09	2.65E-09	5.14E-09	2.43E-09	2.36E-09	4.79E-09	1.29E-09	1.07E-09	2.36E-09
1003	649770.6	4197916	1.58E-08	1.68E-08	3.26E-08	2.37E-09	2.52E-09	4.89E-09	2.32E-09	2.25E-09	4.56E-09	1.23E-09	1.02E-09	2.25E-09
1004	649798.8	4197930	1.50E-08	1.60E-08	3.09E-08	2.25E-09	2.39E-09	4.64E-09	2.20E-09	2.13E-09	4.33E-09	1.17E-09	9.67E-10	2.14E-09
1005	649826.9	4197944	1.42E-08	1.52E-08	2.94E-08	2.14E-09	2.28E-09	4.42E-09	2.09E-09	2.03E-09	4.12E-09	1.11E-09	9.20E-10	2.03E-09
1006	649855.1	4197958	1.33E-08	1.42E-08	2.75E-08	2.01E-09	2.13E-09	4.14E-09	1.96E-09	1.90E-09	3.86E-09	1.04E-09	8.62E-10	1.90E-09
1007	649891.6	4198031	1.23E-08	1.31E-08	2.54E-08	1.85E-09	1.96E-09	3.81E-09	1.80E-09	1.75E-09	3.55E-09	9.59E-10	7.93E-10	1.75E-09
1008	649907	4198070	1.11E-08	1.19E-08	2.30E-08	1.67E-09	1.78E-09	3.45E-09	1.64E-09	1.59E-09	3.22E-09	8.69E-10	7.19E-10	1.59E-09
1009	649918.6	4198100	1.00E-08	1.07E-08	2.07E-08	1.50E-09	1.60E-09	3.10E-09	1.47E-09	1.42E-09	2.89E-09	7.81E-10	6.46E-10	1.43E-09
1010	649843.9	4197901	1.23E-08	1.32E-08	2.55E-08	1.86E-09	1.97E-09	3.83E-09	1.81E-09	1.76E-09	3.57E-09	9.64E-10	7.98E-10	1.76E-09
1011	649872.6	4197915	1.17E-08	1.25E-08	2.42E-08	1.76E-09	1.88E-09	3.64E-09	1.73E-09	1.67E-09	3.40E-09	9.17E-10	7.58E-10	1.68E-09
1012	649905.3	4197939	1.09E-08	1.17E-08	2.26E-08	1.65E-09	1.75E-09	3.39E-09	1.61E-09	1.56E-09	3.17E-09	8.55E-10	7.07E-10	1.56E-09
1013	649917.1	4197969	1.07E-08	1.15E-08	2.22E-08	1.62E-09	1.72E-09	3.33E-09	1.58E-09	1.53E-09	3.11E-09	8.39E-10	6.94E-10	1.53E-09
1014	649928.9	4197999	1.03E-08	1.10E-08	2.14E-08	1.56E-09	1.65E-09	3.21E-09	1.52E-09	1.47E-09	3.00E-09	8.08E-10	6.69E-10	1.48E-09
1015	649927.7	4197838	8.85E-09	9.43E-09	1.83E-08	1.33E-09	1.41E-09	2.74E-09	1.30E-09	1.26E-09	2.56E-09	6.91E-10	5.72E-10	1.26E-09
1016	649956.1	4197852	8.36E-09	8.91E-09	1.73E-08	1.26E-09	1.34E-09	2.59E-09	1.23E-09	1.19E-09	2.42E-09	6.53E-10	5.40E-10	1.19E-09
1017	649978.9	4197872	8.07E-09	8.60E-09	1.67E-08	1.21E-09	1.29E-09	2.50E-09	1.19E-09	1.15E-09	2.34E-09	6.30E-10	5.22E-10	1.15E-09
1018	649990.6	4197901	8.01E-09	8.54E-09	1.65E-08	1.20E-09	1.28E-09	2.48E-09	1.18E-09	1.14E-09	2.32E-09	6.25E-10	5.17E-10	1.14E-09
1019	650002.3	4197931	7.79E-09	8.31E-09	1.61E-08	1.17E-09	1.25E-09	2.42E-09	1.15E-09	1.11E-09	2.26E-09	6.09E-10	5.04E-10	1.11E-09
1020	650017.9	4197970	7.34E-09	7.83E-09	1.52E-08	1.10E-09	1.17E-09	2.28E-09	1.08E-09	1.05E-09	2.13E-09	5.74E-10	4.75E-10	1.05E-09
1021	650029.6	4197999	6.90E-09	7.36E-09	1.43E-08	1.04E-09	1.10E-09	2.14E-09	1.02E-09	9.84E-10	2.00E-09	5.39E-10	4.46E-10	9.85E-10
1022	650041.3	4198029	6.40E-09	6.82E-09	1.32E-08	9.62E-10	1.02E-09	1.99E-09	9.41E-10	9.12E-10	1.85E-09	5.00E-10	4.14E-10	9.13E-10
1023	650052.9	4198058	5.85E-09	6.24E-09	1.21E-08	8.80E-10	9.36E-10	1.82E-09	8.61E-10	8.34E-10	1.69E-09	4.57E-10	3.78E-10	8.36E-10
1024	650064.6	4198088	5.30E-09	5.64E-09	1.09E-08	7.96E-10	8.47E-10	1.64E-09	7.79E-10	7.55E-10	1.53E-09	4.14E-10	3.42E-10	7.56E-10
1025	649961.7	4197751	7.32E-09	7.80E-09	1.51E-08	1.10E-09	1.17E-09	2.27E-09	1.08E-09	1.04E-09	2.12E-09	5.72E-10	4.73E-10	1.04E-09
1026	649990.7	4197765	6.96E-09	7.42E-09	1.44E-08	1.05E-09	1.11E-09	2.16E-09	1.02E-09	9.93E-10	2.02E-09	5.44E-10	4.50E-10	9.94E-10
1027	650019.7	4197780	6.62E-09	7.06E-09	1.37E-08	9.96E-10	1.06E-09	2.05E-09	9.74E-10	9.44E-10	1.92E-09	5.17E-10	4.28E-10	9.45E-10
1028	650052.7	4197804	6.28E-09	6.70E-09	1.30E-08	9.45E-10	1.00E-09	1.95E-09	9.24E-10	8.95E-10	1.82E-09	4.91E-10	4.06E-10	8.97E-10
1029	650064.7	4197834	6.25E-09	6.66E-09	1.29E-08	9.40E-10	9.99E-10	1.94E-09	9.19E-10	8.91E-10	1.81E-09	4.88E-10	4.04E-10	8.92E-10
1030	650076.6	4197864	6.12E-09	6.53E-09	1.26E-08	9.21E-10	9.79E-10	1.90E-09	9.00E-10	8.72E-10	1.77E-09	4.78E-10	3.96E-10	8.74E-10
1031	650088.6	4197895	5.92E-09	6.31E-09	1.22E-08	8.90E-10	9.46E-10	1.84E-09	8.70E-10	8.44E-10	1.71E-09	4.62E-10	3.83E-10	8.45E-10
1032	650100.5	4197925	5.66E-09	6.04E-09	1.17E-08	8.52E-10	9.05E-10	1.76E-09	8.33E-10	8.07E-10	1.64E-09	4.42E-10	3.66E-10	8.08E-10
1033	650112.5	4197955	5.36E-09	5.71E-09	1.11E-08	8.06E-10	8.57E-10	1.66E-09	7.88E-10	7.64E-10	1.55E-09	4.19E-10	3.46E-10	7.65E-10
1034	650124.4	4197985	5.02E-09	5.35E-09	1.04E-08	7.55E-10	8.02E-10	1.56E-09	7.38E-10	7.15E-10	1.45E-09	3.92E-10	3.24E-10	7.16E-10
1035	650136.4	4198015	4.65E-09	4.96E-09	9.61E-09	7.00E-10	7.44E-10	1.44E-09	6.84E-10	6.63E-10	1.35E-09	3.63E-10	3.01E-10	6.64E-10
1036	650148.3	4198045	4.28E-09	4.56E-09	8.83E-09	6.43E-10	6.83E-10	1.33E-09	6.29E-10	6.09E-10	1.24E-09	3.34E-10	2.76E-10	6.10E-10
1037	650160.3	4198076	3.90E-09	4.16E-09	8.07E-09	5.87E-10	6.24E-10	1.21E-09	5.74E-10	5.56E-10	1.13E-09	3.05E-10	2.52E-10	5.57E-10
1038	650172.2	4198106	3.55E-09	3.78E-09	7.33E-09	5.34E-10	5.68E-10	1.10E-09	5.22E-10	5.06E-10	1.03E-09	2.77E-10	2.29E-10	5.07E-10
1039	650074.6	4197703	5.47E-09	5.83E-09	1.13E-08	8.23E-10	8.75E-10	1.70E-09	8.04E-10	7.80E-10	1.58E-09	4.27E-10	3.54E-10	7.81E-10
1040	650103.3	4197717	5.22E-09	5.56E-09	1.08E-08	7.85E-10	8.34E-10	1.62E-09	7.67E-10	7.44E-10	1.51E-09	4.08E-10	3.37E-10	7.45E-10
1041	650126.4	4197736	5.04E-09	5.37E-09	1.04E-08	7.57E-10	8.05E-10	1.56E-09	7.40E-10	7.18E-10	1.46E-09	3.93E-10	3.25E-10	7.19E-10
1042	650138.2	4197766	5.00E-09	5.33E-09	1.03E-08	7.52E-10	7.99E-10	1.55E-09	7.35E-10	7.12E-10	1.45E-09	3.90E-10	3.23E-10	7.13E-10
1043	650150	4197796	4.94E-09	5.27E-09	1.02E-08	7.43E-10	7.90E-10	1.53E-09	7.27E-10	7.05E-10	1.43E-09	3.86E-10	3.20E-10	7.06E-10
1044	650161.9	4197826	4.84E-09	5.16E-09	1.00E-08	7.28E-10	7.74E-10	1.50E-09	7.12E-10	6.90E-10	1.40E-09	3.78E-10	3.13E-10	6.91E-10
1045	650173.7	4197856	4.69E-09	5.00E-09	9.69E-09	7.05E-10	7.49E-10	1.45E-09	6.89E-10	6.68E-10	1.36E-09	3.66E-10	3.03E-10	6.69E-10
1046	650185.5	4197886	4.50E-09	4.79E-09	9.29E-09	6.76E-10	7.19E-10	1.40E-09	6.61E-10	6.41E-10	1.30E-09	3.51E-10	2.91E-10	6.42E-10
1047	650197.4	4197916	4.28E-09	4.56E-09	8.84E-09	6.44E-10	6.84E-10	1.33E-09	6.29E-10	6.10E-10	1.24E-09	3.34E-10	2.77E-10	6.11E-10
1048	650209.2	4197945	4.04E-09	4.31E-09	8.35E-09	6.08E-10	6.46E-10	1.25E-09	5.94E-10	5.76E-10	1.17E-09	3.16E-10	2.61E-10	5.77E-10
1049	650221	4197975	3.79E-09	4.04E-09	7.83E-09	5.70E-10	6.06E-10	1.18E-09	5.57E-10	5.40E-10	1.10E-09	2.96E-10	2.45E-10	5.41E-10
1050	650232.9	4198005	3.52E-09	3.75E-09	7.27E-09	5.29E-10	5.63E-10	1.09E-09	5.18E-10	5.02E-10	1.02E-09	2.75E-10	2.28E-10	5.03E-10
1051	650244.7	4198035	3.27E-09	3.49E-09	6.76E-09	4.92E-10	5.23E-10	1.01E-09	4.81E-10	4.66E-10	9.47E-10	2.55E-10	2.11E-10	4.67E-10
1052	650256.5	4198065	3.02E-09	3.22E-09	6.24E-09	4.54E-10	4.83E-10	9.37E-10	4.44E-10	4.31E-10	8.75E-10	2.36E-10	1.95E-10	4.31E-10
1053	650268.4	4198095	2.78E-09	2.97E-09	5.75E-09	4.18E-10	4.45E-10	8.63E-10	4.09E-10	3.97E-10	8.06E-10	2.17E-10	1.80E-10	3.97E-10
1054	649759	4197440	4.45E-09	4.75E-09	9.20E-09	6.70E-10	7.12E-10	1.38E-09	6.55E-10	6.35E-10	1.29E-09	3.48E-10	2.88E-10	6.36E-10
1055	649788.1	4197455	4.64E-09	4.95E-09	9.59E-09	6.98E-10	7.42E-10	1.44E-09	6.82E-10	6.61E-10	1.34E-09	3.63E-10	3.00E-10	6.63E-10
1056	649817.3	4197469	4.80E-09	5.12E-09	9.92E-09	7.22E-10	7.68E-10	1.49E-09	7.06E-10	6.84E-10	1.39E-09	3.75E-10	3.10E-10	6.85E-10
1057	649846.4	4197484	4.93E-09	5.26E-09	1.02E-08	7.41E-10	7.88E-10	1.53E-09	7.25E-10	7.03E-10	1.43E-09	3.85E-10	3.19E-10	7.04E-10
1058	649875.6	4197499	5.03E-09	5.36E-09	1.04E-08	7.56E-10	8.04E-10	1.56E-09	7.39E-10	7.16E-10	1.46E-09	3.93E-10	3.25E-10	7.18E-10
1059	649904.7	4197513	5.09E-09	5.43E-09	1.05E-08	7.66E-10	8.14E-10	1.58E-09	7.49E-10	7.26E-10	1.47E-09	3.98E-10	3.29E-10	7.27E-10
1060	649933.8	4197528	5.13E-09	5.46E-09	1.06E-08	7.71E-10	8.19E-10	1.59E-09	7.54E-10	7.30E-10	1.48E-09	4.00E-10	3.31E-10	7.32E-10

1061	649963	4197542	5.14E-09	5.48E-09	1.06E-08	7.72E-10	8.21E-10	1.59E-09	7.55E-10	7.32E-10	1.49E-09	4.01E-10	3.32E-10	7.33E-10
1062	649992.1	4197557	5.11E-09	5.44E-09	1.06E-08	7.68E-10	8.16E-10	1.58E-09	7.51E-10	7.28E-10	1.48E-09	3.99E-10	3.30E-10	7.29E-10
1063	650021.3	4197572	5.05E-09	5.38E-09	1.04E-08	7.59E-10	8.07E-10	1.57E-09	7.42E-10	7.20E-10	1.46E-09	3.94E-10	3.26E-10	7.21E-10
1064	650050.4	4197586	4.96E-09	5.29E-09	1.03E-08	7.47E-10	7.94E-10	1.54E-09	7.30E-10	7.08E-10	1.44E-09	3.88E-10	3.21E-10	7.09E-10
1065	650079.6	4197601	4.85E-09	5.17E-09	1.00E-08	7.30E-10	7.76E-10	1.51E-09	7.14E-10	6.92E-10	1.41E-09	3.79E-10	3.14E-10	6.93E-10
1066	650108.7	4197615	4.72E-09	5.03E-09	9.75E-09	7.09E-10	7.54E-10	1.46E-09	6.94E-10	6.72E-10	1.37E-09	3.69E-10	3.05E-10	6.73E-10
1067	650137.8	4197630	4.54E-09	4.84E-09	9.38E-09	6.83E-10	7.26E-10	1.41E-09	6.68E-10	6.47E-10	1.31E-09	3.55E-10	2.93E-10	6.48E-10
1068	650167	4197644	4.36E-09	4.65E-09	9.01E-09	6.56E-10	6.97E-10	1.35E-09	6.41E-10	6.21E-10	1.26E-09	3.41E-10	2.82E-10	6.22E-10
1069	650200.1	4197669	4.18E-09	4.45E-09	8.63E-09	6.28E-10	6.67E-10	1.30E-09	6.14E-10	5.95E-10	1.21E-09	3.26E-10	2.70E-10	5.96E-10
1070	650212.1	4197699	4.15E-09	4.42E-09	8.57E-09	6.24E-10	6.63E-10	1.29E-09	6.10E-10	5.91E-10	1.20E-09	3.24E-10	2.68E-10	5.92E-10
1071	650224.1	4197730	4.09E-09	4.36E-09	8.45E-09	6.15E-10	6.54E-10	1.27E-09	6.02E-10	5.83E-10	1.18E-09	3.20E-10	2.64E-10	5.84E-10
1072	650236.1	4197760	4.01E-09	4.28E-09	8.29E-09	6.03E-10	6.41E-10	1.24E-09	5.90E-10	5.72E-10	1.16E-09	3.13E-10	2.59E-10	5.73E-10
1073	650248.1	4197790	3.91E-09	4.17E-09	8.08E-09	5.88E-10	6.26E-10	1.21E-09	5.75E-10	5.58E-10	1.13E-09	3.06E-10	2.53E-10	5.59E-10
1074	650260.1	4197820	3.80E-09	4.05E-09	7.86E-09	5.72E-10	6.08E-10	1.18E-09	5.59E-10	5.42E-10	1.10E-09	2.97E-10	2.46E-10	5.43E-10
1075	650272.2	4197851	3.66E-09	3.90E-09	7.56E-09	5.50E-10	5.85E-10	1.14E-09	5.38E-10	5.21E-10	1.06E-09	2.86E-10	2.36E-10	5.22E-10
1076	650284.2	4197881	3.49E-09	3.72E-09	7.22E-09	5.25E-10	5.58E-10	1.08E-09	5.13E-10	4.98E-10	1.01E-09	2.73E-10	2.26E-10	4.98E-10
1077	650296.2	4197911	3.31E-09	3.53E-09	6.84E-09	4.98E-10	5.30E-10	1.03E-09	4.87E-10	4.72E-10	9.59E-10	2.59E-10	2.14E-10	4.73E-10
1078	650308.2	4197942	3.12E-09	3.33E-09	6.46E-09	4.70E-10	4.99E-10	9.69E-10	4.59E-10	4.45E-10	9.05E-10	2.44E-10	2.02E-10	4.46E-10
1079	650320.2	4197972	2.93E-09	3.13E-09	6.06E-09	4.41E-10	4.69E-10	9.10E-10	4.31E-10	4.18E-10	8.49E-10	2.29E-10	1.89E-10	4.19E-10
1080	650332.2	4198002	2.74E-09	2.92E-09	5.66E-09	4.12E-10	4.38E-10	8.50E-10	4.03E-10	3.91E-10	7.94E-10	2.14E-10	1.77E-10	3.91E-10
1081	650344.2	4198033	2.55E-09	2.72E-09	5.28E-09	3.84E-10	4.08E-10	7.92E-10	3.75E-10	3.64E-10	7.39E-10	1.99E-10	1.65E-10	3.65E-10
1082	650356.2	4198063	2.37E-09	2.53E-09	4.91E-09	3.57E-10	3.80E-10	7.37E-10	3.49E-10	3.38E-10	6.88E-10	1.85E-10	1.53E-10	3.39E-10
1083	650368.2	4198093	2.21E-09	2.35E-09	4.56E-09	3.32E-10	3.53E-10	6.84E-10	3.24E-10	3.14E-10	6.39E-10	1.72E-10	1.43E-10	3.15E-10
1084	649778.7	4197241	2.48E-09	2.65E-09	5.13E-09	3.74E-10	3.97E-10	7.71E-10	3.65E-10	3.54E-10	7.19E-10	1.94E-10	1.61E-10	3.55E-10
1085	649807.9	4197256	2.63E-09	2.81E-09	5.44E-09	3.96E-10	4.21E-10	8.17E-10	3.87E-10	3.75E-10	7.62E-10	2.06E-10	1.70E-10	3.76E-10
1086	649837.2	4197271	2.77E-09	2.96E-09	5.73E-09	4.17E-10	4.44E-10	8.61E-10	4.08E-10	3.95E-10	8.03E-10	2.17E-10	1.79E-10	3.96E-10
1087	649866.4	4197285	2.91E-09	3.10E-09	6.01E-09	4.38E-10	4.65E-10	9.03E-10	4.28E-10	4.15E-10	8.43E-10	2.27E-10	1.88E-10	4.15E-10
1088	649895.6	4197300	3.03E-09	3.23E-09	6.26E-09	4.56E-10	4.85E-10	9.41E-10	4.46E-10	4.32E-10	8.78E-10	2.37E-10	1.96E-10	4.33E-10
1089	649924.8	4197314	3.14E-09	3.35E-09	6.49E-09	4.72E-10	5.02E-10	9.74E-10	4.62E-10	4.48E-10	9.09E-10	2.45E-10	2.03E-10	4.48E-10
1090	649954	4197329	3.24E-09	3.45E-09	6.68E-09	4.87E-10	5.17E-10	1.00E-09	4.76E-10	4.61E-10	9.37E-10	2.53E-10	2.09E-10	4.62E-10
1091	649983.2	4197344	3.31E-09	3.53E-09	6.85E-09	4.98E-10	5.30E-10	1.03E-09	4.87E-10	4.72E-10	9.60E-10	2.59E-10	2.14E-10	4.73E-10
1092	650012.4	4197358	3.38E-09	3.60E-09	6.97E-09	5.08E-10	5.40E-10	1.05E-09	4.96E-10	4.81E-10	9.77E-10	2.64E-10	2.18E-10	4.82E-10
1093	650041.6	4197373	3.42E-09	3.65E-09	7.07E-09	5.14E-10	5.47E-10	1.06E-09	5.03E-10	4.87E-10	9.90E-10	2.67E-10	2.21E-10	4.88E-10
1094	650070.9	4197387	3.45E-09	3.68E-09	7.13E-09	5.19E-10	5.52E-10	1.07E-09	5.08E-10	4.92E-10	1.00E-09	2.70E-10	2.23E-10	4.93E-10
1095	650100.1	4197402	3.47E-09	3.69E-09	7.16E-09	5.21E-10	5.54E-10	1.08E-09	5.10E-10	4.94E-10	1.00E-09	2.71E-10	2.24E-10	4.95E-10
1096	650129.3	4197417	3.46E-09	3.69E-09	7.15E-09	5.20E-10	5.53E-10	1.07E-09	5.09E-10	4.93E-10	1.00E-09	2.70E-10	2.24E-10	4.94E-10
1097	650158.5	4197431	3.44E-09	3.67E-09	7.11E-09	5.17E-10	5.50E-10	1.07E-09	5.06E-10	4.90E-10	9.96E-10	2.69E-10	2.22E-10	4.91E-10
1098	650187.7	4197446	3.40E-09	3.63E-09	7.03E-09	5.12E-10	5.44E-10	1.06E-09	5.00E-10	4.85E-10	9.86E-10	2.66E-10	2.20E-10	4.86E-10
1099	650216.9	4197460	3.35E-09	3.57E-09	6.93E-09	5.04E-10	5.36E-10	1.04E-09	4.93E-10	4.78E-10	9.71E-10	2.62E-10	2.17E-10	4.79E-10
1100	650246.1	4197475	3.29E-09	3.51E-09	6.80E-09	4.95E-10	5.26E-10	1.02E-09	4.84E-10	4.69E-10	9.52E-10	2.57E-10	2.13E-10	4.70E-10
1101	650275.4	4197490	3.21E-09	3.43E-09	6.64E-09	4.83E-10	5.14E-10	9.97E-10	4.72E-10	4.58E-10	9.30E-10	2.51E-10	2.08E-10	4.59E-10
1102	650304.6	4197504	3.13E-09	3.33E-09	6.46E-09	4.70E-10	5.00E-10	9.69E-10	4.59E-10	4.45E-10	9.05E-10	2.44E-10	2.02E-10	4.46E-10
1103	650333.8	4197519	3.03E-09	3.23E-09	6.27E-09	4.56E-10	4.85E-10	9.41E-10	4.46E-10	4.32E-10	8.78E-10	2.37E-10	1.96E-10	4.33E-10
1104	650351.5	4197544	3.00E-09	3.20E-09	6.20E-09	4.52E-10	4.80E-10	9.32E-10	4.42E-10	4.28E-10	8.70E-10	2.35E-10	1.94E-10	4.29E-10
1105	650363.6	4197574	3.00E-09	3.19E-09	6.19E-09	4.51E-10	4.79E-10	9.30E-10	4.41E-10	4.27E-10	8.68E-10	2.34E-10	1.94E-10	4.28E-10
1106	650379.6	4197615	2.96E-09	3.16E-09	6.12E-09	4.46E-10	4.74E-10	9.20E-10	4.36E-10	4.22E-10	8.58E-10	2.32E-10	1.92E-10	4.23E-10
1107	650391.7	4197645	2.92E-09	3.12E-09	6.04E-09	4.39E-10	4.67E-10	9.07E-10	4.30E-10	4.16E-10	8.46E-10	2.28E-10	1.89E-10	4.17E-10
1108	650403.7	4197676	2.87E-09	3.06E-09	5.93E-09	4.31E-10	4.58E-10	8.90E-10	4.22E-10	4.09E-10	8.30E-10	2.24E-10	1.85E-10	4.09E-10
1109	650415.7	4197706	2.80E-09	2.98E-09	5.78E-09	4.21E-10	4.48E-10	8.69E-10	4.12E-10	3.99E-10	8.11E-10	2.19E-10	1.81E-10	4.00E-10
1110	650427.8	4197736	2.72E-09	2.90E-09	5.62E-09	4.09E-10	4.35E-10	8.44E-10	4.00E-10	3.88E-10	7.88E-10	2.13E-10	1.76E-10	3.88E-10
1111	650439.8	4197767	2.63E-09	2.80E-09	5.44E-09	3.96E-10	4.21E-10	8.16E-10	3.87E-10	3.75E-10	7.62E-10	2.06E-10	1.70E-10	3.76E-10
1112	650451.8	4197797	2.53E-09	2.70E-09	5.23E-09	3.81E-10	4.05E-10	7.86E-10	3.72E-10	3.61E-10	7.33E-10	1.98E-10	1.64E-10	3.61E-10
1113	650463.9	4197827	2.43E-09	2.59E-09	5.02E-09	3.65E-10	3.88E-10	7.53E-10	3.57E-10	3.46E-10	7.03E-10	1.90E-10	1.57E-10	3.46E-10
1114	650475.9	4197858	2.32E-09	2.47E-09	4.79E-09	3.49E-10	3.71E-10	7.19E-10	3.41E-10	3.30E-10	6.71E-10	1.81E-10	1.50E-10	3.31E-10
1115	650487.9	4197888	2.21E-09	2.35E-09	4.56E-09	3.32E-10	3.53E-10	6.84E-10	3.24E-10	3.14E-10	6.38E-10	1.72E-10	1.43E-10	3.15E-10
1116	650500	4197919	2.09E-09	2.23E-09	4.32E-09	3.15E-10	3.34E-10	6.49E-10	3.08E-10	2.98E-10	6.06E-10	1.63E-10	1.35E-10	2.99E-10
1117	650512	4197949	1.98E-09	2.11E-09	4.09E-09	2.98E-10	3.16E-10	6.14E-10	2.91E-10	2.82E-10	5.73E-10	1.55E-10	1.28E-10	2.83E-10
1118	650524	4197979	1.87E-09	1.99E-09	3.86E-09	2.81E-10	2.99E-10	5.80E-10	2.75E-10	2.66E-10	5.41E-10	1.46E-10	1.21E-10	2.67E-10
1119	650536.1	4198010	1.76E-09	1.88E-09	3.65E-09	2.65E-10	2.82E-10	5.47E-10	2.59E-10	2.51E-10	5.11E-10	1.38E-10	1.14E-10	2.52E-10
1120	650548.1	4198040	1.66E-09	1.77E-09	3.44E-09	2.50E-10	2.66E-10	5.16E-10	2.45E-10	2.37E-10	4.82E-10	1.30E-10	1.07E-10	2.37E-10
1121	650560.1	4198070	1.57E-09	1.67E-09	3.24E-09	2.36E-10	2.51E-10	4.86E-10	2.31E-10	2.23E-10	4.54E-10	1.22E-10	1.01E-10	2.24E-10
1122	650572.2	4198101	1.48E-09	1.57E-09	3.05E-09	2.22E-10	2.36E-10	4.58E-10	2.17E-10	2.11E-10	4.28E-10	1.15E-10	9.55E-11	2.11E-10
1123	649798.5	4197042	1.50E-09	1.60E-09	3.10E-09	2.25E-10	2.40E-10	4.65E-10	2.20E-10	2.14E-10	4.34E-10	1.17E-10	9.69E-11	2.14E-10
1124	649827.7	4197057	1.60E-09	1.70E-09	3.30E-09	2.40E-10	2.55E-10	4.95E-10	2.35E-10	2.27E-10	4.62E-10	1.25E-10	1.03E-10	2.28E-10
1125	649857	4197072	1.69E-09	1.80E-09	3.49E-09	2.54E-10	2.70E-10	5.25E-10	2.49E-10	2.41E-10	4.90E-10	1.32E-10	1.09E-10	2.41E-10
1126	649886.2	4197086	1.79E-09	1.91E-09	3.69E-09	2.69E-10	2.86E-10	5.55E-10	2.63E-10	2.55E-10	5.18E-10	1.40E-10	1.16E-10	2.55E-10
1127	649915.5	4197101	1.88E-09	2.01E-09	3.89E-09	2.83E-10	3.01E-10	5.84E-10	2.77E-10	2.68E-10	5.45E-10	1.47E-10	1.22E-10	2.69E-10
1128	649944.8	4197115	1.97E-09	2.10E-09	4.08E-09	2.97E-10	3.15E-10	6.12E-10	2.90E-10	2.81E-10	5.71E-10	1.54E-10	1.28E-10	2.82E-10
1129	649974	4197130	2.06E-09	2.20E-09	4.26E-09	3.10E-10	3.29E-10	6.39E-10	3.03E-10	2.94E-10	5.97E-10	1.61E-10	1.33E-10	2.94E-10
1130	650003.3	4197145	2.14E-09	2.28E-09	4.43E-09	3.22E-10	3.42E-10	6.65E-10	3.15E-10	3.05E-10	6.20E-10	1.67E-10	1.38E-10	3.06E-10
1131	650032.5	4197159	2.22E-09	2.36E-09	4.58E-09	3.34E-10	3.55E-10	6.88E-10	3.26E-10	3.16E-10	6.42E-10	1.73E-10	1.43E-10	3.17E-10
1132	650061.8	4197174	2.29E-09	2.44E-09	4.72E-09	3.44E-10	3.65E-10	7.09E-10	3.36E-10	3.26E-10	6.62E-10	1.79E-10	1.48E-10	3.26E-10
1133	650091	4197189	2.35E-09	2.50E-09	4.85E-09	3.53E-10	3.75E-10	7.28E-10	3.45E-10	3.34E-10	6.79E-10	1.83E-10	1.52E-10	3.35E-10
1134	650120.3	4197203	2.40E-09	2.55E-09	4.95E-09	3.60E-10	3.83E-10	7.43E-10	3.52E-10	3.41E-10	6.94E-10	1.87E-10	1.55E-10	3.42E-10
1135	650149.6	4197218	2.44E-09	2.60E-09	5.04E-09	3.66E-10	3.90E-10	7.56E-10	3.58E-10	3.47E-10	7.06E-10	1.90E-10	1.58E-10	3.48E-10
1136	650178.8	4197233	2.47E-09	2.63E-09	5.10E-09	3.71E-10	3.95E-10	7.66E-10	3.63E-10	3.52E-10	7.15E-10	1.93E-10	1.60E-10	3.52E-10

1137	650208.1	4197247	2.49E-09	2.65E-09	5.14E-09	3.74E-10	3.98E-10	7.72E-10	3.66E-10	3.55E-10	7.21E-10	1.94E-10	1.61E-10	3.55E-10
1138	650237.3	4197262	2.50E-09	2.66E-09	5.16E-09	3.76E-10	4.00E-10	7.75E-10	3.67E-10	3.56E-10	7.24E-10	1.95E-10	1.61E-10	3.57E-10
1139	650266.6	4197276	2.50E-09	2.67E-09	5.17E-09	3.76E-10	4.00E-10	7.76E-10	3.68E-10	3.56E-10	7.24E-10	1.95E-10	1.62E-10	3.57E-10
1140	650295.9	4197291	2.50E-09	2.66E-09	5.16E-09	3.76E-10	3.99E-10	7.75E-10	3.67E-10	3.56E-10	7.23E-10	1.95E-10	1.61E-10	3.57E-10
1141	650325.1	4197306	2.48E-09	2.65E-09	5.13E-09	3.73E-10	3.97E-10	7.70E-10	3.65E-10	3.54E-10	7.19E-10	1.94E-10	1.60E-10	3.54E-10
1142	650354.4	4197320	2.45E-09	2.62E-09	5.07E-09	3.69E-10	3.92E-10	7.61E-10	3.61E-10	3.50E-10	7.11E-10	1.92E-10	1.59E-10	3.50E-10
1143	650383.6	4197335	2.42E-09	2.58E-09	5.00E-09	3.64E-10	3.87E-10	7.51E-10	3.56E-10	3.45E-10	7.01E-10	1.89E-10	1.57E-10	3.46E-10
1144	650412.9	4197350	2.38E-09	2.54E-09	4.92E-09	3.58E-10	3.81E-10	7.39E-10	3.50E-10	3.40E-10	6.90E-10	1.86E-10	1.54E-10	3.40E-10
1145	650442.2	4197364	2.34E-09	2.49E-09	4.83E-09	3.52E-10	3.74E-10	7.25E-10	3.44E-10	3.33E-10	6.77E-10	1.83E-10	1.51E-10	3.34E-10
1146	650471.4	4197379	2.29E-09	2.44E-09	4.73E-09	3.44E-10	3.66E-10	7.10E-10	3.37E-10	3.26E-10	6.63E-10	1.79E-10	1.48E-10	3.27E-10
1147	650494.9	4197399	2.26E-09	2.41E-09	4.66E-09	3.39E-10	3.61E-10	7.00E-10	3.32E-10	3.22E-10	6.54E-10	1.76E-10	1.46E-10	3.22E-10
1148	650507	4197429	2.27E-09	2.41E-09	4.68E-09	3.41E-10	3.62E-10	7.03E-10	3.33E-10	3.23E-10	6.56E-10	1.77E-10	1.46E-10	3.23E-10
1149	650519	4197460	2.26E-09	2.41E-09	4.68E-09	3.41E-10	3.62E-10	7.03E-10	3.33E-10	3.23E-10	6.56E-10	1.77E-10	1.46E-10	3.23E-10
1150	650531.1	4197490	2.26E-09	2.40E-09	4.66E-09	3.39E-10	3.61E-10	7.00E-10	3.32E-10	3.21E-10	6.53E-10	1.76E-10	1.46E-10	3.22E-10
1151	650543.1	4197520	2.24E-09	2.39E-09	4.62E-09	3.37E-10	3.58E-10	6.94E-10	3.29E-10	3.19E-10	6.48E-10	1.75E-10	1.45E-10	3.19E-10
1152	650555.2	4197551	2.21E-09	2.36E-09	4.57E-09	3.33E-10	3.54E-10	6.86E-10	3.25E-10	3.15E-10	6.40E-10	1.73E-10	1.43E-10	3.16E-10
1153	650567.2	4197581	2.18E-09	2.32E-09	4.50E-09	3.27E-10	3.48E-10	6.76E-10	3.20E-10	3.10E-10	6.31E-10	1.70E-10	1.41E-10	3.11E-10
1154	650579.3	4197612	2.14E-09	2.28E-09	4.41E-09	3.21E-10	3.41E-10	6.62E-10	3.14E-10	3.04E-10	6.18E-10	1.67E-10	1.38E-10	3.05E-10
1155	650591.3	4197642	2.09E-09	2.22E-09	4.31E-09	3.14E-10	3.34E-10	6.47E-10	3.07E-10	2.97E-10	6.04E-10	1.63E-10	1.35E-10	2.98E-10
1156	650603.4	4197672	2.03E-09	2.17E-09	4.20E-09	3.06E-10	3.25E-10	6.31E-10	2.99E-10	2.90E-10	5.89E-10	1.59E-10	1.31E-10	2.90E-10
1157	650615.5	4197703	1.97E-09	2.10E-09	4.07E-09	2.97E-10	3.15E-10	6.12E-10	2.90E-10	2.81E-10	5.71E-10	1.54E-10	1.27E-10	2.81E-10
1158	650627.5	4197733	1.91E-09	2.03E-09	3.94E-09	2.87E-10	3.05E-10	5.91E-10	2.80E-10	2.72E-10	5.52E-10	1.49E-10	1.23E-10	2.72E-10
1159	650639.6	4197764	1.84E-09	1.96E-09	3.80E-09	2.76E-10	2.94E-10	5.70E-10	2.70E-10	2.62E-10	5.32E-10	1.44E-10	1.19E-10	2.62E-10
1160	650651.6	4197794	1.77E-09	1.88E-09	3.65E-09	2.65E-10	2.82E-10	5.48E-10	2.60E-10	2.52E-10	5.11E-10	1.38E-10	1.14E-10	2.52E-10
1161	650663.7	4197824	1.69E-09	1.80E-09	3.50E-09	2.55E-10	2.71E-10	5.25E-10	2.49E-10	2.41E-10	4.90E-10	1.32E-10	1.09E-10	2.42E-10
1162	650675.7	4197855	1.62E-09	1.73E-09	3.34E-09	2.43E-10	2.59E-10	5.02E-10	2.38E-10	2.31E-10	4.69E-10	1.26E-10	1.05E-10	2.31E-10
1163	650687.8	4197885	1.55E-09	1.65E-09	3.19E-09	2.32E-10	2.47E-10	4.80E-10	2.27E-10	2.20E-10	4.48E-10	1.21E-10	9.99E-11	2.21E-10
1164	650699.8	4197916	1.47E-09	1.57E-09	3.05E-09	2.22E-10	2.36E-10	4.57E-10	2.17E-10	2.10E-10	4.27E-10	1.15E-10	9.53E-11	2.10E-10
1165	650711.9	4197946	1.41E-09	1.50E-09	2.90E-09	2.11E-10	2.25E-10	4.36E-10	2.07E-10	2.00E-10	4.07E-10	1.10E-10	9.08E-11	2.01E-10
1166	650723.9	4197977	1.34E-09	1.43E-09	2.77E-09	2.01E-10	2.14E-10	4.15E-10	1.97E-10	1.91E-10	3.88E-10	1.05E-10	8.65E-11	1.91E-10
1167	650736	4198007	1.27E-09	1.36E-09	2.63E-09	1.92E-10	2.04E-10	3.95E-10	1.87E-10	1.82E-10	3.69E-10	9.96E-11	8.24E-11	1.82E-10
1168	650748	4198037	1.21E-09	1.29E-09	2.51E-09	1.82E-10	1.94E-10	3.77E-10	1.78E-10	1.73E-10	3.51E-10	9.48E-11	7.84E-11	1.73E-10
1169	650760.1	4198068	1.16E-09	1.23E-09	2.39E-09	1.74E-10	1.85E-10	3.58E-10	1.70E-10	1.65E-10	3.35E-10	9.03E-11	7.47E-11	1.65E-10
1170	649818.2	4196843	9.80E-10	1.04E-09	2.03E-09	1.47E-10	1.57E-10	3.04E-10	1.44E-10	1.40E-10	2.84E-10	7.66E-11	6.33E-11	1.40E-10
1171	649847.5	4196858	1.04E-09	1.11E-09	2.15E-09	1.56E-10	1.66E-10	3.22E-10	1.53E-10	1.48E-10	3.01E-10	8.12E-11	6.72E-11	1.48E-10
1172	649876.8	4196873	1.10E-09	1.17E-09	2.27E-09	1.66E-10	1.76E-10	3.42E-10	1.62E-10	1.57E-10	3.19E-10	8.60E-11	7.11E-11	1.57E-10
1173	649906.1	4196887	1.16E-09	1.24E-09	2.41E-09	1.75E-10	1.86E-10	3.61E-10	1.71E-10	1.66E-10	3.37E-10	9.10E-11	7.52E-11	1.66E-10
1174	649935.3	4196902	1.23E-09	1.31E-09	2.54E-09	1.85E-10	1.96E-10	3.81E-10	1.81E-10	1.75E-10	3.56E-10	9.60E-11	7.94E-11	1.75E-10
1175	649964.6	4196917	1.29E-09	1.38E-09	2.67E-09	1.95E-10	2.07E-10	4.02E-10	1.90E-10	1.84E-10	3.75E-10	1.01E-10	8.36E-11	1.85E-10
1176	649993.9	4196931	1.36E-09	1.45E-09	2.81E-09	2.04E-10	2.17E-10	4.22E-10	2.00E-10	1.94E-10	3.94E-10	1.06E-10	8.78E-11	1.94E-10
1177	650023.2	4196946	1.42E-09	1.52E-09	2.94E-09	2.14E-10	2.28E-10	4.42E-10	2.09E-10	2.03E-10	4.12E-10	1.11E-10	9.20E-11	2.03E-10
1178	650052.5	4196960	1.49E-09	1.59E-09	3.07E-09	2.24E-10	2.38E-10	4.61E-10	2.19E-10	2.12E-10	4.30E-10	1.16E-10	9.61E-11	2.12E-10
1179	650081.8	4196975	1.55E-09	1.65E-09	3.20E-09	2.33E-10	2.47E-10	4.80E-10	2.28E-10	2.21E-10	4.48E-10	1.21E-10	1.00E-10	2.21E-10
1180	650111.1	4196990	1.60E-09	1.71E-09	3.32E-09	2.41E-10	2.57E-10	4.98E-10	2.36E-10	2.29E-10	4.65E-10	1.25E-10	1.04E-10	2.29E-10
1181	650140.4	4197004	1.66E-09	1.77E-09	3.43E-09	2.49E-10	2.65E-10	5.14E-10	2.44E-10	2.36E-10	4.80E-10	1.30E-10	1.07E-10	2.37E-10
1182	650169.7	4197019	1.71E-09	1.82E-09	3.53E-09	2.57E-10	2.73E-10	5.30E-10	2.51E-10	2.43E-10	4.94E-10	1.33E-10	1.10E-10	2.44E-10
1183	650199	4197034	1.75E-09	1.87E-09	3.62E-09	2.63E-10	2.80E-10	5.43E-10	2.57E-10	2.50E-10	5.07E-10	1.37E-10	1.13E-10	2.50E-10
1184	650228.3	4197048	1.79E-09	1.91E-09	3.70E-09	2.69E-10	2.86E-10	5.55E-10	2.63E-10	2.55E-10	5.18E-10	1.40E-10	1.16E-10	2.55E-10
1185	650257.5	4197063	1.82E-09	1.94E-09	3.77E-09	2.74E-10	2.91E-10	5.65E-10	2.68E-10	2.60E-10	5.28E-10	1.42E-10	1.18E-10	2.60E-10
1186	650286.8	4197078	1.85E-09	1.97E-09	3.82E-09	2.78E-10	2.96E-10	5.74E-10	2.72E-10	2.64E-10	5.36E-10	1.45E-10	1.20E-10	2.64E-10
1187	650316.1	4197092	1.87E-09	2.00E-09	3.87E-09	2.82E-10	2.99E-10	5.81E-10	2.75E-10	2.67E-10	5.42E-10	1.46E-10	1.21E-10	2.67E-10
1188	650345.4	4197107	1.89E-09	2.02E-09	3.91E-09	2.84E-10	3.02E-10	5.87E-10	2.78E-10	2.69E-10	5.48E-10	1.48E-10	1.22E-10	2.70E-10
1189	650374.7	4197122	1.90E-09	2.03E-09	3.93E-09	2.86E-10	3.04E-10	5.90E-10	2.80E-10	2.71E-10	5.51E-10	1.49E-10	1.23E-10	2.71E-10
1190	650404	4197136	1.91E-09	2.03E-09	3.94E-09	2.87E-10	3.05E-10	5.91E-10	2.80E-10	2.72E-10	5.52E-10	1.49E-10	1.23E-10	2.72E-10
1191	650433.3	4197151	1.90E-09	2.03E-09	3.93E-09	2.86E-10	3.04E-10	5.90E-10	2.80E-10	2.71E-10	5.51E-10	1.49E-10	1.23E-10	2.72E-10
1192	650462.6	4197166	1.90E-09	2.02E-09	3.92E-09	2.85E-10	3.03E-10	5.88E-10	2.79E-10	2.70E-10	5.49E-10	1.48E-10	1.23E-10	2.71E-10
1193	650491.9	4197180	1.88E-09	2.01E-09	3.89E-09	2.83E-10	3.01E-10	5.85E-10	2.77E-10	2.69E-10	5.46E-10	1.47E-10	1.22E-10	2.69E-10
1194	650521.2	4197195	1.87E-09	1.99E-09	3.86E-09	2.81E-10	2.99E-10	5.80E-10	2.75E-10	2.66E-10	5.41E-10	1.46E-10	1.21E-10	2.67E-10
1195	650550.4	4197209	1.85E-09	1.97E-09	3.82E-09	2.78E-10	2.95E-10	5.73E-10	2.72E-10	2.63E-10	5.35E-10	1.44E-10	1.19E-10	2.64E-10
1196	650579.7	4197224	1.82E-09	1.94E-09	3.77E-09	2.74E-10	2.92E-10	5.66E-10	2.68E-10	2.60E-10	5.28E-10	1.42E-10	1.18E-10	2.60E-10
1197	650609	4197239	1.80E-09	1.91E-09	3.71E-09	2.70E-10	2.87E-10	5.57E-10	2.64E-10	2.56E-10	5.20E-10	1.40E-10	1.16E-10	2.56E-10
1198	650642.3	4197264	1.77E-09	1.89E-09	3.66E-09	2.66E-10	2.83E-10	5.49E-10	2.60E-10	2.52E-10	5.12E-10	1.38E-10	1.14E-10	2.53E-10
1199	650654.4	4197294	1.78E-09	1.90E-09	3.68E-09	2.68E-10	2.84E-10	5.52E-10	2.62E-10	2.54E-10	5.15E-10	1.39E-10	1.15E-10	2.54E-10
1200	650666.5	4197324	1.78E-09	1.90E-09	3.69E-09	2.68E-10	2.85E-10	5.54E-10	2.62E-10	2.54E-10	5.17E-10	1.39E-10	1.15E-10	2.55E-10
1201	650678.5	4197355	1.79E-09	1.90E-09	3.69E-09	2.68E-10	2.85E-10	5.54E-10	2.63E-10	2.54E-10	5.17E-10	1.39E-10	1.15E-10	2.55E-10
1202	650690.6	4197385	1.78E-09	1.90E-09	3.68E-09	2.68E-10	2.85E-10	5.53E-10	2.62E-10	2.54E-10	5.16E-10	1.39E-10	1.15E-10	2.54E-10
1203	650702.7	4197416	1.77E-09	1.89E-09	3.66E-09	2.66E-10	2.83E-10	5.50E-10	2.60E-10	2.52E-10	5.13E-10	1.38E-10	1.14E-10	2.53E-10
1204	650714.7	4197446	1.76E-09	1.87E-09	3.63E-09	2.64E-10	2.81E-10	5.45E-10	2.58E-10	2.50E-10	5.09E-10	1.37E-10	1.13E-10	2.51E-10
1205	650726.8	4197477	1.74E-09	1.85E-09	3.59E-09	2.61E-10	2.78E-10	5.39E-10	2.55E-10	2.47E-10	5.03E-10	1.36E-10	1.12E-10	2.48E-10
1206	650738.9	4197507	1.71E-09	1.82E-09	3.53E-09	2.57E-10	2.73E-10	5.31E-10	2.51E-10	2.44E-10	4.95E-10	1.34E-10	1.11E-10	2.44E-10
1207	650750.9	4197538	1.68E-09	1.79E-09	3.47E-09	2.53E-10	2.69E-10	5.21E-10	2.47E-10	2.39E-10	4.86E-10	1.31E-10	1.09E-10	2.40E-10
1208	650763	4197568	1.65E-09	1.75E-09	3.40E-09	2.47E-10	2.63E-10	5.10E-10	2.42E-10	2.34E-10	4.76E-10	1.29E-10	1.06E-10	2.35E-10
1209	650775	4197598	1.61E-09	1.71E-09	3.32E-09	2.42E-10	2.57E-10	4.98E-10	2.36E-10	2.29E-10	4.65E-10	1.25E-10	1.04E-10	2.29E-10
1210	650787.1	4197629	1.56E-09	1.67E-09	3.23E-09	2.35E-10	2.50E-10	4.85E-10	2.30E-10	2.23E-10	4.53E-10	1.22E-10	1.01E-10	2.23E-10
1211	650799.2	4197659	1.52E-09	1.62E-09	3.14E-09	2.29E-10	2.43E-10	4.72E-10	2.23E-10	2.17E-10	4.40E-10	1.19E-10	9.82E-11	2.17E-10
1212	650811.2	4197690	1.47E-09	1.57E-09	3.04E-09	2.21E-10	2.35E-10	4.57E-10	2.17E-10	2.10E-10	4.26E-10	1.15E-10	9.52E-11	2.10E-10

1213	650823.3	4197720	1.42E-09	1.52E-09	2.94E-09	2.14E-10	2.28E-10	4.42E-10	2.09E-10	2.03E-10	4.12E-10	1.11E-10	9.20E-11	2.03E-10
1214	650835.4	4197751	1.37E-09	1.46E-09	2.84E-09	2.06E-10	2.20E-10	4.26E-10	2.02E-10	1.96E-10	3.98E-10	1.07E-10	8.87E-11	1.96E-10
1215	650847.4	4197781	1.32E-09	1.41E-09	2.73E-09	1.99E-10	2.11E-10	4.10E-10	1.94E-10	1.88E-10	3.83E-10	1.03E-10	8.54E-11	1.89E-10
1216	650859.5	4197812	1.27E-09	1.36E-09	2.63E-09	1.91E-10	2.03E-10	3.94E-10	1.87E-10	1.81E-10	3.68E-10	9.93E-11	8.22E-11	1.81E-10
1217	650871.6	4197842	1.22E-09	1.30E-09	2.52E-09	1.84E-10	1.95E-10	3.79E-10	1.80E-10	1.74E-10	3.54E-10	9.54E-11	7.89E-11	1.74E-10
1218	650883.6	4197872	1.17E-09	1.25E-09	2.42E-09	1.76E-10	1.87E-10	3.64E-10	1.72E-10	1.67E-10	3.39E-10	9.16E-11	7.58E-11	1.67E-10
1219	650895.7	4197903	1.13E-09	1.20E-09	2.32E-09	1.69E-10	1.80E-10	3.49E-10	1.65E-10	1.60E-10	3.26E-10	8.79E-11	7.27E-11	1.61E-10
1220	650907.8	4197933	1.08E-09	1.15E-09	2.23E-09	1.62E-10	1.73E-10	3.35E-10	1.59E-10	1.54E-10	3.12E-10	8.43E-11	6.97E-11	1.54E-10
1221	650919.8	4197964	1.04E-09	1.10E-09	2.14E-09	1.56E-10	1.65E-10	3.21E-10	1.52E-10	1.48E-10	3.00E-10	8.09E-11	6.69E-11	1.48E-10
1222	650931.9	4197994	9.93E-10	1.06E-09	2.05E-09	1.49E-10	1.59E-10	3.08E-10	1.46E-10	1.42E-10	2.88E-10	7.76E-11	6.42E-11	1.42E-10
1223	650944	4198025	9.52E-10	1.02E-09	1.97E-09	1.43E-10	1.52E-10	2.95E-10	1.40E-10	1.36E-10	2.76E-10	7.44E-11	6.15E-11	1.36E-10
1224	650956	4198055	9.14E-10	9.74E-10	1.89E-09	1.37E-10	1.46E-10	2.83E-10	1.34E-10	1.30E-10	2.65E-10	7.14E-11	5.90E-11	1.30E-10
1225	650968.1	4198086	8.76E-10	9.34E-10	1.81E-09	1.32E-10	1.40E-10	2.72E-10	1.29E-10	1.25E-10	2.54E-10	6.84E-11	5.66E-11	1.25E-10
1226	649837.9	4196644	6.92E-10	7.38E-10	1.43E-09	1.04E-10	1.11E-10	2.15E-10	1.02E-10	9.86E-11	2.00E-10	5.41E-11	4.47E-11	9.88E-11
1227	649867.2	4196659	7.29E-10	7.77E-10	1.51E-09	1.10E-10	1.17E-10	2.26E-10	1.07E-10	1.04E-10	2.11E-10	5.69E-11	4.71E-11	1.04E-10
1228	649896.5	4196674	7.68E-10	8.19E-10	1.59E-09	1.16E-10	1.23E-10	2.38E-10	1.13E-10	1.09E-10	2.22E-10	6.00E-11	4.96E-11	1.10E-10
1229	649925.9	4196688	8.09E-10	8.63E-10	1.67E-09	1.22E-10	1.29E-10	2.51E-10	1.19E-10	1.15E-10	2.34E-10	6.32E-11	5.23E-11	1.15E-10
1230	649955.2	4196703	8.52E-10	9.08E-10	1.76E-09	1.28E-10	1.36E-10	2.64E-10	1.25E-10	1.21E-10	2.47E-10	6.65E-11	5.51E-11	1.22E-10
1231	649984.5	4196718	8.96E-10	9.55E-10	1.85E-09	1.35E-10	1.43E-10	2.78E-10	1.32E-10	1.28E-10	2.59E-10	7.00E-11	5.79E-11	1.28E-10
1232	650013.8	4196732	9.42E-10	1.00E-09	1.95E-09	1.42E-10	1.51E-10	2.92E-10	1.38E-10	1.34E-10	2.73E-10	7.35E-11	6.08E-11	1.34E-10
1233	650043.1	4196747	9.88E-10	1.05E-09	2.04E-09	1.49E-10	1.58E-10	3.06E-10	1.45E-10	1.41E-10	2.86E-10	7.71E-11	6.38E-11	1.41E-10
1234	650072.4	4196762	1.03E-09	1.10E-09	2.14E-09	1.56E-10	1.65E-10	3.21E-10	1.52E-10	1.47E-10	2.99E-10	8.08E-11	6.68E-11	1.48E-10
1235	650101.7	4196776	1.08E-09	1.15E-09	2.23E-09	1.63E-10	1.73E-10	3.35E-10	1.59E-10	1.54E-10	3.13E-10	8.45E-11	6.99E-11	1.54E-10
1236	650131	4196791	1.13E-09	1.20E-09	2.33E-09	1.70E-10	1.80E-10	3.50E-10	1.66E-10	1.61E-10	3.26E-10	8.81E-11	7.28E-11	1.61E-10
1237	650160.4	4196806	1.17E-09	1.25E-09	2.42E-09	1.76E-10	1.87E-10	3.64E-10	1.72E-10	1.67E-10	3.39E-10	9.16E-11	7.57E-11	1.67E-10
1238	650189.7	4196820	1.22E-09	1.30E-09	2.51E-09	1.83E-10	1.94E-10	3.77E-10	1.79E-10	1.73E-10	3.52E-10	9.49E-11	7.86E-11	1.74E-10
1239	650219	4196835	1.26E-09	1.34E-09	2.60E-09	1.89E-10	2.01E-10	3.90E-10	1.85E-10	1.79E-10	3.64E-10	9.82E-11	8.12E-11	1.79E-10
1240	650248.3	4196849	1.30E-09	1.38E-09	2.68E-09	1.95E-10	2.07E-10	4.02E-10	1.91E-10	1.85E-10	3.75E-10	1.01E-10	8.38E-11	1.85E-10
1241	650277.6	4196864	1.33E-09	1.42E-09	2.76E-09	2.01E-10	2.13E-10	4.14E-10	1.96E-10	1.90E-10	3.86E-10	1.04E-10	8.62E-11	1.90E-10
1242	650306.9	4196879	1.37E-09	1.46E-09	2.82E-09	2.06E-10	2.19E-10	4.24E-10	2.01E-10	1.95E-10	3.96E-10	1.07E-10	8.83E-11	1.95E-10
1243	650336.2	4196893	1.40E-09	1.49E-09	2.89E-09	2.10E-10	2.23E-10	4.34E-10	2.05E-10	1.99E-10	4.05E-10	1.09E-10	9.03E-11	1.99E-10
1244	650365.6	4196908	1.42E-09	1.52E-09	2.94E-09	2.14E-10	2.28E-10	4.42E-10	2.09E-10	2.03E-10	4.12E-10	1.11E-10	9.21E-11	2.03E-10
1245	650394.9	4196923	1.45E-09	1.54E-09	2.99E-09	2.18E-10	2.31E-10	4.49E-10	2.13E-10	2.06E-10	4.19E-10	1.13E-10	9.36E-11	2.07E-10
1246	650424.2	4196937	1.46E-09	1.56E-09	3.03E-09	2.20E-10	2.34E-10	4.54E-10	2.15E-10	2.09E-10	4.24E-10	1.14E-10	9.46E-11	2.09E-10
1247	650453.5	4196952	1.48E-09	1.58E-09	3.07E-09	2.23E-10	2.37E-10	4.60E-10	2.18E-10	2.11E-10	4.30E-10	1.16E-10	9.59E-11	2.12E-10
1248	650482.8	4196967	1.50E-09	1.59E-09	3.09E-09	2.25E-10	2.39E-10	4.64E-10	2.20E-10	2.13E-10	4.33E-10	1.17E-10	9.67E-11	2.14E-10
1249	650512.1	4196981	1.50E-09	1.60E-09	3.11E-09	2.26E-10	2.40E-10	4.67E-10	2.21E-10	2.14E-10	4.36E-10	1.18E-10	9.72E-11	2.15E-10
1250	650541.4	4196996	1.51E-09	1.61E-09	3.11E-09	2.27E-10	2.41E-10	4.68E-10	2.22E-10	2.15E-10	4.36E-10	1.18E-10	9.74E-11	2.15E-10
1251	650570.7	4197011	1.51E-09	1.61E-09	3.12E-09	2.27E-10	2.41E-10	4.68E-10	2.22E-10	2.15E-10	4.37E-10	1.18E-10	9.75E-11	2.15E-10
1252	650600.1	4197025	1.51E-09	1.61E-09	3.11E-09	2.27E-10	2.41E-10	4.67E-10	2.21E-10	2.15E-10	4.36E-10	1.18E-10	9.73E-11	2.15E-10
1253	650629.4	4197040	1.50E-09	1.60E-09	3.10E-09	2.26E-10	2.40E-10	4.66E-10	2.21E-10	2.14E-10	4.35E-10	1.17E-10	9.70E-11	2.14E-10
1254	650658.7	4197055	1.49E-09	1.59E-09	3.08E-09	2.24E-10	2.39E-10	4.63E-10	2.19E-10	2.13E-10	4.32E-10	1.17E-10	9.65E-11	2.13E-10
1255	650688	4197069	1.48E-09	1.58E-09	3.06E-09	2.23E-10	2.37E-10	4.59E-10	2.18E-10	2.11E-10	4.29E-10	1.16E-10	9.57E-11	2.11E-10
1256	650717.3	4197084	1.47E-09	1.56E-09	3.03E-09	2.20E-10	2.34E-10	4.55E-10	2.16E-10	2.09E-10	4.25E-10	1.15E-10	9.47E-11	2.09E-10
1257	650746.6	4197099	1.45E-09	1.55E-09	3.00E-09	2.18E-10	2.32E-10	4.50E-10	2.13E-10	2.07E-10	4.20E-10	1.13E-10	9.37E-11	2.07E-10
1258	650775.9	4197113	1.43E-09	1.53E-09	2.96E-09	2.15E-10	2.29E-10	4.44E-10	2.11E-10	2.04E-10	4.15E-10	1.12E-10	9.25E-11	2.04E-10
1259	650793.8	4197139	1.43E-09	1.53E-09	2.96E-09	2.16E-10	2.29E-10	4.45E-10	2.11E-10	2.04E-10	4.15E-10	1.12E-10	9.26E-11	2.05E-10
1260	650805.8	4197169	1.44E-09	1.54E-09	2.98E-09	2.17E-10	2.31E-10	4.48E-10	2.12E-10	2.06E-10	4.18E-10	1.13E-10	9.33E-11	2.06E-10
1261	650817.9	4197199	1.45E-09	1.55E-09	3.00E-09	2.18E-10	2.32E-10	4.50E-10	2.13E-10	2.07E-10	4.20E-10	1.13E-10	9.37E-11	2.07E-10
1262	650830	4197230	1.45E-09	1.55E-09	3.00E-09	2.19E-10	2.32E-10	4.51E-10	2.14E-10	2.07E-10	4.21E-10	1.14E-10	9.40E-11	2.08E-10
1263	650842.1	4197260	1.45E-09	1.55E-09	3.00E-09	2.19E-10	2.33E-10	4.51E-10	2.14E-10	2.07E-10	4.21E-10	1.14E-10	9.40E-11	2.08E-10
1264	650854.1	4197291	1.45E-09	1.55E-09	3.00E-09	2.18E-10	2.32E-10	4.50E-10	2.13E-10	2.07E-10	4.20E-10	1.13E-10	9.38E-11	2.07E-10
1265	650866.2	4197321	1.45E-09	1.54E-09	2.99E-09	2.17E-10	2.31E-10	4.48E-10	2.12E-10	2.06E-10	4.18E-10	1.13E-10	9.34E-11	2.06E-10
1266	650878.3	4197352	1.44E-09	1.53E-09	2.97E-09	2.16E-10	2.29E-10	4.45E-10	2.11E-10	2.05E-10	4.16E-10	1.12E-10	9.28E-11	2.05E-10
1267	650890.4	4197382	1.42E-09	1.52E-09	2.94E-09	2.14E-10	2.27E-10	4.41E-10	2.09E-10	2.03E-10	4.12E-10	1.11E-10	9.19E-11	2.03E-10
1268	650902.4	4197413	1.41E-09	1.50E-09	2.90E-09	2.11E-10	2.25E-10	4.36E-10	2.07E-10	2.00E-10	4.07E-10	1.10E-10	9.08E-11	2.01E-10
1269	650914.5	4197443	1.38E-09	1.48E-09	2.86E-09	2.08E-10	2.21E-10	4.30E-10	2.04E-10	1.97E-10	4.01E-10	1.08E-10	8.95E-11	1.98E-10
1270	650926.6	4197474	1.36E-09	1.45E-09	2.81E-09	2.05E-10	2.18E-10	4.22E-10	2.00E-10	1.94E-10	3.94E-10	1.06E-10	8.80E-11	1.94E-10
1271	650938.6	4197504	1.34E-09	1.42E-09	2.76E-09	2.01E-10	2.13E-10	4.14E-10	1.96E-10	1.90E-10	3.87E-10	1.04E-10	8.63E-11	1.91E-10
1272	650950.7	4197535	1.31E-09	1.39E-09	2.70E-09	1.96E-10	2.09E-10	4.05E-10	1.92E-10	1.86E-10	3.78E-10	1.02E-10	8.44E-11	1.86E-10
1273	650962.8	4197565	1.27E-09	1.36E-09	2.63E-09	1.92E-10	2.04E-10	3.95E-10	1.87E-10	1.82E-10	3.69E-10	9.96E-11	8.24E-11	1.82E-10
1274	650974.9	4197596	1.24E-09	1.32E-09	2.56E-09	1.87E-10	1.98E-10	3.85E-10	1.83E-10	1.77E-10	3.59E-10	9.70E-11	8.02E-11	1.77E-10
1275	650986.9	4197626	1.21E-09	1.29E-09	2.49E-09	1.81E-10	1.93E-10	3.74E-10	1.77E-10	1.72E-10	3.49E-10	9.43E-11	7.80E-11	1.72E-10
1276	650999	4197656	1.17E-09	1.25E-09	2.42E-09	1.76E-10	1.87E-10	3.63E-10	1.72E-10	1.67E-10	3.39E-10	9.15E-11	7.57E-11	1.67E-10
1277	651011.1	4197687	1.13E-09	1.21E-09	2.34E-09	1.71E-10	1.81E-10	3.52E-10	1.67E-10	1.62E-10	3.29E-10	8.86E-11	7.33E-11	1.62E-10
1278	651023.2	4197717	1.10E-09	1.17E-09	2.27E-09	1.65E-10	1.75E-10	3.41E-10	1.61E-10	1.56E-10	3.18E-10	8.57E-11	7.09E-11	1.57E-10
1279	651035.2	4197748	1.06E-09	1.13E-09	2.19E-09	1.59E-10	1.70E-10	3.29E-10	1.56E-10	1.51E-10	3.07E-10	8.28E-11	6.85E-11	1.51E-10
1280	651047.3	4197778	1.02E-09	1.09E-09	2.12E-09	1.54E-10	1.64E-10	3.18E-10	1.51E-10	1.46E-10	2.96E-10	8.00E-11	6.62E-11	1.46E-10
1281	651059.4	4197809	9.88E-10	1.05E-09	2.04E-09	1.49E-10	1.58E-10	3.07E-10	1.45E-10	1.41E-10	2.86E-10	7.72E-11	6.38E-11	1.41E-10
1282	651071.5	4197839	9.53E-10	1.02E-09	1.97E-09	1.43E-10	1.52E-10	2.96E-10	1.40E-10	1.36E-10	2.76E-10	7.45E-11	6.16E-11	1.36E-10
1283	651083.5	4197870	9.19E-10	9.80E-10	1.90E-09	1.38E-10	1.47E-10	2.85E-10	1.35E-10	1.31E-10	2.66E-10	7.18E-11	5.94E-11	1.31E-10
1284	651095.6	4197900	8.87E-10	9.45E-10	1.83E-09	1.33E-10	1.42E-10	2.75E-10	1.30E-10	1.26E-10	2.57E-10	6.93E-11	5.73E-11	1.27E-10
1285	651107.7	4197931	8.55E-10	9.12E-10	1.77E-09	1.29E-10	1.37E-10	2.65E-10	1.26E-10	1.22E-10	2.48E-10	6.68E-11	5.53E-11	1.22E-10
1286	651119.8	4197961	8.25E-10	8.80E-10	1.70E-09	1.24E-10	1.32E-10	2.56E-10	1.21E-10	1.18E-10	2.39E-10	6.45E-11	5.33E-11	1.18E-10
1287	651131.8	4197992	7.96E-10	8.49E-10	1.64E-09	1.20E-10	1.27E-10	2.47E-10	1.17E-10	1.13E-10	2.30E-10	6.22E-11	5.14E-11	1.14E-10
1288	651143.9	4198022	7.68E-10	8.18E-10	1.59E-09	1.15E-10	1.23E-10	2.38E-10	1.13E-10	1.09E-10	2.22E-10	6.00E-11	4.96E-11	1.10E-10

1289	651156	4198053	7.40E-10	7.89E-10	1.53E-09	1.11E-10	1.18E-10	2.30E-10	1.09E-10	1.05E-10	2.14E-10	5.78E-11	4.78E-11	1.06E-10
1290	651168.1	4198083	7.14E-10	7.61E-10	1.47E-09	1.07E-10	1.14E-10	2.21E-10	1.05E-10	1.02E-10	2.07E-10	5.58E-11	4.61E-11	1.02E-10
1291	649653.7	4198103	5.69E-08	6.06E-08	1.17E-07	8.55E-09	9.09E-09	1.76E-08	8.36E-09	8.10E-09	1.65E-08	4.44E-09	3.67E-09	8.12E-09
1292	649614.2	4198097	6.35E-08	6.77E-08	1.31E-07	9.55E-09	1.01E-08	1.97E-08	9.33E-09	9.05E-09	1.84E-08	4.96E-09	4.10E-09	9.06E-09
1293	649574.7	4198090	7.35E-08	7.84E-08	1.52E-07	1.11E-08	1.18E-08	2.28E-08	1.08E-08	1.05E-08	2.13E-08	5.74E-09	4.75E-09	1.05E-08
1294	649657.8	4198078	4.49E-08	4.78E-08	9.27E-08	6.75E-09	7.17E-09	1.39E-08	6.60E-09	6.39E-09	1.30E-08	3.51E-09	2.90E-09	6.40E-09
1295	649618.3	4198072	5.05E-08	5.38E-08	1.04E-07	7.59E-09	8.07E-09	1.57E-08	7.42E-09	7.19E-09	1.46E-08	3.94E-09	3.26E-09	7.20E-09
1296	649578.8	4198065	5.82E-08	6.20E-08	1.20E-07	8.75E-09	9.30E-09	1.81E-08	8.56E-09	8.29E-09	1.68E-08	4.55E-09	3.76E-09	8.31E-09
1297	649661.8	4198054	3.76E-08	4.01E-08	7.78E-08	5.66E-09	6.02E-09	1.17E-08	5.53E-09	5.36E-09	1.09E-08	2.94E-09	2.43E-09	5.37E-09
1298	649622.3	4198047	4.24E-08	4.52E-08	8.76E-08	6.38E-09	6.78E-09	1.32E-08	6.24E-09	6.04E-09	1.23E-08	3.31E-09	2.74E-09	6.05E-09
1299	649582.8	4198041	4.86E-08	5.18E-08	1.00E-07	7.31E-09	7.78E-09	1.51E-08	7.15E-09	6.93E-09	1.41E-08	3.80E-09	3.14E-09	6.94E-09
1300	649646.2	4198026	3.46E-08	3.69E-08	7.16E-08	5.21E-09	5.54E-09	1.07E-08	5.09E-09	4.94E-09	1.00E-08	2.71E-09	2.24E-09	4.94E-09
1301	649606.7	4198019	3.92E-08	4.18E-08	8.10E-08	5.90E-09	6.27E-09	1.22E-08	5.77E-09	5.59E-09	1.14E-08	3.06E-09	2.53E-09	5.60E-09
1302	649654.3	4197976	2.76E-08	2.94E-08	5.70E-08	4.15E-09	4.41E-09	8.56E-09	4.06E-09	3.93E-09	7.99E-09	2.16E-09	1.78E-09	3.94E-09
1303	649614.8	4197970	3.09E-08	3.30E-08	6.39E-08	4.65E-09	4.95E-09	9.60E-09	4.55E-09	4.41E-09	8.96E-09	2.42E-09	2.00E-09	4.42E-09
1304	649642.7	4197924	2.40E-08	2.56E-08	4.97E-08	3.61E-09	3.84E-09	7.46E-09	3.53E-09	3.43E-09	6.96E-09	1.88E-09	1.55E-09	3.43E-09
1305	649603.2	4197917	2.67E-08	2.84E-08	5.51E-08	4.01E-09	4.27E-09	8.28E-09	3.92E-09	3.80E-09	7.73E-09	2.08E-09	1.72E-09	3.81E-09
1306	649690.4	4197881	1.82E-08	1.94E-08	3.76E-08	2.74E-09	2.91E-09	5.64E-09	2.68E-09	2.59E-09	5.27E-09	1.42E-09	1.18E-09	2.60E-09
1307	649650.9	4197875	2.00E-08	2.13E-08	4.14E-08	3.01E-09	3.20E-09	6.21E-09	2.94E-09	2.85E-09	5.80E-09	1.56E-09	1.29E-09	2.86E-09
1308	649611.4	4197868	2.19E-08	2.34E-08	4.53E-08	3.29E-09	3.50E-09	6.80E-09	3.22E-09	3.12E-09	6.34E-09	1.71E-09	1.42E-09	3.13E-09
1309	649659.1	4197825	1.64E-08	1.75E-08	3.40E-08	2.47E-09	2.63E-09	5.10E-09	2.42E-09	2.34E-09	4.76E-09	1.28E-09	1.06E-09	2.35E-09
1310	649619.6	4197819	1.77E-08	1.89E-08	3.66E-08	2.67E-09	2.83E-09	5.50E-09	2.61E-09	2.53E-09	5.13E-09	1.38E-09	1.15E-09	2.53E-09
1311	649655.6	4197723	1.22E-08	1.30E-08	2.52E-08	1.84E-09	1.95E-09	3.79E-09	1.79E-09	1.74E-09	3.53E-09	9.53E-10	7.89E-10	1.74E-09
1312	649652.2	4197621	8.48E-09	9.04E-09	1.75E-08	1.28E-09	1.36E-09	2.63E-09	1.25E-09	1.21E-09	2.46E-09	6.63E-10	5.48E-10	1.21E-09
1313	649724.4	4197431	4.30E-09	4.58E-09	8.89E-09	6.47E-10	6.88E-10	1.33E-09	6.32E-10	6.13E-10	1.25E-09	3.36E-10	2.78E-10	6.14E-10
1314	649684.9	4197424	4.15E-09	4.43E-09	8.58E-09	6.24E-10	6.64E-10	1.29E-09	6.10E-10	5.92E-10	1.20E-09	3.24E-10	2.68E-10	5.93E-10
1315	649757	4197233	2.39E-09	2.55E-09	4.94E-09	3.59E-10	3.82E-10	7.42E-10	3.51E-10	3.41E-10	6.92E-10	1.87E-10	1.54E-10	3.41E-10
1316	649717.5	4197227	2.27E-09	2.42E-09	4.69E-09	3.41E-10	3.63E-10	7.04E-10	3.33E-10	3.23E-10	6.57E-10	1.77E-10	1.47E-10	3.24E-10
1317	649848.9	4197046	1.58E-09	1.68E-09	3.27E-09	2.38E-10	2.53E-10	4.90E-10	2.32E-10	2.25E-10	4.58E-10	1.23E-10	1.02E-10	2.26E-10
1318	649769.9	4197033	1.42E-09	1.52E-09	2.94E-09	2.14E-10	2.27E-10	4.41E-10	2.09E-10	2.03E-10	4.12E-10	1.11E-10	9.19E-11	2.03E-10
1319	649881.6	4196848	1.05E-09	1.12E-09	2.17E-09	1.58E-10	1.68E-10	3.27E-10	1.55E-10	1.50E-10	3.05E-10	8.22E-11	6.80E-11	1.50E-10
1320	649782.8	4196832	9.24E-10	9.85E-10	1.91E-09	1.39E-10	1.48E-10	2.87E-10	1.36E-10	1.32E-10	2.68E-10	7.22E-11	5.97E-11	1.32E-10
1321	649914.2	4196651	7.51E-10	8.00E-10	1.55E-09	1.13E-10	1.20E-10	2.33E-10	1.10E-10	1.07E-10	2.17E-10	5.87E-11	4.85E-11	1.07E-10
1322	649815.5	4196635	6.67E-10	7.11E-10	1.38E-09	1.00E-10	1.07E-10	2.07E-10	9.81E-11	9.50E-11	1.93E-10	5.21E-11	4.31E-11	9.52E-11
1323	649936.4	4197077	1.80E-09	1.92E-09	3.72E-09	2.71E-10	2.88E-10	5.59E-10	2.65E-10	2.57E-10	5.22E-10	1.41E-10	1.16E-10	2.57E-10
1324	650002.9	4196889	1.26E-09	1.34E-09	2.59E-09	1.89E-10	2.01E-10	3.89E-10	1.85E-10	1.79E-10	3.63E-10	9.81E-11	8.11E-11	1.79E-10
1325	650069.4	4196700	9.27E-10	9.88E-10	1.91E-09	1.39E-10	1.48E-10	2.87E-10	1.36E-10	1.32E-10	2.68E-10	7.24E-11	5.99E-11	1.32E-10
1326	649546.5	4198075	7.64E-08	8.15E-08	1.58E-07	1.15E-08	1.22E-08	2.37E-08	1.12E-08	1.09E-08	2.21E-08	5.97E-09	4.94E-09	1.09E-08
1327	649558.7	4198053	5.95E-08	6.35E-08	1.23E-07	8.95E-09	9.52E-09	1.85E-08	8.75E-09	8.48E-09	1.72E-08	4.65E-09	3.85E-09	8.50E-09
1328	649583.2	4198010	4.13E-08	4.41E-08	8.54E-08	6.22E-09	6.61E-09	1.28E-08	6.08E-09	5.89E-09	1.20E-08	3.23E-09	2.67E-09	5.90E-09
1329	649705	4197849	1.57E-08	1.67E-08	3.24E-08	2.36E-09	2.51E-09	4.87E-09	2.31E-09	2.24E-09	4.54E-09	1.23E-09	1.01E-09	2.24E-09
1330	649999.1	4197326	3.17E-09	3.38E-09	6.55E-09	4.77E-10	5.07E-10	9.84E-10	4.66E-10	4.52E-10	9.18E-10	2.48E-10	2.05E-10	4.53E-10
1331	649975.3	4197312	3.10E-09	3.31E-09	6.41E-09	4.66E-10	4.96E-10	9.62E-10	4.56E-10	4.42E-10	8.98E-10	2.42E-10	2.00E-10	4.43E-10
1332	650097.1	4197151	2.18E-09	2.33E-09	4.51E-09	3.28E-10	3.49E-10	6.77E-10	3.21E-10	3.11E-10	6.32E-10	1.70E-10	1.41E-10	3.11E-10
1333	650073.3	4197138	2.13E-09	2.27E-09	4.39E-09	3.20E-10	3.40E-10	6.60E-10	3.13E-10	3.03E-10	6.16E-10	1.66E-10	1.37E-10	3.04E-10
1334	650195.1	4196977	1.59E-09	1.70E-09	3.29E-09	2.39E-10	2.54E-10	4.93E-10	2.34E-10	2.27E-10	4.60E-10	1.24E-10	1.03E-10	2.27E-10
1335	650171.4	4196964	1.55E-09	1.65E-09	3.20E-09	2.33E-10	2.48E-10	4.81E-10	2.28E-10	2.21E-10	4.49E-10	1.21E-10	1.00E-10	2.21E-10
1336	650293.2	4196803	1.21E-09	1.30E-09	2.51E-09	1.83E-10	1.94E-10	3.77E-10	1.79E-10	1.73E-10	3.52E-10	9.49E-11	7.85E-11	1.73E-10
1337	650269.4	4196789	1.18E-09	1.26E-09	2.45E-09	1.78E-10	1.89E-10	3.67E-10	1.74E-10	1.69E-10	3.43E-10	9.24E-11	7.65E-11	1.69E-10
1338	649520.1	4198057	7.81E-08	8.32E-08	1.61E-07	1.17E-08	1.25E-08	2.42E-08	1.15E-08	1.11E-08	2.26E-08	6.10E-09	5.04E-09	1.11E-08
1339	649534.2	4198036	6.10E-08	6.50E-08	1.26E-07	9.17E-09	9.75E-09	1.89E-08	8.97E-09	8.69E-09	1.77E-08	4.76E-09	3.94E-09	8.70E-09
1340	649562.5	4198025	4.92E-08	5.24E-08	1.02E-07	7.40E-09	7.87E-09	1.53E-08	7.23E-09	7.01E-09	1.42E-08	3.84E-09	3.18E-09	7.02E-09
1341	649534.3	4198006	5.10E-08	5.43E-08	1.05E-07	7.67E-09	8.15E-09	1.58E-08	7.50E-09	7.26E-09	1.48E-08	3.98E-09	3.29E-09	7.28E-09
1342	649562.5	4197995	4.23E-08	4.51E-08	8.73E-08	6.36E-09	6.76E-09	1.31E-08	6.22E-09	6.02E-09	1.22E-08	3.30E-09	2.73E-09	6.03E-09
1343	649590.7	4197954	3.18E-08	3.39E-08	6.57E-08	4.78E-09	5.08E-09	9.86E-09	4.67E-09	4.53E-09	9.20E-09	2.48E-09	2.05E-09	4.54E-09
1344	650155.4	4197189	2.31E-09	2.46E-09	4.77E-09	3.48E-10	3.69E-10	7.17E-10	3.40E-10	3.29E-10	6.69E-10	1.81E-10	1.49E-10	3.30E-10
1345	650127.2	4197170	2.25E-09	2.40E-09	4.64E-09	3.38E-10	3.59E-10	6.97E-10	3.31E-10	3.20E-10	6.51E-10	1.76E-10	1.45E-10	3.21E-10
1346	650268.4	4197024	1.71E-09	1.83E-09	3.54E-09	2.57E-10	2.74E-10	5.31E-10	2.52E-10	2.44E-10	4.96E-10	1.34E-10	1.11E-10	2.44E-10
1347	650240.2	4197005	1.67E-09	1.78E-09	3.44E-09	2.51E-10	2.66E-10	5.17E-10	2.45E-10	2.37E-10	4.82E-10	1.30E-10	1.08E-10	2.38E-10
1348	650381.3	4196859	1.33E-09	1.41E-09	2.74E-09	1.99E-10	2.12E-10	4.11E-10	1.95E-10	1.89E-10	3.84E-10	1.04E-10	8.57E-11	1.89E-10
1349	650353.1	4196840	1.29E-09	1.38E-09	2.67E-09	1.94E-10	2.06E-10	4.00E-10	1.90E-10	1.84E-10	3.74E-10	1.01E-10	8.34E-11	1.84E-10
1350	649490.9	4198036	8.09E-08	8.62E-08	1.67E-07	1.22E-08	1.29E-08	2.51E-08	1.19E-08	1.15E-08	2.34E-08	6.32E-09	5.23E-09	1.15E-08
1351	649505.8	4198016	6.32E-08	6.73E-08	1.31E-07	9.50E-09	1.01E-08	1.96E-08	9.29E-09	9.00E-09	1.83E-08	4.93E-09	4.08E-09	9.02E-09
1352	649504.8	4197984	5.28E-08	5.63E-08	1.09E-07	7.94E-09	8.44E-09	1.64E-08	7.76E-09	7.52E-09	1.53E-08	4.12E-09	3.41E-09	7.54E-09
1353	649535.6	4197976	4.36E-08	4.65E-08	9.01E-08	6.55E-09	6.97E-09	1.35E-08	6.41E-09	6.21E-09	1.26E-08	3.41E-09	2.82E-09	6.22E-09
1354	649565.5	4197936	3.25E-08	3.47E-08	6.72E-08	4.89E-09	5.20E-09	1.01E-08	4.78E-09	4.64E-09	9.42E-09	2.54E-09	2.10E-09	4.64E-09
1355	649595.4	4197896	2.53E-08	2.70E-08	5.23E-08	3.81E-09	4.05E-09	7.85E-09	3.72E-09	3.61E-09	7.33E-09	1.98E-09	1.64E-09	3.61E-09
1356	649609.3	4197844	2.01E-08	2.14E-08	4.16E-08	3.03E-09	3.22E-09	6.24E-09	2.96E-09	2.87E-09	5.82E-09	1.57E-09	1.30E-09	2.87E-09
1357	649639.1	4197803	1.61E-08	1.71E-08	3.32E-08	2.42E-09	2.57E-09	4.98E-09	2.36E-09	2.29E-09	4.65E-09	1.25E-09	1.04E-09	2.29E-09
1358	649461.9	4198013	8.36E-08	8.92E-08	1.73E-07	1.26E-08	1.34E-08	2.59E-08	1.23E-08	1.19E-08	2.42E-08	6.53E-09	5.40E-09	1.19E-08
1359	649478.3	4197994	6.51E-08	6.94E-08	1.34E-07	9.79E-09	1.04E-08	2.02E-08	9.57E-09	9.28E-09	1.88E-08	5.09E-09	4.21E-09	9.29E-09
1360	649480.3	4197962	5.36E-08	5.72E-08	1.11E-07	8.06E-09	8.57E-09	1.66E-08	7.88E-09	7.64E-09	1.55E-08	4.19E-09	3.47E-09	7.65E-09
1361	649511.2	4197956	4.45E-08	4.74E-08	9.19E-08	6.69E-09	7.11E-09	1.38E-08	6.54E-09	6.34E-09	1.29E-08	3.47E-09	2.87E-09	6.35E-09
1362	649544	4197918	3.26E-08	3.48E-08	6.73E-08	4.90E-09	5.21E-09	1.01E-08	4.79E-09	4.65E-09	9.44E-09	2.55E-09	2.11E-09	4.65E-09
1363	649576.9	4197881	2.54E-08	2.71E-08	5.24E-08	3.82E-09	4.06E-09	7.87E-09	3.73E-09	3.62E-09	7.35E-09	1.98E-09	1.64E-09	3.62E-09
1364	650314.1	4197064	1.80E-09	1.92E-09	3.72E-09	2.71E-10	2.88E-10	5.58E-10	2.65E-10	2.56E-10	5.21E-10	1.41E-10	1.16E-10	2.57E-10

1365	650445.5	4196913	1.41E-09	1.51E-09	2.92E-09	2.13E-10	2.26E-10	4.38E-10	2.08E-10	2.01E-10	4.09E-10	1.10E-10	9.13E-11	2.02E-10
1366	650416.6	4196888	1.37E-09	1.47E-09	2.84E-09	2.07E-10	2.20E-10	4.27E-10	2.02E-10	1.96E-10	3.98E-10	1.07E-10	8.88E-11	1.96E-10
1367	649435.4	4197986	8.44E-08	9.00E-08	1.74E-07	1.27E-08	1.35E-08	2.62E-08	1.24E-08	1.20E-08	2.44E-08	6.59E-09	5.45E-09	1.20E-08
1368	649406.7	4197953	8.28E-08	8.82E-08	1.71E-07	1.24E-08	1.32E-08	2.57E-08	1.22E-08	1.18E-08	2.40E-08	6.47E-09	5.35E-09	1.18E-08
1369	649378	4197921	7.92E-08	8.44E-08	1.64E-07	1.19E-08	1.27E-08	2.46E-08	1.16E-08	1.13E-08	2.29E-08	6.18E-09	5.11E-09	1.13E-08
1370	649454.2	4197970	6.53E-08	6.96E-08	1.35E-07	9.82E-09	1.04E-08	2.03E-08	9.60E-09	9.31E-09	1.89E-08	5.10E-09	4.22E-09	9.32E-09
1371	649425.5	4197937	6.37E-08	6.79E-08	1.32E-07	9.57E-09	1.02E-08	1.98E-08	9.36E-09	9.07E-09	1.84E-08	4.97E-09	4.11E-09	9.09E-09
1372	649396.8	4197904	5.99E-08	6.39E-08	1.24E-07	9.01E-09	9.58E-09	1.86E-08	8.81E-09	8.54E-09	1.73E-08	4.68E-09	3.87E-09	8.55E-09
1373	649458.6	4197937	5.23E-08	5.58E-08	1.08E-07	7.87E-09	8.37E-09	1.62E-08	7.69E-09	7.46E-09	1.52E-08	4.09E-09	3.38E-09	7.47E-09
1374	649429.9	4197904	4.99E-08	5.32E-08	1.03E-07	7.51E-09	7.98E-09	1.55E-08	7.34E-09	7.12E-09	1.45E-08	3.90E-09	3.23E-09	7.13E-09
1375	649401.2	4197871	4.49E-08	4.79E-08	9.28E-08	6.75E-09	7.18E-09	1.39E-08	6.60E-09	6.40E-09	1.30E-08	3.51E-09	2.90E-09	6.41E-09
1376	649491.8	4197937	4.43E-08	4.72E-08	9.15E-08	6.66E-09	7.08E-09	1.37E-08	6.51E-09	6.31E-09	1.28E-08	3.46E-09	2.86E-09	6.32E-09
1377	649463.1	4197904	4.25E-08	4.53E-08	8.78E-08	6.39E-09	6.79E-09	1.32E-08	6.25E-09	6.06E-09	1.23E-08	3.32E-09	2.75E-09	6.07E-09
1378	649434.4	4197871	3.95E-08	4.21E-08	8.16E-08	5.94E-09	6.32E-09	1.23E-08	5.81E-09	5.63E-09	1.14E-08	3.09E-09	2.55E-09	5.64E-09
1379	649515	4197887	3.13E-08	3.33E-08	6.46E-08	4.70E-09	5.00E-09	9.70E-09	4.60E-09	4.45E-09	9.05E-09	2.44E-09	2.02E-09	4.46E-09
1380	649486.3	4197855	2.90E-08	3.09E-08	5.98E-08	4.36E-09	4.63E-09	8.99E-09	4.26E-09	4.13E-09	8.39E-09	2.26E-09	1.87E-09	4.13E-09
1381	649457.6	4197822	2.61E-08	2.78E-08	5.39E-08	3.92E-09	4.17E-09	8.09E-09	3.84E-09	3.72E-09	7.55E-09	2.04E-09	1.69E-09	3.72E-09
1382	649552.5	4197854	2.47E-08	2.63E-08	5.10E-08	3.71E-09	3.94E-09	7.65E-09	3.63E-09	3.51E-09	7.14E-09	1.93E-09	1.59E-09	3.52E-09
1383	649523.8	4197822	2.28E-08	2.43E-08	4.72E-08	3.43E-09	3.65E-09	7.09E-09	3.36E-09	3.26E-09	6.61E-09	1.78E-09	1.48E-09	3.26E-09
1384	649495.1	4197789	2.03E-08	2.16E-08	4.19E-08	3.05E-09	3.24E-09	6.29E-09	2.98E-09	2.89E-09	5.87E-09	1.58E-09	1.31E-09	2.90E-09
1385	649590.1	4197821	1.93E-08	2.06E-08	3.99E-08	2.90E-09	3.08E-09	5.99E-09	2.84E-09	2.75E-09	5.59E-09	1.51E-09	1.25E-09	2.75E-09
1386	649561.4	4197789	1.80E-08	1.92E-08	3.71E-08	2.70E-09	2.87E-09	5.57E-09	2.64E-09	2.56E-09	5.20E-09	1.40E-09	1.16E-09	2.56E-09
1387	649532.7	4197756	1.65E-08	1.76E-08	3.41E-08	2.48E-09	2.64E-09	5.12E-09	2.43E-09	2.35E-09	4.78E-09	1.29E-09	1.07E-09	2.36E-09
1388	649613.3	4197772	1.53E-08	1.63E-08	3.15E-08	2.30E-09	2.44E-09	4.74E-09	2.25E-09	2.18E-09	4.42E-09	1.19E-09	9.87E-10	2.18E-09
1389	649584.6	4197739	1.42E-08	1.52E-08	2.94E-08	2.14E-09	2.27E-09	4.41E-09	2.09E-09	2.03E-09	4.12E-09	1.11E-09	9.19E-10	2.03E-09
1390	649674.1	4197690	1.06E-08	1.13E-08	2.19E-08	1.59E-09	1.69E-09	3.29E-09	1.56E-09	1.51E-09	3.07E-09	8.28E-10	6.85E-10	1.51E-09
1391	649645.4	4197657	9.73E-09	1.04E-08	2.01E-08	1.46E-09	1.56E-09	3.02E-09	1.43E-09	1.39E-09	2.82E-09	7.60E-10	6.29E-10	1.39E-09
1392	649806.6	4197689	8.75E-09	9.33E-09	1.81E-08	1.32E-09	1.40E-09	2.71E-09	1.29E-09	1.25E-09	2.53E-09	6.83E-10	5.65E-10	1.25E-09
1393	649734.8	4197607	7.60E-09	8.10E-09	1.57E-08	1.14E-09	1.21E-09	2.36E-09	1.12E-09	1.08E-09	2.20E-09	5.94E-10	4.91E-10	1.08E-09
1394	649881.7	4197623	6.73E-09	7.17E-09	1.39E-08	1.01E-09	1.08E-09	2.09E-09	9.89E-10	9.59E-10	1.95E-09	5.26E-10	4.35E-10	9.60E-10
1395	649810	4197541	5.89E-09	6.28E-09	1.22E-08	8.86E-10	9.42E-10	1.83E-09	8.66E-10	8.40E-10	1.71E-09	4.60E-10	3.81E-10	8.41E-10
1396	649885.1	4197475	4.71E-09	5.02E-09	9.74E-09	7.09E-10	7.53E-10	1.46E-09	6.93E-10	6.72E-10	1.36E-09	3.68E-10	3.05E-10	6.73E-10
1397	650107.1	4197425	3.58E-09	3.82E-09	7.40E-09	5.38E-10	5.72E-10	1.11E-09	5.26E-10	5.10E-10	1.04E-09	2.80E-10	2.31E-10	5.11E-10
1398	650035.3	4197343	3.24E-09	3.45E-09	6.69E-09	4.87E-10	5.18E-10	1.00E-09	4.76E-10	4.62E-10	9.38E-10	2.53E-10	2.09E-10	4.62E-10
1399	650185.6	4197211	2.37E-09	2.53E-09	4.90E-09	3.57E-10	3.80E-10	7.36E-10	3.49E-10	3.38E-10	6.87E-10	1.85E-10	1.53E-10	3.39E-10
1400	650407.6	4197161	1.96E-09	2.09E-09	4.05E-09	2.95E-10	3.13E-10	6.08E-10	2.88E-10	2.79E-10	5.67E-10	1.53E-10	1.27E-10	2.80E-10
1401	650335.8	4197079	1.82E-09	1.95E-09	3.77E-09	2.74E-10	2.92E-10	5.66E-10	2.68E-10	2.60E-10	5.28E-10	1.43E-10	1.18E-10	2.60E-10
1402	650557.8	4197029	1.55E-09	1.65E-09	3.20E-09	2.33E-10	2.47E-10	4.80E-10	2.28E-10	2.21E-10	4.48E-10	1.21E-10	1.00E-10	2.21E-10
1403	650471.7	4196931	1.44E-09	1.53E-09	2.97E-09	2.16E-10	2.30E-10	4.46E-10	2.11E-10	2.05E-10	4.16E-10	1.12E-10	9.29E-11	2.05E-10
1404	649362.1	4197903	7.41E-08	7.90E-08	1.53E-07	1.11E-08	1.18E-08	2.30E-08	1.09E-08	1.06E-08	2.15E-08	5.79E-09	4.79E-09	1.06E-08
1405	649379.4	4197885	5.54E-08	5.91E-08	1.14E-07	8.33E-09	8.86E-09	1.72E-08	8.15E-09	7.90E-09	1.60E-08	4.33E-09	3.58E-09	7.91E-09
1406	649381	4197852	4.05E-08	4.31E-08	8.36E-08	6.08E-09	6.47E-09	1.26E-08	5.95E-09	5.77E-09	1.17E-08	3.16E-09	2.61E-09	5.77E-09
1407	649413.8	4197848	3.61E-08	3.84E-08	7.45E-08	5.42E-09	5.76E-09	1.12E-08	5.30E-09	5.14E-09	1.04E-08	2.82E-09	2.33E-09	5.15E-09
1408	649432.7	4197797	2.38E-08	2.54E-08	4.91E-08	3.58E-09	3.80E-09	7.38E-09	3.50E-09	3.39E-09	6.89E-09	1.86E-09	1.54E-09	3.39E-09
1409	649467.2	4197761	1.80E-08	1.92E-08	3.71E-08	2.70E-09	2.87E-09	5.57E-09	2.64E-09	2.56E-09	5.20E-09	1.40E-09	1.16E-09	2.56E-09
1410	649501.7	4197725	1.47E-08	1.57E-08	3.04E-08	2.21E-09	2.35E-09	4.57E-09	2.16E-09	2.10E-09	4.26E-09	1.15E-09	9.51E-10	2.10E-09
1411	649561	4197713	1.32E-08	1.40E-08	2.72E-08	1.98E-09	2.11E-09	4.09E-09	1.94E-09	1.88E-09	3.82E-09	1.03E-09	8.52E-10	1.88E-09
1412	649536.1	4197689	1.20E-08	1.28E-08	2.49E-08	1.81E-09	1.92E-09	3.73E-09	1.77E-09	1.72E-09	3.48E-09	9.40E-10	7.78E-10	1.72E-09
1413	649620.7	4197631	8.97E-09	9.56E-09	1.85E-08	1.35E-09	1.43E-09	2.78E-09	1.32E-09	1.28E-09	2.60E-09	7.00E-10	5.79E-10	1.28E-09
1414	649699.9	4197569	6.87E-09	7.33E-09	1.42E-08	1.03E-09	1.10E-09	2.13E-09	1.01E-09	9.79E-10	1.99E-09	5.37E-10	4.44E-10	9.81E-10
1415	649674	4197544	6.34E-09	6.75E-09	1.31E-08	9.53E-10	1.01E-09	1.97E-09	9.31E-10	9.03E-10	1.83E-09	4.95E-10	4.09E-10	9.04E-10
1416	649770.9	4197499	5.32E-09	5.67E-09	1.10E-08	8.00E-10	8.51E-10	1.65E-09	7.82E-10	7.58E-10	1.54E-09	4.16E-10	3.44E-10	7.59E-10
1417	649743	4197471	4.91E-09	5.24E-09	1.01E-08	7.39E-10	7.85E-10	1.52E-09	7.22E-10	7.00E-10	1.42E-09	3.84E-10	3.17E-10	7.01E-10
1418	649841.9	4197429	4.26E-09	4.54E-09	8.80E-09	6.41E-10	6.81E-10	1.32E-09	6.26E-10	6.07E-10	1.23E-09	3.33E-10	2.75E-10	6.08E-10
1419	649811.9	4197399	3.94E-09	4.20E-09	8.14E-09	5.93E-10	6.30E-10	1.22E-09	5.79E-10	5.62E-10	1.14E-09	3.08E-10	2.55E-10	5.62E-10
1420	649979.3	4197283	2.91E-09	3.10E-09	6.00E-09	4.37E-10	4.64E-10	9.01E-10	4.27E-10	4.14E-10	8.41E-10	2.27E-10	1.88E-10	4.15E-10
1421	649949.8	4197254	2.72E-09	2.90E-09	5.62E-09	4.09E-10	4.35E-10	8.44E-10	4.00E-10	3.88E-10	7.88E-10	2.13E-10	1.76E-10	3.88E-10
1422	650116.9	4197138	2.12E-09	2.26E-09	4.39E-09	3.19E-10	3.39E-10	6.59E-10	3.12E-10	3.03E-10	6.15E-10	1.66E-10	1.37E-10	3.03E-10
1423	650087.7	4197109	2.01E-09	2.14E-09	4.15E-09	3.02E-10	3.21E-10	6.24E-10	2.96E-10	2.86E-10	5.82E-10	1.57E-10	1.30E-10	2.87E-10
1424	650294.7	4197035	1.73E-09	1.85E-09	3.58E-09	2.60E-10	2.77E-10	5.37E-10	2.55E-10	2.47E-10	5.01E-10	1.35E-10	1.12E-10	2.47E-10
1425	650241.2	4196979	1.60E-09	1.70E-09	3.30E-09	2.40E-10	2.56E-10	4.96E-10	2.35E-10	2.28E-10	4.63E-10	1.25E-10	1.03E-10	2.28E-10
1426	650405.6	4196862	1.33E-09	1.42E-09	2.75E-09	2.00E-10	2.13E-10	4.12E-10	1.95E-10	1.89E-10	3.85E-10	1.04E-10	8.59E-11	1.90E-10
1427	650379.1	4196834	1.28E-09	1.37E-09	2.65E-09	1.93E-10	2.05E-10	3.97E-10	1.88E-10	1.83E-10	3.71E-10	1.00E-10	8.28E-11	1.83E-10
1428	649338.6	4197883	6.51E-08	6.94E-08	1.35E-07	9.79E-09	1.04E-08	2.02E-08	9.58E-09	9.28E-09	1.89E-08	5.09E-09	4.21E-09	9.30E-09
1429	649347.9	4197860	4.73E-08	5.04E-08	9.77E-08	7.11E-09	7.56E-09	1.47E-08	6.95E-09	6.74E-09	1.37E-08	3.69E-09	3.05E-09	6.75E-09
1430	649357.1	4197836	3.65E-08	3.89E-08	7.54E-08	5.49E-09	5.83E-09	1.13E-08	5.36E-09	5.20E-09	1.06E-08	2.85E-09	2.36E-09	5.21E-09
1431	649382.3	4197823	3.15E-08	3.35E-08	6.50E-08	4.73E-09	5.03E-09	9.76E-09	4.62E-09	4.48E-09	9.11E-09	2.46E-09	2.03E-09	4.49E-09
1432	649347.9	4197806	2.74E-08	2.93E-08	5.67E-08	4.13E-09	4.39E-09	8.51E-09	4.04E-09	3.91E-09	7.95E-09	2.14E-09	1.77E-09	3.92E-09
1433	649400.9	4197777	2.15E-08	2.30E-08	4.45E-08	3.24E-09	3.44E-09	6.68E-09	3.17E-09	3.07E-09	6.23E-09	1.68E-09	1.39E-09	3.07E-09
1434	649366.4	4197759	1.88E-08	2.00E-08	3.88E-08	2.82E-09	3.00E-09	5.83E-09	2.76E-09	2.68E-09	5.44E-09	1.47E-09	1.21E-09	2.68E-09
1435	649419.5	4197731	1.56E-08	1.66E-08	3.22E-08	2.35E-09	2.49E-09	4.84E-09	2.29E-09	2.22E-09	4.52E-09	1.22E-09	1.01E-09	2.23E-09
1436	649385	4197713	1.36E-08	1.45E-08	2.81E-08	2.05E-09	2.18E-09	4.22E-09	2.00E-09	1.94E-09	3.94E-09	1.06E-09	8.79E-10	1.94E-09
1437	649438	4197684	1.18E-08	1.25E-08	2.43E-08	1.77E-09	1.88E-09	3.65E-09	1.73E-09	1.68E-09	3.41E-09	9.19E-10	7.60E-10	1.68E-09
1438	649469.8	4197705	1.33E-08	1.42E-08	2.76E-08	2.01E-09	2.13E-09	4.14E-09	1.96E-09	1.90E-09	3.86E-09	1.04E-09	8.63E-10	1.91E-09
1439	649403.5	4197666	1.03E-08	1.09E-08	2.12E-08	1.54E-09	1.64E-09	3.18E-09	1.51E-09	1.46E-09	2.97E-09	8.01E-10	6.63E-10	1.46E-09
1440	649456.6	4197638	9.13E-09	9.73E-09	1.89E-08	1.37E-09	1.46E-09	2.83E-09	1.34E-09	1.30E-09	2.64E-09	7.13E-10	5.90E-10	1.30E-09

1441	649488.4	4197658	1.04E-08	1.11E-08	2.14E-08	1.56E-09	1.66E-09	3.22E-09	1.52E-09	1.48E-09	3.00E-09	8.10E-10	6.70E-10	1.48E-09
1442	649422.1	4197620	7.96E-09	8.49E-09	1.65E-08	1.20E-09	1.27E-09	2.47E-09	1.17E-09	1.14E-09	2.31E-09	6.22E-10	5.15E-10	1.14E-09
1443	649493.7	4197545	5.88E-09	6.26E-09	1.21E-08	8.84E-10	9.40E-10	1.82E-09	8.64E-10	8.37E-10	1.70E-09	4.59E-10	3.80E-10	8.39E-10
1444	649525.5	4197565	6.67E-09	7.11E-09	1.38E-08	1.00E-09	1.07E-09	2.07E-09	9.80E-10	9.50E-10	1.93E-09	5.21E-10	4.31E-10	9.52E-10
1445	649557.3	4197586	7.44E-09	7.93E-09	1.54E-08	1.12E-09	1.19E-09	2.31E-09	1.09E-09	1.06E-09	2.15E-09	5.81E-10	4.81E-10	1.06E-09
1446	649589.2	4197606	8.17E-09	8.70E-09	1.69E-08	1.23E-09	1.31E-09	2.53E-09	1.20E-09	1.16E-09	2.36E-09	6.38E-10	5.28E-10	1.17E-09
1447	649459.2	4197527	5.16E-09	5.50E-09	1.07E-08	7.76E-10	8.25E-10	1.60E-09	7.58E-10	7.35E-10	1.49E-09	4.03E-10	3.33E-10	7.36E-10
1448	649530.8	4197452	4.06E-09	4.33E-09	8.39E-09	6.11E-10	6.49E-10	1.26E-09	5.97E-10	5.79E-10	1.18E-09	3.17E-10	2.62E-10	5.80E-10
1449	649562.6	4197472	4.58E-09	4.88E-09	9.47E-09	6.89E-10	7.32E-10	1.42E-09	6.74E-10	6.53E-10	1.33E-09	3.58E-10	2.96E-10	6.54E-10
1450	649594.5	4197493	5.11E-09	5.45E-09	1.06E-08	7.68E-10	8.17E-10	1.59E-09	7.51E-10	7.28E-10	1.48E-09	3.99E-10	3.30E-10	7.29E-10
1451	649626.3	4197513	5.63E-09	6.00E-09	1.16E-08	8.46E-10	9.00E-10	1.75E-09	8.27E-10	8.02E-10	1.63E-09	4.40E-10	3.64E-10	8.03E-10
1452	649496.3	4197434	3.59E-09	3.83E-09	7.43E-09	5.41E-10	5.75E-10	1.12E-09	5.29E-10	5.12E-10	1.04E-09	2.81E-10	2.32E-10	5.13E-10
1453	649567.9	4197359	2.97E-09	3.16E-09	6.13E-09	4.46E-10	4.74E-10	9.20E-10	4.36E-10	4.23E-10	8.59E-10	2.32E-10	1.92E-10	4.23E-10
1454	649599.8	4197380	3.32E-09	3.54E-09	6.86E-09	4.99E-10	5.31E-10	1.03E-09	4.88E-10	4.73E-10	9.62E-10	2.59E-10	2.15E-10	4.74E-10
1455	649631.6	4197400	3.69E-09	3.93E-09	7.61E-09	5.54E-10	5.89E-10	1.14E-09	5.42E-10	5.25E-10	1.07E-09	2.88E-10	2.38E-10	5.26E-10
1456	649711.2	4197451	4.59E-09	4.89E-09	9.48E-09	6.90E-10	7.33E-10	1.42E-09	6.74E-10	6.54E-10	1.33E-09	3.58E-10	2.96E-10	6.55E-10
1457	649533.5	4197341	2.65E-09	2.82E-09	5.47E-09	3.98E-10	4.23E-10	8.22E-10	3.89E-10	3.77E-10	7.67E-10	2.07E-10	1.71E-10	3.78E-10
1458	649605.1	4197266	2.26E-09	2.41E-09	4.67E-09	3.40E-10	3.61E-10	7.01E-10	3.32E-10	3.22E-10	6.54E-10	1.76E-10	1.46E-10	3.22E-10
1459	649636.9	4197287	2.51E-09	2.68E-09	5.18E-09	3.77E-10	4.01E-10	7.79E-10	3.69E-10	3.58E-10	7.27E-10	1.96E-10	1.62E-10	3.58E-10
1460	649780.1	4197379	3.71E-09	3.95E-09	7.65E-09	5.57E-10	5.92E-10	1.15E-09	5.45E-10	5.28E-10	1.07E-09	2.89E-10	2.39E-10	5.29E-10
1461	649570.6	4197249	2.04E-09	2.17E-09	4.21E-09	3.06E-10	3.26E-10	6.32E-10	2.99E-10	2.90E-10	5.90E-10	1.59E-10	1.32E-10	2.91E-10
1462	649679.3	4197081	1.45E-09	1.54E-09	2.99E-09	2.18E-10	2.31E-10	4.49E-10	2.13E-10	2.06E-10	4.19E-10	1.13E-10	9.36E-11	2.07E-10
1463	649711.1	4197101	1.59E-09	1.69E-09	3.28E-09	2.39E-10	2.54E-10	4.92E-10	2.33E-10	2.26E-10	4.59E-10	1.24E-10	1.02E-10	2.26E-10
1464	649902.1	4197224	2.51E-09	2.68E-09	5.19E-09	3.78E-10	4.01E-10	7.79E-10	3.69E-10	3.58E-10	7.27E-10	1.96E-10	1.62E-10	3.58E-10
1465	649644.8	4197063	1.33E-09	1.41E-09	2.74E-09	1.99E-10	2.12E-10	4.11E-10	1.95E-10	1.89E-10	3.84E-10	1.04E-10	8.56E-11	1.89E-10
1466	649754.3	4196895	1.02E-09	1.09E-09	2.11E-09	1.54E-10	1.63E-10	3.17E-10	1.50E-10	1.46E-10	2.96E-10	7.98E-11	6.60E-11	1.46E-10
1467	649787.6	4196917	1.11E-09	1.18E-09	2.29E-09	1.67E-10	1.77E-10	3.44E-10	1.63E-10	1.58E-10	3.21E-10	8.66E-11	7.16E-11	1.58E-10
1468	649821	4196938	1.20E-09	1.28E-09	2.48E-09	1.81E-10	1.92E-10	3.73E-10	1.77E-10	1.71E-10	3.48E-10	9.39E-11	7.77E-11	1.72E-10
1469	649854.3	4196960	1.30E-09	1.39E-09	2.69E-09	1.96E-10	2.08E-10	4.03E-10	1.91E-10	1.85E-10	3.77E-10	1.02E-10	8.40E-11	1.86E-10
1470	649887.7	4196981	1.40E-09	1.50E-09	2.90E-09	2.11E-10	2.24E-10	4.35E-10	2.06E-10	2.00E-10	4.06E-10	1.10E-10	9.06E-11	2.00E-10
1471	649719.1	4196877	9.46E-10	1.01E-09	1.95E-09	1.42E-10	1.51E-10	2.93E-10	1.39E-10	1.35E-10	2.74E-10	7.39E-11	6.11E-11	1.35E-10
1472	649828.4	4196710	7.67E-10	8.18E-10	1.59E-09	1.15E-10	1.23E-10	2.38E-10	1.13E-10	1.09E-10	2.22E-10	5.99E-11	4.96E-11	1.10E-10
1473	649861.5	4196731	8.23E-10	8.78E-10	1.70E-09	1.24E-10	1.32E-10	2.55E-10	1.21E-10	1.17E-10	2.38E-10	6.43E-11	5.32E-11	1.18E-10
1474	649894.6	4196752	8.83E-10	9.42E-10	1.82E-09	1.33E-10	1.41E-10	2.74E-10	1.30E-10	1.26E-10	2.56E-10	6.90E-11	5.71E-11	1.26E-10
1475	649927.7	4196773	9.47E-10	1.01E-09	1.96E-09	1.42E-10	1.51E-10	2.94E-10	1.39E-10	1.35E-10	2.74E-10	7.40E-11	6.12E-11	1.35E-10
1476	649960.8	4196795	1.01E-09	1.08E-09	2.09E-09	1.52E-10	1.62E-10	3.14E-10	1.49E-10	1.44E-10	2.93E-10	7.92E-11	6.55E-11	1.45E-10
1477	649993.9	4196816	1.08E-09	1.15E-09	2.24E-09	1.63E-10	1.73E-10	3.36E-10	1.59E-10	1.54E-10	3.13E-10	8.46E-11	7.00E-11	1.55E-10
1478	649793.3	4196692	7.19E-10	7.66E-10	1.48E-09	1.08E-10	1.15E-10	2.23E-10	1.06E-10	1.02E-10	2.08E-10	5.61E-11	4.64E-11	1.03E-10
1479	649902.6	4196524	6.05E-10	6.45E-10	1.25E-09	9.10E-11	9.68E-11	1.88E-10	8.90E-11	8.63E-11	1.75E-10	4.73E-11	3.91E-11	8.64E-11
1480	649935.5	4196545	6.43E-10	6.86E-10	1.33E-09	9.68E-11	1.03E-10	2.00E-10	9.46E-11	9.17E-11	1.86E-10	5.03E-11	4.16E-11	9.18E-11
1481	649968.4	4196566	6.84E-10	7.29E-10	1.41E-09	1.03E-10	1.09E-10	2.12E-10	1.01E-10	9.75E-11	1.98E-10	5.34E-11	4.42E-11	9.76E-11
1482	650001.4	4196587	7.27E-10	7.75E-10	1.50E-09	1.09E-10	1.16E-10	2.26E-10	1.07E-10	1.04E-10	2.11E-10	5.68E-11	4.70E-11	1.04E-10
1483	650034.3	4196608	7.73E-10	8.24E-10	1.60E-09	1.16E-10	1.24E-10	2.40E-10	1.14E-10	1.10E-10	2.24E-10	6.04E-11	5.00E-11	1.10E-10
1484	650067.2	4196629	8.21E-10	8.75E-10	1.70E-09	1.23E-10	1.31E-10	2.55E-10	1.21E-10	1.17E-10	2.38E-10	6.41E-11	5.31E-11	1.17E-10
1485	650100.1	4196651	8.71E-10	9.29E-10	1.80E-09	1.31E-10	1.39E-10	2.70E-10	1.28E-10	1.24E-10	2.52E-10	6.81E-11	5.63E-11	1.24E-10
1486	650133.1	4196672	9.22E-10	9.83E-10	1.90E-09	1.39E-10	1.47E-10	2.86E-10	1.36E-10	1.31E-10	2.67E-10	7.20E-11	5.96E-11	1.32E-10
1487	650166	4196693	9.73E-10	1.04E-09	2.01E-09	1.46E-10	1.55E-10	3.02E-10	1.43E-10	1.39E-10	2.82E-10	7.60E-11	6.29E-11	1.39E-10
1488	650198.9	4196714	1.02E-09	1.09E-09	2.11E-09	1.54E-10	1.64E-10	3.17E-10	1.50E-10	1.46E-10	2.96E-10	7.99E-11	6.61E-11	1.46E-10
1489	650231.8	4196735	1.07E-09	1.14E-09	2.22E-09	1.61E-10	1.72E-10	3.33E-10	1.58E-10	1.53E-10	3.11E-10	8.38E-11	6.93E-11	1.53E-10
1490	650264.7	4196756	1.12E-09	1.20E-09	2.32E-09	1.69E-10	1.79E-10	3.48E-10	1.65E-10	1.60E-10	3.25E-10	8.76E-11	7.25E-11	1.60E-10
1491	650297.7	4196777	1.17E-09	1.25E-09	2.41E-09	1.76E-10	1.87E-10	3.63E-10	1.72E-10	1.67E-10	3.38E-10	9.13E-11	7.55E-11	1.67E-10
1492	650330.6	4196798	1.21E-09	1.29E-09	2.51E-09	1.82E-10	1.94E-10	3.76E-10	1.78E-10	1.73E-10	3.51E-10	9.48E-11	7.84E-11	1.73E-10
1493	649867.6	4196506	5.72E-10	6.10E-10	1.18E-09	8.60E-11	9.14E-11	1.77E-10	8.41E-11	8.15E-11	1.66E-10	4.47E-11	3.70E-11	8.16E-11
1494	649316	4197874	6.03E-08	6.43E-08	1.25E-07	9.07E-09	9.65E-09	1.87E-08	8.87E-09	8.60E-09	1.75E-08	4.71E-09	3.90E-09	8.61E-09
1495	649321.2	4197850	4.33E-08	4.62E-08	8.95E-08	6.51E-09	6.92E-09	1.34E-08	6.37E-09	6.17E-09	1.25E-08	3.38E-09	2.80E-09	6.18E-09
1496	649326.5	4197825	3.30E-08	3.52E-08	6.83E-08	4.97E-09	5.28E-09	1.03E-08	4.86E-09	4.71E-09	9.57E-09	2.58E-09	2.14E-09	4.72E-09
1497	649310.9	4197796	2.47E-08	2.63E-08	5.10E-08	3.71E-09	3.95E-09	7.66E-09	3.63E-09	3.52E-09	7.15E-09	1.93E-09	1.60E-09	3.53E-09
1498	649342.2	4197752	1.74E-08	1.85E-08	3.59E-08	2.61E-09	2.78E-09	5.39E-09	2.56E-09	2.48E-09	5.03E-09	1.36E-09	1.12E-09	2.48E-09
1499	649352.7	4197703	1.22E-08	1.30E-08	2.53E-08	1.84E-09	1.95E-09	3.79E-09	1.80E-09	1.74E-09	3.54E-09	9.55E-10	7.90E-10	1.74E-09
1500	649363.2	4197654	8.94E-09	9.53E-09	1.85E-08	1.34E-09	1.43E-09	2.77E-09	1.31E-09	1.27E-09	2.59E-09	6.98E-10	5.78E-10	1.28E-09
1501	649389.8	4197610	7.16E-09	7.63E-09	1.48E-08	1.08E-09	1.14E-09	2.22E-09	1.05E-09	1.02E-09	2.07E-09	5.59E-10	4.63E-10	1.02E-09
1502	649352.9	4197601	6.31E-09	6.72E-09	1.30E-08	9.48E-10	1.01E-09	1.96E-09	9.27E-10	8.99E-10	1.83E-09	4.93E-10	4.07E-10	9.00E-10
1503	649410.8	4197512	4.42E-09	4.71E-09	9.12E-09	6.64E-10	7.06E-10	1.37E-09	6.49E-10	6.29E-10	1.28E-09	3.45E-10	2.85E-10	6.30E-10
1504	649373.8	4197503	3.91E-09	4.17E-09	8.08E-09	5.88E-10	6.25E-10	1.21E-09	5.75E-10	5.57E-10	1.13E-09	3.05E-10	2.53E-10	5.58E-10
1505	649435.8	4197416	3.00E-09	3.20E-09	6.19E-09	4.51E-10	4.79E-10	9.30E-10	4.41E-10	4.27E-10	8.68E-10	2.34E-10	1.94E-10	4.28E-10
1506	649394.8	4197405	2.65E-09	2.82E-09	5.47E-09	3.98E-10	4.23E-10	8.21E-10	3.89E-10	3.77E-10	7.67E-10	2.07E-10	1.71E-10	3.78E-10
1507	649456	4197318	2.14E-09	2.28E-09	4.42E-09	3.22E-10	3.42E-10	6.64E-10	3.14E-10	3.05E-10	6.19E-10	1.67E-10	1.38E-10	3.05E-10
1508	649494.7	4197330	2.39E-09	2.54E-09	4.93E-09	3.59E-10	3.81E-10	7.40E-10	3.51E-10	3.40E-10	6.91E-10	1.86E-10	1.54E-10	3.41E-10
1509	649415.8	4197308	1.92E-09	2.04E-09	3.96E-09	2.88E-10	3.07E-10	5.95E-10	2.82E-10	2.73E-10	5.55E-10	1.50E-10	1.24E-10	2.74E-10
1510	649476.4	4197220	1.61E-09	1.71E-09	3.32E-09	2.42E-10	2.57E-10	4.99E-10	2.36E-10	2.29E-10	4.66E-10	1.26E-10	1.04E-10	2.30E-10
1511	649514.1	4197231	1.77E-09	1.89E-09	3.66E-09	2.66E-10	2.83E-10	5.49E-10	2.60E-10	2.52E-10	5.12E-10	1.38E-10	1.14E-10	2.53E-10
1512	649436.8	4197210	1.46E-09	1.56E-09	3.02E-09	2.20E-10	2.34E-10	4.53E-10	2.15E-10	2.08E-10	4.23E-10	1.14E-10	9.45E-11	2.09E-10
1513	649517.7	4197024	1.02E-09	1.09E-09	2.11E-09	1.53E-10	1.63E-10	3.16E-10	1.50E-10	1.45E-10	2.95E-10	7.97E-11	6.59E-11	1.46E-10
1514	649554	4197035	1.10E-09	1.17E-09	2.27E-09	1.65E-10	1.76E-10	3.41E-10	1.61E-10	1.57E-10	3.18E-10	8.58E-11	7.10E-11	1.57E-10
1515	649590.3	4197046	1.18E-09	1.26E-09	2.44E-09	1.78E-10	1.89E-10	3.67E-10	1.74E-10	1.69E-10	3.42E-10	9.24E-11	7.64E-11	1.69E-10
1516	649478.7	4197014	9.48E-10	1.01E-09	1.96E-09	1.43E-10	1.52E-10	2.94E-10	1.39E-10	1.35E-10	2.74E-10	7.40E-11	6.12E-11	1.35E-10

1517	649561.2	4196829	7.23E-10	7.71E-10	1.49E-09	1.09E-10	1.16E-10	2.24E-10	1.06E-10	1.03E-10	2.09E-10	5.65E-11	4.67E-11	1.03E-10
1518	649600.7	4196841	7.71E-10	8.22E-10	1.59E-09	1.16E-10	1.23E-10	2.39E-10	1.13E-10	1.10E-10	2.23E-10	6.03E-11	4.99E-11	1.10E-10
1519	649640.1	4196853	8.24E-10	8.78E-10	1.70E-09	1.24E-10	1.32E-10	2.56E-10	1.21E-10	1.17E-10	2.39E-10	6.44E-11	5.32E-11	1.18E-10
1520	649679.6	4196865	8.82E-10	9.40E-10	1.82E-09	1.33E-10	1.41E-10	2.74E-10	1.30E-10	1.26E-10	2.55E-10	6.89E-11	5.70E-11	1.26E-10
1521	649520.7	4196819	6.81E-10	7.26E-10	1.41E-09	1.02E-10	1.09E-10	2.11E-10	1.00E-10	9.70E-11	1.97E-10	5.32E-11	4.40E-11	9.72E-11
1522	649602.5	4196633	5.49E-10	5.85E-10	1.13E-09	8.25E-11	8.77E-11	1.70E-10	8.07E-11	7.82E-11	1.59E-10	4.29E-11	3.55E-11	7.83E-11
1523	649640.7	4196645	5.77E-10	6.15E-10	1.19E-09	8.68E-11	9.22E-11	1.79E-10	8.48E-11	8.22E-11	1.67E-10	4.51E-11	3.73E-11	8.24E-11
1524	649678.8	4196657	6.08E-10	6.48E-10	1.26E-09	9.14E-11	9.72E-11	1.89E-10	8.94E-11	8.66E-11	1.76E-10	4.75E-11	3.93E-11	8.68E-11
1525	649717	4196668	6.42E-10	6.84E-10	1.33E-09	9.65E-11	1.03E-10	1.99E-10	9.44E-11	9.15E-11	1.86E-10	5.01E-11	4.15E-11	9.16E-11
1526	649755.2	4196680	6.79E-10	7.24E-10	1.40E-09	1.02E-10	1.09E-10	2.11E-10	9.98E-11	9.67E-11	1.97E-10	5.30E-11	4.39E-11	9.69E-11
1527	649562.6	4196623	5.23E-10	5.58E-10	1.08E-09	7.87E-11	8.37E-11	1.62E-10	7.69E-11	7.46E-11	1.52E-10	4.09E-11	3.38E-11	7.47E-11
1528	649645.5	4196438	4.40E-10	4.69E-10	9.08E-10	6.61E-11	7.03E-11	1.36E-10	6.46E-11	6.26E-11	1.27E-10	3.43E-11	2.84E-11	6.27E-11
1529	649685.9	4196450	4.59E-10	4.89E-10	9.48E-10	6.90E-11	7.34E-11	1.42E-10	6.75E-11	6.54E-11	1.33E-10	3.59E-11	2.97E-11	6.55E-11
1530	649726.3	4196463	4.80E-10	5.12E-10	9.92E-10	7.22E-11	7.68E-11	1.49E-10	7.06E-11	6.85E-11	1.39E-10	3.75E-11	3.10E-11	6.86E-11
1531	649766.6	4196475	5.04E-10	5.37E-10	1.04E-09	7.57E-11	8.05E-11	1.56E-10	7.41E-11	7.18E-11	1.46E-10	3.93E-11	3.25E-11	7.19E-11
1532	649807	4196487	5.29E-10	5.64E-10	1.09E-09	7.96E-11	8.46E-11	1.64E-10	7.78E-11	7.54E-11	1.53E-10	4.13E-11	3.42E-11	7.56E-11
1533	649604.6	4196428	4.22E-10	4.50E-10	8.73E-10	6.35E-11	6.75E-11	1.31E-10	6.21E-11	6.02E-11	1.22E-10	3.30E-11	2.73E-11	6.03E-11
1534	649291.1	4197869	5.65E-08	6.02E-08	1.17E-07	8.50E-09	9.03E-09	1.75E-08	8.31E-09	8.05E-09	1.64E-08	4.41E-09	3.65E-09	8.07E-09
1535	649292.2	4197844	4.04E-08	4.31E-08	8.35E-08	6.08E-09	6.46E-09	1.25E-08	5.94E-09	5.76E-09	1.17E-08	3.16E-09	2.61E-09	5.77E-09
1536	649293.3	4197819	3.05E-08	3.26E-08	6.31E-08	4.59E-09	4.88E-09	9.48E-09	4.49E-09	4.35E-09	8.84E-09	2.39E-09	1.97E-09	4.36E-09
1537	649278.1	4197794	2.32E-08	2.47E-08	4.78E-08	3.48E-09	3.70E-09	7.18E-09	3.40E-09	3.30E-09	6.70E-09	1.81E-09	1.50E-09	3.30E-09
1538	649309.1	4197746	1.58E-08	1.69E-08	3.27E-08	2.38E-09	2.53E-09	4.92E-09	2.33E-09	2.26E-09	4.59E-09	1.24E-09	1.02E-09	2.26E-09
1539	649280.4	4197744	1.47E-08	1.57E-08	3.05E-08	2.22E-09	2.36E-09	4.57E-09	2.17E-09	2.10E-09	4.27E-09	1.15E-09	9.52E-10	2.10E-09
1540	649310	4197696	1.07E-08	1.15E-08	2.22E-08	1.62E-09	1.72E-09	3.33E-09	1.58E-09	1.53E-09	3.11E-09	8.39E-10	6.94E-10	1.53E-09
1541	649282.7	4197694	9.92E-09	1.06E-08	2.05E-08	1.49E-09	1.59E-09	3.08E-09	1.46E-09	1.41E-09	2.87E-09	7.75E-10	6.41E-10	1.42E-09
1542	649315	4197646	7.68E-09	8.18E-09	1.59E-08	1.15E-09	1.23E-09	2.38E-09	1.13E-09	1.09E-09	2.22E-09	6.00E-10	4.96E-10	1.10E-09
1543	649284.9	4197644	6.98E-09	7.44E-09	1.44E-08	1.05E-09	1.12E-09	2.17E-09	1.03E-09	9.95E-10	2.02E-09	5.45E-10	4.51E-10	9.96E-10
1544	649315.9	4197596	5.61E-09	5.99E-09	1.16E-08	8.44E-10	8.98E-10	1.74E-09	8.26E-10	8.00E-10	1.63E-09	4.39E-10	3.63E-10	8.01E-10
1545	649287.2	4197594	5.12E-09	5.46E-09	1.06E-08	7.70E-10	8.19E-10	1.59E-09	7.53E-10	7.30E-10	1.48E-09	4.00E-10	3.31E-10	7.31E-10
1546	649321.2	4197496	3.34E-09	3.56E-09	6.91E-09	5.03E-10	5.34E-10	1.04E-09	4.91E-10	4.76E-10	9.68E-10	2.61E-10	2.16E-10	4.77E-10
1547	649347.5	4197500	3.62E-09	3.86E-09	7.48E-09	5.45E-10	5.79E-10	1.12E-09	5.32E-10	5.16E-10	1.05E-09	2.83E-10	2.34E-10	5.17E-10
1548	649291.7	4197494	3.06E-09	3.27E-09	6.33E-09	4.61E-10	4.90E-10	9.51E-10	4.51E-10	4.37E-10	8.87E-10	2.39E-10	1.98E-10	4.37E-10
1549	649326.3	4197396	2.21E-09	2.36E-09	4.56E-09	3.32E-10	3.53E-10	6.85E-10	3.25E-10	3.15E-10	6.40E-10	1.73E-10	1.43E-10	3.15E-10
1550	649353.7	4197400	2.38E-09	2.53E-09	4.91E-09	3.57E-10	3.80E-10	7.38E-10	3.50E-10	3.39E-10	6.88E-10	1.86E-10	1.54E-10	3.39E-10
1551	649296.2	4197394	2.05E-09	2.18E-09	4.23E-09	3.08E-10	3.27E-10	6.36E-10	3.01E-10	2.92E-10	5.93E-10	1.60E-10	1.32E-10	2.92E-10
1552	649331.2	4197297	1.58E-09	1.68E-09	3.27E-09	2.38E-10	2.53E-10	4.90E-10	2.32E-10	2.25E-10	4.58E-10	1.23E-10	1.02E-10	2.26E-10
1553	649359.4	4197300	1.69E-09	1.80E-09	3.48E-09	2.53E-10	2.69E-10	5.23E-10	2.48E-10	2.40E-10	4.88E-10	1.32E-10	1.09E-10	2.41E-10
1554	649387.6	4197304	1.80E-09	1.92E-09	3.71E-09	2.70E-10	2.87E-10	5.58E-10	2.64E-10	2.56E-10	5.21E-10	1.40E-10	1.16E-10	2.57E-10
1555	649300.8	4197294	1.48E-09	1.58E-09	3.06E-09	2.23E-10	2.37E-10	4.60E-10	2.18E-10	2.11E-10	4.29E-10	1.16E-10	9.58E-11	2.12E-10
1556	649336	4197197	1.20E-09	1.28E-09	2.48E-09	1.80E-10	1.92E-10	3.72E-10	1.76E-10	1.71E-10	3.47E-10	9.37E-11	7.75E-11	1.71E-10
1557	649364.8	4197200	1.27E-09	1.35E-09	2.62E-09	1.91E-10	2.03E-10	3.93E-10	1.86E-10	1.81E-10	3.67E-10	9.90E-11	8.19E-11	1.81E-10
1558	649393.6	4197204	1.34E-09	1.43E-09	2.77E-09	2.02E-10	2.14E-10	4.16E-10	1.97E-10	1.91E-10	3.88E-10	1.05E-10	8.66E-11	1.91E-10
1559	649305.3	4197194	1.14E-09	1.21E-09	2.35E-09	1.71E-10	1.82E-10	3.53E-10	1.67E-10	1.62E-10	3.29E-10	8.88E-11	7.35E-11	1.62E-10
1560	649345.5	4196997	7.80E-10	8.32E-10	1.61E-09	1.17E-10	1.25E-10	2.42E-10	1.15E-10	1.11E-10	2.26E-10	6.09E-11	5.04E-11	1.11E-10
1561	649375.1	4197001	8.13E-10	8.66E-10	1.68E-09	1.22E-10	1.30E-10	2.52E-10	1.19E-10	1.16E-10	2.35E-10	6.35E-11	5.25E-11	1.16E-10
1562	649404.7	4197005	8.47E-10	9.03E-10	1.75E-09	1.27E-10	1.35E-10	2.63E-10	1.25E-10	1.21E-10	2.45E-10	6.62E-11	5.48E-11	1.21E-10
1563	649434.3	4197008	8.85E-10	9.44E-10	1.83E-09	1.33E-10	1.42E-10	2.75E-10	1.30E-10	1.26E-10	2.56E-10	6.92E-11	5.72E-11	1.26E-10
1564	649314.4	4196994	7.50E-10	8.00E-10	1.55E-09	1.13E-10	1.20E-10	2.33E-10	1.10E-10	1.07E-10	2.17E-10	5.86E-11	4.85E-11	1.07E-10
1565	649354.8	4196797	5.64E-10	6.01E-10	1.16E-09	8.48E-11	9.01E-11	1.75E-10	8.29E-11	8.03E-11	1.63E-10	4.40E-11	3.64E-11	8.05E-11
1566	649385	4196801	5.82E-10	6.21E-10	1.20E-09	8.75E-11	9.31E-11	1.81E-10	8.56E-11	8.30E-11	1.69E-10	4.55E-11	3.76E-11	8.31E-11
1567	649415.1	4196805	6.02E-10	6.42E-10	1.24E-09	9.05E-11	9.62E-11	1.87E-10	8.85E-11	8.58E-11	1.74E-10	4.70E-11	3.89E-11	8.59E-11
1568	649445.3	4196809	6.23E-10	6.64E-10	1.29E-09	9.36E-11	9.95E-11	1.93E-10	9.15E-11	8.87E-11	1.80E-10	4.86E-11	4.02E-11	8.89E-11
1569	649475.4	4196813	6.45E-10	6.87E-10	1.33E-09	9.70E-11	1.03E-10	2.00E-10	9.48E-11	9.19E-11	1.87E-10	5.04E-11	4.17E-11	9.20E-11
1570	649323.4	4196795	5.47E-10	5.83E-10	1.13E-09	8.22E-11	8.74E-11	1.70E-10	8.04E-11	7.79E-11	1.58E-10	4.27E-11	3.53E-11	7.81E-11
1571	649364.1	4196597	4.36E-10	4.65E-10	9.01E-10	6.55E-11	6.97E-11	1.35E-10	6.41E-11	6.21E-11	1.26E-10	3.40E-11	2.82E-11	6.22E-11
1572	649394.6	4196601	4.48E-10	4.77E-10	9.25E-10	6.73E-11	7.16E-11	1.39E-10	6.58E-11	6.38E-11	1.30E-10	3.50E-11	2.89E-11	6.39E-11
1573	649425.2	4196605	4.60E-10	4.91E-10	9.51E-10	6.92E-11	7.36E-11	1.43E-10	6.77E-11	6.56E-11	1.33E-10	3.59E-11	2.97E-11	6.57E-11
1574	649455.7	4196609	4.73E-10	5.04E-10	9.78E-10	7.12E-11	7.56E-11	1.47E-10	6.96E-11	6.74E-11	1.37E-10	3.70E-11	3.06E-11	6.75E-11
1575	649486.3	4196613	4.87E-10	5.19E-10	1.01E-09	7.32E-11	7.78E-11	1.51E-10	7.15E-11	6.93E-11	1.41E-10	3.80E-11	3.14E-11	6.95E-11
1576	649516.8	4196617	5.01E-10	5.34E-10	1.03E-09	7.53E-11	8.00E-11	1.55E-10	7.36E-11	7.13E-11	1.45E-10	3.91E-11	3.23E-11	7.15E-11
1577	649332.5	4196595	4.25E-10	4.53E-10	8.78E-10	6.39E-11	6.79E-11	1.32E-10	6.25E-11	6.05E-11	1.23E-10	3.32E-11	2.75E-11	6.06E-11
1578	649373.3	4196398	3.53E-10	3.77E-10	7.30E-10	5.31E-11	5.65E-11	1.10E-10	5.19E-11	5.03E-11	1.02E-10	2.76E-11	2.28E-11	5.04E-11
1579	649404.1	4196402	3.62E-10	3.86E-10	7.48E-10	5.44E-11	5.78E-11	1.12E-10	5.32E-11	5.16E-11	1.05E-10	2.83E-11	2.34E-11	5.16E-11
1580	649435	4196406	3.71E-10	3.95E-10	7.66E-10	5.57E-11	5.92E-11	1.15E-10	5.45E-11	5.28E-11	1.07E-10	2.89E-11	2.39E-11	5.29E-11
1581	649465.8	4196410	3.80E-10	4.05E-10	7.84E-10	5.71E-11	6.07E-11	1.18E-10	5.58E-11	5.41E-11	1.10E-10	2.96E-11	2.45E-11	5.42E-11
1582	649496.6	4196414	3.89E-10	4.14E-10	8.03E-10	5.84E-11	6.21E-11	1.21E-10	5.71E-11	5.54E-11	1.13E-10	3.04E-11	2.51E-11	5.55E-11
1583	649527.5	4196418	3.98E-10	4.24E-10	8.22E-10	5.98E-11	6.36E-11	1.23E-10	5.85E-11	5.67E-11	1.15E-10	3.11E-11	2.57E-11	5.68E-11
1584	649558.3	4196422	4.08E-10	4.34E-10	8.42E-10	6.13E-11	6.51E-11	1.26E-10	5.99E-11	5.81E-11	1.18E-10	3.18E-11	2.63E-11	5.82E-11
1585	649341.5	4196395	3.45E-10	3.68E-10	7.13E-10	5.19E-11	5.52E-11	1.07E-10	5.07E-11	4.92E-11	9.99E-11	2.70E-11	2.23E-11	4.93E-11
1586	649255.9	4197868	5.49E-08	5.85E-08	1.13E-07	8.26E-09	8.78E-09	1.70E-08	8.07E-09	7.83E-09	1.59E-08	4.29E-09	3.55E-09	7.84E-09
1587	649256.4	4197843	3.89E-08	4.15E-08	8.04E-08	5.85E-09	6.22E-09	1.21E-08	5.72E-09	5.55E-09	1.13E-08	3.04E-09	2.52E-09	5.56E-09
1588	649257	4197818	2.90E-08	3.10E-08	6.00E-08	4.37E-09	4.64E-09	9.01E-09	4.27E-09	4.14E-09	8.41E-09	2.27E-09	1.88E-09	4.14E-09
1589	649239.3	4197793	2.15E-08	2.29E-08	4.44E-08	3.23E-09	3.43E-09	6.66E-09	3.16E-09	3.06E-09	6.22E-09	1.68E-09	1.39E-09	3.07E-09
1590	649240.3	4197743	1.33E-08	1.41E-08	2.74E-08	1.99E-09	2.12E-09	4.11E-09	1.95E-09	1.89E-09	3.84E-09	1.04E-09	8.56E-10	1.89E-09
1591	649259.5	4197693	9.26E-09	9.88E-09	1.91E-08	1.39E-09	1.48E-09	2.87E-09	1.36E-09	1.32E-09	2.68E-09	7.24E-10	5.99E-10	1.32E-09
1592	649260.5	4197643	6.47E-09	6.90E-09	1.34E-08	9.73E-10	1.03E-09	2.01E-09	9.51E-10	9.22E-10	1.87E-09	5.05E-10	4.18E-10	9.23E-10

1593	649261.5	4197593	4.73E-09	5.04E-09	9.77E-09	7.11E-10	7.56E-10	1.47E-09	6.96E-10	6.74E-10	1.37E-09	3.70E-10	3.06E-10	6.75E-10
1594	649263.6	4197493	2.84E-09	3.02E-09	5.86E-09	4.26E-10	4.53E-10	8.80E-10	4.17E-10	4.04E-10	8.21E-10	2.22E-10	1.83E-10	4.05E-10
1595	649265.6	4197393	1.91E-09	2.04E-09	3.95E-09	2.87E-10	3.05E-10	5.93E-10	2.81E-10	2.72E-10	5.53E-10	1.49E-10	1.23E-10	2.73E-10
1596	649267.6	4197293	1.39E-09	1.49E-09	2.88E-09	2.10E-10	2.23E-10	4.33E-10	2.05E-10	1.99E-10	4.04E-10	1.09E-10	9.01E-11	1.99E-10
1597	649269.7	4197193	1.08E-09	1.15E-09	2.22E-09	1.62E-10	1.72E-10	3.34E-10	1.58E-10	1.53E-10	3.12E-10	8.41E-11	6.96E-11	1.54E-10
1598	649273.7	4196993	7.17E-10	7.64E-10	1.48E-09	1.08E-10	1.15E-10	2.22E-10	1.05E-10	1.02E-10	2.08E-10	5.60E-11	4.63E-11	1.02E-10
1599	649296	4196794	5.33E-10	5.69E-10	1.10E-09	8.02E-11	8.53E-11	1.65E-10	7.84E-11	7.60E-11	1.54E-10	4.17E-11	3.45E-11	7.61E-11
1600	649259.6	4196793	5.17E-10	5.51E-10	1.07E-09	7.78E-11	8.27E-11	1.60E-10	7.60E-11	7.37E-11	1.50E-10	4.04E-11	3.34E-11	7.38E-11
1601	649300.1	4196594	4.14E-10	4.42E-10	8.56E-10	6.23E-11	6.62E-11	1.29E-10	6.09E-11	5.90E-11	1.20E-10	3.24E-11	2.68E-11	5.91E-11
1602	649263.7	4196593	4.03E-10	4.30E-10	8.33E-10	6.07E-11	6.45E-11	1.25E-10	5.93E-11	5.75E-11	1.17E-10	3.15E-11	2.61E-11	5.76E-11
1603	649316.6	4196394	3.39E-10	3.62E-10	7.01E-10	5.10E-11	5.42E-11	1.05E-10	4.99E-11	4.84E-11	9.82E-11	2.65E-11	2.19E-11	4.84E-11
1604	649285.9	4196393	3.32E-10	3.54E-10	6.87E-10	5.00E-11	5.31E-11	1.03E-10	4.89E-11	4.74E-11	9.62E-11	2.60E-11	2.15E-11	4.74E-11
1605	649211.2	4197869	5.50E-08	5.86E-08	1.14E-07	8.26E-09	8.79E-09	1.71E-08	8.08E-09	7.83E-09	1.59E-08	4.29E-09	3.55E-09	7.84E-09
1606	649209.7	4197844	3.77E-08	4.02E-08	7.79E-08	5.67E-09	6.03E-09	1.17E-08	5.55E-09	5.38E-09	1.09E-08	2.95E-09	2.44E-09	5.38E-09
1607	649232.7	4197818	2.80E-08	2.98E-08	5.78E-08	4.20E-09	4.47E-09	8.67E-09	4.11E-09	3.98E-09	8.09E-09	2.18E-09	1.81E-09	3.99E-09
1608	649208.2	4197819	2.72E-08	2.90E-08	5.62E-08	4.09E-09	4.35E-09	8.44E-09	4.00E-09	3.88E-09	7.88E-09	2.13E-09	1.76E-09	3.88E-09
1609	649206.7	4197794	2.02E-08	2.16E-08	4.18E-08	3.04E-09	3.23E-09	6.27E-09	2.97E-09	2.88E-09	5.86E-09	1.58E-09	1.31E-09	2.89E-09
1610	649203.7	4197744	1.20E-08	1.27E-08	2.47E-08	1.80E-09	1.91E-09	3.71E-09	1.76E-09	1.70E-09	3.46E-09	9.33E-10	7.72E-10	1.71E-09
1611	649225.2	4197693	8.28E-09	8.83E-09	1.71E-08	1.25E-09	1.32E-09	2.57E-09	1.22E-09	1.18E-09	2.40E-09	6.47E-10	5.35E-10	1.18E-09
1612	649200.7	4197695	7.64E-09	8.14E-09	1.58E-08	1.15E-09	1.22E-09	2.37E-09	1.12E-09	1.09E-09	2.21E-09	5.97E-10	4.94E-10	1.09E-09
1613	649222.2	4197643	5.69E-09	6.06E-09	1.18E-08	8.55E-10	9.09E-10	1.76E-09	8.36E-10	8.11E-10	1.65E-09	4.44E-10	3.68E-10	8.12E-10
1614	649197.7	4197645	5.24E-09	5.59E-09	1.08E-08	7.88E-10	8.38E-10	1.63E-09	7.71E-10	7.47E-10	1.52E-09	4.10E-10	3.39E-10	7.48E-10
1615	649219.1	4197593	4.13E-09	4.40E-09	8.53E-09	6.21E-10	6.60E-10	1.28E-09	6.07E-10	5.88E-10	1.19E-09	3.22E-10	2.67E-10	5.89E-10
1616	649194.6	4197595	3.82E-09	4.08E-09	7.90E-09	5.75E-10	6.11E-10	1.19E-09	5.62E-10	5.45E-10	1.11E-09	2.99E-10	2.47E-10	5.46E-10
1617	649229.2	4197493	2.59E-09	2.76E-09	5.34E-09	3.89E-10	4.13E-10	8.02E-10	3.80E-10	3.68E-10	7.49E-10	2.02E-10	1.67E-10	3.69E-10
1618	649188.6	4197495	2.34E-09	2.49E-09	4.82E-09	3.51E-10	3.73E-10	7.24E-10	3.43E-10	3.33E-10	6.76E-10	1.82E-10	1.51E-10	3.33E-10
1619	649227.2	4197393	1.76E-09	1.88E-09	3.63E-09	2.65E-10	2.81E-10	5.46E-10	2.59E-10	2.51E-10	5.09E-10	1.37E-10	1.14E-10	2.51E-10
1620	649182.6	4197395	1.61E-09	1.72E-09	3.33E-09	2.43E-10	2.58E-10	5.00E-10	2.37E-10	2.30E-10	4.67E-10	1.26E-10	1.04E-10	2.30E-10
1621	649225.2	4197293	1.30E-09	1.38E-09	2.68E-09	1.95E-10	2.07E-10	4.02E-10	1.91E-10	1.85E-10	3.76E-10	1.01E-10	8.38E-11	1.85E-10
1622	649201.1	4197294	1.25E-09	1.33E-09	2.58E-09	1.88E-10	1.99E-10	3.87E-10	1.83E-10	1.78E-10	3.61E-10	9.75E-11	8.06E-11	1.78E-10
1623	649176.6	4197295	1.20E-09	1.28E-09	2.49E-09	1.81E-10	1.92E-10	3.73E-10	1.77E-10	1.72E-10	3.49E-10	9.40E-11	7.78E-11	1.72E-10
1624	649213.8	4197194	9.97E-10	1.06E-09	2.06E-09	1.50E-10	1.59E-10	3.09E-10	1.47E-10	1.42E-10	2.89E-10	7.79E-11	6.44E-11	1.42E-10
1625	649170.5	4197195	9.45E-10	1.01E-09	1.95E-09	1.42E-10	1.51E-10	2.93E-10	1.39E-10	1.35E-10	2.74E-10	7.39E-11	6.11E-11	1.35E-10
1626	649207.2	4196994	6.71E-10	7.16E-10	1.39E-09	1.01E-10	1.07E-10	2.08E-10	9.87E-11	9.57E-11	1.94E-10	5.24E-11	4.34E-11	9.58E-11
1627	649231.3	4196993	6.87E-10	7.32E-10	1.42E-09	1.03E-10	1.10E-10	2.13E-10	1.01E-10	9.79E-11	1.99E-10	5.37E-11	4.44E-11	9.81E-11
1628	649183	4196994	6.56E-10	7.00E-10	1.36E-09	9.87E-11	1.05E-10	2.04E-10	9.65E-11	9.35E-11	1.90E-10	5.13E-11	4.24E-11	9.37E-11
1629	649158.5	4196996	6.43E-10	6.85E-10	1.33E-09	9.66E-11	1.03E-10	1.99E-10	9.45E-11	9.16E-11	1.86E-10	5.02E-11	4.15E-11	9.17E-11
1630	649193.1	4196794	4.91E-10	5.23E-10	1.01E-09	7.38E-11	7.85E-11	1.52E-10	7.22E-11	7.00E-11	1.42E-10	3.84E-11	3.17E-11	7.01E-11
1631	649146.4	4196796	4.76E-10	5.07E-10	9.82E-10	7.15E-11	7.60E-11	1.48E-10	6.99E-11	6.78E-11	1.38E-10	3.71E-11	3.07E-11	6.79E-11
1632	649179.8	4196595	3.82E-10	4.07E-10	7.89E-10	5.74E-11	6.10E-11	1.18E-10	5.61E-11	5.44E-11	1.11E-10	2.98E-11	2.47E-11	5.45E-11
1633	649221.7	4196594	3.92E-10	4.18E-10	8.10E-10	5.90E-11	6.27E-11	1.22E-10	5.77E-11	5.59E-11	1.14E-10	3.06E-11	2.53E-11	5.60E-11
1634	649134.3	4196597	3.72E-10	3.97E-10	7.69E-10	5.60E-11	5.95E-11	1.15E-10	5.47E-11	5.30E-11	1.08E-10	2.91E-11	2.40E-11	5.31E-11
1635	649171	4196395	3.10E-10	3.31E-10	6.41E-10	4.66E-11	4.96E-11	9.62E-11	4.56E-11	4.42E-11	8.98E-11	2.42E-11	2.00E-11	4.43E-11
1636	649195.2	4196394	3.14E-10	3.35E-10	6.50E-10	4.73E-11	5.03E-11	9.75E-11	4.62E-11	4.48E-11	9.10E-11	2.46E-11	2.03E-11	4.49E-11
1637	649219.4	4196394	3.19E-10	3.40E-10	6.58E-10	4.79E-11	5.09E-11	9.89E-11	4.69E-11	4.54E-11	9.23E-11	2.49E-11	2.06E-11	4.55E-11
1638	649243.5	4196393	3.23E-10	3.45E-10	6.68E-10	4.86E-11	5.17E-11	1.00E-10	4.75E-11	4.61E-11	9.36E-11	2.53E-11	2.09E-11	4.62E-11
1639	649146.8	4196395	3.06E-10	3.26E-10	6.33E-10	4.61E-11	4.90E-11	9.50E-11	4.50E-11	4.36E-11	8.87E-11	2.39E-11	1.98E-11	4.37E-11
1640	649122.3	4196397	3.03E-10	3.23E-10	6.26E-10	4.56E-11	4.85E-11	9.40E-11	4.46E-11	4.32E-11	8.78E-11	2.37E-11	1.96E-11	4.33E-11
1641	649168.8	4197867	5.17E-08	5.51E-08	1.07E-07	7.77E-09	8.26E-09	1.60E-08	7.60E-09	7.37E-09	1.50E-08	4.04E-09	3.34E-09	7.38E-09
1642	649146.4	4197865	4.83E-08	5.15E-08	9.98E-08	7.26E-09	7.72E-09	1.50E-08	7.10E-09	6.88E-09	1.40E-08	3.77E-09	3.12E-09	6.89E-09
1643	649123.9	4197863	4.42E-08	4.71E-08	9.12E-08	6.64E-09	7.06E-09	1.37E-08	6.49E-09	6.29E-09	1.28E-08	3.45E-09	2.85E-09	6.30E-09
1644	649101.4	4197861	3.89E-08	4.15E-08	8.03E-08	5.85E-09	6.22E-09	1.21E-08	5.72E-09	5.54E-09	1.13E-08	3.04E-09	2.51E-09	5.55E-09
1645	649078.9	4197859	3.20E-08	3.41E-08	6.62E-08	4.82E-09	5.12E-09	9.94E-09	4.71E-09	4.56E-09	9.27E-09	2.50E-09	2.07E-09	4.57E-09
1646	649056.4	4197857	2.37E-08	2.52E-08	4.89E-08	3.56E-09	3.78E-09	7.34E-09	3.48E-09	3.37E-09	6.85E-09	1.85E-09	1.53E-09	3.38E-09
1647	649033.9	4197854	1.59E-08	1.70E-08	3.29E-08	2.39E-09	2.54E-09	4.93E-09	2.34E-09	2.27E-09	4.60E-09	1.24E-09	1.03E-09	2.27E-09
1648	649171.2	4197842	3.44E-08	3.67E-08	7.11E-08	5.17E-09	5.50E-09	1.07E-08	5.06E-09	4.90E-09	9.96E-09	2.69E-09	2.22E-09	4.91E-09
1649	649148.7	4197840	3.14E-08	3.35E-08	6.49E-08	4.72E-09	5.02E-09	9.75E-09	4.62E-09	4.48E-09	9.10E-09	2.45E-09	2.03E-09	4.48E-09
1650	649126.2	4197838	2.79E-08	2.97E-08	5.76E-08	4.20E-09	4.46E-09	8.66E-09	4.10E-09	3.98E-09	8.08E-09	2.18E-09	1.80E-09	3.98E-09
1651	649103.7	4197836	2.38E-08	2.54E-08	4.91E-08	3.58E-09	3.80E-09	7.38E-09	3.50E-09	3.39E-09	6.89E-09	1.86E-09	1.54E-09	3.40E-09
1652	649081.2	4197834	1.92E-08	2.05E-08	3.96E-08	2.88E-09	3.07E-09	5.95E-09	2.82E-09	2.73E-09	5.55E-09	1.50E-09	1.24E-09	2.74E-09
1653	649058.8	4197832	1.46E-08	1.56E-08	3.02E-08	2.20E-09	2.34E-09	4.54E-09	2.15E-09	2.08E-09	4.23E-09	1.14E-09	9.45E-10	2.09E-09
1654	649036.3	4197830	1.09E-08	1.16E-08	2.26E-08	1.64E-09	1.75E-09	3.39E-09	1.61E-09	1.56E-09	3.16E-09	8.53E-10	7.06E-10	1.56E-09
1655	649173.5	4197817	2.43E-08	2.59E-08	5.03E-08	3.66E-09	3.89E-09	7.55E-09	3.58E-09	3.47E-09	7.04E-09	1.90E-09	1.57E-09	3.47E-09
1656	649151	4197815	2.18E-08	2.33E-08	4.51E-08	3.28E-09	3.49E-09	6.77E-09	3.21E-09	3.11E-09	6.32E-09	1.70E-09	1.41E-09	3.12E-09
1657	649128.6	4197813	1.90E-08	2.03E-08	3.93E-08	2.86E-09	3.04E-09	5.91E-09	2.80E-09	2.71E-09	5.51E-09	1.49E-09	1.23E-09	2.72E-09
1658	649106.1	4197811	1.61E-08	1.71E-08	3.32E-08	2.41E-09	2.57E-09	4.98E-09	2.36E-09	2.29E-09	4.65E-09	1.25E-09	1.04E-09	2.29E-09
1659	649083.6	4197809	1.31E-08	1.39E-08	2.70E-08	1.96E-09	2.09E-09	4.05E-09	1.92E-09	1.86E-09	3.78E-09	1.02E-09	8.44E-10	1.86E-09
1660	649061.1	4197807	1.04E-08	1.11E-08	2.14E-08	1.56E-09	1.66E-09	3.22E-09	1.53E-09	1.48E-09	3.01E-09	8.11E-10	6.71E-10	1.48E-09
1661	649038.6	4197805	8.27E-09	8.81E-09	1.71E-08	1.24E-09	1.32E-09	2.56E-09	1.22E-09	1.18E-09	2.39E-09	6.46E-10	5.34E-10	1.18E-09
1662	649175.9	4197792	1.79E-08	1.91E-08	3.70E-08	2.70E-09	2.87E-09	5.56E-09	2.64E-09	2.56E-09	5.19E-09	1.40E-09	1.16E-09	2.56E-09
1663	649153.4	4197790	1.59E-08	1.70E-08	3.29E-08	2.39E-09	2.54E-09	4.93E-09	2.34E-09	2.27E-09	4.60E-09	1.24E-09	1.03E-09	2.27E-09
1664	649130.9	4197788	1.38E-08	1.47E-08	2.85E-08	2.07E-09	2.20E-09	4.28E-09	2.03E-09	1.96E-09	3.99E-09	1.08E-09	8.91E-10	1.97E-09
1665	649108.4	4197786	1.17E-08	1.24E-08	2.41E-08	1.75E-09	1.86E-09	3.62E-09	1.71E-09	1.66E-09	3.37E-09	9.10E-10	7.53E-10	1.66E-09
1666	649085.9	4197784	9.66E-09	1.03E-08	2.00E-08	1.45E-09	1.54E-09	3.00E-09	1.42E-09	1.38E-09	2.80E-09	7.55E-10	6.24E-10	1.38E-09
1667	649063.5	4197782	7.95E-09	8.47E-09	1.64E-08	1.20E-09	1.27E-09	2.47E-09	1.17E-09	1.13E-09	2.30E-09	6.21E-10	5.14E-10	1.13E-09
1668	649041	4197780	6.60E-09	7.03E-09	1.36E-08	9.92E-10	1.05E-09	2.05E-09	9.70E-10	9.40E-10	1.91E-09	5.15E-10	4.26E-10	9.42E-10

1669	649180.6	4197743	1.07E-08	1.14E-08	2.21E-08	1.61E-09	1.71E-09	3.32E-09	1.58E-09	1.53E-09	3.10E-09	8.37E-10	6.92E-10	1.53E-09
1670	649158.1	4197741	9.45E-09	1.01E-08	1.95E-08	1.42E-09	1.51E-09	2.93E-09	1.39E-09	1.35E-09	2.74E-09	7.39E-10	6.11E-10	1.35E-09
1671	649135.6	4197738	8.24E-09	8.78E-09	1.70E-08	1.24E-09	1.32E-09	2.56E-09	1.21E-09	1.17E-09	2.39E-09	6.44E-10	5.32E-10	1.18E-09
1672	649113.1	4197736	7.11E-09	7.58E-09	1.47E-08	1.07E-09	1.14E-09	2.21E-09	1.05E-09	1.01E-09	2.06E-09	5.56E-10	4.60E-10	1.02E-09
1673	649090.6	4197734	6.12E-09	6.53E-09	1.27E-08	9.21E-10	9.79E-10	1.90E-09	9.00E-10	8.73E-10	1.77E-09	4.78E-10	3.96E-10	8.74E-10
1674	649068.1	4197732	5.29E-09	5.64E-09	1.09E-08	7.95E-10	8.46E-10	1.64E-09	7.78E-10	7.54E-10	1.53E-09	4.13E-10	3.42E-10	7.55E-10
1675	649045.7	4197730	4.61E-09	4.92E-09	9.53E-09	6.93E-10	7.37E-10	1.43E-09	6.78E-10	6.57E-10	1.34E-09	3.60E-10	2.98E-10	6.58E-10
1676	649162.8	4197691	6.30E-09	6.71E-09	1.30E-08	9.47E-10	1.01E-09	1.95E-09	9.26E-10	8.97E-10	1.82E-09	4.92E-10	4.07E-10	8.99E-10
1677	649140.3	4197689	5.58E-09	5.94E-09	1.15E-08	8.38E-10	8.91E-10	1.73E-09	8.20E-10	7.95E-10	1.61E-09	4.36E-10	3.60E-10	7.96E-10
1678	649117.8	4197687	4.93E-09	5.25E-09	1.02E-08	7.41E-10	7.88E-10	1.53E-09	7.24E-10	7.02E-10	1.43E-09	3.85E-10	3.18E-10	7.03E-10
1679	649095.3	4197684	4.36E-09	4.65E-09	9.01E-09	6.56E-10	6.97E-10	1.35E-09	6.41E-10	6.22E-10	1.26E-09	3.41E-10	2.82E-10	6.23E-10
1680	649072.8	4197682	3.88E-09	4.14E-09	8.02E-09	5.84E-10	6.21E-10	1.20E-09	5.71E-10	5.53E-10	1.12E-09	3.03E-10	2.51E-10	5.54E-10
1681	649050.4	4197680	3.48E-09	3.71E-09	7.19E-09	5.23E-10	5.56E-10	1.08E-09	5.11E-10	4.96E-10	1.01E-09	2.72E-10	2.25E-10	4.96E-10
1682	649167.5	4197641	4.54E-09	4.84E-09	9.39E-09	6.83E-10	7.26E-10	1.41E-09	6.68E-10	6.47E-10	1.32E-09	3.55E-10	2.94E-10	6.48E-10
1683	649145	4197639	4.09E-09	4.36E-09	8.45E-09	6.15E-10	6.54E-10	1.27E-09	6.01E-10	5.83E-10	1.18E-09	3.19E-10	2.64E-10	5.84E-10
1684	649122.5	4197637	3.69E-09	3.93E-09	7.61E-09	5.54E-10	5.89E-10	1.14E-09	5.42E-10	5.25E-10	1.07E-09	2.88E-10	2.38E-10	5.26E-10
1685	649100	4197635	3.33E-09	3.55E-09	6.88E-09	5.01E-10	5.32E-10	1.03E-09	4.90E-10	4.75E-10	9.64E-10	2.60E-10	2.15E-10	4.75E-10
1686	649077.5	4197633	3.02E-09	3.22E-09	6.25E-09	4.55E-10	4.83E-10	9.38E-10	4.44E-10	4.31E-10	8.75E-10	2.36E-10	1.95E-10	4.31E-10
1687	649055.1	4197630	2.76E-09	2.94E-09	5.69E-09	4.14E-10	4.41E-10	8.55E-10	4.05E-10	3.93E-10	7.98E-10	2.15E-10	1.78E-10	3.93E-10
1688	649172.2	4197591	3.47E-09	3.70E-09	7.16E-09	5.21E-10	5.54E-10	1.08E-09	5.10E-10	4.94E-10	1.00E-09	2.71E-10	2.24E-10	4.95E-10
1689	649149.7	4197589	3.17E-09	3.38E-09	6.55E-09	4.77E-10	5.07E-10	9.83E-10	4.66E-10	4.52E-10	9.18E-10	2.48E-10	2.05E-10	4.52E-10
1690	649127.2	4197587	2.90E-09	3.09E-09	5.99E-09	4.36E-10	4.64E-10	9.00E-10	4.27E-10	4.13E-10	8.40E-10	2.27E-10	1.87E-10	4.14E-10
1691	649104.7	4197585	2.66E-09	2.84E-09	5.50E-09	4.00E-10	4.26E-10	8.26E-10	3.92E-10	3.79E-10	7.71E-10	2.08E-10	1.72E-10	3.80E-10
1692	649082.2	4197583	2.45E-09	2.61E-09	5.06E-09	3.69E-10	3.92E-10	7.61E-10	3.60E-10	3.49E-10	7.10E-10	1.91E-10	1.58E-10	3.50E-10
1693	649059.8	4197581	2.26E-09	2.41E-09	4.68E-09	3.40E-10	3.62E-10	7.02E-10	3.33E-10	3.23E-10	6.55E-10	1.77E-10	1.46E-10	3.23E-10
1694	649159.1	4197490	2.12E-09	2.25E-09	4.37E-09	3.18E-10	3.38E-10	6.56E-10	3.11E-10	3.01E-10	6.12E-10	1.65E-10	1.37E-10	3.02E-10
1695	649136.6	4197487	1.98E-09	2.11E-09	4.09E-09	2.98E-10	3.17E-10	6.15E-10	2.91E-10	2.82E-10	5.74E-10	1.55E-10	1.28E-10	2.83E-10
1696	649114.1	4197485	1.86E-09	1.98E-09	3.84E-09	2.79E-10	2.97E-10	5.76E-10	2.73E-10	2.65E-10	5.38E-10	1.45E-10	1.20E-10	2.65E-10
1697	649091.6	4197483	1.75E-09	1.86E-09	3.61E-09	2.62E-10	2.79E-10	5.42E-10	2.57E-10	2.49E-10	5.05E-10	1.36E-10	1.13E-10	2.49E-10
1698	649069.1	4197481	1.64E-09	1.75E-09	3.39E-09	2.47E-10	2.63E-10	5.09E-10	2.41E-10	2.34E-10	4.75E-10	1.28E-10	1.06E-10	2.34E-10
1699	649146	4197388	1.47E-09	1.56E-09	3.03E-09	2.21E-10	2.35E-10	4.55E-10	2.16E-10	2.09E-10	4.25E-10	1.15E-10	9.48E-11	2.09E-10
1700	649123.5	4197386	1.40E-09	1.49E-09	2.88E-09	2.10E-10	2.23E-10	4.33E-10	2.05E-10	1.99E-10	4.04E-10	1.09E-10	9.02E-11	1.99E-10
1701	649101	4197384	1.33E-09	1.42E-09	2.75E-09	2.00E-10	2.13E-10	4.12E-10	1.95E-10	1.89E-10	3.85E-10	1.04E-10	8.59E-11	1.90E-10
1702	649078.5	4197382	1.27E-09	1.35E-09	2.62E-09	1.91E-10	2.03E-10	3.93E-10	1.86E-10	1.81E-10	3.67E-10	9.90E-11	8.19E-11	1.81E-10
1703	649132.9	4197286	1.10E-09	1.17E-09	2.27E-09	1.65E-10	1.76E-10	3.41E-10	1.62E-10	1.57E-10	3.18E-10	8.59E-11	7.11E-11	1.57E-10
1704	649110.4	4197284	1.06E-09	1.13E-09	2.18E-09	1.59E-10	1.69E-10	3.28E-10	1.55E-10	1.51E-10	3.06E-10	8.26E-11	6.83E-11	1.51E-10
1705	649087.9	4197282	1.02E-09	1.08E-09	2.10E-09	1.53E-10	1.63E-10	3.15E-10	1.50E-10	1.45E-10	2.94E-10	7.94E-11	6.57E-11	1.45E-10
1706	649142.3	4197187	8.95E-10	9.54E-10	1.85E-09	1.35E-10	1.43E-10	2.78E-10	1.32E-10	1.28E-10	2.59E-10	6.99E-11	5.78E-11	1.28E-10
1707	649119.8	4197185	8.66E-10	9.24E-10	1.79E-09	1.30E-10	1.38E-10	2.69E-10	1.27E-10	1.23E-10	2.51E-10	6.77E-11	5.60E-11	1.24E-10
1708	649097.3	4197182	8.39E-10	8.95E-10	1.73E-09	1.26E-10	1.34E-10	2.60E-10	1.23E-10	1.20E-10	2.43E-10	6.55E-11	5.42E-11	1.20E-10
1709	649116.1	4196983	6.06E-10	6.46E-10	1.25E-09	9.12E-11	9.69E-11	1.88E-10	8.91E-11	8.64E-11	1.76E-10	4.74E-11	3.92E-11	8.65E-11
1710	649224.8	4196793	5.02E-10	5.36E-10	1.04E-09	7.55E-11	8.03E-11	1.56E-10	7.39E-11	7.16E-11	1.45E-10	3.92E-11	3.25E-11	7.17E-11
1711	649153.7	4196585	3.72E-10	3.96E-10	7.68E-10	5.59E-11	5.94E-11	1.15E-10	5.46E-11	5.29E-11	1.08E-10	2.90E-11	2.40E-11	5.30E-11
1712	649015.8	4197805	6.89E-09	7.35E-09	1.42E-08	1.04E-09	1.10E-09	2.14E-09	1.01E-09	9.82E-10	2.00E-09	5.38E-10	4.45E-10	9.84E-10
1713	649014	4197780	5.53E-09	5.90E-09	1.14E-08	8.32E-10	8.84E-10	1.72E-09	8.13E-10	7.88E-10	1.60E-09	4.32E-10	3.57E-10	7.90E-10
1714	649020.8	4197730	4.06E-09	4.33E-09	8.39E-09	6.11E-10	6.49E-10	1.26E-09	5.97E-10	5.79E-10	1.18E-09	3.17E-10	2.63E-10	5.80E-10
1715	649025.5	4197680	3.14E-09	3.35E-09	6.48E-09	4.72E-10	5.02E-10	9.74E-10	4.61E-10	4.47E-10	9.09E-10	2.45E-10	2.03E-10	4.48E-10
1716	649024	4197630	2.47E-09	2.64E-09	5.11E-09	3.72E-10	3.95E-10	7.67E-10	3.63E-10	3.52E-10	7.16E-10	1.93E-10	1.60E-10	3.53E-10
1717	649019.9	4197580	2.01E-09	2.14E-09	4.14E-09	3.02E-10	3.21E-10	6.22E-10	2.95E-10	2.86E-10	5.81E-10	1.57E-10	1.30E-10	2.86E-10
1718	649012.3	4197480	1.43E-09	1.53E-09	2.96E-09	2.16E-10	2.29E-10	4.45E-10	2.11E-10	2.04E-10	4.15E-10	1.12E-10	9.27E-11	2.05E-10
1719	649040.7	4197481	1.53E-09	1.63E-09	3.17E-09	2.31E-10	2.45E-10	4.76E-10	2.25E-10	2.19E-10	4.44E-10	1.20E-10	9.91E-11	2.19E-10
1720	649006	4197381	1.10E-09	1.18E-09	2.28E-09	1.66E-10	1.77E-10	3.43E-10	1.62E-10	1.57E-10	3.20E-10	8.63E-11	7.14E-11	1.58E-10
1721	649037.1	4197381	1.17E-09	1.25E-09	2.42E-09	1.76E-10	1.87E-10	3.63E-10	1.72E-10	1.67E-10	3.39E-10	9.15E-11	7.57E-11	1.67E-10
1722	648998.4	4197281	8.88E-10	9.47E-10	1.83E-09	1.34E-10	1.42E-10	2.76E-10	1.31E-10	1.27E-10	2.57E-10	6.94E-11	5.74E-11	1.27E-10
1723	649028.2	4197281	9.29E-10	9.90E-10	1.92E-09	1.40E-10	1.48E-10	2.88E-10	1.37E-10	1.32E-10	2.69E-10	7.25E-11	6.00E-11	1.33E-10
1724	649058.1	4197282	9.72E-10	1.04E-09	2.01E-09	1.46E-10	1.55E-10	3.01E-10	1.43E-10	1.38E-10	2.81E-10	7.59E-11	6.28E-11	1.39E-10
1725	648990.9	4197181	7.37E-10	7.86E-10	1.52E-09	1.11E-10	1.18E-10	2.29E-10	1.08E-10	1.05E-10	2.13E-10	5.76E-11	4.76E-11	1.05E-10
1726	649019.9	4197182	7.63E-10	8.14E-10	1.58E-09	1.15E-10	1.22E-10	2.37E-10	1.12E-10	1.09E-10	2.21E-10	5.96E-11	4.93E-11	1.09E-10
1727	649048.9	4197182	7.91E-10	8.43E-10	1.63E-09	1.19E-10	1.26E-10	2.45E-10	1.16E-10	1.13E-10	2.29E-10	6.18E-11	5.11E-11	1.13E-10
1728	648976.8	4196982	5.41E-10	5.77E-10	1.12E-09	8.14E-11	8.65E-11	1.68E-10	7.95E-11	7.71E-11	1.57E-10	4.23E-11	3.50E-11	7.72E-11
1729	649006.6	4196982	5.54E-10	5.90E-10	1.14E-09	8.33E-11	8.85E-11	1.72E-10	8.14E-11	7.89E-11	1.60E-10	4.32E-11	3.58E-11	7.90E-11
1730	649036.5	4196982	5.67E-10	6.04E-10	1.17E-09	8.52E-11	9.06E-11	1.76E-10	8.33E-11	8.08E-11	1.64E-10	4.43E-11	3.66E-11	8.09E-11
1731	649066.4	4196983	5.81E-10	6.19E-10	1.20E-09	8.73E-11	9.29E-11	1.80E-10	8.54E-11	8.28E-11	1.68E-10	4.54E-11	3.75E-11	8.29E-11
1732	648962.6	4196782	4.20E-10	4.48E-10	8.68E-10	6.32E-11	6.72E-11	1.30E-10	6.18E-11	5.99E-11	1.22E-10	3.28E-11	2.71E-11	6.00E-11
1733	648993	4196783	4.27E-10	4.55E-10	8.81E-10	6.41E-11	6.82E-11	1.32E-10	6.27E-11	6.08E-11	1.24E-10	3.33E-11	2.76E-11	6.09E-11
1734	649023.4	4196783	4.33E-10	4.62E-10	8.95E-10	6.52E-11	6.93E-11	1.34E-10	6.37E-11	6.18E-11	1.25E-10	3.39E-11	2.80E-11	6.19E-11
1735	649053.8	4196783	4.41E-10	4.70E-10	9.11E-10	6.63E-11	7.05E-11	1.37E-10	6.48E-11	6.28E-11	1.28E-10	3.44E-11	2.85E-11	6.29E-11
1736	649084.2	4196784	4.49E-10	4.79E-10	9.27E-10	6.75E-11	7.18E-11	1.39E-10	6.60E-11	6.40E-11	1.30E-10	3.51E-11	2.90E-11	6.41E-11
1737	649114.6	4196784	4.58E-10	4.88E-10	9.46E-10	6.88E-11	7.32E-11	1.42E-10	6.73E-11	6.52E-11	1.33E-10	3.58E-11	2.96E-11	6.53E-11
1738	648948.3	4196583	3.39E-10	3.62E-10	7.01E-10	5.10E-11	5.43E-11	1.05E-10	4.99E-11	4.84E-11	9.83E-11	2.65E-11	2.19E-11	4.85E-11
1739	648979.1	4196583	3.43E-10	3.65E-10	7.08E-10	5.15E-11	5.48E-11	1.06E-10	5.04E-11	4.88E-11	9.93E-11	2.68E-11	2.22E-11	4.89E-11
1740	649009.9	4196583	3.46E-10	3.69E-10	7.16E-10	5.21E-11	5.54E-11	1.07E-10	5.09E-11	4.94E-11	1.00E-10	2.71E-11	2.24E-11	4.95E-11
1741	649040.7	4196584	3.51E-10	3.74E-10	7.25E-10	5.27E-11	5.61E-11	1.09E-10	5.16E-11	5.00E-11	1.02E-10	2.74E-11	2.27E-11	5.01E-11
1742	649071.5	4196584	3.55E-10	3.79E-10	7.34E-10	5.34E-11	5.68E-11	1.10E-10	5.23E-11	5.07E-11	1.03E-10	2.78E-11	2.30E-11	5.07E-11
1743	649102.3	4196584	3.61E-10	3.85E-10	7.46E-10	5.43E-11	5.77E-11	1.12E-10	5.31E-11	5.14E-11	1.04E-10	2.82E-11	2.33E-11	5.15E-11
1744	648934	4196383	2.83E-10	3.01E-10	5.84E-10	4.25E-11	4.52E-11	8.77E-11	4.15E-11	4.03E-11	8.18E-11	2.21E-11	1.83E-11	4.03E-11

1745	648965.1	4196384	2.84E-10	3.03E-10	5.87E-10	4.28E-11	4.54E-11	8.82E-11	4.18E-11	4.05E-11	8.23E-11	2.22E-11	1.84E-11	4.06E-11
1746	648996.2	4196384	2.86E-10	3.05E-10	5.92E-10	4.31E-11	4.58E-11	8.89E-11	4.21E-11	4.08E-11	8.29E-11	2.24E-11	1.85E-11	4.09E-11
1747	649027.3	4196384	2.89E-10	3.08E-10	5.97E-10	4.35E-11	4.62E-11	8.96E-11	4.25E-11	4.12E-11	8.37E-11	2.26E-11	1.87E-11	4.12E-11
1748	649058.4	4196385	2.92E-10	3.11E-10	6.03E-10	4.39E-11	4.67E-11	9.06E-11	4.29E-11	4.16E-11	8.45E-11	2.28E-11	1.89E-11	4.17E-11
1749	649089.5	4196385	2.96E-10	3.15E-10	6.11E-10	4.44E-11	4.73E-11	9.17E-11	4.35E-11	4.21E-11	8.56E-11	2.31E-11	1.91E-11	4.22E-11
1750	649004.5	4197860	1.12E-08	1.19E-08	2.31E-08	1.68E-09	1.78E-09	3.46E-09	1.64E-09	1.59E-09	3.23E-09	8.72E-10	7.21E-10	1.59E-09
1751	649010.8	4197832	8.57E-09	9.14E-09	1.77E-08	1.29E-09	1.37E-09	2.66E-09	1.26E-09	1.22E-09	2.48E-09	6.69E-10	5.54E-10	1.22E-09
1752	648987.4	4197813	5.94E-09	6.33E-09	1.23E-08	8.94E-10	9.50E-10	1.84E-09	8.74E-10	8.47E-10	1.72E-09	4.64E-10	3.84E-10	8.48E-10
1753	648987	4197786	4.89E-09	5.22E-09	1.01E-08	7.36E-10	7.82E-10	1.52E-09	7.19E-10	6.97E-10	1.42E-09	3.82E-10	3.16E-10	6.98E-10
1754	648978	4197737	3.49E-09	3.72E-09	7.21E-09	5.25E-10	5.58E-10	1.08E-09	5.13E-10	4.97E-10	1.01E-09	2.73E-10	2.26E-10	4.98E-10
1755	648960.5	4197690	2.60E-09	2.77E-09	5.37E-09	3.91E-10	4.15E-10	8.06E-10	3.82E-10	3.70E-10	7.52E-10	2.03E-10	1.68E-10	3.71E-10
1756	648983.6	4197686	2.76E-09	2.94E-09	5.69E-09	4.14E-10	4.40E-10	8.55E-10	4.05E-10	3.93E-10	7.98E-10	2.15E-10	1.78E-10	3.93E-10
1757	648944.1	4197643	2.04E-09	2.17E-09	4.21E-09	3.06E-10	3.26E-10	6.32E-10	2.99E-10	2.90E-10	5.90E-10	1.59E-10	1.32E-10	2.91E-10
1758	648969.4	4197638	2.15E-09	2.29E-09	4.44E-09	3.23E-10	3.44E-10	6.67E-10	3.16E-10	3.06E-10	6.22E-10	1.68E-10	1.39E-10	3.07E-10
1759	648994.8	4197633	2.27E-09	2.42E-09	4.70E-09	3.42E-10	3.63E-10	7.05E-10	3.34E-10	3.24E-10	6.58E-10	1.78E-10	1.47E-10	3.24E-10
1760	648926.7	4197596	1.65E-09	1.76E-09	3.41E-09	2.48E-10	2.64E-10	5.12E-10	2.43E-10	2.35E-10	4.78E-10	1.29E-10	1.07E-10	2.36E-10
1761	648951	4197591	1.73E-09	1.84E-09	3.57E-09	2.60E-10	2.76E-10	5.36E-10	2.54E-10	2.46E-10	5.00E-10	1.35E-10	1.12E-10	2.46E-10
1762	648975.3	4197586	1.81E-09	1.93E-09	3.74E-09	2.72E-10	2.89E-10	5.61E-10	2.66E-10	2.58E-10	5.23E-10	1.41E-10	1.17E-10	2.58E-10
1763	648892.7	4197502	1.17E-09	1.25E-09	2.42E-09	1.76E-10	1.87E-10	3.63E-10	1.72E-10	1.67E-10	3.39E-10	9.15E-11	7.57E-11	1.67E-10
1764	648917.6	4197497	1.22E-09	1.30E-09	2.52E-09	1.83E-10	1.95E-10	3.78E-10	1.79E-10	1.74E-10	3.53E-10	9.51E-11	7.87E-11	1.74E-10
1765	648942.5	4197492	1.27E-09	1.35E-09	2.62E-09	1.90E-10	2.02E-10	3.93E-10	1.86E-10	1.80E-10	3.67E-10	9.89E-11	8.18E-11	1.81E-10
1766	648967.5	4197486	1.32E-09	1.41E-09	2.72E-09	1.98E-10	2.11E-10	4.09E-10	1.94E-10	1.88E-10	3.82E-10	1.03E-10	8.52E-11	1.88E-10
1767	648858.6	4197408	8.93E-10	9.51E-10	1.84E-09	1.34E-10	1.43E-10	2.77E-10	1.31E-10	1.27E-10	2.58E-10	6.97E-11	5.77E-11	1.27E-10
1768	648883.9	4197403	9.26E-10	9.87E-10	1.91E-09	1.39E-10	1.48E-10	2.87E-10	1.36E-10	1.32E-10	2.68E-10	7.23E-11	5.98E-11	1.32E-10
1769	648909.2	4197398	9.59E-10	1.02E-09	1.98E-09	1.44E-10	1.53E-10	2.98E-10	1.41E-10	1.37E-10	2.78E-10	7.49E-11	6.20E-11	1.37E-10
1770	648934.6	4197392	9.94E-10	1.06E-09	2.05E-09	1.49E-10	1.59E-10	3.08E-10	1.46E-10	1.42E-10	2.88E-10	7.76E-11	6.42E-11	1.42E-10
1771	648959.9	4197387	1.03E-09	1.10E-09	2.13E-09	1.55E-10	1.64E-10	3.19E-10	1.51E-10	1.47E-10	2.98E-10	8.04E-11	6.65E-11	1.47E-10
1772	648824.1	4197315	7.15E-10	7.62E-10	1.48E-09	1.08E-10	1.14E-10	2.22E-10	1.05E-10	1.02E-10	2.07E-10	5.58E-11	4.62E-11	1.02E-10
1773	648848.4	4197309	7.39E-10	7.88E-10	1.53E-09	1.11E-10	1.18E-10	2.29E-10	1.09E-10	1.05E-10	2.14E-10	5.77E-11	4.77E-11	1.05E-10
1774	648872.7	4197304	7.63E-10	8.13E-10	1.58E-09	1.15E-10	1.22E-10	2.37E-10	1.12E-10	1.09E-10	2.21E-10	5.96E-11	4.93E-11	1.09E-10
1775	648897	4197299	7.87E-10	8.39E-10	1.63E-09	1.18E-10	1.26E-10	2.44E-10	1.16E-10	1.12E-10	2.28E-10	6.14E-11	5.08E-11	1.12E-10
1776	648921.3	4197294	8.10E-10	8.63E-10	1.67E-09	1.22E-10	1.29E-10	2.51E-10	1.19E-10	1.15E-10	2.34E-10	6.33E-11	5.23E-11	1.16E-10
1777	648945.6	4197289	8.33E-10	8.88E-10	1.72E-09	1.25E-10	1.33E-10	2.58E-10	1.22E-10	1.19E-10	2.41E-10	6.50E-11	5.38E-11	1.19E-10
1778	648969.9	4197283	8.55E-10	9.12E-10	1.77E-09	1.29E-10	1.37E-10	2.65E-10	1.26E-10	1.22E-10	2.48E-10	6.68E-11	5.53E-11	1.22E-10
1779	648790	4197221	5.94E-10	6.33E-10	1.23E-09	8.94E-11	9.50E-11	1.84E-10	8.74E-11	8.47E-11	1.72E-10	4.64E-11	3.84E-11	8.48E-11
1780	648814.6	4197215	6.13E-10	6.54E-10	1.27E-09	9.23E-11	9.81E-11	1.90E-10	9.02E-11	8.74E-11	1.78E-10	4.79E-11	3.96E-11	8.76E-11
1781	648839.3	4197210	6.32E-10	6.74E-10	1.31E-09	9.51E-11	1.01E-10	1.96E-10	9.30E-11	9.01E-11	1.83E-10	4.94E-11	4.09E-11	9.03E-11
1782	648864	4197205	6.51E-10	6.94E-10	1.34E-09	9.78E-11	1.04E-10	2.02E-10	9.57E-11	9.27E-11	1.88E-10	5.08E-11	4.20E-11	9.29E-11
1783	648888.6	4197199	6.68E-10	7.12E-10	1.38E-09	1.00E-10	1.07E-10	2.07E-10	9.82E-11	9.52E-11	1.93E-10	5.22E-11	4.32E-11	9.53E-11
1784	648913.3	4197194	6.85E-10	7.30E-10	1.41E-09	1.03E-10	1.09E-10	2.12E-10	1.01E-10	9.76E-11	1.98E-10	5.35E-11	4.42E-11	9.77E-11
1785	648937.9	4197189	7.00E-10	7.47E-10	1.45E-09	1.05E-10	1.12E-10	2.17E-10	1.03E-10	9.98E-11	2.03E-10	5.47E-11	4.53E-11	1.00E-10
1786	648962.6	4197184	7.16E-10	7.63E-10	1.48E-09	1.08E-10	1.14E-10	2.22E-10	1.05E-10	1.02E-10	2.07E-10	5.59E-11	4.62E-11	1.02E-10
1787	648721.7	4197033	4.43E-10	4.72E-10	9.15E-10	6.66E-11	7.08E-11	1.37E-10	6.51E-11	6.31E-11	1.28E-10	3.46E-11	2.86E-11	6.32E-11
1788	648746.9	4197027	4.56E-10	4.86E-10	9.41E-10	6.85E-11	7.29E-11	1.41E-10	6.70E-11	6.49E-11	1.32E-10	3.56E-11	2.94E-11	6.50E-11
1789	648772	4197022	4.68E-10	4.99E-10	9.67E-10	7.04E-11	7.48E-11	1.45E-10	6.88E-11	6.67E-11	1.36E-10	3.66E-11	3.03E-11	6.68E-11
1790	648797.2	4197016	4.80E-10	5.11E-10	9.91E-10	7.21E-11	7.67E-11	1.49E-10	7.05E-11	6.84E-11	1.39E-10	3.75E-11	3.10E-11	6.85E-11
1791	648822.3	4197011	4.91E-10	5.23E-10	1.01E-09	7.38E-11	7.84E-11	1.52E-10	7.21E-11	6.99E-11	1.42E-10	3.83E-11	3.17E-11	7.00E-11
1792	648847.5	4197006	5.00E-10	5.33E-10	1.03E-09	7.52E-11	8.00E-11	1.55E-10	7.36E-11	7.13E-11	1.45E-10	3.91E-11	3.23E-11	7.14E-11
1793	648872.6	4197000	5.09E-10	5.43E-10	1.05E-09	7.66E-11	8.14E-11	1.58E-10	7.49E-11	7.26E-11	1.47E-10	3.98E-11	3.29E-11	7.27E-11
1794	648897.8	4196995	5.17E-10	5.51E-10	1.07E-09	7.78E-11	8.27E-11	1.60E-10	7.61E-11	7.37E-11	1.50E-10	4.04E-11	3.34E-11	7.38E-11
1795	648922.9	4196990	5.24E-10	5.59E-10	1.08E-09	7.89E-11	8.38E-11	1.63E-10	7.71E-11	7.47E-11	1.52E-10	4.10E-11	3.39E-11	7.49E-11
1796	648948.1	4196984	5.31E-10	5.66E-10	1.10E-09	7.99E-11	8.49E-11	1.65E-10	7.81E-11	7.57E-11	1.54E-10	4.15E-11	3.43E-11	7.58E-11
1797	648653.4	4196845	3.52E-10	3.75E-10	7.27E-10	5.29E-11	5.62E-11	1.09E-10	5.17E-11	5.01E-11	1.02E-10	2.75E-11	2.27E-11	5.02E-11
1798	648678.9	4196839	3.61E-10	3.85E-10	7.46E-10	5.43E-11	5.77E-11	1.12E-10	5.31E-11	5.15E-11	1.05E-10	2.82E-11	2.33E-11	5.15E-11
1799	648704.4	4196834	3.70E-10	3.94E-10	7.64E-10	5.56E-11	5.91E-11	1.15E-10	5.44E-11	5.27E-11	1.07E-10	2.89E-11	2.39E-11	5.28E-11
1800	648729.8	4196828	3.78E-10	4.03E-10	7.80E-10	5.68E-11	6.04E-11	1.17E-10	5.55E-11	5.38E-11	1.09E-10	2.95E-11	2.44E-11	5.39E-11
1801	648755.3	4196823	3.85E-10	4.11E-10	7.96E-10	5.79E-11	6.16E-11	1.19E-10	5.66E-11	5.49E-11	1.12E-10	3.01E-11	2.49E-11	5.50E-11
1802	648780.8	4196817	3.92E-10	4.17E-10	8.09E-10	5.89E-11	6.26E-11	1.21E-10	5.76E-11	5.58E-11	1.13E-10	3.06E-11	2.53E-11	5.59E-11
1803	648806.2	4196812	3.97E-10	4.23E-10	8.21E-10	5.97E-11	6.35E-11	1.23E-10	5.84E-11	5.66E-11	1.15E-10	3.10E-11	2.57E-11	5.67E-11
1804	648831.7	4196806	4.02E-10	4.29E-10	8.31E-10	6.05E-11	6.43E-11	1.25E-10	5.91E-11	5.73E-11	1.16E-10	3.14E-11	2.60E-11	5.74E-11
1805	648857.2	4196801	4.06E-10	4.33E-10	8.40E-10	6.11E-11	6.50E-11	1.26E-10	5.97E-11	5.79E-11	1.18E-10	3.17E-11	2.63E-11	5.80E-11
1806	648882.6	4196796	4.10E-10	4.37E-10	8.47E-10	6.16E-11	6.55E-11	1.27E-10	6.03E-11	5.84E-11	1.19E-10	3.20E-11	2.65E-11	5.85E-11
1807	648908.1	4196790	4.13E-10	4.40E-10	8.53E-10	6.21E-11	6.60E-11	1.28E-10	6.07E-11	5.88E-11	1.20E-10	3.23E-11	2.67E-11	5.89E-11
1808	648933.6	4196785	4.15E-10	4.43E-10	8.58E-10	6.25E-11	6.64E-11	1.29E-10	6.11E-11	5.92E-11	1.20E-10	3.25E-11	2.68E-11	5.93E-11
1809	648584.9	4196657	2.91E-10	3.11E-10	6.02E-10	4.38E-11	4.66E-11	9.04E-11	4.28E-11	4.15E-11	8.43E-11	2.28E-11	1.88E-11	4.16E-11
1810	648610	4196651	2.98E-10	3.18E-10	6.15E-10	4.48E-11	4.76E-11	9.24E-11	4.38E-11	4.25E-11	8.63E-11	2.33E-11	1.93E-11	4.25E-11
1811	648635.1	4196646	3.04E-10	3.24E-10	6.28E-10	4.57E-11	4.86E-11	9.43E-11	4.47E-11	4.33E-11	8.81E-11	2.38E-11	1.97E-11	4.34E-11
1812	648660.1	4196641	3.10E-10	3.30E-10	6.40E-10	4.66E-11	4.95E-11	9.61E-11	4.55E-11	4.41E-11	8.97E-11	2.42E-11	2.00E-11	4.42E-11
1813	648685.2	4196635	3.15E-10	3.36E-10	6.51E-10	4.74E-11	5.04E-11	9.77E-11	4.63E-11	4.49E-11	9.12E-11	2.46E-11	2.04E-11	4.50E-11
1814	648710.3	4196630	3.20E-10	3.41E-10	6.60E-10	4.81E-11	5.11E-11	9.92E-11	4.70E-11	4.56E-11	9.26E-11	2.50E-11	2.07E-11	4.56E-11
1815	648735.4	4196625	3.24E-10	3.45E-10	6.68E-10	4.87E-11	5.17E-11	1.00E-10	4.76E-11	4.61E-11	9.37E-11	2.53E-11	2.09E-11	4.62E-11
1816	648760.5	4196619	3.27E-10	3.49E-10	6.76E-10	4.92E-11	5.23E-11	1.01E-10	4.81E-11	4.66E-11	9.47E-11	2.55E-11	2.11E-11	4.67E-11
1817	648785.5	4196614	3.30E-10	3.52E-10	6.81E-10	4.96E-11	5.27E-11	1.02E-10	4.85E-11	4.70E-11	9.55E-11	2.58E-11	2.13E-11	4.71E-11
1818	648810.6	4196608	3.32E-10	3.54E-10	6.86E-10	4.99E-11	5.31E-11	1.03E-10	4.88E-11	4.73E-11	9.62E-11	2.59E-11	2.15E-11	4.74E-11
1819	648835.7	4196603	3.34E-10	3.56E-10	6.90E-10	5.02E-11	5.34E-11	1.04E-10	4.91E-11	4.76E-11	9.67E-11	2.61E-11	2.16E-11	4.77E-11
1820	648860.8	4196598	3.35E-10	3.57E-10	6.93E-10	5.04E-11	5.36E-11	1.04E-10	4.93E-11	4.78E-11	9.71E-11	2.62E-11	2.17E-11	4.78E-11

1821	648885.9	4196592	3.36E-10	3.58E-10	6.95E-10	5.06E-11	5.37E-11	1.04E-10	4.94E-11	4.79E-11	9.73E-11	2.63E-11	2.17E-11	4.80E-11
1822	648910.9	4196587	3.37E-10	3.59E-10	6.97E-10	5.07E-11	5.39E-11	1.05E-10	4.96E-11	4.80E-11	9.76E-11	2.63E-11	2.18E-11	4.81E-11
1823	648516.6	4196469	2.48E-10	2.65E-10	5.13E-10	3.73E-11	3.97E-11	7.70E-11	3.65E-11	3.54E-11	7.19E-11	1.94E-11	1.60E-11	3.54E-11
1824	648541.9	4196463	2.53E-10	2.70E-10	5.23E-10	3.81E-11	4.05E-11	7.86E-11	3.72E-11	3.61E-11	7.33E-11	1.98E-11	1.64E-11	3.61E-11
1825	648567.2	4196458	2.58E-10	2.75E-10	5.33E-10	3.88E-11	4.12E-11	8.00E-11	3.79E-11	3.67E-11	7.47E-11	2.01E-11	1.67E-11	3.68E-11
1826	648592.5	4196452	2.62E-10	2.79E-10	5.42E-10	3.94E-11	4.19E-11	8.13E-11	3.85E-11	3.74E-11	7.59E-11	2.05E-11	1.69E-11	3.74E-11
1827	648617.9	4196447	2.66E-10	2.84E-10	5.50E-10	4.00E-11	4.25E-11	8.25E-11	3.91E-11	3.79E-11	7.70E-11	2.08E-11	1.72E-11	3.80E-11
1828	648643.2	4196442	2.70E-10	2.87E-10	5.57E-10	4.05E-11	4.31E-11	8.36E-11	3.96E-11	3.84E-11	7.80E-11	2.11E-11	1.74E-11	3.85E-11
1829	648668.5	4196436	2.72E-10	2.90E-10	5.63E-10	4.10E-11	4.36E-11	8.45E-11	4.01E-11	3.88E-11	7.89E-11	2.13E-11	1.76E-11	3.89E-11
1830	648693.8	4196431	2.75E-10	2.93E-10	5.68E-10	4.13E-11	4.40E-11	8.53E-11	4.04E-11	3.92E-11	7.96E-11	2.15E-11	1.78E-11	3.92E-11
1831	648719.2	4196425	2.77E-10	2.95E-10	5.73E-10	4.17E-11	4.43E-11	8.60E-11	4.07E-11	3.95E-11	8.02E-11	2.16E-11	1.79E-11	3.96E-11
1832	648744.5	4196420	2.79E-10	2.97E-10	5.76E-10	4.19E-11	4.45E-11	8.65E-11	4.10E-11	3.97E-11	8.07E-11	2.18E-11	1.80E-11	3.98E-11
1833	648769.8	4196415	2.80E-10	2.98E-10	5.78E-10	4.21E-11	4.47E-11	8.68E-11	4.11E-11	3.99E-11	8.10E-11	2.19E-11	1.81E-11	3.99E-11
1834	648795.1	4196409	2.81E-10	2.99E-10	5.80E-10	4.22E-11	4.49E-11	8.71E-11	4.13E-11	4.00E-11	8.13E-11	2.19E-11	1.81E-11	4.01E-11
1835	648820.4	4196404	2.81E-10	3.00E-10	5.81E-10	4.23E-11	4.50E-11	8.73E-11	4.14E-11	4.01E-11	8.15E-11	2.20E-11	1.82E-11	4.02E-11
1836	648845.8	4196398	2.82E-10	3.00E-10	5.82E-10	4.23E-11	4.50E-11	8.74E-11	4.14E-11	4.01E-11	8.15E-11	2.20E-11	1.82E-11	4.02E-11
1837	648871.1	4196393	2.82E-10	3.00E-10	5.82E-10	4.23E-11	4.50E-11	8.74E-11	4.14E-11	4.01E-11	8.15E-11	2.20E-11	1.82E-11	4.02E-11
1838	648896.4	4196388	2.82E-10	3.00E-10	5.82E-10	4.23E-11	4.50E-11	8.74E-11	4.14E-11	4.01E-11	8.15E-11	2.20E-11	1.82E-11	4.02E-11
1839	648989.1	4197839	7.55E-09	8.05E-09	1.56E-08	1.14E-09	1.21E-09	2.34E-09	1.11E-09	1.08E-09	2.19E-09	5.90E-10	4.88E-10	1.08E-09
1840	648965.2	4197795	4.59E-09	4.89E-09	9.48E-09	6.90E-10	7.34E-10	1.42E-09	6.75E-10	6.54E-10	1.33E-09	3.58E-10	2.97E-10	6.55E-10
1841	648948.1	4197748	3.25E-09	3.47E-09	6.72E-09	4.89E-10	5.20E-10	1.01E-09	4.78E-10	4.64E-10	9.42E-10	2.54E-10	2.10E-10	4.64E-10
1842	648924.2	4197704	2.44E-09	2.60E-09	5.04E-09	3.67E-10	3.90E-10	7.57E-10	3.59E-10	3.48E-10	7.06E-10	1.91E-10	1.58E-10	3.48E-10
1843	648900.2	4197660	1.92E-09	2.04E-09	3.96E-09	2.88E-10	3.06E-10	5.94E-10	2.82E-10	2.73E-10	5.55E-10	1.50E-10	1.24E-10	2.73E-10
1844	648920.7	4197651	1.96E-09	2.09E-09	4.05E-09	2.95E-10	3.14E-10	6.09E-10	2.88E-10	2.80E-10	5.68E-10	1.53E-10	1.27E-10	2.80E-10
1845	648877.7	4197616	1.56E-09	1.66E-09	3.22E-09	2.34E-10	2.49E-10	4.83E-10	2.29E-10	2.22E-10	4.51E-10	1.22E-10	1.01E-10	2.22E-10
1846	648902.2	4197605	1.60E-09	1.70E-09	3.30E-09	2.40E-10	2.55E-10	4.95E-10	2.35E-10	2.27E-10	4.62E-10	1.25E-10	1.03E-10	2.28E-10
1847	648829.5	4197528	1.10E-09	1.17E-09	2.27E-09	1.65E-10	1.75E-10	3.40E-10	1.61E-10	1.56E-10	3.18E-10	8.57E-11	7.09E-11	1.57E-10
1848	648852.8	4197518	1.12E-09	1.19E-09	2.31E-09	1.68E-10	1.79E-10	3.47E-10	1.65E-10	1.60E-10	3.24E-10	8.75E-11	7.24E-11	1.60E-10
1849	648781.4	4197441	8.26E-10	8.80E-10	1.71E-09	1.24E-10	1.32E-10	2.56E-10	1.21E-10	1.18E-10	2.39E-10	6.45E-11	5.34E-11	1.18E-10
1850	648804.1	4197430	8.42E-10	8.98E-10	1.74E-09	1.27E-10	1.35E-10	2.61E-10	1.24E-10	1.20E-10	2.44E-10	6.58E-11	5.44E-11	1.20E-10
1851	648826.9	4197420	8.60E-10	9.17E-10	1.78E-09	1.29E-10	1.38E-10	2.67E-10	1.27E-10	1.23E-10	2.49E-10	6.72E-11	5.56E-11	1.23E-10
1852	648734.2	4197352	6.52E-10	6.95E-10	1.35E-09	9.80E-11	1.04E-10	2.02E-10	9.58E-11	9.29E-11	1.89E-10	5.09E-11	4.21E-11	9.30E-11
1853	648758.7	4197341	6.66E-10	7.10E-10	1.38E-09	1.00E-10	1.07E-10	2.07E-10	9.80E-11	9.50E-11	1.93E-10	5.21E-11	4.31E-11	9.51E-11
1854	648783.3	4197330	6.83E-10	7.28E-10	1.41E-09	1.03E-10	1.09E-10	2.12E-10	1.00E-10	9.73E-11	1.98E-10	5.33E-11	4.41E-11	9.74E-11
1855	648686.1	4197265	5.33E-10	5.68E-10	1.10E-09	8.01E-11	8.52E-11	1.65E-10	7.83E-11	7.59E-11	1.54E-10	4.16E-11	3.44E-11	7.60E-11
1856	648710	4197254	5.45E-10	5.81E-10	1.13E-09	8.19E-11	8.71E-11	1.69E-10	8.01E-11	7.76E-11	1.58E-10	4.25E-11	3.52E-11	7.77E-11
1857	648733.8	4197243	5.58E-10	5.95E-10	1.15E-09	8.39E-11	8.92E-11	1.73E-10	8.21E-11	7.95E-11	1.62E-10	4.36E-11	3.61E-11	7.97E-11
1858	648757.7	4197232	5.72E-10	6.10E-10	1.18E-09	8.61E-11	9.15E-11	1.78E-10	8.42E-11	8.16E-11	1.66E-10	4.47E-11	3.70E-11	8.17E-11
1859	648590.7	4197089	3.85E-10	4.10E-10	7.95E-10	5.79E-11	6.15E-11	1.19E-10	5.66E-11	5.48E-11	1.11E-10	3.01E-11	2.49E-11	5.49E-11
1860	648615.2	4197078	3.94E-10	4.20E-10	8.14E-10	5.93E-11	6.30E-11	1.22E-10	5.79E-11	5.62E-11	1.14E-10	3.08E-11	2.55E-11	5.63E-11
1861	648639.8	4197067	4.05E-10	4.31E-10	8.36E-10	6.08E-11	6.47E-11	1.26E-10	5.95E-11	5.77E-11	1.17E-10	3.16E-11	2.61E-11	5.77E-11
1862	648664.3	4197056	4.16E-10	4.43E-10	8.59E-10	6.25E-11	6.65E-11	1.29E-10	6.11E-11	5.92E-11	1.20E-10	3.25E-11	2.69E-11	5.93E-11
1863	648688.8	4197045	4.27E-10	4.55E-10	8.82E-10	6.42E-11	6.83E-11	1.32E-10	6.28E-11	6.08E-11	1.24E-10	3.33E-11	2.76E-11	6.09E-11
1864	648495.2	4196913	2.98E-10	3.18E-10	6.17E-10	4.49E-11	4.77E-11	9.26E-11	4.39E-11	4.25E-11	8.64E-11	2.33E-11	1.93E-11	4.26E-11
1865	648520.2	4196902	3.06E-10	3.26E-10	6.32E-10	4.60E-11	4.89E-11	9.50E-11	4.50E-11	4.36E-11	8.86E-11	2.39E-11	1.98E-11	4.37E-11
1866	648545.2	4196891	3.14E-10	3.35E-10	6.49E-10	4.73E-11	5.02E-11	9.75E-11	4.62E-11	4.48E-11	9.10E-11	2.45E-11	2.03E-11	4.49E-11
1867	648570.2	4196879	3.23E-10	3.44E-10	6.67E-10	4.86E-11	5.16E-11	1.00E-10	4.75E-11	4.60E-11	9.35E-11	2.52E-11	2.09E-11	4.61E-11
1868	648595.1	4196868	3.32E-10	3.53E-10	6.85E-10	4.99E-11	5.30E-11	1.03E-10	4.87E-11	4.72E-11	9.60E-11	2.59E-11	2.14E-11	4.73E-11
1869	648620.1	4196857	3.40E-10	3.63E-10	7.03E-10	5.12E-11	5.44E-11	1.06E-10	5.00E-11	4.85E-11	9.85E-11	2.66E-11	2.20E-11	4.86E-11
1870	648399.6	4196738	2.43E-10	2.59E-10	5.02E-10	3.66E-11	3.89E-11	7.54E-11	3.57E-11	3.46E-11	7.04E-11	1.90E-11	1.57E-11	3.47E-11
1871	648424.9	4196726	2.49E-10	2.66E-10	5.15E-10	3.75E-11	3.99E-11	7.73E-11	3.67E-11	3.55E-11	7.22E-11	1.95E-11	1.61E-11	3.56E-11
1872	648450.3	4196715	2.56E-10	2.73E-10	5.28E-10	3.85E-11	4.09E-11	7.93E-11	3.76E-11	3.64E-11	7.40E-11	2.00E-11	1.65E-11	3.65E-11
1873	648475.6	4196703	2.63E-10	2.80E-10	5.42E-10	3.95E-11	4.20E-11	8.14E-11	3.86E-11	3.74E-11	7.60E-11	2.05E-11	1.70E-11	3.75E-11
1874	648500.9	4196692	2.69E-10	2.87E-10	5.56E-10	4.05E-11	4.31E-11	8.36E-11	3.96E-11	3.84E-11	7.80E-11	2.10E-11	1.74E-11	3.84E-11
1875	648526.2	4196680	2.76E-10	2.94E-10	5.71E-10	4.15E-11	4.41E-11	8.57E-11	4.06E-11	3.94E-11	8.00E-11	2.16E-11	1.78E-11	3.94E-11
1876	648551.5	4196669	2.83E-10	3.01E-10	5.84E-10	4.25E-11	4.52E-11	8.77E-11	4.16E-11	4.03E-11	8.19E-11	2.21E-11	1.83E-11	4.04E-11
1877	648303.7	4196562	2.05E-10	2.18E-10	4.23E-10	3.08E-11	3.27E-11	6.35E-11	3.01E-11	2.92E-11	5.93E-11	1.60E-11	1.32E-11	2.92E-11
1878	648328.2	4196551	2.09E-10	2.23E-10	4.33E-10	3.15E-11	3.35E-11	6.50E-11	3.08E-11	2.99E-11	6.07E-11	1.64E-11	1.35E-11	2.99E-11
1879	648352.8	4196540	2.15E-10	2.29E-10	4.43E-10	3.23E-11	3.43E-11	6.66E-11	3.15E-11	3.06E-11	6.21E-11	1.68E-11	1.39E-11	3.06E-11
1880	648377.3	4196529	2.20E-10	2.34E-10	4.54E-10	3.30E-11	3.51E-11	6.82E-11	3.23E-11	3.13E-11	6.36E-11	1.72E-11	1.42E-11	3.14E-11
1881	648401.8	4196518	2.25E-10	2.40E-10	4.65E-10	3.38E-11	3.60E-11	6.98E-11	3.31E-11	3.21E-11	6.52E-11	1.76E-11	1.45E-11	3.21E-11
1882	648426.4	4196507	2.30E-10	2.45E-10	4.76E-10	3.46E-11	3.68E-11	7.14E-11	3.39E-11	3.28E-11	6.67E-11	1.80E-11	1.49E-11	3.29E-11
1883	648450.9	4196496	2.35E-10	2.51E-10	4.86E-10	3.54E-11	3.76E-11	7.30E-11	3.46E-11	3.35E-11	6.81E-11	1.84E-11	1.52E-11	3.36E-11
1884	648475.4	4196485	2.40E-10	2.56E-10	4.96E-10	3.61E-11	3.84E-11	7.45E-11	3.53E-11	3.42E-11	6.95E-11	1.88E-11	1.55E-11	3.43E-11
1885	648979	4197877	9.98E-09	1.06E-08	2.06E-08	1.50E-09	1.59E-09	3.10E-09	1.47E-09	1.42E-09	2.89E-09	7.79E-10	6.45E-10	1.42E-09
1886	648962.9	4197857	7.07E-09	7.54E-09	1.46E-08	1.06E-09	1.13E-09	2.19E-09	1.04E-09	1.01E-09	2.05E-09	5.52E-10	4.57E-10	1.01E-09
1887	648962.7	4197826	5.55E-09	5.91E-09	1.15E-08	8.34E-10	8.87E-10	1.72E-09	8.16E-10	7.91E-10	1.61E-09	4.33E-10	3.58E-10	7.92E-10
1888	648940.2	4197811	4.41E-09	4.70E-09	9.11E-09	6.63E-10	7.05E-10	1.37E-09	6.48E-10	6.29E-10	1.28E-09	3.45E-10	2.85E-10	6.30E-10
1889	648916.3	4197767	3.13E-09	3.34E-09	6.48E-09	4.71E-10	5.01E-10	9.72E-10	4.61E-10	4.47E-10	9.08E-10	2.45E-10	2.03E-10	4.47E-10
1890	648898.3	4197781	3.11E-09	3.32E-09	6.43E-09	4.68E-10	4.97E-10	9.65E-10	4.57E-10	4.43E-10	9.01E-10	2.43E-10	2.01E-10	4.44E-10
1891	648884	4197729	2.37E-09	2.52E-09	4.89E-09	3.56E-10	3.79E-10	7.35E-10	3.48E-10	3.37E-10	6.86E-10	1.85E-10	1.53E-10	3.38E-10
1892	648866	4197743	2.36E-09	2.52E-09	4.88E-09	3.55E-10	3.78E-10	7.33E-10	3.47E-10	3.37E-10	6.84E-10	1.85E-10	1.53E-10	3.37E-10
1893	648851.7	4197691	1.87E-09	2.00E-09	3.87E-09	2.81E-10	2.99E-10	5.81E-10	2.75E-10	2.67E-10	5.42E-10	1.46E-10	1.21E-10	2.67E-10
1894	648876.9	4197674	1.88E-09	2.01E-09	3.89E-09	2.83E-10	3.01E-10	5.84E-10	2.77E-10	2.68E-10	5.45E-10	1.47E-10	1.22E-10	2.69E-10
1895	648833.7	4197705	1.88E-09	2.00E-09	3.87E-09	2.82E-10	3.00E-10	5.82E-10	2.76E-10	2.67E-10	5.43E-10	1.46E-10	1.21E-10	2.68E-10
1896	648821.1	4197652	1.53E-09	1.63E-09	3.16E-09	2.30E-10	2.44E-10	4.74E-10	2.25E-10	2.18E-10	4.42E-10	1.19E-10	9.87E-11	2.18E-10

1897	648841.2	4197638	1.53E-09	1.63E-09	3.16E-09	2.30E-10	2.45E-10	4.75E-10	2.25E-10	2.18E-10	4.43E-10	1.20E-10	9.89E-11	2.18E-10
1898	648801.3	4197667	1.54E-09	1.64E-09	3.17E-09	2.31E-10	2.45E-10	4.76E-10	2.26E-10	2.19E-10	4.45E-10	1.20E-10	9.92E-11	2.19E-10
1899	648756	4197576	1.09E-09	1.16E-09	2.25E-09	1.64E-10	1.74E-10	3.37E-10	1.60E-10	1.55E-10	3.15E-10	8.50E-11	7.03E-11	1.55E-10
1900	648775.2	4197562	1.08E-09	1.16E-09	2.24E-09	1.63E-10	1.73E-10	3.36E-10	1.59E-10	1.54E-10	3.14E-10	8.47E-11	7.00E-11	1.55E-10
1901	648794.3	4197549	1.08E-09	1.15E-09	2.24E-09	1.63E-10	1.73E-10	3.36E-10	1.59E-10	1.54E-10	3.14E-10	8.46E-11	7.00E-11	1.55E-10
1902	648736.7	4197590	1.10E-09	1.17E-09	2.27E-09	1.65E-10	1.76E-10	3.41E-10	1.62E-10	1.57E-10	3.18E-10	8.59E-11	7.11E-11	1.57E-10
1903	648691.1	4197499	8.25E-10	8.80E-10	1.70E-09	1.24E-10	1.32E-10	2.56E-10	1.21E-10	1.18E-10	2.39E-10	6.45E-11	5.33E-11	1.18E-10
1904	648709.7	4197487	8.19E-10	8.73E-10	1.69E-09	1.23E-10	1.31E-10	2.54E-10	1.20E-10	1.17E-10	2.37E-10	6.40E-11	5.29E-11	1.17E-10
1905	648737.7	4197468	8.15E-10	8.69E-10	1.68E-09	1.23E-10	1.30E-10	2.53E-10	1.20E-10	1.16E-10	2.36E-10	6.36E-11	5.27E-11	1.16E-10
1906	648672.1	4197514	8.37E-10	8.92E-10	1.73E-09	1.26E-10	1.34E-10	2.60E-10	1.23E-10	1.19E-10	2.42E-10	6.54E-11	5.41E-11	1.19E-10
1907	648627.2	4197423	6.54E-10	6.97E-10	1.35E-09	9.83E-11	1.04E-10	2.03E-10	9.61E-11	9.31E-11	1.89E-10	5.11E-11	4.22E-11	9.33E-11
1908	648647.4	4197409	6.47E-10	6.89E-10	1.34E-09	9.72E-11	1.03E-10	2.01E-10	9.51E-11	9.21E-11	1.87E-10	5.05E-11	4.18E-11	9.23E-11
1909	648667.5	4197395	6.42E-10	6.85E-10	1.33E-09	9.66E-11	1.03E-10	1.99E-10	9.44E-11	9.15E-11	1.86E-10	5.02E-11	4.15E-11	9.17E-11
1910	648687.6	4197381	6.41E-10	6.83E-10	1.32E-09	9.64E-11	1.02E-10	1.99E-10	9.42E-11	9.13E-11	1.86E-10	5.01E-11	4.14E-11	9.15E-11
1911	648707.8	4197367	6.42E-10	6.85E-10	1.33E-09	9.66E-11	1.03E-10	1.99E-10	9.45E-11	9.16E-11	1.86E-10	5.02E-11	4.15E-11	9.17E-11
1912	648607.5	4197438	6.65E-10	7.09E-10	1.37E-09	1.00E-10	1.06E-10	2.06E-10	9.78E-11	9.48E-11	1.93E-10	5.19E-11	4.30E-11	9.49E-11
1913	648562.3	4197347	5.35E-10	5.70E-10	1.11E-09	8.04E-11	8.55E-11	1.66E-10	7.87E-11	7.62E-11	1.55E-10	4.18E-11	3.46E-11	7.64E-11
1914	648581.9	4197333	5.28E-10	5.63E-10	1.09E-09	7.95E-11	8.45E-11	1.64E-10	7.77E-11	7.53E-11	1.53E-10	4.13E-11	3.41E-11	7.54E-11
1915	648601.5	4197320	5.24E-10	5.58E-10	1.08E-09	7.88E-11	8.38E-11	1.63E-10	7.70E-11	7.47E-11	1.52E-10	4.09E-11	3.39E-11	7.48E-11
1916	648621.1	4197306	5.22E-10	5.56E-10	1.08E-09	7.84E-11	8.34E-11	1.62E-10	7.67E-11	7.43E-11	1.51E-10	4.07E-11	3.37E-11	7.44E-11
1917	648640.6	4197293	5.22E-10	5.56E-10	1.08E-09	7.85E-11	8.34E-11	1.62E-10	7.67E-11	7.44E-11	1.51E-10	4.08E-11	3.37E-11	7.45E-11
1918	648660.2	4197279	5.24E-10	5.59E-10	1.08E-09	7.88E-11	8.38E-11	1.63E-10	7.71E-11	7.47E-11	1.52E-10	4.10E-11	3.39E-11	7.48E-11
1919	648542.9	4197361	5.45E-10	5.81E-10	1.13E-09	8.20E-11	8.72E-11	1.69E-10	8.02E-11	7.77E-11	1.58E-10	4.26E-11	3.52E-11	7.78E-11
1920	648433.4	4197194	3.84E-10	4.10E-10	7.94E-10	5.78E-11	6.14E-11	1.19E-10	5.65E-11	5.48E-11	1.11E-10	3.00E-11	2.48E-11	5.49E-11
1921	648453.5	4197180	3.79E-10	4.04E-10	7.82E-10	5.70E-11	6.05E-11	1.17E-10	5.57E-11	5.40E-11	1.10E-10	2.96E-11	2.45E-11	5.41E-11
1922	648473.7	4197166	3.75E-10	3.99E-10	7.74E-10	5.63E-11	5.99E-11	1.16E-10	5.51E-11	5.34E-11	1.08E-10	2.93E-11	2.42E-11	5.35E-11
1923	648493.8	4197152	3.72E-10	3.97E-10	7.69E-10	5.60E-11	5.95E-11	1.15E-10	5.47E-11	5.30E-11	1.08E-10	2.91E-11	2.40E-11	5.31E-11
1924	648513.9	4197139	3.72E-10	3.96E-10	7.68E-10	5.59E-11	5.94E-11	1.15E-10	5.46E-11	5.29E-11	1.08E-10	2.90E-11	2.40E-11	5.30E-11
1925	648534.1	4197125	3.73E-10	3.97E-10	7.70E-10	5.60E-11	5.96E-11	1.16E-10	5.48E-11	5.31E-11	1.08E-10	2.91E-11	2.41E-11	5.32E-11
1926	648554.2	4197111	3.75E-10	4.00E-10	7.75E-10	5.64E-11	6.00E-11	1.16E-10	5.52E-11	5.35E-11	1.09E-10	2.93E-11	2.42E-11	5.36E-11
1927	648413.7	4197209	3.92E-10	4.18E-10	8.10E-10	5.90E-11	6.27E-11	1.22E-10	5.77E-11	5.59E-11	1.14E-10	3.06E-11	2.53E-11	5.60E-11
1928	648304.3	4197041	2.95E-10	3.14E-10	6.09E-10	4.43E-11	4.71E-11	9.15E-11	4.33E-11	4.20E-11	8.54E-11	2.30E-11	1.91E-11	4.21E-11
1929	648324.8	4197027	2.90E-10	3.09E-10	6.00E-10	4.37E-11	4.64E-11	9.01E-11	4.27E-11	4.14E-11	8.41E-11	2.27E-11	1.88E-11	4.14E-11
1930	648345.4	4197013	2.87E-10	3.06E-10	5.93E-10	4.31E-11	4.59E-11	8.90E-11	4.22E-11	4.09E-11	8.30E-11	2.24E-11	1.85E-11	4.09E-11
1931	648365.9	4196999	2.85E-10	3.03E-10	5.88E-10	4.28E-11	4.55E-11	8.83E-11	4.19E-11	4.06E-11	8.24E-11	2.22E-11	1.84E-11	4.06E-11
1932	648386.4	4196985	2.84E-10	3.03E-10	5.87E-10	4.27E-11	4.54E-11	8.81E-11	4.17E-11	4.05E-11	8.22E-11	2.22E-11	1.83E-11	4.05E-11
1933	648406.9	4196971	2.84E-10	3.03E-10	5.87E-10	4.27E-11	4.54E-11	8.81E-11	4.18E-11	4.05E-11	8.23E-11	2.22E-11	1.84E-11	4.06E-11
1934	648427.4	4196957	2.86E-10	3.05E-10	5.90E-10	4.30E-11	4.57E-11	8.86E-11	4.20E-11	4.07E-11	8.27E-11	2.23E-11	1.85E-11	4.08E-11
1935	648447.9	4196943	2.88E-10	3.07E-10	5.96E-10	4.34E-11	4.61E-11	8.95E-11	4.24E-11	4.11E-11	8.35E-11	2.25E-11	1.86E-11	4.12E-11
1936	648468.4	4196929	2.92E-10	3.11E-10	6.03E-10	4.39E-11	4.67E-11	9.06E-11	4.29E-11	4.16E-11	8.45E-11	2.28E-11	1.89E-11	4.17E-11
1937	648284.4	4197056	3.01E-10	3.21E-10	6.22E-10	4.52E-11	4.81E-11	9.33E-11	4.42E-11	4.29E-11	8.71E-11	2.35E-11	1.94E-11	4.29E-11
1938	648175.2	4196888	2.37E-10	2.52E-10	4.89E-10	3.56E-11	3.78E-11	7.34E-11	3.48E-11	3.37E-11	6.85E-11	1.85E-11	1.53E-11	3.38E-11
1939	648196	4196874	2.33E-10	2.48E-10	4.81E-10	3.50E-11	3.72E-11	7.23E-11	3.43E-11	3.32E-11	6.75E-11	1.82E-11	1.51E-11	3.33E-11
1940	648216.8	4196860	2.30E-10	2.45E-10	4.76E-10	3.46E-11	3.68E-11	7.14E-11	3.39E-11	3.28E-11	6.67E-11	1.80E-11	1.49E-11	3.29E-11
1941	648237.6	4196845	2.29E-10	2.44E-10	4.72E-10	3.44E-11	3.65E-11	7.09E-11	3.36E-11	3.26E-11	6.62E-11	1.79E-11	1.48E-11	3.26E-11
1942	648258.3	4196831	2.28E-10	2.43E-10	4.70E-10	3.42E-11	3.64E-11	7.06E-11	3.35E-11	3.24E-11	6.59E-11	1.78E-11	1.47E-11	3.25E-11
1943	648279.1	4196817	2.28E-10	2.43E-10	4.70E-10	3.42E-11	3.64E-11	7.06E-11	3.35E-11	3.24E-11	6.59E-11	1.78E-11	1.47E-11	3.25E-11
1944	648299.9	4196803	2.28E-10	2.43E-10	4.72E-10	3.43E-11	3.65E-11	7.08E-11	3.36E-11	3.25E-11	6.61E-11	1.78E-11	1.48E-11	3.26E-11
1945	648320.7	4196789	2.30E-10	2.45E-10	4.75E-10	3.46E-11	3.68E-11	7.14E-11	3.38E-11	3.28E-11	6.66E-11	1.80E-11	1.49E-11	3.28E-11
1946	648341.5	4196774	2.33E-10	2.48E-10	4.81E-10	3.50E-11	3.72E-11	7.22E-11	3.42E-11	3.31E-11	6.74E-11	1.82E-11	1.50E-11	3.32E-11
1947	648362.2	4196760	2.36E-10	2.51E-10	4.87E-10	3.54E-11	3.77E-11	7.31E-11	3.47E-11	3.36E-11	6.82E-11	1.84E-11	1.52E-11	3.36E-11
1948	648155.2	4196903	2.41E-10	2.57E-10	4.98E-10	3.63E-11	3.86E-11	7.48E-11	3.55E-11	3.44E-11	6.98E-11	1.88E-11	1.56E-11	3.44E-11
1949	648045.7	4196736	1.96E-10	2.09E-10	4.06E-10	2.95E-11	3.14E-11	6.09E-11	2.89E-11	2.80E-11	5.68E-11	1.53E-11	1.27E-11	2.80E-11
1950	648065.8	4196722	1.94E-10	2.06E-10	4.00E-10	2.91E-11	3.09E-11	6.00E-11	2.85E-11	2.76E-11	5.60E-11	1.51E-11	1.25E-11	2.76E-11
1951	648086	4196708	1.91E-10	2.04E-10	3.95E-10	2.88E-11	3.06E-11	5.94E-11	2.81E-11	2.73E-11	5.54E-11	1.50E-11	1.24E-11	2.73E-11
1952	648106.1	4196694	1.90E-10	2.02E-10	3.92E-10	2.85E-11	3.04E-11	5.89E-11	2.79E-11	2.71E-11	5.50E-11	1.48E-11	1.23E-11	2.71E-11
1953	648126.2	4196681	1.89E-10	2.02E-10	3.91E-10	2.84E-11	3.02E-11	5.87E-11	2.78E-11	2.69E-11	5.47E-11	1.48E-11	1.22E-11	2.70E-11
1954	648146.4	4196667	1.89E-10	2.01E-10	3.90E-10	2.84E-11	3.02E-11	5.85E-11	2.77E-11	2.69E-11	5.46E-11	1.47E-11	1.22E-11	2.69E-11
1955	648166.5	4196653	1.89E-10	2.02E-10	3.91E-10	2.84E-11	3.02E-11	5.87E-11	2.78E-11	2.69E-11	5.47E-11	1.48E-11	1.22E-11	2.70E-11
1956	648186.7	4196639	1.90E-10	2.02E-10	3.92E-10	2.85E-11	3.04E-11	5.89E-11	2.79E-11	2.71E-11	5.50E-11	1.48E-11	1.23E-11	2.71E-11
1957	648206.8	4196625	1.91E-10	2.04E-10	3.95E-10	2.88E-11	3.06E-11	5.94E-11	2.81E-11	2.73E-11	5.54E-11	1.50E-11	1.24E-11	2.73E-11
1958	648226.9	4196612	1.93E-10	2.06E-10	3.99E-10	2.91E-11	3.09E-11	6.00E-11	2.84E-11	2.76E-11	5.60E-11	1.51E-11	1.25E-11	2.76E-11
1959	648247.1	4196598	1.96E-10	2.09E-10	4.05E-10	2.95E-11	3.13E-11	6.08E-11	2.88E-11	2.79E-11	5.67E-11	1.53E-11	1.27E-11	2.80E-11
1960	648267.2	4196584	1.99E-10	2.12E-10	4.10E-10	2.99E-11	3.17E-11	6.16E-11	2.92E-11	2.83E-11	5.75E-11	1.55E-11	1.28E-11	2.83E-11
1961	648026	4196751	2.00E-10	2.13E-10	4.12E-10	3.00E-11	3.19E-11	6.19E-11	2.93E-11	2.84E-11	5.78E-11	1.56E-11	1.29E-11	2.85E-11
1962	648964.3	4197898	1.04E-08	1.11E-08	2.16E-08	1.57E-09	1.67E-09	3.24E-09	1.53E-09	1.49E-09	3.02E-09	8.15E-10	6.74E-10	1.49E-09
1963	648943	4197885	7.37E-09	7.85E-09	1.52E-08	1.11E-09	1.18E-09	2.29E-09	1.08E-09	1.05E-09	2.13E-09	5.76E-10	4.76E-10	1.05E-09
1964	648939.1	4197847	5.48E-09	5.84E-09	1.13E-08	8.24E-10	8.76E-10	1.70E-09	8.06E-10	7.81E-10	1.59E-09	4.28E-10	3.54E-10	7.82E-10
1965	648921.8	4197872	5.67E-09	6.05E-09	1.17E-08	8.53E-10	9.07E-10	1.76E-09	8.34E-10	8.08E-10	1.64E-09	4.43E-10	3.67E-10	8.10E-10
1966	648920.4	4197831	4.44E-09	4.73E-09	9.17E-09	6.67E-10	7.09E-10	1.38E-09	6.52E-10	6.32E-10	1.28E-09	3.47E-10	2.87E-10	6.33E-10
1967	648900.5	4197859	4.59E-09	4.90E-09	9.49E-09	6.90E-10	7.34E-10	1.42E-09	6.75E-10	6.54E-10	1.33E-09	3.59E-10	2.97E-10	6.55E-10
1968	648877.9	4197805	3.19E-09	3.40E-09	6.58E-09	4.79E-10	5.09E-10	9.88E-10	4.68E-10	4.54E-10	9.22E-10	2.49E-10	2.06E-10	4.55E-10
1969	648858	4197832	3.29E-09	3.51E-09	6.80E-09	4.95E-10	5.26E-10	1.02E-09	4.84E-10	4.69E-10	9.53E-10	2.57E-10	2.13E-10	4.70E-10
1970	648835.3	4197779	2.46E-09	2.62E-09	5.08E-09	3.69E-10	3.93E-10	7.62E-10	3.61E-10	3.50E-10	7.11E-10	1.92E-10	1.59E-10	3.51E-10
1971	648815.5	4197806	2.54E-09	2.71E-09	5.25E-09	3.82E-10	4.06E-10	7.88E-10	3.74E-10	3.62E-10	7.36E-10	1.98E-10	1.64E-10	3.63E-10
1972	648792.8	4197752	1.98E-09	2.12E-09	4.10E-09	2.98E-10	3.17E-10	6.16E-10	2.92E-10	2.83E-10	5.75E-10	1.55E-10	1.28E-10	2.83E-10

1973	648813.2	4197729	1.93E-09	2.06E-09	3.99E-09	2.90E-10	3.09E-10	5.99E-10	2.84E-10	2.75E-10	5.59E-10	1.51E-10	1.25E-10	2.76E-10
1974	648773	4197780	2.05E-09	2.19E-09	4.24E-09	3.09E-10	3.28E-10	6.37E-10	3.02E-10	2.92E-10	5.94E-10	1.60E-10	1.33E-10	2.93E-10
1975	648750.3	4197726	1.66E-09	1.77E-09	3.42E-09	2.49E-10	2.65E-10	5.14E-10	2.43E-10	2.36E-10	4.79E-10	1.29E-10	1.07E-10	2.36E-10
1976	648770.7	4197702	1.61E-09	1.72E-09	3.33E-09	2.42E-10	2.57E-10	4.99E-10	2.37E-10	2.29E-10	4.66E-10	1.26E-10	1.04E-10	2.30E-10
1977	648730.5	4197753	1.71E-09	1.82E-09	3.53E-09	2.57E-10	2.74E-10	5.31E-10	2.52E-10	2.44E-10	4.95E-10	1.34E-10	1.11E-10	2.44E-10
1978	648666.7	4197672	1.23E-09	1.31E-09	2.54E-09	1.85E-10	1.96E-10	3.81E-10	1.81E-10	1.75E-10	3.56E-10	9.60E-11	7.94E-11	1.75E-10
1979	648690.1	4197645	1.19E-09	1.27E-09	2.46E-09	1.79E-10	1.90E-10	3.69E-10	1.75E-10	1.70E-10	3.44E-10	9.29E-11	7.69E-11	1.70E-10
1980	648713.4	4197617	1.14E-09	1.22E-09	2.36E-09	1.72E-10	1.83E-10	3.55E-10	1.68E-10	1.63E-10	3.31E-10	8.94E-11	7.39E-11	1.63E-10
1981	648645.4	4197701	1.27E-09	1.35E-09	2.62E-09	1.91E-10	2.03E-10	3.93E-10	1.86E-10	1.81E-10	3.67E-10	9.90E-11	8.19E-11	1.81E-10
1982	648581.4	4197619	9.69E-10	1.03E-09	2.00E-09	1.46E-10	1.55E-10	3.01E-10	1.43E-10	1.38E-10	2.81E-10	7.57E-11	6.27E-11	1.38E-10
1983	648604.1	4197593	9.42E-10	1.00E-09	1.95E-09	1.42E-10	1.51E-10	2.92E-10	1.39E-10	1.34E-10	2.73E-10	7.36E-11	6.09E-11	1.34E-10
1984	648626.8	4197567	9.09E-10	9.69E-10	1.88E-09	1.37E-10	1.45E-10	2.82E-10	1.34E-10	1.29E-10	2.63E-10	7.10E-11	5.87E-11	1.30E-10
1985	648649.4	4197540	8.72E-10	9.30E-10	1.80E-09	1.31E-10	1.39E-10	2.71E-10	1.28E-10	1.24E-10	2.53E-10	6.81E-11	5.64E-11	1.25E-10
1986	648560.4	4197648	9.95E-10	1.06E-09	2.06E-09	1.50E-10	1.59E-10	3.09E-10	1.46E-10	1.42E-10	2.88E-10	7.77E-11	6.43E-11	1.42E-10
1987	648496.2	4197567	7.95E-10	8.47E-10	1.64E-09	1.20E-10	1.27E-10	2.47E-10	1.17E-10	1.13E-10	2.30E-10	6.21E-11	5.14E-11	1.13E-10
1988	648518.4	4197541	7.76E-10	8.27E-10	1.60E-09	1.17E-10	1.24E-10	2.41E-10	1.14E-10	1.11E-10	2.25E-10	6.06E-11	5.02E-11	1.11E-10
1989	648540.7	4197515	7.52E-10	8.01E-10	1.55E-09	1.13E-10	1.20E-10	2.33E-10	1.11E-10	1.07E-10	2.18E-10	5.87E-11	4.86E-11	1.07E-10
1990	648563	4197489	7.23E-10	7.71E-10	1.49E-09	1.09E-10	1.16E-10	2.24E-10	1.06E-10	1.03E-10	2.09E-10	5.65E-11	4.67E-11	1.03E-10
1991	648585.2	4197464	6.93E-10	7.39E-10	1.43E-09	1.04E-10	1.11E-10	2.15E-10	1.02E-10	9.88E-11	2.01E-10	5.42E-11	4.48E-11	9.90E-11
1992	648475.4	4197595	8.12E-10	8.65E-10	1.68E-09	1.22E-10	1.30E-10	2.52E-10	1.19E-10	1.16E-10	2.35E-10	6.34E-11	5.25E-11	1.16E-10
1993	648411.9	4197513	6.70E-10	7.14E-10	1.38E-09	1.01E-10	1.07E-10	2.08E-10	9.85E-11	9.54E-11	1.94E-10	5.23E-11	4.33E-11	9.56E-11
1994	648435.7	4197486	6.55E-10	6.98E-10	1.35E-09	9.85E-11	1.05E-10	2.03E-10	9.63E-11	9.34E-11	1.90E-10	5.12E-11	4.23E-11	9.35E-11
1995	648459.5	4197458	6.35E-10	6.77E-10	1.31E-09	9.55E-11	1.02E-10	1.97E-10	9.34E-11	9.05E-11	1.84E-10	4.96E-11	4.10E-11	9.06E-11
1996	648483.3	4197430	6.11E-10	6.51E-10	1.26E-09	9.18E-11	9.76E-11	1.89E-10	8.98E-11	8.70E-11	1.77E-10	4.77E-11	3.95E-11	8.72E-11
1997	648507.2	4197403	5.84E-10	6.23E-10	1.21E-09	8.78E-11	9.34E-11	1.81E-10	8.59E-11	8.32E-11	1.69E-10	4.56E-11	3.77E-11	8.34E-11
1998	648390.3	4197543	6.81E-10	7.26E-10	1.41E-09	1.02E-10	1.09E-10	2.11E-10	1.00E-10	9.71E-11	1.97E-10	5.32E-11	4.40E-11	9.72E-11
1999	648241.4	4197409	5.04E-10	5.37E-10	1.04E-09	7.58E-11	8.06E-11	1.56E-10	7.41E-11	7.18E-11	1.46E-10	3.94E-11	3.26E-11	7.19E-11
2000	648264.4	4197382	4.97E-10	5.30E-10	1.03E-09	7.48E-11	7.95E-11	1.54E-10	7.31E-11	7.09E-11	1.44E-10	3.88E-11	3.21E-11	7.10E-11
2001	648287.3	4197355	4.87E-10	5.19E-10	1.01E-09	7.32E-11	7.78E-11	1.51E-10	7.16E-11	6.94E-11	1.41E-10	3.80E-11	3.15E-11	6.95E-11
2002	648310.3	4197329	4.73E-10	5.04E-10	9.77E-10	7.11E-11	7.56E-11	1.47E-10	6.95E-11	6.74E-11	1.37E-10	3.69E-11	3.06E-11	6.75E-11
2003	648333.3	4197302	4.56E-10	4.86E-10	9.42E-10	6.86E-11	7.29E-11	1.41E-10	6.71E-11	6.50E-11	1.32E-10	3.56E-11	2.95E-11	6.51E-11
2004	648356.2	4197275	4.37E-10	4.66E-10	9.04E-10	6.58E-11	6.99E-11	1.36E-10	6.43E-11	6.23E-11	1.27E-10	3.42E-11	2.83E-11	6.24E-11
2005	648379.2	4197249	4.19E-10	4.46E-10	8.65E-10	6.29E-11	6.69E-11	1.30E-10	6.15E-11	5.97E-11	1.21E-10	3.27E-11	2.70E-11	5.97E-11
2006	648220.3	4197438	5.09E-10	5.42E-10	1.05E-09	7.65E-11	8.13E-11	1.58E-10	7.48E-11	7.25E-11	1.47E-10	3.97E-11	3.29E-11	7.26E-11
2007	648071.7	4197303	4.00E-10	4.26E-10	8.25E-10	6.01E-11	6.39E-11	1.24E-10	5.87E-11	5.69E-11	1.16E-10	3.12E-11	2.58E-11	5.70E-11
2008	648095.3	4197276	3.96E-10	4.23E-10	8.19E-10	5.96E-11	6.34E-11	1.23E-10	5.83E-11	5.65E-11	1.15E-10	3.10E-11	2.56E-11	5.66E-11
2009	648119	4197248	3.90E-10	4.16E-10	8.07E-10	5.87E-11	6.24E-11	1.21E-10	5.74E-11	5.56E-11	1.13E-10	3.05E-11	2.52E-11	5.57E-11
2010	648142.6	4197221	3.82E-10	4.07E-10	7.89E-10	5.74E-11	6.10E-11	1.18E-10	5.61E-11	5.44E-11	1.11E-10	2.98E-11	2.47E-11	5.45E-11
2011	648166.2	4197193	3.70E-10	3.95E-10	7.65E-10	5.57E-11	5.92E-11	1.15E-10	5.44E-11	5.28E-11	1.07E-10	2.89E-11	2.39E-11	5.28E-11
2012	648189.9	4197166	3.57E-10	3.81E-10	7.38E-10	5.37E-11	5.71E-11	1.11E-10	5.25E-11	5.09E-11	1.03E-10	2.79E-11	2.31E-11	5.10E-11
2013	648213.5	4197138	3.42E-10	3.65E-10	7.07E-10	5.15E-11	5.47E-11	1.06E-10	5.03E-11	4.88E-11	9.91E-11	2.67E-11	2.21E-11	4.89E-11
2014	648237.2	4197111	3.28E-10	3.49E-10	6.77E-10	4.93E-11	5.24E-11	1.02E-10	4.82E-11	4.67E-11	9.49E-11	2.56E-11	2.12E-11	4.68E-11
2015	648260.8	4197084	3.14E-10	3.34E-10	6.48E-10	4.72E-11	5.01E-11	9.73E-11	4.61E-11	4.47E-11	9.08E-11	2.45E-11	2.03E-11	4.48E-11
2016	648050.2	4197332	4.01E-10	4.28E-10	8.29E-10	6.03E-11	6.42E-11	1.24E-10	5.90E-11	5.72E-11	1.16E-10	3.13E-11	2.59E-11	5.73E-11
2017	647901.4	4197198	3.28E-10	3.50E-10	6.79E-10	4.94E-11	5.25E-11	1.02E-10	4.83E-11	4.68E-11	9.51E-11	2.57E-11	2.12E-11	4.69E-11
2018	647924.4	4197171	3.27E-10	3.49E-10	6.77E-10	4.92E-11	5.23E-11	1.02E-10	4.81E-11	4.67E-11	9.48E-11	2.56E-11	2.12E-11	4.67E-11
2019	647947.5	4197144	3.25E-10	3.46E-10	6.70E-10	4.88E-11	5.19E-11	1.01E-10	4.77E-11	4.62E-11	9.40E-11	2.54E-11	2.10E-11	4.63E-11
2020	647970.6	4197118	3.19E-10	3.41E-10	6.60E-10	4.80E-11	5.11E-11	9.91E-11	4.70E-11	4.55E-11	9.25E-11	2.50E-11	2.06E-11	4.56E-11
2021	647993.7	4197091	3.12E-10	3.33E-10	6.46E-10	4.70E-11	5.00E-11	9.69E-11	4.59E-11	4.45E-11	9.05E-11	2.44E-11	2.02E-11	4.46E-11
2022	648016.7	4197064	3.04E-10	3.24E-10	6.28E-10	4.57E-11	4.86E-11	9.42E-11	4.47E-11	4.33E-11	8.79E-11	2.37E-11	1.96E-11	4.34E-11
2023	648039.8	4197037	2.94E-10	3.13E-10	6.07E-10	4.42E-11	4.70E-11	9.12E-11	4.32E-11	4.19E-11	8.51E-11	2.30E-11	1.90E-11	4.19E-11
2024	648062.9	4197011	2.83E-10	3.02E-10	5.85E-10	4.25E-11	4.52E-11	8.78E-11	4.16E-11	4.03E-11	8.19E-11	2.21E-11	1.83E-11	4.04E-11
2025	648086	4196984	2.72E-10	2.90E-10	5.61E-10	4.09E-11	4.34E-11	8.43E-11	3.99E-11	3.87E-11	7.87E-11	2.12E-11	1.76E-11	3.88E-11
2026	648109	4196957	2.61E-10	2.78E-10	5.39E-10	3.92E-11	4.17E-11	8.09E-11	3.83E-11	3.72E-11	7.55E-11	2.04E-11	1.69E-11	3.72E-11
2027	648132.1	4196930	2.50E-10	2.67E-10	5.17E-10	3.76E-11	4.00E-11	7.77E-11	3.68E-11	3.57E-11	7.25E-11	1.96E-11	1.62E-11	3.57E-11
2028	647880.2	4197227	3.29E-10	3.50E-10	6.79E-10	4.94E-11	5.25E-11	1.02E-10	4.83E-11	4.68E-11	9.51E-11	2.57E-11	2.12E-11	4.69E-11
2029	647731.5	4197093	2.77E-10	2.95E-10	5.73E-10	4.17E-11	4.43E-11	8.60E-11	4.07E-11	3.95E-11	8.02E-11	2.16E-11	1.79E-11	3.96E-11
2030	647755.1	4197065	2.77E-10	2.95E-10	5.73E-10	4.17E-11	4.43E-11	8.60E-11	4.07E-11	3.95E-11	8.02E-11	2.16E-11	1.79E-11	3.96E-11
2031	647778.6	4197038	2.76E-10	2.94E-10	5.70E-10	4.15E-11	4.41E-11	8.55E-11	4.05E-11	3.93E-11	7.98E-11	2.15E-11	1.78E-11	3.94E-11
2032	647802.2	4197011	2.73E-10	2.91E-10	5.63E-10	4.10E-11	4.36E-11	8.46E-11	4.01E-11	3.89E-11	7.89E-11	2.13E-11	1.76E-11	3.89E-11
2033	647825.8	4196983	2.68E-10	2.86E-10	5.54E-10	4.03E-11	4.28E-11	8.31E-11	3.94E-11	3.82E-11	7.76E-11	2.09E-11	1.73E-11	3.83E-11
2034	647849.3	4196956	2.62E-10	2.79E-10	5.41E-10	3.94E-11	4.19E-11	8.13E-11	3.85E-11	3.73E-11	7.58E-11	2.05E-11	1.69E-11	3.74E-11
2035	647872.9	4196929	2.55E-10	2.71E-10	5.26E-10	3.83E-11	4.07E-11	7.90E-11	3.74E-11	3.63E-11	7.37E-11	1.99E-11	1.65E-11	3.63E-11
2036	647896.4	4196901	2.46E-10	2.62E-10	5.09E-10	3.70E-11	3.94E-11	7.64E-11	3.62E-11	3.51E-11	7.13E-11	1.92E-11	1.59E-11	3.51E-11
2037	647920	4196874	2.37E-10	2.53E-10	4.91E-10	3.57E-11	3.80E-11	7.37E-11	3.49E-11	3.38E-11	6.88E-11	1.86E-11	1.53E-11	3.39E-11
2038	647943.5	4196847	2.28E-10	2.43E-10	4.72E-10	3.43E-11	3.65E-11	7.08E-11	3.36E-11	3.25E-11	6.61E-11	1.78E-11	1.48E-11	3.26E-11
2039	647967.1	4196819	2.19E-10	2.34E-10	4.53E-10	3.30E-11	3.50E-11	6.80E-11	3.22E-11	3.12E-11	6.35E-11	1.71E-11	1.42E-11	3.13E-11
2040	647990.6	4196792	2.11E-10	2.25E-10	4.36E-10	3.17E-11	3.37E-11	6.54E-11	3.10E-11	3.00E-11	6.10E-11	1.65E-11	1.36E-11	3.01E-11
2041	647710.1	4197122	2.77E-10	2.95E-10	5.71E-10	4.16E-11	4.42E-11	8.58E-11	4.07E-11	3.94E-11	8.01E-11	2.16E-11	1.79E-11	3.95E-11
2042	648953.5	4197924	1.17E-08	1.24E-08	2.41E-08	1.76E-09	1.87E-09	3.62E-09	1.72E-09	1.66E-09	3.38E-09	9.12E-10	7.55E-10	1.67E-09
2043	648944.6	4197945	1.26E-08	1.34E-08	2.60E-08	1.89E-09	2.01E-09	3.91E-09	1.85E-09	1.79E-09	3.64E-09	9.83E-10	8.13E-10	1.80E-09
2044	648935.7	4197967	1.32E-08	1.40E-08	2.72E-08	1.98E-09	2.11E-09	4.09E-09	1.94E-09	1.88E-09	3.81E-09	1.03E-09	8.51E-10	1.88E-09
2045	648930.4	4197914	8.13E-09	8.66E-09	1.68E-08	1.22E-09	1.30E-09	2.52E-09	1.19E-09	1.16E-09	2.35E-09	6.35E-10	5.25E-10	1.16E-09
2046	648921.4	4197936	8.68E-09	9.25E-09	1.79E-08	1.30E-09	1.39E-09	2.69E-09	1.28E-09	1.24E-09	2.51E-09	6.78E-10	5.61E-10	1.24E-09
2047	648912.5	4197958	9.11E-09	9.71E-09	1.88E-08	1.37E-09	1.46E-09	2.83E-09	1.34E-09	1.30E-09	2.64E-09	7.11E-10	5.89E-10	1.30E-09
2048	648907.2	4197905	6.20E-09	6.61E-09	1.28E-08	9.33E-10	9.92E-10	1.92E-09	9.12E-10	8.84E-10	1.80E-09	4.84E-10	4.01E-10	8.85E-10

2049	648898.3	4197926	6.56E-09	7.00E-09	1.36E-08	9.87E-10	1.05E-09	2.04E-09	9.65E-10	9.35E-10	1.90E-09	5.13E-10	4.24E-10	9.37E-10
2050	648889.4	4197948	6.87E-09	7.32E-09	1.42E-08	1.03E-09	1.10E-09	2.13E-09	1.01E-09	9.79E-10	1.99E-09	5.37E-10	4.44E-10	9.80E-10
2051	648884.1	4197895	5.00E-09	5.33E-09	1.03E-08	7.52E-10	7.99E-10	1.55E-09	7.35E-10	7.13E-10	1.45E-09	3.91E-10	3.23E-10	7.14E-10
2052	648875.2	4197917	5.25E-09	5.60E-09	1.08E-08	7.89E-10	8.39E-10	1.63E-09	7.72E-10	7.48E-10	1.52E-09	4.10E-10	3.39E-10	7.49E-10
2053	648866.3	4197939	5.47E-09	5.83E-09	1.13E-08	8.22E-10	8.74E-10	1.70E-09	8.04E-10	7.79E-10	1.58E-09	4.27E-10	3.53E-10	7.81E-10
2054	648846.7	4197854	3.42E-09	3.65E-09	7.07E-09	5.15E-10	5.47E-10	1.06E-09	5.03E-10	4.88E-10	9.91E-10	2.67E-10	2.21E-10	4.89E-10
2055	648837.8	4197876	3.57E-09	3.81E-09	7.38E-09	5.37E-10	5.71E-10	1.11E-09	5.25E-10	5.09E-10	1.03E-09	2.79E-10	2.31E-10	5.10E-10
2056	648828.9	4197898	3.71E-09	3.95E-09	7.66E-09	5.58E-10	5.93E-10	1.15E-09	5.45E-10	5.29E-10	1.07E-09	2.90E-10	2.40E-10	5.29E-10
2057	648820	4197920	3.83E-09	4.08E-09	7.91E-09	5.76E-10	6.12E-10	1.19E-09	5.63E-10	5.46E-10	1.11E-09	2.99E-10	2.47E-10	5.46E-10
2058	648800.4	4197836	2.66E-09	2.84E-09	5.49E-09	4.00E-10	4.25E-10	8.25E-10	3.91E-10	3.79E-10	7.70E-10	2.08E-10	1.72E-10	3.80E-10
2059	648791.5	4197857	2.75E-09	2.93E-09	5.69E-09	4.14E-10	4.40E-10	8.54E-10	4.05E-10	3.92E-10	7.97E-10	2.15E-10	1.78E-10	3.93E-10
2060	648782.6	4197879	2.83E-09	3.02E-09	5.86E-09	4.26E-10	4.53E-10	8.79E-10	4.17E-10	4.04E-10	8.21E-10	2.21E-10	1.83E-10	4.05E-10
2061	648773.7	4197901	2.90E-09	3.10E-09	6.00E-09	4.37E-10	4.64E-10	9.01E-10	4.27E-10	4.14E-10	8.41E-10	2.27E-10	1.88E-10	4.15E-10
2062	648754.2	4197817	2.16E-09	2.30E-09	4.46E-09	3.25E-10	3.45E-10	6.70E-10	3.17E-10	3.08E-10	6.25E-10	1.69E-10	1.40E-10	3.08E-10
2063	648745.2	4197838	2.22E-09	2.37E-09	4.59E-09	3.34E-10	3.55E-10	6.89E-10	3.27E-10	3.16E-10	6.43E-10	1.73E-10	1.44E-10	3.17E-10
2064	648736.3	4197860	2.27E-09	2.42E-09	4.70E-09	3.42E-10	3.63E-10	7.05E-10	3.34E-10	3.24E-10	6.58E-10	1.78E-10	1.47E-10	3.24E-10
2065	648727.4	4197882	2.32E-09	2.47E-09	4.78E-09	3.48E-10	3.70E-10	7.18E-10	3.40E-10	3.30E-10	6.70E-10	1.81E-10	1.50E-10	3.31E-10
2066	648715.4	4197783	1.78E-09	1.90E-09	3.67E-09	2.67E-10	2.84E-10	5.52E-10	2.61E-10	2.53E-10	5.15E-10	1.39E-10	1.15E-10	2.54E-10
2067	648699	4197819	1.85E-09	1.97E-09	3.82E-09	2.78E-10	2.95E-10	5.73E-10	2.72E-10	2.63E-10	5.35E-10	1.44E-10	1.19E-10	2.64E-10
2068	648690.1	4197841	1.88E-09	2.01E-09	3.89E-09	2.83E-10	3.01E-10	5.84E-10	2.77E-10	2.68E-10	5.45E-10	1.47E-10	1.22E-10	2.69E-10
2069	648681.2	4197863	1.91E-09	2.04E-09	3.95E-09	2.87E-10	3.05E-10	5.92E-10	2.81E-10	2.72E-10	5.53E-10	1.49E-10	1.23E-10	2.73E-10
2070	648625.4	4197740	1.32E-09	1.41E-09	2.73E-09	1.99E-10	2.11E-10	4.10E-10	1.94E-10	1.88E-10	3.82E-10	1.03E-10	8.54E-11	1.89E-10
2071	648606.4	4197782	1.36E-09	1.45E-09	2.81E-09	2.05E-10	2.18E-10	4.22E-10	2.00E-10	1.94E-10	3.94E-10	1.06E-10	8.80E-11	1.94E-10
2072	648597.5	4197803	1.38E-09	1.47E-09	2.85E-09	2.07E-10	2.20E-10	4.27E-10	2.03E-10	1.96E-10	3.99E-10	1.08E-10	8.90E-11	1.97E-10
2073	648588.6	4197825	1.39E-09	1.48E-09	2.87E-09	2.09E-10	2.22E-10	4.31E-10	2.04E-10	1.98E-10	4.03E-10	1.09E-10	8.99E-11	1.99E-10
2074	648532.2	4197703	1.04E-09	1.11E-09	2.15E-09	1.56E-10	1.66E-10	3.22E-10	1.53E-10	1.48E-10	3.01E-10	8.12E-11	6.72E-11	1.48E-10
2075	648513.9	4197744	1.06E-09	1.13E-09	2.19E-09	1.59E-10	1.70E-10	3.29E-10	1.56E-10	1.51E-10	3.07E-10	8.28E-11	6.85E-11	1.51E-10
2076	648505	4197765	1.07E-09	1.14E-09	2.21E-09	1.61E-10	1.71E-10	3.32E-10	1.57E-10	1.52E-10	3.10E-10	8.36E-11	6.91E-11	1.53E-10
2077	648496	4197787	1.08E-09	1.15E-09	2.23E-09	1.62E-10	1.72E-10	3.34E-10	1.58E-10	1.53E-10	3.12E-10	8.41E-11	6.96E-11	1.54E-10
2078	648439.2	4197666	8.46E-10	9.02E-10	1.75E-09	1.27E-10	1.35E-10	2.63E-10	1.24E-10	1.21E-10	2.45E-10	6.61E-11	5.47E-11	1.21E-10
2079	648457.3	4197631	8.32E-10	8.87E-10	1.72E-09	1.25E-10	1.33E-10	2.58E-10	1.22E-10	1.19E-10	2.41E-10	6.50E-11	5.38E-11	1.19E-10
2080	648421.3	4197706	8.58E-10	9.15E-10	1.77E-09	1.29E-10	1.37E-10	2.66E-10	1.26E-10	1.22E-10	2.49E-10	6.70E-11	5.55E-11	1.23E-10
2081	648412.4	4197728	8.64E-10	9.21E-10	1.79E-09	1.30E-10	1.38E-10	2.68E-10	1.27E-10	1.23E-10	2.50E-10	6.75E-11	5.58E-11	1.23E-10
2082	648403.5	4197749	8.69E-10	9.26E-10	1.80E-09	1.31E-10	1.39E-10	2.70E-10	1.28E-10	1.24E-10	2.52E-10	6.79E-11	5.61E-11	1.24E-10
2083	648348.2	4197626	7.06E-10	7.53E-10	1.46E-09	1.06E-10	1.13E-10	2.19E-10	1.04E-10	1.01E-10	2.05E-10	5.52E-11	4.56E-11	1.01E-10
2084	648358.7	4197605	7.02E-10	7.49E-10	1.45E-09	1.06E-10	1.12E-10	2.18E-10	1.03E-10	1.00E-10	2.03E-10	5.49E-11	4.54E-11	1.00E-10
2085	648369.3	4197584	6.97E-10	7.43E-10	1.44E-09	1.05E-10	1.11E-10	2.16E-10	1.02E-10	9.93E-11	2.02E-10	5.44E-11	4.50E-11	9.95E-11
2086	648379.8	4197563	6.90E-10	7.35E-10	1.43E-09	1.04E-10	1.10E-10	2.14E-10	1.01E-10	9.83E-11	2.00E-10	5.39E-11	4.46E-11	9.85E-11
2087	648337.7	4197646	7.10E-10	7.57E-10	1.47E-09	1.07E-10	1.13E-10	2.20E-10	1.04E-10	1.01E-10	2.05E-10	5.54E-11	4.59E-11	1.01E-10
2088	648328.8	4197668	7.15E-10	7.62E-10	1.48E-09	1.07E-10	1.14E-10	2.22E-10	1.05E-10	1.02E-10	2.07E-10	5.58E-11	4.62E-11	1.02E-10
2089	648319.8	4197690	7.19E-10	7.66E-10	1.48E-09	1.08E-10	1.15E-10	2.23E-10	1.06E-10	1.02E-10	2.08E-10	5.61E-11	4.64E-11	1.03E-10
2090	648310.9	4197712	7.22E-10	7.70E-10	1.49E-09	1.09E-10	1.15E-10	2.24E-10	1.06E-10	1.03E-10	2.09E-10	5.64E-11	4.67E-11	1.03E-10
2091	648162.2	4197551	5.22E-10	5.56E-10	1.08E-09	7.84E-11	8.34E-11	1.62E-10	7.67E-11	7.43E-11	1.51E-10	4.07E-11	3.37E-11	7.44E-11
2092	648181.6	4197514	5.19E-10	5.53E-10	1.07E-09	7.81E-11	8.30E-11	1.61E-10	7.63E-11	7.40E-11	1.50E-10	4.05E-11	3.35E-11	7.41E-11
2093	648200.9	4197476	5.15E-10	5.49E-10	1.06E-09	7.75E-11	8.24E-11	1.60E-10	7.57E-11	7.34E-11	1.49E-10	4.02E-11	3.33E-11	7.35E-11
2094	648143.6	4197592	5.25E-10	5.60E-10	1.09E-09	7.90E-11	8.40E-11	1.63E-10	7.73E-11	7.49E-11	1.52E-10	4.10E-11	3.40E-11	7.50E-11
2095	648134.7	4197614	5.28E-10	5.63E-10	1.09E-09	7.95E-11	8.45E-11	1.64E-10	7.77E-11	7.53E-11	1.53E-10	4.13E-11	3.41E-11	7.54E-11
2096	648125.8	4197636	5.31E-10	5.66E-10	1.10E-09	7.99E-11	8.49E-11	1.65E-10	7.81E-11	7.57E-11	1.54E-10	4.15E-11	3.43E-11	7.58E-11
2097	647977.8	4197474	4.06E-10	4.33E-10	8.39E-10	6.10E-11	6.49E-11	1.26E-10	5.97E-11	5.79E-11	1.18E-10	3.17E-11	2.62E-11	5.79E-11
2098	647988.1	4197454	4.06E-10	4.32E-10	8.38E-10	6.10E-11	6.48E-11	1.26E-10	5.96E-11	5.78E-11	1.17E-10	3.17E-11	2.62E-11	5.79E-11
2099	647998.5	4197434	4.05E-10	4.32E-10	8.37E-10	6.09E-11	6.48E-11	1.26E-10	5.96E-11	5.77E-11	1.17E-10	3.17E-11	2.62E-11	5.78E-11
2100	648008.8	4197414	4.05E-10	4.32E-10	8.36E-10	6.09E-11	6.47E-11	1.26E-10	5.95E-11	5.77E-11	1.17E-10	3.16E-11	2.62E-11	5.78E-11
2101	648019.2	4197393	4.05E-10	4.31E-10	8.36E-10	6.08E-11	6.47E-11	1.26E-10	5.95E-11	5.77E-11	1.17E-10	3.16E-11	2.61E-11	5.77E-11
2102	648029.5	4197373	4.04E-10	4.31E-10	8.35E-10	6.07E-11	6.46E-11	1.25E-10	5.94E-11	5.76E-11	1.17E-10	3.16E-11	2.61E-11	5.77E-11
2103	648039.9	4197353	4.03E-10	4.29E-10	8.32E-10	6.06E-11	6.44E-11	1.25E-10	5.92E-11	5.74E-11	1.17E-10	3.15E-11	2.60E-11	5.75E-11
2104	647967.4	4197495	4.07E-10	4.34E-10	8.40E-10	6.12E-11	6.50E-11	1.26E-10	5.98E-11	5.80E-11	1.18E-10	3.18E-11	2.63E-11	5.81E-11
2105	647958.5	4197517	4.09E-10	4.36E-10	8.45E-10	6.15E-11	6.54E-11	1.27E-10	6.01E-11	5.83E-11	1.18E-10	3.19E-11	2.64E-11	5.84E-11
2106	647949.6	4197538	4.11E-10	4.38E-10	8.50E-10	6.18E-11	6.57E-11	1.28E-10	6.05E-11	5.86E-11	1.19E-10	3.21E-11	2.66E-11	5.87E-11
2107	647940.7	4197560	4.14E-10	4.41E-10	8.55E-10	6.22E-11	6.61E-11	1.28E-10	6.08E-11	5.90E-11	1.20E-10	3.23E-11	2.67E-11	5.91E-11
2108	647792.1	4197400	3.28E-10	3.50E-10	6.79E-10	4.94E-11	5.25E-11	1.02E-10	4.83E-11	4.68E-11	9.51E-11	2.57E-11	2.12E-11	4.69E-11
2109	647811.7	4197361	3.28E-10	3.49E-10	6.77E-10	4.93E-11	5.24E-11	1.02E-10	4.82E-11	4.67E-11	9.49E-11	2.56E-11	2.12E-11	4.68E-11
2110	647831.3	4197323	3.28E-10	3.50E-10	6.78E-10	4.94E-11	5.25E-11	1.02E-10	4.83E-11	4.68E-11	9.50E-11	2.56E-11	2.12E-11	4.68E-11
2111	647850.8	4197285	3.29E-10	3.51E-10	6.80E-10	4.95E-11	5.26E-11	1.02E-10	4.84E-11	4.69E-11	9.53E-11	2.57E-11	2.13E-11	4.70E-11
2112	647773.4	4197441	3.31E-10	3.53E-10	6.83E-10	4.97E-11	5.29E-11	1.03E-10	4.86E-11	4.71E-11	9.58E-11	2.58E-11	2.14E-11	4.72E-11
2113	647764.5	4197463	3.33E-10	3.55E-10	6.87E-10	5.00E-11	5.32E-11	1.03E-10	4.89E-11	4.74E-11	9.63E-11	2.60E-11	2.15E-11	4.75E-11
2114	647755.6	4197484	3.35E-10	3.57E-10	6.92E-10	5.04E-11	5.36E-11	1.04E-10	4.93E-11	4.77E-11	9.70E-11	2.62E-11	2.16E-11	4.78E-11
2115	647607.5	4197323	2.73E-10	2.91E-10	5.64E-10	4.11E-11	4.36E-11	8.47E-11	4.01E-11	3.89E-11	7.91E-11	2.13E-11	1.76E-11	3.90E-11
2116	647628	4197283	2.73E-10	2.91E-10	5.63E-10	4.10E-11	4.36E-11	8.46E-11	4.01E-11	3.89E-11	7.89E-11	2.13E-11	1.76E-11	3.89E-11
2117	647638.3	4197263	2.73E-10	2.91E-10	5.64E-10	4.10E-11	4.36E-11	8.46E-11	4.01E-11	3.89E-11	7.90E-11	2.13E-11	1.76E-11	3.89E-11
2118	647648.5	4197243	2.73E-10	2.91E-10	5.64E-10	4.11E-11	4.37E-11	8.48E-11	4.02E-11	3.89E-11	7.91E-11	2.13E-11	1.77E-11	3.90E-11
2119	647669.1	4197202	2.75E-10	2.93E-10	5.67E-10	4.13E-11	4.39E-11	8.52E-11	4.04E-11	3.91E-11	7.95E-11	2.14E-11	1.77E-11	3.92E-11
2120	647679.3	4197182	2.75E-10	2.94E-10	5.69E-10	4.14E-11	4.40E-11	8.54E-11	4.05E-11	3.92E-11	7.97E-11	2.15E-11	1.78E-11	3.93E-11
2121	647597.2	4197343	2.74E-10	2.92E-10	5.66E-10	4.12E-11	4.38E-11	8.49E-11	4.03E-11	3.90E-11	7.93E-11	2.14E-11	1.77E-11	3.91E-11
2122	647588.3	4197365	2.75E-10	2.94E-10	5.69E-10	4.14E-11	4.40E-11	8.54E-11	4.05E-11	3.92E-11	7.97E-11	2.15E-11	1.78E-11	3.93E-11
2123	647579.4	4197387	2.77E-10	2.95E-10	5.73E-10	4.17E-11	4.43E-11	8.60E-11	4.07E-11	3.95E-11	8.02E-11	2.16E-11	1.79E-11	3.96E-11
2124	647570.5	4197409	2.79E-10	2.98E-10	5.77E-10	4.20E-11	4.46E-11	8.66E-11	4.11E-11	3.98E-11	8.09E-11	2.18E-11	1.80E-11	3.99E-11

2125	648948	4198010	2.20E-08	2.34E-08	4.54E-08	3.30E-09	3.51E-09	6.81E-09	3.23E-09	3.13E-09	6.36E-09	1.72E-09	1.42E-09	3.14E-09
2126	648959.4	4198032	2.80E-08	2.98E-08	5.78E-08	4.21E-09	4.47E-09	8.68E-09	4.11E-09	3.99E-09	8.10E-09	2.19E-09	1.81E-09	3.99E-09
2127	648970.9	4198055	3.12E-08	3.32E-08	6.44E-08	4.69E-09	4.98E-09	9.67E-09	4.58E-09	4.44E-09	9.03E-09	2.44E-09	2.01E-09	4.45E-09
2128	648982.3	4198077	3.31E-08	3.52E-08	6.83E-08	4.97E-09	5.28E-09	1.03E-08	4.86E-09	4.71E-09	9.57E-09	2.58E-09	2.14E-09	4.72E-09
2129	648993.7	4198099	3.43E-08	3.66E-08	7.09E-08	5.16E-09	5.49E-09	1.06E-08	5.05E-09	4.89E-09	9.94E-09	2.68E-09	2.22E-09	4.90E-09
2130	649005.1	4198121	3.52E-08	3.75E-08	7.27E-08	5.29E-09	5.63E-09	1.09E-08	5.18E-09	5.02E-09	1.02E-08	2.75E-09	2.27E-09	5.02E-09
2131	649016.6	4198143	3.58E-08	3.82E-08	7.40E-08	5.38E-09	5.72E-09	1.11E-08	5.26E-09	5.10E-09	1.04E-08	2.80E-09	2.31E-09	5.11E-09
2132	649028	4198166	3.61E-08	3.85E-08	7.47E-08	5.44E-09	5.78E-09	1.12E-08	5.31E-09	5.15E-09	1.05E-08	2.82E-09	2.34E-09	5.16E-09
2133	649039.4	4198188	3.62E-08	3.86E-08	7.48E-08	5.45E-09	5.79E-09	1.12E-08	5.33E-09	5.16E-09	1.05E-08	2.83E-09	2.34E-09	5.17E-09
2134	649050.8	4198210	3.60E-08	3.83E-08	7.43E-08	5.41E-09	5.75E-09	1.12E-08	5.29E-09	5.13E-09	1.04E-08	2.81E-09	2.32E-09	5.13E-09
2135	649062.2	4198232	3.53E-08	3.76E-08	7.29E-08	5.30E-09	5.64E-09	1.09E-08	5.19E-09	5.03E-09	1.02E-08	2.75E-09	2.28E-09	5.03E-09
2136	649073.7	4198254	3.37E-08	3.60E-08	6.97E-08	5.07E-09	5.39E-09	1.05E-08	4.96E-09	4.81E-09	9.77E-09	2.63E-09	2.18E-09	4.81E-09
2137	649085.1	4198277	3.03E-08	3.23E-08	6.26E-08	4.55E-09	4.84E-09	9.39E-09	4.45E-09	4.31E-09	8.77E-09	2.37E-09	1.96E-09	4.32E-09
2138	648914.4	4197999	1.19E-08	1.26E-08	2.45E-08	1.78E-09	1.89E-09	3.68E-09	1.74E-09	1.69E-09	3.43E-09	9.26E-10	7.66E-10	1.69E-09
2139	648925.8	4198022	1.53E-08	1.63E-08	3.17E-08	2.30E-09	2.45E-09	4.75E-09	2.25E-09	2.18E-09	4.44E-09	1.20E-09	9.90E-10	2.19E-09
2140	648937.2	4198044	1.89E-08	2.02E-08	3.91E-08	2.84E-09	3.02E-09	5.87E-09	2.78E-09	2.70E-09	5.48E-09	1.48E-09	1.22E-09	2.70E-09
2141	648948.6	4198066	2.16E-08	2.30E-08	4.46E-08	3.25E-09	3.45E-09	6.70E-09	3.18E-09	3.08E-09	6.25E-09	1.69E-09	1.40E-09	3.08E-09
2142	648960.1	4198088	2.34E-08	2.49E-08	4.83E-08	3.51E-09	3.74E-09	7.25E-09	3.44E-09	3.33E-09	6.77E-09	1.83E-09	1.51E-09	3.34E-09
2143	648971.5	4198110	2.46E-08	2.62E-08	5.08E-08	3.70E-09	3.93E-09	7.63E-09	3.61E-09	3.50E-09	7.12E-09	1.92E-09	1.59E-09	3.51E-09
2144	648982.9	4198133	2.54E-08	2.71E-08	5.26E-08	3.83E-09	4.07E-09	7.89E-09	3.74E-09	3.63E-09	7.37E-09	1.99E-09	1.64E-09	3.63E-09
2145	648994.3	4198155	2.60E-08	2.78E-08	5.38E-08	3.92E-09	4.16E-09	8.08E-09	3.83E-09	3.71E-09	7.54E-09	2.03E-09	1.68E-09	3.72E-09
2146	649005.7	4198177	2.64E-08	2.81E-08	5.45E-08	3.97E-09	4.22E-09	8.19E-09	3.88E-09	3.76E-09	7.64E-09	2.06E-09	1.71E-09	3.77E-09
2147	649017.2	4198199	2.65E-08	2.83E-08	5.48E-08	3.99E-09	4.24E-09	8.23E-09	3.90E-09	3.78E-09	7.68E-09	2.07E-09	1.71E-09	3.79E-09
2148	649028.6	4198221	2.64E-08	2.82E-08	5.46E-08	3.97E-09	4.22E-09	8.19E-09	3.88E-09	3.76E-09	7.65E-09	2.06E-09	1.71E-09	3.77E-09
2149	649040	4198244	2.60E-08	2.77E-08	5.36E-08	3.90E-09	4.15E-09	8.05E-09	3.82E-09	3.70E-09	7.51E-09	2.03E-09	1.68E-09	3.70E-09
2150	649051.4	4198266	2.50E-08	2.66E-08	5.16E-08	3.76E-09	3.99E-09	7.75E-09	3.67E-09	3.56E-09	7.23E-09	1.95E-09	1.61E-09	3.57E-09
2151	649062.9	4198288	2.32E-08	2.47E-08	4.78E-08	3.48E-09	3.70E-09	7.18E-09	3.40E-09	3.30E-09	6.70E-09	1.81E-09	1.50E-09	3.31E-09
2152	648891.2	4197990	8.64E-09	9.21E-09	1.78E-08	1.30E-09	1.38E-09	2.68E-09	1.27E-09	1.23E-09	2.50E-09	6.75E-10	5.58E-10	1.23E-09
2153	648903.6	4198033	1.18E-08	1.25E-08	2.43E-08	1.77E-09	1.88E-09	3.65E-09	1.73E-09	1.68E-09	3.41E-09	9.19E-10	7.61E-10	1.68E-09
2154	648915	4198055	1.41E-08	1.51E-08	2.92E-08	2.12E-09	2.26E-09	4.38E-09	2.08E-09	2.01E-09	4.09E-09	1.10E-09	9.13E-10	2.02E-09
2155	648926.4	4198077	1.62E-08	1.73E-08	3.35E-08	2.43E-09	2.59E-09	5.02E-09	2.38E-09	2.31E-09	4.69E-09	1.26E-09	1.05E-09	2.31E-09
2156	648937.8	4198100	1.78E-08	1.89E-08	3.67E-08	2.67E-09	2.84E-09	5.51E-09	2.61E-09	2.53E-09	5.14E-09	1.39E-09	1.15E-09	2.54E-09
2157	648949.2	4198122	1.89E-08	2.02E-08	3.91E-08	2.84E-09	3.02E-09	5.87E-09	2.78E-09	2.69E-09	5.47E-09	1.48E-09	1.22E-09	2.70E-09
2158	648960.7	4198144	1.97E-08	2.10E-08	4.08E-08	2.97E-09	3.15E-09	6.12E-09	2.90E-09	2.81E-09	5.71E-09	1.54E-09	1.28E-09	2.82E-09
2159	648972.1	4198166	2.03E-08	2.17E-08	4.20E-08	3.05E-09	3.25E-09	6.30E-09	2.99E-09	2.89E-09	5.88E-09	1.59E-09	1.31E-09	2.90E-09
2160	648983.5	4198188	2.07E-08	2.21E-08	4.28E-08	3.11E-09	3.31E-09	6.42E-09	3.04E-09	2.95E-09	5.99E-09	1.62E-09	1.34E-09	2.95E-09
2161	648994.9	4198211	2.09E-08	2.23E-08	4.31E-08	3.14E-09	3.34E-09	6.48E-09	3.07E-09	2.97E-09	6.04E-09	1.63E-09	1.35E-09	2.98E-09
2162	649006.4	4198233	2.08E-08	2.22E-08	4.31E-08	3.13E-09	3.33E-09	6.47E-09	3.07E-09	2.97E-09	6.04E-09	1.63E-09	1.35E-09	2.98E-09
2163	649017.8	4198255	2.06E-08	2.19E-08	4.25E-08	3.09E-09	3.29E-09	6.38E-09	3.02E-09	2.93E-09	5.95E-09	1.61E-09	1.33E-09	2.94E-09
2164	649029.2	4198277	1.99E-08	2.12E-08	4.12E-08	3.00E-09	3.19E-09	6.18E-09	2.93E-09	2.84E-09	5.77E-09	1.56E-09	1.29E-09	2.84E-09
2165	649040.6	4198299	1.88E-08	2.00E-08	3.89E-08	2.83E-09	3.01E-09	5.83E-09	2.77E-09	2.68E-09	5.45E-09	1.47E-09	1.22E-09	2.68E-09
2166	648869	4198001	7.34E-09	7.82E-09	1.52E-08	1.10E-09	1.17E-09	2.28E-09	1.08E-09	1.05E-09	2.12E-09	5.73E-10	4.74E-10	1.05E-09
2167	648881.3	4198045	9.53E-09	1.02E-08	1.97E-08	1.43E-09	1.52E-09	2.96E-09	1.40E-09	1.36E-09	2.76E-09	7.45E-10	6.16E-10	1.36E-09
2168	648892.7	4198067	1.12E-08	1.19E-08	2.31E-08	1.68E-09	1.79E-09	3.47E-09	1.65E-09	1.60E-09	3.24E-09	8.75E-10	7.24E-10	1.60E-09
2169	648904.2	4198089	1.28E-08	1.36E-08	2.64E-08	1.92E-09	2.04E-09	3.96E-09	1.88E-09	1.82E-09	3.70E-09	9.98E-10	8.26E-10	1.82E-09
2170	648915.6	4198111	1.41E-08	1.50E-08	2.91E-08	2.12E-09	2.25E-09	4.38E-09	2.07E-09	2.01E-09	4.08E-09	1.10E-09	9.11E-10	2.01E-09
2171	648927	4198133	1.51E-08	1.61E-08	3.13E-08	2.28E-09	2.42E-09	4.70E-09	2.23E-09	2.16E-09	4.38E-09	1.18E-09	9.79E-10	2.16E-09
2172	648938.4	4198156	1.59E-08	1.70E-08	3.29E-08	2.39E-09	2.55E-09	4.94E-09	2.34E-09	2.27E-09	4.61E-09	1.24E-09	1.03E-09	2.27E-09
2173	648949.9	4198178	1.65E-08	1.76E-08	3.41E-08	2.48E-09	2.64E-09	5.12E-09	2.43E-09	2.35E-09	4.78E-09	1.29E-09	1.07E-09	2.36E-09
2174	648961.3	4198200	1.69E-08	1.80E-08	3.49E-08	2.54E-09	2.70E-09	5.24E-09	2.48E-09	2.41E-09	4.89E-09	1.32E-09	1.09E-09	2.41E-09
2175	648972.7	4198222	1.71E-08	1.82E-08	3.54E-08	2.57E-09	2.74E-09	5.31E-09	2.52E-09	2.44E-09	4.95E-09	1.34E-09	1.11E-09	2.44E-09
2176	648984.1	4198244	1.72E-08	1.83E-08	3.54E-08	2.58E-09	2.74E-09	5.32E-09	2.52E-09	2.44E-09	4.97E-09	1.34E-09	1.11E-09	2.45E-09
2177	648995.6	4198266	1.70E-08	1.81E-08	3.51E-08	2.55E-09	2.71E-09	5.27E-09	2.50E-09	2.42E-09	4.92E-09	1.33E-09	1.10E-09	2.42E-09
2178	649007	4198289	1.66E-08	1.76E-08	3.42E-08	2.49E-09	2.65E-09	5.14E-09	2.43E-09	2.36E-09	4.79E-09	1.29E-09	1.07E-09	2.36E-09
2179	649018.4	4198311	1.58E-08	1.69E-08	3.27E-08	2.38E-09	2.53E-09	4.91E-09	2.33E-09	2.25E-09	4.58E-09	1.24E-09	1.02E-09	2.26E-09
2180	648824.5	4198024	5.59E-09	5.96E-09	1.16E-08	8.41E-10	8.94E-10	1.73E-09	8.22E-10	7.97E-10	1.62E-09	4.37E-10	3.61E-10	7.98E-10
2181	648822.7	4197983	4.83E-09	5.15E-09	9.99E-09	7.27E-10	7.73E-10	1.50E-09	7.11E-10	6.89E-10	1.40E-09	3.78E-10	3.12E-10	6.90E-10
2182	648836.9	4198067	6.85E-09	7.30E-09	1.42E-08	1.03E-09	1.10E-09	2.13E-09	1.01E-09	9.76E-10	1.98E-09	5.35E-10	4.43E-10	9.78E-10
2183	648848.3	4198090	7.81E-09	8.33E-09	1.61E-08	1.17E-09	1.25E-09	2.42E-09	1.15E-09	1.11E-09	2.26E-09	6.10E-10	5.05E-10	1.11E-09
2184	648859.7	4198112	8.78E-09	9.36E-09	1.81E-08	1.32E-09	1.40E-09	2.72E-09	1.29E-09	1.25E-09	2.54E-09	6.86E-10	5.67E-10	1.25E-09
2185	648871.1	4198134	9.69E-09	1.03E-08	2.00E-08	1.46E-09	1.55E-09	3.01E-09	1.42E-09	1.38E-09	2.81E-09	7.57E-10	6.26E-10	1.38E-09
2186	648882.6	4198156	1.05E-08	1.12E-08	2.17E-08	1.58E-09	1.68E-09	3.25E-09	1.54E-09	1.49E-09	3.04E-09	8.19E-10	6.78E-10	1.50E-09
2187	648894	4198178	1.12E-08	1.19E-08	2.30E-08	1.68E-09	1.78E-09	3.46E-09	1.64E-09	1.59E-09	3.23E-09	8.71E-10	7.21E-10	1.59E-09
2188	648905.4	4198201	1.17E-08	1.24E-08	2.41E-08	1.76E-09	1.87E-09	3.62E-09	1.72E-09	1.66E-09	3.38E-09	9.12E-10	7.55E-10	1.67E-09
2189	648916.8	4198223	1.21E-08	1.29E-08	2.49E-08	1.81E-09	1.93E-09	3.74E-09	1.77E-09	1.72E-09	3.49E-09	9.43E-10	7.80E-10	1.72E-09
2190	648928.3	4198245	1.23E-08	1.31E-08	2.55E-08	1.85E-09	1.97E-09	3.82E-09	1.81E-09	1.76E-09	3.57E-09	9.63E-10	7.97E-10	1.76E-09
2191	648939.7	4198267	1.24E-08	1.33E-08	2.57E-08	1.87E-09	1.99E-09	3.86E-09	1.83E-09	1.77E-09	3.60E-09	9.72E-10	8.04E-10	1.78E-09
2192	648951.1	4198289	1.24E-08	1.32E-08	2.57E-08	1.87E-09	1.99E-09	3.85E-09	1.83E-09	1.77E-09	3.60E-09	9.70E-10	8.03E-10	1.77E-09
2193	648962.5	4198312	1.22E-08	1.30E-08	2.53E-08	1.84E-09	1.96E-09	3.80E-09	1.80E-09	1.74E-09	3.54E-09	9.56E-10	7.91E-10	1.75E-09
2194	648974	4198334	1.19E-08	1.27E-08	2.46E-08	1.79E-09	1.90E-09	3.69E-09	1.75E-09	1.69E-09	3.44E-09	9.28E-10	7.68E-10	1.70E-09
2195	648779.9	4198044	4.44E-09	4.73E-09	9.17E-09	6.67E-10	7.09E-10	1.38E-09	6.52E-10	6.32E-10	1.28E-09	3.47E-10	2.87E-10	6.33E-10
2196	648778.9	4198020	4.15E-09	4.43E-09	8.58E-09	6.24E-10	6.64E-10	1.29E-09	6.11E-10	5.92E-10	1.20E-09	3.24E-10	2.68E-10	5.93E-10
2197	648777.9	4197996	3.87E-09	4.13E-09	8.00E-09	5.82E-10	6.19E-10	1.20E-09	5.69E-10	5.52E-10	1.12E-09	3.02E-10	2.50E-10	5.53E-10
2198	648776.8	4197973	3.60E-09	3.84E-09	7.44E-09	5.42E-10	5.76E-10	1.12E-09	5.30E-10	5.13E-10	1.04E-09	2.81E-10	2.33E-10	5.14E-10
2199	648775.8	4197949	3.35E-09	3.57E-09	6.92E-09	5.04E-10	5.36E-10	1.04E-09	4.93E-10	4.77E-10	9.70E-10	2.62E-10	2.16E-10	4.78E-10
2200	648774.7	4197925	3.12E-09	3.32E-09	6.44E-09	4.69E-10	4.98E-10	9.67E-10	4.58E-10	4.44E-10	9.03E-10	2.44E-10	2.01E-10	4.45E-10

2201	648781	4198068	4.72E-09	5.03E-09	9.74E-09	7.09E-10	7.54E-10	1.46E-09	6.93E-10	6.72E-10	1.37E-09	3.68E-10	3.05E-10	6.73E-10
2202	648792.4	4198090	5.29E-09	5.64E-09	1.09E-08	7.96E-10	8.46E-10	1.64E-09	7.78E-10	7.54E-10	1.53E-09	4.13E-10	3.42E-10	7.55E-10
2203	648803.8	4198112	5.91E-09	6.30E-09	1.22E-08	8.89E-10	9.45E-10	1.83E-09	8.69E-10	8.43E-10	1.71E-09	4.62E-10	3.82E-10	8.44E-10
2204	648815.3	4198135	6.56E-09	6.99E-09	1.35E-08	9.86E-10	1.05E-09	2.03E-09	9.64E-10	9.35E-10	1.90E-09	5.12E-10	4.24E-10	9.36E-10
2205	648826.7	4198157	7.19E-09	7.67E-09	1.49E-08	1.08E-09	1.15E-09	2.23E-09	1.06E-09	1.03E-09	2.08E-09	5.62E-10	4.65E-10	1.03E-09
2206	648838.1	4198179	7.79E-09	8.30E-09	1.61E-08	1.17E-09	1.24E-09	2.42E-09	1.15E-09	1.11E-09	2.25E-09	6.08E-10	5.03E-10	1.11E-09
2207	648849.5	4198201	8.32E-09	8.86E-09	1.72E-08	1.25E-09	1.33E-09	2.58E-09	1.22E-09	1.19E-09	2.41E-09	6.50E-10	5.37E-10	1.19E-09
2208	648861	4198223	8.76E-09	9.34E-09	1.81E-08	1.32E-09	1.40E-09	2.72E-09	1.29E-09	1.25E-09	2.54E-09	6.84E-10	5.66E-10	1.25E-09
2209	648872.4	4198246	9.12E-09	9.72E-09	1.88E-08	1.37E-09	1.46E-09	2.83E-09	1.34E-09	1.30E-09	2.64E-09	7.12E-10	5.89E-10	1.30E-09
2210	648883.8	4198268	9.37E-09	9.99E-09	1.94E-08	1.41E-09	1.50E-09	2.91E-09	1.38E-09	1.34E-09	2.71E-09	7.32E-10	6.06E-10	1.34E-09
2211	648895.2	4198290	9.53E-09	1.02E-08	1.97E-08	1.43E-09	1.52E-09	2.96E-09	1.40E-09	1.36E-09	2.76E-09	7.44E-10	6.16E-10	1.36E-09
2212	648906.7	4198312	9.58E-09	1.02E-08	1.98E-08	1.44E-09	1.53E-09	2.97E-09	1.41E-09	1.37E-09	2.77E-09	7.48E-10	6.19E-10	1.37E-09
2213	648918.1	4198334	9.52E-09	1.02E-08	1.97E-08	1.43E-09	1.52E-09	2.95E-09	1.40E-09	1.36E-09	2.76E-09	7.44E-10	6.16E-10	1.36E-09
2214	648929.5	4198357	9.36E-09	9.98E-09	1.93E-08	1.41E-09	1.50E-09	2.90E-09	1.38E-09	1.33E-09	2.71E-09	7.31E-10	6.05E-10	1.34E-09
2215	648735.5	4198068	3.68E-09	3.92E-09	7.60E-09	5.53E-10	5.88E-10	1.14E-09	5.41E-10	5.24E-10	1.07E-09	2.88E-10	2.38E-10	5.25E-10
2216	648734.5	4198045	3.49E-09	3.72E-09	7.20E-09	5.24E-10	5.57E-10	1.08E-09	5.12E-10	4.97E-10	1.01E-09	2.72E-10	2.25E-10	4.97E-10
2217	648733.5	4198021	3.29E-09	3.51E-09	6.80E-09	4.95E-10	5.26E-10	1.02E-09	4.84E-10	4.69E-10	9.53E-10	2.57E-10	2.13E-10	4.70E-10
2218	648732.5	4197998	3.10E-09	3.31E-09	6.41E-09	4.66E-10	4.96E-10	9.62E-10	4.56E-10	4.42E-10	8.98E-10	2.42E-10	2.00E-10	4.43E-10
2219	648731.5	4197975	2.92E-09	3.11E-09	6.03E-09	4.39E-10	4.67E-10	9.06E-10	4.29E-10	4.16E-10	8.45E-10	2.28E-10	1.89E-10	4.17E-10
2220	648730.5	4197952	2.75E-09	2.93E-09	5.68E-09	4.14E-10	4.40E-10	8.53E-10	4.04E-10	3.92E-10	7.96E-10	2.15E-10	1.78E-10	3.93E-10
2221	648729.5	4197928	2.59E-09	2.76E-09	5.36E-09	3.90E-10	4.15E-10	8.05E-10	3.81E-10	3.70E-10	7.51E-10	2.03E-10	1.68E-10	3.70E-10
2222	648728.4	4197905	2.45E-09	2.61E-09	5.06E-09	3.68E-10	3.92E-10	7.60E-10	3.60E-10	3.49E-10	7.09E-10	1.91E-10	1.58E-10	3.50E-10
2223	648736.5	4198091	3.87E-09	4.13E-09	8.00E-09	5.82E-10	6.19E-10	1.20E-09	5.69E-10	5.52E-10	1.12E-09	3.03E-10	2.50E-10	5.53E-10
2224	648748	4198113	4.28E-09	4.56E-09	8.84E-09	6.43E-10	6.84E-10	1.33E-09	6.29E-10	6.09E-10	1.24E-09	3.34E-10	2.76E-10	6.10E-10
2225	648759.4	4198135	4.71E-09	5.02E-09	9.73E-09	7.08E-10	7.53E-10	1.46E-09	6.93E-10	6.71E-10	1.36E-09	3.68E-10	3.04E-10	6.73E-10
2226	648770.8	4198158	5.17E-09	5.51E-09	1.07E-08	7.77E-10	8.26E-10	1.60E-09	7.60E-10	7.36E-10	1.50E-09	4.04E-10	3.34E-10	7.37E-10
2227	648782.2	4198180	5.63E-09	6.00E-09	1.16E-08	8.46E-10	8.99E-10	1.75E-09	8.27E-10	8.02E-10	1.63E-09	4.40E-10	3.64E-10	8.03E-10
2228	648793.7	4198202	6.07E-09	6.47E-09	1.25E-08	9.13E-10	9.71E-10	1.88E-09	8.93E-10	8.65E-10	1.76E-09	4.74E-10	3.92E-10	8.67E-10
2229	648805.1	4198224	6.48E-09	6.91E-09	1.34E-08	9.75E-10	1.04E-09	2.01E-09	9.53E-10	9.24E-10	1.88E-09	5.06E-10	4.19E-10	9.25E-10
2230	648816.5	4198246	6.84E-09	7.30E-09	1.41E-08	1.03E-09	1.09E-09	2.12E-09	1.01E-09	9.75E-10	1.98E-09	5.35E-10	4.42E-10	9.77E-10
2231	648827.9	4198269	7.15E-09	7.62E-09	1.48E-08	1.07E-09	1.14E-09	2.22E-09	1.05E-09	1.02E-09	2.07E-09	5.58E-10	4.62E-10	1.02E-09
2232	648839.3	4198291	7.38E-09	7.87E-09	1.53E-08	1.11E-09	1.18E-09	2.29E-09	1.09E-09	1.05E-09	2.14E-09	5.77E-10	4.77E-10	1.05E-09
2233	648850.8	4198313	7.55E-09	8.04E-09	1.56E-08	1.13E-09	1.21E-09	2.34E-09	1.11E-09	1.08E-09	2.19E-09	5.90E-10	4.88E-10	1.08E-09
2234	648862.2	4198335	7.64E-09	8.14E-09	1.58E-08	1.15E-09	1.22E-09	2.37E-09	1.12E-09	1.09E-09	2.21E-09	5.96E-10	4.93E-10	1.09E-09
2235	648873.6	4198357	7.65E-09	8.15E-09	1.58E-08	1.15E-09	1.22E-09	2.37E-09	1.12E-09	1.09E-09	2.21E-09	5.97E-10	4.94E-10	1.09E-09
2236	648885	4198380	7.59E-09	8.09E-09	1.57E-08	1.14E-09	1.21E-09	2.35E-09	1.12E-09	1.08E-09	2.20E-09	5.93E-10	4.90E-10	1.08E-09
2237	648691.1	4198091	3.13E-09	3.33E-09	6.46E-09	4.70E-10	5.00E-10	9.70E-10	4.60E-10	4.46E-10	9.06E-10	2.44E-10	2.02E-10	4.46E-10
2238	648690.1	4198068	2.98E-09	3.18E-09	6.17E-09	4.49E-10	4.77E-10	9.26E-10	4.39E-10	4.25E-10	8.64E-10	2.33E-10	1.93E-10	4.26E-10
2239	648689.1	4198045	2.84E-09	3.03E-09	5.87E-09	4.27E-10	4.54E-10	8.81E-10	4.18E-10	4.05E-10	8.22E-10	2.22E-10	1.84E-10	4.05E-10
2240	648688.1	4198023	2.70E-09	2.88E-09	5.58E-09	4.06E-10	4.31E-10	8.37E-10	3.97E-10	3.85E-10	7.81E-10	2.11E-10	1.74E-10	3.85E-10
2241	648687.1	4198000	2.56E-09	2.73E-09	5.29E-09	3.85E-10	4.10E-10	7.95E-10	3.77E-10	3.65E-10	7.42E-10	2.00E-10	1.66E-10	3.66E-10
2242	648686.1	4197977	2.43E-09	2.59E-09	5.03E-09	3.66E-10	3.89E-10	7.55E-10	3.58E-10	3.47E-10	7.04E-10	1.90E-10	1.57E-10	3.47E-10
2243	648685.1	4197954	2.31E-09	2.46E-09	4.77E-09	3.47E-10	3.69E-10	7.17E-10	3.40E-10	3.29E-10	6.69E-10	1.81E-10	1.49E-10	3.30E-10
2244	648684.1	4197931	2.20E-09	2.34E-09	4.54E-09	3.31E-10	3.52E-10	6.82E-10	3.23E-10	3.13E-10	6.37E-10	1.72E-10	1.42E-10	3.14E-10
2245	648683.1	4197909	2.10E-09	2.23E-09	4.33E-09	3.15E-10	3.35E-10	6.50E-10	3.08E-10	2.99E-10	6.07E-10	1.64E-10	1.35E-10	2.99E-10
2246	648682.1	4197886	2.00E-09	2.13E-09	4.13E-09	3.01E-10	3.20E-10	6.20E-10	2.94E-10	2.85E-10	5.79E-10	1.56E-10	1.29E-10	2.85E-10
2247	648692.1	4198114	3.27E-09	3.49E-09	6.75E-09	4.92E-10	5.23E-10	1.01E-09	4.81E-10	4.66E-10	9.47E-10	2.55E-10	2.11E-10	4.67E-10
2248	648703.5	4198136	3.57E-09	3.80E-09	7.37E-09	5.37E-10	5.70E-10	1.11E-09	5.25E-10	5.09E-10	1.03E-09	2.79E-10	2.31E-10	5.09E-10
2249	648714.9	4198158	3.89E-09	4.15E-09	8.03E-09	5.85E-10	6.22E-10	1.21E-09	5.72E-10	5.54E-10	1.13E-09	3.04E-10	2.51E-10	5.55E-10
2250	648726.3	4198180	4.22E-09	4.50E-09	8.73E-09	6.35E-10	6.75E-10	1.31E-09	6.21E-10	6.02E-10	1.22E-09	3.30E-10	2.73E-10	6.03E-10
2251	648737.8	4198203	4.57E-09	4.87E-09	9.43E-09	6.87E-10	7.30E-10	1.42E-09	6.71E-10	6.51E-10	1.32E-09	3.57E-10	2.95E-10	6.52E-10
2252	648749.2	4198225	4.90E-09	5.23E-09	1.01E-08	7.37E-10	7.84E-10	1.52E-09	7.21E-10	6.99E-10	1.42E-09	3.83E-10	3.17E-10	7.00E-10
2253	648760.6	4198247	5.22E-09	5.57E-09	1.08E-08	7.85E-10	8.35E-10	1.62E-09	7.68E-10	7.44E-10	1.51E-09	4.08E-10	3.37E-10	7.45E-10
2254	648772	4198269	5.51E-09	5.88E-09	1.14E-08	8.29E-10	8.81E-10	1.71E-09	8.10E-10	7.86E-10	1.60E-09	4.31E-10	3.56E-10	7.87E-10
2255	648783.5	4198291	5.76E-09	6.14E-09	1.19E-08	8.67E-10	9.21E-10	1.79E-09	8.47E-10	8.21E-10	1.67E-09	4.50E-10	3.72E-10	8.23E-10
2256	648794.9	4198314	5.97E-09	6.36E-09	1.23E-08	8.98E-10	9.54E-10	1.85E-09	8.78E-10	8.51E-10	1.73E-09	4.66E-10	3.86E-10	8.52E-10
2257	648806.3	4198336	6.12E-09	6.53E-09	1.27E-08	9.21E-10	9.79E-10	1.90E-09	9.01E-10	8.73E-10	1.77E-09	4.78E-10	3.96E-10	8.74E-10
2258	648817.7	4198358	6.23E-09	6.64E-09	1.29E-08	9.36E-10	9.96E-10	1.93E-09	9.16E-10	8.87E-10	1.80E-09	4.86E-10	4.02E-10	8.89E-10
2259	648829.2	4198380	6.28E-09	6.69E-09	1.30E-08	9.44E-10	1.00E-09	1.95E-09	9.23E-10	8.95E-10	1.82E-09	4.90E-10	4.06E-10	8.96E-10
2260	648840.6	4198402	6.27E-09	6.69E-09	1.30E-08	9.43E-10	1.00E-09	1.95E-09	9.22E-10	8.94E-10	1.82E-09	4.90E-10	4.05E-10	8.95E-10
2261	648602.1	4198136	2.38E-09	2.53E-09	4.91E-09	3.57E-10	3.80E-10	7.37E-10	3.49E-10	3.39E-10	6.88E-10	1.86E-10	1.54E-10	3.39E-10
2262	648601.1	4198112	2.28E-09	2.43E-09	4.71E-09	3.43E-10	3.65E-10	7.08E-10	3.36E-10	3.25E-10	6.61E-10	1.78E-10	1.47E-10	3.26E-10
2263	648600	4198088	2.19E-09	2.33E-09	4.52E-09	3.29E-10	3.50E-10	6.79E-10	3.22E-10	3.12E-10	6.33E-10	1.71E-10	1.41E-10	3.12E-10
2264	648599	4198064	2.09E-09	2.23E-09	4.33E-09	3.15E-10	3.35E-10	6.49E-10	3.08E-10	2.98E-10	6.06E-10	1.64E-10	1.35E-10	2.99E-10
2265	648598	4198040	2.00E-09	2.13E-09	4.14E-09	3.01E-10	3.20E-10	6.21E-10	2.94E-10	2.85E-10	5.80E-10	1.56E-10	1.29E-10	2.86E-10
2266	648596.9	4198016	1.91E-09	2.04E-09	3.95E-09	2.88E-10	3.06E-10	5.93E-10	2.81E-10	2.73E-10	5.54E-10	1.49E-10	1.24E-10	2.73E-10
2267	648595.9	4197992	1.83E-09	1.95E-09	3.78E-09	2.75E-10	2.92E-10	5.67E-10	2.69E-10	2.61E-10	5.30E-10	1.43E-10	1.18E-10	2.61E-10
2268	648594.8	4197968	1.75E-09	1.87E-09	3.62E-09	2.63E-10	2.80E-10	5.43E-10	2.57E-10	2.49E-10	5.07E-10	1.37E-10	1.13E-10	2.50E-10
2269	648593.8	4197945	1.68E-09	1.79E-09	3.47E-09	2.52E-10	2.68E-10	5.20E-10	2.47E-10	2.39E-10	4.86E-10	1.31E-10	1.08E-10	2.39E-10
2270	648592.8	4197921	1.61E-09	1.72E-09	3.33E-09	2.42E-10	2.58E-10	5.00E-10	2.37E-10	2.30E-10	4.66E-10	1.26E-10	1.04E-10	2.30E-10
2271	648591.7	4197897	1.55E-09	1.65E-09	3.20E-09	2.33E-10	2.48E-10	4.81E-10	2.28E-10	2.21E-10	4.49E-10	1.21E-10	1.00E-10	2.21E-10
2272	648590.7	4197873	1.49E-09	1.59E-09	3.09E-09	2.25E-10	2.39E-10	4.63E-10	2.20E-10	2.13E-10	4.32E-10	1.17E-10	9.65E-11	2.13E-10
2273	648589.6	4197849	1.44E-09	1.54E-09	2.98E-09	2.17E-10	2.30E-10	4.47E-10	2.12E-10	2.05E-10	4.17E-10	1.13E-10	9.31E-11	2.06E-10
2274	648603.2	4198160	2.47E-09	2.63E-09	5.10E-09	3.71E-10	3.95E-10	7.66E-10	3.63E-10	3.52E-10	7.15E-10	1.93E-10	1.60E-10	3.52E-10
2275	648614.6	4198182	2.65E-09	2.83E-09	5.48E-09	3.98E-10	4.24E-10	8.22E-10	3.90E-10	3.78E-10	7.67E-10	2.07E-10	1.71E-10	3.78E-10
2276	648626	4198204	2.84E-09	3.03E-09	5.87E-09	4.27E-10	4.54E-10	8.81E-10	4.18E-10	4.05E-10	8.23E-10	2.22E-10	1.84E-10	4.06E-10

2277	648637.4	4198226	3.04E-09	3.24E-09	6.28E-09	4.57E-10	4.86E-10	9.43E-10	4.47E-10	4.33E-10	8.80E-10	2.37E-10	1.96E-10	4.34E-10
2278	648648.9	4198248	3.24E-09	3.46E-09	6.70E-09	4.88E-10	5.18E-10	1.01E-09	4.77E-10	4.62E-10	9.39E-10	2.53E-10	2.10E-10	4.63E-10
2279	648660.3	4198271	3.45E-09	3.67E-09	7.12E-09	5.18E-10	5.51E-10	1.07E-09	5.07E-10	4.91E-10	9.97E-10	2.69E-10	2.23E-10	4.92E-10
2280	648671.7	4198293	3.64E-09	3.88E-09	7.52E-09	5.48E-10	5.82E-10	1.13E-09	5.35E-10	5.19E-10	1.05E-09	2.84E-10	2.35E-10	5.20E-10
2281	648683.1	4198315	3.83E-09	4.08E-09	7.91E-09	5.76E-10	6.12E-10	1.19E-09	5.63E-10	5.45E-10	1.11E-09	2.99E-10	2.47E-10	5.46E-10
2282	648694.6	4198337	4.00E-09	4.26E-09	8.26E-09	6.01E-10	6.39E-10	1.24E-09	5.88E-10	5.70E-10	1.16E-09	3.12E-10	2.58E-10	5.71E-10
2283	648706	4198359	4.15E-09	4.42E-09	8.57E-09	6.23E-10	6.63E-10	1.29E-09	6.10E-10	5.91E-10	1.20E-09	3.24E-10	2.68E-10	5.92E-10
2284	648717.4	4198382	4.27E-09	4.55E-09	8.82E-09	6.42E-10	6.83E-10	1.33E-09	6.28E-10	6.09E-10	1.24E-09	3.34E-10	2.76E-10	6.10E-10
2285	648728.8	4198404	4.37E-09	4.66E-09	9.03E-09	6.57E-10	6.99E-10	1.36E-09	6.43E-10	6.23E-10	1.27E-09	3.41E-10	2.82E-10	6.24E-10
2286	648740.3	4198426	4.44E-09	4.73E-09	9.18E-09	6.68E-10	7.10E-10	1.38E-09	6.53E-10	6.33E-10	1.29E-09	3.47E-10	2.87E-10	6.34E-10
2287	648751.7	4198448	4.48E-09	4.78E-09	9.26E-09	6.74E-10	7.17E-10	1.39E-09	6.59E-10	6.39E-10	1.30E-09	3.50E-10	2.90E-10	6.40E-10
2288	648513.2	4198181	1.90E-09	2.03E-09	3.93E-09	2.86E-10	3.04E-10	5.90E-10	2.80E-10	2.71E-10	5.50E-10	1.49E-10	1.23E-10	2.71E-10
2289	648512.1	4198156	1.84E-09	1.96E-09	3.79E-09	2.76E-10	2.93E-10	5.69E-10	2.70E-10	2.62E-10	5.31E-10	1.43E-10	1.19E-10	2.62E-10
2290	648511	4198132	1.77E-09	1.89E-09	3.65E-09	2.66E-10	2.83E-10	5.49E-10	2.60E-10	2.52E-10	5.12E-10	1.38E-10	1.14E-10	2.52E-10
2291	648510	4198107	1.70E-09	1.81E-09	3.51E-09	2.56E-10	2.72E-10	5.28E-10	2.50E-10	2.42E-10	4.93E-10	1.33E-10	1.10E-10	2.43E-10
2292	648508.9	4198082	1.63E-09	1.74E-09	3.38E-09	2.46E-10	2.61E-10	5.07E-10	2.40E-10	2.33E-10	4.73E-10	1.28E-10	1.06E-10	2.33E-10
2293	648507.8	4198058	1.57E-09	1.67E-09	3.24E-09	2.36E-10	2.51E-10	4.87E-10	2.31E-10	2.24E-10	4.55E-10	1.23E-10	1.01E-10	2.24E-10
2294	648506.8	4198033	1.51E-09	1.61E-09	3.11E-09	2.27E-10	2.41E-10	4.68E-10	2.22E-10	2.15E-10	4.36E-10	1.18E-10	9.74E-11	2.15E-10
2295	648505.7	4198009	1.45E-09	1.54E-09	2.99E-09	2.18E-10	2.32E-10	4.49E-10	2.13E-10	2.06E-10	4.19E-10	1.13E-10	9.36E-11	2.07E-10
2296	648504.6	4197984	1.39E-09	1.48E-09	2.88E-09	2.09E-10	2.23E-10	4.32E-10	2.05E-10	1.98E-10	4.03E-10	1.09E-10	9.00E-11	1.99E-10
2297	648503.5	4197959	1.34E-09	1.43E-09	2.77E-09	2.02E-10	2.14E-10	4.16E-10	1.97E-10	1.91E-10	3.88E-10	1.05E-10	8.67E-11	1.91E-10
2298	648502.5	4197935	1.29E-09	1.38E-09	2.67E-09	1.95E-10	2.07E-10	4.01E-10	1.90E-10	1.84E-10	3.75E-10	1.01E-10	8.36E-11	1.85E-10
2299	648501.4	4197910	1.25E-09	1.33E-09	2.58E-09	1.88E-10	2.00E-10	3.88E-10	1.84E-10	1.78E-10	3.62E-10	9.77E-11	8.08E-11	1.79E-10
2300	648500.3	4197886	1.21E-09	1.29E-09	2.50E-09	1.82E-10	1.94E-10	3.76E-10	1.78E-10	1.73E-10	3.51E-10	9.46E-11	7.83E-11	1.73E-10
2301	648499.3	4197861	1.17E-09	1.25E-09	2.43E-09	1.77E-10	1.88E-10	3.65E-10	1.73E-10	1.67E-10	3.40E-10	9.18E-11	7.59E-11	1.68E-10
2302	648498.2	4197836	1.14E-09	1.22E-09	2.36E-09	1.72E-10	1.82E-10	3.54E-10	1.68E-10	1.63E-10	3.30E-10	8.91E-11	7.37E-11	1.63E-10
2303	648497.1	4197812	1.11E-09	1.18E-09	2.29E-09	1.67E-10	1.77E-10	3.44E-10	1.63E-10	1.58E-10	3.21E-10	8.66E-11	7.16E-11	1.58E-10
2304	648514.3	4198205	1.96E-09	2.09E-09	4.06E-09	2.95E-10	3.14E-10	6.10E-10	2.89E-10	2.80E-10	5.69E-10	1.53E-10	1.27E-10	2.80E-10
2305	648525.7	4198228	2.08E-09	2.22E-09	4.30E-09	3.13E-10	3.33E-10	6.46E-10	3.06E-10	2.97E-10	6.03E-10	1.63E-10	1.35E-10	2.97E-10
2306	648537.1	4198250	2.21E-09	2.35E-09	4.56E-09	3.32E-10	3.53E-10	6.85E-10	3.24E-10	3.14E-10	6.39E-10	1.72E-10	1.43E-10	3.15E-10
2307	648548.5	4198272	2.33E-09	2.49E-09	4.82E-09	3.51E-10	3.73E-10	7.24E-10	3.43E-10	3.32E-10	6.75E-10	1.82E-10	1.51E-10	3.33E-10
2308	648559.9	4198294	2.46E-09	2.62E-09	5.08E-09	3.70E-10	3.93E-10	7.63E-10	3.62E-10	3.51E-10	7.12E-10	1.92E-10	1.59E-10	3.51E-10
2309	648571.4	4198316	2.59E-09	2.76E-09	5.35E-09	3.89E-10	4.14E-10	8.03E-10	3.81E-10	3.69E-10	7.50E-10	2.02E-10	1.67E-10	3.70E-10
2310	648582.8	4198339	2.72E-09	2.90E-09	5.61E-09	4.08E-10	4.34E-10	8.43E-10	3.99E-10	3.87E-10	7.87E-10	2.12E-10	1.76E-10	3.88E-10
2311	648594.2	4198361	2.84E-09	3.03E-09	5.87E-09	4.27E-10	4.54E-10	8.81E-10	4.17E-10	4.05E-10	8.22E-10	2.22E-10	1.83E-10	4.05E-10
2312	648605.6	4198383	2.96E-09	3.15E-09	6.11E-09	4.44E-10	4.72E-10	9.17E-10	4.35E-10	4.21E-10	8.56E-10	2.31E-10	1.91E-10	4.22E-10
2313	648617.1	4198405	3.06E-09	3.26E-09	6.33E-09	4.60E-10	4.90E-10	9.50E-10	4.50E-10	4.36E-10	8.87E-10	2.39E-10	1.98E-10	4.37E-10
2314	648628.5	4198427	3.16E-09	3.37E-09	6.52E-09	4.75E-10	5.05E-10	9.80E-10	4.64E-10	4.50E-10	9.14E-10	2.47E-10	2.04E-10	4.51E-10
2315	648639.9	4198450	3.24E-09	3.45E-09	6.69E-09	4.87E-10	5.18E-10	1.01E-09	4.76E-10	4.62E-10	9.38E-10	2.53E-10	2.09E-10	4.62E-10
2316	648651.3	4198472	3.31E-09	3.53E-09	6.83E-09	4.97E-10	5.29E-10	1.03E-09	4.86E-10	4.71E-10	9.58E-10	2.58E-10	2.14E-10	4.72E-10
2317	648662.8	4198494	3.36E-09	3.58E-09	6.94E-09	5.05E-10	5.37E-10	1.04E-09	4.94E-10	4.79E-10	9.72E-10	2.62E-10	2.17E-10	4.79E-10
2318	648424.3	4198227	1.58E-09	1.68E-09	3.26E-09	2.37E-10	2.52E-10	4.89E-10	2.32E-10	2.25E-10	4.56E-10	1.23E-10	1.02E-10	2.25E-10
2319	648423.3	4198203	1.53E-09	1.63E-09	3.17E-09	2.30E-10	2.45E-10	4.75E-10	2.25E-10	2.18E-10	4.44E-10	1.20E-10	9.90E-11	2.19E-10
2320	648422.2	4198179	1.49E-09	1.58E-09	3.07E-09	2.23E-10	2.38E-10	4.61E-10	2.19E-10	2.12E-10	4.30E-10	1.16E-10	9.60E-11	2.12E-10
2321	648421.2	4198156	1.44E-09	1.53E-09	2.97E-09	2.16E-10	2.30E-10	4.46E-10	2.12E-10	2.05E-10	4.17E-10	1.12E-10	9.30E-11	2.05E-10
2322	648420.1	4198132	1.39E-09	1.48E-09	2.87E-09	2.09E-10	2.22E-10	4.32E-10	2.05E-10	1.98E-10	4.03E-10	1.09E-10	8.99E-11	1.99E-10
2323	648419.1	4198108	1.34E-09	1.43E-09	2.78E-09	2.02E-10	2.15E-10	4.17E-10	1.97E-10	1.91E-10	3.89E-10	1.05E-10	8.68E-11	1.92E-10
2324	648418.1	4198084	1.30E-09	1.38E-09	2.68E-09	1.95E-10	2.07E-10	4.02E-10	1.91E-10	1.85E-10	3.75E-10	1.01E-10	8.38E-11	1.85E-10
2325	648417	4198060	1.25E-09	1.33E-09	2.58E-09	1.88E-10	2.00E-10	3.88E-10	1.84E-10	1.78E-10	3.62E-10	9.77E-11	8.08E-11	1.79E-10
2326	648416	4198036	1.21E-09	1.29E-09	2.50E-09	1.82E-10	1.93E-10	3.75E-10	1.78E-10	1.72E-10	3.50E-10	9.44E-11	7.81E-11	1.72E-10
2327	648414.9	4198012	1.17E-09	1.24E-09	2.41E-09	1.75E-10	1.87E-10	3.62E-10	1.72E-10	1.66E-10	3.38E-10	9.12E-11	7.54E-11	1.67E-10
2328	648413.9	4197988	1.13E-09	1.20E-09	2.33E-09	1.70E-10	1.80E-10	3.50E-10	1.66E-10	1.61E-10	3.27E-10	8.82E-11	7.29E-11	1.61E-10
2329	648412.9	4197964	1.09E-09	1.17E-09	2.26E-09	1.64E-10	1.75E-10	3.39E-10	1.61E-10	1.56E-10	3.17E-10	8.54E-11	7.07E-11	1.56E-10
2330	648411.8	4197941	1.06E-09	1.13E-09	2.19E-09	1.59E-10	1.70E-10	3.29E-10	1.56E-10	1.51E-10	3.07E-10	8.28E-11	6.85E-11	1.51E-10
2331	648410.8	4197917	1.03E-09	1.10E-09	2.13E-09	1.55E-10	1.65E-10	3.20E-10	1.52E-10	1.47E-10	2.98E-10	8.05E-11	6.66E-11	1.47E-10
2332	648409.7	4197893	1.00E-09	1.07E-09	2.07E-09	1.51E-10	1.60E-10	3.11E-10	1.48E-10	1.43E-10	2.90E-10	7.84E-11	6.48E-11	1.43E-10
2333	648408.7	4197869	9.78E-10	1.04E-09	2.02E-09	1.47E-10	1.56E-10	3.03E-10	1.44E-10	1.39E-10	2.83E-10	7.64E-11	6.32E-11	1.40E-10
2334	648407.6	4197845	9.55E-10	1.02E-09	1.97E-09	1.44E-10	1.53E-10	2.96E-10	1.40E-10	1.36E-10	2.76E-10	7.46E-11	6.17E-11	1.36E-10
2335	648406.6	4197821	9.32E-10	9.94E-10	1.93E-09	1.40E-10	1.49E-10	2.89E-10	1.37E-10	1.33E-10	2.70E-10	7.28E-11	6.03E-11	1.33E-10
2336	648405.6	4197797	9.11E-10	9.71E-10	1.88E-09	1.37E-10	1.46E-10	2.83E-10	1.34E-10	1.30E-10	2.64E-10	7.12E-11	5.89E-11	1.30E-10
2337	648404.5	4197773	8.90E-10	9.49E-10	1.84E-09	1.34E-10	1.42E-10	2.76E-10	1.31E-10	1.27E-10	2.58E-10	6.95E-11	5.75E-11	1.27E-10
2338	648425.3	4198251	1.62E-09	1.72E-09	3.34E-09	2.43E-10	2.59E-10	5.02E-10	2.38E-10	2.31E-10	4.68E-10	1.26E-10	1.05E-10	2.31E-10
2339	648436.8	4198273	1.70E-09	1.81E-09	3.51E-09	2.55E-10	2.72E-10	5.27E-10	2.50E-10	2.42E-10	4.92E-10	1.33E-10	1.10E-10	2.43E-10
2340	648448.2	4198296	1.78E-09	1.90E-09	3.68E-09	2.68E-10	2.85E-10	5.53E-10	2.62E-10	2.54E-10	5.16E-10	1.39E-10	1.15E-10	2.54E-10
2341	648459.6	4198318	1.87E-09	1.99E-09	3.86E-09	2.81E-10	2.98E-10	5.79E-10	2.74E-10	2.66E-10	5.40E-10	1.46E-10	1.21E-10	2.66E-10
2342	648471	4198340	1.95E-09	2.08E-09	4.03E-09	2.94E-10	3.12E-10	6.06E-10	2.87E-10	2.78E-10	5.65E-10	1.52E-10	1.26E-10	2.79E-10
2343	648482.5	4198362	2.04E-09	2.17E-09	4.21E-09	3.06E-10	3.26E-10	6.32E-10	3.00E-10	2.90E-10	5.90E-10	1.59E-10	1.32E-10	2.91E-10
2344	648493.9	4198384	2.12E-09	2.26E-09	4.39E-09	3.19E-10	3.40E-10	6.59E-10	3.12E-10	3.03E-10	6.15E-10	1.66E-10	1.37E-10	3.03E-10
2345	648505.3	4198407	2.21E-09	2.35E-09	4.56E-09	3.32E-10	3.53E-10	6.85E-10	3.25E-10	3.15E-10	6.40E-10	1.73E-10	1.43E-10	3.15E-10
2346	648516.7	4198429	2.29E-09	2.44E-09	4.73E-09	3.44E-10	3.66E-10	7.11E-10	3.37E-10	3.26E-10	6.63E-10	1.79E-10	1.48E-10	3.27E-10
2347	648528.2	4198451	2.37E-09	2.52E-09	4.89E-09	3.56E-10	3.79E-10	7.35E-10	3.48E-10	3.37E-10	6.86E-10	1.85E-10	1.53E-10	3.38E-10
2348	648539.6	4198473	2.44E-09	2.60E-09	5.04E-09	3.67E-10	3.90E-10	7.57E-10	3.59E-10	3.48E-10	7.07E-10	1.91E-10	1.58E-10	3.48E-10
2349	648551	4198495	2.51E-09	2.67E-09	5.18E-09	3.77E-10	4.01E-10	7.77E-10	3.68E-10	3.57E-10	7.26E-10	1.96E-10	1.62E-10	3.58E-10
2350	648562.4	4198517	2.56E-09	2.73E-09	5.30E-09	3.85E-10	4.10E-10	7.95E-10	3.77E-10	3.65E-10	7.42E-10	2.00E-10	1.66E-10	3.66E-10
2351	648573.8	4198540	2.61E-09	2.78E-09	5.40E-09	3.93E-10	4.18E-10	8.10E-10	3.84E-10	3.72E-10	7.56E-10	2.04E-10	1.69E-10	3.73E-10
2352	648335.4	4198273	1.34E-09	1.42E-09	2.76E-09	2.01E-10	2.13E-10	4.14E-10	1.96E-10	1.90E-10	3.87E-10	1.04E-10	8.63E-11	1.91E-10

2353	648334.3	4198248	1.30E-09	1.39E-09	2.69E-09	1.96E-10	2.08E-10	4.05E-10	1.92E-10	1.86E-10	3.78E-10	1.02E-10	8.43E-11	1.86E-10
2354	648333.2	4198224	1.27E-09	1.35E-09	2.63E-09	1.91E-10	2.03E-10	3.94E-10	1.87E-10	1.81E-10	3.68E-10	9.93E-11	8.21E-11	1.81E-10
2355	648332.2	4198199	1.24E-09	1.32E-09	2.55E-09	1.86E-10	1.98E-10	3.83E-10	1.82E-10	1.76E-10	3.58E-10	9.65E-11	7.98E-11	1.76E-10
2356	648331.1	4198175	1.20E-09	1.28E-09	2.48E-09	1.80E-10	1.92E-10	3.72E-10	1.76E-10	1.71E-10	3.47E-10	9.37E-11	7.75E-11	1.71E-10
2357	648330.1	4198151	1.16E-09	1.24E-09	2.40E-09	1.75E-10	1.86E-10	3.60E-10	1.71E-10	1.66E-10	3.36E-10	9.08E-11	7.51E-11	1.66E-10
2358	648329	4198126	1.12E-09	1.20E-09	2.32E-09	1.69E-10	1.80E-10	3.49E-10	1.65E-10	1.60E-10	3.26E-10	8.78E-11	7.27E-11	1.61E-10
2359	648327.9	4198102	1.09E-09	1.16E-09	2.25E-09	1.64E-10	1.74E-10	3.37E-10	1.60E-10	1.55E-10	3.15E-10	8.50E-11	7.03E-11	1.55E-10
2360	648326.9	4198077	1.05E-09	1.12E-09	2.17E-09	1.58E-10	1.68E-10	3.26E-10	1.55E-10	1.50E-10	3.05E-10	8.22E-11	6.80E-11	1.50E-10
2361	648325.8	4198053	1.02E-09	1.08E-09	2.10E-09	1.53E-10	1.63E-10	3.16E-10	1.50E-10	1.45E-10	2.95E-10	7.95E-11	6.58E-11	1.45E-10
2362	648324.7	4198029	9.85E-10	1.05E-09	2.04E-09	1.48E-10	1.58E-10	3.06E-10	1.45E-10	1.40E-10	2.85E-10	7.70E-11	6.37E-11	1.41E-10
2363	648323.7	4198004	9.55E-10	1.02E-09	1.97E-09	1.44E-10	1.53E-10	2.96E-10	1.40E-10	1.36E-10	2.77E-10	7.46E-11	6.17E-11	1.36E-10
2364	648322.6	4197980	9.27E-10	9.88E-10	1.92E-09	1.39E-10	1.48E-10	2.88E-10	1.36E-10	1.32E-10	2.68E-10	7.24E-11	5.99E-11	1.32E-10
2365	648321.6	4197955	9.01E-10	9.61E-10	1.86E-09	1.36E-10	1.44E-10	2.80E-10	1.33E-10	1.28E-10	2.61E-10	7.04E-11	5.83E-11	1.29E-10
2366	648320.5	4197931	8.78E-10	9.36E-10	1.81E-09	1.32E-10	1.40E-10	2.72E-10	1.29E-10	1.25E-10	2.54E-10	6.86E-11	5.67E-11	1.25E-10
2367	648319.4	4197907	8.57E-10	9.13E-10	1.77E-09	1.29E-10	1.37E-10	2.66E-10	1.26E-10	1.22E-10	2.48E-10	6.69E-11	5.54E-11	1.22E-10
2368	648318.4	4197882	8.37E-10	8.92E-10	1.73E-09	1.26E-10	1.34E-10	2.60E-10	1.23E-10	1.19E-10	2.42E-10	6.54E-11	5.41E-11	1.19E-10
2369	648317.3	4197858	8.19E-10	8.73E-10	1.69E-09	1.23E-10	1.31E-10	2.54E-10	1.20E-10	1.17E-10	2.37E-10	6.40E-11	5.29E-11	1.17E-10
2370	648316.2	4197833	8.02E-10	8.55E-10	1.66E-09	1.21E-10	1.28E-10	2.49E-10	1.18E-10	1.14E-10	2.32E-10	6.26E-11	5.18E-11	1.14E-10
2371	648315.2	4197809	7.85E-10	8.37E-10	1.62E-09	1.18E-10	1.26E-10	2.44E-10	1.15E-10	1.12E-10	2.27E-10	6.14E-11	5.08E-11	1.12E-10
2372	648314.1	4197785	7.70E-10	8.20E-10	1.59E-09	1.16E-10	1.23E-10	2.39E-10	1.13E-10	1.10E-10	2.23E-10	6.01E-11	4.97E-11	1.10E-10
2373	648313.1	4197760	7.54E-10	8.04E-10	1.56E-09	1.13E-10	1.21E-10	2.34E-10	1.11E-10	1.07E-10	2.18E-10	5.89E-11	4.87E-11	1.08E-10
2374	648312	4197736	7.38E-10	7.87E-10	1.52E-09	1.11E-10	1.18E-10	2.29E-10	1.09E-10	1.05E-10	2.14E-10	5.77E-11	4.77E-11	1.05E-10
2375	648336.4	4198297	1.36E-09	1.45E-09	2.82E-09	2.05E-10	2.18E-10	4.23E-10	2.01E-10	1.94E-10	3.95E-10	1.07E-10	8.81E-11	1.95E-10
2376	648347.8	4198319	1.42E-09	1.52E-09	2.94E-09	2.14E-10	2.27E-10	4.41E-10	2.09E-10	2.03E-10	4.12E-10	1.11E-10	9.18E-11	2.03E-10
2377	648359.3	4198341	1.48E-09	1.58E-09	3.06E-09	2.22E-10	2.37E-10	4.59E-10	2.18E-10	2.11E-10	4.28E-10	1.16E-10	9.56E-11	2.11E-10
2378	648370.7	4198364	1.54E-09	1.64E-09	3.18E-09	2.31E-10	2.46E-10	4.77E-10	2.26E-10	2.19E-10	4.45E-10	1.20E-10	9.94E-11	2.20E-10
2379	648382.1	4198386	1.60E-09	1.70E-09	3.30E-09	2.40E-10	2.55E-10	4.96E-10	2.35E-10	2.28E-10	4.63E-10	1.25E-10	1.03E-10	2.28E-10
2380	648393.5	4198408	1.66E-09	1.77E-09	3.43E-09	2.49E-10	2.65E-10	5.15E-10	2.44E-10	2.36E-10	4.80E-10	1.30E-10	1.07E-10	2.37E-10
2381	648405	4198430	1.72E-09	1.83E-09	3.55E-09	2.59E-10	2.75E-10	5.33E-10	2.53E-10	2.45E-10	4.98E-10	1.34E-10	1.11E-10	2.45E-10
2382	648416.4	4198452	1.78E-09	1.90E-09	3.68E-09	2.68E-10	2.85E-10	5.52E-10	2.62E-10	2.54E-10	5.15E-10	1.39E-10	1.15E-10	2.54E-10
2383	648427.8	4198474	1.84E-09	1.96E-09	3.80E-09	2.77E-10	2.94E-10	5.71E-10	2.70E-10	2.62E-10	5.33E-10	1.44E-10	1.19E-10	2.63E-10
2384	648439.2	4198497	1.90E-09	2.02E-09	3.92E-09	2.85E-10	3.03E-10	5.89E-10	2.79E-10	2.70E-10	5.49E-10	1.48E-10	1.23E-10	2.71E-10
2385	648450.7	4198519	1.95E-09	2.08E-09	4.03E-09	2.94E-10	3.12E-10	6.06E-10	2.87E-10	2.78E-10	5.65E-10	1.52E-10	1.26E-10	2.79E-10
2386	648462.1	4198541	2.00E-09	2.14E-09	4.14E-09	3.01E-10	3.20E-10	6.22E-10	2.95E-10	2.86E-10	5.80E-10	1.57E-10	1.29E-10	2.86E-10
2387	648473.5	4198563	2.05E-09	2.19E-09	4.24E-09	3.08E-10	3.28E-10	6.36E-10	3.02E-10	2.92E-10	5.94E-10	1.60E-10	1.33E-10	2.93E-10
2388	648484.9	4198585	2.09E-09	2.23E-09	4.33E-09	3.15E-10	3.35E-10	6.50E-10	3.08E-10	2.98E-10	6.06E-10	1.64E-10	1.35E-10	2.99E-10
2389	648157.5	4198364	1.00E-09	1.07E-09	2.07E-09	1.51E-10	1.60E-10	3.11E-10	1.48E-10	1.43E-10	2.91E-10	7.84E-11	6.49E-11	1.43E-10
2390	648156.5	4198340	9.89E-10	1.05E-09	2.04E-09	1.49E-10	1.58E-10	3.07E-10	1.45E-10	1.41E-10	2.86E-10	7.72E-11	6.39E-11	1.41E-10
2391	648155.4	4198316	9.72E-10	1.04E-09	2.01E-09	1.46E-10	1.55E-10	3.02E-10	1.43E-10	1.39E-10	2.81E-10	7.59E-11	6.28E-11	1.39E-10
2392	648154.4	4198291	9.54E-10	1.02E-09	1.97E-09	1.43E-10	1.53E-10	2.96E-10	1.40E-10	1.36E-10	2.76E-10	7.45E-11	6.17E-11	1.36E-10
2393	648153.3	4198267	9.35E-10	9.97E-10	1.93E-09	1.41E-10	1.49E-10	2.90E-10	1.37E-10	1.33E-10	2.71E-10	7.30E-11	6.04E-11	1.33E-10
2394	648152.3	4198243	9.15E-10	9.75E-10	1.89E-09	1.38E-10	1.46E-10	2.84E-10	1.34E-10	1.30E-10	2.65E-10	7.14E-11	5.91E-11	1.31E-10
2395	648151.2	4198219	8.93E-10	9.52E-10	1.84E-09	1.34E-10	1.43E-10	2.77E-10	1.31E-10	1.27E-10	2.59E-10	6.98E-11	5.77E-11	1.27E-10
2396	648150.1	4198194	8.70E-10	9.28E-10	1.80E-09	1.31E-10	1.39E-10	2.70E-10	1.28E-10	1.24E-10	2.52E-10	6.80E-11	5.62E-11	1.24E-10
2397	648149.1	4198170	8.47E-10	9.03E-10	1.75E-09	1.27E-10	1.35E-10	2.63E-10	1.25E-10	1.21E-10	2.45E-10	6.62E-11	5.47E-11	1.21E-10
2398	648148	4198146	8.24E-10	8.78E-10	1.70E-09	1.24E-10	1.32E-10	2.55E-10	1.21E-10	1.17E-10	2.38E-10	6.43E-11	5.32E-11	1.18E-10
2399	648147	4198121	8.00E-10	8.53E-10	1.65E-09	1.20E-10	1.28E-10	2.48E-10	1.18E-10	1.14E-10	2.32E-10	6.25E-11	5.17E-11	1.14E-10
2400	648145.9	4198097	7.77E-10	8.28E-10	1.61E-09	1.17E-10	1.24E-10	2.41E-10	1.14E-10	1.11E-10	2.25E-10	6.07E-11	5.02E-11	1.11E-10
2401	648144.9	4198073	7.55E-10	8.05E-10	1.56E-09	1.14E-10	1.21E-10	2.34E-10	1.11E-10	1.08E-10	2.19E-10	5.90E-11	4.88E-11	1.08E-10
2402	648143.8	4198049	7.34E-10	7.82E-10	1.52E-09	1.10E-10	1.17E-10	2.28E-10	1.08E-10	1.05E-10	2.12E-10	5.73E-11	4.74E-11	1.05E-10
2403	648142.7	4198024	7.14E-10	7.61E-10	1.48E-09	1.07E-10	1.14E-10	2.22E-10	1.05E-10	1.02E-10	2.07E-10	5.58E-11	4.61E-11	1.02E-10
2404	648141.7	4198000	6.96E-10	7.42E-10	1.44E-09	1.05E-10	1.11E-10	2.16E-10	1.02E-10	9.92E-11	2.01E-10	5.44E-11	4.50E-11	9.93E-11
2405	648140.6	4197976	6.79E-10	7.24E-10	1.40E-09	1.02E-10	1.09E-10	2.11E-10	9.99E-11	9.68E-11	1.97E-10	5.31E-11	4.39E-11	9.69E-11
2406	648139.6	4197951	6.64E-10	7.08E-10	1.37E-09	9.98E-11	1.06E-10	2.06E-10	9.76E-11	9.46E-11	1.92E-10	5.19E-11	4.29E-11	9.48E-11
2407	648138.5	4197927	6.50E-10	6.93E-10	1.34E-09	9.78E-11	1.04E-10	2.02E-10	9.56E-11	9.27E-11	1.88E-10	5.08E-11	4.20E-11	9.28E-11
2408	648137.5	4197903	6.38E-10	6.80E-10	1.32E-09	9.60E-11	1.02E-10	1.98E-10	9.38E-11	9.09E-11	1.85E-10	4.99E-11	4.12E-11	9.11E-11
2409	648136.4	4197879	6.27E-10	6.69E-10	1.30E-09	9.43E-11	1.00E-10	1.95E-10	9.22E-11	8.94E-11	1.82E-10	4.90E-11	4.05E-11	8.95E-11
2410	648135.3	4197854	6.17E-10	6.58E-10	1.27E-09	9.28E-11	9.86E-11	1.91E-10	9.07E-11	8.79E-11	1.79E-10	4.82E-11	3.99E-11	8.81E-11
2411	648134.3	4197830	6.08E-10	6.48E-10	1.26E-09	9.14E-11	9.71E-11	1.89E-10	8.93E-11	8.66E-11	1.76E-10	4.75E-11	3.93E-11	8.67E-11
2412	648133.2	4197806	5.99E-10	6.38E-10	1.24E-09	9.00E-11	9.57E-11	1.86E-10	8.80E-11	8.53E-11	1.73E-10	4.68E-11	3.87E-11	8.54E-11
2413	648132.2	4197781	5.89E-10	6.28E-10	1.22E-09	8.86E-11	9.42E-11	1.83E-10	8.67E-11	8.40E-11	1.71E-10	4.60E-11	3.81E-11	8.41E-11
2414	648131.1	4197757	5.80E-10	6.19E-10	1.20E-09	8.73E-11	9.28E-11	1.80E-10	8.53E-11	8.27E-11	1.68E-10	4.53E-11	3.75E-11	8.28E-11
2415	648130.1	4197733	5.71E-10	6.09E-10	1.18E-09	8.59E-11	9.13E-11	1.77E-10	8.39E-11	8.14E-11	1.65E-10	4.46E-11	3.69E-11	8.15E-11
2416	648129	4197709	5.61E-10	5.98E-10	1.16E-09	8.44E-11	8.97E-11	1.74E-10	8.25E-11	8.00E-11	1.62E-10	4.38E-11	3.63E-11	8.01E-11
2417	648127.9	4197684	5.51E-10	5.88E-10	1.14E-09	8.29E-11	8.81E-11	1.71E-10	8.11E-11	7.86E-11	1.60E-10	4.31E-11	3.56E-11	7.87E-11
2418	648126.9	4197660	5.41E-10	5.77E-10	1.12E-09	8.14E-11	8.65E-11	1.68E-10	7.96E-11	7.71E-11	1.57E-10	4.23E-11	3.50E-11	7.72E-11
2419	648158.6	4198388	1.02E-09	1.09E-09	2.10E-09	1.53E-10	1.63E-10	3.16E-10	1.50E-10	1.45E-10	2.95E-10	7.95E-11	6.58E-11	1.45E-10
2420	648170	4198411	1.05E-09	1.12E-09	2.17E-09	1.58E-10	1.68E-10	3.25E-10	1.54E-10	1.50E-10	3.04E-10	8.20E-11	6.78E-11	1.50E-10
2421	648181.4	4198433	1.08E-09	1.15E-09	2.23E-09	1.62E-10	1.73E-10	3.35E-10	1.59E-10	1.54E-10	3.13E-10	8.44E-11	6.98E-11	1.54E-10
2422	648192.9	4198455	1.11E-09	1.19E-09	2.30E-09	1.67E-10	1.78E-10	3.45E-10	1.64E-10	1.59E-10	3.22E-10	8.69E-11	7.19E-11	1.59E-10
2423	648204.3	4198477	1.15E-09	1.22E-09	2.37E-09	1.72E-10	1.83E-10	3.55E-10	1.68E-10	1.63E-10	3.32E-10	8.95E-11	7.40E-11	1.63E-10
2424	648215.7	4198499	1.18E-09	1.26E-09	2.44E-09	1.77E-10	1.88E-10	3.66E-10	1.73E-10	1.68E-10	3.41E-10	9.21E-11	7.62E-11	1.68E-10
2425	648227.1	4198522	1.21E-09	1.29E-09	2.50E-09	1.82E-10	1.94E-10	3.76E-10	1.78E-10	1.73E-10	3.51E-10	9.47E-11	7.83E-11	1.73E-10
2426	648238.6	4198544	1.25E-09	1.33E-09	2.58E-09	1.87E-10	1.99E-10	3.87E-10	1.83E-10	1.78E-10	3.61E-10	9.74E-11	8.05E-11	1.78E-10
2427	648250	4198566	1.28E-09	1.37E-09	2.65E-09	1.93E-10	2.05E-10	3.97E-10	1.88E-10	1.83E-10	3.71E-10	1.00E-10	8.28E-11	1.83E-10
2428	648261.4	4198588	1.31E-09	1.40E-09	2.72E-09	1.98E-10	2.10E-10	4.08E-10	1.93E-10	1.87E-10	3.81E-10	1.03E-10	8.50E-11	1.88E-10

2429	648272.8	4198610	1.35E-09	1.44E-09	2.79E-09	2.03E-10	2.16E-10	4.18E-10	1.98E-10	1.92E-10	3.90E-10	1.05E-10	8.71E-11	1.92E-10
2430	648284.3	4198633	1.38E-09	1.47E-09	2.85E-09	2.08E-10	2.21E-10	4.29E-10	2.03E-10	1.97E-10	4.00E-10	1.08E-10	8.93E-11	1.97E-10
2431	648295.7	4198655	1.41E-09	1.51E-09	2.92E-09	2.12E-10	2.26E-10	4.38E-10	2.08E-10	2.01E-10	4.09E-10	1.10E-10	9.13E-11	2.02E-10
2432	648307.1	4198677	1.44E-09	1.54E-09	2.98E-09	2.17E-10	2.31E-10	4.48E-10	2.12E-10	2.06E-10	4.18E-10	1.13E-10	9.33E-11	2.06E-10
2433	647979.7	4198455	7.88E-10	8.40E-10	1.63E-09	1.19E-10	1.26E-10	2.45E-10	1.16E-10	1.12E-10	2.28E-10	6.16E-11	5.09E-11	1.13E-10
2434	647978.6	4198430	7.80E-10	8.31E-10	1.61E-09	1.17E-10	1.25E-10	2.42E-10	1.15E-10	1.11E-10	2.26E-10	6.09E-11	5.04E-11	1.11E-10
2435	647977.5	4198405	7.71E-10	8.22E-10	1.59E-09	1.16E-10	1.23E-10	2.39E-10	1.13E-10	1.10E-10	2.23E-10	6.02E-11	4.98E-11	1.10E-10
2436	647976.4	4198381	7.61E-10	8.11E-10	1.57E-09	1.14E-10	1.22E-10	2.36E-10	1.12E-10	1.08E-10	2.20E-10	5.95E-11	4.92E-11	1.09E-10
2437	647975.4	4198356	7.51E-10	8.00E-10	1.55E-09	1.13E-10	1.20E-10	2.33E-10	1.10E-10	1.07E-10	2.17E-10	5.86E-11	4.85E-11	1.07E-10
2438	647974.3	4198331	7.39E-10	7.88E-10	1.53E-09	1.11E-10	1.18E-10	2.29E-10	1.09E-10	1.05E-10	2.14E-10	5.77E-11	4.78E-11	1.06E-10
2439	647973.2	4198306	7.27E-10	7.75E-10	1.50E-09	1.09E-10	1.16E-10	2.26E-10	1.07E-10	1.04E-10	2.10E-10	5.68E-11	4.70E-11	1.04E-10
2440	647972.1	4198281	7.14E-10	7.61E-10	1.47E-09	1.07E-10	1.14E-10	2.21E-10	1.05E-10	1.02E-10	2.07E-10	5.58E-11	4.61E-11	1.02E-10
2441	647971	4198256	7.00E-10	7.46E-10	1.45E-09	1.05E-10	1.12E-10	2.17E-10	1.03E-10	9.97E-11	2.03E-10	5.46E-11	4.52E-11	9.99E-11
2442	647969.9	4198231	6.85E-10	7.30E-10	1.41E-09	1.03E-10	1.09E-10	2.12E-10	1.01E-10	9.76E-11	1.98E-10	5.35E-11	4.43E-11	9.77E-11
2443	647968.9	4198207	6.69E-10	7.13E-10	1.38E-09	1.01E-10	1.07E-10	2.08E-10	9.84E-11	9.54E-11	1.94E-10	5.23E-11	4.32E-11	9.55E-11
2444	647967.8	4198182	6.53E-10	6.96E-10	1.35E-09	9.82E-11	1.04E-10	2.03E-10	9.60E-11	9.31E-11	1.89E-10	5.10E-11	4.22E-11	9.32E-11
2445	647966.7	4198157	6.37E-10	6.79E-10	1.32E-09	9.57E-11	1.02E-10	1.98E-10	9.36E-11	9.07E-11	1.84E-10	4.97E-11	4.11E-11	9.09E-11
2446	647965.6	4198132	6.20E-10	6.61E-10	1.28E-09	9.33E-11	9.92E-11	1.92E-10	9.12E-11	8.84E-11	1.80E-10	4.85E-11	4.01E-11	8.85E-11
2447	647964.5	4198107	6.04E-10	6.44E-10	1.25E-09	9.08E-11	9.66E-11	1.87E-10	8.88E-11	8.61E-11	1.75E-10	4.72E-11	3.90E-11	8.62E-11
2448	647963.5	4198082	5.88E-10	6.27E-10	1.21E-09	8.84E-11	9.40E-11	1.82E-10	8.65E-11	8.38E-11	1.70E-10	4.59E-11	3.80E-11	8.39E-11
2449	647962.4	4198057	5.73E-10	6.11E-10	1.18E-09	8.61E-11	9.16E-11	1.78E-10	8.42E-11	8.16E-11	1.66E-10	4.48E-11	3.70E-11	8.18E-11
2450	647961.3	4198032	5.58E-10	5.95E-10	1.15E-09	8.40E-11	8.93E-11	1.73E-10	8.21E-11	7.96E-11	1.62E-10	4.36E-11	3.61E-11	7.97E-11
2451	647960.2	4198008	5.45E-10	5.81E-10	1.13E-09	8.20E-11	8.71E-11	1.69E-10	8.01E-11	7.77E-11	1.58E-10	4.26E-11	3.52E-11	7.78E-11
2452	647959.1	4197983	5.33E-10	5.68E-10	1.10E-09	8.02E-11	8.52E-11	1.65E-10	7.84E-11	7.60E-11	1.54E-10	4.16E-11	3.44E-11	7.61E-11
2453	647958	4197958	5.22E-10	5.57E-10	1.08E-09	7.85E-11	8.35E-11	1.62E-10	7.68E-11	7.44E-11	1.51E-10	4.08E-11	3.37E-11	7.45E-11
2454	647957	4197933	5.13E-10	5.46E-10	1.06E-09	7.71E-11	8.20E-11	1.59E-10	7.54E-11	7.31E-11	1.48E-10	4.00E-11	3.31E-11	7.32E-11
2455	647955.9	4197908	5.04E-10	5.37E-10	1.04E-09	7.58E-11	8.06E-11	1.56E-10	7.41E-11	7.18E-11	1.46E-10	3.94E-11	3.26E-11	7.20E-11
2456	647954.8	4197883	4.97E-10	5.29E-10	1.03E-09	7.47E-11	7.94E-11	1.54E-10	7.30E-11	7.08E-11	1.44E-10	3.88E-11	3.21E-11	7.09E-11
2457	647953.7	4197858	4.90E-10	5.23E-10	1.01E-09	7.37E-11	7.84E-11	1.52E-10	7.21E-11	6.99E-11	1.42E-10	3.83E-11	3.17E-11	7.00E-11
2458	647952.6	4197834	4.84E-10	5.16E-10	1.00E-09	7.28E-11	7.74E-11	1.50E-10	7.12E-11	6.90E-11	1.40E-10	3.78E-11	3.13E-11	6.92E-11
2459	647951.5	4197809	4.79E-10	5.11E-10	9.90E-10	7.20E-11	7.66E-11	1.49E-10	7.04E-11	6.83E-11	1.39E-10	3.74E-11	3.10E-11	6.84E-11
2460	647950.5	4197784	4.74E-10	5.05E-10	9.79E-10	7.12E-11	7.57E-11	1.47E-10	6.97E-11	6.75E-11	1.37E-10	3.70E-11	3.06E-11	6.76E-11
2461	647949.4	4197759	4.68E-10	4.99E-10	9.68E-10	7.04E-11	7.49E-11	1.45E-10	6.89E-11	6.67E-11	1.36E-10	3.66E-11	3.03E-11	6.68E-11
2462	647948.3	4197734	4.63E-10	4.93E-10	9.56E-10	6.96E-11	7.40E-11	1.44E-10	6.80E-11	6.59E-11	1.34E-10	3.61E-11	2.99E-11	6.60E-11
2463	647947.2	4197709	4.57E-10	4.87E-10	9.43E-10	6.87E-11	7.30E-11	1.42E-10	6.71E-11	6.51E-11	1.32E-10	3.57E-11	2.95E-11	6.52E-11
2464	647946.1	4197684	4.50E-10	4.80E-10	9.30E-10	6.77E-11	7.20E-11	1.40E-10	6.62E-11	6.42E-11	1.30E-10	3.52E-11	2.91E-11	6.43E-11
2465	647945	4197660	4.43E-10	4.73E-10	9.16E-10	6.67E-11	7.09E-11	1.38E-10	6.52E-11	6.32E-11	1.28E-10	3.46E-11	2.86E-11	6.33E-11
2466	647944	4197635	4.36E-10	4.65E-10	9.01E-10	6.56E-11	6.97E-11	1.35E-10	6.41E-11	6.21E-11	1.26E-10	3.41E-11	2.82E-11	6.22E-11
2467	647942.9	4197610	4.29E-10	4.57E-10	8.86E-10	6.45E-11	6.85E-11	1.33E-10	6.30E-11	6.11E-11	1.24E-10	3.35E-11	2.77E-11	6.12E-11
2468	647941.8	4197585	4.21E-10	4.49E-10	8.70E-10	6.33E-11	6.73E-11	1.31E-10	6.19E-11	6.00E-11	1.22E-10	3.29E-11	2.72E-11	6.01E-11
2469	647980.8	4198480	7.96E-10	8.49E-10	1.64E-09	1.20E-10	1.27E-10	2.47E-10	1.17E-10	1.13E-10	2.30E-10	6.22E-11	5.14E-11	1.14E-10
2470	647992.2	4198502	8.15E-10	8.69E-10	1.68E-09	1.23E-10	1.30E-10	2.53E-10	1.20E-10	1.16E-10	2.36E-10	6.36E-11	5.27E-11	1.16E-10
2471	648003.6	4198524	8.34E-10	8.89E-10	1.72E-09	1.25E-10	1.33E-10	2.59E-10	1.23E-10	1.19E-10	2.41E-10	6.51E-11	5.39E-11	1.19E-10
2472	648015	4198547	8.53E-10	9.10E-10	1.76E-09	1.28E-10	1.36E-10	2.65E-10	1.25E-10	1.22E-10	2.47E-10	6.67E-11	5.51E-11	1.22E-10
2473	648026.5	4198569	8.73E-10	9.31E-10	1.80E-09	1.31E-10	1.40E-10	2.71E-10	1.28E-10	1.24E-10	2.53E-10	6.82E-11	5.64E-11	1.25E-10
2474	648037.9	4198591	8.94E-10	9.53E-10	1.85E-09	1.34E-10	1.43E-10	2.77E-10	1.31E-10	1.27E-10	2.59E-10	6.98E-11	5.77E-11	1.28E-10
2475	648049.3	4198613	9.14E-10	9.75E-10	1.89E-09	1.37E-10	1.46E-10	2.84E-10	1.34E-10	1.30E-10	2.65E-10	7.14E-11	5.91E-11	1.31E-10
2476	648060.7	4198635	9.35E-10	9.97E-10	1.93E-09	1.41E-10	1.50E-10	2.90E-10	1.38E-10	1.33E-10	2.71E-10	7.31E-11	6.05E-11	1.34E-10
2477	648072.2	4198658	9.57E-10	1.02E-09	1.98E-09	1.44E-10	1.53E-10	2.97E-10	1.41E-10	1.36E-10	2.77E-10	7.48E-11	6.18E-11	1.37E-10
2478	648083.6	4198680	9.79E-10	1.04E-09	2.02E-09	1.47E-10	1.57E-10	3.04E-10	1.44E-10	1.40E-10	2.83E-10	7.65E-11	6.33E-11	1.40E-10
2479	648095	4198702	1.00E-09	1.07E-09	2.07E-09	1.51E-10	1.60E-10	3.11E-10	1.47E-10	1.43E-10	2.90E-10	7.82E-11	6.47E-11	1.43E-10
2480	648106.4	4198724	1.02E-09	1.09E-09	2.11E-09	1.54E-10	1.64E-10	3.17E-10	1.50E-10	1.46E-10	2.96E-10	7.99E-11	6.61E-11	1.46E-10
2481	648117.9	4198746	1.05E-09	1.11E-09	2.16E-09	1.57E-10	1.67E-10	3.24E-10	1.54E-10	1.49E-10	3.03E-10	8.17E-11	6.75E-11	1.49E-10
2482	648129.3	4198769	1.07E-09	1.14E-09	2.20E-09	1.60E-10	1.71E-10	3.31E-10	1.57E-10	1.52E-10	3.09E-10	8.33E-11	6.89E-11	1.52E-10
2483	647801.9	4198547	6.40E-10	6.82E-10	1.32E-09	9.62E-11	1.02E-10	1.98E-10	9.40E-11	9.11E-11	1.85E-10	5.00E-11	4.13E-11	9.13E-11
2484	647800.8	4198522	6.35E-10	6.77E-10	1.31E-09	9.55E-11	1.01E-10	1.97E-10	9.33E-11	9.05E-11	1.84E-10	4.96E-11	4.10E-11	9.06E-11
2485	647799.7	4198497	6.30E-10	6.71E-10	1.30E-09	9.47E-11	1.01E-10	1.95E-10	9.26E-11	8.98E-11	1.82E-10	4.92E-11	4.07E-11	8.99E-11
2486	647798.6	4198473	6.24E-10	6.66E-10	1.29E-09	9.39E-11	9.98E-11	1.94E-10	9.18E-11	8.90E-11	1.81E-10	4.88E-11	4.03E-11	8.91E-11
2487	647797.6	4198448	6.19E-10	6.59E-10	1.28E-09	9.30E-11	9.89E-11	1.92E-10	9.09E-11	8.81E-11	1.79E-10	4.83E-11	4.00E-11	8.83E-11
2488	647796.5	4198423	6.12E-10	6.53E-10	1.26E-09	9.20E-11	9.79E-11	1.90E-10	9.00E-11	8.72E-11	1.77E-10	4.78E-11	3.96E-11	8.74E-11
2489	647795.4	4198399	6.05E-10	6.45E-10	1.25E-09	9.10E-11	9.68E-11	1.88E-10	8.90E-11	8.63E-11	1.75E-10	4.73E-11	3.91E-11	8.64E-11
2490	647794.3	4198374	5.98E-10	6.37E-10	1.24E-09	8.99E-11	9.56E-11	1.86E-10	8.79E-11	8.52E-11	1.73E-10	4.67E-11	3.86E-11	8.53E-11
2491	647793.3	4198349	5.90E-10	6.29E-10	1.22E-09	8.87E-11	9.43E-11	1.83E-10	8.67E-11	8.41E-11	1.71E-10	4.61E-11	3.81E-11	8.42E-11
2492	647792.2	4198324	5.81E-10	6.20E-10	1.20E-09	8.74E-11	9.29E-11	1.80E-10	8.55E-11	8.29E-11	1.68E-10	4.54E-11	3.76E-11	8.30E-11
2493	647791.1	4198300	5.72E-10	6.10E-10	1.18E-09	8.60E-11	9.15E-11	1.77E-10	8.41E-11	8.15E-11	1.66E-10	4.47E-11	3.70E-11	8.17E-11
2494	647790	4198275	5.62E-10	6.00E-10	1.16E-09	8.46E-11	8.99E-11	1.74E-10	8.27E-11	8.01E-11	1.63E-10	4.39E-11	3.63E-11	8.03E-11
2495	647789	4198250	5.52E-10	5.89E-10	1.14E-09	8.30E-11	8.83E-11	1.71E-10	8.12E-11	7.87E-11	1.60E-10	4.31E-11	3.57E-11	7.88E-11
2496	647787.9	4198226	5.41E-10	5.77E-10	1.12E-09	8.14E-11	8.65E-11	1.68E-10	7.96E-11	7.71E-11	1.57E-10	4.23E-11	3.50E-11	7.72E-11
2497	647786.8	4198201	5.30E-10	5.65E-10	1.09E-09	7.97E-11	8.47E-11	1.64E-10	7.79E-11	7.55E-11	1.53E-10	4.14E-11	3.42E-11	7.56E-11
2498	647785.7	4198176	5.18E-10	5.53E-10	1.07E-09	7.80E-11	8.29E-11	1.61E-10	7.62E-11	7.39E-11	1.50E-10	4.05E-11	3.35E-11	7.40E-11
2499	647784.7	4198151	5.07E-10	5.40E-10	1.05E-09	7.62E-11	8.10E-11	1.57E-10	7.45E-11	7.22E-11	1.47E-10	3.96E-11	3.27E-11	7.23E-11
2500	647783.6	4198127	4.95E-10	5.27E-10	1.02E-09	7.44E-11	7.91E-11	1.53E-10	7.27E-11	7.05E-11	1.43E-10	3.86E-11	3.20E-11	7.06E-11
2501	647782.5	4198102	4.83E-10	5.15E-10	9.98E-10	7.26E-11	7.72E-11	1.50E-10	7.10E-11	6.88E-11	1.40E-10	3.77E-11	3.12E-11	6.89E-11
2502	647781.4	4198077	4.71E-10	5.03E-10	9.74E-10	7.09E-11	7.54E-11	1.46E-10	6.93E-11	6.72E-11	1.36E-10	3.68E-11	3.05E-11	6.73E-11
2503	647780.4	4198053	4.60E-10	4.91E-10	9.51E-10	6.92E-11	7.36E-11	1.43E-10	6.77E-11	6.56E-11	1.33E-10	3.60E-11	2.97E-11	6.57E-11
2504	647779.3	4198028	4.50E-10	4.80E-10	9.29E-10	6.76E-11	7.19E-11	1.40E-10	6.61E-11	6.41E-11	1.30E-10	3.51E-11	2.91E-11	6.42E-11

2505	647778.2	4198003	4.40E-10	4.69E-10	9.09E-10	6.62E-11	7.04E-11	1.37E-10	6.47E-11	6.27E-11	1.27E-10	3.44E-11	2.84E-11	6.28E-11
2506	647777.1	4197979	4.31E-10	4.60E-10	8.91E-10	6.49E-11	6.90E-11	1.34E-10	6.34E-11	6.15E-11	1.25E-10	3.37E-11	2.79E-11	6.16E-11
2507	647776	4197954	4.23E-10	4.51E-10	8.75E-10	6.37E-11	6.77E-11	1.31E-10	6.23E-11	6.03E-11	1.23E-10	3.31E-11	2.74E-11	6.04E-11
2508	647775	4197929	4.17E-10	4.44E-10	8.61E-10	6.27E-11	6.66E-11	1.29E-10	6.13E-11	5.94E-11	1.21E-10	3.25E-11	2.69E-11	5.95E-11
2509	647773.9	4197904	4.11E-10	4.38E-10	8.48E-10	6.17E-11	6.56E-11	1.27E-10	6.04E-11	5.85E-11	1.19E-10	3.21E-11	2.65E-11	5.86E-11
2510	647772.8	4197880	4.06E-10	4.32E-10	8.38E-10	6.10E-11	6.48E-11	1.26E-10	5.96E-11	5.78E-11	1.17E-10	3.17E-11	2.62E-11	5.79E-11
2511	647771.7	4197855	4.01E-10	4.28E-10	8.29E-10	6.03E-11	6.41E-11	1.24E-10	5.90E-11	5.72E-11	1.16E-10	3.13E-11	2.59E-11	5.73E-11
2512	647770.7	4197830	3.97E-10	4.24E-10	8.21E-10	5.98E-11	6.35E-11	1.23E-10	5.84E-11	5.66E-11	1.15E-10	3.10E-11	2.57E-11	5.67E-11
2513	647769.6	4197806	3.94E-10	4.20E-10	8.14E-10	5.93E-11	6.30E-11	1.22E-10	5.79E-11	5.62E-11	1.14E-10	3.08E-11	2.55E-11	5.63E-11
2514	647768.5	4197781	3.91E-10	4.17E-10	8.08E-10	5.88E-11	6.25E-11	1.21E-10	5.75E-11	5.57E-11	1.13E-10	3.05E-11	2.53E-11	5.58E-11
2515	647767.4	4197756	3.88E-10	4.13E-10	8.01E-10	5.83E-11	6.20E-11	1.20E-10	5.70E-11	5.53E-11	1.12E-10	3.03E-11	2.51E-11	5.54E-11
2516	647766.4	4197731	3.85E-10	4.10E-10	7.95E-10	5.79E-11	6.15E-11	1.19E-10	5.66E-11	5.48E-11	1.11E-10	3.01E-11	2.49E-11	5.49E-11
2517	647765.3	4197707	3.81E-10	4.07E-10	7.88E-10	5.74E-11	6.10E-11	1.18E-10	5.61E-11	5.44E-11	1.10E-10	2.98E-11	2.47E-11	5.44E-11
2518	647764.2	4197682	3.78E-10	4.03E-10	7.80E-10	5.68E-11	6.04E-11	1.17E-10	5.55E-11	5.38E-11	1.09E-10	2.95E-11	2.44E-11	5.39E-11
2519	647763.1	4197657	3.73E-10	3.98E-10	7.71E-10	5.61E-11	5.97E-11	1.16E-10	5.49E-11	5.32E-11	1.08E-10	2.92E-11	2.41E-11	5.33E-11
2520	647762.1	4197633	3.69E-10	3.93E-10	7.62E-10	5.54E-11	5.89E-11	1.14E-10	5.42E-11	5.25E-11	1.07E-10	2.88E-11	2.38E-11	5.26E-11
2521	647761	4197608	3.64E-10	3.88E-10	7.51E-10	5.47E-11	5.81E-11	1.13E-10	5.35E-11	5.18E-11	1.05E-10	2.84E-11	2.35E-11	5.19E-11
2522	647759.9	4197583	3.58E-10	3.82E-10	7.40E-10	5.39E-11	5.73E-11	1.11E-10	5.27E-11	5.10E-11	1.04E-10	2.80E-11	2.31E-11	5.11E-11
2523	647758.8	4197558	3.52E-10	3.76E-10	7.28E-10	5.30E-11	5.63E-11	1.09E-10	5.18E-11	5.02E-11	1.02E-10	2.75E-11	2.28E-11	5.03E-11
2524	647757.8	4197534	3.46E-10	3.69E-10	7.16E-10	5.21E-11	5.54E-11	1.07E-10	5.09E-11	4.94E-11	1.00E-10	2.71E-11	2.24E-11	4.95E-11
2525	647756.7	4197509	3.41E-10	3.63E-10	7.04E-10	5.12E-11	5.45E-11	1.06E-10	5.01E-11	4.85E-11	9.86E-11	2.66E-11	2.20E-11	4.86E-11
2526	647802.9	4198572	6.44E-10	6.87E-10	1.33E-09	9.68E-11	1.03E-10	2.00E-10	9.47E-11	9.18E-11	1.86E-10	5.03E-11	4.16E-11	9.19E-11
2527	647814.4	4198594	6.56E-10	7.00E-10	1.36E-09	9.87E-11	1.05E-10	2.04E-10	9.65E-11	9.35E-11	1.90E-10	5.13E-11	4.24E-11	9.37E-11
2528	647825.8	4198616	6.69E-10	7.13E-10	1.38E-09	1.01E-10	1.07E-10	2.08E-10	9.83E-11	9.53E-11	1.94E-10	5.22E-11	4.32E-11	9.55E-11
2529	647837.2	4198638	6.82E-10	7.27E-10	1.41E-09	1.03E-10	1.09E-10	2.11E-10	1.00E-10	9.71E-11	1.97E-10	5.33E-11	4.41E-11	9.73E-11
2530	647848.6	4198660	6.95E-10	7.41E-10	1.44E-09	1.04E-10	1.11E-10	2.16E-10	1.02E-10	9.90E-11	2.01E-10	5.43E-11	4.49E-11	9.92E-11
2531	647860.1	4198683	7.08E-10	7.55E-10	1.46E-09	1.07E-10	1.13E-10	2.20E-10	1.04E-10	1.01E-10	2.05E-10	5.53E-11	4.58E-11	1.01E-10
2532	647871.5	4198705	7.22E-10	7.70E-10	1.49E-09	1.09E-10	1.15E-10	2.24E-10	1.06E-10	1.03E-10	2.09E-10	5.64E-11	4.67E-11	1.03E-10
2533	647882.9	4198727	7.37E-10	7.85E-10	1.52E-09	1.11E-10	1.18E-10	2.28E-10	1.08E-10	1.05E-10	2.13E-10	5.75E-11	4.76E-11	1.05E-10
2534	647894.3	4198749	7.51E-10	8.01E-10	1.55E-09	1.13E-10	1.20E-10	2.33E-10	1.10E-10	1.07E-10	2.17E-10	5.87E-11	4.85E-11	1.07E-10
2535	647905.8	4198771	7.66E-10	8.17E-10	1.58E-09	1.15E-10	1.22E-10	2.38E-10	1.13E-10	1.09E-10	2.22E-10	5.99E-11	4.95E-11	1.09E-10
2536	647917.2	4198793	7.82E-10	8.33E-10	1.61E-09	1.18E-10	1.25E-10	2.42E-10	1.15E-10	1.11E-10	2.26E-10	6.11E-11	5.05E-11	1.12E-10
2537	647928.6	4198816	7.97E-10	8.50E-10	1.65E-09	1.20E-10	1.27E-10	2.47E-10	1.17E-10	1.14E-10	2.31E-10	6.23E-11	5.15E-11	1.14E-10
2538	647940	4198838	8.13E-10	8.67E-10	1.68E-09	1.22E-10	1.30E-10	2.52E-10	1.20E-10	1.16E-10	2.35E-10	6.35E-11	5.25E-11	1.16E-10
2539	647951.5	4198860	8.29E-10	8.83E-10	1.71E-09	1.25E-10	1.32E-10	2.57E-10	1.22E-10	1.18E-10	2.40E-10	6.47E-11	5.35E-11	1.18E-10
2540	647624.1	4198638	5.32E-10	5.67E-10	1.10E-09	8.00E-11	8.51E-11	1.65E-10	7.83E-11	7.59E-11	1.54E-10	4.16E-11	3.44E-11	7.60E-11
2541	647623	4198614	5.29E-10	5.64E-10	1.09E-09	7.96E-11	8.46E-11	1.64E-10	7.78E-11	7.54E-11	1.53E-10	4.13E-11	3.42E-11	7.56E-11
2542	647621.9	4198589	5.26E-10	5.61E-10	1.09E-09	7.92E-11	8.42E-11	1.63E-10	7.74E-11	7.50E-11	1.52E-10	4.11E-11	3.40E-11	7.51E-11
2543	647620.8	4198565	5.23E-10	5.58E-10	1.08E-09	7.87E-11	8.36E-11	1.62E-10	7.69E-11	7.46E-11	1.51E-10	4.09E-11	3.38E-11	7.47E-11
2544	647619.8	4198540	5.20E-10	5.54E-10	1.07E-09	7.81E-11	8.31E-11	1.61E-10	7.64E-11	7.41E-11	1.50E-10	4.06E-11	3.36E-11	7.42E-11
2545	647618.7	4198515	5.16E-10	5.50E-10	1.07E-09	7.76E-11	8.25E-11	1.60E-10	7.59E-11	7.35E-11	1.49E-10	4.03E-11	3.33E-11	7.36E-11
2546	647617.6	4198491	5.12E-10	5.46E-10	1.06E-09	7.70E-11	8.18E-11	1.59E-10	7.53E-11	7.29E-11	1.48E-10	4.00E-11	3.31E-11	7.31E-11
2547	647616.6	4198466	5.08E-10	5.41E-10	1.05E-09	7.63E-11	8.11E-11	1.57E-10	7.46E-11	7.23E-11	1.47E-10	3.96E-11	3.28E-11	7.25E-11
2548	647615.5	4198442	5.03E-10	5.36E-10	1.04E-09	7.56E-11	8.04E-11	1.56E-10	7.39E-11	7.16E-11	1.46E-10	3.93E-11	3.25E-11	7.18E-11
2549	647614.4	4198417	4.97E-10	5.30E-10	1.03E-09	7.48E-11	7.95E-11	1.54E-10	7.31E-11	7.09E-11	1.44E-10	3.88E-11	3.21E-11	7.10E-11
2550	647613.3	4198393	4.92E-10	5.25E-10	1.02E-09	7.40E-11	7.87E-11	1.53E-10	7.23E-11	7.01E-11	1.42E-10	3.84E-11	3.18E-11	7.02E-11
2551	647612.3	4198368	4.86E-10	5.18E-10	1.00E-09	7.31E-11	7.77E-11	1.51E-10	7.15E-11	6.93E-11	1.41E-10	3.80E-11	3.14E-11	6.94E-11
2552	647611.2	4198343	4.80E-10	5.12E-10	9.92E-10	7.22E-11	7.68E-11	1.49E-10	7.06E-11	6.84E-11	1.39E-10	3.75E-11	3.10E-11	6.85E-11
2553	647610.1	4198319	4.74E-10	5.05E-10	9.79E-10	7.12E-11	7.57E-11	1.47E-10	6.97E-11	6.75E-11	1.37E-10	3.70E-11	3.06E-11	6.76E-11
2554	647609.1	4198294	4.67E-10	4.98E-10	9.64E-10	7.02E-11	7.46E-11	1.45E-10	6.86E-11	6.65E-11	1.35E-10	3.65E-11	3.02E-11	6.66E-11
2555	647608	4198270	4.59E-10	4.90E-10	9.49E-10	6.91E-11	7.34E-11	1.43E-10	6.75E-11	6.55E-11	1.33E-10	3.59E-11	2.97E-11	6.56E-11
2556	647606.9	4198245	4.52E-10	4.81E-10	9.33E-10	6.79E-11	7.22E-11	1.40E-10	6.64E-11	6.44E-11	1.31E-10	3.53E-11	2.92E-11	6.45E-11
2557	647605.8	4198220	4.43E-10	4.73E-10	9.16E-10	6.67E-11	7.09E-11	1.38E-10	6.52E-11	6.32E-11	1.28E-10	3.46E-11	2.86E-11	6.33E-11
2558	647604.8	4198196	4.35E-10	4.64E-10	8.99E-10	6.54E-11	6.95E-11	1.35E-10	6.39E-11	6.20E-11	1.26E-10	3.40E-11	2.81E-11	6.21E-11
2559	647603.7	4198171	4.26E-10	4.54E-10	8.80E-10	6.41E-11	6.81E-11	1.32E-10	6.27E-11	6.07E-11	1.23E-10	3.33E-11	2.75E-11	6.08E-11
2560	647602.6	4198147	4.17E-10	4.45E-10	8.62E-10	6.27E-11	6.67E-11	1.29E-10	6.13E-11	5.94E-11	1.21E-10	3.26E-11	2.69E-11	5.95E-11
2561	647601.6	4198122	4.08E-10	4.35E-10	8.42E-10	6.13E-11	6.52E-11	1.26E-10	5.99E-11	5.81E-11	1.18E-10	3.18E-11	2.63E-11	5.82E-11
2562	647600.5	4198097	3.99E-10	4.25E-10	8.24E-10	6.00E-11	6.37E-11	1.24E-10	5.86E-11	5.68E-11	1.15E-10	3.11E-11	2.58E-11	5.69E-11
2563	647599.4	4198073	3.90E-10	4.16E-10	8.06E-10	5.86E-11	6.23E-11	1.21E-10	5.73E-11	5.56E-11	1.13E-10	3.05E-11	2.52E-11	5.57E-11
2564	647598.3	4198048	3.82E-10	4.07E-10	7.89E-10	5.74E-11	6.10E-11	1.18E-10	5.61E-11	5.44E-11	1.11E-10	2.98E-11	2.47E-11	5.45E-11
2565	647597.3	4198024	3.74E-10	3.98E-10	7.72E-10	5.62E-11	5.97E-11	1.16E-10	5.49E-11	5.33E-11	1.08E-10	2.92E-11	2.41E-11	5.33E-11
2566	647596.2	4197999	3.66E-10	3.90E-10	7.57E-10	5.51E-11	5.86E-11	1.14E-10	5.39E-11	5.22E-11	1.06E-10	2.86E-11	2.37E-11	5.23E-11
2567	647595.1	4197974	3.60E-10	3.84E-10	7.44E-10	5.41E-11	5.75E-11	1.12E-10	5.29E-11	5.13E-11	1.04E-10	2.81E-11	2.33E-11	5.14E-11
2568	647594.1	4197950	3.54E-10	3.77E-10	7.31E-10	5.32E-11	5.65E-11	1.10E-10	5.20E-11	5.04E-11	1.02E-10	2.76E-11	2.29E-11	5.05E-11
2569	647593	4197925	3.48E-10	3.71E-10	7.20E-10	5.24E-11	5.57E-11	1.08E-10	5.12E-11	4.97E-11	1.01E-10	2.72E-11	2.25E-11	4.97E-11
2570	647591.9	4197901	3.44E-10	3.66E-10	7.10E-10	5.17E-11	5.50E-11	1.07E-10	5.05E-11	4.90E-11	9.95E-11	2.69E-11	2.22E-11	4.91E-11
2571	647590.8	4197876	3.40E-10	3.62E-10	7.02E-10	5.11E-11	5.43E-11	1.05E-10	5.00E-11	4.84E-11	9.84E-11	2.65E-11	2.20E-11	4.85E-11
2572	647589.8	4197851	3.37E-10	3.59E-10	6.96E-10	5.06E-11	5.38E-11	1.04E-10	4.95E-11	4.80E-11	9.75E-11	2.63E-11	2.18E-11	4.81E-11
2573	647588.7	4197827	3.34E-10	3.56E-10	6.90E-10	5.02E-11	5.34E-11	1.04E-10	4.91E-11	4.76E-11	9.67E-11	2.61E-11	2.16E-11	4.77E-11
2574	647587.6	4197802	3.32E-10	3.54E-10	6.86E-10	4.99E-11	5.31E-11	1.03E-10	4.88E-11	4.73E-11	9.61E-11	2.59E-11	2.14E-11	4.74E-11
2575	647586.6	4197778	3.30E-10	3.52E-10	6.82E-10	4.96E-11	5.28E-11	1.02E-10	4.85E-11	4.70E-11	9.55E-11	2.58E-11	2.13E-11	4.71E-11
2576	647585.5	4197753	3.28E-10	3.50E-10	6.78E-10	4.94E-11	5.25E-11	1.02E-10	4.83E-11	4.68E-11	9.50E-11	2.56E-11	2.12E-11	4.68E-11
2577	647584.4	4197728	3.26E-10	3.48E-10	6.74E-10	4.91E-11	5.22E-11	1.01E-10	4.80E-11	4.65E-11	9.45E-11	2.55E-11	2.11E-11	4.66E-11
2578	647583.3	4197704	3.25E-10	3.46E-10	6.71E-10	4.88E-11	5.19E-11	1.01E-10	4.77E-11	4.63E-11	9.40E-11	2.54E-11	2.10E-11	4.63E-11
2579	647582.3	4197679	3.23E-10	3.44E-10	6.66E-10	4.85E-11	5.16E-11	1.00E-10	4.74E-11	4.60E-11	9.34E-11	2.52E-11	2.08E-11	4.60E-11
2580	647581.2	4197655	3.20E-10	3.41E-10	6.62E-10	4.82E-11	5.12E-11	9.94E-11	4.71E-11	4.56E-11	9.27E-11	2.50E-11	2.07E-11	4.57E-11

2581	647580.1	4197630	3.17E-10	3.38E-10	6.56E-10	4.77E-11	5.07E-11	9.84E-11	4.67E-11	4.52E-11	9.19E-11	2.48E-11	2.05E-11	4.53E-11
2582	647579.1	4197605	3.14E-10	3.35E-10	6.49E-10	4.73E-11	5.02E-11	9.75E-11	4.62E-11	4.48E-11	9.10E-11	2.45E-11	2.03E-11	4.49E-11
2583	647578	4197581	3.11E-10	3.31E-10	6.42E-10	4.67E-11	4.97E-11	9.64E-11	4.57E-11	4.43E-11	9.00E-11	2.43E-11	2.01E-11	4.44E-11
2584	647576.9	4197556	3.07E-10	3.27E-10	6.34E-10	4.61E-11	4.90E-11	9.51E-11	4.51E-11	4.37E-11	8.88E-11	2.40E-11	1.98E-11	4.38E-11
2585	647575.9	4197532	3.02E-10	3.22E-10	6.25E-10	4.55E-11	4.83E-11	9.38E-11	4.45E-11	4.31E-11	8.75E-11	2.36E-11	1.95E-11	4.32E-11
2586	647574.8	4197507	2.98E-10	3.18E-10	6.15E-10	4.48E-11	4.76E-11	9.24E-11	4.38E-11	4.25E-11	8.63E-11	2.33E-11	1.93E-11	4.25E-11
2587	647573.7	4197482	2.93E-10	3.13E-10	6.06E-10	4.41E-11	4.69E-11	9.10E-11	4.31E-11	4.18E-11	8.49E-11	2.29E-11	1.89E-11	4.19E-11
2588	647572.6	4197458	2.88E-10	3.07E-10	5.96E-10	4.34E-11	4.61E-11	8.95E-11	4.24E-11	4.11E-11	8.35E-11	2.25E-11	1.86E-11	4.12E-11
2589	647571.6	4197433	2.84E-10	3.02E-10	5.86E-10	4.27E-11	4.54E-11	8.80E-11	4.17E-11	4.04E-11	8.21E-11	2.22E-11	1.83E-11	4.05E-11
2590	647625.1	4198663	5.35E-10	5.71E-10	1.11E-09	8.05E-11	8.56E-11	1.66E-10	7.87E-11	7.63E-11	1.55E-10	4.18E-11	3.46E-11	7.64E-11
2591	647636.5	4198685	5.44E-10	5.79E-10	1.12E-09	8.17E-11	8.69E-11	1.69E-10	7.99E-11	7.75E-11	1.57E-10	4.25E-11	3.51E-11	7.76E-11
2592	647648	4198707	5.52E-10	5.89E-10	1.14E-09	8.30E-11	8.83E-11	1.71E-10	8.12E-11	7.87E-11	1.60E-10	4.31E-11	3.57E-11	7.88E-11
2593	647659.4	4198730	5.61E-10	5.98E-10	1.16E-09	8.44E-11	8.97E-11	1.74E-10	8.25E-11	8.00E-11	1.62E-10	4.38E-11	3.63E-11	8.01E-11
2594	647670.8	4198752	5.70E-10	6.08E-10	1.18E-09	8.58E-11	9.12E-11	1.77E-10	8.39E-11	8.13E-11	1.65E-10	4.46E-11	3.69E-11	8.14E-11
2595	647682.2	4198774	5.80E-10	6.18E-10	1.20E-09	8.72E-11	9.27E-11	1.80E-10	8.53E-11	8.26E-11	1.68E-10	4.53E-11	3.75E-11	8.28E-11
2596	647693.7	4198796	5.90E-10	6.29E-10	1.22E-09	8.87E-11	9.43E-11	1.83E-10	8.67E-11	8.40E-11	1.71E-10	4.61E-11	3.81E-11	8.42E-11
2597	647705.1	4198818	6.00E-10	6.39E-10	1.24E-09	9.02E-11	9.59E-11	1.86E-10	8.82E-11	8.55E-11	1.74E-10	4.69E-11	3.88E-11	8.56E-11
2598	647716.5	4198841	6.10E-10	6.51E-10	1.26E-09	9.18E-11	9.76E-11	1.89E-10	8.97E-11	8.70E-11	1.77E-10	4.77E-11	3.94E-11	8.71E-11
2599	647727.9	4198863	6.21E-10	6.62E-10	1.28E-09	9.34E-11	9.93E-11	1.93E-10	9.13E-11	8.85E-11	1.80E-10	4.85E-11	4.01E-11	8.87E-11
2600	647739.4	4198885	6.33E-10	6.74E-10	1.31E-09	9.51E-11	1.01E-10	1.96E-10	9.30E-11	9.01E-11	1.83E-10	4.94E-11	4.09E-11	9.03E-11
2601	647750.8	4198907	6.44E-10	6.87E-10	1.33E-09	9.68E-11	1.03E-10	2.00E-10	9.47E-11	9.18E-11	1.86E-10	5.03E-11	4.16E-11	9.19E-11
2602	647762.2	4198929	6.56E-10	6.99E-10	1.36E-09	9.86E-11	1.05E-10	2.03E-10	9.64E-11	9.35E-11	1.90E-10	5.12E-11	4.24E-11	9.36E-11
2603	647773.6	4198952	6.68E-10	7.12E-10	1.38E-09	1.00E-10	1.07E-10	2.07E-10	9.82E-11	9.52E-11	1.93E-10	5.22E-11	4.31E-11	9.53E-11
2604	649091.1	4198311	2.13E-08	2.27E-08	4.41E-08	3.21E-09	3.41E-09	6.62E-09	3.14E-09	3.04E-09	6.18E-09	1.67E-09	1.38E-09	3.05E-09
2605	649089.8	4198337	1.69E-08	1.80E-08	3.50E-08	2.55E-09	2.71E-09	5.25E-09	2.49E-09	2.41E-09	4.90E-09	1.32E-09	1.09E-09	2.42E-09
2606	649069.1	4198328	1.74E-08	1.85E-08	3.59E-08	2.61E-09	2.78E-09	5.39E-09	2.55E-09	2.47E-09	5.03E-09	1.36E-09	1.12E-09	2.48E-09
2607	649088.5	4198363	1.39E-08	1.49E-08	2.88E-08	2.10E-09	2.23E-09	4.33E-09	2.05E-09	1.99E-09	4.04E-09	1.09E-09	9.01E-10	1.99E-09
2608	649067.8	4198354	1.44E-08	1.54E-08	2.98E-08	2.17E-09	2.30E-09	4.47E-09	2.12E-09	2.05E-09	4.17E-09	1.13E-09	9.31E-10	2.06E-09
2609	649046.8	4198344	1.46E-08	1.56E-08	3.02E-08	2.20E-09	2.34E-09	4.53E-09	2.15E-09	2.08E-09	4.23E-09	1.14E-09	9.44E-10	2.09E-09
2610	649079.3	4198412	1.02E-08	1.09E-08	2.11E-08	1.54E-09	1.63E-09	3.17E-09	1.50E-09	1.46E-09	2.96E-09	7.99E-10	6.61E-10	1.46E-09
2611	649058.4	4198403	1.06E-08	1.13E-08	2.19E-08	1.59E-09	1.69E-09	3.29E-09	1.56E-09	1.51E-09	3.07E-09	8.27E-10	6.84E-10	1.51E-09
2612	649037.5	4198394	1.08E-08	1.15E-08	2.24E-08	1.63E-09	1.73E-09	3.36E-09	1.59E-09	1.54E-09	3.14E-09	8.46E-10	7.00E-10	1.55E-09
2613	649017	4198385	1.09E-08	1.17E-08	2.26E-08	1.64E-09	1.75E-09	3.39E-09	1.61E-09	1.56E-09	3.17E-09	8.54E-10	7.07E-10	1.56E-09
2614	649002.3	4198367	1.14E-08	1.22E-08	2.36E-08	1.72E-09	1.83E-09	3.55E-09	1.68E-09	1.63E-09	3.31E-09	8.93E-10	7.39E-10	1.63E-09
2615	649070.1	4198461	7.91E-09	8.43E-09	1.63E-08	1.19E-09	1.26E-09	2.45E-09	1.16E-09	1.13E-09	2.29E-09	6.18E-10	5.11E-10	1.13E-09
2616	649049.3	4198452	8.20E-09	8.74E-09	1.69E-08	1.23E-09	1.31E-09	2.54E-09	1.21E-09	1.17E-09	2.37E-09	6.40E-10	5.30E-10	1.17E-09
2617	649028.5	4198443	8.43E-09	8.99E-09	1.74E-08	1.27E-09	1.35E-09	2.62E-09	1.24E-09	1.20E-09	2.44E-09	6.58E-10	5.45E-10	1.20E-09
2618	649007.6	4198434	8.58E-09	9.14E-09	1.77E-08	1.29E-09	1.37E-09	2.66E-09	1.26E-09	1.22E-09	2.48E-09	6.70E-10	5.54E-10	1.22E-09
2619	648987.1	4198425	8.64E-09	9.21E-09	1.79E-08	1.30E-09	1.38E-09	2.68E-09	1.27E-09	1.23E-09	2.50E-09	6.75E-10	5.58E-10	1.23E-09
2620	648972	4198407	8.98E-09	9.58E-09	1.86E-08	1.35E-09	1.44E-09	2.79E-09	1.32E-09	1.28E-09	2.60E-09	7.02E-10	5.81E-10	1.28E-09
2621	648957.3	4198389	9.22E-09	9.83E-09	1.90E-08	1.39E-09	1.47E-09	2.86E-09	1.36E-09	1.31E-09	2.67E-09	7.20E-10	5.96E-10	1.32E-09
2622	649061	4198511	6.32E-09	6.74E-09	1.31E-08	9.50E-10	1.01E-09	1.96E-09	9.29E-10	9.00E-10	1.83E-09	4.94E-10	4.08E-10	9.02E-10
2623	649040.2	4198502	6.56E-09	6.99E-09	1.36E-08	9.87E-10	1.05E-09	2.04E-09	9.65E-10	9.35E-10	1.90E-09	5.12E-10	4.24E-10	9.36E-10
2624	649019.4	4198492	6.77E-09	7.21E-09	1.40E-08	1.02E-09	1.08E-09	2.10E-09	9.95E-10	9.64E-10	1.96E-09	5.29E-10	4.37E-10	9.66E-10
2625	648998.6	4198483	6.92E-09	7.38E-09	1.43E-08	1.04E-09	1.11E-09	2.15E-09	1.02E-09	9.87E-10	2.00E-09	5.41E-10	4.47E-10	9.88E-10
2626	648977.8	4198474	7.02E-09	7.49E-09	1.45E-08	1.06E-09	1.12E-09	2.18E-09	1.03E-09	1.00E-09	2.03E-09	5.48E-10	4.54E-10	1.00E-09
2627	648957.3	4198465	7.07E-09	7.53E-09	1.46E-08	1.06E-09	1.13E-09	2.19E-09	1.04E-09	1.01E-09	2.05E-09	5.52E-10	4.57E-10	1.01E-09
2628	648942.2	4198447	7.31E-09	7.80E-09	1.51E-08	1.10E-09	1.17E-09	2.27E-09	1.08E-09	1.04E-09	2.12E-09	5.71E-10	4.73E-10	1.04E-09
2629	648927.5	4198430	7.49E-09	7.98E-09	1.55E-08	1.13E-09	1.20E-09	2.32E-09	1.10E-09	1.07E-09	2.17E-09	5.85E-10	4.84E-10	1.07E-09
2630	648912.5	4198412	7.59E-09	8.10E-09	1.57E-08	1.14E-09	1.21E-09	2.36E-09	1.12E-09	1.08E-09	2.20E-09	5.93E-10	4.91E-10	1.08E-09
2631	649051.8	4198560	5.17E-09	5.51E-09	1.07E-08	7.77E-10	8.27E-10	1.60E-09	7.60E-10	7.37E-10	1.50E-09	4.04E-10	3.34E-10	7.38E-10
2632	649030.9	4198551	5.38E-09	5.73E-09	1.11E-08	8.08E-10	8.59E-10	1.67E-09	7.90E-10	7.66E-10	1.56E-09	4.20E-10	3.47E-10	7.67E-10
2633	649010	4198542	5.56E-09	5.92E-09	1.15E-08	8.36E-10	8.88E-10	1.72E-09	8.17E-10	7.92E-10	1.61E-09	4.34E-10	3.59E-10	7.93E-10
2634	648989.2	4198532	5.71E-09	6.08E-09	1.18E-08	8.58E-10	9.12E-10	1.77E-09	8.39E-10	8.13E-10	1.65E-09	4.46E-10	3.69E-10	8.15E-10
2635	648968.3	4198523	5.82E-09	6.20E-09	1.20E-08	8.75E-10	9.30E-10	1.81E-09	8.56E-10	8.29E-10	1.69E-09	4.55E-10	3.76E-10	8.31E-10
2636	648947.4	4198514	5.89E-09	6.28E-09	1.22E-08	8.86E-10	9.41E-10	1.83E-09	8.66E-10	8.39E-10	1.71E-09	4.60E-10	3.81E-10	8.41E-10
2637	648927	4198504	5.93E-09	6.32E-09	1.22E-08	8.91E-10	9.47E-10	1.84E-09	8.71E-10	8.45E-10	1.72E-09	4.63E-10	3.83E-10	8.46E-10
2638	648912.3	4198487	6.11E-09	6.51E-09	1.26E-08	9.18E-10	9.76E-10	1.89E-09	8.98E-10	8.70E-10	1.77E-09	4.77E-10	3.95E-10	8.72E-10
2639	648897.6	4198470	6.24E-09	6.65E-09	1.29E-08	9.39E-10	9.98E-10	1.94E-09	9.18E-10	8.90E-10	1.81E-09	4.88E-10	4.03E-10	8.91E-10
2640	648882.8	4198452	6.33E-09	6.74E-09	1.31E-08	9.51E-10	1.01E-09	1.96E-09	9.30E-10	9.02E-10	1.83E-09	4.94E-10	4.09E-10	9.03E-10
2641	648867.7	4198434	6.36E-09	6.78E-09	1.31E-08	9.56E-10	1.02E-09	1.97E-09	9.35E-10	9.06E-10	1.84E-09	4.97E-10	4.11E-10	9.07E-10
2642	649033.5	4198658	3.64E-09	3.88E-09	7.51E-09	5.47E-10	5.81E-10	1.13E-09	5.35E-10	5.18E-10	1.05E-09	2.84E-10	2.35E-10	5.19E-10
2643	649012.6	4198649	3.79E-09	4.04E-09	7.83E-09	5.70E-10	6.06E-10	1.18E-09	5.57E-10	5.40E-10	1.10E-09	2.96E-10	2.45E-10	5.41E-10
2644	648991.8	4198640	3.93E-09	4.19E-09	8.12E-09	5.91E-10	6.28E-10	1.22E-09	5.78E-10	5.60E-10	1.14E-09	3.07E-10	2.54E-10	5.61E-10
2645	648971	4198631	4.06E-09	4.33E-09	8.38E-09	6.10E-10	6.49E-10	1.26E-09	5.97E-10	5.78E-10	1.17E-09	3.17E-10	2.62E-10	5.79E-10
2646	648950.2	4198622	4.17E-09	4.44E-09	8.61E-09	6.26E-10	6.66E-10	1.29E-09	6.13E-10	5.94E-10	1.21E-09	3.25E-10	2.69E-10	5.95E-10
2647	648929.3	4198613	4.25E-09	4.53E-09	8.79E-09	6.40E-10	6.80E-10	1.32E-09	6.25E-10	6.06E-10	1.23E-09	3.32E-10	2.75E-10	6.07E-10
2648	648908.5	4198603	4.32E-09	4.60E-09	8.92E-09	6.49E-10	6.90E-10	1.34E-09	6.35E-10	6.15E-10	1.25E-09	3.37E-10	2.79E-10	6.16E-10
2649	648887.7	4198594	4.36E-09	4.64E-09	9.00E-09	6.55E-10	6.96E-10	1.35E-09	6.40E-10	6.21E-10	1.26E-09	3.40E-10	2.81E-10	6.22E-10
2650	648867.3	4198585	4.38E-09	4.67E-09	9.04E-09	6.58E-10	7.00E-10	1.36E-09	6.44E-10	6.24E-10	1.27E-09	3.42E-10	2.83E-10	6.25E-10
2651	648852.6	4198567	4.49E-09	4.78E-09	9.27E-09	6.75E-10	7.17E-10	1.39E-09	6.60E-10	6.39E-10	1.30E-09	3.51E-10	2.90E-10	6.41E-10
2652	648837.5	4198549	4.57E-09	4.88E-09	9.45E-09	6.88E-10	7.31E-10	1.42E-09	6.73E-10	6.52E-10	1.32E-09	3.57E-10	2.96E-10	6.53E-10
2653	648822.8	4198532	4.63E-09	4.94E-09	9.57E-09	6.96E-10	7.40E-10	1.44E-09	6.81E-10	6.60E-10	1.34E-09	3.62E-10	2.99E-10	6.61E-10
2654	648807.8	4198514	4.66E-09	4.96E-09	9.62E-09	7.00E-10	7.44E-10	1.44E-09	6.85E-10	6.64E-10	1.35E-09	3.64E-10	3.01E-10	6.65E-10
2655	648793.1	4198497	4.65E-09	4.96E-09	9.61E-09	6.99E-10	7.44E-10	1.44E-09	6.84E-10	6.63E-10	1.35E-09	3.63E-10	3.01E-10	6.64E-10
2656	648778.4	4198480	4.62E-09	4.92E-09	9.54E-09	6.94E-10	7.38E-10	1.43E-09	6.79E-10	6.58E-10	1.34E-09	3.61E-10	2.98E-10	6.59E-10

2657	649015.1	4198756	2.68E-09	2.86E-09	5.54E-09	4.03E-10	4.29E-10	8.32E-10	3.94E-10	3.82E-10	7.76E-10	2.09E-10	1.73E-10	3.83E-10
2658	648994.3	4198747	2.80E-09	2.98E-09	5.78E-09	4.21E-10	4.48E-10	8.68E-10	4.12E-10	3.99E-10	8.11E-10	2.19E-10	1.81E-10	4.00E-10
2659	648973.4	4198738	2.91E-09	3.10E-09	6.01E-09	4.38E-10	4.65E-10	9.03E-10	4.28E-10	4.15E-10	8.43E-10	2.27E-10	1.88E-10	4.16E-10
2660	648952.6	4198729	3.02E-09	3.21E-09	6.23E-09	4.53E-10	4.82E-10	9.35E-10	4.43E-10	4.30E-10	8.73E-10	2.36E-10	1.95E-10	4.30E-10
2661	648931.7	4198720	3.11E-09	3.31E-09	6.42E-09	4.68E-10	4.97E-10	9.65E-10	4.57E-10	4.43E-10	9.00E-10	2.43E-10	2.01E-10	4.44E-10
2662	648910.9	4198711	3.19E-09	3.40E-09	6.60E-09	4.80E-10	5.10E-10	9.90E-10	4.69E-10	4.55E-10	9.24E-10	2.49E-10	2.06E-10	4.56E-10
2663	648890	4198702	3.26E-09	3.48E-09	6.74E-09	4.91E-10	5.22E-10	1.01E-09	4.80E-10	4.65E-10	9.45E-10	2.55E-10	2.11E-10	4.66E-10
2664	648869.1	4198693	3.32E-09	3.54E-09	6.85E-09	4.99E-10	5.30E-10	1.03E-09	4.88E-10	4.73E-10	9.61E-10	2.59E-10	2.14E-10	4.74E-10
2665	648848.3	4198683	3.36E-09	3.58E-09	6.94E-09	5.05E-10	5.37E-10	1.04E-09	4.94E-10	4.78E-10	9.72E-10	2.62E-10	2.17E-10	4.79E-10
2666	648827.4	4198674	3.38E-09	3.60E-09	6.98E-09	5.08E-10	5.40E-10	1.05E-09	4.97E-10	4.82E-10	9.79E-10	2.64E-10	2.18E-10	4.83E-10
2667	648807.2	4198664	3.40E-09	3.62E-09	7.02E-09	5.11E-10	5.43E-10	1.05E-09	4.99E-10	4.84E-10	9.83E-10	2.65E-10	2.19E-10	4.85E-10
2668	648792.5	4198647	3.47E-09	3.70E-09	7.17E-09	5.22E-10	5.55E-10	1.08E-09	5.10E-10	4.94E-10	1.00E-09	2.71E-10	2.24E-10	4.95E-10
2669	648777.8	4198630	3.53E-09	3.76E-09	7.29E-09	5.30E-10	5.64E-10	1.09E-09	5.18E-10	5.02E-10	1.02E-09	2.75E-10	2.28E-10	5.03E-10
2670	648763.1	4198612	3.57E-09	3.80E-09	7.37E-09	5.36E-10	5.70E-10	1.11E-09	5.24E-10	5.08E-10	1.03E-09	2.79E-10	2.30E-10	5.09E-10
2671	648748.4	4198595	3.59E-09	3.82E-09	7.41E-09	5.40E-10	5.74E-10	1.11E-09	5.28E-10	5.11E-10	1.04E-09	2.80E-10	2.32E-10	5.12E-10
2672	648733.6	4198578	3.59E-09	3.83E-09	7.42E-09	5.40E-10	5.74E-10	1.11E-09	5.28E-10	5.12E-10	1.04E-09	2.80E-10	2.32E-10	5.13E-10
2673	648718.9	4198560	3.58E-09	3.81E-09	7.39E-09	5.38E-10	5.72E-10	1.11E-09	5.26E-10	5.09E-10	1.04E-09	2.79E-10	2.31E-10	5.10E-10
2674	648704.2	4198543	3.54E-09	3.78E-09	7.32E-09	5.32E-10	5.66E-10	1.10E-09	5.21E-10	5.05E-10	1.03E-09	2.77E-10	2.29E-10	5.05E-10
2675	648689.5	4198525	3.49E-09	3.72E-09	7.21E-09	5.25E-10	5.58E-10	1.08E-09	5.13E-10	4.97E-10	1.01E-09	2.73E-10	2.26E-10	4.98E-10
2676	648996.8	4198855	2.05E-09	2.18E-09	4.23E-09	3.08E-10	3.27E-10	6.36E-10	3.01E-10	2.92E-10	5.93E-10	1.60E-10	1.32E-10	2.92E-10
2677	648975.9	4198846	2.14E-09	2.28E-09	4.42E-09	3.22E-10	3.42E-10	6.64E-10	3.15E-10	3.05E-10	6.20E-10	1.67E-10	1.38E-10	3.06E-10
2678	648955.1	4198836	2.23E-09	2.38E-09	4.61E-09	3.35E-10	3.56E-10	6.92E-10	3.28E-10	3.18E-10	6.46E-10	1.74E-10	1.44E-10	3.18E-10
2679	648934.2	4198827	2.31E-09	2.47E-09	4.78E-09	3.48E-10	3.70E-10	7.18E-10	3.40E-10	3.30E-10	6.70E-10	1.81E-10	1.50E-10	3.30E-10
2680	648913.3	4198818	2.39E-09	2.55E-09	4.95E-09	3.60E-10	3.83E-10	7.43E-10	3.52E-10	3.41E-10	6.93E-10	1.87E-10	1.55E-10	3.42E-10
2681	648892.4	4198809	2.47E-09	2.63E-09	5.10E-09	3.71E-10	3.94E-10	7.65E-10	3.63E-10	3.52E-10	7.14E-10	1.93E-10	1.59E-10	3.52E-10
2682	648871.6	4198800	2.53E-09	2.70E-09	5.23E-09	3.81E-10	4.05E-10	7.86E-10	3.72E-10	3.61E-10	7.33E-10	1.98E-10	1.64E-10	3.61E-10
2683	648850.7	4198791	2.59E-09	2.76E-09	5.35E-09	3.89E-10	4.14E-10	8.03E-10	3.81E-10	3.69E-10	7.50E-10	2.02E-10	1.67E-10	3.70E-10
2684	648829.8	4198782	2.64E-09	2.81E-09	5.45E-09	3.96E-10	4.21E-10	8.18E-10	3.88E-10	3.76E-10	7.63E-10	2.06E-10	1.70E-10	3.76E-10
2685	648808.9	4198773	2.67E-09	2.85E-09	5.52E-09	4.02E-10	4.27E-10	8.29E-10	3.93E-10	3.81E-10	7.74E-10	2.09E-10	1.73E-10	3.82E-10
2686	648788.1	4198763	2.70E-09	2.88E-09	5.58E-09	4.06E-10	4.32E-10	8.38E-10	3.97E-10	3.85E-10	7.82E-10	2.11E-10	1.74E-10	3.85E-10
2687	648767.2	4198754	2.72E-09	2.89E-09	5.61E-09	4.08E-10	4.34E-10	8.42E-10	3.99E-10	3.87E-10	7.86E-10	2.12E-10	1.75E-10	3.88E-10
2688	648747.1	4198744	2.73E-09	2.91E-09	5.63E-09	4.10E-10	4.36E-10	8.46E-10	4.01E-10	3.89E-10	7.90E-10	2.13E-10	1.76E-10	3.89E-10
2689	648732.4	4198727	2.78E-09	2.96E-09	5.74E-09	4.18E-10	4.44E-10	8.62E-10	4.09E-10	3.96E-10	8.05E-10	2.17E-10	1.80E-10	3.97E-10
2690	648717.3	4198709	2.82E-09	3.01E-09	5.83E-09	4.24E-10	4.51E-10	8.75E-10	4.15E-10	4.02E-10	8.17E-10	2.20E-10	1.82E-10	4.03E-10
2691	648702.5	4198692	2.85E-09	3.04E-09	5.89E-09	4.29E-10	4.56E-10	8.84E-10	4.19E-10	4.06E-10	8.25E-10	2.23E-10	1.84E-10	4.07E-10
2692	648687.8	4198674	2.87E-09	3.06E-09	5.93E-09	4.31E-10	4.59E-10	8.90E-10	4.22E-10	4.09E-10	8.31E-10	2.24E-10	1.85E-10	4.09E-10
2693	648673.1	4198657	2.87E-09	3.06E-09	5.94E-09	4.32E-10	4.60E-10	8.92E-10	4.23E-10	4.10E-10	8.32E-10	2.25E-10	1.86E-10	4.10E-10
2694	648658.4	4198639	2.87E-09	3.06E-09	5.92E-09	4.31E-10	4.58E-10	8.90E-10	4.22E-10	4.09E-10	8.30E-10	2.24E-10	1.85E-10	4.09E-10
2695	648643.6	4198622	2.85E-09	3.04E-09	5.88E-09	4.28E-10	4.55E-10	8.84E-10	4.19E-10	4.06E-10	8.25E-10	2.22E-10	1.84E-10	4.07E-10
2696	648628.9	4198605	2.82E-09	3.00E-09	5.82E-09	4.24E-10	4.50E-10	8.74E-10	4.14E-10	4.01E-10	8.16E-10	2.20E-10	1.82E-10	4.02E-10
2697	648614.2	4198587	2.78E-09	2.96E-09	5.73E-09	4.17E-10	4.44E-10	8.61E-10	4.08E-10	3.95E-10	8.04E-10	2.17E-10	1.79E-10	3.96E-10
2698	648599.4	4198570	2.72E-09	2.90E-09	5.63E-09	4.09E-10	4.35E-10	8.45E-10	4.00E-10	3.88E-10	7.88E-10	2.13E-10	1.76E-10	3.89E-10
2699	648978.5	4198953	1.61E-09	1.72E-09	3.33E-09	2.42E-10	2.58E-10	5.00E-10	2.37E-10	2.30E-10	4.66E-10	1.26E-10	1.04E-10	2.30E-10
2700	648957.6	4198944	1.68E-09	1.79E-09	3.48E-09	2.53E-10	2.69E-10	5.22E-10	2.48E-10	2.40E-10	4.87E-10	1.32E-10	1.09E-10	2.40E-10
2701	648936.7	4198935	1.75E-09	1.87E-09	3.63E-09	2.64E-10	2.80E-10	5.44E-10	2.58E-10	2.50E-10	5.08E-10	1.37E-10	1.13E-10	2.50E-10
2702	648915.8	4198926	1.82E-09	1.94E-09	3.77E-09	2.74E-10	2.92E-10	5.66E-10	2.68E-10	2.60E-10	5.28E-10	1.42E-10	1.18E-10	2.60E-10
2703	648894.9	4198916	1.89E-09	2.01E-09	3.90E-09	2.84E-10	3.02E-10	5.86E-10	2.78E-10	2.69E-10	5.47E-10	1.48E-10	1.22E-10	2.70E-10
2704	648874	4198907	1.95E-09	2.08E-09	4.03E-09	2.93E-10	3.12E-10	6.06E-10	2.87E-10	2.78E-10	5.65E-10	1.52E-10	1.26E-10	2.79E-10
2705	648853.2	4198898	2.01E-09	2.14E-09	4.15E-09	3.02E-10	3.21E-10	6.23E-10	2.95E-10	2.86E-10	5.82E-10	1.57E-10	1.30E-10	2.87E-10
2706	648832.3	4198889	2.06E-09	2.20E-09	4.26E-09	3.10E-10	3.30E-10	6.40E-10	3.03E-10	2.94E-10	5.97E-10	1.61E-10	1.33E-10	2.94E-10
2707	648811.4	4198880	2.11E-09	2.25E-09	4.36E-09	3.17E-10	3.37E-10	6.54E-10	3.10E-10	3.00E-10	6.10E-10	1.65E-10	1.36E-10	3.01E-10
2708	648790.5	4198871	2.15E-09	2.29E-09	4.44E-09	3.23E-10	3.43E-10	6.67E-10	3.16E-10	3.06E-10	6.22E-10	1.68E-10	1.39E-10	3.07E-10
2709	648769.6	4198862	2.18E-09	2.33E-09	4.51E-09	3.28E-10	3.49E-10	6.77E-10	3.21E-10	3.11E-10	6.32E-10	1.70E-10	1.41E-10	3.11E-10
2710	648748.7	4198853	2.21E-09	2.35E-09	4.56E-09	3.32E-10	3.53E-10	6.85E-10	3.25E-10	3.15E-10	6.39E-10	1.72E-10	1.43E-10	3.15E-10
2711	648727.8	4198843	2.23E-09	2.37E-09	4.60E-09	3.35E-10	3.56E-10	6.91E-10	3.27E-10	3.17E-10	6.45E-10	1.74E-10	1.44E-10	3.18E-10
2712	648706.9	4198834	2.24E-09	2.39E-09	4.62E-09	3.37E-10	3.58E-10	6.94E-10	3.29E-10	3.19E-10	6.48E-10	1.75E-10	1.45E-10	3.19E-10
2713	648687	4198824	2.25E-09	2.40E-09	4.65E-09	3.38E-10	3.59E-10	6.98E-10	3.31E-10	3.20E-10	6.51E-10	1.76E-10	1.45E-10	3.21E-10
2714	648672.3	4198806	2.29E-09	2.44E-09	4.73E-09	3.44E-10	3.66E-10	7.10E-10	3.36E-10	3.26E-10	6.62E-10	1.79E-10	1.48E-10	3.26E-10
2715	648657.5	4198789	2.32E-09	2.47E-09	4.79E-09	3.49E-10	3.71E-10	7.19E-10	3.41E-10	3.30E-10	6.71E-10	1.81E-10	1.50E-10	3.31E-10
2716	648642.8	4198772	2.34E-09	2.50E-09	4.84E-09	3.52E-10	3.75E-10	7.27E-10	3.44E-10	3.34E-10	6.78E-10	1.83E-10	1.51E-10	3.34E-10
2717	648628.1	4198754	2.36E-09	2.51E-09	4.87E-09	3.55E-10	3.77E-10	7.32E-10	3.47E-10	3.36E-10	6.83E-10	1.84E-10	1.52E-10	3.37E-10
2718	648613.3	4198737	2.37E-09	2.52E-09	4.89E-09	3.56E-10	3.78E-10	7.34E-10	3.48E-10	3.37E-10	6.85E-10	1.85E-10	1.53E-10	3.38E-10
2719	648598.6	4198720	2.36E-09	2.52E-09	4.88E-09	3.56E-10	3.78E-10	7.33E-10	3.48E-10	3.37E-10	6.85E-10	1.85E-10	1.53E-10	3.37E-10
2720	648583.8	4198702	2.35E-09	2.51E-09	4.86E-09	3.54E-10	3.76E-10	7.30E-10	3.46E-10	3.35E-10	6.82E-10	1.84E-10	1.52E-10	3.36E-10
2721	648569.1	4198685	2.34E-09	2.49E-09	4.83E-09	3.51E-10	3.73E-10	7.25E-10	3.43E-10	3.33E-10	6.76E-10	1.82E-10	1.51E-10	3.33E-10
2722	648554.4	4198667	2.31E-09	2.46E-09	4.77E-09	3.47E-10	3.69E-10	7.16E-10	3.39E-10	3.29E-10	6.68E-10	1.80E-10	1.49E-10	3.30E-10
2723	648539.6	4198650	2.27E-09	2.42E-09	4.70E-09	3.42E-10	3.64E-10	7.06E-10	3.34E-10	3.24E-10	6.59E-10	1.78E-10	1.47E-10	3.25E-10
2724	648524.9	4198633	2.23E-09	2.38E-09	4.61E-09	3.36E-10	3.57E-10	6.93E-10	3.28E-10	3.18E-10	6.47E-10	1.74E-10	1.44E-10	3.19E-10
2725	648510.1	4198615	2.19E-09	2.33E-09	4.52E-09	3.29E-10	3.49E-10	6.78E-10	3.21E-10	3.12E-10	6.33E-10	1.71E-10	1.41E-10	3.12E-10
2726	648941.8	4199150	1.07E-09	1.14E-09	2.21E-09	1.61E-10	1.71E-10	3.32E-10	1.57E-10	1.53E-10	3.10E-10	8.36E-11	6.92E-11	1.53E-10
2727	648920.9	4199140	1.12E-09	1.19E-09	2.31E-09	1.68E-10	1.79E-10	3.46E-10	1.64E-10	1.59E-10	3.23E-10	8.72E-11	7.22E-11	1.59E-10
2728	648900.1	4199131	1.16E-09	1.24E-09	2.40E-09	1.75E-10	1.86E-10	3.61E-10	1.71E-10	1.66E-10	3.37E-10	9.08E-11	7.51E-11	1.66E-10
2729	648879.2	4199122	1.21E-09	1.29E-09	2.50E-09	1.82E-10	1.93E-10	3.75E-10	1.78E-10	1.72E-10	3.50E-10	9.44E-11	7.81E-11	1.72E-10
2730	648858.3	4199113	1.25E-09	1.34E-09	2.59E-09	1.88E-10	2.00E-10	3.89E-10	1.84E-10	1.79E-10	3.63E-10	9.79E-11	8.10E-11	1.79E-10
2731	648837.5	4199104	1.30E-09	1.38E-09	2.68E-09	1.95E-10	2.07E-10	4.02E-10	1.91E-10	1.85E-10	3.75E-10	1.01E-10	8.38E-11	1.85E-10
2732	648816.6	4199095	1.34E-09	1.43E-09	2.76E-09	2.01E-10	2.14E-10	4.15E-10	1.97E-10	1.91E-10	3.87E-10	1.04E-10	8.64E-11	1.91E-10

2733	648795.7	4199086	1.38E-09	1.47E-09	2.85E-09	2.07E-10	2.20E-10	4.27E-10	2.03E-10	1.96E-10	3.99E-10	1.08E-10	8.90E-11	1.97E-10
2734	648774.8	4199077	1.41E-09	1.51E-09	2.92E-09	2.13E-10	2.26E-10	4.39E-10	2.08E-10	2.02E-10	4.10E-10	1.11E-10	9.14E-11	2.02E-10
2735	648754	4199067	1.45E-09	1.55E-09	3.00E-09	2.18E-10	2.32E-10	4.50E-10	2.13E-10	2.07E-10	4.20E-10	1.13E-10	9.37E-11	2.07E-10
2736	648733.1	4199058	1.48E-09	1.58E-09	3.06E-09	2.23E-10	2.37E-10	4.60E-10	2.18E-10	2.11E-10	4.29E-10	1.16E-10	9.58E-11	2.11E-10
2737	648712.2	4199049	1.51E-09	1.61E-09	3.12E-09	2.27E-10	2.42E-10	4.69E-10	2.22E-10	2.15E-10	4.37E-10	1.18E-10	9.76E-11	2.16E-10
2738	648691.3	4199040	1.54E-09	1.64E-09	3.17E-09	2.31E-10	2.46E-10	4.77E-10	2.26E-10	2.19E-10	4.45E-10	1.20E-10	9.93E-11	2.19E-10
2739	648670.5	4199031	1.56E-09	1.66E-09	3.22E-09	2.34E-10	2.49E-10	4.84E-10	2.29E-10	2.22E-10	4.51E-10	1.22E-10	1.01E-10	2.22E-10
2740	648649.6	4199022	1.58E-09	1.68E-09	3.26E-09	2.37E-10	2.52E-10	4.89E-10	2.32E-10	2.25E-10	4.57E-10	1.23E-10	1.02E-10	2.25E-10
2741	648628.7	4199013	1.59E-09	1.70E-09	3.29E-09	2.39E-10	2.55E-10	4.94E-10	2.34E-10	2.27E-10	4.61E-10	1.24E-10	1.03E-10	2.27E-10
2742	648607.8	4199004	1.60E-09	1.71E-09	3.31E-09	2.41E-10	2.56E-10	4.98E-10	2.36E-10	2.29E-10	4.64E-10	1.25E-10	1.04E-10	2.29E-10
2743	648587	4198994	1.61E-09	1.72E-09	3.33E-09	2.42E-10	2.58E-10	5.00E-10	2.37E-10	2.30E-10	4.66E-10	1.26E-10	1.04E-10	2.30E-10
2744	648566.8	4198983	1.62E-09	1.73E-09	3.35E-09	2.44E-10	2.59E-10	5.03E-10	2.38E-10	2.31E-10	4.69E-10	1.27E-10	1.05E-10	2.31E-10
2745	648552.1	4198966	1.64E-09	1.75E-09	3.40E-09	2.47E-10	2.63E-10	5.10E-10	2.42E-10	2.34E-10	4.76E-10	1.28E-10	1.06E-10	2.35E-10
2746	648537.4	4198949	1.67E-09	1.78E-09	3.44E-09	2.50E-10	2.66E-10	5.17E-10	2.45E-10	2.37E-10	4.82E-10	1.30E-10	1.08E-10	2.38E-10
2747	648522.6	4198931	1.68E-09	1.79E-09	3.48E-09	2.53E-10	2.69E-10	5.22E-10	2.47E-10	2.40E-10	4.87E-10	1.31E-10	1.09E-10	2.40E-10
2748	648507.5	4198913	1.70E-09	1.81E-09	3.50E-09	2.55E-10	2.71E-10	5.26E-10	2.49E-10	2.42E-10	4.91E-10	1.32E-10	1.10E-10	2.42E-10
2749	648492.8	4198896	1.70E-09	1.82E-09	3.52E-09	2.56E-10	2.72E-10	5.28E-10	2.50E-10	2.43E-10	4.93E-10	1.33E-10	1.10E-10	2.43E-10
2750	648478.1	4198879	1.71E-09	1.82E-09	3.53E-09	2.57E-10	2.73E-10	5.29E-10	2.51E-10	2.43E-10	4.94E-10	1.33E-10	1.10E-10	2.44E-10
2751	648463.3	4198861	1.71E-09	1.82E-09	3.52E-09	2.56E-10	2.73E-10	5.29E-10	2.51E-10	2.43E-10	4.94E-10	1.33E-10	1.10E-10	2.43E-10
2752	648448.6	4198844	1.70E-09	1.81E-09	3.51E-09	2.55E-10	2.72E-10	5.27E-10	2.50E-10	2.42E-10	4.92E-10	1.33E-10	1.10E-10	2.43E-10
2753	648433.9	4198827	1.69E-09	1.80E-09	3.49E-09	2.54E-10	2.70E-10	5.24E-10	2.48E-10	2.41E-10	4.89E-10	1.32E-10	1.09E-10	2.41E-10
2754	648419.1	4198809	1.67E-09	1.78E-09	3.46E-09	2.52E-10	2.67E-10	5.19E-10	2.46E-10	2.38E-10	4.84E-10	1.31E-10	1.08E-10	2.39E-10
2755	648404.4	4198792	1.65E-09	1.76E-09	3.42E-09	2.49E-10	2.64E-10	5.13E-10	2.43E-10	2.36E-10	4.79E-10	1.29E-10	1.07E-10	2.36E-10
2756	648389.7	4198774	1.63E-09	1.74E-09	3.37E-09	2.45E-10	2.60E-10	5.06E-10	2.40E-10	2.32E-10	4.72E-10	1.27E-10	1.05E-10	2.33E-10
2757	648374.9	4198757	1.60E-09	1.71E-09	3.31E-09	2.41E-10	2.56E-10	4.97E-10	2.36E-10	2.28E-10	4.64E-10	1.25E-10	1.04E-10	2.29E-10
2758	648360.2	4198740	1.57E-09	1.68E-09	3.25E-09	2.36E-10	2.51E-10	4.88E-10	2.31E-10	2.24E-10	4.55E-10	1.23E-10	1.02E-10	2.24E-10
2759	648345.1	4198722	1.54E-09	1.64E-09	3.18E-09	2.31E-10	2.46E-10	4.77E-10	2.26E-10	2.19E-10	4.45E-10	1.20E-10	9.94E-11	2.20E-10
2760	648330.4	4198704	1.50E-09	1.60E-09	3.10E-09	2.26E-10	2.40E-10	4.66E-10	2.21E-10	2.14E-10	4.35E-10	1.17E-10	9.71E-11	2.14E-10
2761	648905.2	4199346	7.68E-10	8.18E-10	1.59E-09	1.15E-10	1.23E-10	2.38E-10	1.13E-10	1.09E-10	2.22E-10	6.00E-11	4.96E-11	1.10E-10
2762	648884.3	4199337	7.98E-10	8.51E-10	1.65E-09	1.20E-10	1.28E-10	2.48E-10	1.17E-10	1.14E-10	2.31E-10	6.24E-11	5.16E-11	1.14E-10
2763	648863.4	4199328	8.29E-10	8.84E-10	1.71E-09	1.25E-10	1.33E-10	2.57E-10	1.22E-10	1.18E-10	2.40E-10	6.48E-11	5.36E-11	1.18E-10
2764	648842.5	4199319	8.60E-10	9.17E-10	1.78E-09	1.29E-10	1.37E-10	2.67E-10	1.26E-10	1.23E-10	2.49E-10	6.72E-11	5.56E-11	1.23E-10
2765	648821.6	4199310	8.90E-10	9.49E-10	1.84E-09	1.34E-10	1.42E-10	2.76E-10	1.31E-10	1.27E-10	2.58E-10	6.95E-11	5.75E-11	1.27E-10
2766	648800.7	4199301	9.20E-10	9.81E-10	1.90E-09	1.38E-10	1.47E-10	2.86E-10	1.35E-10	1.31E-10	2.66E-10	7.19E-11	5.95E-11	1.31E-10
2767	648779.8	4199291	9.50E-10	1.01E-09	1.96E-09	1.43E-10	1.52E-10	2.95E-10	1.40E-10	1.35E-10	2.75E-10	7.42E-11	6.14E-11	1.36E-10
2768	648758.9	4199282	9.78E-10	1.04E-09	2.02E-09	1.47E-10	1.56E-10	3.04E-10	1.44E-10	1.39E-10	2.83E-10	7.64E-11	6.32E-11	1.40E-10
2769	648738	4199273	1.01E-09	1.07E-09	2.08E-09	1.51E-10	1.61E-10	3.12E-10	1.48E-10	1.43E-10	2.91E-10	7.86E-11	6.50E-11	1.44E-10
2770	648717.1	4199264	1.03E-09	1.10E-09	2.13E-09	1.55E-10	1.65E-10	3.20E-10	1.52E-10	1.47E-10	2.99E-10	8.07E-11	6.67E-11	1.47E-10
2771	648696.3	4199255	1.06E-09	1.13E-09	2.19E-09	1.59E-10	1.69E-10	3.28E-10	1.56E-10	1.51E-10	3.06E-10	8.27E-11	6.84E-11	1.51E-10
2772	648675.4	4199246	1.08E-09	1.15E-09	2.24E-09	1.63E-10	1.73E-10	3.36E-10	1.59E-10	1.54E-10	3.13E-10	8.45E-11	6.99E-11	1.54E-10
2773	648654.5	4199237	1.10E-09	1.18E-09	2.28E-09	1.66E-10	1.77E-10	3.43E-10	1.62E-10	1.57E-10	3.20E-10	8.63E-11	7.14E-11	1.58E-10
2774	648633.6	4199228	1.13E-09	1.20E-09	2.33E-09	1.69E-10	1.80E-10	3.49E-10	1.66E-10	1.60E-10	3.26E-10	8.79E-11	7.27E-11	1.61E-10
2775	648612.7	4199218	1.15E-09	1.22E-09	2.37E-09	1.72E-10	1.83E-10	3.55E-10	1.68E-10	1.63E-10	3.32E-10	8.94E-11	7.40E-11	1.63E-10
2776	648591.8	4199209	1.16E-09	1.24E-09	2.40E-09	1.75E-10	1.86E-10	3.61E-10	1.71E-10	1.66E-10	3.37E-10	9.08E-11	7.51E-11	1.66E-10
2777	648570.9	4199200	1.18E-09	1.26E-09	2.43E-09	1.77E-10	1.88E-10	3.66E-10	1.73E-10	1.68E-10	3.41E-10	9.20E-11	7.61E-11	1.68E-10
2778	648550	4199191	1.19E-09	1.27E-09	2.46E-09	1.79E-10	1.91E-10	3.70E-10	1.75E-10	1.70E-10	3.45E-10	9.31E-11	7.70E-11	1.70E-10
2779	648529.1	4199182	1.20E-09	1.28E-09	2.49E-09	1.81E-10	1.92E-10	3.73E-10	1.77E-10	1.72E-10	3.49E-10	9.40E-11	7.78E-11	1.72E-10
2780	648508.2	4199173	1.21E-09	1.29E-09	2.51E-09	1.83E-10	1.94E-10	3.77E-10	1.78E-10	1.73E-10	3.51E-10	9.48E-11	7.84E-11	1.73E-10
2781	648487.4	4199164	1.22E-09	1.30E-09	2.52E-09	1.84E-10	1.95E-10	3.79E-10	1.80E-10	1.74E-10	3.54E-10	9.54E-11	7.89E-11	1.74E-10
2782	648466.5	4199154	1.23E-09	1.31E-09	2.54E-09	1.85E-10	1.96E-10	3.81E-10	1.80E-10	1.75E-10	3.55E-10	9.59E-11	7.93E-11	1.75E-10
2783	648446.6	4199143	1.24E-09	1.32E-09	2.55E-09	1.86E-10	1.97E-10	3.83E-10	1.82E-10	1.76E-10	3.58E-10	9.65E-11	7.98E-11	1.76E-10
2784	648431.9	4199126	1.25E-09	1.34E-09	2.59E-09	1.88E-10	2.00E-10	3.89E-10	1.84E-10	1.78E-10	3.63E-10	9.78E-11	8.09E-11	1.79E-10
2785	648417.2	4199108	1.27E-09	1.35E-09	2.62E-09	1.91E-10	2.03E-10	3.93E-10	1.86E-10	1.81E-10	3.67E-10	9.90E-11	8.19E-11	1.81E-10
2786	648402.4	4199091	1.28E-09	1.37E-09	2.65E-09	1.93E-10	2.05E-10	3.97E-10	1.88E-10	1.82E-10	3.71E-10	1.00E-10	8.27E-11	1.83E-10
2787	648387.3	4199073	1.29E-09	1.38E-09	2.67E-09	1.94E-10	2.06E-10	4.01E-10	1.90E-10	1.84E-10	3.74E-10	1.01E-10	8.34E-11	1.84E-10
2788	648372.5	4199055	1.30E-09	1.38E-09	2.68E-09	1.95E-10	2.08E-10	4.03E-10	1.91E-10	1.85E-10	3.76E-10	1.01E-10	8.39E-11	1.85E-10
2789	648357.8	4199038	1.30E-09	1.39E-09	2.69E-09	1.96E-10	2.08E-10	4.05E-10	1.92E-10	1.86E-10	3.78E-10	1.02E-10	8.43E-11	1.86E-10
2790	648343.1	4199021	1.31E-09	1.39E-09	2.70E-09	1.96E-10	2.09E-10	4.05E-10	1.92E-10	1.86E-10	3.78E-10	1.02E-10	8.44E-11	1.86E-10
2791	648328.3	4199003	1.31E-09	1.39E-09	2.70E-09	1.96E-10	2.09E-10	4.05E-10	1.92E-10	1.86E-10	3.78E-10	1.02E-10	8.44E-11	1.86E-10
2792	648313.6	4198986	1.30E-09	1.39E-09	2.69E-09	1.96E-10	2.08E-10	4.04E-10	1.91E-10	1.86E-10	3.77E-10	1.02E-10	8.41E-11	1.86E-10
2793	648298.8	4198969	1.30E-09	1.38E-09	2.68E-09	1.95E-10	2.07E-10	4.02E-10	1.90E-10	1.85E-10	3.75E-10	1.01E-10	8.37E-11	1.85E-10
2794	648284.1	4198951	1.29E-09	1.37E-09	2.66E-09	1.93E-10	2.06E-10	3.99E-10	1.89E-10	1.83E-10	3.72E-10	1.00E-10	8.31E-11	1.84E-10
2795	648269.3	4198934	1.27E-09	1.36E-09	2.63E-09	1.92E-10	2.04E-10	3.95E-10	1.87E-10	1.82E-10	3.69E-10	9.96E-11	8.24E-11	1.82E-10
2796	648254.6	4198916	1.26E-09	1.34E-09	2.60E-09	1.89E-10	2.01E-10	3.91E-10	1.85E-10	1.80E-10	3.65E-10	9.84E-11	8.14E-11	1.80E-10
2797	648239.9	4198899	1.24E-09	1.33E-09	2.57E-09	1.87E-10	1.99E-10	3.86E-10	1.83E-10	1.77E-10	3.60E-10	9.71E-11	8.03E-11	1.77E-10
2798	648225.1	4198882	1.22E-09	1.30E-09	2.53E-09	1.84E-10	1.96E-10	3.80E-10	1.80E-10	1.74E-10	3.54E-10	9.56E-11	7.91E-11	1.75E-10
2799	648210.4	4198864	1.20E-09	1.28E-09	2.49E-09	1.81E-10	1.92E-10	3.73E-10	1.77E-10	1.71E-10	3.48E-10	9.40E-11	7.77E-11	1.72E-10
2800	648195.6	4198847	1.18E-09	1.26E-09	2.44E-09	1.78E-10	1.89E-10	3.66E-10	1.74E-10	1.68E-10	3.42E-10	9.22E-11	7.63E-11	1.69E-10
2801	648180.9	4198829	1.16E-09	1.23E-09	2.39E-09	1.74E-10	1.85E-10	3.59E-10	1.70E-10	1.65E-10	3.35E-10	9.04E-11	7.48E-11	1.65E-10
2802	648166.1	4198812	1.13E-09	1.21E-09	2.34E-09	1.70E-10	1.81E-10	3.51E-10	1.66E-10	1.61E-10	3.28E-10	8.84E-11	7.31E-11	1.62E-10
2803	648151.4	4198795	1.11E-09	1.18E-09	2.29E-09	1.66E-10	1.77E-10	3.43E-10	1.63E-10	1.58E-10	3.20E-10	8.64E-11	7.15E-11	1.58E-10
2804	648868.5	4199543	5.83E-10	6.21E-10	1.20E-09	8.76E-11	9.31E-11	1.81E-10	8.57E-11	8.30E-11	1.69E-10	4.55E-11	3.76E-11	8.32E-11
2805	648847.6	4199534	6.04E-10	6.44E-10	1.25E-09	9.08E-11	9.66E-11	1.87E-10	8.88E-11	8.61E-11	1.75E-10	4.72E-11	3.90E-11	8.62E-11
2806	648826.7	4199525	6.25E-10	6.67E-10	1.29E-09	9.40E-11	1.00E-10	1.94E-10	9.19E-11	8.91E-11	1.81E-10	4.88E-11	4.04E-11	8.93E-11
2807	648805.9	4199515	6.47E-10	6.90E-10	1.34E-09	9.73E-11	1.03E-10	2.01E-10	9.51E-11	9.22E-11	1.87E-10	5.05E-11	4.18E-11	9.23E-11
2808	648785	4199506	6.68E-10	7.12E-10	1.38E-09	1.00E-10	1.07E-10	2.07E-10	9.83E-11	9.52E-11	1.93E-10	5.22E-11	4.32E-11	9.54E-11

2809	648764.1	4199497	6.90E-10	7.35E-10	1.42E-09	1.04E-10	1.10E-10	2.14E-10	1.01E-10	9.83E-11	2.00E-10	5.39E-11	4.46E-11	9.84E-11
2810	648743.2	4199488	7.11E-10	7.58E-10	1.47E-09	1.07E-10	1.14E-10	2.20E-10	1.04E-10	1.01E-10	2.06E-10	5.55E-11	4.59E-11	1.01E-10
2811	648722.3	4199479	7.31E-10	7.80E-10	1.51E-09	1.10E-10	1.17E-10	2.27E-10	1.08E-10	1.04E-10	2.12E-10	5.71E-11	4.73E-11	1.04E-10
2812	648701.5	4199470	7.52E-10	8.01E-10	1.55E-09	1.13E-10	1.20E-10	2.33E-10	1.11E-10	1.07E-10	2.18E-10	5.87E-11	4.86E-11	1.07E-10
2813	648680.6	4199461	7.72E-10	8.23E-10	1.59E-09	1.16E-10	1.23E-10	2.39E-10	1.13E-10	1.10E-10	2.23E-10	6.03E-11	4.99E-11	1.10E-10
2814	648659.7	4199452	7.91E-10	8.43E-10	1.63E-09	1.19E-10	1.26E-10	2.45E-10	1.16E-10	1.13E-10	2.29E-10	6.18E-11	5.11E-11	1.13E-10
2815	648638.8	4199442	8.09E-10	8.63E-10	1.67E-09	1.22E-10	1.29E-10	2.51E-10	1.19E-10	1.15E-10	2.34E-10	6.32E-11	5.23E-11	1.16E-10
2816	648617.9	4199433	8.27E-10	8.82E-10	1.71E-09	1.24E-10	1.32E-10	2.57E-10	1.22E-10	1.18E-10	2.40E-10	6.46E-11	5.35E-11	1.18E-10
2817	648597.1	4199424	8.44E-10	9.00E-10	1.74E-09	1.27E-10	1.35E-10	2.62E-10	1.24E-10	1.20E-10	2.44E-10	6.60E-11	5.46E-11	1.21E-10
2818	648576.2	4199415	8.61E-10	9.18E-10	1.78E-09	1.29E-10	1.38E-10	2.67E-10	1.27E-10	1.23E-10	2.49E-10	6.72E-11	5.56E-11	1.23E-10
2819	648555.3	4199406	8.76E-10	9.34E-10	1.81E-09	1.32E-10	1.40E-10	2.72E-10	1.29E-10	1.25E-10	2.54E-10	6.84E-11	5.66E-11	1.25E-10
2820	648534.4	4199397	8.90E-10	9.49E-10	1.84E-09	1.34E-10	1.42E-10	2.76E-10	1.31E-10	1.27E-10	2.58E-10	6.96E-11	5.75E-11	1.27E-10
2821	648513.5	4199388	9.04E-10	9.64E-10	1.87E-09	1.36E-10	1.45E-10	2.80E-10	1.33E-10	1.29E-10	2.62E-10	7.06E-11	5.84E-11	1.29E-10
2822	648492.7	4199379	9.16E-10	9.77E-10	1.89E-09	1.38E-10	1.47E-10	2.84E-10	1.35E-10	1.31E-10	2.65E-10	7.16E-11	5.92E-11	1.31E-10
2823	648471.8	4199369	9.28E-10	9.89E-10	1.92E-09	1.40E-10	1.48E-10	2.88E-10	1.36E-10	1.32E-10	2.69E-10	7.25E-11	6.00E-11	1.32E-10
2824	648450.9	4199360	9.39E-10	1.00E-09	1.94E-09	1.41E-10	1.50E-10	2.91E-10	1.38E-10	1.34E-10	2.72E-10	7.33E-11	6.07E-11	1.34E-10
2825	648430	4199351	9.48E-10	1.01E-09	1.96E-09	1.43E-10	1.52E-10	2.94E-10	1.39E-10	1.35E-10	2.74E-10	7.40E-11	6.13E-11	1.35E-10
2826	648409.1	4199342	9.56E-10	1.02E-09	1.98E-09	1.44E-10	1.53E-10	2.97E-10	1.41E-10	1.36E-10	2.77E-10	7.47E-11	6.18E-11	1.36E-10
2827	648388.2	4199333	9.63E-10	1.03E-09	1.99E-09	1.45E-10	1.54E-10	2.99E-10	1.42E-10	1.37E-10	2.79E-10	7.52E-11	6.23E-11	1.37E-10
2828	648367.4	4199324	9.69E-10	1.03E-09	2.00E-09	1.46E-10	1.55E-10	3.01E-10	1.42E-10	1.38E-10	2.81E-10	7.57E-11	6.26E-11	1.38E-10
2829	648346.5	4199315	9.74E-10	1.04E-09	2.01E-09	1.46E-10	1.56E-10	3.02E-10	1.43E-10	1.39E-10	2.82E-10	7.61E-11	6.29E-11	1.39E-10
2830	648326.8	4199303	9.80E-10	1.05E-09	2.03E-09	1.47E-10	1.57E-10	3.04E-10	1.44E-10	1.40E-10	2.84E-10	7.66E-11	6.34E-11	1.40E-10
2831	648312.1	4199285	9.93E-10	1.06E-09	2.05E-09	1.49E-10	1.59E-10	3.08E-10	1.46E-10	1.42E-10	2.88E-10	7.76E-11	6.42E-11	1.42E-10
2832	648297.4	4199268	1.01E-09	1.07E-09	2.08E-09	1.51E-10	1.61E-10	3.12E-10	1.48E-10	1.43E-10	2.91E-10	7.85E-11	6.49E-11	1.43E-10
2833	648282.6	4199251	1.02E-09	1.08E-09	2.10E-09	1.53E-10	1.62E-10	3.15E-10	1.49E-10	1.45E-10	2.94E-10	7.93E-11	6.56E-11	1.45E-10
2834	648267.9	4199233	1.02E-09	1.09E-09	2.12E-09	1.54E-10	1.64E-10	3.18E-10	1.51E-10	1.46E-10	2.97E-10	8.00E-11	6.62E-11	1.46E-10
2835	648253.2	4199216	1.03E-09	1.10E-09	2.13E-09	1.55E-10	1.65E-10	3.20E-10	1.52E-10	1.47E-10	2.99E-10	8.06E-11	6.66E-11	1.47E-10
2836	648238.4	4199199	1.04E-09	1.11E-09	2.14E-09	1.56E-10	1.66E-10	3.22E-10	1.52E-10	1.48E-10	3.00E-10	8.10E-11	6.70E-11	1.48E-10
2837	648223.7	4199181	1.04E-09	1.11E-09	2.15E-09	1.56E-10	1.66E-10	3.23E-10	1.53E-10	1.48E-10	3.01E-10	8.13E-11	6.72E-11	1.49E-10
2838	648208.9	4199164	1.04E-09	1.11E-09	2.15E-09	1.57E-10	1.67E-10	3.23E-10	1.53E-10	1.49E-10	3.02E-10	8.14E-11	6.74E-11	1.49E-10
2839	648194.2	4199146	1.04E-09	1.11E-09	2.15E-09	1.57E-10	1.67E-10	3.23E-10	1.53E-10	1.49E-10	3.02E-10	8.14E-11	6.74E-11	1.49E-10
2840	648179.5	4199129	1.04E-09	1.11E-09	2.15E-09	1.56E-10	1.66E-10	3.23E-10	1.53E-10	1.48E-10	3.01E-10	8.13E-11	6.72E-11	1.49E-10
2841	648164.7	4199112	1.04E-09	1.11E-09	2.14E-09	1.56E-10	1.66E-10	3.22E-10	1.52E-10	1.48E-10	3.00E-10	8.10E-11	6.70E-11	1.48E-10
2842	648150	4199094	1.03E-09	1.10E-09	2.13E-09	1.55E-10	1.65E-10	3.20E-10	1.52E-10	1.47E-10	2.99E-10	8.06E-11	6.66E-11	1.47E-10
2843	648135.3	4199077	1.02E-09	1.09E-09	2.12E-09	1.54E-10	1.64E-10	3.18E-10	1.51E-10	1.46E-10	2.96E-10	8.00E-11	6.62E-11	1.46E-10
2844	648120.5	4199060	1.01E-09	1.08E-09	2.10E-09	1.53E-10	1.62E-10	3.15E-10	1.49E-10	1.45E-10	2.94E-10	7.93E-11	6.56E-11	1.45E-10
2845	648105.8	4199042	1.00E-09	1.07E-09	2.07E-09	1.51E-10	1.61E-10	3.12E-10	1.48E-10	1.43E-10	2.91E-10	7.84E-11	6.49E-11	1.43E-10
2846	648091.1	4199025	9.92E-10	1.06E-09	2.05E-09	1.49E-10	1.59E-10	3.08E-10	1.46E-10	1.41E-10	2.87E-10	7.75E-11	6.41E-11	1.42E-10
2847	648076.3	4199007	9.78E-10	1.04E-09	2.02E-09	1.47E-10	1.56E-10	3.03E-10	1.44E-10	1.39E-10	2.83E-10	7.64E-11	6.32E-11	1.40E-10
2848	648061.6	4198990	9.63E-10	1.03E-09	1.99E-09	1.45E-10	1.54E-10	2.99E-10	1.42E-10	1.37E-10	2.79E-10	7.52E-11	6.23E-11	1.37E-10
2849	648046.9	4198973	9.47E-10	1.01E-09	1.96E-09	1.42E-10	1.51E-10	2.94E-10	1.39E-10	1.35E-10	2.74E-10	7.40E-11	6.12E-11	1.35E-10
2850	648032.1	4198955	9.30E-10	9.92E-10	1.92E-09	1.40E-10	1.49E-10	2.89E-10	1.37E-10	1.33E-10	2.69E-10	7.27E-11	6.01E-11	1.33E-10
2851	648017.4	4198938	9.13E-10	9.73E-10	1.89E-09	1.37E-10	1.46E-10	2.83E-10	1.34E-10	1.30E-10	2.64E-10	7.13E-11	5.90E-11	1.30E-10
2852	648002.6	4198920	8.94E-10	9.53E-10	1.85E-09	1.34E-10	1.43E-10	2.77E-10	1.31E-10	1.27E-10	2.59E-10	6.99E-11	5.78E-11	1.28E-10
2853	647987.9	4198903	8.75E-10	9.33E-10	1.81E-09	1.32E-10	1.40E-10	2.72E-10	1.29E-10	1.25E-10	2.53E-10	6.84E-11	5.66E-11	1.25E-10
2854	647973.2	4198886	8.57E-10	9.13E-10	1.77E-09	1.29E-10	1.37E-10	2.66E-10	1.26E-10	1.22E-10	2.48E-10	6.69E-11	5.54E-11	1.22E-10
2855	648831.9	4199739	4.62E-10	4.92E-10	9.54E-10	6.94E-11	7.38E-11	1.43E-10	6.79E-11	6.58E-11	1.34E-10	3.61E-11	2.98E-11	6.59E-11
2856	648811	4199730	4.77E-10	5.09E-10	9.86E-10	7.18E-11	7.63E-11	1.48E-10	7.02E-11	6.80E-11	1.38E-10	3.73E-11	3.08E-11	6.81E-11
2857	648790.1	4199721	4.93E-10	5.25E-10	1.02E-09	7.41E-11	7.88E-11	1.53E-10	7.25E-11	7.02E-11	1.43E-10	3.85E-11	3.18E-11	7.03E-11
2858	648769.2	4199712	5.08E-10	5.42E-10	1.05E-09	7.64E-11	8.13E-11	1.58E-10	7.47E-11	7.24E-11	1.47E-10	3.97E-11	3.29E-11	7.26E-11
2859	648748.3	4199703	5.24E-10	5.59E-10	1.08E-09	7.88E-11	8.38E-11	1.63E-10	7.71E-11	7.47E-11	1.52E-10	4.09E-11	3.39E-11	7.48E-11
2860	648727.4	4199694	5.40E-10	5.75E-10	1.11E-09	8.11E-11	8.63E-11	1.67E-10	7.93E-11	7.69E-11	1.56E-10	4.22E-11	3.49E-11	7.70E-11
2861	648706.5	4199685	5.55E-10	5.92E-10	1.15E-09	8.35E-11	8.88E-11	1.72E-10	8.16E-11	7.91E-11	1.61E-10	4.34E-11	3.59E-11	7.92E-11
2862	648685.6	4199676	5.70E-10	6.08E-10	1.18E-09	8.58E-11	9.12E-11	1.77E-10	8.39E-11	8.13E-11	1.65E-10	4.46E-11	3.69E-11	8.14E-11
2863	648664.7	4199666	5.86E-10	6.24E-10	1.21E-09	8.80E-11	9.36E-11	1.82E-10	8.61E-11	8.34E-11	1.70E-10	4.57E-11	3.78E-11	8.36E-11
2864	648643.8	4199657	6.00E-10	6.40E-10	1.24E-09	9.03E-11	9.60E-11	1.86E-10	8.83E-11	8.56E-11	1.74E-10	4.69E-11	3.88E-11	8.57E-11
2865	648622.9	4199648	6.15E-10	6.56E-10	1.27E-09	9.25E-11	9.83E-11	1.91E-10	9.04E-11	8.76E-11	1.78E-10	4.80E-11	3.97E-11	8.78E-11
2866	648602	4199639	6.29E-10	6.71E-10	1.30E-09	9.46E-11	1.01E-10	1.95E-10	9.25E-11	8.97E-11	1.82E-10	4.92E-11	4.07E-11	8.98E-11
2867	648581.1	4199630	6.43E-10	6.85E-10	1.33E-09	9.67E-11	1.03E-10	1.99E-10	9.45E-11	9.16E-11	1.86E-10	5.02E-11	4.16E-11	9.18E-11
2868	648560.3	4199621	6.57E-10	7.00E-10	1.36E-09	9.87E-11	1.05E-10	2.04E-10	9.65E-11	9.36E-11	1.90E-10	5.13E-11	4.24E-11	9.37E-11
2869	648539.4	4199612	6.69E-10	7.14E-10	1.38E-09	1.01E-10	1.07E-10	2.08E-10	9.84E-11	9.54E-11	1.94E-10	5.23E-11	4.33E-11	9.56E-11
2870	648518.5	4199602	6.82E-10	7.27E-10	1.41E-09	1.03E-10	1.09E-10	2.12E-10	1.00E-10	9.72E-11	1.97E-10	5.33E-11	4.41E-11	9.74E-11
2871	648497.6	4199593	6.94E-10	7.40E-10	1.43E-09	1.04E-10	1.11E-10	2.15E-10	1.02E-10	9.89E-11	2.01E-10	5.42E-11	4.49E-11	9.91E-11
2872	648476.7	4199584	7.06E-10	7.52E-10	1.46E-09	1.06E-10	1.13E-10	2.19E-10	1.04E-10	1.01E-10	2.04E-10	5.51E-11	4.56E-11	1.01E-10
2873	648455.8	4199575	7.16E-10	7.64E-10	1.48E-09	1.08E-10	1.15E-10	2.22E-10	1.05E-10	1.02E-10	2.07E-10	5.60E-11	4.63E-11	1.02E-10
2874	648434.9	4199566	7.27E-10	7.75E-10	1.50E-09	1.09E-10	1.16E-10	2.26E-10	1.07E-10	1.04E-10	2.10E-10	5.68E-11	4.70E-11	1.04E-10
2875	648414	4199557	7.37E-10	7.86E-10	1.52E-09	1.11E-10	1.18E-10	2.29E-10	1.08E-10	1.05E-10	2.13E-10	5.76E-11	4.76E-11	1.05E-10
2876	648393.1	4199548	7.46E-10	7.95E-10	1.54E-09	1.12E-10	1.19E-10	2.32E-10	1.10E-10	1.06E-10	2.16E-10	5.83E-11	4.82E-11	1.07E-10
2877	648372.2	4199539	7.55E-10	8.05E-10	1.56E-09	1.13E-10	1.21E-10	2.34E-10	1.11E-10	1.08E-10	2.19E-10	5.90E-11	4.88E-11	1.08E-10
2878	648351.3	4199529	7.63E-10	8.13E-10	1.58E-09	1.15E-10	1.22E-10	2.37E-10	1.12E-10	1.09E-10	2.21E-10	5.96E-11	4.93E-11	1.09E-10
2879	648330.4	4199520	7.71E-10	8.21E-10	1.59E-09	1.16E-10	1.23E-10	2.39E-10	1.13E-10	1.10E-10	2.23E-10	6.02E-11	4.98E-11	1.10E-10
2880	648309.5	4199511	7.77E-10	8.29E-10	1.61E-09	1.17E-10	1.24E-10	2.41E-10	1.14E-10	1.11E-10	2.25E-10	6.07E-11	5.02E-11	1.11E-10
2881	648288.6	4199502	7.83E-10	8.35E-10	1.62E-09	1.18E-10	1.25E-10	2.43E-10	1.15E-10	1.12E-10	2.27E-10	6.12E-11	5.06E-11	1.12E-10
2882	648267.8	4199493	7.89E-10	8.41E-10	1.63E-09	1.19E-10	1.26E-10	2.45E-10	1.16E-10	1.12E-10	2.28E-10	6.16E-11	5.10E-11	1.13E-10
2883	648246.9	4199484	7.93E-10	8.46E-10	1.64E-09	1.19E-10	1.27E-10	2.46E-10	1.17E-10	1.13E-10	2.30E-10	6.20E-11	5.13E-11	1.13E-10
2884	648226	4199475	7.97E-10	8.50E-10	1.65E-09	1.20E-10	1.27E-10	2.47E-10	1.17E-10	1.14E-10	2.31E-10	6.23E-11	5.15E-11	1.14E-10

2885	648206.6	4199462	8.03E-10	8.56E-10	1.66E-09	1.21E-10	1.28E-10	2.49E-10	1.18E-10	1.14E-10	2.32E-10	6.27E-11	5.19E-11	1.15E-10
2886	648191.9	4199445	8.13E-10	8.67E-10	1.68E-09	1.22E-10	1.30E-10	2.52E-10	1.20E-10	1.16E-10	2.35E-10	6.35E-11	5.25E-11	1.16E-10
2887	648177.1	4199428	8.22E-10	8.76E-10	1.70E-09	1.24E-10	1.31E-10	2.55E-10	1.21E-10	1.17E-10	2.38E-10	6.42E-11	5.31E-11	1.17E-10
2888	648162.4	4199410	8.30E-10	8.85E-10	1.72E-09	1.25E-10	1.33E-10	2.58E-10	1.22E-10	1.18E-10	2.40E-10	6.49E-11	5.37E-11	1.19E-10
2889	648147.7	4199393	8.38E-10	8.93E-10	1.73E-09	1.26E-10	1.34E-10	2.60E-10	1.23E-10	1.19E-10	2.43E-10	6.54E-11	5.41E-11	1.20E-10
2890	648132.9	4199375	8.44E-10	9.00E-10	1.74E-09	1.27E-10	1.35E-10	2.62E-10	1.24E-10	1.20E-10	2.44E-10	6.59E-11	5.45E-11	1.20E-10
2891	648118.2	4199358	8.49E-10	9.05E-10	1.75E-09	1.28E-10	1.36E-10	2.63E-10	1.25E-10	1.21E-10	2.46E-10	6.63E-11	5.49E-11	1.21E-10
2892	648103.4	4199341	8.53E-10	9.10E-10	1.76E-09	1.28E-10	1.36E-10	2.65E-10	1.25E-10	1.22E-10	2.47E-10	6.67E-11	5.51E-11	1.22E-10
2893	648088.7	4199323	8.56E-10	9.13E-10	1.77E-09	1.29E-10	1.37E-10	2.66E-10	1.26E-10	1.22E-10	2.48E-10	6.69E-11	5.53E-11	1.22E-10
2894	648073.9	4199306	8.58E-10	9.15E-10	1.77E-09	1.29E-10	1.37E-10	2.66E-10	1.26E-10	1.22E-10	2.48E-10	6.70E-11	5.54E-11	1.22E-10
2895	648059.2	4199288	8.58E-10	9.15E-10	1.77E-09	1.29E-10	1.37E-10	2.66E-10	1.26E-10	1.22E-10	2.49E-10	6.70E-11	5.55E-11	1.23E-10
2896	648044.5	4199271	8.58E-10	9.14E-10	1.77E-09	1.29E-10	1.37E-10	2.66E-10	1.26E-10	1.22E-10	2.48E-10	6.70E-11	5.54E-11	1.22E-10
2897	648029.7	4199254	8.55E-10	9.12E-10	1.77E-09	1.29E-10	1.37E-10	2.65E-10	1.26E-10	1.22E-10	2.48E-10	6.68E-11	5.53E-11	1.22E-10
2898	648015	4199236	8.52E-10	9.08E-10	1.76E-09	1.28E-10	1.36E-10	2.64E-10	1.25E-10	1.21E-10	2.47E-10	6.65E-11	5.51E-11	1.22E-10
2899	648000.2	4199219	8.47E-10	9.03E-10	1.75E-09	1.27E-10	1.35E-10	2.63E-10	1.25E-10	1.21E-10	2.45E-10	6.62E-11	5.47E-11	1.21E-10
2900	647985.5	4199201	8.41E-10	8.97E-10	1.74E-09	1.26E-10	1.34E-10	2.61E-10	1.24E-10	1.20E-10	2.44E-10	6.57E-11	5.44E-11	1.20E-10
2901	647970.7	4199184	8.34E-10	8.89E-10	1.72E-09	1.25E-10	1.33E-10	2.59E-10	1.23E-10	1.19E-10	2.41E-10	6.52E-11	5.39E-11	1.19E-10
2902	647956	4199167	8.26E-10	8.80E-10	1.71E-09	1.24E-10	1.32E-10	2.56E-10	1.21E-10	1.18E-10	2.39E-10	6.45E-11	5.34E-11	1.18E-10
2903	647941.2	4199149	8.17E-10	8.70E-10	1.69E-09	1.23E-10	1.31E-10	2.53E-10	1.20E-10	1.16E-10	2.36E-10	6.38E-11	5.28E-11	1.17E-10
2904	647926.5	4199132	8.06E-10	8.60E-10	1.67E-09	1.21E-10	1.29E-10	2.50E-10	1.19E-10	1.15E-10	2.34E-10	6.30E-11	5.21E-11	1.15E-10
2905	647911.8	4199115	7.95E-10	8.48E-10	1.64E-09	1.20E-10	1.27E-10	2.47E-10	1.17E-10	1.13E-10	2.30E-10	6.21E-11	5.14E-11	1.14E-10
2906	647897	4199097	7.83E-10	8.35E-10	1.62E-09	1.18E-10	1.25E-10	2.43E-10	1.15E-10	1.12E-10	2.27E-10	6.12E-11	5.06E-11	1.12E-10
2907	647882.3	4199080	7.71E-10	8.22E-10	1.59E-09	1.16E-10	1.23E-10	2.39E-10	1.13E-10	1.10E-10	2.23E-10	6.02E-11	4.98E-11	1.10E-10
2908	647867.5	4199062	7.57E-10	8.08E-10	1.56E-09	1.14E-10	1.21E-10	2.35E-10	1.11E-10	1.08E-10	2.19E-10	5.92E-11	4.90E-11	1.08E-10
2909	647852.8	4199045	7.44E-10	7.93E-10	1.54E-09	1.12E-10	1.19E-10	2.31E-10	1.09E-10	1.06E-10	2.15E-10	5.81E-11	4.81E-11	1.06E-10
2910	647838	4199028	7.30E-10	7.78E-10	1.51E-09	1.10E-10	1.17E-10	2.26E-10	1.07E-10	1.04E-10	2.11E-10	5.70E-11	4.72E-11	1.04E-10
2911	647823.3	4199010	7.16E-10	7.63E-10	1.48E-09	1.08E-10	1.14E-10	2.22E-10	1.05E-10	1.02E-10	2.07E-10	5.59E-11	4.63E-11	1.02E-10
2912	647808.6	4198993	7.02E-10	7.48E-10	1.45E-09	1.05E-10	1.12E-10	2.18E-10	1.03E-10	1.00E-10	2.03E-10	5.48E-11	4.53E-11	1.00E-10
2913	647793.8	4198975	6.87E-10	7.33E-10	1.42E-09	1.03E-10	1.10E-10	2.13E-10	1.01E-10	9.79E-11	1.99E-10	5.37E-11	4.44E-11	9.81E-11
2914	649078.4	4198562	5.08E-09	5.42E-09	1.05E-08	7.65E-10	8.13E-10	1.58E-09	7.48E-10	7.25E-10	1.47E-09	3.97E-10	3.29E-10	7.26E-10
2915	649075.3	4198661	3.50E-09	3.73E-09	7.23E-09	5.26E-10	5.59E-10	1.09E-09	5.14E-10	4.99E-10	1.01E-09	2.73E-10	2.26E-10	4.99E-10
2916	649076.5	4198760	2.50E-09	2.66E-09	5.16E-09	3.75E-10	3.99E-10	7.75E-10	3.67E-10	3.56E-10	7.23E-10	1.95E-10	1.61E-10	3.56E-10
2917	649049.7	4198759	2.58E-09	2.75E-09	5.33E-09	3.88E-10	4.13E-10	8.01E-10	3.80E-10	3.68E-10	7.47E-10	2.02E-10	1.67E-10	3.68E-10
2918	649070.9	4198859	1.86E-09	1.98E-09	3.84E-09	2.79E-10	2.97E-10	5.77E-10	2.73E-10	2.65E-10	5.38E-10	1.45E-10	1.20E-10	2.65E-10
2919	649044.4	4198858	1.93E-09	2.06E-09	3.99E-09	2.90E-10	3.08E-10	5.99E-10	2.84E-10	2.75E-10	5.59E-10	1.51E-10	1.25E-10	2.75E-10
2920	649068.6	4198958	1.42E-09	1.51E-09	2.93E-09	2.13E-10	2.27E-10	4.40E-10	2.09E-10	2.02E-10	4.11E-10	1.11E-10	9.17E-11	2.03E-10
2921	649041.2	4198957	1.48E-09	1.58E-09	3.06E-09	2.22E-10	2.37E-10	4.59E-10	2.18E-10	2.11E-10	4.28E-10	1.16E-10	9.56E-11	2.11E-10
2922	649013.8	4198955	1.54E-09	1.64E-09	3.18E-09	2.31E-10	2.46E-10	4.77E-10	2.26E-10	2.19E-10	4.45E-10	1.20E-10	9.94E-11	2.20E-10
2923	649064.1	4199157	8.96E-10	9.55E-10	1.85E-09	1.35E-10	1.43E-10	2.78E-10	1.32E-10	1.28E-10	2.59E-10	7.00E-11	5.79E-11	1.28E-10
2924	649037.2	4199155	9.35E-10	9.96E-10	1.93E-09	1.41E-10	1.49E-10	2.90E-10	1.37E-10	1.33E-10	2.71E-10	7.30E-11	6.04E-11	1.33E-10
2925	649010.3	4199154	9.74E-10	1.04E-09	2.01E-09	1.46E-10	1.56E-10	3.02E-10	1.43E-10	1.39E-10	2.82E-10	7.61E-11	6.29E-11	1.39E-10
2926	648983.3	4199152	1.01E-09	1.08E-09	2.09E-09	1.52E-10	1.62E-10	3.14E-10	1.49E-10	1.44E-10	2.93E-10	7.91E-11	6.54E-11	1.44E-10
2927	649063.2	4199355	6.14E-10	6.54E-10	1.27E-09	9.23E-11	9.81E-11	1.90E-10	9.02E-11	8.75E-11	1.78E-10	4.79E-11	3.97E-11	8.76E-11
2928	649035.9	4199354	6.40E-10	6.82E-10	1.32E-09	9.62E-11	1.02E-10	1.98E-10	9.41E-11	9.12E-11	1.85E-10	5.00E-11	4.13E-11	9.13E-11
2929	649008.6	4199352	6.66E-10	7.10E-10	1.38E-09	1.00E-10	1.06E-10	2.07E-10	9.79E-11	9.49E-11	1.93E-10	5.20E-11	4.30E-11	9.51E-11
2930	648981.3	4199351	6.93E-10	7.39E-10	1.43E-09	1.04E-10	1.11E-10	2.15E-10	1.02E-10	9.88E-11	2.01E-10	5.41E-11	4.48E-11	9.89E-11
2931	648954	4199349	7.20E-10	7.68E-10	1.49E-09	1.08E-10	1.15E-10	2.23E-10	1.06E-10	1.03E-10	2.08E-10	5.62E-11	4.65E-11	1.03E-10
2932	649055.5	4199554	4.54E-10	4.84E-10	9.37E-10	6.82E-11	7.25E-11	1.41E-10	6.67E-11	6.46E-11	1.31E-10	3.54E-11	2.93E-11	6.47E-11
2933	649028	4199552	4.72E-10	5.03E-10	9.75E-10	7.09E-11	7.54E-11	1.46E-10	6.94E-11	6.72E-11	1.37E-10	3.69E-11	3.05E-11	6.73E-11
2934	649000.5	4199551	4.90E-10	5.23E-10	1.01E-09	7.38E-11	7.84E-11	1.52E-10	7.21E-11	6.99E-11	1.42E-10	3.83E-11	3.17E-11	7.00E-11
2935	648972.9	4199549	5.10E-10	5.43E-10	1.05E-09	7.66E-11	8.15E-11	1.58E-10	7.49E-11	7.26E-11	1.48E-10	3.98E-11	3.29E-11	7.27E-11
2936	648945.4	4199547	5.29E-10	5.64E-10	1.09E-09	7.95E-11	8.45E-11	1.64E-10	7.77E-11	7.54E-11	1.53E-10	4.13E-11	3.42E-11	7.55E-11
2937	648917.8	4199546	5.48E-10	5.84E-10	1.13E-09	8.24E-11	8.76E-11	1.70E-10	8.06E-11	7.81E-11	1.59E-10	4.28E-11	3.54E-11	7.82E-11
2938	649050.9	4199752	3.51E-10	3.74E-10	7.25E-10	5.27E-11	5.61E-11	1.09E-10	5.16E-11	5.00E-11	1.02E-10	2.74E-11	2.27E-11	5.01E-11
2939	649023.7	4199751	3.64E-10	3.88E-10	7.51E-10	5.47E-11	5.81E-11	1.13E-10	5.35E-11	5.18E-11	1.05E-10	2.84E-11	2.35E-11	5.19E-11
2940	648996.4	4199749	3.77E-10	4.02E-10	7.78E-10	5.67E-11	6.02E-11	1.17E-10	5.54E-11	5.37E-11	1.09E-10	2.94E-11	2.43E-11	5.38E-11
2941	648969.2	4199748	3.91E-10	4.16E-10	8.07E-10	5.87E-11	6.24E-11	1.21E-10	5.74E-11	5.57E-11	1.13E-10	3.05E-11	2.52E-11	5.58E-11
2942	648941.9	4199746	4.05E-10	4.31E-10	8.36E-10	6.08E-11	6.47E-11	1.26E-10	5.95E-11	5.77E-11	1.17E-10	3.16E-11	2.61E-11	5.77E-11
2943	648914.7	4199744	4.19E-10	4.46E-10	8.65E-10	6.29E-11	6.69E-11	1.30E-10	6.15E-11	5.97E-11	1.21E-10	3.27E-11	2.70E-11	5.97E-11
2944	648887.5	4199743	4.33E-10	4.61E-10	8.94E-10	6.51E-11	6.92E-11	1.34E-10	6.36E-11	6.17E-11	1.25E-10	3.38E-11	2.80E-11	6.18E-11
2945	648860.2	4199741	4.47E-10	4.76E-10	9.23E-10	6.72E-11	7.15E-11	1.39E-10	6.57E-11	6.37E-11	1.29E-10	3.49E-11	2.89E-11	6.38E-11

EXHIBIT 1

			T2		T2L3		T4i		T4f	
			582	649681.31						
			7.98E-03	8.51E-03	1.20E-03	1.28E-03	1.17E-03	1.14E-03	6.23E-04	5.16E-04
			Yr 1	Yr 2	Yr 1	Yr 2	Yr 1	Yr 2	Yr 1	Yr 2
1	649114.1	4198290	2.26E-03	2.41E-03	3.40E-04	3.61E-04	3.32E-04	3.22E-04	1.76E-04	1.46E-04
2	649113.4	4198315	1.67E-03	1.78E-03	2.51E-04	2.67E-04	2.45E-04	2.38E-04	1.30E-04	1.08E-04
3	649112.7	4198340	1.32E-03	1.41E-03	1.99E-04	2.11E-04	1.94E-04	1.88E-04	1.03E-04	8.54E-05
4	649112	4198365	1.09E-03	1.16E-03	1.64E-04	1.74E-04	1.60E-04	1.55E-04	8.51E-05	7.04E-05
5	649110.6	4198415	7.89E-04	8.42E-04	1.19E-04	1.26E-04	1.16E-04	1.13E-04	6.17E-05	5.10E-05
6	649109.2	4198465	6.03E-04	6.43E-04	9.06E-05	9.64E-05	8.86E-05	8.59E-05	4.71E-05	3.89E-05
7	649107.8	4198515	4.75E-04	5.07E-04	7.14E-05	7.60E-05	6.99E-05	6.77E-05	3.71E-05	3.07E-05
8	649106.5	4198565	3.83E-04	4.08E-04	5.76E-05	6.12E-05	5.63E-05	5.46E-05	2.99E-05	2.47E-05
9	649103.7	4198665	2.60E-04	2.78E-04	3.92E-05	4.16E-05	3.83E-05	3.71E-05	2.03E-05	1.68E-05
10	649100.9	4198765	1.85E-04	1.97E-04	2.78E-05	2.96E-05	2.72E-05	2.64E-05	1.45E-05	1.20E-05
11	649098.1	4198864	1.37E-04	1.46E-04	2.05E-05	2.18E-05	2.01E-05	1.95E-05	1.07E-05	8.82E-06
12	649095.3	4198964	1.04E-04	1.11E-04	1.56E-05	1.66E-05	1.53E-05	1.48E-05	8.13E-06	6.72E-06
13	649089.8	4199164	6.57E-05	7.00E-05	9.88E-06	1.05E-05	9.66E-06	9.36E-06	5.13E-06	4.25E-06
14	649084.2	4199364	4.54E-05	4.84E-05	6.83E-06	7.26E-06	6.68E-06	6.47E-06	3.55E-06	2.93E-06
15	649078.6	4199564	3.35E-05	3.58E-05	5.04E-06	5.36E-06	4.93E-06	4.78E-06	2.62E-06	2.17E-06
16	649073.1	4199764	2.60E-05	2.77E-05	3.91E-06	4.16E-06	3.83E-06	3.71E-06	2.03E-06	1.68E-06
17	649150.6	4198290	2.41E-03	2.57E-03	3.62E-04	3.85E-04	3.54E-04	3.43E-04	1.88E-04	1.56E-04
18	649193.6	4198290	2.51E-03	2.67E-03	3.77E-04	4.01E-04	3.69E-04	3.57E-04	1.96E-04	1.62E-04
19	649150.6	4198315	1.73E-03	1.84E-03	2.60E-04	2.77E-04	2.54E-04	2.47E-04	1.35E-04	1.12E-04
20	649193.5	4198315	1.78E-03	1.90E-03	2.68E-04	2.85E-04	2.62E-04	2.54E-04	1.39E-04	1.15E-04
21	649150.5	4198340	1.35E-03	1.44E-03	2.03E-04	2.16E-04	1.99E-04	1.93E-04	1.06E-04	8.73E-05
22	649193.5	4198340	1.37E-03	1.47E-03	2.07E-04	2.20E-04	2.02E-04	1.96E-04	1.07E-04	8.88E-05
23	649150.4	4198365	1.10E-03	1.18E-03	1.66E-04	1.76E-04	1.62E-04	1.57E-04	8.61E-05	7.12E-05
24	649193.4	4198365	1.11E-03	1.18E-03	1.67E-04	1.77E-04	1.63E-04	1.58E-04	8.67E-05	7.17E-05
25	649150.3	4198415	7.87E-04	8.39E-04	1.18E-04	1.26E-04	1.16E-04	1.12E-04	6.15E-05	5.09E-05
26	649193.3	4198415	7.80E-04	8.32E-04	1.17E-04	1.25E-04	1.15E-04	1.11E-04	6.09E-05	5.04E-05
27	649150.2	4198465	5.94E-04	6.33E-04	8.93E-05	9.50E-05	8.74E-05	8.47E-05	4.64E-05	3.84E-05
28	649193.2	4198465	5.82E-04	6.20E-04	8.75E-05	9.30E-05	8.55E-05	8.29E-05	4.54E-05	3.76E-05
29	649150.1	4198515	4.64E-04	4.94E-04	6.97E-05	7.41E-05	6.82E-05	6.61E-05	3.62E-05	3.00E-05
30	649193.1	4198515	4.49E-04	4.79E-04	6.75E-05	7.18E-05	6.60E-05	6.40E-05	3.51E-05	2.90E-05
31	649149.9	4198565	3.70E-04	3.94E-04	5.56E-05	5.92E-05	5.44E-05	5.27E-05	2.89E-05	2.39E-05
32	649192.9	4198565	3.55E-04	3.79E-04	5.34E-05	5.68E-05	5.22E-05	5.06E-05	2.78E-05	2.30E-05
33	649128.2	4198665	2.53E-04	2.70E-04	3.81E-05	4.05E-05	3.73E-05	3.61E-05	1.98E-05	1.64E-05
34	649171.2	4198665	2.41E-04	2.57E-04	3.62E-05	3.85E-05	3.54E-05	3.43E-05	1.88E-05	1.56E-05
35	649214.2	4198665	2.27E-04	2.42E-04	3.41E-05	3.63E-05	3.34E-05	3.23E-05	1.77E-05	1.47E-05
36	649128	4198765	1.78E-04	1.90E-04	2.68E-05	2.85E-05	2.62E-05	2.54E-05	1.39E-05	1.15E-05
37	649170.9	4198765	1.68E-04	1.79E-04	2.52E-05	2.68E-05	2.47E-05	2.39E-05	1.31E-05	1.08E-05
38	649213.9	4198765	1.57E-04	1.67E-04	2.36E-05	2.51E-05	2.30E-05	2.23E-05	1.22E-05	1.01E-05
39	649127.7	4198865	1.31E-04	1.39E-04	1.96E-05	2.09E-05	1.92E-05	1.86E-05	1.02E-05	8.44E-06
40	649170.7	4198865	1.22E-04	1.30E-04	1.84E-05	1.95E-05	1.79E-05	1.74E-05	9.53E-06	7.89E-06
41	649213.7	4198865	1.14E-04	1.21E-04	1.71E-05	1.82E-05	1.67E-05	1.62E-05	8.87E-06	7.34E-06
42	649127.5	4198965	9.89E-05	1.05E-04	1.49E-05	1.58E-05	1.45E-05	1.41E-05	7.72E-06	6.39E-06
43	649170.5	4198965	9.22E-05	9.83E-05	1.39E-05	1.47E-05	1.36E-05	1.31E-05	7.21E-06	5.96E-06
44	649213.5	4198965	8.58E-05	9.15E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.70E-06	5.55E-06
45	649115.6	4199165	6.31E-05	6.73E-05	9.49E-06	1.01E-05	9.28E-06	8.99E-06	4.93E-06	4.08E-06
46	649148.5	4199165	5.99E-05	6.39E-05	9.01E-06	9.58E-06	8.81E-06	8.54E-06	4.68E-06	3.87E-06
47	649191.5	4199165	5.60E-05	5.97E-05	8.42E-06	8.95E-06	8.23E-06	7.98E-06	4.37E-06	3.62E-06
48	649112.5	4199365	4.35E-05	4.64E-05	6.55E-06	6.96E-06	6.40E-06	6.20E-06	3.40E-06	2.81E-06
49	649148	4199365	4.13E-05	4.41E-05	6.21E-06	6.61E-06	6.08E-06	5.89E-06	3.23E-06	2.67E-06
50	649191	4199365	3.88E-05	4.14E-05	5.84E-06	6.21E-06	5.71E-06	5.54E-06	3.03E-06	2.51E-06
51	649109.5	4199565	3.21E-05	3.43E-05	4.83E-06	5.14E-06	4.73E-06	4.58E-06	2.51E-06	2.08E-06
52	649147.5	4199565	3.06E-05	3.26E-05	4.60E-06	4.89E-06	4.49E-06	4.35E-06	2.39E-06	1.97E-06

53	649190.5	4199565	2.89E-05	3.08E-05	4.35E-06	4.62E-06	4.25E-06	4.12E-06	2.26E-06	1.87E-06
54	649106.5	4199765	2.50E-05	2.66E-05	3.76E-06	3.99E-06	3.67E-06	3.56E-06	1.95E-06	1.61E-06
55	649147	4199765	2.38E-05	2.54E-05	3.58E-06	3.80E-06	3.50E-06	3.39E-06	1.86E-06	1.54E-06
56	649190	4199765	2.26E-05	2.41E-05	3.40E-06	3.62E-06	3.33E-06	3.23E-06	1.77E-06	1.46E-06
57	649236.8	4198291	2.54E-03	2.71E-03	3.82E-04	4.06E-04	3.73E-04	3.62E-04	1.98E-04	1.64E-04
58	649281.5	4198292	2.52E-03	2.69E-03	3.80E-04	4.03E-04	3.71E-04	3.60E-04	1.97E-04	1.63E-04
59	649236.1	4198316	1.80E-03	1.92E-03	2.71E-04	2.88E-04	2.65E-04	2.56E-04	1.41E-04	1.16E-04
60	649280.8	4198317	1.79E-03	1.91E-03	2.69E-04	2.86E-04	2.63E-04	2.55E-04	1.40E-04	1.15E-04
61	649235.3	4198341	1.38E-03	1.47E-03	2.07E-04	2.20E-04	2.03E-04	1.97E-04	1.08E-04	8.91E-05
62	649280	4198342	1.36E-03	1.45E-03	2.05E-04	2.18E-04	2.00E-04	1.94E-04	1.07E-04	8.81E-05
63	649234.6	4198366	1.10E-03	1.18E-03	1.66E-04	1.77E-04	1.62E-04	1.57E-04	8.63E-05	7.14E-05
64	649279.3	4198367	1.09E-03	1.16E-03	1.63E-04	1.74E-04	1.60E-04	1.55E-04	8.48E-05	7.02E-05
65	649233.1	4198416	7.66E-04	8.17E-04	1.15E-04	1.23E-04	1.13E-04	1.09E-04	5.99E-05	4.95E-05
66	649277.8	4198417	7.43E-04	7.92E-04	1.12E-04	1.19E-04	1.09E-04	1.06E-04	5.81E-05	4.80E-05
67	649231.6	4198466	5.66E-04	6.03E-04	8.50E-05	9.04E-05	8.31E-05	8.06E-05	4.42E-05	3.65E-05
68	649276.4	4198467	5.42E-04	5.77E-04	8.14E-05	8.66E-05	7.96E-05	7.72E-05	4.23E-05	3.50E-05
69	649230.2	4198516	4.33E-04	4.62E-04	6.52E-05	6.93E-05	6.37E-05	6.18E-05	3.38E-05	2.80E-05
70	649274.9	4198517	4.10E-04	4.37E-04	6.17E-05	6.56E-05	6.03E-05	5.85E-05	3.21E-05	2.65E-05
71	649228.7	4198566	3.41E-04	3.63E-04	5.12E-05	5.45E-05	5.01E-05	4.86E-05	2.66E-05	2.20E-05
72	649273.4	4198567	3.20E-04	3.41E-04	4.81E-05	5.11E-05	4.70E-05	4.56E-05	2.50E-05	2.07E-05
73	649248.1	4198666	2.14E-04	2.29E-04	3.23E-05	3.43E-05	3.15E-05	3.06E-05	1.68E-05	1.39E-05
74	649292.8	4198668	1.98E-04	2.11E-04	2.98E-05	3.16E-05	2.91E-05	2.82E-05	1.55E-05	1.28E-05
75	649245.2	4198766	1.48E-04	1.58E-04	2.23E-05	2.37E-05	2.18E-05	2.11E-05	1.16E-05	9.57E-06
76	649289.9	4198768	1.36E-04	1.45E-04	2.05E-05	2.18E-05	2.00E-05	1.94E-05	1.06E-05	8.80E-06
77	649242.2	4198866	1.08E-04	1.15E-04	1.62E-05	1.72E-05	1.58E-05	1.54E-05	8.42E-06	6.97E-06
78	649287	4198868	9.91E-05	1.06E-04	1.49E-05	1.58E-05	1.46E-05	1.41E-05	7.74E-06	6.41E-06
79	649239.3	4198966	8.19E-05	8.73E-05	1.23E-05	1.31E-05	1.20E-05	1.17E-05	6.40E-06	5.29E-06
80	649284	4198968	7.56E-05	8.06E-05	1.14E-05	1.21E-05	1.11E-05	1.08E-05	5.90E-06	4.88E-06
81	649233.4	4199166	5.23E-05	5.58E-05	7.87E-06	8.37E-06	7.69E-06	7.46E-06	4.09E-06	3.38E-06
82	649278.1	4199168	4.87E-05	5.20E-05	7.33E-06	7.79E-06	7.17E-06	6.94E-06	3.81E-06	3.15E-06
83	649227.5	4199366	3.69E-05	3.93E-05	5.54E-06	5.89E-06	5.42E-06	5.25E-06	2.88E-06	2.38E-06
84	649272.3	4199367	3.47E-05	3.69E-05	5.21E-06	5.54E-06	5.09E-06	4.94E-06	2.71E-06	2.24E-06
85	649221.7	4199566	2.78E-05	2.96E-05	4.18E-06	4.44E-06	4.09E-06	3.96E-06	2.17E-06	1.80E-06
86	649266.4	4199567	2.63E-05	2.81E-05	3.96E-06	4.21E-06	3.87E-06	3.75E-06	2.06E-06	1.70E-06
87	649215.8	4199766	2.20E-05	2.35E-05	3.31E-06	3.52E-06	3.24E-06	3.14E-06	1.72E-06	1.42E-06
88	649260.5	4199767	2.10E-05	2.24E-05	3.16E-06	3.36E-06	3.09E-06	3.00E-06	1.64E-06	1.36E-06
89	649304.1	4198293	2.51E-03	2.68E-03	3.78E-04	4.02E-04	3.69E-04	3.58E-04	1.96E-04	1.62E-04
90	649347.2	4198294	2.49E-03	2.66E-03	3.75E-04	3.98E-04	3.66E-04	3.55E-04	1.95E-04	1.61E-04
91	649390.3	4198295	2.46E-03	2.62E-03	3.70E-04	3.93E-04	3.61E-04	3.50E-04	1.92E-04	1.59E-04
92	649303.5	4198318	1.78E-03	1.89E-03	2.67E-04	2.84E-04	2.61E-04	2.53E-04	1.39E-04	1.15E-04
93	649346.6	4198319	1.75E-03	1.87E-03	2.63E-04	2.80E-04	2.58E-04	2.50E-04	1.37E-04	1.13E-04
94	649389.7	4198320	1.71E-03	1.83E-03	2.58E-04	2.74E-04	2.52E-04	2.44E-04	1.34E-04	1.11E-04
95	649303	4198343	1.35E-03	1.44E-03	2.03E-04	2.16E-04	1.99E-04	1.93E-04	1.06E-04	8.73E-05
96	649346.1	4198344	1.32E-03	1.41E-03	1.99E-04	2.12E-04	1.95E-04	1.89E-04	1.03E-04	8.56E-05
97	649389.2	4198345	1.29E-03	1.37E-03	1.94E-04	2.06E-04	1.89E-04	1.83E-04	1.01E-04	8.32E-05
98	649302.5	4198368	1.07E-03	1.14E-03	1.61E-04	1.72E-04	1.58E-04	1.53E-04	8.38E-05	6.93E-05
99	649345.6	4198369	1.05E-03	1.11E-03	1.57E-04	1.67E-04	1.54E-04	1.49E-04	8.16E-05	6.75E-05
100	649388.7	4198370	1.01E-03	1.07E-03	1.52E-04	1.61E-04	1.48E-04	1.44E-04	7.87E-05	6.51E-05
101	649301.4	4198418	7.29E-04	7.77E-04	1.10E-04	1.17E-04	1.07E-04	1.04E-04	5.70E-05	4.71E-05
102	649344.5	4198419	7.01E-04	7.48E-04	1.05E-04	1.12E-04	1.03E-04	9.99E-05	5.48E-05	4.53E-05
103	649387.6	4198420	6.67E-04	7.11E-04	1.00E-04	1.07E-04	9.80E-05	9.50E-05	5.21E-05	4.31E-05
104	649300.4	4198468	5.27E-04	5.62E-04	7.93E-05	8.43E-05	7.75E-05	7.52E-05	4.12E-05	3.41E-05
105	649343.5	4198469	5.00E-04	5.33E-04	7.52E-05	8.00E-05	7.36E-05	7.13E-05	3.91E-05	3.23E-05
106	649386.6	4198470	4.69E-04	5.00E-04	7.06E-05	7.50E-05	6.90E-05	6.69E-05	3.67E-05	3.03E-05
107	649299.3	4198518	3.97E-04	4.23E-04	5.97E-05	6.34E-05	5.83E-05	5.65E-05	3.10E-05	2.56E-05
108	649342.4	4198519	3.72E-04	3.96E-04	5.59E-05	5.95E-05	5.47E-05	5.30E-05	2.91E-05	2.40E-05

109	649385.5	4198520	3.45E-04	3.68E-04	5.19E-05	5.51E-05	5.07E-05	4.92E-05	2.69E-05	2.23E-05
110	649298.3	4198568	3.07E-04	3.28E-04	4.62E-05	4.91E-05	4.52E-05	4.38E-05	2.40E-05	1.99E-05
111	649341.4	4198569	2.85E-04	3.04E-04	4.29E-05	4.56E-05	4.19E-05	4.06E-05	2.23E-05	1.84E-05
112	649384.5	4198570	2.62E-04	2.80E-04	3.95E-05	4.19E-05	3.86E-05	3.74E-05	2.05E-05	1.70E-05
113	649317.7	4198668	1.89E-04	2.01E-04	2.84E-05	3.02E-05	2.77E-05	2.69E-05	1.47E-05	1.22E-05
114	649360.8	4198669	1.73E-04	1.84E-04	2.60E-05	2.76E-05	2.54E-05	2.46E-05	1.35E-05	1.12E-05
115	649315.6	4198768	1.29E-04	1.38E-04	1.95E-05	2.07E-05	1.90E-05	1.85E-05	1.01E-05	8.37E-06
116	649358.7	4198769	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.69E-05	9.28E-06	7.67E-06
117	649313.5	4198868	9.43E-05	1.01E-04	1.42E-05	1.51E-05	1.39E-05	1.34E-05	7.37E-06	6.09E-06
118	649356.6	4198869	8.69E-05	9.27E-05	1.31E-05	1.39E-05	1.28E-05	1.24E-05	6.79E-06	5.62E-06
119	649311.4	4198968	7.20E-05	7.68E-05	1.08E-05	1.15E-05	1.06E-05	1.03E-05	5.62E-06	4.65E-06
120	649354.5	4198969	6.68E-05	7.12E-05	1.00E-05	1.07E-05	9.82E-06	9.52E-06	5.22E-06	4.31E-06
121	649307.1	4199168	4.66E-05	4.97E-05	7.01E-06	7.45E-06	6.86E-06	6.64E-06	3.64E-06	3.01E-06
122	649350.2	4199169	4.38E-05	4.67E-05	6.58E-06	7.00E-06	6.44E-06	6.24E-06	3.42E-06	2.83E-06
123	649302.9	4199368	3.33E-05	3.55E-05	5.01E-06	5.33E-06	4.90E-06	4.75E-06	2.60E-06	2.15E-06
124	649346	4199369	3.16E-05	3.37E-05	4.75E-06	5.05E-06	4.65E-06	4.50E-06	2.47E-06	2.04E-06
125	649298.7	4199568	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
126	649341.8	4199569	2.43E-05	2.60E-05	3.66E-06	3.89E-06	3.58E-06	3.47E-06	1.90E-06	1.57E-06
127	649294.5	4199768	2.04E-05	2.17E-05	3.06E-06	3.25E-06	2.99E-06	2.90E-06	1.59E-06	1.32E-06
128	649337.6	4199769	1.96E-05	2.09E-05	2.95E-06	3.14E-06	2.88E-06	2.80E-06	1.53E-06	1.27E-06
129	649426	4198295	2.46E-03	2.62E-03	3.69E-04	3.93E-04	3.61E-04	3.50E-04	1.92E-04	1.59E-04
130	649426.1	4198320	1.69E-03	1.80E-03	2.54E-04	2.70E-04	2.49E-04	2.41E-04	1.32E-04	1.09E-04
131	649426.2	4198345	1.26E-03	1.34E-03	1.89E-04	2.01E-04	1.85E-04	1.79E-04	9.81E-05	8.12E-05
132	649426.3	4198370	9.74E-04	1.04E-03	1.47E-04	1.56E-04	1.43E-04	1.39E-04	7.61E-05	6.30E-05
133	649426.5	4198420	6.33E-04	6.75E-04	9.52E-05	1.01E-04	9.31E-05	9.03E-05	4.95E-05	4.09E-05
134	649409.1	4198470	4.53E-04	4.83E-04	6.81E-05	7.24E-05	6.66E-05	6.46E-05	3.54E-05	2.93E-05
135	649444.2	4198470	4.25E-04	4.53E-04	6.40E-05	6.80E-05	6.25E-05	6.06E-05	3.32E-05	2.75E-05
136	649409.3	4198520	3.30E-04	3.52E-04	4.97E-05	5.28E-05	4.86E-05	4.71E-05	2.58E-05	2.13E-05
137	649444.4	4198520	3.08E-04	3.28E-04	4.63E-05	4.92E-05	4.53E-05	4.39E-05	2.41E-05	1.99E-05
138	649409.5	4198570	2.50E-04	2.66E-04	3.75E-05	3.99E-05	3.67E-05	3.56E-05	1.95E-05	1.61E-05
139	649444.6	4198570	2.32E-04	2.47E-04	3.49E-05	3.71E-05	3.41E-05	3.31E-05	1.81E-05	1.50E-05
140	649392.4	4198670	1.62E-04	1.72E-04	2.43E-05	2.59E-05	2.38E-05	2.31E-05	1.26E-05	1.05E-05
141	649427.4	4198670	1.50E-04	1.60E-04	2.26E-05	2.40E-05	2.21E-05	2.14E-05	1.17E-05	9.72E-06
142	649392.8	4198770	1.11E-04	1.18E-04	1.67E-05	1.77E-05	1.63E-05	1.58E-05	8.66E-06	7.16E-06
143	649427.8	4198770	1.03E-04	1.10E-04	1.56E-05	1.65E-05	1.52E-05	1.47E-05	8.08E-06	6.68E-06
144	649393.2	4198870	8.12E-05	8.65E-05	1.22E-05	1.30E-05	1.19E-05	1.16E-05	6.34E-06	5.25E-06
145	649428.2	4198870	7.63E-05	8.13E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.96E-06	4.93E-06
146	649384.8	4198970	6.34E-05	6.76E-05	9.54E-06	1.01E-05	9.32E-06	9.04E-06	4.95E-06	4.10E-06
147	649411.1	4198970	6.08E-05	6.48E-05	9.14E-06	9.72E-06	8.94E-06	8.66E-06	4.75E-06	3.93E-06
148	649446.2	4198970	5.76E-05	6.14E-05	8.67E-06	9.21E-06	8.47E-06	8.21E-06	4.50E-06	3.72E-06
149	649383.1	4199170	4.18E-05	4.46E-05	6.29E-06	6.69E-06	6.15E-06	5.96E-06	3.27E-06	2.70E-06
150	649411.9	4199170	4.04E-05	4.30E-05	6.07E-06	6.45E-06	5.93E-06	5.75E-06	3.15E-06	2.61E-06
151	649447	4199170	3.87E-05	4.13E-05	5.83E-06	6.19E-06	5.70E-06	5.52E-06	3.03E-06	2.50E-06
152	649381.4	4199370	3.04E-05	3.24E-05	4.57E-06	4.86E-06	4.47E-06	4.33E-06	2.37E-06	1.96E-06
153	649412.7	4199370	2.95E-05	3.14E-05	4.43E-06	4.71E-06	4.33E-06	4.20E-06	2.30E-06	1.90E-06
154	649447.8	4199370	2.85E-05	3.04E-05	4.29E-06	4.56E-06	4.20E-06	4.07E-06	2.23E-06	1.84E-06
155	649379.7	4199570	2.35E-05	2.51E-05	3.54E-06	3.76E-06	3.46E-06	3.35E-06	1.84E-06	1.52E-06
156	649413.5	4199570	2.29E-05	2.44E-05	3.44E-06	3.66E-06	3.37E-06	3.26E-06	1.79E-06	1.48E-06
157	649448.6	4199570	2.23E-05	2.38E-05	3.36E-06	3.57E-06	3.29E-06	3.18E-06	1.75E-06	1.44E-06
158	649384.2	4199770	1.90E-05	2.02E-05	2.85E-06	3.03E-06	2.79E-06	2.70E-06	1.48E-06	1.23E-06
159	649414.3	4199770	1.86E-05	1.98E-05	2.80E-06	2.97E-06	2.73E-06	2.65E-06	1.45E-06	1.20E-06
160	649449.4	4199770	1.82E-05	1.94E-05	2.74E-06	2.91E-06	2.68E-06	2.60E-06	1.42E-06	1.18E-06
161	649467	4198296	2.39E-03	2.55E-03	3.59E-04	3.82E-04	3.51E-04	3.41E-04	1.87E-04	1.54E-04
162	649491.7	4198297	2.30E-03	2.46E-03	3.46E-04	3.68E-04	3.39E-04	3.28E-04	1.80E-04	1.49E-04
163	649466	4198321	1.62E-03	1.73E-03	2.44E-04	2.59E-04	2.39E-04	2.31E-04	1.27E-04	1.05E-04
164	649490.7	4198322	1.55E-03	1.66E-03	2.33E-04	2.48E-04	2.28E-04	2.21E-04	1.21E-04	1.00E-04

165	649465	4198346	1.19E-03	1.27E-03	1.79E-04	1.91E-04	1.75E-04	1.70E-04	9.32E-05	7.71E-05
166	649489.7	4198347	1.14E-03	1.21E-03	1.71E-04	1.82E-04	1.67E-04	1.62E-04	8.87E-05	7.34E-05
167	649464	4198370	9.19E-04	9.80E-04	1.38E-04	1.47E-04	1.35E-04	1.31E-04	7.18E-05	5.94E-05
168	649488.6	4198372	8.71E-04	9.28E-04	1.31E-04	1.39E-04	1.28E-04	1.24E-04	6.80E-05	5.63E-05
169	649461.9	4198420	5.92E-04	6.31E-04	8.90E-05	9.47E-05	8.71E-05	8.44E-05	4.62E-05	3.83E-05
170	649486.6	4198421	5.58E-04	5.95E-04	8.39E-05	8.92E-05	8.20E-05	7.95E-05	4.36E-05	3.61E-05
171	649484.5	4198471	3.85E-04	4.10E-04	5.79E-05	6.15E-05	5.66E-05	5.48E-05	3.01E-05	2.49E-05
172	649482.5	4198521	2.80E-04	2.98E-04	4.21E-05	4.47E-05	4.11E-05	3.99E-05	2.19E-05	1.81E-05
173	649480.4	4198571	2.12E-04	2.26E-04	3.19E-05	3.39E-05	3.12E-05	3.02E-05	1.66E-05	1.37E-05
174	649451.6	4198670	1.43E-04	1.52E-04	2.14E-05	2.28E-05	2.10E-05	2.03E-05	1.11E-05	9.21E-06
175	649476.3	4198671	1.35E-04	1.44E-04	2.03E-05	2.15E-05	1.98E-05	1.92E-05	1.05E-05	8.71E-06
176	649472.2	4198771	9.45E-05	1.01E-04	1.42E-05	1.51E-05	1.39E-05	1.35E-05	7.38E-06	6.11E-06
177	649468.1	4198871	7.10E-05	7.57E-05	1.07E-05	1.13E-05	1.04E-05	1.01E-05	5.55E-06	4.59E-06
178	649509.3	4198471	3.62E-04	3.86E-04	5.45E-05	5.79E-05	5.33E-05	5.16E-05	2.83E-05	2.34E-05
179	649510	4198521	2.62E-04	2.79E-04	3.94E-05	4.19E-05	3.85E-05	3.73E-05	2.05E-05	1.69E-05
180	649510.7	4198571	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.91E-05	2.82E-05	1.55E-05	1.28E-05
181	649512.2	4198671	1.25E-04	1.33E-04	1.88E-05	2.00E-05	1.84E-05	1.78E-05	9.78E-06	8.09E-06
182	649500.1	4198772	8.97E-05	9.56E-05	1.35E-05	1.43E-05	1.32E-05	1.28E-05	7.01E-06	5.80E-06
183	649501.6	4198872	6.72E-05	7.17E-05	1.01E-05	1.07E-05	9.89E-06	9.58E-06	5.25E-06	4.35E-06
184	649490.1	4198971	5.39E-05	5.75E-05	8.11E-06	8.62E-06	7.93E-06	7.68E-06	4.21E-06	3.48E-06
185	649516.6	4198971	5.21E-05	5.55E-05	7.83E-06	8.33E-06	7.66E-06	7.43E-06	4.07E-06	3.37E-06
186	649493.5	4199171	3.68E-05	3.92E-05	5.53E-06	5.88E-06	5.41E-06	5.24E-06	2.87E-06	2.38E-06
187	649519.6	4199171	3.59E-05	3.83E-05	5.40E-06	5.74E-06	5.28E-06	5.12E-06	2.80E-06	2.32E-06
188	649496.7	4199371	2.74E-05	2.92E-05	4.12E-06	4.38E-06	4.03E-06	3.90E-06	2.14E-06	1.77E-06
189	649472.1	4199371	2.79E-05	2.98E-05	4.20E-06	4.46E-06	4.11E-06	3.98E-06	2.18E-06	1.80E-06
190	649522.5	4199371	2.69E-05	2.87E-05	4.05E-06	4.30E-06	3.96E-06	3.84E-06	2.10E-06	1.74E-06
191	649499.8	4199571	2.16E-05	2.30E-05	3.25E-06	3.45E-06	3.18E-06	3.08E-06	1.69E-06	1.40E-06
192	649475.6	4199571	2.19E-05	2.34E-05	3.30E-06	3.50E-06	3.22E-06	3.12E-06	1.71E-06	1.42E-06
193	649525.5	4199571	2.13E-05	2.27E-05	3.20E-06	3.41E-06	3.13E-06	3.04E-06	1.66E-06	1.38E-06
194	649502.9	4199771	1.77E-05	1.89E-05	2.67E-06	2.83E-06	2.61E-06	2.53E-06	1.38E-06	1.15E-06
195	649479	4199771	1.79E-05	1.91E-05	2.69E-06	2.86E-06	2.63E-06	2.55E-06	1.40E-06	1.16E-06
196	649528.4	4199771	1.75E-05	1.87E-05	2.64E-06	2.80E-06	2.58E-06	2.50E-06	1.37E-06	1.13E-06
197	649519.6	4198295	2.26E-03	2.41E-03	3.40E-04	3.62E-04	3.33E-04	3.23E-04	1.77E-04	1.46E-04
198	649521.9	4198320	1.50E-03	1.60E-03	2.25E-04	2.39E-04	2.20E-04	2.13E-04	1.17E-04	9.68E-05
199	649513.3	4198346	1.09E-03	1.16E-03	1.64E-04	1.74E-04	1.60E-04	1.55E-04	8.52E-05	7.05E-05
200	649515.6	4198371	8.27E-04	8.81E-04	1.24E-04	1.32E-04	1.22E-04	1.18E-04	6.46E-05	5.34E-05
201	649514.4	4198421	5.24E-04	5.58E-04	7.88E-05	8.37E-05	7.70E-05	7.46E-05	4.09E-05	3.38E-05
202	649535.8	4198470	3.42E-04	3.65E-04	5.15E-05	5.47E-05	5.03E-05	4.88E-05	2.67E-05	2.21E-05
203	649540.5	4198519	2.46E-04	2.62E-04	3.70E-05	3.93E-05	3.62E-05	3.51E-05	1.92E-05	1.59E-05
204	649534.2	4198570	1.89E-04	2.01E-04	2.84E-05	3.02E-05	2.78E-05	2.69E-05	1.48E-05	1.22E-05
205	649543.5	4198670	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.69E-05	9.28E-06	7.68E-06
206	649543	4198770	8.40E-05	8.95E-05	1.26E-05	1.34E-05	1.24E-05	1.20E-05	6.56E-06	5.43E-06
207	649552.7	4198869	6.29E-05	6.71E-05	9.46E-06	1.01E-05	9.25E-06	8.97E-06	4.92E-06	4.07E-06
208	649524.6	4198871	6.51E-05	6.94E-05	9.79E-06	1.04E-05	9.57E-06	9.28E-06	5.09E-06	4.21E-06
209	649562.3	4198969	4.97E-05	5.29E-05	7.47E-06	7.94E-06	7.30E-06	7.08E-06	3.88E-06	3.21E-06
210	649580	4199168	3.43E-05	3.66E-05	5.16E-06	5.49E-06	5.05E-06	4.89E-06	2.68E-06	2.22E-06
211	649549.8	4199170	3.51E-05	3.74E-05	5.27E-06	5.61E-06	5.16E-06	5.00E-06	2.74E-06	2.27E-06
212	649597.9	4199367	2.59E-05	2.76E-05	3.89E-06	4.13E-06	3.80E-06	3.69E-06	2.02E-06	1.67E-06
213	649565.6	4199369	2.63E-05	2.80E-05	3.95E-06	4.20E-06	3.86E-06	3.75E-06	2.05E-06	1.70E-06
214	649617	4199566	2.06E-05	2.19E-05	3.09E-06	3.29E-06	3.02E-06	2.93E-06	1.61E-06	1.33E-06
215	649586.5	4199568	2.08E-05	2.22E-05	3.12E-06	3.32E-06	3.06E-06	2.96E-06	1.62E-06	1.34E-06
216	649556	4199570	2.10E-05	2.24E-05	3.16E-06	3.36E-06	3.09E-06	3.00E-06	1.64E-06	1.36E-06
217	649635.1	4199765	1.70E-05	1.81E-05	2.55E-06	2.72E-06	2.50E-06	2.42E-06	1.33E-06	1.10E-06
218	649603.1	4199767	1.71E-05	1.83E-05	2.57E-06	2.74E-06	2.52E-06	2.44E-06	1.34E-06	1.11E-06
219	649571.1	4199769	1.73E-05	1.84E-05	2.60E-06	2.76E-06	2.54E-06	2.46E-06	1.35E-06	1.12E-06
220	649545.1	4198342	1.06E-03	1.13E-03	1.59E-04	1.69E-04	1.56E-04	1.51E-04	8.27E-05	6.84E-05

221	649548.5	4198367	7.91E-04	8.43E-04	1.19E-04	1.26E-04	1.16E-04	1.13E-04	6.18E-05	5.11E-05
222	649537.7	4198419	5.00E-04	5.33E-04	7.52E-05	8.00E-05	7.36E-05	7.13E-05	3.91E-05	3.23E-05
223	649562.1	4198466	3.26E-04	3.47E-04	4.90E-05	5.21E-05	4.79E-05	4.64E-05	2.54E-05	2.10E-05
224	649568.9	4198516	2.34E-04	2.50E-04	3.52E-05	3.74E-05	3.44E-05	3.34E-05	1.83E-05	1.51E-05
225	649558.1	4198568	1.81E-04	1.93E-04	2.73E-05	2.90E-05	2.67E-05	2.59E-05	1.42E-05	1.17E-05
226	649571.7	4198667	1.14E-04	1.22E-04	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.94E-06	7.40E-06
227	649574.5	4198767	8.09E-05	8.63E-05	1.22E-05	1.29E-05	1.19E-05	1.15E-05	6.32E-06	5.23E-06
228	649602.9	4198763	7.90E-05	8.42E-05	1.19E-05	1.26E-05	1.16E-05	1.13E-05	6.17E-06	5.10E-06
229	649586	4198866	6.09E-05	6.49E-05	9.16E-06	9.73E-06	8.95E-06	8.68E-06	4.76E-06	3.93E-06
230	649616.6	4198862	5.96E-05	6.35E-05	8.95E-06	9.52E-06	8.76E-06	8.49E-06	4.65E-06	3.85E-06
231	649597.5	4198966	4.83E-05	5.14E-05	7.26E-06	7.71E-06	7.09E-06	6.88E-06	3.77E-06	3.12E-06
232	649630.2	4198961	4.73E-05	5.04E-05	7.11E-06	7.55E-06	6.95E-06	6.73E-06	3.69E-06	3.05E-06
233	649626.9	4199163	3.34E-05	3.56E-05	5.03E-06	5.34E-06	4.92E-06	4.76E-06	2.61E-06	2.16E-06
234	649657.4	4199160	3.30E-05	3.51E-05	4.96E-06	5.27E-06	4.85E-06	4.70E-06	2.58E-06	2.13E-06
235	649651.2	4199362	2.53E-05	2.70E-05	3.81E-06	4.05E-06	3.73E-06	3.61E-06	1.98E-06	1.64E-06
236	649684.7	4199358	2.51E-05	2.67E-05	3.77E-06	4.01E-06	3.69E-06	3.57E-06	1.96E-06	1.62E-06
237	649680.3	4199560	2.02E-05	2.16E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
238	649652.2	4199563	2.04E-05	2.17E-05	3.06E-06	3.25E-06	2.99E-06	2.90E-06	1.59E-06	1.32E-06
239	649711.9	4199556	2.01E-05	2.14E-05	3.02E-06	3.21E-06	2.95E-06	2.86E-06	1.57E-06	1.30E-06
240	649705.4	4199758	1.68E-05	1.79E-05	2.52E-06	2.68E-06	2.46E-06	2.39E-06	1.31E-06	1.08E-06
241	649672.9	4199762	1.69E-05	1.80E-05	2.53E-06	2.69E-06	2.48E-06	2.40E-06	1.32E-06	1.09E-06
242	649739.2	4199754	1.67E-05	1.78E-05	2.51E-06	2.67E-06	2.45E-06	2.38E-06	1.30E-06	1.08E-06
243	649554	4198291	2.29E-03	2.44E-03	3.44E-04	3.66E-04	3.36E-04	3.26E-04	1.79E-04	1.48E-04
244	649556.9	4198316	1.47E-03	1.57E-03	2.22E-04	2.36E-04	2.17E-04	2.10E-04	1.15E-04	9.53E-05
245	649576.1	4198339	1.01E-03	1.08E-03	1.52E-04	1.62E-04	1.49E-04	1.44E-04	7.90E-05	6.54E-05
246	649579	4198363	7.46E-04	7.95E-04	1.12E-04	1.19E-04	1.10E-04	1.06E-04	5.83E-05	4.82E-05
247	649568.7	4198415	4.71E-04	5.02E-04	7.08E-05	7.53E-05	6.92E-05	6.71E-05	3.68E-05	3.04E-05
248	649590.8	4198463	3.07E-04	3.27E-04	4.61E-05	4.91E-05	4.51E-05	4.37E-05	2.40E-05	1.98E-05
249	649596.7	4198512	2.23E-04	2.38E-04	3.35E-05	3.56E-05	3.28E-05	3.18E-05	1.74E-05	1.44E-05
250	649586.4	4198564	1.74E-04	1.86E-04	2.62E-05	2.78E-05	2.56E-05	2.48E-05	1.36E-05	1.12E-05
251	649598.3	4198663	1.11E-04	1.19E-04	1.67E-05	1.78E-05	1.64E-05	1.59E-05	8.70E-06	7.19E-06
252	649626.2	4198761	7.76E-05	8.27E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.06E-06	5.01E-06
253	649584.9	4198287	2.26E-03	2.40E-03	3.39E-04	3.61E-04	3.32E-04	3.21E-04	1.76E-04	1.46E-04
254	649587.4	4198312	1.42E-03	1.51E-03	2.13E-04	2.27E-04	2.09E-04	2.02E-04	1.11E-04	9.17E-05
255	649605	4198336	9.43E-04	1.00E-03	1.42E-04	1.51E-04	1.39E-04	1.34E-04	7.36E-05	6.09E-05
256	649607.5	4198361	6.90E-04	7.35E-04	1.04E-04	1.10E-04	1.01E-04	9.83E-05	5.39E-05	4.46E-05
257	649597.3	4198412	4.39E-04	4.68E-04	6.61E-05	7.02E-05	6.46E-05	6.26E-05	3.43E-05	2.84E-05
258	649617.4	4198460	2.90E-04	3.09E-04	4.36E-05	4.63E-05	4.26E-05	4.13E-05	2.26E-05	1.87E-05
259	649622.4	4198510	2.13E-04	2.27E-04	3.21E-05	3.41E-05	3.14E-05	3.04E-05	1.67E-05	1.38E-05
260	649612.2	4198561	1.68E-04	1.79E-04	2.52E-05	2.68E-05	2.47E-05	2.39E-05	1.31E-05	1.08E-05
261	649622.1	4198661	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.50E-06	7.03E-06
262	649642	4198860	5.86E-05	6.24E-05	8.81E-06	9.36E-06	8.61E-06	8.35E-06	4.58E-06	3.79E-06
263	649667.1	4198958	4.63E-05	4.94E-05	6.96E-06	7.40E-06	6.81E-06	6.60E-06	3.62E-06	2.99E-06
264	649687	4199157	3.25E-05	3.47E-05	4.89E-06	5.20E-06	4.78E-06	4.64E-06	2.54E-06	2.10E-06
265	649616	4198287	2.06E-03	2.20E-03	3.10E-04	3.30E-04	3.04E-04	2.94E-04	1.61E-04	1.33E-04
266	649615.4	4198312	1.29E-03	1.37E-03	1.94E-04	2.06E-04	1.89E-04	1.84E-04	1.01E-04	8.32E-05
267	649633.8	4198337	8.09E-04	8.62E-04	1.22E-04	1.29E-04	1.19E-04	1.15E-04	6.32E-05	5.22E-05
268	649633.2	4198362	6.07E-04	6.47E-04	9.13E-05	9.70E-05	8.92E-05	8.65E-05	4.74E-05	3.92E-05
269	649631.8	4198412	3.90E-04	4.15E-04	5.86E-05	6.23E-05	5.73E-05	5.55E-05	3.04E-05	2.52E-05
270	649655.5	4198287	1.64E-03	1.75E-03	2.47E-04	2.63E-04	2.42E-04	2.34E-04	1.28E-04	1.06E-04
271	649695.4	4198288	1.15E-03	1.23E-03	1.73E-04	1.84E-04	1.69E-04	1.64E-04	8.98E-05	7.43E-05
272	649655.3	4198312	1.02E-03	1.08E-03	1.53E-04	1.63E-04	1.50E-04	1.45E-04	7.95E-05	6.58E-05
273	649695.2	4198313	7.88E-04	8.40E-04	1.18E-04	1.26E-04	1.16E-04	1.12E-04	6.15E-05	5.09E-05
274	649675	4198337	6.50E-04	6.93E-04	9.77E-05	1.04E-04	9.55E-05	9.26E-05	5.07E-05	4.20E-05
275	649674.7	4198362	5.06E-04	5.40E-04	7.61E-05	8.10E-05	7.45E-05	7.22E-05	3.96E-05	3.27E-05
276	649674.2	4198412	3.41E-04	3.64E-04	5.13E-05	5.46E-05	5.02E-05	4.86E-05	2.67E-05	2.21E-05

277	649653.7	4198462	2.61E-04	2.78E-04	3.92E-05	4.17E-05	3.83E-05	3.72E-05	2.04E-05	1.68E-05
278	649693.6	4198463	2.39E-04	2.55E-04	3.60E-05	3.83E-05	3.52E-05	3.41E-05	1.87E-05	1.55E-05
279	649653.2	4198512	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.91E-05	2.82E-05	1.55E-05	1.28E-05
280	649693.1	4198513	1.85E-04	1.97E-04	2.78E-05	2.96E-05	2.72E-05	2.64E-05	1.45E-05	1.20E-05
281	649652.7	4198562	1.56E-04	1.66E-04	2.35E-05	2.49E-05	2.29E-05	2.22E-05	1.22E-05	1.01E-05
282	649692.6	4198563	1.48E-04	1.57E-04	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.54E-06
283	649651.7	4198662	1.04E-04	1.11E-04	1.57E-05	1.67E-05	1.54E-05	1.49E-05	8.16E-06	6.75E-06
284	649691.6	4198663	1.00E-04	1.07E-04	1.51E-05	1.60E-05	1.48E-05	1.43E-05	7.84E-06	6.49E-06
285	649650.7	4198762	7.54E-05	8.04E-05	1.13E-05	1.21E-05	1.11E-05	1.07E-05	5.89E-06	4.87E-06
286	649690.6	4198763	7.30E-05	7.78E-05	1.10E-05	1.17E-05	1.07E-05	1.04E-05	5.70E-06	4.72E-06
287	649669.6	4198862	5.69E-05	6.07E-05	8.56E-06	9.10E-06	8.37E-06	8.11E-06	4.45E-06	3.68E-06
288	649624.6	4199362	2.57E-05	2.74E-05	3.86E-06	4.10E-06	3.77E-06	3.66E-06	2.01E-06	1.66E-06
289	649720.7	4198264	1.51E-03	1.61E-03	2.28E-04	2.42E-04	2.23E-04	2.16E-04	1.18E-04	9.78E-05
290	649722.9	4198220	3.33E-03	3.55E-03	5.01E-04	5.32E-04	4.89E-04	4.74E-04	2.60E-04	2.15E-04
291	649737.8	4198282	9.41E-04	1.00E-03	1.42E-04	1.50E-04	1.38E-04	1.34E-04	7.35E-05	6.08E-05
292	649746.7	4198243	1.57E-03	1.68E-03	2.37E-04	2.52E-04	2.31E-04	2.24E-04	1.23E-04	1.02E-04
293	649762.7	4198283	7.86E-04	8.38E-04	1.18E-04	1.26E-04	1.16E-04	1.12E-04	6.14E-05	5.08E-05
294	649729.7	4198324	5.94E-04	6.33E-04	8.93E-05	9.50E-05	8.73E-05	8.46E-05	4.64E-05	3.84E-05
295	649771.7	4198244	1.15E-03	1.23E-03	1.74E-04	1.85E-04	1.70E-04	1.65E-04	9.02E-05	7.46E-05
296	649787.7	4198285	6.69E-04	7.13E-04	1.01E-04	1.07E-04	9.83E-05	9.53E-05	5.22E-05	4.32E-05
297	649772	4198319	5.29E-04	5.64E-04	7.96E-05	8.46E-05	7.78E-05	7.54E-05	4.13E-05	3.42E-05
298	649746.8	4198342	4.73E-04	5.04E-04	7.12E-05	7.57E-05	6.96E-05	6.74E-05	3.70E-05	3.06E-05
299	649712	4198356	4.71E-04	5.02E-04	7.09E-05	7.54E-05	6.93E-05	6.72E-05	3.68E-05	3.05E-05
300	649796.7	4198246	9.12E-04	9.72E-04	1.37E-04	1.46E-04	1.34E-04	1.30E-04	7.13E-05	5.89E-05
301	649837.7	4198287	5.08E-04	5.41E-04	7.64E-05	8.12E-05	7.47E-05	7.24E-05	3.97E-05	3.28E-05
302	649822	4198321	4.27E-04	4.55E-04	6.42E-05	6.82E-05	6.28E-05	6.08E-05	3.33E-05	2.76E-05
303	649806.3	4198355	3.58E-04	3.82E-04	5.39E-05	5.73E-05	5.27E-05	5.11E-05	2.80E-05	2.32E-05
304	649781.1	4198379	3.30E-04	3.51E-04	4.96E-05	5.27E-05	4.85E-05	4.70E-05	2.57E-05	2.13E-05
305	649746.3	4198392	3.28E-04	3.50E-04	4.93E-05	5.25E-05	4.82E-05	4.68E-05	2.56E-05	2.12E-05
306	649711.5	4198406	3.25E-04	3.47E-04	4.89E-05	5.20E-05	4.78E-05	4.63E-05	2.54E-05	2.10E-05
307	649846.6	4198248	6.38E-04	6.80E-04	9.59E-05	1.02E-04	9.38E-05	9.09E-05	4.98E-05	4.12E-05
308	649886.5	4198292	4.00E-04	4.27E-04	6.02E-05	6.40E-05	5.88E-05	5.70E-05	3.13E-05	2.59E-05
309	649868.5	4198331	3.41E-04	3.64E-04	5.13E-05	5.46E-05	5.02E-05	4.86E-05	2.67E-05	2.21E-05
310	649850.6	4198370	2.90E-04	3.09E-04	4.36E-05	4.64E-05	4.27E-05	4.14E-05	2.27E-05	1.88E-05
311	649812.8	4198416	2.48E-04	2.64E-04	3.72E-05	3.96E-05	3.64E-05	3.53E-05	1.93E-05	1.60E-05
312	649773.1	4198432	2.46E-04	2.62E-04	3.70E-05	3.93E-05	3.62E-05	3.51E-05	1.92E-05	1.59E-05
313	649733.4	4198447	2.43E-04	2.59E-04	3.65E-05	3.88E-05	3.57E-05	3.46E-05	1.90E-05	1.57E-05
314	649896.6	4198251	4.84E-04	5.16E-04	7.28E-05	7.74E-05	7.12E-05	6.90E-05	3.78E-05	3.13E-05
315	649897.7	4198229	5.42E-04	5.78E-04	8.15E-05	8.67E-05	7.97E-05	7.73E-05	4.23E-05	3.50E-05
316	649936.6	4198294	3.30E-04	3.52E-04	4.96E-05	5.28E-05	4.85E-05	4.70E-05	2.58E-05	2.13E-05
317	649919.2	4198332	2.90E-04	3.09E-04	4.36E-05	4.64E-05	4.27E-05	4.14E-05	2.27E-05	1.88E-05
318	649901.8	4198370	2.54E-04	2.71E-04	3.82E-05	4.06E-05	3.73E-05	3.62E-05	1.98E-05	1.64E-05
319	649884.4	4198407	2.22E-04	2.37E-04	3.34E-05	3.55E-05	3.27E-05	3.17E-05	1.74E-05	1.44E-05
320	649847.7	4198452	1.95E-04	2.08E-04	2.93E-05	3.12E-05	2.87E-05	2.78E-05	1.52E-05	1.26E-05
321	649809	4198467	1.94E-04	2.07E-04	2.92E-05	3.10E-05	2.85E-05	2.76E-05	1.52E-05	1.25E-05
322	649770.4	4198483	1.91E-04	2.04E-04	2.88E-05	3.06E-05	2.81E-05	2.73E-05	1.50E-05	1.24E-05
323	649731.8	4198498	1.88E-04	2.01E-04	2.83E-05	3.01E-05	2.77E-05	2.68E-05	1.47E-05	1.22E-05
324	649946.5	4198253	3.86E-04	4.12E-04	5.81E-05	6.18E-05	5.68E-05	5.51E-05	3.02E-05	2.50E-05
325	649947.6	4198231	4.25E-04	4.53E-04	6.39E-05	6.79E-05	6.25E-05	6.05E-05	3.32E-05	2.74E-05
326	649986.7	4198296	2.78E-04	2.97E-04	4.18E-05	4.45E-05	4.09E-05	3.96E-05	2.17E-05	1.80E-05
327	649969.6	4198333	2.50E-04	2.66E-04	3.75E-05	3.99E-05	3.67E-05	3.56E-05	1.95E-05	1.61E-05
328	649952.5	4198370	2.23E-04	2.37E-04	3.35E-05	3.56E-05	3.27E-05	3.17E-05	1.74E-05	1.44E-05
329	649935.4	4198407	1.99E-04	2.12E-04	2.99E-05	3.18E-05	2.92E-05	2.83E-05	1.55E-05	1.28E-05
330	649918.3	4198444	1.78E-04	1.90E-04	2.67E-05	2.84E-05	2.61E-05	2.53E-05	1.39E-05	1.15E-05
331	649882.3	4198489	1.59E-04	1.69E-04	2.39E-05	2.54E-05	2.34E-05	2.27E-05	1.24E-05	1.03E-05
332	649844.3	4198503	1.58E-04	1.68E-04	2.38E-05	2.53E-05	2.32E-05	2.25E-05	1.23E-05	1.02E-05

333	649806.4	4198518	1.56E-04	1.66E-04	2.35E-05	2.49E-05	2.29E-05	2.22E-05	1.22E-05	1.01E-05
334	649768.5	4198533	1.53E-04	1.64E-04	2.31E-05	2.45E-05	2.26E-05	2.19E-05	1.20E-05	9.91E-06
335	649730.6	4198548	1.50E-04	1.60E-04	2.26E-05	2.40E-05	2.21E-05	2.14E-05	1.18E-05	9.72E-06
336	649996.4	4198256	3.18E-04	3.39E-04	4.78E-05	5.09E-05	4.68E-05	4.53E-05	2.49E-05	2.06E-05
337	650086.2	4198302	2.07E-04	2.21E-04	3.11E-05	3.31E-05	3.04E-05	2.95E-05	1.62E-05	1.34E-05
338	650068.3	4198341	1.90E-04	2.02E-04	2.85E-05	3.03E-05	2.79E-05	2.70E-05	1.48E-05	1.22E-05
339	650050.4	4198380	1.72E-04	1.84E-04	2.59E-05	2.76E-05	2.53E-05	2.46E-05	1.35E-05	1.11E-05
340	650032.5	4198419	1.57E-04	1.67E-04	2.35E-05	2.50E-05	2.30E-05	2.23E-05	1.22E-05	1.01E-05
341	650014.5	4198457	1.43E-04	1.52E-04	2.14E-05	2.28E-05	2.10E-05	2.03E-05	1.11E-05	9.22E-06
342	649996.6	4198496	1.30E-04	1.39E-04	1.96E-05	2.08E-05	1.91E-05	1.86E-05	1.02E-05	8.41E-06
343	649978.7	4198535	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.69E-05	9.27E-06	7.67E-06
344	649949.9	4198562	1.13E-04	1.21E-04	1.70E-05	1.81E-05	1.66E-05	1.61E-05	8.85E-06	7.32E-06
345	649910.1	4198577	1.13E-04	1.20E-04	1.69E-05	1.80E-05	1.65E-05	1.60E-05	8.79E-06	7.27E-06
346	649870.4	4198593	1.11E-04	1.18E-04	1.67E-05	1.77E-05	1.63E-05	1.58E-05	8.66E-06	7.16E-06
347	649830.7	4198608	1.09E-04	1.16E-04	1.63E-05	1.74E-05	1.60E-05	1.55E-05	8.49E-06	7.03E-06
348	649790.9	4198624	1.06E-04	1.13E-04	1.60E-05	1.70E-05	1.56E-05	1.51E-05	8.30E-06	6.87E-06
349	649751.2	4198639	1.04E-04	1.11E-04	1.56E-05	1.66E-05	1.53E-05	1.48E-05	8.11E-06	6.71E-06
350	650096.3	4198261	2.30E-04	2.45E-04	3.46E-05	3.68E-05	3.39E-05	3.28E-05	1.80E-05	1.49E-05
351	650185.8	4198308	1.62E-04	1.73E-04	2.44E-05	2.59E-05	2.39E-05	2.31E-05	1.27E-05	1.05E-05
352	650167.4	4198348	1.51E-04	1.61E-04	2.27E-05	2.41E-05	2.22E-05	2.15E-05	1.18E-05	9.75E-06
353	650148.9	4198388	1.39E-04	1.48E-04	2.09E-05	2.23E-05	2.05E-05	1.98E-05	1.09E-05	9.00E-06
354	650130.5	4198428	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.88E-05	1.83E-05	1.00E-05	8.28E-06
355	650112	4198468	1.18E-04	1.26E-04	1.78E-05	1.89E-05	1.74E-05	1.68E-05	9.22E-06	7.63E-06
356	650093.6	4198507	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.52E-06	7.05E-06
357	650075.1	4198547	1.01E-04	1.08E-04	1.52E-05	1.62E-05	1.49E-05	1.44E-05	7.90E-06	6.53E-06
358	650056.7	4198587	9.36E-05	9.97E-05	1.41E-05	1.50E-05	1.38E-05	1.33E-05	7.31E-06	6.05E-06
359	650017.8	4198635	8.62E-05	9.19E-05	1.30E-05	1.38E-05	1.27E-05	1.23E-05	6.73E-06	5.57E-06
360	649976.9	4198651	8.54E-05	9.10E-05	1.28E-05	1.36E-05	1.26E-05	1.22E-05	6.67E-06	5.52E-06
361	649936	4198667	8.40E-05	8.96E-05	1.26E-05	1.34E-05	1.24E-05	1.20E-05	6.57E-06	5.43E-06
362	649895.1	4198683	8.24E-05	8.78E-05	1.24E-05	1.32E-05	1.21E-05	1.17E-05	6.43E-06	5.32E-06
363	649854.2	4198699	8.04E-05	8.57E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.28E-06	5.19E-06
364	649813.3	4198715	7.83E-05	8.35E-05	1.18E-05	1.25E-05	1.15E-05	1.12E-05	6.12E-06	5.06E-06
365	649772.4	4198731	7.63E-05	8.13E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.96E-06	4.93E-06
366	649731.5	4198747	7.45E-05	7.94E-05	1.12E-05	1.19E-05	1.10E-05	1.06E-05	5.82E-06	4.81E-06
367	650196.2	4198266	1.77E-04	1.89E-04	2.66E-05	2.83E-05	2.61E-05	2.52E-05	1.38E-05	1.14E-05
368	650285.9	4198313	1.32E-04	1.41E-04	1.98E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.52E-06
369	650268	4198351	1.24E-04	1.33E-04	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.71E-06	8.04E-06
370	650250.1	4198390	1.17E-04	1.24E-04	1.75E-05	1.86E-05	1.71E-05	1.66E-05	9.11E-06	7.53E-06
371	650232.2	4198429	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.51E-06	7.04E-06
372	650214.3	4198467	1.02E-04	1.08E-04	1.53E-05	1.62E-05	1.49E-05	1.45E-05	7.94E-06	6.57E-06
373	650196.4	4198506	9.49E-05	1.01E-04	1.43E-05	1.52E-05	1.40E-05	1.35E-05	7.42E-06	6.14E-06
374	650178.4	4198545	8.89E-05	9.48E-05	1.34E-05	1.42E-05	1.31E-05	1.27E-05	6.95E-06	5.75E-06
375	650160.5	4198584	8.35E-05	8.91E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.53E-06	5.40E-06
376	650142.6	4198622	7.85E-05	8.37E-05	1.18E-05	1.26E-05	1.15E-05	1.12E-05	6.13E-06	5.07E-06
377	650124.7	4198661	7.37E-05	7.85E-05	1.11E-05	1.18E-05	1.08E-05	1.05E-05	5.75E-06	4.76E-06
378	650086.9	4198708	6.87E-05	7.32E-05	1.03E-05	1.10E-05	1.01E-05	9.79E-06	5.36E-06	4.44E-06
379	650047.2	4198723	6.80E-05	7.25E-05	1.02E-05	1.09E-05	9.99E-06	9.69E-06	5.31E-06	4.39E-06
380	650007.4	4198739	6.69E-05	7.13E-05	1.01E-05	1.07E-05	9.84E-06	9.53E-06	5.23E-06	4.32E-06
381	649967.7	4198754	6.55E-05	6.99E-05	9.85E-06	1.05E-05	9.63E-06	9.34E-06	5.12E-06	4.23E-06
382	649928	4198770	6.39E-05	6.82E-05	9.62E-06	1.02E-05	9.40E-06	9.11E-06	5.00E-06	4.13E-06
383	649888.2	4198785	6.24E-05	6.65E-05	9.38E-06	9.97E-06	9.17E-06	8.89E-06	4.87E-06	4.03E-06
384	649848.5	4198801	6.08E-05	6.48E-05	9.14E-06	9.72E-06	8.94E-06	8.66E-06	4.75E-06	3.93E-06
385	649808.8	4198816	5.93E-05	6.32E-05	8.91E-06	9.48E-06	8.72E-06	8.45E-06	4.63E-06	3.83E-06
386	649769	4198832	5.80E-05	6.18E-05	8.71E-06	9.27E-06	8.52E-06	8.26E-06	4.53E-06	3.75E-06
387	649729.3	4198847	5.69E-05	6.06E-05	8.55E-06	9.09E-06	8.36E-06	8.11E-06	4.44E-06	3.68E-06
388	650296	4198271	1.42E-04	1.51E-04	2.14E-05	2.27E-05	2.09E-05	2.02E-05	1.11E-05	9.18E-06

389	650385.6	4198318	1.10E-04	1.17E-04	1.65E-05	1.76E-05	1.62E-05	1.57E-05	8.58E-06	7.10E-06
390	650367.3	4198358	1.04E-04	1.11E-04	1.57E-05	1.67E-05	1.54E-05	1.49E-05	8.16E-06	6.75E-06
391	650349	4198397	9.87E-05	1.05E-04	1.48E-05	1.58E-05	1.45E-05	1.41E-05	7.71E-06	6.38E-06
392	650330.8	4198437	9.30E-05	9.91E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.26E-06	6.01E-06
393	650312.5	4198476	8.74E-05	9.32E-05	1.31E-05	1.40E-05	1.29E-05	1.25E-05	6.83E-06	5.65E-06
394	650294.2	4198516	8.22E-05	8.76E-05	1.24E-05	1.31E-05	1.21E-05	1.17E-05	6.42E-06	5.31E-06
395	650275.9	4198555	7.74E-05	8.26E-05	1.16E-05	1.24E-05	1.14E-05	1.10E-05	6.05E-06	5.00E-06
396	650257.6	4198595	7.32E-05	7.80E-05	1.10E-05	1.17E-05	1.08E-05	1.04E-05	5.71E-06	4.73E-06
397	650239.3	4198634	6.93E-05	7.38E-05	1.04E-05	1.11E-05	1.02E-05	9.87E-06	5.41E-06	4.48E-06
398	650221	4198674	6.56E-05	7.00E-05	9.87E-06	1.05E-05	9.65E-06	9.35E-06	5.13E-06	4.24E-06
399	650202.7	4198713	6.21E-05	6.62E-05	9.34E-06	9.93E-06	9.13E-06	8.85E-06	4.85E-06	4.01E-06
400	650184.4	4198753	5.85E-05	6.24E-05	8.80E-06	9.35E-06	8.60E-06	8.34E-06	4.57E-06	3.78E-06
401	650155	4198781	5.65E-05	6.02E-05	8.50E-06	9.03E-06	8.31E-06	8.05E-06	4.41E-06	3.65E-06
402	650114.4	4198796	5.59E-05	5.96E-05	8.40E-06	8.93E-06	8.22E-06	7.96E-06	4.37E-06	3.61E-06
403	650073.9	4198812	5.49E-05	5.85E-05	8.26E-06	8.78E-06	8.07E-06	7.83E-06	4.29E-06	3.55E-06
404	650033.3	4198828	5.37E-05	5.73E-05	8.08E-06	8.59E-06	7.90E-06	7.66E-06	4.20E-06	3.47E-06
405	649992.8	4198844	5.24E-05	5.58E-05	7.88E-06	8.38E-06	7.70E-06	7.47E-06	4.09E-06	3.39E-06
406	649952.2	4198860	5.10E-05	5.44E-05	7.67E-06	8.15E-06	7.50E-06	7.27E-06	3.98E-06	3.30E-06
407	649911.6	4198876	4.97E-05	5.29E-05	7.47E-06	7.94E-06	7.30E-06	7.08E-06	3.88E-06	3.21E-06
408	649871.1	4198891	4.84E-05	5.16E-05	7.28E-06	7.74E-06	7.12E-06	6.90E-06	3.78E-06	3.13E-06
409	649830.5	4198907	4.74E-05	5.05E-05	7.12E-06	7.57E-06	6.97E-06	6.75E-06	3.70E-06	3.06E-06
410	649790	4198923	4.65E-05	4.95E-05	6.99E-06	7.43E-06	6.83E-06	6.62E-06	3.63E-06	3.00E-06
411	649749.4	4198939	4.58E-05	4.88E-05	6.88E-06	7.32E-06	6.73E-06	6.52E-06	3.58E-06	2.96E-06
412	649708.8	4198955	4.53E-05	4.83E-05	6.81E-06	7.24E-06	6.66E-06	6.46E-06	3.54E-06	2.93E-06
413	650395.9	4198276	1.17E-04	1.25E-04	1.76E-05	1.87E-05	1.72E-05	1.67E-05	9.15E-06	7.57E-06
414	650397	4198254	1.22E-04	1.30E-04	1.83E-05	1.95E-05	1.79E-05	1.74E-05	9.52E-06	7.87E-06
415	650585.4	4198328	8.09E-05	8.62E-05	1.22E-05	1.29E-05	1.19E-05	1.15E-05	6.32E-06	5.23E-06
416	650567.2	4198368	7.78E-05	8.29E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.08E-06	5.03E-06
417	650549	4198407	7.46E-05	7.95E-05	1.12E-05	1.19E-05	1.10E-05	1.06E-05	5.83E-06	4.82E-06
418	650530.8	4198446	7.14E-05	7.61E-05	1.07E-05	1.14E-05	1.05E-05	1.02E-05	5.57E-06	4.61E-06
419	650512.6	4198486	6.81E-05	7.26E-05	1.02E-05	1.09E-05	1.00E-05	9.70E-06	5.32E-06	4.40E-06
420	650494.4	4198525	6.48E-05	6.91E-05	9.75E-06	1.04E-05	9.53E-06	9.24E-06	5.07E-06	4.19E-06
421	650476.2	4198564	6.17E-05	6.58E-05	9.28E-06	9.87E-06	9.08E-06	8.80E-06	4.82E-06	3.99E-06
422	650458	4198604	5.88E-05	6.27E-05	8.85E-06	9.41E-06	8.65E-06	8.39E-06	4.60E-06	3.80E-06
423	650439.8	4198643	5.62E-05	5.99E-05	8.45E-06	8.98E-06	8.26E-06	8.01E-06	4.39E-06	3.63E-06
424	650421.5	4198682	5.38E-05	5.73E-05	8.09E-06	8.60E-06	7.91E-06	7.66E-06	4.20E-06	3.47E-06
425	650403.3	4198722	5.16E-05	5.50E-05	7.76E-06	8.25E-06	7.59E-06	7.35E-06	4.03E-06	3.33E-06
426	650385.1	4198761	4.95E-05	5.28E-05	7.45E-06	7.92E-06	7.28E-06	7.06E-06	3.87E-06	3.20E-06
427	650366.9	4198800	4.75E-05	5.07E-05	7.15E-06	7.60E-06	6.99E-06	6.77E-06	3.71E-06	3.07E-06
428	650348.7	4198840	4.55E-05	4.85E-05	6.84E-06	7.27E-06	6.69E-06	6.48E-06	3.55E-06	2.94E-06
429	650330.5	4198879	4.34E-05	4.63E-05	6.53E-06	6.94E-06	6.38E-06	6.19E-06	3.39E-06	2.80E-06
430	650292.1	4198926	4.10E-05	4.37E-05	6.17E-06	6.56E-06	6.03E-06	5.84E-06	3.20E-06	2.65E-06
431	650251.7	4198942	4.05E-05	4.32E-05	6.09E-06	6.47E-06	5.95E-06	5.77E-06	3.16E-06	2.62E-06
432	650211.4	4198958	3.98E-05	4.24E-05	5.98E-06	6.36E-06	5.85E-06	5.67E-06	3.11E-06	2.57E-06
433	650171	4198973	3.89E-05	4.15E-05	5.85E-06	6.22E-06	5.72E-06	5.54E-06	3.04E-06	2.51E-06
434	650130.6	4198989	3.79E-05	4.05E-05	5.71E-06	6.07E-06	5.58E-06	5.41E-06	2.96E-06	2.45E-06
435	650090.3	4199005	3.70E-05	3.94E-05	5.56E-06	5.91E-06	5.44E-06	5.27E-06	2.89E-06	2.39E-06
436	650049.9	4199021	3.60E-05	3.84E-05	5.41E-06	5.76E-06	5.29E-06	5.13E-06	2.81E-06	2.33E-06
437	650009.5	4199037	3.51E-05	3.74E-05	5.28E-06	5.61E-06	5.16E-06	5.00E-06	2.74E-06	2.27E-06
438	649969.1	4199052	3.43E-05	3.66E-05	5.16E-06	5.49E-06	5.05E-06	4.89E-06	2.68E-06	2.22E-06
439	649928.8	4199068	3.37E-05	3.59E-05	5.06E-06	5.38E-06	4.95E-06	4.80E-06	2.63E-06	2.18E-06
440	649888.4	4199084	3.31E-05	3.53E-05	4.98E-06	5.30E-06	4.87E-06	4.72E-06	2.59E-06	2.14E-06
441	649848	4199100	3.28E-05	3.49E-05	4.93E-06	5.24E-06	4.82E-06	4.67E-06	2.56E-06	2.12E-06
442	649807.6	4199115	3.25E-05	3.46E-05	4.89E-06	5.20E-06	4.78E-06	4.63E-06	2.54E-06	2.10E-06
443	649767.3	4199131	3.23E-05	3.45E-05	4.86E-06	5.17E-06	4.76E-06	4.61E-06	2.53E-06	2.09E-06
444	649726.9	4199147	3.23E-05	3.44E-05	4.85E-06	5.16E-06	4.74E-06	4.60E-06	2.52E-06	2.08E-06

445	650595.6	4198286	8.50E-05	9.06E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.64E-06	5.49E-06
446	650785.2	4198338	6.29E-05	6.70E-05	9.45E-06	1.01E-05	9.24E-06	8.96E-06	4.91E-06	4.06E-06
447	650767	4198378	6.10E-05	6.50E-05	9.17E-06	9.74E-06	8.96E-06	8.69E-06	4.76E-06	3.94E-06
448	650748.9	4198417	5.90E-05	6.29E-05	8.87E-06	9.43E-06	8.67E-06	8.40E-06	4.61E-06	3.81E-06
449	650730.7	4198456	5.70E-05	6.07E-05	8.57E-06	9.11E-06	8.38E-06	8.12E-06	4.45E-06	3.68E-06
450	650712.6	4198495	5.49E-05	5.86E-05	8.26E-06	8.78E-06	8.08E-06	7.83E-06	4.29E-06	3.55E-06
451	650694.4	4198535	5.29E-05	5.64E-05	7.95E-06	8.45E-06	7.78E-06	7.54E-06	4.13E-06	3.42E-06
452	650676.3	4198574	5.08E-05	5.42E-05	7.64E-06	8.13E-06	7.47E-06	7.24E-06	3.97E-06	3.28E-06
453	650658.1	4198613	4.88E-05	5.20E-05	7.34E-06	7.81E-06	7.18E-06	6.96E-06	3.81E-06	3.15E-06
454	650639.9	4198652	4.69E-05	5.00E-05	7.05E-06	7.50E-06	6.90E-06	6.68E-06	3.66E-06	3.03E-06
455	650621.8	4198691	4.51E-05	4.81E-05	6.78E-06	7.21E-06	6.63E-06	6.43E-06	3.52E-06	2.91E-06
456	650603.6	4198731	4.35E-05	4.63E-05	6.53E-06	6.95E-06	6.39E-06	6.19E-06	3.39E-06	2.81E-06
457	650585.5	4198770	4.20E-05	4.47E-05	6.31E-06	6.71E-06	6.17E-06	5.98E-06	3.28E-06	2.71E-06
458	650567.3	4198809	4.06E-05	4.33E-05	6.11E-06	6.49E-06	5.97E-06	5.79E-06	3.17E-06	2.62E-06
459	650549.2	4198848	3.93E-05	4.19E-05	5.91E-06	6.29E-06	5.78E-06	5.60E-06	3.07E-06	2.54E-06
460	650531	4198887	3.81E-05	4.06E-05	5.72E-06	6.09E-06	5.60E-06	5.42E-06	2.97E-06	2.46E-06
461	650512.9	4198927	3.68E-05	3.92E-05	5.53E-06	5.88E-06	5.41E-06	5.24E-06	2.87E-06	2.38E-06
462	650494.7	4198966	3.55E-05	3.78E-05	5.34E-06	5.67E-06	5.22E-06	5.06E-06	2.77E-06	2.29E-06
463	650476.6	4199005	3.41E-05	3.63E-05	5.13E-06	5.45E-06	5.01E-06	4.86E-06	2.66E-06	2.20E-06
464	650458.4	4199044	3.26E-05	3.48E-05	4.91E-06	5.22E-06	4.80E-06	4.65E-06	2.55E-06	2.11E-06
465	650429.2	4199072	3.17E-05	3.38E-05	4.77E-06	5.07E-06	4.66E-06	4.52E-06	2.48E-06	2.05E-06
466	650388.9	4199088	3.13E-05	3.33E-05	4.70E-06	5.00E-06	4.60E-06	4.46E-06	2.44E-06	2.02E-06
467	650348.7	4199103	3.07E-05	3.27E-05	4.62E-06	4.91E-06	4.52E-06	4.38E-06	2.40E-06	1.98E-06
468	650308.4	4199119	3.01E-05	3.20E-05	4.52E-06	4.81E-06	4.42E-06	4.28E-06	2.35E-06	1.94E-06
469	650268.2	4199135	2.94E-05	3.13E-05	4.41E-06	4.69E-06	4.32E-06	4.18E-06	2.29E-06	1.90E-06
470	650227.9	4199150	2.86E-05	3.05E-05	4.31E-06	4.58E-06	4.21E-06	4.08E-06	2.24E-06	1.85E-06
471	650187.7	4199166	2.79E-05	2.98E-05	4.20E-06	4.46E-06	4.11E-06	3.98E-06	2.18E-06	1.80E-06
472	650147.4	4199182	2.73E-05	2.91E-05	4.10E-06	4.36E-06	4.01E-06	3.89E-06	2.13E-06	1.76E-06
473	650107.2	4199198	2.67E-05	2.84E-05	4.01E-06	4.26E-06	3.92E-06	3.80E-06	2.08E-06	1.72E-06
474	650066.9	4199213	2.62E-05	2.79E-05	3.93E-06	4.18E-06	3.85E-06	3.73E-06	2.04E-06	1.69E-06
475	650026.6	4199229	2.57E-05	2.74E-05	3.87E-06	4.12E-06	3.79E-06	3.67E-06	2.01E-06	1.66E-06
476	649986.4	4199245	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
477	649946.1	4199260	2.52E-05	2.69E-05	3.79E-06	4.03E-06	3.71E-06	3.59E-06	1.97E-06	1.63E-06
478	649905.9	4199276	2.51E-05	2.67E-05	3.77E-06	4.00E-06	3.68E-06	3.57E-06	1.96E-06	1.62E-06
479	649865.6	4199292	2.50E-05	2.66E-05	3.75E-06	3.99E-06	3.67E-06	3.56E-06	1.95E-06	1.61E-06
480	649825.4	4199308	2.49E-05	2.66E-05	3.75E-06	3.98E-06	3.66E-06	3.55E-06	1.95E-06	1.61E-06
481	649785.1	4199323	2.49E-05	2.65E-05	3.74E-06	3.98E-06	3.66E-06	3.55E-06	1.95E-06	1.61E-06
482	649744.9	4199339	2.49E-05	2.66E-05	3.75E-06	3.98E-06	3.66E-06	3.55E-06	1.95E-06	1.61E-06
483	650795.4	4198297	6.55E-05	6.99E-05	9.85E-06	1.05E-05	9.63E-06	9.34E-06	5.12E-06	4.23E-06
484	650984.7	4198349	5.09E-05	5.42E-05	7.65E-06	8.13E-06	7.48E-06	7.25E-06	3.97E-06	3.29E-06
485	650966.2	4198389	4.95E-05	5.28E-05	7.45E-06	7.92E-06	7.28E-06	7.06E-06	3.87E-06	3.20E-06
486	650947.7	4198429	4.82E-05	5.13E-05	7.24E-06	7.70E-06	7.08E-06	6.86E-06	3.76E-06	3.11E-06
487	650929.1	4198469	4.68E-05	4.99E-05	7.04E-06	7.48E-06	6.88E-06	6.67E-06	3.66E-06	3.02E-06
488	650910.6	4198509	4.54E-05	4.84E-05	6.83E-06	7.26E-06	6.68E-06	6.47E-06	3.55E-06	2.93E-06
489	650892.1	4198549	4.40E-05	4.69E-05	6.62E-06	7.04E-06	6.47E-06	6.27E-06	3.44E-06	2.84E-06
490	650873.6	4198589	4.26E-05	4.54E-05	6.41E-06	6.81E-06	6.26E-06	6.07E-06	3.33E-06	2.75E-06
491	650855	4198629	4.12E-05	4.39E-05	6.19E-06	6.58E-06	6.05E-06	5.87E-06	3.22E-06	2.66E-06
492	650836.5	4198669	3.98E-05	4.24E-05	5.98E-06	6.36E-06	5.85E-06	5.67E-06	3.11E-06	2.57E-06
493	650818	4198709	3.84E-05	4.09E-05	5.77E-06	6.14E-06	5.64E-06	5.47E-06	3.00E-06	2.48E-06
494	650799.4	4198749	3.71E-05	3.95E-05	5.57E-06	5.93E-06	5.45E-06	5.28E-06	2.90E-06	2.40E-06
495	650780.9	4198789	3.59E-05	3.83E-05	5.40E-06	5.74E-06	5.28E-06	5.12E-06	2.80E-06	2.32E-06
496	650762.4	4198829	3.48E-05	3.71E-05	5.24E-06	5.57E-06	5.12E-06	4.96E-06	2.72E-06	2.25E-06
497	650743.9	4198869	3.38E-05	3.61E-05	5.09E-06	5.41E-06	4.98E-06	4.82E-06	2.64E-06	2.19E-06
498	650725.3	4198909	3.29E-05	3.51E-05	4.95E-06	5.27E-06	4.84E-06	4.69E-06	2.57E-06	2.13E-06
499	650706.8	4198949	3.21E-05	3.42E-05	4.82E-06	5.13E-06	4.72E-06	4.57E-06	2.51E-06	2.07E-06
500	650688.3	4198989	3.12E-05	3.33E-05	4.69E-06	4.99E-06	4.59E-06	4.45E-06	2.44E-06	2.02E-06

501	650669.7	4199030	3.03E-05	3.24E-05	4.56E-06	4.85E-06	4.46E-06	4.32E-06	2.37E-06	1.96E-06
502	650651.2	4199070	2.94E-05	3.14E-05	4.42E-06	4.70E-06	4.32E-06	4.19E-06	2.30E-06	1.90E-06
503	650632.7	4199110	2.84E-05	3.03E-05	4.28E-06	4.55E-06	4.18E-06	4.05E-06	2.22E-06	1.84E-06
504	650614.1	4199150	2.74E-05	2.92E-05	4.12E-06	4.38E-06	4.03E-06	3.90E-06	2.14E-06	1.77E-06
505	650595.6	4199190	2.63E-05	2.80E-05	3.95E-06	4.20E-06	3.87E-06	3.75E-06	2.05E-06	1.70E-06
506	650565.8	4199218	2.56E-05	2.73E-05	3.85E-06	4.09E-06	3.76E-06	3.64E-06	2.00E-06	1.65E-06
507	650524.7	4199234	2.52E-05	2.69E-05	3.79E-06	4.03E-06	3.71E-06	3.59E-06	1.97E-06	1.63E-06
508	650483.6	4199250	2.48E-05	2.64E-05	3.72E-06	3.96E-06	3.64E-06	3.53E-06	1.93E-06	1.60E-06
509	650442.6	4199266	2.43E-05	2.59E-05	3.65E-06	3.88E-06	3.57E-06	3.46E-06	1.89E-06	1.57E-06
510	650401.5	4199282	2.37E-05	2.53E-05	3.57E-06	3.79E-06	3.49E-06	3.38E-06	1.85E-06	1.53E-06
511	650360.4	4199298	2.31E-05	2.47E-05	3.48E-06	3.70E-06	3.40E-06	3.30E-06	1.81E-06	1.50E-06
512	650319.3	4199314	2.26E-05	2.41E-05	3.40E-06	3.61E-06	3.32E-06	3.22E-06	1.77E-06	1.46E-06
513	650278.2	4199330	2.21E-05	2.35E-05	3.32E-06	3.53E-06	3.25E-06	3.15E-06	1.72E-06	1.43E-06
514	650237.1	4199346	2.16E-05	2.30E-05	3.25E-06	3.45E-06	3.18E-06	3.08E-06	1.69E-06	1.40E-06
515	650196	4199362	2.12E-05	2.26E-05	3.19E-06	3.39E-06	3.12E-06	3.02E-06	1.66E-06	1.37E-06
516	650154.9	4199378	2.09E-05	2.22E-05	3.14E-06	3.34E-06	3.07E-06	2.97E-06	1.63E-06	1.35E-06
517	650113.9	4199394	2.06E-05	2.20E-05	3.10E-06	3.30E-06	3.03E-06	2.94E-06	1.61E-06	1.33E-06
518	650072.8	4199410	2.04E-05	2.18E-05	3.07E-06	3.27E-06	3.01E-06	2.91E-06	1.60E-06	1.32E-06
519	650031.7	4199426	2.03E-05	2.17E-05	3.06E-06	3.25E-06	2.99E-06	2.90E-06	1.59E-06	1.31E-06
520	649990.6	4199442	2.03E-05	2.16E-05	3.05E-06	3.24E-06	2.98E-06	2.89E-06	1.58E-06	1.31E-06
521	649949.5	4199458	2.02E-05	2.16E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
522	649908.4	4199474	2.02E-05	2.15E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
523	649867.3	4199490	2.02E-05	2.15E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
524	649826.2	4199506	2.02E-05	2.16E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
525	649785.2	4199523	2.02E-05	2.16E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
526	649744.1	4199539	2.02E-05	2.15E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
527	650995.1	4198307	5.27E-05	5.62E-05	7.92E-06	8.42E-06	7.75E-06	7.51E-06	4.12E-06	3.40E-06
528	651184.5	4198359	4.24E-05	4.52E-05	6.37E-06	6.78E-06	6.23E-06	6.04E-06	3.31E-06	2.74E-06
529	651166.1	4198399	4.14E-05	4.41E-05	6.23E-06	6.62E-06	6.09E-06	5.90E-06	3.23E-06	2.68E-06
530	651147.6	4198439	4.04E-05	4.31E-05	6.08E-06	6.46E-06	5.94E-06	5.76E-06	3.16E-06	2.61E-06
531	651129.2	4198479	3.95E-05	4.21E-05	5.93E-06	6.31E-06	5.80E-06	5.62E-06	3.08E-06	2.55E-06
532	651110.7	4198519	3.85E-05	4.11E-05	5.79E-06	6.16E-06	5.66E-06	5.49E-06	3.01E-06	2.49E-06
533	651092.3	4198558	3.76E-05	4.00E-05	5.65E-06	6.00E-06	5.52E-06	5.35E-06	2.93E-06	2.43E-06
534	651073.8	4198598	3.66E-05	3.90E-05	5.50E-06	5.85E-06	5.38E-06	5.21E-06	2.86E-06	2.36E-06
535	651055.4	4198638	3.56E-05	3.79E-05	5.35E-06	5.69E-06	5.23E-06	5.07E-06	2.78E-06	2.30E-06
536	651036.9	4198678	3.46E-05	3.69E-05	5.20E-06	5.53E-06	5.08E-06	4.93E-06	2.70E-06	2.23E-06
537	651018.5	4198718	3.36E-05	3.58E-05	5.05E-06	5.36E-06	4.93E-06	4.78E-06	2.62E-06	2.17E-06
538	651000.1	4198758	3.26E-05	3.47E-05	4.90E-06	5.20E-06	4.79E-06	4.64E-06	2.54E-06	2.10E-06
539	650981.6	4198797	3.16E-05	3.37E-05	4.75E-06	5.05E-06	4.64E-06	4.50E-06	2.47E-06	2.04E-06
540	650963.2	4198837	3.07E-05	3.27E-05	4.61E-06	4.90E-06	4.51E-06	4.37E-06	2.40E-06	1.98E-06
541	650944.7	4198877	2.99E-05	3.18E-05	4.49E-06	4.77E-06	4.39E-06	4.25E-06	2.33E-06	1.93E-06
542	650926.3	4198917	2.91E-05	3.10E-05	4.38E-06	4.65E-06	4.28E-06	4.15E-06	2.27E-06	1.88E-06
543	650907.8	4198957	2.84E-05	3.03E-05	4.27E-06	4.54E-06	4.18E-06	4.05E-06	2.22E-06	1.84E-06
544	650889.4	4198997	2.78E-05	2.96E-05	4.18E-06	4.44E-06	4.09E-06	3.96E-06	2.17E-06	1.80E-06
545	650870.9	4199037	2.72E-05	2.90E-05	4.09E-06	4.35E-06	4.00E-06	3.88E-06	2.12E-06	1.76E-06
546	650852.5	4199076	2.66E-05	2.84E-05	4.00E-06	4.25E-06	3.91E-06	3.79E-06	2.08E-06	1.72E-06
547	650834.1	4199116	2.60E-05	2.77E-05	3.91E-06	4.15E-06	3.82E-06	3.70E-06	2.03E-06	1.68E-06
548	650815.6	4199156	2.53E-05	2.70E-05	3.81E-06	4.05E-06	3.73E-06	3.61E-06	1.98E-06	1.64E-06
549	650797.2	4199196	2.46E-05	2.63E-05	3.71E-06	3.94E-06	3.62E-06	3.51E-06	1.93E-06	1.59E-06
550	650778.7	4199236	2.39E-05	2.55E-05	3.59E-06	3.82E-06	3.52E-06	3.41E-06	1.87E-06	1.54E-06
551	650760.3	4199276	2.31E-05	2.46E-05	3.48E-06	3.69E-06	3.40E-06	3.29E-06	1.81E-06	1.49E-06
552	650741.8	4199315	2.23E-05	2.38E-05	3.35E-06	3.56E-06	3.28E-06	3.18E-06	1.74E-06	1.44E-06
553	650702.9	4199363	2.13E-05	2.27E-05	3.20E-06	3.41E-06	3.13E-06	3.04E-06	1.66E-06	1.38E-06
554	650662	4199379	2.10E-05	2.24E-05	3.16E-06	3.36E-06	3.09E-06	2.99E-06	1.64E-06	1.36E-06
555	650621.1	4199395	2.06E-05	2.20E-05	3.10E-06	3.30E-06	3.03E-06	2.94E-06	1.61E-06	1.33E-06
556	650580.2	4199411	2.02E-05	2.16E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06

557	650539.3	4199427	1.98E-05	2.11E-05	2.98E-06	3.17E-06	2.92E-06	2.83E-06	1.55E-06	1.28E-06
558	650498.4	4199443	1.94E-05	2.07E-05	2.92E-06	3.10E-06	2.85E-06	2.76E-06	1.51E-06	1.25E-06
559	650457.5	4199459	1.90E-05	2.02E-05	2.85E-06	3.03E-06	2.79E-06	2.70E-06	1.48E-06	1.23E-06
560	650416.6	4199475	1.86E-05	1.98E-05	2.79E-06	2.97E-06	2.73E-06	2.65E-06	1.45E-06	1.20E-06
561	650375.7	4199491	1.82E-05	1.94E-05	2.74E-06	2.91E-06	2.67E-06	2.59E-06	1.42E-06	1.18E-06
562	650334.8	4199507	1.79E-05	1.90E-05	2.69E-06	2.86E-06	2.63E-06	2.55E-06	1.40E-06	1.15E-06
563	650293.9	4199523	1.76E-05	1.87E-05	2.64E-06	2.81E-06	2.58E-06	2.50E-06	1.37E-06	1.14E-06
564	650253	4199539	1.73E-05	1.85E-05	2.61E-06	2.77E-06	2.55E-06	2.47E-06	1.36E-06	1.12E-06
565	650212.1	4199555	1.72E-05	1.83E-05	2.58E-06	2.74E-06	2.52E-06	2.45E-06	1.34E-06	1.11E-06
566	650171.2	4199571	1.70E-05	1.82E-05	2.56E-06	2.73E-06	2.51E-06	2.43E-06	1.33E-06	1.10E-06
567	650130.3	4199587	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.50E-06	2.42E-06	1.33E-06	1.10E-06
568	650089.4	4199603	1.69E-05	1.81E-05	2.55E-06	2.71E-06	2.49E-06	2.41E-06	1.32E-06	1.09E-06
569	650048.5	4199619	1.69E-05	1.80E-05	2.55E-06	2.71E-06	2.49E-06	2.41E-06	1.32E-06	1.09E-06
570	650007.6	4199635	1.69E-05	1.81E-05	2.55E-06	2.71E-06	2.49E-06	2.41E-06	1.32E-06	1.09E-06
571	649966.7	4199651	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.49E-06	2.42E-06	1.32E-06	1.10E-06
572	649925.8	4199667	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.49E-06	2.42E-06	1.32E-06	1.10E-06
573	649884.9	4199683	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.50E-06	2.42E-06	1.33E-06	1.10E-06
574	649844	4199699	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.49E-06	2.42E-06	1.32E-06	1.10E-06
575	649803.1	4199715	1.69E-05	1.80E-05	2.55E-06	2.71E-06	2.49E-06	2.41E-06	1.32E-06	1.09E-06
576	649762.2	4199731	1.69E-05	1.80E-05	2.54E-06	2.70E-06	2.48E-06	2.41E-06	1.32E-06	1.09E-06
577	651194.9	4198317	4.37E-05	4.66E-05	6.58E-06	6.99E-06	6.43E-06	6.23E-06	3.42E-06	2.83E-06
578	649707	4198197	4.97E-03	5.29E-03	7.47E-04	7.94E-04	7.30E-04	7.08E-04	3.88E-04	3.21E-04
579	649681.3	4198193	7.80E-03	8.32E-03	1.17E-03	1.25E-03	1.15E-03	1.11E-03	6.10E-04	5.04E-04
580	649710	4198174	4.79E-03	5.11E-03	7.21E-04	7.66E-04	7.05E-04	6.83E-04	3.74E-04	3.10E-04
581	649738.8	4198196	2.82E-03	3.01E-03	4.25E-04	4.52E-04	4.15E-04	4.02E-04	2.21E-04	1.83E-04
582	649681.3	4198168	7.98E-03	8.51E-03	1.20E-03	1.28E-03	1.17E-03	1.14E-03	6.23E-04	5.16E-04
583	649711.5	4198149	4.48E-03	4.78E-03	6.74E-04	7.16E-04	6.59E-04	6.38E-04	3.50E-04	2.89E-04
584	649738.7	4198161	3.07E-03	3.27E-03	4.62E-04	4.91E-04	4.52E-04	4.38E-04	2.40E-04	1.99E-04
585	649757.4	4198181	2.30E-03	2.45E-03	3.46E-04	3.68E-04	3.38E-04	3.28E-04	1.80E-04	1.49E-04
586	649767.7	4198208	1.72E-03	1.83E-03	2.58E-04	2.75E-04	2.53E-04	2.45E-04	1.34E-04	1.11E-04
587	649681.3	4198143	6.67E-03	7.11E-03	1.00E-03	1.07E-03	9.81E-04	9.50E-04	5.21E-04	4.31E-04
588	649712.4	4198125	3.78E-03	4.03E-03	5.68E-04	6.04E-04	5.56E-04	5.38E-04	2.95E-04	2.44E-04
589	649741.4	4198137	2.91E-03	3.10E-03	4.38E-04	4.65E-04	4.28E-04	4.15E-04	2.27E-04	1.88E-04
590	649775.9	4198164	1.94E-03	2.07E-03	2.92E-04	3.11E-04	2.86E-04	2.77E-04	1.52E-04	1.26E-04
591	649786.9	4198194	1.51E-03	1.61E-03	2.28E-04	2.42E-04	2.23E-04	2.16E-04	1.18E-04	9.78E-05
592	649681.3	4198118	4.58E-03	4.88E-03	6.88E-04	7.32E-04	6.73E-04	6.52E-04	3.57E-04	2.96E-04
593	649711.5	4198074	2.68E-03	2.85E-03	4.03E-04	4.28E-04	3.94E-04	3.82E-04	2.09E-04	1.73E-04
594	649738.7	4198086	2.45E-03	2.61E-03	3.69E-04	3.92E-04	3.60E-04	3.49E-04	1.91E-04	1.58E-04
595	649765.9	4198098	2.12E-03	2.26E-03	3.18E-04	3.39E-04	3.11E-04	3.02E-04	1.65E-04	1.37E-04
596	649793.1	4198109	1.75E-03	1.86E-03	2.63E-04	2.79E-04	2.57E-04	2.49E-04	1.36E-04	1.13E-04
597	649811.8	4198129	1.49E-03	1.59E-03	2.24E-04	2.38E-04	2.19E-04	2.12E-04	1.16E-04	9.61E-05
598	649822.1	4198157	1.28E-03	1.36E-03	1.92E-04	2.04E-04	1.88E-04	1.82E-04	9.99E-05	8.26E-05
599	649832.3	4198184	1.04E-03	1.11E-03	1.57E-04	1.67E-04	1.54E-04	1.49E-04	8.16E-05	6.75E-05
600	649842.6	4198212	8.27E-04	8.82E-04	1.24E-04	1.32E-04	1.22E-04	1.18E-04	6.46E-05	5.35E-05
601	649681.3	4198068	2.95E-03	3.14E-03	4.43E-04	4.71E-04	4.34E-04	4.20E-04	2.30E-04	1.91E-04
602	649712.4	4198025	2.10E-03	2.24E-03	3.15E-04	3.35E-04	3.08E-04	2.99E-04	1.64E-04	1.35E-04
603	649741.4	4198037	1.97E-03	2.10E-03	2.96E-04	3.14E-04	2.89E-04	2.80E-04	1.54E-04	1.27E-04
604	649770.4	4198050	1.79E-03	1.91E-03	2.70E-04	2.87E-04	2.64E-04	2.56E-04	1.40E-04	1.16E-04
605	649799.4	4198062	1.58E-03	1.69E-03	2.38E-04	2.53E-04	2.32E-04	2.25E-04	1.24E-04	1.02E-04
606	649828.4	4198074	1.35E-03	1.44E-03	2.03E-04	2.16E-04	1.98E-04	1.92E-04	1.05E-04	8.72E-05
607	649848.4	4198095	1.18E-03	1.26E-03	1.78E-04	1.89E-04	1.74E-04	1.69E-04	9.25E-05	7.65E-05
608	649859.4	4198125	1.05E-03	1.12E-03	1.58E-04	1.68E-04	1.55E-04	1.50E-04	8.22E-05	6.80E-05
609	649870.3	4198155	8.96E-04	9.55E-04	1.35E-04	1.43E-04	1.32E-04	1.28E-04	7.00E-05	5.79E-05
610	649881.3	4198184	7.40E-04	7.89E-04	1.11E-04	1.18E-04	1.09E-04	1.06E-04	5.78E-05	4.78E-05
611	649681.3	4198018	2.29E-03	2.44E-03	3.44E-04	3.65E-04	3.36E-04	3.26E-04	1.79E-04	1.48E-04
612	649713	4197975	1.75E-03	1.87E-03	2.63E-04	2.80E-04	2.58E-04	2.50E-04	1.37E-04	1.13E-04

613	649743.3	4197988	1.65E-03	1.76E-03	2.48E-04	2.63E-04	2.42E-04	2.35E-04	1.29E-04	1.06E-04
614	649773.5	4198001	1.53E-03	1.63E-03	2.30E-04	2.45E-04	2.25E-04	2.18E-04	1.20E-04	9.90E-05
615	649803.7	4198014	1.40E-03	1.49E-03	2.10E-04	2.24E-04	2.06E-04	1.99E-04	1.09E-04	9.05E-05
616	649833.9	4198027	1.25E-03	1.33E-03	1.88E-04	2.00E-04	1.84E-04	1.78E-04	9.77E-05	8.09E-05
617	649864.1	4198040	1.09E-03	1.16E-03	1.64E-04	1.74E-04	1.60E-04	1.55E-04	8.52E-05	7.05E-05
618	649884.9	4198062	9.77E-04	1.04E-03	1.47E-04	1.56E-04	1.44E-04	1.39E-04	7.63E-05	6.31E-05
619	649896.3	4198092	8.88E-04	9.47E-04	1.34E-04	1.42E-04	1.31E-04	1.27E-04	6.94E-05	5.74E-05
620	649907.7	4198123	7.80E-04	8.32E-04	1.17E-04	1.25E-04	1.15E-04	1.11E-04	6.10E-05	5.04E-05
621	649919.1	4198154	6.67E-04	7.11E-04	1.00E-04	1.07E-04	9.80E-05	9.50E-05	5.21E-05	4.31E-05
622	649930.5	4198185	5.59E-04	5.96E-04	8.41E-05	8.94E-05	8.23E-05	7.97E-05	4.37E-05	3.62E-05
623	649681.3	4197968	1.90E-03	2.03E-03	2.86E-04	3.04E-04	2.79E-04	2.71E-04	1.48E-04	1.23E-04
624	649712.4	4197925	1.51E-03	1.61E-03	2.26E-04	2.41E-04	2.21E-04	2.15E-04	1.18E-04	9.73E-05
625	649741.4	4197937	1.43E-03	1.52E-03	2.14E-04	2.28E-04	2.10E-04	2.03E-04	1.11E-04	9.21E-05
626	649770.4	4197950	1.34E-03	1.43E-03	2.02E-04	2.14E-04	1.97E-04	1.91E-04	1.05E-04	8.67E-05
627	649799.4	4197962	1.25E-03	1.34E-03	1.89E-04	2.01E-04	1.84E-04	1.79E-04	9.80E-05	8.11E-05
628	649828.4	4197974	1.17E-03	1.25E-03	1.76E-04	1.87E-04	1.72E-04	1.66E-04	9.12E-05	7.55E-05
629	649857.4	4197987	1.07E-03	1.14E-03	1.61E-04	1.71E-04	1.57E-04	1.52E-04	8.34E-05	6.90E-05
630	649886.4	4197999	9.60E-04	1.02E-03	1.44E-04	1.54E-04	1.41E-04	1.37E-04	7.50E-05	6.21E-05
631	649920.9	4198027	8.28E-04	8.82E-04	1.24E-04	1.32E-04	1.22E-04	1.18E-04	6.47E-05	5.35E-05
632	649931.8	4198056	7.71E-04	8.22E-04	1.16E-04	1.23E-04	1.13E-04	1.10E-04	6.02E-05	4.98E-05
633	649942.8	4198086	7.00E-04	7.46E-04	1.05E-04	1.12E-04	1.03E-04	9.98E-05	5.47E-05	4.52E-05
634	649953.7	4198115	6.22E-04	6.63E-04	9.35E-05	9.94E-05	9.15E-05	8.86E-05	4.86E-05	4.02E-05
635	649964.7	4198145	5.43E-04	5.79E-04	8.17E-05	8.68E-05	7.99E-05	7.74E-05	4.24E-05	3.51E-05
636	649975.7	4198175	4.69E-04	5.00E-04	7.05E-05	7.50E-05	6.90E-05	6.68E-05	3.66E-05	3.03E-05
637	649986.6	4198204	4.03E-04	4.29E-04	6.06E-05	6.44E-05	5.92E-05	5.74E-05	3.15E-05	2.60E-05
638	649681.3	4197918	1.63E-03	1.73E-03	2.44E-04	2.60E-04	2.39E-04	2.32E-04	1.27E-04	1.05E-04
639	649713.2	4197825	1.11E-03	1.19E-03	1.68E-04	1.78E-04	1.64E-04	1.59E-04	8.71E-05	7.20E-05
640	649743.7	4197838	1.07E-03	1.14E-03	1.61E-04	1.72E-04	1.58E-04	1.53E-04	8.38E-05	6.93E-05
641	649774.3	4197851	1.03E-03	1.10E-03	1.55E-04	1.65E-04	1.51E-04	1.47E-04	8.04E-05	6.65E-05
642	649804.8	4197864	9.81E-04	1.05E-03	1.48E-04	1.57E-04	1.44E-04	1.40E-04	7.67E-05	6.34E-05
643	649835.3	4197877	9.32E-04	9.93E-04	1.40E-04	1.49E-04	1.37E-04	1.33E-04	7.28E-05	6.02E-05
644	649865.8	4197891	8.85E-04	9.43E-04	1.33E-04	1.41E-04	1.30E-04	1.26E-04	6.91E-05	5.72E-05
645	649896.3	4197904	8.32E-04	8.87E-04	1.25E-04	1.33E-04	1.22E-04	1.19E-04	6.50E-05	5.37E-05
646	649926.9	4197917	7.70E-04	8.20E-04	1.16E-04	1.23E-04	1.13E-04	1.10E-04	6.01E-05	4.97E-05
647	649957.4	4197930	7.03E-04	7.49E-04	1.06E-04	1.12E-04	1.03E-04	1.00E-04	5.49E-05	4.54E-05
648	649993.7	4197958	6.22E-04	6.64E-04	9.36E-05	9.95E-05	9.15E-05	8.87E-05	4.86E-05	4.02E-05
649	650005.2	4197990	5.91E-04	6.30E-04	8.88E-05	9.44E-05	8.68E-05	8.42E-05	4.61E-05	3.82E-05
650	650016.7	4198021	5.51E-04	5.87E-04	8.28E-05	8.80E-05	8.10E-05	7.85E-05	4.30E-05	3.56E-05
651	650028.3	4198052	5.05E-04	5.38E-04	7.59E-05	8.07E-05	7.42E-05	7.19E-05	3.94E-05	3.26E-05
652	650039.8	4198083	4.56E-04	4.86E-04	6.86E-05	7.29E-05	6.70E-05	6.50E-05	3.56E-05	2.95E-05
653	650051.3	4198114	4.07E-04	4.34E-04	6.12E-05	6.51E-05	5.98E-05	5.80E-05	3.18E-05	2.63E-05
654	650062.8	4198145	3.60E-04	3.84E-04	5.41E-05	5.76E-05	5.29E-05	5.13E-05	2.81E-05	2.33E-05
655	650074.4	4198177	3.17E-04	3.38E-04	4.77E-05	5.07E-05	4.66E-05	4.52E-05	2.48E-05	2.05E-05
656	650085.9	4198208	2.79E-04	2.97E-04	4.19E-05	4.46E-05	4.10E-05	3.97E-05	2.18E-05	1.80E-05
657	649681.3	4197818	1.18E-03	1.26E-03	1.78E-04	1.89E-04	1.74E-04	1.69E-04	9.25E-05	7.65E-05
658	649713	4197725	8.68E-04	9.25E-04	1.31E-04	1.39E-04	1.28E-04	1.24E-04	6.78E-05	5.61E-05
659	649743.3	4197738	8.55E-04	9.11E-04	1.29E-04	1.37E-04	1.26E-04	1.22E-04	6.68E-05	5.52E-05
660	649773.5	4197751	8.30E-04	8.85E-04	1.25E-04	1.33E-04	1.22E-04	1.18E-04	6.49E-05	5.37E-05
661	649803.7	4197764	8.06E-04	8.59E-04	1.21E-04	1.29E-04	1.19E-04	1.15E-04	6.30E-05	5.21E-05
662	649833.9	4197777	7.76E-04	8.28E-04	1.17E-04	1.24E-04	1.14E-04	1.11E-04	6.06E-05	5.02E-05
663	649864.1	4197790	7.40E-04	7.89E-04	1.11E-04	1.18E-04	1.09E-04	1.05E-04	5.78E-05	4.78E-05
664	649894.3	4197803	7.05E-04	7.51E-04	1.06E-04	1.13E-04	1.04E-04	1.00E-04	5.51E-05	4.55E-05
665	649924.5	4197816	6.69E-04	7.14E-04	1.01E-04	1.07E-04	9.84E-05	9.54E-05	5.23E-05	4.33E-05
666	649954.7	4197829	6.31E-04	6.73E-04	9.49E-05	1.01E-04	9.28E-05	8.99E-05	4.93E-05	4.08E-05
667	649984.9	4197842	5.94E-04	6.33E-04	8.94E-05	9.50E-05	8.74E-05	8.47E-05	4.64E-05	3.84E-05
668	650015.1	4197855	5.60E-04	5.97E-04	8.42E-05	8.95E-05	8.23E-05	7.98E-05	4.37E-05	3.62E-05

669	650045.3	4197868	5.19E-04	5.53E-04	7.80E-05	8.30E-05	7.63E-05	7.40E-05	4.05E-05	3.35E-05
670	650066.1	4197889	4.90E-04	5.23E-04	7.37E-05	7.84E-05	7.21E-05	6.99E-05	3.83E-05	3.17E-05
671	650077.5	4197920	4.72E-04	5.03E-04	7.10E-05	7.54E-05	6.94E-05	6.73E-05	3.69E-05	3.05E-05
672	650088.9	4197951	4.49E-04	4.79E-04	6.75E-05	7.18E-05	6.60E-05	6.40E-05	3.51E-05	2.90E-05
673	650100.3	4197982	4.22E-04	4.50E-04	6.35E-05	6.75E-05	6.21E-05	6.01E-05	3.30E-05	2.73E-05
674	650111.7	4198013	3.92E-04	4.18E-04	5.90E-05	6.27E-05	5.77E-05	5.59E-05	3.06E-05	2.53E-05
675	650123.1	4198044	3.60E-04	3.84E-04	5.42E-05	5.76E-05	5.30E-05	5.14E-05	2.82E-05	2.33E-05
676	650134.6	4198074	3.29E-04	3.50E-04	4.94E-05	5.25E-05	4.83E-05	4.68E-05	2.57E-05	2.12E-05
677	650146	4198105	2.98E-04	3.18E-04	4.48E-05	4.77E-05	4.38E-05	4.25E-05	2.33E-05	1.93E-05
678	650157.4	4198136	2.69E-04	2.87E-04	4.05E-05	4.30E-05	3.96E-05	3.83E-05	2.10E-05	1.74E-05
679	650168.8	4198167	2.43E-04	2.59E-04	3.65E-05	3.88E-05	3.57E-05	3.46E-05	1.90E-05	1.57E-05
680	650180.2	4198198	2.19E-04	2.33E-04	3.29E-05	3.50E-05	3.22E-05	3.12E-05	1.71E-05	1.41E-05
681	650191.6	4198229	1.97E-04	2.10E-04	2.96E-05	3.15E-05	2.89E-05	2.81E-05	1.54E-05	1.27E-05
682	649681.3	4197718	8.95E-04	9.54E-04	1.35E-04	1.43E-04	1.32E-04	1.28E-04	6.99E-05	5.78E-05
683	649712.9	4197625	6.35E-04	6.76E-04	9.54E-05	1.01E-04	9.33E-05	9.04E-05	4.96E-05	4.10E-05
684	649742.9	4197638	6.41E-04	6.84E-04	9.64E-05	1.03E-04	9.43E-05	9.14E-05	5.01E-05	4.14E-05
685	649772.9	4197651	6.43E-04	6.85E-04	9.66E-05	1.03E-04	9.45E-05	9.16E-05	5.02E-05	4.15E-05
686	649802.9	4197664	6.39E-04	6.81E-04	9.61E-05	1.02E-04	9.40E-05	9.11E-05	4.99E-05	4.13E-05
687	649832.9	4197676	6.31E-04	6.73E-04	9.49E-05	1.01E-04	9.28E-05	9.00E-05	4.93E-05	4.08E-05
688	649862.9	4197689	6.19E-04	6.60E-04	9.31E-05	9.90E-05	9.11E-05	8.83E-05	4.84E-05	4.00E-05
689	649892.9	4197702	6.03E-04	6.43E-04	9.06E-05	9.64E-05	8.86E-05	8.59E-05	4.71E-05	3.90E-05
690	649922.9	4197715	5.84E-04	6.23E-04	8.78E-05	9.34E-05	8.59E-05	8.32E-05	4.56E-05	3.77E-05
691	649952.9	4197728	5.62E-04	5.99E-04	8.44E-05	8.98E-05	8.26E-05	8.00E-05	4.39E-05	3.63E-05
692	649982.9	4197741	5.35E-04	5.70E-04	8.04E-05	8.55E-05	7.87E-05	7.62E-05	4.18E-05	3.46E-05
693	650012.9	4197754	5.07E-04	5.40E-04	7.62E-05	8.10E-05	7.45E-05	7.22E-05	3.96E-05	3.28E-05
694	650042.9	4197767	4.80E-04	5.12E-04	7.22E-05	7.68E-05	7.06E-05	6.85E-05	3.75E-05	3.10E-05
695	650072.9	4197779	4.54E-04	4.84E-04	6.82E-05	7.25E-05	6.67E-05	6.46E-05	3.54E-05	2.93E-05
696	650102.9	4197792	4.26E-04	4.54E-04	6.40E-05	6.80E-05	6.26E-05	6.07E-05	3.32E-05	2.75E-05
697	650138.6	4197820	3.97E-04	4.23E-04	5.97E-05	6.35E-05	5.84E-05	5.66E-05	3.10E-05	2.57E-05
698	650149.9	4197851	3.87E-04	4.13E-04	5.82E-05	6.19E-05	5.69E-05	5.51E-05	3.02E-05	2.50E-05
699	650161.2	4197882	3.73E-04	3.97E-04	5.61E-05	5.96E-05	5.48E-05	5.31E-05	2.91E-05	2.41E-05
700	650172.5	4197912	3.56E-04	3.80E-04	5.36E-05	5.69E-05	5.24E-05	5.08E-05	2.78E-05	2.30E-05
701	650183.9	4197943	3.37E-04	3.60E-04	5.07E-05	5.39E-05	4.96E-05	4.81E-05	2.63E-05	2.18E-05
702	650195.2	4197974	3.17E-04	3.38E-04	4.76E-05	5.06E-05	4.66E-05	4.51E-05	2.47E-05	2.05E-05
703	650206.5	4198004	2.94E-04	3.14E-04	4.43E-05	4.71E-05	4.33E-05	4.20E-05	2.30E-05	1.90E-05
704	650217.9	4198035	2.73E-04	2.91E-04	4.10E-05	4.36E-05	4.01E-05	3.88E-05	2.13E-05	1.76E-05
705	650229.2	4198065	2.51E-04	2.68E-04	3.78E-05	4.02E-05	3.69E-05	3.58E-05	1.96E-05	1.62E-05
706	650240.5	4198096	2.31E-04	2.46E-04	3.47E-05	3.69E-05	3.40E-05	3.29E-05	1.80E-05	1.49E-05
707	650251.8	4198127	2.12E-04	2.26E-04	3.19E-05	3.39E-05	3.12E-05	3.02E-05	1.65E-05	1.37E-05
708	650263.2	4198157	1.94E-04	2.07E-04	2.92E-05	3.10E-05	2.85E-05	2.76E-05	1.52E-05	1.25E-05
709	650274.5	4198188	1.77E-04	1.89E-04	2.67E-05	2.84E-05	2.61E-05	2.53E-05	1.39E-05	1.15E-05
710	650285.8	4198218	1.62E-04	1.73E-04	2.44E-05	2.60E-05	2.39E-05	2.32E-05	1.27E-05	1.05E-05
711	649681.3	4197618	6.37E-04	6.79E-04	9.58E-05	1.02E-04	9.37E-05	9.08E-05	4.98E-05	4.12E-05
712	649712.9	4197525	4.55E-04	4.85E-04	6.84E-05	7.27E-05	6.68E-05	6.48E-05	3.55E-05	2.94E-05
713	649742.7	4197538	4.70E-04	5.01E-04	7.06E-05	7.51E-05	6.91E-05	6.70E-05	3.67E-05	3.04E-05
714	649772.6	4197550	4.81E-04	5.13E-04	7.24E-05	7.69E-05	7.08E-05	6.86E-05	3.76E-05	3.11E-05
715	649802.4	4197563	4.89E-04	5.21E-04	7.35E-05	7.81E-05	7.18E-05	6.96E-05	3.82E-05	3.16E-05
716	649832.3	4197576	4.92E-04	5.25E-04	7.40E-05	7.87E-05	7.24E-05	7.02E-05	3.85E-05	3.18E-05
717	649862.1	4197589	4.93E-04	5.25E-04	7.41E-05	7.88E-05	7.25E-05	7.02E-05	3.85E-05	3.19E-05
718	649892	4197602	4.90E-04	5.23E-04	7.37E-05	7.84E-05	7.21E-05	6.99E-05	3.83E-05	3.17E-05
719	649921.8	4197615	4.85E-04	5.17E-04	7.29E-05	7.75E-05	7.13E-05	6.91E-05	3.79E-05	3.13E-05
720	649951.7	4197627	4.77E-04	5.08E-04	7.17E-05	7.62E-05	7.01E-05	6.79E-05	3.72E-05	3.08E-05
721	649981.5	4197640	4.66E-04	4.96E-04	7.00E-05	7.45E-05	6.85E-05	6.64E-05	3.64E-05	3.01E-05
722	650011.4	4197653	4.53E-04	4.82E-04	6.81E-05	7.24E-05	6.65E-05	6.45E-05	3.54E-05	2.92E-05
723	650041.2	4197666	4.37E-04	4.66E-04	6.57E-05	6.98E-05	6.42E-05	6.22E-05	3.41E-05	2.82E-05
724	650071.1	4197679	4.17E-04	4.45E-04	6.28E-05	6.67E-05	6.14E-05	5.95E-05	3.26E-05	2.70E-05

725	650100.9	4197691	3.98E-04	4.24E-04	5.99E-05	6.37E-05	5.85E-05	5.67E-05	3.11E-05	2.57E-05
726	650130.8	4197704	3.79E-04	4.04E-04	5.69E-05	6.05E-05	5.57E-05	5.40E-05	2.96E-05	2.45E-05
727	650160.6	4197717	3.59E-04	3.83E-04	5.40E-05	5.74E-05	5.28E-05	5.12E-05	2.81E-05	2.32E-05
728	650190.5	4197730	3.40E-04	3.62E-04	5.11E-05	5.43E-05	5.00E-05	4.84E-05	2.66E-05	2.20E-05
729	650211	4197752	3.28E-04	3.49E-04	4.92E-05	5.24E-05	4.82E-05	4.67E-05	2.56E-05	2.12E-05
730	650222.3	4197782	3.21E-04	3.42E-04	4.83E-05	5.13E-05	4.72E-05	4.58E-05	2.51E-05	2.08E-05
731	650233.6	4197812	3.13E-04	3.34E-04	4.71E-05	5.01E-05	4.61E-05	4.47E-05	2.45E-05	2.02E-05
732	650244.8	4197843	3.04E-04	3.24E-04	4.57E-05	4.86E-05	4.47E-05	4.33E-05	2.37E-05	1.96E-05
733	650256.1	4197873	2.91E-04	3.11E-04	4.38E-05	4.66E-05	4.28E-05	4.15E-05	2.28E-05	1.88E-05
734	650267.4	4197904	2.77E-04	2.96E-04	4.17E-05	4.43E-05	4.08E-05	3.95E-05	2.17E-05	1.79E-05
735	650278.7	4197934	2.62E-04	2.80E-04	3.95E-05	4.20E-05	3.86E-05	3.74E-05	2.05E-05	1.70E-05
736	650289.9	4197965	2.47E-04	2.63E-04	3.71E-05	3.95E-05	3.63E-05	3.52E-05	1.93E-05	1.60E-05
737	650301.2	4197995	2.31E-04	2.46E-04	3.48E-05	3.70E-05	3.40E-05	3.29E-05	1.81E-05	1.49E-05
738	650312.5	4198026	2.16E-04	2.30E-04	3.24E-05	3.45E-05	3.17E-05	3.07E-05	1.68E-05	1.39E-05
739	650323.8	4198056	2.00E-04	2.14E-04	3.01E-05	3.20E-05	2.95E-05	2.85E-05	1.56E-05	1.29E-05
740	650335	4198087	1.86E-04	1.98E-04	2.79E-05	2.97E-05	2.73E-05	2.65E-05	1.45E-05	1.20E-05
741	650346.3	4198117	1.72E-04	1.84E-04	2.59E-05	2.75E-05	2.53E-05	2.46E-05	1.35E-05	1.11E-05
742	650357.6	4198148	1.60E-04	1.70E-04	2.40E-05	2.55E-05	2.35E-05	2.27E-05	1.25E-05	1.03E-05
743	650368.9	4198178	1.48E-04	1.57E-04	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.53E-06
744	650380.1	4198208	1.37E-04	1.46E-04	2.05E-05	2.18E-05	2.01E-05	1.95E-05	1.07E-05	8.83E-06
745	649681.3	4197518	4.48E-04	4.77E-04	6.73E-05	7.16E-05	6.58E-05	6.38E-05	3.50E-05	2.89E-05
746	649713.1	4197325	2.36E-04	2.52E-04	3.55E-05	3.77E-05	3.47E-05	3.36E-05	1.84E-05	1.52E-05
747	649743.5	4197338	2.50E-04	2.67E-04	3.76E-05	4.00E-05	3.68E-05	3.57E-05	1.96E-05	1.62E-05
748	649773.8	4197351	2.64E-04	2.81E-04	3.97E-05	4.22E-05	3.88E-05	3.76E-05	2.06E-05	1.70E-05
749	649804.2	4197364	2.76E-04	2.95E-04	4.16E-05	4.42E-05	4.06E-05	3.94E-05	2.16E-05	1.79E-05
750	649834.5	4197377	2.87E-04	3.06E-04	4.32E-05	4.59E-05	4.22E-05	4.09E-05	2.24E-05	1.86E-05
751	649864.8	4197390	2.96E-04	3.16E-04	4.45E-05	4.74E-05	4.36E-05	4.22E-05	2.31E-05	1.91E-05
752	649895.2	4197403	3.04E-04	3.24E-04	4.57E-05	4.85E-05	4.47E-05	4.33E-05	2.37E-05	1.96E-05
753	649925.5	4197416	3.10E-04	3.30E-04	4.65E-05	4.95E-05	4.55E-05	4.41E-05	2.42E-05	2.00E-05
754	649955.9	4197429	3.14E-04	3.34E-04	4.72E-05	5.02E-05	4.61E-05	4.47E-05	2.45E-05	2.03E-05
755	649986.2	4197442	3.16E-04	3.37E-04	4.75E-05	5.05E-05	4.65E-05	4.51E-05	2.47E-05	2.04E-05
756	650016.6	4197455	3.17E-04	3.38E-04	4.76E-05	5.06E-05	4.66E-05	4.51E-05	2.47E-05	2.05E-05
757	650046.9	4197468	3.16E-04	3.37E-04	4.75E-05	5.05E-05	4.65E-05	4.50E-05	2.47E-05	2.04E-05
758	650077.3	4197481	3.14E-04	3.35E-04	4.72E-05	5.02E-05	4.61E-05	4.47E-05	2.45E-05	2.03E-05
759	650107.6	4197494	3.10E-04	3.30E-04	4.66E-05	4.95E-05	4.55E-05	4.41E-05	2.42E-05	2.00E-05
760	650138	4197507	3.04E-04	3.24E-04	4.58E-05	4.86E-05	4.47E-05	4.34E-05	2.38E-05	1.97E-05
761	650168.3	4197520	2.97E-04	3.17E-04	4.47E-05	4.76E-05	4.37E-05	4.24E-05	2.32E-05	1.92E-05
762	650198.6	4197533	2.90E-04	3.09E-04	4.35E-05	4.63E-05	4.26E-05	4.13E-05	2.26E-05	1.87E-05
763	650229	4197546	2.81E-04	2.99E-04	4.22E-05	4.49E-05	4.13E-05	4.00E-05	2.19E-05	1.81E-05
764	650259.3	4197559	2.71E-04	2.89E-04	4.07E-05	4.33E-05	3.98E-05	3.86E-05	2.12E-05	1.75E-05
765	650289.7	4197572	2.61E-04	2.78E-04	3.92E-05	4.17E-05	3.83E-05	3.72E-05	2.04E-05	1.68E-05
766	650320	4197585	2.50E-04	2.67E-04	3.76E-05	4.00E-05	3.68E-05	3.57E-05	1.96E-05	1.62E-05
767	650356.1	4197614	2.39E-04	2.55E-04	3.59E-05	3.82E-05	3.51E-05	3.40E-05	1.87E-05	1.54E-05
768	650367.6	4197645	2.36E-04	2.52E-04	3.55E-05	3.78E-05	3.47E-05	3.37E-05	1.84E-05	1.53E-05
769	650379	4197676	2.32E-04	2.48E-04	3.49E-05	3.71E-05	3.42E-05	3.31E-05	1.81E-05	1.50E-05
770	650390.5	4197707	2.27E-04	2.42E-04	3.42E-05	3.63E-05	3.34E-05	3.24E-05	1.78E-05	1.47E-05
771	650401.9	4197738	2.21E-04	2.36E-04	3.33E-05	3.54E-05	3.25E-05	3.15E-05	1.73E-05	1.43E-05
772	650413.4	4197769	2.14E-04	2.29E-04	3.22E-05	3.43E-05	3.15E-05	3.06E-05	1.67E-05	1.39E-05
773	650424.9	4197800	2.07E-04	2.20E-04	3.11E-05	3.30E-05	3.04E-05	2.95E-05	1.61E-05	1.34E-05
774	650436.3	4197831	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.92E-05	2.83E-05	1.55E-05	1.28E-05
775	650447.8	4197862	1.89E-04	2.02E-04	2.85E-05	3.03E-05	2.78E-05	2.70E-05	1.48E-05	1.22E-05
776	650459.2	4197893	1.80E-04	1.92E-04	2.71E-05	2.88E-05	2.65E-05	2.57E-05	1.41E-05	1.16E-05
777	650470.7	4197924	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.43E-05	1.33E-05	1.10E-05
778	650482.2	4197955	1.61E-04	1.72E-04	2.43E-05	2.58E-05	2.37E-05	2.30E-05	1.26E-05	1.04E-05
779	650493.6	4197986	1.52E-04	1.62E-04	2.29E-05	2.44E-05	2.24E-05	2.17E-05	1.19E-05	9.84E-06
780	650505.1	4198017	1.44E-04	1.53E-04	2.16E-05	2.29E-05	2.11E-05	2.05E-05	1.12E-05	9.27E-06

781	650516.5	4198048	1.35E-04	1.44E-04	2.03E-05	2.16E-05	1.99E-05	1.92E-05	1.05E-05	8.73E-06
782	650528	4198079	1.27E-04	1.35E-04	1.91E-05	2.03E-05	1.87E-05	1.81E-05	9.92E-06	8.21E-06
783	650539.5	4198110	1.19E-04	1.27E-04	1.80E-05	1.91E-05	1.76E-05	1.70E-05	9.33E-06	7.72E-06
784	650550.9	4198140	1.12E-04	1.20E-04	1.69E-05	1.80E-05	1.65E-05	1.60E-05	8.77E-06	7.26E-06
785	650562.4	4198171	1.06E-04	1.13E-04	1.59E-05	1.69E-05	1.55E-05	1.50E-05	8.25E-06	6.82E-06
786	650573.9	4198202	9.93E-05	1.06E-04	1.49E-05	1.59E-05	1.46E-05	1.41E-05	7.75E-06	6.41E-06
787	650585.3	4198233	9.33E-05	9.95E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.29E-06	6.03E-06
788	649681.3	4197318	2.25E-04	2.40E-04	3.39E-05	3.60E-05	3.31E-05	3.21E-05	1.76E-05	1.46E-05
789	649713	4197125	1.31E-04	1.40E-04	1.97E-05	2.10E-05	1.93E-05	1.87E-05	1.02E-05	8.48E-06
790	649743.1	4197138	1.40E-04	1.49E-04	2.11E-05	2.24E-05	2.06E-05	2.00E-05	1.10E-05	9.06E-06
791	649773.2	4197151	1.49E-04	1.59E-04	2.25E-05	2.39E-05	2.20E-05	2.13E-05	1.17E-05	9.65E-06
792	649803.3	4197164	1.58E-04	1.69E-04	2.38E-05	2.53E-05	2.33E-05	2.26E-05	1.24E-05	1.02E-05
793	649833.4	4197177	1.67E-04	1.78E-04	2.52E-05	2.67E-05	2.46E-05	2.38E-05	1.31E-05	1.08E-05
794	649863.4	4197189	1.76E-04	1.88E-04	2.65E-05	2.81E-05	2.59E-05	2.51E-05	1.37E-05	1.14E-05
795	649893.5	4197202	1.84E-04	1.96E-04	2.77E-05	2.94E-05	2.71E-05	2.62E-05	1.44E-05	1.19E-05
796	649923.6	4197215	1.92E-04	2.04E-04	2.88E-05	3.06E-05	2.82E-05	2.73E-05	1.50E-05	1.24E-05
797	649953.7	4197228	1.99E-04	2.12E-04	2.99E-05	3.17E-05	2.92E-05	2.83E-05	1.55E-05	1.28E-05
798	649983.8	4197241	2.05E-04	2.18E-04	3.08E-05	3.27E-05	3.01E-05	2.92E-05	1.60E-05	1.32E-05
799	650013.9	4197254	2.10E-04	2.24E-04	3.16E-05	3.36E-05	3.09E-05	2.99E-05	1.64E-05	1.36E-05
800	650044	4197267	2.14E-04	2.28E-04	3.22E-05	3.43E-05	3.15E-05	3.05E-05	1.67E-05	1.38E-05
801	650074.1	4197280	2.18E-04	2.32E-04	3.27E-05	3.48E-05	3.20E-05	3.10E-05	1.70E-05	1.41E-05
802	650104.2	4197293	2.20E-04	2.35E-04	3.31E-05	3.52E-05	3.24E-05	3.14E-05	1.72E-05	1.42E-05
803	650134.3	4197306	2.22E-04	2.36E-04	3.33E-05	3.54E-05	3.26E-05	3.16E-05	1.73E-05	1.43E-05
804	650164.4	4197319	2.22E-04	2.37E-04	3.34E-05	3.55E-05	3.27E-05	3.17E-05	1.74E-05	1.44E-05
805	650194.4	4197332	2.22E-04	2.37E-04	3.34E-05	3.55E-05	3.26E-05	3.16E-05	1.73E-05	1.43E-05
806	650224.5	4197344	2.21E-04	2.35E-04	3.32E-05	3.53E-05	3.25E-05	3.15E-05	1.72E-05	1.43E-05
807	650254.6	4197357	2.19E-04	2.33E-04	3.29E-05	3.50E-05	3.22E-05	3.12E-05	1.71E-05	1.41E-05
808	650284.7	4197370	2.16E-04	2.30E-04	3.25E-05	3.45E-05	3.17E-05	3.08E-05	1.69E-05	1.39E-05
809	650314.8	4197383	2.12E-04	2.26E-04	3.19E-05	3.39E-05	3.12E-05	3.02E-05	1.66E-05	1.37E-05
810	650344.9	4197396	2.08E-04	2.22E-04	3.13E-05	3.32E-05	3.06E-05	2.96E-05	1.62E-05	1.34E-05
811	650375	4197409	2.03E-04	2.17E-04	3.05E-05	3.25E-05	2.99E-05	2.89E-05	1.59E-05	1.31E-05
812	650405.1	4197422	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.91E-05	2.82E-05	1.55E-05	1.28E-05
813	650435.2	4197435	1.93E-04	2.05E-04	2.90E-05	3.08E-05	2.83E-05	2.75E-05	1.50E-05	1.25E-05
814	650465.3	4197448	1.87E-04	1.99E-04	2.81E-05	2.99E-05	2.75E-05	2.66E-05	1.46E-05	1.21E-05
815	650501	4197476	1.81E-04	1.93E-04	2.72E-05	2.89E-05	2.66E-05	2.58E-05	1.41E-05	1.17E-05
816	650512.4	4197507	1.80E-04	1.92E-04	2.71E-05	2.88E-05	2.65E-05	2.57E-05	1.41E-05	1.17E-05
817	650523.8	4197538	1.79E-04	1.91E-04	2.69E-05	2.86E-05	2.63E-05	2.55E-05	1.40E-05	1.16E-05
818	650535.1	4197568	1.77E-04	1.89E-04	2.66E-05	2.83E-05	2.60E-05	2.52E-05	1.38E-05	1.14E-05
819	650546.5	4197599	1.74E-04	1.86E-04	2.62E-05	2.78E-05	2.56E-05	2.48E-05	1.36E-05	1.13E-05
820	650557.9	4197630	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.43E-05	1.33E-05	1.10E-05
821	650569.2	4197660	1.67E-04	1.78E-04	2.51E-05	2.67E-05	2.45E-05	2.38E-05	1.30E-05	1.08E-05
822	650580.6	4197691	1.62E-04	1.73E-04	2.44E-05	2.60E-05	2.39E-05	2.31E-05	1.27E-05	1.05E-05
823	650592	4197722	1.58E-04	1.68E-04	2.37E-05	2.52E-05	2.32E-05	2.24E-05	1.23E-05	1.02E-05
824	650603.3	4197752	1.52E-04	1.62E-04	2.29E-05	2.43E-05	2.24E-05	2.17E-05	1.19E-05	9.83E-06
825	650614.7	4197783	1.47E-04	1.56E-04	2.20E-05	2.34E-05	2.15E-05	2.09E-05	1.14E-05	9.47E-06
826	650626	4197814	1.41E-04	1.50E-04	2.12E-05	2.25E-05	2.07E-05	2.01E-05	1.10E-05	9.09E-06
827	650637.4	4197845	1.35E-04	1.44E-04	2.03E-05	2.15E-05	1.98E-05	1.92E-05	1.05E-05	8.71E-06
828	650648.8	4197875	1.29E-04	1.37E-04	1.94E-05	2.06E-05	1.89E-05	1.84E-05	1.01E-05	8.32E-06
829	650660.1	4197906	1.23E-04	1.31E-04	1.85E-05	1.96E-05	1.81E-05	1.75E-05	9.60E-06	7.94E-06
830	650671.5	4197937	1.17E-04	1.25E-04	1.76E-05	1.87E-05	1.72E-05	1.67E-05	9.14E-06	7.56E-06
831	650682.9	4197967	1.11E-04	1.19E-04	1.68E-05	1.78E-05	1.64E-05	1.59E-05	8.71E-06	7.20E-06
832	650694.2	4197998	1.06E-04	1.13E-04	1.59E-05	1.70E-05	1.56E-05	1.51E-05	8.28E-06	6.85E-06
833	650705.6	4198029	1.01E-04	1.08E-04	1.52E-05	1.61E-05	1.48E-05	1.44E-05	7.88E-06	6.52E-06
834	650717	4198060	9.59E-05	1.02E-04	1.44E-05	1.53E-05	1.41E-05	1.37E-05	7.49E-06	6.20E-06
835	650728.3	4198090	9.12E-05	9.73E-05	1.37E-05	1.46E-05	1.34E-05	1.30E-05	7.13E-06	5.90E-06
836	650739.7	4198121	8.67E-05	9.25E-05	1.30E-05	1.39E-05	1.28E-05	1.24E-05	6.78E-06	5.61E-06

837	650751.1	4198152	8.25E-05	8.79E-05	1.24E-05	1.32E-05	1.21E-05	1.17E-05	6.44E-06	5.33E-06
838	650762.4	4198182	7.84E-05	8.35E-05	1.18E-05	1.25E-05	1.15E-05	1.12E-05	6.12E-06	5.06E-06
839	650773.8	4198213	7.45E-05	7.94E-05	1.12E-05	1.19E-05	1.10E-05	1.06E-05	5.82E-06	4.81E-06
840	650785.1	4198244	7.08E-05	7.54E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.53E-06	4.57E-06
841	649681.3	4197118	1.24E-04	1.32E-04	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.71E-06	8.03E-06
842	649713.1	4196925	8.05E-05	8.58E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.29E-06	5.20E-06
843	649743.5	4196938	8.58E-05	9.14E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.70E-06	5.54E-06
844	649773.9	4196951	9.13E-05	9.73E-05	1.37E-05	1.46E-05	1.34E-05	1.30E-05	7.13E-06	5.90E-06
845	649804.3	4196964	9.71E-05	1.04E-04	1.46E-05	1.55E-05	1.43E-05	1.38E-05	7.58E-06	6.27E-06
846	649834.7	4196977	1.03E-04	1.10E-04	1.55E-05	1.65E-05	1.51E-05	1.47E-05	8.05E-06	6.66E-06
847	649865.1	4196990	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.51E-06	7.04E-06
848	649895.5	4197003	1.15E-04	1.23E-04	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.98E-06	7.43E-06
849	649925.9	4197016	1.21E-04	1.29E-04	1.82E-05	1.93E-05	1.78E-05	1.72E-05	9.44E-06	7.81E-06
850	649956.3	4197029	1.27E-04	1.35E-04	1.90E-05	2.02E-05	1.86E-05	1.80E-05	9.89E-06	8.18E-06
851	649986.7	4197042	1.32E-04	1.41E-04	1.99E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.54E-06
852	650017.1	4197055	1.38E-04	1.47E-04	2.07E-05	2.20E-05	2.02E-05	1.96E-05	1.07E-05	8.89E-06
853	650047.5	4197069	1.43E-04	1.52E-04	2.15E-05	2.28E-05	2.10E-05	2.03E-05	1.11E-05	9.22E-06
854	650077.9	4197082	1.47E-04	1.57E-04	2.21E-05	2.35E-05	2.17E-05	2.10E-05	1.15E-05	9.52E-06
855	650108.3	4197095	1.51E-04	1.61E-04	2.28E-05	2.42E-05	2.23E-05	2.16E-05	1.18E-05	9.79E-06
856	650138.7	4197108	1.55E-04	1.65E-04	2.33E-05	2.48E-05	2.28E-05	2.21E-05	1.21E-05	1.00E-05
857	650169.1	4197121	1.58E-04	1.69E-04	2.38E-05	2.53E-05	2.33E-05	2.25E-05	1.24E-05	1.02E-05
858	650199.5	4197134	1.61E-04	1.71E-04	2.41E-05	2.57E-05	2.36E-05	2.29E-05	1.25E-05	1.04E-05
859	650229.9	4197147	1.62E-04	1.73E-04	2.44E-05	2.60E-05	2.39E-05	2.32E-05	1.27E-05	1.05E-05
860	650260.3	4197160	1.64E-04	1.75E-04	2.46E-05	2.62E-05	2.41E-05	2.34E-05	1.28E-05	1.06E-05
861	650290.7	4197173	1.65E-04	1.76E-04	2.48E-05	2.63E-05	2.42E-05	2.35E-05	1.29E-05	1.06E-05
862	650321.1	4197186	1.65E-04	1.76E-04	2.48E-05	2.64E-05	2.43E-05	2.35E-05	1.29E-05	1.07E-05
863	650351.5	4197199	1.65E-04	1.76E-04	2.48E-05	2.64E-05	2.43E-05	2.35E-05	1.29E-05	1.07E-05
864	650381.9	4197212	1.64E-04	1.75E-04	2.47E-05	2.62E-05	2.41E-05	2.34E-05	1.28E-05	1.06E-05
865	650412.3	4197225	1.63E-04	1.73E-04	2.45E-05	2.60E-05	2.39E-05	2.32E-05	1.27E-05	1.05E-05
866	650442.7	4197238	1.61E-04	1.72E-04	2.42E-05	2.57E-05	2.37E-05	2.29E-05	1.26E-05	1.04E-05
867	650473.1	4197251	1.59E-04	1.69E-04	2.39E-05	2.54E-05	2.34E-05	2.26E-05	1.24E-05	1.03E-05
868	650503.5	4197264	1.56E-04	1.67E-04	2.35E-05	2.50E-05	2.30E-05	2.23E-05	1.22E-05	1.01E-05
869	650533.9	4197277	1.54E-04	1.64E-04	2.31E-05	2.46E-05	2.26E-05	2.19E-05	1.20E-05	9.93E-06
870	650564.3	4197290	1.51E-04	1.61E-04	2.26E-05	2.41E-05	2.21E-05	2.15E-05	1.18E-05	9.73E-06
871	650594.7	4197303	1.47E-04	1.57E-04	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.52E-06
872	650625.1	4197316	1.44E-04	1.53E-04	2.16E-05	2.30E-05	2.11E-05	2.05E-05	1.12E-05	9.29E-06
873	650646.1	4197338	1.42E-04	1.52E-04	2.14E-05	2.27E-05	2.09E-05	2.03E-05	1.11E-05	9.19E-06
874	650657.6	4197370	1.42E-04	1.52E-04	2.14E-05	2.28E-05	2.09E-05	2.03E-05	1.11E-05	9.20E-06
875	650669	4197401	1.42E-04	1.52E-04	2.14E-05	2.27E-05	2.09E-05	2.03E-05	1.11E-05	9.19E-06
876	650680.5	4197432	1.41E-04	1.51E-04	2.13E-05	2.26E-05	2.08E-05	2.02E-05	1.10E-05	9.14E-06
877	650692	4197463	1.40E-04	1.50E-04	2.11E-05	2.24E-05	2.06E-05	2.00E-05	1.10E-05	9.06E-06
878	650703.5	4197494	1.39E-04	1.48E-04	2.09E-05	2.22E-05	2.04E-05	1.98E-05	1.08E-05	8.96E-06
879	650715	4197525	1.37E-04	1.46E-04	2.05E-05	2.18E-05	2.01E-05	1.95E-05	1.07E-05	8.83E-06
880	650726.4	4197556	1.34E-04	1.43E-04	2.02E-05	2.15E-05	1.97E-05	1.91E-05	1.05E-05	8.67E-06
881	650737.9	4197587	1.31E-04	1.40E-04	1.98E-05	2.10E-05	1.93E-05	1.87E-05	1.03E-05	8.49E-06
882	650749.4	4197618	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.88E-05	1.83E-05	1.00E-05	8.28E-06
883	650760.9	4197649	1.25E-04	1.33E-04	1.88E-05	1.99E-05	1.83E-05	1.78E-05	9.74E-06	8.06E-06
884	650772.4	4197680	1.21E-04	1.29E-04	1.82E-05	1.94E-05	1.78E-05	1.73E-05	9.46E-06	7.83E-06
885	650783.9	4197711	1.17E-04	1.25E-04	1.76E-05	1.87E-05	1.72E-05	1.67E-05	9.16E-06	7.58E-06
886	650795.3	4197742	1.13E-04	1.21E-04	1.70E-05	1.81E-05	1.66E-05	1.61E-05	8.84E-06	7.32E-06
887	650806.8	4197773	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.52E-06	7.05E-06
888	650818.3	4197804	1.05E-04	1.12E-04	1.58E-05	1.68E-05	1.54E-05	1.50E-05	8.20E-06	6.78E-06
889	650829.8	4197835	1.01E-04	1.07E-04	1.52E-05	1.61E-05	1.48E-05	1.44E-05	7.87E-06	6.51E-06
890	650841.3	4197866	9.67E-05	1.03E-04	1.45E-05	1.55E-05	1.42E-05	1.38E-05	7.55E-06	6.25E-06
891	650852.7	4197897	9.27E-05	9.88E-05	1.39E-05	1.48E-05	1.36E-05	1.32E-05	7.24E-06	5.99E-06
892	650864.2	4197928	8.89E-05	9.47E-05	1.34E-05	1.42E-05	1.31E-05	1.27E-05	6.94E-06	5.74E-06

893	650875.7	4197959	8.52E-05	9.08E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.65E-06	5.50E-06
894	650887.2	4197990	8.16E-05	8.70E-05	1.23E-05	1.30E-05	1.20E-05	1.16E-05	6.37E-06	5.27E-06
895	650898.7	4198021	7.82E-05	8.33E-05	1.18E-05	1.25E-05	1.15E-05	1.11E-05	6.11E-06	5.05E-06
896	650910.1	4198052	7.49E-05	7.98E-05	1.13E-05	1.20E-05	1.10E-05	1.07E-05	5.85E-06	4.84E-06
897	650921.6	4198083	7.17E-05	7.64E-05	1.08E-05	1.15E-05	1.05E-05	1.02E-05	5.60E-06	4.63E-06
898	650933.1	4198114	6.87E-05	7.32E-05	1.03E-05	1.10E-05	1.01E-05	9.78E-06	5.36E-06	4.44E-06
899	650944.6	4198145	6.57E-05	7.01E-05	9.88E-06	1.05E-05	9.66E-06	9.37E-06	5.13E-06	4.25E-06
900	650956.1	4198176	6.29E-05	6.70E-05	9.46E-06	1.01E-05	9.25E-06	8.96E-06	4.91E-06	4.06E-06
901	650967.5	4198207	6.02E-05	6.42E-05	9.05E-06	9.62E-06	8.85E-06	8.58E-06	4.70E-06	3.89E-06
902	650979	4198238	5.76E-05	6.14E-05	8.66E-06	9.21E-06	8.47E-06	8.21E-06	4.50E-06	3.72E-06
903	650990.5	4198269	5.51E-05	5.87E-05	8.28E-06	8.81E-06	8.10E-06	7.85E-06	4.30E-06	3.56E-06
904	649681.3	4196918	7.65E-05	8.15E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.98E-06	4.94E-06
905	649713	4196725	5.45E-05	5.80E-05	8.19E-06	8.70E-06	8.01E-06	7.76E-06	4.25E-06	3.52E-06
906	649743.3	4196738	5.74E-05	6.12E-05	8.64E-06	9.18E-06	8.44E-06	8.18E-06	4.49E-06	3.71E-06
907	649773.5	4196751	6.06E-05	6.46E-05	9.12E-06	9.69E-06	8.92E-06	8.64E-06	4.74E-06	3.92E-06
908	649803.7	4196764	6.40E-05	6.83E-05	9.63E-06	1.02E-05	9.42E-06	9.13E-06	5.00E-06	4.14E-06
909	649833.9	4196777	6.76E-05	7.21E-05	1.02E-05	1.08E-05	9.94E-06	9.64E-06	5.28E-06	4.37E-06
910	649864.1	4196790	7.14E-05	7.61E-05	1.07E-05	1.14E-05	1.05E-05	1.02E-05	5.58E-06	4.61E-06
911	649894.3	4196803	7.53E-05	8.03E-05	1.13E-05	1.20E-05	1.11E-05	1.07E-05	5.88E-06	4.87E-06
912	649924.5	4196816	7.93E-05	8.45E-05	1.19E-05	1.27E-05	1.17E-05	1.13E-05	6.19E-06	5.12E-06
913	649954.7	4196829	8.34E-05	8.89E-05	1.25E-05	1.33E-05	1.23E-05	1.19E-05	6.51E-06	5.39E-06
914	649984.9	4196842	8.75E-05	9.33E-05	1.32E-05	1.40E-05	1.29E-05	1.25E-05	6.84E-06	5.66E-06
915	650015.1	4196855	9.16E-05	9.77E-05	1.38E-05	1.47E-05	1.35E-05	1.31E-05	7.16E-06	5.92E-06
916	650045.3	4196868	9.58E-05	1.02E-04	1.44E-05	1.53E-05	1.41E-05	1.36E-05	7.48E-06	6.19E-06
917	650075.5	4196881	9.98E-05	1.06E-04	1.50E-05	1.60E-05	1.47E-05	1.42E-05	7.80E-06	6.45E-06
918	650105.7	4196893	1.04E-04	1.11E-04	1.56E-05	1.66E-05	1.52E-05	1.48E-05	8.10E-06	6.70E-06
919	650135.9	4196906	1.07E-04	1.14E-04	1.61E-05	1.72E-05	1.58E-05	1.53E-05	8.39E-06	6.94E-06
920	650166.1	4196919	1.11E-04	1.18E-04	1.67E-05	1.77E-05	1.63E-05	1.58E-05	8.66E-06	7.17E-06
921	650196.3	4196932	1.14E-04	1.22E-04	1.72E-05	1.82E-05	1.68E-05	1.63E-05	8.91E-06	7.37E-06
922	650226.5	4196945	1.17E-04	1.25E-04	1.76E-05	1.87E-05	1.72E-05	1.67E-05	9.14E-06	7.56E-06
923	650256.7	4196958	1.20E-04	1.28E-04	1.80E-05	1.91E-05	1.76E-05	1.71E-05	9.35E-06	7.73E-06
924	650286.9	4196971	1.22E-04	1.30E-04	1.83E-05	1.95E-05	1.79E-05	1.74E-05	9.53E-06	7.88E-06
925	650317.1	4196984	1.24E-04	1.32E-04	1.86E-05	1.98E-05	1.82E-05	1.76E-05	9.67E-06	8.00E-06
926	650347.4	4196997	1.25E-04	1.34E-04	1.88E-05	2.00E-05	1.84E-05	1.79E-05	9.79E-06	8.10E-06
927	650377.6	4197010	1.27E-04	1.35E-04	1.91E-05	2.03E-05	1.86E-05	1.81E-05	9.91E-06	8.19E-06
928	650407.8	4197023	1.28E-04	1.36E-04	1.92E-05	2.04E-05	1.88E-05	1.82E-05	9.98E-06	8.25E-06
929	650438	4197036	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.89E-05	1.83E-05	1.00E-05	8.29E-06
930	650468.2	4197049	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.89E-05	1.83E-05	1.00E-05	8.30E-06
931	650498.4	4197062	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.88E-05	1.83E-05	1.00E-05	8.28E-06
932	650528.6	4197075	1.28E-04	1.36E-04	1.92E-05	2.04E-05	1.88E-05	1.82E-05	9.98E-06	8.26E-06
933	650558.8	4197088	1.27E-04	1.35E-04	1.91E-05	2.03E-05	1.87E-05	1.81E-05	9.93E-06	8.21E-06
934	650589	4197101	1.26E-04	1.34E-04	1.90E-05	2.02E-05	1.85E-05	1.80E-05	9.85E-06	8.15E-06
935	650619.2	4197114	1.25E-04	1.33E-04	1.88E-05	2.00E-05	1.84E-05	1.78E-05	9.76E-06	8.07E-06
936	650649.4	4197127	1.23E-04	1.32E-04	1.86E-05	1.97E-05	1.82E-05	1.76E-05	9.64E-06	7.98E-06
937	650679.6	4197140	1.22E-04	1.30E-04	1.83E-05	1.95E-05	1.79E-05	1.74E-05	9.51E-06	7.87E-06
938	650709.8	4197153	1.20E-04	1.28E-04	1.80E-05	1.92E-05	1.76E-05	1.71E-05	9.37E-06	7.75E-06
939	650740	4197166	1.18E-04	1.26E-04	1.77E-05	1.89E-05	1.73E-05	1.68E-05	9.21E-06	7.62E-06
940	650770.2	4197179	1.16E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.05E-06	7.48E-06
941	650791	4197201	1.15E-04	1.23E-04	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.99E-06	7.43E-06
942	650802.4	4197231	1.16E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.03E-06	7.47E-06
943	650813.8	4197262	1.16E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.05E-06	7.48E-06
944	650825.3	4197293	1.16E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.04E-06	7.48E-06
945	650836.7	4197324	1.15E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.64E-05	9.02E-06	7.46E-06
946	650848.1	4197355	1.15E-04	1.22E-04	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.97E-06	7.42E-06
947	650859.5	4197386	1.14E-04	1.21E-04	1.71E-05	1.82E-05	1.67E-05	1.62E-05	8.90E-06	7.36E-06
948	650870.9	4197416	1.13E-04	1.20E-04	1.69E-05	1.80E-05	1.66E-05	1.61E-05	8.80E-06	7.28E-06

949	650882.3	4197447	1.11E-04	1.19E-04	1.67E-05	1.78E-05	1.64E-05	1.59E-05	8.69E-06	7.19E-06
950	650893.7	4197478	1.09E-04	1.17E-04	1.65E-05	1.75E-05	1.61E-05	1.56E-05	8.55E-06	7.08E-06
951	650905.1	4197509	1.07E-04	1.15E-04	1.62E-05	1.72E-05	1.58E-05	1.53E-05	8.40E-06	6.95E-06
952	650916.5	4197540	1.05E-04	1.12E-04	1.58E-05	1.68E-05	1.55E-05	1.50E-05	8.22E-06	6.80E-06
953	650927.9	4197571	1.03E-04	1.10E-04	1.55E-05	1.64E-05	1.51E-05	1.46E-05	8.03E-06	6.64E-06
954	650939.3	4197601	1.00E-04	1.07E-04	1.51E-05	1.60E-05	1.47E-05	1.43E-05	7.82E-06	6.47E-06
955	650950.7	4197632	9.74E-05	1.04E-04	1.46E-05	1.56E-05	1.43E-05	1.39E-05	7.61E-06	6.29E-06
956	650962.1	4197663	9.46E-05	1.01E-04	1.42E-05	1.51E-05	1.39E-05	1.35E-05	7.39E-06	6.11E-06
957	650973.5	4197694	9.17E-05	9.77E-05	1.38E-05	1.47E-05	1.35E-05	1.31E-05	7.16E-06	5.92E-06
958	650985	4197725	8.87E-05	9.45E-05	1.33E-05	1.42E-05	1.30E-05	1.26E-05	6.93E-06	5.73E-06
959	650996.4	4197756	8.57E-05	9.13E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.69E-06	5.54E-06
960	651007.8	4197786	8.27E-05	8.81E-05	1.24E-05	1.32E-05	1.22E-05	1.18E-05	6.46E-06	5.34E-06
961	651019.2	4197817	7.98E-05	8.50E-05	1.20E-05	1.28E-05	1.17E-05	1.14E-05	6.23E-06	5.15E-06
962	651030.6	4197848	7.69E-05	8.20E-05	1.16E-05	1.23E-05	1.13E-05	1.10E-05	6.01E-06	4.97E-06
963	651042	4197879	7.41E-05	7.90E-05	1.11E-05	1.19E-05	1.09E-05	1.06E-05	5.79E-06	4.79E-06
964	651053.4	4197910	7.15E-05	7.62E-05	1.07E-05	1.14E-05	1.05E-05	1.02E-05	5.58E-06	4.62E-06
965	651064.8	4197940	6.89E-05	7.34E-05	1.04E-05	1.10E-05	1.01E-05	9.82E-06	5.38E-06	4.45E-06
966	651076.2	4197971	6.64E-05	7.08E-05	9.98E-06	1.06E-05	9.76E-06	9.46E-06	5.19E-06	4.29E-06
967	651087.6	4198002	6.40E-05	6.82E-05	9.62E-06	1.02E-05	9.41E-06	9.12E-06	5.00E-06	4.14E-06
968	651099	4198033	6.17E-05	6.57E-05	9.27E-06	9.86E-06	9.07E-06	8.79E-06	4.82E-06	3.99E-06
969	651110.4	4198064	5.94E-05	6.33E-05	8.93E-06	9.50E-06	8.74E-06	8.47E-06	4.64E-06	3.84E-06
970	651121.8	4198095	5.72E-05	6.10E-05	8.61E-06	9.15E-06	8.42E-06	8.16E-06	4.47E-06	3.70E-06
971	651133.3	4198125	5.51E-05	5.87E-05	8.28E-06	8.81E-06	8.10E-06	7.85E-06	4.30E-06	3.56E-06
972	651144.7	4198156	5.30E-05	5.65E-05	7.98E-06	8.48E-06	7.80E-06	7.56E-06	4.14E-06	3.43E-06
973	651156.1	4198187	5.11E-05	5.44E-05	7.68E-06	8.16E-06	7.51E-06	7.27E-06	3.99E-06	3.30E-06
974	651167.5	4198218	4.91E-05	5.24E-05	7.39E-06	7.85E-06	7.22E-06	7.00E-06	3.84E-06	3.17E-06
975	651178.9	4198249	4.73E-05	5.04E-05	7.11E-06	7.55E-06	6.95E-06	6.73E-06	3.69E-06	3.05E-06
976	651190.3	4198280	4.55E-05	4.85E-05	6.84E-06	7.27E-06	6.69E-06	6.48E-06	3.55E-06	2.94E-06
977	649681.3	4196718	5.22E-05	5.56E-05	7.84E-06	8.34E-06	7.67E-06	7.43E-06	4.07E-06	3.37E-06
978	649780.2	4198131	1.95E-03	2.08E-03	2.94E-04	3.12E-04	2.87E-04	2.78E-04	1.53E-04	1.26E-04
979	649931.3	4198215	4.90E-04	5.22E-04	7.37E-05	7.83E-05	7.21E-05	6.98E-05	3.83E-05	3.17E-05
980	649930.2	4198129	6.78E-04	7.23E-04	1.02E-04	1.08E-04	9.97E-05	9.66E-05	5.30E-05	4.38E-05
981	649980.2	4198128	5.30E-04	5.65E-04	7.96E-05	8.47E-05	7.79E-05	7.55E-05	4.14E-05	3.42E-05
982	650080.2	4198127	3.54E-04	3.77E-04	5.32E-05	5.66E-05	5.20E-05	5.04E-05	2.76E-05	2.29E-05
983	650180.5	4198147	2.46E-04	2.62E-04	3.69E-05	3.93E-05	3.61E-05	3.50E-05	1.92E-05	1.59E-05
984	650280.2	4198125	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.91E-05	2.82E-05	1.55E-05	1.28E-05
985	650380.5	4198145	1.53E-04	1.63E-04	2.30E-05	2.44E-05	2.24E-05	2.18E-05	1.19E-05	9.87E-06
986	650580.4	4198143	1.07E-04	1.14E-04	1.61E-05	1.71E-05	1.57E-05	1.52E-05	8.34E-06	6.90E-06
987	650780.7	4198162	7.84E-05	8.36E-05	1.18E-05	1.25E-05	1.15E-05	1.12E-05	6.13E-06	5.07E-06
988	650780.2	4198118	8.24E-05	8.78E-05	1.24E-05	1.32E-05	1.21E-05	1.17E-05	6.44E-06	5.33E-06
989	650980.9	4198181	6.10E-05	6.50E-05	9.17E-06	9.75E-06	8.96E-06	8.69E-06	4.76E-06	3.94E-06
990	650980.4	4198138	6.37E-05	6.79E-05	9.57E-06	1.02E-05	9.36E-06	9.07E-06	4.97E-06	4.11E-06
991	651181.2	4198200	4.93E-05	5.26E-05	7.42E-06	7.89E-06	7.25E-06	7.03E-06	3.85E-06	3.19E-06
992	651180.7	4198157	5.13E-05	5.47E-05	7.71E-06	8.20E-06	7.54E-06	7.31E-06	4.01E-06	3.31E-06
993	651180.1	4198114	5.33E-05	5.68E-05	8.01E-06	8.51E-06	7.83E-06	7.59E-06	4.16E-06	3.44E-06
994	649747.4	4198111	2.55E-03	2.72E-03	3.84E-04	4.08E-04	3.75E-04	3.64E-04	1.99E-04	1.65E-04
995	649744.8	4198060	2.12E-03	2.26E-03	3.18E-04	3.38E-04	3.11E-04	3.02E-04	1.65E-04	1.37E-04
996	649752.5	4198012	1.72E-03	1.83E-03	2.59E-04	2.75E-04	2.53E-04	2.45E-04	1.34E-04	1.11E-04
997	649781.2	4198026	1.59E-03	1.70E-03	2.40E-04	2.55E-04	2.34E-04	2.27E-04	1.25E-04	1.03E-04
998	649818.4	4198100	1.45E-03	1.54E-03	2.18E-04	2.31E-04	2.13E-04	2.06E-04	1.13E-04	9.35E-05
999	649809.4	4197988	1.29E-03	1.37E-03	1.94E-04	2.06E-04	1.89E-04	1.84E-04	1.01E-04	8.33E-05
1000	649853.9	4198063	1.16E-03	1.23E-03	1.74E-04	1.85E-04	1.70E-04	1.65E-04	9.05E-05	7.48E-05
1001	649714.3	4197888	1.34E-03	1.43E-03	2.01E-04	2.14E-04	1.97E-04	1.91E-04	1.05E-04	8.65E-05
1002	649742.4	4197902	1.28E-03	1.37E-03	1.93E-04	2.05E-04	1.88E-04	1.83E-04	1.00E-04	8.28E-05
1003	649770.6	4197916	1.22E-03	1.30E-03	1.84E-04	1.95E-04	1.79E-04	1.74E-04	9.53E-05	7.89E-05
1004	649798.8	4197930	1.16E-03	1.23E-03	1.74E-04	1.85E-04	1.70E-04	1.65E-04	9.05E-05	7.49E-05

1005	649826.9	4197944	1.10E-03	1.18E-03	1.66E-04	1.76E-04	1.62E-04	1.57E-04	8.61E-05	7.12E-05
1006	649855.1	4197958	1.03E-03	1.10E-03	1.55E-04	1.65E-04	1.52E-04	1.47E-04	8.06E-05	6.67E-05
1007	649891.6	4198031	9.50E-04	1.01E-03	1.43E-04	1.52E-04	1.40E-04	1.35E-04	7.42E-05	6.14E-05
1008	649907	4198070	8.61E-04	9.18E-04	1.30E-04	1.38E-04	1.27E-04	1.23E-04	6.73E-05	5.57E-05
1009	649918.6	4198100	7.74E-04	8.25E-04	1.16E-04	1.24E-04	1.14E-04	1.10E-04	6.05E-05	5.00E-05
1010	649843.9	4197901	9.56E-04	1.02E-03	1.44E-04	1.53E-04	1.41E-04	1.36E-04	7.46E-05	6.18E-05
1011	649872.6	4197915	9.09E-04	9.69E-04	1.37E-04	1.45E-04	1.34E-04	1.29E-04	7.10E-05	5.87E-05
1012	649905.3	4197939	8.47E-04	9.03E-04	1.27E-04	1.35E-04	1.25E-04	1.21E-04	6.62E-05	5.47E-05
1013	649917.1	4197969	8.32E-04	8.87E-04	1.25E-04	1.33E-04	1.22E-04	1.19E-04	6.50E-05	5.38E-05
1014	649928.9	4197999	8.01E-04	8.54E-04	1.20E-04	1.28E-04	1.18E-04	1.14E-04	6.26E-05	5.18E-05
1015	649927.7	4197838	6.85E-04	7.30E-04	1.03E-04	1.09E-04	1.01E-04	9.76E-05	5.35E-05	4.43E-05
1016	649956.1	4197852	6.47E-04	6.90E-04	9.73E-05	1.03E-04	9.51E-05	9.22E-05	5.06E-05	4.18E-05
1017	649978.9	4197872	6.25E-04	6.66E-04	9.40E-05	9.99E-05	9.19E-05	8.91E-05	4.88E-05	4.04E-05
1018	649990.6	4197901	6.20E-04	6.61E-04	9.32E-05	9.91E-05	9.12E-05	8.83E-05	4.84E-05	4.01E-05
1019	650002.3	4197931	6.03E-04	6.43E-04	9.07E-05	9.64E-05	8.87E-05	8.60E-05	4.71E-05	3.90E-05
1020	650017.9	4197970	5.69E-04	6.06E-04	8.55E-05	9.09E-05	8.36E-05	8.10E-05	4.44E-05	3.67E-05
1021	650029.6	4197999	5.35E-04	5.70E-04	8.04E-05	8.55E-05	7.86E-05	7.62E-05	4.18E-05	3.45E-05
1022	650041.3	4198029	4.95E-04	5.28E-04	7.45E-05	7.92E-05	7.29E-05	7.06E-05	3.87E-05	3.20E-05
1023	650052.9	4198058	4.53E-04	4.83E-04	6.82E-05	7.25E-05	6.66E-05	6.46E-05	3.54E-05	2.93E-05
1024	650064.6	4198088	4.10E-04	4.37E-04	6.16E-05	6.55E-05	6.03E-05	5.84E-05	3.20E-05	2.65E-05
1025	649961.7	4197751	5.67E-04	6.04E-04	8.52E-05	9.06E-05	8.33E-05	8.07E-05	4.43E-05	3.66E-05
1026	649990.7	4197765	5.39E-04	5.75E-04	8.11E-05	8.62E-05	7.93E-05	7.68E-05	4.21E-05	3.48E-05
1027	650019.7	4197780	5.13E-04	5.47E-04	7.71E-05	8.20E-05	7.54E-05	7.31E-05	4.01E-05	3.31E-05
1028	650052.7	4197804	4.86E-04	5.18E-04	7.31E-05	7.78E-05	7.15E-05	6.93E-05	3.80E-05	3.14E-05
1029	650064.7	4197834	4.84E-04	5.16E-04	7.28E-05	7.74E-05	7.11E-05	6.90E-05	3.78E-05	3.13E-05
1030	650076.6	4197864	4.74E-04	5.05E-04	7.13E-05	7.58E-05	6.97E-05	6.76E-05	3.70E-05	3.06E-05
1031	650088.6	4197895	4.58E-04	4.89E-04	6.89E-05	7.33E-05	6.74E-05	6.53E-05	3.58E-05	2.96E-05
1032	650100.5	4197925	4.38E-04	4.67E-04	6.59E-05	7.01E-05	6.45E-05	6.25E-05	3.43E-05	2.83E-05
1033	650112.5	4197955	4.15E-04	4.42E-04	6.24E-05	6.63E-05	6.10E-05	5.91E-05	3.24E-05	2.68E-05
1034	650124.4	4197985	3.89E-04	4.14E-04	5.84E-05	6.21E-05	5.71E-05	5.54E-05	3.04E-05	2.51E-05
1035	650136.4	4198015	3.60E-04	3.84E-04	5.42E-05	5.76E-05	5.30E-05	5.13E-05	2.81E-05	2.33E-05
1036	650148.3	4198045	3.31E-04	3.53E-04	4.98E-05	5.29E-05	4.87E-05	4.72E-05	2.59E-05	2.14E-05
1037	650160.3	4198076	3.02E-04	3.22E-04	4.55E-05	4.83E-05	4.44E-05	4.31E-05	2.36E-05	1.95E-05
1038	650172.2	4198106	2.75E-04	2.93E-04	4.13E-05	4.39E-05	4.04E-05	3.92E-05	2.15E-05	1.78E-05
1039	650074.6	4197703	4.24E-04	4.52E-04	6.37E-05	6.77E-05	6.23E-05	6.04E-05	3.31E-05	2.74E-05
1040	650103.3	4197717	4.04E-04	4.31E-04	6.08E-05	6.46E-05	5.94E-05	5.76E-05	3.16E-05	2.61E-05
1041	650126.4	4197736	3.90E-04	4.16E-04	5.86E-05	6.23E-05	5.73E-05	5.56E-05	3.05E-05	2.52E-05
1042	650138.2	4197766	3.87E-04	4.13E-04	5.82E-05	6.19E-05	5.69E-05	5.52E-05	3.02E-05	2.50E-05
1043	650150	4197796	3.83E-04	4.08E-04	5.76E-05	6.12E-05	5.63E-05	5.46E-05	2.99E-05	2.47E-05
1044	650161.9	4197826	3.75E-04	4.00E-04	5.64E-05	5.99E-05	5.51E-05	5.34E-05	2.93E-05	2.42E-05
1045	650173.7	4197856	3.63E-04	3.87E-04	5.46E-05	5.80E-05	5.34E-05	5.17E-05	2.84E-05	2.35E-05
1046	650185.5	4197886	3.48E-04	3.71E-04	5.24E-05	5.57E-05	5.12E-05	4.96E-05	2.72E-05	2.25E-05
1047	650197.4	4197916	3.31E-04	3.53E-04	4.98E-05	5.30E-05	4.87E-05	4.72E-05	2.59E-05	2.14E-05
1048	650209.2	4197945	3.13E-04	3.34E-04	4.71E-05	5.00E-05	4.60E-05	4.46E-05	2.45E-05	2.02E-05
1049	650221	4197975	2.93E-04	3.13E-04	4.41E-05	4.69E-05	4.31E-05	4.18E-05	2.29E-05	1.90E-05
1050	650232.9	4198005	2.73E-04	2.91E-04	4.10E-05	4.36E-05	4.01E-05	3.88E-05	2.13E-05	1.76E-05
1051	650244.7	4198035	2.53E-04	2.70E-04	3.81E-05	4.05E-05	3.72E-05	3.61E-05	1.98E-05	1.64E-05
1052	650256.5	4198065	2.34E-04	2.49E-04	3.52E-05	3.74E-05	3.44E-05	3.33E-05	1.83E-05	1.51E-05
1053	650268.4	4198095	2.15E-04	2.30E-04	3.24E-05	3.44E-05	3.17E-05	3.07E-05	1.68E-05	1.39E-05
1054	649759	4197440	3.45E-04	3.68E-04	5.18E-05	5.51E-05	5.07E-05	4.91E-05	2.69E-05	2.23E-05
1055	649788.1	4197455	3.59E-04	3.83E-04	5.40E-05	5.75E-05	5.28E-05	5.12E-05	2.81E-05	2.32E-05
1056	649817.3	4197469	3.72E-04	3.96E-04	5.59E-05	5.94E-05	5.47E-05	5.30E-05	2.90E-05	2.40E-05
1057	649846.4	4197484	3.82E-04	4.07E-04	5.74E-05	6.10E-05	5.61E-05	5.44E-05	2.98E-05	2.47E-05
1058	649875.6	4197499	3.89E-04	4.15E-04	5.85E-05	6.22E-05	5.72E-05	5.55E-05	3.04E-05	2.52E-05
1059	649904.7	4197513	3.94E-04	4.20E-04	5.93E-05	6.30E-05	5.80E-05	5.62E-05	3.08E-05	2.55E-05
1060	649933.8	4197528	3.97E-04	4.23E-04	5.97E-05	6.34E-05	5.83E-05	5.66E-05	3.10E-05	2.56E-05

1061	649963	4197542	3.98E-04	4.24E-04	5.98E-05	6.36E-05	5.85E-05	5.67E-05	3.11E-05	2.57E-05
1062	649992.1	4197557	3.95E-04	4.22E-04	5.95E-05	6.32E-05	5.81E-05	5.63E-05	3.09E-05	2.56E-05
1063	650021.3	4197572	3.91E-04	4.17E-04	5.88E-05	6.25E-05	5.75E-05	5.57E-05	3.05E-05	2.53E-05
1064	650050.4	4197586	3.84E-04	4.10E-04	5.78E-05	6.15E-05	5.65E-05	5.48E-05	3.00E-05	2.48E-05
1065	650079.6	4197601	3.76E-04	4.01E-04	5.65E-05	6.01E-05	5.53E-05	5.36E-05	2.94E-05	2.43E-05
1066	650108.7	4197615	3.65E-04	3.89E-04	5.49E-05	5.84E-05	5.37E-05	5.21E-05	2.85E-05	2.36E-05
1067	650137.8	4197630	3.52E-04	3.75E-04	5.29E-05	5.62E-05	5.17E-05	5.01E-05	2.75E-05	2.27E-05
1068	650167	4197644	3.38E-04	3.60E-04	5.08E-05	5.40E-05	4.96E-05	4.81E-05	2.64E-05	2.18E-05
1069	650200.1	4197669	3.23E-04	3.45E-04	4.86E-05	5.17E-05	4.75E-05	4.61E-05	2.53E-05	2.09E-05
1070	650212.1	4197699	3.21E-04	3.43E-04	4.83E-05	5.14E-05	4.72E-05	4.58E-05	2.51E-05	2.08E-05
1071	650224.1	4197730	3.17E-04	3.38E-04	4.76E-05	5.06E-05	4.66E-05	4.51E-05	2.47E-05	2.05E-05
1072	650236.1	4197760	3.11E-04	3.31E-04	4.67E-05	4.97E-05	4.57E-05	4.43E-05	2.43E-05	2.01E-05
1073	650248.1	4197790	3.03E-04	3.23E-04	4.56E-05	4.84E-05	4.45E-05	4.32E-05	2.37E-05	1.96E-05
1074	650260.1	4197820	2.95E-04	3.14E-04	4.43E-05	4.71E-05	4.33E-05	4.20E-05	2.30E-05	1.90E-05
1075	650272.2	4197851	2.83E-04	3.02E-04	4.26E-05	4.53E-05	4.16E-05	4.04E-05	2.21E-05	1.83E-05
1076	650284.2	4197881	2.70E-04	2.88E-04	4.07E-05	4.32E-05	3.98E-05	3.85E-05	2.11E-05	1.75E-05
1077	650296.2	4197911	2.56E-04	2.73E-04	3.86E-05	4.10E-05	3.77E-05	3.65E-05	2.00E-05	1.66E-05
1078	650308.2	4197942	2.42E-04	2.58E-04	3.64E-05	3.87E-05	3.56E-05	3.45E-05	1.89E-05	1.56E-05
1079	650320.2	4197972	2.27E-04	2.42E-04	3.41E-05	3.63E-05	3.34E-05	3.24E-05	1.77E-05	1.47E-05
1080	650332.2	4198002	2.12E-04	2.26E-04	3.19E-05	3.39E-05	3.12E-05	3.02E-05	1.66E-05	1.37E-05
1081	650344.2	4198033	1.98E-04	2.11E-04	2.97E-05	3.16E-05	2.91E-05	2.82E-05	1.54E-05	1.28E-05
1082	650356.2	4198063	1.84E-04	1.96E-04	2.76E-05	2.94E-05	2.70E-05	2.62E-05	1.44E-05	1.19E-05
1083	650368.2	4198093	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.43E-05	1.33E-05	1.10E-05
1084	649778.7	4197241	1.92E-04	2.05E-04	2.89E-05	3.07E-05	2.83E-05	2.74E-05	1.50E-05	1.24E-05
1085	649807.9	4197256	2.04E-04	2.17E-04	3.06E-05	3.26E-05	3.00E-05	2.90E-05	1.59E-05	1.32E-05
1086	649837.2	4197271	2.15E-04	2.29E-04	3.23E-05	3.43E-05	3.16E-05	3.06E-05	1.68E-05	1.39E-05
1087	649866.4	4197285	2.25E-04	2.40E-04	3.39E-05	3.60E-05	3.31E-05	3.21E-05	1.76E-05	1.46E-05
1088	649895.6	4197300	2.35E-04	2.50E-04	3.53E-05	3.75E-05	3.45E-05	3.35E-05	1.83E-05	1.52E-05
1089	649924.8	4197314	2.43E-04	2.59E-04	3.66E-05	3.89E-05	3.58E-05	3.47E-05	1.90E-05	1.57E-05
1090	649954	4197329	2.51E-04	2.67E-04	3.77E-05	4.00E-05	3.68E-05	3.57E-05	1.96E-05	1.62E-05
1091	649983.2	4197344	2.57E-04	2.74E-04	3.86E-05	4.10E-05	3.77E-05	3.66E-05	2.00E-05	1.66E-05
1092	650012.4	4197358	2.61E-04	2.79E-04	3.93E-05	4.18E-05	3.84E-05	3.72E-05	2.04E-05	1.69E-05
1093	650041.6	4197373	2.65E-04	2.82E-04	3.98E-05	4.23E-05	3.89E-05	3.77E-05	2.07E-05	1.71E-05
1094	650070.9	4197387	2.67E-04	2.85E-04	4.02E-05	4.27E-05	3.93E-05	3.81E-05	2.09E-05	1.73E-05
1095	650100.1	4197402	2.68E-04	2.86E-04	4.03E-05	4.29E-05	3.95E-05	3.82E-05	2.10E-05	1.73E-05
1096	650129.3	4197417	2.68E-04	2.86E-04	4.03E-05	4.28E-05	3.94E-05	3.82E-05	2.09E-05	1.73E-05
1097	650158.5	4197431	2.66E-04	2.84E-04	4.01E-05	4.26E-05	3.92E-05	3.80E-05	2.08E-05	1.72E-05
1098	650187.7	4197446	2.64E-04	2.81E-04	3.96E-05	4.21E-05	3.87E-05	3.76E-05	2.06E-05	1.70E-05
1099	650216.9	4197460	2.60E-04	2.77E-04	3.90E-05	4.15E-05	3.82E-05	3.70E-05	2.03E-05	1.68E-05
1100	650246.1	4197475	2.55E-04	2.71E-04	3.83E-05	4.07E-05	3.74E-05	3.63E-05	1.99E-05	1.65E-05
1101	650275.4	4197490	2.49E-04	2.65E-04	3.74E-05	3.98E-05	3.66E-05	3.55E-05	1.94E-05	1.61E-05
1102	650304.6	4197504	2.42E-04	2.58E-04	3.64E-05	3.87E-05	3.56E-05	3.45E-05	1.89E-05	1.56E-05
1103	650333.8	4197519	2.35E-04	2.50E-04	3.53E-05	3.75E-05	3.45E-05	3.35E-05	1.83E-05	1.52E-05
1104	650351.5	4197544	2.33E-04	2.48E-04	3.50E-05	3.72E-05	3.42E-05	3.31E-05	1.82E-05	1.50E-05
1105	650363.6	4197574	2.32E-04	2.47E-04	3.49E-05	3.71E-05	3.41E-05	3.31E-05	1.81E-05	1.50E-05
1106	650379.6	4197615	2.29E-04	2.45E-04	3.45E-05	3.67E-05	3.37E-05	3.27E-05	1.79E-05	1.48E-05
1107	650391.7	4197645	2.26E-04	2.41E-04	3.40E-05	3.62E-05	3.33E-05	3.22E-05	1.77E-05	1.46E-05
1108	650403.7	4197676	2.22E-04	2.37E-04	3.34E-05	3.55E-05	3.26E-05	3.16E-05	1.73E-05	1.43E-05
1109	650415.7	4197706	2.17E-04	2.31E-04	3.26E-05	3.47E-05	3.19E-05	3.09E-05	1.69E-05	1.40E-05
1110	650427.8	4197736	2.11E-04	2.25E-04	3.17E-05	3.37E-05	3.10E-05	3.00E-05	1.65E-05	1.36E-05
1111	650439.8	4197767	2.04E-04	2.17E-04	3.06E-05	3.26E-05	2.99E-05	2.90E-05	1.59E-05	1.32E-05
1112	650451.8	4197797	1.96E-04	2.09E-04	2.95E-05	3.13E-05	2.88E-05	2.79E-05	1.53E-05	1.27E-05
1113	650463.9	4197827	1.88E-04	2.00E-04	2.83E-05	3.00E-05	2.76E-05	2.68E-05	1.47E-05	1.21E-05
1114	650475.9	4197858	1.79E-04	1.91E-04	2.70E-05	2.87E-05	2.64E-05	2.56E-05	1.40E-05	1.16E-05
1115	650487.9	4197888	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.43E-05	1.33E-05	1.10E-05
1116	650500	4197919	1.62E-04	1.73E-04	2.44E-05	2.59E-05	2.38E-05	2.31E-05	1.27E-05	1.05E-05

1117	650512	4197949	1.53E-04	1.63E-04	2.30E-05	2.45E-05	2.25E-05	2.18E-05	1.20E-05	9.90E-06
1118	650524	4197979	1.45E-04	1.54E-04	2.18E-05	2.31E-05	2.13E-05	2.06E-05	1.13E-05	9.36E-06
1119	650536.1	4198010	1.37E-04	1.46E-04	2.05E-05	2.18E-05	2.01E-05	1.95E-05	1.07E-05	8.83E-06
1120	650548.1	4198040	1.29E-04	1.37E-04	1.94E-05	2.06E-05	1.89E-05	1.84E-05	1.01E-05	8.32E-06
1121	650560.1	4198070	1.21E-04	1.29E-04	1.83E-05	1.94E-05	1.78E-05	1.73E-05	9.48E-06	7.84E-06
1122	650572.2	4198101	1.14E-04	1.22E-04	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.93E-06	7.39E-06
1123	649798.5	4197042	1.16E-04	1.24E-04	1.75E-05	1.86E-05	1.71E-05	1.65E-05	9.07E-06	7.50E-06
1124	649827.7	4197057	1.23E-04	1.32E-04	1.86E-05	1.97E-05	1.82E-05	1.76E-05	9.65E-06	7.98E-06
1125	649857	4197072	1.31E-04	1.40E-04	1.97E-05	2.09E-05	1.93E-05	1.87E-05	1.02E-05	8.46E-06
1126	649886.2	4197086	1.38E-04	1.48E-04	2.08E-05	2.21E-05	2.03E-05	1.97E-05	1.08E-05	8.94E-06
1127	649915.5	4197101	1.46E-04	1.55E-04	2.19E-05	2.33E-05	2.14E-05	2.08E-05	1.14E-05	9.42E-06
1128	649944.8	4197115	1.53E-04	1.63E-04	2.30E-05	2.44E-05	2.25E-05	2.18E-05	1.19E-05	9.87E-06
1129	649974	4197130	1.60E-04	1.70E-04	2.40E-05	2.55E-05	2.35E-05	2.27E-05	1.25E-05	1.03E-05
1130	650003.3	4197145	1.66E-04	1.77E-04	2.49E-05	2.65E-05	2.44E-05	2.36E-05	1.30E-05	1.07E-05
1131	650032.5	4197159	1.72E-04	1.83E-04	2.58E-05	2.75E-05	2.53E-05	2.45E-05	1.34E-05	1.11E-05
1132	650061.8	4197174	1.77E-04	1.89E-04	2.66E-05	2.83E-05	2.60E-05	2.52E-05	1.38E-05	1.14E-05
1133	650091	4197189	1.82E-04	1.94E-04	2.73E-05	2.90E-05	2.67E-05	2.59E-05	1.42E-05	1.17E-05
1134	650120.3	4197203	1.86E-04	1.98E-04	2.79E-05	2.97E-05	2.73E-05	2.64E-05	1.45E-05	1.20E-05
1135	650149.6	4197218	1.89E-04	2.01E-04	2.84E-05	3.02E-05	2.77E-05	2.69E-05	1.47E-05	1.22E-05
1136	650178.8	4197233	1.91E-04	2.04E-04	2.87E-05	3.06E-05	2.81E-05	2.72E-05	1.49E-05	1.24E-05
1137	650208.1	4197247	1.93E-04	2.05E-04	2.90E-05	3.08E-05	2.83E-05	2.75E-05	1.51E-05	1.25E-05
1138	650237.3	4197262	1.93E-04	2.06E-04	2.91E-05	3.09E-05	2.84E-05	2.76E-05	1.51E-05	1.25E-05
1139	650266.6	4197276	1.94E-04	2.06E-04	2.91E-05	3.10E-05	2.85E-05	2.76E-05	1.51E-05	1.25E-05
1140	650295.9	4197291	1.93E-04	2.06E-04	2.91E-05	3.09E-05	2.84E-05	2.76E-05	1.51E-05	1.25E-05
1141	650325.1	4197306	1.92E-04	2.05E-04	2.89E-05	3.07E-05	2.83E-05	2.74E-05	1.50E-05	1.24E-05
1142	650354.4	4197320	1.90E-04	2.03E-04	2.86E-05	3.04E-05	2.79E-05	2.71E-05	1.48E-05	1.23E-05
1143	650383.6	4197335	1.88E-04	2.00E-04	2.82E-05	3.00E-05	2.76E-05	2.67E-05	1.46E-05	1.21E-05
1144	650412.9	4197350	1.84E-04	1.97E-04	2.77E-05	2.95E-05	2.71E-05	2.63E-05	1.44E-05	1.19E-05
1145	650442.2	4197364	1.81E-04	1.93E-04	2.72E-05	2.89E-05	2.66E-05	2.58E-05	1.41E-05	1.17E-05
1146	650471.4	4197379	1.77E-04	1.89E-04	2.66E-05	2.83E-05	2.61E-05	2.53E-05	1.38E-05	1.15E-05
1147	650494.9	4197399	1.75E-04	1.86E-04	2.63E-05	2.79E-05	2.57E-05	2.49E-05	1.37E-05	1.13E-05
1148	650507	4197429	1.75E-04	1.87E-04	2.64E-05	2.80E-05	2.58E-05	2.50E-05	1.37E-05	1.13E-05
1149	650519	4197460	1.75E-04	1.87E-04	2.64E-05	2.80E-05	2.58E-05	2.50E-05	1.37E-05	1.13E-05
1150	650531.1	4197490	1.75E-04	1.86E-04	2.63E-05	2.79E-05	2.57E-05	2.49E-05	1.36E-05	1.13E-05
1151	650543.1	4197520	1.73E-04	1.85E-04	2.61E-05	2.77E-05	2.55E-05	2.47E-05	1.35E-05	1.12E-05
1152	650555.2	4197551	1.71E-04	1.83E-04	2.58E-05	2.74E-05	2.52E-05	2.44E-05	1.34E-05	1.11E-05
1153	650567.2	4197581	1.69E-04	1.80E-04	2.54E-05	2.70E-05	2.48E-05	2.40E-05	1.32E-05	1.09E-05
1154	650579.3	4197612	1.65E-04	1.76E-04	2.49E-05	2.64E-05	2.43E-05	2.36E-05	1.29E-05	1.07E-05
1155	650591.3	4197642	1.62E-04	1.72E-04	2.43E-05	2.58E-05	2.38E-05	2.30E-05	1.26E-05	1.04E-05
1156	650603.4	4197672	1.57E-04	1.68E-04	2.37E-05	2.52E-05	2.31E-05	2.24E-05	1.23E-05	1.02E-05
1157	650615.5	4197703	1.53E-04	1.63E-04	2.30E-05	2.44E-05	2.24E-05	2.18E-05	1.19E-05	9.87E-06
1158	650627.5	4197733	1.48E-04	1.57E-04	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.54E-06
1159	650639.6	4197764	1.42E-04	1.52E-04	2.14E-05	2.27E-05	2.09E-05	2.03E-05	1.11E-05	9.19E-06
1160	650651.6	4197794	1.37E-04	1.46E-04	2.06E-05	2.19E-05	2.01E-05	1.95E-05	1.07E-05	8.83E-06
1161	650663.7	4197824	1.31E-04	1.40E-04	1.97E-05	2.10E-05	1.93E-05	1.87E-05	1.02E-05	8.47E-06
1162	650675.7	4197855	1.25E-04	1.34E-04	1.88E-05	2.00E-05	1.84E-05	1.79E-05	9.79E-06	8.10E-06
1163	650687.8	4197885	1.20E-04	1.28E-04	1.80E-05	1.91E-05	1.76E-05	1.71E-05	9.35E-06	7.74E-06
1164	650699.8	4197916	1.14E-04	1.22E-04	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.92E-06	7.38E-06
1165	650711.9	4197946	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.50E-06	7.03E-06
1166	650723.9	4197977	1.04E-04	1.10E-04	1.56E-05	1.66E-05	1.52E-05	1.48E-05	8.10E-06	6.70E-06
1167	650736	4198007	9.87E-05	1.05E-04	1.48E-05	1.58E-05	1.45E-05	1.41E-05	7.71E-06	6.38E-06
1168	650748	4198037	9.40E-05	1.00E-04	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.34E-06	6.07E-06
1169	650760.1	4198068	8.95E-05	9.54E-05	1.35E-05	1.43E-05	1.32E-05	1.27E-05	6.99E-06	5.78E-06
1170	649818.2	4196843	7.59E-05	8.09E-05	1.14E-05	1.21E-05	1.12E-05	1.08E-05	5.93E-06	4.90E-06
1171	649847.5	4196858	8.05E-05	8.58E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.29E-06	5.20E-06
1172	649876.8	4196873	8.52E-05	9.09E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.66E-06	5.51E-06

1173	649906.1	4196887	9.02E-05	9.61E-05	1.36E-05	1.44E-05	1.33E-05	1.28E-05	7.04E-06	5.83E-06
1174	649935.3	4196902	9.51E-05	1.01E-04	1.43E-05	1.52E-05	1.40E-05	1.36E-05	7.43E-06	6.15E-06
1175	649964.6	4196917	1.00E-04	1.07E-04	1.51E-05	1.60E-05	1.47E-05	1.43E-05	7.83E-06	6.48E-06
1176	649993.9	4196931	1.05E-04	1.12E-04	1.58E-05	1.68E-05	1.55E-05	1.50E-05	8.22E-06	6.80E-06
1177	650023.2	4196946	1.10E-04	1.17E-04	1.66E-05	1.76E-05	1.62E-05	1.57E-05	8.61E-06	7.12E-06
1178	650052.5	4196960	1.15E-04	1.23E-04	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.99E-06	7.44E-06
1179	650081.8	4196975	1.20E-04	1.28E-04	1.80E-05	1.92E-05	1.76E-05	1.71E-05	9.36E-06	7.74E-06
1180	650111.1	4196990	1.24E-04	1.32E-04	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.71E-06	8.03E-06
1181	650140.4	4197004	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.89E-05	1.83E-05	1.00E-05	8.30E-06
1182	650169.7	4197019	1.32E-04	1.41E-04	1.99E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.54E-06
1183	650199	4197034	1.36E-04	1.45E-04	2.04E-05	2.17E-05	1.99E-05	1.93E-05	1.06E-05	8.76E-06
1184	650228.3	4197048	1.39E-04	1.48E-04	2.08E-05	2.21E-05	2.04E-05	1.97E-05	1.08E-05	8.95E-06
1185	650257.5	4197063	1.41E-04	1.50E-04	2.12E-05	2.26E-05	2.08E-05	2.01E-05	1.10E-05	9.12E-06
1186	650286.8	4197078	1.43E-04	1.53E-04	2.15E-05	2.29E-05	2.11E-05	2.04E-05	1.12E-05	9.26E-06
1187	650316.1	4197092	1.45E-04	1.55E-04	2.18E-05	2.32E-05	2.13E-05	2.07E-05	1.13E-05	9.37E-06
1188	650345.4	4197107	1.46E-04	1.56E-04	2.20E-05	2.34E-05	2.15E-05	2.09E-05	1.14E-05	9.46E-06
1189	650374.7	4197122	1.47E-04	1.57E-04	2.21E-05	2.35E-05	2.17E-05	2.10E-05	1.15E-05	9.52E-06
1190	650404	4197136	1.48E-04	1.57E-04	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.54E-06
1191	650433.3	4197151	1.47E-04	1.57E-04	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.52E-06
1192	650462.6	4197166	1.47E-04	1.57E-04	2.21E-05	2.35E-05	2.16E-05	2.09E-05	1.15E-05	9.49E-06
1193	650491.9	4197180	1.46E-04	1.56E-04	2.19E-05	2.33E-05	2.15E-05	2.08E-05	1.14E-05	9.43E-06
1194	650521.2	4197195	1.45E-04	1.54E-04	2.18E-05	2.31E-05	2.13E-05	2.06E-05	1.13E-05	9.35E-06
1195	650550.4	4197209	1.43E-04	1.53E-04	2.15E-05	2.29E-05	2.10E-05	2.04E-05	1.12E-05	9.25E-06
1196	650579.7	4197224	1.41E-04	1.51E-04	2.12E-05	2.26E-05	2.08E-05	2.01E-05	1.10E-05	9.13E-06
1197	650609	4197239	1.39E-04	1.48E-04	2.09E-05	2.22E-05	2.04E-05	1.98E-05	1.09E-05	8.99E-06
1198	650642.3	4197264	1.37E-04	1.46E-04	2.06E-05	2.19E-05	2.01E-05	1.95E-05	1.07E-05	8.85E-06
1199	650654.4	4197294	1.38E-04	1.47E-04	2.07E-05	2.20E-05	2.03E-05	1.96E-05	1.08E-05	8.90E-06
1200	650666.5	4197324	1.38E-04	1.47E-04	2.08E-05	2.21E-05	2.03E-05	1.97E-05	1.08E-05	8.93E-06
1201	650678.5	4197355	1.38E-04	1.47E-04	2.08E-05	2.21E-05	2.03E-05	1.97E-05	1.08E-05	8.93E-06
1202	650690.6	4197385	1.38E-04	1.47E-04	2.07E-05	2.20E-05	2.03E-05	1.97E-05	1.08E-05	8.91E-06
1203	650702.7	4197416	1.37E-04	1.46E-04	2.06E-05	2.19E-05	2.02E-05	1.95E-05	1.07E-05	8.86E-06
1204	650714.7	4197446	1.36E-04	1.45E-04	2.04E-05	2.17E-05	2.00E-05	1.94E-05	1.06E-05	8.79E-06
1205	650726.8	4197477	1.34E-04	1.43E-04	2.02E-05	2.15E-05	1.98E-05	1.92E-05	1.05E-05	8.69E-06
1206	650738.9	4197507	1.32E-04	1.41E-04	1.99E-05	2.12E-05	1.95E-05	1.89E-05	1.03E-05	8.56E-06
1207	650750.9	4197538	1.30E-04	1.39E-04	1.96E-05	2.08E-05	1.91E-05	1.85E-05	1.02E-05	8.41E-06
1208	650763	4197568	1.27E-04	1.36E-04	1.92E-05	2.04E-05	1.87E-05	1.82E-05	9.95E-06	8.23E-06
1209	650775	4197598	1.24E-04	1.33E-04	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.72E-06	8.04E-06
1210	650787.1	4197629	1.21E-04	1.29E-04	1.82E-05	1.94E-05	1.78E-05	1.73E-05	9.46E-06	7.83E-06
1211	650799.2	4197659	1.18E-04	1.25E-04	1.77E-05	1.88E-05	1.73E-05	1.68E-05	9.19E-06	7.60E-06
1212	650811.2	4197690	1.14E-04	1.22E-04	1.71E-05	1.82E-05	1.68E-05	1.63E-05	8.91E-06	7.37E-06
1213	650823.3	4197720	1.10E-04	1.17E-04	1.66E-05	1.76E-05	1.62E-05	1.57E-05	8.61E-06	7.12E-06
1214	650835.4	4197751	1.06E-04	1.13E-04	1.60E-05	1.70E-05	1.56E-05	1.52E-05	8.30E-06	6.87E-06
1215	650847.4	4197781	1.02E-04	1.09E-04	1.54E-05	1.64E-05	1.51E-05	1.46E-05	8.00E-06	6.62E-06
1216	650859.5	4197812	9.84E-05	1.05E-04	1.48E-05	1.57E-05	1.45E-05	1.40E-05	7.69E-06	6.36E-06
1217	650871.6	4197842	9.46E-05	1.01E-04	1.42E-05	1.51E-05	1.39E-05	1.35E-05	7.39E-06	6.11E-06
1218	650883.6	4197872	9.08E-05	9.68E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.09E-06	5.87E-06
1219	650895.7	4197903	8.71E-05	9.28E-05	1.31E-05	1.39E-05	1.28E-05	1.24E-05	6.80E-06	5.63E-06
1220	650907.8	4197933	8.35E-05	8.91E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.53E-06	5.40E-06
1221	650919.8	4197964	8.01E-05	8.54E-05	1.21E-05	1.28E-05	1.18E-05	1.14E-05	6.26E-06	5.18E-06
1222	650931.9	4197994	7.69E-05	8.20E-05	1.16E-05	1.23E-05	1.13E-05	1.10E-05	6.01E-06	4.97E-06
1223	650944	4198025	7.37E-05	7.86E-05	1.11E-05	1.18E-05	1.08E-05	1.05E-05	5.76E-06	4.77E-06
1224	650956	4198055	7.07E-05	7.54E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.53E-06	4.57E-06
1225	650968.1	4198086	6.78E-05	7.23E-05	1.02E-05	1.08E-05	9.97E-06	9.67E-06	5.30E-06	4.38E-06
1226	649837.9	4196644	5.36E-05	5.71E-05	8.06E-06	8.57E-06	7.88E-06	7.64E-06	4.19E-06	3.46E-06
1227	649867.2	4196659	5.64E-05	6.02E-05	8.49E-06	9.02E-06	8.30E-06	8.04E-06	4.41E-06	3.65E-06
1228	649896.5	4196674	5.95E-05	6.34E-05	8.94E-06	9.51E-06	8.74E-06	8.48E-06	4.65E-06	3.84E-06

1229	649925.9	4196688	6.27E-05	6.68E-05	9.42E-06	1.00E-05	9.21E-06	8.93E-06	4.89E-06	4.05E-06
1230	649955.2	4196703	6.60E-05	7.03E-05	9.92E-06	1.05E-05	9.70E-06	9.40E-06	5.15E-06	4.26E-06
1231	649984.5	4196718	6.94E-05	7.40E-05	1.04E-05	1.11E-05	1.02E-05	9.89E-06	5.42E-06	4.48E-06
1232	650013.8	4196732	7.29E-05	7.77E-05	1.10E-05	1.17E-05	1.07E-05	1.04E-05	5.69E-06	4.71E-06
1233	650043.1	4196747	7.65E-05	8.15E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.97E-06	4.94E-06
1234	650072.4	4196762	8.01E-05	8.54E-05	1.20E-05	1.28E-05	1.18E-05	1.14E-05	6.25E-06	5.17E-06
1235	650101.7	4196776	8.37E-05	8.93E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.54E-06	5.41E-06
1236	650131	4196791	8.73E-05	9.30E-05	1.31E-05	1.40E-05	1.28E-05	1.24E-05	6.82E-06	5.64E-06
1237	650160.4	4196806	9.08E-05	9.67E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.09E-06	5.86E-06
1238	650189.7	4196820	9.41E-05	1.00E-04	1.42E-05	1.50E-05	1.38E-05	1.34E-05	7.35E-06	6.08E-06
1239	650219	4196835	9.73E-05	1.04E-04	1.46E-05	1.56E-05	1.43E-05	1.39E-05	7.60E-06	6.29E-06
1240	650248.3	4196849	1.00E-04	1.07E-04	1.51E-05	1.61E-05	1.48E-05	1.43E-05	7.84E-06	6.49E-06
1241	650277.6	4196864	1.03E-04	1.10E-04	1.55E-05	1.65E-05	1.52E-05	1.47E-05	8.06E-06	6.67E-06
1242	650306.9	4196879	1.06E-04	1.13E-04	1.59E-05	1.69E-05	1.56E-05	1.51E-05	8.27E-06	6.84E-06
1243	650336.2	4196893	1.08E-04	1.15E-04	1.63E-05	1.73E-05	1.59E-05	1.54E-05	8.45E-06	6.99E-06
1244	650365.6	4196908	1.10E-04	1.18E-04	1.66E-05	1.76E-05	1.62E-05	1.57E-05	8.62E-06	7.13E-06
1245	650394.9	4196923	1.12E-04	1.20E-04	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.76E-06	7.24E-06
1246	650424.2	4196937	1.13E-04	1.21E-04	1.70E-05	1.81E-05	1.67E-05	1.62E-05	8.86E-06	7.33E-06
1247	650453.5	4196952	1.15E-04	1.22E-04	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.97E-06	7.42E-06
1248	650482.8	4196967	1.16E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.05E-06	7.48E-06
1249	650512.1	4196981	1.16E-04	1.24E-04	1.75E-05	1.86E-05	1.71E-05	1.66E-05	9.10E-06	7.53E-06
1250	650541.4	4196996	1.17E-04	1.24E-04	1.75E-05	1.87E-05	1.72E-05	1.66E-05	9.12E-06	7.54E-06
1251	650570.7	4197011	1.17E-04	1.25E-04	1.76E-05	1.87E-05	1.72E-05	1.66E-05	9.12E-06	7.55E-06
1252	650600.1	4197025	1.17E-04	1.24E-04	1.75E-05	1.86E-05	1.71E-05	1.66E-05	9.11E-06	7.54E-06
1253	650629.4	4197040	1.16E-04	1.24E-04	1.75E-05	1.86E-05	1.71E-05	1.66E-05	9.08E-06	7.51E-06
1254	650658.7	4197055	1.16E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.03E-06	7.47E-06
1255	650688	4197069	1.15E-04	1.22E-04	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.95E-06	7.41E-06
1256	650717.3	4197084	1.14E-04	1.21E-04	1.71E-05	1.81E-05	1.67E-05	1.62E-05	8.87E-06	7.34E-06
1257	650746.6	4197099	1.12E-04	1.20E-04	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.77E-06	7.25E-06
1258	650775.9	4197113	1.11E-04	1.18E-04	1.67E-05	1.77E-05	1.63E-05	1.58E-05	8.66E-06	7.16E-06
1259	650793.8	4197139	1.11E-04	1.18E-04	1.67E-05	1.77E-05	1.63E-05	1.58E-05	8.67E-06	7.17E-06
1260	650805.8	4197169	1.12E-04	1.19E-04	1.68E-05	1.79E-05	1.64E-05	1.59E-05	8.73E-06	7.22E-06
1261	650817.9	4197199	1.12E-04	1.20E-04	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.77E-06	7.25E-06
1262	650830	4197230	1.13E-04	1.20E-04	1.69E-05	1.80E-05	1.66E-05	1.60E-05	8.79E-06	7.27E-06
1263	650842.1	4197260	1.13E-04	1.20E-04	1.69E-05	1.80E-05	1.66E-05	1.60E-05	8.80E-06	7.28E-06
1264	650854.1	4197291	1.12E-04	1.20E-04	1.69E-05	1.80E-05	1.65E-05	1.60E-05	8.78E-06	7.26E-06
1265	650866.2	4197321	1.12E-04	1.19E-04	1.68E-05	1.79E-05	1.65E-05	1.59E-05	8.74E-06	7.23E-06
1266	650878.3	4197352	1.11E-04	1.18E-04	1.67E-05	1.78E-05	1.63E-05	1.58E-05	8.68E-06	7.18E-06
1267	650890.4	4197382	1.10E-04	1.17E-04	1.66E-05	1.76E-05	1.62E-05	1.57E-05	8.60E-06	7.11E-06
1268	650902.4	4197413	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.50E-06	7.03E-06
1269	650914.5	4197443	1.07E-04	1.14E-04	1.61E-05	1.71E-05	1.58E-05	1.53E-05	8.37E-06	6.93E-06
1270	650926.6	4197474	1.05E-04	1.12E-04	1.59E-05	1.69E-05	1.55E-05	1.50E-05	8.23E-06	6.81E-06
1271	650938.6	4197504	1.03E-04	1.10E-04	1.55E-05	1.65E-05	1.52E-05	1.47E-05	8.07E-06	6.68E-06
1272	650950.7	4197535	1.01E-04	1.08E-04	1.52E-05	1.62E-05	1.49E-05	1.44E-05	7.90E-06	6.53E-06
1273	650962.8	4197565	9.87E-05	1.05E-04	1.48E-05	1.58E-05	1.45E-05	1.41E-05	7.71E-06	6.38E-06
1274	650974.9	4197596	9.61E-05	1.02E-04	1.45E-05	1.54E-05	1.41E-05	1.37E-05	7.51E-06	6.21E-06
1275	650986.9	4197626	9.34E-05	9.96E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.30E-06	6.04E-06
1276	650999	4197656	9.07E-05	9.67E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.09E-06	5.86E-06
1277	651011.1	4197687	8.79E-05	9.37E-05	1.32E-05	1.40E-05	1.29E-05	1.25E-05	6.86E-06	5.68E-06
1278	651023.2	4197717	8.50E-05	9.06E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.64E-06	5.49E-06
1279	651035.2	4197748	8.21E-05	8.75E-05	1.23E-05	1.31E-05	1.21E-05	1.17E-05	6.41E-06	5.31E-06
1280	651047.3	4197778	7.93E-05	8.45E-05	1.19E-05	1.27E-05	1.17E-05	1.13E-05	6.19E-06	5.12E-06
1281	651059.4	4197809	7.65E-05	8.15E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.98E-06	4.94E-06
1282	651071.5	4197839	7.38E-05	7.87E-05	1.11E-05	1.18E-05	1.09E-05	1.05E-05	5.76E-06	4.77E-06
1283	651083.5	4197870	7.12E-05	7.59E-05	1.07E-05	1.14E-05	1.05E-05	1.01E-05	5.56E-06	4.60E-06
1284	651095.6	4197900	6.87E-05	7.32E-05	1.03E-05	1.10E-05	1.01E-05	9.78E-06	5.36E-06	4.44E-06

1285	651107.7	4197931	6.62E-05	7.06E-05	9.96E-06	1.06E-05	9.74E-06	9.44E-06	5.17E-06	4.28E-06
1286	651119.8	4197961	6.39E-05	6.81E-05	9.61E-06	1.02E-05	9.39E-06	9.10E-06	4.99E-06	4.13E-06
1287	651131.8	4197992	6.16E-05	6.57E-05	9.27E-06	9.85E-06	9.06E-06	8.78E-06	4.81E-06	3.98E-06
1288	651143.9	4198022	5.94E-05	6.34E-05	8.94E-06	9.50E-06	8.74E-06	8.47E-06	4.64E-06	3.84E-06
1289	651156	4198053	5.73E-05	6.11E-05	8.62E-06	9.16E-06	8.43E-06	8.17E-06	4.48E-06	3.70E-06
1290	651168.1	4198083	5.53E-05	5.89E-05	8.31E-06	8.83E-06	8.13E-06	7.88E-06	4.32E-06	3.57E-06
1291	649653.7	4198103	4.40E-03	4.69E-03	6.62E-04	7.04E-04	6.47E-04	6.27E-04	3.44E-04	2.84E-04
1292	649614.2	4198097	4.91E-03	5.24E-03	7.39E-04	7.86E-04	7.23E-04	7.00E-04	3.84E-04	3.18E-04
1293	649574.7	4198090	5.69E-03	6.07E-03	8.56E-04	9.10E-04	8.37E-04	8.11E-04	4.45E-04	3.68E-04
1294	649657.8	4198078	3.47E-03	3.70E-03	5.22E-04	5.55E-04	5.11E-04	4.95E-04	2.71E-04	2.25E-04
1295	649618.3	4198072	3.91E-03	4.16E-03	5.87E-04	6.25E-04	5.74E-04	5.57E-04	3.05E-04	2.52E-04
1296	649578.8	4198065	4.51E-03	4.80E-03	6.77E-04	7.20E-04	6.62E-04	6.42E-04	3.52E-04	2.91E-04
1297	649661.8	4198054	2.91E-03	3.11E-03	4.38E-04	4.66E-04	4.28E-04	4.15E-04	2.28E-04	1.88E-04
1298	649622.3	4198047	3.28E-03	3.50E-03	4.94E-04	5.25E-04	4.83E-04	4.68E-04	2.56E-04	2.12E-04
1299	649582.8	4198041	3.77E-03	4.01E-03	5.66E-04	6.02E-04	5.54E-04	5.37E-04	2.94E-04	2.43E-04
1300	649646.2	4198026	2.68E-03	2.86E-03	4.03E-04	4.29E-04	3.94E-04	3.82E-04	2.10E-04	1.73E-04
1301	649606.7	4198019	3.04E-03	3.24E-03	4.56E-04	4.85E-04	4.46E-04	4.33E-04	2.37E-04	1.96E-04
1302	649654.3	4197976	2.14E-03	2.28E-03	3.21E-04	3.42E-04	3.14E-04	3.04E-04	1.67E-04	1.38E-04
1303	649614.8	4197970	2.40E-03	2.55E-03	3.60E-04	3.83E-04	3.52E-04	3.41E-04	1.87E-04	1.55E-04
1304	649642.7	4197924	1.86E-03	1.98E-03	2.80E-04	2.98E-04	2.74E-04	2.65E-04	1.45E-04	1.20E-04
1305	649603.2	4197917	2.07E-03	2.20E-03	3.11E-04	3.30E-04	3.04E-04	2.94E-04	1.61E-04	1.34E-04
1306	649690.4	4197881	1.41E-03	1.50E-03	2.12E-04	2.25E-04	2.07E-04	2.01E-04	1.10E-04	9.10E-05
1307	649650.9	4197875	1.55E-03	1.65E-03	2.33E-04	2.48E-04	2.28E-04	2.21E-04	1.21E-04	1.00E-04
1308	649611.4	4197868	1.70E-03	1.81E-03	2.55E-04	2.71E-04	2.49E-04	2.42E-04	1.33E-04	1.10E-04
1309	649659.1	4197825	1.27E-03	1.36E-03	1.91E-04	2.04E-04	1.87E-04	1.81E-04	9.95E-05	8.23E-05
1310	649619.6	4197819	1.37E-03	1.46E-03	2.06E-04	2.19E-04	2.02E-04	1.96E-04	1.07E-04	8.87E-05
1311	649655.6	4197723	9.45E-04	1.01E-03	1.42E-04	1.51E-04	1.39E-04	1.35E-04	7.38E-05	6.11E-05
1312	649652.2	4197621	6.57E-04	7.00E-04	9.88E-05	1.05E-04	9.66E-05	9.36E-05	5.13E-05	4.24E-05
1313	649724.4	4197431	3.33E-04	3.55E-04	5.01E-05	5.32E-05	4.90E-05	4.75E-05	2.60E-05	2.15E-05
1314	649684.9	4197424	3.21E-04	3.43E-04	4.83E-05	5.14E-05	4.73E-05	4.58E-05	2.51E-05	2.08E-05
1315	649757	4197233	1.85E-04	1.97E-04	2.78E-05	2.96E-05	2.72E-05	2.64E-05	1.45E-05	1.20E-05
1316	649717.5	4197227	1.76E-04	1.87E-04	2.64E-05	2.81E-05	2.58E-05	2.50E-05	1.37E-05	1.13E-05
1317	649848.9	4197046	1.22E-04	1.30E-04	1.84E-05	1.96E-05	1.80E-05	1.74E-05	9.56E-06	7.91E-06
1318	649769.9	4197033	1.10E-04	1.17E-04	1.66E-05	1.76E-05	1.62E-05	1.57E-05	8.60E-06	7.11E-06
1319	649881.6	4196848	8.15E-05	8.69E-05	1.23E-05	1.30E-05	1.20E-05	1.16E-05	6.37E-06	5.27E-06
1320	649782.8	4196832	7.15E-05	7.63E-05	1.08E-05	1.14E-05	1.05E-05	1.02E-05	5.59E-06	4.62E-06
1321	649914.2	4196651	5.81E-05	6.20E-05	8.74E-06	9.29E-06	8.55E-06	8.28E-06	4.54E-06	3.76E-06
1322	649815.5	4196635	5.16E-05	5.50E-05	7.76E-06	8.25E-06	7.59E-06	7.36E-06	4.03E-06	3.34E-06
1323	649936.4	4197077	1.40E-04	1.49E-04	2.10E-05	2.23E-05	2.05E-05	1.99E-05	1.09E-05	9.02E-06
1324	650002.9	4196889	9.72E-05	1.04E-04	1.46E-05	1.55E-05	1.43E-05	1.38E-05	7.59E-06	6.28E-06
1325	650069.4	4196700	7.17E-05	7.65E-05	1.08E-05	1.15E-05	1.05E-05	1.02E-05	5.60E-06	4.64E-06
1326	649546.5	4198075	5.92E-03	6.31E-03	8.90E-04	9.46E-04	8.70E-04	8.43E-04	4.62E-04	3.82E-04
1327	649558.7	4198053	4.61E-03	4.91E-03	6.93E-04	7.37E-04	6.78E-04	6.57E-04	3.60E-04	2.98E-04
1328	649583.2	4198010	3.20E-03	3.41E-03	4.81E-04	5.12E-04	4.71E-04	4.56E-04	2.50E-04	2.07E-04
1329	649705	4197849	1.22E-03	1.30E-03	1.83E-04	1.94E-04	1.79E-04	1.73E-04	9.49E-05	7.85E-05
1330	649999.1	4197326	2.46E-04	2.62E-04	3.69E-05	3.92E-05	3.61E-05	3.50E-05	1.92E-05	1.59E-05
1331	649975.3	4197312	2.40E-04	2.56E-04	3.61E-05	3.84E-05	3.53E-05	3.42E-05	1.88E-05	1.55E-05
1332	650097.1	4197151	1.69E-04	1.80E-04	2.54E-05	2.70E-05	2.48E-05	2.41E-05	1.32E-05	1.09E-05
1333	650073.3	4197138	1.65E-04	1.76E-04	2.48E-05	2.63E-05	2.42E-05	2.35E-05	1.29E-05	1.06E-05
1334	650195.1	4196977	1.23E-04	1.31E-04	1.85E-05	1.97E-05	1.81E-05	1.75E-05	9.62E-06	7.96E-06
1335	650171.4	4196964	1.20E-04	1.28E-04	1.80E-05	1.92E-05	1.76E-05	1.71E-05	9.37E-06	7.75E-06
1336	650293.2	4196803	9.41E-05	1.00E-04	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.35E-06	6.08E-06
1337	650269.4	4196789	9.16E-05	9.77E-05	1.38E-05	1.46E-05	1.35E-05	1.31E-05	7.16E-06	5.92E-06
1338	649520.1	4198057	6.04E-03	6.44E-03	9.09E-04	9.66E-04	8.89E-04	8.61E-04	4.72E-04	3.91E-04
1339	649534.2	4198036	4.72E-03	5.03E-03	7.10E-04	7.55E-04	6.94E-04	6.73E-04	3.69E-04	3.05E-04
1340	649562.5	4198025	3.81E-03	4.06E-03	5.73E-04	6.09E-04	5.60E-04	5.43E-04	2.98E-04	2.46E-04

1341	649534.3	4198006	3.95E-03	4.21E-03	5.93E-04	6.31E-04	5.80E-04	5.62E-04	3.08E-04	2.55E-04
1342	649562.5	4197995	3.27E-03	3.49E-03	4.92E-04	5.23E-04	4.81E-04	4.66E-04	2.56E-04	2.11E-04
1343	649590.7	4197954	2.46E-03	2.62E-03	3.70E-04	3.93E-04	3.62E-04	3.51E-04	1.92E-04	1.59E-04
1344	650155.4	4197189	1.79E-04	1.91E-04	2.69E-05	2.86E-05	2.63E-05	2.55E-05	1.40E-05	1.16E-05
1345	650127.2	4197170	1.74E-04	1.86E-04	2.62E-05	2.78E-05	2.56E-05	2.48E-05	1.36E-05	1.12E-05
1346	650268.4	4197024	1.33E-04	1.41E-04	1.99E-05	2.12E-05	1.95E-05	1.89E-05	1.04E-05	8.57E-06
1347	650240.2	4197005	1.29E-04	1.38E-04	1.94E-05	2.06E-05	1.90E-05	1.84E-05	1.01E-05	8.34E-06
1348	650381.3	4196859	1.03E-04	1.09E-04	1.54E-05	1.64E-05	1.51E-05	1.46E-05	8.02E-06	6.63E-06
1349	650353.1	4196840	9.99E-05	1.07E-04	1.50E-05	1.60E-05	1.47E-05	1.42E-05	7.80E-06	6.46E-06
1350	649490.9	4198036	6.26E-03	6.68E-03	9.42E-04	1.00E-03	9.21E-04	8.92E-04	4.89E-04	4.05E-04
1351	649505.8	4198016	4.89E-03	5.21E-03	7.35E-04	7.82E-04	7.19E-04	6.97E-04	3.82E-04	3.16E-04
1352	649504.8	4197984	4.09E-03	4.36E-03	6.15E-04	6.53E-04	6.01E-04	5.82E-04	3.19E-04	2.64E-04
1353	649535.6	4197976	3.38E-03	3.60E-03	5.08E-04	5.40E-04	4.96E-04	4.81E-04	2.64E-04	2.18E-04
1354	649565.5	4197936	2.52E-03	2.69E-03	3.79E-04	4.03E-04	3.70E-04	3.59E-04	1.97E-04	1.63E-04
1355	649595.4	4197896	1.96E-03	2.09E-03	2.95E-04	3.13E-04	2.88E-04	2.79E-04	1.53E-04	1.27E-04
1356	649609.3	4197844	1.56E-03	1.66E-03	2.34E-04	2.49E-04	2.29E-04	2.22E-04	1.22E-04	1.01E-04
1357	649639.1	4197803	1.24E-03	1.33E-03	1.87E-04	1.99E-04	1.83E-04	1.77E-04	9.72E-05	8.04E-05
1358	649461.9	4198013	6.48E-03	6.90E-03	9.74E-04	1.04E-03	9.52E-04	9.23E-04	5.06E-04	4.18E-04
1359	649478.3	4197994	5.04E-03	5.37E-03	7.58E-04	8.06E-04	7.41E-04	7.18E-04	3.94E-04	3.26E-04
1360	649480.3	4197962	4.15E-03	4.43E-03	6.24E-04	6.64E-04	6.10E-04	5.92E-04	3.24E-04	2.68E-04
1361	649511.2	4197956	3.44E-03	3.67E-03	5.18E-04	5.50E-04	5.06E-04	4.91E-04	2.69E-04	2.22E-04
1362	649544	4197918	2.52E-03	2.69E-03	3.80E-04	4.03E-04	3.71E-04	3.60E-04	1.97E-04	1.63E-04
1363	649576.9	4197881	1.96E-03	2.09E-03	2.95E-04	3.14E-04	2.89E-04	2.80E-04	1.53E-04	1.27E-04
1364	650314.1	4197064	1.39E-04	1.48E-04	2.09E-05	2.23E-05	2.05E-05	1.99E-05	1.09E-05	9.00E-06
1365	650445.5	4196913	1.09E-04	1.17E-04	1.65E-05	1.75E-05	1.61E-05	1.56E-05	8.55E-06	7.07E-06
1366	650416.6	4196888	1.06E-04	1.13E-04	1.60E-05	1.70E-05	1.57E-05	1.52E-05	8.32E-06	6.88E-06
1367	649435.4	4197986	6.53E-03	6.96E-03	9.82E-04	1.04E-03	9.61E-04	9.31E-04	5.10E-04	4.22E-04
1368	649406.7	4197953	6.41E-03	6.83E-03	9.64E-04	1.02E-03	9.42E-04	9.13E-04	5.01E-04	4.14E-04
1369	649378	4197921	6.13E-03	6.53E-03	9.21E-04	9.80E-04	9.01E-04	8.73E-04	4.79E-04	3.96E-04
1370	649454.2	4197970	5.06E-03	5.39E-03	7.61E-04	8.09E-04	7.44E-04	7.21E-04	3.95E-04	3.27E-04
1371	649425.5	4197937	4.93E-03	5.25E-03	7.41E-04	7.88E-04	7.25E-04	7.02E-04	3.85E-04	3.19E-04
1372	649396.8	4197904	4.64E-03	4.95E-03	6.98E-04	7.42E-04	6.82E-04	6.61E-04	3.62E-04	3.00E-04
1373	649458.6	4197937	4.05E-03	4.32E-03	6.09E-04	6.48E-04	5.96E-04	5.77E-04	3.16E-04	2.62E-04
1374	649429.9	4197904	3.87E-03	4.12E-03	5.81E-04	6.18E-04	5.68E-04	5.51E-04	3.02E-04	2.50E-04
1375	649401.2	4197871	3.48E-03	3.71E-03	5.23E-04	5.56E-04	5.11E-04	4.95E-04	2.72E-04	2.25E-04
1376	649491.8	4197937	3.43E-03	3.66E-03	5.16E-04	5.48E-04	5.04E-04	4.89E-04	2.68E-04	2.22E-04
1377	649463.1	4197904	3.29E-03	3.51E-03	4.95E-04	5.26E-04	4.84E-04	4.69E-04	2.57E-04	2.13E-04
1378	649434.4	4197871	3.06E-03	3.26E-03	4.60E-04	4.89E-04	4.50E-04	4.36E-04	2.39E-04	1.98E-04
1379	649515	4197887	2.42E-03	2.58E-03	3.64E-04	3.87E-04	3.56E-04	3.45E-04	1.89E-04	1.56E-04
1380	649486.3	4197855	2.24E-03	2.39E-03	3.37E-04	3.59E-04	3.30E-04	3.20E-04	1.75E-04	1.45E-04
1381	649457.6	4197822	2.02E-03	2.15E-03	3.04E-04	3.23E-04	2.97E-04	2.88E-04	1.58E-04	1.31E-04
1382	649552.5	4197854	1.91E-03	2.04E-03	2.87E-04	3.05E-04	2.81E-04	2.72E-04	1.49E-04	1.23E-04
1383	649523.8	4197822	1.77E-03	1.89E-03	2.66E-04	2.83E-04	2.60E-04	2.52E-04	1.38E-04	1.14E-04
1384	649495.1	4197789	1.57E-03	1.67E-03	2.36E-04	2.51E-04	2.31E-04	2.24E-04	1.23E-04	1.02E-04
1385	649590.1	4197821	1.49E-03	1.59E-03	2.25E-04	2.39E-04	2.20E-04	2.13E-04	1.17E-04	9.65E-05
1386	649561.4	4197789	1.39E-03	1.48E-03	2.09E-04	2.22E-04	2.05E-04	1.98E-04	1.09E-04	8.99E-05
1387	649532.7	4197756	1.28E-03	1.36E-03	1.92E-04	2.04E-04	1.88E-04	1.82E-04	9.98E-05	8.26E-05
1388	649613.3	4197772	1.18E-03	1.26E-03	1.78E-04	1.89E-04	1.74E-04	1.68E-04	9.23E-05	7.64E-05
1389	649584.6	4197739	1.10E-03	1.17E-03	1.65E-04	1.76E-04	1.62E-04	1.57E-04	8.60E-05	7.11E-05
1390	649674.1	4197690	8.21E-04	8.75E-04	1.23E-04	1.31E-04	1.21E-04	1.17E-04	6.41E-05	5.30E-05
1391	649645.4	4197657	7.53E-04	8.03E-04	1.13E-04	1.20E-04	1.11E-04	1.07E-04	5.88E-05	4.87E-05
1392	649806.6	4197689	6.77E-04	7.22E-04	1.02E-04	1.08E-04	9.96E-05	9.65E-05	5.29E-05	4.38E-05
1393	649734.8	4197607	5.88E-04	6.27E-04	8.85E-05	9.41E-05	8.65E-05	8.38E-05	4.60E-05	3.80E-05
1394	649881.7	4197623	5.21E-04	5.55E-04	7.83E-05	8.33E-05	7.66E-05	7.42E-05	4.07E-05	3.37E-05
1395	649810	4197541	4.56E-04	4.86E-04	6.86E-05	7.29E-05	6.71E-05	6.50E-05	3.56E-05	2.95E-05
1396	649885.1	4197475	3.65E-04	3.89E-04	5.49E-05	5.83E-05	5.37E-05	5.20E-05	2.85E-05	2.36E-05

1397	650107.1	4197425	2.77E-04	2.95E-04	4.17E-05	4.43E-05	4.08E-05	3.95E-05	2.17E-05	1.79E-05
1398	650035.3	4197343	2.51E-04	2.67E-04	3.77E-05	4.01E-05	3.69E-05	3.57E-05	1.96E-05	1.62E-05
1399	650185.6	4197211	1.84E-04	1.96E-04	2.76E-05	2.94E-05	2.70E-05	2.62E-05	1.44E-05	1.19E-05
1400	650407.6	4197161	1.52E-04	1.62E-04	2.28E-05	2.43E-05	2.23E-05	2.16E-05	1.19E-05	9.80E-06
1401	650335.8	4197079	1.41E-04	1.51E-04	2.12E-05	2.26E-05	2.08E-05	2.01E-05	1.10E-05	9.13E-06
1402	650557.8	4197029	1.20E-04	1.28E-04	1.80E-05	1.92E-05	1.76E-05	1.71E-05	9.36E-06	7.74E-06
1403	650471.7	4196931	1.11E-04	1.19E-04	1.67E-05	1.78E-05	1.64E-05	1.59E-05	8.69E-06	7.19E-06
1404	649362.1	4197903	5.74E-03	6.12E-03	8.63E-04	9.17E-04	8.44E-04	8.18E-04	4.48E-04	3.71E-04
1405	649379.4	4197885	4.29E-03	4.57E-03	6.45E-04	6.86E-04	6.31E-04	6.11E-04	3.35E-04	2.77E-04
1406	649381	4197852	3.13E-03	3.34E-03	4.71E-04	5.01E-04	4.61E-04	4.46E-04	2.45E-04	2.02E-04
1407	649413.8	4197848	2.79E-03	2.98E-03	4.20E-04	4.46E-04	4.10E-04	3.98E-04	2.18E-04	1.80E-04
1408	649432.7	4197797	1.84E-03	1.96E-03	2.77E-04	2.94E-04	2.71E-04	2.62E-04	1.44E-04	1.19E-04
1409	649467.2	4197761	1.39E-03	1.48E-03	2.09E-04	2.22E-04	2.05E-04	1.98E-04	1.09E-04	8.99E-05
1410	649501.7	4197725	1.14E-03	1.21E-03	1.71E-04	1.82E-04	1.68E-04	1.62E-04	8.90E-05	7.36E-05
1411	649561	4197713	1.02E-03	1.09E-03	1.53E-04	1.63E-04	1.50E-04	1.45E-04	7.97E-05	6.59E-05
1412	649536.1	4197689	9.32E-04	9.93E-04	1.40E-04	1.49E-04	1.37E-04	1.33E-04	7.28E-05	6.02E-05
1413	649620.7	4197631	6.94E-04	7.40E-04	1.04E-04	1.11E-04	1.02E-04	9.89E-05	5.42E-05	4.49E-05
1414	649699.9	4197569	5.32E-04	5.67E-04	8.00E-05	8.51E-05	7.82E-05	7.58E-05	4.16E-05	3.44E-05
1415	649674	4197544	4.90E-04	5.23E-04	7.38E-05	7.84E-05	7.21E-05	6.99E-05	3.83E-05	3.17E-05
1416	649770.9	4197499	4.12E-04	4.39E-04	6.19E-05	6.59E-05	6.06E-05	5.87E-05	3.22E-05	2.66E-05
1417	649743	4197471	3.80E-04	4.05E-04	5.72E-05	6.08E-05	5.59E-05	5.42E-05	2.97E-05	2.46E-05
1418	649841.9	4197429	3.30E-04	3.52E-04	4.96E-05	5.27E-05	4.85E-05	4.70E-05	2.58E-05	2.13E-05
1419	649811.9	4197399	3.05E-04	3.25E-04	4.59E-05	4.88E-05	4.49E-05	4.35E-05	2.38E-05	1.97E-05
1420	649979.3	4197283	2.25E-04	2.40E-04	3.38E-05	3.60E-05	3.31E-05	3.21E-05	1.76E-05	1.45E-05
1421	649949.8	4197254	2.11E-04	2.25E-04	3.17E-05	3.37E-05	3.10E-05	3.00E-05	1.65E-05	1.36E-05
1422	650116.9	4197138	1.64E-04	1.75E-04	2.47E-05	2.63E-05	2.42E-05	2.34E-05	1.28E-05	1.06E-05
1423	650087.7	4197109	1.56E-04	1.66E-04	2.34E-05	2.49E-05	2.29E-05	2.22E-05	1.22E-05	1.01E-05
1424	650294.7	4197035	1.34E-04	1.43E-04	2.02E-05	2.14E-05	1.97E-05	1.91E-05	1.05E-05	8.66E-06
1425	650241.2	4196979	1.24E-04	1.32E-04	1.86E-05	1.98E-05	1.82E-05	1.76E-05	9.67E-06	8.00E-06
1426	650405.6	4196862	1.03E-04	1.10E-04	1.55E-05	1.65E-05	1.51E-05	1.47E-05	8.04E-06	6.65E-06
1427	650379.1	4196834	9.92E-05	1.06E-04	1.49E-05	1.59E-05	1.46E-05	1.41E-05	7.75E-06	6.41E-06
1428	649338.6	4197883	5.04E-03	5.38E-03	7.58E-04	8.06E-04	7.41E-04	7.19E-04	3.94E-04	3.26E-04
1429	649347.9	4197860	3.66E-03	3.90E-03	5.50E-04	5.85E-04	5.38E-04	5.22E-04	2.86E-04	2.36E-04
1430	649357.1	4197836	2.82E-03	3.01E-03	4.25E-04	4.52E-04	4.15E-04	4.02E-04	2.21E-04	1.83E-04
1431	649382.3	4197823	2.44E-03	2.60E-03	3.66E-04	3.89E-04	3.58E-04	3.47E-04	1.90E-04	1.57E-04
1432	649347.9	4197806	2.12E-03	2.27E-03	3.20E-04	3.40E-04	3.12E-04	3.03E-04	1.66E-04	1.37E-04
1433	649400.9	4197777	1.67E-03	1.78E-03	2.51E-04	2.66E-04	2.45E-04	2.38E-04	1.30E-04	1.08E-04
1434	649366.4	4197759	1.45E-03	1.55E-03	2.19E-04	2.32E-04	2.14E-04	2.07E-04	1.14E-04	9.39E-05
1435	649419.5	4197731	1.21E-03	1.29E-03	1.82E-04	1.93E-04	1.78E-04	1.72E-04	9.44E-05	7.81E-05
1436	649385	4197713	1.05E-03	1.12E-03	1.58E-04	1.68E-04	1.55E-04	1.50E-04	8.23E-05	6.81E-05
1437	649438	4197684	9.11E-04	9.71E-04	1.37E-04	1.46E-04	1.34E-04	1.30E-04	7.11E-05	5.88E-05
1438	649469.8	4197705	1.03E-03	1.10E-03	1.55E-04	1.65E-04	1.52E-04	1.47E-04	8.07E-05	6.68E-05
1439	649403.5	4197666	7.94E-04	8.46E-04	1.19E-04	1.27E-04	1.17E-04	1.13E-04	6.20E-05	5.13E-05
1440	649456.6	4197638	7.07E-04	7.53E-04	1.06E-04	1.13E-04	1.04E-04	1.01E-04	5.52E-05	4.57E-05
1441	649488.4	4197658	8.03E-04	8.56E-04	1.21E-04	1.28E-04	1.18E-04	1.14E-04	6.27E-05	5.19E-05
1442	649422.1	4197620	6.17E-04	6.57E-04	9.27E-05	9.86E-05	9.07E-05	8.79E-05	4.82E-05	3.99E-05
1443	649493.7	4197545	4.55E-04	4.85E-04	6.84E-05	7.27E-05	6.69E-05	6.48E-05	3.55E-05	2.94E-05
1444	649525.5	4197565	5.16E-04	5.50E-04	7.76E-05	8.25E-05	7.59E-05	7.36E-05	4.03E-05	3.34E-05
1445	649557.3	4197586	5.76E-04	6.14E-04	8.66E-05	9.21E-05	8.47E-05	8.21E-05	4.50E-05	3.72E-05
1446	649589.2	4197606	6.32E-04	6.74E-04	9.51E-05	1.01E-04	9.30E-05	9.01E-05	4.94E-05	4.09E-05
1447	649459.2	4197527	3.99E-04	4.26E-04	6.01E-05	6.38E-05	5.87E-05	5.69E-05	3.12E-05	2.58E-05
1448	649530.8	4197452	3.14E-04	3.35E-04	4.73E-05	5.03E-05	4.62E-05	4.48E-05	2.46E-05	2.03E-05
1449	649562.6	4197472	3.55E-04	3.78E-04	5.33E-05	5.67E-05	5.22E-05	5.06E-05	2.77E-05	2.29E-05
1450	649594.5	4197493	3.96E-04	4.22E-04	5.95E-05	6.33E-05	5.82E-05	5.64E-05	3.09E-05	2.56E-05
1451	649626.3	4197513	4.36E-04	4.64E-04	6.55E-05	6.97E-05	6.41E-05	6.21E-05	3.40E-05	2.82E-05
1452	649496.3	4197434	2.78E-04	2.97E-04	4.18E-05	4.45E-05	4.09E-05	3.97E-05	2.17E-05	1.80E-05

1453	649567.9	4197359	2.30E-04	2.45E-04	3.45E-05	3.67E-05	3.38E-05	3.27E-05	1.79E-05	1.48E-05
1454	649599.8	4197380	2.57E-04	2.74E-04	3.87E-05	4.11E-05	3.78E-05	3.66E-05	2.01E-05	1.66E-05
1455	649631.6	4197400	2.85E-04	3.04E-04	4.29E-05	4.56E-05	4.20E-05	4.07E-05	2.23E-05	1.84E-05
1456	649711.2	4197451	3.55E-04	3.79E-04	5.34E-05	5.68E-05	5.22E-05	5.06E-05	2.77E-05	2.30E-05
1457	649533.5	4197341	2.05E-04	2.19E-04	3.08E-05	3.28E-05	3.02E-05	2.92E-05	1.60E-05	1.33E-05
1458	649605.1	4197266	1.75E-04	1.86E-04	2.63E-05	2.80E-05	2.57E-05	2.49E-05	1.37E-05	1.13E-05
1459	649636.9	4197287	1.94E-04	2.07E-04	2.92E-05	3.11E-05	2.86E-05	2.77E-05	1.52E-05	1.26E-05
1460	649780.1	4197379	2.87E-04	3.06E-04	4.31E-05	4.59E-05	4.22E-05	4.09E-05	2.24E-05	1.85E-05
1461	649570.6	4197249	1.58E-04	1.68E-04	2.37E-05	2.52E-05	2.32E-05	2.25E-05	1.23E-05	1.02E-05
1462	649679.3	4197081	1.12E-04	1.20E-04	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.76E-06	7.24E-06
1463	649711.1	4197101	1.23E-04	1.31E-04	1.85E-05	1.96E-05	1.81E-05	1.75E-05	9.59E-06	7.94E-06
1464	649902.1	4197224	1.94E-04	2.07E-04	2.92E-05	3.11E-05	2.86E-05	2.77E-05	1.52E-05	1.26E-05
1465	649644.8	4197063	1.03E-04	1.09E-04	1.54E-05	1.64E-05	1.51E-05	1.46E-05	8.01E-06	6.63E-06
1466	649754.3	4196895	7.91E-05	8.43E-05	1.19E-05	1.26E-05	1.16E-05	1.13E-05	6.18E-06	5.11E-06
1467	649787.6	4196917	8.58E-05	9.15E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.70E-06	5.55E-06
1468	649821	4196938	9.31E-05	9.92E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.27E-06	6.02E-06
1469	649854.3	4196960	1.01E-04	1.07E-04	1.51E-05	1.61E-05	1.48E-05	1.43E-05	7.86E-06	6.51E-06
1470	649887.7	4196981	1.09E-04	1.16E-04	1.63E-05	1.74E-05	1.60E-05	1.55E-05	8.48E-06	7.02E-06
1471	649719.1	4196877	7.32E-05	7.80E-05	1.10E-05	1.17E-05	1.08E-05	1.04E-05	5.72E-06	4.73E-06
1472	649828.4	4196710	5.94E-05	6.33E-05	8.93E-06	9.50E-06	8.74E-06	8.47E-06	4.64E-06	3.84E-06
1473	649861.5	4196731	6.37E-05	6.80E-05	9.59E-06	1.02E-05	9.37E-06	9.08E-06	4.98E-06	4.12E-06
1474	649894.6	4196752	6.84E-05	7.29E-05	1.03E-05	1.09E-05	1.01E-05	9.74E-06	5.34E-06	4.42E-06
1475	649927.7	4196773	7.33E-05	7.81E-05	1.10E-05	1.17E-05	1.08E-05	1.04E-05	5.73E-06	4.74E-06
1476	649960.8	4196795	7.85E-05	8.36E-05	1.18E-05	1.25E-05	1.15E-05	1.12E-05	6.13E-06	5.07E-06
1477	649993.9	4196816	8.38E-05	8.94E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.55E-06	5.42E-06
1478	649793.3	4196692	5.56E-05	5.93E-05	8.37E-06	8.89E-06	8.18E-06	7.93E-06	4.35E-06	3.60E-06
1479	649902.6	4196524	4.69E-05	5.00E-05	7.05E-06	7.49E-06	6.89E-06	6.68E-06	3.66E-06	3.03E-06
1480	649935.5	4196545	4.98E-05	5.31E-05	7.49E-06	7.96E-06	7.32E-06	7.10E-06	3.89E-06	3.22E-06
1481	649968.4	4196566	5.30E-05	5.65E-05	7.96E-06	8.47E-06	7.79E-06	7.55E-06	4.14E-06	3.42E-06
1482	650001.4	4196587	5.63E-05	6.00E-05	8.47E-06	9.00E-06	8.28E-06	8.03E-06	4.40E-06	3.64E-06
1483	650034.3	4196608	5.99E-05	6.38E-05	9.00E-06	9.57E-06	8.80E-06	8.53E-06	4.68E-06	3.87E-06
1484	650067.2	4196629	6.36E-05	6.78E-05	9.56E-06	1.02E-05	9.35E-06	9.06E-06	4.97E-06	4.11E-06
1485	650100.1	4196651	6.74E-05	7.19E-05	1.01E-05	1.08E-05	9.92E-06	9.61E-06	5.27E-06	4.36E-06
1486	650133.1	4196672	7.14E-05	7.61E-05	1.07E-05	1.14E-05	1.05E-05	1.02E-05	5.57E-06	4.61E-06
1487	650166	4196693	7.53E-05	8.03E-05	1.13E-05	1.20E-05	1.11E-05	1.07E-05	5.88E-06	4.87E-06
1488	650198.9	4196714	7.92E-05	8.44E-05	1.19E-05	1.27E-05	1.16E-05	1.13E-05	6.19E-06	5.12E-06
1489	650231.8	4196735	8.31E-05	8.86E-05	1.25E-05	1.33E-05	1.22E-05	1.18E-05	6.49E-06	5.37E-06
1490	650264.7	4196756	8.69E-05	9.26E-05	1.31E-05	1.39E-05	1.28E-05	1.24E-05	6.78E-06	5.61E-06
1491	650297.7	4196777	9.05E-05	9.65E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.07E-06	5.85E-06
1492	650330.6	4196798	9.39E-05	1.00E-04	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.34E-06	6.07E-06
1493	649867.6	4196506	4.43E-05	4.72E-05	6.66E-06	7.08E-06	6.51E-06	6.31E-06	3.46E-06	2.86E-06
1494	649316	4197874	4.67E-03	4.98E-03	7.02E-04	7.47E-04	6.87E-04	6.66E-04	3.65E-04	3.02E-04
1495	649321.2	4197850	3.35E-03	3.57E-03	5.04E-04	5.36E-04	4.93E-04	4.78E-04	2.62E-04	2.17E-04
1496	649326.5	4197825	2.56E-03	2.73E-03	3.85E-04	4.09E-04	3.76E-04	3.65E-04	2.00E-04	1.65E-04
1497	649310.9	4197796	1.91E-03	2.04E-03	2.88E-04	3.06E-04	2.81E-04	2.73E-04	1.49E-04	1.24E-04
1498	649342.2	4197752	1.35E-03	1.44E-03	2.02E-04	2.15E-04	1.98E-04	1.92E-04	1.05E-04	8.70E-05
1499	649352.7	4197703	9.47E-04	1.01E-03	1.42E-04	1.51E-04	1.39E-04	1.35E-04	7.39E-05	6.12E-05
1500	649363.2	4197654	6.92E-04	7.38E-04	1.04E-04	1.11E-04	1.02E-04	9.87E-05	5.41E-05	4.47E-05
1501	649389.8	4197610	5.54E-04	5.91E-04	8.34E-05	8.86E-05	8.15E-05	7.90E-05	4.33E-05	3.58E-05
1502	649352.9	4197601	4.88E-04	5.20E-04	7.34E-05	7.80E-05	7.18E-05	6.96E-05	3.81E-05	3.15E-05
1503	649410.8	4197512	3.42E-04	3.64E-04	5.14E-05	5.47E-05	5.03E-05	4.87E-05	2.67E-05	2.21E-05
1504	649373.8	4197503	3.03E-04	3.23E-04	4.55E-05	4.84E-05	4.45E-05	4.31E-05	2.36E-05	1.96E-05
1505	649435.8	4197416	2.32E-04	2.47E-04	3.49E-05	3.71E-05	3.41E-05	3.31E-05	1.81E-05	1.50E-05
1506	649394.8	4197405	2.05E-04	2.19E-04	3.08E-05	3.28E-05	3.01E-05	2.92E-05	1.60E-05	1.32E-05
1507	649456	4197318	1.66E-04	1.77E-04	2.49E-05	2.65E-05	2.43E-05	2.36E-05	1.29E-05	1.07E-05
1508	649494.7	4197330	1.85E-04	1.97E-04	2.78E-05	2.95E-05	2.72E-05	2.63E-05	1.44E-05	1.19E-05

1509	649415.8	4197308	1.48E-04	1.58E-04	2.23E-05	2.37E-05	2.18E-05	2.12E-05	1.16E-05	9.60E-06
1510	649476.4	4197220	1.24E-04	1.33E-04	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.72E-06	8.04E-06
1511	649514.1	4197231	1.37E-04	1.46E-04	2.06E-05	2.19E-05	2.01E-05	1.95E-05	1.07E-05	8.85E-06
1512	649436.8	4197210	1.13E-04	1.21E-04	1.70E-05	1.81E-05	1.66E-05	1.61E-05	8.84E-06	7.31E-06
1513	649517.7	4197024	7.90E-05	8.42E-05	1.19E-05	1.26E-05	1.16E-05	1.13E-05	6.17E-06	5.10E-06
1514	649554	4197035	8.50E-05	9.07E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.64E-06	5.50E-06
1515	649590.3	4197046	9.16E-05	9.76E-05	1.38E-05	1.46E-05	1.35E-05	1.31E-05	7.15E-06	5.92E-06
1516	649478.7	4197014	7.34E-05	7.82E-05	1.10E-05	1.17E-05	1.08E-05	1.05E-05	5.73E-06	4.74E-06
1517	649561.2	4196829	5.60E-05	5.97E-05	8.42E-06	8.95E-06	8.23E-06	7.98E-06	4.37E-06	3.62E-06
1518	649600.7	4196841	5.97E-05	6.37E-05	8.98E-06	9.55E-06	8.78E-06	8.51E-06	4.67E-06	3.86E-06
1519	649640.1	4196853	6.38E-05	6.80E-05	9.59E-06	1.02E-05	9.38E-06	9.09E-06	4.98E-06	4.12E-06
1520	649679.6	4196865	6.83E-05	7.28E-05	1.03E-05	1.09E-05	1.00E-05	9.73E-06	5.34E-06	4.41E-06
1521	649520.7	4196819	5.27E-05	5.62E-05	7.93E-06	8.43E-06	7.75E-06	7.51E-06	4.12E-06	3.41E-06
1522	649602.5	4196633	4.25E-05	4.53E-05	6.39E-06	6.79E-06	6.25E-06	6.05E-06	3.32E-06	2.74E-06
1523	649640.7	4196645	4.47E-05	4.76E-05	6.72E-06	7.14E-06	6.57E-06	6.37E-06	3.49E-06	2.89E-06
1524	649678.8	4196657	4.71E-05	5.02E-05	7.08E-06	7.52E-06	6.92E-06	6.71E-06	3.68E-06	3.04E-06
1525	649717	4196668	4.97E-05	5.30E-05	7.47E-06	7.94E-06	7.31E-06	7.08E-06	3.88E-06	3.21E-06
1526	649755.2	4196680	5.26E-05	5.60E-05	7.90E-06	8.40E-06	7.73E-06	7.49E-06	4.11E-06	3.40E-06
1527	649562.6	4196623	4.05E-05	4.32E-05	6.09E-06	6.48E-06	5.96E-06	5.77E-06	3.17E-06	2.62E-06
1528	649645.5	4196438	3.40E-05	3.63E-05	5.12E-06	5.44E-06	5.00E-06	4.85E-06	2.66E-06	2.20E-06
1529	649685.9	4196450	3.55E-05	3.79E-05	5.34E-06	5.68E-06	5.23E-06	5.06E-06	2.78E-06	2.30E-06
1530	649726.3	4196463	3.72E-05	3.96E-05	5.59E-06	5.95E-06	5.47E-06	5.30E-06	2.91E-06	2.40E-06
1531	649766.6	4196475	3.90E-05	4.16E-05	5.86E-06	6.23E-06	5.73E-06	5.56E-06	3.05E-06	2.52E-06
1532	649807	4196487	4.10E-05	4.37E-05	6.16E-06	6.55E-06	6.03E-06	5.84E-06	3.20E-06	2.65E-06
1533	649604.6	4196428	3.27E-05	3.49E-05	4.92E-06	5.23E-06	4.81E-06	4.66E-06	2.56E-06	2.11E-06
1534	649291.1	4197869	4.38E-03	4.66E-03	6.58E-04	6.99E-04	6.43E-04	6.24E-04	3.42E-04	2.83E-04
1535	649292.2	4197844	3.13E-03	3.34E-03	4.70E-04	5.00E-04	4.60E-04	4.46E-04	2.44E-04	2.02E-04
1536	649293.3	4197819	2.36E-03	2.52E-03	3.56E-04	3.78E-04	3.48E-04	3.37E-04	1.85E-04	1.53E-04
1537	649278.1	4197794	1.79E-03	1.91E-03	2.70E-04	2.87E-04	2.64E-04	2.55E-04	1.40E-04	1.16E-04
1538	649309.1	4197746	1.23E-03	1.31E-03	1.84E-04	1.96E-04	1.80E-04	1.75E-04	9.58E-05	7.93E-05
1539	649280.4	4197744	1.14E-03	1.22E-03	1.72E-04	1.82E-04	1.68E-04	1.63E-04	8.91E-05	7.37E-05
1540	649310	4197696	8.32E-04	8.87E-04	1.25E-04	1.33E-04	1.22E-04	1.19E-04	6.50E-05	5.37E-05
1541	649282.7	4197694	7.68E-04	8.18E-04	1.15E-04	1.23E-04	1.13E-04	1.09E-04	6.00E-05	4.96E-05
1542	649315	4197646	5.94E-04	6.34E-04	8.94E-05	9.50E-05	8.74E-05	8.47E-05	4.64E-05	3.84E-05
1543	649284.9	4197644	5.41E-04	5.76E-04	8.13E-05	8.64E-05	7.95E-05	7.70E-05	4.22E-05	3.49E-05
1544	649315.9	4197596	4.35E-04	4.63E-04	6.54E-05	6.95E-05	6.39E-05	6.19E-05	3.40E-05	2.81E-05
1545	649287.2	4197594	3.97E-04	4.23E-04	5.96E-05	6.34E-05	5.83E-05	5.65E-05	3.10E-05	2.56E-05
1546	649321.2	4197496	2.59E-04	2.76E-04	3.89E-05	4.14E-05	3.81E-05	3.69E-05	2.02E-05	1.67E-05
1547	649347.5	4197500	2.80E-04	2.99E-04	4.22E-05	4.48E-05	4.12E-05	4.00E-05	2.19E-05	1.81E-05
1548	649291.7	4197494	2.37E-04	2.53E-04	3.57E-05	3.79E-05	3.49E-05	3.38E-05	1.85E-05	1.53E-05
1549	649326.3	4197396	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.44E-05	1.34E-05	1.11E-05
1550	649353.7	4197400	1.84E-04	1.96E-04	2.77E-05	2.94E-05	2.71E-05	2.62E-05	1.44E-05	1.19E-05
1551	649296.2	4197394	1.59E-04	1.69E-04	2.39E-05	2.54E-05	2.33E-05	2.26E-05	1.24E-05	1.02E-05
1552	649331.2	4197297	1.22E-04	1.30E-04	1.84E-05	1.96E-05	1.80E-05	1.74E-05	9.56E-06	7.91E-06
1553	649359.4	4197300	1.30E-04	1.39E-04	1.96E-05	2.09E-05	1.92E-05	1.86E-05	1.02E-05	8.43E-06
1554	649387.6	4197304	1.39E-04	1.48E-04	2.09E-05	2.23E-05	2.05E-05	1.98E-05	1.09E-05	8.99E-06
1555	649300.8	4197294	1.15E-04	1.22E-04	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.97E-06	7.42E-06
1556	649336	4197197	9.29E-05	9.90E-05	1.40E-05	1.48E-05	1.37E-05	1.32E-05	7.25E-06	6.00E-06
1557	649364.8	4197200	9.81E-05	1.05E-04	1.48E-05	1.57E-05	1.44E-05	1.40E-05	7.66E-06	6.34E-06
1558	649393.6	4197204	1.04E-04	1.11E-04	1.56E-05	1.66E-05	1.53E-05	1.48E-05	8.11E-06	6.71E-06
1559	649305.3	4197194	8.80E-05	9.38E-05	1.32E-05	1.41E-05	1.29E-05	1.25E-05	6.88E-06	5.69E-06
1560	649345.5	4196997	6.04E-05	6.44E-05	9.08E-06	9.65E-06	8.88E-06	8.61E-06	4.72E-06	3.90E-06
1561	649375.1	4197001	6.29E-05	6.71E-05	9.46E-06	1.01E-05	9.25E-06	8.97E-06	4.92E-06	4.07E-06
1562	649404.7	4197005	6.56E-05	6.99E-05	9.86E-06	1.05E-05	9.65E-06	9.35E-06	5.12E-06	4.24E-06
1563	649434.3	4197008	6.85E-05	7.31E-05	1.03E-05	1.10E-05	1.01E-05	9.77E-06	5.35E-06	4.43E-06
1564	649314.4	4196994	5.81E-05	6.19E-05	8.73E-06	9.28E-06	8.54E-06	8.28E-06	4.54E-06	3.75E-06

1565	649354.8	4196797	4.36E-05	4.65E-05	6.56E-06	6.98E-06	6.42E-06	6.22E-06	3.41E-06	2.82E-06
1566	649385	4196801	4.51E-05	4.81E-05	6.78E-06	7.21E-06	6.63E-06	6.42E-06	3.52E-06	2.91E-06
1567	649415.1	4196805	4.66E-05	4.97E-05	7.01E-06	7.45E-06	6.85E-06	6.64E-06	3.64E-06	3.01E-06
1568	649445.3	4196809	4.82E-05	5.14E-05	7.25E-06	7.71E-06	7.09E-06	6.87E-06	3.77E-06	3.12E-06
1569	649475.4	4196813	4.99E-05	5.32E-05	7.51E-06	7.98E-06	7.34E-06	7.11E-06	3.90E-06	3.23E-06
1570	649323.4	4196795	4.23E-05	4.51E-05	6.37E-06	6.77E-06	6.23E-06	6.03E-06	3.31E-06	2.74E-06
1571	649364.1	4196597	3.37E-05	3.60E-05	5.07E-06	5.39E-06	4.96E-06	4.81E-06	2.64E-06	2.18E-06
1572	649394.6	4196601	3.47E-05	3.70E-05	5.21E-06	5.54E-06	5.10E-06	4.94E-06	2.71E-06	2.24E-06
1573	649425.2	4196605	3.56E-05	3.80E-05	5.36E-06	5.70E-06	5.24E-06	5.08E-06	2.78E-06	2.30E-06
1574	649455.7	4196609	3.66E-05	3.91E-05	5.51E-06	5.86E-06	5.39E-06	5.22E-06	2.86E-06	2.37E-06
1575	649486.3	4196613	3.77E-05	4.02E-05	5.67E-06	6.02E-06	5.54E-06	5.37E-06	2.94E-06	2.43E-06
1576	649516.8	4196617	3.88E-05	4.13E-05	5.83E-06	6.20E-06	5.70E-06	5.52E-06	3.03E-06	2.50E-06
1577	649332.5	4196595	3.29E-05	3.51E-05	4.95E-06	5.26E-06	4.84E-06	4.69E-06	2.57E-06	2.13E-06
1578	649373.3	4196398	2.74E-05	2.92E-05	4.11E-06	4.37E-06	4.02E-06	3.90E-06	2.14E-06	1.77E-06
1579	649404.1	4196402	2.80E-05	2.99E-05	4.21E-06	4.48E-06	4.12E-06	3.99E-06	2.19E-06	1.81E-06
1580	649435	4196406	2.87E-05	3.06E-05	4.31E-06	4.59E-06	4.22E-06	4.09E-06	2.24E-06	1.85E-06
1581	649465.8	4196410	2.94E-05	3.13E-05	4.42E-06	4.70E-06	4.32E-06	4.19E-06	2.30E-06	1.90E-06
1582	649496.6	4196414	3.01E-05	3.21E-05	4.52E-06	4.81E-06	4.42E-06	4.29E-06	2.35E-06	1.94E-06
1583	649527.5	4196418	3.08E-05	3.28E-05	4.63E-06	4.92E-06	4.53E-06	4.39E-06	2.41E-06	1.99E-06
1584	649558.3	4196422	3.16E-05	3.36E-05	4.74E-06	5.04E-06	4.64E-06	4.50E-06	2.46E-06	2.04E-06
1585	649341.5	4196395	2.67E-05	2.85E-05	4.02E-06	4.27E-06	3.93E-06	3.81E-06	2.09E-06	1.73E-06
1586	649255.9	4197868	4.25E-03	4.53E-03	6.39E-04	6.80E-04	6.25E-04	6.06E-04	3.32E-04	2.75E-04
1587	649256.4	4197843	3.01E-03	3.21E-03	4.53E-04	4.82E-04	4.43E-04	4.29E-04	2.35E-04	1.95E-04
1588	649257	4197818	2.25E-03	2.40E-03	3.38E-04	3.59E-04	3.31E-04	3.20E-04	1.76E-04	1.45E-04
1589	649239.3	4197793	1.66E-03	1.77E-03	2.50E-04	2.66E-04	2.44E-04	2.37E-04	1.30E-04	1.07E-04
1590	649240.3	4197743	1.03E-03	1.09E-03	1.54E-04	1.64E-04	1.51E-04	1.46E-04	8.02E-05	6.63E-05
1591	649259.5	4197693	7.17E-04	7.65E-04	1.08E-04	1.15E-04	1.05E-04	1.02E-04	5.60E-05	4.64E-05
1592	649260.5	4197643	5.01E-04	5.34E-04	7.53E-05	8.01E-05	7.36E-05	7.14E-05	3.91E-05	3.24E-05
1593	649261.5	4197593	3.66E-04	3.90E-04	5.51E-05	5.85E-05	5.38E-05	5.22E-05	2.86E-05	2.37E-05
1594	649263.6	4197493	2.20E-04	2.34E-04	3.30E-05	3.51E-05	3.23E-05	3.13E-05	1.72E-05	1.42E-05
1595	649265.6	4197393	1.48E-04	1.58E-04	2.22E-05	2.36E-05	2.17E-05	2.11E-05	1.16E-05	9.56E-06
1596	649267.6	4197293	1.08E-04	1.15E-04	1.62E-05	1.73E-05	1.59E-05	1.54E-05	8.43E-06	6.98E-06
1597	649269.7	4197193	8.34E-05	8.89E-05	1.25E-05	1.33E-05	1.23E-05	1.19E-05	6.51E-06	5.39E-06
1598	649273.7	4196993	5.55E-05	5.92E-05	8.35E-06	8.88E-06	8.16E-06	7.91E-06	4.34E-06	3.59E-06
1599	649296	4196794	4.13E-05	4.40E-05	6.21E-06	6.60E-06	6.07E-06	5.89E-06	3.23E-06	2.67E-06
1600	649259.6	4196793	4.00E-05	4.27E-05	6.02E-06	6.40E-06	5.89E-06	5.71E-06	3.13E-06	2.59E-06
1601	649300.1	4196594	3.21E-05	3.42E-05	4.82E-06	5.13E-06	4.72E-06	4.57E-06	2.51E-06	2.07E-06
1602	649263.7	4196593	3.12E-05	3.33E-05	4.70E-06	4.99E-06	4.59E-06	4.45E-06	2.44E-06	2.02E-06
1603	649316.6	4196394	2.63E-05	2.80E-05	3.95E-06	4.20E-06	3.86E-06	3.74E-06	2.05E-06	1.70E-06
1604	649285.9	4196393	2.57E-05	2.74E-05	3.87E-06	4.11E-06	3.78E-06	3.67E-06	2.01E-06	1.66E-06
1605	649211.2	4197869	4.26E-03	4.54E-03	6.40E-04	6.80E-04	6.26E-04	6.06E-04	3.32E-04	2.75E-04
1606	649209.7	4197844	2.92E-03	3.11E-03	4.39E-04	4.67E-04	4.29E-04	4.16E-04	2.28E-04	1.89E-04
1607	649232.7	4197818	2.16E-03	2.31E-03	3.25E-04	3.46E-04	3.18E-04	3.08E-04	1.69E-04	1.40E-04
1608	649208.2	4197819	2.11E-03	2.25E-03	3.17E-04	3.37E-04	3.10E-04	3.00E-04	1.65E-04	1.36E-04
1609	649206.7	4197794	1.57E-03	1.67E-03	2.35E-04	2.50E-04	2.30E-04	2.23E-04	1.22E-04	1.01E-04
1610	649203.7	4197744	9.25E-04	9.86E-04	1.39E-04	1.48E-04	1.36E-04	1.32E-04	7.23E-05	5.98E-05
1611	649225.2	4197693	6.41E-04	6.84E-04	9.64E-05	1.03E-04	9.43E-05	9.14E-05	5.01E-05	4.14E-05
1612	649200.7	4197695	5.91E-04	6.31E-04	8.89E-05	9.46E-05	8.70E-05	8.43E-05	4.62E-05	3.82E-05
1613	649222.2	4197643	4.40E-04	4.69E-04	6.62E-05	7.04E-05	6.48E-05	6.28E-05	3.44E-05	2.85E-05
1614	649197.7	4197645	4.06E-04	4.33E-04	6.10E-05	6.49E-05	5.97E-05	5.78E-05	3.17E-05	2.62E-05
1615	649219.1	4197593	3.20E-04	3.41E-04	4.80E-05	5.11E-05	4.70E-05	4.55E-05	2.50E-05	2.06E-05
1616	649194.6	4197595	2.96E-04	3.16E-04	4.45E-05	4.73E-05	4.35E-05	4.22E-05	2.31E-05	1.91E-05
1617	649229.2	4197493	2.00E-04	2.13E-04	3.01E-05	3.20E-05	2.94E-05	2.85E-05	1.56E-05	1.29E-05
1618	649188.6	4197495	1.81E-04	1.93E-04	2.72E-05	2.89E-05	2.66E-05	2.58E-05	1.41E-05	1.17E-05
1619	649227.2	4197393	1.36E-04	1.45E-04	2.05E-05	2.18E-05	2.00E-05	1.94E-05	1.06E-05	8.80E-06
1620	649182.6	4197395	1.25E-04	1.33E-04	1.88E-05	2.00E-05	1.84E-05	1.78E-05	9.76E-06	8.07E-06

1621	649225.2	4197293	1.00E-04	1.07E-04	1.51E-05	1.61E-05	1.48E-05	1.43E-05	7.85E-06	6.49E-06
1622	649201.1	4197294	9.66E-05	1.03E-04	1.45E-05	1.54E-05	1.42E-05	1.38E-05	7.55E-06	6.24E-06
1623	649176.6	4197295	9.32E-05	9.94E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.28E-06	6.02E-06
1624	649213.8	4197194	7.72E-05	8.23E-05	1.16E-05	1.23E-05	1.14E-05	1.10E-05	6.03E-06	4.99E-06
1625	649170.5	4197195	7.32E-05	7.80E-05	1.10E-05	1.17E-05	1.08E-05	1.04E-05	5.72E-06	4.73E-06
1626	649207.2	4196994	5.20E-05	5.54E-05	7.81E-06	8.31E-06	7.64E-06	7.41E-06	4.06E-06	3.36E-06
1627	649231.3	4196993	5.32E-05	5.67E-05	8.00E-06	8.50E-06	7.82E-06	7.58E-06	4.15E-06	3.44E-06
1628	649183	4196994	5.08E-05	5.42E-05	7.64E-06	8.12E-06	7.47E-06	7.24E-06	3.97E-06	3.28E-06
1629	649158.5	4196996	4.98E-05	5.30E-05	7.48E-06	7.95E-06	7.32E-06	7.09E-06	3.89E-06	3.22E-06
1630	649193.1	4196794	3.80E-05	4.05E-05	5.72E-06	6.08E-06	5.59E-06	5.42E-06	2.97E-06	2.46E-06
1631	649146.4	4196796	3.68E-05	3.92E-05	5.54E-06	5.89E-06	5.41E-06	5.25E-06	2.88E-06	2.38E-06
1632	649179.8	4196595	2.95E-05	3.15E-05	4.44E-06	4.72E-06	4.34E-06	4.21E-06	2.31E-06	1.91E-06
1633	649221.7	4196594	3.04E-05	3.24E-05	4.57E-06	4.85E-06	4.46E-06	4.33E-06	2.37E-06	1.96E-06
1634	649134.3	4196597	2.88E-05	3.07E-05	4.33E-06	4.61E-06	4.24E-06	4.11E-06	2.25E-06	1.86E-06
1635	649171	4196395	2.40E-05	2.56E-05	3.61E-06	3.84E-06	3.53E-06	3.42E-06	1.88E-06	1.55E-06
1636	649195.2	4196394	2.43E-05	2.60E-05	3.66E-06	3.89E-06	3.58E-06	3.47E-06	1.90E-06	1.57E-06
1637	649219.4	4196394	2.47E-05	2.63E-05	3.71E-06	3.94E-06	3.63E-06	3.52E-06	1.93E-06	1.59E-06
1638	649243.5	4196393	2.50E-05	2.67E-05	3.76E-06	4.00E-06	3.68E-06	3.57E-06	1.96E-06	1.62E-06
1639	649146.8	4196395	2.37E-05	2.53E-05	3.57E-06	3.79E-06	3.49E-06	3.38E-06	1.85E-06	1.53E-06
1640	649122.3	4196397	2.35E-05	2.50E-05	3.53E-06	3.75E-06	3.45E-06	3.34E-06	1.83E-06	1.52E-06
1641	649168.8	4197867	4.00E-03	4.27E-03	6.02E-04	6.40E-04	5.88E-04	5.70E-04	3.13E-04	2.59E-04
1642	649146.4	4197865	3.74E-03	3.99E-03	5.62E-04	5.98E-04	5.50E-04	5.33E-04	2.92E-04	2.42E-04
1643	649123.9	4197863	3.42E-03	3.64E-03	5.14E-04	5.47E-04	5.03E-04	4.87E-04	2.67E-04	2.21E-04
1644	649101.4	4197861	3.01E-03	3.21E-03	4.53E-04	4.81E-04	4.43E-04	4.29E-04	2.35E-04	1.95E-04
1645	649078.9	4197859	2.48E-03	2.64E-03	3.73E-04	3.96E-04	3.65E-04	3.53E-04	1.94E-04	1.60E-04
1646	649056.4	4197857	1.83E-03	1.95E-03	2.75E-04	2.93E-04	2.69E-04	2.61E-04	1.43E-04	1.18E-04
1647	649033.9	4197854	1.23E-03	1.31E-03	1.85E-04	1.97E-04	1.81E-04	1.75E-04	9.62E-05	7.96E-05
1648	649171.2	4197842	2.66E-03	2.84E-03	4.01E-04	4.26E-04	3.92E-04	3.80E-04	2.08E-04	1.72E-04
1649	649148.7	4197840	2.43E-03	2.59E-03	3.66E-04	3.89E-04	3.58E-04	3.47E-04	1.90E-04	1.57E-04
1650	649126.2	4197838	2.16E-03	2.30E-03	3.25E-04	3.45E-04	3.18E-04	3.08E-04	1.69E-04	1.40E-04
1651	649103.7	4197836	1.84E-03	1.96E-03	2.77E-04	2.94E-04	2.71E-04	2.62E-04	1.44E-04	1.19E-04
1652	649081.2	4197834	1.49E-03	1.58E-03	2.23E-04	2.37E-04	2.18E-04	2.12E-04	1.16E-04	9.60E-05
1653	649058.8	4197832	1.13E-03	1.21E-03	1.70E-04	1.81E-04	1.66E-04	1.61E-04	8.84E-05	7.32E-05
1654	649036.3	4197830	8.46E-04	9.02E-04	1.27E-04	1.35E-04	1.24E-04	1.21E-04	6.61E-05	5.47E-05
1655	649173.5	4197817	1.88E-03	2.01E-03	2.83E-04	3.01E-04	2.77E-04	2.68E-04	1.47E-04	1.22E-04
1656	649151	4197815	1.69E-03	1.80E-03	2.54E-04	2.70E-04	2.48E-04	2.41E-04	1.32E-04	1.09E-04
1657	649128.6	4197813	1.47E-03	1.57E-03	2.22E-04	2.36E-04	2.17E-04	2.10E-04	1.15E-04	9.53E-05
1658	649106.1	4197811	1.24E-03	1.33E-03	1.87E-04	1.99E-04	1.83E-04	1.77E-04	9.71E-05	8.03E-05
1659	649083.6	4197809	1.01E-03	1.08E-03	1.52E-04	1.62E-04	1.49E-04	1.44E-04	7.90E-05	6.54E-05
1660	649061.1	4197807	8.04E-04	8.57E-04	1.21E-04	1.28E-04	1.18E-04	1.15E-04	6.28E-05	5.19E-05
1661	649038.6	4197805	6.40E-04	6.82E-04	9.62E-05	1.02E-04	9.41E-05	9.12E-05	5.00E-05	4.14E-05
1662	649175.9	4197792	1.39E-03	1.48E-03	2.09E-04	2.22E-04	2.04E-04	1.98E-04	1.08E-04	8.97E-05
1663	649153.4	4197790	1.23E-03	1.31E-03	1.85E-04	1.97E-04	1.81E-04	1.75E-04	9.62E-05	7.96E-05
1664	649130.9	4197788	1.07E-03	1.14E-03	1.60E-04	1.71E-04	1.57E-04	1.52E-04	8.33E-05	6.89E-05
1665	649108.4	4197786	9.02E-04	9.62E-04	1.36E-04	1.44E-04	1.33E-04	1.29E-04	7.05E-05	5.83E-05
1666	649085.9	4197784	7.48E-04	7.97E-04	1.12E-04	1.20E-04	1.10E-04	1.07E-04	5.84E-05	4.83E-05
1667	649063.5	4197782	6.16E-04	6.56E-04	9.26E-05	9.84E-05	9.05E-05	8.77E-05	4.81E-05	3.98E-05
1668	649041	4197780	5.11E-04	5.45E-04	7.68E-05	8.17E-05	7.51E-05	7.28E-05	3.99E-05	3.30E-05
1669	649180.6	4197743	8.29E-04	8.84E-04	1.25E-04	1.33E-04	1.22E-04	1.18E-04	6.48E-05	5.36E-05
1670	649158.1	4197741	7.32E-04	7.80E-04	1.10E-04	1.17E-04	1.08E-04	1.04E-04	5.72E-05	4.73E-05
1671	649135.6	4197738	6.38E-04	6.80E-04	9.59E-05	1.02E-04	9.38E-05	9.09E-05	4.98E-05	4.12E-05
1672	649113.1	4197736	5.51E-04	5.87E-04	8.28E-05	8.81E-05	8.10E-05	7.85E-05	4.30E-05	3.56E-05
1673	649090.6	4197734	4.74E-04	5.05E-04	7.13E-05	7.58E-05	6.97E-05	6.76E-05	3.70E-05	3.06E-05
1674	649068.1	4197732	4.10E-04	4.37E-04	6.16E-05	6.55E-05	6.02E-05	5.84E-05	3.20E-05	2.65E-05
1675	649045.7	4197730	3.57E-04	3.81E-04	5.37E-05	5.71E-05	5.25E-05	5.09E-05	2.79E-05	2.31E-05
1676	649162.8	4197691	4.88E-04	5.20E-04	7.33E-05	7.80E-05	7.17E-05	6.95E-05	3.81E-05	3.15E-05

1677	649140.3	4197689	4.32E-04	4.60E-04	6.49E-05	6.90E-05	6.35E-05	6.15E-05	3.37E-05	2.79E-05
1678	649117.8	4197687	3.81E-04	4.07E-04	5.74E-05	6.10E-05	5.61E-05	5.44E-05	2.98E-05	2.46E-05
1679	649095.3	4197684	3.38E-04	3.60E-04	5.08E-05	5.40E-05	4.97E-05	4.81E-05	2.64E-05	2.18E-05
1680	649072.8	4197682	3.01E-04	3.20E-04	4.52E-05	4.80E-05	4.42E-05	4.28E-05	2.35E-05	1.94E-05
1681	649050.4	4197680	2.69E-04	2.87E-04	4.05E-05	4.30E-05	3.96E-05	3.84E-05	2.10E-05	1.74E-05
1682	649167.5	4197641	3.52E-04	3.75E-04	5.29E-05	5.62E-05	5.17E-05	5.01E-05	2.75E-05	2.27E-05
1683	649145	4197639	3.17E-04	3.38E-04	4.76E-05	5.06E-05	4.66E-05	4.51E-05	2.47E-05	2.05E-05
1684	649122.5	4197637	2.85E-04	3.04E-04	4.29E-05	4.56E-05	4.20E-05	4.07E-05	2.23E-05	1.84E-05
1685	649100	4197635	2.58E-04	2.75E-04	3.88E-05	4.12E-05	3.79E-05	3.67E-05	2.01E-05	1.67E-05
1686	649077.5	4197633	2.34E-04	2.49E-04	3.52E-05	3.74E-05	3.44E-05	3.34E-05	1.83E-05	1.51E-05
1687	649055.1	4197630	2.13E-04	2.28E-04	3.21E-05	3.41E-05	3.14E-05	3.04E-05	1.67E-05	1.38E-05
1688	649172.2	4197591	2.69E-04	2.86E-04	4.04E-05	4.29E-05	3.95E-05	3.83E-05	2.10E-05	1.74E-05
1689	649149.7	4197589	2.45E-04	2.62E-04	3.69E-05	3.92E-05	3.61E-05	3.50E-05	1.92E-05	1.59E-05
1690	649127.2	4197587	2.25E-04	2.39E-04	3.38E-05	3.59E-05	3.30E-05	3.20E-05	1.75E-05	1.45E-05
1691	649104.7	4197585	2.06E-04	2.20E-04	3.10E-05	3.30E-05	3.03E-05	2.94E-05	1.61E-05	1.33E-05
1692	649082.2	4197583	1.90E-04	2.02E-04	2.85E-05	3.03E-05	2.79E-05	2.70E-05	1.48E-05	1.23E-05
1693	649059.8	4197581	1.75E-04	1.87E-04	2.64E-05	2.80E-05	2.58E-05	2.50E-05	1.37E-05	1.13E-05
1694	649159.1	4197490	1.64E-04	1.75E-04	2.46E-05	2.62E-05	2.41E-05	2.33E-05	1.28E-05	1.06E-05
1695	649136.6	4197487	1.53E-04	1.64E-04	2.31E-05	2.45E-05	2.26E-05	2.19E-05	1.20E-05	9.91E-06
1696	649114.1	4197485	1.44E-04	1.53E-04	2.16E-05	2.30E-05	2.12E-05	2.05E-05	1.12E-05	9.30E-06
1697	649091.6	4197483	1.35E-04	1.44E-04	2.03E-05	2.16E-05	1.99E-05	1.93E-05	1.06E-05	8.73E-06
1698	649069.1	4197481	1.27E-04	1.36E-04	1.91E-05	2.03E-05	1.87E-05	1.81E-05	9.93E-06	8.22E-06
1699	649146	4197388	1.14E-04	1.21E-04	1.71E-05	1.82E-05	1.67E-05	1.62E-05	8.87E-06	7.34E-06
1700	649123.5	4197386	1.08E-04	1.15E-04	1.63E-05	1.73E-05	1.59E-05	1.54E-05	8.44E-06	6.99E-06
1701	649101	4197384	1.03E-04	1.10E-04	1.55E-05	1.65E-05	1.51E-05	1.47E-05	8.04E-06	6.65E-06
1702	649078.5	4197382	9.81E-05	1.05E-04	1.48E-05	1.57E-05	1.44E-05	1.40E-05	7.66E-06	6.34E-06
1703	649132.9	4197286	8.51E-05	9.07E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.65E-06	5.50E-06
1704	649110.4	4197284	8.18E-05	8.73E-05	1.23E-05	1.31E-05	1.20E-05	1.17E-05	6.39E-06	5.29E-06
1705	649087.9	4197282	7.87E-05	8.39E-05	1.18E-05	1.26E-05	1.16E-05	1.12E-05	6.15E-06	5.09E-06
1706	649142.3	4197187	6.93E-05	7.39E-05	1.04E-05	1.11E-05	1.02E-05	9.88E-06	5.41E-06	4.48E-06
1707	649119.8	4197185	6.71E-05	7.15E-05	1.01E-05	1.07E-05	9.86E-06	9.56E-06	5.24E-06	4.33E-06
1708	649097.3	4197182	6.50E-05	6.93E-05	9.77E-06	1.04E-05	9.55E-06	9.26E-06	5.07E-06	4.20E-06
1709	649116.1	4196983	4.69E-05	5.00E-05	7.06E-06	7.50E-06	6.90E-06	6.69E-06	3.67E-06	3.03E-06
1710	649224.8	4196793	3.89E-05	4.15E-05	5.85E-06	6.22E-06	5.72E-06	5.54E-06	3.04E-06	2.51E-06
1711	649153.7	4196585	2.88E-05	3.07E-05	4.33E-06	4.60E-06	4.23E-06	4.10E-06	2.25E-06	1.86E-06
1712	649015.8	4197805	5.34E-04	5.69E-04	8.02E-05	8.53E-05	7.85E-05	7.60E-05	4.17E-05	3.45E-05
1713	649014	4197780	4.28E-04	4.57E-04	6.44E-05	6.85E-05	6.30E-05	6.10E-05	3.35E-05	2.77E-05
1714	649020.8	4197730	3.15E-04	3.35E-04	4.73E-05	5.03E-05	4.63E-05	4.48E-05	2.46E-05	2.03E-05
1715	649025.5	4197680	2.43E-04	2.59E-04	3.65E-05	3.88E-05	3.57E-05	3.46E-05	1.90E-05	1.57E-05
1716	649024	4197630	1.91E-04	2.04E-04	2.88E-05	3.06E-05	2.81E-05	2.73E-05	1.50E-05	1.24E-05
1717	649019.9	4197580	1.55E-04	1.66E-04	2.34E-05	2.48E-05	2.28E-05	2.21E-05	1.21E-05	1.00E-05
1718	649012.3	4197480	1.11E-04	1.18E-04	1.67E-05	1.78E-05	1.63E-05	1.58E-05	8.67E-06	7.18E-06
1719	649040.7	4197481	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.69E-05	9.27E-06	7.67E-06
1720	649006	4197381	8.55E-05	9.12E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.68E-06	5.53E-06
1721	649037.1	4197381	9.07E-05	9.66E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.08E-06	5.86E-06
1722	648998.4	4197281	6.88E-05	7.33E-05	1.03E-05	1.10E-05	1.01E-05	9.80E-06	5.37E-06	4.44E-06
1723	649028.2	4197281	7.19E-05	7.67E-05	1.08E-05	1.15E-05	1.06E-05	1.02E-05	5.62E-06	4.65E-06
1724	649058.1	4197282	7.52E-05	8.02E-05	1.13E-05	1.20E-05	1.11E-05	1.07E-05	5.88E-06	4.86E-06
1725	648990.9	4197181	5.71E-05	6.08E-05	8.58E-06	9.12E-06	8.39E-06	8.13E-06	4.46E-06	3.69E-06
1726	649019.9	4197182	5.91E-05	6.30E-05	8.88E-06	9.45E-06	8.69E-06	8.42E-06	4.62E-06	3.82E-06
1727	649048.9	4197182	6.12E-05	6.52E-05	9.20E-06	9.78E-06	9.00E-06	8.72E-06	4.78E-06	3.96E-06
1728	648976.8	4196982	4.19E-05	4.47E-05	6.30E-06	6.70E-06	6.16E-06	5.97E-06	3.27E-06	2.71E-06
1729	649006.6	4196982	4.29E-05	4.57E-05	6.45E-06	6.85E-06	6.30E-06	6.11E-06	3.35E-06	2.77E-06
1730	649036.5	4196982	4.39E-05	4.68E-05	6.60E-06	7.02E-06	6.45E-06	6.25E-06	3.43E-06	2.84E-06
1731	649066.4	4196983	4.50E-05	4.79E-05	6.76E-06	7.19E-06	6.61E-06	6.41E-06	3.51E-06	2.91E-06
1732	648962.6	4196782	3.25E-05	3.47E-05	4.89E-06	5.20E-06	4.78E-06	4.64E-06	2.54E-06	2.10E-06

1733	648993	4196783	3.30E-05	3.52E-05	4.97E-06	5.28E-06	4.86E-06	4.71E-06	2.58E-06	2.13E-06
1734	649023.4	4196783	3.36E-05	3.58E-05	5.05E-06	5.36E-06	4.93E-06	4.78E-06	2.62E-06	2.17E-06
1735	649053.8	4196783	3.41E-05	3.64E-05	5.13E-06	5.46E-06	5.02E-06	4.86E-06	2.67E-06	2.21E-06
1736	649084.2	4196784	3.48E-05	3.71E-05	5.23E-06	5.56E-06	5.11E-06	4.95E-06	2.71E-06	2.25E-06
1737	649114.6	4196784	3.54E-05	3.78E-05	5.33E-06	5.67E-06	5.21E-06	5.05E-06	2.77E-06	2.29E-06
1738	648948.3	4196583	2.63E-05	2.80E-05	3.95E-06	4.20E-06	3.86E-06	3.75E-06	2.05E-06	1.70E-06
1739	648979.1	4196583	2.65E-05	2.83E-05	3.99E-06	4.24E-06	3.90E-06	3.78E-06	2.07E-06	1.72E-06
1740	649009.9	4196583	2.68E-05	2.86E-05	4.03E-06	4.29E-06	3.94E-06	3.82E-06	2.10E-06	1.73E-06
1741	649040.7	4196584	2.72E-05	2.90E-05	4.08E-06	4.34E-06	3.99E-06	3.87E-06	2.12E-06	1.75E-06
1742	649071.5	4196584	2.75E-05	2.93E-05	4.14E-06	4.40E-06	4.05E-06	3.92E-06	2.15E-06	1.78E-06
1743	649102.3	4196584	2.79E-05	2.98E-05	4.20E-06	4.47E-06	4.11E-06	3.98E-06	2.18E-06	1.81E-06
1744	648934	4196383	2.19E-05	2.33E-05	3.29E-06	3.50E-06	3.22E-06	3.12E-06	1.71E-06	1.41E-06
1745	648965.1	4196384	2.20E-05	2.35E-05	3.31E-06	3.52E-06	3.24E-06	3.14E-06	1.72E-06	1.42E-06
1746	648996.2	4196384	2.22E-05	2.36E-05	3.33E-06	3.55E-06	3.26E-06	3.16E-06	1.73E-06	1.43E-06
1747	649027.3	4196384	2.24E-05	2.39E-05	3.36E-06	3.58E-06	3.29E-06	3.19E-06	1.75E-06	1.45E-06
1748	649058.4	4196385	2.26E-05	2.41E-05	3.40E-06	3.61E-06	3.32E-06	3.22E-06	1.77E-06	1.46E-06
1749	649089.5	4196385	2.29E-05	2.44E-05	3.44E-06	3.66E-06	3.36E-06	3.26E-06	1.79E-06	1.48E-06
1750	649004.5	4197860	8.64E-04	9.21E-04	1.30E-04	1.38E-04	1.27E-04	1.23E-04	6.75E-05	5.58E-05
1751	649010.8	4197832	6.64E-04	7.07E-04	9.98E-05	1.06E-04	9.76E-05	9.46E-05	5.18E-05	4.29E-05
1752	648987.4	4197813	4.60E-04	4.90E-04	6.92E-05	7.36E-05	6.76E-05	6.56E-05	3.59E-05	2.97E-05
1753	648987	4197786	3.79E-04	4.04E-04	5.70E-05	6.06E-05	5.57E-05	5.40E-05	2.96E-05	2.45E-05
1754	648978	4197737	2.70E-04	2.88E-04	4.06E-05	4.32E-05	3.97E-05	3.85E-05	2.11E-05	1.75E-05
1755	648960.5	4197690	2.01E-04	2.14E-04	3.02E-05	3.22E-05	2.96E-05	2.87E-05	1.57E-05	1.30E-05
1756	648983.6	4197686	2.13E-04	2.27E-04	3.21E-05	3.41E-05	3.14E-05	3.04E-05	1.67E-05	1.38E-05
1757	648944.1	4197643	1.58E-04	1.68E-04	2.37E-05	2.52E-05	2.32E-05	2.25E-05	1.23E-05	1.02E-05
1758	648969.4	4197638	1.66E-04	1.77E-04	2.50E-05	2.66E-05	2.45E-05	2.37E-05	1.30E-05	1.08E-05
1759	648994.8	4197633	1.76E-04	1.88E-04	2.65E-05	2.81E-05	2.59E-05	2.51E-05	1.37E-05	1.14E-05
1760	648926.7	4197596	1.28E-04	1.36E-04	1.92E-05	2.04E-05	1.88E-05	1.82E-05	9.98E-06	8.26E-06
1761	648951	4197591	1.34E-04	1.42E-04	2.01E-05	2.14E-05	1.97E-05	1.90E-05	1.04E-05	8.64E-06
1762	648975.3	4197586	1.40E-04	1.49E-04	2.10E-05	2.24E-05	2.06E-05	1.99E-05	1.09E-05	9.05E-06
1763	648892.7	4197502	9.07E-05	9.67E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.08E-06	5.86E-06
1764	648917.6	4197497	9.43E-05	1.01E-04	1.42E-05	1.51E-05	1.39E-05	1.34E-05	7.36E-06	6.09E-06
1765	648942.5	4197492	9.81E-05	1.05E-04	1.47E-05	1.57E-05	1.44E-05	1.40E-05	7.66E-06	6.34E-06
1766	648967.5	4197486	1.02E-04	1.09E-04	1.53E-05	1.63E-05	1.50E-05	1.45E-05	7.97E-06	6.60E-06
1767	648858.6	4197408	6.91E-05	7.37E-05	1.04E-05	1.10E-05	1.02E-05	9.85E-06	5.40E-06	4.47E-06
1768	648883.9	4197403	7.17E-05	7.64E-05	1.08E-05	1.15E-05	1.05E-05	1.02E-05	5.60E-06	4.63E-06
1769	648909.2	4197398	7.43E-05	7.92E-05	1.12E-05	1.19E-05	1.09E-05	1.06E-05	5.80E-06	4.80E-06
1770	648934.6	4197392	7.69E-05	8.20E-05	1.16E-05	1.23E-05	1.13E-05	1.10E-05	6.01E-06	4.97E-06
1771	648959.9	4197387	7.97E-05	8.49E-05	1.20E-05	1.27E-05	1.17E-05	1.14E-05	6.22E-06	5.15E-06
1772	648824.1	4197315	5.54E-05	5.90E-05	8.32E-06	8.85E-06	8.14E-06	7.89E-06	4.32E-06	3.58E-06
1773	648848.4	4197309	5.72E-05	6.10E-05	8.60E-06	9.14E-06	8.41E-06	8.15E-06	4.47E-06	3.70E-06
1774	648872.7	4197304	5.91E-05	6.30E-05	8.88E-06	9.44E-06	8.69E-06	8.42E-06	4.61E-06	3.82E-06
1775	648897	4197299	6.09E-05	6.49E-05	9.16E-06	9.74E-06	8.95E-06	8.68E-06	4.76E-06	3.94E-06
1776	648921.3	4197294	6.27E-05	6.68E-05	9.43E-06	1.00E-05	9.22E-06	8.93E-06	4.90E-06	4.05E-06
1777	648945.6	4197289	6.45E-05	6.87E-05	9.69E-06	1.03E-05	9.48E-06	9.19E-06	5.04E-06	4.17E-06
1778	648969.9	4197283	6.62E-05	7.06E-05	9.96E-06	1.06E-05	9.74E-06	9.44E-06	5.17E-06	4.28E-06
1779	648790	4197221	4.60E-05	4.90E-05	6.92E-06	7.36E-06	6.76E-06	6.56E-06	3.59E-06	2.97E-06
1780	648814.6	4197215	4.75E-05	5.06E-05	7.14E-06	7.59E-06	6.98E-06	6.77E-06	3.71E-06	3.07E-06
1781	648839.3	4197210	4.90E-05	5.22E-05	7.36E-06	7.83E-06	7.20E-06	6.98E-06	3.82E-06	3.16E-06
1782	648864	4197205	5.04E-05	5.37E-05	7.57E-06	8.05E-06	7.41E-06	7.18E-06	3.93E-06	3.26E-06
1783	648888.6	4197199	5.17E-05	5.51E-05	7.78E-06	8.27E-06	7.60E-06	7.37E-06	4.04E-06	3.34E-06
1784	648913.3	4197194	5.30E-05	5.65E-05	7.97E-06	8.47E-06	7.79E-06	7.55E-06	4.14E-06	3.43E-06
1785	648937.9	4197189	5.42E-05	5.78E-05	8.15E-06	8.67E-06	7.97E-06	7.73E-06	4.24E-06	3.50E-06
1786	648962.6	4197184	5.54E-05	5.91E-05	8.33E-06	8.86E-06	8.15E-06	7.89E-06	4.33E-06	3.58E-06
1787	648721.7	4197033	3.43E-05	3.65E-05	5.15E-06	5.48E-06	5.04E-06	4.88E-06	2.68E-06	2.21E-06
1788	648746.9	4197027	3.53E-05	3.76E-05	5.31E-06	5.64E-06	5.19E-06	5.03E-06	2.76E-06	2.28E-06

1789	648772	4197022	3.62E-05	3.86E-05	5.45E-06	5.79E-06	5.33E-06	5.17E-06	2.83E-06	2.34E-06
1790	648797.2	4197016	3.71E-05	3.96E-05	5.59E-06	5.94E-06	5.46E-06	5.29E-06	2.90E-06	2.40E-06
1791	648822.3	4197011	3.80E-05	4.05E-05	5.71E-06	6.07E-06	5.59E-06	5.41E-06	2.97E-06	2.45E-06
1792	648847.5	4197006	3.87E-05	4.13E-05	5.83E-06	6.19E-06	5.70E-06	5.52E-06	3.03E-06	2.50E-06
1793	648872.6	4197000	3.94E-05	4.20E-05	5.93E-06	6.30E-06	5.80E-06	5.62E-06	3.08E-06	2.55E-06
1794	648897.8	4196995	4.01E-05	4.27E-05	6.02E-06	6.40E-06	5.89E-06	5.71E-06	3.13E-06	2.59E-06
1795	648922.9	4196990	4.06E-05	4.33E-05	6.11E-06	6.49E-06	5.97E-06	5.79E-06	3.17E-06	2.62E-06
1796	648948.1	4196984	4.11E-05	4.38E-05	6.18E-06	6.57E-06	6.05E-06	5.86E-06	3.21E-06	2.66E-06
1797	648653.4	4196845	2.72E-05	2.90E-05	4.09E-06	4.35E-06	4.00E-06	3.88E-06	2.13E-06	1.76E-06
1798	648678.9	4196839	2.80E-05	2.98E-05	4.20E-06	4.47E-06	4.11E-06	3.98E-06	2.18E-06	1.81E-06
1799	648704.4	4196834	2.86E-05	3.05E-05	4.31E-06	4.58E-06	4.21E-06	4.08E-06	2.24E-06	1.85E-06
1800	648729.8	4196828	2.92E-05	3.12E-05	4.40E-06	4.68E-06	4.30E-06	4.17E-06	2.28E-06	1.89E-06
1801	648755.3	4196823	2.98E-05	3.18E-05	4.48E-06	4.77E-06	4.38E-06	4.25E-06	2.33E-06	1.93E-06
1802	648780.8	4196817	3.03E-05	3.23E-05	4.56E-06	4.85E-06	4.46E-06	4.32E-06	2.37E-06	1.96E-06
1803	648806.2	4196812	3.08E-05	3.28E-05	4.62E-06	4.92E-06	4.52E-06	4.38E-06	2.40E-06	1.99E-06
1804	648831.7	4196806	3.11E-05	3.32E-05	4.68E-06	4.98E-06	4.58E-06	4.44E-06	2.43E-06	2.01E-06
1805	648857.2	4196801	3.15E-05	3.35E-05	4.73E-06	5.03E-06	4.63E-06	4.48E-06	2.46E-06	2.03E-06
1806	648882.6	4196796	3.17E-05	3.38E-05	4.77E-06	5.07E-06	4.67E-06	4.52E-06	2.48E-06	2.05E-06
1807	648908.1	4196790	3.20E-05	3.41E-05	4.81E-06	5.11E-06	4.70E-06	4.56E-06	2.50E-06	2.07E-06
1808	648933.6	4196785	3.22E-05	3.43E-05	4.84E-06	5.14E-06	4.73E-06	4.58E-06	2.51E-06	2.08E-06
1809	648584.9	4196657	2.26E-05	2.40E-05	3.39E-06	3.61E-06	3.32E-06	3.21E-06	1.76E-06	1.46E-06
1810	648610	4196651	2.31E-05	2.46E-05	3.47E-06	3.69E-06	3.39E-06	3.29E-06	1.80E-06	1.49E-06
1811	648635.1	4196646	2.35E-05	2.51E-05	3.54E-06	3.76E-06	3.46E-06	3.36E-06	1.84E-06	1.52E-06
1812	648660.1	4196641	2.40E-05	2.56E-05	3.61E-06	3.83E-06	3.53E-06	3.42E-06	1.87E-06	1.55E-06
1813	648685.2	4196635	2.44E-05	2.60E-05	3.67E-06	3.90E-06	3.59E-06	3.48E-06	1.91E-06	1.58E-06
1814	648710.3	4196630	2.48E-05	2.64E-05	3.72E-06	3.96E-06	3.64E-06	3.53E-06	1.93E-06	1.60E-06
1815	648735.4	4196625	2.51E-05	2.67E-05	3.77E-06	4.00E-06	3.68E-06	3.57E-06	1.96E-06	1.62E-06
1816	648760.5	4196619	2.53E-05	2.70E-05	3.81E-06	4.05E-06	3.72E-06	3.61E-06	1.98E-06	1.64E-06
1817	648785.5	4196614	2.55E-05	2.72E-05	3.84E-06	4.08E-06	3.75E-06	3.64E-06	1.99E-06	1.65E-06
1818	648810.6	4196608	2.57E-05	2.74E-05	3.87E-06	4.11E-06	3.78E-06	3.66E-06	2.01E-06	1.66E-06
1819	648835.7	4196603	2.58E-05	2.76E-05	3.89E-06	4.13E-06	3.80E-06	3.68E-06	2.02E-06	1.67E-06
1820	648860.8	4196598	2.60E-05	2.77E-05	3.90E-06	4.15E-06	3.82E-06	3.70E-06	2.03E-06	1.68E-06
1821	648885.9	4196592	2.60E-05	2.77E-05	3.91E-06	4.16E-06	3.83E-06	3.71E-06	2.03E-06	1.68E-06
1822	648910.9	4196587	2.61E-05	2.78E-05	3.93E-06	4.17E-06	3.84E-06	3.72E-06	2.04E-06	1.69E-06
1823	648516.6	4196469	1.92E-05	2.05E-05	2.89E-06	3.07E-06	2.82E-06	2.74E-06	1.50E-06	1.24E-06
1824	648541.9	4196463	1.96E-05	2.09E-05	2.95E-06	3.13E-06	2.88E-06	2.79E-06	1.53E-06	1.27E-06
1825	648567.2	4196458	2.00E-05	2.13E-05	3.00E-06	3.19E-06	2.94E-06	2.85E-06	1.56E-06	1.29E-06
1826	648592.5	4196452	2.03E-05	2.16E-05	3.05E-06	3.24E-06	2.98E-06	2.89E-06	1.59E-06	1.31E-06
1827	648617.9	4196447	2.06E-05	2.20E-05	3.10E-06	3.29E-06	3.03E-06	2.94E-06	1.61E-06	1.33E-06
1828	648643.2	4196442	2.09E-05	2.22E-05	3.14E-06	3.34E-06	3.07E-06	2.97E-06	1.63E-06	1.35E-06
1829	648668.5	4196436	2.11E-05	2.25E-05	3.17E-06	3.37E-06	3.10E-06	3.01E-06	1.65E-06	1.36E-06
1830	648693.8	4196431	2.13E-05	2.27E-05	3.20E-06	3.40E-06	3.13E-06	3.03E-06	1.66E-06	1.38E-06
1831	648719.2	4196425	2.15E-05	2.29E-05	3.23E-06	3.43E-06	3.15E-06	3.06E-06	1.68E-06	1.39E-06
1832	648744.5	4196420	2.16E-05	2.30E-05	3.24E-06	3.45E-06	3.17E-06	3.07E-06	1.69E-06	1.39E-06
1833	648769.8	4196415	2.17E-05	2.31E-05	3.26E-06	3.46E-06	3.19E-06	3.09E-06	1.69E-06	1.40E-06
1834	648795.1	4196409	2.17E-05	2.32E-05	3.27E-06	3.48E-06	3.20E-06	3.10E-06	1.70E-06	1.40E-06
1835	648820.4	4196404	2.18E-05	2.32E-05	3.28E-06	3.48E-06	3.20E-06	3.10E-06	1.70E-06	1.41E-06
1836	648845.8	4196398	2.18E-05	2.32E-05	3.28E-06	3.49E-06	3.21E-06	3.11E-06	1.70E-06	1.41E-06
1837	648871.1	4196393	2.18E-05	2.32E-05	3.28E-06	3.49E-06	3.21E-06	3.11E-06	1.70E-06	1.41E-06
1838	648896.4	4196388	2.18E-05	2.32E-05	3.28E-06	3.49E-06	3.21E-06	3.11E-06	1.70E-06	1.41E-06
1839	648989.1	4197839	5.85E-04	6.23E-04	8.79E-05	9.35E-05	8.60E-05	8.33E-05	4.57E-05	3.78E-05
1840	648965.2	4197795	3.55E-04	3.79E-04	5.34E-05	5.68E-05	5.22E-05	5.06E-05	2.78E-05	2.30E-05
1841	648948.1	4197748	2.52E-04	2.69E-04	3.79E-05	4.03E-05	3.70E-05	3.59E-05	1.97E-05	1.63E-05
1842	648924.2	4197704	1.89E-04	2.01E-04	2.84E-05	3.02E-05	2.78E-05	2.69E-05	1.48E-05	1.22E-05
1843	648900.2	4197660	1.48E-04	1.58E-04	2.23E-05	2.37E-05	2.18E-05	2.11E-05	1.16E-05	9.59E-06
1844	648920.7	4197651	1.52E-04	1.62E-04	2.28E-05	2.43E-05	2.23E-05	2.16E-05	1.19E-05	9.81E-06

1845	648877.7	4197616	1.21E-04	1.28E-04	1.81E-05	1.93E-05	1.77E-05	1.72E-05	9.41E-06	7.79E-06
1846	648902.2	4197605	1.24E-04	1.32E-04	1.86E-05	1.98E-05	1.82E-05	1.76E-05	9.65E-06	7.98E-06
1847	648829.5	4197528	8.49E-05	9.05E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.63E-06	5.49E-06
1848	648852.8	4197518	8.67E-05	9.24E-05	1.30E-05	1.39E-05	1.27E-05	1.24E-05	6.77E-06	5.60E-06
1849	648781.4	4197441	6.39E-05	6.81E-05	9.61E-06	1.02E-05	9.40E-06	9.11E-06	4.99E-06	4.13E-06
1850	648804.1	4197430	6.52E-05	6.95E-05	9.80E-06	1.04E-05	9.59E-06	9.29E-06	5.09E-06	4.21E-06
1851	648826.9	4197420	6.66E-05	7.10E-05	1.00E-05	1.07E-05	9.80E-06	9.49E-06	5.20E-06	4.31E-06
1852	648734.2	4197352	5.05E-05	5.38E-05	7.59E-06	8.07E-06	7.42E-06	7.19E-06	3.94E-06	3.26E-06
1853	648758.7	4197341	5.16E-05	5.50E-05	7.76E-06	8.25E-06	7.59E-06	7.35E-06	4.03E-06	3.33E-06
1854	648783.3	4197330	5.29E-05	5.63E-05	7.95E-06	8.45E-06	7.77E-06	7.53E-06	4.13E-06	3.42E-06
1855	648686.1	4197265	4.12E-05	4.40E-05	6.20E-06	6.59E-06	6.06E-06	5.88E-06	3.22E-06	2.67E-06
1856	648710	4197254	4.22E-05	4.50E-05	6.34E-06	6.74E-06	6.20E-06	6.01E-06	3.29E-06	2.73E-06
1857	648733.8	4197243	4.32E-05	4.61E-05	6.50E-06	6.91E-06	6.35E-06	6.16E-06	3.38E-06	2.79E-06
1858	648757.7	4197232	4.43E-05	4.73E-05	6.67E-06	7.09E-06	6.52E-06	6.32E-06	3.46E-06	2.86E-06
1859	648590.7	4197089	2.98E-05	3.18E-05	4.48E-06	4.76E-06	4.38E-06	4.25E-06	2.33E-06	1.93E-06
1860	648615.2	4197078	3.05E-05	3.25E-05	4.59E-06	4.88E-06	4.49E-06	4.35E-06	2.38E-06	1.97E-06
1861	648639.8	4197067	3.13E-05	3.34E-05	4.71E-06	5.01E-06	4.61E-06	4.46E-06	2.45E-06	2.02E-06
1862	648664.3	4197056	3.22E-05	3.43E-05	4.84E-06	5.14E-06	4.73E-06	4.59E-06	2.51E-06	2.08E-06
1863	648688.8	4197045	3.31E-05	3.52E-05	4.97E-06	5.28E-06	4.86E-06	4.71E-06	2.58E-06	2.14E-06
1864	648495.2	4196913	2.31E-05	2.46E-05	3.48E-06	3.69E-06	3.40E-06	3.29E-06	1.81E-06	1.49E-06
1865	648520.2	4196902	2.37E-05	2.53E-05	3.56E-06	3.79E-06	3.48E-06	3.38E-06	1.85E-06	1.53E-06
1866	648545.2	4196891	2.43E-05	2.59E-05	3.66E-06	3.89E-06	3.58E-06	3.47E-06	1.90E-06	1.57E-06
1867	648570.2	4196879	2.50E-05	2.67E-05	3.76E-06	4.00E-06	3.68E-06	3.56E-06	1.95E-06	1.62E-06
1868	648595.1	4196868	2.57E-05	2.74E-05	3.86E-06	4.10E-06	3.77E-06	3.66E-06	2.01E-06	1.66E-06
1869	648620.1	4196857	2.63E-05	2.81E-05	3.96E-06	4.21E-06	3.87E-06	3.75E-06	2.06E-06	1.70E-06
1870	648399.6	4196738	1.88E-05	2.01E-05	2.83E-06	3.01E-06	2.77E-06	2.68E-06	1.47E-06	1.22E-06
1871	648424.9	4196726	1.93E-05	2.06E-05	2.90E-06	3.09E-06	2.84E-06	2.75E-06	1.51E-06	1.25E-06
1872	648450.3	4196715	1.98E-05	2.11E-05	2.98E-06	3.17E-06	2.91E-06	2.82E-06	1.55E-06	1.28E-06
1873	648475.6	4196703	2.03E-05	2.17E-05	3.06E-06	3.25E-06	2.99E-06	2.90E-06	1.59E-06	1.31E-06
1874	648500.9	4196692	2.09E-05	2.22E-05	3.14E-06	3.33E-06	3.07E-06	2.97E-06	1.63E-06	1.35E-06
1875	648526.2	4196680	2.14E-05	2.28E-05	3.21E-06	3.42E-06	3.14E-06	3.05E-06	1.67E-06	1.38E-06
1876	648551.5	4196669	2.19E-05	2.33E-05	3.29E-06	3.50E-06	3.22E-06	3.12E-06	1.71E-06	1.41E-06
1877	648303.7	4196562	1.59E-05	1.69E-05	2.38E-06	2.54E-06	2.33E-06	2.26E-06	1.24E-06	1.02E-06
1878	648328.2	4196551	1.62E-05	1.73E-05	2.44E-06	2.59E-06	2.38E-06	2.31E-06	1.27E-06	1.05E-06
1879	648352.8	4196540	1.66E-05	1.77E-05	2.50E-06	2.66E-06	2.44E-06	2.37E-06	1.30E-06	1.07E-06
1880	648377.3	4196529	1.70E-05	1.81E-05	2.56E-06	2.72E-06	2.50E-06	2.42E-06	1.33E-06	1.10E-06
1881	648401.8	4196518	1.74E-05	1.86E-05	2.62E-06	2.79E-06	2.56E-06	2.48E-06	1.36E-06	1.13E-06
1882	648426.4	4196507	1.78E-05	1.90E-05	2.68E-06	2.85E-06	2.62E-06	2.54E-06	1.39E-06	1.15E-06
1883	648450.9	4196496	1.82E-05	1.94E-05	2.74E-06	2.91E-06	2.68E-06	2.60E-06	1.42E-06	1.18E-06
1884	648475.4	4196485	1.86E-05	1.98E-05	2.80E-06	2.97E-06	2.73E-06	2.65E-06	1.45E-06	1.20E-06
1885	648979	4197877	7.72E-04	8.23E-04	1.16E-04	1.23E-04	1.14E-04	1.10E-04	6.03E-05	4.99E-05
1886	648962.9	4197857	5.47E-04	5.84E-04	8.23E-05	8.75E-05	8.05E-05	7.80E-05	4.28E-05	3.54E-05
1887	648962.7	4197826	4.29E-04	4.58E-04	6.46E-05	6.87E-05	6.31E-05	6.12E-05	3.35E-05	2.78E-05
1888	648940.2	4197811	3.41E-04	3.64E-04	5.13E-05	5.46E-05	5.02E-05	4.87E-05	2.67E-05	2.21E-05
1889	648916.3	4197767	2.43E-04	2.59E-04	3.65E-05	3.88E-05	3.57E-05	3.46E-05	1.90E-05	1.57E-05
1890	648898.3	4197781	2.41E-04	2.57E-04	3.62E-05	3.85E-05	3.54E-05	3.43E-05	1.88E-05	1.56E-05
1891	648884	4197729	1.83E-04	1.95E-04	2.76E-05	2.93E-05	2.70E-05	2.61E-05	1.43E-05	1.18E-05
1892	648866	4197743	1.83E-04	1.95E-04	2.75E-05	2.92E-05	2.69E-05	2.61E-05	1.43E-05	1.18E-05
1893	648851.7	4197691	1.45E-04	1.54E-04	2.18E-05	2.32E-05	2.13E-05	2.06E-05	1.13E-05	9.36E-06
1894	648876.9	4197674	1.46E-04	1.55E-04	2.19E-05	2.33E-05	2.14E-05	2.08E-05	1.14E-05	9.43E-06
1895	648833.7	4197705	1.45E-04	1.55E-04	2.18E-05	2.32E-05	2.13E-05	2.07E-05	1.13E-05	9.38E-06
1896	648821.1	4197652	1.18E-04	1.26E-04	1.78E-05	1.89E-05	1.74E-05	1.69E-05	9.24E-06	7.64E-06
1897	648841.2	4197638	1.18E-04	1.26E-04	1.78E-05	1.89E-05	1.74E-05	1.69E-05	9.25E-06	7.66E-06
1898	648801.3	4197667	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.69E-05	9.29E-06	7.68E-06
1899	648756	4197576	8.42E-05	8.98E-05	1.27E-05	1.35E-05	1.24E-05	1.20E-05	6.58E-06	5.44E-06
1900	648775.2	4197562	8.39E-05	8.94E-05	1.26E-05	1.34E-05	1.23E-05	1.20E-05	6.55E-06	5.42E-06

1901	648794.3	4197549	8.38E-05	8.94E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.55E-06	5.42E-06
1902	648736.7	4197590	8.51E-05	9.07E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.65E-06	5.50E-06
1903	648691.1	4197499	6.39E-05	6.81E-05	9.61E-06	1.02E-05	9.39E-06	9.10E-06	4.99E-06	4.13E-06
1904	648709.7	4197487	6.34E-05	6.76E-05	9.53E-06	1.01E-05	9.32E-06	9.04E-06	4.95E-06	4.10E-06
1905	648737.7	4197468	6.31E-05	6.73E-05	9.49E-06	1.01E-05	9.28E-06	8.99E-06	4.93E-06	4.08E-06
1906	648672.1	4197514	6.48E-05	6.91E-05	9.74E-06	1.04E-05	9.53E-06	9.23E-06	5.06E-06	4.19E-06
1907	648627.2	4197423	5.06E-05	5.39E-05	7.61E-06	8.09E-06	7.44E-06	7.21E-06	3.95E-06	3.27E-06
1908	648647.4	4197409	5.01E-05	5.34E-05	7.53E-06	8.00E-06	7.36E-06	7.13E-06	3.91E-06	3.23E-06
1909	648667.5	4197395	4.97E-05	5.30E-05	7.48E-06	7.95E-06	7.31E-06	7.09E-06	3.88E-06	3.21E-06
1910	648687.6	4197381	4.96E-05	5.29E-05	7.46E-06	7.93E-06	7.30E-06	7.07E-06	3.88E-06	3.21E-06
1911	648707.8	4197367	4.97E-05	5.30E-05	7.48E-06	7.95E-06	7.31E-06	7.09E-06	3.89E-06	3.21E-06
1912	648607.5	4197438	5.15E-05	5.49E-05	7.74E-06	8.23E-06	7.57E-06	7.34E-06	4.02E-06	3.33E-06
1913	648562.3	4197347	4.14E-05	4.42E-05	6.23E-06	6.62E-06	6.09E-06	5.90E-06	3.24E-06	2.68E-06
1914	648581.9	4197333	4.09E-05	4.36E-05	6.15E-06	6.54E-06	6.01E-06	5.83E-06	3.20E-06	2.64E-06
1915	648601.5	4197320	4.06E-05	4.32E-05	6.10E-06	6.48E-06	5.96E-06	5.78E-06	3.17E-06	2.62E-06
1916	648621.1	4197306	4.04E-05	4.30E-05	6.07E-06	6.46E-06	5.94E-06	5.75E-06	3.15E-06	2.61E-06
1917	648640.6	4197293	4.04E-05	4.31E-05	6.07E-06	6.46E-06	5.94E-06	5.76E-06	3.16E-06	2.61E-06
1918	648660.2	4197279	4.06E-05	4.33E-05	6.10E-06	6.49E-06	5.97E-06	5.78E-06	3.17E-06	2.62E-06
1919	648542.9	4197361	4.22E-05	4.50E-05	6.35E-06	6.75E-06	6.21E-06	6.02E-06	3.30E-06	2.73E-06
1920	648433.4	4197194	2.98E-05	3.17E-05	4.48E-06	4.76E-06	4.38E-06	4.24E-06	2.32E-06	1.92E-06
1921	648453.5	4197180	2.93E-05	3.13E-05	4.41E-06	4.69E-06	4.31E-06	4.18E-06	2.29E-06	1.89E-06
1922	648473.7	4197166	2.90E-05	3.09E-05	4.36E-06	4.64E-06	4.27E-06	4.13E-06	2.27E-06	1.87E-06
1923	648493.8	4197152	2.88E-05	3.07E-05	4.33E-06	4.61E-06	4.24E-06	4.11E-06	2.25E-06	1.86E-06
1924	648513.9	4197139	2.88E-05	3.07E-05	4.33E-06	4.60E-06	4.23E-06	4.10E-06	2.25E-06	1.86E-06
1925	648534.1	4197125	2.88E-05	3.07E-05	4.34E-06	4.61E-06	4.24E-06	4.11E-06	2.25E-06	1.86E-06
1926	648554.2	4197111	2.91E-05	3.10E-05	4.37E-06	4.64E-06	4.27E-06	4.14E-06	2.27E-06	1.88E-06
1927	648413.7	4197209	3.04E-05	3.24E-05	4.57E-06	4.85E-06	4.46E-06	4.33E-06	2.37E-06	1.96E-06
1928	648304.3	4197041	2.28E-05	2.43E-05	3.43E-06	3.65E-06	3.36E-06	3.25E-06	1.78E-06	1.47E-06
1929	648324.8	4197027	2.25E-05	2.40E-05	3.38E-06	3.59E-06	3.30E-06	3.20E-06	1.76E-06	1.45E-06
1930	648345.4	4197013	2.22E-05	2.37E-05	3.34E-06	3.55E-06	3.27E-06	3.16E-06	1.73E-06	1.44E-06
1931	648365.9	4196999	2.20E-05	2.35E-05	3.31E-06	3.52E-06	3.24E-06	3.14E-06	1.72E-06	1.42E-06
1932	648386.4	4196985	2.20E-05	2.34E-05	3.31E-06	3.51E-06	3.23E-06	3.13E-06	1.72E-06	1.42E-06
1933	648406.9	4196971	2.20E-05	2.34E-05	3.31E-06	3.52E-06	3.23E-06	3.13E-06	1.72E-06	1.42E-06
1934	648427.4	4196957	2.21E-05	2.36E-05	3.33E-06	3.54E-06	3.25E-06	3.15E-06	1.73E-06	1.43E-06
1935	648447.9	4196943	2.23E-05	2.38E-05	3.36E-06	3.57E-06	3.28E-06	3.18E-06	1.74E-06	1.44E-06
1936	648468.4	4196929	2.26E-05	2.41E-05	3.40E-06	3.61E-06	3.32E-06	3.22E-06	1.77E-06	1.46E-06
1937	648284.4	4197056	2.33E-05	2.48E-05	3.50E-06	3.72E-06	3.42E-06	3.32E-06	1.82E-06	1.51E-06
1938	648175.2	4196888	1.83E-05	1.95E-05	2.75E-06	2.93E-06	2.69E-06	2.61E-06	1.43E-06	1.18E-06
1939	648196	4196874	1.80E-05	1.92E-05	2.71E-06	2.88E-06	2.65E-06	2.57E-06	1.41E-06	1.17E-06
1940	648216.8	4196860	1.78E-05	1.90E-05	2.68E-06	2.85E-06	2.62E-06	2.54E-06	1.39E-06	1.15E-06
1941	648237.6	4196845	1.77E-05	1.89E-05	2.66E-06	2.83E-06	2.60E-06	2.52E-06	1.38E-06	1.14E-06
1942	648258.3	4196831	1.76E-05	1.88E-05	2.65E-06	2.82E-06	2.59E-06	2.51E-06	1.38E-06	1.14E-06
1943	648279.1	4196817	1.76E-05	1.88E-05	2.65E-06	2.82E-06	2.59E-06	2.51E-06	1.38E-06	1.14E-06
1944	648299.9	4196803	1.77E-05	1.88E-05	2.66E-06	2.83E-06	2.60E-06	2.52E-06	1.38E-06	1.14E-06
1945	648320.7	4196789	1.78E-05	1.90E-05	2.68E-06	2.85E-06	2.62E-06	2.54E-06	1.39E-06	1.15E-06
1946	648341.5	4196774	1.80E-05	1.92E-05	2.71E-06	2.88E-06	2.65E-06	2.57E-06	1.41E-06	1.16E-06
1947	648362.2	4196760	1.83E-05	1.95E-05	2.74E-06	2.92E-06	2.68E-06	2.60E-06	1.43E-06	1.18E-06
1948	648155.2	4196903	1.87E-05	1.99E-05	2.81E-06	2.98E-06	2.75E-06	2.66E-06	1.46E-06	1.21E-06
1949	648045.7	4196736	1.52E-05	1.62E-05	2.29E-06	2.43E-06	2.23E-06	2.17E-06	1.19E-06	9.82E-07
1950	648065.8	4196722	1.50E-05	1.60E-05	2.25E-06	2.40E-06	2.20E-06	2.14E-06	1.17E-06	9.68E-07
1951	648086	4196708	1.48E-05	1.58E-05	2.23E-06	2.37E-06	2.18E-06	2.11E-06	1.16E-06	9.58E-07
1952	648106.1	4196694	1.47E-05	1.57E-05	2.21E-06	2.35E-06	2.16E-06	2.09E-06	1.15E-06	9.50E-07
1953	648126.2	4196681	1.46E-05	1.56E-05	2.20E-06	2.34E-06	2.15E-06	2.09E-06	1.14E-06	9.46E-07
1954	648146.4	4196667	1.46E-05	1.56E-05	2.20E-06	2.34E-06	2.15E-06	2.08E-06	1.14E-06	9.44E-07
1955	648166.5	4196653	1.46E-05	1.56E-05	2.20E-06	2.34E-06	2.15E-06	2.09E-06	1.14E-06	9.46E-07
1956	648186.7	4196639	1.47E-05	1.57E-05	2.21E-06	2.35E-06	2.16E-06	2.09E-06	1.15E-06	9.50E-07

1957	648206.8	4196625	1.48E-05	1.58E-05	2.23E-06	2.37E-06	2.18E-06	2.11E-06	1.16E-06	9.58E-07
1958	648226.9	4196612	1.50E-05	1.60E-05	2.25E-06	2.39E-06	2.20E-06	2.13E-06	1.17E-06	9.67E-07
1959	648247.1	4196598	1.52E-05	1.62E-05	2.28E-06	2.42E-06	2.23E-06	2.16E-06	1.18E-06	9.80E-07
1960	648267.2	4196584	1.54E-05	1.64E-05	2.31E-06	2.46E-06	2.26E-06	2.19E-06	1.20E-06	9.94E-07
1961	648026	4196751	1.55E-05	1.65E-05	2.32E-06	2.47E-06	2.27E-06	2.20E-06	1.21E-06	9.99E-07
1962	648964.3	4197898	8.08E-04	8.61E-04	1.21E-04	1.29E-04	1.19E-04	1.15E-04	6.31E-05	5.22E-05
1963	648943	4197885	5.70E-04	6.08E-04	8.58E-05	9.12E-05	8.39E-05	8.13E-05	4.46E-05	3.69E-05
1964	648939.1	4197847	4.24E-04	4.52E-04	6.38E-05	6.78E-05	6.24E-05	6.05E-05	3.31E-05	2.74E-05
1965	648921.8	4197872	4.39E-04	4.68E-04	6.60E-05	7.02E-05	6.46E-05	6.26E-05	3.43E-05	2.84E-05
1966	648920.4	4197831	3.44E-04	3.66E-04	5.17E-05	5.49E-05	5.05E-05	4.90E-05	2.68E-05	2.22E-05
1967	648900.5	4197859	3.56E-04	3.79E-04	5.35E-05	5.68E-05	5.23E-05	5.07E-05	2.78E-05	2.30E-05
1968	648877.9	4197805	2.47E-04	2.63E-04	3.71E-05	3.94E-05	3.63E-05	3.51E-05	1.93E-05	1.59E-05
1969	648858	4197832	2.55E-04	2.72E-04	3.83E-05	4.08E-05	3.75E-05	3.63E-05	1.99E-05	1.65E-05
1970	648835.3	4197779	1.90E-04	2.03E-04	2.86E-05	3.04E-05	2.80E-05	2.71E-05	1.49E-05	1.23E-05
1971	648815.5	4197806	1.97E-04	2.10E-04	2.96E-05	3.14E-05	2.89E-05	2.80E-05	1.54E-05	1.27E-05
1972	648792.8	4197752	1.54E-04	1.64E-04	2.31E-05	2.46E-05	2.26E-05	2.19E-05	1.20E-05	9.93E-06
1973	648813.2	4197729	1.50E-04	1.59E-04	2.25E-05	2.39E-05	2.20E-05	2.13E-05	1.17E-05	9.66E-06
1974	648773	4197780	1.59E-04	1.69E-04	2.39E-05	2.54E-05	2.34E-05	2.26E-05	1.24E-05	1.03E-05
1975	648750.3	4197726	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.88E-05	1.83E-05	1.00E-05	8.28E-06
1976	648770.7	4197702	1.25E-04	1.33E-04	1.87E-05	1.99E-05	1.83E-05	1.78E-05	9.74E-06	8.05E-06
1977	648730.5	4197753	1.32E-04	1.41E-04	1.99E-05	2.12E-05	1.95E-05	1.89E-05	1.03E-05	8.56E-06
1978	648666.7	4197672	9.51E-05	1.01E-04	1.43E-05	1.52E-05	1.40E-05	1.36E-05	7.43E-06	6.15E-06
1979	648690.1	4197645	9.21E-05	9.82E-05	1.38E-05	1.47E-05	1.35E-05	1.31E-05	7.19E-06	5.95E-06
1980	648713.4	4197617	8.86E-05	9.45E-05	1.33E-05	1.42E-05	1.30E-05	1.26E-05	6.92E-06	5.73E-06
1981	648645.4	4197701	9.81E-05	1.05E-04	1.48E-05	1.57E-05	1.44E-05	1.40E-05	7.67E-06	6.34E-06
1982	648581.4	4197619	7.51E-05	8.00E-05	1.13E-05	1.20E-05	1.10E-05	1.07E-05	5.86E-06	4.85E-06
1983	648604.1	4197593	7.29E-05	7.78E-05	1.10E-05	1.17E-05	1.07E-05	1.04E-05	5.70E-06	4.71E-06
1984	648626.8	4197567	7.04E-05	7.50E-05	1.06E-05	1.12E-05	1.03E-05	1.00E-05	5.50E-06	4.55E-06
1985	648649.4	4197540	6.75E-05	7.20E-05	1.02E-05	1.08E-05	9.93E-06	9.62E-06	5.28E-06	4.36E-06
1986	648560.4	4197648	7.70E-05	8.21E-05	1.16E-05	1.23E-05	1.13E-05	1.10E-05	6.02E-06	4.98E-06
1987	648496.2	4197567	6.16E-05	6.56E-05	9.26E-06	9.84E-06	9.05E-06	8.77E-06	4.81E-06	3.98E-06
1988	648518.4	4197541	6.01E-05	6.41E-05	9.04E-06	9.61E-06	8.84E-06	8.56E-06	4.69E-06	3.88E-06
1989	648540.7	4197515	5.82E-05	6.20E-05	8.75E-06	9.30E-06	8.56E-06	8.29E-06	4.55E-06	3.76E-06
1990	648563	4197489	5.60E-05	5.97E-05	8.42E-06	8.95E-06	8.23E-06	7.98E-06	4.37E-06	3.62E-06
1991	648585.2	4197464	5.37E-05	5.72E-05	8.07E-06	8.58E-06	7.89E-06	7.65E-06	4.19E-06	3.47E-06
1992	648475.4	4197595	6.28E-05	6.70E-05	9.45E-06	1.00E-05	9.24E-06	8.96E-06	4.91E-06	4.06E-06
1993	648411.9	4197513	5.18E-05	5.53E-05	7.80E-06	8.29E-06	7.62E-06	7.39E-06	4.05E-06	3.35E-06
1994	648435.7	4197486	5.07E-05	5.41E-05	7.63E-06	8.11E-06	7.46E-06	7.23E-06	3.96E-06	3.28E-06
1995	648459.5	4197458	4.92E-05	5.24E-05	7.39E-06	7.86E-06	7.23E-06	7.01E-06	3.84E-06	3.18E-06
1996	648483.3	4197430	4.73E-05	5.04E-05	7.11E-06	7.56E-06	6.95E-06	6.74E-06	3.69E-06	3.05E-06
1997	648507.2	4197403	4.52E-05	4.82E-05	6.80E-06	7.23E-06	6.65E-06	6.44E-06	3.53E-06	2.92E-06
1998	648390.3	4197543	5.27E-05	5.62E-05	7.93E-06	8.43E-06	7.75E-06	7.52E-06	4.12E-06	3.41E-06
1999	648241.4	4197409	3.90E-05	4.16E-05	5.87E-06	6.24E-06	5.74E-06	5.56E-06	3.05E-06	2.52E-06
2000	648264.4	4197382	3.85E-05	4.10E-05	5.79E-06	6.16E-06	5.66E-06	5.49E-06	3.01E-06	2.49E-06
2001	648287.3	4197355	3.77E-05	4.02E-05	5.67E-06	6.03E-06	5.54E-06	5.37E-06	2.94E-06	2.44E-06
2002	648310.3	4197329	3.66E-05	3.90E-05	5.50E-06	5.85E-06	5.38E-06	5.22E-06	2.86E-06	2.37E-06
2003	648333.3	4197302	3.53E-05	3.76E-05	5.31E-06	5.65E-06	5.19E-06	5.03E-06	2.76E-06	2.28E-06
2004	648356.2	4197275	3.39E-05	3.61E-05	5.09E-06	5.41E-06	4.98E-06	4.83E-06	2.65E-06	2.19E-06
2005	648379.2	4197249	3.24E-05	3.45E-05	4.87E-06	5.18E-06	4.77E-06	4.62E-06	2.53E-06	2.09E-06
2006	648220.3	4197438	3.94E-05	4.20E-05	5.92E-06	6.30E-06	5.79E-06	5.61E-06	3.08E-06	2.55E-06
2007	648071.7	4197303	3.09E-05	3.30E-05	4.65E-06	4.95E-06	4.55E-06	4.41E-06	2.42E-06	2.00E-06
2008	648095.3	4197276	3.07E-05	3.27E-05	4.62E-06	4.91E-06	4.51E-06	4.37E-06	2.40E-06	1.98E-06
2009	648119	4197248	3.02E-05	3.22E-05	4.55E-06	4.83E-06	4.44E-06	4.31E-06	2.36E-06	1.95E-06
2010	648142.6	4197221	2.95E-05	3.15E-05	4.44E-06	4.72E-06	4.34E-06	4.21E-06	2.31E-06	1.91E-06
2011	648166.2	4197193	2.87E-05	3.06E-05	4.31E-06	4.58E-06	4.21E-06	4.08E-06	2.24E-06	1.85E-06
2012	648189.9	4197166	2.76E-05	2.95E-05	4.16E-06	4.42E-06	4.06E-06	3.94E-06	2.16E-06	1.79E-06

2013	648213.5	4197138	2.65E-05	2.83E-05	3.99E-06	4.24E-06	3.90E-06	3.78E-06	2.07E-06	1.71E-06
2014	648237.2	4197111	2.54E-05	2.70E-05	3.81E-06	4.06E-06	3.73E-06	3.62E-06	1.98E-06	1.64E-06
2015	648260.8	4197084	2.43E-05	2.59E-05	3.65E-06	3.88E-06	3.57E-06	3.46E-06	1.90E-06	1.57E-06
2016	648050.2	4197332	3.11E-05	3.31E-05	4.67E-06	4.97E-06	4.57E-06	4.43E-06	2.43E-06	2.01E-06
2017	647901.4	4197198	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
2018	647924.4	4197171	2.54E-05	2.70E-05	3.81E-06	4.05E-06	3.73E-06	3.61E-06	1.98E-06	1.64E-06
2019	647947.5	4197144	2.51E-05	2.68E-05	3.78E-06	4.02E-06	3.69E-06	3.58E-06	1.96E-06	1.62E-06
2020	647970.6	4197118	2.47E-05	2.64E-05	3.72E-06	3.95E-06	3.64E-06	3.52E-06	1.93E-06	1.60E-06
2021	647993.7	4197091	2.42E-05	2.58E-05	3.64E-06	3.87E-06	3.56E-06	3.45E-06	1.89E-06	1.56E-06
2022	648016.7	4197064	2.35E-05	2.51E-05	3.54E-06	3.76E-06	3.46E-06	3.35E-06	1.84E-06	1.52E-06
2023	648039.8	4197037	2.27E-05	2.43E-05	3.42E-06	3.64E-06	3.34E-06	3.24E-06	1.78E-06	1.47E-06
2024	648062.9	4197011	2.19E-05	2.34E-05	3.29E-06	3.50E-06	3.22E-06	3.12E-06	1.71E-06	1.42E-06
2025	648086	4196984	2.10E-05	2.24E-05	3.16E-06	3.36E-06	3.09E-06	3.00E-06	1.64E-06	1.36E-06
2026	648109	4196957	2.02E-05	2.15E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.30E-06
2027	648132.1	4196930	1.94E-05	2.07E-05	2.91E-06	3.10E-06	2.85E-06	2.76E-06	1.51E-06	1.25E-06
2028	647880.2	4197227	2.54E-05	2.71E-05	3.83E-06	4.07E-06	3.74E-06	3.63E-06	1.99E-06	1.64E-06
2029	647731.5	4197093	2.15E-05	2.29E-05	3.23E-06	3.43E-06	3.15E-06	3.06E-06	1.68E-06	1.39E-06
2030	647755.1	4197065	2.15E-05	2.29E-05	3.23E-06	3.43E-06	3.15E-06	3.06E-06	1.68E-06	1.39E-06
2031	647778.6	4197038	2.14E-05	2.28E-05	3.21E-06	3.41E-06	3.14E-06	3.04E-06	1.67E-06	1.38E-06
2032	647802.2	4197011	2.11E-05	2.25E-05	3.17E-06	3.37E-06	3.10E-06	3.01E-06	1.65E-06	1.36E-06
2033	647825.8	4196983	2.07E-05	2.21E-05	3.12E-06	3.32E-06	3.05E-06	2.96E-06	1.62E-06	1.34E-06
2034	647849.3	4196956	2.03E-05	2.16E-05	3.05E-06	3.24E-06	2.98E-06	2.89E-06	1.58E-06	1.31E-06
2035	647872.9	4196929	1.97E-05	2.10E-05	2.96E-06	3.15E-06	2.90E-06	2.81E-06	1.54E-06	1.27E-06
2036	647896.4	4196901	1.91E-05	2.03E-05	2.87E-06	3.05E-06	2.80E-06	2.72E-06	1.49E-06	1.23E-06
2037	647920	4196874	1.84E-05	1.96E-05	2.76E-06	2.94E-06	2.70E-06	2.62E-06	1.44E-06	1.19E-06
2038	647943.5	4196847	1.77E-05	1.88E-05	2.66E-06	2.83E-06	2.60E-06	2.52E-06	1.38E-06	1.14E-06
2039	647967.1	4196819	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.50E-06	2.42E-06	1.33E-06	1.10E-06
2040	647990.6	4196792	1.63E-05	1.74E-05	2.45E-06	2.61E-06	2.40E-06	2.33E-06	1.28E-06	1.05E-06
2041	647710.1	4197122	2.14E-05	2.28E-05	3.22E-06	3.42E-06	3.15E-06	3.05E-06	1.67E-06	1.38E-06
2042	648953.5	4197924	9.04E-04	9.64E-04	1.36E-04	1.45E-04	1.33E-04	1.29E-04	7.06E-05	5.84E-05
2043	648944.6	4197945	9.75E-04	1.04E-03	1.47E-04	1.56E-04	1.43E-04	1.39E-04	7.61E-05	6.30E-05
2044	648935.7	4197967	1.02E-03	1.09E-03	1.53E-04	1.63E-04	1.50E-04	1.45E-04	7.96E-05	6.59E-05
2045	648930.4	4197914	6.29E-04	6.71E-04	9.46E-05	1.01E-04	9.25E-05	8.96E-05	4.91E-05	4.07E-05
2046	648921.4	4197936	6.72E-04	7.16E-04	1.01E-04	1.07E-04	9.88E-05	9.57E-05	5.25E-05	4.34E-05
2047	648912.5	4197958	7.05E-04	7.52E-04	1.06E-04	1.13E-04	1.04E-04	1.00E-04	5.51E-05	4.56E-05
2048	648907.2	4197905	4.80E-04	5.12E-04	7.22E-05	7.68E-05	7.06E-05	6.84E-05	3.75E-05	3.10E-05
2049	648898.3	4197926	5.08E-04	5.42E-04	7.64E-05	8.12E-05	7.47E-05	7.24E-05	3.97E-05	3.28E-05
2050	648889.4	4197948	5.32E-04	5.67E-04	8.00E-05	8.50E-05	7.82E-05	7.58E-05	4.15E-05	3.44E-05
2051	648884.1	4197895	3.87E-04	4.13E-04	5.82E-05	6.19E-05	5.69E-05	5.52E-05	3.02E-05	2.50E-05
2052	648875.2	4197917	4.06E-04	4.33E-04	6.11E-05	6.50E-05	5.98E-05	5.79E-05	3.18E-05	2.63E-05
2053	648866.3	4197939	4.23E-04	4.51E-04	6.37E-05	6.77E-05	6.23E-05	6.03E-05	3.31E-05	2.74E-05
2054	648846.7	4197854	2.65E-04	2.83E-04	3.99E-05	4.24E-05	3.90E-05	3.78E-05	2.07E-05	1.71E-05
2055	648837.8	4197876	2.77E-04	2.95E-04	4.16E-05	4.42E-05	4.07E-05	3.94E-05	2.16E-05	1.79E-05
2056	648828.9	4197898	2.87E-04	3.06E-04	4.32E-05	4.59E-05	4.22E-05	4.09E-05	2.24E-05	1.86E-05
2057	648820	4197920	2.96E-04	3.16E-04	4.46E-05	4.74E-05	4.36E-05	4.22E-05	2.32E-05	1.92E-05
2058	648800.4	4197836	2.06E-04	2.20E-04	3.10E-05	3.29E-05	3.03E-05	2.93E-05	1.61E-05	1.33E-05
2059	648791.5	4197857	2.13E-04	2.27E-04	3.21E-05	3.41E-05	3.13E-05	3.04E-05	1.67E-05	1.38E-05
2060	648782.6	4197879	2.19E-04	2.34E-04	3.30E-05	3.51E-05	3.23E-05	3.13E-05	1.71E-05	1.42E-05
2061	648773.7	4197901	2.25E-04	2.40E-04	3.38E-05	3.59E-05	3.31E-05	3.20E-05	1.76E-05	1.45E-05
2062	648754.2	4197817	1.67E-04	1.78E-04	2.51E-05	2.67E-05	2.46E-05	2.38E-05	1.31E-05	1.08E-05
2063	648745.2	4197838	1.72E-04	1.83E-04	2.59E-05	2.75E-05	2.53E-05	2.45E-05	1.34E-05	1.11E-05
2064	648736.3	4197860	1.76E-04	1.88E-04	2.65E-05	2.81E-05	2.59E-05	2.51E-05	1.37E-05	1.14E-05
2065	648727.4	4197882	1.79E-04	1.91E-04	2.70E-05	2.87E-05	2.64E-05	2.55E-05	1.40E-05	1.16E-05
2066	648715.4	4197783	1.38E-04	1.47E-04	2.07E-05	2.20E-05	2.02E-05	1.96E-05	1.08E-05	8.90E-06
2067	648699	4197819	1.43E-04	1.53E-04	2.15E-05	2.29E-05	2.10E-05	2.04E-05	1.12E-05	9.25E-06
2068	648690.1	4197841	1.46E-04	1.55E-04	2.19E-05	2.33E-05	2.14E-05	2.08E-05	1.14E-05	9.42E-06

2069	648681.2	4197863	1.48E-04	1.58E-04	2.22E-05	2.36E-05	2.17E-05	2.11E-05	1.15E-05	9.55E-06
2070	648625.4	4197740	1.02E-04	1.09E-04	1.54E-05	1.63E-05	1.50E-05	1.46E-05	7.99E-06	6.61E-06
2071	648606.4	4197782	1.05E-04	1.12E-04	1.58E-05	1.68E-05	1.55E-05	1.50E-05	8.23E-06	6.81E-06
2072	648597.5	4197803	1.07E-04	1.14E-04	1.60E-05	1.71E-05	1.57E-05	1.52E-05	8.33E-06	6.89E-06
2073	648588.6	4197825	1.08E-04	1.15E-04	1.62E-05	1.72E-05	1.58E-05	1.53E-05	8.41E-06	6.96E-06
2074	648532.2	4197703	8.05E-05	8.58E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.29E-06	5.20E-06
2075	648513.9	4197744	8.21E-05	8.75E-05	1.23E-05	1.31E-05	1.21E-05	1.17E-05	6.41E-06	5.31E-06
2076	648505	4197765	8.28E-05	8.83E-05	1.25E-05	1.32E-05	1.22E-05	1.18E-05	6.47E-06	5.35E-06
2077	648496	4197787	8.34E-05	8.89E-05	1.25E-05	1.33E-05	1.23E-05	1.19E-05	6.51E-06	5.39E-06
2078	648439.2	4197666	6.55E-05	6.99E-05	9.85E-06	1.05E-05	9.63E-06	9.34E-06	5.12E-06	4.23E-06
2079	648457.3	4197631	6.45E-05	6.87E-05	9.69E-06	1.03E-05	9.48E-06	9.19E-06	5.03E-06	4.17E-06
2080	648421.3	4197706	6.65E-05	7.08E-05	9.99E-06	1.06E-05	9.77E-06	9.47E-06	5.19E-06	4.29E-06
2081	648412.4	4197728	6.69E-05	7.13E-05	1.01E-05	1.07E-05	9.84E-06	9.53E-06	5.23E-06	4.32E-06
2082	648403.5	4197749	6.73E-05	7.17E-05	1.01E-05	1.08E-05	9.89E-06	9.59E-06	5.25E-06	4.35E-06
2083	648348.2	4197626	5.47E-05	5.83E-05	8.22E-06	8.74E-06	8.04E-06	7.79E-06	4.27E-06	3.53E-06
2084	648358.7	4197605	5.44E-05	5.80E-05	8.18E-06	8.69E-06	7.99E-06	7.75E-06	4.25E-06	3.51E-06
2085	648369.3	4197584	5.40E-05	5.75E-05	8.11E-06	8.63E-06	7.93E-06	7.69E-06	4.21E-06	3.49E-06
2086	648379.8	4197563	5.34E-05	5.69E-05	8.03E-06	8.54E-06	7.85E-06	7.61E-06	4.17E-06	3.45E-06
2087	648337.7	4197646	5.49E-05	5.86E-05	8.26E-06	8.78E-06	8.08E-06	7.83E-06	4.29E-06	3.55E-06
2088	648328.8	4197668	5.53E-05	5.90E-05	8.32E-06	8.84E-06	8.13E-06	7.88E-06	4.32E-06	3.58E-06
2089	648319.8	4197690	5.56E-05	5.93E-05	8.37E-06	8.89E-06	8.18E-06	7.93E-06	4.35E-06	3.60E-06
2090	648310.9	4197712	5.59E-05	5.96E-05	8.41E-06	8.94E-06	8.22E-06	7.97E-06	4.37E-06	3.61E-06
2091	648162.2	4197551	4.04E-05	4.30E-05	6.07E-06	6.46E-06	5.94E-06	5.75E-06	3.15E-06	2.61E-06
2092	648181.6	4197514	4.02E-05	4.28E-05	6.04E-06	6.42E-06	5.91E-06	5.73E-06	3.14E-06	2.60E-06
2093	648200.9	4197476	3.99E-05	4.25E-05	6.00E-06	6.38E-06	5.86E-06	5.68E-06	3.12E-06	2.58E-06
2094	648143.6	4197592	4.07E-05	4.34E-05	6.12E-06	6.50E-06	5.98E-06	5.80E-06	3.18E-06	2.63E-06
2095	648134.7	4197614	4.09E-05	4.36E-05	6.15E-06	6.54E-06	6.01E-06	5.83E-06	3.20E-06	2.64E-06
2096	648125.8	4197636	4.11E-05	4.38E-05	6.18E-06	6.57E-06	6.05E-06	5.86E-06	3.21E-06	2.66E-06
2097	647977.8	4197474	3.14E-05	3.35E-05	4.73E-06	5.02E-06	4.62E-06	4.48E-06	2.46E-06	2.03E-06
2098	647988.1	4197454	3.14E-05	3.35E-05	4.72E-06	5.02E-06	4.62E-06	4.47E-06	2.45E-06	2.03E-06
2099	647998.5	4197434	3.14E-05	3.34E-05	4.72E-06	5.01E-06	4.61E-06	4.47E-06	2.45E-06	2.03E-06
2100	648008.8	4197414	3.13E-05	3.34E-05	4.71E-06	5.01E-06	4.61E-06	4.47E-06	2.45E-06	2.03E-06
2101	648019.2	4197393	3.13E-05	3.34E-05	4.71E-06	5.01E-06	4.61E-06	4.46E-06	2.45E-06	2.02E-06
2102	648029.5	4197373	3.13E-05	3.33E-05	4.70E-06	5.00E-06	4.60E-06	4.46E-06	2.44E-06	2.02E-06
2103	648039.9	4197353	3.12E-05	3.32E-05	4.69E-06	4.99E-06	4.59E-06	4.44E-06	2.44E-06	2.02E-06
2104	647967.4	4197495	3.15E-05	3.36E-05	4.74E-06	5.03E-06	4.63E-06	4.49E-06	2.46E-06	2.03E-06
2105	647958.5	4197517	3.17E-05	3.37E-05	4.76E-06	5.06E-06	4.65E-06	4.51E-06	2.47E-06	2.05E-06
2106	647949.6	4197538	3.18E-05	3.39E-05	4.79E-06	5.09E-06	4.68E-06	4.54E-06	2.49E-06	2.06E-06
2107	647940.7	4197560	3.20E-05	3.41E-05	4.82E-06	5.12E-06	4.71E-06	4.56E-06	2.50E-06	2.07E-06
2108	647792.1	4197400	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
2109	647811.7	4197361	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.73E-06	3.62E-06	1.98E-06	1.64E-06
2110	647831.3	4197323	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
2111	647850.8	4197285	2.55E-05	2.72E-05	3.83E-06	4.07E-06	3.75E-06	3.63E-06	1.99E-06	1.65E-06
2112	647773.4	4197441	2.56E-05	2.73E-05	3.85E-06	4.09E-06	3.77E-06	3.65E-06	2.00E-06	1.65E-06
2113	647764.5	4197463	2.58E-05	2.75E-05	3.87E-06	4.12E-06	3.79E-06	3.67E-06	2.01E-06	1.66E-06
2114	647755.6	4197484	2.59E-05	2.77E-05	3.90E-06	4.15E-06	3.81E-06	3.70E-06	2.03E-06	1.68E-06
2115	647607.5	4197323	2.11E-05	2.25E-05	3.18E-06	3.38E-06	3.11E-06	3.01E-06	1.65E-06	1.37E-06
2116	647628	4197283	2.11E-05	2.25E-05	3.17E-06	3.37E-06	3.10E-06	3.01E-06	1.65E-06	1.36E-06
2117	647638.3	4197263	2.11E-05	2.25E-05	3.18E-06	3.38E-06	3.11E-06	3.01E-06	1.65E-06	1.37E-06
2118	647648.5	4197243	2.12E-05	2.26E-05	3.18E-06	3.38E-06	3.11E-06	3.01E-06	1.65E-06	1.37E-06
2119	647669.1	4197202	2.13E-05	2.27E-05	3.20E-06	3.40E-06	3.13E-06	3.03E-06	1.66E-06	1.37E-06
2120	647679.3	4197182	2.13E-05	2.27E-05	3.21E-06	3.41E-06	3.13E-06	3.04E-06	1.67E-06	1.38E-06
2121	647597.2	4197343	2.12E-05	2.26E-05	3.19E-06	3.39E-06	3.12E-06	3.02E-06	1.66E-06	1.37E-06
2122	647588.3	4197365	2.13E-05	2.27E-05	3.21E-06	3.41E-06	3.13E-06	3.04E-06	1.67E-06	1.38E-06
2123	647579.4	4197387	2.15E-05	2.29E-05	3.23E-06	3.43E-06	3.15E-06	3.06E-06	1.68E-06	1.39E-06
2124	647570.5	4197409	2.16E-05	2.30E-05	3.25E-06	3.46E-06	3.18E-06	3.08E-06	1.69E-06	1.40E-06

2125	648948	4198010	1.70E-03	1.81E-03	2.56E-04	2.72E-04	2.50E-04	2.42E-04	1.33E-04	1.10E-04
2126	648959.4	4198032	2.17E-03	2.31E-03	3.26E-04	3.46E-04	3.19E-04	3.09E-04	1.69E-04	1.40E-04
2127	648970.9	4198055	2.41E-03	2.57E-03	3.63E-04	3.86E-04	3.55E-04	3.44E-04	1.89E-04	1.56E-04
2128	648982.3	4198077	2.56E-03	2.73E-03	3.85E-04	4.09E-04	3.76E-04	3.65E-04	2.00E-04	1.65E-04
2129	648993.7	4198099	2.66E-03	2.83E-03	4.00E-04	4.25E-04	3.91E-04	3.79E-04	2.08E-04	1.72E-04
2130	649005.1	4198121	2.73E-03	2.91E-03	4.10E-04	4.36E-04	4.01E-04	3.88E-04	2.13E-04	1.76E-04
2131	649016.6	4198143	2.77E-03	2.95E-03	4.17E-04	4.43E-04	4.08E-04	3.95E-04	2.17E-04	1.79E-04
2132	649028	4198166	2.80E-03	2.98E-03	4.21E-04	4.47E-04	4.11E-04	3.99E-04	2.19E-04	1.81E-04
2133	649039.4	4198188	2.80E-03	2.99E-03	4.22E-04	4.48E-04	4.12E-04	4.00E-04	2.19E-04	1.81E-04
2134	649050.8	4198210	2.79E-03	2.97E-03	4.19E-04	4.45E-04	4.10E-04	3.97E-04	2.18E-04	1.80E-04
2135	649062.2	4198232	2.73E-03	2.91E-03	4.11E-04	4.36E-04	4.01E-04	3.89E-04	2.13E-04	1.76E-04
2136	649073.7	4198254	2.61E-03	2.78E-03	3.93E-04	4.17E-04	3.84E-04	3.72E-04	2.04E-04	1.69E-04
2137	649085.1	4198277	2.34E-03	2.50E-03	3.52E-04	3.75E-04	3.45E-04	3.34E-04	1.83E-04	1.51E-04
2138	648914.4	4197999	9.17E-04	9.78E-04	1.38E-04	1.47E-04	1.35E-04	1.31E-04	7.17E-05	5.93E-05
2139	648925.8	4198022	1.19E-03	1.26E-03	1.78E-04	1.90E-04	1.74E-04	1.69E-04	9.27E-05	7.67E-05
2140	648937.2	4198044	1.46E-03	1.56E-03	2.20E-04	2.34E-04	2.15E-04	2.09E-04	1.14E-04	9.46E-05
2141	648948.6	4198066	1.67E-03	1.78E-03	2.52E-04	2.67E-04	2.46E-04	2.38E-04	1.31E-04	1.08E-04
2142	648960.1	4198088	1.81E-03	1.93E-03	2.72E-04	2.89E-04	2.66E-04	2.58E-04	1.41E-04	1.17E-04
2143	648971.5	4198110	1.90E-03	2.03E-03	2.86E-04	3.04E-04	2.80E-04	2.71E-04	1.49E-04	1.23E-04
2144	648982.9	4198133	1.97E-03	2.10E-03	2.96E-04	3.15E-04	2.90E-04	2.81E-04	1.54E-04	1.27E-04
2145	648994.3	4198155	2.02E-03	2.15E-03	3.03E-04	3.22E-04	2.96E-04	2.87E-04	1.57E-04	1.30E-04
2146	649005.7	4198177	2.04E-03	2.18E-03	3.07E-04	3.27E-04	3.01E-04	2.91E-04	1.60E-04	1.32E-04
2147	649017.2	4198199	2.05E-03	2.19E-03	3.09E-04	3.28E-04	3.02E-04	2.93E-04	1.60E-04	1.33E-04
2148	649028.6	4198221	2.04E-03	2.18E-03	3.07E-04	3.27E-04	3.01E-04	2.91E-04	1.60E-04	1.32E-04
2149	649040	4198244	2.01E-03	2.14E-03	3.02E-04	3.21E-04	2.95E-04	2.86E-04	1.57E-04	1.30E-04
2150	649051.4	4198266	1.93E-03	2.06E-03	2.91E-04	3.09E-04	2.84E-04	2.76E-04	1.51E-04	1.25E-04
2151	649062.9	4198288	1.79E-03	1.91E-03	2.70E-04	2.87E-04	2.64E-04	2.55E-04	1.40E-04	1.16E-04
2152	648891.2	4197990	6.69E-04	7.13E-04	1.01E-04	1.07E-04	9.83E-05	9.53E-05	5.22E-05	4.32E-05
2153	648903.6	4198033	9.11E-04	9.71E-04	1.37E-04	1.46E-04	1.34E-04	1.30E-04	7.12E-05	5.89E-05
2154	648915	4198055	1.09E-03	1.17E-03	1.64E-04	1.75E-04	1.61E-04	1.56E-04	8.54E-05	7.07E-05
2155	648926.4	4198077	1.25E-03	1.34E-03	1.89E-04	2.00E-04	1.84E-04	1.79E-04	9.79E-05	8.10E-05
2156	648937.8	4198100	1.38E-03	1.47E-03	2.07E-04	2.20E-04	2.02E-04	1.96E-04	1.07E-04	8.89E-05
2157	648949.2	4198122	1.46E-03	1.56E-03	2.20E-04	2.34E-04	2.15E-04	2.09E-04	1.14E-04	9.46E-05
2158	648960.7	4198144	1.53E-03	1.63E-03	2.30E-04	2.44E-04	2.25E-04	2.18E-04	1.19E-04	9.87E-05
2159	648972.1	4198166	1.57E-03	1.68E-03	2.37E-04	2.51E-04	2.31E-04	2.24E-04	1.23E-04	1.02E-04
2160	648983.5	4198188	1.60E-03	1.71E-03	2.41E-04	2.56E-04	2.36E-04	2.28E-04	1.25E-04	1.04E-04
2161	648994.9	4198211	1.62E-03	1.72E-03	2.43E-04	2.58E-04	2.38E-04	2.30E-04	1.26E-04	1.04E-04
2162	649006.4	4198233	1.61E-03	1.72E-03	2.43E-04	2.58E-04	2.37E-04	2.30E-04	1.26E-04	1.04E-04
2163	649017.8	4198255	1.59E-03	1.70E-03	2.39E-04	2.55E-04	2.34E-04	2.27E-04	1.24E-04	1.03E-04
2164	649029.2	4198277	1.54E-03	1.64E-03	2.32E-04	2.47E-04	2.27E-04	2.20E-04	1.21E-04	9.97E-05
2165	649040.6	4198299	1.46E-03	1.55E-03	2.19E-04	2.33E-04	2.14E-04	2.08E-04	1.14E-04	9.41E-05
2166	648869	4198001	5.68E-04	6.06E-04	8.54E-05	9.08E-05	8.35E-05	8.10E-05	4.44E-05	3.67E-05
2167	648881.3	4198045	7.38E-04	7.87E-04	1.11E-04	1.18E-04	1.09E-04	1.05E-04	5.77E-05	4.77E-05
2168	648892.7	4198067	8.67E-04	9.24E-04	1.30E-04	1.39E-04	1.27E-04	1.24E-04	6.77E-05	5.60E-05
2169	648904.2	4198089	9.89E-04	1.05E-03	1.49E-04	1.58E-04	1.45E-04	1.41E-04	7.73E-05	6.39E-05
2170	648915.6	4198111	1.09E-03	1.16E-03	1.64E-04	1.75E-04	1.61E-04	1.56E-04	8.53E-05	7.06E-05
2171	648927	4198133	1.17E-03	1.25E-03	1.76E-04	1.87E-04	1.72E-04	1.67E-04	9.16E-05	7.58E-05
2172	648938.4	4198156	1.23E-03	1.31E-03	1.85E-04	1.97E-04	1.81E-04	1.76E-04	9.63E-05	7.97E-05
2173	648949.9	4198178	1.28E-03	1.36E-03	1.92E-04	2.04E-04	1.88E-04	1.82E-04	9.98E-05	8.26E-05
2174	648961.3	4198200	1.31E-03	1.39E-03	1.97E-04	2.09E-04	1.92E-04	1.86E-04	1.02E-04	8.45E-05
2175	648972.7	4198222	1.32E-03	1.41E-03	1.99E-04	2.12E-04	1.95E-04	1.89E-04	1.03E-04	8.56E-05
2176	648984.1	4198244	1.33E-03	1.42E-03	2.00E-04	2.12E-04	1.95E-04	1.89E-04	1.04E-04	8.58E-05
2177	648995.6	4198266	1.31E-03	1.40E-03	1.98E-04	2.10E-04	1.93E-04	1.87E-04	1.03E-04	8.50E-05
2178	649007	4198289	1.28E-03	1.37E-03	1.93E-04	2.05E-04	1.88E-04	1.83E-04	1.00E-04	8.28E-05
2179	649018.4	4198311	1.22E-03	1.31E-03	1.84E-04	1.96E-04	1.80E-04	1.75E-04	9.57E-05	7.91E-05
2180	648824.5	4198024	4.33E-04	4.61E-04	6.51E-05	6.92E-05	6.36E-05	6.17E-05	3.38E-05	2.80E-05

2181	648822.7	4197983	3.74E-04	3.99E-04	5.63E-05	5.98E-05	5.50E-05	5.33E-05	2.92E-05	2.42E-05
2182	648836.9	4198067	5.30E-04	5.65E-04	7.98E-05	8.48E-05	7.80E-05	7.56E-05	4.14E-05	3.43E-05
2183	648848.3	4198090	6.05E-04	6.45E-04	9.09E-05	9.67E-05	8.89E-05	8.62E-05	4.72E-05	3.91E-05
2184	648859.7	4198112	6.80E-04	7.25E-04	1.02E-04	1.09E-04	9.99E-05	9.69E-05	5.31E-05	4.39E-05
2185	648871.1	4198134	7.50E-04	8.00E-04	1.13E-04	1.20E-04	1.10E-04	1.07E-04	5.86E-05	4.85E-05
2186	648882.6	4198156	8.12E-04	8.66E-04	1.22E-04	1.30E-04	1.19E-04	1.16E-04	6.34E-05	5.25E-05
2187	648894	4198178	8.63E-04	9.20E-04	1.30E-04	1.38E-04	1.27E-04	1.23E-04	6.74E-05	5.58E-05
2188	648905.4	4198201	9.04E-04	9.64E-04	1.36E-04	1.45E-04	1.33E-04	1.29E-04	7.06E-05	5.84E-05
2189	648916.8	4198223	9.34E-04	9.96E-04	1.40E-04	1.49E-04	1.37E-04	1.33E-04	7.30E-05	6.04E-05
2190	648928.3	4198245	9.54E-04	1.02E-03	1.44E-04	1.53E-04	1.40E-04	1.36E-04	7.45E-05	6.17E-05
2191	648939.7	4198267	9.64E-04	1.03E-03	1.45E-04	1.54E-04	1.42E-04	1.37E-04	7.53E-05	6.23E-05
2192	648951.1	4198289	9.62E-04	1.03E-03	1.45E-04	1.54E-04	1.41E-04	1.37E-04	7.51E-05	6.21E-05
2193	648962.5	4198312	9.47E-04	1.01E-03	1.42E-04	1.51E-04	1.39E-04	1.35E-04	7.40E-05	6.12E-05
2194	648974	4198334	9.20E-04	9.81E-04	1.38E-04	1.47E-04	1.35E-04	1.31E-04	7.19E-05	5.95E-05
2195	648779.9	4198044	3.44E-04	3.66E-04	5.17E-05	5.49E-05	5.05E-05	4.90E-05	2.68E-05	2.22E-05
2196	648778.9	4198020	3.22E-04	3.43E-04	4.83E-05	5.14E-05	4.73E-05	4.58E-05	2.51E-05	2.08E-05
2197	648777.9	4197996	3.00E-04	3.20E-04	4.51E-05	4.79E-05	4.41E-05	4.27E-05	2.34E-05	1.94E-05
2198	648776.8	4197973	2.79E-04	2.97E-04	4.19E-05	4.46E-05	4.10E-05	3.97E-05	2.18E-05	1.80E-05
2199	648775.8	4197949	2.59E-04	2.76E-04	3.90E-05	4.15E-05	3.81E-05	3.70E-05	2.03E-05	1.68E-05
2200	648774.7	4197925	2.41E-04	2.57E-04	3.63E-05	3.86E-05	3.55E-05	3.44E-05	1.89E-05	1.56E-05
2201	648781	4198068	3.65E-04	3.89E-04	5.49E-05	5.84E-05	5.37E-05	5.20E-05	2.85E-05	2.36E-05
2202	648792.4	4198090	4.10E-04	4.37E-04	6.16E-05	6.55E-05	6.02E-05	5.84E-05	3.20E-05	2.65E-05
2203	648803.8	4198112	4.58E-04	4.88E-04	6.88E-05	7.32E-05	6.73E-05	6.52E-05	3.58E-05	2.96E-05
2204	648815.3	4198135	5.08E-04	5.41E-04	7.63E-05	8.12E-05	7.47E-05	7.24E-05	3.97E-05	3.28E-05
2205	648826.7	4198157	5.57E-04	5.94E-04	8.37E-05	8.90E-05	8.19E-05	7.94E-05	4.35E-05	3.60E-05
2206	648838.1	4198179	6.03E-04	6.43E-04	9.07E-05	9.64E-05	8.87E-05	8.59E-05	4.71E-05	3.90E-05
2207	648849.5	4198201	6.44E-04	6.86E-04	9.68E-05	1.03E-04	9.47E-05	9.18E-05	5.03E-05	4.16E-05
2208	648861	4198223	6.78E-04	7.23E-04	1.02E-04	1.08E-04	9.97E-05	9.67E-05	5.30E-05	4.38E-05
2209	648872.4	4198246	7.06E-04	7.53E-04	1.06E-04	1.13E-04	1.04E-04	1.01E-04	5.51E-05	4.56E-05
2210	648883.8	4198268	7.26E-04	7.74E-04	1.09E-04	1.16E-04	1.07E-04	1.03E-04	5.67E-05	4.69E-05
2211	648895.2	4198290	7.38E-04	7.87E-04	1.11E-04	1.18E-04	1.08E-04	1.05E-04	5.76E-05	4.77E-05
2212	648906.7	4198312	7.42E-04	7.91E-04	1.12E-04	1.19E-04	1.09E-04	1.06E-04	5.79E-05	4.79E-05
2213	648918.1	4198334	7.37E-04	7.86E-04	1.11E-04	1.18E-04	1.08E-04	1.05E-04	5.76E-05	4.77E-05
2214	648929.5	4198357	7.25E-04	7.73E-04	1.09E-04	1.16E-04	1.07E-04	1.03E-04	5.66E-05	4.68E-05
2215	648735.5	4198068	2.85E-04	3.04E-04	4.28E-05	4.56E-05	4.19E-05	4.06E-05	2.23E-05	1.84E-05
2216	648734.5	4198045	2.70E-04	2.88E-04	4.06E-05	4.31E-05	3.97E-05	3.85E-05	2.11E-05	1.74E-05
2217	648733.5	4198021	2.55E-04	2.72E-04	3.83E-05	4.07E-05	3.75E-05	3.63E-05	1.99E-05	1.65E-05
2218	648732.5	4197998	2.40E-04	2.56E-04	3.61E-05	3.84E-05	3.53E-05	3.42E-05	1.88E-05	1.55E-05
2219	648731.5	4197975	2.26E-04	2.41E-04	3.40E-05	3.61E-05	3.32E-05	3.22E-05	1.77E-05	1.46E-05
2220	648730.5	4197952	2.13E-04	2.27E-04	3.20E-05	3.40E-05	3.13E-05	3.03E-05	1.66E-05	1.38E-05
2221	648729.5	4197928	2.01E-04	2.14E-04	3.02E-05	3.21E-05	2.95E-05	2.86E-05	1.57E-05	1.30E-05
2222	648728.4	4197905	1.90E-04	2.02E-04	2.85E-05	3.03E-05	2.79E-05	2.70E-05	1.48E-05	1.23E-05
2223	648736.5	4198091	3.00E-04	3.20E-04	4.51E-05	4.79E-05	4.41E-05	4.27E-05	2.34E-05	1.94E-05
2224	648748	4198113	3.31E-04	3.53E-04	4.98E-05	5.29E-05	4.87E-05	4.72E-05	2.59E-05	2.14E-05
2225	648759.4	4198135	3.65E-04	3.89E-04	5.49E-05	5.83E-05	5.36E-05	5.20E-05	2.85E-05	2.36E-05
2226	648770.8	4198158	4.00E-04	4.26E-04	6.02E-05	6.40E-05	5.88E-05	5.70E-05	3.12E-05	2.59E-05
2227	648782.2	4198180	4.36E-04	4.64E-04	6.55E-05	6.96E-05	6.40E-05	6.21E-05	3.40E-05	2.82E-05
2228	648793.7	4198202	4.70E-04	5.01E-04	7.07E-05	7.51E-05	6.91E-05	6.70E-05	3.67E-05	3.04E-05
2229	648805.1	4198224	5.02E-04	5.35E-04	7.55E-05	8.02E-05	7.38E-05	7.15E-05	3.92E-05	3.24E-05
2230	648816.5	4198246	5.30E-04	5.65E-04	7.97E-05	8.47E-05	7.79E-05	7.55E-05	4.14E-05	3.42E-05
2231	648827.9	4198269	5.53E-04	5.90E-04	8.32E-05	8.85E-05	8.14E-05	7.89E-05	4.32E-05	3.58E-05
2232	648839.3	4198291	5.72E-04	6.09E-04	8.60E-05	9.14E-05	8.40E-05	8.15E-05	4.47E-05	3.69E-05
2233	648850.8	4198313	5.84E-04	6.23E-04	8.79E-05	9.34E-05	8.59E-05	8.33E-05	4.56E-05	3.78E-05
2234	648862.2	4198335	5.91E-04	6.30E-04	8.89E-05	9.45E-05	8.69E-05	8.42E-05	4.62E-05	3.82E-05
2235	648873.6	4198357	5.92E-04	6.31E-04	8.90E-05	9.47E-05	8.71E-05	8.44E-05	4.63E-05	3.83E-05
2236	648885	4198380	5.88E-04	6.26E-04	8.83E-05	9.39E-05	8.64E-05	8.37E-05	4.59E-05	3.80E-05

2237	648691.1	4198091	2.42E-04	2.58E-04	3.64E-05	3.87E-05	3.56E-05	3.45E-05	1.89E-05	1.56E-05
2238	648690.1	4198068	2.31E-04	2.46E-04	3.47E-05	3.69E-05	3.40E-05	3.29E-05	1.80E-05	1.49E-05
2239	648689.1	4198045	2.20E-04	2.34E-04	3.31E-05	3.52E-05	3.23E-05	3.13E-05	1.72E-05	1.42E-05
2240	648688.1	4198023	2.09E-04	2.23E-04	3.14E-05	3.34E-05	3.07E-05	2.98E-05	1.63E-05	1.35E-05
2241	648687.1	4198000	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.92E-05	2.83E-05	1.55E-05	1.28E-05
2242	648686.1	4197977	1.88E-04	2.01E-04	2.83E-05	3.01E-05	2.77E-05	2.68E-05	1.47E-05	1.22E-05
2243	648685.1	4197954	1.79E-04	1.91E-04	2.69E-05	2.86E-05	2.63E-05	2.55E-05	1.40E-05	1.16E-05
2244	648684.1	4197931	1.70E-04	1.81E-04	2.56E-05	2.72E-05	2.50E-05	2.43E-05	1.33E-05	1.10E-05
2245	648683.1	4197909	1.62E-04	1.73E-04	2.44E-05	2.59E-05	2.39E-05	2.31E-05	1.27E-05	1.05E-05
2246	648682.1	4197886	1.55E-04	1.65E-04	2.33E-05	2.47E-05	2.28E-05	2.21E-05	1.21E-05	1.00E-05
2247	648692.1	4198114	2.53E-04	2.70E-04	3.81E-05	4.05E-05	3.72E-05	3.61E-05	1.98E-05	1.64E-05
2248	648703.5	4198136	2.76E-04	2.95E-04	4.15E-05	4.42E-05	4.06E-05	3.94E-05	2.16E-05	1.79E-05
2249	648714.9	4198158	3.01E-04	3.21E-04	4.53E-05	4.81E-05	4.43E-05	4.29E-05	2.35E-05	1.95E-05
2250	648726.3	4198180	3.27E-04	3.49E-04	4.92E-05	5.23E-05	4.81E-05	4.66E-05	2.55E-05	2.11E-05
2251	648737.8	4198203	3.54E-04	3.77E-04	5.32E-05	5.65E-05	5.20E-05	5.04E-05	2.76E-05	2.28E-05
2252	648749.2	4198225	3.80E-04	4.05E-04	5.71E-05	6.07E-05	5.58E-05	5.41E-05	2.97E-05	2.45E-05
2253	648760.6	4198247	4.04E-04	4.31E-04	6.08E-05	6.46E-05	5.94E-05	5.76E-05	3.16E-05	2.61E-05
2254	648772	4198269	4.27E-04	4.55E-04	6.42E-05	6.82E-05	6.28E-05	6.08E-05	3.33E-05	2.76E-05
2255	648783.5	4198291	4.46E-04	4.76E-04	6.71E-05	7.13E-05	6.56E-05	6.36E-05	3.49E-05	2.88E-05
2256	648794.9	4198314	4.62E-04	4.93E-04	6.95E-05	7.39E-05	6.80E-05	6.59E-05	3.61E-05	2.99E-05
2257	648806.3	4198336	4.74E-04	5.06E-04	7.13E-05	7.58E-05	6.97E-05	6.76E-05	3.70E-05	3.06E-05
2258	648817.7	4198358	4.82E-04	5.14E-04	7.25E-05	7.71E-05	7.09E-05	6.87E-05	3.77E-05	3.12E-05
2259	648829.2	4198380	4.86E-04	5.18E-04	7.31E-05	7.77E-05	7.15E-05	6.93E-05	3.80E-05	3.14E-05
2260	648840.6	4198402	4.86E-04	5.18E-04	7.30E-05	7.77E-05	7.14E-05	6.92E-05	3.79E-05	3.14E-05
2261	648602.1	4198136	1.84E-04	1.96E-04	2.77E-05	2.94E-05	2.70E-05	2.62E-05	1.44E-05	1.19E-05
2262	648601.1	4198112	1.77E-04	1.88E-04	2.66E-05	2.82E-05	2.60E-05	2.52E-05	1.38E-05	1.14E-05
2263	648600	4198088	1.69E-04	1.81E-04	2.55E-05	2.71E-05	2.49E-05	2.41E-05	1.32E-05	1.09E-05
2264	648599	4198064	1.62E-04	1.73E-04	2.44E-05	2.59E-05	2.38E-05	2.31E-05	1.27E-05	1.05E-05
2265	648598	4198040	1.55E-04	1.65E-04	2.33E-05	2.48E-05	2.28E-05	2.21E-05	1.21E-05	1.00E-05
2266	648596.9	4198016	1.48E-04	1.58E-04	2.23E-05	2.37E-05	2.18E-05	2.11E-05	1.16E-05	9.57E-06
2267	648595.9	4197992	1.42E-04	1.51E-04	2.13E-05	2.26E-05	2.08E-05	2.02E-05	1.11E-05	9.15E-06
2268	648594.8	4197968	1.36E-04	1.44E-04	2.04E-05	2.17E-05	1.99E-05	1.93E-05	1.06E-05	8.76E-06
2269	648593.8	4197945	1.30E-04	1.38E-04	1.95E-05	2.08E-05	1.91E-05	1.85E-05	1.01E-05	8.39E-06
2270	648592.8	4197921	1.25E-04	1.33E-04	1.88E-05	1.99E-05	1.83E-05	1.78E-05	9.74E-06	8.06E-06
2271	648591.7	4197897	1.20E-04	1.28E-04	1.80E-05	1.92E-05	1.76E-05	1.71E-05	9.37E-06	7.76E-06
2272	648590.7	4197873	1.16E-04	1.23E-04	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.03E-06	7.47E-06
2273	648589.6	4197849	1.12E-04	1.19E-04	1.68E-05	1.78E-05	1.64E-05	1.59E-05	8.72E-06	7.21E-06
2274	648603.2	4198160	1.91E-04	2.04E-04	2.87E-05	3.06E-05	2.81E-05	2.72E-05	1.49E-05	1.24E-05
2275	648614.6	4198182	2.05E-04	2.19E-04	3.09E-05	3.28E-05	3.02E-05	2.92E-05	1.60E-05	1.33E-05
2276	648626	4198204	2.20E-04	2.35E-04	3.31E-05	3.52E-05	3.23E-05	3.13E-05	1.72E-05	1.42E-05
2277	648637.4	4198226	2.35E-04	2.51E-04	3.54E-05	3.76E-05	3.46E-05	3.35E-05	1.84E-05	1.52E-05
2278	648648.9	4198248	2.51E-04	2.68E-04	3.78E-05	4.01E-05	3.69E-05	3.58E-05	1.96E-05	1.62E-05
2279	648660.3	4198271	2.67E-04	2.84E-04	4.01E-05	4.26E-05	3.92E-05	3.80E-05	2.08E-05	1.72E-05
2280	648671.7	4198293	2.82E-04	3.01E-04	4.24E-05	4.51E-05	4.15E-05	4.02E-05	2.20E-05	1.82E-05
2281	648683.1	4198315	2.96E-04	3.16E-04	4.46E-05	4.74E-05	4.36E-05	4.22E-05	2.31E-05	1.91E-05
2282	648694.6	4198337	3.09E-04	3.30E-04	4.65E-05	4.95E-05	4.55E-05	4.41E-05	2.42E-05	2.00E-05
2283	648706	4198359	3.21E-04	3.42E-04	4.83E-05	5.13E-05	4.72E-05	4.57E-05	2.51E-05	2.07E-05
2284	648717.4	4198382	3.31E-04	3.53E-04	4.97E-05	5.29E-05	4.86E-05	4.71E-05	2.58E-05	2.14E-05
2285	648728.8	4198404	3.38E-04	3.61E-04	5.09E-05	5.41E-05	4.97E-05	4.82E-05	2.64E-05	2.19E-05
2286	648740.3	4198426	3.44E-04	3.67E-04	5.17E-05	5.50E-05	5.06E-05	4.90E-05	2.69E-05	2.22E-05
2287	648751.7	4198448	3.47E-04	3.70E-04	5.22E-05	5.55E-05	5.10E-05	4.95E-05	2.71E-05	2.24E-05
2288	648513.2	4198181	1.47E-04	1.57E-04	2.21E-05	2.35E-05	2.16E-05	2.10E-05	1.15E-05	9.51E-06
2289	648512.1	4198156	1.42E-04	1.51E-04	2.14E-05	2.27E-05	2.09E-05	2.03E-05	1.11E-05	9.18E-06
2290	648511	4198132	1.37E-04	1.46E-04	2.06E-05	2.19E-05	2.01E-05	1.95E-05	1.07E-05	8.85E-06
2291	648510	4198107	1.32E-04	1.40E-04	1.98E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.51E-06
2292	648508.9	4198082	1.27E-04	1.35E-04	1.90E-05	2.02E-05	1.86E-05	1.80E-05	9.89E-06	8.18E-06

2293	648507.8	4198058	1.22E-04	1.30E-04	1.83E-05	1.94E-05	1.79E-05	1.73E-05	9.49E-06	7.85E-06
2294	648506.8	4198033	1.17E-04	1.24E-04	1.75E-05	1.87E-05	1.72E-05	1.66E-05	9.12E-06	7.54E-06
2295	648505.7	4198009	1.12E-04	1.20E-04	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.76E-06	7.25E-06
2296	648504.6	4197984	1.08E-04	1.15E-04	1.62E-05	1.72E-05	1.59E-05	1.54E-05	8.42E-06	6.97E-06
2297	648503.5	4197959	1.04E-04	1.11E-04	1.56E-05	1.66E-05	1.53E-05	1.48E-05	8.11E-06	6.71E-06
2298	648502.5	4197935	1.00E-04	1.07E-04	1.51E-05	1.60E-05	1.47E-05	1.43E-05	7.82E-06	6.47E-06
2299	648501.4	4197910	9.68E-05	1.03E-04	1.46E-05	1.55E-05	1.42E-05	1.38E-05	7.56E-06	6.26E-06
2300	648500.3	4197886	9.38E-05	1.00E-04	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.33E-06	6.06E-06
2301	648499.3	4197861	9.10E-05	9.70E-05	1.37E-05	1.45E-05	1.34E-05	1.30E-05	7.11E-06	5.88E-06
2302	648498.2	4197836	8.83E-05	9.42E-05	1.33E-05	1.41E-05	1.30E-05	1.26E-05	6.90E-06	5.71E-06
2303	648497.1	4197812	8.58E-05	9.15E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.71E-06	5.55E-06
2304	648514.3	4198205	1.52E-04	1.62E-04	2.29E-05	2.43E-05	2.24E-05	2.17E-05	1.19E-05	9.83E-06
2305	648525.7	4198228	1.61E-04	1.72E-04	2.43E-05	2.58E-05	2.37E-05	2.30E-05	1.26E-05	1.04E-05
2306	648537.1	4198250	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.43E-05	1.33E-05	1.10E-05
2307	648548.5	4198272	1.81E-04	1.93E-04	2.72E-05	2.89E-05	2.66E-05	2.57E-05	1.41E-05	1.17E-05
2308	648559.9	4198294	1.91E-04	2.03E-04	2.86E-05	3.05E-05	2.80E-05	2.72E-05	1.49E-05	1.23E-05
2309	648571.4	4198316	2.01E-04	2.14E-04	3.01E-05	3.21E-05	2.95E-05	2.86E-05	1.57E-05	1.30E-05
2310	648582.8	4198339	2.10E-04	2.24E-04	3.16E-05	3.36E-05	3.09E-05	3.00E-05	1.64E-05	1.36E-05
2311	648594.2	4198361	2.20E-04	2.34E-04	3.31E-05	3.51E-05	3.23E-05	3.13E-05	1.72E-05	1.42E-05
2312	648605.6	4198383	2.29E-04	2.44E-04	3.44E-05	3.66E-05	3.36E-05	3.26E-05	1.79E-05	1.48E-05
2313	648617.1	4198405	2.37E-04	2.53E-04	3.57E-05	3.79E-05	3.49E-05	3.38E-05	1.85E-05	1.53E-05
2314	648628.5	4198427	2.44E-04	2.61E-04	3.68E-05	3.91E-05	3.59E-05	3.48E-05	1.91E-05	1.58E-05
2315	648639.9	4198450	2.51E-04	2.67E-04	3.77E-05	4.01E-05	3.69E-05	3.57E-05	1.96E-05	1.62E-05
2316	648651.3	4198472	2.56E-04	2.73E-04	3.85E-05	4.09E-05	3.76E-05	3.65E-05	2.00E-05	1.65E-05
2317	648662.8	4198494	2.60E-04	2.77E-04	3.91E-05	4.16E-05	3.82E-05	3.71E-05	2.03E-05	1.68E-05
2318	648424.3	4198227	1.22E-04	1.30E-04	1.83E-05	1.95E-05	1.79E-05	1.74E-05	9.53E-06	7.89E-06
2319	648423.3	4198203	1.19E-04	1.26E-04	1.78E-05	1.90E-05	1.74E-05	1.69E-05	9.27E-06	7.67E-06
2320	648422.2	4198179	1.15E-04	1.23E-04	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.99E-06	7.44E-06
2321	648421.2	4198156	1.11E-04	1.19E-04	1.68E-05	1.78E-05	1.64E-05	1.59E-05	8.70E-06	7.20E-06
2322	648420.1	4198132	1.08E-04	1.15E-04	1.62E-05	1.72E-05	1.58E-05	1.53E-05	8.41E-06	6.96E-06
2323	648419.1	4198108	1.04E-04	1.11E-04	1.56E-05	1.66E-05	1.53E-05	1.48E-05	8.12E-06	6.72E-06
2324	648418.1	4198084	1.00E-04	1.07E-04	1.51E-05	1.60E-05	1.48E-05	1.43E-05	7.84E-06	6.49E-06
2325	648417	4198060	9.69E-05	1.03E-04	1.46E-05	1.55E-05	1.42E-05	1.38E-05	7.57E-06	6.26E-06
2326	648416	4198036	9.35E-05	9.97E-05	1.41E-05	1.50E-05	1.38E-05	1.33E-05	7.31E-06	6.04E-06
2327	648414.9	4198012	9.04E-05	9.63E-05	1.36E-05	1.44E-05	1.33E-05	1.29E-05	7.06E-06	5.84E-06
2328	648413.9	4197988	8.74E-05	9.32E-05	1.31E-05	1.40E-05	1.29E-05	1.25E-05	6.83E-06	5.65E-06
2329	648412.9	4197964	8.46E-05	9.02E-05	1.27E-05	1.35E-05	1.24E-05	1.21E-05	6.61E-06	5.47E-06
2330	648411.8	4197941	8.21E-05	8.75E-05	1.23E-05	1.31E-05	1.21E-05	1.17E-05	6.41E-06	5.31E-06
2331	648410.8	4197917	7.98E-05	8.51E-05	1.20E-05	1.28E-05	1.17E-05	1.14E-05	6.23E-06	5.16E-06
2332	648409.7	4197893	7.77E-05	8.28E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.07E-06	5.02E-06
2333	648408.7	4197869	7.57E-05	8.07E-05	1.14E-05	1.21E-05	1.11E-05	1.08E-05	5.92E-06	4.89E-06
2334	648407.6	4197845	7.39E-05	7.88E-05	1.11E-05	1.18E-05	1.09E-05	1.05E-05	5.77E-06	4.78E-06
2335	648406.6	4197821	7.22E-05	7.70E-05	1.09E-05	1.15E-05	1.06E-05	1.03E-05	5.64E-06	4.66E-06
2336	648405.6	4197797	7.05E-05	7.52E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.51E-06	4.56E-06
2337	648404.5	4197773	6.89E-05	7.34E-05	1.04E-05	1.10E-05	1.01E-05	9.82E-06	5.38E-06	4.45E-06
2338	648425.3	4198251	1.25E-04	1.34E-04	1.88E-05	2.00E-05	1.84E-05	1.79E-05	9.79E-06	8.10E-06
2339	648436.8	4198273	1.32E-04	1.40E-04	1.98E-05	2.10E-05	1.93E-05	1.87E-05	1.03E-05	8.50E-06
2340	648448.2	4198296	1.38E-04	1.47E-04	2.07E-05	2.21E-05	2.03E-05	1.97E-05	1.08E-05	8.92E-06
2341	648459.6	4198318	1.45E-04	1.54E-04	2.17E-05	2.31E-05	2.12E-05	2.06E-05	1.13E-05	9.34E-06
2342	648471	4198340	1.51E-04	1.61E-04	2.27E-05	2.42E-05	2.22E-05	2.15E-05	1.18E-05	9.77E-06
2343	648482.5	4198362	1.58E-04	1.68E-04	2.37E-05	2.52E-05	2.32E-05	2.25E-05	1.23E-05	1.02E-05
2344	648493.9	4198384	1.64E-04	1.75E-04	2.47E-05	2.63E-05	2.42E-05	2.34E-05	1.28E-05	1.06E-05
2345	648505.3	4198407	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.44E-05	1.34E-05	1.11E-05
2346	648516.7	4198429	1.77E-04	1.89E-04	2.67E-05	2.84E-05	2.61E-05	2.53E-05	1.39E-05	1.15E-05
2347	648528.2	4198451	1.83E-04	1.95E-04	2.76E-05	2.93E-05	2.70E-05	2.61E-05	1.43E-05	1.18E-05
2348	648539.6	4198473	1.89E-04	2.01E-04	2.84E-05	3.02E-05	2.78E-05	2.69E-05	1.48E-05	1.22E-05

2349	648551	4198495	1.94E-04	2.07E-04	2.92E-05	3.10E-05	2.85E-05	2.76E-05	1.52E-05	1.25E-05
2350	648562.4	4198517	1.98E-04	2.12E-04	2.98E-05	3.17E-05	2.92E-05	2.83E-05	1.55E-05	1.28E-05
2351	648573.8	4198540	2.02E-04	2.16E-04	3.04E-05	3.23E-05	2.97E-05	2.88E-05	1.58E-05	1.31E-05
2352	648335.4	4198273	1.03E-04	1.10E-04	1.55E-05	1.65E-05	1.52E-05	1.47E-05	8.07E-06	6.68E-06
2353	648334.3	4198248	1.01E-04	1.08E-04	1.52E-05	1.61E-05	1.48E-05	1.44E-05	7.89E-06	6.52E-06
2354	648333.2	4198224	9.84E-05	1.05E-04	1.48E-05	1.57E-05	1.45E-05	1.40E-05	7.69E-06	6.36E-06
2355	648332.2	4198199	9.57E-05	1.02E-04	1.44E-05	1.53E-05	1.41E-05	1.36E-05	7.47E-06	6.18E-06
2356	648331.1	4198175	9.28E-05	9.90E-05	1.40E-05	1.48E-05	1.37E-05	1.32E-05	7.25E-06	6.00E-06
2357	648330.1	4198151	9.00E-05	9.59E-05	1.35E-05	1.44E-05	1.32E-05	1.28E-05	7.03E-06	5.81E-06
2358	648329	4198126	8.71E-05	9.28E-05	1.31E-05	1.39E-05	1.28E-05	1.24E-05	6.80E-06	5.63E-06
2359	648327.9	4198102	8.42E-05	8.98E-05	1.27E-05	1.35E-05	1.24E-05	1.20E-05	6.58E-06	5.44E-06
2360	648326.9	4198077	8.15E-05	8.68E-05	1.22E-05	1.30E-05	1.20E-05	1.16E-05	6.36E-06	5.26E-06
2361	648325.8	4198053	7.88E-05	8.40E-05	1.18E-05	1.26E-05	1.16E-05	1.12E-05	6.16E-06	5.09E-06
2362	648324.7	4198029	7.63E-05	8.13E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.96E-06	4.93E-06
2363	648323.7	4198004	7.39E-05	7.88E-05	1.11E-05	1.18E-05	1.09E-05	1.05E-05	5.78E-06	4.78E-06
2364	648322.6	4197980	7.18E-05	7.65E-05	1.08E-05	1.15E-05	1.06E-05	1.02E-05	5.61E-06	4.64E-06
2365	648321.6	4197955	6.98E-05	7.44E-05	1.05E-05	1.12E-05	1.03E-05	9.95E-06	5.45E-06	4.51E-06
2366	648320.5	4197931	6.80E-05	7.25E-05	1.02E-05	1.09E-05	9.99E-06	9.69E-06	5.31E-06	4.39E-06
2367	648319.4	4197907	6.63E-05	7.07E-05	9.97E-06	1.06E-05	9.75E-06	9.45E-06	5.18E-06	4.29E-06
2368	648318.4	4197882	6.48E-05	6.91E-05	9.74E-06	1.04E-05	9.53E-06	9.23E-06	5.06E-06	4.19E-06
2369	648317.3	4197858	6.34E-05	6.76E-05	9.53E-06	1.01E-05	9.32E-06	9.03E-06	4.95E-06	4.10E-06
2370	648316.2	4197833	6.21E-05	6.62E-05	9.33E-06	9.92E-06	9.13E-06	8.85E-06	4.85E-06	4.01E-06
2371	648315.2	4197809	6.08E-05	6.48E-05	9.14E-06	9.72E-06	8.94E-06	8.67E-06	4.75E-06	3.93E-06
2372	648314.1	4197785	5.96E-05	6.35E-05	8.96E-06	9.52E-06	8.76E-06	8.49E-06	4.65E-06	3.85E-06
2373	648313.1	4197760	5.84E-05	6.22E-05	8.78E-06	9.33E-06	8.58E-06	8.32E-06	4.56E-06	3.77E-06
2374	648312	4197736	5.71E-05	6.09E-05	8.59E-06	9.14E-06	8.40E-06	8.14E-06	4.46E-06	3.69E-06
2375	648336.4	4198297	1.06E-04	1.13E-04	1.59E-05	1.69E-05	1.55E-05	1.50E-05	8.25E-06	6.82E-06
2376	648347.8	4198319	1.10E-04	1.17E-04	1.65E-05	1.76E-05	1.62E-05	1.57E-05	8.60E-06	7.11E-06
2377	648359.3	4198341	1.15E-04	1.22E-04	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.95E-06	7.40E-06
2378	648370.7	4198364	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.70E-05	9.30E-06	7.70E-06
2379	648382.1	4198386	1.24E-04	1.32E-04	1.86E-05	1.98E-05	1.82E-05	1.76E-05	9.67E-06	8.00E-06
2380	648393.5	4198408	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.89E-05	1.83E-05	1.00E-05	8.30E-06
2381	648405	4198430	1.33E-04	1.42E-04	2.00E-05	2.13E-05	1.96E-05	1.90E-05	1.04E-05	8.60E-06
2382	648416.4	4198452	1.38E-04	1.47E-04	2.07E-05	2.20E-05	2.03E-05	1.96E-05	1.08E-05	8.90E-06
2383	648427.8	4198474	1.42E-04	1.52E-04	2.14E-05	2.28E-05	2.09E-05	2.03E-05	1.11E-05	9.20E-06
2384	648439.2	4198497	1.47E-04	1.57E-04	2.21E-05	2.35E-05	2.16E-05	2.09E-05	1.15E-05	9.49E-06
2385	648450.7	4198519	1.51E-04	1.61E-04	2.27E-05	2.42E-05	2.22E-05	2.15E-05	1.18E-05	9.77E-06
2386	648462.1	4198541	1.55E-04	1.65E-04	2.33E-05	2.48E-05	2.28E-05	2.21E-05	1.21E-05	1.00E-05
2387	648473.5	4198563	1.59E-04	1.69E-04	2.39E-05	2.54E-05	2.34E-05	2.26E-05	1.24E-05	1.03E-05
2388	648484.9	4198585	1.62E-04	1.73E-04	2.44E-05	2.59E-05	2.38E-05	2.31E-05	1.27E-05	1.05E-05
2389	648157.5	4198364	7.77E-05	8.29E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.07E-06	5.02E-06
2390	648156.5	4198340	7.65E-05	8.16E-05	1.15E-05	1.22E-05	1.13E-05	1.09E-05	5.98E-06	4.95E-06
2391	648155.4	4198316	7.53E-05	8.02E-05	1.13E-05	1.20E-05	1.11E-05	1.07E-05	5.88E-06	4.86E-06
2392	648154.4	4198291	7.39E-05	7.88E-05	1.11E-05	1.18E-05	1.09E-05	1.05E-05	5.77E-06	4.77E-06
2393	648153.3	4198267	7.24E-05	7.72E-05	1.09E-05	1.16E-05	1.06E-05	1.03E-05	5.65E-06	4.68E-06
2394	648152.3	4198243	7.08E-05	7.55E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.53E-06	4.58E-06
2395	648151.2	4198219	6.91E-05	7.37E-05	1.04E-05	1.11E-05	1.02E-05	9.85E-06	5.40E-06	4.47E-06
2396	648150.1	4198194	6.74E-05	7.18E-05	1.01E-05	1.08E-05	9.91E-06	9.60E-06	5.26E-06	4.35E-06
2397	648149.1	4198170	6.56E-05	6.99E-05	9.86E-06	1.05E-05	9.64E-06	9.35E-06	5.12E-06	4.24E-06
2398	648148	4198146	6.38E-05	6.80E-05	9.59E-06	1.02E-05	9.38E-06	9.09E-06	4.98E-06	4.12E-06
2399	648147	4198121	6.19E-05	6.60E-05	9.31E-06	9.90E-06	9.11E-06	8.83E-06	4.84E-06	4.00E-06
2400	648145.9	4198097	6.02E-05	6.41E-05	9.05E-06	9.62E-06	8.85E-06	8.57E-06	4.70E-06	3.89E-06
2401	648144.9	4198073	5.85E-05	6.23E-05	8.79E-06	9.34E-06	8.59E-06	8.33E-06	4.57E-06	3.78E-06
2402	648143.8	4198049	5.68E-05	6.06E-05	8.54E-06	9.08E-06	8.35E-06	8.10E-06	4.44E-06	3.67E-06
2403	648142.7	4198024	5.53E-05	5.89E-05	8.31E-06	8.84E-06	8.13E-06	7.88E-06	4.32E-06	3.57E-06
2404	648141.7	4198000	5.39E-05	5.74E-05	8.10E-06	8.61E-06	7.92E-06	7.68E-06	4.21E-06	3.48E-06

2405	648140.6	4197976	5.26E-05	5.61E-05	7.91E-06	8.41E-06	7.73E-06	7.49E-06	4.11E-06	3.40E-06
2406	648139.6	4197951	5.14E-05	5.48E-05	7.73E-06	8.22E-06	7.56E-06	7.33E-06	4.02E-06	3.32E-06
2407	648138.5	4197927	5.04E-05	5.37E-05	7.57E-06	8.05E-06	7.40E-06	7.18E-06	3.93E-06	3.25E-06
2408	648137.5	4197903	4.94E-05	5.27E-05	7.43E-06	7.90E-06	7.26E-06	7.04E-06	3.86E-06	3.19E-06
2409	648136.4	4197879	4.86E-05	5.18E-05	7.30E-06	7.76E-06	7.14E-06	6.92E-06	3.79E-06	3.14E-06
2410	648135.3	4197854	4.78E-05	5.09E-05	7.18E-06	7.64E-06	7.02E-06	6.81E-06	3.73E-06	3.09E-06
2411	648134.3	4197830	4.70E-05	5.02E-05	7.07E-06	7.52E-06	6.92E-06	6.70E-06	3.68E-06	3.04E-06
2412	648133.2	4197806	4.63E-05	4.94E-05	6.97E-06	7.41E-06	6.81E-06	6.60E-06	3.62E-06	2.99E-06
2413	648132.2	4197781	4.56E-05	4.86E-05	6.86E-06	7.30E-06	6.71E-06	6.50E-06	3.56E-06	2.95E-06
2414	648131.1	4197757	4.49E-05	4.79E-05	6.76E-06	7.18E-06	6.61E-06	6.40E-06	3.51E-06	2.90E-06
2415	648130.1	4197733	4.42E-05	4.71E-05	6.65E-06	7.07E-06	6.50E-06	6.30E-06	3.45E-06	2.86E-06
2416	648129	4197709	4.35E-05	4.63E-05	6.53E-06	6.95E-06	6.39E-06	6.19E-06	3.39E-06	2.81E-06
2417	648127.9	4197684	4.27E-05	4.55E-05	6.42E-06	6.82E-06	6.28E-06	6.08E-06	3.33E-06	2.76E-06
2418	648126.9	4197660	4.19E-05	4.47E-05	6.30E-06	6.70E-06	6.16E-06	5.97E-06	3.27E-06	2.71E-06
2419	648158.6	4198388	7.88E-05	8.40E-05	1.19E-05	1.26E-05	1.16E-05	1.12E-05	6.16E-06	5.09E-06
2420	648170	4198411	8.12E-05	8.66E-05	1.22E-05	1.30E-05	1.19E-05	1.16E-05	6.35E-06	5.25E-06
2421	648181.4	4198433	8.37E-05	8.92E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.54E-06	5.41E-06
2422	648192.9	4198455	8.62E-05	9.18E-05	1.30E-05	1.38E-05	1.27E-05	1.23E-05	6.73E-06	5.57E-06
2423	648204.3	4198477	8.87E-05	9.45E-05	1.33E-05	1.42E-05	1.30E-05	1.26E-05	6.93E-06	5.73E-06
2424	648215.7	4198499	9.13E-05	9.73E-05	1.37E-05	1.46E-05	1.34E-05	1.30E-05	7.13E-06	5.90E-06
2425	648227.1	4198522	9.39E-05	1.00E-04	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.33E-06	6.06E-06
2426	648238.6	4198544	9.65E-05	1.03E-04	1.45E-05	1.54E-05	1.42E-05	1.38E-05	7.54E-06	6.24E-06
2427	648250	4198566	9.92E-05	1.06E-04	1.49E-05	1.59E-05	1.46E-05	1.41E-05	7.75E-06	6.41E-06
2428	648261.4	4198588	1.02E-04	1.09E-04	1.53E-05	1.63E-05	1.50E-05	1.45E-05	7.95E-06	6.58E-06
2429	648272.8	4198610	1.04E-04	1.11E-04	1.57E-05	1.67E-05	1.54E-05	1.49E-05	8.16E-06	6.75E-06
2430	648284.3	4198633	1.07E-04	1.14E-04	1.61E-05	1.71E-05	1.57E-05	1.52E-05	8.35E-06	6.91E-06
2431	648295.7	4198655	1.09E-04	1.17E-04	1.65E-05	1.75E-05	1.61E-05	1.56E-05	8.55E-06	7.07E-06
2432	648307.1	4198677	1.12E-04	1.19E-04	1.68E-05	1.79E-05	1.64E-05	1.59E-05	8.73E-06	7.22E-06
2433	647979.7	4198455	6.10E-05	6.51E-05	9.18E-06	9.76E-06	8.97E-06	8.70E-06	4.77E-06	3.94E-06
2434	647978.6	4198430	6.04E-05	6.44E-05	9.08E-06	9.65E-06	8.88E-06	8.60E-06	4.72E-06	3.90E-06
2435	647977.5	4198405	5.97E-05	6.36E-05	8.98E-06	9.54E-06	8.78E-06	8.51E-06	4.66E-06	3.86E-06
2436	647976.4	4198381	5.89E-05	6.28E-05	8.86E-06	9.42E-06	8.67E-06	8.40E-06	4.60E-06	3.81E-06
2437	647975.4	4198356	5.81E-05	6.20E-05	8.74E-06	9.29E-06	8.55E-06	8.28E-06	4.54E-06	3.76E-06
2438	647974.3	4198331	5.72E-05	6.10E-05	8.61E-06	9.15E-06	8.42E-06	8.16E-06	4.47E-06	3.70E-06
2439	647973.2	4198306	5.63E-05	6.00E-05	8.46E-06	9.00E-06	8.28E-06	8.02E-06	4.40E-06	3.64E-06
2440	647972.1	4198281	5.53E-05	5.89E-05	8.31E-06	8.83E-06	8.13E-06	7.88E-06	4.32E-06	3.57E-06
2441	647971	4198256	5.42E-05	5.77E-05	8.14E-06	8.66E-06	7.96E-06	7.72E-06	4.23E-06	3.50E-06
2442	647969.9	4198231	5.30E-05	5.65E-05	7.97E-06	8.48E-06	7.80E-06	7.56E-06	4.14E-06	3.43E-06
2443	647968.9	4198207	5.18E-05	5.52E-05	7.79E-06	8.28E-06	7.62E-06	7.38E-06	4.05E-06	3.35E-06
2444	647967.8	4198182	5.06E-05	5.39E-05	7.60E-06	8.08E-06	7.44E-06	7.21E-06	3.95E-06	3.27E-06
2445	647966.7	4198157	4.93E-05	5.25E-05	7.41E-06	7.88E-06	7.25E-06	7.02E-06	3.85E-06	3.19E-06
2446	647965.6	4198132	4.80E-05	5.12E-05	7.22E-06	7.68E-06	7.06E-06	6.84E-06	3.75E-06	3.10E-06
2447	647964.5	4198107	4.68E-05	4.98E-05	7.03E-06	7.48E-06	6.88E-06	6.66E-06	3.65E-06	3.02E-06
2448	647963.5	4198082	4.55E-05	4.85E-05	6.85E-06	7.28E-06	6.69E-06	6.49E-06	3.56E-06	2.94E-06
2449	647962.4	4198057	4.44E-05	4.73E-05	6.67E-06	7.09E-06	6.52E-06	6.32E-06	3.46E-06	2.87E-06
2450	647961.3	4198032	4.32E-05	4.61E-05	6.50E-06	6.91E-06	6.36E-06	6.16E-06	3.38E-06	2.79E-06
2451	647960.2	4198008	4.22E-05	4.50E-05	6.35E-06	6.75E-06	6.21E-06	6.01E-06	3.30E-06	2.73E-06
2452	647959.1	4197983	4.13E-05	4.40E-05	6.21E-06	6.60E-06	6.07E-06	5.88E-06	3.22E-06	2.67E-06
2453	647958	4197958	4.04E-05	4.31E-05	6.08E-06	6.46E-06	5.94E-06	5.76E-06	3.16E-06	2.61E-06
2454	647957	4197933	3.97E-05	4.23E-05	5.97E-06	6.35E-06	5.84E-06	5.66E-06	3.10E-06	2.56E-06
2455	647955.9	4197908	3.90E-05	4.16E-05	5.87E-06	6.24E-06	5.74E-06	5.56E-06	3.05E-06	2.52E-06
2456	647954.8	4197883	3.85E-05	4.10E-05	5.78E-06	6.15E-06	5.65E-06	5.48E-06	3.00E-06	2.49E-06
2457	647953.7	4197858	3.80E-05	4.05E-05	5.71E-06	6.07E-06	5.58E-06	5.41E-06	2.97E-06	2.45E-06
2458	647952.6	4197834	3.75E-05	4.00E-05	5.64E-06	6.00E-06	5.52E-06	5.35E-06	2.93E-06	2.42E-06
2459	647951.5	4197809	3.71E-05	3.95E-05	5.58E-06	5.93E-06	5.45E-06	5.29E-06	2.90E-06	2.40E-06
2460	647950.5	4197784	3.67E-05	3.91E-05	5.52E-06	5.86E-06	5.39E-06	5.23E-06	2.87E-06	2.37E-06

2461	647949.4	4197759	3.63E-05	3.87E-05	5.45E-06	5.80E-06	5.33E-06	5.17E-06	2.83E-06	2.34E-06
2462	647948.3	4197734	3.58E-05	3.82E-05	5.39E-06	5.73E-06	5.27E-06	5.11E-06	2.80E-06	2.31E-06
2463	647947.2	4197709	3.54E-05	3.77E-05	5.32E-06	5.65E-06	5.20E-06	5.04E-06	2.76E-06	2.28E-06
2464	647946.1	4197684	3.49E-05	3.72E-05	5.24E-06	5.57E-06	5.13E-06	4.97E-06	2.72E-06	2.25E-06
2465	647945	4197660	3.43E-05	3.66E-05	5.16E-06	5.49E-06	5.05E-06	4.89E-06	2.68E-06	2.22E-06
2466	647944	4197635	3.38E-05	3.60E-05	5.08E-06	5.40E-06	4.96E-06	4.81E-06	2.64E-06	2.18E-06
2467	647942.9	4197610	3.32E-05	3.54E-05	4.99E-06	5.31E-06	4.88E-06	4.73E-06	2.59E-06	2.14E-06
2468	647941.8	4197585	3.26E-05	3.48E-05	4.90E-06	5.21E-06	4.79E-06	4.65E-06	2.55E-06	2.11E-06
2469	647980.8	4198480	6.16E-05	6.57E-05	9.27E-06	9.85E-06	9.06E-06	8.78E-06	4.81E-06	3.98E-06
2470	647992.2	4198502	6.31E-05	6.73E-05	9.49E-06	1.01E-05	9.28E-06	8.99E-06	4.93E-06	4.08E-06
2471	648003.6	4198524	6.46E-05	6.88E-05	9.71E-06	1.03E-05	9.49E-06	9.20E-06	5.04E-06	4.17E-06
2472	648015	4198547	6.61E-05	7.04E-05	9.93E-06	1.06E-05	9.71E-06	9.41E-06	5.16E-06	4.27E-06
2473	648026.5	4198569	6.76E-05	7.21E-05	1.02E-05	1.08E-05	9.94E-06	9.64E-06	5.28E-06	4.37E-06
2474	648037.9	4198591	6.92E-05	7.37E-05	1.04E-05	1.11E-05	1.02E-05	9.86E-06	5.40E-06	4.47E-06
2475	648049.3	4198613	7.08E-05	7.55E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.53E-06	4.57E-06
2476	648060.7	4198635	7.24E-05	7.72E-05	1.09E-05	1.16E-05	1.06E-05	1.03E-05	5.66E-06	4.68E-06
2477	648072.2	4198658	7.41E-05	7.90E-05	1.11E-05	1.18E-05	1.09E-05	1.06E-05	5.79E-06	4.79E-06
2478	648083.6	4198680	7.58E-05	8.08E-05	1.14E-05	1.21E-05	1.11E-05	1.08E-05	5.92E-06	4.90E-06
2479	648095	4198702	7.75E-05	8.26E-05	1.17E-05	1.24E-05	1.14E-05	1.10E-05	6.06E-06	5.01E-06
2480	648106.4	4198724	7.92E-05	8.45E-05	1.19E-05	1.27E-05	1.16E-05	1.13E-05	6.19E-06	5.12E-06
2481	648117.9	4198746	8.09E-05	8.63E-05	1.22E-05	1.29E-05	1.19E-05	1.15E-05	6.32E-06	5.23E-06
2482	648129.3	4198769	8.26E-05	8.81E-05	1.24E-05	1.32E-05	1.21E-05	1.18E-05	6.45E-06	5.34E-06
2483	647801.9	4198547	4.95E-05	5.28E-05	7.45E-06	7.92E-06	7.28E-06	7.06E-06	3.87E-06	3.20E-06
2484	647800.8	4198522	4.92E-05	5.24E-05	7.39E-06	7.86E-06	7.23E-06	7.00E-06	3.84E-06	3.18E-06
2485	647799.7	4198497	4.88E-05	5.20E-05	7.33E-06	7.80E-06	7.17E-06	6.95E-06	3.81E-06	3.15E-06
2486	647798.6	4198473	4.83E-05	5.15E-05	7.27E-06	7.73E-06	7.11E-06	6.89E-06	3.78E-06	3.12E-06
2487	647797.6	4198448	4.79E-05	5.11E-05	7.20E-06	7.66E-06	7.04E-06	6.82E-06	3.74E-06	3.09E-06
2488	647796.5	4198423	4.74E-05	5.05E-05	7.13E-06	7.58E-06	6.97E-06	6.75E-06	3.70E-06	3.06E-06
2489	647795.4	4198399	4.69E-05	5.00E-05	7.05E-06	7.49E-06	6.89E-06	6.68E-06	3.66E-06	3.03E-06
2490	647794.3	4198374	4.63E-05	4.94E-05	6.96E-06	7.40E-06	6.81E-06	6.60E-06	3.62E-06	2.99E-06
2491	647793.3	4198349	4.57E-05	4.87E-05	6.87E-06	7.30E-06	6.72E-06	6.51E-06	3.57E-06	2.95E-06
2492	647792.2	4198324	4.50E-05	4.80E-05	6.77E-06	7.20E-06	6.62E-06	6.42E-06	3.52E-06	2.91E-06
2493	647791.1	4198300	4.43E-05	4.72E-05	6.66E-06	7.08E-06	6.51E-06	6.31E-06	3.46E-06	2.86E-06
2494	647790	4198275	4.35E-05	4.64E-05	6.55E-06	6.96E-06	6.40E-06	6.21E-06	3.40E-06	2.81E-06
2495	647789	4198250	4.27E-05	4.56E-05	6.43E-06	6.83E-06	6.28E-06	6.09E-06	3.34E-06	2.76E-06
2496	647787.9	4198226	4.19E-05	4.47E-05	6.30E-06	6.70E-06	6.16E-06	5.97E-06	3.27E-06	2.71E-06
2497	647786.8	4198201	4.10E-05	4.37E-05	6.17E-06	6.56E-06	6.03E-06	5.85E-06	3.21E-06	2.65E-06
2498	647785.7	4198176	4.01E-05	4.28E-05	6.04E-06	6.42E-06	5.90E-06	5.72E-06	3.14E-06	2.59E-06
2499	647784.7	4198151	3.92E-05	4.18E-05	5.90E-06	6.27E-06	5.77E-06	5.59E-06	3.06E-06	2.53E-06
2500	647783.6	4198127	3.83E-05	4.08E-05	5.76E-06	6.12E-06	5.63E-06	5.46E-06	2.99E-06	2.48E-06
2501	647782.5	4198102	3.74E-05	3.99E-05	5.62E-06	5.98E-06	5.50E-06	5.33E-06	2.92E-06	2.42E-06
2502	647781.4	4198077	3.65E-05	3.89E-05	5.49E-06	5.84E-06	5.37E-06	5.20E-06	2.85E-06	2.36E-06
2503	647780.4	4198053	3.56E-05	3.80E-05	5.36E-06	5.70E-06	5.24E-06	5.08E-06	2.78E-06	2.30E-06
2504	647779.3	4198028	3.48E-05	3.71E-05	5.24E-06	5.57E-06	5.12E-06	4.96E-06	2.72E-06	2.25E-06
2505	647778.2	4198003	3.41E-05	3.63E-05	5.12E-06	5.45E-06	5.01E-06	4.86E-06	2.66E-06	2.20E-06
2506	647777.1	4197979	3.34E-05	3.56E-05	5.02E-06	5.34E-06	4.91E-06	4.76E-06	2.61E-06	2.16E-06
2507	647776	4197954	3.28E-05	3.49E-05	4.93E-06	5.24E-06	4.82E-06	4.67E-06	2.56E-06	2.12E-06
2508	647775	4197929	3.23E-05	3.44E-05	4.85E-06	5.16E-06	4.74E-06	4.60E-06	2.52E-06	2.08E-06
2509	647773.9	4197904	3.18E-05	3.39E-05	4.78E-06	5.08E-06	4.67E-06	4.53E-06	2.48E-06	2.05E-06
2510	647772.8	4197880	3.14E-05	3.35E-05	4.72E-06	5.02E-06	4.62E-06	4.47E-06	2.45E-06	2.03E-06
2511	647771.7	4197855	3.11E-05	3.31E-05	4.67E-06	4.96E-06	4.57E-06	4.43E-06	2.43E-06	2.01E-06
2512	647770.7	4197830	3.08E-05	3.28E-05	4.63E-06	4.92E-06	4.52E-06	4.38E-06	2.40E-06	1.99E-06
2513	647769.6	4197806	3.05E-05	3.25E-05	4.59E-06	4.88E-06	4.49E-06	4.35E-06	2.38E-06	1.97E-06
2514	647768.5	4197781	3.03E-05	3.23E-05	4.55E-06	4.84E-06	4.45E-06	4.31E-06	2.36E-06	1.96E-06
2515	647767.4	4197756	3.00E-05	3.20E-05	4.52E-06	4.80E-06	4.42E-06	4.28E-06	2.35E-06	1.94E-06
2516	647766.4	4197731	2.98E-05	3.18E-05	4.48E-06	4.76E-06	4.38E-06	4.25E-06	2.33E-06	1.93E-06

2517	647765.3	4197707	2.95E-05	3.15E-05	4.44E-06	4.72E-06	4.34E-06	4.21E-06	2.31E-06	1.91E-06
2518	647764.2	4197682	2.92E-05	3.12E-05	4.40E-06	4.67E-06	4.30E-06	4.17E-06	2.28E-06	1.89E-06
2519	647763.1	4197657	2.89E-05	3.08E-05	4.35E-06	4.62E-06	4.25E-06	4.12E-06	2.26E-06	1.87E-06
2520	647762.1	4197633	2.85E-05	3.04E-05	4.29E-06	4.56E-06	4.20E-06	4.07E-06	2.23E-06	1.84E-06
2521	647761	4197608	2.82E-05	3.00E-05	4.23E-06	4.50E-06	4.14E-06	4.01E-06	2.20E-06	1.82E-06
2522	647759.9	4197583	2.77E-05	2.96E-05	4.17E-06	4.43E-06	4.08E-06	3.95E-06	2.17E-06	1.79E-06
2523	647758.8	4197558	2.73E-05	2.91E-05	4.10E-06	4.36E-06	4.01E-06	3.89E-06	2.13E-06	1.76E-06
2524	647757.8	4197534	2.68E-05	2.86E-05	4.03E-06	4.29E-06	3.94E-06	3.82E-06	2.10E-06	1.73E-06
2525	647756.7	4197509	2.64E-05	2.81E-05	3.97E-06	4.22E-06	3.88E-06	3.76E-06	2.06E-06	1.70E-06
2526	647802.9	4198572	4.99E-05	5.32E-05	7.50E-06	7.97E-06	7.33E-06	7.11E-06	3.89E-06	3.22E-06
2527	647814.4	4198594	5.08E-05	5.42E-05	7.64E-06	8.13E-06	7.47E-06	7.24E-06	3.97E-06	3.28E-06
2528	647825.8	4198616	5.18E-05	5.52E-05	7.79E-06	8.28E-06	7.61E-06	7.38E-06	4.05E-06	3.35E-06
2529	647837.2	4198638	5.28E-05	5.63E-05	7.94E-06	8.44E-06	7.76E-06	7.52E-06	4.12E-06	3.41E-06
2530	647848.6	4198660	5.38E-05	5.73E-05	8.09E-06	8.60E-06	7.91E-06	7.67E-06	4.20E-06	3.48E-06
2531	647860.1	4198683	5.48E-05	5.85E-05	8.25E-06	8.77E-06	8.06E-06	7.82E-06	4.28E-06	3.54E-06
2532	647871.5	4198705	5.59E-05	5.96E-05	8.41E-06	8.94E-06	8.22E-06	7.97E-06	4.37E-06	3.61E-06
2533	647882.9	4198727	5.70E-05	6.08E-05	8.57E-06	9.12E-06	8.38E-06	8.13E-06	4.45E-06	3.68E-06
2534	647894.3	4198749	5.82E-05	6.20E-05	8.74E-06	9.30E-06	8.55E-06	8.29E-06	4.54E-06	3.76E-06
2535	647905.8	4198771	5.93E-05	6.32E-05	8.92E-06	9.48E-06	8.72E-06	8.45E-06	4.63E-06	3.83E-06
2536	647917.2	4198793	6.05E-05	6.45E-05	9.10E-06	9.67E-06	8.90E-06	8.62E-06	4.73E-06	3.91E-06
2537	647928.6	4198816	6.17E-05	6.58E-05	9.28E-06	9.87E-06	9.07E-06	8.80E-06	4.82E-06	3.99E-06
2538	647940	4198838	6.29E-05	6.71E-05	9.46E-06	1.01E-05	9.25E-06	8.97E-06	4.92E-06	4.07E-06
2539	647951.5	4198860	6.42E-05	6.84E-05	9.65E-06	1.03E-05	9.43E-06	9.14E-06	5.01E-06	4.15E-06
2540	647624.1	4198638	4.12E-05	4.39E-05	6.20E-06	6.59E-06	6.06E-06	5.87E-06	3.22E-06	2.66E-06
2541	647623	4198614	4.10E-05	4.37E-05	6.16E-06	6.55E-06	6.03E-06	5.84E-06	3.20E-06	2.65E-06
2542	647621.9	4198589	4.08E-05	4.34E-05	6.13E-06	6.52E-06	5.99E-06	5.81E-06	3.18E-06	2.63E-06
2543	647620.8	4198565	4.05E-05	4.32E-05	6.09E-06	6.48E-06	5.96E-06	5.77E-06	3.16E-06	2.62E-06
2544	647619.8	4198540	4.02E-05	4.29E-05	6.05E-06	6.43E-06	5.92E-06	5.73E-06	3.14E-06	2.60E-06
2545	647618.7	4198515	3.99E-05	4.26E-05	6.01E-06	6.39E-06	5.87E-06	5.69E-06	3.12E-06	2.58E-06
2546	647617.6	4198491	3.96E-05	4.22E-05	5.96E-06	6.34E-06	5.83E-06	5.65E-06	3.10E-06	2.56E-06
2547	647616.6	4198466	3.93E-05	4.19E-05	5.91E-06	6.28E-06	5.78E-06	5.60E-06	3.07E-06	2.54E-06
2548	647615.5	4198442	3.89E-05	4.15E-05	5.85E-06	6.22E-06	5.72E-06	5.55E-06	3.04E-06	2.52E-06
2549	647614.4	4198417	3.85E-05	4.10E-05	5.79E-06	6.16E-06	5.66E-06	5.49E-06	3.01E-06	2.49E-06
2550	647613.3	4198393	3.81E-05	4.06E-05	5.73E-06	6.09E-06	5.60E-06	5.43E-06	2.98E-06	2.46E-06
2551	647612.3	4198368	3.76E-05	4.01E-05	5.66E-06	6.02E-06	5.53E-06	5.36E-06	2.94E-06	2.43E-06
2552	647611.2	4198343	3.72E-05	3.96E-05	5.59E-06	5.94E-06	5.47E-06	5.30E-06	2.90E-06	2.40E-06
2553	647610.1	4198319	3.67E-05	3.91E-05	5.52E-06	5.86E-06	5.39E-06	5.23E-06	2.87E-06	2.37E-06
2554	647609.1	4198294	3.61E-05	3.85E-05	5.43E-06	5.78E-06	5.31E-06	5.15E-06	2.82E-06	2.34E-06
2555	647608	4198270	3.56E-05	3.79E-05	5.35E-06	5.69E-06	5.23E-06	5.07E-06	2.78E-06	2.30E-06
2556	647606.9	4198245	3.50E-05	3.73E-05	5.26E-06	5.59E-06	5.14E-06	4.98E-06	2.73E-06	2.26E-06
2557	647605.8	4198220	3.43E-05	3.66E-05	5.16E-06	5.49E-06	5.05E-06	4.89E-06	2.68E-06	2.22E-06
2558	647604.8	4198196	3.37E-05	3.59E-05	5.06E-06	5.38E-06	4.95E-06	4.80E-06	2.63E-06	2.18E-06
2559	647603.7	4198171	3.30E-05	3.52E-05	4.96E-06	5.27E-06	4.85E-06	4.70E-06	2.58E-06	2.13E-06
2560	647602.6	4198147	3.23E-05	3.44E-05	4.86E-06	5.16E-06	4.75E-06	4.60E-06	2.52E-06	2.09E-06
2561	647601.6	4198122	3.16E-05	3.37E-05	4.75E-06	5.05E-06	4.64E-06	4.50E-06	2.47E-06	2.04E-06
2562	647600.5	4198097	3.09E-05	3.29E-05	4.64E-06	4.94E-06	4.54E-06	4.40E-06	2.41E-06	2.00E-06
2563	647599.4	4198073	3.02E-05	3.22E-05	4.54E-06	4.83E-06	4.44E-06	4.30E-06	2.36E-06	1.95E-06
2564	647598.3	4198048	2.95E-05	3.15E-05	4.44E-06	4.72E-06	4.34E-06	4.21E-06	2.31E-06	1.91E-06
2565	647597.3	4198024	2.89E-05	3.08E-05	4.35E-06	4.63E-06	4.25E-06	4.12E-06	2.26E-06	1.87E-06
2566	647596.2	4197999	2.84E-05	3.02E-05	4.26E-06	4.53E-06	4.17E-06	4.04E-06	2.22E-06	1.83E-06
2567	647595.1	4197974	2.79E-05	2.97E-05	4.19E-06	4.45E-06	4.10E-06	3.97E-06	2.18E-06	1.80E-06
2568	647594.1	4197950	2.74E-05	2.92E-05	4.12E-06	4.38E-06	4.03E-06	3.90E-06	2.14E-06	1.77E-06
2569	647593	4197925	2.70E-05	2.88E-05	4.06E-06	4.31E-06	3.97E-06	3.84E-06	2.11E-06	1.74E-06
2570	647591.9	4197901	2.66E-05	2.84E-05	4.00E-06	4.25E-06	3.91E-06	3.79E-06	2.08E-06	1.72E-06
2571	647590.8	4197876	2.63E-05	2.81E-05	3.96E-06	4.21E-06	3.87E-06	3.75E-06	2.06E-06	1.70E-06
2572	647589.8	4197851	2.61E-05	2.78E-05	3.92E-06	4.17E-06	3.83E-06	3.72E-06	2.04E-06	1.68E-06

2573	647588.7	4197827	2.59E-05	2.76E-05	3.89E-06	4.13E-06	3.80E-06	3.69E-06	2.02E-06	1.67E-06
2574	647587.6	4197802	2.57E-05	2.74E-05	3.86E-06	4.11E-06	3.78E-06	3.66E-06	2.01E-06	1.66E-06
2575	647586.6	4197778	2.55E-05	2.72E-05	3.84E-06	4.08E-06	3.76E-06	3.64E-06	2.00E-06	1.65E-06
2576	647585.5	4197753	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
2577	647584.4	4197728	2.53E-05	2.69E-05	3.80E-06	4.04E-06	3.72E-06	3.60E-06	1.97E-06	1.63E-06
2578	647583.3	4197704	2.51E-05	2.68E-05	3.78E-06	4.02E-06	3.70E-06	3.58E-06	1.96E-06	1.62E-06
2579	647582.3	4197679	2.50E-05	2.66E-05	3.76E-06	3.99E-06	3.67E-06	3.56E-06	1.95E-06	1.61E-06
2580	647581.2	4197655	2.48E-05	2.64E-05	3.73E-06	3.96E-06	3.65E-06	3.53E-06	1.94E-06	1.60E-06
2581	647580.1	4197630	2.46E-05	2.62E-05	3.69E-06	3.93E-06	3.61E-06	3.50E-06	1.92E-06	1.59E-06
2582	647579.1	4197605	2.43E-05	2.59E-05	3.66E-06	3.89E-06	3.58E-06	3.47E-06	1.90E-06	1.57E-06
2583	647578	4197581	2.41E-05	2.56E-05	3.62E-06	3.85E-06	3.54E-06	3.43E-06	1.88E-06	1.55E-06
2584	647576.9	4197556	2.37E-05	2.53E-05	3.57E-06	3.80E-06	3.49E-06	3.38E-06	1.85E-06	1.53E-06
2585	647575.9	4197532	2.34E-05	2.50E-05	3.52E-06	3.74E-06	3.44E-06	3.34E-06	1.83E-06	1.51E-06
2586	647574.8	4197507	2.31E-05	2.46E-05	3.47E-06	3.69E-06	3.39E-06	3.29E-06	1.80E-06	1.49E-06
2587	647573.7	4197482	2.27E-05	2.42E-05	3.41E-06	3.63E-06	3.34E-06	3.24E-06	1.77E-06	1.47E-06
2588	647572.6	4197458	2.23E-05	2.38E-05	3.36E-06	3.57E-06	3.28E-06	3.18E-06	1.74E-06	1.44E-06
2589	647571.6	4197433	2.20E-05	2.34E-05	3.30E-06	3.51E-06	3.23E-06	3.13E-06	1.72E-06	1.42E-06
2590	647625.1	4198663	4.14E-05	4.42E-05	6.23E-06	6.62E-06	6.09E-06	5.90E-06	3.24E-06	2.68E-06
2591	647636.5	4198685	4.21E-05	4.49E-05	6.33E-06	6.73E-06	6.19E-06	6.00E-06	3.29E-06	2.72E-06
2592	647648	4198707	4.28E-05	4.56E-05	6.43E-06	6.84E-06	6.29E-06	6.09E-06	3.34E-06	2.76E-06
2593	647659.4	4198730	4.35E-05	4.63E-05	6.53E-06	6.95E-06	6.39E-06	6.19E-06	3.39E-06	2.81E-06
2594	647670.8	4198752	4.42E-05	4.71E-05	6.64E-06	7.06E-06	6.49E-06	6.29E-06	3.45E-06	2.85E-06
2595	647682.2	4198774	4.49E-05	4.79E-05	6.75E-06	7.18E-06	6.60E-06	6.40E-06	3.51E-06	2.90E-06
2596	647693.7	4198796	4.56E-05	4.87E-05	6.86E-06	7.30E-06	6.71E-06	6.51E-06	3.57E-06	2.95E-06
2597	647705.1	4198818	4.64E-05	4.95E-05	6.98E-06	7.43E-06	6.83E-06	6.62E-06	3.63E-06	3.00E-06
2598	647716.5	4198841	4.73E-05	5.04E-05	7.11E-06	7.55E-06	6.95E-06	6.73E-06	3.69E-06	3.05E-06
2599	647727.9	4198863	4.81E-05	5.13E-05	7.23E-06	7.69E-06	7.07E-06	6.85E-06	3.76E-06	3.11E-06
2600	647739.4	4198885	4.90E-05	5.22E-05	7.36E-06	7.83E-06	7.20E-06	6.98E-06	3.83E-06	3.16E-06
2601	647750.8	4198907	4.99E-05	5.32E-05	7.50E-06	7.97E-06	7.33E-06	7.11E-06	3.89E-06	3.22E-06
2602	647762.2	4198929	5.08E-05	5.41E-05	7.64E-06	8.12E-06	7.47E-06	7.24E-06	3.97E-06	3.28E-06
2603	647773.6	4198952	5.17E-05	5.51E-05	7.77E-06	8.26E-06	7.60E-06	7.37E-06	4.04E-06	3.34E-06
2604	649091.1	4198311	1.65E-03	1.76E-03	2.48E-04	2.64E-04	2.43E-04	2.35E-04	1.29E-04	1.07E-04
2605	649089.8	4198337	1.31E-03	1.40E-03	1.97E-04	2.10E-04	1.93E-04	1.87E-04	1.02E-04	8.47E-05
2606	649069.1	4198328	1.34E-03	1.43E-03	2.02E-04	2.15E-04	1.98E-04	1.92E-04	1.05E-04	8.69E-05
2607	649088.5	4198363	1.08E-03	1.15E-03	1.62E-04	1.73E-04	1.59E-04	1.54E-04	8.43E-05	6.98E-05
2608	649067.8	4198354	1.12E-03	1.19E-03	1.68E-04	1.78E-04	1.64E-04	1.59E-04	8.71E-05	7.21E-05
2609	649046.8	4198344	1.13E-03	1.21E-03	1.70E-04	1.81E-04	1.66E-04	1.61E-04	8.83E-05	7.31E-05
2610	649079.3	4198412	7.92E-04	8.44E-04	1.19E-04	1.27E-04	1.16E-04	1.13E-04	6.19E-05	5.12E-05
2611	649058.4	4198403	8.20E-04	8.74E-04	1.23E-04	1.31E-04	1.21E-04	1.17E-04	6.41E-05	5.30E-05
2612	649037.5	4198394	8.39E-04	8.94E-04	1.26E-04	1.34E-04	1.23E-04	1.19E-04	6.55E-05	5.42E-05
2613	649017	4198385	8.47E-04	9.03E-04	1.27E-04	1.35E-04	1.24E-04	1.21E-04	6.61E-05	5.47E-05
2614	649002.3	4198367	8.85E-04	9.43E-04	1.33E-04	1.41E-04	1.30E-04	1.26E-04	6.91E-05	5.72E-05
2615	649070.1	4198461	6.12E-04	6.53E-04	9.20E-05	9.79E-05	9.00E-05	8.72E-05	4.78E-05	3.96E-05
2616	649049.3	4198452	6.35E-04	6.77E-04	9.54E-05	1.01E-04	9.33E-05	9.05E-05	4.96E-05	4.10E-05
2617	649028.5	4198443	6.53E-04	6.96E-04	9.81E-05	1.04E-04	9.60E-05	9.30E-05	5.10E-05	4.22E-05
2618	649007.6	4198434	6.64E-04	7.08E-04	9.98E-05	1.06E-04	9.76E-05	9.46E-05	5.19E-05	4.29E-05
2619	648987.1	4198425	6.69E-04	7.13E-04	1.01E-04	1.07E-04	9.84E-05	9.54E-05	5.23E-05	4.32E-05
2620	648972	4198407	6.96E-04	7.42E-04	1.05E-04	1.11E-04	1.02E-04	9.91E-05	5.43E-05	4.50E-05
2621	648957.3	4198389	7.14E-04	7.61E-04	1.07E-04	1.14E-04	1.05E-04	1.02E-04	5.58E-05	4.61E-05
2622	649061	4198511	4.89E-04	5.22E-04	7.36E-05	7.82E-05	7.19E-05	6.97E-05	3.82E-05	3.16E-05
2623	649040.2	4198502	5.08E-04	5.41E-04	7.64E-05	8.12E-05	7.47E-05	7.24E-05	3.97E-05	3.28E-05
2624	649019.4	4198492	5.24E-04	5.58E-04	7.88E-05	8.37E-05	7.70E-05	7.47E-05	4.09E-05	3.39E-05
2625	648998.6	4198483	5.36E-04	5.71E-04	8.06E-05	8.57E-05	7.88E-05	7.64E-05	4.19E-05	3.46E-05
2626	648977.8	4198474	5.44E-04	5.80E-04	8.17E-05	8.69E-05	7.99E-05	7.75E-05	4.25E-05	3.51E-05
2627	648957.3	4198465	5.47E-04	5.83E-04	8.23E-05	8.75E-05	8.05E-05	7.80E-05	4.27E-05	3.54E-05
2628	648942.2	4198447	5.66E-04	6.04E-04	8.52E-05	9.05E-05	8.33E-05	8.07E-05	4.42E-05	3.66E-05

2629	648927.5	4198430	5.80E-04	6.18E-04	8.72E-05	9.27E-05	8.53E-05	8.26E-05	4.53E-05	3.75E-05
2630	648912.5	4198412	5.88E-04	6.27E-04	8.84E-05	9.40E-05	8.65E-05	8.38E-05	4.59E-05	3.80E-05
2631	649051.8	4198560	4.00E-04	4.27E-04	6.02E-05	6.40E-05	5.89E-05	5.70E-05	3.13E-05	2.59E-05
2632	649030.9	4198551	4.16E-04	4.44E-04	6.26E-05	6.65E-05	6.12E-05	5.93E-05	3.25E-05	2.69E-05
2633	649010	4198542	4.30E-04	4.59E-04	6.47E-05	6.88E-05	6.33E-05	6.13E-05	3.36E-05	2.78E-05
2634	648989.2	4198532	4.42E-04	4.71E-04	6.64E-05	7.06E-05	6.50E-05	6.30E-05	3.45E-05	2.86E-05
2635	648968.3	4198523	4.51E-04	4.80E-04	6.78E-05	7.20E-05	6.63E-05	6.42E-05	3.52E-05	2.91E-05
2636	648947.4	4198514	4.56E-04	4.86E-04	6.86E-05	7.29E-05	6.70E-05	6.50E-05	3.56E-05	2.95E-05
2637	648927	4198504	4.59E-04	4.89E-04	6.90E-05	7.34E-05	6.75E-05	6.54E-05	3.58E-05	2.97E-05
2638	648912.3	4198487	4.73E-04	5.04E-04	7.11E-05	7.56E-05	6.95E-05	6.74E-05	3.69E-05	3.06E-05
2639	648897.6	4198470	4.83E-04	5.15E-04	7.27E-05	7.73E-05	7.11E-05	6.89E-05	3.78E-05	3.12E-05
2640	648882.8	4198452	4.90E-04	5.22E-04	7.37E-05	7.83E-05	7.20E-05	6.98E-05	3.83E-05	3.17E-05
2641	648867.7	4198434	4.92E-04	5.25E-04	7.40E-05	7.87E-05	7.24E-05	7.01E-05	3.84E-05	3.18E-05
2642	649033.5	4198658	2.82E-04	3.00E-04	4.23E-05	4.50E-05	4.14E-05	4.01E-05	2.20E-05	1.82E-05
2643	649012.6	4198649	2.93E-04	3.13E-04	4.41E-05	4.69E-05	4.31E-05	4.18E-05	2.29E-05	1.90E-05
2644	648991.8	4198640	3.04E-04	3.24E-04	4.58E-05	4.86E-05	4.47E-05	4.34E-05	2.38E-05	1.97E-05
2645	648971	4198631	3.14E-04	3.35E-04	4.72E-05	5.02E-05	4.62E-05	4.48E-05	2.45E-05	2.03E-05
2646	648950.2	4198622	3.23E-04	3.44E-04	4.85E-05	5.16E-05	4.74E-05	4.60E-05	2.52E-05	2.08E-05
2647	648929.3	4198613	3.29E-04	3.51E-04	4.95E-05	5.27E-05	4.84E-05	4.69E-05	2.57E-05	2.13E-05
2648	648908.5	4198603	3.34E-04	3.56E-04	5.03E-05	5.34E-05	4.92E-05	4.76E-05	2.61E-05	2.16E-05
2649	648887.7	4198594	3.37E-04	3.60E-04	5.07E-05	5.39E-05	4.96E-05	4.81E-05	2.63E-05	2.18E-05
2650	648867.3	4198585	3.39E-04	3.61E-04	5.10E-05	5.42E-05	4.98E-05	4.83E-05	2.65E-05	2.19E-05
2651	648852.6	4198567	3.47E-04	3.70E-04	5.22E-05	5.55E-05	5.11E-05	4.95E-05	2.71E-05	2.25E-05
2652	648837.5	4198549	3.54E-04	3.78E-04	5.33E-05	5.66E-05	5.21E-05	5.05E-05	2.77E-05	2.29E-05
2653	648822.8	4198532	3.58E-04	3.82E-04	5.39E-05	5.73E-05	5.27E-05	5.11E-05	2.80E-05	2.32E-05
2654	648807.8	4198514	3.61E-04	3.84E-04	5.42E-05	5.76E-05	5.30E-05	5.14E-05	2.82E-05	2.33E-05
2655	648793.1	4198497	3.60E-04	3.84E-04	5.42E-05	5.76E-05	5.30E-05	5.13E-05	2.81E-05	2.33E-05
2656	648778.4	4198480	3.57E-04	3.81E-04	5.38E-05	5.71E-05	5.26E-05	5.09E-05	2.79E-05	2.31E-05
2657	649015.1	4198756	2.08E-04	2.21E-04	3.12E-05	3.32E-05	3.05E-05	2.96E-05	1.62E-05	1.34E-05
2658	648994.3	4198747	2.17E-04	2.31E-04	3.26E-05	3.46E-05	3.19E-05	3.09E-05	1.69E-05	1.40E-05
2659	648973.4	4198738	2.25E-04	2.40E-04	3.39E-05	3.60E-05	3.31E-05	3.21E-05	1.76E-05	1.46E-05
2660	648952.6	4198729	2.33E-04	2.49E-04	3.51E-05	3.73E-05	3.43E-05	3.33E-05	1.82E-05	1.51E-05
2661	648931.7	4198720	2.41E-04	2.57E-04	3.62E-05	3.85E-05	3.54E-05	3.43E-05	1.88E-05	1.56E-05
2662	648910.9	4198711	2.47E-04	2.64E-04	3.72E-05	3.95E-05	3.63E-05	3.52E-05	1.93E-05	1.60E-05
2663	648890	4198702	2.53E-04	2.69E-04	3.80E-05	4.04E-05	3.71E-05	3.60E-05	1.97E-05	1.63E-05
2664	648869.1	4198693	2.57E-04	2.74E-04	3.86E-05	4.11E-05	3.78E-05	3.66E-05	2.01E-05	1.66E-05
2665	648848.3	4198683	2.60E-04	2.77E-04	3.91E-05	4.16E-05	3.82E-05	3.70E-05	2.03E-05	1.68E-05
2666	648827.4	4198674	2.62E-04	2.79E-04	3.94E-05	4.18E-05	3.85E-05	3.73E-05	2.04E-05	1.69E-05
2667	648807.2	4198664	2.63E-04	2.80E-04	3.95E-05	4.20E-05	3.87E-05	3.75E-05	2.05E-05	1.70E-05
2668	648792.5	4198647	2.69E-04	2.86E-04	4.04E-05	4.29E-05	3.95E-05	3.83E-05	2.10E-05	1.74E-05
2669	648777.8	4198630	2.73E-04	2.91E-04	4.11E-05	4.36E-05	4.01E-05	3.89E-05	2.13E-05	1.76E-05
2670	648763.1	4198612	2.76E-04	2.94E-04	4.15E-05	4.41E-05	4.06E-05	3.93E-05	2.16E-05	1.78E-05
2671	648748.4	4198595	2.78E-04	2.96E-04	4.18E-05	4.44E-05	4.08E-05	3.96E-05	2.17E-05	1.80E-05
2672	648733.6	4198578	2.78E-04	2.96E-04	4.18E-05	4.44E-05	4.09E-05	3.96E-05	2.17E-05	1.80E-05
2673	648718.9	4198560	2.77E-04	2.95E-04	4.16E-05	4.43E-05	4.07E-05	3.94E-05	2.16E-05	1.79E-05
2674	648704.2	4198543	2.74E-04	2.92E-04	4.12E-05	4.38E-05	4.03E-05	3.91E-05	2.14E-05	1.77E-05
2675	648689.5	4198525	2.70E-04	2.88E-04	4.06E-05	4.32E-05	3.97E-05	3.85E-05	2.11E-05	1.75E-05
2676	648996.8	4198855	1.59E-04	1.69E-04	2.39E-05	2.54E-05	2.33E-05	2.26E-05	1.24E-05	1.02E-05
2677	648975.9	4198846	1.66E-04	1.77E-04	2.49E-05	2.65E-05	2.44E-05	2.36E-05	1.29E-05	1.07E-05
2678	648955.1	4198836	1.73E-04	1.84E-04	2.60E-05	2.76E-05	2.54E-05	2.46E-05	1.35E-05	1.12E-05
2679	648934.2	4198827	1.79E-04	1.91E-04	2.69E-05	2.86E-05	2.63E-05	2.55E-05	1.40E-05	1.16E-05
2680	648913.3	4198818	1.85E-04	1.98E-04	2.79E-05	2.96E-05	2.73E-05	2.64E-05	1.45E-05	1.20E-05
2681	648892.4	4198809	1.91E-04	2.04E-04	2.87E-05	3.05E-05	2.81E-05	2.72E-05	1.49E-05	1.23E-05
2682	648871.6	4198800	1.96E-04	2.09E-04	2.95E-05	3.13E-05	2.88E-05	2.79E-05	1.53E-05	1.27E-05
2683	648850.7	4198791	2.00E-04	2.14E-04	3.01E-05	3.20E-05	2.95E-05	2.86E-05	1.57E-05	1.30E-05
2684	648829.8	4198782	2.04E-04	2.18E-04	3.07E-05	3.26E-05	3.00E-05	2.91E-05	1.59E-05	1.32E-05

2685	648808.9	4198773	2.07E-04	2.21E-04	3.11E-05	3.31E-05	3.04E-05	2.95E-05	1.62E-05	1.34E-05
2686	648788.1	4198763	2.09E-04	2.23E-04	3.14E-05	3.34E-05	3.07E-05	2.98E-05	1.63E-05	1.35E-05
2687	648767.2	4198754	2.10E-04	2.24E-04	3.16E-05	3.36E-05	3.09E-05	3.00E-05	1.64E-05	1.36E-05
2688	648747.1	4198744	2.11E-04	2.25E-04	3.18E-05	3.38E-05	3.10E-05	3.01E-05	1.65E-05	1.36E-05
2689	648732.4	4198727	2.15E-04	2.29E-04	3.24E-05	3.44E-05	3.16E-05	3.07E-05	1.68E-05	1.39E-05
2690	648717.3	4198709	2.18E-04	2.33E-04	3.28E-05	3.49E-05	3.21E-05	3.11E-05	1.71E-05	1.41E-05
2691	648702.5	4198692	2.21E-04	2.35E-04	3.32E-05	3.53E-05	3.25E-05	3.15E-05	1.72E-05	1.43E-05
2692	648687.8	4198674	2.22E-04	2.37E-04	3.34E-05	3.55E-05	3.27E-05	3.17E-05	1.74E-05	1.44E-05
2693	648673.1	4198657	2.23E-04	2.37E-04	3.35E-05	3.56E-05	3.27E-05	3.17E-05	1.74E-05	1.44E-05
2694	648658.4	4198639	2.22E-04	2.37E-04	3.34E-05	3.55E-05	3.26E-05	3.16E-05	1.73E-05	1.43E-05
2695	648643.6	4198622	2.21E-04	2.35E-04	3.32E-05	3.53E-05	3.24E-05	3.14E-05	1.72E-05	1.42E-05
2696	648628.9	4198605	2.18E-04	2.33E-04	3.28E-05	3.49E-05	3.21E-05	3.11E-05	1.70E-05	1.41E-05
2697	648614.2	4198587	2.15E-04	2.29E-04	3.23E-05	3.43E-05	3.16E-05	3.06E-05	1.68E-05	1.39E-05
2698	648599.4	4198570	2.11E-04	2.25E-04	3.17E-05	3.37E-05	3.10E-05	3.00E-05	1.65E-05	1.36E-05
2699	648978.5	4198953	1.25E-04	1.33E-04	1.88E-05	1.99E-05	1.83E-05	1.78E-05	9.74E-06	8.06E-06
2700	648957.6	4198944	1.30E-04	1.39E-04	1.96E-05	2.08E-05	1.92E-05	1.86E-05	1.02E-05	8.42E-06
2701	648936.7	4198935	1.36E-04	1.45E-04	2.04E-05	2.17E-05	2.00E-05	1.94E-05	1.06E-05	8.78E-06
2702	648915.8	4198926	1.41E-04	1.51E-04	2.12E-05	2.26E-05	2.08E-05	2.01E-05	1.10E-05	9.12E-06
2703	648894.9	4198916	1.46E-04	1.56E-04	2.20E-05	2.34E-05	2.15E-05	2.08E-05	1.14E-05	9.45E-06
2704	648874	4198907	1.51E-04	1.61E-04	2.27E-05	2.42E-05	2.22E-05	2.15E-05	1.18E-05	9.77E-06
2705	648853.2	4198898	1.56E-04	1.66E-04	2.34E-05	2.49E-05	2.29E-05	2.22E-05	1.22E-05	1.01E-05
2706	648832.3	4198889	1.60E-04	1.70E-04	2.40E-05	2.55E-05	2.35E-05	2.27E-05	1.25E-05	1.03E-05
2707	648811.4	4198880	1.63E-04	1.74E-04	2.45E-05	2.61E-05	2.40E-05	2.33E-05	1.28E-05	1.05E-05
2708	648790.5	4198871	1.66E-04	1.77E-04	2.50E-05	2.66E-05	2.45E-05	2.37E-05	1.30E-05	1.07E-05
2709	648769.6	4198862	1.69E-04	1.80E-04	2.54E-05	2.70E-05	2.48E-05	2.41E-05	1.32E-05	1.09E-05
2710	648748.7	4198853	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.44E-05	1.34E-05	1.10E-05
2711	648727.8	4198843	1.72E-04	1.84E-04	2.59E-05	2.76E-05	2.53E-05	2.46E-05	1.35E-05	1.11E-05
2712	648706.9	4198834	1.73E-04	1.85E-04	2.61E-05	2.77E-05	2.55E-05	2.47E-05	1.35E-05	1.12E-05
2713	648687	4198824	1.74E-04	1.86E-04	2.62E-05	2.78E-05	2.56E-05	2.48E-05	1.36E-05	1.13E-05
2714	648672.3	4198806	1.77E-04	1.89E-04	2.66E-05	2.83E-05	2.60E-05	2.52E-05	1.38E-05	1.14E-05
2715	648657.5	4198789	1.80E-04	1.91E-04	2.70E-05	2.87E-05	2.64E-05	2.56E-05	1.40E-05	1.16E-05
2716	648642.8	4198772	1.81E-04	1.93E-04	2.73E-05	2.90E-05	2.67E-05	2.58E-05	1.42E-05	1.17E-05
2717	648628.1	4198754	1.83E-04	1.95E-04	2.75E-05	2.92E-05	2.68E-05	2.60E-05	1.43E-05	1.18E-05
2718	648613.3	4198737	1.83E-04	1.95E-04	2.75E-05	2.93E-05	2.69E-05	2.61E-05	1.43E-05	1.18E-05
2719	648598.6	4198720	1.83E-04	1.95E-04	2.75E-05	2.93E-05	2.69E-05	2.61E-05	1.43E-05	1.18E-05
2720	648583.8	4198702	1.82E-04	1.94E-04	2.74E-05	2.91E-05	2.68E-05	2.60E-05	1.42E-05	1.18E-05
2721	648569.1	4198685	1.81E-04	1.93E-04	2.72E-05	2.89E-05	2.66E-05	2.58E-05	1.41E-05	1.17E-05
2722	648554.4	4198667	1.79E-04	1.91E-04	2.69E-05	2.86E-05	2.63E-05	2.55E-05	1.40E-05	1.16E-05
2723	648539.6	4198650	1.76E-04	1.88E-04	2.65E-05	2.82E-05	2.59E-05	2.51E-05	1.38E-05	1.14E-05
2724	648524.9	4198633	1.73E-04	1.84E-04	2.60E-05	2.76E-05	2.54E-05	2.46E-05	1.35E-05	1.12E-05
2725	648510.1	4198615	1.69E-04	1.80E-04	2.55E-05	2.71E-05	2.49E-05	2.41E-05	1.32E-05	1.09E-05
2726	648941.8	4199150	8.29E-05	8.84E-05	1.25E-05	1.33E-05	1.22E-05	1.18E-05	6.48E-06	5.36E-06
2727	648920.9	4199140	8.65E-05	9.22E-05	1.30E-05	1.38E-05	1.27E-05	1.23E-05	6.75E-06	5.59E-06
2728	648900.1	4199131	9.00E-05	9.60E-05	1.35E-05	1.44E-05	1.32E-05	1.28E-05	7.03E-06	5.82E-06
2729	648879.2	4199122	9.35E-05	9.97E-05	1.41E-05	1.50E-05	1.38E-05	1.33E-05	7.31E-06	6.04E-06
2730	648858.3	4199113	9.70E-05	1.03E-04	1.46E-05	1.55E-05	1.43E-05	1.38E-05	7.58E-06	6.27E-06
2731	648837.5	4199104	1.00E-04	1.07E-04	1.51E-05	1.60E-05	1.48E-05	1.43E-05	7.84E-06	6.49E-06
2732	648816.6	4199095	1.04E-04	1.10E-04	1.56E-05	1.66E-05	1.52E-05	1.48E-05	8.09E-06	6.69E-06
2733	648795.7	4199086	1.07E-04	1.14E-04	1.60E-05	1.71E-05	1.57E-05	1.52E-05	8.33E-06	6.89E-06
2734	648774.8	4199077	1.10E-04	1.17E-04	1.65E-05	1.75E-05	1.61E-05	1.56E-05	8.56E-06	7.08E-06
2735	648754	4199067	1.12E-04	1.20E-04	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.77E-06	7.25E-06
2736	648733.1	4199058	1.15E-04	1.22E-04	1.73E-05	1.83E-05	1.69E-05	1.63E-05	8.96E-06	7.41E-06
2737	648712.2	4199049	1.17E-04	1.25E-04	1.76E-05	1.87E-05	1.72E-05	1.67E-05	9.14E-06	7.56E-06
2738	648691.3	4199040	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.70E-05	9.29E-06	7.69E-06
2739	648670.5	4199031	1.21E-04	1.29E-04	1.81E-05	1.93E-05	1.77E-05	1.72E-05	9.43E-06	7.80E-06
2740	648649.6	4199022	1.22E-04	1.30E-04	1.84E-05	1.95E-05	1.80E-05	1.74E-05	9.54E-06	7.89E-06

2741	648628.7	4199013	1.23E-04	1.31E-04	1.85E-05	1.97E-05	1.81E-05	1.76E-05	9.63E-06	7.97E-06
2742	648607.8	4199004	1.24E-04	1.32E-04	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.70E-06	8.02E-06
2743	648587	4198994	1.25E-04	1.33E-04	1.88E-05	1.99E-05	1.83E-05	1.78E-05	9.74E-06	8.06E-06
2744	648566.8	4198983	1.25E-04	1.34E-04	1.89E-05	2.01E-05	1.84E-05	1.79E-05	9.80E-06	8.11E-06
2745	648552.1	4198966	1.27E-04	1.36E-04	1.91E-05	2.04E-05	1.87E-05	1.81E-05	9.95E-06	8.23E-06
2746	648537.4	4198949	1.29E-04	1.37E-04	1.94E-05	2.06E-05	1.90E-05	1.84E-05	1.01E-05	8.33E-06
2747	648522.6	4198931	1.30E-04	1.39E-04	1.96E-05	2.08E-05	1.92E-05	1.86E-05	1.02E-05	8.42E-06
2748	648507.5	4198913	1.31E-04	1.40E-04	1.97E-05	2.10E-05	1.93E-05	1.87E-05	1.03E-05	8.48E-06
2749	648492.8	4198896	1.32E-04	1.41E-04	1.98E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.52E-06
2750	648478.1	4198879	1.32E-04	1.41E-04	1.99E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.54E-06
2751	648463.3	4198861	1.32E-04	1.41E-04	1.99E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.53E-06
2752	648448.6	4198844	1.32E-04	1.40E-04	1.98E-05	2.10E-05	1.93E-05	1.87E-05	1.03E-05	8.50E-06
2753	648433.9	4198827	1.31E-04	1.39E-04	1.97E-05	2.09E-05	1.92E-05	1.86E-05	1.02E-05	8.45E-06
2754	648419.1	4198809	1.30E-04	1.38E-04	1.95E-05	2.07E-05	1.90E-05	1.85E-05	1.01E-05	8.37E-06
2755	648404.4	4198792	1.28E-04	1.36E-04	1.92E-05	2.05E-05	1.88E-05	1.82E-05	1.00E-05	8.27E-06
2756	648389.7	4198774	1.26E-04	1.34E-04	1.90E-05	2.02E-05	1.85E-05	1.80E-05	9.86E-06	8.15E-06
2757	648374.9	4198757	1.24E-04	1.32E-04	1.87E-05	1.98E-05	1.82E-05	1.77E-05	9.69E-06	8.02E-06
2758	648360.2	4198740	1.22E-04	1.30E-04	1.83E-05	1.95E-05	1.79E-05	1.73E-05	9.51E-06	7.86E-06
2759	648345.1	4198722	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.70E-05	9.30E-06	7.69E-06
2760	648330.4	4198704	1.16E-04	1.24E-04	1.75E-05	1.86E-05	1.71E-05	1.66E-05	9.09E-06	7.52E-06
2761	648905.2	4199346	5.94E-05	6.34E-05	8.94E-06	9.50E-06	8.74E-06	8.47E-06	4.64E-06	3.84E-06
2762	648884.3	4199337	6.18E-05	6.59E-05	9.29E-06	9.88E-06	9.09E-06	8.81E-06	4.83E-06	3.99E-06
2763	648863.4	4199328	6.42E-05	6.84E-05	9.65E-06	1.03E-05	9.44E-06	9.15E-06	5.01E-06	4.15E-06
2764	648842.5	4199319	6.66E-05	7.10E-05	1.00E-05	1.06E-05	9.79E-06	9.49E-06	5.20E-06	4.30E-06
2765	648821.6	4199310	6.89E-05	7.35E-05	1.04E-05	1.10E-05	1.01E-05	9.82E-06	5.38E-06	4.45E-06
2766	648800.7	4199301	7.13E-05	7.60E-05	1.07E-05	1.14E-05	1.05E-05	1.02E-05	5.57E-06	4.60E-06
2767	648779.8	4199291	7.35E-05	7.84E-05	1.11E-05	1.18E-05	1.08E-05	1.05E-05	5.74E-06	4.75E-06
2768	648758.9	4199282	7.58E-05	8.08E-05	1.14E-05	1.21E-05	1.11E-05	1.08E-05	5.92E-06	4.90E-06
2769	648738	4199273	7.79E-05	8.31E-05	1.17E-05	1.25E-05	1.15E-05	1.11E-05	6.09E-06	5.03E-06
2770	648717.1	4199264	8.00E-05	8.52E-05	1.20E-05	1.28E-05	1.18E-05	1.14E-05	6.25E-06	5.17E-06
2771	648696.3	4199255	8.19E-05	8.73E-05	1.23E-05	1.31E-05	1.20E-05	1.17E-05	6.40E-06	5.29E-06
2772	648675.4	4199246	8.38E-05	8.93E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.55E-06	5.41E-06
2773	648654.5	4199237	8.55E-05	9.12E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.68E-06	5.53E-06
2774	648633.6	4199228	8.72E-05	9.29E-05	1.31E-05	1.39E-05	1.28E-05	1.24E-05	6.81E-06	5.63E-06
2775	648612.7	4199218	8.86E-05	9.45E-05	1.33E-05	1.42E-05	1.30E-05	1.26E-05	6.92E-06	5.73E-06
2776	648591.8	4199209	9.00E-05	9.59E-05	1.35E-05	1.44E-05	1.32E-05	1.28E-05	7.03E-06	5.82E-06
2777	648570.9	4199200	9.12E-05	9.72E-05	1.37E-05	1.46E-05	1.34E-05	1.30E-05	7.13E-06	5.89E-06
2778	648550	4199191	9.23E-05	9.84E-05	1.39E-05	1.48E-05	1.36E-05	1.32E-05	7.21E-06	5.96E-06
2779	648529.1	4199182	9.32E-05	9.94E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.28E-06	6.02E-06
2780	648508.2	4199173	9.40E-05	1.00E-04	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.34E-06	6.07E-06
2781	648487.4	4199164	9.46E-05	1.01E-04	1.42E-05	1.51E-05	1.39E-05	1.35E-05	7.39E-06	6.11E-06
2782	648466.5	4199154	9.50E-05	1.01E-04	1.43E-05	1.52E-05	1.40E-05	1.35E-05	7.42E-06	6.14E-06
2783	648446.6	4199143	9.56E-05	1.02E-04	1.44E-05	1.53E-05	1.41E-05	1.36E-05	7.47E-06	6.18E-06
2784	648431.9	4199126	9.70E-05	1.03E-04	1.46E-05	1.55E-05	1.43E-05	1.38E-05	7.57E-06	6.27E-06
2785	648417.2	4199108	9.81E-05	1.05E-04	1.48E-05	1.57E-05	1.44E-05	1.40E-05	7.67E-06	6.34E-06
2786	648402.4	4199091	9.91E-05	1.06E-04	1.49E-05	1.58E-05	1.46E-05	1.41E-05	7.74E-06	6.41E-06
2787	648387.3	4199073	1.00E-04	1.07E-04	1.50E-05	1.60E-05	1.47E-05	1.42E-05	7.81E-06	6.46E-06
2788	648372.5	4199055	1.01E-04	1.07E-04	1.51E-05	1.61E-05	1.48E-05	1.43E-05	7.86E-06	6.50E-06
2789	648357.8	4199038	1.01E-04	1.08E-04	1.52E-05	1.61E-05	1.48E-05	1.44E-05	7.89E-06	6.52E-06
2790	648343.1	4199021	1.01E-04	1.08E-04	1.52E-05	1.62E-05	1.49E-05	1.44E-05	7.90E-06	6.54E-06
2791	648328.3	4199003	1.01E-04	1.08E-04	1.52E-05	1.62E-05	1.49E-05	1.44E-05	7.90E-06	6.53E-06
2792	648313.6	4198986	1.01E-04	1.07E-04	1.52E-05	1.61E-05	1.48E-05	1.44E-05	7.87E-06	6.51E-06
2793	648298.8	4198969	1.00E-04	1.07E-04	1.51E-05	1.60E-05	1.47E-05	1.43E-05	7.84E-06	6.48E-06
2794	648284.1	4198951	9.96E-05	1.06E-04	1.50E-05	1.59E-05	1.46E-05	1.42E-05	7.78E-06	6.44E-06
2795	648269.3	4198934	9.87E-05	1.05E-04	1.48E-05	1.58E-05	1.45E-05	1.41E-05	7.71E-06	6.38E-06
2796	648254.6	4198916	9.75E-05	1.04E-04	1.47E-05	1.56E-05	1.43E-05	1.39E-05	7.62E-06	6.30E-06

2797	648239.9	4198899	9.62E-05	1.03E-04	1.45E-05	1.54E-05	1.42E-05	1.37E-05	7.52E-06	6.22E-06
2798	648225.1	4198882	9.48E-05	1.01E-04	1.43E-05	1.52E-05	1.39E-05	1.35E-05	7.40E-06	6.12E-06
2799	648210.4	4198864	9.31E-05	9.93E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.28E-06	6.02E-06
2800	648195.6	4198847	9.14E-05	9.74E-05	1.37E-05	1.46E-05	1.34E-05	1.30E-05	7.14E-06	5.91E-06
2801	648180.9	4198829	8.96E-05	9.55E-05	1.35E-05	1.43E-05	1.32E-05	1.28E-05	7.00E-06	5.79E-06
2802	648166.1	4198812	8.76E-05	9.34E-05	1.32E-05	1.40E-05	1.29E-05	1.25E-05	6.84E-06	5.66E-06
2803	648151.4	4198795	8.56E-05	9.13E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.69E-06	5.53E-06
2804	648868.5	4199543	4.51E-05	4.81E-05	6.78E-06	7.21E-06	6.63E-06	6.43E-06	3.52E-06	2.91E-06
2805	648847.6	4199534	4.68E-05	4.98E-05	7.03E-06	7.48E-06	6.88E-06	6.66E-06	3.65E-06	3.02E-06
2806	648826.7	4199525	4.84E-05	5.16E-05	7.28E-06	7.74E-06	7.12E-06	6.90E-06	3.78E-06	3.13E-06
2807	648805.9	4199515	5.01E-05	5.34E-05	7.53E-06	8.01E-06	7.36E-06	7.14E-06	3.91E-06	3.24E-06
2808	648785	4199506	5.17E-05	5.52E-05	7.78E-06	8.27E-06	7.61E-06	7.37E-06	4.04E-06	3.34E-06
2809	648764.1	4199497	5.34E-05	5.69E-05	8.03E-06	8.54E-06	7.85E-06	7.61E-06	4.17E-06	3.45E-06
2810	648743.2	4199488	5.50E-05	5.87E-05	8.27E-06	8.80E-06	8.09E-06	7.84E-06	4.30E-06	3.56E-06
2811	648722.3	4199479	5.66E-05	6.04E-05	8.52E-06	9.05E-06	8.33E-06	8.07E-06	4.42E-06	3.66E-06
2812	648701.5	4199470	5.82E-05	6.21E-05	8.75E-06	9.31E-06	8.56E-06	8.30E-06	4.55E-06	3.76E-06
2813	648680.6	4199461	5.97E-05	6.37E-05	8.98E-06	9.55E-06	8.78E-06	8.51E-06	4.67E-06	3.86E-06
2814	648659.7	4199452	6.12E-05	6.53E-05	9.21E-06	9.79E-06	9.00E-06	8.73E-06	4.78E-06	3.96E-06
2815	648638.8	4199442	6.27E-05	6.68E-05	9.42E-06	1.00E-05	9.21E-06	8.93E-06	4.90E-06	4.05E-06
2816	648617.9	4199433	6.40E-05	6.83E-05	9.63E-06	1.02E-05	9.42E-06	9.13E-06	5.00E-06	4.14E-06
2817	648597.1	4199424	6.54E-05	6.97E-05	9.83E-06	1.05E-05	9.61E-06	9.32E-06	5.11E-06	4.22E-06
2818	648576.2	4199415	6.66E-05	7.10E-05	1.00E-05	1.07E-05	9.80E-06	9.50E-06	5.21E-06	4.31E-06
2819	648555.3	4199406	6.78E-05	7.23E-05	1.02E-05	1.08E-05	9.97E-06	9.67E-06	5.30E-06	4.38E-06
2820	648534.4	4199397	6.89E-05	7.35E-05	1.04E-05	1.10E-05	1.01E-05	9.82E-06	5.39E-06	4.45E-06
2821	648513.5	4199388	7.00E-05	7.46E-05	1.05E-05	1.12E-05	1.03E-05	9.97E-06	5.47E-06	4.52E-06
2822	648492.7	4199379	7.10E-05	7.56E-05	1.07E-05	1.13E-05	1.04E-05	1.01E-05	5.54E-06	4.59E-06
2823	648471.8	4199369	7.19E-05	7.66E-05	1.08E-05	1.15E-05	1.06E-05	1.02E-05	5.61E-06	4.64E-06
2824	648450.9	4199360	7.27E-05	7.75E-05	1.09E-05	1.16E-05	1.07E-05	1.04E-05	5.68E-06	4.70E-06
2825	648430	4199351	7.34E-05	7.82E-05	1.10E-05	1.17E-05	1.08E-05	1.05E-05	5.73E-06	4.74E-06
2826	648409.1	4199342	7.40E-05	7.89E-05	1.11E-05	1.18E-05	1.09E-05	1.06E-05	5.78E-06	4.78E-06
2827	648388.2	4199333	7.46E-05	7.95E-05	1.12E-05	1.19E-05	1.10E-05	1.06E-05	5.83E-06	4.82E-06
2828	648367.4	4199324	7.50E-05	8.00E-05	1.13E-05	1.20E-05	1.10E-05	1.07E-05	5.86E-06	4.85E-06
2829	648346.5	4199315	7.54E-05	8.04E-05	1.13E-05	1.21E-05	1.11E-05	1.07E-05	5.89E-06	4.87E-06
2830	648326.8	4199303	7.59E-05	8.09E-05	1.14E-05	1.21E-05	1.12E-05	1.08E-05	5.93E-06	4.91E-06
2831	648312.1	4199285	7.69E-05	8.20E-05	1.16E-05	1.23E-05	1.13E-05	1.10E-05	6.01E-06	4.97E-06
2832	648297.4	4199268	7.78E-05	8.30E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.08E-06	5.03E-06
2833	648282.6	4199251	7.86E-05	8.38E-05	1.18E-05	1.26E-05	1.16E-05	1.12E-05	6.14E-06	5.08E-06
2834	648267.9	4199233	7.93E-05	8.45E-05	1.19E-05	1.27E-05	1.17E-05	1.13E-05	6.19E-06	5.12E-06
2835	648253.2	4199216	7.98E-05	8.51E-05	1.20E-05	1.28E-05	1.17E-05	1.14E-05	6.24E-06	5.16E-06
2836	648238.4	4199199	8.03E-05	8.56E-05	1.21E-05	1.28E-05	1.18E-05	1.14E-05	6.27E-06	5.19E-06
2837	648223.7	4199181	8.06E-05	8.59E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.29E-06	5.21E-06
2838	648208.9	4199164	8.07E-05	8.60E-05	1.21E-05	1.29E-05	1.19E-05	1.15E-05	6.30E-06	5.22E-06
2839	648194.2	4199146	8.07E-05	8.60E-05	1.21E-05	1.29E-05	1.19E-05	1.15E-05	6.31E-06	5.22E-06
2840	648179.5	4199129	8.06E-05	8.59E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.29E-06	5.21E-06
2841	648164.7	4199112	8.03E-05	8.56E-05	1.21E-05	1.28E-05	1.18E-05	1.14E-05	6.27E-06	5.19E-06
2842	648150	4199094	7.98E-05	8.51E-05	1.20E-05	1.28E-05	1.17E-05	1.14E-05	6.24E-06	5.16E-06
2843	648135.3	4199077	7.93E-05	8.45E-05	1.19E-05	1.27E-05	1.17E-05	1.13E-05	6.19E-06	5.12E-06
2844	648120.5	4199060	7.86E-05	8.38E-05	1.18E-05	1.26E-05	1.16E-05	1.12E-05	6.14E-06	5.08E-06
2845	648105.8	4199042	7.77E-05	8.29E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.07E-06	5.02E-06
2846	648091.1	4199025	7.68E-05	8.19E-05	1.15E-05	1.23E-05	1.13E-05	1.09E-05	6.00E-06	4.96E-06
2847	648076.3	4199007	7.57E-05	8.07E-05	1.14E-05	1.21E-05	1.11E-05	1.08E-05	5.92E-06	4.89E-06
2848	648061.6	4198990	7.46E-05	7.95E-05	1.12E-05	1.19E-05	1.10E-05	1.06E-05	5.83E-06	4.82E-06
2849	648046.9	4198973	7.33E-05	7.82E-05	1.10E-05	1.17E-05	1.08E-05	1.05E-05	5.73E-06	4.74E-06
2850	648032.1	4198955	7.20E-05	7.68E-05	1.08E-05	1.15E-05	1.06E-05	1.03E-05	5.63E-06	4.65E-06
2851	648017.4	4198938	7.07E-05	7.53E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.52E-06	4.57E-06
2852	648002.6	4198920	6.92E-05	7.38E-05	1.04E-05	1.11E-05	1.02E-05	9.87E-06	5.41E-06	4.47E-06

2853	647987.9	4198903	6.78E-05	7.23E-05	1.02E-05	1.08E-05	9.97E-06	9.66E-06	5.29E-06	4.38E-06
2854	647973.2	4198886	6.63E-05	7.07E-05	9.97E-06	1.06E-05	9.75E-06	9.45E-06	5.18E-06	4.29E-06
2855	648831.9	4199739	3.57E-05	3.81E-05	5.38E-06	5.72E-06	5.26E-06	5.09E-06	2.79E-06	2.31E-06
2856	648811	4199730	3.70E-05	3.94E-05	5.56E-06	5.91E-06	5.43E-06	5.27E-06	2.89E-06	2.39E-06
2857	648790.1	4199721	3.82E-05	4.07E-05	5.74E-06	6.10E-06	5.61E-06	5.44E-06	2.98E-06	2.47E-06
2858	648769.2	4199712	3.94E-05	4.20E-05	5.92E-06	6.29E-06	5.79E-06	5.61E-06	3.07E-06	2.54E-06
2859	648748.3	4199703	4.06E-05	4.33E-05	6.10E-06	6.49E-06	5.97E-06	5.78E-06	3.17E-06	2.62E-06
2860	648727.4	4199694	4.18E-05	4.45E-05	6.28E-06	6.68E-06	6.14E-06	5.95E-06	3.26E-06	2.70E-06
2861	648706.5	4199685	4.30E-05	4.58E-05	6.46E-06	6.87E-06	6.32E-06	6.13E-06	3.36E-06	2.78E-06
2862	648685.6	4199676	4.42E-05	4.71E-05	6.64E-06	7.06E-06	6.49E-06	6.29E-06	3.45E-06	2.85E-06
2863	648664.7	4199666	4.53E-05	4.83E-05	6.82E-06	7.25E-06	6.67E-06	6.46E-06	3.54E-06	2.93E-06
2864	648643.8	4199657	4.65E-05	4.96E-05	6.99E-06	7.43E-06	6.84E-06	6.63E-06	3.63E-06	3.00E-06
2865	648622.9	4199648	4.76E-05	5.08E-05	7.16E-06	7.61E-06	7.00E-06	6.79E-06	3.72E-06	3.08E-06
2866	648602	4199639	4.87E-05	5.19E-05	7.33E-06	7.79E-06	7.16E-06	6.94E-06	3.81E-06	3.15E-06
2867	648581.1	4199630	4.98E-05	5.31E-05	7.49E-06	7.96E-06	7.32E-06	7.09E-06	3.89E-06	3.22E-06
2868	648560.3	4199621	5.08E-05	5.42E-05	7.64E-06	8.13E-06	7.47E-06	7.24E-06	3.97E-06	3.29E-06
2869	648539.4	4199612	5.18E-05	5.53E-05	7.79E-06	8.29E-06	7.62E-06	7.39E-06	4.05E-06	3.35E-06
2870	648518.5	4199602	5.28E-05	5.63E-05	7.94E-06	8.44E-06	7.76E-06	7.53E-06	4.13E-06	3.41E-06
2871	648497.6	4199593	5.37E-05	5.73E-05	8.08E-06	8.59E-06	7.90E-06	7.66E-06	4.20E-06	3.47E-06
2872	648476.7	4199584	5.46E-05	5.82E-05	8.21E-06	8.73E-06	8.03E-06	7.79E-06	4.27E-06	3.53E-06
2873	648455.8	4199575	5.55E-05	5.91E-05	8.34E-06	8.87E-06	8.16E-06	7.91E-06	4.33E-06	3.58E-06
2874	648434.9	4199566	5.63E-05	6.00E-05	8.46E-06	9.00E-06	8.28E-06	8.02E-06	4.40E-06	3.64E-06
2875	648414	4199557	5.71E-05	6.08E-05	8.58E-06	9.12E-06	8.39E-06	8.13E-06	4.46E-06	3.69E-06
2876	648393.1	4199548	5.78E-05	6.16E-05	8.69E-06	9.24E-06	8.49E-06	8.23E-06	4.51E-06	3.73E-06
2877	648372.2	4199539	5.84E-05	6.23E-05	8.79E-06	9.34E-06	8.59E-06	8.33E-06	4.56E-06	3.78E-06
2878	648351.3	4199529	5.91E-05	6.30E-05	8.88E-06	9.44E-06	8.69E-06	8.42E-06	4.61E-06	3.82E-06
2879	648330.4	4199520	5.97E-05	6.36E-05	8.97E-06	9.54E-06	8.77E-06	8.50E-06	4.66E-06	3.86E-06
2880	648309.5	4199511	6.02E-05	6.42E-05	9.05E-06	9.62E-06	8.85E-06	8.58E-06	4.70E-06	3.89E-06
2881	648288.6	4199502	6.06E-05	6.47E-05	9.12E-06	9.70E-06	8.92E-06	8.64E-06	4.74E-06	3.92E-06
2882	648267.8	4199493	6.11E-05	6.51E-05	9.18E-06	9.76E-06	8.98E-06	8.70E-06	4.77E-06	3.95E-06
2883	648246.9	4199484	6.14E-05	6.55E-05	9.24E-06	9.82E-06	9.03E-06	8.75E-06	4.80E-06	3.97E-06
2884	648226	4199475	6.17E-05	6.58E-05	9.28E-06	9.87E-06	9.07E-06	8.80E-06	4.82E-06	3.99E-06
2885	648206.6	4199462	6.22E-05	6.63E-05	9.35E-06	9.94E-06	9.14E-06	8.86E-06	4.86E-06	4.02E-06
2886	648191.9	4199445	6.30E-05	6.71E-05	9.47E-06	1.01E-05	9.26E-06	8.97E-06	4.92E-06	4.07E-06
2887	648177.1	4199428	6.37E-05	6.79E-05	9.57E-06	1.02E-05	9.36E-06	9.07E-06	4.97E-06	4.11E-06
2888	648162.4	4199410	6.43E-05	6.85E-05	9.67E-06	1.03E-05	9.45E-06	9.16E-06	5.02E-06	4.15E-06
2889	648147.7	4199393	6.49E-05	6.91E-05	9.75E-06	1.04E-05	9.54E-06	9.24E-06	5.07E-06	4.19E-06
2890	648132.9	4199375	6.53E-05	6.97E-05	9.83E-06	1.04E-05	9.61E-06	9.31E-06	5.10E-06	4.22E-06
2891	648118.2	4199358	6.57E-05	7.01E-05	9.89E-06	1.05E-05	9.67E-06	9.37E-06	5.14E-06	4.25E-06
2892	648103.4	4199341	6.61E-05	7.04E-05	9.93E-06	1.06E-05	9.71E-06	9.41E-06	5.16E-06	4.27E-06
2893	648088.7	4199323	6.63E-05	7.07E-05	9.97E-06	1.06E-05	9.75E-06	9.45E-06	5.18E-06	4.28E-06
2894	648073.9	4199306	6.64E-05	7.08E-05	9.99E-06	1.06E-05	9.77E-06	9.47E-06	5.19E-06	4.29E-06
2895	648059.2	4199288	6.65E-05	7.08E-05	9.99E-06	1.06E-05	9.77E-06	9.47E-06	5.19E-06	4.29E-06
2896	648044.5	4199271	6.64E-05	7.08E-05	9.98E-06	1.06E-05	9.76E-06	9.46E-06	5.19E-06	4.29E-06
2897	648029.7	4199254	6.62E-05	7.06E-05	9.96E-06	1.06E-05	9.74E-06	9.44E-06	5.17E-06	4.28E-06
2898	648015	4199236	6.60E-05	7.03E-05	9.92E-06	1.05E-05	9.70E-06	9.40E-06	5.15E-06	4.26E-06
2899	648000.2	4199219	6.56E-05	6.99E-05	9.86E-06	1.05E-05	9.64E-06	9.35E-06	5.12E-06	4.24E-06
2900	647985.5	4199201	6.51E-05	6.94E-05	9.79E-06	1.04E-05	9.58E-06	9.28E-06	5.09E-06	4.21E-06
2901	647970.7	4199184	6.46E-05	6.88E-05	9.71E-06	1.03E-05	9.49E-06	9.20E-06	5.04E-06	4.17E-06
2902	647956	4199167	6.39E-05	6.82E-05	9.62E-06	1.02E-05	9.40E-06	9.11E-06	5.00E-06	4.13E-06
2903	647941.2	4199149	6.32E-05	6.74E-05	9.51E-06	1.01E-05	9.30E-06	9.01E-06	4.94E-06	4.09E-06
2904	647926.5	4199132	6.24E-05	6.66E-05	9.39E-06	9.98E-06	9.18E-06	8.90E-06	4.88E-06	4.03E-06
2905	647911.8	4199115	6.16E-05	6.56E-05	9.26E-06	9.84E-06	9.05E-06	8.77E-06	4.81E-06	3.98E-06
2906	647897	4199097	6.06E-05	6.47E-05	9.12E-06	9.70E-06	8.92E-06	8.64E-06	4.74E-06	3.92E-06
2907	647882.3	4199080	5.97E-05	6.36E-05	8.97E-06	9.54E-06	8.77E-06	8.50E-06	4.66E-06	3.86E-06
2908	647867.5	4199062	5.86E-05	6.25E-05	8.82E-06	9.38E-06	8.62E-06	8.36E-06	4.58E-06	3.79E-06

2909	647852.8	4199045	5.76E-05	6.14E-05	8.66E-06	9.21E-06	8.47E-06	8.21E-06	4.50E-06	3.72E-06
2910	647838	4199028	5.65E-05	6.02E-05	8.50E-06	9.03E-06	8.31E-06	8.05E-06	4.41E-06	3.65E-06
2911	647823.3	4199010	5.54E-05	5.91E-05	8.33E-06	8.86E-06	8.15E-06	7.90E-06	4.33E-06	3.58E-06
2912	647808.6	4198993	5.43E-05	5.79E-05	8.17E-06	8.68E-06	7.99E-06	7.74E-06	4.24E-06	3.51E-06
2913	647793.8	4198975	5.32E-05	5.67E-05	8.00E-06	8.51E-06	7.82E-06	7.58E-06	4.16E-06	3.44E-06
2914	649078.4	4198562	3.94E-04	4.20E-04	5.92E-05	6.29E-05	5.79E-05	5.61E-05	3.08E-05	2.54E-05
2915	649075.3	4198661	2.71E-04	2.89E-04	4.07E-05	4.33E-05	3.98E-05	3.86E-05	2.12E-05	1.75E-05
2916	649076.5	4198760	1.93E-04	2.06E-04	2.91E-05	3.09E-05	2.84E-05	2.75E-05	1.51E-05	1.25E-05
2917	649049.7	4198759	2.00E-04	2.13E-04	3.01E-05	3.20E-05	2.94E-05	2.85E-05	1.56E-05	1.29E-05
2918	649070.9	4198859	1.44E-04	1.53E-04	2.16E-05	2.30E-05	2.12E-05	2.05E-05	1.12E-05	9.30E-06
2919	649044.4	4198858	1.49E-04	1.59E-04	2.25E-05	2.39E-05	2.20E-05	2.13E-05	1.17E-05	9.65E-06
2920	649068.6	4198958	1.10E-04	1.17E-04	1.65E-05	1.76E-05	1.62E-05	1.57E-05	8.58E-06	7.10E-06
2921	649041.2	4198957	1.15E-04	1.22E-04	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.95E-06	7.40E-06
2922	649013.8	4198955	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.70E-05	9.30E-06	7.70E-06
2923	649064.1	4199157	6.94E-05	7.40E-05	1.04E-05	1.11E-05	1.02E-05	9.89E-06	5.42E-06	4.48E-06
2924	649037.2	4199155	7.24E-05	7.71E-05	1.09E-05	1.16E-05	1.06E-05	1.03E-05	5.65E-06	4.68E-06
2925	649010.3	4199154	7.54E-05	8.04E-05	1.13E-05	1.21E-05	1.11E-05	1.07E-05	5.89E-06	4.87E-06
2926	648983.3	4199152	7.84E-05	8.35E-05	1.18E-05	1.25E-05	1.15E-05	1.12E-05	6.12E-06	5.06E-06
2927	649063.2	4199355	4.75E-05	5.07E-05	7.14E-06	7.60E-06	6.99E-06	6.77E-06	3.71E-06	3.07E-06
2928	649035.9	4199354	4.95E-05	5.28E-05	7.45E-06	7.92E-06	7.28E-06	7.06E-06	3.87E-06	3.20E-06
2929	649008.6	4199352	5.16E-05	5.50E-05	7.76E-06	8.25E-06	7.58E-06	7.35E-06	4.03E-06	3.33E-06
2930	648981.3	4199351	5.37E-05	5.72E-05	8.07E-06	8.58E-06	7.89E-06	7.65E-06	4.19E-06	3.47E-06
2931	648954	4199349	5.57E-05	5.94E-05	8.38E-06	8.91E-06	8.20E-06	7.94E-06	4.35E-06	3.60E-06
2932	649055.5	4199554	3.51E-05	3.74E-05	5.28E-06	5.61E-06	5.16E-06	5.00E-06	2.74E-06	2.27E-06
2933	649028	4199552	3.65E-05	3.89E-05	5.49E-06	5.84E-06	5.37E-06	5.21E-06	2.85E-06	2.36E-06
2934	649000.5	4199551	3.80E-05	4.05E-05	5.71E-06	6.07E-06	5.58E-06	5.41E-06	2.97E-06	2.45E-06
2935	648972.9	4199549	3.94E-05	4.21E-05	5.93E-06	6.31E-06	5.80E-06	5.62E-06	3.08E-06	2.55E-06
2936	648945.4	4199547	4.09E-05	4.36E-05	6.16E-06	6.54E-06	6.02E-06	5.83E-06	3.20E-06	2.65E-06
2937	648917.8	4199546	4.24E-05	4.52E-05	6.38E-06	6.79E-06	6.24E-06	6.05E-06	3.32E-06	2.74E-06
2938	649050.9	4199752	2.72E-05	2.90E-05	4.08E-06	4.34E-06	3.99E-06	3.87E-06	2.12E-06	1.75E-06
2939	649023.7	4199751	2.82E-05	3.00E-05	4.23E-06	4.50E-06	4.14E-06	4.01E-06	2.20E-06	1.82E-06
2940	648996.4	4199749	2.92E-05	3.11E-05	4.39E-06	4.66E-06	4.29E-06	4.16E-06	2.28E-06	1.89E-06
2941	648969.2	4199748	3.02E-05	3.22E-05	4.55E-06	4.83E-06	4.45E-06	4.31E-06	2.36E-06	1.95E-06
2942	648941.9	4199746	3.13E-05	3.34E-05	4.71E-06	5.01E-06	4.61E-06	4.46E-06	2.45E-06	2.02E-06
2943	648914.7	4199744	3.24E-05	3.45E-05	4.87E-06	5.18E-06	4.77E-06	4.62E-06	2.53E-06	2.09E-06
2944	648887.5	4199743	3.35E-05	3.57E-05	5.04E-06	5.36E-06	4.93E-06	4.77E-06	2.62E-06	2.17E-06
2945	648860.2	4199741	3.46E-05	3.69E-05	5.20E-06	5.53E-06	5.09E-06	4.93E-06	2.70E-06	2.24E-06

EXHIBIT 1

			T2		39	T2L3			T4i			T4f		
					9.12E-08			1.37E-08			1.28E-08			6.30E-09
					4198665.32									
			Yr 1	Yr 2	Total	Yr 1	Yr 2	Total	Yr 1	Yr 2	Total	Yr 1	Yr 2	Total
1	649114.1	4198289.7	4.40E-07	4.69E-07	9.08E-07	6.61E-08	7.03E-08	1.36E-07	6.46E-08	6.27E-08	1.27E-07	3.43E-08	2.84E-08	6.28E-08
2	649113.41	4198314.69	3.24E-07	3.46E-07	6.70E-07	4.88E-08	5.19E-08	1.01E-07	4.77E-08	4.62E-08	9.39E-08	2.53E-08	2.10E-08	4.63E-08
3	649112.71	4198339.68	2.57E-07	2.74E-07	5.31E-07	3.87E-08	4.11E-08	7.98E-08	3.78E-08	3.67E-08	7.45E-08	2.01E-08	1.66E-08	3.67E-08
4	649112.02	4198364.67	2.12E-07	2.26E-07	4.38E-07	3.19E-08	3.39E-08	6.58E-08	3.12E-08	3.02E-08	6.14E-08	1.66E-08	1.37E-08	3.03E-08
5	649110.63	4198414.65	1.54E-07	1.64E-07	3.17E-07	2.31E-08	2.46E-08	4.77E-08	2.26E-08	2.19E-08	4.45E-08	1.20E-08	9.93E-09	2.19E-08
6	649109.24	4198464.63	1.17E-07	1.25E-07	2.42E-07	1.76E-08	1.88E-08	3.64E-08	1.72E-08	1.67E-08	3.40E-08	9.16E-09	7.58E-09	1.67E-08
7	649107.84	4198514.61	9.25E-08	9.86E-08	1.91E-07	1.39E-08	1.48E-08	2.87E-08	1.36E-08	1.32E-08	2.68E-08	7.22E-09	5.98E-09	1.32E-08
8	649106.45	4198564.59	7.45E-08	7.94E-08	1.54E-07	1.12E-08	1.19E-08	2.31E-08	1.10E-08	1.06E-08	2.16E-08	5.82E-09	4.82E-09	1.06E-08
9	649103.67	4198664.56	5.07E-08	5.40E-08	1.05E-07	7.62E-09	8.10E-09	1.57E-08	7.45E-09	7.22E-09	1.47E-08	3.96E-09	3.28E-09	7.23E-09
10	649100.89	4198764.52	3.60E-08	3.84E-08	7.45E-08	5.42E-09	5.76E-09	1.12E-08	5.30E-09	5.14E-09	1.04E-08	2.82E-09	2.33E-09	5.14E-09
11	649098.11	4198864.48	2.66E-08	2.83E-08	5.49E-08	4.00E-09	4.25E-09	8.24E-09	3.91E-09	3.79E-09	7.69E-09	2.08E-09	1.72E-09	3.79E-09
12	649095.32	4198964.44	2.02E-08	2.16E-08	4.18E-08	3.04E-09	3.24E-09	6.28E-09	2.98E-09	2.89E-09	5.86E-09	1.58E-09	1.31E-09	2.89E-09
13	649089.76	4199164.36	1.28E-08	1.36E-08	2.64E-08	1.92E-09	2.04E-09	3.97E-09	1.88E-09	1.82E-09	3.70E-09	9.99E-10	8.26E-10	1.83E-09
14	649084.19	4199364.28	8.84E-09	9.42E-09	1.83E-08	1.33E-09	1.41E-09	2.74E-09	1.30E-09	1.26E-09	2.56E-09	6.90E-10	5.71E-10	1.26E-09
15	649078.63	4199564.21	6.53E-09	6.96E-09	1.35E-08	9.81E-10	1.04E-09	2.02E-09	9.60E-10	9.30E-10	1.89E-09	5.10E-10	4.22E-10	9.32E-10
16	649073.06	4199764.13	5.07E-09	5.40E-09	1.05E-08	7.62E-10	8.10E-10	1.57E-09	7.45E-10	7.22E-10	1.47E-09	3.96E-10	3.27E-10	7.23E-10
17	649150.61	4198290.16	4.68E-07	4.99E-07	9.68E-07	7.04E-08	7.49E-08	1.45E-07	6.89E-08	6.67E-08	1.36E-07	3.66E-08	3.03E-08	6.69E-08
18	649193.6	4198290.27	4.88E-07	5.20E-07	1.01E-06	7.34E-08	7.80E-08	1.51E-07	7.18E-08	6.95E-08	1.41E-07	3.81E-08	3.15E-08	6.97E-08
19	649150.55	4198315.16	3.37E-07	3.59E-07	6.96E-07	5.06E-08	5.38E-08	1.04E-07	4.95E-08	4.80E-08	9.75E-08	2.63E-08	2.18E-08	4.81E-08
20	649193.54	4198315.27	3.46E-07	3.69E-07	7.16E-07	5.21E-08	5.54E-08	1.07E-07	5.09E-08	4.94E-08	1.00E-07	2.71E-08	2.24E-08	4.95E-08
21	649150.48	4198340.16	2.63E-07	2.80E-07	5.43E-07	3.96E-08	4.21E-08	8.16E-08	3.87E-08	3.75E-08	7.62E-08	2.05E-08	1.70E-08	3.75E-08
22	649193.48	4198340.27	2.67E-07	2.85E-07	5.53E-07	4.02E-08	4.28E-08	8.30E-08	3.93E-08	3.81E-08	7.74E-08	2.09E-08	1.73E-08	3.82E-08
23	649150.42	4198365.16	2.15E-07	2.29E-07	4.43E-07	3.23E-08	3.43E-08	6.66E-08	3.15E-08	3.06E-08	6.21E-08	1.68E-08	1.39E-08	3.06E-08
24	649193.42	4198365.27	2.16E-07	2.30E-07	4.46E-07	3.25E-08	3.45E-08	6.70E-08	3.18E-08	3.08E-08	6.25E-08	1.69E-08	1.40E-08	3.08E-08
25	649150.3	4198415.16	1.53E-07	1.63E-07	3.17E-07	2.30E-08	2.45E-08	4.75E-08	2.25E-08	2.18E-08	4.44E-08	1.20E-08	9.90E-09	2.19E-08
26	649193.3	4198415.27	1.52E-07	1.62E-07	3.14E-07	2.28E-08	2.43E-08	4.71E-08	2.23E-08	2.16E-08	4.40E-08	1.19E-08	9.81E-09	2.17E-08
27	649150.18	4198465.16	1.16E-07	1.23E-07	2.39E-07	1.74E-08	1.85E-08	3.59E-08	1.70E-08	1.65E-08	3.35E-08	9.03E-09	7.47E-09	1.65E-08
28	649193.17	4198465.27	1.13E-07	1.21E-07	2.34E-07	1.70E-08	1.81E-08	3.51E-08	1.66E-08	1.61E-08	3.28E-08	8.84E-09	7.31E-09	1.62E-08
29	649150.06	4198515.16	9.02E-08	9.62E-08	1.86E-07	1.36E-08	1.44E-08	2.80E-08	1.33E-08	1.29E-08	2.61E-08	7.05E-09	5.83E-09	1.29E-08
30	649193.05	4198515.27	8.74E-08	9.32E-08	1.81E-07	1.31E-08	1.40E-08	2.71E-08	1.29E-08	1.25E-08	2.53E-08	6.83E-09	5.65E-09	1.25E-08
31	649149.93	4198565.16	7.20E-08	7.68E-08	1.49E-07	1.08E-08	1.15E-08	2.23E-08	1.06E-08	1.03E-08	2.09E-08	5.63E-09	4.65E-09	1.03E-08
32	649192.93	4198565.27	6.92E-08	7.37E-08	1.43E-07	1.04E-08	1.11E-08	2.15E-08	1.02E-08	9.85E-09	2.00E-08	5.40E-09	4.47E-09	9.87E-09
33	649128.19	4198665.11	4.93E-08	5.26E-08	1.02E-07	7.41E-09	7.88E-09	1.53E-08	7.25E-09	7.03E-09	1.43E-08	3.85E-09	3.19E-09	7.04E-09
34	649171.19	4198665.21	4.68E-08	4.99E-08	9.68E-08	7.04E-09	7.49E-09	1.45E-08	6.89E-09	6.67E-09	1.36E-08	3.66E-09	3.03E-09	6.69E-09
35	649214.18	4198665.32	4.42E-08	4.71E-08	9.12E-08	6.64E-09	7.06E-09	1.37E-08	6.49E-09	6.29E-09	1.28E-08	3.45E-09	2.85E-09	6.30E-09
36	649127.95	4198765.11	3.47E-08	3.70E-08	7.18E-08	5.22E-09	5.55E-09	1.08E-08	5.11E-09	4.95E-09	1.01E-08	2.71E-09	2.24E-09	4.96E-09
37	649170.94	4198765.21	3.27E-08	3.48E-08	6.75E-08	4.91E-09	5.22E-09	1.01E-08	4.80E-09	4.65E-09	9.45E-09	2.55E-09	2.11E-09	4.66E-09
38	649213.94	4198765.32	3.05E-08	3.25E-08	6.30E-08	4.59E-09	4.88E-09	9.46E-09	4.49E-09	4.35E-09	8.83E-09	2.38E-09	1.97E-09	4.35E-09
39	649127.7	4198865.11	2.54E-08	2.71E-08	5.25E-08	3.82E-09	4.06E-09	7.88E-09	3.74E-09	3.62E-09	7.36E-09	1.98E-09	1.64E-09	3.63E-09
40	649170.7	4198865.21	2.38E-08	2.53E-08	4.91E-08	3.57E-09	3.80E-09	7.37E-09	3.49E-09	3.39E-09	6.88E-09	1.86E-09	1.54E-09	3.39E-09
41	649213.69	4198865.32	2.21E-08	2.36E-08	4.57E-08	3.32E-09	3.53E-09	6.86E-09	3.25E-09	3.15E-09	6.40E-09	1.73E-09	1.43E-09	3.16E-09
42	649127.46	4198965.11	1.92E-08	2.05E-08	3.98E-08	2.89E-09	3.08E-09	5.97E-09	2.83E-09	2.74E-09	5.57E-09	1.50E-09	1.24E-09	2.75E-09
43	649170.46	4198965.21	1.80E-08	1.91E-08	3.71E-08	2.70E-09	2.87E-09	5.57E-09	2.64E-09	2.56E-09	5.20E-09	1.40E-09	1.16E-09	2.56E-09
44	649213.45	4198965.32	1.67E-08	1.78E-08	3.45E-08	2.51E-09	2.67E-09	5.18E-09	2.46E-09	2.38E-09	4.84E-09	1.30E-09	1.08E-09	2.38E-09
45	649115.55	4199164.93	1.23E-08	1.31E-08	2.54E-08	1.85E-09	1.96E-09	3.81E-09	1.81E-09	1.75E-09	3.55E-09	9.59E-10	7.93E-10	1.75E-09
46	649148.47	4199165.16	1.17E-08	1.24E-08	2.41E-08	1.75E-09	1.86E-09	3.62E-09	1.71E-09	1.66E-09	3.38E-09	9.11E-10	7.53E-10	1.66E-09
47	649191.46	4199165.26	1.09E-08	1.16E-08	2.25E-08	1.64E-09	1.74E-09	3.38E-09	1.60E-09	1.55E-09	3.15E-09	8.51E-10	7.04E-10	1.56E-09
48	649112.52	4199364.9	8.47E-09	9.03E-09	1.75E-08	1.27E-09	1.35E-09	2.63E-09	1.25E-09	1.21E-09	2.45E-09	6.62E-10	5.47E-10	1.21E-09
49	649147.98	4199365.16	8.04E-09	8.57E-09	1.66E-08	1.21E-09	1.29E-09	2.50E-09	1.18E-09	1.15E-09	2.33E-09	6.28E-10	5.20E-10	1.15E-09
50	649190.98	4199365.26	7.56E-09	8.06E-09	1.56E-08	1.14E-09	1.21E-09	2.35E-09	1.11E-09	1.08E-09	2.19E-09	5.91E-10	4.89E-10	1.08E-09
51	649109.5	4199564.86	6.25E-09	6.67E-09	1.29E-08	9.40E-10	1.00E-09	1.94E-09	9.20E-10	8.91E-10	1.81E-09	4.89E-10	4.04E-10	8.93E-10
52	649147.49	4199565.16	5.95E-09	6.34E-09	1.23E-08	8.94E-10	9.51E-10	1.84E-09	8.74E-10	8.47E-10	1.72E-09	4.65E-10	3.84E-10	8.49E-10
53	649190.49	4199565.26	5.63E-09	6.00E-09	1.16E-08	8.46E-10	9.00E-10	1.75E-09	8.27E-10	8.02E-10	1.63E-09	4.40E-10	3.64E-10	8.03E-10
54	649106.47	4199764.82	4.86E-09	5.18E-09	1.00E-08	7.31E-10	7.77E-10	1.51E-09	7.15E-10	6.93E-10	1.41E-09	3.80E-10	3.14E-10	6.94E-10
55	649147	4199765.16	4.63E-09	4.93E-09	9.56E-09	6.96E-10	7.40E-10	1.44E-09	6.81E-10	6.60E-10	1.34E-09	3.62E-10	2.99E-10	6.61E-10
56	649190	4199765.26	4.41E-09	4.70E-09	9.10E-09	6.63E-10	7.04E-10	1.37E-09	6.48E-10	6.28E-10	1.28E-09	3.44E-10	2.85E-10	6.29E-10
57	649236.78	4198290.97	4.94E-07	5.27E-07	1.02E-06	7.43E-08	7.90E-08	1.53E-07	7.27E-08	7.04E-08	1.43E-07	3.86E-08	3.19E-08	7.05E-08
58	649281.5	4198292.28	4.91E-07	5.24E-07	1.01E-06	7.39E-08	7.85E-08	1.52E-07	7.22E-08	7.00E-08	1.42E-07	3.84E-08	3.17E-08	7.01E-08
59	649236.05	4198315.96	3.50E-07	3.73E-07	7.23E-07	5.26E-08	5.60E-08	1.09E-07	5.15E-08	4.99E-08	1.01E-07	2.74E-08	2.26E-08	5.00E-08
60	649280.76	4198317.27	3.48E-07	3.71E-07	7.19E-07	5.23E-08	5.56E-08	1.08E-07	5.11E-08	4.96E-08	1.01E-07	2.72E-08	2.25E-08	4.96E-08
61	649235.31	4198340.95	2.68E-07	2.86E-07	5.54E-07	4.04E-08	4.29E-08	8.33E-08	3.95E-08	3.82E-08	7.77E-08	2.10E-08	1.73E-08	3.83E-08
62	649280.03	4198342.26	2.65E-07	2.83E-07	5.48E-07	3.99E-08	4.24E-08	8.23E-08	3.90E-08	3.78E-08	7.68E-08	2.07E-08	1.71E-08	3.79E-08
63	649234.58	4198365.93	2.15E-07	2.29E-07	4.44E-07	3.23E-08	3.44E-08	6.67E-08	3.16E-08	3.06E-08	6.23E-08	1.68E-08	1.39E-08	3.07E-08
64	649279.29	4198367.25	2.11E-07	2.25E-07	4.37E-07	3.18E-08	3.38E-08	6.56E-08	3.11E-08	3.01E-08	6.12E-08	1.65E-08	1.37E-08	3.02E-08
65	649233.11	4198415.91	1.49E-07	1.59E-07	3.08E-07	2.24E-08	2.38E-08	4.63E-08	2.19E-08	2.13E-08	4.32E-08	1.17E-08	9.64E-09	2.13E-08
66	649277.82	4198417.23	1.45E-07	1.54E-07	2.99E-07	2.18E-08	2.31E-08	4.49E-08	2.13E-08	2.06E-08	4.19E-08	1.13E-08	9.35E-09	2.06E-08
67	649231.64	4198465.89	1.10E-07	1.17E-07	2.27E-07	1.65E-08	1.76E-08	3.41E-08	1.62E-08	1.57E-08	3.19E-08	8.60E-09	7.11E-09	1.57E-08
68	649276.35	4198467.21	1.05E-07	1.12E-07	2.18E-07	1.58E-08	1.69E-08	3.27E-08	1.55E-08	1.50E-08	3.05E-08	8.23E-09	6.81E-09	1.50E-08
69	649230.17	4198515.87	8.43E-08	8.99E-08	1.74E-07	1.27E-08	1.35E-08	2.62E-08	1.24E-08	1.20E-08	2.44E-08	6.59E-09	5.45E-09	1.20E-08
70	649274.88	4198517.18	7.99E-08	8.51E-08	1.65E-07	1.20E-08	1.28E-08	2.48E-08	1.17E-08	1.14E-08	2.31E-08	6.24E-09	5.16E-09	1.14E-08
71	649228.7	4198565.85	6.63E-08	7.07E-08	1.37E-07	9.97E-09	1.06E-08	2.06E-08	9.75E-09	9.45E-09	1.92E-08	5.18E-09	4.28E-09	9.46E-09
72	649273.41	4198567.16	6.22E-08	6.63E-08	1.29E-07	9.35E-09	9.95E-09	1.93E-08	9.15E-09	8.87E-09	1.80E-08	4.86E-09	4.02E-09	8.88E-09

73	649248.12	4198666.46	4.17E-08	4.45E-08	8.62E-08	6.28E-09	6.67E-09	1.29E-08	6.14E-09	5.95E-09	1.21E-08	3.26E-09	2.70E-09	5.96E-09
74	649292.83	4198667.78	3.85E-08	4.10E-08	7.95E-08	5.79E-09	6.16E-09	1.19E-08	5.66E-09	5.49E-09	1.11E-08	3.01E-09	2.49E-09	5.50E-09
75	649245.18	4198766.42	2.88E-08	3.07E-08	5.96E-08	4.34E-09	4.61E-09	8.94E-09	4.24E-09	4.11E-09	8.35E-09	2.25E-09	1.86E-09	4.12E-09
76	649289.89	4198767.73	2.65E-08	2.82E-08	5.47E-08	3.98E-09	4.24E-09	8.22E-09	3.90E-09	3.78E-09	7.67E-09	2.07E-09	1.71E-09	3.78E-09
77	649242.24	4198866.38	2.10E-08	2.24E-08	4.33E-08	3.15E-09	3.35E-09	6.51E-09	3.08E-09	2.99E-09	6.07E-09	1.64E-09	1.36E-09	2.99E-09
78	649286.95	4198867.69	1.93E-08	2.06E-08	3.99E-08	2.90E-09	3.08E-09	5.99E-09	2.84E-09	2.75E-09	5.59E-09	1.51E-09	1.25E-09	2.75E-09
79	649239.3	4198966.33	1.59E-08	1.70E-08	3.29E-08	2.40E-09	2.55E-09	4.95E-09	2.34E-09	2.27E-09	4.62E-09	1.25E-09	1.03E-09	2.28E-09
80	649284.01	4198967.65	1.47E-08	1.57E-08	3.04E-08	2.21E-09	2.35E-09	4.56E-09	2.16E-09	2.10E-09	4.26E-09	1.15E-09	9.51E-10	2.10E-09
81	649233.42	4199166.25	1.02E-08	1.09E-08	2.10E-08	1.53E-09	1.63E-09	3.16E-09	1.50E-09	1.45E-09	2.95E-09	7.96E-10	6.58E-10	1.45E-09
82	649278.13	4199167.56	9.48E-09	1.01E-08	1.96E-08	1.43E-09	1.52E-09	2.94E-09	1.39E-09	1.35E-09	2.75E-09	7.41E-10	6.13E-10	1.35E-09
83	649227.54	4199366.16	7.17E-09	7.65E-09	1.48E-08	1.08E-09	1.15E-09	2.23E-09	1.05E-09	1.02E-09	2.08E-09	5.60E-10	4.64E-10	1.02E-09
84	649272.25	4199367.47	6.74E-09	7.19E-09	1.39E-08	1.01E-09	1.08E-09	2.09E-09	9.91E-10	9.61E-10	1.95E-09	5.27E-10	4.36E-10	9.63E-10
85	649221.66	4199566.07	5.41E-09	5.77E-09	1.12E-08	8.14E-10	8.65E-10	1.68E-09	7.96E-10	7.71E-10	1.57E-09	4.23E-10	3.50E-10	7.72E-10
86	649266.38	4199567.39	5.13E-09	5.47E-09	1.06E-08	7.71E-10	8.20E-10	1.59E-09	7.54E-10	7.31E-10	1.48E-09	4.00E-10	3.31E-10	7.32E-10
87	649215.78	4199765.99	4.28E-09	4.57E-09	8.85E-09	6.44E-10	6.85E-10	1.33E-09	6.30E-10	6.10E-10	1.24E-09	3.35E-10	2.77E-10	6.11E-10
88	649260.5	4199767.3	4.09E-09	4.36E-09	8.45E-09	6.15E-10	6.54E-10	1.27E-09	6.01E-10	5.83E-10	1.18E-09	3.20E-10	2.64E-10	5.84E-10
89	649304.06	4198292.94	4.89E-07	5.21E-07	1.01E-06	7.35E-08	7.82E-08	1.52E-07	7.19E-08	6.97E-08	1.42E-07	3.82E-08	3.16E-08	6.98E-08
90	649347.16	4198293.85	4.85E-07	5.17E-07	1.00E-06	7.29E-08	7.75E-08	1.50E-07	7.13E-08	6.91E-08	1.40E-07	3.79E-08	3.13E-08	6.92E-08
91	649390.25	4198294.76	4.78E-07	5.10E-07	9.89E-07	7.19E-08	7.65E-08	1.48E-07	7.03E-08	6.82E-08	1.39E-07	3.74E-08	3.09E-08	6.83E-08
92	649303.53	4198317.94	3.46E-07	3.68E-07	7.14E-07	5.20E-08	5.53E-08	1.07E-07	5.08E-08	4.93E-08	1.00E-07	2.70E-08	2.23E-08	4.93E-08
93	649346.63	4198318.85	3.41E-07	3.63E-07	7.04E-07	5.13E-08	5.45E-08	1.06E-07	5.01E-08	4.86E-08	9.87E-08	2.66E-08	2.20E-08	4.87E-08
94	649389.72	4198319.76	3.34E-07	3.56E-07	6.89E-07	5.02E-08	5.33E-08	1.04E-07	4.91E-08	4.76E-08	9.66E-08	2.61E-08	2.16E-08	4.76E-08
95	649303.01	4198342.93	2.63E-07	2.80E-07	5.43E-07	3.95E-08	4.20E-08	8.16E-08	3.87E-08	3.75E-08	7.61E-08	2.05E-08	1.70E-08	3.75E-08
96	649346.1	4198343.84	2.58E-07	2.75E-07	5.33E-07	3.88E-08	4.12E-08	8.00E-08	3.79E-08	3.67E-08	7.47E-08	2.01E-08	1.67E-08	3.68E-08
97	649389.2	4198344.75	2.51E-07	2.67E-07	5.18E-07	3.77E-08	4.00E-08	7.77E-08	3.68E-08	3.57E-08	7.25E-08	1.96E-08	1.62E-08	3.58E-08
98	649302.48	4198367.93	2.09E-07	2.23E-07	4.31E-07	3.14E-08	3.34E-08	6.48E-08	3.07E-08	2.98E-08	6.05E-08	1.63E-08	1.35E-08	2.98E-08
99	649345.57	4198368.84	2.03E-07	2.17E-07	4.20E-07	3.06E-08	3.25E-08	6.31E-08	2.99E-08	2.90E-08	5.89E-08	1.59E-08	1.31E-08	2.90E-08
100	649388.67	4198369.75	1.96E-07	2.09E-07	4.05E-07	2.95E-08	3.14E-08	6.09E-08	2.88E-08	2.80E-08	5.68E-08	1.53E-08	1.27E-08	2.80E-08
101	649301.42	4198417.92	1.42E-07	1.51E-07	2.93E-07	2.13E-08	2.27E-08	4.40E-08	2.09E-08	2.02E-08	4.11E-08	1.11E-08	9.17E-09	2.03E-08
102	649344.52	4198418.83	1.36E-07	1.45E-07	2.82E-07	2.05E-08	2.18E-08	4.23E-08	2.01E-08	1.94E-08	3.95E-08	1.07E-08	8.82E-09	1.95E-08
103	649387.61	4198419.74	1.30E-07	1.38E-07	2.68E-07	1.95E-08	2.07E-08	4.03E-08	1.91E-08	1.85E-08	3.76E-08	1.01E-08	8.38E-09	1.85E-08
104	649300.37	4198467.91	1.03E-07	1.09E-07	2.12E-07	1.54E-08	1.64E-08	3.18E-08	1.51E-08	1.46E-08	2.97E-08	8.02E-09	6.63E-09	1.46E-08
105	649343.46	4198468.82	9.74E-08	1.04E-07	2.01E-07	1.46E-08	1.56E-08	3.02E-08	1.43E-08	1.39E-08	2.82E-08	7.61E-09	6.29E-09	1.39E-08
106	649386.56	4198469.73	9.13E-08	9.74E-08	1.89E-07	1.37E-08	1.46E-08	2.83E-08	1.34E-08	1.30E-08	2.64E-08	7.14E-09	5.90E-09	1.30E-08
107	649299.31	4198517.89	7.72E-08	8.23E-08	1.60E-07	1.16E-08	1.23E-08	2.40E-08	1.14E-08	1.10E-08	2.24E-08	6.03E-09	4.99E-09	1.10E-08
108	649342.41	4198518.8	7.24E-08	7.72E-08	1.50E-07	1.09E-08	1.16E-08	2.25E-08	1.06E-08	1.03E-08	2.10E-08	5.65E-09	4.68E-09	1.03E-08
109	649385.5	4198519.71	6.71E-08	7.16E-08	1.39E-07	1.01E-08	1.07E-08	2.08E-08	9.87E-09	9.57E-09	1.94E-08	5.24E-09	4.34E-09	9.58E-09
110	649298.26	4198567.88	5.98E-08	6.37E-08	1.24E-07	8.99E-09	9.56E-09	1.85E-08	8.79E-09	8.52E-09	1.73E-08	4.67E-09	3.86E-09	8.53E-09
111	649341.35	4198568.79	5.55E-08	5.92E-08	1.15E-07	8.35E-09	8.87E-09	1.72E-08	8.16E-09	7.91E-09	1.61E-08	4.34E-09	3.59E-09	7.92E-09
112	649384.45	4198569.7	5.11E-08	5.44E-08	1.05E-07	7.68E-09	8.16E-09	1.58E-08	7.51E-09	7.28E-09	1.48E-08	3.99E-09	3.30E-09	7.29E-09
113	649317.69	4198668.32	3.67E-08	3.91E-08	7.59E-08	5.52E-09	5.87E-09	1.14E-08	5.40E-09	5.23E-09	1.06E-08	2.87E-09	2.37E-09	5.24E-09
114	649360.79	4198669.23	3.37E-08	3.59E-08	6.95E-08	5.06E-09	5.38E-09	1.04E-08	4.95E-09	4.80E-09	9.74E-09	2.63E-09	2.17E-09	4.80E-09
115	649315.58	4198768.29	2.52E-08	2.69E-08	5.21E-08	3.79E-09	4.03E-09	7.82E-09	3.70E-09	3.59E-09	7.30E-09	1.97E-09	1.63E-09	3.60E-09
116	649358.68	4198769.2	2.31E-08	2.46E-08	4.77E-08	3.48E-09	3.69E-09	7.17E-09	3.40E-09	3.29E-09	6.69E-09	1.81E-09	1.49E-09	3.30E-09
117	649313.47	4198868.27	1.84E-08	1.96E-08	3.79E-08	2.76E-09	2.93E-09	5.69E-09	2.70E-09	2.62E-09	5.31E-09	1.43E-09	1.19E-09	2.62E-09
118	649356.57	4198869.18	1.69E-08	1.80E-08	3.49E-08	2.54E-09	2.70E-09	5.25E-09	2.49E-09	2.41E-09	4.90E-09	1.32E-09	1.09E-09	2.41E-09
119	649311.36	4198968.25	1.40E-08	1.49E-08	2.90E-08	2.11E-09	2.24E-09	4.35E-09	2.06E-09	2.00E-09	4.06E-09	1.09E-09	9.06E-10	2.00E-09
120	649354.45	4198969.16	1.30E-08	1.39E-08	2.68E-08	1.95E-09	2.08E-09	4.03E-09	1.91E-09	1.85E-09	3.76E-09	1.02E-09	8.40E-10	1.85E-09
121	649307.14	4199168.2	9.07E-09	9.67E-09	1.87E-08	1.36E-09	1.45E-09	2.82E-09	1.33E-09	1.29E-09	2.63E-09	7.09E-10	5.86E-10	1.30E-09
122	649350.23	4199169.11	8.52E-09	9.08E-09	1.76E-08	1.28E-09	1.36E-09	2.64E-09	1.25E-09	1.21E-09	2.47E-09	6.65E-10	5.50E-10	1.22E-09
123	649302.91	4199368.16	6.48E-09	6.91E-09	1.34E-08	9.75E-10	1.04E-09	2.01E-09	9.53E-10	9.24E-10	1.88E-09	5.06E-10	4.19E-10	9.25E-10
124	649346.01	4199369.07	6.15E-09	6.56E-09	1.27E-08	9.25E-10	9.83E-10	1.91E-09	9.05E-10	8.77E-10	1.78E-09	4.81E-10	3.98E-10	8.78E-10
125	649298.69	4199568.12	4.95E-09	5.28E-09	1.02E-08	7.44E-10	7.91E-10	1.54E-09	7.28E-10	7.05E-10	1.43E-09	3.87E-10	3.20E-10	7.06E-10
126	649341.79	4199569.03	4.74E-09	5.05E-09	9.79E-09	7.12E-10	7.57E-10	1.47E-09	6.97E-10	6.75E-10	1.37E-09	3.70E-10	3.06E-10	6.76E-10
127	649294.47	4199768.07	3.96E-09	4.22E-09	8.18E-09	5.96E-10	6.33E-10	1.23E-09	5.82E-10	5.65E-10	1.15E-09	3.09E-10	2.56E-10	5.65E-10
128	649337.57	4199768.98	3.82E-09	4.07E-09	7.89E-09	5.74E-10	6.10E-10	1.18E-09	5.61E-10	5.44E-10	1.11E-09	2.98E-10	2.47E-10	5.45E-10
129	649425.95	4198294.63	4.78E-07	5.10E-07	9.88E-07	7.19E-08	7.64E-08	1.48E-07	7.03E-08	6.81E-08	1.38E-07	3.73E-08	3.09E-08	6.82E-08
130	649426.05	4198319.63	3.29E-07	3.51E-07	6.80E-07	4.95E-08	5.26E-08	1.02E-07	4.84E-08	4.69E-08	9.53E-08	2.57E-08	2.13E-08	4.70E-08
131	649426.15	4198344.63	2.44E-07	2.61E-07	5.05E-07	3.68E-08	3.91E-08	7.58E-08	3.59E-08	3.48E-08	7.08E-08	1.91E-08	1.58E-08	3.49E-08
132	649426.25	4198369.63	1.90E-07	2.02E-07	3.92E-07	2.85E-08	3.03E-08	5.88E-08	2.79E-08	2.70E-08	5.49E-08	1.48E-08	1.23E-08	2.71E-08
133	649426.45	4198419.63	1.23E-07	1.31E-07	2.55E-07	1.85E-08	1.97E-08	3.82E-08	1.81E-08	1.76E-08	3.57E-08	9.63E-09	7.97E-09	1.76E-08
134	649409.11	4198469.7	8.82E-08	9.40E-08	1.82E-07	1.33E-08	1.41E-08	2.73E-08	1.30E-08	1.26E-08	2.55E-08	6.89E-09	5.70E-09	1.26E-08
135	649444.18	4198469.56	8.28E-08	8.82E-08	1.71E-07	1.24E-08	1.32E-08	2.57E-08	1.22E-08	1.18E-08	2.40E-08	6.47E-09	5.35E-09	1.18E-08
136	649409.31	4198519.7	6.43E-08	6.85E-08	1.33E-07	9.66E-09	1.03E-08	1.99E-08	9.45E-09	9.16E-09	1.86E-08	5.02E-09	4.15E-09	9.17E-09
137	649444.38	4198519.56	5.99E-08	6.39E-08	1.24E-07	9.01E-09	9.58E-09	1.86E-08	8.81E-09	8.54E-09	1.74E-08	4.68E-09	3.87E-09	8.56E-09
138	649409.51	4198569.7	4.86E-08	5.18E-08	1.00E-07	7.30E-09	7.77E-09	1.51E-08	7.14E-09	6.92E-09	1.41E-08	3.79E-09	3.14E-09	6.93E-09
139	649444.58	4198569.56	4.51E-08	4.81E-08	9.33E-08	6.79E-09	7.22E-09	1.40E-08	6.64E-09	6.43E-09	1.31E-08	3.53E-09	2.92E-09	6.44E-09
140	649392.38	4198669.77	3.15E-08	3.36E-08	6.50E-08	4.73E-09	5.03E-09	9.77E-09	4.63E-09	4.49E-09	9.11E-09	2.46E-09	2.03E-09	4.49E-09
141	649427.44	4198669.63	2.93E-08	3.12E-08	6.05E-08	4.40E-09	4.68E-09	9.08E-09	4.30E-09	4.17E-09	8.47E-09	2.29E-09	1.89E-09	4.18E-09
142	649392.78	4198769.77	2.16E-08	2.30E-08	4.46E-08	3.24E-09	3.45E-09	6.69E-09	3.17E-09	3.07E-09	6.24E-09	1.68E-09	1.39E-09	3.08E-09
143	649427.84	4198769.63	2.01E-08	2.15E-08	4.16E-08	3.03E-09	3.22E-09	6.25E-09	2.96E-09	2.87E-09	5.83E-09	1.57E-09	1.30E-09	2.87E-09
144	649393.18	4198869.77	1.58E-08	1.68E-08	3.26E-08	2.38E-09	2.53E-09	4.90E-09	2.32E-09	2.25E-09	4.57E-09	1.23E-09	1.02E-09	2.25E-09
145	649428.24	4198869.63	1.48E-08	1.58E-08	3.07E-08	2.23E-09	2.37E-09	4.61E-09	2.18E-09	2.12E-09	4.30E-09	1.16E-09	9.59E-10	2.12E-09
146	649384.79	4198969.69	1.23E-08	1.32E-08	2.55E-08	1.86E-09	1.97E-09	3.83E-09	1.81E-09	1.76E-09	3.57E-09	9.64E-10	7.98E-10	1.76E-09
147	649411.11	4198969.69	1.18E-08	1.26E-08	2.44E-08	1.78E-09	1.89E-09	3.67E-09	1.74E-09	1.69E-09	3.43E-09	9.24E-10	7.65E-10	1.69E-09
148	649446.17	4198969.55	1.12E-08	1.20E-08	2.32E-08	1.69E-09	1.79E-09	3.48E-09	1.65E-09	1.60E-09	3.25E-09	8.76E-10	7.25E-10	1.60E-09

149	649383.08	4199169.67	8.14E-09	8.68E-09	1.68E-08	1.22E-09	1.30E-09	2.53E-09	1.20E-09	1.16E-09	2.36E-09	6.36E-10	5.26E-10	1.16E-09
150	649411.91	4199169.69	7.85E-09	8.37E-09	1.62E-08	1.18E-09	1.26E-09	2.44E-09	1.15E-09	1.12E-09	2.27E-09	6.13E-10	5.07E-10	1.12E-09
151	649446.97	4199169.55	7.54E-09	8.04E-09	1.56E-08	1.13E-09	1.21E-09	2.34E-09	1.11E-09	1.07E-09	2.18E-09	5.89E-10	4.87E-10	1.08E-09
152	649381.36	4199369.64	5.91E-09	6.31E-09	1.22E-08	8.89E-10	9.46E-10	1.83E-09	8.70E-10	8.43E-10	1.71E-09	4.62E-10	3.82E-10	8.44E-10
153	649412.7	4199369.69	5.73E-09	6.11E-09	1.18E-08	8.62E-10	9.17E-10	1.78E-09	8.43E-10	8.17E-10	1.66E-09	4.48E-10	3.70E-10	8.18E-10
154	649447.77	4199369.55	5.55E-09	5.92E-09	1.15E-08	8.35E-10	8.88E-10	1.72E-09	8.17E-10	7.92E-10	1.61E-09	4.34E-10	3.59E-10	7.93E-10
155	649379.65	4199569.62	4.58E-09	4.88E-09	9.46E-09	6.89E-10	7.32E-10	1.42E-09	6.73E-10	6.53E-10	1.33E-09	3.58E-10	2.96E-10	6.54E-10
156	649413.5	4199569.69	4.46E-09	4.75E-09	9.21E-09	6.70E-10	7.12E-10	1.38E-09	6.55E-10	6.35E-10	1.29E-09	3.48E-10	2.88E-10	6.36E-10
157	649448.57	4199569.55	4.35E-09	4.64E-09	8.98E-09	6.54E-10	6.95E-10	1.35E-09	6.39E-10	6.20E-10	1.26E-09	3.40E-10	2.81E-10	6.21E-10
158	649384.22	4199769.65	3.69E-09	3.93E-09	7.62E-09	5.55E-10	5.90E-10	1.14E-09	5.42E-10	5.26E-10	1.07E-09	2.88E-10	2.38E-10	5.27E-10
159	649414.3	4199769.69	3.62E-09	3.86E-09	7.48E-09	5.44E-10	5.79E-10	1.12E-09	5.32E-10	5.16E-10	1.05E-09	2.83E-10	2.34E-10	5.17E-10
160	649449.37	4199769.55	3.55E-09	3.78E-09	7.33E-09	5.33E-10	5.67E-10	1.10E-09	5.21E-10	5.05E-10	1.03E-09	2.77E-10	2.29E-10	5.06E-10
161	649467.04	4198295.55	4.65E-07	4.96E-07	9.61E-07	6.99E-08	7.44E-08	1.44E-07	6.84E-08	6.63E-08	1.35E-07	3.63E-08	3.01E-08	6.64E-08
162	649491.72	4198296.57	4.48E-07	4.78E-07	9.26E-07	6.74E-08	7.17E-08	1.39E-07	6.59E-08	6.39E-08	1.30E-07	3.50E-08	2.90E-08	6.40E-08
163	649466.01	4198320.53	3.16E-07	3.37E-07	6.53E-07	4.75E-08	5.05E-08	9.80E-08	4.64E-08	4.50E-08	9.15E-08	2.47E-08	2.04E-08	4.51E-08
164	649490.7	4198321.55	3.02E-07	3.22E-07	6.24E-07	4.54E-08	4.83E-08	9.37E-08	4.44E-08	4.31E-08	8.75E-08	2.36E-08	1.95E-08	4.31E-08
165	649464.98	4198345.51	2.32E-07	2.48E-07	4.80E-07	3.49E-08	3.71E-08	7.21E-08	3.41E-08	3.31E-08	6.72E-08	1.81E-08	1.50E-08	3.32E-08
166	649489.67	4198346.53	2.21E-07	2.36E-07	4.57E-07	3.32E-08	3.53E-08	6.86E-08	3.25E-08	3.15E-08	6.40E-08	1.73E-08	1.43E-08	3.15E-08
167	649463.96	4198370.49	1.79E-07	1.91E-07	3.69E-07	2.69E-08	2.86E-08	5.55E-08	2.63E-08	2.55E-08	5.18E-08	1.40E-08	1.16E-08	2.55E-08
168	649488.64	4198371.51	1.70E-07	1.81E-07	3.50E-07	2.55E-08	2.71E-08	5.26E-08	2.49E-08	2.42E-08	4.91E-08	1.32E-08	1.10E-08	2.42E-08
169	649461.9	4198420.45	1.15E-07	1.23E-07	2.38E-07	1.73E-08	1.84E-08	3.57E-08	1.69E-08	1.64E-08	3.34E-08	9.00E-09	7.45E-09	1.64E-08
170	649486.59	4198421.46	1.09E-07	1.16E-07	2.24E-07	1.63E-08	1.74E-08	3.37E-08	1.60E-08	1.55E-08	3.14E-08	8.48E-09	7.02E-09	1.55E-08
171	649484.53	4198471.42	7.49E-08	7.98E-08	1.55E-07	1.13E-08	1.20E-08	2.32E-08	1.10E-08	1.07E-08	2.17E-08	5.85E-09	4.84E-09	1.07E-08
172	649482.48	4198521.38	5.45E-08	5.80E-08	1.12E-07	8.19E-09	8.71E-09	1.69E-08	8.01E-09	7.76E-09	1.58E-08	4.25E-09	3.52E-09	7.77E-09
173	649480.42	4198571.34	4.13E-08	4.40E-08	8.53E-08	6.21E-09	6.60E-09	1.28E-08	6.07E-09	5.88E-09	1.20E-08	3.23E-09	2.67E-09	5.89E-09
174	649451.63	4198670.24	2.77E-08	2.96E-08	5.73E-08	4.17E-09	4.43E-09	8.60E-09	4.08E-09	3.95E-09	8.03E-09	2.17E-09	1.79E-09	3.96E-09
175	649476.32	4198671.25	2.62E-08	2.80E-08	5.42E-08	3.94E-09	4.19E-09	8.13E-09	3.86E-09	3.74E-09	7.59E-09	2.05E-09	1.69E-09	3.74E-09
176	649472.21	4198771.17	1.84E-08	1.96E-08	3.80E-08	2.77E-09	2.94E-09	5.70E-09	2.70E-09	2.62E-09	5.32E-09	1.44E-09	1.19E-09	2.62E-09
177	649468.1	4198871.08	1.38E-08	1.47E-08	2.85E-08	2.08E-09	2.21E-09	4.29E-09	2.03E-09	1.97E-09	4.00E-09	1.08E-09	8.93E-10	1.97E-09
178	649509.26	4198471.37	7.05E-08	7.52E-08	1.46E-07	1.06E-08	1.13E-08	2.19E-08	1.04E-08	1.01E-08	2.04E-08	5.51E-09	4.56E-09	1.01E-08
179	649510	4198521.36	5.10E-08	5.44E-08	1.05E-07	7.67E-09	8.15E-09	1.58E-08	7.50E-09	7.27E-09	1.48E-08	3.98E-09	3.30E-09	7.28E-09
180	649510.73	4198571.36	3.85E-08	4.11E-08	7.96E-08	5.79E-09	6.16E-09	1.20E-08	5.67E-09	5.49E-09	1.12E-08	3.01E-09	2.49E-09	5.50E-09
181	649512.21	4198671.35	2.44E-08	2.60E-08	5.03E-08	3.66E-09	3.90E-09	7.56E-09	3.58E-09	3.47E-09	7.06E-09	1.90E-09	1.57E-09	3.48E-09
182	649500.12	4198771.54	1.75E-08	1.86E-08	3.61E-08	2.63E-09	2.79E-09	5.42E-09	2.57E-09	2.49E-09	5.05E-09	1.36E-09	1.13E-09	2.49E-09
183	649501.6	4198871.52	1.31E-08	1.39E-08	2.70E-08	1.97E-09	2.09E-09	4.06E-09	1.92E-09	1.86E-09	3.79E-09	1.02E-09	8.46E-10	1.87E-09
184	649490.05	4198971.34	1.05E-08	1.12E-08	2.17E-08	1.58E-09	1.68E-09	3.26E-09	1.54E-09	1.50E-09	3.04E-09	8.20E-10	6.78E-10	1.50E-09
185	649516.63	4198971.31	1.01E-08	1.08E-08	2.09E-08	1.52E-09	1.62E-09	3.15E-09	1.49E-09	1.44E-09	2.94E-09	7.92E-10	6.55E-10	1.45E-09
186	649493.46	4199171.33	7.16E-09	7.63E-09	1.48E-08	1.08E-09	1.14E-09	2.22E-09	1.05E-09	1.02E-09	2.07E-09	5.59E-10	4.63E-10	1.02E-09
187	649519.58	4199171.29	6.99E-09	7.45E-09	1.44E-08	1.05E-09	1.12E-09	2.17E-09	1.03E-09	9.96E-10	2.02E-09	5.46E-10	4.51E-10	9.97E-10
188	649496.69	4199371.31	5.33E-09	5.68E-09	1.10E-08	8.02E-10	8.52E-10	1.65E-09	7.84E-10	7.60E-10	1.54E-09	4.17E-10	3.45E-10	7.61E-10
189	649472.12	4199370.98	5.43E-09	5.79E-09	1.12E-08	8.17E-10	8.69E-10	1.69E-09	7.99E-10	7.74E-10	1.57E-09	4.25E-10	3.51E-10	7.76E-10
190	649522.53	4199371.27	5.24E-09	5.58E-09	1.08E-08	7.88E-10	8.37E-10	1.63E-09	7.70E-10	7.46E-10	1.52E-09	4.09E-10	3.39E-10	7.48E-10
191	649499.83	4199571.29	4.20E-09	4.48E-09	8.69E-09	6.32E-10	6.72E-10	1.30E-09	6.18E-10	5.99E-10	1.22E-09	3.28E-10	2.72E-10	6.00E-10
192	649475.63	4199570.97	4.27E-09	4.55E-09	8.81E-09	6.41E-10	6.82E-10	1.32E-09	6.27E-10	6.08E-10	1.24E-09	3.33E-10	2.76E-10	6.09E-10
193	649525.48	4199571.25	4.15E-09	4.42E-09	8.57E-09	6.23E-10	6.63E-10	1.29E-09	6.10E-10	5.91E-10	1.20E-09	3.24E-10	2.68E-10	5.92E-10
194	649502.91	4199771.27	3.45E-09	3.68E-09	7.13E-09	5.19E-10	5.51E-10	1.07E-09	5.07E-10	4.92E-10	9.99E-10	2.69E-10	2.23E-10	4.92E-10
195	649478.98	4199770.95	3.49E-09	3.72E-09	7.20E-09	5.24E-10	5.57E-10	1.08E-09	5.13E-10	4.97E-10	1.01E-09	2.72E-10	2.25E-10	4.98E-10
196	649528.43	4199771.23	3.41E-09	3.64E-09	7.05E-09	5.13E-10	5.45E-10	1.06E-09	5.02E-10	4.86E-10	9.88E-10	2.66E-10	2.20E-10	4.87E-10
197	649519.56	4198295.26	4.40E-07	4.70E-07	9.10E-07	6.62E-08	7.04E-08	1.37E-07	6.48E-08	6.28E-08	1.28E-07	3.44E-08	2.85E-08	6.29E-08
198	649521.88	4198320.15	2.91E-07	3.11E-07	6.02E-07	4.38E-08	4.66E-08	9.04E-08	4.28E-08	4.15E-08	8.44E-08	2.28E-08	1.88E-08	4.16E-08
199	649513.29	4198346.06	2.12E-07	2.26E-07	4.39E-07	3.19E-08	3.39E-08	6.59E-08	3.12E-08	3.03E-08	6.15E-08	1.66E-08	1.37E-08	3.03E-08
200	649515.61	4198370.96	1.61E-07	1.72E-07	3.32E-07	2.42E-08	2.57E-08	4.99E-08	2.37E-08	2.29E-08	4.66E-08	1.26E-08	1.04E-08	2.30E-08
201	649514.39	4198421.06	1.02E-07	1.09E-07	2.11E-07	1.53E-08	1.63E-08	3.16E-08	1.50E-08	1.45E-08	2.95E-08	7.96E-09	6.59E-09	1.45E-08
202	649535.83	4198469.5	6.66E-08	7.10E-08	1.38E-07	1.00E-08	1.06E-08	2.07E-08	9.79E-09	9.49E-09	1.93E-08	5.20E-09	4.30E-09	9.51E-09
203	649540.48	4198519.29	4.79E-08	5.10E-08	9.89E-08	7.20E-09	7.65E-09	1.49E-08	7.04E-09	6.82E-09	1.39E-08	3.74E-09	3.09E-09	6.83E-09
204	649534.21	4198570.09	3.68E-08	3.92E-08	7.60E-08	5.53E-09	5.88E-09	1.14E-08	5.41E-09	5.24E-09	1.06E-08	2.87E-09	2.38E-09	5.25E-09
205	649543.51	4198669.66	2.31E-08	2.46E-08	4.78E-08	3.48E-09	3.70E-09	7.17E-09	3.40E-09	3.29E-09	6.69E-09	1.81E-09	1.49E-09	3.30E-09
206	649543.03	4198769.75	1.63E-08	1.74E-08	3.38E-08	2.46E-09	2.61E-09	5.07E-09	2.40E-09	2.33E-09	4.73E-09	1.28E-09	1.06E-09	2.33E-09
207	649552.72	4198869.3	1.22E-08	1.31E-08	2.53E-08	1.84E-09	1.96E-09	3.80E-09	1.80E-09	1.74E-09	3.55E-09	9.57E-10	7.91E-10	1.75E-09
208	649524.55	4198870.82	1.27E-08	1.35E-08	2.62E-08	1.91E-09	2.03E-09	3.93E-09	1.86E-09	1.81E-09	3.67E-09	9.90E-10	8.19E-10	1.81E-09
209	649562.28	4198968.85	9.67E-09	1.03E-08	2.00E-08	1.45E-09	1.55E-09	3.00E-09	1.42E-09	1.38E-09	2.80E-09	7.55E-10	6.25E-10	1.38E-09
210	649579.95	4199168.03	6.68E-09	7.12E-09	1.38E-08	1.00E-09	1.07E-09	2.07E-09	9.82E-10	9.52E-10	1.93E-09	5.22E-10	4.32E-10	9.54E-10
211	649549.77	4199169.66	6.83E-09	7.28E-09	1.41E-08	1.03E-09	1.09E-09	2.12E-09	1.00E-09	9.73E-10	1.98E-09	5.33E-10	4.41E-10	9.74E-10
212	649597.85	4199367.2	5.03E-09	5.37E-09	1.04E-08	7.57E-10	8.05E-10	1.56E-09	7.40E-10	7.17E-10	1.46E-09	3.93E-10	3.25E-10	7.18E-10
213	649565.57	4199368.95	5.12E-09	5.45E-09	1.06E-08	7.69E-10	8.18E-10	1.59E-09	7.52E-10	7.29E-10	1.48E-09	4.00E-10	3.31E-10	7.30E-10
214	649617.04	4199566.31	4.00E-09	4.27E-09	8.27E-09	6.02E-10	6.40E-10	1.24E-09	5.89E-10	5.70E-10	1.16E-09	3.13E-10	2.59E-10	5.71E-10
215	649586.52	4199567.95	4.04E-09	4.31E-09	8.35E-09	6.08E-10	6.46E-10	1.25E-09	5.95E-10	5.76E-10	1.17E-09	3.16E-10	2.61E-10	5.77E-10
216	649556	4199569.6	4.09E-09	4.36E-09	8.46E-09	6.16E-10	6.54E-10	1.27E-09	6.02E-10	5.83E-10	1.19E-09	3.20E-10	2.65E-10	5.84E-10
217	649635.14	4199765.47	3.31E-09	3.52E-09	6.83E-09	4.97E-10	5.28E-10	1.03E-09	4.86E-10	4.71E-10	9.57E-10	2.58E-10	2.14E-10	4.72E-10
218	649603.13	4199767.19	3.33E-09	3.55E-09	6.88E-09	5.01E-10	5.33E-10	1.03E-09	4.90E-10	4.75E-10	9.65E-10	2.60E-10	2.15E-10	4.76E-10
219	649571.12	4199768.92	3.36E-09	3.59E-09	6.95E-09	5.06E-10	5.38E-10	1.04E-09	4.95E-10	4.79E-10	9.74E-10	2.63E-10	2.17E-10	4.80E-10
220	649545.05	4198342.25	2.06E-07	2.20E-07	4.26E-07	3.10E-08	3.30E-08	6.39E-08	3.03E-08	2.94E-08	5.97E-08	1.61E-08	1.33E-08	2.94E-08
221	649548.45	4198367.02	1.54E-07	1.64E-07	3.18E-07	2.31E-08	2.46E-08	4.77E-08	2.26E-08	2.19E-08	4.46E-08	1.20E-08	9.94E-09	2.20E-08
222	649537.66	4198418.97	9.74E-08	1.04E-07	2.01E-07	1.46E-08	1.56E-08	3.02E-08	1.43E-08	1.39E-08	2.82E-08	7.61E-09	6.29E-09	1.39E-08
223	649562.07	4198466.09	6.34E-08	6.76E-08	1.31E-07	9.53E-09	1.01E-08	1.97E-08	9.32E-09	9.03E-09	1.84E-08	4.95E-09	4.10E-09	9.05E-09
224	649568.88	4198515.62	4.56E-08	4.86E-08	9.41E-08	6.85E-09	7.28E-09	1.41E-08	6.70E-09	6.49E-09	1.32E-08	3.56E-09	2.94E-09	6.50E-09

225	649558.1	4198567.57	3.53E-08	3.77E-08	7.30E-08	5.31E-09	5.65E-09	1.10E-08	5.19E-09	5.03E-09	1.02E-08	2.76E-09	2.28E-09	5.04E-09
226	649571.72	4198666.64	2.23E-08	2.38E-08	4.60E-08	3.35E-09	3.56E-09	6.91E-09	3.28E-09	3.17E-09	6.45E-09	1.74E-09	1.44E-09	3.18E-09
227	649574.54	4198766.96	1.58E-08	1.68E-08	3.25E-08	2.37E-09	2.52E-09	4.89E-09	2.32E-09	2.24E-09	4.56E-09	1.23E-09	1.02E-09	2.25E-09
228	649602.94	4198763.29	1.54E-08	1.64E-08	3.17E-08	2.31E-09	2.46E-09	4.77E-09	2.26E-09	2.19E-09	4.45E-09	1.20E-09	9.93E-10	2.19E-09
229	649586	4198866.27	1.19E-08	1.26E-08	2.45E-08	1.78E-09	1.89E-09	3.68E-09	1.74E-09	1.69E-09	3.43E-09	9.26E-10	7.66E-10	1.69E-09
230	649616.56	4198862.36	1.16E-08	1.24E-08	2.39E-08	1.74E-09	1.85E-09	3.60E-09	1.70E-09	1.65E-09	3.36E-09	9.05E-10	7.49E-10	1.65E-09
231	649597.46	4198965.59	9.39E-09	1.00E-08	1.94E-08	1.41E-09	1.50E-09	2.91E-09	1.38E-09	1.34E-09	2.72E-09	7.34E-10	6.07E-10	1.34E-09
232	649630.18	4198961.43	9.20E-09	9.80E-09	1.90E-08	1.38E-09	1.47E-09	2.85E-09	1.35E-09	1.31E-09	2.66E-09	7.18E-10	5.94E-10	1.31E-09
233	649626.86	4199163.48	6.51E-09	6.94E-09	1.34E-08	9.78E-10	1.04E-09	2.02E-09	9.57E-10	9.27E-10	1.88E-09	5.08E-10	4.20E-10	9.29E-10
234	649657.43	4199159.56	6.42E-09	6.84E-09	1.33E-08	9.65E-10	1.03E-09	1.99E-09	9.43E-10	9.14E-10	1.86E-09	5.01E-10	4.15E-10	9.16E-10
235	649651.22	4199361.95	4.93E-09	5.26E-09	1.02E-08	7.41E-10	7.88E-10	1.53E-09	7.25E-10	7.03E-10	1.43E-09	3.85E-10	3.19E-10	7.04E-10
236	649684.67	4199357.7	4.88E-09	5.20E-09	1.01E-08	7.34E-10	7.80E-10	1.51E-09	7.17E-10	6.95E-10	1.41E-09	3.81E-10	3.15E-10	6.96E-10
237	649680.27	4199559.87	3.94E-09	4.20E-09	8.13E-09	5.92E-10	6.29E-10	1.22E-09	5.79E-10	5.61E-10	1.14E-09	3.07E-10	2.54E-10	5.62E-10
238	649652.18	4199563.11	3.96E-09	4.22E-09	8.18E-09	5.96E-10	6.33E-10	1.23E-09	5.82E-10	5.65E-10	1.15E-09	3.09E-10	2.56E-10	5.65E-10
239	649711.91	4199555.83	3.91E-09	4.17E-09	8.08E-09	5.88E-10	6.25E-10	1.21E-09	5.75E-10	5.57E-10	1.13E-09	3.05E-10	2.53E-10	5.58E-10
240	649705.35	4199758.26	3.26E-09	3.48E-09	6.74E-09	4.90E-10	5.21E-10	1.01E-09	4.80E-10	4.65E-10	9.44E-10	2.55E-10	2.11E-10	4.66E-10
241	649672.94	4199762	3.28E-09	3.50E-09	6.78E-09	4.93E-10	5.24E-10	1.02E-09	4.82E-10	4.67E-10	9.50E-10	2.56E-10	2.12E-10	4.68E-10
242	649739.16	4199753.97	3.24E-09	3.46E-09	6.70E-09	4.88E-10	5.19E-10	1.01E-09	4.77E-10	4.62E-10	9.39E-10	2.53E-10	2.10E-10	4.63E-10
243	649553.97	4198290.85	4.45E-07	4.74E-07	9.20E-07	6.69E-08	7.12E-08	1.38E-07	6.54E-08	6.34E-08	1.29E-07	3.48E-08	2.88E-08	6.35E-08
244	649556.92	4198315.68	2.87E-07	3.06E-07	5.93E-07	4.31E-08	4.59E-08	8.90E-08	4.22E-08	4.09E-08	8.31E-08	2.24E-08	1.85E-08	4.10E-08
245	649576.07	4198338.58	1.97E-07	2.10E-07	4.07E-07	2.96E-08	3.15E-08	6.11E-08	2.90E-08	2.81E-08	5.70E-08	1.54E-08	1.27E-08	2.81E-08
246	649579.02	4198363.4	1.45E-07	1.55E-07	3.00E-07	2.18E-08	2.32E-08	4.50E-08	2.13E-08	2.07E-08	4.20E-08	1.13E-08	9.38E-09	2.07E-08
247	649568.73	4198414.98	9.16E-08	9.77E-08	1.89E-07	1.38E-08	1.47E-08	2.84E-08	1.35E-08	1.31E-08	2.65E-08	7.16E-09	5.92E-09	1.31E-08
248	649590.82	4198462.7	5.97E-08	6.37E-08	1.23E-07	8.98E-09	9.55E-09	1.85E-08	8.78E-09	8.51E-09	1.73E-08	4.67E-09	3.86E-09	8.52E-09
249	649596.73	4198512.35	4.34E-08	4.62E-08	8.96E-08	6.52E-09	6.94E-09	1.35E-08	6.38E-09	6.18E-09	1.26E-08	3.39E-09	2.80E-09	6.19E-09
250	649586.44	4198563.93	3.39E-08	3.61E-08	7.00E-08	5.09E-09	5.42E-09	1.05E-08	4.98E-09	4.83E-09	9.81E-09	2.65E-09	2.19E-09	4.84E-09
251	649598.25	4198663.23	2.17E-08	2.31E-08	4.48E-08	3.26E-09	3.46E-09	6.72E-09	3.19E-09	3.09E-09	6.27E-09	1.69E-09	1.40E-09	3.09E-09
252	649626.24	4198760.6	1.51E-08	1.61E-08	3.12E-08	2.27E-09	2.41E-09	4.68E-09	2.22E-09	2.15E-09	4.37E-09	1.18E-09	9.76E-10	2.15E-09
253	649584.87	4198287.46	4.39E-07	4.68E-07	9.07E-07	6.60E-08	7.02E-08	1.36E-07	6.45E-08	6.25E-08	1.27E-07	3.43E-08	2.84E-08	6.26E-08
254	649587.35	4198312.34	2.76E-07	2.94E-07	5.70E-07	4.15E-08	4.41E-08	8.56E-08	4.06E-08	3.93E-08	7.99E-08	2.16E-08	1.78E-08	3.94E-08
255	649605.01	4198335.7	1.83E-07	1.96E-07	3.79E-07	2.76E-08	2.93E-08	5.69E-08	2.70E-08	2.61E-08	5.31E-08	1.43E-08	1.19E-08	2.62E-08
256	649607.49	4198360.58	1.34E-07	1.43E-07	2.77E-07	2.02E-08	2.15E-08	4.16E-08	1.97E-08	1.91E-08	3.89E-08	1.05E-08	8.67E-09	1.92E-08
257	649597.29	4198411.84	8.55E-08	9.12E-08	1.77E-07	1.29E-08	1.37E-08	2.65E-08	1.26E-08	1.22E-08	2.48E-08	6.68E-09	5.53E-09	1.22E-08
258	649617.43	4198460.08	5.64E-08	6.01E-08	1.16E-07	8.48E-09	9.01E-09	1.75E-08	8.29E-09	8.03E-09	1.63E-08	4.40E-09	3.64E-09	8.05E-09
259	649622.4	4198509.83	4.15E-08	4.43E-08	8.58E-08	6.24E-09	6.64E-09	1.29E-08	6.10E-09	5.92E-09	1.20E-08	3.24E-09	2.68E-09	5.93E-09
260	649612.19	4198561.1	3.27E-08	3.48E-08	6.75E-08	4.91E-09	5.22E-09	1.01E-08	4.80E-09	4.66E-09	9.46E-09	2.55E-09	2.11E-09	4.66E-09
261	649622.12	4198660.61	2.12E-08	2.26E-08	4.37E-08	3.18E-09	3.39E-09	6.57E-09	3.11E-09	3.02E-09	6.13E-09	1.65E-09	1.37E-09	3.02E-09
262	649641.99	4198859.62	1.14E-08	1.22E-08	2.36E-08	1.71E-09	1.82E-09	3.54E-09	1.68E-09	1.62E-09	3.30E-09	8.90E-10	7.37E-10	1.63E-09
263	649667.1	4198957.61	9.01E-09	9.60E-09	1.86E-08	1.35E-09	1.44E-09	2.80E-09	1.32E-09	1.28E-09	2.61E-09	7.04E-10	5.82E-10	1.29E-09
264	649686.97	4199156.62	6.33E-09	6.75E-09	1.31E-08	9.52E-10	1.01E-09	1.96E-09	9.31E-10	9.02E-10	1.83E-09	4.95E-10	4.09E-10	9.04E-10
265	649616.02	4198286.57	4.02E-07	4.28E-07	8.30E-07	6.04E-08	6.42E-08	1.25E-07	5.91E-08	5.72E-08	1.16E-07	3.14E-08	2.60E-08	5.73E-08
266	649615.36	4198311.56	2.51E-07	2.67E-07	5.18E-07	3.77E-08	4.01E-08	7.77E-08	3.68E-08	3.57E-08	7.26E-08	1.96E-08	1.62E-08	3.58E-08
267	649633.82	4198337.05	1.57E-07	1.68E-07	3.25E-07	2.37E-08	2.52E-08	4.88E-08	2.31E-08	2.24E-08	4.56E-08	1.23E-08	1.02E-08	2.25E-08
268	649633.16	4198362.05	1.18E-07	1.26E-07	2.44E-07	1.78E-08	1.89E-08	3.66E-08	1.74E-08	1.68E-08	3.42E-08	9.23E-09	7.63E-09	1.69E-08
269	649631.84	4198412.03	7.58E-08	8.08E-08	1.57E-07	1.14E-08	1.21E-08	2.35E-08	1.11E-08	1.08E-08	2.20E-08	5.92E-09	4.90E-09	1.08E-08
270	649655.51	4198287.28	3.20E-07	3.41E-07	6.61E-07	4.81E-08	5.11E-08	9.93E-08	4.70E-08	4.56E-08	9.26E-08	2.50E-08	2.07E-08	4.57E-08
271	649695.43	4198287.69	2.24E-07	2.38E-07	4.62E-07	3.36E-08	3.58E-08	6.94E-08	3.29E-08	3.19E-08	6.48E-08	1.75E-08	1.45E-08	3.19E-08
272	649655.25	4198312.28	1.98E-07	2.11E-07	4.09E-07	2.98E-08	3.17E-08	6.14E-08	2.91E-08	2.82E-08	5.73E-08	1.55E-08	1.28E-08	2.83E-08
273	649695.17	4198312.69	1.53E-07	1.63E-07	3.17E-07	2.31E-08	2.45E-08	4.76E-08	2.25E-08	2.19E-08	4.44E-08	1.20E-08	9.91E-09	2.19E-08
274	649674.96	4198337.48	1.26E-07	1.35E-07	2.61E-07	1.90E-08	2.02E-08	3.92E-08	1.86E-08	1.80E-08	3.66E-08	9.88E-09	8.17E-09	1.80E-08
275	649674.7	4198362.48	9.86E-08	1.05E-07	2.04E-07	1.48E-08	1.58E-08	3.06E-08	1.45E-08	1.40E-08	2.85E-08	7.70E-09	6.37E-09	1.41E-08
276	649674.19	4198412.48	6.64E-08	7.08E-08	1.37E-07	9.99E-09	1.06E-08	2.06E-08	9.77E-09	9.47E-09	1.92E-08	5.19E-09	4.29E-09	9.48E-09
277	649653.72	4198462.27	5.07E-08	5.41E-08	1.05E-07	7.63E-09	8.11E-09	1.57E-08	7.46E-09	7.23E-09	1.47E-08	3.96E-09	3.28E-09	7.24E-09
278	649693.64	4198462.68	4.66E-08	4.97E-08	9.63E-08	7.01E-09	7.45E-09	1.45E-08	6.85E-09	6.64E-09	1.35E-08	3.64E-09	3.01E-09	6.65E-09
279	649653.21	4198512.27	3.85E-08	4.11E-08	7.96E-08	5.80E-09	6.16E-09	1.20E-08	5.67E-09	5.49E-09	1.12E-08	3.01E-09	2.49E-09	5.50E-09
280	649693.13	4198512.68	3.60E-08	3.84E-08	7.44E-08	5.42E-09	5.76E-09	1.12E-08	5.30E-09	5.13E-09	1.04E-08	2.81E-09	2.33E-09	5.14E-09
281	649652.7	4198562.27	3.04E-08	3.24E-08	6.27E-08	4.57E-09	4.85E-09	9.42E-09	4.47E-09	4.33E-09	8.79E-09	2.37E-09	1.96E-09	4.33E-09
282	649692.62	4198562.67	2.87E-08	3.06E-08	5.94E-08	4.32E-09	4.59E-09	8.91E-09	4.22E-09	4.09E-09	8.32E-09	2.24E-09	1.86E-09	4.10E-09
283	649651.69	4198662.26	2.03E-08	2.17E-08	4.20E-08	3.06E-09	3.25E-09	6.31E-09	2.99E-09	2.90E-09	5.89E-09	1.59E-09	1.31E-09	2.90E-09
284	649691.61	4198662.67	1.95E-08	2.08E-08	4.04E-08	2.94E-09	3.12E-09	6.06E-09	2.87E-09	2.78E-09	5.66E-09	1.53E-09	1.26E-09	2.79E-09
285	649650.67	4198762.26	1.47E-08	1.56E-08	3.03E-08	2.21E-09	2.35E-09	4.55E-09	2.16E-09	2.09E-09	4.25E-09	1.15E-09	9.48E-10	2.09E-09
286	649690.59	4198762.66	1.42E-08	1.51E-08	2.93E-08	2.14E-09	2.27E-09	4.41E-09	2.09E-09	2.02E-09	4.11E-09	1.11E-09	9.18E-10	2.03E-09
287	649669.61	4198862.46	1.11E-08	1.18E-08	2.29E-08	1.67E-09	1.77E-09	3.44E-09	1.63E-09	1.58E-09	3.21E-09	8.66E-10	7.16E-10	1.58E-09
288	649624.59	4199362.02	5.00E-09	5.33E-09	1.03E-08	7.51E-10	7.99E-10	1.55E-09	7.34E-10	7.12E-10	1.45E-09	3.90E-10	3.23E-10	7.13E-10
289	649720.65	4198263.97	2.95E-07	3.14E-07	6.09E-07	4.43E-08	4.71E-08	9.14E-08	4.33E-08	4.20E-08	8.53E-08	2.30E-08	1.90E-08	4.20E-08
290	649722.91	4198219.73	6.48E-07	6.91E-07	1.34E-06	9.74E-08	1.04E-07	2.01E-07	9.53E-08	9.23E-08	1.88E-07	5.06E-08	4.19E-08	9.25E-08
291	649737.78	4198282.18	1.83E-07	1.95E-07	3.78E-07	2.75E-08	2.93E-08	5.68E-08	2.69E-08	2.61E-08	5.30E-08	1.43E-08	1.18E-08	2.61E-08
292	649746.74	4198243.12	3.06E-07	3.26E-07	6.33E-07	4.60E-08	4.90E-08	9.50E-08	4.50E-08	4.36E-08	8.87E-08	2.39E-08	1.98E-08	4.37E-08
293	649762.74	4198283.45	1.53E-07	1.63E-07	3.16E-07	2.30E-08	2.45E-08	4.75E-08	2.25E-08	2.18E-08	4.43E-08	1.20E-08	9.89E-09	2.18E-08
294	649729.68	4198324.11	1.16E-07	1.23E-07	2.39E-07	1.74E-08	1.85E-08	3.59E-08	1.70E-08	1.65E-08	3.35E-08	9.03E-09	7.47E-09	1.65E-08
295	649771.71	4198244.4	2.25E-07	2.40E-07	4.64E-07	3.38E-08	3.59E-08	6.97E-08	3.30E-08	3.20E-08	6.51E-08	1.76E-08	1.45E-08	3.21E-08
296	649787.71	4198284.73	1.30E-07	1.39E-07	2.69E-07	1.96E-08	2.08E-08	4.04E-08	1.91E-08	1.85E-08	3.77E-08	1.02E-08	8.41E-09	1.86E-08
297	649772.03	4198318.6	1.03E-07	1.10E-07	2.13E-07	1.55E-08	1.65E-08	3.19E-08	1.51E-08	1.47E-08	2.98E-08	8.04E-09	6.65E-09	1.47E-08
298	649746.81	4198342.32	9.21E-08	9.82E-08	1.90E-07	1.38E-08	1.47E-08	2.86E-08	1.35E-08	1.31E-08	2.67E-08	7.19E-09	5.95E-09	1.31E-08
299	649712.04	4198355.9	9.17E-08	9.78E-08	1.90E-07	1.38E-08	1.47E-08	2.85E-08	1.35E-08	1.31E-08	2.66E-08	7.17E-09	5.93E-09	1.31E-08
300	649796.68	4198245.67	1.78E-07	1.89E-07	3.67E-07	2.67E-08	2.84E-08	5.51E-08	2.61E-08	2.53E-08	5.14E-08	1.39E-08	1.15E-08	2.53E-08

301	649837.65	4198287.28	9.88E-08	1.05E-07	2.04E-07	1.49E-08	1.58E-08	3.07E-08	1.45E-08	1.41E-08	2.86E-08	7.72E-09	6.39E-09	1.41E-08
302	649821.97	4198321.15	8.31E-08	8.85E-08	1.72E-07	1.25E-08	1.33E-08	2.58E-08	1.22E-08	1.18E-08	2.40E-08	6.49E-09	5.37E-09	1.19E-08
303	649806.29	4198355.02	6.98E-08	7.44E-08	1.44E-07	1.05E-08	1.12E-08	2.16E-08	1.03E-08	9.94E-09	2.02E-08	5.45E-09	4.51E-09	9.96E-09
304	649781.07	4198378.74	6.42E-08	6.84E-08	1.33E-07	9.65E-09	1.03E-08	1.99E-08	9.43E-09	9.14E-09	1.86E-08	5.01E-09	4.15E-09	9.16E-09
305	649746.3	4198392.32	6.39E-08	6.81E-08	1.32E-07	9.60E-09	1.02E-08	1.98E-08	9.39E-09	9.10E-09	1.85E-08	4.99E-09	4.13E-09	9.11E-09
306	649711.53	4198405.89	6.33E-08	6.75E-08	1.31E-07	9.52E-09	1.01E-08	1.96E-08	9.31E-09	9.02E-09	1.83E-08	4.94E-09	4.09E-09	9.03E-09
307	649846.61	4198248.22	1.24E-07	1.32E-07	2.56E-07	1.87E-08	1.98E-08	3.85E-08	1.82E-08	1.77E-08	3.59E-08	9.69E-09	8.02E-09	1.77E-08
308	649886.46	4198292.25	7.79E-08	8.30E-08	1.61E-07	1.17E-08	1.25E-08	2.42E-08	1.15E-08	1.11E-08	2.26E-08	6.08E-09	5.03E-09	1.11E-08
309	649868.54	4198330.96	6.64E-08	7.08E-08	1.37E-07	9.99E-09	1.06E-08	2.06E-08	9.77E-09	9.46E-09	1.92E-08	5.19E-09	4.29E-09	9.48E-09
310	649850.62	4198369.67	5.65E-08	6.02E-08	1.17E-07	8.49E-09	9.03E-09	1.75E-08	8.30E-09	8.05E-09	1.64E-08	4.41E-09	3.65E-09	8.06E-09
311	649812.84	4198416.13	4.82E-08	5.14E-08	9.96E-08	7.25E-09	7.70E-09	1.50E-08	7.09E-09	6.87E-09	1.40E-08	3.76E-09	3.11E-09	6.88E-09
312	649773.11	4198431.65	4.79E-08	5.10E-08	9.89E-08	7.20E-09	7.65E-09	1.49E-08	7.04E-09	6.82E-09	1.39E-08	3.74E-09	3.09E-09	6.83E-09
313	649733.38	4198447.16	4.73E-08	5.04E-08	9.76E-08	7.11E-09	7.55E-09	1.47E-08	6.95E-09	6.73E-09	1.37E-08	3.69E-09	3.05E-09	6.75E-09
314	649896.55	4198250.77	9.43E-08	1.01E-07	1.95E-07	1.42E-08	1.51E-08	2.92E-08	1.39E-08	1.34E-08	2.73E-08	7.36E-09	6.09E-09	1.35E-08
315	649897.68	4198228.65	1.05E-07	1.12E-07	2.18E-07	1.59E-08	1.69E-08	3.27E-08	1.55E-08	1.50E-08	3.05E-08	8.24E-09	6.82E-09	1.51E-08
316	649936.64	4198294.26	6.42E-08	6.85E-08	1.33E-07	9.66E-09	1.03E-08	1.99E-08	9.45E-09	9.16E-09	1.86E-08	5.02E-09	4.15E-09	9.17E-09
317	649919.22	4198331.89	5.65E-08	6.02E-08	1.17E-07	8.49E-09	9.03E-09	1.75E-08	8.30E-09	8.05E-09	1.64E-08	4.41E-09	3.65E-09	8.06E-09
318	649901.8	4198369.53	4.94E-08	5.27E-08	1.02E-07	7.43E-09	7.90E-09	1.53E-08	7.26E-09	7.04E-09	1.43E-08	3.86E-09	3.19E-09	7.05E-09
319	649884.38	4198407.16	4.32E-08	4.61E-08	8.93E-08	6.50E-09	6.91E-09	1.34E-08	6.36E-09	6.16E-09	1.25E-08	3.38E-09	2.79E-09	6.17E-09
320	649847.65	4198452.34	3.80E-08	4.05E-08	7.84E-08	5.71E-09	6.07E-09	1.18E-08	5.58E-09	5.41E-09	1.10E-08	2.97E-09	2.45E-09	5.42E-09
321	649809.02	4198467.42	3.77E-08	4.02E-08	7.80E-08	5.68E-09	6.03E-09	1.17E-08	5.55E-09	5.38E-09	1.09E-08	2.95E-09	2.44E-09	5.39E-09
322	649770.39	4198482.51	3.73E-08	3.97E-08	7.70E-08	5.60E-09	5.96E-09	1.16E-08	5.48E-09	5.31E-09	1.08E-08	2.91E-09	2.41E-09	5.32E-09
323	649731.76	4198497.59	3.66E-08	3.91E-08	7.57E-08	5.51E-09	5.86E-09	1.14E-08	5.39E-09	5.22E-09	1.06E-08	2.86E-09	2.37E-09	5.23E-09
324	649946.48	4198253.32	7.52E-08	8.02E-08	1.55E-07	1.13E-08	1.20E-08	2.33E-08	1.11E-08	1.07E-08	2.18E-08	5.87E-09	4.86E-09	1.07E-08
325	649947.61	4198231.2	8.27E-08	8.81E-08	1.71E-07	1.24E-08	1.32E-08	2.56E-08	1.22E-08	1.18E-08	2.39E-08	6.46E-09	5.34E-09	1.18E-08
326	649986.74	4198296.47	5.41E-08	5.77E-08	1.12E-07	8.14E-09	8.65E-09	1.68E-08	7.96E-09	7.71E-09	1.57E-08	4.23E-09	3.50E-09	7.73E-09
327	649969.63	4198333.42	4.86E-08	5.18E-08	1.00E-07	7.30E-09	7.77E-09	1.51E-08	7.14E-09	6.92E-09	1.41E-08	3.79E-09	3.14E-09	6.93E-09
328	649952.53	4198370.37	4.33E-08	4.62E-08	8.95E-08	6.52E-09	6.93E-09	1.34E-08	6.37E-09	6.18E-09	1.25E-08	3.38E-09	2.80E-09	6.19E-09
329	649935.43	4198407.32	3.87E-08	4.12E-08	7.99E-08	5.82E-09	6.18E-09	1.20E-08	5.69E-09	5.51E-09	1.12E-08	3.02E-09	2.50E-09	5.52E-09
330	649918.32	4198444.27	3.46E-08	3.69E-08	7.15E-08	5.20E-09	5.53E-09	1.07E-08	5.09E-09	4.93E-09	1.00E-08	2.70E-09	2.24E-09	4.94E-09
331	649882.26	4198488.62	3.09E-08	3.30E-08	6.39E-08	4.65E-09	4.94E-09	9.60E-09	4.55E-09	4.41E-09	8.96E-09	2.42E-09	2.00E-09	4.42E-09
332	649844.33	4198503.43	3.07E-08	3.28E-08	6.35E-08	4.62E-09	4.92E-09	9.54E-09	4.52E-09	4.38E-09	8.90E-09	2.40E-09	1.99E-09	4.39E-09
333	649806.4	4198518.24	3.04E-08	3.24E-08	6.28E-08	4.57E-09	4.86E-09	9.42E-09	4.47E-09	4.33E-09	8.79E-09	2.37E-09	1.96E-09	4.34E-09
334	649768.48	4198533.05	2.99E-08	3.18E-08	6.17E-08	4.49E-09	4.77E-09	9.26E-09	4.39E-09	4.25E-09	8.64E-09	2.33E-09	1.93E-09	4.26E-09
335	649730.55	4198547.86	2.93E-08	3.12E-08	6.05E-08	4.40E-09	4.68E-09	9.08E-09	4.30E-09	4.17E-09	8.48E-09	2.29E-09	1.89E-09	4.18E-09
336	649996.42	4198255.88	6.19E-08	6.60E-08	1.28E-07	9.31E-09	9.90E-09	1.92E-08	9.11E-09	8.83E-09	1.79E-08	4.84E-09	4.00E-09	8.84E-09
337	650086.2	4198302.45	4.03E-08	4.29E-08	8.32E-08	6.06E-09	6.44E-09	1.25E-08	5.92E-09	5.74E-09	1.17E-08	3.15E-09	2.60E-09	5.75E-09
338	650068.28	4198341.16	3.69E-08	3.93E-08	7.62E-08	5.55E-09	5.90E-09	1.14E-08	5.42E-09	5.26E-09	1.07E-08	2.88E-09	2.38E-09	5.27E-09
339	650050.36	4198379.87	3.35E-08	3.58E-08	6.93E-08	5.04E-09	5.36E-09	1.04E-08	4.93E-09	4.78E-09	9.71E-09	2.62E-09	2.17E-09	4.79E-09
340	650032.45	4198418.58	3.05E-08	3.25E-08	6.30E-08	4.58E-09	4.87E-09	9.46E-09	4.48E-09	4.34E-09	8.82E-09	2.38E-09	1.97E-09	4.35E-09
341	650014.53	4198457.29	2.78E-08	2.96E-08	5.73E-08	4.17E-09	4.44E-09	8.61E-09	4.08E-09	3.96E-09	8.04E-09	2.17E-09	1.79E-09	3.96E-09
342	649996.61	4198495.99	2.53E-08	2.70E-08	5.23E-08	3.81E-09	4.05E-09	7.86E-09	3.72E-09	3.61E-09	7.33E-09	1.98E-09	1.64E-09	3.62E-09
343	649978.69	4198534.7	2.31E-08	2.46E-08	4.77E-08	3.47E-09	3.69E-09	7.17E-09	3.40E-09	3.29E-09	6.69E-09	1.80E-09	1.49E-09	3.30E-09
344	649949.87	4198561.82	2.20E-08	2.35E-08	4.55E-08	3.31E-09	3.52E-09	6.84E-09	3.24E-09	3.14E-09	6.38E-09	1.72E-09	1.42E-09	3.15E-09
345	649910.13	4198577.33	2.19E-08	2.33E-08	4.52E-08	3.29E-09	3.50E-09	6.79E-09	3.22E-09	3.12E-09	6.34E-09	1.71E-09	1.41E-09	3.12E-09
346	649870.4	4198592.85	2.16E-08	2.30E-08	4.46E-08	3.24E-09	3.45E-09	6.69E-09	3.17E-09	3.07E-09	6.25E-09	1.69E-09	1.39E-09	3.08E-09
347	649830.67	4198608.36	2.12E-08	2.26E-08	4.37E-08	3.18E-09	3.38E-09	6.56E-09	3.11E-09	3.02E-09	6.13E-09	1.65E-09	1.37E-09	3.02E-09
348	649790.94	4198623.88	2.07E-08	2.20E-08	4.27E-08	3.11E-09	3.31E-09	6.42E-09	3.04E-09	2.95E-09	5.99E-09	1.62E-09	1.34E-09	2.95E-09
349	649751.2	4198639.4	2.02E-08	2.15E-08	4.17E-08	3.04E-09	3.23E-09	6.27E-09	2.97E-09	2.88E-09	5.85E-09	1.58E-09	1.31E-09	2.88E-09
350	650096.29	4198260.98	4.48E-08	4.78E-08	9.26E-08	6.74E-09	7.16E-09	1.39E-08	6.59E-09	6.39E-09	1.30E-08	3.50E-09	2.90E-09	6.40E-09
351	650185.81	4198308.12	3.16E-08	3.37E-08	6.52E-08	4.75E-09	5.05E-09	9.80E-09	4.64E-09	4.50E-09	9.14E-09	2.47E-09	2.04E-09	4.51E-09
352	650167.36	4198347.97	2.93E-08	3.13E-08	6.06E-08	4.41E-09	4.69E-09	9.10E-09	4.31E-09	4.18E-09	8.50E-09	2.29E-09	1.90E-09	4.19E-09
353	650148.92	4198387.82	2.71E-08	2.89E-08	5.60E-08	4.07E-09	4.33E-09	8.41E-09	3.98E-09	3.86E-09	7.84E-09	2.12E-09	1.75E-09	3.87E-09
354	650130.47	4198427.66	2.49E-08	2.66E-08	5.15E-08	3.75E-09	3.99E-09	7.74E-09	3.67E-09	3.55E-09	7.22E-09	1.95E-09	1.61E-09	3.56E-09
355	650112.03	4198467.51	2.30E-08	2.45E-08	4.75E-08	3.45E-09	3.67E-09	7.13E-09	3.38E-09	3.27E-09	6.65E-09	1.79E-09	1.48E-09	3.28E-09
356	650093.58	4198507.36	2.12E-08	2.26E-08	4.39E-08	3.19E-09	3.39E-09	6.59E-09	3.12E-09	3.03E-09	6.15E-09	1.66E-09	1.37E-09	3.03E-09
357	650075.14	4198547.21	1.97E-08	2.10E-08	4.06E-08	2.96E-09	3.14E-09	6.10E-09	2.89E-09	2.80E-09	5.70E-09	1.54E-09	1.27E-09	2.81E-09
358	650056.69	4198587.05	1.82E-08	1.94E-08	3.76E-08	2.74E-09	2.91E-09	5.65E-09	2.68E-09	2.60E-09	5.27E-09	1.42E-09	1.18E-09	2.60E-09
359	650017.8	4198634.89	1.68E-08	1.79E-08	3.47E-08	2.52E-09	2.68E-09	5.20E-09	2.47E-09	2.39E-09	4.86E-09	1.31E-09	1.08E-09	2.39E-09
360	649976.89	4198650.86	1.66E-08	1.77E-08	3.43E-08	2.50E-09	2.66E-09	5.16E-09	2.44E-09	2.37E-09	4.81E-09	1.30E-09	1.07E-09	2.37E-09
361	649935.99	4198666.83	1.64E-08	1.74E-08	3.38E-08	2.46E-09	2.61E-09	5.07E-09	2.40E-09	2.33E-09	4.74E-09	1.28E-09	1.06E-09	2.33E-09
362	649895.09	4198682.8	1.60E-08	1.71E-08	3.31E-08	2.41E-09	2.56E-09	4.97E-09	2.36E-09	2.28E-09	4.64E-09	1.25E-09	1.04E-09	2.29E-09
363	649854.19	4198698.77	1.56E-08	1.67E-08	3.23E-08	2.35E-09	2.50E-09	4.85E-09	2.30E-09	2.23E-09	4.53E-09	1.22E-09	1.01E-09	2.23E-09
364	649813.29	4198714.75	1.52E-08	1.62E-08	3.15E-08	2.29E-09	2.44E-09	4.73E-09	2.24E-09	2.17E-09	4.41E-09	1.19E-09	9.85E-10	2.17E-09
365	649772.39	4198730.72	1.48E-08	1.58E-08	3.07E-08	2.23E-09	2.37E-09	4.61E-09	2.18E-09	2.12E-09	4.30E-09	1.16E-09	9.59E-10	2.12E-09
366	649731.49	4198746.69	1.45E-08	1.55E-08	3.00E-08	2.18E-09	2.32E-09	4.50E-09	2.13E-09	2.07E-09	4.20E-09	1.13E-09	9.37E-10	2.07E-09
367	650196.16	4198266.08	3.45E-08	3.68E-08	7.12E-08	5.18E-09	5.51E-09	1.07E-08	5.07E-09	4.91E-09	9.98E-09	2.69E-09	2.23E-09	4.92E-09
368	650285.94	4198312.66	2.57E-08	2.74E-08	5.30E-08	3.86E-09	4.10E-09	7.96E-09	3.77E-09	3.66E-09	7.43E-09	2.00E-09	1.66E-09	3.66E-09
369	650268.02	4198351.36	2.42E-08	2.58E-08	5.00E-08	3.64E-09	3.87E-09	7.51E-09	3.56E-09	3.45E-09	7.01E-09	1.89E-09	1.56E-09	3.45E-09
370	650250.1	4198390.07	2.27E-08	2.42E-08	4.69E-08	3.41E-09	3.63E-09	7.04E-09	3.34E-09	3.23E-09	6.57E-09	1.77E-09	1.47E-09	3.24E-09
371	650232.19	4198428.78	2.12E-08	2.26E-08	4.38E-08	3.19E-09	3.39E-09	6.58E-09	3.12E-09	3.02E-09	6.14E-09	1.66E-09	1.37E-09	3.03E-09
372	650214.27	4198467.49	1.98E-08	2.11E-08	4.09E-08	2.97E-09	3.16E-09	6.14E-09	2.91E-09	2.82E-09	5.73E-09	1.54E-09	1.28E-09	2.82E-09
373	650196.35	4198506.2	1.85E-08	1.97E-08	3.82E-08	2.78E-09	2.95E-09	5.73E-09	2.72E-09	2.63E-09	5.35E-09	1.44E-09	1.19E-09	2.64E-09
374	650178.43	4198544.91	1.73E-08	1.85E-08	3.58E-08	2.60E-09	2.77E-09	5.37E-09	2.55E-09	2.47E-09	5.01E-09	1.35E-09	1.12E-09	2.47E-09
375	650160.51	4198583.62	1.63E-08	1.73E-08	3.36E-08	2.44E-09	2.60E-09	5.04E-09	2.39E-09	2.32E-09	4.71E-09	1.27E-09	1.05E-09	2.32E-09
376	650142.6	4198622.32	1.53E-08	1.63E-08	3.16E-08	2.30E-09	2.44E-09	4.74E-09	2.25E-09	2.18E-09	4.42E-09	1.19E-09	9.87E-10	2.18E-09

377	650124.68	4198661.03	1.43E-08	1.53E-08	2.96E-08	2.16E-09	2.29E-09	4.45E-09	2.11E-09	2.04E-09	4.15E-09	1.12E-09	9.26E-10	2.05E-09
378	650086.89	4198707.5	1.34E-08	1.42E-08	2.76E-08	2.01E-09	2.14E-09	4.15E-09	1.96E-09	1.90E-09	3.87E-09	1.04E-09	8.64E-10	1.91E-09
379	650047.16	4198723.02	1.32E-08	1.41E-08	2.73E-08	1.99E-09	2.11E-09	4.10E-09	1.95E-09	1.89E-09	3.83E-09	1.03E-09	8.55E-10	1.89E-09
380	650007.43	4198738.53	1.30E-08	1.39E-08	2.69E-08	1.96E-09	2.08E-09	4.04E-09	1.91E-09	1.86E-09	3.77E-09	1.02E-09	8.41E-10	1.86E-09
381	649967.7	4198754.05	1.28E-08	1.36E-08	2.63E-08	1.92E-09	2.04E-09	3.96E-09	1.87E-09	1.82E-09	3.69E-09	9.96E-10	8.24E-10	1.82E-09
382	649927.96	4198769.56	1.24E-08	1.33E-08	2.57E-08	1.87E-09	1.99E-09	3.86E-09	1.83E-09	1.77E-09	3.60E-09	9.72E-10	8.04E-10	1.78E-09
383	649888.23	4198785.08	1.21E-08	1.29E-08	2.51E-08	1.83E-09	1.94E-09	3.77E-09	1.79E-09	1.73E-09	3.52E-09	9.48E-10	7.85E-10	1.73E-09
384	649848.5	4198800.6	1.18E-08	1.26E-08	2.44E-08	1.78E-09	1.89E-09	3.67E-09	1.74E-09	1.69E-09	3.43E-09	9.24E-10	7.65E-10	1.69E-09
385	649808.77	4198816.11	1.15E-08	1.23E-08	2.38E-08	1.73E-09	1.84E-09	3.58E-09	1.70E-09	1.64E-09	3.34E-09	9.01E-10	7.45E-10	1.65E-09
386	649769.03	4198831.63	1.13E-08	1.20E-08	2.33E-08	1.70E-09	1.80E-09	3.50E-09	1.66E-09	1.61E-09	3.27E-09	8.81E-10	7.29E-10	1.61E-09
387	649729.3	4198847.14	1.11E-08	1.18E-08	2.29E-08	1.66E-09	1.77E-09	3.43E-09	1.63E-09	1.58E-09	3.21E-09	8.65E-10	7.15E-10	1.58E-09
388	650296.03	4198271.18	2.76E-08	2.95E-08	5.71E-08	4.16E-09	4.42E-09	8.57E-09	4.06E-09	3.94E-09	8.00E-09	2.16E-09	1.79E-09	3.94E-09
389	650385.62	4198318.16	2.14E-08	2.28E-08	4.42E-08	3.22E-09	3.42E-09	6.63E-09	3.14E-09	3.05E-09	6.19E-09	1.67E-09	1.38E-09	3.05E-09
390	650367.33	4198357.68	2.03E-08	2.17E-08	4.20E-08	3.06E-09	3.25E-09	6.30E-09	2.99E-09	2.90E-09	5.88E-09	1.59E-09	1.31E-09	2.90E-09
391	650349.04	4198397.19	1.92E-08	2.05E-08	3.97E-08	2.89E-09	3.07E-09	5.96E-09	2.82E-09	2.74E-09	5.56E-09	1.50E-09	1.24E-09	2.74E-09
392	650330.75	4198436.71	1.81E-08	1.93E-08	3.74E-08	2.72E-09	2.89E-09	5.61E-09	2.66E-09	2.58E-09	5.24E-09	1.41E-09	1.17E-09	2.58E-09
393	650312.46	4198476.22	1.70E-08	1.81E-08	3.52E-08	2.56E-09	2.72E-09	5.28E-09	2.50E-09	2.43E-09	4.93E-09	1.33E-09	1.10E-09	2.43E-09
394	650294.17	4198515.74	1.60E-08	1.71E-08	3.31E-08	2.41E-09	2.56E-09	4.96E-09	2.35E-09	2.28E-09	4.63E-09	1.25E-09	1.03E-09	2.28E-09
395	650275.87	4198555.25	1.51E-08	1.61E-08	3.11E-08	2.27E-09	2.41E-09	4.68E-09	2.22E-09	2.15E-09	4.36E-09	1.18E-09	9.74E-10	2.15E-09
396	650257.58	4198594.77	1.42E-08	1.52E-08	2.94E-08	2.14E-09	2.28E-09	4.42E-09	2.09E-09	2.03E-09	4.12E-09	1.11E-09	9.20E-10	2.03E-09
397	650239.29	4198634.28	1.35E-08	1.44E-08	2.79E-08	2.03E-09	2.16E-09	4.18E-09	1.98E-09	1.92E-09	3.90E-09	1.05E-09	8.71E-10	1.92E-09
398	650221	4198673.8	1.28E-08	1.36E-08	2.64E-08	1.92E-09	2.04E-09	3.96E-09	1.88E-09	1.82E-09	3.70E-09	9.98E-10	8.26E-10	1.82E-09
399	650202.71	4198713.31	1.21E-08	1.29E-08	2.50E-08	1.82E-09	1.93E-09	3.75E-09	1.78E-09	1.72E-09	3.50E-09	9.44E-10	7.81E-10	1.72E-09
400	650184.42	4198752.83	1.14E-08	1.21E-08	2.35E-08	1.71E-09	1.82E-09	3.53E-09	1.67E-09	1.62E-09	3.30E-09	8.90E-10	7.36E-10	1.63E-09
401	650154.99	4198780.5	1.10E-08	1.17E-08	2.27E-08	1.65E-09	1.76E-09	3.41E-09	1.62E-09	1.57E-09	3.18E-09	8.59E-10	7.11E-10	1.57E-09
402	650114.43	4198796.34	1.09E-08	1.16E-08	2.25E-08	1.64E-09	1.74E-09	3.37E-09	1.60E-09	1.55E-09	3.15E-09	8.50E-10	7.03E-10	1.55E-09
403	650073.87	4198812.18	1.07E-08	1.14E-08	2.21E-08	1.61E-09	1.71E-09	3.32E-09	1.57E-09	1.52E-09	3.09E-09	8.35E-10	6.91E-10	1.53E-09
404	650033.31	4198828.02	1.05E-08	1.11E-08	2.16E-08	1.57E-09	1.67E-09	3.24E-09	1.54E-09	1.49E-09	3.03E-09	8.17E-10	6.76E-10	1.49E-09
405	649992.75	4198843.86	1.02E-08	1.09E-08	2.11E-08	1.53E-09	1.63E-09	3.16E-09	1.50E-09	1.45E-09	2.95E-09	7.96E-10	6.59E-10	1.46E-09
406	649952.19	4198859.7	9.93E-09	1.06E-08	2.05E-08	1.49E-09	1.59E-09	3.08E-09	1.46E-09	1.41E-09	2.87E-09	7.75E-10	6.41E-10	1.42E-09
407	649911.63	4198875.54	9.66E-09	1.03E-08	2.00E-08	1.45E-09	1.54E-09	3.00E-09	1.42E-09	1.38E-09	2.80E-09	7.55E-10	6.24E-10	1.38E-09
408	649871.07	4198891.38	9.43E-09	1.00E-08	1.95E-08	1.42E-09	1.51E-09	2.92E-09	1.39E-09	1.34E-09	2.73E-09	7.36E-10	6.09E-10	1.35E-09
409	649830.51	4198907.22	9.22E-09	9.83E-09	1.90E-08	1.39E-09	1.47E-09	2.86E-09	1.36E-09	1.31E-09	2.67E-09	7.20E-10	5.96E-10	1.32E-09
410	649789.95	4198923.06	9.04E-09	9.64E-09	1.87E-08	1.36E-09	1.45E-09	2.81E-09	1.33E-09	1.29E-09	2.62E-09	7.07E-10	5.84E-10	1.29E-09
411	649749.39	4198938.89	8.91E-09	9.50E-09	1.84E-08	1.34E-09	1.42E-09	2.76E-09	1.31E-09	1.27E-09	2.58E-09	6.96E-10	5.76E-10	1.27E-09
412	649708.83	4198954.73	8.82E-09	9.40E-09	1.82E-08	1.33E-09	1.41E-09	2.74E-09	1.30E-09	1.26E-09	2.55E-09	6.89E-10	5.70E-10	1.26E-09
413	650395.9	4198276.28	2.28E-08	2.43E-08	4.71E-08	3.43E-09	3.64E-09	7.07E-09	3.35E-09	3.25E-09	6.60E-09	1.78E-09	1.47E-09	3.25E-09
414	650397.03	4198254.16	2.37E-08	2.53E-08	4.90E-08	3.57E-09	3.79E-09	7.36E-09	3.49E-09	3.38E-09	6.87E-09	1.85E-09	1.53E-09	3.38E-09
415	650585.4	4198328.27	1.57E-08	1.68E-08	3.25E-08	2.37E-09	2.52E-09	4.88E-09	2.31E-09	2.24E-09	4.56E-09	1.23E-09	1.02E-09	2.25E-09
416	650567.2	4198367.61	1.51E-08	1.61E-08	3.13E-08	2.28E-09	2.42E-09	4.70E-09	2.23E-09	2.16E-09	4.38E-09	1.18E-09	9.78E-10	2.16E-09
417	650548.99	4198406.94	1.45E-08	1.55E-08	3.00E-08	2.18E-09	2.32E-09	4.50E-09	2.13E-09	2.07E-09	4.20E-09	1.13E-09	9.38E-10	2.07E-09
418	650530.78	4198446.27	1.39E-08	1.48E-08	2.87E-08	2.09E-09	2.22E-09	4.31E-09	2.04E-09	1.98E-09	4.02E-09	1.08E-09	8.97E-10	1.98E-09
419	650512.58	4198485.6	1.32E-08	1.41E-08	2.74E-08	1.99E-09	2.12E-09	4.11E-09	1.95E-09	1.89E-09	3.84E-09	1.03E-09	8.56E-10	1.89E-09
420	650494.37	4198524.94	1.26E-08	1.35E-08	2.61E-08	1.90E-09	2.02E-09	3.92E-09	1.86E-09	1.80E-09	3.65E-09	9.86E-10	8.16E-10	1.80E-09
421	650476.16	4198564.27	1.20E-08	1.28E-08	2.48E-08	1.81E-09	1.92E-09	3.73E-09	1.77E-09	1.71E-09	3.48E-09	9.39E-10	7.77E-10	1.72E-09
422	650457.96	4198603.6	1.15E-08	1.22E-08	2.37E-08	1.72E-09	1.83E-09	3.55E-09	1.68E-09	1.63E-09	3.32E-09	8.95E-10	7.40E-10	1.63E-09
423	650439.75	4198642.94	1.09E-08	1.17E-08	2.26E-08	1.64E-09	1.75E-09	3.39E-09	1.61E-09	1.56E-09	3.17E-09	8.54E-10	7.07E-10	1.56E-09
424	650421.54	4198682.27	1.05E-08	1.12E-08	2.16E-08	1.57E-09	1.67E-09	3.25E-09	1.54E-09	1.49E-09	3.03E-09	8.17E-10	6.76E-10	1.49E-09
425	650403.33	4198721.6	1.00E-08	1.07E-08	2.07E-08	1.51E-09	1.61E-09	3.11E-09	1.48E-09	1.43E-09	2.91E-09	7.84E-10	6.49E-10	1.43E-09
426	650385.13	4198760.94	9.64E-09	1.03E-08	1.99E-08	1.45E-09	1.54E-09	2.99E-09	1.42E-09	1.37E-09	2.79E-09	7.53E-10	6.23E-10	1.38E-09
427	650366.92	4198800.27	9.25E-09	9.86E-09	1.91E-08	1.39E-09	1.48E-09	2.87E-09	1.36E-09	1.32E-09	2.68E-09	7.23E-10	5.98E-10	1.32E-09
428	650348.71	4198839.6	8.85E-09	9.44E-09	1.83E-08	1.33E-09	1.42E-09	2.75E-09	1.30E-09	1.26E-09	2.56E-09	6.92E-10	5.72E-10	1.26E-09
429	650330.51	4198878.93	8.45E-09	9.01E-09	1.75E-08	1.27E-09	1.35E-09	2.62E-09	1.24E-09	1.20E-09	2.45E-09	6.60E-10	5.46E-10	1.21E-09
430	650292.11	4198926.15	7.98E-09	8.51E-09	1.65E-08	1.20E-09	1.28E-09	2.48E-09	1.17E-09	1.14E-09	2.31E-09	6.24E-10	5.16E-10	1.14E-09
431	650251.74	4198941.92	7.88E-09	8.40E-09	1.63E-08	1.18E-09	1.26E-09	2.44E-09	1.16E-09	1.12E-09	2.28E-09	6.15E-10	5.09E-10	1.12E-09
432	650211.37	4198957.68	7.74E-09	8.25E-09	1.60E-08	1.16E-09	1.24E-09	2.40E-09	1.14E-09	1.10E-09	2.24E-09	6.05E-10	5.00E-10	1.10E-09
433	650170.99	4198973.45	7.57E-09	8.07E-09	1.56E-08	1.14E-09	1.21E-09	2.35E-09	1.11E-09	1.08E-09	2.19E-09	5.91E-10	4.89E-10	1.08E-09
434	650130.62	4198989.22	7.38E-09	7.87E-09	1.53E-08	1.11E-09	1.18E-09	2.29E-09	1.09E-09	1.05E-09	2.14E-09	5.77E-10	4.77E-10	1.05E-09
435	650090.25	4199004.98	7.19E-09	7.67E-09	1.49E-08	1.08E-09	1.15E-09	2.23E-09	1.06E-09	1.03E-09	2.08E-09	5.62E-10	4.65E-10	1.03E-09
436	650049.87	4199020.75	7.01E-09	7.47E-09	1.45E-08	1.05E-09	1.12E-09	2.17E-09	1.03E-09	9.99E-10	2.03E-09	5.47E-10	4.53E-10	1.00E-09
437	650009.5	4199036.51	6.83E-09	7.29E-09	1.41E-08	1.03E-09	1.09E-09	2.12E-09	1.00E-09	9.74E-10	1.98E-09	5.34E-10	4.42E-10	9.75E-10
438	649969.13	4199052.28	6.68E-09	7.12E-09	1.38E-08	1.00E-09	1.07E-09	2.07E-09	9.82E-10	9.52E-10	1.93E-09	5.22E-10	4.32E-10	9.54E-10
439	649928.75	4199068.05	6.55E-09	6.99E-09	1.35E-08	9.85E-10	1.05E-09	2.03E-09	9.63E-10	9.34E-10	1.90E-09	5.12E-10	4.23E-10	9.35E-10
440	649888.38	4199083.81	6.45E-09	6.88E-09	1.33E-08	9.70E-10	1.03E-09	2.00E-09	9.48E-10	9.19E-10	1.87E-09	5.04E-10	4.17E-10	9.21E-10
441	649848.01	4199099.58	6.37E-09	6.80E-09	1.32E-08	9.59E-10	1.02E-09	1.98E-09	9.37E-10	9.08E-10	1.85E-09	4.98E-10	4.12E-10	9.10E-10
442	649807.63	4199115.34	6.32E-09	6.74E-09	1.31E-08	9.51E-10	1.01E-09	1.96E-09	9.30E-10	9.01E-10	1.83E-09	4.94E-10	4.09E-10	9.03E-10
443	649767.26	4199131.11	6.30E-09	6.71E-09	1.30E-08	9.47E-10	1.01E-09	1.95E-09	9.26E-10	8.97E-10	1.82E-09	4.92E-10	4.07E-10	8.99E-10
444	649726.89	4199146.88	6.28E-09	6.69E-09	1.30E-08	9.44E-10	1.00E-09	1.95E-09	9.23E-10	8.95E-10	1.82E-09	4.90E-10	4.06E-10	8.96E-10
445	650595.64	4198286.49	1.65E-08	1.76E-08	3.42E-08	2.49E-09	2.64E-09	5.13E-09	2.43E-09	2.36E-09	4.79E-09	1.29E-09	1.07E-09	2.36E-09
446	650785.17	4198338.42	1.22E-08	1.30E-08	2.53E-08	1.84E-09	1.96E-09	3.80E-09	1.80E-09	1.74E-09	3.54E-09	9.56E-10	7.91E-10	1.75E-09
447	650767.02	4198377.64	1.19E-08	1.26E-08	2.45E-08	1.78E-09	1.90E-09	3.68E-09	1.74E-09	1.69E-09	3.43E-09	9.27E-10	7.67E-10	1.69E-09
448	650748.86	4198416.86	1.15E-08	1.22E-08	2.37E-08	1.73E-09	1.83E-09	3.56E-09	1.69E-09	1.64E-09	3.32E-09	8.97E-10	7.42E-10	1.64E-09
449	650730.71	4198456.07	1.11E-08	1.18E-08	2.29E-08	1.67E-09	1.77E-09	3.44E-09	1.63E-09	1.58E-09	3.21E-09	8.66E-10	7.17E-10	1.58E-09
450	650712.56	4198495.29	1.07E-08	1.14E-08	2.21E-08	1.61E-09	1.71E-09	3.32E-09	1.57E-09	1.52E-09	3.10E-09	8.35E-10	6.91E-10	1.53E-09
451	650694.4	4198534.51	1.03E-08	1.10E-08	2.13E-08	1.55E-09	1.65E-09	3.19E-09	1.51E-09	1.47E-09	2.98E-09	8.04E-10	6.65E-10	1.47E-09
452	650676.25	4198573.73	9.89E-09	1.05E-08	2.04E-08	1.49E-09	1.58E-09	3.07E-09	1.45E-09	1.41E-09	2.86E-09	7.73E-10	6.39E-10	1.41E-09

453	650658.09	4198612.94	9.50E-09	1.01E-08	1.96E-08	1.43E-09	1.52E-09	2.95E-09	1.40E-09	1.35E-09	2.75E-09	7.42E-10	6.14E-10	1.36E-09
454	650639.94	4198652.16	9.13E-09	9.73E-09	1.89E-08	1.37E-09	1.46E-09	2.83E-09	1.34E-09	1.30E-09	2.64E-09	7.13E-10	5.90E-10	1.30E-09
455	650621.79	4198691.38	8.78E-09	9.35E-09	1.81E-08	1.32E-09	1.40E-09	2.72E-09	1.29E-09	1.25E-09	2.54E-09	6.85E-10	5.67E-10	1.25E-09
456	650603.63	4198730.6	8.46E-09	9.01E-09	1.75E-08	1.27E-09	1.35E-09	2.62E-09	1.24E-09	1.21E-09	2.45E-09	6.61E-10	5.46E-10	1.21E-09
457	650585.48	4198769.82	8.17E-09	8.71E-09	1.69E-08	1.23E-09	1.31E-09	2.53E-09	1.20E-09	1.16E-09	2.36E-09	6.38E-10	5.28E-10	1.17E-09
458	650567.32	4198809.03	7.90E-09	8.42E-09	1.63E-08	1.19E-09	1.26E-09	2.45E-09	1.16E-09	1.13E-09	2.29E-09	6.17E-10	5.11E-10	1.13E-09
459	650549.17	4198848.25	7.65E-09	8.16E-09	1.58E-08	1.15E-09	1.22E-09	2.37E-09	1.12E-09	1.09E-09	2.22E-09	5.98E-10	4.94E-10	1.09E-09
460	650531.02	4198887.47	7.41E-09	7.90E-09	1.53E-08	1.11E-09	1.18E-09	2.30E-09	1.09E-09	1.06E-09	2.14E-09	5.79E-10	4.79E-10	1.06E-09
461	650512.86	4198926.69	7.16E-09	7.63E-09	1.48E-08	1.08E-09	1.14E-09	2.22E-09	1.05E-09	1.02E-09	2.07E-09	5.59E-10	4.63E-10	1.02E-09
462	650494.71	4198965.91	6.91E-09	7.36E-09	1.43E-08	1.04E-09	1.10E-09	2.14E-09	1.02E-09	9.84E-10	2.00E-09	5.40E-10	4.46E-10	9.86E-10
463	650476.56	4199005.12	6.63E-09	7.07E-09	1.37E-08	9.98E-10	1.06E-09	2.06E-09	9.76E-10	9.46E-10	1.92E-09	5.18E-10	4.29E-10	9.47E-10
464	650458.4	4199044.34	6.35E-09	6.77E-09	1.31E-08	9.55E-10	1.02E-09	1.97E-09	9.34E-10	9.05E-10	1.84E-09	4.96E-10	4.10E-10	9.07E-10
465	650429.2	4199071.81	6.17E-09	6.58E-09	1.28E-08	9.28E-10	9.87E-10	1.91E-09	9.08E-10	8.80E-10	1.79E-09	4.82E-10	3.99E-10	8.81E-10
466	650388.94	4199087.53	6.08E-09	6.49E-09	1.26E-08	9.15E-10	9.73E-10	1.89E-09	8.95E-10	8.67E-10	1.76E-09	4.75E-10	3.93E-10	8.68E-10
467	650348.69	4199103.25	5.98E-09	6.37E-09	1.23E-08	8.99E-10	9.55E-10	1.85E-09	8.79E-10	8.52E-10	1.73E-09	4.67E-10	3.86E-10	8.53E-10
468	650308.43	4199118.97	5.85E-09	6.24E-09	1.21E-08	8.80E-10	9.35E-10	1.81E-09	8.60E-10	8.34E-10	1.69E-09	4.57E-10	3.78E-10	8.35E-10
469	650268.18	4199134.69	5.71E-09	6.09E-09	1.18E-08	8.59E-10	9.13E-10	1.77E-09	8.40E-10	8.14E-10	1.65E-09	4.46E-10	3.69E-10	8.15E-10
470	650227.92	4199150.41	5.57E-09	5.94E-09	1.15E-08	8.38E-10	8.91E-10	1.73E-09	8.19E-10	7.94E-10	1.61E-09	4.35E-10	3.60E-10	7.95E-10
471	650187.67	4199166.13	5.43E-09	5.79E-09	1.12E-08	8.17E-10	8.69E-10	1.69E-09	7.99E-10	7.74E-10	1.57E-09	4.25E-10	3.51E-10	7.76E-10
472	650147.41	4199181.85	5.31E-09	5.66E-09	1.10E-08	7.98E-10	8.48E-10	1.65E-09	7.80E-10	7.56E-10	1.54E-09	4.14E-10	3.43E-10	7.57E-10
473	650107.16	4199197.57	5.19E-09	5.53E-09	1.07E-08	7.80E-10	8.29E-10	1.61E-09	7.63E-10	7.39E-10	1.50E-09	4.05E-10	3.35E-10	7.41E-10
474	650066.9	4199213.29	5.09E-09	5.43E-09	1.05E-08	7.66E-10	8.14E-10	1.58E-09	7.49E-10	7.26E-10	1.47E-09	3.98E-10	3.29E-10	7.27E-10
475	650026.64	4199229.01	5.01E-09	5.34E-09	1.04E-08	7.53E-10	8.01E-10	1.55E-09	7.37E-10	7.14E-10	1.45E-09	3.91E-10	3.24E-10	7.15E-10
476	649986.39	4199244.73	4.95E-09	5.28E-09	1.02E-08	7.44E-10	7.91E-10	1.54E-09	7.28E-10	7.05E-10	1.43E-09	3.87E-10	3.20E-10	7.06E-10
477	649946.13	4199260.45	4.90E-09	5.23E-09	1.01E-08	7.37E-10	7.84E-10	1.52E-09	7.21E-10	6.99E-10	1.42E-09	3.83E-10	3.17E-10	7.00E-10
478	649905.88	4199276.17	4.88E-09	5.20E-09	1.01E-08	7.33E-10	7.79E-10	1.51E-09	7.17E-10	6.95E-10	1.41E-09	3.81E-10	3.15E-10	6.96E-10
479	649865.62	4199291.89	4.86E-09	5.18E-09	1.00E-08	7.30E-10	7.77E-10	1.51E-09	7.14E-10	6.92E-10	1.41E-09	3.79E-10	3.14E-10	6.93E-10
480	649825.37	4199307.61	4.85E-09	5.17E-09	1.00E-08	7.29E-10	7.75E-10	1.50E-09	7.13E-10	6.91E-10	1.40E-09	3.79E-10	3.13E-10	6.92E-10
481	649785.11	4199323.33	4.85E-09	5.17E-09	1.00E-08	7.29E-10	7.75E-10	1.50E-09	7.13E-10	6.91E-10	1.40E-09	3.79E-10	3.13E-10	6.92E-10
482	649744.86	4199339.05	4.85E-09	5.17E-09	1.00E-08	7.29E-10	7.75E-10	1.50E-09	7.13E-10	6.91E-10	1.40E-09	3.79E-10	3.13E-10	6.92E-10
483	650795.38	4198296.69	1.28E-08	1.36E-08	2.63E-08	1.92E-09	2.04E-09	3.96E-09	1.87E-09	1.82E-09	3.69E-09	9.96E-10	8.24E-10	1.82E-09
484	650984.72	4198349.03	9.90E-09	1.06E-08	2.04E-08	1.49E-09	1.58E-09	3.07E-09	1.46E-09	1.41E-09	2.87E-09	7.73E-10	6.40E-10	1.41E-09
485	650966.19	4198389.06	9.64E-09	1.03E-08	1.99E-08	1.45E-09	1.54E-09	2.99E-09	1.42E-09	1.37E-09	2.79E-09	7.53E-10	6.23E-10	1.38E-09
486	650947.66	4198429.08	9.37E-09	9.99E-09	1.94E-08	1.41E-09	1.50E-09	2.91E-09	1.38E-09	1.34E-09	2.71E-09	7.32E-10	6.06E-10	1.34E-09
487	650929.14	4198469.11	9.11E-09	9.71E-09	1.88E-08	1.37E-09	1.46E-09	2.83E-09	1.34E-09	1.30E-09	2.64E-09	7.11E-10	5.88E-10	1.30E-09
488	650910.61	4198509.14	8.84E-09	9.42E-09	1.83E-08	1.33E-09	1.41E-09	2.74E-09	1.30E-09	1.26E-09	2.56E-09	6.90E-10	5.71E-10	1.26E-09
489	650892.08	4198549.17	8.57E-09	9.13E-09	1.77E-08	1.29E-09	1.37E-09	2.66E-09	1.26E-09	1.22E-09	2.48E-09	6.69E-10	5.54E-10	1.22E-09
490	650873.55	4198589.2	8.29E-09	8.84E-09	1.71E-08	1.25E-09	1.33E-09	2.57E-09	1.22E-09	1.18E-09	2.40E-09	6.48E-10	5.36E-10	1.18E-09
491	650855.02	4198629.23	8.01E-09	8.54E-09	1.66E-08	1.21E-09	1.28E-09	2.49E-09	1.18E-09	1.14E-09	2.32E-09	6.26E-10	5.18E-10	1.14E-09
492	650836.49	4198669.25	7.74E-09	8.25E-09	1.60E-08	1.16E-09	1.24E-09	2.40E-09	1.14E-09	1.10E-09	2.24E-09	6.05E-10	5.00E-10	1.10E-09
493	650817.96	4198709.28	7.47E-09	7.96E-09	1.54E-08	1.12E-09	1.19E-09	2.32E-09	1.10E-09	1.06E-09	2.16E-09	5.83E-10	4.83E-10	1.07E-09
494	650799.43	4198749.31	7.21E-09	7.69E-09	1.49E-08	1.08E-09	1.15E-09	2.24E-09	1.06E-09	1.03E-09	2.09E-09	5.64E-10	4.66E-10	1.03E-09
495	650780.9	4198789.34	6.99E-09	7.45E-09	1.44E-08	1.05E-09	1.12E-09	2.17E-09	1.03E-09	9.96E-10	2.02E-09	5.46E-10	4.51E-10	9.97E-10
496	650762.38	4198829.37	6.78E-09	7.22E-09	1.40E-08	1.02E-09	1.08E-09	2.10E-09	9.96E-10	9.66E-10	1.96E-09	5.29E-10	4.38E-10	9.67E-10
497	650743.85	4198869.4	6.59E-09	7.02E-09	1.36E-08	9.90E-10	1.05E-09	2.04E-09	9.68E-10	9.38E-10	1.91E-09	5.14E-10	4.26E-10	9.40E-10
498	650725.32	4198909.42	6.41E-09	6.83E-09	1.32E-08	9.64E-10	1.02E-09	1.99E-09	9.42E-10	9.13E-10	1.86E-09	5.01E-10	4.14E-10	9.15E-10
499	650706.79	4198949.45	6.24E-09	6.65E-09	1.29E-08	9.39E-10	9.98E-10	1.94E-09	9.18E-10	8.90E-10	1.81E-09	4.88E-10	4.03E-10	8.91E-10
500	650688.26	4198989.48	6.08E-09	6.48E-09	1.26E-08	9.14E-10	9.71E-10	1.88E-09	8.93E-10	8.66E-10	1.76E-09	4.75E-10	3.93E-10	8.67E-10
501	650669.73	4199029.51	5.91E-09	6.30E-09	1.22E-08	8.88E-10	9.44E-10	1.83E-09	8.68E-10	8.42E-10	1.71E-09	4.61E-10	3.82E-10	8.43E-10
502	650651.2	4199069.54	5.72E-09	6.10E-09	1.18E-08	8.61E-10	9.15E-10	1.78E-09	8.42E-10	8.16E-10	1.66E-09	4.47E-10	3.70E-10	8.17E-10
503	650632.67	4199109.56	5.53E-09	5.90E-09	1.14E-08	8.32E-10	8.85E-10	1.72E-09	8.14E-10	7.89E-10	1.60E-09	4.32E-10	3.58E-10	7.90E-10
504	650614.14	4199149.59	5.33E-09	5.68E-09	1.10E-08	8.02E-10	8.52E-10	1.65E-09	7.84E-10	7.60E-10	1.54E-09	4.17E-10	3.45E-10	7.61E-10
505	650595.62	4199189.62	5.12E-09	5.46E-09	1.06E-08	7.70E-10	8.18E-10	1.59E-09	7.53E-10	7.29E-10	1.48E-09	4.00E-10	3.31E-10	7.31E-10
506	650565.81	4199217.66	4.98E-09	5.31E-09	1.03E-08	7.48E-10	7.96E-10	1.54E-09	7.32E-10	7.09E-10	1.44E-09	3.89E-10	3.22E-10	7.10E-10
507	650524.72	4199233.7	4.90E-09	5.23E-09	1.01E-08	7.37E-10	7.84E-10	1.52E-09	7.21E-10	6.99E-10	1.42E-09	3.83E-10	3.17E-10	7.00E-10
508	650483.63	4199249.75	4.82E-09	5.14E-09	9.96E-09	7.25E-10	7.70E-10	1.50E-09	7.09E-10	6.87E-10	1.40E-09	3.76E-10	3.11E-10	6.88E-10
509	650442.55	4199265.79	4.72E-09	5.03E-09	9.75E-09	7.10E-10	7.55E-10	1.46E-09	6.94E-10	6.73E-10	1.37E-09	3.69E-10	3.05E-10	6.74E-10
510	650401.46	4199281.84	4.61E-09	4.92E-09	9.53E-09	6.94E-10	7.38E-10	1.43E-09	6.78E-10	6.58E-10	1.34E-09	3.60E-10	2.98E-10	6.59E-10
511	650360.37	4199297.88	4.50E-09	4.80E-09	9.30E-09	6.77E-10	7.20E-10	1.40E-09	6.62E-10	6.42E-10	1.30E-09	3.52E-10	2.91E-10	6.43E-10
512	650319.29	4199313.93	4.40E-09	4.69E-09	9.09E-09	6.61E-10	7.03E-10	1.36E-09	6.47E-10	6.27E-10	1.27E-09	3.44E-10	2.84E-10	6.28E-10
513	650278.2	4199329.97	4.30E-09	4.58E-09	8.87E-09	6.46E-10	6.87E-10	1.33E-09	6.32E-10	6.12E-10	1.24E-09	3.36E-10	2.78E-10	6.13E-10
514	650237.11	4199346.02	4.20E-09	4.48E-09	8.69E-09	6.32E-10	6.72E-10	1.30E-09	6.18E-10	5.99E-10	1.22E-09	3.28E-10	2.72E-10	6.00E-10
515	650196.02	4199362.06	4.13E-09	4.40E-09	8.53E-09	6.21E-10	6.60E-10	1.28E-09	6.07E-10	5.88E-10	1.20E-09	3.23E-10	2.67E-10	5.89E-10
516	650154.94	4199378.11	4.06E-09	4.33E-09	8.39E-09	6.11E-10	6.49E-10	1.26E-09	5.97E-10	5.79E-10	1.18E-09	3.17E-10	2.62E-10	5.80E-10
517	650113.85	4199394.15	4.01E-09	4.28E-09	8.29E-09	6.03E-10	6.41E-10	1.24E-09	5.90E-10	5.72E-10	1.16E-09	3.13E-10	2.59E-10	5.73E-10
518	650072.76	4199410.2	3.98E-09	4.24E-09	8.22E-09	5.98E-10	6.36E-10	1.23E-09	5.85E-10	5.67E-10	1.15E-09	3.11E-10	2.57E-10	5.68E-10
519	650031.68	4199426.24	3.96E-09	4.22E-09	8.17E-09	5.95E-10	6.32E-10	1.23E-09	5.82E-10	5.64E-10	1.15E-09	3.09E-10	2.56E-10	5.65E-10
520	649990.59	4199442.29	3.94E-09	4.20E-09	8.14E-09	5.93E-10	6.30E-10	1.22E-09	5.79E-10	5.62E-10	1.14E-09	3.08E-10	2.55E-10	5.63E-10
521	649949.5	4199458.33	3.94E-09	4.20E-09	8.13E-09	5.92E-10	6.29E-10	1.22E-09	5.79E-10	5.61E-10	1.14E-09	3.07E-10	2.54E-10	5.62E-10
522	649908.42	4199474.38	3.93E-09	4.19E-09	8.12E-09	5.91E-10	6.29E-10	1.22E-09	5.78E-10	5.60E-10	1.14E-09	3.07E-10	2.54E-10	5.61E-10
523	649867.33	4199490.42	3.93E-09	4.19E-09	8.12E-09	5.91E-10	6.29E-10	1.22E-09	5.78E-10	5.60E-10	1.14E-09	3.07E-10	2.54E-10	5.61E-10
524	649826.24	4199506.47	3.94E-09	4.20E-09	8.13E-09	5.92E-10	6.29E-10	1.22E-09	5.79E-10	5.61E-10	1.14E-09	3.07E-10	2.54E-10	5.62E-10
525	649785.15	4199522.51	3.94E-09	4.20E-09	8.13E-09	5.92E-10	6.29E-10	1.22E-09	5.79E-10	5.61E-10	1.14E-09	3.07E-10	2.54E-10	5.62E-10
526	649744.07	4199538.56	3.93E-09	4.19E-09	8.12E-09	5.91E-10	6.29E-10	1.22E-09	5.78E-10	5.60E-10	1.14E-09	3.07E-10	2.54E-10	5.61E-10
527	650995.12	4198306.89	1.03E-08	1.09E-08	2.12E-08	1.54E-09	1.64E-09	3.18E-09	1.51E-09	1.46E-09	2.97E-09	8.01E-10	6.63E-10	1.46E-09
528	651184.5	4198359.14	8.25E-09	8.79E-09	1.70E-08	1.24E-09	1.32E-09	2.56E-09	1.21E-09	1.18E-09	2.39E-09	6.44E-10	5.33E-10	1.18E-09

529	651166.06	4198398.99	8.06E-09	8.59E-09	1.66E-08	1.21E-09	1.29E-09	2.50E-09	1.18E-09	1.15E-09	2.33E-09	6.29E-10	5.21E-10	1.15E-09
530	651147.61	4198438.84	7.87E-09	8.39E-09	1.63E-08	1.18E-09	1.26E-09	2.44E-09	1.16E-09	1.12E-09	2.28E-09	6.15E-10	5.08E-10	1.12E-09
531	651129.17	4198478.68	7.68E-09	8.19E-09	1.59E-08	1.15E-09	1.23E-09	2.38E-09	1.13E-09	1.09E-09	2.22E-09	6.00E-10	4.96E-10	1.10E-09
532	651110.72	4198518.53	7.50E-09	7.99E-09	1.55E-08	1.13E-09	1.20E-09	2.33E-09	1.10E-09	1.07E-09	2.17E-09	5.86E-10	4.84E-10	1.07E-09
533	651092.28	4198558.38	7.31E-09	7.79E-09	1.51E-08	1.10E-09	1.17E-09	2.27E-09	1.07E-09	1.04E-09	2.12E-09	5.71E-10	4.72E-10	1.04E-09
534	651073.83	4198598.22	7.12E-09	7.59E-09	1.47E-08	1.07E-09	1.14E-09	2.21E-09	1.05E-09	1.01E-09	2.06E-09	5.56E-10	4.60E-10	1.02E-09
535	651055.39	4198638.07	6.92E-09	7.38E-09	1.43E-08	1.04E-09	1.11E-09	2.15E-09	1.02E-09	9.87E-10	2.00E-09	5.41E-10	4.47E-10	9.88E-10
536	651036.94	4198677.92	6.73E-09	7.17E-09	1.39E-08	1.01E-09	1.08E-09	2.09E-09	9.89E-10	9.59E-10	1.95E-09	5.26E-10	4.35E-10	9.60E-10
537	651018.5	4198717.77	6.53E-09	6.96E-09	1.35E-08	9.82E-10	1.04E-09	2.03E-09	9.60E-10	9.31E-10	1.89E-09	5.10E-10	4.22E-10	9.32E-10
538	651000.05	4198757.61	6.34E-09	6.75E-09	1.31E-08	9.53E-10	1.01E-09	1.97E-09	9.32E-10	9.03E-10	1.83E-09	4.95E-10	4.09E-10	9.04E-10
539	650981.61	4198797.46	6.15E-09	6.55E-09	1.27E-08	9.24E-10	9.83E-10	1.91E-09	9.04E-10	8.76E-10	1.78E-09	4.80E-10	3.97E-10	8.77E-10
540	650963.16	4198837.31	5.97E-09	6.36E-09	1.23E-08	8.98E-10	9.54E-10	1.85E-09	8.78E-10	8.51E-10	1.73E-09	4.66E-10	3.86E-10	8.52E-10
541	650944.72	4198877.15	5.81E-09	6.19E-09	1.20E-08	8.74E-10	9.29E-10	1.80E-09	8.54E-10	8.28E-10	1.68E-09	4.54E-10	3.75E-10	8.29E-10
542	650926.27	4198917	5.67E-09	6.04E-09	1.17E-08	8.52E-10	9.06E-10	1.76E-09	8.33E-10	8.07E-10	1.64E-09	4.43E-10	3.66E-10	8.09E-10
543	650907.83	4198956.85	5.53E-09	5.90E-09	1.14E-08	8.32E-10	8.84E-10	1.72E-09	8.13E-10	7.88E-10	1.60E-09	4.32E-10	3.57E-10	7.89E-10
544	650889.38	4198996.69	5.41E-09	5.77E-09	1.12E-08	8.14E-10	8.65E-10	1.68E-09	7.96E-10	7.71E-10	1.57E-09	4.23E-10	3.50E-10	7.72E-10
545	650870.94	4199036.54	5.29E-09	5.64E-09	1.09E-08	7.96E-10	8.46E-10	1.64E-09	7.78E-10	7.54E-10	1.53E-09	4.14E-10	3.42E-10	7.56E-10
546	650852.49	4199076.39	5.18E-09	5.52E-09	1.07E-08	7.78E-10	8.28E-10	1.61E-09	7.61E-10	7.38E-10	1.50E-09	4.04E-10	3.35E-10	7.39E-10
547	650834.05	4199116.24	5.06E-09	5.39E-09	1.04E-08	7.60E-10	8.08E-10	1.57E-09	7.43E-10	7.21E-10	1.46E-09	3.95E-10	3.27E-10	7.22E-10
548	650815.6	4199156.08	4.93E-09	5.26E-09	1.02E-08	7.41E-10	7.88E-10	1.53E-09	7.25E-10	7.03E-10	1.43E-09	3.85E-10	3.19E-10	7.04E-10
549	650797.16	4199195.93	4.80E-09	5.11E-09	9.91E-09	7.21E-10	7.67E-10	1.49E-09	7.05E-10	6.83E-10	1.39E-09	3.75E-10	3.10E-10	6.85E-10
550	650778.71	4199235.78	4.65E-09	4.96E-09	9.61E-09	7.00E-10	7.44E-10	1.44E-09	6.84E-10	6.63E-10	1.35E-09	3.63E-10	3.01E-10	6.64E-10
551	650760.27	4199275.62	4.50E-09	4.79E-09	9.29E-09	6.76E-10	7.19E-10	1.40E-09	6.61E-10	6.41E-10	1.30E-09	3.51E-10	2.91E-10	6.42E-10
552	650741.82	4199315.47	4.34E-09	4.62E-09	8.96E-09	6.52E-10	6.93E-10	1.35E-09	6.38E-10	6.18E-10	1.26E-09	3.39E-10	2.80E-10	6.19E-10
553	650702.93	4199363.3	4.15E-09	4.42E-09	8.57E-09	6.23E-10	6.63E-10	1.29E-09	6.10E-10	5.91E-10	1.20E-09	3.24E-10	2.68E-10	5.92E-10
554	650662.03	4199379.28	4.08E-09	4.35E-09	8.44E-09	6.14E-10	6.53E-10	1.27E-09	6.01E-10	5.82E-10	1.18E-09	3.19E-10	2.64E-10	5.83E-10
555	650621.12	4199395.25	4.01E-09	4.28E-09	8.29E-09	6.04E-10	6.42E-10	1.25E-09	5.90E-10	5.72E-10	1.16E-09	3.14E-10	2.59E-10	5.73E-10
556	650580.22	4199411.22	3.94E-09	4.20E-09	8.13E-09	5.92E-10	6.29E-10	1.22E-09	5.79E-10	5.61E-10	1.14E-09	3.07E-10	2.54E-10	5.62E-10
557	650539.32	4199427.19	3.86E-09	4.11E-09	7.97E-09	5.80E-10	6.17E-10	1.20E-09	5.67E-10	5.50E-10	1.12E-09	3.01E-10	2.49E-10	5.51E-10
558	650498.42	4199443.17	3.77E-09	4.02E-09	7.80E-09	5.68E-10	6.03E-10	1.17E-09	5.55E-10	5.38E-10	1.09E-09	2.95E-10	2.44E-10	5.39E-10
559	650457.52	4199459.14	3.69E-09	3.94E-09	7.63E-09	5.55E-10	5.90E-10	1.15E-09	5.43E-10	5.26E-10	1.07E-09	2.88E-10	2.39E-10	5.27E-10
560	650416.62	4199475.11	3.61E-09	3.85E-09	7.46E-09	5.43E-10	5.78E-10	1.12E-09	5.31E-10	5.15E-10	1.05E-09	2.82E-10	2.33E-10	5.16E-10
561	650375.72	4199491.08	3.54E-09	3.77E-09	7.31E-09	5.32E-10	5.66E-10	1.10E-09	5.20E-10	5.04E-10	1.02E-09	2.77E-10	2.29E-10	5.05E-10
562	650334.82	4199507.06	3.48E-09	3.71E-09	7.18E-09	5.23E-10	5.56E-10	1.08E-09	5.11E-10	4.95E-10	1.01E-09	2.71E-10	2.25E-10	4.96E-10
563	650293.92	4199523.03	3.42E-09	3.65E-09	7.07E-09	5.14E-10	5.47E-10	1.06E-09	5.03E-10	4.87E-10	9.90E-10	2.67E-10	2.21E-10	4.88E-10
564	650253.02	4199539	3.38E-09	3.60E-09	6.97E-09	5.08E-10	5.40E-10	1.05E-09	4.96E-10	4.81E-10	9.77E-10	2.64E-10	2.18E-10	4.82E-10
565	650212.11	4199554.97	3.34E-09	3.56E-09	6.90E-09	5.02E-10	5.34E-10	1.04E-09	4.91E-10	4.76E-10	9.67E-10	2.61E-10	2.16E-10	4.77E-10
566	650171.21	4199570.94	3.32E-09	3.54E-09	6.85E-09	4.99E-10	5.30E-10	1.03E-09	4.88E-10	4.73E-10	9.61E-10	2.59E-10	2.14E-10	4.74E-10
567	650130.31	4199586.92	3.30E-09	3.52E-09	6.82E-09	4.97E-10	5.28E-10	1.02E-09	4.86E-10	4.71E-10	9.56E-10	2.58E-10	2.13E-10	4.71E-10
568	650089.41	4199602.89	3.30E-09	3.51E-09	6.81E-09	4.96E-10	5.27E-10	1.02E-09	4.85E-10	4.70E-10	9.55E-10	2.58E-10	2.13E-10	4.71E-10
569	650048.51	4199618.86	3.29E-09	3.51E-09	6.81E-09	4.95E-10	5.27E-10	1.02E-09	4.84E-10	4.69E-10	9.54E-10	2.57E-10	2.13E-10	4.70E-10
570	650007.61	4199634.83	3.30E-09	3.51E-09	6.81E-09	4.96E-10	5.27E-10	1.02E-09	4.85E-10	4.70E-10	9.55E-10	2.58E-10	2.13E-10	4.71E-10
571	649966.71	4199650.81	3.30E-09	3.52E-09	6.82E-09	4.96E-10	5.28E-10	1.02E-09	4.85E-10	4.70E-10	9.55E-10	2.58E-10	2.13E-10	4.71E-10
572	649925.81	4199666.78	3.30E-09	3.52E-09	6.82E-09	4.96E-10	5.28E-10	1.02E-09	4.85E-10	4.70E-10	9.55E-10	2.58E-10	2.13E-10	4.71E-10
573	649884.91	4199682.75	3.30E-09	3.52E-09	6.82E-09	4.97E-10	5.28E-10	1.02E-09	4.86E-10	4.71E-10	9.56E-10	2.58E-10	2.13E-10	4.71E-10
574	649844	4199698.72	3.30E-09	3.52E-09	6.82E-09	4.96E-10	5.28E-10	1.02E-09	4.85E-10	4.70E-10	9.55E-10	2.58E-10	2.13E-10	4.71E-10
575	649803.1	4199714.7	3.29E-09	3.51E-09	6.81E-09	4.95E-10	5.27E-10	1.02E-09	4.84E-10	4.69E-10	9.54E-10	2.57E-10	2.13E-10	4.70E-10
576	649762.2	4199730.67	3.29E-09	3.51E-09	6.79E-09	4.94E-10	5.26E-10	1.02E-09	4.83E-10	4.69E-10	9.52E-10	2.57E-10	2.12E-10	4.69E-10
577	651194.86	4198317.1	8.51E-09	9.07E-09	1.76E-08	1.28E-09	1.36E-09	2.64E-09	1.25E-09	1.21E-09	2.46E-09	6.65E-10	5.50E-10	1.21E-09
578	649707	4198197.34	9.67E-07	1.03E-06	2.00E-06	1.45E-07	1.55E-07	3.00E-07	1.42E-07	1.38E-07	2.80E-07	7.55E-08	6.25E-08	1.38E-07
579	649681.31	4198193.45	1.52E-06	1.62E-06	3.14E-06	2.28E-07	2.43E-07	4.71E-07	2.23E-07	2.16E-07	4.40E-07	1.19E-07	9.81E-08	2.17E-07
580	649710.02	4198173.64	9.33E-07	9.94E-07	1.93E-06	1.40E-07	1.49E-07	2.89E-07	1.37E-07	1.33E-07	2.70E-07	7.29E-08	6.03E-08	1.33E-07
581	649738.75	4198196.34	5.50E-07	5.86E-07	1.14E-06	8.27E-08	8.79E-08	1.71E-07	8.08E-08	7.83E-08	1.59E-07	4.29E-08	3.55E-08	7.85E-08
582	649681.31	4198168.45	1.55E-06	1.66E-06	3.21E-06	2.34E-07	2.48E-07	4.82E-07	2.28E-07	2.21E-07	4.50E-07	1.21E-07	1.00E-07	2.22E-07
583	649711.53	4198149.28	8.72E-07	9.29E-07	1.80E-06	1.31E-07	1.39E-07	2.70E-07	1.28E-07	1.24E-07	2.52E-07	6.81E-08	5.63E-08	1.24E-07
584	649738.72	4198160.95	5.98E-07	6.37E-07	1.24E-06	8.99E-08	9.56E-08	1.85E-07	8.79E-08	8.52E-08	1.73E-07	4.67E-08	3.86E-08	8.53E-08
585	649757.44	4198180.66	4.47E-07	4.77E-07	9.25E-07	6.73E-08	7.15E-08	1.39E-07	6.58E-08	6.38E-08	1.30E-07	3.50E-08	2.89E-08	6.39E-08
586	649767.71	4198208.4	3.34E-07	3.56E-07	6.91E-07	5.03E-08	5.34E-08	1.04E-07	4.91E-08	4.76E-08	9.68E-08	2.61E-08	2.16E-08	4.77E-08
587	649681.31	4198143.45	1.30E-06	1.38E-06	2.68E-06	1.95E-07	2.07E-07	4.03E-07	1.91E-07	1.85E-07	3.76E-07	1.01E-07	8.39E-08	1.85E-07
588	649712.44	4198124.67	7.35E-07	7.84E-07	1.52E-06	1.11E-07	1.18E-07	2.28E-07	1.08E-07	1.05E-07	2.13E-07	5.74E-08	4.75E-08	1.05E-07
589	649741.44	4198137.12	5.66E-07	6.04E-07	1.17E-06	8.52E-08	9.05E-08	1.76E-07	8.33E-08	8.07E-08	1.64E-07	4.42E-08	3.66E-08	8.08E-08
590	649775.91	4198164.36	3.78E-07	4.03E-07	7.82E-07	5.69E-08	6.05E-08	1.17E-07	5.56E-08	5.39E-08	1.10E-07	2.96E-08	2.44E-08	5.40E-08
591	649786.86	4198193.96	2.95E-07	3.14E-07	6.08E-07	4.43E-08	4.71E-08	9.14E-08	4.33E-08	4.20E-08	8.53E-08	2.30E-08	1.90E-08	4.20E-08
592	649681.31	4198118.45	8.91E-07	9.49E-07	1.84E-06	1.34E-07	1.42E-07	2.76E-07	1.31E-07	1.27E-07	2.58E-07	6.96E-08	5.75E-08	1.27E-07
593	649711.53	4198074.28	5.21E-07	5.55E-07	1.08E-06	7.84E-08	8.33E-08	1.62E-07	7.66E-08	7.43E-08	1.51E-07	4.07E-08	3.37E-08	7.44E-08
594	649738.72	4198085.95	4.77E-07	5.09E-07	9.86E-07	7.17E-08	7.63E-08	1.48E-07	7.01E-08	6.80E-08	1.38E-07	3.73E-08	3.08E-08	6.81E-08
595	649765.9	4198097.62	4.12E-07	4.39E-07	8.52E-07	6.20E-08	6.59E-08	1.28E-07	6.06E-08	5.87E-08	1.19E-07	3.22E-08	2.66E-08	5.88E-08
596	649793.09	4198109.29	3.40E-07	3.63E-07	7.03E-07	5.11E-08	5.44E-08	1.05E-07	5.00E-08	4.85E-08	9.85E-08	2.66E-08	2.20E-08	4.85E-08
597	649811.81	4198129	2.90E-07	3.09E-07	5.98E-07	4.35E-08	4.63E-08	8.98E-08	4.26E-08	4.13E-08	8.38E-08	2.26E-08	1.87E-08	4.13E-08
598	649822.08	4198156.74	2.49E-07	2.65E-07	5.14E-07	3.74E-08	3.98E-08	7.72E-08	3.66E-08	3.55E-08	7.20E-08	1.94E-08	1.61E-08	3.55E-08
599	649832.34	4198184.49	2.03E-07	2.17E-07	4.20E-07	3.06E-08	3.25E-08	6.31E-08	2.99E-08	2.90E-08	5.89E-08	1.59E-08	1.31E-08	2.90E-08
600	649842.61	4198212.23	1.61E-07	1.72E-07	3.33E-07	2.42E-08	2.57E-08	5.00E-08	2.37E-08	2.29E-08	4.66E-08	1.26E-08	1.04E-08	2.30E-08
601	649681.31	4198068.45	5.74E-07	6.12E-07	1.19E-06	8.63E-08	9.17E-08	1.78E-07	8.44E-08	8.18E-08	1.66E-07	4.48E-08	3.71E-08	8.19E-08
602	649712.44	4198024.67	4.08E-07	4.35E-07	8.43E-07	6.14E-08	6.52E-08	1.27E-07	6.00E-08	5.81E-08	1.18E-07	3.19E-08	2.64E-08	5.82E-08
603	649741.44	4198037.12	3.83E-07	4.08E-07	7.90E-07	5.75E-08	6.12E-08	1.19E-07	5.62E-08	5.45E-08	1.11E-07	2.99E-08	2.47E-08	5.46E-08
604	649770.43	4198049.57	3.49E-07	3.72E-07	7.21E-07	5.25E-08	5.58E-08	1.08E-07	5.13E-08	4.98E-08	1.01E-07	2.73E-08	2.26E-08	4.98E-08

605	649799.43	4198062.01	3.08E-07	3.28E-07	6.36E-07	4.63E-08	4.92E-08	9.55E-08	4.52E-08	4.39E-08	8.91E-08	2.40E-08	1.99E-08	4.39E-08
606	649828.43	4198074.46	2.63E-07	2.80E-07	5.42E-07	3.95E-08	4.20E-08	8.14E-08	3.86E-08	3.74E-08	7.60E-08	2.05E-08	1.70E-08	3.75E-08
607	649848.4	4198095.48	2.30E-07	2.46E-07	4.76E-07	3.46E-08	3.68E-08	7.15E-08	3.39E-08	3.28E-08	6.67E-08	1.80E-08	1.49E-08	3.29E-08
608	649859.35	4198125.07	2.05E-07	2.18E-07	4.23E-07	3.08E-08	3.27E-08	6.35E-08	3.01E-08	2.92E-08	5.93E-08	1.60E-08	1.32E-08	2.92E-08
609	649870.3	4198154.67	1.74E-07	1.86E-07	3.60E-07	2.62E-08	2.79E-08	5.41E-08	2.56E-08	2.49E-08	5.05E-08	1.36E-08	1.13E-08	2.49E-08
610	649881.25	4198184.26	1.44E-07	1.54E-07	2.98E-07	2.17E-08	2.30E-08	4.47E-08	2.12E-08	2.05E-08	4.17E-08	1.13E-08	9.31E-09	2.06E-08
611	649681.31	4198018.45	4.45E-07	4.74E-07	9.19E-07	6.69E-08	7.11E-08	1.38E-07	6.54E-08	6.34E-08	1.29E-07	3.47E-08	2.87E-08	6.35E-08
612	649713.04	4197974.93	3.41E-07	3.63E-07	7.04E-07	5.13E-08	5.45E-08	1.06E-07	5.01E-08	4.86E-08	9.87E-08	2.66E-08	2.20E-08	4.87E-08
613	649743.25	4197987.9	3.21E-07	3.42E-07	6.63E-07	4.82E-08	5.13E-08	9.95E-08	4.72E-08	4.57E-08	9.29E-08	2.51E-08	2.07E-08	4.58E-08
614	649773.45	4198000.86	2.98E-07	3.18E-07	6.16E-07	4.48E-08	4.77E-08	9.25E-08	4.38E-08	4.25E-08	8.63E-08	2.33E-08	1.93E-08	4.26E-08
615	649803.66	4198013.83	2.72E-07	2.90E-07	5.63E-07	4.10E-08	4.35E-08	8.45E-08	4.01E-08	3.88E-08	7.89E-08	2.13E-08	1.76E-08	3.89E-08
616	649833.86	4198026.79	2.44E-07	2.60E-07	5.03E-07	3.66E-08	3.89E-08	7.55E-08	3.58E-08	3.47E-08	7.05E-08	1.90E-08	1.57E-08	3.48E-08
617	649864.07	4198039.76	2.12E-07	2.26E-07	4.38E-07	3.19E-08	3.39E-08	6.58E-08	3.12E-08	3.02E-08	6.14E-08	1.66E-08	1.37E-08	3.03E-08
618	649884.87	4198061.66	1.90E-07	2.03E-07	3.93E-07	2.86E-08	3.04E-08	5.90E-08	2.79E-08	2.71E-08	5.50E-08	1.48E-08	1.23E-08	2.71E-08
619	649896.28	4198092.48	1.73E-07	1.84E-07	3.57E-07	2.60E-08	2.76E-08	5.36E-08	2.54E-08	2.46E-08	5.00E-08	1.35E-08	1.12E-08	2.47E-08
620	649907.69	4198123.31	1.52E-07	1.62E-07	3.14E-07	2.28E-08	2.43E-08	4.71E-08	2.23E-08	2.16E-08	4.40E-08	1.19E-08	9.81E-09	2.17E-08
621	649919.1	4198154.14	1.30E-07	1.38E-07	2.68E-07	1.95E-08	2.07E-08	4.03E-08	1.91E-08	1.85E-08	3.76E-08	1.01E-08	8.38E-09	1.85E-08
622	649930.5	4198184.96	1.09E-07	1.16E-07	2.25E-07	1.64E-08	1.74E-08	3.38E-08	1.60E-08	1.55E-08	3.15E-08	8.51E-09	7.04E-09	1.55E-08
623	649681.31	4197968.45	3.70E-07	3.94E-07	7.64E-07	5.56E-08	5.91E-08	1.15E-07	5.44E-08	5.27E-08	1.07E-07	2.89E-08	2.39E-08	5.28E-08
624	649712.44	4197924.67	2.93E-07	3.12E-07	6.06E-07	4.41E-08	4.69E-08	9.09E-08	4.31E-08	4.18E-08	8.49E-08	2.29E-08	1.89E-08	4.18E-08
625	649741.44	4197937.12	2.77E-07	2.96E-07	5.73E-07	4.17E-08	4.44E-08	8.61E-08	4.08E-08	3.95E-08	8.03E-08	2.17E-08	1.79E-08	3.96E-08
626	649770.43	4197949.57	2.61E-07	2.78E-07	5.39E-07	3.92E-08	4.17E-08	8.10E-08	3.84E-08	3.72E-08	7.56E-08	2.04E-08	1.69E-08	3.73E-08
627	649799.43	4197962.01	2.44E-07	2.60E-07	5.05E-07	3.67E-08	3.90E-08	7.58E-08	3.59E-08	3.48E-08	7.07E-08	1.91E-08	1.58E-08	3.49E-08
628	649828.43	4197974.46	2.27E-07	2.42E-07	4.70E-07	3.42E-08	3.63E-08	7.05E-08	3.34E-08	3.24E-08	6.58E-08	1.78E-08	1.47E-08	3.24E-08
629	649857.42	4197986.91	2.08E-07	2.22E-07	4.29E-07	3.13E-08	3.32E-08	6.45E-08	3.06E-08	2.96E-08	6.02E-08	1.62E-08	1.34E-08	2.97E-08
630	649886.42	4197999.35	1.87E-07	1.99E-07	3.86E-07	2.81E-08	2.99E-08	5.80E-08	2.75E-08	2.66E-08	5.41E-08	1.46E-08	1.21E-08	2.67E-08
631	649920.89	4198026.6	1.61E-07	1.72E-07	3.33E-07	2.42E-08	2.58E-08	5.00E-08	2.37E-08	2.30E-08	4.66E-08	1.26E-08	1.04E-08	2.30E-08
632	649931.84	4198056.19	1.50E-07	1.60E-07	3.10E-07	2.26E-08	2.40E-08	4.65E-08	2.21E-08	2.14E-08	4.34E-08	1.17E-08	9.69E-09	2.14E-08
633	649942.79	4198085.79	1.36E-07	1.45E-07	2.82E-07	2.05E-08	2.18E-08	4.23E-08	2.00E-08	1.94E-08	3.95E-08	1.06E-08	8.80E-09	1.94E-08
634	649953.74	4198115.38	1.21E-07	1.29E-07	2.50E-07	1.82E-08	1.94E-08	3.76E-08	1.78E-08	1.73E-08	3.51E-08	9.46E-09	7.82E-09	1.73E-08
635	649964.7	4198144.97	1.06E-07	1.13E-07	2.18E-07	1.59E-08	1.69E-08	3.28E-08	1.55E-08	1.51E-08	3.06E-08	8.26E-09	6.83E-09	1.51E-08
636	649975.65	4198174.57	9.13E-08	9.73E-08	1.89E-07	1.37E-08	1.46E-08	2.83E-08	1.34E-08	1.30E-08	2.64E-08	7.13E-09	5.90E-09	1.30E-08
637	649986.6	4198204.16	7.84E-08	8.35E-08	1.62E-07	1.18E-08	1.25E-08	2.43E-08	1.15E-08	1.12E-08	2.27E-08	6.12E-09	5.06E-09	1.12E-08
638	649681.31	4197918.45	3.16E-07	3.37E-07	6.54E-07	4.76E-08	5.06E-08	9.81E-08	4.65E-08	4.51E-08	9.16E-08	2.47E-08	2.04E-08	4.52E-08
639	649713.2	4197825	2.17E-07	2.31E-07	4.48E-07	3.26E-08	3.47E-08	6.73E-08	3.19E-08	3.09E-08	6.28E-08	1.69E-08	1.40E-08	3.10E-08
640	649743.72	4197838.1	2.09E-07	2.23E-07	4.31E-07	3.14E-08	3.34E-08	6.48E-08	3.07E-08	2.98E-08	6.05E-08	1.63E-08	1.35E-08	2.98E-08
641	649774.25	4197851.2	2.00E-07	2.13E-07	4.14E-07	3.01E-08	3.20E-08	6.21E-08	2.94E-08	2.85E-08	5.80E-08	1.56E-08	1.29E-08	2.86E-08
642	649804.77	4197864.31	1.91E-07	2.04E-07	3.95E-07	2.87E-08	3.05E-08	5.93E-08	2.81E-08	2.72E-08	5.53E-08	1.49E-08	1.23E-08	2.73E-08
643	649835.29	4197877.41	1.81E-07	1.93E-07	3.75E-07	2.73E-08	2.90E-08	5.63E-08	2.67E-08	2.58E-08	5.25E-08	1.42E-08	1.17E-08	2.59E-08
644	649865.82	4197890.51	1.72E-07	1.84E-07	3.56E-07	2.59E-08	2.75E-08	5.34E-08	2.53E-08	2.45E-08	4.99E-08	1.35E-08	1.11E-08	2.46E-08
645	649896.34	4197903.61	1.62E-07	1.73E-07	3.34E-07	2.43E-08	2.59E-08	5.02E-08	2.38E-08	2.31E-08	4.69E-08	1.26E-08	1.05E-08	2.31E-08
646	649926.86	4197916.71	1.50E-07	1.60E-07	3.09E-07	2.25E-08	2.39E-08	4.65E-08	2.20E-08	2.13E-08	4.34E-08	1.17E-08	9.68E-09	2.14E-08
647	649957.39	4197929.82	1.37E-07	1.46E-07	2.83E-07	2.06E-08	2.19E-08	4.24E-08	2.01E-08	1.95E-08	3.96E-08	1.07E-08	8.84E-09	1.95E-08
648	649993.67	4197958.49	1.21E-07	1.29E-07	2.50E-07	1.82E-08	1.94E-08	3.76E-08	1.78E-08	1.73E-08	3.51E-08	9.46E-09	7.83E-09	1.73E-08
649	650005.2	4197989.64	1.15E-07	1.23E-07	2.37E-07	1.73E-08	1.84E-08	3.57E-08	1.69E-08	1.64E-08	3.33E-08	8.98E-09	7.43E-09	1.64E-08
650	650016.73	4198020.8	1.07E-07	1.14E-07	2.21E-07	1.61E-08	1.71E-08	3.32E-08	1.58E-08	1.53E-08	3.10E-08	8.37E-09	6.92E-09	1.53E-08
651	650028.25	4198051.95	9.82E-08	1.05E-07	2.03E-07	1.48E-08	1.57E-08	3.05E-08	1.44E-08	1.40E-08	2.84E-08	7.67E-09	6.35E-09	1.40E-08
652	650039.78	4198083.1	8.87E-08	9.46E-08	1.83E-07	1.33E-08	1.42E-08	2.75E-08	1.30E-08	1.26E-08	2.57E-08	6.93E-09	5.73E-09	1.27E-08
653	650051.31	4198114.25	7.92E-08	8.44E-08	1.64E-07	1.19E-08	1.27E-08	2.46E-08	1.16E-08	1.13E-08	2.29E-08	6.19E-09	5.12E-09	1.13E-08
654	650062.84	4198145.4	7.01E-08	7.47E-08	1.45E-07	1.05E-08	1.12E-08	2.17E-08	1.03E-08	9.99E-09	2.03E-08	5.47E-09	4.53E-09	1.00E-08
655	650074.36	4198176.55	6.17E-08	6.58E-08	1.28E-07	9.28E-09	9.87E-09	1.92E-08	9.08E-09	8.80E-09	1.79E-08	4.82E-09	3.99E-09	8.81E-09
656	650085.89	4198207.71	5.43E-08	5.79E-08	1.12E-07	8.16E-09	8.68E-09	1.68E-08	7.98E-09	7.73E-09	1.57E-08	4.24E-09	3.51E-09	7.75E-09
657	649681.31	4197818.45	2.30E-07	2.46E-07	4.76E-07	3.46E-08	3.68E-08	7.15E-08	3.39E-08	3.28E-08	6.67E-08	1.80E-08	1.49E-08	3.29E-08
658	649713.04	4197724.93	1.69E-07	1.80E-07	3.49E-07	2.54E-08	2.70E-08	5.24E-08	2.48E-08	2.41E-08	4.89E-08	1.32E-08	1.09E-08	2.41E-08
659	649743.25	4197737.9	1.66E-07	1.77E-07	3.44E-07	2.50E-08	2.66E-08	5.16E-08	2.45E-08	2.37E-08	4.82E-08	1.30E-08	1.07E-08	2.37E-08
660	649773.45	4197750.86	1.62E-07	1.72E-07	3.34E-07	2.43E-08	2.58E-08	5.01E-08	2.38E-08	2.30E-08	4.68E-08	1.26E-08	1.04E-08	2.31E-08
661	649803.66	4197763.83	1.57E-07	1.67E-07	3.24E-07	2.36E-08	2.51E-08	4.87E-08	2.31E-08	2.24E-08	4.54E-08	1.23E-08	1.01E-08	2.24E-08
662	649833.86	4197776.79	1.51E-07	1.61E-07	3.12E-07	2.27E-08	2.42E-08	4.69E-08	2.22E-08	2.15E-08	4.37E-08	1.18E-08	9.76E-09	2.16E-08
663	649864.07	4197789.76	1.44E-07	1.53E-07	2.97E-07	2.16E-08	2.30E-08	4.47E-08	2.12E-08	2.05E-08	4.17E-08	1.12E-08	9.30E-09	2.06E-08
664	649894.27	4197802.72	1.37E-07	1.46E-07	2.83E-07	2.06E-08	2.19E-08	4.26E-08	2.02E-08	1.95E-08	3.97E-08	1.07E-08	8.86E-09	1.96E-08
665	649924.48	4197815.69	1.30E-07	1.39E-07	2.69E-07	1.96E-08	2.08E-08	4.04E-08	1.92E-08	1.86E-08	3.77E-08	1.02E-08	8.42E-09	1.86E-08
666	649954.68	4197828.66	1.23E-07	1.31E-07	2.54E-07	1.85E-08	1.96E-08	3.81E-08	1.81E-08	1.75E-08	3.56E-08	9.59E-09	7.94E-09	1.75E-08
667	649984.89	4197841.62	1.16E-07	1.23E-07	2.39E-07	1.74E-08	1.85E-08	3.59E-08	1.70E-08	1.65E-08	3.35E-08	9.03E-09	7.47E-09	1.65E-08
668	650015.09	4197854.59	1.09E-07	1.16E-07	2.25E-07	1.64E-08	1.74E-08	3.38E-08	1.60E-08	1.55E-08	3.16E-08	8.51E-09	7.04E-09	1.56E-08
669	650045.3	4197867.55	1.01E-07	1.08E-07	2.09E-07	1.52E-08	1.61E-08	3.13E-08	1.48E-08	1.44E-08	2.92E-08	7.89E-09	6.53E-09	1.44E-08
670	650066.1	4197889.45	9.54E-08	1.02E-07	1.97E-07	1.43E-08	1.53E-08	2.96E-08	1.40E-08	1.36E-08	2.76E-08	7.45E-09	6.17E-09	1.36E-08
671	650077.51	4197920.27	9.18E-08	9.79E-08	1.90E-07	1.38E-08	1.47E-08	2.85E-08	1.35E-08	1.31E-08	2.66E-08	7.17E-09	5.94E-09	1.31E-08
672	650088.92	4197951.1	8.74E-08	9.32E-08	1.81E-07	1.31E-08	1.40E-08	2.71E-08	1.29E-08	1.25E-08	2.53E-08	6.83E-09	5.65E-09	1.25E-08
673	650100.33	4197981.93	8.21E-08	8.76E-08	1.70E-07	1.24E-08	1.31E-08	2.55E-08	1.21E-08	1.17E-08	2.38E-08	6.42E-09	5.31E-09	1.17E-08
674	650111.73	4198012.76	7.63E-08	8.14E-08	1.58E-07	1.15E-08	1.22E-08	2.37E-08	1.12E-08	1.09E-08	2.21E-08	5.96E-09	4.93E-09	1.09E-08
675	650123.14	4198043.58	7.01E-08	7.48E-08	1.45E-07	1.05E-08	1.12E-08	2.18E-08	1.03E-08	1.00E-08	2.03E-08	5.48E-09	4.53E-09	1.00E-08
676	650134.55	4198074.41	6.40E-08	6.82E-08	1.32E-07	9.62E-09	1.02E-08	1.98E-08	9.40E-09	9.11E-09	1.85E-08	5.00E-09	4.13E-09	9.13E-09
677	650145.96	4198105.24	5.80E-08	6.18E-08	1.20E-07	8.72E-09	9.27E-09	1.80E-08	8.53E-09	8.27E-09	1.68E-08	4.53E-09	3.75E-09	8.28E-09
678	650157.36	4198136.06	5.24E-08	5.58E-08	1.08E-07	7.87E-09	8.37E-09	1.62E-08	7.70E-09	7.46E-09	1.52E-08	4.09E-09	3.38E-09	7.47E-09
679	650168.77	4198166.89	4.72E-08	5.04E-08	9.76E-08	7.10E-09	7.55E-09	1.47E-08	6.95E-09	6.73E-09	1.37E-08	3.69E-09	3.05E-09	6.74E-09
680	650180.18	4198197.72	4.26E-08	4.54E-08	8.79E-08	6.40E-09	6.80E-09	1.32E-08	6.26E-09	6.06E-09	1.23E-08	3.32E-09	2.75E-09	6.07E-09

681	650191.59	4198228.55	3.83E-08	4.08E-08	7.92E-08	5.76E-09	6.13E-09	1.19E-08	5.63E-09	5.46E-09	1.11E-08	2.99E-09	2.48E-09	5.47E-09
682	649681.31	4197718.45	1.74E-07	1.86E-07	3.60E-07	2.62E-08	2.78E-08	5.40E-08	2.56E-08	2.48E-08	5.04E-08	1.36E-08	1.13E-08	2.49E-08
683	649712.94	4197624.89	1.23E-07	1.32E-07	2.55E-07	1.86E-08	1.97E-08	3.83E-08	1.82E-08	1.76E-08	3.58E-08	9.65E-09	7.98E-09	1.76E-08
684	649742.94	4197637.76	1.25E-07	1.33E-07	2.58E-07	1.88E-08	2.00E-08	3.87E-08	1.83E-08	1.78E-08	3.61E-08	9.75E-09	8.06E-09	1.78E-08
685	649772.93	4197650.64	1.25E-07	1.33E-07	2.58E-07	1.88E-08	2.00E-08	3.88E-08	1.84E-08	1.78E-08	3.62E-08	9.77E-09	8.08E-09	1.79E-08
686	649802.93	4197663.52	1.24E-07	1.33E-07	2.57E-07	1.87E-08	1.99E-08	3.86E-08	1.83E-08	1.77E-08	3.60E-08	9.72E-09	8.04E-09	1.78E-08
687	649832.93	4197676.39	1.23E-07	1.31E-07	2.54E-07	1.85E-08	1.96E-08	3.81E-08	1.81E-08	1.75E-08	3.56E-08	9.60E-09	7.94E-09	1.75E-08
688	649862.92	4197689.27	1.21E-07	1.28E-07	2.49E-07	1.81E-08	1.93E-08	3.74E-08	1.77E-08	1.72E-08	3.49E-08	9.42E-09	7.79E-09	1.72E-08
689	649892.92	4197702.14	1.17E-07	1.25E-07	2.42E-07	1.76E-08	1.88E-08	3.64E-08	1.72E-08	1.67E-08	3.40E-08	9.16E-09	7.58E-09	1.67E-08
690	649922.92	4197715.02	1.14E-07	1.21E-07	2.35E-07	1.71E-08	1.82E-08	3.53E-08	1.67E-08	1.62E-08	3.29E-08	8.88E-09	7.34E-09	1.62E-08
691	649952.91	4197727.89	1.09E-07	1.16E-07	2.26E-07	1.64E-08	1.75E-08	3.39E-08	1.61E-08	1.56E-08	3.16E-08	8.54E-09	7.06E-09	1.56E-08
692	649982.91	4197740.77	1.04E-07	1.11E-07	2.15E-07	1.57E-08	1.66E-08	3.23E-08	1.53E-08	1.48E-08	3.01E-08	8.13E-09	6.73E-09	1.49E-08
693	650012.91	4197753.65	9.86E-08	1.05E-07	2.04E-07	1.48E-08	1.58E-08	3.06E-08	1.45E-08	1.41E-08	2.86E-08	7.71E-09	6.37E-09	1.41E-08
694	650042.9	4197766.52	9.35E-08	9.96E-08	1.93E-07	1.41E-08	1.49E-08	2.90E-08	1.37E-08	1.33E-08	2.71E-08	7.30E-09	6.04E-09	1.33E-08
695	650072.9	4197779.4	8.83E-08	9.41E-08	1.82E-07	1.33E-08	1.41E-08	2.74E-08	1.30E-08	1.26E-08	2.56E-08	6.90E-09	5.70E-09	1.26E-08
696	650102.9	4197792.27	8.28E-08	8.83E-08	1.71E-07	1.25E-08	1.32E-08	2.57E-08	1.22E-08	1.18E-08	2.40E-08	6.47E-09	5.35E-09	1.18E-08
697	650138.56	4197820.46	7.73E-08	8.24E-08	1.60E-07	1.16E-08	1.24E-08	2.40E-08	1.14E-08	1.10E-08	2.24E-08	6.04E-09	4.99E-09	1.10E-08
698	650149.89	4197851.07	7.53E-08	8.03E-08	1.56E-07	1.13E-08	1.20E-08	2.34E-08	1.11E-08	1.07E-08	2.18E-08	5.88E-09	4.87E-09	1.07E-08
699	650161.21	4197881.69	7.26E-08	7.74E-08	1.50E-07	1.09E-08	1.16E-08	2.25E-08	1.07E-08	1.03E-08	2.10E-08	5.67E-09	4.69E-09	1.04E-08
700	650172.54	4197912.3	6.93E-08	7.39E-08	1.43E-07	1.04E-08	1.11E-08	2.15E-08	1.02E-08	9.88E-09	2.01E-08	5.41E-09	4.48E-09	9.89E-09
701	650183.87	4197942.92	6.56E-08	7.00E-08	1.36E-07	9.87E-09	1.05E-08	2.04E-08	9.65E-09	9.35E-09	1.90E-08	5.13E-09	4.24E-09	9.37E-09
702	650195.2	4197973.53	6.16E-08	6.57E-08	1.27E-07	9.27E-09	9.85E-09	1.91E-08	9.06E-09	8.78E-09	1.78E-08	4.81E-09	3.98E-09	8.80E-09
703	650206.53	4198004.14	5.73E-08	6.11E-08	1.18E-07	8.62E-09	9.16E-09	1.78E-08	8.42E-09	8.16E-09	1.66E-08	4.48E-09	3.70E-09	8.18E-09
704	650217.86	4198034.76	5.30E-08	5.65E-08	1.10E-07	7.97E-09	8.48E-09	1.65E-08	7.80E-09	7.56E-09	1.54E-08	4.14E-09	3.43E-09	7.57E-09
705	650229.19	4198065.37	4.89E-08	5.21E-08	1.01E-07	7.35E-09	7.82E-09	1.52E-08	7.19E-09	6.97E-09	1.42E-08	3.82E-09	3.16E-09	6.98E-09
706	650240.51	4198095.99	4.50E-08	4.79E-08	9.29E-08	6.76E-09	7.19E-09	1.39E-08	6.61E-09	6.41E-09	1.30E-08	3.51E-09	2.91E-09	6.42E-09
707	650251.84	4198126.6	4.12E-08	4.40E-08	8.52E-08	6.20E-09	6.59E-09	1.28E-08	6.06E-09	5.88E-09	1.19E-08	3.22E-09	2.66E-09	5.88E-09
708	650263.17	4198157.22	3.78E-08	4.03E-08	7.80E-08	5.68E-09	6.04E-09	1.17E-08	5.55E-09	5.38E-09	1.09E-08	2.95E-09	2.44E-09	5.39E-09
709	650274.5	4198187.83	3.45E-08	3.68E-08	7.14E-08	5.19E-09	5.52E-09	1.07E-08	5.08E-09	4.92E-09	1.00E-08	2.70E-09	2.23E-09	4.93E-09
710	650285.83	4198218.45	3.16E-08	3.37E-08	6.53E-08	4.75E-09	5.05E-09	9.81E-09	4.65E-09	4.51E-09	9.15E-09	2.47E-09	2.04E-09	4.51E-09
711	649681.31	4197618.45	1.24E-07	1.32E-07	2.56E-07	1.86E-08	1.98E-08	3.85E-08	1.82E-08	1.77E-08	3.59E-08	9.69E-09	8.01E-09	1.77E-08
712	649712.86	4197524.86	8.85E-08	9.43E-08	1.83E-07	1.33E-08	1.41E-08	2.74E-08	1.30E-08	1.26E-08	2.56E-08	6.91E-09	5.72E-09	1.26E-08
713	649742.71	4197537.67	9.14E-08	9.75E-08	1.89E-07	1.37E-08	1.46E-08	2.84E-08	1.34E-08	1.30E-08	2.65E-08	7.14E-09	5.91E-09	1.31E-08
714	649772.56	4197550.48	9.36E-08	9.98E-08	1.93E-07	1.41E-08	1.50E-08	2.91E-08	1.38E-08	1.33E-08	2.71E-08	7.32E-09	6.05E-09	1.34E-08
715	649802.41	4197563.29	9.51E-08	1.01E-07	1.96E-07	1.43E-08	1.52E-08	2.95E-08	1.40E-08	1.35E-08	2.75E-08	7.43E-09	6.14E-09	1.36E-08
716	649832.26	4197576.11	9.58E-08	1.02E-07	1.98E-07	1.44E-08	1.53E-08	2.97E-08	1.41E-08	1.37E-08	2.77E-08	7.48E-09	6.19E-09	1.37E-08
717	649862.11	4197588.92	9.59E-08	1.02E-07	1.98E-07	1.44E-08	1.53E-08	2.98E-08	1.41E-08	1.37E-08	2.78E-08	7.49E-09	6.20E-09	1.37E-08
718	649891.96	4197601.73	9.54E-08	1.02E-07	1.97E-07	1.43E-08	1.53E-08	2.96E-08	1.40E-08	1.36E-08	2.76E-08	7.45E-09	6.17E-09	1.36E-08
719	649921.81	4197614.55	9.44E-08	1.01E-07	1.95E-07	1.42E-08	1.51E-08	2.93E-08	1.39E-08	1.34E-08	2.73E-08	7.37E-09	6.10E-09	1.35E-08
720	649951.66	4197627.36	9.27E-08	9.89E-08	1.92E-07	1.39E-08	1.48E-08	2.88E-08	1.36E-08	1.32E-08	2.69E-08	7.24E-09	5.99E-09	1.32E-08
721	649981.51	4197640.17	9.06E-08	9.66E-08	1.87E-07	1.36E-08	1.45E-08	2.81E-08	1.33E-08	1.29E-08	2.62E-08	7.08E-09	5.86E-09	1.29E-08
722	650011.36	4197652.98	8.81E-08	9.39E-08	1.82E-07	1.32E-08	1.41E-08	2.73E-08	1.29E-08	1.26E-08	2.55E-08	6.88E-09	5.69E-09	1.26E-08
723	650041.21	4197665.8	8.50E-08	9.06E-08	1.76E-07	1.28E-08	1.36E-08	2.64E-08	1.25E-08	1.21E-08	2.46E-08	6.64E-09	5.49E-09	1.21E-08
724	650071.06	4197678.61	8.12E-08	8.66E-08	1.68E-07	1.22E-08	1.30E-08	2.52E-08	1.19E-08	1.16E-08	2.35E-08	6.34E-09	5.25E-09	1.16E-08
725	650100.91	4197691.42	7.75E-08	8.26E-08	1.60E-07	1.17E-08	1.24E-08	2.40E-08	1.14E-08	1.10E-08	2.24E-08	6.05E-09	5.01E-09	1.11E-08
726	650130.76	4197704.24	7.37E-08	7.85E-08	1.52E-07	1.11E-08	1.18E-08	2.29E-08	1.08E-08	1.05E-08	2.13E-08	5.76E-09	4.76E-09	1.05E-08
727	650160.61	4197717.05	6.99E-08	7.45E-08	1.44E-07	1.05E-08	1.12E-08	2.17E-08	1.03E-08	9.96E-09	2.02E-08	5.46E-09	4.52E-09	9.98E-09
728	650190.46	4197729.86	6.61E-08	7.05E-08	1.37E-07	9.95E-09	1.06E-08	2.05E-08	9.73E-09	9.43E-09	1.92E-08	5.17E-09	4.27E-09	9.44E-09
729	650211.02	4197751.5	6.37E-08	6.79E-08	1.32E-07	9.58E-09	1.02E-08	1.98E-08	9.37E-09	9.08E-09	1.85E-08	4.98E-09	4.12E-09	9.10E-09
730	650222.29	4197781.96	6.25E-08	6.66E-08	1.29E-07	9.40E-09	9.99E-09	1.94E-08	9.19E-09	8.91E-09	1.81E-08	4.88E-09	4.04E-09	8.92E-09
731	650233.57	4197812.43	6.10E-08	6.50E-08	1.26E-07	9.17E-09	9.75E-09	1.89E-08	8.97E-09	8.69E-09	1.77E-08	4.76E-09	3.94E-09	8.70E-09
732	650244.84	4197842.89	5.91E-08	6.30E-08	1.22E-07	8.89E-09	9.45E-09	1.83E-08	8.69E-09	8.42E-09	1.71E-08	4.62E-09	3.82E-09	8.44E-09
733	650256.11	4197873.36	5.67E-08	6.04E-08	1.17E-07	8.52E-09	9.06E-09	1.76E-08	8.34E-09	8.08E-09	1.64E-08	4.43E-09	3.66E-09	8.09E-09
734	650267.39	4197903.82	5.40E-08	5.76E-08	1.12E-07	8.12E-09	8.63E-09	1.67E-08	7.94E-09	7.69E-09	1.56E-08	4.22E-09	3.49E-09	7.71E-09
735	650278.66	4197934.29	5.11E-08	5.45E-08	1.06E-07	7.68E-09	8.17E-09	1.58E-08	7.51E-09	7.28E-09	1.48E-08	3.99E-09	3.30E-09	7.29E-09
736	650289.93	4197964.75	4.81E-08	5.12E-08	9.93E-08	7.23E-09	7.68E-09	1.49E-08	7.07E-09	6.85E-09	1.39E-08	3.75E-09	3.11E-09	6.86E-09
737	650301.21	4197995.21	4.50E-08	4.80E-08	9.29E-08	6.76E-09	7.19E-09	1.40E-08	6.61E-09	6.41E-09	1.30E-08	3.51E-09	2.91E-09	6.42E-09
738	650312.48	4198025.68	4.19E-08	4.47E-08	8.67E-08	6.31E-09	6.71E-09	1.30E-08	6.17E-09	5.98E-09	1.21E-08	3.28E-09	2.71E-09	5.99E-09
739	650323.75	4198056.14	3.90E-08	4.16E-08	8.05E-08	5.86E-09	6.23E-09	1.21E-08	5.73E-09	5.56E-09	1.13E-08	3.05E-09	2.52E-09	5.56E-09
740	650335.03	4198086.61	3.62E-08	3.86E-08	7.47E-08	5.44E-09	5.78E-09	1.12E-08	5.32E-09	5.15E-09	1.05E-08	2.83E-09	2.34E-09	5.16E-09
741	650346.3	4198117.07	3.35E-08	3.57E-08	6.93E-08	5.04E-09	5.36E-09	1.04E-08	4.93E-09	4.78E-09	9.71E-09	2.62E-09	2.17E-09	4.79E-09
742	650357.57	4198147.54	3.10E-08	3.31E-08	6.41E-08	4.67E-09	4.96E-09	9.63E-09	4.56E-09	4.42E-09	8.99E-09	2.42E-09	2.01E-09	4.43E-09
743	650368.85	4198178	2.87E-08	3.06E-08	5.93E-08	4.32E-09	4.59E-09	8.91E-09	4.22E-09	4.09E-09	8.31E-09	2.24E-09	1.86E-09	4.10E-09
744	650380.12	4198208.47	2.66E-08	2.83E-08	5.49E-08	4.00E-09	4.25E-09	8.25E-09	3.91E-09	3.79E-09	7.70E-09	2.08E-09	1.72E-09	3.80E-09
745	649681.31	4197518.45	8.71E-08	9.29E-08	1.80E-07	1.31E-08	1.39E-08	2.70E-08	1.28E-08	1.24E-08	2.52E-08	6.81E-09	5.63E-09	1.24E-08
746	649713.11	4197324.96	4.59E-08	4.89E-08	9.49E-08	6.90E-09	7.34E-09	1.42E-08	6.75E-09	6.54E-09	1.33E-08	3.59E-09	2.97E-09	6.55E-09
747	649743.46	4197337.99	4.87E-08	5.19E-08	1.01E-07	7.32E-09	7.79E-09	1.51E-08	7.16E-09	6.94E-09	1.41E-08	3.80E-09	3.15E-09	6.95E-09
748	649773.8	4197351.01	5.13E-08	5.47E-08	1.06E-07	7.72E-09	8.21E-09	1.59E-08	7.55E-09	7.32E-09	1.49E-08	4.01E-09	3.32E-09	7.33E-09
749	649804.15	4197364.04	5.38E-08	5.73E-08	1.11E-07	8.09E-09	8.60E-09	1.67E-08	7.91E-09	7.66E-09	1.56E-08	4.20E-09	3.48E-09	7.68E-09
750	649834.49	4197377.07	5.59E-08	5.96E-08	1.15E-07	8.40E-09	8.93E-09	1.73E-08	8.22E-09	7.96E-09	1.62E-08	4.37E-09	3.61E-09	7.98E-09
751	649864.84	4197390.09	5.77E-08	6.15E-08	1.19E-07	8.67E-09	9.22E-09	1.79E-08	8.48E-09	8.22E-09	1.67E-08	4.50E-09	3.73E-09	8.23E-09
752	649895.19	4197403.12	5.91E-08	6.30E-08	1.22E-07	8.89E-09	9.45E-09	1.83E-08	8.69E-09	8.42E-09	1.71E-08	4.62E-09	3.82E-09	8.44E-09
753	649925.53	4197416.14	6.02E-08	6.42E-08	1.24E-07	9.06E-09	9.63E-09	1.87E-08	8.86E-09	8.59E-09	1.74E-08	4.71E-09	3.89E-09	8.60E-09
754	649955.88	4197429.17	6.11E-08	6.51E-08	1.26E-07	9.18E-09	9.76E-09	1.89E-08	8.98E-09	8.70E-09	1.77E-08	4.77E-09	3.95E-09	8.71E-09
755	649986.22	4197442.19	6.15E-08	6.56E-08	1.27E-07	9.25E-09	9.84E-09	1.91E-08	9.05E-09	8.77E-09	1.78E-08	4.81E-09	3.98E-09	8.78E-09
756	650016.57	4197455.22	6.17E-08	6.57E-08	1.27E-07	9.27E-09	9.86E-09	1.91E-08	9.06E-09	8.79E-09	1.79E-08	4.82E-09	3.98E-09	8.80E-09

757	650046.91	4197468.24	6.15E-08	6.56E-08	1.27E-07	9.25E-09	9.83E-09	1.91E-08	9.04E-09	8.77E-09	1.78E-08	4.80E-09	3.97E-09	8.78E-09
758	650077.26	4197481.27	6.11E-08	6.51E-08	1.26E-07	9.18E-09	9.76E-09	1.89E-08	8.98E-09	8.70E-09	1.77E-08	4.77E-09	3.95E-09	8.72E-09
759	650107.6	4197494.3	6.03E-08	6.43E-08	1.25E-07	9.06E-09	9.64E-09	1.87E-08	8.86E-09	8.59E-09	1.75E-08	4.71E-09	3.90E-09	8.60E-09
760	650137.95	4197507.32	5.92E-08	6.31E-08	1.22E-07	8.90E-09	9.47E-09	1.84E-08	8.71E-09	8.44E-09	1.71E-08	4.63E-09	3.83E-09	8.45E-09
761	650168.3	4197520.35	5.79E-08	6.17E-08	1.20E-07	8.70E-09	9.25E-09	1.80E-08	8.51E-09	8.25E-09	1.68E-08	4.52E-09	3.74E-09	8.26E-09
762	650198.64	4197533.37	5.64E-08	6.01E-08	1.16E-07	8.47E-09	9.01E-09	1.75E-08	8.29E-09	8.03E-09	1.63E-08	4.40E-09	3.64E-09	8.04E-09
763	650228.99	4197546.4	5.46E-08	5.82E-08	1.13E-07	8.21E-09	8.73E-09	1.69E-08	8.03E-09	7.78E-09	1.58E-08	4.27E-09	3.53E-09	7.79E-09
764	650259.33	4197559.42	5.27E-08	5.62E-08	1.09E-07	7.93E-09	8.43E-09	1.64E-08	7.75E-09	7.51E-09	1.53E-08	4.12E-09	3.41E-09	7.52E-09
765	650289.68	4197572.45	5.07E-08	5.41E-08	1.05E-07	7.63E-09	8.11E-09	1.57E-08	7.46E-09	7.23E-09	1.47E-08	3.96E-09	3.28E-09	7.24E-09
766	650320.02	4197585.47	4.87E-08	5.19E-08	1.01E-07	7.33E-09	7.79E-09	1.51E-08	7.16E-09	6.94E-09	1.41E-08	3.81E-09	3.15E-09	6.95E-09
767	650356.1	4197613.99	4.65E-08	4.95E-08	9.60E-08	6.99E-09	7.43E-09	1.44E-08	6.83E-09	6.62E-09	1.35E-08	3.63E-09	3.00E-09	6.63E-09
768	650367.56	4197644.96	4.60E-08	4.90E-08	9.50E-08	6.91E-09	7.35E-09	1.43E-08	6.76E-09	6.55E-09	1.33E-08	3.59E-09	2.97E-09	6.56E-09
769	650379.02	4197675.93	4.52E-08	4.82E-08	9.34E-08	6.80E-09	7.23E-09	1.40E-08	6.65E-09	6.44E-09	1.31E-08	3.53E-09	2.92E-09	6.45E-09
770	650390.48	4197706.9	4.42E-08	4.72E-08	9.14E-08	6.65E-09	7.07E-09	1.37E-08	6.51E-09	6.31E-09	1.28E-08	3.46E-09	2.86E-09	6.32E-09
771	650401.94	4197737.87	4.31E-08	4.59E-08	8.90E-08	6.48E-09	6.89E-09	1.34E-08	6.33E-09	6.14E-09	1.25E-08	3.36E-09	2.78E-09	6.15E-09
772	650413.4	4197768.84	4.17E-08	4.45E-08	8.62E-08	6.27E-09	6.67E-09	1.29E-08	6.14E-09	5.95E-09	1.21E-08	3.26E-09	2.70E-09	5.96E-09
773	650424.86	4197799.81	4.02E-08	4.29E-08	8.31E-08	6.05E-09	6.43E-09	1.25E-08	5.91E-09	5.73E-09	1.16E-08	3.14E-09	2.60E-09	5.74E-09
774	650436.32	4197830.78	3.86E-08	4.11E-08	7.97E-08	5.80E-09	6.17E-09	1.20E-08	5.67E-09	5.50E-09	1.12E-08	3.01E-09	2.49E-09	5.51E-09
775	650447.78	4197861.75	3.69E-08	3.93E-08	7.61E-08	5.54E-09	5.89E-09	1.14E-08	5.42E-09	5.25E-09	1.07E-08	2.88E-09	2.38E-09	5.26E-09
776	650459.24	4197892.72	3.51E-08	3.74E-08	7.24E-08	5.27E-09	5.60E-09	1.09E-08	5.15E-09	5.00E-09	1.02E-08	2.74E-09	2.27E-09	5.00E-09
777	650470.7	4197923.69	3.32E-08	3.54E-08	6.87E-08	5.00E-09	5.31E-09	1.03E-08	4.89E-09	4.74E-09	9.62E-09	2.60E-09	2.15E-09	4.74E-09
778	650482.16	4197954.66	3.14E-08	3.35E-08	6.49E-08	4.73E-09	5.02E-09	9.75E-09	4.62E-09	4.48E-09	9.10E-09	2.45E-09	2.03E-09	4.49E-09
779	650493.62	4197985.63	2.96E-08	3.16E-08	6.12E-08	4.46E-09	4.74E-09	9.20E-09	4.36E-09	4.22E-09	8.58E-09	2.32E-09	1.92E-09	4.23E-09
780	650505.08	4198016.6	2.79E-08	2.98E-08	5.77E-08	4.20E-09	4.47E-09	8.66E-09	4.11E-09	3.98E-09	8.09E-09	2.18E-09	1.80E-09	3.99E-09
781	650516.54	4198047.57	2.63E-08	2.80E-08	5.43E-08	3.95E-09	4.20E-09	8.15E-09	3.86E-09	3.75E-09	7.61E-09	2.05E-09	1.70E-09	3.75E-09
782	650528.01	4198078.54	2.47E-08	2.64E-08	5.11E-08	3.72E-09	3.95E-09	7.67E-09	3.64E-09	3.52E-09	7.16E-09	1.93E-09	1.60E-09	3.53E-09
783	650539.47	4198109.51	2.32E-08	2.48E-08	4.80E-08	3.50E-09	3.72E-09	7.21E-09	3.42E-09	3.31E-09	6.73E-09	1.82E-09	1.50E-09	3.32E-09
784	650550.93	4198140.48	2.19E-08	2.33E-08	4.52E-08	3.29E-09	3.49E-09	6.78E-09	3.21E-09	3.11E-09	6.33E-09	1.71E-09	1.41E-09	3.12E-09
785	650562.39	4198171.46	2.05E-08	2.19E-08	4.25E-08	3.09E-09	3.28E-09	6.37E-09	3.02E-09	2.93E-09	5.95E-09	1.61E-09	1.33E-09	2.93E-09
786	650573.85	4198202.43	1.93E-08	2.06E-08	3.99E-08	2.90E-09	3.09E-09	5.99E-09	2.84E-09	2.75E-09	5.59E-09	1.51E-09	1.25E-09	2.76E-09
787	650585.31	4198233.4	1.82E-08	1.94E-08	3.75E-08	2.73E-09	2.90E-09	5.63E-09	2.67E-09	2.59E-09	5.26E-09	1.42E-09	1.17E-09	2.59E-09
788	649681.31	4197318.45	4.39E-08	4.68E-08	9.06E-08	6.60E-09	7.01E-09	1.36E-08	6.45E-09	6.25E-09	1.27E-08	3.43E-09	2.83E-09	6.26E-09
789	649712.99	4197124.91	2.55E-08	2.72E-08	5.27E-08	3.84E-09	4.08E-09	7.92E-09	3.75E-09	3.64E-09	7.39E-09	1.99E-09	1.65E-09	3.64E-09
790	649743.08	4197137.82	2.73E-08	2.91E-08	5.64E-08	4.10E-09	4.36E-09	8.46E-09	4.01E-09	3.89E-09	7.90E-09	2.13E-09	1.76E-09	3.89E-09
791	649773.17	4197150.74	2.91E-08	3.10E-08	6.00E-08	4.37E-09	4.64E-09	9.01E-09	4.27E-09	4.14E-09	8.41E-09	2.27E-09	1.88E-09	4.15E-09
792	649803.26	4197163.66	3.08E-08	3.29E-08	6.37E-08	4.63E-09	4.93E-09	9.56E-09	4.53E-09	4.39E-09	8.92E-09	2.41E-09	1.99E-09	4.40E-09
793	649833.35	4197176.57	3.26E-08	3.47E-08	6.73E-08	4.90E-09	5.20E-09	1.01E-08	4.79E-09	4.64E-09	9.43E-09	2.54E-09	2.10E-09	4.65E-09
794	649863.44	4197189.49	3.43E-08	3.65E-08	7.08E-08	5.15E-09	5.48E-09	1.06E-08	5.04E-09	4.88E-09	9.92E-09	2.68E-09	2.21E-09	4.89E-09
795	649893.53	4197202.41	3.58E-08	3.82E-08	7.40E-08	5.39E-09	5.73E-09	1.11E-08	5.27E-09	5.11E-09	1.04E-08	2.80E-09	2.32E-09	5.11E-09
796	649923.62	4197215.32	3.73E-08	3.98E-08	7.70E-08	5.61E-09	5.96E-09	1.16E-08	5.48E-09	5.31E-09	1.08E-08	2.91E-09	2.41E-09	5.32E-09
797	649953.71	4197228.24	3.86E-08	4.12E-08	7.98E-08	5.81E-09	6.18E-09	1.20E-08	5.68E-09	5.51E-09	1.12E-08	3.02E-09	2.50E-09	5.52E-09
798	649983.8	4197241.16	3.98E-08	4.25E-08	8.23E-08	5.99E-09	6.37E-09	1.24E-08	5.86E-09	5.68E-09	1.15E-08	3.11E-09	2.57E-09	5.69E-09
799	650013.9	4197254.07	4.09E-08	4.35E-08	8.44E-08	6.14E-09	6.53E-09	1.27E-08	6.01E-09	5.82E-09	1.18E-08	3.19E-09	2.64E-09	5.83E-09
800	650043.99	4197266.99	4.17E-08	4.45E-08	8.62E-08	6.27E-09	6.67E-09	1.29E-08	6.13E-09	5.94E-09	1.21E-08	3.26E-09	2.69E-09	5.95E-09
801	650074.08	4197279.9	4.24E-08	4.52E-08	8.75E-08	6.37E-09	6.77E-09	1.31E-08	6.23E-09	6.04E-09	1.23E-08	3.31E-09	2.74E-09	6.05E-09
802	650104.17	4197292.82	4.28E-08	4.57E-08	8.85E-08	6.44E-09	6.85E-09	1.33E-08	6.30E-09	6.11E-09	1.24E-08	3.35E-09	2.77E-09	6.12E-09
803	650134.26	4197305.74	4.31E-08	4.60E-08	8.91E-08	6.49E-09	6.90E-09	1.34E-08	6.34E-09	6.15E-09	1.25E-08	3.37E-09	2.79E-09	6.16E-09
804	650164.35	4197318.65	4.33E-08	4.61E-08	8.94E-08	6.50E-09	6.92E-09	1.34E-08	6.36E-09	6.16E-09	1.25E-08	3.38E-09	2.80E-09	6.17E-09
805	650194.44	4197331.57	4.32E-08	4.60E-08	8.92E-08	6.49E-09	6.90E-09	1.34E-08	6.35E-09	6.15E-09	1.25E-08	3.37E-09	2.79E-09	6.16E-09
806	650224.53	4197344.49	4.30E-08	4.58E-08	8.87E-08	6.46E-09	6.87E-09	1.33E-08	6.32E-09	6.12E-09	1.24E-08	3.36E-09	2.78E-09	6.13E-09
807	650254.62	4197357.4	4.26E-08	4.54E-08	8.79E-08	6.40E-09	6.80E-09	1.32E-08	6.26E-09	6.06E-09	1.23E-08	3.32E-09	2.75E-09	6.07E-09
808	650284.71	4197370.32	4.20E-08	4.48E-08	8.68E-08	6.32E-09	6.72E-09	1.30E-08	6.18E-09	5.99E-09	1.22E-08	3.28E-09	2.71E-09	6.00E-09
809	650314.81	4197383.24	4.13E-08	4.40E-08	8.52E-08	6.20E-09	6.60E-09	1.28E-08	6.07E-09	5.88E-09	1.19E-08	3.22E-09	2.67E-09	5.89E-09
810	650344.9	4197396.15	4.05E-08	4.31E-08	8.36E-08	6.08E-09	6.47E-09	1.26E-08	5.95E-09	5.76E-09	1.17E-08	3.16E-09	2.61E-09	5.77E-09
811	650374.99	4197409.07	3.95E-08	4.21E-08	8.17E-08	5.94E-09	6.32E-09	1.23E-08	5.81E-09	5.63E-09	1.14E-08	3.09E-09	2.55E-09	5.64E-09
812	650405.08	4197421.98	3.85E-08	4.11E-08	7.96E-08	5.80E-09	6.16E-09	1.20E-08	5.67E-09	5.49E-09	1.12E-08	3.01E-09	2.49E-09	5.50E-09
813	650435.17	4197434.9	3.75E-08	4.00E-08	7.75E-08	5.64E-09	5.99E-09	1.16E-08	5.51E-09	5.34E-09	1.09E-08	2.93E-09	2.42E-09	5.35E-09
814	650465.26	4197447.82	3.64E-08	3.88E-08	7.52E-08	5.47E-09	5.82E-09	1.13E-08	5.35E-09	5.18E-09	1.05E-08	2.84E-09	2.35E-09	5.19E-09
815	650501.03	4197476.09	3.52E-08	3.75E-08	7.28E-08	5.30E-09	5.63E-09	1.09E-08	5.18E-09	5.02E-09	1.02E-08	2.75E-09	2.28E-09	5.03E-09
816	650512.4	4197506.8	3.51E-08	3.74E-08	7.25E-08	5.28E-09	5.61E-09	1.09E-08	5.16E-09	5.00E-09	1.02E-08	2.74E-09	2.27E-09	5.01E-09
817	650523.76	4197537.51	3.48E-08	3.71E-08	7.19E-08	5.24E-09	5.57E-09	1.08E-08	5.12E-09	4.96E-09	1.01E-08	2.72E-09	2.25E-09	4.97E-09
818	650535.13	4197568.22	3.44E-08	3.67E-08	7.11E-08	5.18E-09	5.50E-09	1.07E-08	5.06E-09	4.90E-09	9.97E-09	2.69E-09	2.22E-09	4.91E-09
819	650546.49	4197598.93	3.39E-08	3.61E-08	7.00E-08	5.10E-09	5.42E-09	1.05E-08	4.98E-09	4.83E-09	9.81E-09	2.65E-09	2.19E-09	4.84E-09
820	650557.86	4197629.64	3.32E-08	3.54E-08	6.87E-08	5.00E-09	5.31E-09	1.03E-08	4.89E-09	4.74E-09	9.62E-09	2.60E-09	2.15E-09	4.74E-09
821	650569.22	4197660.35	3.25E-08	3.46E-08	6.71E-08	4.89E-09	5.19E-09	1.01E-08	4.78E-09	4.63E-09	9.41E-09	2.54E-09	2.10E-09	4.64E-09
822	650580.58	4197691.06	3.16E-08	3.37E-08	6.53E-08	4.75E-09	5.05E-09	9.81E-09	4.65E-09	4.51E-09	9.15E-09	2.47E-09	2.04E-09	4.51E-09
823	650591.95	4197721.78	3.07E-08	3.27E-08	6.33E-08	4.61E-09	4.90E-09	9.51E-09	4.51E-09	4.37E-09	8.87E-09	2.39E-09	1.98E-09	4.37E-09
824	650603.31	4197752.49	2.96E-08	3.16E-08	6.12E-08	4.45E-09	4.73E-09	9.19E-09	4.35E-09	4.22E-09	8.57E-09	2.31E-09	1.91E-09	4.23E-09
825	650614.68	4197783.2	2.85E-08	3.04E-08	5.89E-08	4.29E-09	4.56E-09	8.85E-09	4.19E-09	4.06E-09	8.26E-09	2.23E-09	1.84E-09	4.07E-09
826	650626.04	4197813.91	2.74E-08	2.92E-08	5.66E-08	4.12E-09	4.38E-09	8.50E-09	4.03E-09	3.90E-09	7.93E-09	2.14E-09	1.77E-09	3.91E-09
827	650637.41	4197844.62	2.62E-08	2.8E-08	5.42E-08	3.94E-09	4.19E-09	8.14E-09	3.86E-09	3.74E-09	7.59E-09	2.05E-09	1.69E-09	3.74E-09
828	650648.77	4197875.33	2.51E-08	2.67E-08	5.18E-08	3.77E-09	4.01E-09	7.77E-09	3.68E-09	3.57E-09	7.26E-09	1.96E-09	1.62E-09	3.58E-09
829	650660.14	4197906.04	2.39E-08	2.55E-08	4.94E-08	3.59E-09	3.82E-09	7.42E-09	3.52E-09	3.41E-09	6.92E-09	1.87E-09	1.54E-09	3.41E-09
830	650671.5	4197936.75	2.28E-08	2.43E-08	4.71E-08	3.43E-09	3.64E-09	7.07E-09	3.35E-09	3.25E-09	6.60E-09	1.78E-09	1.47E-09	3.25E-09
831	650682.86	4197967.46	2.17E-08	2.31E-08	4.48E-08	3.26E-09	3.47E-09	6.73E-09	3.19E-09	3.09E-09	6.28E-09	1.69E-09	1.40E-09	3.10E-09
832	650694.23	4197998.17	2.06E-08	2.2E-08	4.26E-08	3.10E-09	3.30E-09	6.40E-09	3.03E-09	2.94E-09	5.98E-09	1.61E-09	1.33E-09	2.95E-09

833	650705.59	4198028.88	1.96E-08	2.09E-08	4.06E-08	2.95E-09	3.14E-09	6.09E-09	2.89E-09	2.80E-09	5.68E-09	1.53E-09	1.27E-09	2.80E-09
834	650716.96	4198059.59	1.87E-08	1.99E-08	3.86E-08	2.81E-09	2.99E-09	5.79E-09	2.75E-09	2.66E-09	5.41E-09	1.46E-09	1.21E-09	2.67E-09
835	650728.32	4198090.31	1.78E-08	1.89E-08	3.67E-08	2.67E-09	2.84E-09	5.51E-09	2.61E-09	2.53E-09	5.14E-09	1.39E-09	1.15E-09	2.53E-09
836	650739.69	4198121.02	1.69E-08	1.8E-08	3.49E-08	2.54E-09	2.70E-09	5.24E-09	2.48E-09	2.41E-09	4.89E-09	1.32E-09	1.09E-09	2.41E-09
837	650751.05	4198151.73	1.60E-08	1.71E-08	3.32E-08	2.41E-09	2.57E-09	4.98E-09	2.36E-09	2.29E-09	4.65E-09	1.25E-09	1.04E-09	2.29E-09
838	650762.41	4198182.44	1.52E-08	1.63E-08	3.15E-08	2.29E-09	2.44E-09	4.73E-09	2.24E-09	2.17E-09	4.42E-09	1.19E-09	9.85E-10	2.18E-09
839	650773.78	4198213.15	1.45E-08	1.55E-08	2.99E-08	2.18E-09	2.32E-09	4.50E-09	2.13E-09	2.07E-09	4.20E-09	1.13E-09	9.37E-10	2.07E-09
840	650785.14	4198243.86	1.38E-08	1.47E-08	2.85E-08	2.07E-09	2.20E-09	4.27E-09	2.03E-09	1.96E-09	3.99E-09	1.08E-09	8.90E-10	1.97E-09
841	649681.31	4197118.45	2.42E-08	2.58E-08	5.00E-08	3.64E-09	3.87E-09	7.50E-09	3.56E-09	3.45E-09	7.00E-09	1.89E-09	1.56E-09	3.45E-09
842	649713.14	4196924.97	1.57E-08	1.67E-08	3.24E-08	2.36E-09	2.50E-09	4.86E-09	2.30E-09	2.23E-09	4.54E-09	1.22E-09	1.01E-09	2.24E-09
843	649743.54	4196938.02	1.67E-08	1.78E-08	3.45E-08	2.51E-09	2.67E-09	5.18E-09	2.45E-09	2.38E-09	4.83E-09	1.30E-09	1.08E-09	2.38E-09
844	649773.94	4196951.07	1.78E-08	1.89E-08	3.67E-08	2.67E-09	2.84E-09	5.51E-09	2.61E-09	2.53E-09	5.14E-09	1.39E-09	1.15E-09	2.54E-09
845	649804.34	4196964.12	1.89E-08	2.01E-08	3.90E-08	2.84E-09	3.02E-09	5.86E-09	2.78E-09	2.69E-09	5.47E-09	1.48E-09	1.22E-09	2.70E-09
846	649834.74	4196977.17	2.00E-08	2.14E-08	4.14E-08	3.01E-09	3.21E-09	6.22E-09	2.95E-09	2.86E-09	5.80E-09	1.57E-09	1.30E-09	2.86E-09
847	649865.14	4196990.22	2.12E-08	2.26E-08	4.38E-08	3.19E-09	3.39E-09	6.58E-09	3.12E-09	3.02E-09	6.14E-09	1.66E-09	1.37E-09	3.03E-09
848	649895.54	4197003.27	2.24E-08	2.38E-08	4.62E-08	3.36E-09	3.58E-09	6.94E-09	3.29E-09	3.19E-09	6.48E-09	1.75E-09	1.45E-09	3.19E-09
849	649925.94	4197016.32	2.35E-08	2.51E-08	4.86E-08	3.54E-09	3.76E-09	7.29E-09	3.46E-09	3.35E-09	6.81E-09	1.84E-09	1.52E-09	3.36E-09
850	649956.34	4197029.37	2.46E-08	2.63E-08	5.09E-08	3.70E-09	3.94E-09	7.64E-09	3.62E-09	3.51E-09	7.13E-09	1.92E-09	1.59E-09	3.52E-09
851	649986.74	4197042.41	2.57E-08	2.74E-08	5.32E-08	3.87E-09	4.11E-09	7.98E-09	3.78E-09	3.67E-09	7.45E-09	2.01E-09	1.66E-09	3.67E-09
852	650017.14	4197055.46	2.68E-08	2.85E-08	5.53E-08	4.03E-09	4.28E-09	8.31E-09	3.94E-09	3.82E-09	7.75E-09	2.09E-09	1.73E-09	3.82E-09
853	650047.54	4197068.51	2.78E-08	2.96E-08	5.74E-08	4.18E-09	4.44E-09	8.61E-09	4.08E-09	3.96E-09	8.04E-09	2.17E-09	1.79E-09	3.96E-09
854	650077.94	4197081.56	2.87E-08	3.06E-08	5.92E-08	4.31E-09	4.58E-09	8.89E-09	4.21E-09	4.09E-09	8.30E-09	2.24E-09	1.85E-09	4.09E-09
855	650108.34	4197094.61	2.95E-08	3.14E-08	6.09E-08	4.43E-09	4.71E-09	9.14E-09	4.33E-09	4.20E-09	8.53E-09	2.30E-09	1.90E-09	4.21E-09
856	650138.74	4197107.66	3.02E-08	3.22E-08	6.23E-08	4.54E-09	4.82E-09	9.36E-09	4.44E-09	4.30E-09	8.74E-09	2.36E-09	1.95E-09	4.31E-09
857	650169.14	4197120.71	3.08E-08	3.28E-08	6.36E-08	4.63E-09	4.92E-09	9.55E-09	4.53E-09	4.39E-09	8.91E-09	2.40E-09	1.99E-09	4.39E-09
858	650199.54	4197133.76	3.13E-08	3.33E-08	6.46E-08	4.70E-09	5.00E-09	9.70E-09	4.60E-09	4.45E-09	9.05E-09	2.44E-09	2.02E-09	4.46E-09
859	650229.94	4197146.81	3.16E-08	3.37E-08	6.53E-08	4.75E-09	5.05E-09	9.81E-09	4.65E-09	4.51E-09	9.16E-09	2.47E-09	2.04E-09	4.51E-09
860	650260.34	4197159.86	3.19E-08	3.4E-08	6.59E-08	4.80E-09	5.10E-09	9.89E-09	4.69E-09	4.54E-09	9.23E-09	2.49E-09	2.06E-09	4.55E-09
861	650290.74	4197172.9	3.21E-08	3.42E-08	6.63E-08	4.82E-09	5.13E-09	9.95E-09	4.72E-09	4.57E-09	9.28E-09	2.51E-09	2.07E-09	4.58E-09
862	650321.14	4197185.95	3.22E-08	3.43E-08	6.64E-08	4.83E-09	5.14E-09	9.97E-09	4.73E-09	4.58E-09	9.31E-09	2.51E-09	2.08E-09	4.59E-09
863	650351.54	4197199	3.21E-08	3.42E-08	6.63E-08	4.83E-09	5.13E-09	9.96E-09	4.72E-09	4.57E-09	9.29E-09	2.51E-09	2.07E-09	4.58E-09
864	650381.94	4197212.05	3.19E-08	3.4E-08	6.60E-08	4.80E-09	5.11E-09	9.91E-09	4.70E-09	4.55E-09	9.25E-09	2.49E-09	2.06E-09	4.56E-09
865	650412.34	4197225.1	3.17E-08	3.37E-08	6.54E-08	4.76E-09	5.06E-09	9.82E-09	4.65E-09	4.51E-09	9.16E-09	2.47E-09	2.05E-09	4.52E-09
866	650442.74	4197238.15	3.13E-08	3.34E-08	6.47E-08	4.71E-09	5.01E-09	9.72E-09	4.61E-09	4.46E-09	9.07E-09	2.45E-09	2.02E-09	4.47E-09
867	650473.14	4197251.2	3.09E-08	3.3E-08	6.39E-08	4.65E-09	4.94E-09	9.59E-09	4.55E-09	4.41E-09	8.95E-09	2.42E-09	2.00E-09	4.41E-09
868	650503.54	4197264.25	3.04E-08	3.24E-08	6.29E-08	4.58E-09	4.87E-09	9.44E-09	4.48E-09	4.34E-09	8.81E-09	2.38E-09	1.97E-09	4.34E-09
869	650533.94	4197277.3	2.99E-08	3.19E-08	6.18E-08	4.50E-09	4.78E-09	9.28E-09	4.40E-09	4.26E-09	8.66E-09	2.34E-09	1.93E-09	4.27E-09
870	650564.34	4197290.34	2.93E-08	3.12E-08	6.06E-08	4.41E-09	4.69E-09	9.09E-09	4.31E-09	4.18E-09	8.49E-09	2.29E-09	1.89E-09	4.18E-09
871	650594.74	4197303.39	2.87E-08	3.06E-08	5.92E-08	4.31E-09	4.58E-09	8.90E-09	4.22E-09	4.09E-09	8.30E-09	2.24E-09	1.85E-09	4.09E-09
872	650625.14	4197316.44	2.80E-08	2.98E-08	5.78E-08	4.21E-09	4.47E-09	8.68E-09	4.11E-09	3.99E-09	8.10E-09	2.19E-09	1.81E-09	3.99E-09
873	650646.08	4197338.48	2.77E-08	2.95E-08	5.72E-08	4.16E-09	4.42E-09	8.59E-09	4.07E-09	3.94E-09	8.01E-09	2.16E-09	1.79E-09	3.95E-09
874	650657.56	4197369.51	2.77E-08	2.95E-08	5.73E-08	4.17E-09	4.43E-09	8.60E-09	4.07E-09	3.95E-09	8.02E-09	2.16E-09	1.79E-09	3.96E-09
875	650669.04	4197400.53	2.77E-08	2.95E-08	5.71E-08	4.16E-09	4.42E-09	8.58E-09	4.07E-09	3.94E-09	8.01E-09	2.16E-09	1.79E-09	3.95E-09
876	650680.52	4197431.56	2.75E-08	2.93E-08	5.69E-08	4.14E-09	4.40E-09	8.54E-09	4.05E-09	3.92E-09	7.97E-09	2.15E-09	1.78E-09	3.93E-09
877	650692	4197462.58	2.73E-08	2.91E-08	5.64E-08	4.10E-09	4.36E-09	8.47E-09	4.01E-09	3.89E-09	7.90E-09	2.13E-09	1.76E-09	3.90E-09
878	650703.48	4197493.61	2.70E-08	2.88E-08	5.58E-08	4.06E-09	4.31E-09	8.37E-09	3.97E-09	3.85E-09	7.81E-09	2.11E-09	1.74E-09	3.85E-09
879	650714.96	4197524.64	2.66E-08	2.83E-08	5.49E-08	4.00E-09	4.25E-09	8.25E-09	3.91E-09	3.79E-09	7.70E-09	2.08E-09	1.72E-09	3.79E-09
880	650726.44	4197555.66	2.61E-08	2.78E-08	5.39E-08	3.93E-09	4.17E-09	8.10E-09	3.84E-09	3.72E-09	7.56E-09	2.04E-09	1.69E-09	3.73E-09
881	650737.92	4197586.69	2.56E-08	2.72E-08	5.28E-08	3.84E-09	4.09E-09	7.93E-09	3.76E-09	3.64E-09	7.40E-09	2.00E-09	1.65E-09	3.65E-09
882	650749.41	4197617.71	2.49E-08	2.66E-08	5.15E-08	3.75E-09	3.99E-09	7.74E-09	3.67E-09	3.56E-09	7.22E-09	1.95E-09	1.61E-09	3.56E-09
883	650760.89	4197648.74	2.43E-08	2.59E-08	5.02E-08	3.65E-09	3.88E-09	7.53E-09	3.57E-09	3.46E-09	7.03E-09	1.90E-09	1.57E-09	3.47E-09
884	650772.37	4197679.77	2.36E-08	2.51E-08	4.87E-08	3.55E-09	3.77E-09	7.32E-09	3.47E-09	3.36E-09	6.83E-09	1.84E-09	1.52E-09	3.37E-09
885	650783.85	4197710.79	2.28E-08	2.43E-08	4.71E-08	3.43E-09	3.65E-09	7.08E-09	3.36E-09	3.25E-09	6.61E-09	1.78E-09	1.47E-09	3.26E-09
886	650795.33	4197741.82	2.20E-08	2.35E-08	4.55E-08	3.31E-09	3.52E-09	6.84E-09	3.24E-09	3.14E-09	6.38E-09	1.72E-09	1.42E-09	3.14E-09
887	650806.81	4197772.84	2.12E-08	2.26E-08	4.39E-08	3.19E-09	3.39E-09	6.59E-09	3.12E-09	3.03E-09	6.15E-09	1.66E-09	1.37E-09	3.03E-09
888	650818.29	4197803.87	2.04E-08	2.18E-08	4.22E-08	3.07E-09	3.26E-09	6.34E-09	3.00E-09	2.91E-09	5.91E-09	1.60E-09	1.32E-09	2.91E-09
889	650829.77	4197834.9	1.96E-08	2.09E-08	4.05E-08	2.95E-09	3.14E-09	6.08E-09	2.88E-09	2.79E-09	5.68E-09	1.53E-09	1.27E-09	2.80E-09
890	650841.25	4197865.92	1.88E-08	2.01E-08	3.89E-08	2.83E-09	3.01E-09	5.84E-09	2.77E-09	2.68E-09	5.45E-09	1.47E-09	1.22E-09	2.69E-09
891	650852.73	4197896.95	1.80E-08	1.92E-08	3.73E-08	2.71E-09	2.88E-09	5.60E-09	2.65E-09	2.57E-09	5.22E-09	1.41E-09	1.17E-09	2.58E-09
892	650864.22	4197927.97	1.73E-08	1.84E-08	3.57E-08	2.60E-09	2.76E-09	5.36E-09	2.54E-09	2.46E-09	5.01E-09	1.35E-09	1.12E-09	2.47E-09
893	650875.7	4197959	1.66E-08	1.77E-08	3.42E-08	2.49E-09	2.65E-09	5.14E-09	2.44E-09	2.36E-09	4.80E-09	1.29E-09	1.07E-09	2.37E-09
894	650887.18	4197990.03	1.59E-08	1.69E-08	3.28E-08	2.39E-09	2.54E-09	4.93E-09	2.33E-09	2.26E-09	4.60E-09	1.24E-09	1.03E-09	2.27E-09
895	650898.66	4198021.05	1.52E-08	1.62E-08	3.14E-08	2.29E-09	2.43E-09	4.72E-09	2.24E-09	2.17E-09	4.40E-09	1.19E-09	9.83E-10	2.17E-09
896	650910.14	4198052.08	1.46E-08	1.55E-08	3.01E-08	2.19E-09	2.33E-09	4.52E-09	2.14E-09	2.08E-09	4.22E-09	1.14E-09	9.42E-10	2.08E-09
897	650921.62	4198083.1	1.40E-08	1.49E-08	2.88E-08	2.10E-09	2.23E-09	4.33E-09	2.05E-09	1.99E-09	4.04E-09	1.09E-09	9.02E-10	1.99E-09
898	650933.1	4198114.13	1.34E-08	1.42E-08	2.76E-08	2.01E-09	2.14E-09	4.15E-09	1.96E-09	1.90E-09	3.87E-09	1.04E-09	8.63E-10	1.91E-09
899	650944.58	4198145.16	1.28E-08	1.36E-08	2.64E-08	1.92E-09	2.04E-09	3.97E-09	1.88E-09	1.82E-09	3.70E-09	9.99E-10	8.26E-10	1.83E-09
900	650956.06	4198176.18	1.22E-08	1.3E-08	2.53E-08	1.84E-09	1.96E-09	3.80E-09	1.80E-09	1.74E-09	3.54E-09	9.56E-10	7.91E-10	1.75E-09
901	650967.54	4198207.21	1.17E-08	1.25E-08	2.42E-08	1.76E-09	1.87E-09	3.63E-09	1.72E-09	1.67E-09	3.39E-09	9.15E-10	7.57E-10	1.67E-09
902	650979.03	4198238.23	1.12E-08	1.19E-08	2.32E-08	1.68E-09	1.79E-09	3.48E-09	1.65E-09	1.60E-09	3.24E-09	8.75E-10	7.24E-10	1.60E-09
903	650990.51	4198269.26	1.07E-08	1.14E-08	2.22E-08	1.61E-09	1.71E-09	3.33E-09	1.58E-09	1.53E-09	3.10E-09	8.38E-10	6.93E-10	1.53E-09
904	649681.31	4196918.45	1.49E-08	1.59E-08	3.08E-08	2.24E-09	2.38E-09	4.62E-09	2.19E-09	2.12E-09	4.31E-09	1.16E-09	9.62E-10	2.12E-09
905	649713.04	4196724.93	1.06E-08	1.13E-08	2.19E-08	1.59E-09	1.69E-09	3.29E-09	1.56E-09	1.51E-09	3.07E-09	8.28E-10	6.85E-10	1.51E-09
906	649743.25	4196737.9	1.12E-08	1.19E-08	2.31E-08	1.68E-09	1.79E-09	3.47E-09	1.64E-09	1.59E-09	3.24E-09	8.73E-10	7.22E-10	1.60E-09
907	649773.45	4196750.86	1.18E-08	1.26E-08	2.44E-08	1.77E-09	1.89E-09	3.66E-09	1.73E-09	1.68E-09	3.42E-09	9.22E-10	7.63E-10	1.68E-09
908	649803.66	4196763.83	1.25E-08	1.33E-08	2.57E-08	1.87E-09	1.99E-09	3.87E-09	1.83E-09	1.78E-09	3.61E-09	9.73E-10	8.05E-10	1.78E-09

909	649833.86	4196776.79	1.32E-08	1.4E-08	2.72E-08	1.98E-09	2.10E-09	4.08E-09	1.94E-09	1.88E-09	3.81E-09	1.03E-09	8.50E-10	1.88E-09
910	649864.07	4196789.76	1.39E-08	1.48E-08	2.87E-08	2.09E-09	2.22E-09	4.31E-09	2.04E-09	1.98E-09	4.02E-09	1.09E-09	8.98E-10	1.98E-09
911	649894.27	4196802.72	1.47E-08	1.56E-08	3.03E-08	2.20E-09	2.34E-09	4.55E-09	2.15E-09	2.09E-09	4.24E-09	1.14E-09	9.47E-10	2.09E-09
912	649924.48	4196815.69	1.54E-08	1.65E-08	3.19E-08	2.32E-09	2.47E-09	4.79E-09	2.27E-09	2.20E-09	4.47E-09	1.21E-09	9.97E-10	2.20E-09
913	649954.68	4196828.66	1.62E-08	1.73E-08	3.35E-08	2.44E-09	2.59E-09	5.04E-09	2.39E-09	2.31E-09	4.70E-09	1.27E-09	1.05E-09	2.32E-09
914	649984.89	4196841.62	1.70E-08	1.82E-08	3.52E-08	2.56E-09	2.72E-09	5.28E-09	2.50E-09	2.43E-09	4.93E-09	1.33E-09	1.10E-09	2.43E-09
915	650015.09	4196854.59	1.78E-08	1.9E-08	3.68E-08	2.68E-09	2.85E-09	5.53E-09	2.62E-09	2.54E-09	5.16E-09	1.39E-09	1.15E-09	2.55E-09
916	650045.3	4196867.55	1.86E-08	1.99E-08	3.85E-08	2.80E-09	2.98E-09	5.78E-09	2.74E-09	2.66E-09	5.40E-09	1.46E-09	1.20E-09	2.66E-09
917	650075.5	4196880.52	1.94E-08	2.07E-08	4.01E-08	2.92E-09	3.11E-09	6.03E-09	2.86E-09	2.77E-09	5.62E-09	1.52E-09	1.26E-09	2.77E-09
918	650105.71	4196893.48	2.02E-08	2.15E-08	4.17E-08	3.03E-09	3.23E-09	6.26E-09	2.97E-09	2.88E-09	5.84E-09	1.58E-09	1.30E-09	2.88E-09
919	650135.91	4196906.45	2.09E-08	2.23E-08	4.32E-08	3.14E-09	3.34E-09	6.48E-09	3.07E-09	2.98E-09	6.05E-09	1.63E-09	1.35E-09	2.98E-09
920	650166.12	4196919.41	2.16E-08	2.3E-08	4.46E-08	3.24E-09	3.45E-09	6.69E-09	3.17E-09	3.08E-09	6.25E-09	1.69E-09	1.39E-09	3.08E-09
921	650196.32	4196932.38	2.22E-08	2.37E-08	4.59E-08	3.34E-09	3.55E-09	6.89E-09	3.27E-09	3.16E-09	6.43E-09	1.73E-09	1.43E-09	3.17E-09
922	650226.53	4196945.34	2.28E-08	2.43E-08	4.71E-08	3.42E-09	3.64E-09	7.07E-09	3.35E-09	3.25E-09	6.59E-09	1.78E-09	1.47E-09	3.25E-09
923	650256.73	4196958.31	2.33E-08	2.48E-08	4.81E-08	3.50E-09	3.72E-09	7.23E-09	3.42E-09	3.32E-09	6.74E-09	1.82E-09	1.50E-09	3.32E-09
924	650286.94	4196971.27	2.37E-08	2.53E-08	4.90E-08	3.57E-09	3.79E-09	7.36E-09	3.49E-09	3.38E-09	6.87E-09	1.85E-09	1.53E-09	3.39E-09
925	650317.14	4196984.24	2.41E-08	2.57E-08	4.98E-08	3.62E-09	3.85E-09	7.48E-09	3.54E-09	3.43E-09	6.98E-09	1.88E-09	1.56E-09	3.44E-09
926	650347.35	4196997.2	2.44E-08	2.6E-08	5.04E-08	3.67E-09	3.90E-09	7.57E-09	3.59E-09	3.48E-09	7.06E-09	1.91E-09	1.58E-09	3.48E-09
927	650377.55	4197010.17	2.47E-08	2.63E-08	5.10E-08	3.71E-09	3.95E-09	7.66E-09	3.63E-09	3.52E-09	7.15E-09	1.93E-09	1.59E-09	3.52E-09
928	650407.76	4197023.13	2.49E-08	2.65E-08	5.13E-08	3.74E-09	3.97E-09	7.71E-09	3.65E-09	3.54E-09	7.20E-09	1.94E-09	1.61E-09	3.55E-09
929	650437.96	4197036.1	2.50E-08	2.66E-08	5.16E-08	3.75E-09	3.99E-09	7.74E-09	3.67E-09	3.56E-09	7.23E-09	1.95E-09	1.61E-09	3.56E-09
930	650468.17	4197049.07	2.50E-08	2.66E-08	5.16E-08	3.76E-09	3.99E-09	7.75E-09	3.67E-09	3.56E-09	7.23E-09	1.95E-09	1.61E-09	3.57E-09
931	650498.37	4197062.03	2.50E-08	2.66E-08	5.15E-08	3.75E-09	3.99E-09	7.74E-09	3.67E-09	3.56E-09	7.22E-09	1.95E-09	1.61E-09	3.56E-09
932	650528.58	4197075	2.49E-08	2.65E-08	5.14E-08	3.74E-09	3.98E-09	7.72E-09	3.66E-09	3.54E-09	7.20E-09	1.94E-09	1.61E-09	3.55E-09
933	650558.78	4197087.96	2.47E-08	2.64E-08	5.11E-08	3.72E-09	3.95E-09	7.67E-09	3.64E-09	3.52E-09	7.16E-09	1.93E-09	1.60E-09	3.53E-09
934	650588.99	4197100.93	2.45E-08	2.62E-08	5.07E-08	3.69E-09	3.92E-09	7.61E-09	3.61E-09	3.50E-09	7.11E-09	1.92E-09	1.59E-09	3.50E-09
935	650619.19	4197113.89	2.43E-08	2.59E-08	5.02E-08	3.66E-09	3.89E-09	7.54E-09	3.57E-09	3.46E-09	7.04E-09	1.90E-09	1.57E-09	3.47E-09
936	650649.4	4197126.86	2.40E-08	2.56E-08	4.96E-08	3.61E-09	3.84E-09	7.45E-09	3.53E-09	3.42E-09	6.96E-09	1.88E-09	1.55E-09	3.43E-09
937	650679.6	4197139.82	2.37E-08	2.53E-08	4.90E-08	3.56E-09	3.79E-09	7.35E-09	3.48E-09	3.38E-09	6.86E-09	1.85E-09	1.53E-09	3.38E-09
938	650709.81	4197152.79	2.33E-08	2.49E-08	4.82E-08	3.51E-09	3.73E-09	7.24E-09	3.43E-09	3.33E-09	6.76E-09	1.82E-09	1.51E-09	3.33E-09
939	650740.01	4197165.75	2.30E-08	2.45E-08	4.74E-08	3.45E-09	3.67E-09	7.12E-09	3.37E-09	3.27E-09	6.64E-09	1.79E-09	1.48E-09	3.28E-09
940	650770.22	4197178.72	2.25E-08	2.4E-08	4.66E-08	3.39E-09	3.60E-09	6.99E-09	3.31E-09	3.21E-09	6.53E-09	1.76E-09	1.46E-09	3.22E-09
941	650791.02	4197200.61	2.24E-08	2.39E-08	4.63E-08	3.37E-09	3.58E-09	6.95E-09	3.29E-09	3.19E-09	6.48E-09	1.75E-09	1.45E-09	3.20E-09
942	650802.43	4197231.44	2.25E-08	2.4E-08	4.65E-08	3.38E-09	3.59E-09	6.98E-09	3.31E-09	3.20E-09	6.51E-09	1.76E-09	1.45E-09	3.21E-09
943	650813.84	4197262.27	2.25E-08	2.4E-08	4.66E-08	3.39E-09	3.60E-09	6.99E-09	3.31E-09	3.21E-09	6.52E-09	1.76E-09	1.46E-09	3.22E-09
944	650825.25	4197293.1	2.25E-08	2.4E-08	4.65E-08	3.39E-09	3.60E-09	6.99E-09	3.31E-09	3.21E-09	6.52E-09	1.76E-09	1.46E-09	3.22E-09
945	650836.65	4197323.92	2.25E-08	2.39E-08	4.64E-08	3.38E-09	3.59E-09	6.97E-09	3.30E-09	3.20E-09	6.50E-09	1.75E-09	1.45E-09	3.21E-09
946	650848.06	4197354.75	2.23E-08	2.38E-08	4.62E-08	3.36E-09	3.57E-09	6.93E-09	3.29E-09	3.18E-09	6.47E-09	1.75E-09	1.44E-09	3.19E-09
947	650859.47	4197385.58	2.22E-08	2.36E-08	4.58E-08	3.33E-09	3.54E-09	6.88E-09	3.26E-09	3.16E-09	6.42E-09	1.73E-09	1.43E-09	3.16E-09
948	650870.88	4197416.4	2.19E-08	2.34E-08	4.53E-08	3.30E-09	3.51E-09	6.80E-09	3.23E-09	3.13E-09	6.35E-09	1.71E-09	1.42E-09	3.13E-09
949	650882.28	4197447.23	2.16E-08	2.31E-08	4.47E-08	3.26E-09	3.46E-09	6.72E-09	3.18E-09	3.08E-09	6.27E-09	1.69E-09	1.40E-09	3.09E-09
950	650893.69	4197478.06	2.13E-08	2.27E-08	4.40E-08	3.20E-09	3.41E-09	6.61E-09	3.13E-09	3.04E-09	6.17E-09	1.66E-09	1.38E-09	3.04E-09
951	650905.1	4197508.89	2.09E-08	2.23E-08	4.32E-08	3.15E-09	3.34E-09	6.49E-09	3.08E-09	2.98E-09	6.06E-09	1.63E-09	1.35E-09	2.99E-09
952	650916.51	4197539.71	2.05E-08	2.18E-08	4.23E-08	3.08E-09	3.27E-09	6.35E-09	3.01E-09	2.92E-09	5.93E-09	1.60E-09	1.32E-09	2.92E-09
953	650927.91	4197570.54	2.00E-08	2.13E-08	4.13E-08	3.01E-09	3.20E-09	6.21E-09	2.94E-09	2.85E-09	5.79E-09	1.56E-09	1.29E-09	2.86E-09
954	650939.32	4197601.37	1.95E-08	2.08E-08	4.03E-08	2.93E-09	3.12E-09	6.05E-09	2.87E-09	2.78E-09	5.64E-09	1.52E-09	1.26E-09	2.78E-09
955	650950.73	4197632.19	1.90E-08	2.02E-08	3.92E-08	2.85E-09	3.03E-09	5.88E-09	2.79E-09	2.70E-09	5.49E-09	1.48E-09	1.22E-09	2.71E-09
956	650962.13	4197663.02	1.84E-08	1.96E-08	3.80E-08	2.77E-09	2.94E-09	5.71E-09	2.71E-09	2.62E-09	5.33E-09	1.44E-09	1.19E-09	2.63E-09
957	650973.54	4197693.85	1.78E-08	1.9E-08	3.69E-08	2.68E-09	2.85E-09	5.53E-09	2.62E-09	2.54E-09	5.16E-09	1.39E-09	1.15E-09	2.55E-09
958	650984.95	4197724.68	1.73E-08	1.84E-08	3.56E-08	2.59E-09	2.76E-09	5.35E-09	2.54E-09	2.46E-09	5.00E-09	1.35E-09	1.12E-09	2.46E-09
959	650996.36	4197755.5	1.67E-08	1.78E-08	3.44E-08	2.51E-09	2.66E-09	5.17E-09	2.45E-09	2.38E-09	4.83E-09	1.30E-09	1.08E-09	2.38E-09
960	651007.76	4197786.33	1.61E-08	1.72E-08	3.32E-08	2.42E-09	2.57E-09	4.99E-09	2.37E-09	2.29E-09	4.66E-09	1.26E-09	1.04E-09	2.30E-09
961	651019.17	4197817.16	1.55E-08	1.65E-08	3.21E-08	2.33E-09	2.48E-09	4.82E-09	2.28E-09	2.21E-09	4.49E-09	1.21E-09	1.00E-09	2.22E-09
962	651030.58	4197847.98	1.50E-08	1.6E-08	3.09E-08	2.25E-09	2.39E-09	4.64E-09	2.20E-09	2.13E-09	4.33E-09	1.17E-09	9.67E-10	2.14E-09
963	651041.99	4197878.81	1.44E-08	1.54E-08	2.98E-08	2.17E-09	2.31E-09	4.48E-09	2.12E-09	2.06E-09	4.18E-09	1.13E-09	9.32E-10	2.06E-09
964	651053.39	4197909.64	1.39E-08	1.48E-08	2.87E-08	2.09E-09	2.22E-09	4.31E-09	2.04E-09	1.98E-09	4.03E-09	1.09E-09	8.99E-10	1.99E-09
965	651064.8	4197940.47	1.34E-08	1.43E-08	2.77E-08	2.02E-09	2.14E-09	4.16E-09	1.97E-09	1.91E-09	3.88E-09	1.05E-09	8.66E-10	1.91E-09
966	651076.21	4197971.29	1.29E-08	1.38E-08	2.67E-08	1.94E-09	2.07E-09	4.01E-09	1.90E-09	1.84E-09	3.74E-09	1.01E-09	8.35E-10	1.84E-09
967	651087.62	4198002.12	1.25E-08	1.33E-08	2.57E-08	1.87E-09	1.99E-09	3.86E-09	1.83E-09	1.77E-09	3.61E-09	9.73E-10	8.05E-10	1.78E-09
968	651099.02	4198032.95	1.20E-08	1.28E-08	2.48E-08	1.80E-09	1.92E-09	3.72E-09	1.76E-09	1.71E-09	3.48E-09	9.38E-10	7.76E-10	1.71E-09
969	651110.43	4198063.77	1.16E-08	1.23E-08	2.39E-08	1.74E-09	1.85E-09	3.59E-09	1.70E-09	1.65E-09	3.35E-09	9.03E-10	7.47E-10	1.65E-09
970	651121.84	4198094.6	1.11E-08	1.19E-08	2.30E-08	1.67E-09	1.78E-09	3.46E-09	1.64E-09	1.59E-09	3.22E-09	8.70E-10	7.20E-10	1.59E-09
971	651133.25	4198125.43	1.07E-08	1.14E-08	2.22E-08	1.61E-09	1.71E-09	3.33E-09	1.58E-09	1.53E-09	3.10E-09	8.38E-10	6.93E-10	1.53E-09
972	651144.65	4198156.26	1.03E-08	1.1E-08	2.13E-08	1.55E-09	1.65E-09	3.20E-09	1.52E-09	1.47E-09	2.99E-09	8.06E-10	6.67E-10	1.47E-09
973	651156.06	4198187.08	9.93E-09	1.06E-08	2.05E-08	1.49E-09	1.59E-09	3.08E-09	1.46E-09	1.42E-09	2.88E-09	7.76E-10	6.42E-10	1.42E-09
974	651167.47	4198217.91	9.56E-09	1.02E-08	1.98E-08	1.44E-09	1.53E-09	2.97E-09	1.41E-09	1.36E-09	2.77E-09	7.47E-10	6.18E-10	1.36E-09
975	651178.88	4198248.74	9.20E-09	9.8E-09	1.90E-08	1.38E-09	1.47E-09	2.85E-09	1.35E-09	1.31E-09	2.66E-09	7.18E-10	5.94E-10	1.31E-09
976	651190.28	4198279.56	8.85E-09	9.43E-09	1.83E-08	1.33E-09	1.41E-09	2.75E-09	1.30E-09	1.26E-09	2.56E-09	6.91E-10	5.72E-10	1.26E-09
977	649681.31	4196718.45	1.02E-08	1.08E-08	2.10E-08	1.53E-09	1.62E-09	3.15E-09	1.49E-09	1.45E-09	2.94E-09	7.93E-10	6.56E-10	1.45E-09
978	649780.23	4198130.84	3.80E-07	4.05E-07	7.86E-07	5.72E-08	6.08E-08	1.18E-07	5.59E-08	5.42E-08	1.10E-07	2.97E-08	2.46E-08	5.43E-08
979	649931.29	4198215.35	9.54E-08	1.02E-07	1.97E-07	1.43E-08	1.52E-08	2.96E-08	1.40E-08	1.36E-08	2.76E-08	7.45E-09	6.16E-09	1.36E-08
980	649930.22	4198128.98	1.32E-07	1.41E-07	2.73E-07	1.98E-08	2.11E-08	4.09E-08	1.94E-08	1.88E-08	3.82E-08	1.03E-08	8.53E-09	1.88E-08
981	649980.22	4198128.36	1.03E-07	1.1E-07	2.13E-07	1.55E-08	1.65E-08	3.20E-08	1.52E-08	1.47E-08	2.98E-08	8.05E-09	6.66E-09	1.47E-08
982	650080.21	4198127.12	6.88E-08	7.34E-08	1.42E-07	1.04E-08	1.10E-08	2.14E-08	1.01E-08	9.81E-09	1.99E-08	5.38E-09	4.45E-09	9.83E-09
983	650180.47	4198147.48	4.78E-08	5.1E-08	9.88E-08	7.19E-09	7.64E-09	1.48E-08	7.03E-09	6.81E-09	1.38E-08	3.73E-09	3.09E-09	6.82E-09
984	650280.19	4198124.65	3.86E-08	4.11E-08	7.97E-08	5.80E-09	6.17E-09	1.20E-08	5.67E-09	5.50E-09	1.12E-08	3.01E-09	2.49E-09	5.50E-09

985	650380.45	4198145	2.97E-08	3.17E-08	6.14E-08	4.47E-09	4.75E-09	9.22E-09	4.37E-09	4.23E-09	8.60E-09	2.32E-09	1.92E-09	4.24E-09
986	650580.44	4198142.52	2.08E-08	2.22E-08	4.29E-08	3.12E-09	3.32E-09	6.45E-09	3.06E-09	2.96E-09	6.02E-09	1.62E-09	1.34E-09	2.97E-09
987	650780.69	4198161.64	1.53E-08	1.63E-08	3.15E-08	2.30E-09	2.44E-09	4.74E-09	2.24E-09	2.18E-09	4.42E-09	1.19E-09	9.87E-10	2.18E-09
988	650780.16	4198118.45	1.60E-08	1.71E-08	3.31E-08	2.41E-09	2.56E-09	4.98E-09	2.36E-09	2.29E-09	4.64E-09	1.25E-09	1.04E-09	2.29E-09
989	650980.94	4198180.75	1.19E-08	1.26E-08	2.45E-08	1.78E-09	1.90E-09	3.68E-09	1.74E-09	1.69E-09	3.44E-09	9.27E-10	7.67E-10	1.69E-09
990	650980.41	4198137.57	1.24E-08	1.32E-08	2.56E-08	1.86E-09	1.98E-09	3.84E-09	1.82E-09	1.77E-09	3.59E-09	9.68E-10	8.01E-10	1.77E-09
991	651181.19	4198199.87	9.60E-09	1.02E-08	1.98E-08	1.44E-09	1.53E-09	2.98E-09	1.41E-09	1.37E-09	2.78E-09	7.50E-10	6.20E-10	1.37E-09
992	651180.66	4198156.68	9.98E-09	1.06E-08	2.06E-08	1.50E-09	1.60E-09	3.10E-09	1.47E-09	1.42E-09	2.89E-09	7.80E-10	6.45E-10	1.42E-09
993	651180.12	4198113.5	1.04E-08	1.11E-08	2.14E-08	1.56E-09	1.66E-09	3.22E-09	1.52E-09	1.48E-09	3.00E-09	8.10E-10	6.70E-10	1.48E-09
994	649747.35	4198111.24	4.97E-07	5.3E-07	1.03E-06	7.47E-08	7.94E-08	1.54E-07	7.30E-08	7.08E-08	1.44E-07	3.88E-08	3.21E-08	7.09E-08
995	649744.82	4198059.93	4.12E-07	4.39E-07	8.51E-07	6.20E-08	6.59E-08	1.28E-07	6.06E-08	5.87E-08	1.19E-07	3.22E-08	2.66E-08	5.88E-08
996	649752.48	4198011.54	3.35E-07	3.57E-07	6.92E-07	5.03E-08	5.35E-08	1.04E-07	4.92E-08	4.77E-08	9.69E-08	2.61E-08	2.16E-08	4.78E-08
997	649781.21	4198025.9	3.10E-07	3.31E-07	6.41E-07	4.66E-08	4.96E-08	9.62E-08	4.56E-08	4.42E-08	8.98E-08	2.42E-08	2.00E-08	4.43E-08
998	649818.4	4198100.36	2.82E-07	3E-07	5.82E-07	4.23E-08	4.50E-08	8.73E-08	4.14E-08	4.01E-08	8.15E-08	2.20E-08	1.82E-08	4.02E-08
999	649809.4	4197987.78	2.51E-07	2.67E-07	5.18E-07	3.77E-08	4.01E-08	7.78E-08	3.69E-08	3.57E-08	7.26E-08	1.96E-08	1.62E-08	3.58E-08
1000	649853.93	4198063.25	2.25E-07	2.4E-07	4.66E-07	3.39E-08	3.60E-08	6.99E-08	3.31E-08	3.21E-08	6.53E-08	1.76E-08	1.46E-08	3.22E-08
1001	649714.28	4197887.99	2.60E-07	2.78E-07	5.38E-07	3.92E-08	4.16E-08	8.08E-08	3.83E-08	3.71E-08	7.54E-08	2.03E-08	1.68E-08	3.72E-08
1002	649742.44	4197902.08	2.49E-07	2.66E-07	5.15E-07	3.75E-08	3.99E-08	7.74E-08	3.67E-08	3.56E-08	7.22E-08	1.95E-08	1.61E-08	3.56E-08
1003	649770.61	4197916.16	2.38E-07	2.53E-07	4.91E-07	3.57E-08	3.80E-08	7.37E-08	3.49E-08	3.38E-08	6.88E-08	1.86E-08	1.53E-08	3.39E-08
1004	649798.77	4197930.24	2.25E-07	2.4E-07	4.66E-07	3.39E-08	3.60E-08	6.99E-08	3.31E-08	3.21E-08	6.53E-08	1.76E-08	1.46E-08	3.22E-08
1005	649826.93	4197944.32	2.15E-07	2.29E-07	4.43E-07	3.23E-08	3.43E-08	6.66E-08	3.15E-08	3.06E-08	6.21E-08	1.68E-08	1.39E-08	3.06E-08
1006	649855.1	4197958.41	2.01E-07	2.14E-07	4.15E-07	3.02E-08	3.21E-08	6.23E-08	2.95E-08	2.86E-08	5.82E-08	1.57E-08	1.30E-08	2.87E-08
1007	649891.55	4198031.4	1.85E-07	1.97E-07	3.82E-07	2.78E-08	2.96E-08	5.74E-08	2.72E-08	2.63E-08	5.35E-08	1.44E-08	1.19E-08	2.64E-08
1008	649907.02	4198070.44	1.68E-07	1.79E-07	3.46E-07	2.52E-08	2.68E-08	5.20E-08	2.46E-08	2.39E-08	4.85E-08	1.31E-08	1.08E-08	2.39E-08
1009	649918.62	4198099.71	1.51E-07	1.61E-07	3.11E-07	2.27E-08	2.41E-08	4.67E-08	2.21E-08	2.15E-08	4.36E-08	1.18E-08	9.73E-09	2.15E-08
1010	649843.88	4197900.58	1.86E-07	1.98E-07	3.84E-07	2.80E-08	2.97E-08	5.77E-08	2.73E-08	2.65E-08	5.38E-08	1.45E-08	1.20E-08	2.65E-08
1011	649872.61	4197914.94	1.77E-07	1.89E-07	3.65E-07	2.66E-08	2.83E-08	5.49E-08	2.60E-08	2.52E-08	5.12E-08	1.38E-08	1.14E-08	2.52E-08
1012	649905.28	4197939.26	1.65E-07	1.76E-07	3.41E-07	2.48E-08	2.64E-08	5.11E-08	2.42E-08	2.35E-08	4.77E-08	1.29E-08	1.07E-08	2.35E-08
1013	649917.11	4197969.12	1.62E-07	1.73E-07	3.34E-07	2.43E-08	2.59E-08	5.02E-08	2.38E-08	2.31E-08	4.69E-08	1.26E-08	1.05E-08	2.31E-08
1014	649928.94	4197998.97	1.56E-07	1.66E-07	3.22E-07	2.34E-08	2.49E-08	4.84E-08	2.29E-08	2.22E-08	4.51E-08	1.22E-08	1.01E-08	2.23E-08
1015	649927.74	4197838.07	1.33E-07	1.42E-07	2.75E-07	2.00E-08	2.13E-08	4.14E-08	1.96E-08	1.90E-08	3.86E-08	1.04E-08	8.61E-09	1.90E-08
1016	649956.12	4197852.25	1.26E-07	1.34E-07	2.60E-07	1.89E-08	2.01E-08	3.91E-08	1.85E-08	1.79E-08	3.65E-08	9.84E-09	8.14E-09	1.80E-08
1017	649978.93	4197871.54	1.22E-07	1.3E-07	2.51E-07	1.83E-08	1.94E-08	3.77E-08	1.79E-08	1.73E-08	3.52E-08	9.50E-09	7.86E-09	1.74E-08
1018	649990.61	4197901.03	1.21E-07	1.29E-07	2.49E-07	1.81E-08	1.93E-08	3.74E-08	1.77E-08	1.72E-08	3.49E-08	9.42E-09	7.80E-09	1.72E-08
1019	650002.3	4197930.52	1.17E-07	1.25E-07	2.43E-07	1.77E-08	1.88E-08	3.64E-08	1.73E-08	1.67E-08	3.40E-08	9.17E-09	7.59E-09	1.68E-08
1020	650017.88	4197969.84	1.11E-07	1.18E-07	2.29E-07	1.66E-08	1.77E-08	3.43E-08	1.63E-08	1.58E-08	3.20E-08	8.64E-09	7.15E-09	1.58E-08
1021	650029.57	4197999.33	1.04E-07	1.11E-07	2.15E-07	1.56E-08	1.66E-08	3.23E-08	1.53E-08	1.48E-08	3.01E-08	8.13E-09	6.72E-09	1.48E-08
1022	650041.25	4198028.82	9.64E-08	1.03E-07	1.99E-07	1.45E-08	1.54E-08	2.99E-08	1.42E-08	1.37E-08	2.79E-08	7.53E-09	6.23E-09	1.38E-08
1023	650052.94	4198058.31	8.82E-08	9.4E-08	1.82E-07	1.33E-08	1.41E-08	2.74E-08	1.30E-08	1.26E-08	2.55E-08	6.89E-09	5.70E-09	1.26E-08
1024	650064.63	4198087.8	7.98E-08	8.51E-08	1.65E-07	1.20E-08	1.28E-08	2.48E-08	1.17E-08	1.14E-08	2.31E-08	6.23E-09	5.16E-09	1.14E-08
1025	649961.68	4197750.59	1.10E-07	1.18E-07	2.28E-07	1.66E-08	1.76E-08	3.42E-08	1.62E-08	1.57E-08	3.19E-08	8.61E-09	7.12E-09	1.57E-08
1026	649990.69	4197765.1	1.05E-07	1.12E-07	2.17E-07	1.58E-08	1.68E-08	3.26E-08	1.54E-08	1.50E-08	3.04E-08	8.20E-09	6.78E-09	1.50E-08
1027	650019.71	4197779.61	9.98E-08	1.06E-07	2.06E-07	1.50E-08	1.60E-08	3.10E-08	1.47E-08	1.42E-08	2.89E-08	7.80E-09	6.45E-09	1.42E-08
1028	650052.71	4197804.17	9.47E-08	1.01E-07	1.96E-07	1.42E-08	1.51E-08	2.94E-08	1.39E-08	1.35E-08	2.74E-08	7.39E-09	6.12E-09	1.35E-08
1029	650064.66	4197834.33	9.42E-08	1E-07	1.95E-07	1.42E-08	1.51E-08	2.92E-08	1.38E-08	1.34E-08	2.73E-08	7.36E-09	6.09E-09	1.34E-08
1030	650076.62	4197864.49	9.22E-08	9.83E-08	1.91E-07	1.39E-08	1.47E-08	2.86E-08	1.36E-08	1.31E-08	2.67E-08	7.21E-09	5.96E-09	1.32E-08
1031	650088.57	4197894.66	8.92E-08	9.51E-08	1.84E-07	1.34E-08	1.43E-08	2.77E-08	1.31E-08	1.27E-08	2.58E-08	6.97E-09	5.76E-09	1.27E-08
1032	650100.52	4197924.82	8.53E-08	9.1E-08	1.76E-07	1.28E-08	1.36E-08	2.65E-08	1.25E-08	1.22E-08	2.47E-08	6.67E-09	5.51E-09	1.22E-08
1033	650112.47	4197954.98	8.08E-08	8.61E-08	1.67E-07	1.21E-08	1.29E-08	2.51E-08	1.19E-08	1.15E-08	2.34E-08	6.31E-09	5.22E-09	1.15E-08
1034	650124.42	4197985.14	7.56E-08	8.06E-08	1.56E-07	1.14E-08	1.21E-08	2.35E-08	1.11E-08	1.08E-08	2.19E-08	5.91E-09	4.89E-09	1.08E-08
1035	650136.38	4198015.3	7.01E-08	7.47E-08	1.45E-07	1.05E-08	1.12E-08	2.18E-08	1.03E-08	9.99E-09	2.03E-08	5.48E-09	4.53E-09	1.00E-08
1036	650148.33	4198045.46	6.44E-08	6.87E-08	1.33E-07	9.69E-09	1.03E-08	2.00E-08	9.47E-09	9.18E-09	1.87E-08	5.03E-09	4.16E-09	9.19E-09
1037	650160.28	4198075.62	5.88E-08	6.27E-08	1.22E-07	8.85E-09	9.40E-09	1.83E-08	8.65E-09	8.38E-09	1.70E-08	4.60E-09	3.80E-09	8.40E-09
1038	650172.23	4198105.78	5.35E-08	5.7E-08	1.11E-07	8.04E-09	8.55E-09	1.66E-08	7.87E-09	7.62E-09	1.55E-08	4.18E-09	3.46E-09	7.64E-09
1039	650074.55	4197702.59	8.24E-08	8.79E-08	1.70E-07	1.24E-08	1.32E-08	2.56E-08	1.21E-08	1.17E-08	2.39E-08	6.44E-09	5.33E-09	1.18E-08
1040	650103.27	4197716.95	7.86E-08	8.38E-08	1.62E-07	1.18E-08	1.26E-08	2.44E-08	1.16E-08	1.12E-08	2.28E-08	6.14E-09	5.08E-09	1.12E-08
1041	650126.37	4197736.48	7.59E-08	8.09E-08	1.57E-07	1.14E-08	1.21E-08	2.35E-08	1.12E-08	1.08E-08	2.20E-08	5.93E-09	4.90E-09	1.08E-08
1042	650138.2	4197766.34	7.53E-08	8.03E-08	1.56E-07	1.13E-08	1.20E-08	2.34E-08	1.11E-08	1.07E-08	2.18E-08	5.88E-09	4.87E-09	1.08E-08
1043	650150.03	4197796.2	7.45E-08	7.94E-08	1.54E-07	1.12E-08	1.19E-08	2.31E-08	1.10E-08	1.06E-08	2.16E-08	5.82E-09	4.81E-09	1.06E-08
1044	650161.87	4197826.06	7.30E-08	7.78E-08	1.51E-07	1.10E-08	1.17E-08	2.26E-08	1.07E-08	1.04E-08	2.11E-08	5.70E-09	4.72E-09	1.04E-08
1045	650173.7	4197855.92	7.06E-08	7.53E-08	1.46E-07	1.06E-08	1.13E-08	2.19E-08	1.04E-08	1.01E-08	2.05E-08	5.52E-09	4.56E-09	1.01E-08
1046	650185.53	4197885.78	6.78E-08	7.22E-08	1.40E-07	1.02E-08	1.08E-08	2.10E-08	9.96E-09	9.66E-09	1.96E-08	5.29E-09	4.38E-09	9.67E-09
1047	650197.37	4197915.63	6.45E-08	6.88E-08	1.33E-07	9.70E-09	1.03E-08	2.00E-08	9.48E-09	9.19E-09	1.87E-08	5.04E-09	4.17E-09	9.21E-09
1048	650209.2	4197945.49	6.09E-08	6.49E-08	1.26E-07	9.16E-09	9.74E-09	1.89E-08	8.96E-09	8.68E-09	1.76E-08	4.76E-09	3.94E-09	8.69E-09
1049	650221.03	4197975.35	5.71E-08	6.09E-08	1.18E-07	8.59E-09	9.13E-09	1.77E-08	8.39E-09	8.14E-09	1.65E-08	4.46E-09	3.69E-09	8.15E-09
1050	650232.86	4198005.21	5.31E-08	5.66E-08	1.10E-07	7.98E-09	8.48E-09	1.65E-08	7.80E-09	7.56E-09	1.54E-08	4.14E-09	3.43E-09	7.57E-09
1051	650244.7	4198035.07	4.93E-08	5.25E-08	1.02E-07	7.41E-09	7.88E-09	1.53E-08	7.24E-09	7.02E-09	1.43E-08	3.85E-09	3.18E-09	7.03E-09
1052	650256.53	4198064.93	4.55E-08	4.85E-08	9.40E-08	6.84E-09	7.28E-09	1.41E-08	6.69E-09	6.49E-09	1.32E-08	3.56E-09	2.94E-09	6.50E-09
1053	650268.36	4198094.79	4.19E-08	4.47E-08	8.66E-08	6.30E-09	6.70E-09	1.30E-08	6.16E-09	5.98E-09	1.21E-08	3.28E-09	2.71E-09	5.98E-09
1054	649758.97	4197440.35	6.71E-08	7.15E-08	1.39E-07	1.01E-08	1.07E-08	2.08E-08	9.87E-09	9.56E-09	1.94E-08	5.24E-09	4.34E-09	9.58E-09
1055	649788.12	4197454.92	6.99E-08	7.46E-08	1.44E-07	1.05E-08	1.12E-08	2.17E-08	1.03E-08	9.97E-09	2.02E-08	5.46E-09	4.52E-09	9.98E-09
1056	649817.26	4197469.49	7.23E-08	7.71E-08	1.49E-07	1.09E-08	1.16E-08	2.24E-08	1.06E-08	1.03E-08	2.09E-08	5.65E-09	4.67E-09	1.03E-08
1057	649846.4	4197484.07	7.43E-08	7.92E-08	1.53E-07	1.12E-08	1.19E-08	2.30E-08	1.09E-08	1.06E-08	2.15E-08	5.80E-09	4.80E-09	1.06E-08
1058	649875.55	4197498.64	7.57E-08	8.07E-08	1.56E-07	1.14E-08	1.21E-08	2.35E-08	1.11E-08	1.08E-08	2.19E-08	5.92E-09	4.89E-09	1.08E-08
1059	649904.69	4197513.21	7.67E-08	8.18E-08	1.58E-07	1.15E-08	1.23E-08	2.38E-08	1.13E-08	1.09E-08	2.22E-08	5.99E-09	4.96E-09	1.10E-08
1060	649933.83	4197527.78	7.72E-08	8.23E-08	1.60E-07	1.16E-08	1.23E-08	2.40E-08	1.14E-08	1.10E-08	2.24E-08	6.03E-09	4.99E-09	1.10E-08

1061	649962.98	4197542.36	7.74E-08	8.25E-08	1.60E-07	1.16E-08	1.24E-08	2.40E-08	1.14E-08	1.10E-08	2.24E-08	6.05E-09	5.00E-09	1.10E-08
1062	649992.12	4197556.93	7.70E-08	8.2E-08	1.59E-07	1.16E-08	1.23E-08	2.39E-08	1.13E-08	1.10E-08	2.23E-08	6.01E-09	4.97E-09	1.10E-08
1063	650021.26	4197571.5	7.61E-08	8.11E-08	1.57E-07	1.14E-08	1.22E-08	2.36E-08	1.12E-08	1.08E-08	2.20E-08	5.94E-09	4.92E-09	1.09E-08
1064	650050.41	4197586.07	7.48E-08	7.97E-08	1.55E-07	1.12E-08	1.20E-08	2.32E-08	1.10E-08	1.07E-08	2.17E-08	5.84E-09	4.83E-09	1.07E-08
1065	650079.55	4197600.65	7.31E-08	7.8E-08	1.51E-07	1.10E-08	1.17E-08	2.27E-08	1.08E-08	1.04E-08	2.12E-08	5.71E-09	4.73E-09	1.04E-08
1066	650108.69	4197615.22	7.11E-08	7.58E-08	1.47E-07	1.07E-08	1.14E-08	2.21E-08	1.05E-08	1.01E-08	2.06E-08	5.55E-09	4.59E-09	1.01E-08
1067	650137.84	4197629.79	6.84E-08	7.29E-08	1.41E-07	1.03E-08	1.09E-08	2.12E-08	1.01E-08	9.75E-09	1.98E-08	5.35E-09	4.42E-09	9.77E-09
1068	650166.98	4197644.36	6.57E-08	7E-08	1.36E-07	9.88E-09	1.05E-08	2.04E-08	9.66E-09	9.36E-09	1.90E-08	5.13E-09	4.25E-09	9.38E-09
1069	650200.12	4197669.03	6.29E-08	6.71E-08	1.30E-07	9.46E-09	1.01E-08	1.95E-08	9.25E-09	8.96E-09	1.82E-08	4.91E-09	4.07E-09	8.98E-09
1070	650212.13	4197699.33	6.25E-08	6.67E-08	1.29E-07	9.40E-09	1.00E-08	1.94E-08	9.19E-09	8.91E-09	1.81E-08	4.88E-09	4.04E-09	8.92E-09
1071	650224.13	4197729.62	6.17E-08	6.57E-08	1.27E-07	9.27E-09	9.86E-09	1.91E-08	9.07E-09	8.79E-09	1.79E-08	4.82E-09	3.98E-09	8.80E-09
1072	650236.14	4197759.91	6.04E-08	6.44E-08	1.25E-07	9.09E-09	9.66E-09	1.88E-08	8.89E-09	8.61E-09	1.75E-08	4.72E-09	3.91E-09	8.63E-09
1073	650248.14	4197790.2	5.90E-08	6.29E-08	1.22E-07	8.87E-09	9.43E-09	1.83E-08	8.67E-09	8.40E-09	1.71E-08	4.61E-09	3.81E-09	8.42E-09
1074	650260.14	4197820.49	5.73E-08	6.11E-08	1.18E-07	8.62E-09	9.16E-09	1.78E-08	8.43E-09	8.17E-09	1.66E-08	4.48E-09	3.70E-09	8.18E-09
1075	650272.15	4197850.78	5.51E-08	5.88E-08	1.14E-07	8.29E-09	8.81E-09	1.71E-08	8.11E-09	7.86E-09	1.60E-08	4.31E-09	3.56E-09	7.87E-09
1076	650284.15	4197881.08	5.26E-08	5.61E-08	1.09E-07	7.91E-09	8.41E-09	1.63E-08	7.74E-09	7.50E-09	1.52E-08	4.11E-09	3.40E-09	7.51E-09
1077	650296.16	4197911.37	4.99E-08	5.32E-08	1.03E-07	7.51E-09	7.98E-09	1.55E-08	7.34E-09	7.11E-09	1.45E-08	3.90E-09	3.23E-09	7.12E-09
1078	650308.16	4197941.66	4.71E-08	5.02E-08	9.73E-08	7.08E-09	7.53E-09	1.46E-08	6.92E-09	6.71E-09	1.36E-08	3.68E-09	3.04E-09	6.72E-09
1079	650320.17	4197971.95	4.42E-08	4.71E-08	9.13E-08	6.64E-09	7.06E-09	1.37E-08	6.50E-09	6.30E-09	1.28E-08	3.45E-09	2.86E-09	6.31E-09
1080	650332.17	4198002.24	4.13E-08	4.4E-08	8.53E-08	6.21E-09	6.60E-09	1.28E-08	6.07E-09	5.89E-09	1.20E-08	3.23E-09	2.67E-09	5.89E-09
1081	650344.17	4198032.53	3.85E-08	4.1E-08	7.95E-08	5.79E-09	6.15E-09	1.19E-08	5.66E-09	5.48E-09	1.11E-08	3.01E-09	2.49E-09	5.49E-09
1082	650356.18	4198062.83	3.58E-08	3.81E-08	7.39E-08	5.38E-09	5.72E-09	1.11E-08	5.26E-09	5.10E-09	1.04E-08	2.79E-09	2.31E-09	5.11E-09
1083	650368.18	4198093.12	3.32E-08	3.54E-08	6.87E-08	5.00E-09	5.31E-09	1.03E-08	4.89E-09	4.74E-09	9.62E-09	2.60E-09	2.15E-09	4.74E-09
1084	649778.72	4197241.33	3.74E-08	3.99E-08	7.73E-08	5.63E-09	5.98E-09	1.16E-08	5.50E-09	5.33E-09	1.08E-08	2.92E-09	2.42E-09	5.34E-09
1085	649807.93	4197255.94	3.97E-08	4.23E-08	8.19E-08	5.96E-09	6.34E-09	1.23E-08	5.83E-09	5.65E-09	1.15E-08	3.10E-09	2.56E-09	5.66E-09
1086	649837.15	4197270.55	4.18E-08	4.46E-08	8.64E-08	6.29E-09	6.68E-09	1.30E-08	6.15E-09	5.96E-09	1.21E-08	3.27E-09	2.70E-09	5.97E-09
1087	649866.36	4197285.16	4.38E-08	4.67E-08	9.06E-08	6.59E-09	7.01E-09	1.36E-08	6.45E-09	6.25E-09	1.27E-08	3.43E-09	2.83E-09	6.26E-09
1088	649895.57	4197299.77	4.57E-08	4.87E-08	9.44E-08	6.87E-09	7.30E-09	1.42E-08	6.72E-09	6.51E-09	1.32E-08	3.57E-09	2.95E-09	6.52E-09
1089	649924.79	4197314.37	4.73E-08	5.04E-08	9.78E-08	7.12E-09	7.57E-09	1.47E-08	6.96E-09	6.74E-09	1.37E-08	3.70E-09	3.06E-09	6.75E-09
1090	649954	4197328.98	4.88E-08	5.2E-08	1.01E-07	7.33E-09	7.79E-09	1.51E-08	7.17E-09	6.95E-09	1.41E-08	3.81E-09	3.15E-09	6.96E-09
1091	649983.21	4197343.59	4.99E-08	5.32E-08	1.03E-07	7.51E-09	7.98E-09	1.55E-08	7.34E-09	7.12E-09	1.45E-08	3.90E-09	3.23E-09	7.13E-09
1092	650012.43	4197358.2	5.09E-08	5.42E-08	1.05E-07	7.65E-09	8.13E-09	1.58E-08	7.48E-09	7.25E-09	1.47E-08	3.97E-09	3.29E-09	7.26E-09
1093	650041.64	4197372.8	5.15E-08	5.49E-08	1.06E-07	7.75E-09	8.24E-09	1.60E-08	7.58E-09	7.34E-09	1.49E-08	4.03E-09	3.33E-09	7.36E-09
1094	650070.86	4197387.41	5.20E-08	5.55E-08	1.07E-07	7.82E-09	8.32E-09	1.61E-08	7.65E-09	7.41E-09	1.51E-08	4.06E-09	3.36E-09	7.43E-09
1095	650100.07	4197402.02	5.22E-08	5.57E-08	1.08E-07	7.85E-09	8.35E-09	1.62E-08	7.68E-09	7.44E-09	1.51E-08	4.08E-09	3.37E-09	7.45E-09
1096	650129.28	4197416.63	5.21E-08	5.56E-08	1.08E-07	7.84E-09	8.34E-09	1.62E-08	7.67E-09	7.43E-09	1.51E-08	4.07E-09	3.37E-09	7.44E-09
1097	650158.5	4197431.24	5.18E-08	5.53E-08	1.07E-07	7.79E-09	8.29E-09	1.61E-08	7.62E-09	7.39E-09	1.50E-08	4.05E-09	3.35E-09	7.40E-09
1098	650187.71	4197445.84	5.13E-08	5.47E-08	1.06E-07	7.71E-09	8.20E-09	1.59E-08	7.54E-09	7.31E-09	1.48E-08	4.01E-09	3.31E-09	7.32E-09
1099	650216.92	4197460.45	5.05E-08	5.39E-08	1.04E-07	7.60E-09	8.08E-09	1.57E-08	7.43E-09	7.20E-09	1.46E-08	3.95E-09	3.26E-09	7.21E-09
1100	650246.14	4197475.06	4.96E-08	5.28E-08	1.02E-07	7.45E-09	7.92E-09	1.54E-08	7.29E-09	7.06E-09	1.44E-08	3.87E-09	3.20E-09	7.07E-09
1101	650275.35	4197489.67	4.84E-08	5.16E-08	1.00E-07	7.28E-09	7.74E-09	1.50E-08	7.12E-09	6.90E-09	1.40E-08	3.78E-09	3.13E-09	6.91E-09
1102	650304.57	4197504.28	4.71E-08	5.02E-08	9.73E-08	7.08E-09	7.53E-09	1.46E-08	6.92E-09	6.71E-09	1.36E-08	3.68E-09	3.04E-09	6.72E-09
1103	650333.78	4197518.88	4.57E-08	4.87E-08	9.44E-08	6.87E-09	7.30E-09	1.42E-08	6.72E-09	6.51E-09	1.32E-08	3.57E-09	2.95E-09	6.52E-09
1104	650351.54	4197544	4.53E-08	4.82E-08	9.35E-08	6.80E-09	7.23E-09	1.40E-08	6.65E-09	6.45E-09	1.31E-08	3.53E-09	2.92E-09	6.46E-09
1105	650363.57	4197574.36	4.51E-08	4.81E-08	9.33E-08	6.79E-09	7.22E-09	1.40E-08	6.64E-09	6.43E-09	1.31E-08	3.53E-09	2.92E-09	6.44E-09
1106	650379.62	4197614.85	4.47E-08	4.76E-08	9.23E-08	6.72E-09	7.14E-09	1.39E-08	6.57E-09	6.36E-09	1.29E-08	3.49E-09	2.89E-09	6.37E-09
1107	650391.65	4197645.21	4.40E-08	4.69E-08	9.10E-08	6.62E-09	7.04E-09	1.37E-08	6.47E-09	6.28E-09	1.28E-08	3.44E-09	2.85E-09	6.29E-09
1108	650403.68	4197675.58	4.32E-08	4.61E-08	8.93E-08	6.50E-09	6.91E-09	1.34E-08	6.35E-09	6.16E-09	1.25E-08	3.38E-09	2.79E-09	6.17E-09
1109	650415.72	4197705.94	4.22E-08	4.5E-08	8.72E-08	6.34E-09	6.74E-09	1.31E-08	6.20E-09	6.01E-09	1.22E-08	3.30E-09	2.73E-09	6.02E-09
1110	650427.75	4197736.31	4.10E-08	4.37E-08	8.47E-08	6.16E-09	6.55E-09	1.27E-08	6.03E-09	5.84E-09	1.19E-08	3.20E-09	2.65E-09	5.85E-09
1111	650439.78	4197766.67	3.96E-08	4.23E-08	8.19E-08	5.96E-09	6.34E-09	1.23E-08	5.83E-09	5.65E-09	1.15E-08	3.10E-09	2.56E-09	5.66E-09
1112	650451.82	4197797.04	3.82E-08	4.07E-08	7.88E-08	5.74E-09	6.10E-09	1.18E-08	5.61E-09	5.44E-09	1.10E-08	2.98E-09	2.47E-09	5.45E-09
1113	650463.85	4197827.4	3.66E-08	3.9E-08	7.56E-08	5.50E-09	5.85E-09	1.13E-08	5.38E-09	5.21E-09	1.06E-08	2.86E-09	2.36E-09	5.22E-09
1114	650475.88	4197857.77	3.49E-08	3.72E-08	7.22E-08	5.25E-09	5.58E-09	1.08E-08	5.13E-09	4.98E-09	1.01E-08	2.73E-09	2.26E-09	4.98E-09
1115	650487.92	4197888.13	3.32E-08	3.54E-08	6.86E-08	5.00E-09	5.31E-09	1.03E-08	4.89E-09	4.74E-09	9.62E-09	2.60E-09	2.15E-09	4.74E-09
1116	650499.95	4197918.5	3.15E-08	3.36E-08	6.51E-08	4.74E-09	5.04E-09	9.78E-09	4.63E-09	4.49E-09	9.13E-09	2.46E-09	2.04E-09	4.50E-09
1117	650511.98	4197948.86	2.98E-08	3.18E-08	6.16E-08	4.48E-09	4.77E-09	9.25E-09	4.39E-09	4.25E-09	8.64E-09	2.33E-09	1.93E-09	4.26E-09
1118	650524.02	4197979.23	2.82E-08	3E-08	5.82E-08	4.24E-09	4.50E-09	8.74E-09	4.14E-09	4.01E-09	8.16E-09	2.20E-09	1.82E-09	4.02E-09
1119	650536.05	4198009.59	2.66E-08	2.83E-08	5.49E-08	4.00E-09	4.25E-09	8.25E-09	3.91E-09	3.79E-09	7.70E-09	2.08E-09	1.72E-09	3.79E-09
1120	650548.08	4198039.96	2.51E-08	2.67E-08	5.18E-08	3.77E-09	4.01E-09	7.78E-09	3.69E-09	3.57E-09	7.26E-09	1.96E-09	1.62E-09	3.58E-09
1121	650560.12	4198070.32	2.36E-08	2.52E-08	4.88E-08	3.55E-09	3.78E-09	7.33E-09	3.47E-09	3.37E-09	6.84E-09	1.85E-09	1.53E-09	3.37E-09
1122	650572.15	4198100.69	2.23E-08	2.37E-08	4.60E-08	3.35E-09	3.56E-09	6.91E-09	3.27E-09	3.17E-09	6.44E-09	1.74E-09	1.44E-09	3.18E-09
1123	649798.45	4197042.32	2.26E-08	2.41E-08	4.67E-08	3.40E-09	3.61E-09	7.01E-09	3.32E-09	3.22E-09	6.54E-09	1.76E-09	1.46E-09	3.22E-09
1124	649827.71	4197056.95	2.40E-08	2.56E-08	4.97E-08	3.61E-09	3.84E-09	7.46E-09	3.53E-09	3.42E-09	6.96E-09	1.88E-09	1.55E-09	3.43E-09
1125	649856.97	4197071.58	2.55E-08	2.72E-08	5.27E-08	3.83E-09	4.07E-09	7.91E-09	3.75E-09	3.63E-09	7.38E-09	1.99E-09	1.65E-09	3.64E-09
1126	649886.23	4197086.21	2.69E-08	2.87E-08	5.56E-08	4.05E-09	4.31E-09	8.36E-09	3.96E-09	3.84E-09	7.80E-09	2.10E-09	1.74E-09	3.84E-09
1127	649915.49	4197100.84	2.84E-08	3.02E-08	5.86E-08	4.26E-09	4.53E-09	8.80E-09	4.17E-09	4.04E-09	8.21E-09	2.21E-09	1.83E-09	4.05E-09
1128	649944.75	4197115.47	2.97E-08	3.17E-08	6.14E-08	4.47E-09	4.75E-09	9.22E-09	4.37E-09	4.24E-09	8.61E-09	2.32E-09	1.92E-09	4.24E-09
1129	649974.01	4197130.1	3.10E-08	3.31E-08	6.41E-08	4.67E-09	4.96E-09	9.63E-09	4.56E-09	4.42E-09	8.99E-09	2.42E-09	2.01E-09	4.43E-09
1130	650003.26	4197144.73	3.23E-08	3.44E-08	6.67E-08	4.85E-09	5.16E-09	1.00E-08	4.75E-09	4.60E-09	9.34E-09	2.52E-09	2.09E-09	4.61E-09
1131	650032.52	4197159.36	3.34E-08	3.56E-08	6.91E-08	5.03E-09	5.34E-09	1.04E-08	4.91E-09	4.76E-09	9.68E-09	2.61E-09	2.16E-09	4.77E-09
1132	650061.78	4197173.99	3.44E-08	3.67E-08	7.12E-08	5.18E-09	5.51E-09	1.07E-08	5.06E-09	4.91E-09	9.97E-09	2.69E-09	2.23E-09	4.92E-09
1133	650091.04	4197188.62	3.53E-08	3.77E-08	7.30E-08	5.31E-09	5.65E-09	1.10E-08	5.20E-09	5.04E-09	1.02E-08	2.76E-09	2.28E-09	5.04E-09
1134	650120.3	4197203.25	3.61E-08	3.85E-08	7.46E-08	5.43E-09	5.77E-09	1.12E-08	5.31E-09	5.15E-09	1.05E-08	2.82E-09	2.33E-09	5.15E-09
1135	650149.56	4197217.88	3.67E-08	3.91E-08	7.59E-08	5.52E-09	5.87E-09	1.14E-08	5.40E-09	5.23E-09	1.06E-08	2.87E-09	2.37E-09	5.24E-09
1136	650178.82	4197232.51	3.72E-08	3.97E-08	7.69E-08	5.59E-09	5.95E-09	1.15E-08	5.47E-09	5.30E-09	1.08E-08	2.91E-09	2.40E-09	5.31E-09

1137	650208.08	4197247.14	3.75E-08	4E-08	7.75E-08	5.64E-09	6.00E-09	1.16E-08	5.52E-09	5.35E-09	1.09E-08	2.93E-09	2.42E-09	5.35E-09
1138	650237.34	4197261.77	3.77E-08	4.01E-08	7.78E-08	5.66E-09	6.02E-09	1.17E-08	5.54E-09	5.37E-09	1.09E-08	2.94E-09	2.43E-09	5.37E-09
1139	650266.59	4197276.4	3.77E-08	4.02E-08	7.79E-08	5.67E-09	6.03E-09	1.17E-08	5.54E-09	5.37E-09	1.09E-08	2.94E-09	2.44E-09	5.38E-09
1140	650295.85	4197291.03	3.76E-08	4.01E-08	7.78E-08	5.66E-09	6.02E-09	1.17E-08	5.53E-09	5.36E-09	1.09E-08	2.94E-09	2.43E-09	5.37E-09
1141	650325.11	4197305.66	3.74E-08	3.99E-08	7.73E-08	5.62E-09	5.98E-09	1.16E-08	5.50E-09	5.33E-09	1.08E-08	2.92E-09	2.42E-09	5.34E-09
1142	650354.37	4197320.29	3.70E-08	3.94E-08	7.64E-08	5.56E-09	5.91E-09	1.15E-08	5.44E-09	5.27E-09	1.07E-08	2.89E-09	2.39E-09	5.28E-09
1143	650383.63	4197334.92	3.65E-08	3.89E-08	7.54E-08	5.49E-09	5.83E-09	1.13E-08	5.37E-09	5.20E-09	1.06E-08	2.85E-09	2.36E-09	5.21E-09
1144	650412.89	4197349.55	3.59E-08	3.83E-08	7.42E-08	5.40E-09	5.74E-09	1.11E-08	5.28E-09	5.12E-09	1.04E-08	2.80E-09	2.32E-09	5.12E-09
1145	650442.15	4197364.18	3.52E-08	3.76E-08	7.28E-08	5.30E-09	5.63E-09	1.09E-08	5.18E-09	5.02E-09	1.02E-08	2.75E-09	2.28E-09	5.03E-09
1146	650471.41	4197378.81	3.45E-08	3.68E-08	7.12E-08	5.19E-09	5.51E-09	1.07E-08	5.07E-09	4.91E-09	9.99E-09	2.69E-09	2.23E-09	4.92E-09
1147	650494.93	4197398.71	3.40E-08	3.63E-08	7.03E-08	5.11E-09	5.44E-09	1.06E-08	5.00E-09	4.85E-09	9.85E-09	2.66E-09	2.20E-09	4.86E-09
1148	650506.98	4197429.12	3.41E-08	3.64E-08	7.05E-08	5.13E-09	5.46E-09	1.06E-08	5.02E-09	4.86E-09	9.88E-09	2.67E-09	2.21E-09	4.87E-09
1149	650519.03	4197459.53	3.41E-08	3.64E-08	7.05E-08	5.13E-09	5.46E-09	1.06E-08	5.02E-09	4.86E-09	9.88E-09	2.67E-09	2.21E-09	4.87E-09
1150	650531.09	4197489.94	3.40E-08	3.62E-08	7.02E-08	5.11E-09	5.43E-09	1.05E-08	5.00E-09	4.84E-09	9.84E-09	2.65E-09	2.20E-09	4.85E-09
1151	650543.14	4197520.35	3.37E-08	3.59E-08	6.97E-08	5.07E-09	5.39E-09	1.05E-08	4.96E-09	4.81E-09	9.76E-09	2.63E-09	2.18E-09	4.81E-09
1152	650555.19	4197550.77	3.33E-08	3.55E-08	6.89E-08	5.01E-09	5.33E-09	1.03E-08	4.90E-09	4.75E-09	9.65E-09	2.60E-09	2.15E-09	4.76E-09
1153	650567.24	4197581.18	3.28E-08	3.5E-08	6.78E-08	4.93E-09	5.25E-09	1.02E-08	4.82E-09	4.68E-09	9.50E-09	2.56E-09	2.12E-09	4.68E-09
1154	650579.29	4197611.59	3.22E-08	3.43E-08	6.65E-08	4.84E-09	5.14E-09	9.98E-09	4.73E-09	4.59E-09	9.32E-09	2.51E-09	2.08E-09	4.59E-09
1155	650591.34	4197642	3.14E-08	3.35E-08	6.50E-08	4.73E-09	5.03E-09	9.76E-09	4.62E-09	4.48E-09	9.11E-09	2.46E-09	2.03E-09	4.49E-09
1156	650603.4	4197672.41	3.06E-08	3.27E-08	6.33E-08	4.61E-09	4.90E-09	9.50E-09	4.50E-09	4.36E-09	8.87E-09	2.39E-09	1.98E-09	4.37E-09
1157	650615.45	4197702.82	2.97E-08	3.17E-08	6.14E-08	4.47E-09	4.75E-09	9.22E-09	4.37E-09	4.23E-09	8.60E-09	2.32E-09	1.92E-09	4.24E-09
1158	650627.5	4197733.24	2.87E-08	3.06E-08	5.93E-08	4.32E-09	4.59E-09	8.91E-09	4.22E-09	4.09E-09	8.32E-09	2.24E-09	1.86E-09	4.10E-09
1159	650639.55	4197763.65	2.77E-08	2.95E-08	5.72E-08	4.16E-09	4.43E-09	8.59E-09	4.07E-09	3.95E-09	8.02E-09	2.16E-09	1.79E-09	3.95E-09
1160	650651.6	4197794.06	2.66E-08	2.84E-08	5.50E-08	4.00E-09	4.25E-09	8.25E-09	3.91E-09	3.79E-09	7.70E-09	2.08E-09	1.72E-09	3.80E-09
1161	650663.66	4197824.47	2.55E-08	2.72E-08	5.27E-08	3.83E-09	4.08E-09	7.91E-09	3.75E-09	3.63E-09	7.38E-09	1.99E-09	1.65E-09	3.64E-09
1162	650675.71	4197854.88	2.44E-08	2.6E-08	5.04E-08	3.67E-09	3.90E-09	7.57E-09	3.59E-09	3.48E-09	7.06E-09	1.91E-09	1.58E-09	3.48E-09
1163	650687.76	4197885.3	2.33E-08	2.48E-08	4.81E-08	3.50E-09	3.72E-09	7.23E-09	3.43E-09	3.32E-09	6.74E-09	1.82E-09	1.51E-09	3.33E-09
1164	650699.81	4197915.71	2.22E-08	2.37E-08	4.59E-08	3.34E-09	3.55E-09	6.89E-09	3.27E-09	3.17E-09	6.43E-09	1.74E-09	1.44E-09	3.17E-09
1165	650711.86	4197946.12	2.12E-08	2.26E-08	4.37E-08	3.18E-09	3.38E-09	6.57E-09	3.11E-09	3.02E-09	6.13E-09	1.65E-09	1.37E-09	3.02E-09
1166	650723.91	4197976.53	2.02E-08	2.15E-08	4.17E-08	3.03E-09	3.22E-09	6.26E-09	2.97E-09	2.87E-09	5.84E-09	1.58E-09	1.30E-09	2.88E-09
1167	650735.97	4198006.94	1.92E-08	2.05E-08	3.97E-08	2.89E-09	3.07E-09	5.96E-09	2.82E-09	2.74E-09	5.56E-09	1.50E-09	1.24E-09	2.74E-09
1168	650748.02	4198037.36	1.83E-08	1.95E-08	3.78E-08	2.75E-09	2.92E-09	5.67E-09	2.69E-09	2.61E-09	5.29E-09	1.43E-09	1.18E-09	2.61E-09
1169	650760.07	4198067.77	1.74E-08	1.86E-08	3.60E-08	2.62E-09	2.78E-09	5.40E-09	2.56E-09	2.48E-09	5.04E-09	1.36E-09	1.13E-09	2.49E-09
1170	649818.18	4196843.3	1.48E-08	1.57E-08	3.05E-08	2.22E-09	2.36E-09	4.58E-09	2.17E-09	2.10E-09	4.28E-09	1.15E-09	9.54E-10	2.11E-09
1171	649847.47	4196857.94	1.57E-08	1.67E-08	3.24E-08	2.36E-09	2.50E-09	4.86E-09	2.30E-09	2.23E-09	4.53E-09	1.22E-09	1.01E-09	2.24E-09
1172	649876.76	4196872.59	1.66E-08	1.77E-08	3.43E-08	2.49E-09	2.65E-09	5.15E-09	2.44E-09	2.36E-09	4.80E-09	1.30E-09	1.07E-09	2.37E-09
1173	649906.05	4196887.23	1.75E-08	1.87E-08	3.62E-08	2.64E-09	2.80E-09	5.44E-09	2.58E-09	2.50E-09	5.08E-09	1.37E-09	1.13E-09	2.50E-09
1174	649935.34	4196901.88	1.85E-08	1.97E-08	3.83E-08	2.78E-09	2.96E-09	5.74E-09	2.72E-09	2.64E-09	5.36E-09	1.45E-09	1.20E-09	2.64E-09
1175	649964.63	4196916.53	1.95E-08	2.08E-08	4.03E-08	2.93E-09	3.12E-09	6.05E-09	2.87E-09	2.78E-09	5.65E-09	1.52E-09	1.26E-09	2.78E-09
1176	649993.92	4196931.17	2.05E-08	2.18E-08	4.23E-08	3.08E-09	3.27E-09	6.35E-09	3.01E-09	2.92E-09	5.93E-09	1.60E-09	1.32E-09	2.92E-09
1177	650023.21	4196945.82	2.14E-08	2.29E-08	4.43E-08	3.22E-09	3.43E-09	6.65E-09	3.15E-09	3.06E-09	6.21E-09	1.68E-09	1.39E-09	3.06E-09
1178	650052.5	4196960.46	2.24E-08	2.39E-08	4.63E-08	3.37E-09	3.58E-09	6.95E-09	3.29E-09	3.19E-09	6.49E-09	1.75E-09	1.45E-09	3.20E-09
1179	650081.79	4196975.11	2.33E-08	2.49E-08	4.82E-08	3.51E-09	3.73E-09	7.23E-09	3.43E-09	3.32E-09	6.75E-09	1.82E-09	1.51E-09	3.33E-09
1180	650111.08	4196989.76	2.42E-08	2.58E-08	5.00E-08	3.64E-09	3.87E-09	7.50E-09	3.56E-09	3.45E-09	7.00E-09	1.89E-09	1.56E-09	3.45E-09
1181	650140.37	4197004.4	2.50E-08	2.66E-08	5.16E-08	3.76E-09	3.99E-09	7.75E-09	3.67E-09	3.56E-09	7.23E-09	1.95E-09	1.61E-09	3.57E-09
1182	650169.67	4197019.05	2.57E-08	2.74E-08	5.32E-08	3.87E-09	4.11E-09	7.98E-09	3.78E-09	3.67E-09	7.45E-09	2.01E-09	1.66E-09	3.67E-09
1183	650198.96	4197033.69	2.64E-08	2.81E-08	5.45E-08	3.97E-09	4.22E-09	8.19E-09	3.88E-09	3.76E-09	7.64E-09	2.06E-09	1.71E-09	3.77E-09
1184	650228.25	4197048.34	2.70E-08	2.87E-08	5.57E-08	4.05E-09	4.31E-09	8.36E-09	3.96E-09	3.84E-09	7.81E-09	2.11E-09	1.74E-09	3.85E-09
1185	650257.54	4197062.99	2.75E-08	2.93E-08	5.67E-08	4.13E-09	4.39E-09	8.52E-09	4.04E-09	3.91E-09	7.95E-09	2.15E-09	1.77E-09	3.92E-09
1186	650286.83	4197077.63	2.79E-08	2.97E-08	5.76E-08	4.19E-09	4.46E-09	8.65E-09	4.10E-09	3.97E-09	8.07E-09	2.18E-09	1.80E-09	3.98E-09
1187	650316.12	4197092.28	2.82E-08	3.01E-08	5.83E-08	4.24E-09	4.51E-09	8.76E-09	4.15E-09	4.02E-09	8.17E-09	2.20E-09	1.82E-09	4.03E-09
1188	650345.41	4197106.92	2.85E-08	3.04E-08	5.89E-08	4.28E-09	4.56E-09	8.84E-09	4.19E-09	4.06E-09	8.25E-09	2.23E-09	1.84E-09	4.07E-09
1189	650374.7	4197121.57	2.87E-08	3.05E-08	5.92E-08	4.31E-09	4.58E-09	8.89E-09	4.21E-09	4.08E-09	8.30E-09	2.24E-09	1.85E-09	4.09E-09
1190	650403.99	4197136.22	2.87E-08	3.06E-08	5.94E-08	4.32E-09	4.59E-09	8.91E-09	4.22E-09	4.09E-09	8.32E-09	2.24E-09	1.86E-09	4.10E-09
1191	650433.28	4197150.86	2.87E-08	3.06E-08	5.92E-08	4.31E-09	4.58E-09	8.90E-09	4.22E-09	4.09E-09	8.30E-09	2.24E-09	1.85E-09	4.09E-09
1192	650462.57	4197165.51	2.86E-08	3.05E-08	5.90E-08	4.30E-09	4.57E-09	8.86E-09	4.20E-09	4.07E-09	8.27E-09	2.23E-09	1.85E-09	4.08E-09
1193	650491.86	4197180.15	2.84E-08	3.03E-08	5.87E-08	4.27E-09	4.54E-09	8.81E-09	4.18E-09	4.05E-09	8.22E-09	2.22E-09	1.84E-09	4.05E-09
1194	650521.15	4197194.8	2.82E-08	3E-08	5.82E-08	4.23E-09	4.50E-09	8.74E-09	4.14E-09	4.01E-09	8.15E-09	2.20E-09	1.82E-09	4.02E-09
1195	650550.44	4197209.45	2.78E-08	2.97E-08	5.75E-08	4.19E-09	4.45E-09	8.64E-09	4.09E-09	3.97E-09	8.06E-09	2.18E-09	1.80E-09	3.97E-09
1196	650579.73	4197224.09	2.75E-08	2.93E-08	5.68E-08	4.13E-09	4.39E-09	8.53E-09	4.04E-09	3.92E-09	7.96E-09	2.15E-09	1.78E-09	3.92E-09
1197	650609.02	4197238.74	2.71E-08	2.88E-08	5.59E-08	4.07E-09	4.33E-09	8.40E-09	3.98E-09	3.86E-09	7.84E-09	2.11E-09	1.75E-09	3.86E-09
1198	650642.33	4197263.53	2.67E-08	2.84E-08	5.51E-08	4.01E-09	4.26E-09	8.27E-09	3.92E-09	3.80E-09	7.72E-09	2.08E-09	1.72E-09	3.80E-09
1199	650654.39	4197293.98	2.68E-08	2.86E-08	5.54E-08	4.03E-09	4.29E-09	8.32E-09	3.94E-09	3.82E-09	7.76E-09	2.09E-09	1.73E-09	3.83E-09
1200	650666.46	4197324.42	2.69E-08	2.87E-08	5.56E-08	4.04E-09	4.30E-09	8.34E-09	3.95E-09	3.83E-09	7.79E-09	2.10E-09	1.74E-09	3.84E-09
1201	650678.52	4197354.87	2.69E-08	2.87E-08	5.56E-08	4.05E-09	4.30E-09	8.35E-09	3.96E-09	3.83E-09	7.79E-09	2.10E-09	1.74E-09	3.84E-09
1202	650690.59	4197385.31	2.68E-08	2.86E-08	5.54E-08	4.04E-09	4.29E-09	8.33E-09	3.95E-09	3.82E-09	7.77E-09	2.10E-09	1.73E-09	3.83E-09
1203	650702.65	4197415.75	2.67E-08	2.85E-08	5.51E-08	4.01E-09	4.27E-09	8.28E-09	3.92E-09	3.80E-09	7.73E-09	2.09E-09	1.72E-09	3.81E-09
1204	650714.72	4197446.2	2.65E-08	2.82E-08	5.47E-08	3.98E-09	4.23E-09	8.21E-09	3.89E-09	3.77E-09	7.66E-09	2.07E-09	1.71E-09	3.78E-09
1205	650726.78	4197476.64	2.62E-08	2.79E-08	5.40E-08	3.93E-09	4.18E-09	8.11E-09	3.85E-09	3.73E-09	7.57E-09	2.04E-09	1.69E-09	3.73E-09
1206	650738.85	4197507.09	2.58E-08	2.75E-08	5.32E-08	3.88E-09	4.12E-09	8.00E-09	3.79E-09	3.67E-09	7.46E-09	2.01E-09	1.67E-09	3.68E-09
1207	650750.91	4197537.53	2.53E-08	2.7E-08	5.23E-08	3.81E-09	4.05E-09	7.85E-09	3.72E-09	3.61E-09	7.33E-09	1.98E-09	1.64E-09	3.61E-09
1208	650762.98	4197567.98	2.48E-08	2.64E-08	5.12E-08	3.73E-09	3.96E-09	7.69E-09	3.65E-09	3.53E-09	7.18E-09	1.94E-09	1.60E-09	3.54E-09
1209	650775.04	4197598.42	2.42E-08	2.58E-08	5.00E-08	3.64E-09	3.87E-09	7.51E-09	3.56E-09	3.45E-09	7.01E-09	1.89E-09	1.56E-09	3.46E-09
1210	650787.11	4197628.87	2.36E-08	2.51E-08	4.87E-08	3.54E-09	3.77E-09	7.31E-09	3.47E-09	3.36E-09	6.82E-09	1.84E-09	1.52E-09	3.36E-09
1211	650799.17	4197659.31	2.29E-08	2.44E-08	4.73E-08	3.44E-09	3.66E-09	7.10E-09	3.37E-09	3.26E-09	6.63E-09	1.79E-09	1.48E-09	3.27E-09
1212	650811.23	4197689.75	2.22E-08	2.37E-08	4.59E-08	3.34E-09	3.55E-09	6.89E-09	3.26E-09	3.16E-09	6.43E-09	1.73E-09	1.43E-09	3.17E-09

1213	650823.3	4197720.2	2.14E-08	2.29E-08	4.43E-08	3.23E-09	3.43E-09	6.65E-09	3.15E-09	3.06E-09	6.21E-09	1.68E-09	1.39E-09	3.06E-09
1214	650835.36	4197750.64	2.07E-08	2.21E-08	4.27E-08	3.11E-09	3.31E-09	6.42E-09	3.04E-09	2.95E-09	5.99E-09	1.62E-09	1.34E-09	2.95E-09
1215	650847.43	4197781.09	1.99E-08	2.12E-08	4.12E-08	3.00E-09	3.18E-09	6.18E-09	2.93E-09	2.84E-09	5.77E-09	1.56E-09	1.29E-09	2.84E-09
1216	650859.49	4197811.53	1.92E-08	2.04E-08	3.96E-08	2.88E-09	3.06E-09	5.94E-09	2.82E-09	2.73E-09	5.55E-09	1.50E-09	1.24E-09	2.73E-09
1217	650871.56	4197841.98	1.84E-08	1.96E-08	3.80E-08	2.77E-09	2.94E-09	5.71E-09	2.71E-09	2.62E-09	5.33E-09	1.44E-09	1.19E-09	2.63E-09
1218	650883.62	4197872.42	1.77E-08	1.88E-08	3.65E-08	2.66E-09	2.82E-09	5.48E-09	2.60E-09	2.52E-09	5.11E-09	1.38E-09	1.14E-09	2.52E-09
1219	650895.69	4197902.87	1.70E-08	1.81E-08	3.50E-08	2.55E-09	2.71E-09	5.26E-09	2.49E-09	2.42E-09	4.91E-09	1.32E-09	1.10E-09	2.42E-09
1220	650907.75	4197933.31	1.63E-08	1.73E-08	3.36E-08	2.44E-09	2.60E-09	5.04E-09	2.39E-09	2.32E-09	4.71E-09	1.27E-09	1.05E-09	2.32E-09
1221	650919.82	4197963.75	1.56E-08	1.66E-08	3.22E-08	2.35E-09	2.49E-09	4.84E-09	2.29E-09	2.22E-09	4.52E-09	1.22E-09	1.01E-09	2.23E-09
1222	650931.88	4197994.2	1.50E-08	1.6E-08	3.09E-08	2.25E-09	2.39E-09	4.64E-09	2.20E-09	2.13E-09	4.33E-09	1.17E-09	9.67E-10	2.14E-09
1223	650943.95	4198024.64	1.44E-08	1.53E-08	2.96E-08	2.16E-09	2.29E-09	4.45E-09	2.11E-09	2.05E-09	4.15E-09	1.12E-09	9.27E-10	2.05E-09
1224	650956.01	4198055.09	1.38E-08	1.47E-08	2.84E-08	2.07E-09	2.20E-09	4.27E-09	2.02E-09	1.96E-09	3.99E-09	1.08E-09	8.89E-10	1.96E-09
1225	650968.08	4198085.53	1.32E-08	1.41E-08	2.73E-08	1.98E-09	2.11E-09	4.09E-09	1.94E-09	1.88E-09	3.82E-09	1.03E-09	8.53E-10	1.88E-09
1226	649837.91	4196644.28	1.04E-08	1.11E-08	2.15E-08	1.57E-09	1.67E-09	3.23E-09	1.53E-09	1.49E-09	3.02E-09	8.15E-10	6.74E-10	1.49E-09
1227	649867.22	4196658.93	1.10E-08	1.17E-08	2.27E-08	1.65E-09	1.76E-09	3.41E-09	1.61E-09	1.57E-09	3.18E-09	8.58E-10	7.10E-10	1.57E-09
1228	649896.54	4196673.59	1.16E-08	1.23E-08	2.39E-08	1.74E-09	1.85E-09	3.59E-09	1.70E-09	1.65E-09	3.35E-09	9.04E-10	7.48E-10	1.65E-09
1229	649925.85	4196688.25	1.22E-08	1.3E-08	2.52E-08	1.83E-09	1.95E-09	3.78E-09	1.79E-09	1.74E-09	3.53E-09	9.52E-10	7.88E-10	1.74E-09
1230	649955.16	4196702.91	1.28E-08	1.37E-08	2.65E-08	1.93E-09	2.05E-09	3.98E-09	1.89E-09	1.83E-09	3.72E-09	1.00E-09	8.30E-10	1.83E-09
1231	649984.48	4196717.56	1.35E-08	1.44E-08	2.79E-08	2.03E-09	2.16E-09	4.19E-09	1.99E-09	1.92E-09	3.91E-09	1.05E-09	8.72E-10	1.93E-09
1232	650013.79	4196732.22	1.42E-08	1.51E-08	2.93E-08	2.13E-09	2.27E-09	4.40E-09	2.09E-09	2.02E-09	4.11E-09	1.11E-09	9.17E-10	2.02E-09
1233	650043.1	4196746.88	1.49E-08	1.59E-08	3.07E-08	2.24E-09	2.38E-09	4.62E-09	2.19E-09	2.12E-09	4.31E-09	1.16E-09	9.62E-10	2.12E-09
1234	650072.42	4196761.53	1.56E-08	1.66E-08	3.22E-08	2.34E-09	2.49E-09	4.83E-09	2.29E-09	2.22E-09	4.51E-09	1.22E-09	1.01E-09	2.22E-09
1235	650101.73	4196776.19	1.63E-08	1.74E-08	3.37E-08	2.45E-09	2.60E-09	5.06E-09	2.40E-09	2.32E-09	4.72E-09	1.27E-09	1.05E-09	2.33E-09
1236	650131.04	4196790.85	1.70E-08	1.81E-08	3.51E-08	2.55E-09	2.72E-09	5.27E-09	2.50E-09	2.42E-09	4.92E-09	1.33E-09	1.10E-09	2.42E-09
1237	650160.36	4196805.51	1.77E-08	1.88E-08	3.65E-08	2.66E-09	2.82E-09	5.48E-09	2.60E-09	2.52E-09	5.11E-09	1.38E-09	1.14E-09	2.52E-09
1238	650189.67	4196820.16	1.83E-08	1.95E-08	3.78E-08	2.75E-09	2.93E-09	5.68E-09	2.69E-09	2.61E-09	5.30E-09	1.43E-09	1.18E-09	2.61E-09
1239	650218.98	4196834.82	1.89E-08	2.02E-08	3.91E-08	2.85E-09	3.03E-09	5.88E-09	2.79E-09	2.70E-09	5.49E-09	1.48E-09	1.22E-09	2.70E-09
1240	650248.29	4196849.48	1.95E-08	2.08E-08	4.04E-08	2.94E-09	3.12E-09	6.06E-09	2.87E-09	2.78E-09	5.66E-09	1.53E-09	1.26E-09	2.79E-09
1241	650277.61	4196864.14	2.01E-08	2.14E-08	4.15E-08	3.02E-09	3.21E-09	6.23E-09	2.95E-09	2.86E-09	5.82E-09	1.57E-09	1.30E-09	2.87E-09
1242	650306.92	4196878.79	2.06E-08	2.2E-08	4.26E-08	3.10E-09	3.29E-09	6.39E-09	3.03E-09	2.94E-09	5.96E-09	1.61E-09	1.33E-09	2.94E-09
1243	650336.23	4196893.45	2.11E-08	2.24E-08	4.35E-08	3.17E-09	3.37E-09	6.53E-09	3.10E-09	3.00E-09	6.10E-09	1.64E-09	1.36E-09	3.01E-09
1244	650365.55	4196908.11	2.15E-08	2.29E-08	4.43E-08	3.23E-09	3.43E-09	6.66E-09	3.16E-09	3.06E-09	6.21E-09	1.68E-09	1.39E-09	3.06E-09
1245	650394.86	4196922.77	2.18E-08	2.33E-08	4.51E-08	3.28E-09	3.49E-09	6.77E-09	3.21E-09	3.11E-09	6.32E-09	1.70E-09	1.41E-09	3.11E-09
1246	650424.17	4196937.42	2.21E-08	2.35E-08	4.56E-08	3.32E-09	3.53E-09	6.84E-09	3.24E-09	3.14E-09	6.39E-09	1.72E-09	1.43E-09	3.15E-09
1247	650453.49	4196952.08	2.24E-08	2.38E-08	4.62E-08	3.36E-09	3.57E-09	6.94E-09	3.29E-09	3.19E-09	6.47E-09	1.75E-09	1.44E-09	3.19E-09
1248	650482.8	4196966.74	2.25E-08	2.4E-08	4.66E-08	3.39E-09	3.60E-09	6.99E-09	3.31E-09	3.21E-09	6.53E-09	1.76E-09	1.46E-09	3.22E-09
1249	650512.11	4196981.4	2.27E-08	2.42E-08	4.68E-08	3.41E-09	3.62E-09	7.03E-09	3.33E-09	3.23E-09	6.56E-09	1.77E-09	1.46E-09	3.24E-09
1250	650541.43	4196996.05	2.27E-08	2.42E-08	4.69E-08	3.41E-09	3.63E-09	7.05E-09	3.34E-09	3.24E-09	6.58E-09	1.77E-09	1.47E-09	3.24E-09
1251	650570.74	4197010.71	2.27E-08	2.42E-08	4.70E-08	3.42E-09	3.63E-09	7.05E-09	3.34E-09	3.24E-09	6.58E-09	1.78E-09	1.47E-09	3.24E-09
1252	650600.05	4197025.37	2.27E-08	2.42E-08	4.69E-08	3.41E-09	3.63E-09	7.04E-09	3.34E-09	3.23E-09	6.57E-09	1.77E-09	1.47E-09	3.24E-09
1253	650629.37	4197040.03	2.26E-08	2.41E-08	4.67E-08	3.40E-09	3.62E-09	7.02E-09	3.33E-09	3.22E-09	6.55E-09	1.77E-09	1.46E-09	3.23E-09
1254	650658.68	4197054.68	2.25E-08	2.4E-08	4.65E-08	3.38E-09	3.60E-09	6.98E-09	3.31E-09	3.21E-09	6.51E-09	1.76E-09	1.45E-09	3.21E-09
1255	650687.99	4197069.34	2.23E-08	2.38E-08	4.61E-08	3.35E-09	3.57E-09	6.92E-09	3.28E-09	3.18E-09	6.46E-09	1.74E-09	1.44E-09	3.18E-09
1256	650717.31	4197084	2.21E-08	2.36E-08	4.56E-08	3.32E-09	3.53E-09	6.85E-09	3.25E-09	3.15E-09	6.40E-09	1.73E-09	1.43E-09	3.15E-09
1257	650746.62	4197098.66	2.18E-08	2.33E-08	4.51E-08	3.29E-09	3.49E-09	6.78E-09	3.21E-09	3.11E-09	6.33E-09	1.71E-09	1.41E-09	3.12E-09
1258	650775.93	4197113.31	2.16E-08	2.3E-08	4.46E-08	3.24E-09	3.45E-09	6.69E-09	3.17E-09	3.07E-09	6.25E-09	1.69E-09	1.39E-09	3.08E-09
1259	650793.75	4197138.51	2.16E-08	2.3E-08	4.46E-08	3.25E-09	3.45E-09	6.70E-09	3.18E-09	3.08E-09	6.25E-09	1.69E-09	1.40E-09	3.08E-09
1260	650805.83	4197168.98	2.17E-08	2.32E-08	4.49E-08	3.27E-09	3.48E-09	6.75E-09	3.20E-09	3.10E-09	6.30E-09	1.70E-09	1.41E-09	3.10E-09
1261	650817.9	4197199.45	2.18E-08	2.33E-08	4.51E-08	3.29E-09	3.49E-09	6.78E-09	3.21E-09	3.11E-09	6.33E-09	1.71E-09	1.41E-09	3.12E-09
1262	650829.97	4197229.92	2.19E-08	2.34E-08	4.53E-08	3.29E-09	3.50E-09	6.80E-09	3.22E-09	3.12E-09	6.34E-09	1.71E-09	1.42E-09	3.13E-09
1263	650842.05	4197260.39	2.19E-08	2.34E-08	4.53E-08	3.30E-09	3.50E-09	6.80E-09	3.22E-09	3.12E-09	6.34E-09	1.71E-09	1.42E-09	3.13E-09
1264	650854.12	4197290.85	2.19E-08	2.33E-08	4.52E-08	3.29E-09	3.50E-09	6.78E-09	3.22E-09	3.12E-09	6.33E-09	1.71E-09	1.41E-09	3.12E-09
1265	650866.2	4197321.32	2.18E-08	2.32E-08	4.50E-08	3.27E-09	3.48E-09	6.75E-09	3.20E-09	3.10E-09	6.30E-09	1.70E-09	1.41E-09	3.11E-09
1266	650878.27	4197351.79	2.16E-08	2.31E-08	4.47E-08	3.25E-09	3.46E-09	6.71E-09	3.18E-09	3.08E-09	6.26E-09	1.69E-09	1.40E-09	3.09E-09
1267	650890.35	4197382.26	2.14E-08	2.28E-08	4.43E-08	3.22E-09	3.43E-09	6.65E-09	3.15E-09	3.05E-09	6.20E-09	1.67E-09	1.38E-09	3.06E-09
1268	650902.42	4197412.73	2.12E-08	2.26E-08	4.37E-08	3.18E-09	3.38E-09	6.57E-09	3.11E-09	3.02E-09	6.13E-09	1.65E-09	1.37E-09	3.02E-09
1269	650914.49	4197443.2	2.09E-08	2.22E-08	4.31E-08	3.14E-09	3.34E-09	6.47E-09	3.07E-09	2.97E-09	6.04E-09	1.63E-09	1.35E-09	2.98E-09
1270	650926.57	4197473.66	2.05E-08	2.19E-08	4.24E-08	3.08E-09	3.28E-09	6.36E-09	3.02E-09	2.92E-09	5.94E-09	1.60E-09	1.33E-09	2.93E-09
1271	650938.64	4197504.13	2.01E-08	2.14E-08	4.16E-08	3.02E-09	3.22E-09	6.24E-09	2.96E-09	2.87E-09	5.82E-09	1.57E-09	1.30E-09	2.87E-09
1272	650950.72	4197534.6	1.97E-08	2.1E-08	4.07E-08	2.96E-09	3.15E-09	6.11E-09	2.89E-09	2.80E-09	5.70E-09	1.54E-09	1.27E-09	2.81E-09
1273	650962.79	4197565.07	1.92E-08	2.05E-08	3.97E-08	2.89E-09	3.07E-09	5.96E-09	2.82E-09	2.74E-09	5.56E-09	1.50E-09	1.24E-09	2.74E-09
1274	650974.86	4197595.54	1.87E-08	1.99E-08	3.86E-08	2.81E-09	2.99E-09	5.80E-09	2.75E-09	2.67E-09	5.42E-09	1.46E-09	1.21E-09	2.67E-09
1275	650986.94	4197626.01	1.82E-08	1.94E-08	3.76E-08	2.73E-09	2.91E-09	5.64E-09	2.67E-09	2.59E-09	5.26E-09	1.42E-09	1.17E-09	2.60E-09
1276	650999.01	4197656.47	1.77E-08	1.88E-08	3.65E-08	2.65E-09	2.82E-09	5.48E-09	2.60E-09	2.52E-09	5.11E-09	1.38E-09	1.14E-09	2.52E-09
1277	651011.09	4197686.94	1.71E-08	1.82E-08	3.53E-08	2.57E-09	2.73E-09	5.30E-09	2.51E-09	2.44E-09	4.95E-09	1.34E-09	1.10E-09	2.44E-09
1278	651023.16	4197717.41	1.65E-08	1.76E-08	3.42E-08	2.49E-09	2.64E-09	5.13E-09	2.43E-09	2.36E-09	4.79E-09	1.29E-09	1.07E-09	2.36E-09
1279	651035.24	4197747.88	1.60E-08	1.7E-08	3.30E-08	2.40E-09	2.55E-09	4.96E-09	2.35E-09	2.28E-09	4.63E-09	1.25E-09	1.03E-09	2.28E-09
1280	651047.31	4197778.35	1.54E-08	1.64E-08	3.19E-08	2.32E-09	2.47E-09	4.79E-09	2.27E-09	2.20E-09	4.47E-09	1.21E-09	9.97E-10	2.20E-09
1281	651059.38	4197808.82	1.49E-08	1.59E-08	3.08E-08	2.24E-09	2.38E-09	4.62E-09	2.19E-09	2.12E-09	4.31E-09	1.16E-09	9.62E-10	2.12E-09
1282	651071.46	4197839.28	1.44E-08	1.53E-08	2.97E-08	2.16E-09	2.30E-09	4.46E-09	2.11E-09	2.05E-09	4.16E-09	1.12E-09	9.28E-10	2.05E-09
1283	651083.53	4197869.75	1.39E-08	1.48E-08	2.86E-08	2.08E-09	2.21E-09	4.30E-09	2.04E-09	1.97E-09	4.01E-09	1.08E-09	8.95E-10	1.98E-09
1284	651095.61	4197900.22	1.34E-08	1.42E-08	2.76E-08	2.01E-09	2.14E-09	4.15E-09	1.96E-09	1.90E-09	3.87E-09	1.04E-09	8.63E-10	1.91E-09
1285	651107.68	4197930.69	1.29E-08	1.37E-08	2.66E-08	1.94E-09	2.06E-09	4.00E-09	1.90E-09	1.84E-09	3.73E-09	1.01E-09	8.33E-10	1.84E-09
1286	651119.75	4197961.16	1.24E-08	1.33E-08	2.57E-08	1.87E-09	1.99E-09	3.86E-09	1.83E-09	1.77E-09	3.60E-09	9.71E-10	8.03E-10	1.77E-09
1287	651131.83	4197991.63	1.20E-08	1.28E-08	2.48E-08	1.80E-09	1.92E-09	3.72E-09	1.76E-09	1.71E-09	3.47E-09	9.37E-10	7.75E-10	1.71E-09
1288	651143.9	4198022.09	1.16E-08	1.23E-08	2.39E-08	1.74E-09	1.85E-09	3.59E-09	1.70E-09	1.65E-09	3.35E-09	9.03E-10	7.47E-10	1.65E-09

1289	651155.98	4198052.56	1.12E-08	1.19E-08	2.30E-08	1.68E-09	1.78E-09	3.46E-09	1.64E-09	1.59E-09	3.23E-09	8.71E-10	7.21E-10	1.59E-09
1290	651168.05	4198083.03	1.08E-08	1.15E-08	2.22E-08	1.62E-09	1.72E-09	3.34E-09	1.58E-09	1.53E-09	3.11E-09	8.40E-10	6.95E-10	1.54E-09
1291	649653.67	4198103.07	8.57E-07	9.13E-07	1.77E-06	1.29E-07	1.37E-07	2.66E-07	1.26E-07	1.22E-07	2.48E-07	6.69E-08	5.54E-08	1.22E-07
1292	649614.17	4198096.53	9.56E-07	1.02E-06	1.98E-06	1.44E-07	1.53E-07	2.97E-07	1.41E-07	1.36E-07	2.77E-07	7.47E-08	6.18E-08	1.37E-07
1293	649574.67	4198090	1.11E-06	1.18E-06	2.29E-06	1.67E-07	1.77E-07	3.44E-07	1.63E-07	1.58E-07	3.21E-07	8.66E-08	7.16E-08	1.58E-07
1294	649657.75	4198078.4	6.76E-07	7.21E-07	1.40E-06	1.02E-07	1.08E-07	2.10E-07	9.94E-08	9.64E-08	1.96E-07	5.28E-08	4.37E-08	9.65E-08
1295	649618.25	4198071.87	7.60E-07	8.1E-07	1.57E-06	1.14E-07	1.22E-07	2.36E-07	1.12E-07	1.08E-07	2.20E-07	5.94E-08	4.91E-08	1.09E-07
1296	649578.75	4198065.33	8.77E-07	9.35E-07	1.81E-06	1.32E-07	1.40E-07	2.72E-07	1.29E-07	1.25E-07	2.54E-07	6.85E-08	5.67E-08	1.25E-07
1297	649661.83	4198053.74	5.67E-07	6.05E-07	1.17E-06	8.53E-08	9.07E-08	1.76E-07	8.34E-08	8.08E-08	1.64E-07	4.43E-08	3.66E-08	8.10E-08
1298	649622.33	4198047.2	6.39E-07	6.81E-07	1.32E-06	9.61E-08	1.02E-07	1.98E-07	9.39E-08	9.11E-08	1.85E-07	4.99E-08	4.13E-08	9.12E-08
1299	649582.83	4198040.67	7.33E-07	7.81E-07	1.51E-06	1.10E-07	1.17E-07	2.27E-07	1.08E-07	1.04E-07	2.12E-07	5.72E-08	4.74E-08	1.05E-07
1300	649646.16	4198025.81	5.22E-07	5.56E-07	1.08E-06	7.85E-08	8.34E-08	1.62E-07	7.67E-08	7.44E-08	1.51E-07	4.08E-08	3.37E-08	7.45E-08
1301	649606.66	4198019.27	5.91E-07	6.3E-07	1.22E-06	8.88E-08	9.44E-08	1.83E-07	8.69E-08	8.42E-08	1.71E-07	4.61E-08	3.82E-08	8.43E-08
1302	649654.33	4197976.48	4.16E-07	4.43E-07	8.59E-07	6.25E-08	6.65E-08	1.29E-07	6.11E-08	5.92E-08	1.20E-07	3.25E-08	2.69E-08	5.93E-08
1303	649614.83	4197969.94	4.66E-07	4.97E-07	9.63E-07	7.01E-08	7.45E-08	1.45E-07	6.85E-08	6.64E-08	1.35E-07	3.64E-08	3.01E-08	6.65E-08
1304	649642.74	4197923.88	3.62E-07	3.86E-07	7.48E-07	5.45E-08	5.79E-08	1.12E-07	5.33E-08	5.16E-08	1.05E-07	2.83E-08	2.34E-08	5.17E-08
1305	649603.24	4197917.34	4.02E-07	4.29E-07	8.31E-07	6.05E-08	6.43E-08	1.25E-07	5.91E-08	5.73E-08	1.16E-07	3.14E-08	2.60E-08	5.74E-08
1306	649690.4	4197881.09	2.74E-07	2.92E-07	5.66E-07	4.12E-08	4.38E-08	8.51E-08	4.03E-08	3.91E-08	7.94E-08	2.14E-08	1.77E-08	3.91E-08
1307	649650.9	4197874.55	3.02E-07	3.22E-07	6.23E-07	4.54E-08	4.82E-08	9.36E-08	4.44E-08	4.30E-08	8.73E-08	2.36E-08	1.95E-08	4.31E-08
1308	649611.4	4197868.01	3.30E-07	3.52E-07	6.82E-07	4.96E-08	5.28E-08	1.02E-07	4.85E-08	4.70E-08	9.56E-08	2.58E-08	2.13E-08	4.71E-08
1309	649659.06	4197825.22	2.48E-07	2.64E-07	5.12E-07	3.73E-08	3.96E-08	7.69E-08	3.64E-08	3.53E-08	7.18E-08	1.94E-08	1.60E-08	3.54E-08
1310	649619.56	4197818.68	2.67E-07	2.85E-07	5.52E-07	4.02E-08	4.27E-08	8.29E-08	3.93E-08	3.81E-08	7.73E-08	2.09E-08	1.73E-08	3.81E-08
1311	649655.64	4197723.29	1.84E-07	1.96E-07	3.80E-07	2.77E-08	2.94E-08	5.71E-08	2.70E-08	2.62E-08	5.33E-08	1.44E-08	1.19E-08	2.63E-08
1312	649652.21	4197621.37	1.28E-07	1.36E-07	2.64E-07	1.92E-08	2.04E-08	3.96E-08	1.88E-08	1.82E-08	3.70E-08	9.98E-09	8.26E-09	1.82E-08
1313	649724.36	4197430.59	6.48E-08	6.91E-08	1.34E-07	9.74E-09	1.04E-08	2.01E-08	9.53E-09	9.23E-09	1.88E-08	5.06E-09	4.19E-09	9.25E-09
1314	649684.86	4197424.05	6.26E-08	6.67E-08	1.29E-07	9.41E-09	1.00E-08	1.94E-08	9.20E-09	8.92E-09	1.81E-08	4.89E-09	4.04E-09	8.93E-09
1315	649757.01	4197233.27	3.60E-08	3.84E-08	7.44E-08	5.42E-09	5.76E-09	1.12E-08	5.30E-09	5.13E-09	1.04E-08	2.81E-09	2.33E-09	5.14E-09
1316	649717.51	4197226.73	3.42E-08	3.64E-08	7.06E-08	5.14E-09	5.46E-09	1.06E-08	5.02E-09	4.87E-09	9.89E-09	2.67E-09	2.21E-09	4.88E-09
1317	649848.91	4197045.76	2.38E-08	2.54E-08	4.92E-08	3.58E-09	3.81E-09	7.39E-09	3.50E-09	3.39E-09	6.90E-09	1.86E-09	1.54E-09	3.40E-09
1318	649769.91	4197032.68	2.14E-08	2.28E-08	4.43E-08	3.22E-09	3.43E-09	6.65E-09	3.15E-09	3.05E-09	6.20E-09	1.67E-09	1.38E-09	3.06E-09
1319	649881.56	4196848.44	1.59E-08	1.69E-08	3.28E-08	2.38E-09	2.54E-09	4.92E-09	2.33E-09	2.26E-09	4.59E-09	1.24E-09	1.02E-09	2.26E-09
1320	649782.81	4196832.1	1.39E-08	1.48E-08	2.88E-08	2.09E-09	2.23E-09	4.32E-09	2.05E-09	1.98E-09	4.03E-09	1.09E-09	9.00E-10	1.99E-09
1321	649914.21	4196651.12	1.13E-08	1.21E-08	2.34E-08	1.70E-09	1.81E-09	3.51E-09	1.66E-09	1.61E-09	3.28E-09	8.84E-10	7.31E-10	1.61E-09
1322	649815.46	4196634.78	1.00E-08	1.07E-08	2.08E-08	1.51E-09	1.61E-09	3.12E-09	1.48E-09	1.43E-09	2.91E-09	7.85E-10	6.49E-10	1.43E-09
1323	649936.39	4197077.26	2.72E-08	2.89E-08	5.61E-08	4.08E-09	4.34E-09	8.42E-09	3.99E-09	3.87E-09	7.86E-09	2.12E-09	1.75E-09	3.88E-09
1324	650002.9	4196888.65	1.89E-08	2.02E-08	3.91E-08	2.84E-09	3.02E-09	5.87E-09	2.78E-09	2.70E-09	5.48E-09	1.48E-09	1.22E-09	2.70E-09
1325	650069.41	4196700.03	1.40E-08	1.49E-08	2.88E-08	2.10E-09	2.23E-09	4.33E-09	2.05E-09	1.99E-09	4.04E-09	1.09E-09	9.02E-10	1.99E-09
1326	649546.46	4198075.06	1.15E-06	1.23E-06	2.38E-06	1.73E-07	1.84E-07	3.57E-07	1.69E-07	1.64E-07	3.34E-07	9.00E-08	7.44E-08	1.64E-07
1327	649558.72	4198053.27	8.97E-07	9.56E-07	1.85E-06	1.35E-07	1.43E-07	2.78E-07	1.32E-07	1.28E-07	2.60E-07	7.01E-08	5.80E-08	1.28E-07
1328	649583.22	4198009.68	6.23E-07	6.64E-07	1.29E-06	9.37E-08	9.96E-08	1.93E-07	9.16E-08	8.88E-08	1.80E-07	4.87E-08	4.03E-08	8.89E-08
1329	649705.01	4197848.71	2.37E-07	2.52E-07	4.89E-07	3.56E-08	3.78E-08	7.34E-08	3.48E-08	3.37E-08	6.85E-08	1.85E-08	1.53E-08	3.38E-08
1330	649999.08	4197325.72	4.78E-08	5.09E-08	9.87E-08	7.18E-09	7.64E-09	1.48E-08	7.02E-09	6.81E-09	1.38E-08	3.73E-09	3.09E-09	6.82E-09
1331	649975.32	4197312.36	4.67E-08	4.98E-08	9.65E-08	7.02E-09	7.47E-09	1.45E-08	6.87E-09	6.66E-09	1.35E-08	3.65E-09	3.02E-09	6.67E-09
1332	650097.1	4197151.39	3.29E-08	3.5E-08	6.79E-08	4.94E-09	5.26E-09	1.02E-08	4.83E-09	4.68E-09	9.52E-09	2.57E-09	2.12E-09	4.69E-09
1333	650073.34	4197138.03	3.20E-08	3.42E-08	6.62E-08	4.82E-09	5.12E-09	9.94E-09	4.71E-09	4.57E-09	9.28E-09	2.50E-09	2.07E-09	4.57E-09
1334	650195.13	4196977.06	2.40E-08	2.55E-08	4.95E-08	3.60E-09	3.83E-09	7.43E-09	3.52E-09	3.41E-09	6.94E-09	1.87E-09	1.55E-09	3.42E-09
1335	650171.37	4196963.7	2.33E-08	2.49E-08	4.82E-08	3.51E-09	3.73E-09	7.24E-09	3.43E-09	3.33E-09	6.76E-09	1.82E-09	1.51E-09	3.33E-09
1336	650293.15	4196802.73	1.83E-08	1.95E-08	3.78E-08	2.75E-09	2.93E-09	5.68E-09	2.69E-09	2.61E-09	5.30E-09	1.43E-09	1.18E-09	2.61E-09
1337	650269.39	4196789.37	1.78E-08	1.9E-08	3.68E-08	2.68E-09	2.85E-09	5.53E-09	2.62E-09	2.54E-09	5.16E-09	1.39E-09	1.15E-09	2.55E-09
1338	649520.12	4198056.91	1.18E-06	1.25E-06	2.43E-06	1.77E-07	1.88E-07	3.65E-07	1.73E-07	1.68E-07	3.41E-07	9.19E-08	7.60E-08	1.68E-07
1339	649534.23	4198036.28	9.19E-07	9.8E-07	1.90E-06	1.38E-07	1.47E-07	2.85E-07	1.35E-07	1.31E-07	2.66E-07	7.18E-08	5.94E-08	1.31E-07
1340	649562.46	4198025.3	7.41E-07	7.9E-07	1.53E-06	1.11E-07	1.19E-07	2.30E-07	1.09E-07	1.06E-07	2.15E-07	5.79E-08	4.79E-08	1.06E-07
1341	649534.25	4198005.99	7.68E-07	8.19E-07	1.59E-06	1.16E-07	1.23E-07	2.38E-07	1.13E-07	1.09E-07	2.22E-07	6.00E-08	4.96E-08	1.10E-07
1342	649562.47	4197995.02	6.37E-07	6.79E-07	1.32E-06	9.58E-08	1.02E-07	1.98E-07	9.36E-08	9.08E-08	1.84E-07	4.98E-08	4.12E-08	9.09E-08
1343	649590.71	4197953.75	4.79E-07	5.11E-07	9.90E-07	7.20E-08	7.66E-08	1.49E-07	7.04E-08	6.83E-08	1.39E-07	3.74E-08	3.10E-08	6.84E-08
1344	650155.42	4197189.05	3.48E-08	3.71E-08	7.19E-08	5.24E-09	5.57E-09	1.08E-08	5.12E-09	4.96E-09	1.01E-08	2.72E-09	2.25E-09	4.97E-09
1345	650127.21	4197169.75	3.39E-08	3.61E-08	7.00E-08	5.09E-09	5.42E-09	1.05E-08	4.98E-09	4.83E-09	9.81E-09	2.65E-09	2.19E-09	4.84E-09
1346	650268.37	4197024	2.58E-08	2.75E-08	5.33E-08	3.88E-09	4.12E-09	8.00E-09	3.79E-09	3.68E-09	7.47E-09	2.02E-09	1.67E-09	3.68E-09
1347	650240.16	4197004.69	2.51E-08	2.68E-08	5.19E-08	3.77E-09	4.01E-09	7.79E-09	3.69E-09	3.58E-09	7.27E-09	1.96E-09	1.62E-09	3.58E-09
1348	650381.32	4196858.95	2.00E-08	2.13E-08	4.13E-08	3.00E-09	3.19E-09	6.20E-09	2.94E-09	2.85E-09	5.78E-09	1.56E-09	1.29E-09	2.85E-09
1349	650353.11	4196839.64	1.94E-08	2.07E-08	4.02E-08	2.92E-09	3.11E-09	6.03E-09	2.86E-09	2.77E-09	5.63E-09	1.52E-09	1.26E-09	2.78E-09
1350	649490.86	4198035.96	1.22E-06	1.3E-06	2.52E-06	1.83E-07	1.95E-07	3.78E-07	1.79E-07	1.74E-07	3.53E-07	9.52E-08	7.88E-08	1.74E-07
1351	649505.79	4198015.9	9.52E-07	1.01E-06	1.97E-06	1.43E-07	1.52E-07	2.95E-07	1.40E-07	1.36E-07	2.76E-07	7.43E-08	6.15E-08	1.36E-07
1352	649504.75	4197983.97	7.95E-07	8.48E-07	1.64E-06	1.20E-07	1.27E-07	2.47E-07	1.17E-07	1.13E-07	2.30E-07	6.21E-08	5.14E-08	1.14E-07
1353	649535.64	4197975.79	6.57E-07	7E-07	1.36E-06	9.88E-08	1.05E-07	2.04E-07	9.66E-08	9.36E-08	1.90E-07	5.13E-08	4.24E-08	9.38E-08
1354	649565.5	4197935.69	4.90E-07	5.23E-07	1.01E-06	7.37E-08	7.84E-08	1.52E-07	7.21E-08	6.99E-08	1.42E-07	3.83E-08	3.17E-08	7.00E-08
1355	649595.35	4197895.58	3.81E-07	4.07E-07	7.88E-07	5.74E-08	6.10E-08	1.18E-07	5.61E-08	5.44E-08	1.10E-07	2.98E-08	2.47E-08	5.45E-08
1356	649609.25	4197843.59	3.03E-07	3.23E-07	6.26E-07	4.56E-08	4.85E-08	9.40E-08	4.46E-08	4.32E-08	8.78E-08	2.37E-08	1.96E-08	4.33E-08
1357	649639.1	4197803.48	2.42E-07	2.58E-07	5.00E-07	3.64E-08	3.87E-08	7.51E-08	3.56E-08	3.45E-08	7.01E-08	1.89E-08	1.56E-08	3.46E-08
1358	649461.92	4198012.66	1.26E-06	1.34E-06	2.60E-06	1.89E-07	2.01E-07	3.91E-07	1.85E-07	1.80E-07	3.65E-07	9.84E-08	8.14E-08	1.80E-07
1359	649478.34	4197993.82	9.81E-07	1.05E-06	2.03E-06	1.47E-07	1.57E-07	3.04E-07	1.44E-07	1.40E-07	2.84E-07	7.66E-08	6.34E-08	1.40E-07
1360	649480.29	4197962.35	8.08E-07	8.61E-07	1.67E-06	1.21E-07	1.29E-07	2.51E-07	1.19E-07	1.15E-07	2.34E-07	6.31E-08	5.22E-08	1.15E-07
1361	649511.19	4197956.12	6.70E-07	7.14E-07	1.38E-06	1.01E-07	1.07E-07	2.08E-07	9.85E-08	9.55E-08	1.94E-07	5.23E-08	4.33E-08	9.56E-08
1362	649544.04	4197918.43	4.91E-07	5.24E-07	1.01E-06	7.39E-08	7.85E-08	1.52E-07	7.22E-08	7.00E-08	1.42E-07	3.84E-08	3.17E-08	7.01E-08
1363	649576.9	4197880.74	3.82E-07	4.08E-07	7.90E-07	5.75E-08	6.11E-08	1.19E-07	5.62E-08	5.45E-08	1.11E-07	2.99E-08	2.47E-08	5.46E-08
1364	650314.11	4197064.11	2.71E-08	2.89E-08	5.60E-08	4.08E-09	4.33E-09	8.41E-09	3.99E-09	3.86E-09	7.85E-09	2.12E-09	1.75E-09	3.87E-09

1365	650445.51	4196913.33	2.13E-08	2.27E-08	4.40E-08	3.20E-09	3.40E-09	6.61E-09	3.13E-09	3.03E-09	6.17E-09	1.66E-09	1.38E-09	3.04E-09
1366	650416.55	4196888.09	2.07E-08	2.21E-08	4.28E-08	3.12E-09	3.31E-09	6.43E-09	3.05E-09	2.95E-09	6.00E-09	1.62E-09	1.34E-09	2.96E-09
1367	649435.44	4197986.05	1.27E-06	1.36E-06	2.63E-06	1.91E-07	2.03E-07	3.94E-07	1.87E-07	1.81E-07	3.68E-07	9.93E-08	8.22E-08	1.81E-07
1368	649406.73	4197953.38	1.25E-06	1.33E-06	2.58E-06	1.88E-07	1.99E-07	3.87E-07	1.83E-07	1.78E-07	3.61E-07	9.74E-08	8.06E-08	1.78E-07
1369	649378.02	4197920.71	1.19E-06	1.27E-06	2.46E-06	1.79E-07	1.91E-07	3.70E-07	1.75E-07	1.70E-07	3.45E-07	9.32E-08	7.71E-08	1.70E-07
1370	649454.22	4197969.55	9.84E-07	1.05E-06	2.03E-06	1.48E-07	1.57E-07	3.05E-07	1.45E-07	1.40E-07	2.85E-07	7.69E-08	6.36E-08	1.40E-07
1371	649425.51	4197936.88	9.59E-07	1.02E-06	1.98E-06	1.44E-07	1.53E-07	2.98E-07	1.41E-07	1.37E-07	2.78E-07	7.49E-08	6.20E-08	1.37E-07
1372	649396.8	4197904.21	9.03E-07	9.62E-07	1.87E-06	1.36E-07	1.44E-07	2.80E-07	1.33E-07	1.29E-07	2.61E-07	7.05E-08	5.83E-08	1.29E-07
1373	649458.64	4197936.71	7.88E-07	8.4E-07	1.63E-06	1.19E-07	1.26E-07	2.45E-07	1.16E-07	1.12E-07	2.28E-07	6.16E-08	5.09E-08	1.13E-07
1374	649429.94	4197904.04	7.52E-07	8.02E-07	1.55E-06	1.13E-07	1.20E-07	2.33E-07	1.11E-07	1.07E-07	2.18E-07	5.88E-08	4.86E-08	1.07E-07
1375	649401.23	4197871.37	6.77E-07	7.21E-07	1.40E-06	1.02E-07	1.08E-07	2.10E-07	9.95E-08	9.64E-08	1.96E-07	5.29E-08	4.37E-08	9.66E-08
1376	649491.78	4197936.55	6.67E-07	7.12E-07	1.38E-06	1.00E-07	1.07E-07	2.07E-07	9.81E-08	9.51E-08	1.93E-07	5.21E-08	4.31E-08	9.53E-08
1377	649463.07	4197903.88	6.40E-07	6.83E-07	1.32E-06	9.63E-08	1.02E-07	1.99E-07	9.42E-08	9.13E-08	1.85E-07	5.00E-08	4.14E-08	9.14E-08
1378	649434.36	4197871.21	5.95E-07	6.35E-07	1.23E-06	8.95E-08	9.52E-08	1.85E-07	8.75E-08	8.48E-08	1.72E-07	4.65E-08	3.85E-08	8.50E-08
1379	649514.98	4197887.21	4.71E-07	5.02E-07	9.73E-07	7.08E-08	7.53E-08	1.46E-07	6.93E-08	6.71E-08	1.36E-07	3.68E-08	3.04E-08	6.72E-08
1380	649486.28	4197854.54	4.36E-07	4.65E-07	9.02E-07	6.56E-08	6.98E-08	1.35E-07	6.42E-08	6.22E-08	1.26E-07	3.41E-08	2.82E-08	6.23E-08
1381	649457.57	4197821.87	3.93E-07	4.19E-07	8.12E-07	5.91E-08	6.28E-08	1.22E-07	5.78E-08	5.60E-08	1.14E-07	3.07E-08	2.54E-08	5.61E-08
1382	649552.54	4197854.21	3.72E-07	3.96E-07	7.68E-07	5.59E-08	5.94E-08	1.15E-07	5.46E-08	5.30E-08	1.08E-07	2.90E-08	2.40E-08	5.30E-08
1383	649523.84	4197821.54	3.44E-07	3.67E-07	7.11E-07	5.18E-08	5.50E-08	1.07E-07	5.06E-08	4.90E-08	9.96E-08	2.69E-08	2.22E-08	4.91E-08
1384	649495.13	4197788.87	3.06E-07	3.26E-07	6.32E-07	4.60E-08	4.89E-08	9.48E-08	4.50E-08	4.36E-08	8.85E-08	2.39E-08	1.98E-08	4.36E-08
1385	649590.1	4197821.2	2.91E-07	3.1E-07	6.01E-07	4.37E-08	4.65E-08	9.02E-08	4.27E-08	4.14E-08	8.42E-08	2.27E-08	1.88E-08	4.15E-08
1386	649561.4	4197788.53	2.71E-07	2.89E-07	5.59E-07	4.07E-08	4.33E-08	8.40E-08	3.98E-08	3.86E-08	7.84E-08	2.12E-08	1.75E-08	3.86E-08
1387	649532.69	4197755.86	2.49E-07	2.65E-07	5.14E-07	3.74E-08	3.97E-08	7.71E-08	3.66E-08	3.54E-08	7.20E-08	1.94E-08	1.61E-08	3.55E-08
1388	649613.31	4197771.86	2.30E-07	2.45E-07	4.75E-07	3.46E-08	3.68E-08	7.14E-08	3.38E-08	3.28E-08	6.66E-08	1.80E-08	1.49E-08	3.28E-08
1389	649584.6	4197739.19	2.14E-07	2.28E-07	4.42E-07	3.22E-08	3.42E-08	6.64E-08	3.15E-08	3.05E-08	6.20E-08	1.67E-08	1.38E-08	3.06E-08
1390	649674.08	4197689.52	1.60E-07	1.7E-07	3.30E-07	2.40E-08	2.55E-08	4.95E-08	2.35E-08	2.28E-08	4.62E-08	1.25E-08	1.03E-08	2.28E-08
1391	649645.37	4197656.85	1.47E-07	1.56E-07	3.03E-07	2.20E-08	2.34E-08	4.55E-08	2.16E-08	2.09E-08	4.24E-08	1.15E-08	9.47E-09	2.09E-08
1392	649806.61	4197688.85	1.32E-07	1.41E-07	2.72E-07	1.98E-08	2.11E-08	4.09E-08	1.94E-08	1.88E-08	3.82E-08	1.03E-08	8.52E-09	1.88E-08
1393	649734.84	4197607.18	1.14E-07	1.22E-07	2.37E-07	1.72E-08	1.83E-08	3.55E-08	1.68E-08	1.63E-08	3.31E-08	8.94E-09	7.40E-09	1.63E-08
1394	649881.73	4197622.85	1.01E-07	1.08E-07	2.09E-07	1.52E-08	1.62E-08	3.14E-08	1.49E-08	1.44E-08	2.94E-08	7.92E-09	6.55E-09	1.45E-08
1395	649809.97	4197541.17	8.88E-08	9.46E-08	1.83E-07	1.33E-08	1.42E-08	2.75E-08	1.31E-08	1.26E-08	2.57E-08	6.93E-09	5.74E-09	1.27E-08
1396	649885.09	4197475.17	7.10E-08	7.57E-08	1.47E-07	1.07E-08	1.14E-08	2.20E-08	1.04E-08	1.01E-08	2.06E-08	5.55E-09	4.59E-09	1.01E-08
1397	650107.09	4197424.83	5.39E-08	5.75E-08	1.11E-07	8.11E-09	8.62E-09	1.67E-08	7.93E-09	7.69E-09	1.56E-08	4.21E-09	3.49E-09	7.70E-09
1398	650035.33	4197343.15	4.88E-08	5.2E-08	1.01E-07	7.34E-09	7.80E-09	1.51E-08	7.18E-09	6.95E-09	1.41E-08	3.81E-09	3.15E-09	6.97E-09
1399	650185.57	4197211.14	3.58E-08	3.81E-08	7.39E-08	5.38E-09	5.72E-09	1.11E-08	5.26E-09	5.10E-09	1.04E-08	2.79E-09	2.31E-09	5.11E-09
1400	650407.57	4197160.8	2.95E-08	3.15E-08	6.10E-08	4.44E-09	4.72E-09	9.16E-09	4.34E-09	4.21E-09	8.55E-09	2.31E-09	1.91E-09	4.21E-09
1401	650335.81	4197079.12	2.75E-08	2.93E-08	5.68E-08	4.13E-09	4.40E-09	8.53E-09	4.04E-09	3.92E-09	7.96E-09	2.15E-09	1.78E-09	3.92E-09
1402	650557.81	4197028.78	2.33E-08	2.49E-08	4.82E-08	3.51E-09	3.73E-09	7.23E-09	3.43E-09	3.32E-09	6.75E-09	1.82E-09	1.51E-09	3.33E-09
1403	650471.69	4196930.77	2.17E-08	2.31E-08	4.47E-08	3.26E-09	3.46E-09	6.72E-09	3.18E-09	3.09E-09	6.27E-09	1.69E-09	1.40E-09	3.09E-09
1404	649362.13	4197902.77	1.12E-06	1.19E-06	2.31E-06	1.68E-07	1.78E-07	3.46E-07	1.64E-07	1.59E-07	3.23E-07	8.72E-08	7.21E-08	1.59E-07
1405	649379.36	4197884.66	8.35E-07	8.9E-07	1.73E-06	1.26E-07	1.33E-07	2.59E-07	1.23E-07	1.19E-07	2.42E-07	6.52E-08	5.40E-08	1.19E-07
1406	649381	4197851.71	6.10E-07	6.5E-07	1.26E-06	9.17E-08	9.75E-08	1.89E-07	8.96E-08	8.69E-08	1.77E-07	4.76E-08	3.94E-08	8.70E-08
1407	649413.84	4197848.45	5.43E-07	5.79E-07	1.12E-06	8.17E-08	8.69E-08	1.69E-07	7.99E-08	7.74E-08	1.57E-07	4.24E-08	3.51E-08	7.75E-08
1408	649432.71	4197797.38	3.58E-07	3.82E-07	7.40E-07	5.39E-08	5.73E-08	1.11E-07	5.27E-08	5.11E-08	1.04E-07	2.80E-08	2.32E-08	5.11E-08
1409	649467.19	4197761.17	2.71E-07	2.89E-07	5.59E-07	4.07E-08	4.33E-08	8.40E-08	3.98E-08	3.86E-08	7.84E-08	2.11E-08	1.75E-08	3.86E-08
1410	649501.66	4197724.95	2.22E-07	2.36E-07	4.58E-07	3.33E-08	3.55E-08	6.88E-08	3.26E-08	3.16E-08	6.42E-08	1.73E-08	1.43E-08	3.17E-08
1411	649560.99	4197713.22	1.99E-07	2.12E-07	4.10E-07	2.99E-08	3.17E-08	6.16E-08	2.92E-08	2.83E-08	5.75E-08	1.55E-08	1.28E-08	2.83E-08
1412	649536.13	4197688.74	1.81E-07	1.93E-07	3.75E-07	2.73E-08	2.90E-08	5.63E-08	2.67E-08	2.58E-08	5.25E-08	1.42E-08	1.17E-08	2.59E-08
1413	649620.68	4197631.16	1.35E-07	1.44E-07	2.79E-07	2.03E-08	2.16E-08	4.19E-08	1.99E-08	1.93E-08	3.91E-08	1.06E-08	8.73E-09	1.93E-08
1414	649699.92	4197569.43	1.04E-07	1.1E-07	2.14E-07	1.56E-08	1.66E-08	3.21E-08	1.52E-08	1.48E-08	3.00E-08	8.09E-09	6.69E-09	1.48E-08
1415	649674.03	4197543.88	9.55E-08	1.02E-07	1.97E-07	1.44E-08	1.53E-08	2.96E-08	1.40E-08	1.36E-08	2.76E-08	7.46E-09	6.17E-09	1.36E-08
1416	649770.92	4197499.14	8.02E-08	8.55E-08	1.66E-07	1.21E-08	1.28E-08	2.49E-08	1.18E-08	1.14E-08	2.32E-08	6.26E-09	5.18E-09	1.14E-08
1417	649742.98	4197471.45	7.40E-08	7.89E-08	1.53E-07	1.11E-08	1.18E-08	2.30E-08	1.09E-08	1.05E-08	2.14E-08	5.78E-09	4.78E-09	1.06E-08
1418	649841.93	4197428.86	6.42E-08	6.84E-08	1.33E-07	9.65E-09	1.03E-08	1.99E-08	9.44E-09	9.15E-09	1.86E-08	5.01E-09	4.15E-09	9.16E-09
1419	649811.93	4197399.02	5.94E-08	6.33E-08	1.23E-07	8.93E-09	9.49E-09	1.84E-08	8.73E-09	8.46E-09	1.72E-08	4.64E-09	3.84E-09	8.47E-09
1420	649979.31	4197283.46	4.38E-08	4.67E-08	9.04E-08	6.58E-09	7.00E-09	1.36E-08	6.44E-09	6.24E-09	1.27E-08	3.42E-09	2.83E-09	6.25E-09
1421	649949.82	4197254.16	4.10E-08	4.37E-08	8.47E-08	6.17E-09	6.56E-09	1.27E-08	6.03E-09	5.84E-09	1.19E-08	3.20E-09	2.65E-09	5.85E-09
1422	650116.9	4197138.28	3.20E-08	3.41E-08	6.61E-08	4.81E-09	5.11E-09	9.93E-09	4.70E-09	4.56E-09	9.26E-09	2.50E-09	2.07E-09	4.57E-09
1423	650087.72	4197109.3	3.03E-08	3.23E-08	6.26E-08	4.55E-09	4.84E-09	9.40E-09	4.45E-09	4.32E-09	8.77E-09	2.37E-09	1.96E-09	4.32E-09
1424	650294.71	4197034.95	2.61E-08	2.78E-08	5.39E-08	3.92E-09	4.17E-09	8.10E-09	3.84E-09	3.72E-09	7.56E-09	2.04E-09	1.69E-09	3.72E-09
1425	650241.22	4196979.29	2.41E-08	2.57E-08	4.98E-08	3.62E-09	3.85E-09	7.47E-09	3.54E-09	3.43E-09	6.97E-09	1.88E-09	1.56E-09	3.44E-09
1426	650405.56	4196861.95	2.00E-08	2.14E-08	4.14E-08	3.01E-09	3.20E-09	6.21E-09	2.94E-09	2.85E-09	5.80E-09	1.56E-09	1.29E-09	2.86E-09
1427	650379.11	4196834.42	1.93E-08	2.06E-08	3.99E-08	2.90E-09	3.09E-09	5.99E-09	2.84E-09	2.75E-09	5.59E-09	1.51E-09	1.25E-09	2.76E-09
1428	649338.57	4197882.82	9.81E-07	1.05E-06	2.03E-06	1.48E-07	1.57E-07	3.04E-07	1.44E-07	1.40E-07	2.84E-07	7.67E-08	6.34E-08	1.40E-07
1429	649347.85	4197859.6	7.12E-07	7.59E-07	1.47E-06	1.07E-07	1.14E-07	2.21E-07	1.05E-07	1.01E-07	2.06E-07	5.56E-08	4.60E-08	1.02E-07
1430	649357.13	4197836.39	5.50E-07	5.86E-07	1.14E-06	8.26E-08	8.79E-08	1.71E-07	8.08E-08	7.83E-08	1.59E-07	4.29E-08	3.55E-08	7.85E-08
1431	649382.32	4197823.39	4.74E-07	5.05E-07	9.79E-07	7.13E-08	7.58E-08	1.47E-07	6.97E-08	6.75E-08	1.37E-07	3.70E-08	3.06E-08	6.76E-08
1432	649347.85	4197805.76	4.14E-07	4.41E-07	8.54E-07	6.22E-08	6.61E-08	1.28E-07	6.08E-08	5.89E-08	1.20E-07	3.23E-08	2.67E-08	5.90E-08
1433	649400.89	4197776.96	3.24E-07	3.46E-07	6.70E-07	4.88E-08	5.19E-08	1.01E-07	4.77E-08	4.62E-08	9.39E-08	2.53E-08	2.10E-08	4.63E-08
1434	649366.41	4197759.33	2.83E-07	3.02E-07	5.85E-07	4.25E-08	4.52E-08	8.78E-08	4.16E-08	4.03E-08	8.19E-08	2.21E-08	1.83E-08	4.04E-08
1435	649419.45	4197730.53	2.35E-07	2.51E-07	4.86E-07	3.53E-08	3.76E-08	7.29E-08	3.46E-08	3.35E-08	6.81E-08	1.84E-08	1.52E-08	3.36E-08
1436	649384.97	4197712.9	2.05E-07	2.19E-07	4.24E-07	3.08E-08	3.28E-08	6.36E-08	3.01E-08	2.92E-08	5.94E-08	1.60E-08	1.32E-08	2.93E-08
1437	649438.01	4197684.11	1.77E-07	1.89E-07	3.66E-07	2.66E-08	2.83E-08	5.50E-08	2.61E-08	2.53E-08	5.13E-08	1.38E-08	1.15E-08	2.53E-08
1438	649469.83	4197704.53	2.01E-07	2.14E-07	4.16E-07	3.02E-08	3.22E-08	6.24E-08	2.96E-08	2.87E-08	5.82E-08	1.57E-08	1.30E-08	2.87E-08
1439	649403.53	4197666.47	1.54E-07	1.65E-07	3.19E-07	2.32E-08	2.47E-08	4.79E-08	2.27E-08	2.20E-08	4.47E-08	1.21E-08	9.98E-09	2.21E-08
1440	649456.57	4197637.68	1.38E-07	1.47E-07	2.84E-07	2.07E-08	2.20E-08	4.27E-08	2.02E-08	1.96E-08	3.98E-08	1.07E-08	8.89E-09	1.96E-08

1441	649488.39	4197658.1	1.56E-07	1.67E-07	3.23E-07	2.35E-08	2.50E-08	4.85E-08	2.30E-08	2.23E-08	4.52E-08	1.22E-08	1.01E-08	2.23E-08
1442	649422.1	4197620.05	1.20E-07	1.28E-07	2.48E-07	1.80E-08	1.92E-08	3.72E-08	1.76E-08	1.71E-08	3.47E-08	9.37E-09	7.76E-09	1.71E-08
1443	649493.69	4197544.82	8.85E-08	9.44E-08	1.83E-07	1.33E-08	1.42E-08	2.75E-08	1.30E-08	1.26E-08	2.56E-08	6.92E-09	5.72E-09	1.26E-08
1444	649525.52	4197565.25	1.00E-07	1.07E-07	2.08E-07	1.51E-08	1.61E-08	3.12E-08	1.48E-08	1.43E-08	2.91E-08	7.85E-09	6.49E-09	1.43E-08
1445	649557.34	4197585.67	1.12E-07	1.2E-07	2.32E-07	1.69E-08	1.79E-08	3.48E-08	1.65E-08	1.60E-08	3.25E-08	8.76E-09	7.25E-09	1.60E-08
1446	649589.17	4197606.1	1.23E-07	1.31E-07	2.54E-07	1.85E-08	1.97E-08	3.82E-08	1.81E-08	1.75E-08	3.56E-08	9.61E-09	7.95E-09	1.76E-08
1447	649459.22	4197527.19	7.77E-08	8.29E-08	1.61E-07	1.17E-08	1.24E-08	2.41E-08	1.14E-08	1.11E-08	2.25E-08	6.07E-09	5.02E-09	1.11E-08
1448	649530.81	4197451.97	6.12E-08	6.52E-08	1.26E-07	9.20E-09	9.78E-09	1.90E-08	9.00E-09	8.72E-09	1.77E-08	4.78E-09	3.95E-09	8.74E-09
1449	649562.64	4197472.39	6.90E-08	7.36E-08	1.43E-07	1.04E-08	1.10E-08	2.14E-08	1.02E-08	9.84E-09	2.00E-08	5.39E-09	4.46E-09	9.85E-09
1450	649594.46	4197492.82	7.70E-08	8.21E-08	1.59E-07	1.16E-08	1.23E-08	2.39E-08	1.13E-08	1.10E-08	2.23E-08	6.01E-09	4.98E-09	1.10E-08
1451	649626.29	4197513.24	8.48E-08	9.04E-08	1.75E-07	1.28E-08	1.36E-08	2.63E-08	1.25E-08	1.21E-08	2.46E-08	6.62E-09	5.48E-09	1.21E-08
1452	649496.34	4197434.34	5.42E-08	5.77E-08	1.12E-07	8.14E-09	8.66E-09	1.68E-08	7.96E-09	7.72E-09	1.57E-08	4.23E-09	3.50E-09	7.73E-09
1453	649567.93	4197359.11	4.47E-08	4.76E-08	9.23E-08	6.72E-09	7.14E-09	1.39E-08	6.57E-09	6.37E-09	1.29E-08	3.49E-09	2.89E-09	6.38E-09
1454	649599.76	4197379.54	5.00E-08	5.33E-08	1.03E-07	7.52E-09	8.00E-09	1.55E-08	7.36E-09	7.13E-09	1.45E-08	3.91E-09	3.23E-09	7.14E-09
1455	649631.59	4197399.96	5.55E-08	5.92E-08	1.15E-07	8.35E-09	8.88E-09	1.72E-08	8.17E-09	7.91E-09	1.61E-08	4.34E-09	3.59E-09	7.93E-09
1456	649711.15	4197451.02	6.91E-08	7.37E-08	1.43E-07	1.04E-08	1.10E-08	2.14E-08	1.02E-08	9.85E-09	2.00E-08	5.40E-09	4.47E-09	9.87E-09
1457	649533.46	4197341.48	3.99E-08	4.25E-08	8.25E-08	6.00E-09	6.38E-09	1.24E-08	5.87E-09	5.69E-09	1.16E-08	3.12E-09	2.58E-09	5.70E-09
1458	649605.06	4197266.26	3.40E-08	3.63E-08	7.03E-08	5.12E-09	5.44E-09	1.06E-08	5.00E-09	4.85E-09	9.85E-09	2.66E-09	2.20E-09	4.86E-09
1459	649636.88	4197286.68	3.78E-08	4.03E-08	7.81E-08	5.69E-09	6.04E-09	1.17E-08	5.56E-09	5.39E-09	1.09E-08	2.95E-09	2.44E-09	5.40E-09
1460	649780.1	4197378.59	5.58E-08	5.95E-08	1.15E-07	8.39E-09	8.92E-09	1.73E-08	8.21E-09	7.96E-09	1.62E-08	4.36E-09	3.61E-09	7.97E-09
1461	649570.58	4197248.63	3.07E-08	3.27E-08	6.34E-08	4.61E-09	4.91E-09	9.52E-09	4.51E-09	4.37E-09	8.88E-09	2.40E-09	1.98E-09	4.38E-09
1462	649679.3	4197080.55	2.18E-08	2.33E-08	4.51E-08	3.28E-09	3.49E-09	6.77E-09	3.21E-09	3.11E-09	6.32E-09	1.70E-09	1.41E-09	3.11E-09
1463	649711.13	4197100.98	2.39E-08	2.55E-08	4.94E-08	3.59E-09	3.82E-09	7.41E-09	3.51E-09	3.41E-09	6.92E-09	1.87E-09	1.54E-09	3.41E-09
1464	649902.08	4197223.52	3.78E-08	4.03E-08	7.82E-08	5.69E-09	6.05E-09	1.17E-08	5.56E-09	5.39E-09	1.10E-08	2.96E-09	2.45E-09	5.40E-09
1465	649644.83	4197062.92	2.00E-08	2.13E-08	4.13E-08	3.00E-09	3.19E-09	6.19E-09	2.94E-09	2.85E-09	5.78E-09	1.56E-09	1.29E-09	2.85E-09
1466	649754.3	4196895.33	1.54E-08	1.64E-08	3.18E-08	2.31E-09	2.46E-09	4.77E-09	2.26E-09	2.19E-09	4.46E-09	1.20E-09	9.95E-10	2.20E-09
1467	649787.64	4196916.72	1.67E-08	1.78E-08	3.45E-08	2.51E-09	2.67E-09	5.18E-09	2.46E-09	2.38E-09	4.84E-09	1.30E-09	1.08E-09	2.38E-09
1468	649820.98	4196938.12	1.81E-08	1.93E-08	3.74E-08	2.72E-09	2.90E-09	5.62E-09	2.66E-09	2.58E-09	5.25E-09	1.42E-09	1.17E-09	2.59E-09
1469	649854.33	4196959.52	1.96E-08	2.09E-08	4.05E-08	2.95E-09	3.13E-09	6.08E-09	2.88E-09	2.79E-09	5.67E-09	1.53E-09	1.27E-09	2.80E-09
1470	649887.67	4196980.92	2.11E-08	2.25E-08	4.37E-08	3.18E-09	3.38E-09	6.56E-09	3.11E-09	3.01E-09	6.12E-09	1.65E-09	1.37E-09	3.02E-09
1471	649719.07	4196877.21	1.42E-08	1.52E-08	2.94E-08	2.14E-09	2.28E-09	4.42E-09	2.09E-09	2.03E-09	4.13E-09	1.11E-09	9.21E-10	2.03E-09
1472	649828.42	4196709.54	1.16E-08	1.23E-08	2.39E-08	1.74E-09	1.85E-09	3.59E-09	1.70E-09	1.65E-09	3.35E-09	9.03E-10	7.47E-10	1.65E-09
1473	649861.52	4196730.78	1.24E-08	1.32E-08	2.56E-08	1.87E-09	1.98E-09	3.85E-09	1.82E-09	1.77E-09	3.59E-09	9.69E-10	8.02E-10	1.77E-09
1474	649894.62	4196752.02	1.33E-08	1.42E-08	2.75E-08	2.00E-09	2.13E-09	4.13E-09	1.96E-09	1.90E-09	3.85E-09	1.04E-09	8.60E-10	1.90E-09
1475	649927.72	4196773.26	1.43E-08	1.52E-08	2.95E-08	2.15E-09	2.28E-09	4.43E-09	2.10E-09	2.03E-09	4.13E-09	1.11E-09	9.22E-10	2.04E-09
1476	649960.82	4196794.51	1.53E-08	1.63E-08	3.15E-08	2.30E-09	2.44E-09	4.74E-09	2.25E-09	2.18E-09	4.42E-09	1.19E-09	9.87E-10	2.18E-09
1477	649993.92	4196815.75	1.63E-08	1.74E-08	3.37E-08	2.45E-09	2.61E-09	5.06E-09	2.40E-09	2.32E-09	4.72E-09	1.27E-09	1.05E-09	2.33E-09
1478	649793.31	4196691.5	1.08E-08	1.15E-08	2.24E-08	1.63E-09	1.73E-09	3.36E-09	1.59E-09	1.54E-09	3.14E-09	8.46E-10	7.00E-10	1.55E-09
1479	649902.58	4196523.78	9.12E-09	9.72E-09	1.88E-08	1.37E-09	1.46E-09	2.83E-09	1.34E-09	1.30E-09	2.64E-09	7.12E-10	5.89E-10	1.30E-09
1480	649935.5	4196544.9	9.69E-09	1.03E-08	2.00E-08	1.46E-09	1.55E-09	3.01E-09	1.43E-09	1.38E-09	2.81E-09	7.57E-10	6.27E-10	1.38E-09
1481	649968.43	4196566.03	1.03E-08	1.1E-08	2.13E-08	1.55E-09	1.65E-09	3.20E-09	1.52E-09	1.47E-09	2.98E-09	8.05E-10	6.66E-10	1.47E-09
1482	650001.35	4196587.16	1.10E-08	1.17E-08	2.26E-08	1.65E-09	1.75E-09	3.40E-09	1.61E-09	1.56E-09	3.17E-09	8.56E-10	7.08E-10	1.56E-09
1483	650034.27	4196608.29	1.16E-08	1.24E-08	2.41E-08	1.75E-09	1.86E-09	3.61E-09	1.71E-09	1.66E-09	3.37E-09	9.10E-10	7.53E-10	1.66E-09
1484	650067.2	4196629.42	1.24E-08	1.32E-08	2.56E-08	1.86E-09	1.98E-09	3.84E-09	1.82E-09	1.76E-09	3.58E-09	9.66E-10	7.99E-10	1.77E-09
1485	650100.12	4196650.55	1.31E-08	1.4E-08	2.71E-08	1.97E-09	2.10E-09	4.07E-09	1.93E-09	1.87E-09	3.80E-09	1.03E-09	8.48E-10	1.87E-09
1486	650133.05	4196671.68	1.39E-08	1.48E-08	2.87E-08	2.09E-09	2.22E-09	4.31E-09	2.04E-09	1.98E-09	4.02E-09	1.08E-09	8.97E-10	1.98E-09
1487	650165.97	4196692.8	1.47E-08	1.56E-08	3.03E-08	2.20E-09	2.34E-09	4.55E-09	2.15E-09	2.09E-09	4.24E-09	1.14E-09	9.47E-10	2.09E-09
1488	650198.89	4196713.93	1.54E-08	1.64E-08	3.19E-08	2.32E-09	2.46E-09	4.78E-09	2.27E-09	2.20E-09	4.46E-09	1.20E-09	9.96E-10	2.20E-09
1489	650231.82	4196735.06	1.62E-08	1.72E-08	3.34E-08	2.43E-09	2.58E-09	5.02E-09	2.38E-09	2.30E-09	4.68E-09	1.26E-09	1.04E-09	2.31E-09
1490	650264.74	4196756.19	1.69E-08	1.8E-08	3.49E-08	2.54E-09	2.70E-09	5.24E-09	2.49E-09	2.41E-09	4.89E-09	1.32E-09	1.09E-09	2.41E-09
1491	650297.66	4196777.32	1.76E-08	1.88E-08	3.64E-08	2.65E-09	2.82E-09	5.46E-09	2.59E-09	2.51E-09	5.10E-09	1.38E-09	1.14E-09	2.51E-09
1492	650330.59	4196798.45	1.83E-08	1.95E-08	3.78E-08	2.75E-09	2.92E-09	5.67E-09	2.69E-09	2.60E-09	5.29E-09	1.43E-09	1.18E-09	2.61E-09
1493	649867.56	4196505.79	8.62E-09	9.19E-09	1.78E-08	1.30E-09	1.38E-09	2.67E-09	1.27E-09	1.23E-09	2.50E-09	6.73E-10	5.57E-10	1.23E-09
1494	649315.97	4197874.17	9.09E-07	9.69E-07	1.88E-06	1.37E-07	1.45E-07	2.82E-07	1.34E-07	1.30E-07	2.63E-07	7.10E-08	5.87E-08	1.30E-07
1495	649321.22	4197849.72	6.52E-07	6.96E-07	1.35E-06	9.81E-08	1.04E-07	2.02E-07	9.59E-08	9.30E-08	1.89E-07	5.10E-08	4.22E-08	9.31E-08
1496	649326.46	4197825.28	4.98E-07	5.31E-07	1.03E-06	7.49E-08	7.96E-08	1.54E-07	7.32E-08	7.10E-08	1.44E-07	3.89E-08	3.22E-08	7.11E-08
1497	649310.92	4197796.37	3.72E-07	3.97E-07	7.69E-07	5.60E-08	5.95E-08	1.15E-07	5.47E-08	5.30E-08	1.08E-07	2.91E-08	2.41E-08	5.31E-08
1498	649342.19	4197751.95	2.62E-07	2.79E-07	5.41E-07	3.94E-08	4.19E-08	8.13E-08	3.85E-08	3.73E-08	7.59E-08	2.05E-08	1.69E-08	3.74E-08
1499	649352.68	4197703.06	1.84E-07	1.96E-07	3.81E-07	2.77E-08	2.94E-08	5.71E-08	2.71E-08	2.62E-08	5.33E-08	1.44E-08	1.19E-08	2.63E-08
1500	649363.17	4197654.17	1.35E-07	1.44E-07	2.78E-07	2.03E-08	2.15E-08	4.18E-08	1.98E-08	1.92E-08	3.90E-08	1.05E-08	8.71E-09	1.92E-08
1501	649389.8	4197610.2	1.08E-07	1.15E-07	2.23E-07	1.62E-08	1.72E-08	3.35E-08	1.59E-08	1.54E-08	3.12E-08	8.43E-09	6.97E-09	1.54E-08
1502	649352.87	4197600.82	9.50E-08	1.01E-07	1.96E-07	1.43E-08	1.52E-08	2.95E-08	1.40E-08	1.35E-08	2.75E-08	7.42E-09	6.14E-09	1.36E-08
1503	649410.78	4197512.43	6.65E-08	7.09E-08	1.37E-07	1.00E-08	1.06E-08	2.06E-08	9.78E-09	9.48E-09	1.93E-08	5.20E-09	4.30E-09	9.50E-09
1504	649373.84	4197503.05	5.89E-08	6.28E-08	1.22E-07	8.86E-09	9.42E-09	1.83E-08	8.66E-09	8.39E-09	1.71E-08	4.60E-09	3.81E-09	8.41E-09
1505	649435.79	4197415.88	4.52E-08	4.82E-08	9.33E-08	6.79E-09	7.22E-09	1.40E-08	6.64E-09	6.44E-09	1.31E-08	3.53E-09	2.92E-09	6.45E-09
1506	649394.82	4197405.27	3.99E-08	4.25E-08	8.24E-08	6.00E-09	6.38E-09	1.24E-08	5.87E-09	5.69E-09	1.16E-08	3.12E-09	2.58E-09	5.69E-09
1507	649455.96	4197317.86	3.22E-08	3.44E-08	6.66E-08	4.85E-09	5.15E-09	1.00E-08	4.74E-09	4.59E-09	9.33E-09	2.52E-09	2.08E-09	4.60E-09
1508	649494.71	4197329.67	3.59E-08	3.83E-08	7.43E-08	5.40E-09	5.75E-09	1.12E-08	5.28E-09	5.12E-09	1.04E-08	2.81E-09	2.32E-09	5.13E-09
1509	649415.79	4197307.5	2.89E-08	3.08E-08	5.97E-08	4.35E-09	4.62E-09	8.96E-09	4.25E-09	4.12E-09	8.37E-09	2.26E-09	1.87E-09	4.12E-09
1510	649476.4	4197219.92	2.42E-08	2.58E-08	5.01E-08	3.64E-09	3.87E-09	7.52E-09	3.56E-09	3.45E-09	7.01E-09	1.89E-09	1.57E-09	3.46E-09
1511	649514.07	4197231.41	2.67E-08	2.84E-08	5.51E-08	4.01E-09	4.26E-09	8.27E-09	3.92E-09	3.80E-09	7.72E-09	2.08E-09	1.72E-09	3.81E-09
1512	649436.77	4197209.72	2.20E-08	2.35E-08	4.55E-08	3.31E-09	3.52E-09	6.83E-09	3.24E-09	3.14E-09	6.38E-09	1.72E-09	1.42E-09	3.14E-09
1513	649517.67	4197024.17	1.54E-08	1.64E-08	3.17E-08	2.31E-09	2.46E-09	4.77E-09	2.26E-09	2.19E-09	4.45E-09	1.20E-09	9.93E-10	2.19E-09
1514	649554	4197035.24	1.65E-08	1.76E-08	3.42E-08	2.49E-09	2.65E-09	5.13E-09	2.43E-09	2.36E-09	4.79E-09	1.29E-09	1.07E-09	2.36E-09
1515	649590.33	4197046.31	1.78E-08	1.9E-08	3.68E-08	2.68E-09	2.85E-09	5.53E-09	2.62E-09	2.54E-09	5.16E-09	1.39E-09	1.15E-09	2.54E-09
1516	649478.72	4197014.17	1.43E-08	1.52E-08	2.95E-08	2.15E-09	2.28E-09	4.43E-09	2.10E-09	2.04E-09	4.13E-09	1.12E-09	9.23E-10	2.04E-09

1517	649561.19	4196829.09	1.09E-08	1.16E-08	2.25E-08	1.64E-09	1.74E-09	3.38E-09	1.60E-09	1.55E-09	3.16E-09	8.51E-10	7.04E-10	1.56E-09
1518	649600.66	4196841.12	1.16E-08	1.24E-08	2.40E-08	1.75E-09	1.86E-09	3.61E-09	1.71E-09	1.66E-09	3.37E-09	9.08E-10	7.51E-10	1.66E-09
1519	649640.13	4196853.15	1.24E-08	1.32E-08	2.56E-08	1.87E-09	1.98E-09	3.85E-09	1.83E-09	1.77E-09	3.59E-09	9.70E-10	8.02E-10	1.77E-09
1520	649679.6	4196865.18	1.33E-08	1.42E-08	2.75E-08	2.00E-09	2.13E-09	4.12E-09	1.95E-09	1.89E-09	3.85E-09	1.04E-09	8.59E-10	1.90E-09
1521	649520.67	4196818.62	1.03E-08	1.09E-08	2.12E-08	1.54E-09	1.64E-09	3.18E-09	1.51E-09	1.46E-09	2.97E-09	8.01E-10	6.63E-10	1.46E-09
1522	649602.49	4196633.35	8.27E-09	8.81E-09	1.71E-08	1.24E-09	1.32E-09	2.56E-09	1.22E-09	1.18E-09	2.39E-09	6.46E-10	5.34E-10	1.18E-09
1523	649640.66	4196644.98	8.69E-09	9.27E-09	1.80E-08	1.31E-09	1.39E-09	2.70E-09	1.28E-09	1.24E-09	2.52E-09	6.79E-10	5.62E-10	1.24E-09
1524	649678.82	4196656.61	9.16E-09	9.76E-09	1.89E-08	1.38E-09	1.46E-09	2.84E-09	1.35E-09	1.31E-09	2.65E-09	7.15E-10	5.92E-10	1.31E-09
1525	649716.99	4196668.24	9.67E-09	1.03E-08	2.00E-08	1.45E-09	1.55E-09	3.00E-09	1.42E-09	1.38E-09	2.80E-09	7.55E-10	6.25E-10	1.38E-09
1526	649755.15	4196679.87	1.02E-08	1.09E-08	2.11E-08	1.54E-09	1.64E-09	3.17E-09	1.50E-09	1.46E-09	2.96E-09	7.99E-10	6.61E-10	1.46E-09
1527	649562.62	4196623.07	7.89E-09	8.41E-09	1.63E-08	1.19E-09	1.26E-09	2.45E-09	1.16E-09	1.12E-09	2.28E-09	6.16E-10	5.10E-10	1.13E-09
1528	649645.54	4196438.13	6.62E-09	7.06E-09	1.37E-08	9.96E-10	1.06E-09	2.05E-09	9.74E-10	9.44E-10	1.92E-09	5.17E-10	4.28E-10	9.45E-10
1529	649685.91	4196450.43	6.92E-09	7.37E-09	1.43E-08	1.04E-09	1.11E-09	2.15E-09	1.02E-09	9.86E-10	2.00E-09	5.40E-10	4.47E-10	9.87E-10
1530	649726.28	4196462.73	7.24E-09	7.72E-09	1.50E-08	1.09E-09	1.16E-09	2.25E-09	1.06E-09	1.03E-09	2.10E-09	5.65E-10	4.68E-10	1.03E-09
1531	649766.64	4196475.04	7.59E-09	8.09E-09	1.57E-08	1.14E-09	1.21E-09	2.35E-09	1.12E-09	1.08E-09	2.20E-09	5.93E-10	4.90E-10	1.08E-09
1532	649807.01	4196487.34	7.98E-09	8.5E-09	1.65E-08	1.20E-09	1.28E-09	2.47E-09	1.17E-09	1.14E-09	2.31E-09	6.23E-10	5.15E-10	1.14E-09
1533	649604.57	4196427.52	6.37E-09	6.79E-09	1.32E-08	9.57E-10	1.02E-09	1.97E-09	9.36E-10	9.07E-10	1.84E-09	4.97E-10	4.11E-10	9.09E-10
1534	649291.07	4197869.18	8.51E-07	9.08E-07	1.76E-06	1.28E-07	1.36E-07	2.64E-07	1.25E-07	1.21E-07	2.47E-07	6.65E-08	5.50E-08	1.22E-07
1535	649292.2	4197844.2	6.09E-07	6.49E-07	1.26E-06	9.16E-08	9.73E-08	1.89E-07	8.95E-08	8.68E-08	1.76E-07	4.76E-08	3.93E-08	8.69E-08
1536	649293.34	4197819.23	4.60E-07	4.91E-07	9.51E-07	6.92E-08	7.36E-08	1.43E-07	6.77E-08	6.56E-08	1.33E-07	3.59E-08	2.97E-08	6.57E-08
1537	649278.14	4197793.51	3.49E-07	3.72E-07	7.21E-07	5.25E-08	5.58E-08	1.08E-07	5.13E-08	4.97E-08	1.01E-07	2.72E-08	2.25E-08	4.98E-08
1538	649309.07	4197745.9	2.39E-07	2.55E-07	4.93E-07	3.59E-08	3.82E-08	7.41E-08	3.51E-08	3.40E-08	6.91E-08	1.87E-08	1.54E-08	3.41E-08
1539	649280.4	4197743.56	2.22E-07	2.37E-07	4.59E-07	3.34E-08	3.55E-08	6.89E-08	3.27E-08	3.16E-08	6.43E-08	1.73E-08	1.44E-08	3.17E-08
1540	649309.96	4197695.77	1.62E-07	1.73E-07	3.34E-07	2.43E-08	2.59E-08	5.02E-08	2.38E-08	2.31E-08	4.69E-08	1.26E-08	1.05E-08	2.31E-08
1541	649282.66	4197693.62	1.49E-07	1.59E-07	3.09E-07	2.25E-08	2.39E-08	4.64E-08	2.20E-08	2.13E-08	4.33E-08	1.17E-08	9.65E-09	2.13E-08
1542	649314.96	4197646.17	1.16E-07	1.23E-07	2.39E-07	1.74E-08	1.85E-08	3.59E-08	1.70E-08	1.65E-08	3.35E-08	9.03E-09	7.47E-09	1.65E-08
1543	649284.93	4197643.67	1.05E-07	1.12E-07	2.17E-07	1.58E-08	1.68E-08	3.26E-08	1.55E-08	1.50E-08	3.05E-08	8.22E-09	6.80E-09	1.50E-08
1544	649315.86	4197596.05	8.46E-08	9.02E-08	1.75E-07	1.27E-08	1.35E-08	2.62E-08	1.24E-08	1.21E-08	2.45E-08	6.61E-09	5.47E-09	1.21E-08
1545	649287.19	4197593.72	7.72E-08	8.23E-08	1.59E-07	1.16E-08	1.23E-08	2.39E-08	1.14E-08	1.10E-08	2.24E-08	6.03E-09	4.99E-09	1.10E-08
1546	649321.21	4197496.26	5.04E-08	5.37E-08	1.04E-07	7.57E-09	8.05E-09	1.56E-08	7.41E-09	7.18E-09	1.46E-08	3.93E-09	3.25E-09	7.19E-09
1547	649347.52	4197499.65	5.46E-08	5.82E-08	1.13E-07	8.20E-09	8.72E-09	1.69E-08	8.02E-09	7.78E-09	1.58E-08	4.26E-09	3.53E-09	7.79E-09
1548	649291.72	4197493.82	4.62E-08	4.92E-08	9.54E-08	6.94E-09	7.38E-09	1.43E-08	6.79E-09	6.58E-09	1.34E-08	3.61E-09	2.98E-09	6.59E-09
1549	649326.28	4197396.43	3.33E-08	3.55E-08	6.88E-08	5.01E-09	5.32E-09	1.03E-08	4.89E-09	4.74E-09	9.64E-09	2.60E-09	2.15E-09	4.75E-09
1550	649353.7	4197399.97	3.58E-08	3.82E-08	7.40E-08	5.39E-09	5.73E-09	1.11E-08	5.27E-09	5.10E-09	1.04E-08	2.80E-09	2.31E-09	5.11E-09
1551	649296.24	4197393.92	3.09E-08	3.29E-08	6.38E-08	4.64E-09	4.93E-09	9.58E-09	4.54E-09	4.40E-09	8.94E-09	2.41E-09	1.99E-09	4.41E-09
1552	649331.2	4197296.58	2.38E-08	2.54E-08	4.92E-08	3.58E-09	3.81E-09	7.39E-09	3.50E-09	3.39E-09	6.90E-09	1.86E-09	1.54E-09	3.40E-09
1553	649359.4	4197300.22	2.54E-08	2.71E-08	5.25E-08	3.82E-09	4.06E-09	7.88E-09	3.73E-09	3.62E-09	7.35E-09	1.98E-09	1.64E-09	3.62E-09
1554	649387.59	4197303.86	2.71E-08	2.89E-08	5.60E-08	4.07E-09	4.33E-09	8.40E-09	3.98E-09	3.86E-09	7.84E-09	2.12E-09	1.75E-09	3.87E-09
1555	649300.77	4197294.03	2.23E-08	2.38E-08	4.62E-08	3.36E-09	3.57E-09	6.93E-09	3.29E-09	3.18E-09	6.47E-09	1.75E-09	1.44E-09	3.19E-09
1556	649336.02	4197196.72	1.81E-08	1.93E-08	3.73E-08	2.72E-09	2.89E-09	5.61E-09	2.66E-09	2.58E-09	5.23E-09	1.41E-09	1.17E-09	2.58E-09
1557	649364.81	4197200.44	1.91E-08	2.04E-08	3.94E-08	2.87E-09	3.05E-09	5.92E-09	2.81E-09	2.72E-09	5.53E-09	1.49E-09	1.23E-09	2.73E-09
1558	649393.59	4197204.15	2.02E-08	2.15E-08	4.17E-08	3.04E-09	3.23E-09	6.27E-09	2.97E-09	2.88E-09	5.85E-09	1.58E-09	1.31E-09	2.88E-09
1559	649305.3	4197194.13	1.71E-08	1.83E-08	3.54E-08	2.58E-09	2.74E-09	5.31E-09	2.52E-09	2.44E-09	4.96E-09	1.34E-09	1.11E-09	2.45E-09
1560	649345.49	4196996.98	1.18E-08	1.25E-08	2.43E-08	1.77E-09	1.88E-09	3.65E-09	1.73E-09	1.67E-09	3.40E-09	9.18E-10	7.59E-10	1.68E-09
1561	649375.09	4197000.8	1.22E-08	1.31E-08	2.53E-08	1.84E-09	1.96E-09	3.80E-09	1.80E-09	1.74E-09	3.55E-09	9.57E-10	7.91E-10	1.75E-09
1562	649404.7	4197004.62	1.28E-08	1.36E-08	2.64E-08	1.92E-09	2.04E-09	3.96E-09	1.88E-09	1.82E-09	3.70E-09	9.97E-10	8.25E-10	1.82E-09
1563	649434.31	4197008.44	1.33E-08	1.42E-08	2.76E-08	2.01E-09	2.13E-09	4.14E-09	1.96E-09	1.90E-09	3.86E-09	1.04E-09	8.62E-10	1.90E-09
1564	649314.35	4196994.33	1.13E-08	1.2E-08	2.34E-08	1.70E-09	1.81E-09	3.51E-09	1.66E-09	1.61E-09	3.27E-09	8.83E-10	7.30E-10	1.61E-09
1565	649354.81	4196797.22	8.49E-09	9.06E-09	1.75E-08	1.28E-09	1.36E-09	2.64E-09	1.25E-09	1.21E-09	2.46E-09	6.64E-10	5.49E-10	1.21E-09
1566	649384.97	4196801.11	8.77E-09	9.35E-09	1.81E-08	1.32E-09	1.40E-09	2.72E-09	1.29E-09	1.25E-09	2.54E-09	6.85E-10	5.67E-10	1.25E-09
1567	649415.12	4196805	9.07E-09	9.67E-09	1.87E-08	1.36E-09	1.45E-09	2.81E-09	1.33E-09	1.29E-09	2.63E-09	7.08E-10	5.86E-10	1.29E-09
1568	649445.28	4196808.89	9.38E-09	1E-08	1.94E-08	1.41E-09	1.50E-09	2.91E-09	1.38E-09	1.34E-09	2.72E-09	7.33E-10	6.06E-10	1.34E-09
1569	649475.44	4196812.78	9.72E-09	1.04E-08	2.01E-08	1.46E-09	1.55E-09	3.01E-09	1.43E-09	1.38E-09	2.81E-09	7.59E-10	6.28E-10	1.39E-09
1570	649323.41	4196794.54	8.24E-09	8.78E-09	1.70E-08	1.24E-09	1.32E-09	2.56E-09	1.21E-09	1.17E-09	2.39E-09	6.44E-10	5.32E-10	1.18E-09
1571	649364.06	4196597.45	6.57E-09	7E-09	1.36E-08	9.88E-10	1.05E-09	2.04E-09	9.66E-10	9.36E-10	1.90E-09	5.13E-10	4.24E-10	9.37E-10
1572	649394.61	4196601.39	6.75E-09	7.19E-09	1.39E-08	1.01E-09	1.08E-09	2.09E-09	9.92E-10	9.61E-10	1.95E-09	5.27E-10	4.36E-10	9.63E-10
1573	649425.16	4196605.34	6.93E-09	7.39E-09	1.43E-08	1.04E-09	1.11E-09	2.15E-09	1.02E-09	9.88E-10	2.01E-09	5.42E-10	4.48E-10	9.90E-10
1574	649455.7	4196609.28	7.13E-09	7.6E-09	1.47E-08	1.07E-09	1.14E-09	2.21E-09	1.05E-09	1.02E-09	2.06E-09	5.57E-10	4.61E-10	1.02E-09
1575	649486.25	4196613.22	7.33E-09	7.82E-09	1.51E-08	1.10E-09	1.17E-09	2.27E-09	1.08E-09	1.04E-09	2.12E-09	5.73E-10	4.74E-10	1.05E-09
1576	649516.8	4196617.16	7.54E-09	8.04E-09	1.56E-08	1.13E-09	1.21E-09	2.34E-09	1.11E-09	1.07E-09	2.18E-09	5.89E-10	4.87E-10	1.08E-09
1577	649332.46	4196594.74	6.40E-09	6.82E-09	1.32E-08	9.62E-10	1.02E-09	1.99E-09	9.41E-10	9.12E-10	1.85E-09	5.00E-10	4.14E-10	9.14E-10
1578	649373.26	4196397.68	5.32E-09	5.67E-09	1.10E-08	8.00E-10	8.51E-10	1.65E-09	7.83E-10	7.59E-10	1.54E-09	4.16E-10	3.44E-10	7.60E-10
1579	649404.1	4196401.66	5.45E-09	5.81E-09	1.13E-08	8.20E-10	8.72E-10	1.69E-09	8.02E-10	7.77E-10	1.58E-09	4.26E-10	3.52E-10	7.78E-10
1580	649434.95	4196405.63	5.58E-09	5.95E-09	1.15E-08	8.40E-10	8.93E-10	1.73E-09	8.21E-10	7.96E-10	1.62E-09	4.36E-10	3.61E-10	7.97E-10
1581	649465.79	4196409.61	5.72E-09	6.1E-09	1.18E-08	8.60E-10	9.14E-10	1.77E-09	8.41E-10	8.15E-10	1.66E-09	4.47E-10	3.70E-10	8.16E-10
1582	649496.63	4196413.59	5.86E-09	6.24E-09	1.21E-08	8.81E-10	9.36E-10	1.82E-09	8.61E-10	8.35E-10	1.70E-09	4.57E-10	3.78E-10	8.36E-10
1583	649527.47	4196417.57	5.99E-09	6.39E-09	1.24E-08	9.01E-10	9.58E-10	1.86E-09	8.81E-10	8.54E-10	1.74E-09	4.68E-10	3.87E-10	8.56E-10
1584	649558.31	4196421.55	6.14E-09	6.55E-09	1.27E-08	9.23E-10	9.82E-10	1.90E-09	9.03E-10	8.75E-10	1.78E-09	4.80E-10	3.97E-10	8.76E-10
1585	649341.51	4196394.95	5.20E-09	5.54E-09	1.07E-08	7.82E-10	8.31E-10	1.61E-09	7.65E-10	7.41E-10	1.51E-09	4.06E-10	3.36E-10	7.42E-10
1586	649255.93	4197868.05	8.27E-07	8.82E-07	1.71E-06	1.24E-07	1.32E-07	2.57E-07	1.22E-07	1.18E-07	2.40E-07	6.46E-08	5.35E-08	1.18E-07
1587	649256.44	4197843.05	5.86E-07	6.25E-07	1.21E-06	8.82E-08	9.38E-08	1.82E-07	8.62E-08	8.36E-08	1.70E-07	4.58E-08	3.79E-08	8.37E-08
1588	649256.95	4197818.06	4.38E-07	4.66E-07	9.04E-07	6.58E-08	6.99E-08	1.36E-07	6.43E-08	6.23E-08	1.27E-07	3.42E-08	2.83E-08	6.24E-08
1589	649239.26	4197792.69	3.24E-07	3.45E-07	6.69E-07	4.87E-08	5.17E-08	1.00E-07	4.76E-08	4.61E-08	9.37E-08	2.53E-08	2.09E-08	4.62E-08
1590	649240.28	4197742.7	2.00E-07	2.13E-07	4.13E-07	3.00E-08	3.19E-08	6.20E-08	2.94E-08	2.85E-08	5.78E-08	1.56E-08	1.29E-08	2.85E-08
1591	649259.49	4197693.08	1.40E-07	1.49E-07	2.88E-07	2.10E-08	2.23E-08	4.33E-08	2.05E-08	1.99E-08	4.04E-08	1.09E-08	9.02E-09	1.99E-08
1592	649260.5	4197643.09	9.75E-08	1.04E-07	2.01E-07	1.47E-08	1.56E-08	3.02E-08	1.43E-08	1.39E-08	2.82E-08	7.61E-09	6.30E-09	1.39E-08

1593	649261.52	4197593.1	7.13E-08	7.6E-08	1.47E-07	1.07E-08	1.14E-08	2.21E-08	1.05E-08	1.02E-08	2.06E-08	5.57E-09	4.61E-09	1.02E-08
1594	649263.55	4197493.12	4.27E-08	4.56E-08	8.83E-08	6.43E-09	6.83E-09	1.33E-08	6.28E-09	6.09E-09	1.24E-08	3.34E-09	2.76E-09	6.10E-09
1595	649265.59	4197393.14	2.88E-08	3.07E-08	5.95E-08	4.33E-09	4.60E-09	8.93E-09	4.23E-09	4.10E-09	8.33E-09	2.25E-09	1.86E-09	4.11E-09
1596	649267.62	4197293.16	2.10E-08	2.24E-08	4.34E-08	3.16E-09	3.36E-09	6.52E-09	3.09E-09	2.99E-09	6.08E-09	1.64E-09	1.36E-09	3.00E-09
1597	649269.66	4197193.18	1.62E-08	1.73E-08	3.35E-08	2.44E-09	2.59E-09	5.03E-09	2.39E-09	2.31E-09	4.70E-09	1.27E-09	1.05E-09	2.32E-09
1598	649273.72	4196993.23	1.08E-08	1.15E-08	2.23E-08	1.62E-09	1.73E-09	3.35E-09	1.59E-09	1.54E-09	3.13E-09	8.44E-10	6.98E-10	1.54E-09
1599	649295.98	4196793.64	8.04E-09	8.57E-09	1.66E-08	1.21E-09	1.28E-09	2.49E-09	1.18E-09	1.15E-09	2.33E-09	6.28E-10	5.19E-10	1.15E-09
1600	649259.6	4196792.9	7.79E-09	8.31E-09	1.61E-08	1.17E-09	1.25E-09	2.42E-09	1.15E-09	1.11E-09	2.26E-09	6.09E-10	5.03E-10	1.11E-09
1601	649300.05	4196593.68	6.24E-09	6.65E-09	1.29E-08	9.39E-10	9.98E-10	1.94E-09	9.18E-10	8.90E-10	1.81E-09	4.88E-10	4.03E-10	8.91E-10
1602	649263.67	4196592.94	6.08E-09	6.48E-09	1.26E-08	9.14E-10	9.72E-10	1.89E-09	8.94E-10	8.66E-10	1.76E-09	4.75E-10	3.93E-10	8.68E-10
1603	649316.58	4196394.13	5.11E-09	5.45E-09	1.06E-08	7.69E-10	8.17E-10	1.59E-09	7.52E-10	7.29E-10	1.48E-09	3.99E-10	3.30E-10	7.30E-10
1604	649285.92	4196393.35	5.01E-09	5.34E-09	1.03E-08	7.53E-10	8.00E-10	1.55E-09	7.36E-10	7.14E-10	1.45E-09	3.91E-10	3.24E-10	7.15E-10
1605	649211.22	4197869.2	8.28E-07	8.83E-07	1.71E-06	1.25E-07	1.32E-07	2.57E-07	1.22E-07	1.18E-07	2.40E-07	6.47E-08	5.35E-08	1.18E-07
1606	649209.72	4197844.24	5.68E-07	6.06E-07	1.17E-06	8.55E-08	9.09E-08	1.76E-07	8.36E-08	8.10E-08	1.65E-07	4.44E-08	3.67E-08	8.11E-08
1607	649232.71	4197817.81	4.21E-07	4.49E-07	8.70E-07	6.33E-08	6.73E-08	1.31E-07	6.19E-08	6.00E-08	1.22E-07	3.29E-08	2.72E-08	6.01E-08
1608	649208.21	4197819.29	4.10E-07	4.37E-07	8.47E-07	6.17E-08	6.55E-08	1.27E-07	6.03E-08	5.84E-08	1.19E-07	3.20E-08	2.65E-08	5.85E-08
1609	649206.7	4197794.33	3.05E-07	3.25E-07	6.30E-07	4.58E-08	4.87E-08	9.45E-08	4.48E-08	4.34E-08	8.82E-08	2.38E-08	1.97E-08	4.35E-08
1610	649203.69	4197744.42	1.80E-07	1.92E-07	3.72E-07	2.71E-08	2.88E-08	5.59E-08	2.65E-08	2.57E-08	5.21E-08	1.41E-08	1.16E-08	2.57E-08
1611	649225.17	4197693.03	1.25E-07	1.33E-07	2.58E-07	1.88E-08	2.00E-08	3.87E-08	1.84E-08	1.78E-08	3.61E-08	9.75E-09	8.07E-09	1.78E-08
1612	649200.67	4197694.51	1.15E-07	1.23E-07	2.38E-07	1.73E-08	1.84E-08	3.57E-08	1.69E-08	1.64E-08	3.33E-08	8.99E-09	7.44E-09	1.64E-08
1613	649222.16	4197643.12	8.57E-08	9.14E-08	1.77E-07	1.29E-08	1.37E-08	2.66E-08	1.26E-08	1.22E-08	2.48E-08	6.69E-09	5.54E-09	1.22E-08
1614	649197.66	4197644.6	7.90E-08	8.42E-08	1.63E-07	1.19E-08	1.26E-08	2.45E-08	1.16E-08	1.13E-08	2.29E-08	6.17E-09	5.10E-09	1.13E-08
1615	649219.14	4197593.22	6.22E-08	6.63E-08	1.28E-07	9.35E-09	9.94E-09	1.93E-08	9.14E-09	8.86E-09	1.80E-08	4.86E-09	4.02E-09	8.88E-09
1616	649194.64	4197594.7	5.76E-08	6.14E-08	1.19E-07	8.67E-09	9.21E-09	1.79E-08	8.47E-09	8.21E-09	1.67E-08	4.50E-09	3.72E-09	8.23E-09
1617	649229.24	4197493.08	3.90E-08	4.15E-08	8.05E-08	5.86E-09	6.23E-09	1.21E-08	5.73E-09	5.55E-09	1.13E-08	3.04E-09	2.52E-09	5.56E-09
1618	649188.61	4197494.88	3.52E-08	3.75E-08	7.27E-08	5.29E-09	5.62E-09	1.09E-08	5.17E-09	5.01E-09	1.02E-08	2.75E-09	2.27E-09	5.02E-09
1619	649227.24	4197393.18	2.65E-08	2.83E-08	5.48E-08	3.99E-09	4.24E-09	8.22E-09	3.90E-09	3.78E-09	7.67E-09	2.07E-09	1.71E-09	3.78E-09
1620	649182.58	4197395.06	2.43E-08	2.59E-08	5.02E-08	3.65E-09	3.89E-09	7.54E-09	3.57E-09	3.46E-09	7.04E-09	1.90E-09	1.57E-09	3.47E-09
1621	649225.24	4197293.28	1.95E-08	2.08E-08	4.04E-08	2.94E-09	3.12E-09	6.06E-09	2.87E-09	2.79E-09	5.66E-09	1.53E-09	1.26E-09	2.79E-09
1622	649201.05	4197293.76	1.88E-08	2E-08	3.88E-08	2.83E-09	3.01E-09	5.83E-09	2.76E-09	2.68E-09	5.44E-09	1.47E-09	1.21E-09	2.68E-09
1623	649176.55	4197295.24	1.81E-08	1.93E-08	3.75E-08	2.73E-09	2.90E-09	5.63E-09	2.67E-09	2.58E-09	5.25E-09	1.42E-09	1.17E-09	2.59E-09
1624	649213.84	4197193.57	1.50E-08	1.6E-08	3.10E-08	2.26E-09	2.40E-09	4.66E-09	2.21E-09	2.14E-09	4.35E-09	1.17E-09	9.71E-10	2.14E-09
1625	649170.52	4197195.42	1.42E-08	1.52E-08	2.94E-08	2.14E-09	2.28E-09	4.42E-09	2.09E-09	2.03E-09	4.12E-09	1.11E-09	9.21E-10	2.03E-09
1626	649207.15	4196993.82	1.01E-08	1.08E-08	2.09E-08	1.52E-09	1.62E-09	3.14E-09	1.49E-09	1.44E-09	2.93E-09	7.90E-10	6.54E-10	1.44E-09
1627	649231.34	4196993.34	1.04E-08	1.1E-08	2.14E-08	1.56E-09	1.65E-09	3.21E-09	1.52E-09	1.48E-09	3.00E-09	8.09E-10	6.69E-10	1.48E-09
1628	649182.96	4196994.31	9.89E-09	1.05E-08	2.04E-08	1.49E-09	1.58E-09	3.07E-09	1.45E-09	1.41E-09	2.86E-09	7.72E-10	6.39E-10	1.41E-09
1629	649158.46	4196995.79	9.68E-09	1.03E-08	2.00E-08	1.46E-09	1.55E-09	3.00E-09	1.42E-09	1.38E-09	2.80E-09	7.56E-10	6.26E-10	1.38E-09
1630	649193.08	4196794.23	7.40E-09	7.89E-09	1.53E-08	1.11E-09	1.18E-09	2.30E-09	1.09E-09	1.05E-09	2.14E-09	5.78E-10	4.78E-10	1.06E-09
1631	649146.4	4196796.15	7.16E-09	7.64E-09	1.48E-08	1.08E-09	1.15E-09	2.22E-09	1.05E-09	1.02E-09	2.07E-09	5.60E-10	4.63E-10	1.02E-09
1632	649179.81	4196594.62	5.75E-09	6.13E-09	1.19E-08	8.65E-10	9.19E-10	1.78E-09	8.46E-10	8.20E-10	1.67E-09	4.49E-10	3.72E-10	8.21E-10
1633	649221.74	4196593.78	5.91E-09	6.3E-09	1.22E-08	8.88E-10	9.45E-10	1.83E-09	8.69E-10	8.42E-10	1.71E-09	4.62E-10	3.82E-10	8.43E-10
1634	649134.34	4196596.52	5.61E-09	5.98E-09	1.16E-08	8.43E-10	8.96E-10	1.74E-09	8.24E-10	7.99E-10	1.62E-09	4.38E-10	3.62E-10	8.00E-10
1635	649170.97	4196394.92	4.67E-09	4.98E-09	9.65E-09	7.03E-10	7.47E-10	1.45E-09	6.87E-10	6.66E-10	1.35E-09	3.65E-10	3.02E-10	6.67E-10
1636	649195.16	4196394.43	4.74E-09	5.05E-09	9.79E-09	7.12E-10	7.57E-10	1.47E-09	6.97E-10	6.75E-10	1.37E-09	3.70E-10	3.06E-10	6.76E-10
1637	649219.35	4196393.95	4.80E-09	5.12E-09	9.92E-09	7.22E-10	7.68E-10	1.49E-09	7.06E-10	6.84E-10	1.39E-09	3.75E-10	3.10E-10	6.85E-10
1638	649243.54	4196393.46	4.87E-09	5.19E-09	1.01E-08	7.33E-10	7.79E-10	1.51E-09	7.16E-10	6.94E-10	1.41E-09	3.81E-10	3.15E-10	6.95E-10
1639	649146.78	4196395.4	4.61E-09	4.92E-09	9.53E-09	6.94E-10	7.38E-10	1.43E-09	6.78E-10	6.58E-10	1.34E-09	3.60E-10	2.98E-10	6.59E-10
1640	649122.28	4196396.88	4.57E-09	4.87E-09	9.44E-09	6.87E-10	7.30E-10	1.42E-09	6.72E-10	6.51E-10	1.32E-09	3.57E-10	2.95E-10	6.52E-10
1641	649168.83	4197867.14	7.79E-07	8.3E-07	1.61E-06	1.17E-07	1.25E-07	2.42E-07	1.15E-07	1.11E-07	2.25E-07	6.08E-08	5.03E-08	1.11E-07
1642	649146.35	4197865.02	7.28E-07	7.76E-07	1.50E-06	1.09E-07	1.16E-07	2.26E-07	1.07E-07	1.04E-07	2.11E-07	5.68E-08	4.70E-08	1.04E-07
1643	649123.86	4197862.9	6.65E-07	7.09E-07	1.37E-06	1.00E-07	1.06E-07	2.06E-07	9.78E-08	9.48E-08	1.93E-07	5.20E-08	4.30E-08	9.50E-08
1644	649101.38	4197860.77	5.86E-07	6.25E-07	1.21E-06	8.81E-08	9.37E-08	1.82E-07	8.61E-08	8.35E-08	1.70E-07	4.58E-08	3.79E-08	8.36E-08
1645	649078.89	4197858.65	4.83E-07	5.14E-07	9.97E-07	7.26E-08	7.71E-08	1.50E-07	7.10E-08	6.88E-08	1.40E-07	3.77E-08	3.12E-08	6.89E-08
1646	649056.4	4197856.53	3.57E-07	3.8E-07	7.37E-07	5.36E-08	5.70E-08	1.11E-07	5.24E-08	5.08E-08	1.03E-07	2.78E-08	2.30E-08	5.09E-08
1647	649033.92	4197854.41	2.40E-07	2.55E-07	4.95E-07	3.60E-08	3.83E-08	7.43E-08	3.52E-08	3.41E-08	6.94E-08	1.87E-08	1.55E-08	3.42E-08
1648	649171.18	4197842.25	5.18E-07	5.53E-07	1.07E-06	7.80E-08	8.29E-08	1.61E-07	7.62E-08	7.39E-08	1.50E-07	4.05E-08	3.35E-08	7.40E-08
1649	649148.69	4197840.13	4.73E-07	5.05E-07	9.78E-07	7.12E-08	7.57E-08	1.47E-07	6.96E-08	6.75E-08	1.37E-07	3.70E-08	3.06E-08	6.76E-08
1650	649126.21	4197838.01	4.20E-07	4.48E-07	8.69E-07	6.32E-08	6.72E-08	1.30E-07	6.18E-08	5.99E-08	1.22E-07	3.28E-08	2.72E-08	6.00E-08
1651	649103.72	4197835.89	3.58E-07	3.82E-07	7.41E-07	5.39E-08	5.73E-08	1.11E-07	5.27E-08	5.11E-08	1.04E-07	2.80E-08	2.32E-08	5.12E-08
1652	649081.24	4197833.76	2.89E-07	3.08E-07	5.97E-07	4.35E-08	4.62E-08	8.97E-08	4.25E-08	4.12E-08	8.37E-08	2.26E-08	1.87E-08	4.13E-08
1653	649058.75	4197831.64	2.20E-07	2.35E-07	4.55E-07	3.31E-08	3.52E-08	6.84E-08	3.24E-08	3.14E-08	6.38E-08	1.72E-08	1.42E-08	3.14E-08
1654	649036.27	4197829.52	1.65E-07	1.75E-07	3.40E-07	2.48E-08	2.63E-08	5.11E-08	2.42E-08	2.35E-08	4.77E-08	1.29E-08	1.06E-08	2.35E-08
1655	649173.53	4197817.36	3.67E-07	3.91E-07	7.57E-07	5.51E-08	5.86E-08	1.14E-07	5.39E-08	5.22E-08	1.06E-07	2.86E-08	2.37E-08	5.23E-08
1656	649151.04	4197815.24	3.29E-07	3.51E-07	6.79E-07	4.94E-08	5.26E-08	1.02E-07	4.83E-08	4.69E-08	9.52E-08	2.57E-08	2.12E-08	4.69E-08
1657	649128.56	4197813.12	2.87E-07	3.06E-07	5.93E-07	4.31E-08	4.59E-08	8.90E-08	4.22E-08	4.09E-08	8.31E-08	2.24E-08	1.85E-08	4.10E-08
1658	649106.07	4197811	2.42E-07	2.58E-07	5.00E-07	3.64E-08	3.87E-08	7.51E-08	3.56E-08	3.45E-08	7.00E-08	1.89E-08	1.56E-08	3.45E-08
1659	649083.59	4197808.87	1.97E-07	2.1E-07	4.07E-07	2.96E-08	3.15E-08	6.11E-08	2.89E-08	2.81E-08	5.70E-08	1.54E-08	1.27E-08	2.81E-08
1660	649061.1	4197806.75	1.56E-07	1.67E-07	3.23E-07	2.35E-08	2.50E-08	4.85E-08	2.30E-08	2.23E-08	4.53E-08	1.22E-08	1.01E-08	2.23E-08
1661	649038.61	4197804.63	1.25E-07	1.33E-07	2.57E-07	1.87E-08	1.99E-08	3.86E-08	1.83E-08	1.78E-08	3.61E-08	9.73E-09	8.05E-09	1.78E-08
1662	649175.88	4197792.47	2.70E-07	2.88E-07	5.58E-07	4.06E-08	4.32E-08	8.38E-08	3.97E-08	3.85E-08	7.82E-08	2.11E-08	1.75E-08	3.86E-08
1663	649153.39	4197790.35	2.40E-07	2.55E-07	4.95E-07	3.60E-08	3.83E-08	7.43E-08	3.52E-08	3.42E-08	6.94E-08	1.87E-08	1.55E-08	3.42E-08
1664	649130.91	4197788.23	2.08E-07	2.21E-07	4.29E-07	3.12E-08	3.32E-08	6.44E-08	3.05E-08	2.96E-08	6.01E-08	1.62E-08	1.34E-08	2.96E-08
1665	649108.42	4197786.11	1.76E-07	1.87E-07	3.63E-07	2.64E-08	2.81E-08	5.45E-08	2.58E-08	2.50E-08	5.08E-08	1.37E-08	1.13E-08	2.51E-08
1666	649085.93	4197783.98	1.46E-07	1.55E-07	3.01E-07	2.19E-08	2.33E-08	4.52E-08	2.14E-08	2.07E-08	4.21E-08	1.14E-08	9.41E-09	2.08E-08
1667	649063.45	4197781.86	1.20E-07	1.28E-07	2.47E-07	1.80E-08	1.91E-08	3.72E-08	1.76E-08	1.71E-08	3.47E-08	9.36E-09	7.74E-09	1.71E-08
1668	649040.96	4197779.74	9.94E-08	1.06E-07	2.05E-07	1.50E-08	1.59E-08	3.08E-08	1.46E-08	1.42E-08	2.88E-08	7.77E-09	6.43E-09	1.42E-08

1669	649180.57	4197742.69	1.61E-07	1.72E-07	3.33E-07	2.43E-08	2.58E-08	5.01E-08	2.37E-08	2.30E-08	4.67E-08	1.26E-08	1.04E-08	2.30E-08
1670	649158.09	4197740.57	1.42E-07	1.52E-07	2.94E-07	2.14E-08	2.28E-08	4.42E-08	2.09E-08	2.03E-08	4.12E-08	1.11E-08	9.21E-09	2.03E-08
1671	649135.6	4197738.45	1.24E-07	1.32E-07	2.56E-07	1.87E-08	1.98E-08	3.85E-08	1.83E-08	1.77E-08	3.59E-08	9.70E-09	8.02E-09	1.77E-08
1672	649113.12	4197736.33	1.07E-07	1.14E-07	2.21E-07	1.61E-08	1.71E-08	3.33E-08	1.58E-08	1.53E-08	3.10E-08	8.37E-09	6.93E-09	1.53E-08
1673	649090.63	4197734.21	9.23E-08	9.84E-08	1.91E-07	1.39E-08	1.47E-08	2.86E-08	1.36E-08	1.31E-08	2.67E-08	7.21E-09	5.96E-09	1.32E-08
1674	649068.14	4197732.08	7.97E-08	8.5E-08	1.65E-07	1.20E-08	1.27E-08	2.47E-08	1.17E-08	1.14E-08	2.31E-08	6.23E-09	5.15E-09	1.14E-08
1675	649045.66	4197729.96	6.95E-08	7.41E-08	1.44E-07	1.04E-08	1.11E-08	2.16E-08	1.02E-08	9.90E-09	2.01E-08	5.43E-09	4.49E-09	9.92E-09
1676	649162.78	4197690.79	9.49E-08	1.01E-07	1.96E-07	1.43E-08	1.52E-08	2.94E-08	1.40E-08	1.35E-08	2.75E-08	7.41E-09	6.13E-09	1.35E-08
1677	649140.3	4197688.67	8.40E-08	8.96E-08	1.74E-07	1.26E-08	1.34E-08	2.61E-08	1.24E-08	1.20E-08	2.43E-08	6.56E-09	5.43E-09	1.20E-08
1678	649117.81	4197686.55	7.42E-08	7.91E-08	1.53E-07	1.12E-08	1.19E-08	2.30E-08	1.09E-08	1.06E-08	2.15E-08	5.80E-09	4.80E-09	1.06E-08
1679	649095.33	4197684.43	6.57E-08	7.01E-08	1.36E-07	9.88E-09	1.05E-08	2.04E-08	9.66E-09	9.37E-09	1.90E-08	5.13E-09	4.25E-09	9.38E-09
1680	649072.84	4197682.31	5.85E-08	6.23E-08	1.21E-07	8.79E-09	9.35E-09	1.81E-08	8.60E-09	8.33E-09	1.69E-08	4.57E-09	3.78E-09	8.35E-09
1681	649050.36	4197680.18	5.24E-08	5.59E-08	1.08E-07	7.88E-09	8.38E-09	1.63E-08	7.70E-09	7.47E-09	1.52E-08	4.09E-09	3.39E-09	7.48E-09
1682	649167.48	4197641.01	6.84E-08	7.3E-08	1.41E-07	1.03E-08	1.09E-08	2.12E-08	1.01E-08	9.75E-09	1.98E-08	5.35E-09	4.42E-09	9.77E-09
1683	649144.99	4197638.89	6.16E-08	6.57E-08	1.27E-07	9.27E-09	9.85E-09	1.91E-08	9.06E-09	8.78E-09	1.78E-08	4.81E-09	3.98E-09	8.80E-09
1684	649122.51	4197636.77	5.55E-08	5.92E-08	1.15E-07	8.35E-09	8.88E-09	1.72E-08	8.16E-09	7.91E-09	1.61E-08	4.34E-09	3.59E-09	7.93E-09
1685	649100.02	4197634.65	5.02E-08	5.35E-08	1.04E-07	7.55E-09	8.02E-09	1.56E-08	7.38E-09	7.15E-09	1.45E-08	3.92E-09	3.24E-09	7.16E-09
1686	649077.54	4197632.53	4.55E-08	4.86E-08	9.41E-08	6.85E-09	7.28E-09	1.41E-08	6.70E-09	6.49E-09	1.32E-08	3.56E-09	2.94E-09	6.50E-09
1687	649055.05	4197630.41	4.15E-08	4.43E-08	8.58E-08	6.25E-09	6.64E-09	1.29E-08	6.11E-09	5.92E-09	1.20E-08	3.24E-09	2.68E-09	5.93E-09
1688	649172.18	4197591.23	5.23E-08	5.57E-08	1.08E-07	7.86E-09	8.35E-09	1.62E-08	7.68E-09	7.45E-09	1.51E-08	4.08E-09	3.38E-09	7.46E-09
1689	649149.69	4197589.11	4.78E-08	5.09E-08	9.87E-08	7.18E-09	7.63E-09	1.48E-08	7.02E-09	6.80E-09	1.38E-08	3.73E-09	3.09E-09	6.82E-09
1690	649127.21	4197586.99	4.37E-08	4.66E-08	9.03E-08	6.57E-09	6.99E-09	1.36E-08	6.43E-09	6.23E-09	1.27E-08	3.41E-09	2.82E-09	6.24E-09
1691	649104.72	4197584.87	4.01E-08	4.28E-08	8.29E-08	6.03E-09	6.41E-09	1.24E-08	5.90E-09	5.72E-09	1.16E-08	3.13E-09	2.59E-09	5.73E-09
1692	649082.23	4197582.75	3.69E-08	3.94E-08	7.63E-08	5.55E-09	5.91E-09	1.15E-08	5.43E-09	5.26E-09	1.07E-08	2.89E-09	2.39E-09	5.27E-09
1693	649059.75	4197580.63	3.41E-08	3.64E-08	7.05E-08	5.13E-09	5.45E-09	1.06E-08	5.02E-09	4.86E-09	9.88E-09	2.66E-09	2.20E-09	4.87E-09
1694	649159.08	4197489.55	3.19E-08	3.4E-08	6.58E-08	4.79E-09	5.09E-09	9.89E-09	4.69E-09	4.54E-09	9.23E-09	2.49E-09	2.06E-09	4.55E-09
1695	649136.6	4197487.43	2.98E-08	3.18E-08	6.17E-08	4.49E-09	4.77E-09	9.26E-09	4.39E-09	4.25E-09	8.64E-09	2.33E-09	1.93E-09	4.26E-09
1696	649114.11	4197485.31	2.80E-08	2.98E-08	5.78E-08	4.21E-09	4.48E-09	8.69E-09	4.12E-09	3.99E-09	8.11E-09	2.19E-09	1.81E-09	4.00E-09
1697	649091.63	4197483.19	2.63E-08	2.8E-08	5.43E-08	3.96E-09	4.20E-09	8.16E-09	3.87E-09	3.75E-09	7.62E-09	2.05E-09	1.70E-09	3.75E-09
1698	649069.14	4197481.07	2.47E-08	2.64E-08	5.11E-08	3.72E-09	3.96E-09	7.68E-09	3.64E-09	3.53E-09	7.16E-09	1.93E-09	1.60E-09	3.53E-09
1699	649145.99	4197387.87	2.21E-08	2.36E-08	4.57E-08	3.32E-09	3.53E-09	6.86E-09	3.25E-09	3.15E-09	6.40E-09	1.73E-09	1.43E-09	3.16E-09
1700	649123.51	4197385.75	2.10E-08	2.24E-08	4.35E-08	3.16E-09	3.36E-09	6.53E-09	3.09E-09	3.00E-09	6.09E-09	1.64E-09	1.36E-09	3.00E-09
1701	649101.02	4197383.63	2.00E-08	2.14E-08	4.14E-08	3.01E-09	3.20E-09	6.22E-09	2.95E-09	2.85E-09	5.80E-09	1.56E-09	1.29E-09	2.86E-09
1702	649078.53	4197381.51	1.91E-08	2.04E-08	3.94E-08	2.87E-09	3.05E-09	5.92E-09	2.81E-09	2.72E-09	5.53E-09	1.49E-09	1.23E-09	2.72E-09
1703	649132.9	4197286.2	1.66E-08	1.77E-08	3.42E-08	2.49E-09	2.65E-09	5.14E-09	2.44E-09	2.36E-09	4.80E-09	1.29E-09	1.07E-09	2.36E-09
1704	649110.41	4197284.07	1.59E-08	1.7E-08	3.29E-08	2.40E-09	2.55E-09	4.94E-09	2.34E-09	2.27E-09	4.61E-09	1.24E-09	1.03E-09	2.27E-09
1705	649087.93	4197281.95	1.53E-08	1.63E-08	3.17E-08	2.30E-09	2.45E-09	4.75E-09	2.25E-09	2.18E-09	4.44E-09	1.20E-09	9.90E-10	2.19E-09
1706	649142.29	4197186.64	1.35E-08	1.44E-08	2.79E-08	2.03E-09	2.16E-09	4.18E-09	1.98E-09	1.92E-09	3.90E-09	1.05E-09	8.72E-10	1.92E-09
1707	649119.81	4197184.52	1.31E-08	1.39E-08	2.70E-08	1.96E-09	2.09E-09	4.05E-09	1.92E-09	1.86E-09	3.78E-09	1.02E-09	8.44E-10	1.86E-09
1708	649097.32	4197182.39	1.26E-08	1.35E-08	2.61E-08	1.90E-09	2.02E-09	3.92E-09	1.86E-09	1.80E-09	3.66E-09	9.88E-10	8.17E-10	1.80E-09
1709	649116.11	4196983.28	9.14E-09	9.74E-09	1.89E-08	1.37E-09	1.46E-09	2.83E-09	1.34E-09	1.30E-09	2.65E-09	7.14E-10	5.90E-10	1.30E-09
1710	649224.83	4196792.65	7.57E-09	8.07E-09	1.56E-08	1.14E-09	1.21E-09	2.35E-09	1.11E-09	1.08E-09	2.19E-09	5.91E-10	4.89E-10	1.08E-09
1711	649153.68	4196585.05	5.60E-09	5.97E-09	1.16E-08	8.42E-10	8.95E-10	1.74E-09	8.23E-10	7.98E-10	1.62E-09	4.37E-10	3.62E-10	7.99E-10
1712	649015.78	4197805.24	1.04E-07	1.11E-07	2.15E-07	1.56E-08	1.66E-08	3.22E-08	1.53E-08	1.48E-08	3.01E-08	8.11E-09	6.71E-09	1.48E-08
1713	649013.98	4197780.31	8.33E-08	8.88E-08	1.72E-07	1.25E-08	1.33E-08	2.59E-08	1.23E-08	1.19E-08	2.41E-08	6.51E-09	5.39E-09	1.19E-08
1714	649020.78	4197729.69	6.12E-08	6.53E-08	1.26E-07	9.21E-09	9.79E-09	1.90E-08	9.00E-09	8.72E-09	1.77E-08	4.78E-09	3.96E-09	8.74E-09
1715	649025.48	4197679.91	4.73E-08	5.04E-08	9.77E-08	7.11E-09	7.56E-09	1.47E-08	6.95E-09	6.74E-09	1.37E-08	3.69E-09	3.06E-09	6.75E-09
1716	649023.95	4197630.06	3.73E-08	3.97E-08	7.70E-08	5.60E-09	5.96E-09	1.16E-08	5.48E-09	5.31E-09	1.08E-08	2.91E-09	2.41E-09	5.32E-09
1717	649019.94	4197580.19	3.02E-08	3.22E-08	6.24E-08	4.55E-09	4.83E-09	9.38E-09	4.44E-09	4.31E-09	8.75E-09	2.36E-09	1.95E-09	4.31E-09
1718	649012.28	4197480.44	2.16E-08	2.3E-08	4.46E-08	3.25E-09	3.45E-09	6.70E-09	3.18E-09	3.08E-09	6.26E-09	1.69E-09	1.40E-09	3.08E-09
1719	649040.71	4197480.75	2.31E-08	2.46E-08	4.77E-08	3.47E-09	3.69E-09	7.17E-09	3.40E-09	3.29E-09	6.69E-09	1.80E-09	1.49E-09	3.30E-09
1720	649005.97	4197380.71	1.66E-08	1.77E-08	3.44E-08	2.50E-09	2.66E-09	5.16E-09	2.45E-09	2.37E-09	4.82E-09	1.30E-09	1.08E-09	2.38E-09
1721	649037.07	4197381.05	1.76E-08	1.88E-08	3.64E-08	2.65E-09	2.82E-09	5.47E-09	2.59E-09	2.51E-09	5.11E-09	1.38E-09	1.14E-09	2.52E-09
1722	648998.36	4197280.96	1.34E-08	1.43E-08	2.76E-08	2.01E-09	2.14E-09	4.15E-09	1.97E-09	1.91E-09	3.87E-09	1.05E-09	8.65E-10	1.91E-09
1723	649028.22	4197281.29	1.40E-08	1.49E-08	2.89E-08	2.10E-09	2.24E-09	4.34E-09	2.06E-09	1.99E-09	4.05E-09	1.09E-09	9.04E-10	2.00E-09
1724	649058.07	4197281.62	1.46E-08	1.56E-08	3.02E-08	2.20E-09	2.34E-09	4.54E-09	2.15E-09	2.09E-09	4.24E-09	1.14E-09	9.46E-10	2.09E-09
1725	648990.89	4197181.22	1.11E-08	1.18E-08	2.29E-08	1.67E-09	1.78E-09	3.45E-09	1.63E-09	1.58E-09	3.22E-09	8.68E-10	7.18E-10	1.59E-09
1726	649019.92	4197181.54	1.15E-08	1.23E-08	2.38E-08	1.73E-09	1.84E-09	3.57E-09	1.69E-09	1.64E-09	3.33E-09	8.98E-10	7.43E-10	1.64E-09
1727	649048.94	4197181.86	1.19E-08	1.27E-08	2.46E-08	1.79E-09	1.90E-09	3.70E-09	1.75E-09	1.70E-09	3.45E-09	9.30E-10	7.70E-10	1.70E-09
1728	648976.79	4196981.74	8.15E-09	8.69E-09	1.68E-08	1.23E-09	1.30E-09	2.53E-09	1.20E-09	1.16E-09	2.36E-09	6.37E-10	5.27E-10	1.16E-09
1729	649006.64	4196982.07	8.34E-09	8.89E-09	1.72E-08	1.25E-09	1.33E-09	2.59E-09	1.23E-09	1.19E-09	2.42E-09	6.52E-10	5.39E-10	1.19E-09
1730	649036.49	4196982.4	8.54E-09	9.1E-09	1.76E-08	1.28E-09	1.37E-09	2.65E-09	1.26E-09	1.22E-09	2.47E-09	6.67E-10	5.52E-10	1.22E-09
1731	649066.35	4196982.73	8.75E-09	9.33E-09	1.81E-08	1.32E-09	1.40E-09	2.72E-09	1.29E-09	1.25E-09	2.53E-09	6.84E-10	5.66E-10	1.25E-09
1732	648962.58	4196782.26	6.33E-09	6.75E-09	1.31E-08	9.52E-10	1.01E-09	1.96E-09	9.31E-10	9.02E-10	1.83E-09	4.95E-10	4.09E-10	9.04E-10
1733	648992.99	4196782.6	6.43E-09	6.85E-09	1.33E-08	9.66E-10	1.03E-09	1.99E-09	9.45E-10	9.16E-10	1.86E-09	5.02E-10	4.15E-10	9.17E-10
1734	649023.4	4196782.93	6.53E-09	6.96E-09	1.35E-08	9.82E-10	1.04E-09	2.03E-09	9.60E-10	9.31E-10	1.89E-09	5.10E-10	4.22E-10	9.32E-10
1735	649053.81	4196783.27	6.64E-09	7.08E-09	1.37E-08	9.99E-10	1.06E-09	2.06E-09	9.76E-10	9.46E-10	1.92E-09	5.19E-10	4.29E-10	9.48E-10
1736	649084.21	4196783.6	6.76E-09	7.21E-09	1.40E-08	1.02E-09	1.08E-09	2.10E-09	9.94E-10	9.64E-10	1.96E-09	5.28E-10	4.37E-10	9.65E-10
1737	649114.62	4196783.94	6.90E-09	7.35E-09	1.43E-08	1.04E-09	1.10E-09	2.14E-09	1.01E-09	9.83E-10	2.00E-09	5.39E-10	4.46E-10	9.85E-10
1738	648948.33	4196582.78	5.12E-09	5.45E-09	1.06E-08	7.69E-10	8.18E-10	1.59E-09	7.52E-10	7.29E-10	1.48E-09	4.00E-10	3.31E-10	7.30E-10
1739	648979.13	4196583.12	5.17E-09	5.51E-09	1.07E-08	7.77E-10	8.26E-10	1.60E-09	7.59E-10	7.36E-10	1.50E-09	4.03E-10	3.34E-10	7.37E-10
1740	649009.93	4196583.46	5.22E-09	5.57E-09	1.08E-08	7.85E-10	8.35E-10	1.62E-09	7.68E-10	7.44E-10	1.51E-09	4.08E-10	3.37E-10	7.45E-10
1741	649040.74	4196583.8	5.29E-09	5.63E-09	1.09E-08	7.95E-10	8.45E-10	1.64E-09	7.77E-10	7.53E-10	1.53E-09	4.13E-10	3.42E-10	7.54E-10
1742	649071.54	4196584.14	5.36E-09	5.71E-09	1.11E-08	8.05E-10	8.56E-10	1.66E-09	7.87E-10	7.63E-10	1.55E-09	4.18E-10	3.46E-10	7.64E-10
1743	649102.34	4196584.48	5.44E-09	5.8E-09	1.12E-08	8.18E-10	8.69E-10	1.69E-09	7.99E-10	7.75E-10	1.57E-09	4.25E-10	3.51E-10	7.76E-10
1744	648934.04	4196383.3	4.26E-09	4.54E-09	8.80E-09	6.40E-10	6.81E-10	1.32E-09	6.26E-10	6.07E-10	1.23E-09	3.33E-10	2.75E-10	6.08E-10

1745	648965.14	4196383.64	4.28E-09	4.57E-09	8.85E-09	6.44E-10	6.85E-10	1.33E-09	6.30E-10	6.10E-10	1.24E-09	3.35E-10	2.77E-10	6.11E-10
1746	648996.24	4196383.99	4.32E-09	4.6E-09	8.92E-09	6.49E-10	6.90E-10	1.34E-09	6.35E-10	6.15E-10	1.25E-09	3.37E-10	2.79E-10	6.16E-10
1747	649027.34	4196384.33	4.35E-09	4.64E-09	9.00E-09	6.55E-10	6.96E-10	1.35E-09	6.40E-10	6.20E-10	1.26E-09	3.40E-10	2.81E-10	6.21E-10
1748	649058.44	4196384.67	4.40E-09	4.69E-09	9.09E-09	6.61E-10	7.03E-10	1.36E-09	6.47E-10	6.27E-10	1.27E-09	3.44E-10	2.84E-10	6.28E-10
1749	649089.53	4196385.02	4.45E-09	4.75E-09	9.20E-09	6.70E-10	7.12E-10	1.38E-09	6.55E-10	6.35E-10	1.29E-09	3.48E-10	2.88E-10	6.36E-10
1750	649004.46	4197859.53	1.68E-07	1.79E-07	3.47E-07	2.53E-08	2.69E-08	5.22E-08	2.47E-08	2.40E-08	4.87E-08	1.31E-08	1.09E-08	2.40E-08
1751	649010.82	4197831.62	1.29E-07	1.38E-07	2.67E-07	1.94E-08	2.06E-08	4.01E-08	1.90E-08	1.84E-08	3.74E-08	1.01E-08	8.34E-09	1.84E-08
1752	648987.36	4197812.54	8.95E-08	9.55E-08	1.85E-07	1.35E-08	1.43E-08	2.78E-08	1.32E-08	1.28E-08	2.59E-08	6.99E-09	5.79E-09	1.28E-08
1753	648986.97	4197786.08	7.37E-08	7.86E-08	1.52E-07	1.11E-08	1.18E-08	2.29E-08	1.08E-08	1.05E-08	2.13E-08	5.76E-09	4.76E-09	1.05E-08
1754	648977.97	4197737.36	5.26E-08	5.61E-08	1.09E-07	7.91E-09	8.41E-09	1.63E-08	7.73E-09	7.49E-09	1.52E-08	4.11E-09	3.40E-09	7.51E-09
1755	648960.48	4197690.46	3.91E-08	4.17E-08	8.09E-08	5.89E-09	6.26E-09	1.21E-08	5.75E-09	5.58E-09	1.13E-08	3.06E-09	2.53E-09	5.59E-09
1756	648983.63	4197685.52	4.15E-08	4.43E-08	8.58E-08	6.24E-09	6.64E-09	1.29E-08	6.10E-09	5.92E-09	1.20E-08	3.24E-09	2.68E-09	5.93E-09
1757	648944.11	4197643.32	3.07E-08	3.27E-08	6.34E-08	4.62E-09	4.91E-09	9.52E-09	4.51E-09	4.37E-09	8.89E-09	2.40E-09	1.98E-09	4.38E-09
1758	648969.43	4197637.91	3.24E-08	3.45E-08	6.69E-08	4.87E-09	5.18E-09	1.00E-08	4.76E-09	4.61E-09	9.37E-09	2.53E-09	2.09E-09	4.62E-09
1759	648994.75	4197632.5	3.42E-08	3.65E-08	7.07E-08	5.15E-09	5.47E-09	1.06E-08	5.03E-09	4.88E-09	9.91E-09	2.67E-09	2.21E-09	4.89E-09
1760	648926.67	4197596.41	2.49E-08	2.65E-08	5.14E-08	3.74E-09	3.98E-09	7.71E-09	3.66E-09	3.54E-09	7.20E-09	1.94E-09	1.61E-09	3.55E-09
1761	648950.97	4197591.22	2.60E-08	2.77E-08	5.37E-08	3.91E-09	4.16E-09	8.07E-09	3.82E-09	3.71E-09	7.53E-09	2.03E-09	1.68E-09	3.71E-09
1762	648975.28	4197586.02	2.72E-08	2.9E-08	5.63E-08	4.10E-09	4.36E-09	8.45E-09	4.01E-09	3.88E-09	7.89E-09	2.13E-09	1.76E-09	3.89E-09
1763	648892.67	4197502.4	1.76E-08	1.88E-08	3.65E-08	2.65E-09	2.82E-09	5.47E-09	2.59E-09	2.51E-09	5.11E-09	1.38E-09	1.14E-09	2.52E-09
1764	648917.6	4197497.07	1.83E-08	1.96E-08	3.79E-08	2.76E-09	2.93E-09	5.69E-09	2.70E-09	2.61E-09	5.31E-09	1.43E-09	1.19E-09	2.62E-09
1765	648942.54	4197491.74	1.91E-08	2.03E-08	3.94E-08	2.87E-09	3.05E-09	5.92E-09	2.81E-09	2.72E-09	5.53E-09	1.49E-09	1.23E-09	2.72E-09
1766	648967.47	4197486.41	1.99E-08	2.12E-08	4.10E-08	2.99E-09	3.18E-09	6.16E-09	2.92E-09	2.83E-09	5.75E-09	1.55E-09	1.28E-09	2.84E-09
1767	648858.6	4197408.4	1.34E-08	1.43E-08	2.78E-08	2.02E-09	2.15E-09	4.17E-09	1.98E-09	1.92E-09	3.89E-09	1.05E-09	8.69E-10	1.92E-09
1768	648883.92	4197402.99	1.39E-08	1.49E-08	2.88E-08	2.10E-09	2.23E-09	4.33E-09	2.05E-09	1.99E-09	4.04E-09	1.09E-09	9.01E-10	1.99E-09
1769	648909.24	4197397.58	1.45E-08	1.54E-08	2.99E-08	2.17E-09	2.31E-09	4.48E-09	2.13E-09	2.06E-09	4.19E-09	1.13E-09	9.34E-10	2.06E-09
1770	648934.56	4197392.17	1.50E-08	1.6E-08	3.09E-08	2.25E-09	2.39E-09	4.65E-09	2.20E-09	2.13E-09	4.34E-09	1.17E-09	9.68E-10	2.14E-09
1771	648959.88	4197386.76	1.55E-08	1.65E-08	3.20E-08	2.33E-09	2.48E-09	4.81E-09	2.28E-09	2.21E-09	4.49E-09	1.21E-09	1.00E-09	2.21E-09
1772	648824.06	4197314.5	1.08E-08	1.15E-08	2.23E-08	1.62E-09	1.72E-09	3.34E-09	1.58E-09	1.54E-09	3.12E-09	8.41E-10	6.96E-10	1.54E-09
1773	648848.37	4197309.31	1.11E-08	1.19E-08	2.30E-08	1.67E-09	1.78E-09	3.45E-09	1.64E-09	1.59E-09	3.22E-09	8.70E-10	7.19E-10	1.59E-09
1774	648872.68	4197304.11	1.15E-08	1.23E-08	2.37E-08	1.73E-09	1.84E-09	3.57E-09	1.69E-09	1.64E-09	3.33E-09	8.98E-10	7.43E-10	1.64E-09
1775	648896.99	4197298.92	1.19E-08	1.26E-08	2.45E-08	1.78E-09	1.89E-09	3.68E-09	1.74E-09	1.69E-09	3.43E-09	9.26E-10	7.66E-10	1.69E-09
1776	648921.29	4197293.72	1.22E-08	1.3E-08	2.52E-08	1.83E-09	1.95E-09	3.79E-09	1.79E-09	1.74E-09	3.53E-09	9.53E-10	7.88E-10	1.74E-09
1777	648945.6	4197288.53	1.25E-08	1.34E-08	2.59E-08	1.89E-09	2.01E-09	3.89E-09	1.84E-09	1.79E-09	3.63E-09	9.80E-10	8.11E-10	1.79E-09
1778	648969.91	4197283.34	1.29E-08	1.37E-08	2.66E-08	1.94E-09	2.06E-09	4.00E-09	1.90E-09	1.84E-09	3.73E-09	1.01E-09	8.33E-10	1.84E-09
1779	648789.98	4197220.51	8.95E-09	9.55E-09	1.85E-08	1.35E-09	1.43E-09	2.78E-09	1.32E-09	1.28E-09	2.59E-09	6.99E-10	5.79E-10	1.28E-09
1780	648814.64	4197215.24	9.24E-09	9.85E-09	1.91E-08	1.39E-09	1.48E-09	2.87E-09	1.36E-09	1.32E-09	2.68E-09	7.22E-10	5.97E-10	1.32E-09
1781	648839.3	4197209.97	9.53E-09	1.02E-08	1.97E-08	1.43E-09	1.52E-09	2.96E-09	1.40E-09	1.36E-09	2.76E-09	7.44E-10	6.16E-10	1.36E-09
1782	648863.96	4197204.7	9.80E-09	1.05E-08	2.03E-08	1.47E-09	1.57E-09	3.04E-09	1.44E-09	1.40E-09	2.84E-09	7.66E-10	6.33E-10	1.40E-09
1783	648888.62	4197199.43	1.01E-08	1.07E-08	2.08E-08	1.51E-09	1.61E-09	3.12E-09	1.48E-09	1.43E-09	2.91E-09	7.86E-10	6.50E-10	1.44E-09
1784	648913.28	4197194.16	1.03E-08	1.1E-08	2.13E-08	1.55E-09	1.65E-09	3.20E-09	1.52E-09	1.47E-09	2.99E-09	8.06E-10	6.67E-10	1.47E-09
1785	648937.94	4197188.89	1.06E-08	1.12E-08	2.18E-08	1.59E-09	1.69E-09	3.27E-09	1.55E-09	1.50E-09	3.06E-09	8.24E-10	6.82E-10	1.51E-09
1786	648962.6	4197183.62	1.08E-08	1.15E-08	2.23E-08	1.62E-09	1.72E-09	3.34E-09	1.59E-09	1.54E-09	3.12E-09	8.42E-10	6.97E-10	1.54E-09
1787	648721.73	4197032.54	6.67E-09	7.11E-09	1.38E-08	1.00E-09	1.07E-09	2.07E-09	9.81E-10	9.51E-10	1.93E-09	5.21E-10	4.31E-10	9.52E-10
1788	648746.88	4197027.16	6.87E-09	7.32E-09	1.42E-08	1.03E-09	1.10E-09	2.13E-09	1.01E-09	9.78E-10	1.99E-09	5.36E-10	4.44E-10	9.80E-10
1789	648772.03	4197021.79	7.05E-09	7.52E-09	1.46E-08	1.06E-09	1.13E-09	2.19E-09	1.04E-09	1.01E-09	2.04E-09	5.51E-10	4.56E-10	1.01E-09
1790	648797.17	4197016.41	7.23E-09	7.71E-09	1.49E-08	1.09E-09	1.16E-09	2.24E-09	1.06E-09	1.03E-09	2.09E-09	5.65E-10	4.67E-10	1.03E-09
1791	648822.32	4197011.04	7.39E-09	7.88E-09	1.53E-08	1.11E-09	1.18E-09	2.29E-09	1.09E-09	1.05E-09	2.14E-09	5.78E-10	4.78E-10	1.06E-09
1792	648847.47	4197005.67	7.54E-09	8.04E-09	1.56E-08	1.13E-09	1.21E-09	2.34E-09	1.11E-09	1.07E-09	2.18E-09	5.89E-10	4.87E-10	1.08E-09
1793	648872.61	4197000.29	7.67E-09	8.18E-09	1.59E-08	1.15E-09	1.23E-09	2.38E-09	1.13E-09	1.09E-09	2.22E-09	5.99E-10	4.96E-10	1.10E-09
1794	648897.76	4196994.92	7.79E-09	8.31E-09	1.61E-08	1.17E-09	1.25E-09	2.42E-09	1.15E-09	1.11E-09	2.26E-09	6.09E-10	5.04E-10	1.11E-09
1795	648922.91	4196989.55	7.90E-09	8.42E-09	1.63E-08	1.19E-09	1.26E-09	2.45E-09	1.16E-09	1.13E-09	2.29E-09	6.17E-10	5.11E-10	1.13E-09
1796	648948.05	4196984.17	8.00E-09	8.53E-09	1.65E-08	1.20E-09	1.28E-09	2.48E-09	1.18E-09	1.14E-09	2.32E-09	6.25E-10	5.17E-10	1.14E-09
1797	648653.44	4196844.57	5.30E-09	5.65E-09	1.09E-08	7.97E-10	8.47E-10	1.64E-09	7.79E-10	7.55E-10	1.53E-09	4.14E-10	3.42E-10	7.56E-10
1798	648678.9	4196839.13	5.44E-09	5.8E-09	1.12E-08	8.18E-10	8.70E-10	1.69E-09	8.00E-10	7.75E-10	1.58E-09	4.25E-10	3.52E-10	7.77E-10
1799	648704.37	4196833.69	5.57E-09	5.94E-09	1.15E-08	8.38E-10	8.91E-10	1.73E-09	8.19E-10	7.94E-10	1.61E-09	4.35E-10	3.60E-10	7.95E-10
1800	648729.83	4196828.25	5.69E-09	6.07E-09	1.18E-08	8.56E-10	9.10E-10	1.77E-09	8.37E-10	8.11E-10	1.65E-09	4.45E-10	3.68E-10	8.12E-10
1801	648755.3	4196822.81	5.80E-09	6.19E-09	1.20E-08	8.73E-10	9.28E-10	1.80E-09	8.53E-10	8.27E-10	1.68E-09	4.53E-10	3.75E-10	8.28E-10
1802	648780.77	4196817.36	5.90E-09	6.29E-09	1.22E-08	8.87E-10	9.43E-10	1.83E-09	8.67E-10	8.41E-10	1.71E-09	4.61E-10	3.81E-10	8.42E-10
1803	648806.23	4196811.92	5.98E-09	6.38E-09	1.24E-08	9.00E-10	9.57E-10	1.86E-09	8.80E-10	8.53E-10	1.73E-09	4.68E-10	3.87E-10	8.54E-10
1804	648831.7	4196806.48	6.06E-09	6.46E-09	1.25E-08	9.11E-10	9.69E-10	1.88E-09	8.91E-10	8.64E-10	1.75E-09	4.73E-10	3.92E-10	8.65E-10
1805	648857.16	4196801.04	6.12E-09	6.53E-09	1.26E-08	9.21E-10	9.79E-10	1.90E-09	9.00E-10	8.72E-10	1.77E-09	4.78E-10	3.96E-10	8.74E-10
1806	648882.63	4196795.6	6.18E-09	6.58E-09	1.28E-08	9.29E-10	9.87E-10	1.92E-09	9.08E-10	8.80E-10	1.79E-09	4.82E-10	3.99E-10	8.81E-10
1807	648908.09	4196790.16	6.22E-09	6.63E-09	1.29E-08	9.36E-10	9.95E-10	1.93E-09	9.15E-10	8.87E-10	1.80E-09	4.86E-10	4.02E-10	8.88E-10
1808	648933.56	4196784.71	6.26E-09	6.67E-09	1.29E-08	9.41E-10	1.00E-09	1.94E-09	9.20E-10	8.92E-10	1.81E-09	4.89E-10	4.05E-10	8.94E-10
1809	648584.9	4196656.66	4.39E-09	4.68E-09	9.07E-09	6.60E-10	7.02E-10	1.36E-09	6.45E-10	6.25E-10	1.27E-09	3.43E-10	2.84E-10	6.26E-10
1810	648609.98	4196651.3	4.49E-09	4.79E-09	9.27E-09	6.75E-10	7.18E-10	1.39E-09	6.60E-10	6.40E-10	1.30E-09	3.51E-10	2.90E-10	6.41E-10
1811	648635.06	4196645.94	4.58E-09	4.88E-09	9.47E-09	6.89E-10	7.33E-10	1.42E-09	6.74E-10	6.53E-10	1.33E-09	3.58E-10	2.96E-10	6.54E-10
1812	648660.14	4196640.58	4.67E-09	4.98E-09	9.64E-09	7.02E-10	7.46E-10	1.45E-09	6.86E-10	6.65E-10	1.35E-09	3.65E-10	3.02E-10	6.66E-10
1813	648685.22	4196635.23	4.75E-09	5.06E-09	9.81E-09	7.14E-10	7.59E-10	1.47E-09	6.98E-10	6.76E-10	1.37E-09	3.71E-10	3.07E-10	6.77E-10
1814	648710.3	4196629.87	4.82E-09	5.13E-09	9.95E-09	7.24E-10	7.70E-10	1.49E-09	7.08E-10	6.86E-10	1.39E-09	3.76E-10	3.11E-10	6.88E-10
1815	648735.38	4196624.51	4.88E-09	5.2E-09	1.01E-08	7.33E-10	7.79E-10	1.51E-09	7.17E-10	6.95E-10	1.41E-09	3.81E-10	3.15E-10	6.96E-10
1816	648760.46	4196619.15	4.93E-09	5.25E-09	1.02E-08	7.41E-10	7.88E-10	1.53E-09	7.25E-10	7.02E-10	1.43E-09	3.85E-10	3.18E-10	7.03E-10
1817	648785.54	4196613.79	4.97E-09	5.3E-09	1.03E-08	7.47E-10	7.94E-10	1.54E-09	7.31E-10	7.08E-10	1.44E-09	3.88E-10	3.21E-10	7.09E-10
1818	648810.62	4196608.43	5.00E-09	5.33E-09	1.03E-08	7.52E-10	8.00E-10	1.55E-09	7.36E-10	7.13E-10	1.45E-09	3.91E-10	3.23E-10	7.14E-10
1819	648835.7	4196603.07	5.03E-09	5.36E-09	1.04E-08	7.56E-10	8.04E-10	1.56E-09	7.40E-10	7.17E-10	1.46E-09	3.93E-10	3.25E-10	7.18E-10
1820	648860.78	4196597.71	5.05E-09	5.38E-09	1.04E-08	7.59E-10	8.07E-10	1.57E-09	7.43E-10	7.20E-10	1.46E-09	3.95E-10	3.26E-10	7.21E-10

1821	648885.86	4196592.35	5.07E-09	5.4E-09	1.05E-08	7.62E-10	8.10E-10	1.57E-09	7.45E-10	7.22E-10	1.47E-09	3.96E-10	3.27E-10	7.23E-10
1822	648910.94	4196586.99	5.08E-09	5.42E-09	1.05E-08	7.64E-10	8.12E-10	1.58E-09	7.47E-10	7.24E-10	1.47E-09	3.97E-10	3.28E-10	7.25E-10
1823	648516.58	4196468.71	3.74E-09	3.99E-09	7.73E-09	5.62E-10	5.98E-10	1.16E-09	5.50E-10	5.33E-10	1.08E-09	2.92E-10	2.42E-10	5.34E-10
1824	648541.9	4196463.3	3.82E-09	4.07E-09	7.88E-09	5.74E-10	6.10E-10	1.18E-09	5.61E-10	5.44E-10	1.10E-09	2.98E-10	2.47E-10	5.45E-10
1825	648567.22	4196457.89	3.89E-09	4.14E-09	8.03E-09	5.84E-10	6.21E-10	1.21E-09	5.71E-10	5.54E-10	1.13E-09	3.04E-10	2.51E-10	5.55E-10
1826	648592.54	4196452.47	3.95E-09	4.21E-09	8.16E-09	5.94E-10	6.31E-10	1.23E-09	5.81E-10	5.63E-10	1.14E-09	3.09E-10	2.55E-10	5.64E-10
1827	648617.86	4196447.06	4.01E-09	4.27E-09	8.28E-09	6.03E-10	6.41E-10	1.24E-09	5.89E-10	5.71E-10	1.16E-09	3.13E-10	2.59E-10	5.72E-10
1828	648643.19	4196441.65	4.06E-09	4.33E-09	8.39E-09	6.11E-10	6.49E-10	1.26E-09	5.97E-10	5.79E-10	1.18E-09	3.17E-10	2.62E-10	5.80E-10
1829	648668.51	4196436.24	4.11E-09	4.38E-09	8.48E-09	6.17E-10	6.56E-10	1.27E-09	6.04E-10	5.85E-10	1.19E-09	3.21E-10	2.65E-10	5.86E-10
1830	648693.83	4196430.83	4.14E-09	4.42E-09	8.56E-09	6.23E-10	6.62E-10	1.29E-09	6.09E-10	5.90E-10	1.20E-09	3.24E-10	2.68E-10	5.91E-10
1831	648719.15	4196425.42	4.18E-09	4.45E-09	8.63E-09	6.28E-10	6.67E-10	1.30E-09	6.14E-10	5.95E-10	1.21E-09	3.26E-10	2.70E-10	5.96E-10
1832	648744.47	4196420.01	4.20E-09	4.48E-09	8.67E-09	6.31E-10	6.71E-10	1.30E-09	6.17E-10	5.98E-10	1.22E-09	3.28E-10	2.71E-10	5.99E-10
1833	648769.79	4196414.6	4.22E-09	4.49E-09	8.71E-09	6.34E-10	6.74E-10	1.31E-09	6.20E-10	6.01E-10	1.22E-09	3.29E-10	2.72E-10	6.02E-10
1834	648795.11	4196409.19	4.23E-09	4.51E-09	8.74E-09	6.36E-10	6.76E-10	1.31E-09	6.22E-10	6.03E-10	1.23E-09	3.31E-10	2.73E-10	6.04E-10
1835	648820.43	4196403.78	4.24E-09	4.52E-09	8.76E-09	6.38E-10	6.78E-10	1.32E-09	6.23E-10	6.04E-10	1.23E-09	3.31E-10	2.74E-10	6.05E-10
1836	648845.75	4196398.36	4.24E-09	4.52E-09	8.77E-09	6.38E-10	6.78E-10	1.32E-09	6.24E-10	6.05E-10	1.23E-09	3.31E-10	2.74E-10	6.06E-10
1837	648871.08	4196392.95	4.24E-09	4.52E-09	8.77E-09	6.38E-10	6.78E-10	1.32E-09	6.24E-10	6.05E-10	1.23E-09	3.31E-10	2.74E-10	6.06E-10
1838	648896.4	4196387.54	4.24E-09	4.52E-09	8.77E-09	6.38E-10	6.78E-10	1.32E-09	6.24E-10	6.05E-10	1.23E-09	3.31E-10	2.74E-10	6.06E-10
1839	648989.09	4197839.11	1.14E-07	1.21E-07	2.35E-07	1.71E-08	1.82E-08	3.53E-08	1.67E-08	1.62E-08	3.29E-08	8.89E-09	7.35E-09	1.62E-08
1840	648965.18	4197795.2	6.91E-08	7.37E-08	1.43E-07	1.04E-08	1.11E-08	2.15E-08	1.02E-08	9.85E-09	2.00E-08	5.40E-09	4.47E-09	9.87E-09
1841	648948.08	4197748.22	4.90E-08	5.23E-08	1.01E-07	7.37E-09	7.84E-09	1.52E-08	7.21E-09	6.99E-09	1.42E-08	3.83E-09	3.17E-09	7.00E-09
1842	648924.16	4197704.31	3.68E-08	3.92E-08	7.59E-08	5.53E-09	5.88E-09	1.14E-08	5.40E-09	5.24E-09	1.06E-08	2.87E-09	2.38E-09	5.25E-09
1843	648900.24	4197660.4	2.89E-08	3.08E-08	5.96E-08	4.34E-09	4.61E-09	8.96E-09	4.24E-09	4.11E-09	8.36E-09	2.25E-09	1.87E-09	4.12E-09
1844	648920.69	4197651.17	2.96E-08	3.15E-08	6.11E-08	4.44E-09	4.73E-09	9.17E-09	4.35E-09	4.21E-09	8.56E-09	2.31E-09	1.91E-09	4.22E-09
1845	648877.69	4197615.87	2.35E-08	2.5E-08	4.84E-08	3.53E-09	3.75E-09	7.28E-09	3.45E-09	3.34E-09	6.79E-09	1.83E-09	1.52E-09	3.35E-09
1846	648902.23	4197604.8	2.40E-08	2.56E-08	4.97E-08	3.62E-09	3.84E-09	7.46E-09	3.53E-09	3.43E-09	6.96E-09	1.88E-09	1.55E-09	3.43E-09
1847	648829.47	4197528.23	1.65E-08	1.76E-08	3.41E-08	2.49E-09	2.64E-09	5.13E-09	2.43E-09	2.36E-09	4.79E-09	1.29E-09	1.07E-09	2.36E-09
1848	648852.84	4197517.69	1.69E-08	1.8E-08	3.49E-08	2.54E-09	2.70E-09	5.23E-09	2.48E-09	2.40E-09	4.89E-09	1.32E-09	1.09E-09	2.41E-09
1849	648781.42	4197440.51	1.24E-08	1.33E-08	2.57E-08	1.87E-09	1.99E-09	3.86E-09	1.83E-09	1.77E-09	3.60E-09	9.72E-10	8.04E-10	1.78E-09
1850	648804.14	4197430.26	1.27E-08	1.35E-08	2.62E-08	1.91E-09	2.03E-09	3.94E-09	1.87E-09	1.81E-09	3.67E-09	9.91E-10	8.20E-10	1.81E-09
1851	648826.85	4197420.01	1.30E-08	1.38E-08	2.68E-08	1.95E-09	2.07E-09	4.02E-09	1.91E-09	1.85E-09	3.75E-09	1.01E-09	8.38E-10	1.85E-09
1852	648734.19	4197352.42	9.82E-09	1.05E-08	2.03E-08	1.48E-09	1.57E-09	3.05E-09	1.44E-09	1.40E-09	2.84E-09	7.67E-10	6.35E-10	1.40E-09
1853	648758.73	4197341.35	1.00E-08	1.07E-08	2.07E-08	1.51E-09	1.61E-09	3.11E-09	1.48E-09	1.43E-09	2.91E-09	7.84E-10	6.49E-10	1.43E-09
1854	648783.26	4197330.28	1.03E-08	1.1E-08	2.13E-08	1.55E-09	1.64E-09	3.19E-09	1.51E-09	1.47E-09	2.98E-09	8.03E-10	6.65E-10	1.47E-09
1855	648686.13	4197264.7	8.03E-09	8.56E-09	1.66E-08	1.21E-09	1.28E-09	2.49E-09	1.18E-09	1.14E-09	2.32E-09	6.27E-10	5.19E-10	1.15E-09
1856	648709.99	4197253.94	8.21E-09	8.75E-09	1.70E-08	1.23E-09	1.31E-09	2.55E-09	1.21E-09	1.17E-09	2.38E-09	6.41E-10	5.30E-10	1.17E-09
1857	648733.84	4197243.18	8.41E-09	8.96E-09	1.74E-08	1.26E-09	1.34E-09	2.61E-09	1.24E-09	1.20E-09	2.43E-09	6.57E-10	5.43E-10	1.20E-09
1858	648757.69	4197232.41	8.63E-09	9.2E-09	1.78E-08	1.30E-09	1.38E-09	2.68E-09	1.27E-09	1.23E-09	2.50E-09	6.74E-10	5.57E-10	1.23E-09
1859	648590.7	4197088.96	5.80E-09	6.18E-09	1.20E-08	8.72E-10	9.27E-10	1.80E-09	8.52E-10	8.26E-10	1.68E-09	4.53E-10	3.75E-10	8.28E-10
1860	648615.23	4197077.89	5.94E-09	6.33E-09	1.23E-08	8.93E-10	9.49E-10	1.84E-09	8.73E-10	8.46E-10	1.72E-09	4.64E-10	3.84E-10	8.48E-10
1861	648639.77	4197066.82	6.10E-09	6.5E-09	1.26E-08	9.17E-10	9.75E-10	1.89E-09	8.96E-10	8.69E-10	1.77E-09	4.76E-10	3.94E-10	8.70E-10
1862	648664.3	4197055.75	6.26E-09	6.68E-09	1.29E-08	9.42E-10	1.00E-09	1.94E-09	9.21E-10	8.93E-10	1.81E-09	4.89E-10	4.05E-10	8.94E-10
1863	648688.84	4197044.68	6.43E-09	6.86E-09	1.33E-08	9.67E-10	1.03E-09	2.00E-09	9.46E-10	9.17E-10	1.86E-09	5.03E-10	4.16E-10	9.18E-10
1864	648495.18	4196913.26	4.50E-09	4.79E-09	9.29E-09	6.76E-10	7.19E-10	1.40E-09	6.61E-10	6.41E-10	1.30E-09	3.51E-10	2.91E-10	6.42E-10
1865	648520.17	4196901.98	4.61E-09	4.92E-09	9.53E-09	6.93E-10	7.37E-10	1.43E-09	6.78E-10	6.57E-10	1.34E-09	3.60E-10	2.98E-10	6.58E-10
1866	648545.16	4196890.71	4.73E-09	5.05E-09	9.78E-09	7.12E-10	7.57E-10	1.47E-09	6.96E-10	6.75E-10	1.37E-09	3.70E-10	3.06E-10	6.76E-10
1867	648570.15	4196879.43	4.87E-09	5.19E-09	1.01E-08	7.32E-10	7.78E-10	1.51E-09	7.16E-10	6.93E-10	1.41E-09	3.80E-10	3.14E-10	6.95E-10
1868	648595.14	4196868.15	5.00E-09	5.33E-09	1.03E-08	7.51E-10	7.99E-10	1.55E-09	7.34E-10	7.12E-10	1.45E-09	3.90E-10	3.23E-10	7.13E-10
1869	648620.13	4196856.88	5.13E-09	5.47E-09	1.06E-08	7.71E-10	8.20E-10	1.59E-09	7.54E-10	7.31E-10	1.48E-09	4.00E-10	3.31E-10	7.32E-10
1870	648399.63	4196737.57	3.66E-09	3.9E-09	7.57E-09	5.51E-10	5.86E-10	1.14E-09	5.39E-10	5.22E-10	1.06E-09	2.86E-10	2.37E-10	5.23E-10
1871	648424.94	4196726.15	3.76E-09	4E-09	7.76E-09	5.65E-10	6.01E-10	1.17E-09	5.52E-10	5.35E-10	1.09E-09	2.93E-10	2.43E-10	5.36E-10
1872	648450.25	4196714.73	3.85E-09	4.11E-09	7.96E-09	5.79E-10	6.16E-10	1.20E-09	5.67E-10	5.49E-10	1.12E-09	3.01E-10	2.49E-10	5.50E-10
1873	648475.57	4196703.3	3.96E-09	4.22E-09	8.17E-09	5.95E-10	6.32E-10	1.23E-09	5.82E-10	5.64E-10	1.15E-09	3.09E-10	2.56E-10	5.65E-10
1874	648500.88	4196691.88	4.06E-09	4.33E-09	8.38E-09	6.10E-10	6.49E-10	1.26E-09	5.97E-10	5.78E-10	1.18E-09	3.17E-10	2.62E-10	5.79E-10
1875	648526.19	4196680.46	4.16E-09	4.44E-09	8.60E-09	6.26E-10	6.65E-10	1.29E-09	6.12E-10	5.93E-10	1.20E-09	3.25E-10	2.69E-10	5.94E-10
1876	648551.51	4196669.04	4.26E-09	4.54E-09	8.80E-09	6.41E-10	6.81E-10	1.32E-09	6.26E-10	6.07E-10	1.23E-09	3.33E-10	2.75E-10	6.08E-10
1877	648303.7	4196562.05	3.09E-09	3.29E-09	6.38E-09	4.64E-10	4.93E-10	9.57E-10	4.54E-10	4.40E-10	8.94E-10	2.41E-10	1.99E-10	4.41E-10
1878	648328.24	4196550.98	3.16E-09	3.36E-09	6.52E-09	4.75E-10	5.05E-10	9.79E-10	4.64E-10	4.50E-10	9.14E-10	2.47E-10	2.04E-10	4.51E-10
1879	648352.77	4196539.91	3.23E-09	3.45E-09	6.68E-09	4.86E-10	5.17E-10	1.00E-09	4.75E-10	4.61E-10	9.36E-10	2.53E-10	2.09E-10	4.61E-10
1880	648377.31	4196528.84	3.31E-09	3.53E-09	6.84E-09	4.98E-10	5.29E-10	1.03E-09	4.87E-10	4.72E-10	9.59E-10	2.59E-10	2.14E-10	4.73E-10
1881	648401.84	4196517.77	3.39E-09	3.61E-09	7.01E-09	5.10E-10	5.42E-10	1.05E-09	4.99E-10	4.83E-10	9.82E-10	2.65E-10	2.19E-10	4.84E-10
1882	648426.37	4196506.7	3.47E-09	3.7E-09	7.17E-09	5.22E-10	5.55E-10	1.08E-09	5.10E-10	4.94E-10	1.00E-09	2.71E-10	2.24E-10	4.95E-10
1883	648450.91	4196495.62	3.55E-09	3.78E-09	7.33E-09	5.33E-10	5.67E-10	1.10E-09	5.21E-10	5.05E-10	1.03E-09	2.77E-10	2.29E-10	5.06E-10
1884	648475.44	4196484.55	3.62E-09	3.86E-09	7.48E-09	5.44E-10	5.79E-10	1.12E-09	5.32E-10	5.16E-10	1.05E-09	2.83E-10	2.34E-10	5.17E-10
1885	648979.04	4197876.56	1.50E-07	1.6E-07	3.11E-07	2.26E-08	2.40E-08	4.66E-08	2.21E-08	2.14E-08	4.35E-08	1.17E-08	9.71E-09	2.15E-08
1886	648962.88	4197857.48	1.07E-07	1.14E-07	2.20E-07	1.60E-08	1.70E-08	3.31E-08	1.57E-08	1.52E-08	3.08E-08	8.32E-09	6.88E-09	1.52E-08
1887	648962.67	4197825.92	8.36E-08	8.91E-08	1.73E-07	1.26E-08	1.34E-08	2.59E-08	1.23E-08	1.19E-08	2.42E-08	6.53E-09	5.40E-09	1.19E-08
1888	648940.22	4197811.15	6.65E-08	7.08E-08	1.37E-07	9.99E-09	1.06E-08	2.06E-08	9.77E-09	9.47E-09	1.92E-08	5.19E-09	4.29E-09	9.49E-09
1889	648916.31	4197767.24	4.72E-08	5.03E-08	9.76E-08	7.10E-09	7.55E-09	1.47E-08	6.94E-09	6.73E-09	1.37E-08	3.69E-09	3.05E-09	6.74E-09
1890	648898.27	4197781.16	4.69E-08	5E-08	9.68E-08	7.05E-09	7.49E-09	1.45E-08	6.89E-09	6.68E-09	1.36E-08	3.66E-09	3.03E-09	6.69E-09
1891	648884	4197729.08	3.57E-08	3.8E-08	7.37E-08	5.36E-09	5.70E-09	1.11E-08	5.25E-09	5.08E-09	1.03E-08	2.79E-09	2.31E-09	5.09E-09
1892	648865.96	4197743	3.56E-08	3.79E-08	7.35E-08	5.35E-09	5.69E-09	1.10E-08	5.23E-09	5.07E-09	1.03E-08	2.78E-09	2.30E-09	5.08E-09
1893	648851.69	4197690.92	2.82E-08	3.01E-08	5.83E-08	4.24E-09	4.51E-09	8.75E-09	4.15E-09	4.02E-09	8.17E-09	2.20E-09	1.82E-09	4.03E-09
1894	648876.87	4197673.67	2.84E-08	3.03E-08	5.86E-08	4.27E-09	4.54E-09	8.81E-09	4.17E-09	4.04E-09	8.22E-09	2.22E-09	1.83E-09	4.05E-09
1895	648833.65	4197704.84	2.83E-08	3.01E-08	5.84E-08	4.25E-09	4.52E-09	8.76E-09	4.15E-09	4.03E-09	8.18E-09	2.21E-09	1.83E-09	4.03E-09
1896	648821.06	4197651.61	2.30E-08	2.45E-08	4.75E-08	3.46E-09	3.68E-09	7.14E-09	3.38E-09	3.28E-09	6.66E-09	1.80E-09	1.49E-09	3.28E-09

1897	648841.2	4197637.81	2.31E-08	2.46E-08	4.76E-08	3.47E-09	3.69E-09	7.15E-09	3.39E-09	3.29E-09	6.68E-09	1.80E-09	1.49E-09	3.29E-09
1898	648801.34	4197666.68	2.31E-08	2.47E-08	4.78E-08	3.48E-09	3.70E-09	7.18E-09	3.40E-09	3.30E-09	6.70E-09	1.81E-09	1.49E-09	3.30E-09
1899	648755.97	4197575.62	1.64E-08	1.75E-08	3.39E-08	2.46E-09	2.62E-09	5.09E-09	2.41E-09	2.34E-09	4.75E-09	1.28E-09	1.06E-09	2.34E-09
1900	648775.15	4197562.48	1.63E-08	1.74E-08	3.37E-08	2.46E-09	2.61E-09	5.07E-09	2.40E-09	2.33E-09	4.73E-09	1.28E-09	1.06E-09	2.33E-09
1901	648794.33	4197549.34	1.63E-08	1.74E-08	3.37E-08	2.45E-09	2.61E-09	5.06E-09	2.40E-09	2.32E-09	4.72E-09	1.27E-09	1.05E-09	2.33E-09
1902	648736.73	4197590.36	1.66E-08	1.77E-08	3.42E-08	2.49E-09	2.65E-09	5.14E-09	2.44E-09	2.36E-09	4.80E-09	1.29E-09	1.07E-09	2.36E-09
1903	648691.09	4197499.48	1.24E-08	1.33E-08	2.57E-08	1.87E-09	1.99E-09	3.86E-09	1.83E-09	1.77E-09	3.60E-09	9.71E-10	8.03E-10	1.77E-09
1904	648709.73	4197486.7	1.23E-08	1.32E-08	2.55E-08	1.86E-09	1.97E-09	3.83E-09	1.81E-09	1.76E-09	3.57E-09	9.64E-10	7.97E-10	1.76E-09
1905	648737.71	4197467.54	1.23E-08	1.31E-08	2.54E-08	1.85E-09	1.96E-09	3.81E-09	1.81E-09	1.75E-09	3.55E-09	9.59E-10	7.93E-10	1.75E-09
1906	648672.11	4197514.04	1.26E-08	1.34E-08	2.61E-08	1.90E-09	2.02E-09	3.91E-09	1.85E-09	1.80E-09	3.65E-09	9.85E-10	8.15E-10	1.80E-09
1907	648627.22	4197422.65	9.85E-09	1.05E-08	2.03E-08	1.48E-09	1.57E-09	3.05E-09	1.45E-09	1.40E-09	2.85E-09	7.69E-10	6.36E-10	1.41E-09
1908	648647.36	4197408.85	9.74E-09	1.04E-08	2.01E-08	1.46E-09	1.56E-09	3.02E-09	1.43E-09	1.39E-09	2.82E-09	7.61E-10	6.30E-10	1.39E-09
1909	648667.5	4197395.05	9.68E-09	1.03E-08	2.00E-08	1.46E-09	1.55E-09	3.00E-09	1.42E-09	1.38E-09	2.80E-09	7.56E-10	6.25E-10	1.38E-09
1910	648687.64	4197381.26	9.66E-09	1.03E-08	2.00E-08	1.45E-09	1.54E-09	3.00E-09	1.42E-09	1.38E-09	2.80E-09	7.54E-10	6.24E-10	1.38E-09
1911	648707.78	4197367.46	9.68E-09	1.03E-08	2.00E-08	1.46E-09	1.55E-09	3.00E-09	1.42E-09	1.38E-09	2.80E-09	7.56E-10	6.26E-10	1.38E-09
1912	648607.5	4197437.72	1.00E-08	1.07E-08	2.07E-08	1.51E-09	1.60E-09	3.11E-09	1.47E-09	1.43E-09	2.90E-09	7.83E-10	6.47E-10	1.43E-09
1913	648562.32	4197346.52	8.06E-09	8.59E-09	1.67E-08	1.21E-09	1.29E-09	2.50E-09	1.19E-09	1.15E-09	2.33E-09	6.30E-10	5.21E-10	1.15E-09
1914	648581.9	4197333.1	7.96E-09	8.49E-09	1.64E-08	1.20E-09	1.27E-09	2.47E-09	1.17E-09	1.13E-09	2.31E-09	6.22E-10	5.14E-10	1.14E-09
1915	648601.48	4197319.69	7.89E-09	8.42E-09	1.63E-08	1.19E-09	1.26E-09	2.45E-09	1.16E-09	1.12E-09	2.29E-09	6.17E-10	5.10E-10	1.13E-09
1916	648621.06	4197306.28	7.86E-09	8.38E-09	1.62E-08	1.18E-09	1.26E-09	2.44E-09	1.16E-09	1.12E-09	2.28E-09	6.14E-10	5.08E-10	1.12E-09
1917	648640.64	4197292.86	7.86E-09	8.38E-09	1.62E-08	1.18E-09	1.26E-09	2.44E-09	1.16E-09	1.12E-09	2.28E-09	6.14E-10	5.08E-10	1.12E-09
1918	648660.22	4197279.45	7.90E-09	8.42E-09	1.63E-08	1.19E-09	1.26E-09	2.45E-09	1.16E-09	1.13E-09	2.29E-09	6.17E-10	5.10E-10	1.13E-09
1919	648542.88	4197361.4	8.22E-09	8.76E-09	1.70E-08	1.24E-09	1.31E-09	2.55E-09	1.21E-09	1.17E-09	2.38E-09	6.42E-10	5.31E-10	1.17E-09
1920	648433.37	4197193.69	5.79E-09	6.17E-09	1.20E-08	8.71E-10	9.26E-10	1.80E-09	8.52E-10	8.25E-10	1.68E-09	4.52E-10	3.74E-10	8.27E-10
1921	648453.51	4197179.89	5.71E-09	6.08E-09	1.18E-08	8.58E-10	9.12E-10	1.77E-09	8.39E-10	8.13E-10	1.65E-09	4.46E-10	3.69E-10	8.15E-10
1922	648473.65	4197166.09	5.65E-09	6.02E-09	1.17E-08	8.49E-10	9.02E-10	1.75E-09	8.30E-10	8.04E-10	1.63E-09	4.41E-10	3.65E-10	8.06E-10
1923	648493.79	4197152.29	5.61E-09	5.98E-09	1.16E-08	8.43E-10	8.96E-10	1.74E-09	8.24E-10	7.99E-10	1.62E-09	4.38E-10	3.62E-10	8.00E-10
1924	648513.93	4197138.5	5.60E-09	5.97E-09	1.16E-08	8.42E-10	8.95E-10	1.74E-09	8.23E-10	7.98E-10	1.62E-09	4.37E-10	3.62E-10	7.99E-10
1925	648534.07	4197124.7	5.61E-09	5.98E-09	1.16E-08	8.44E-10	8.97E-10	1.74E-09	8.25E-10	8.00E-10	1.63E-09	4.38E-10	3.63E-10	8.01E-10
1926	648554.21	4197110.9	5.65E-09	6.03E-09	1.17E-08	8.50E-10	9.04E-10	1.75E-09	8.31E-10	8.06E-10	1.64E-09	4.42E-10	3.65E-10	8.07E-10
1927	648413.65	4197208.75	5.91E-09	6.3E-09	1.22E-08	8.88E-10	9.45E-10	1.83E-09	8.69E-10	8.42E-10	1.71E-09	4.62E-10	3.82E-10	8.43E-10
1928	648304.33	4197040.92	4.44E-09	4.74E-09	9.18E-09	6.68E-10	7.10E-10	1.38E-09	6.53E-10	6.33E-10	1.29E-09	3.47E-10	2.87E-10	6.34E-10
1929	648324.84	4197026.86	4.37E-09	4.66E-09	9.04E-09	6.58E-10	6.99E-10	1.36E-09	6.43E-10	6.23E-10	1.27E-09	3.42E-10	2.83E-10	6.24E-10
1930	648345.35	4197012.81	4.32E-09	4.61E-09	8.93E-09	6.50E-10	6.91E-10	1.34E-09	6.35E-10	6.16E-10	1.25E-09	3.38E-10	2.79E-10	6.17E-10
1931	648365.86	4196998.76	4.29E-09	4.57E-09	8.86E-09	6.45E-10	6.86E-10	1.33E-09	6.31E-10	6.11E-10	1.24E-09	3.35E-10	2.77E-10	6.12E-10
1932	648386.38	4196984.71	4.28E-09	4.56E-09	8.84E-09	6.43E-10	6.84E-10	1.33E-09	6.29E-10	6.10E-10	1.24E-09	3.34E-10	2.76E-10	6.11E-10
1933	648406.89	4196970.65	4.28E-09	4.56E-09	8.84E-09	6.44E-10	6.84E-10	1.33E-09	6.29E-10	6.10E-10	1.24E-09	3.34E-10	2.77E-10	6.11E-10
1934	648427.4	4196956.6	4.30E-09	4.59E-09	8.89E-09	6.47E-10	6.88E-10	1.34E-09	6.33E-10	6.13E-10	1.25E-09	3.36E-10	2.78E-10	6.14E-10
1935	648447.91	4196942.55	4.35E-09	4.63E-09	8.98E-09	6.53E-10	6.95E-10	1.35E-09	6.39E-10	6.19E-10	1.26E-09	3.39E-10	2.81E-10	6.20E-10
1936	648468.43	4196928.5	4.40E-09	4.69E-09	9.09E-09	6.61E-10	7.03E-10	1.36E-09	6.47E-10	6.27E-10	1.27E-09	3.44E-10	2.84E-10	6.28E-10
1937	648284.42	4197056.11	4.53E-09	4.83E-09	9.36E-09	6.82E-10	7.25E-10	1.41E-09	6.66E-10	6.46E-10	1.31E-09	3.54E-10	2.93E-10	6.47E-10
1938	648175.23	4196888.18	3.56E-09	3.8E-09	7.36E-09	5.36E-10	5.70E-10	1.11E-09	5.24E-10	5.08E-10	1.03E-09	2.78E-10	2.30E-10	5.09E-10
1939	648196.01	4196873.95	3.51E-09	3.74E-09	7.25E-09	5.28E-10	5.61E-10	1.09E-09	5.16E-10	5.00E-10	1.02E-09	2.74E-10	2.27E-10	5.01E-10
1940	648216.79	4196859.71	3.47E-09	3.7E-09	7.17E-09	5.22E-10	5.55E-10	1.08E-09	5.10E-10	4.94E-10	1.00E-09	2.71E-10	2.24E-10	4.95E-10
1941	648237.56	4196845.48	3.44E-09	3.67E-09	7.11E-09	5.18E-10	5.50E-10	1.07E-09	5.06E-10	4.91E-10	9.97E-10	2.69E-10	2.23E-10	4.91E-10
1942	648258.34	4196831.24	3.43E-09	3.66E-09	7.08E-09	5.16E-10	5.48E-10	1.06E-09	5.04E-10	4.89E-10	9.93E-10	2.68E-10	2.22E-10	4.89E-10
1943	648279.12	4196817.01	3.43E-09	3.66E-09	7.08E-09	5.16E-10	5.48E-10	1.06E-09	5.04E-10	4.89E-10	9.93E-10	2.68E-10	2.22E-10	4.89E-10
1944	648299.9	4196802.77	3.44E-09	3.67E-09	7.11E-09	5.17E-10	5.50E-10	1.07E-09	5.06E-10	4.90E-10	9.96E-10	2.69E-10	2.22E-10	4.91E-10
1945	648320.68	4196788.54	3.47E-09	3.7E-09	7.16E-09	5.21E-10	5.54E-10	1.08E-09	5.10E-10	4.94E-10	1.00E-09	2.71E-10	2.24E-10	4.95E-10
1946	648341.46	4196774.3	3.50E-09	3.74E-09	7.24E-09	5.27E-10	5.60E-10	1.09E-09	5.15E-10	4.99E-10	1.01E-09	2.74E-10	2.26E-10	5.00E-10
1947	648362.24	4196760.07	3.55E-09	3.79E-09	7.34E-09	5.34E-10	5.68E-10	1.10E-09	5.22E-10	5.06E-10	1.03E-09	2.77E-10	2.30E-10	5.07E-10
1948	648155.19	4196903.47	3.63E-09	3.87E-09	7.51E-09	5.46E-10	5.81E-10	1.13E-09	5.34E-10	5.18E-10	1.05E-09	2.84E-10	2.35E-10	5.19E-10
1949	648045.68	4196735.76	2.96E-09	3.15E-09	6.11E-09	4.45E-10	4.73E-10	9.17E-10	4.35E-10	4.21E-10	8.56E-10	2.31E-10	1.91E-10	4.22E-10
1950	648065.82	4196721.96	2.92E-09	3.11E-09	6.03E-09	4.39E-10	4.66E-10	9.05E-10	4.29E-10	4.16E-10	8.44E-10	2.28E-10	1.88E-10	4.16E-10
1951	648085.96	4196708.17	2.88E-09	3.07E-09	5.96E-09	4.34E-10	4.61E-10	8.95E-10	4.24E-10	4.11E-10	8.35E-10	2.25E-10	1.86E-10	4.12E-10
1952	648106.1	4196694.37	2.86E-09	3.05E-09	5.91E-09	4.30E-10	4.57E-10	8.87E-10	4.21E-10	4.08E-10	8.28E-10	2.23E-10	1.85E-10	4.08E-10
1953	648126.24	4196680.57	2.85E-09	3.04E-09	5.89E-09	4.28E-10	4.55E-10	8.84E-10	4.19E-10	4.06E-10	8.25E-10	2.23E-10	1.84E-10	4.07E-10
1954	648146.38	4196666.78	2.84E-09	3.03E-09	5.87E-09	4.28E-10	4.55E-10	8.82E-10	4.18E-10	4.05E-10	8.23E-10	2.22E-10	1.84E-10	4.06E-10
1955	648166.52	4196652.98	2.85E-09	3.04E-09	5.89E-09	4.28E-10	4.55E-10	8.84E-10	4.19E-10	4.06E-10	8.25E-10	2.23E-10	1.84E-10	4.07E-10
1956	648186.65	4196639.18	2.86E-09	3.05E-09	5.91E-09	4.30E-10	4.57E-10	8.87E-10	4.21E-10	4.08E-10	8.28E-10	2.23E-10	1.85E-10	4.08E-10
1957	648206.79	4196625.38	2.88E-09	3.07E-09	5.96E-09	4.34E-10	4.61E-10	8.95E-10	4.24E-10	4.11E-10	8.35E-10	2.25E-10	1.86E-10	4.12E-10
1958	648226.93	4196611.59	2.91E-09	3.11E-09	6.02E-09	4.38E-10	4.66E-10	9.04E-10	4.28E-10	4.15E-10	8.44E-10	2.28E-10	1.88E-10	4.16E-10
1959	648247.07	4196597.79	2.95E-09	3.15E-09	6.10E-09	4.44E-10	4.72E-10	9.16E-10	4.34E-10	4.21E-10	8.55E-10	2.31E-10	1.91E-10	4.21E-10
1960	648267.21	4196583.99	2.99E-09	3.19E-09	6.18E-09	4.50E-10	4.78E-10	9.28E-10	4.40E-10	4.26E-10	8.66E-10	2.34E-10	1.93E-10	4.27E-10
1961	648025.96	4196750.83	3.01E-09	3.21E-09	6.21E-09	4.52E-10	4.81E-10	9.33E-10	4.42E-10	4.29E-10	8.71E-10	2.35E-10	1.94E-10	4.29E-10
1962	648964.28	4197898.07	1.57E-07	1.68E-07	3.25E-07	2.36E-08	2.51E-08	4.88E-08	2.31E-08	2.24E-08	4.55E-08	1.23E-08	1.02E-08	2.24E-08
1963	648943.03	4197884.91	1.11E-07	1.18E-07	2.29E-07	1.67E-08	1.77E-08	3.44E-08	1.63E-08	1.58E-08	3.21E-08	8.67E-09	7.17E-09	1.58E-08
1964	648939.07	4197847.28	8.26E-08	8.8E-08	1.71E-07	1.24E-08	1.32E-08	2.56E-08	1.21E-08	1.18E-08	2.39E-08	6.45E-09	5.34E-09	1.18E-08
1965	648921.77	4197871.76	8.55E-08	9.11E-08	1.77E-07	1.29E-08	1.37E-08	2.65E-08	1.26E-08	1.22E-08	2.47E-08	6.68E-09	5.52E-09	1.22E-08
1966	648920.37	4197831.16	6.69E-08	7.13E-08	1.38E-07	1.01E-08	1.07E-08	2.07E-08	9.83E-09	9.53E-09	1.94E-08	5.22E-09	4.32E-09	9.54E-09
1967	648900.51	4197858.6	6.92E-08	7.38E-08	1.43E-07	1.04E-08	1.11E-08	2.15E-08	1.02E-08	9.86E-09	2.00E-08	5.40E-09	4.47E-09	9.88E-09
1968	648877.85	4197804.85	4.80E-08	5.12E-08	9.92E-08	7.22E-09	7.67E-09	1.49E-08	7.06E-09	6.84E-09	1.39E-08	3.75E-09	3.10E-09	6.85E-09
1969	648858	4197832.28	4.96E-08	5.29E-08	1.03E-07	7.46E-09	7.93E-09	1.54E-08	7.29E-09	7.07E-09	1.44E-08	3.88E-09	3.21E-09	7.08E-09
1970	648835.34	4197778.53	3.70E-08	3.95E-08	7.65E-08	5.57E-09	5.92E-09	1.15E-08	5.44E-09	5.28E-09	1.07E-08	2.89E-09	2.39E-09	5.28E-09
1971	648815.48	4197805.97	3.83E-08	4.08E-08	7.91E-08	5.76E-09	6.12E-09	1.19E-08	5.63E-09	5.45E-09	1.11E-08	2.99E-09	2.47E-09	5.46E-09
1972	648792.82	4197752.22	2.99E-08	3.19E-08	6.18E-08	4.50E-09	4.78E-09	9.28E-09	4.40E-09	4.26E-09	8.66E-09	2.34E-09	1.93E-09	4.27E-09

1973	648813.24	4197728.53	2.91E-08	3.1E-08	6.01E-08	4.38E-09	4.65E-09	9.03E-09	4.28E-09	4.15E-09	8.43E-09	2.27E-09	1.88E-09	4.15E-09
1974	648772.97	4197779.65	3.09E-08	3.3E-08	6.39E-08	4.65E-09	4.94E-09	9.59E-09	4.55E-09	4.41E-09	8.95E-09	2.42E-09	2.00E-09	4.41E-09
1975	648750.31	4197725.9	2.50E-08	2.66E-08	5.15E-08	3.75E-09	3.99E-09	7.74E-09	3.67E-09	3.56E-09	7.22E-09	1.95E-09	1.61E-09	3.56E-09
1976	648770.72	4197702.21	2.43E-08	2.59E-08	5.01E-08	3.65E-09	3.88E-09	7.53E-09	3.57E-09	3.46E-09	7.02E-09	1.89E-09	1.57E-09	3.46E-09
1977	648730.45	4197753.33	2.58E-08	2.75E-08	5.33E-08	3.88E-09	4.12E-09	8.00E-09	3.79E-09	3.67E-09	7.46E-09	2.01E-09	1.67E-09	3.68E-09
1978	648666.74	4197671.58	1.85E-08	1.97E-08	3.83E-08	2.78E-09	2.96E-09	5.74E-09	2.72E-09	2.64E-09	5.36E-09	1.45E-09	1.20E-09	2.64E-09
1979	648690.07	4197644.5	1.79E-08	1.91E-08	3.70E-08	2.69E-09	2.87E-09	5.56E-09	2.64E-09	2.55E-09	5.19E-09	1.40E-09	1.16E-09	2.56E-09
1980	648713.4	4197617.43	1.72E-08	1.84E-08	3.56E-08	2.59E-09	2.76E-09	5.35E-09	2.54E-09	2.46E-09	4.99E-09	1.35E-09	1.11E-09	2.46E-09
1981	648645.42	4197700.7	1.91E-08	2.04E-08	3.95E-08	2.87E-09	3.05E-09	5.93E-09	2.81E-09	2.72E-09	5.53E-09	1.49E-09	1.23E-09	2.73E-09
1982	648581.39	4197619.32	1.46E-08	1.56E-08	3.02E-08	2.20E-09	2.34E-09	4.53E-09	2.15E-09	2.08E-09	4.23E-09	1.14E-09	9.44E-10	2.09E-09
1983	648604.07	4197593	1.42E-08	1.51E-08	2.93E-08	2.13E-09	2.27E-09	4.40E-09	2.09E-09	2.02E-09	4.11E-09	1.11E-09	9.17E-10	2.03E-09
1984	648626.75	4197566.68	1.37E-08	1.46E-08	2.83E-08	2.06E-09	2.19E-09	4.25E-09	2.01E-09	1.95E-09	3.96E-09	1.07E-09	8.85E-10	1.95E-09
1985	648649.43	4197540.36	1.31E-08	1.4E-08	2.72E-08	1.98E-09	2.10E-09	4.08E-09	1.93E-09	1.87E-09	3.81E-09	1.03E-09	8.49E-10	1.88E-09
1986	648560.4	4197648.07	1.50E-08	1.6E-08	3.10E-08	2.25E-09	2.40E-09	4.65E-09	2.20E-09	2.14E-09	4.34E-09	1.17E-09	9.69E-10	2.14E-09
1987	648496.15	4197566.93	1.20E-08	1.28E-08	2.47E-08	1.80E-09	1.91E-09	3.72E-09	1.76E-09	1.71E-09	3.47E-09	9.36E-10	7.74E-10	1.71E-09
1988	648518.42	4197541.09	1.17E-08	1.25E-08	2.42E-08	1.76E-09	1.87E-09	3.63E-09	1.72E-09	1.67E-09	3.39E-09	9.13E-10	7.56E-10	1.67E-09
1989	648540.69	4197515.24	1.13E-08	1.21E-08	2.34E-08	1.70E-09	1.81E-09	3.51E-09	1.67E-09	1.61E-09	3.28E-09	8.85E-10	7.32E-10	1.62E-09
1990	648562.96	4197489.4	1.09E-08	1.16E-08	2.25E-08	1.64E-09	1.74E-09	3.38E-09	1.60E-09	1.55E-09	3.15E-09	8.51E-10	7.04E-10	1.56E-09
1991	648585.23	4197463.56	1.04E-08	1.11E-08	2.16E-08	1.57E-09	1.67E-09	3.24E-09	1.54E-09	1.49E-09	3.02E-09	8.16E-10	6.75E-10	1.49E-09
1992	648475.37	4197595.44	1.22E-08	1.3E-08	2.53E-08	1.84E-09	1.96E-09	3.79E-09	1.80E-09	1.74E-09	3.54E-09	9.55E-10	7.90E-10	1.75E-09
1993	648411.9	4197513.4	1.01E-08	1.08E-08	2.08E-08	1.52E-09	1.61E-09	3.13E-09	1.48E-09	1.44E-09	2.92E-09	7.88E-10	6.52E-10	1.44E-09
1994	648435.71	4197485.76	9.87E-09	1.05E-08	2.04E-08	1.48E-09	1.58E-09	3.06E-09	1.45E-09	1.41E-09	2.86E-09	7.71E-10	6.38E-10	1.41E-09
1995	648459.53	4197458.13	9.57E-09	1.02E-08	1.98E-08	1.44E-09	1.53E-09	2.97E-09	1.41E-09	1.36E-09	2.77E-09	7.47E-10	6.18E-10	1.37E-09
1996	648483.34	4197430.49	9.20E-09	9.81E-09	1.90E-08	1.38E-09	1.47E-09	2.85E-09	1.35E-09	1.31E-09	2.66E-09	7.19E-10	5.95E-10	1.31E-09
1997	648507.16	4197402.85	8.80E-09	9.38E-09	1.82E-08	1.32E-09	1.41E-09	2.73E-09	1.29E-09	1.25E-09	2.55E-09	6.87E-10	5.69E-10	1.26E-09
1998	648390.34	4197542.81	1.03E-08	1.09E-08	2.12E-08	1.54E-09	1.64E-09	3.18E-09	1.51E-09	1.46E-09	2.97E-09	8.02E-10	6.63E-10	1.46E-09
1999	648241.41	4197408.63	7.59E-09	8.09E-09	1.57E-08	1.14E-09	1.21E-09	2.36E-09	1.12E-09	1.08E-09	2.20E-09	5.93E-10	4.91E-10	1.08E-09
2000	648264.38	4197381.98	7.49E-09	7.99E-09	1.55E-08	1.13E-09	1.20E-09	2.32E-09	1.10E-09	1.07E-09	2.17E-09	5.85E-10	4.84E-10	1.07E-09
2001	648287.34	4197355.33	7.33E-09	7.82E-09	1.52E-08	1.10E-09	1.17E-09	2.28E-09	1.08E-09	1.05E-09	2.12E-09	5.73E-10	4.74E-10	1.05E-09
2002	648310.31	4197328.68	7.12E-09	7.59E-09	1.47E-08	1.07E-09	1.14E-09	2.21E-09	1.05E-09	1.02E-09	2.06E-09	5.56E-10	4.60E-10	1.02E-09
2003	648333.27	4197302.03	6.87E-09	7.33E-09	1.42E-08	1.03E-09	1.10E-09	2.13E-09	1.01E-09	9.79E-10	1.99E-09	5.37E-10	4.44E-10	9.81E-10
2004	648356.24	4197275.38	6.59E-09	7.03E-09	1.36E-08	9.91E-10	1.05E-09	2.04E-09	9.69E-10	9.39E-10	1.91E-09	5.15E-10	4.26E-10	9.41E-10
2005	648379.2	4197248.73	6.31E-09	6.72E-09	1.30E-08	9.48E-10	1.01E-09	1.96E-09	9.27E-10	8.99E-10	1.83E-09	4.93E-10	4.08E-10	9.00E-10
2006	648220.28	4197437.54	7.67E-09	8.17E-09	1.58E-08	1.15E-09	1.23E-09	2.38E-09	1.13E-09	1.09E-09	2.22E-09	5.99E-10	4.95E-10	1.09E-09
2007	648071.69	4197302.98	6.02E-09	6.42E-09	1.24E-08	9.05E-10	9.62E-10	1.87E-09	8.85E-10	8.58E-10	1.74E-09	4.70E-10	3.89E-10	8.59E-10
2008	648095.33	4197275.55	5.97E-09	6.37E-09	1.23E-08	8.98E-10	9.55E-10	1.85E-09	8.78E-10	8.51E-10	1.73E-09	4.67E-10	3.86E-10	8.53E-10
2009	648118.96	4197248.12	5.88E-09	6.27E-09	1.22E-08	8.85E-10	9.40E-10	1.82E-09	8.65E-10	8.38E-10	1.70E-09	4.60E-10	3.80E-10	8.40E-10
2010	648142.6	4197220.69	5.75E-09	6.13E-09	1.19E-08	8.65E-10	9.19E-10	1.78E-09	8.46E-10	8.20E-10	1.67E-09	4.49E-10	3.72E-10	8.21E-10
2011	648166.24	4197193.26	5.58E-09	5.95E-09	1.15E-08	8.39E-10	8.92E-10	1.73E-09	8.20E-10	7.95E-10	1.62E-09	4.36E-10	3.60E-10	7.96E-10
2012	648189.87	4197165.83	5.38E-09	5.73E-09	1.11E-08	8.09E-10	8.60E-10	1.67E-09	7.91E-10	7.67E-10	1.56E-09	4.20E-10	3.48E-10	7.68E-10
2013	648213.51	4197138.4	5.16E-09	5.5E-09	1.07E-08	7.76E-10	8.25E-10	1.60E-09	7.59E-10	7.35E-10	1.49E-09	4.03E-10	3.33E-10	7.36E-10
2014	648237.15	4197110.97	4.94E-09	5.26E-09	1.02E-08	7.42E-10	7.89E-10	1.53E-09	7.26E-10	7.04E-10	1.43E-09	3.86E-10	3.19E-10	7.05E-10
2015	648260.78	4197083.54	4.73E-09	5.04E-09	9.76E-09	7.11E-10	7.55E-10	1.47E-09	6.95E-10	6.73E-10	1.37E-09	3.69E-10	3.05E-10	6.75E-10
2016	648050.22	4197332.28	6.05E-09	6.45E-09	1.25E-08	9.09E-10	9.67E-10	1.88E-09	8.89E-10	8.62E-10	1.75E-09	4.72E-10	3.91E-10	8.63E-10
2017	647901.35	4197198.04	4.95E-09	5.28E-09	1.02E-08	7.44E-10	7.91E-10	1.54E-09	7.28E-10	7.05E-10	1.43E-09	3.87E-10	3.20E-10	7.06E-10
2018	647924.43	4197171.26	4.93E-09	5.26E-09	1.02E-08	7.42E-10	7.89E-10	1.53E-09	7.25E-10	7.03E-10	1.43E-09	3.85E-10	3.19E-10	7.04E-10
2019	647947.5	4197144.48	4.89E-09	5.21E-09	1.01E-08	7.35E-10	7.82E-10	1.52E-09	7.19E-10	6.97E-10	1.42E-09	3.82E-10	3.16E-10	6.98E-10
2020	647970.58	4197117.7	4.81E-09	5.13E-09	9.95E-09	7.24E-10	7.70E-10	1.49E-09	7.08E-10	6.86E-10	1.39E-09	3.76E-10	3.11E-10	6.87E-10
2021	647993.66	4197090.92	4.71E-09	5.02E-09	9.73E-09	7.08E-10	7.53E-10	1.46E-09	6.92E-10	6.71E-10	1.36E-09	3.68E-10	3.04E-10	6.72E-10
2022	648016.73	4197064.14	4.58E-09	4.88E-09	9.46E-09	6.88E-10	7.32E-10	1.42E-09	6.73E-10	6.52E-10	1.33E-09	3.57E-10	2.96E-10	6.53E-10
2023	648039.81	4197037.37	4.43E-09	4.72E-09	9.15E-09	6.66E-10	7.08E-10	1.37E-09	6.51E-10	6.31E-10	1.28E-09	3.46E-10	2.86E-10	6.32E-10
2024	648062.88	4197010.59	4.26E-09	4.54E-09	8.81E-09	6.41E-10	6.82E-10	1.32E-09	6.27E-10	6.08E-10	1.23E-09	3.33E-10	2.75E-10	6.09E-10
2025	648085.96	4196983.81	4.09E-09	4.36E-09	8.46E-09	6.16E-10	6.54E-10	1.27E-09	6.02E-10	5.83E-10	1.19E-09	3.20E-10	2.65E-10	5.84E-10
2026	648109.04	4196957.03	3.93E-09	4.19E-09	8.12E-09	5.91E-10	6.28E-10	1.22E-09	5.78E-10	5.60E-10	1.14E-09	3.07E-10	2.54E-10	5.61E-10
2027	648132.11	4196930.25	3.77E-09	4.02E-09	7.79E-09	5.67E-10	6.03E-10	1.17E-09	5.55E-10	5.37E-10	1.09E-09	2.95E-10	2.44E-10	5.38E-10
2028	647880.17	4197227.02	4.95E-09	5.28E-09	1.02E-08	7.45E-10	7.92E-10	1.54E-09	7.28E-10	7.06E-10	1.43E-09	3.87E-10	3.20E-10	7.07E-10
2029	647731.53	4197092.5	4.18E-09	4.45E-09	8.63E-09	6.28E-10	6.67E-10	1.30E-09	6.14E-10	5.95E-10	1.21E-09	3.26E-10	2.70E-10	5.96E-10
2030	647755.09	4197065.16	4.18E-09	4.45E-09	8.63E-09	6.28E-10	6.67E-10	1.30E-09	6.14E-10	5.95E-10	1.21E-09	3.26E-10	2.70E-10	5.96E-10
2031	647778.64	4197037.83	4.15E-09	4.43E-09	8.58E-09	6.25E-10	6.64E-10	1.29E-09	6.11E-10	5.92E-10	1.20E-09	3.25E-10	2.68E-10	5.93E-10
2032	647802.2	4197010.5	4.11E-09	4.38E-09	8.49E-09	6.18E-10	6.57E-10	1.27E-09	6.04E-10	5.85E-10	1.19E-09	3.21E-10	2.65E-10	5.86E-10
2033	647825.75	4196983.16	4.04E-09	4.3E-09	8.34E-09	6.07E-10	6.45E-10	1.25E-09	5.94E-10	5.75E-10	1.17E-09	3.15E-10	2.61E-10	5.76E-10
2034	647849.3	4196955.83	3.95E-09	4.21E-09	8.15E-09	5.94E-10	6.31E-10	1.22E-09	5.80E-10	5.62E-10	1.14E-09	3.08E-10	2.55E-10	5.63E-10
2035	647872.86	4196928.5	3.84E-09	4.09E-09	7.92E-09	5.77E-10	6.13E-10	1.19E-09	5.64E-10	5.47E-10	1.11E-09	3.00E-10	2.48E-10	5.47E-10
2036	647896.41	4196901.16	3.71E-09	3.95E-09	7.66E-09	5.58E-10	5.93E-10	1.15E-09	5.45E-10	5.29E-10	1.07E-09	2.90E-10	2.40E-10	5.30E-10
2037	647919.97	4196873.83	3.58E-09	3.81E-09	7.39E-09	5.38E-10	5.72E-10	1.11E-09	5.26E-10	5.10E-10	1.04E-09	2.79E-10	2.31E-10	5.11E-10
2038	647943.52	4196846.5	3.44E-09	3.67E-09	7.11E-09	5.17E-10	5.50E-10	1.07E-09	5.06E-10	4.90E-10	9.96E-10	2.69E-10	2.22E-10	4.91E-10
2039	647967.07	4196819.16	3.30E-09	3.52E-09	6.82E-09	4.97E-10	5.28E-10	1.02E-09	4.86E-10	4.71E-10	9.56E-10	2.58E-10	2.13E-10	4.71E-10
2040	647990.63	4196791.83	3.18E-09	3.39E-09	6.56E-09	4.78E-10	5.08E-10	9.86E-10	4.67E-10	4.53E-10	9.20E-10	2.48E-10	2.05E-10	4.53E-10
2041	647710.11	4197121.75	4.17E-09	4.44E-09	8.61E-09	6.27E-10	6.66E-10	1.29E-09	6.13E-10	5.94E-10	1.21E-09	3.25E-10	2.69E-10	5.95E-10
2042	648953.49	4197923.54	1.76E-07	1.88E-07	3.64E-07	2.65E-08	2.81E-08	5.46E-08	2.59E-08	2.51E-08	5.09E-08	1.37E-08	1.14E-08	2.51E-08
2043	648944.58	4197945.32	1.90E-07	2.02E-07	3.92E-07	2.85E-08	3.03E-08	5.88E-08	2.79E-08	2.70E-08	5.49E-08	1.48E-08	1.23E-08	2.71E-08
2044	648935.67	4197967.1	1.98E-07	2.12E-07	4.10E-07	2.98E-08	3.17E-08	6.16E-08	2.92E-08	2.83E-08	5.75E-08	1.55E-08	1.28E-08	2.83E-08
2045	648930.35	4197914.08	1.22E-07	1.31E-07	2.53E-07	1.84E-08	1.96E-08	3.80E-08	1.80E-08	1.74E-08	3.54E-08	9.56E-09	7.91E-09	1.75E-08
2046	648921.44	4197935.86	1.31E-07	1.39E-07	2.70E-07	1.97E-08	2.09E-08	4.06E-08	1.92E-08	1.86E-08	3.78E-08	1.02E-08	8.45E-09	1.87E-08
2047	648912.53	4197957.64	1.37E-07	1.46E-07	2.84E-07	2.06E-08	2.19E-08	4.26E-08	2.02E-08	1.96E-08	3.97E-08	1.07E-08	8.87E-09	1.96E-08
2048	648907.21	4197904.61	9.35E-08	9.96E-08	1.93E-07	1.41E-08	1.49E-08	2.90E-08	1.37E-08	1.33E-08	2.71E-08	7.30E-09	6.04E-09	1.33E-08

2049	648898.3	4197926.39	9.89E-08	1.05E-07	2.04E-07	1.49E-08	1.58E-08	3.07E-08	1.45E-08	1.41E-08	2.86E-08	7.72E-09	6.39E-09	1.41E-08
2050	648889.39	4197948.17	1.03E-07	1.1E-07	2.14E-07	1.56E-08	1.65E-08	3.21E-08	1.52E-08	1.47E-08	3.00E-08	8.08E-09	6.69E-09	1.48E-08
2051	648884.08	4197895.15	7.53E-08	8.03E-08	1.56E-07	1.13E-08	1.20E-08	2.34E-08	1.11E-08	1.07E-08	2.18E-08	5.89E-09	4.87E-09	1.08E-08
2052	648875.17	4197916.93	7.91E-08	8.43E-08	1.63E-07	1.19E-08	1.26E-08	2.45E-08	1.16E-08	1.13E-08	2.29E-08	6.18E-09	5.11E-09	1.13E-08
2053	648866.26	4197938.71	8.24E-08	8.78E-08	1.70E-07	1.24E-08	1.32E-08	2.56E-08	1.21E-08	1.17E-08	2.39E-08	6.44E-09	5.33E-09	1.18E-08
2054	648846.71	4197854.44	5.16E-08	5.5E-08	1.07E-07	7.76E-09	8.25E-09	1.60E-08	7.59E-09	7.35E-09	1.49E-08	4.03E-09	3.33E-09	7.36E-09
2055	648837.8	4197876.22	5.38E-08	5.74E-08	1.11E-07	8.10E-09	8.61E-09	1.67E-08	7.92E-09	7.67E-09	1.56E-08	4.21E-09	3.48E-09	7.68E-09
2056	648828.89	4197898	5.59E-08	5.96E-08	1.15E-07	8.40E-09	8.93E-09	1.73E-08	8.22E-09	7.96E-09	1.62E-08	4.37E-09	3.61E-09	7.98E-09
2057	648819.98	4197919.78	5.77E-08	6.15E-08	1.19E-07	8.67E-09	9.22E-09	1.79E-08	8.48E-09	8.22E-09	1.67E-08	4.51E-09	3.73E-09	8.23E-09
2058	648800.43	4197835.5	4.01E-08	4.27E-08	8.28E-08	6.03E-09	6.41E-09	1.24E-08	5.89E-09	5.71E-09	1.16E-08	3.13E-09	2.59E-09	5.72E-09
2059	648791.52	4197857.28	4.15E-08	4.42E-08	8.57E-08	6.24E-09	6.63E-09	1.29E-08	6.10E-09	5.91E-09	1.20E-08	3.24E-09	2.68E-09	5.92E-09
2060	648782.61	4197879.06	4.27E-08	4.55E-08	8.82E-08	6.42E-09	6.83E-09	1.32E-08	6.28E-09	6.09E-09	1.24E-08	3.34E-09	2.76E-09	6.10E-09
2061	648773.7	4197900.84	4.38E-08	4.67E-08	9.04E-08	6.58E-09	7.00E-09	1.36E-08	6.43E-09	6.24E-09	1.27E-08	3.42E-09	2.83E-09	6.25E-09
2062	648754.15	4197816.57	3.25E-08	3.47E-08	6.72E-08	4.89E-09	5.20E-09	1.01E-08	4.78E-09	4.64E-09	9.42E-09	2.54E-09	2.10E-09	4.64E-09
2063	648745.24	4197838.35	3.35E-08	3.57E-08	6.91E-08	5.03E-09	5.35E-09	1.04E-08	4.92E-09	4.77E-09	9.69E-09	2.61E-09	2.16E-09	4.78E-09
2064	648736.33	4197860.13	3.42E-08	3.65E-08	7.07E-08	5.15E-09	5.47E-09	1.06E-08	5.03E-09	4.88E-09	9.91E-09	2.67E-09	2.21E-09	4.89E-09
2065	648727.42	4197881.91	3.49E-08	3.72E-08	7.21E-08	5.25E-09	5.58E-09	1.08E-08	5.13E-09	4.97E-09	1.01E-08	2.73E-09	2.25E-09	4.98E-09
2066	648715.4	4197782.87	2.68E-08	2.86E-08	5.54E-08	4.03E-09	4.28E-09	8.31E-09	3.94E-09	3.82E-09	7.76E-09	2.09E-09	1.73E-09	3.82E-09
2067	648698.97	4197819.42	2.78E-08	2.97E-08	5.75E-08	4.19E-09	4.45E-09	8.64E-09	4.09E-09	3.97E-09	8.06E-09	2.17E-09	1.80E-09	3.97E-09
2068	648690.06	4197841.2	2.84E-08	3.02E-08	5.86E-08	4.26E-09	4.53E-09	8.80E-09	4.17E-09	4.04E-09	8.21E-09	2.22E-09	1.83E-09	4.05E-09
2069	648681.15	4197862.98	2.88E-08	3.07E-08	5.94E-08	4.33E-09	4.60E-09	8.93E-09	4.23E-09	4.10E-09	8.33E-09	2.25E-09	1.86E-09	4.11E-09
2070	648625.36	4197740.09	1.99E-08	2.12E-08	4.11E-08	2.99E-09	3.18E-09	6.17E-09	2.93E-09	2.84E-09	5.76E-09	1.55E-09	1.29E-09	2.84E-09
2071	648606.41	4197781.56	2.05E-08	2.19E-08	4.24E-08	3.08E-09	3.28E-09	6.36E-09	3.02E-09	2.92E-09	5.94E-09	1.60E-09	1.33E-09	2.93E-09
2072	648597.5	4197803.34	2.08E-08	2.21E-08	4.29E-08	3.12E-09	3.32E-09	6.44E-09	3.05E-09	2.96E-09	6.01E-09	1.62E-09	1.34E-09	2.96E-09
2073	648588.59	4197825.12	2.10E-08	2.23E-08	4.33E-08	3.15E-09	3.35E-09	6.50E-09	3.08E-09	2.99E-09	6.07E-09	1.64E-09	1.35E-09	2.99E-09
2074	648532.17	4197703.45	1.57E-08	1.67E-08	3.24E-08	2.36E-09	2.50E-09	4.86E-09	2.30E-09	2.23E-09	4.53E-09	1.22E-09	1.01E-09	2.24E-09
2075	648513.86	4197743.69	1.60E-08	1.7E-08	3.30E-08	2.40E-09	2.55E-09	4.96E-09	2.35E-09	2.28E-09	4.63E-09	1.25E-09	1.03E-09	2.28E-09
2076	648504.95	4197765.47	1.61E-08	1.72E-08	3.33E-08	2.42E-09	2.58E-09	5.00E-09	2.37E-09	2.30E-09	4.67E-09	1.26E-09	1.04E-09	2.30E-09
2077	648496.04	4197787.25	1.62E-08	1.73E-08	3.35E-08	2.44E-09	2.59E-09	5.03E-09	2.39E-09	2.31E-09	4.70E-09	1.27E-09	1.05E-09	2.32E-09
2078	648439.24	4197666.33	1.28E-08	1.36E-08	2.63E-08	1.92E-09	2.04E-09	3.96E-09	1.87E-09	1.82E-09	3.69E-09	9.96E-10	8.24E-10	1.82E-09
2079	648457.3	4197630.88	1.25E-08	1.34E-08	2.59E-08	1.89E-09	2.01E-09	3.89E-09	1.84E-09	1.79E-09	3.63E-09	9.80E-10	8.11E-10	1.79E-09
2080	648421.3	4197705.83	1.29E-08	1.38E-08	2.67E-08	1.94E-09	2.07E-09	4.01E-09	1.90E-09	1.84E-09	3.74E-09	1.01E-09	8.36E-10	1.85E-09
2081	648412.39	4197727.61	1.30E-08	1.39E-08	2.69E-08	1.96E-09	2.08E-09	4.04E-09	1.91E-09	1.86E-09	3.77E-09	1.02E-09	8.41E-10	1.86E-09
2082	648403.48	4197749.39	1.31E-08	1.4E-08	2.70E-08	1.97E-09	2.09E-09	4.06E-09	1.92E-09	1.87E-09	3.79E-09	1.02E-09	8.46E-10	1.87E-09
2083	648348.19	4197625.51	1.06E-08	1.13E-08	2.20E-08	1.60E-09	1.70E-09	3.30E-09	1.56E-09	1.52E-09	3.08E-09	8.31E-10	6.88E-10	1.52E-09
2084	648358.73	4197604.84	1.06E-08	1.13E-08	2.19E-08	1.59E-09	1.69E-09	3.28E-09	1.56E-09	1.51E-09	3.06E-09	8.27E-10	6.84E-10	1.51E-09
2085	648369.27	4197584.16	1.05E-08	1.12E-08	2.17E-08	1.58E-09	1.68E-09	3.26E-09	1.54E-09	1.50E-09	3.04E-09	8.20E-10	6.79E-10	1.50E-09
2086	648379.8	4197563.48	1.04E-08	1.11E-08	2.15E-08	1.56E-09	1.66E-09	3.22E-09	1.53E-09	1.48E-09	3.01E-09	8.12E-10	6.72E-10	1.48E-09
2087	648337.66	4197646.19	1.07E-08	1.14E-08	2.21E-08	1.61E-09	1.71E-09	3.32E-09	1.57E-09	1.52E-09	3.10E-09	8.35E-10	6.91E-10	1.53E-09
2088	648328.75	4197667.97	1.08E-08	1.15E-08	2.22E-08	1.62E-09	1.72E-09	3.34E-09	1.58E-09	1.53E-09	3.12E-09	8.41E-10	6.96E-10	1.54E-09
2089	648319.84	4197689.75	1.08E-08	1.15E-08	2.24E-08	1.63E-09	1.73E-09	3.36E-09	1.59E-09	1.54E-09	3.14E-09	8.46E-10	7.00E-10	1.55E-09
2090	648310.93	4197711.53	1.09E-08	1.16E-08	2.25E-08	1.64E-09	1.74E-09	3.38E-09	1.60E-09	1.55E-09	3.15E-09	8.50E-10	7.03E-10	1.55E-09
2091	648162.22	4197551.47	7.86E-09	8.38E-09	1.62E-08	1.18E-09	1.26E-09	2.44E-09	1.16E-09	1.12E-09	2.28E-09	6.14E-10	5.08E-10	1.12E-09
2092	648181.58	4197513.5	7.82E-09	8.34E-09	1.62E-08	1.18E-09	1.25E-09	2.43E-09	1.15E-09	1.11E-09	2.26E-09	6.11E-10	5.05E-10	1.12E-09
2093	648200.93	4197475.52	7.76E-09	8.27E-09	1.60E-08	1.17E-09	1.24E-09	2.41E-09	1.14E-09	1.11E-09	2.25E-09	6.06E-10	5.02E-10	1.11E-09
2094	648143.64	4197592.24	7.92E-09	8.44E-09	1.64E-08	1.19E-09	1.27E-09	2.46E-09	1.16E-09	1.13E-09	2.29E-09	6.18E-10	5.12E-10	1.13E-09
2095	648134.73	4197614.02	7.96E-09	8.49E-09	1.64E-08	1.20E-09	1.27E-09	2.47E-09	1.17E-09	1.13E-09	2.31E-09	6.22E-10	5.14E-10	1.14E-09
2096	648125.82	4197635.8	8.00E-09	8.53E-09	1.65E-08	1.20E-09	1.28E-09	2.48E-09	1.18E-09	1.14E-09	2.32E-09	6.25E-10	5.17E-10	1.14E-09
2097	647977.79	4197474.43	6.12E-09	6.52E-09	1.26E-08	9.20E-10	9.78E-10	1.90E-09	8.99E-10	8.72E-10	1.77E-09	4.78E-10	3.95E-10	8.73E-10
2098	647988.13	4197454.12	6.11E-09	6.51E-09	1.26E-08	9.19E-10	9.77E-10	1.90E-09	8.98E-10	8.71E-10	1.77E-09	4.77E-10	3.95E-10	8.72E-10
2099	647998.48	4197433.81	6.10E-09	6.51E-09	1.26E-08	9.18E-10	9.76E-10	1.89E-09	8.98E-10	8.70E-10	1.77E-09	4.77E-10	3.95E-10	8.71E-10
2100	648008.83	4197413.51	6.10E-09	6.5E-09	1.26E-08	9.17E-10	9.75E-10	1.89E-09	8.97E-10	8.69E-10	1.77E-09	4.76E-10	3.94E-10	8.71E-10
2101	648019.18	4197393.2	6.10E-09	6.5E-09	1.26E-08	9.17E-10	9.75E-10	1.89E-09	8.96E-10	8.69E-10	1.77E-09	4.76E-10	3.94E-10	8.70E-10
2102	648029.53	4197372.89	6.09E-09	6.49E-09	1.26E-08	9.15E-10	9.73E-10	1.89E-09	8.95E-10	8.67E-10	1.76E-09	4.76E-10	3.93E-10	8.69E-10
2103	648039.87	4197352.59	6.07E-09	6.47E-09	1.25E-08	9.13E-10	9.70E-10	1.88E-09	8.92E-10	8.65E-10	1.76E-09	4.74E-10	3.92E-10	8.66E-10
2104	647967.44	4197494.73	6.13E-09	6.53E-09	1.27E-08	9.22E-10	9.80E-10	1.90E-09	9.01E-10	8.73E-10	1.77E-09	4.79E-10	3.96E-10	8.75E-10
2105	647958.53	4197516.51	6.16E-09	6.57E-09	1.27E-08	9.26E-10	9.85E-10	1.91E-09	9.06E-10	8.78E-10	1.78E-09	4.81E-10	3.98E-10	8.79E-10
2106	647949.62	4197538.29	6.20E-09	6.6E-09	1.28E-08	9.32E-10	9.90E-10	1.92E-09	9.11E-10	8.83E-10	1.79E-09	4.84E-10	4.00E-10	8.84E-10
2107	647940.71	4197560.07	6.23E-09	6.65E-09	1.29E-08	9.37E-10	9.97E-10	1.93E-09	9.17E-10	8.88E-10	1.80E-09	4.87E-10	4.03E-10	8.90E-10
2108	647792.11	4197399.81	4.95E-09	5.28E-09	1.02E-08	7.44E-10	7.91E-10	1.54E-09	7.28E-10	7.05E-10	1.43E-09	3.87E-10	3.20E-10	7.06E-10
2109	647811.68	4197361.41	4.94E-09	5.27E-09	1.02E-08	7.43E-10	7.90E-10	1.53E-09	7.26E-10	7.04E-10	1.43E-09	3.86E-10	3.19E-10	7.05E-10
2110	647831.25	4197323.01	4.95E-09	5.27E-09	1.02E-08	7.44E-10	7.91E-10	1.53E-09	7.27E-10	7.05E-10	1.43E-09	3.86E-10	3.20E-10	7.06E-10
2111	647850.81	4197284.61	4.96E-09	5.28E-09	1.02E-08	7.45E-10	7.92E-10	1.54E-09	7.29E-10	7.06E-10	1.44E-09	3.87E-10	3.20E-10	7.08E-10
2112	647773.42	4197440.79	4.98E-09	5.31E-09	1.03E-08	7.49E-10	7.97E-10	1.55E-09	7.33E-10	7.10E-10	1.44E-09	3.89E-10	3.22E-10	7.11E-10
2113	647764.51	4197462.57	5.01E-09	5.34E-09	1.04E-08	7.54E-10	8.01E-10	1.56E-09	7.37E-10	7.14E-10	1.45E-09	3.92E-10	3.24E-10	7.16E-10
2114	647755.6	4197484.35	5.05E-09	5.38E-09	1.04E-08	7.59E-10	8.07E-10	1.57E-09	7.42E-10	7.19E-10	1.46E-09	3.94E-10	3.26E-10	7.21E-10
2115	647607.48	4197323.14	4.11E-09	4.39E-09	8.50E-09	6.19E-10	6.58E-10	1.28E-09	6.05E-10	5.86E-10	1.19E-09	3.21E-10	2.66E-10	5.87E-10
2116	647628.01	4197282.86	4.11E-09	4.38E-09	8.49E-09	6.18E-10	6.57E-10	1.27E-09	6.04E-10	5.85E-10	1.19E-09	3.21E-10	2.65E-10	5.86E-10
2117	647638.27	4197262.73	4.11E-09	4.38E-09	8.49E-09	6.18E-10	6.57E-10	1.28E-09	6.04E-10	5.86E-10	1.19E-09	3.21E-10	2.66E-10	5.87E-10
2118	647648.53	4197242.59	4.12E-09	4.39E-09	8.51E-09	6.19E-10	6.58E-10	1.28E-09	6.05E-10	5.87E-10	1.19E-09	3.22E-10	2.66E-10	5.88E-10
2119	647669.06	4197202.31	4.14E-09	4.41E-09	8.55E-09	6.22E-10	6.61E-10	1.28E-09	6.08E-10	5.90E-10	1.20E-09	3.23E-10	2.67E-10	5.91E-10
2120	647679.32	4197182.17	4.15E-09	4.42E-09	8.57E-09	6.24E-10	6.63E-10	1.29E-09	6.10E-10	5.91E-10	1.20E-09	3.24E-10	2.68E-10	5.92E-10
2121	647597.22	4197343.28	4.13E-09	4.4E-09	8.52E-09	6.20E-10	6.60E-10	1.28E-09	6.07E-10	5.88E-10	1.19E-09	3.22E-10	2.67E-10	5.89E-10
2122	647588.31	4197365.06	4.15E-09	4.42E-09	8.57E-09	6.24E-10	6.63E-10	1.29E-09	6.10E-10	5.91E-10	1.20E-09	3.24E-10	2.68E-10	5.92E-10
2123	647579.4	4197386.84	4.18E-09	4.45E-09	8.63E-09	6.28E-10	6.67E-10	1.30E-09	6.14E-10	5.95E-10	1.21E-09	3.26E-10	2.70E-10	5.96E-10
2124	647570.49	4197408.62	4.21E-09	4.49E-09	8.69E-09	6.33E-10	6.73E-10	1.31E-09	6.19E-10	6.00E-10	1.22E-09	3.29E-10	2.72E-10	6.01E-10

2125	648948.01	4198010.21	3.31E-07	3.53E-07	6.84E-07	4.98E-08	5.29E-08	1.03E-07	4.87E-08	4.72E-08	9.58E-08	2.59E-08	2.14E-08	4.72E-08
2126	648959.43	4198032.4	4.22E-07	4.49E-07	8.71E-07	6.34E-08	6.74E-08	1.31E-07	6.20E-08	6.01E-08	1.22E-07	3.29E-08	2.72E-08	6.02E-08
2127	648970.85	4198054.59	4.70E-07	5.01E-07	9.71E-07	7.06E-08	7.51E-08	1.46E-07	6.91E-08	6.69E-08	1.36E-07	3.67E-08	3.04E-08	6.71E-08
2128	648982.28	4198076.79	4.98E-07	5.31E-07	1.03E-06	7.49E-08	7.96E-08	1.55E-07	7.32E-08	7.10E-08	1.44E-07	3.89E-08	3.22E-08	7.11E-08
2129	648993.7	4198098.98	5.17E-07	5.51E-07	1.07E-06	7.77E-08	8.27E-08	1.60E-07	7.60E-08	7.37E-08	1.50E-07	4.04E-08	3.34E-08	7.38E-08
2130	649005.12	4198121.17	5.30E-07	5.65E-07	1.10E-06	7.98E-08	8.48E-08	1.65E-07	7.80E-08	7.56E-08	1.54E-07	4.14E-08	3.43E-08	7.57E-08
2131	649016.55	4198143.37	5.39E-07	5.75E-07	1.11E-06	8.11E-08	8.62E-08	1.67E-07	7.93E-08	7.69E-08	1.56E-07	4.21E-08	3.49E-08	7.70E-08
2132	649027.97	4198165.56	5.45E-07	5.81E-07	1.13E-06	8.19E-08	8.71E-08	1.69E-07	8.01E-08	7.76E-08	1.58E-07	4.25E-08	3.52E-08	7.77E-08
2133	649039.4	4198187.76	5.46E-07	5.82E-07	1.13E-06	8.21E-08	8.72E-08	1.69E-07	8.02E-08	7.78E-08	1.58E-07	4.26E-08	3.53E-08	7.79E-08
2134	649050.82	4198209.95	5.42E-07	5.78E-07	1.12E-06	8.15E-08	8.67E-08	1.68E-07	7.97E-08	7.72E-08	1.57E-07	4.23E-08	3.50E-08	7.74E-08
2135	649062.24	4198232.14	5.31E-07	5.66E-07	1.10E-06	7.99E-08	8.49E-08	1.65E-07	7.81E-08	7.57E-08	1.54E-07	4.15E-08	3.43E-08	7.58E-08
2136	649073.67	4198254.34	5.08E-07	5.42E-07	1.05E-06	7.64E-08	8.12E-08	1.58E-07	7.47E-08	7.24E-08	1.47E-07	3.97E-08	3.28E-08	7.25E-08
2137	649085.09	4198276.53	4.56E-07	4.86E-07	9.43E-07	6.86E-08	7.29E-08	1.42E-07	6.71E-08	6.50E-08	1.32E-07	3.56E-08	2.95E-08	6.51E-08
2138	648914.35	4197999.45	1.79E-07	1.9E-07	3.69E-07	2.68E-08	2.85E-08	5.54E-08	2.63E-08	2.54E-08	5.17E-08	1.39E-08	1.15E-08	2.55E-08
2139	648925.78	4198021.65	2.31E-07	2.46E-07	4.77E-07	3.47E-08	3.69E-08	7.16E-08	3.39E-08	3.29E-08	6.68E-08	1.80E-08	1.49E-08	3.30E-08
2140	648937.2	4198043.84	2.85E-07	3.04E-07	5.89E-07	4.29E-08	4.56E-08	8.84E-08	4.19E-08	4.06E-08	8.25E-08	2.23E-08	1.84E-08	4.07E-08
2141	648948.63	4198066.03	3.26E-07	3.47E-07	6.73E-07	4.89E-08	5.20E-08	1.01E-07	4.79E-08	4.64E-08	9.42E-08	2.54E-08	2.10E-08	4.65E-08
2142	648960.05	4198088.23	3.52E-07	3.75E-07	7.28E-07	5.30E-08	5.63E-08	1.09E-07	5.18E-08	5.02E-08	1.02E-07	2.75E-08	2.28E-08	5.03E-08
2143	648971.47	4198110.42	3.70E-07	3.95E-07	7.65E-07	5.57E-08	5.92E-08	1.15E-07	5.45E-08	5.28E-08	1.07E-07	2.89E-08	2.39E-08	5.29E-08
2144	648982.9	4198132.62	3.83E-07	4.09E-07	7.92E-07	5.76E-08	6.13E-08	1.19E-07	5.64E-08	5.46E-08	1.11E-07	2.99E-08	2.48E-08	5.47E-08
2145	648994.32	4198154.81	3.92E-07	4.18E-07	8.11E-07	5.90E-08	6.27E-08	1.22E-07	5.77E-08	5.59E-08	1.14E-07	3.06E-08	2.54E-08	5.60E-08
2146	649005.74	4198177	3.98E-07	4.24E-07	8.22E-07	5.98E-08	6.36E-08	1.23E-07	5.85E-08	5.67E-08	1.15E-07	3.11E-08	2.57E-08	5.68E-08
2147	649017.17	4198199.2	4.00E-07	4.26E-07	8.26E-07	6.01E-08	6.39E-08	1.24E-07	5.88E-08	5.70E-08	1.16E-07	3.12E-08	2.58E-08	5.71E-08
2148	649028.59	4198221.39	3.98E-07	4.24E-07	8.22E-07	5.98E-08	6.36E-08	1.23E-07	5.85E-08	5.67E-08	1.15E-07	3.11E-08	2.57E-08	5.68E-08
2149	649040.02	4198243.59	3.91E-07	4.17E-07	8.08E-07	5.88E-08	6.25E-08	1.21E-07	5.75E-08	5.57E-08	1.13E-07	3.05E-08	2.53E-08	5.58E-08
2150	649051.44	4198265.78	3.76E-07	4.01E-07	7.78E-07	5.66E-08	6.02E-08	1.17E-07	5.54E-08	5.37E-08	1.09E-07	2.94E-08	2.43E-08	5.37E-08
2151	649062.86	4198287.97	3.49E-07	3.72E-07	7.21E-07	5.25E-08	5.58E-08	1.08E-07	5.13E-08	4.97E-08	1.01E-07	2.73E-08	2.25E-08	4.98E-08
2152	648891.21	4197989.99	1.30E-07	1.39E-07	2.69E-07	1.96E-08	2.08E-08	4.04E-08	1.91E-08	1.85E-08	3.77E-08	1.02E-08	8.41E-09	1.86E-08
2153	648903.55	4198033.09	1.77E-07	1.89E-07	3.66E-07	2.67E-08	2.84E-08	5.50E-08	2.61E-08	2.53E-08	5.13E-08	1.39E-08	1.15E-08	2.53E-08
2154	648914.97	4198055.28	2.13E-07	2.27E-07	4.40E-07	3.20E-08	3.40E-08	6.60E-08	3.13E-08	3.03E-08	6.16E-08	1.66E-08	1.38E-08	3.04E-08
2155	648926.4	4198077.48	2.44E-07	2.6E-07	5.04E-07	3.67E-08	3.90E-08	7.57E-08	3.59E-08	3.48E-08	7.06E-08	1.91E-08	1.58E-08	3.48E-08
2156	648937.82	4198099.67	2.68E-07	2.85E-07	5.53E-07	4.02E-08	4.28E-08	8.30E-08	3.94E-08	3.81E-08	7.75E-08	2.09E-08	1.73E-08	3.82E-08
2157	648949.24	4198121.86	2.85E-07	3.04E-07	5.89E-07	4.28E-08	4.55E-08	8.84E-08	4.19E-08	4.06E-08	8.25E-08	2.23E-08	1.84E-08	4.07E-08
2158	648960.67	4198144.06	2.97E-07	3.17E-07	6.14E-07	4.47E-08	4.75E-08	9.22E-08	4.37E-08	4.24E-08	8.61E-08	2.32E-08	1.92E-08	4.24E-08
2159	648972.09	4198166.25	3.06E-07	3.26E-07	6.32E-07	4.60E-08	4.89E-08	9.50E-08	4.50E-08	4.36E-08	8.86E-08	2.39E-08	1.98E-08	4.37E-08
2160	648983.52	4198188.45	3.12E-07	3.32E-07	6.44E-07	4.69E-08	4.98E-08	9.67E-08	4.58E-08	4.44E-08	9.03E-08	2.44E-08	2.01E-08	4.45E-08
2161	648994.94	4198210.64	3.15E-07	3.35E-07	6.50E-07	4.73E-08	5.03E-08	9.76E-08	4.62E-08	4.48E-08	9.11E-08	2.46E-08	2.03E-08	4.49E-08
2162	649006.36	4198232.83	3.14E-07	3.35E-07	6.49E-07	4.72E-08	5.02E-08	9.75E-08	4.62E-08	4.48E-08	9.10E-08	2.45E-08	2.03E-08	4.48E-08
2163	649017.79	4198255.03	3.10E-07	3.3E-07	6.40E-07	4.66E-08	4.95E-08	9.61E-08	4.56E-08	4.42E-08	8.97E-08	2.42E-08	2.00E-08	4.42E-08
2164	649029.21	4198277.22	3.00E-07	3.2E-07	6.20E-07	4.51E-08	4.80E-08	9.31E-08	4.41E-08	4.28E-08	8.69E-08	2.35E-08	1.94E-08	4.29E-08
2165	649040.64	4198299.41	2.83E-07	3.02E-07	5.85E-07	4.26E-08	4.53E-08	8.79E-08	4.17E-08	4.04E-08	8.20E-08	2.21E-08	1.83E-08	4.04E-08
2166	648868.99	4198001.43	1.11E-07	1.18E-07	2.28E-07	1.66E-08	1.77E-08	3.43E-08	1.63E-08	1.58E-08	3.20E-08	8.64E-09	7.14E-09	1.58E-08
2167	648881.32	4198044.53	1.44E-07	1.53E-07	2.97E-07	2.16E-08	2.30E-08	4.46E-08	2.11E-08	2.05E-08	4.16E-08	1.12E-08	9.28E-09	2.05E-08
2168	648892.74	4198066.72	1.69E-07	1.8E-07	3.49E-07	2.54E-08	2.70E-08	5.24E-08	2.48E-08	2.40E-08	4.89E-08	1.32E-08	1.09E-08	2.41E-08
2169	648904.17	4198088.92	1.93E-07	2.05E-07	3.98E-07	2.90E-08	3.08E-08	5.97E-08	2.83E-08	2.74E-08	5.57E-08	1.50E-08	1.24E-08	2.75E-08
2170	648915.59	4198111.11	2.13E-07	2.27E-07	4.39E-07	3.20E-08	3.40E-08	6.59E-08	3.12E-08	3.03E-08	6.15E-08	1.66E-08	1.37E-08	3.03E-08
2171	648927.02	4198133.31	2.28E-07	2.43E-07	4.71E-07	3.43E-08	3.65E-08	7.08E-08	3.35E-08	3.25E-08	6.61E-08	1.78E-08	1.47E-08	3.26E-08
2172	648938.44	4198155.5	2.40E-07	2.56E-07	4.96E-07	3.61E-08	3.84E-08	7.44E-08	3.53E-08	3.42E-08	6.95E-08	1.87E-08	1.55E-08	3.43E-08
2173	648949.86	4198177.69	2.49E-07	2.65E-07	5.14E-07	3.74E-08	3.97E-08	7.71E-08	3.66E-08	3.54E-08	7.20E-08	1.94E-08	1.61E-08	3.55E-08
2174	648961.29	4198199.89	2.55E-07	2.71E-07	5.26E-07	3.83E-08	4.07E-08	7.90E-08	3.74E-08	3.63E-08	7.37E-08	1.99E-08	1.64E-08	3.63E-08
2175	648972.71	4198222.08	2.58E-07	2.75E-07	5.33E-07	3.88E-08	4.12E-08	8.00E-08	3.79E-08	3.67E-08	7.46E-08	2.01E-08	1.67E-08	3.68E-08
2176	648984.14	4198244.27	2.58E-07	2.76E-07	5.34E-07	3.89E-08	4.13E-08	8.02E-08	3.80E-08	3.68E-08	7.48E-08	2.02E-08	1.67E-08	3.69E-08
2177	648995.56	4198266.47	2.56E-07	2.73E-07	5.29E-07	3.85E-08	4.09E-08	7.94E-08	3.76E-08	3.65E-08	7.41E-08	2.00E-08	1.65E-08	3.65E-08
2178	649006.98	4198288.66	2.49E-07	2.66E-07	5.15E-07	3.75E-08	3.99E-08	7.74E-08	3.67E-08	3.55E-08	7.22E-08	1.95E-08	1.61E-08	3.56E-08
2179	649018.41	4198310.86	2.38E-07	2.54E-07	4.92E-07	3.58E-08	3.81E-08	7.39E-08	3.50E-08	3.40E-08	6.90E-08	1.86E-08	1.54E-08	3.40E-08
2180	648824.53	4198024.31	8.42E-08	8.98E-08	1.74E-07	1.27E-08	1.35E-08	2.61E-08	1.24E-08	1.20E-08	2.44E-08	6.58E-09	5.44E-09	1.20E-08
2181	648822.71	4197982.5	7.28E-08	7.76E-08	1.50E-07	1.10E-08	1.16E-08	2.26E-08	1.07E-08	1.04E-08	2.11E-08	5.69E-09	4.71E-09	1.04E-08
2182	648836.86	4198067.41	1.03E-07	1.1E-07	2.13E-07	1.55E-08	1.65E-08	3.20E-08	1.52E-08	1.47E-08	2.99E-08	8.06E-09	6.67E-09	1.47E-08
2183	648848.29	4198089.61	1.18E-07	1.25E-07	2.43E-07	1.77E-08	1.88E-08	3.65E-08	1.73E-08	1.68E-08	3.41E-08	9.19E-09	7.60E-09	1.68E-08
2184	648859.71	4198111.8	1.32E-07	1.41E-07	2.73E-07	1.99E-08	2.11E-08	4.10E-08	1.95E-08	1.89E-08	3.83E-08	1.03E-08	8.55E-09	1.89E-08
2185	648871.14	4198133.99	1.46E-07	1.56E-07	3.02E-07	2.20E-08	2.33E-08	4.53E-08	2.15E-08	2.08E-08	4.23E-08	1.14E-08	9.44E-09	2.08E-08
2186	648882.56	4198156.19	1.58E-07	1.68E-07	3.26E-07	2.38E-08	2.53E-08	4.90E-08	2.32E-08	2.25E-08	4.58E-08	1.23E-08	1.02E-08	2.26E-08
2187	648893.98	4198178.38	1.68E-07	1.79E-07	3.47E-07	2.53E-08	2.69E-08	5.21E-08	2.47E-08	2.39E-08	4.86E-08	1.31E-08	1.09E-08	2.40E-08
2188	648905.41	4198200.58	1.76E-07	1.88E-07	3.63E-07	2.65E-08	2.81E-08	5.46E-08	2.59E-08	2.51E-08	5.09E-08	1.37E-08	1.14E-08	2.51E-08
2189	648916.83	4198222.77	1.82E-07	1.94E-07	3.76E-07	2.73E-08	2.91E-08	5.64E-08	2.67E-08	2.59E-08	5.26E-08	1.42E-08	1.17E-08	2.60E-08
2190	648928.26	4198244.96	1.86E-07	1.98E-07	3.84E-07	2.79E-08	2.97E-08	5.76E-08	2.73E-08	2.65E-08	5.38E-08	1.45E-08	1.20E-08	2.65E-08
2191	648939.68	4198267.16	1.88E-07	2E-07	3.87E-07	2.82E-08	3.00E-08	5.82E-08	2.76E-08	2.67E-08	5.43E-08	1.46E-08	1.21E-08	2.68E-08
2192	648951.1	4198289.35	1.87E-07	1.99E-07	3.87E-07	2.81E-08	2.99E-08	5.81E-08	2.75E-08	2.67E-08	5.42E-08	1.46E-08	1.21E-08	2.67E-08
2193	648962.53	4198311.55	1.84E-07	1.97E-07	3.81E-07	2.77E-08	2.95E-08	5.72E-08	2.71E-08	2.63E-08	5.34E-08	1.44E-08	1.19E-08	2.63E-08
2194	648973.95	4198333.74	1.79E-07	1.91E-07	3.70E-07	2.69E-08	2.86E-08	5.56E-08	2.63E-08	2.55E-08	5.19E-08	1.40E-08	1.16E-08	2.56E-08
2195	648779.94	4198044.21	6.69E-08	7.13E-08	1.38E-07	1.01E-08	1.07E-08	2.07E-08	9.83E-09	9.53E-09	1.94E-08	5.22E-09	4.32E-09	9.54E-09
2196	648778.9	4198020.31	6.26E-08	6.67E-08	1.29E-07	9.41E-09	1.00E-08	1.94E-08	9.20E-09	8.92E-09	1.81E-08	4.89E-09	4.04E-09	8.93E-09
2197	648777.86	4197996.42	5.83E-08	6.22E-08	1.21E-07	8.77E-09	9.33E-09	1.81E-08	8.58E-09	8.31E-09	1.69E-08	4.56E-09	3.77E-09	8.33E-09
2198	648776.82	4197972.53	5.43E-08	5.79E-08	1.12E-07	8.16E-09	8.68E-09	1.68E-08	7.98E-09	7.73E-09	1.57E-08	4.24E-09	3.51E-09	7.75E-09
2199	648775.78	4197948.63	5.05E-08	5.38E-08	1.04E-07	7.59E-09	8.07E-09	1.57E-08	7.42E-09	7.19E-09	1.46E-08	3.94E-09	3.26E-09	7.20E-09
2200	648774.74	4197924.74	4.70E-08	5.01E-08	9.71E-08	7.06E-09	7.51E-09	1.46E-08	6.91E-09	6.69E-09	1.36E-08	3.67E-09	3.04E-09	6.70E-09

2201	648780.98	4198068.1	7.11E-08	7.58E-08	1.47E-07	1.07E-08	1.14E-08	2.20E-08	1.04E-08	1.01E-08	2.06E-08	5.55E-09	4.59E-09	1.01E-08
2202	648792.41	4198090.3	7.97E-08	8.5E-08	1.65E-07	1.20E-08	1.27E-08	2.47E-08	1.17E-08	1.14E-08	2.31E-08	6.23E-09	5.15E-09	1.14E-08
2203	648803.83	4198112.49	8.91E-08	9.5E-08	1.84E-07	1.34E-08	1.42E-08	2.76E-08	1.31E-08	1.27E-08	2.58E-08	6.96E-09	5.76E-09	1.27E-08
2204	648815.26	4198134.68	9.88E-08	1.05E-07	2.04E-07	1.49E-08	1.58E-08	3.07E-08	1.45E-08	1.41E-08	2.86E-08	7.72E-09	6.39E-09	1.41E-08
2205	648826.68	4198156.88	1.08E-07	1.16E-07	2.24E-07	1.63E-08	1.73E-08	3.36E-08	1.59E-08	1.54E-08	3.14E-08	8.47E-09	7.00E-09	1.55E-08
2206	648838.1	4198179.07	1.17E-07	1.25E-07	2.42E-07	1.76E-08	1.88E-08	3.64E-08	1.73E-08	1.67E-08	3.40E-08	9.17E-09	7.58E-09	1.67E-08
2207	648849.53	4198201.27	1.25E-07	1.34E-07	2.59E-07	1.88E-08	2.00E-08	3.89E-08	1.84E-08	1.79E-08	3.63E-08	9.79E-09	8.10E-09	1.79E-08
2208	648860.95	4198223.46	1.32E-07	1.41E-07	2.73E-07	1.99E-08	2.11E-08	4.10E-08	1.94E-08	1.88E-08	3.82E-08	1.03E-08	8.53E-09	1.88E-08
2209	648872.38	4198245.65	1.37E-07	1.46E-07	2.84E-07	2.07E-08	2.20E-08	4.26E-08	2.02E-08	1.96E-08	3.98E-08	1.07E-08	8.88E-09	1.96E-08
2210	648883.8	4198267.85	1.41E-07	1.51E-07	2.92E-07	2.12E-08	2.26E-08	4.38E-08	2.08E-08	2.01E-08	4.09E-08	1.10E-08	9.13E-09	2.02E-08
2211	648895.22	4198290.04	1.44E-07	1.53E-07	2.97E-07	2.16E-08	2.30E-08	4.45E-08	2.11E-08	2.05E-08	4.16E-08	1.12E-08	9.28E-09	2.05E-08
2212	648906.65	4198312.23	1.44E-07	1.54E-07	2.98E-07	2.17E-08	2.31E-08	4.48E-08	2.12E-08	2.06E-08	4.18E-08	1.13E-08	9.33E-09	2.06E-08
2213	648918.07	4198334.43	1.44E-07	1.53E-07	2.97E-07	2.16E-08	2.29E-08	4.45E-08	2.11E-08	2.05E-08	4.16E-08	1.12E-08	9.27E-09	2.05E-08
2214	648929.49	4198356.62	1.41E-07	1.5E-07	2.91E-07	2.12E-08	2.26E-08	4.38E-08	2.07E-08	2.01E-08	4.08E-08	1.10E-08	9.12E-09	2.01E-08
2215	648735.52	4198067.75	5.55E-08	5.91E-08	1.15E-07	8.34E-09	8.87E-09	1.72E-08	8.15E-09	7.90E-09	1.61E-08	4.33E-09	3.58E-09	7.92E-09
2216	648734.5	4198044.52	5.25E-08	5.6E-08	1.08E-07	7.90E-09	8.39E-09	1.63E-08	7.72E-09	7.48E-09	1.52E-08	4.10E-09	3.39E-09	7.50E-09
2217	648733.49	4198021.29	4.96E-08	5.29E-08	1.02E-07	7.45E-09	7.93E-09	1.54E-08	7.29E-09	7.07E-09	1.44E-08	3.87E-09	3.20E-09	7.08E-09
2218	648732.48	4197998.06	4.67E-08	4.98E-08	9.65E-08	7.02E-09	7.47E-09	1.45E-08	6.87E-09	6.66E-09	1.35E-08	3.65E-09	3.02E-09	6.67E-09
2219	648731.47	4197974.83	4.40E-08	4.69E-08	9.09E-08	6.61E-09	7.03E-09	1.36E-08	6.47E-09	6.27E-09	1.27E-08	3.44E-09	2.84E-09	6.28E-09
2220	648730.46	4197951.6	4.14E-08	4.42E-08	8.56E-08	6.23E-09	6.62E-09	1.29E-08	6.09E-09	5.91E-09	1.20E-08	3.24E-09	2.68E-09	5.91E-09
2221	648729.45	4197928.37	3.91E-08	4.17E-08	8.07E-08	5.88E-09	6.25E-09	1.21E-08	5.75E-09	5.57E-09	1.13E-08	3.05E-09	2.53E-09	5.58E-09
2222	648728.43	4197905.14	3.69E-08	3.93E-08	7.62E-08	5.55E-09	5.90E-09	1.14E-08	5.43E-09	5.26E-09	1.07E-08	2.88E-09	2.38E-09	5.27E-09
2223	648736.53	4198090.99	5.84E-08	6.22E-08	1.21E-07	8.78E-09	9.33E-09	1.81E-08	8.58E-09	8.32E-09	1.69E-08	4.56E-09	3.77E-09	8.33E-09
2224	648747.95	4198113.18	6.44E-08	6.87E-08	1.33E-07	9.69E-09	1.03E-08	2.00E-08	9.47E-09	9.18E-09	1.87E-08	5.03E-09	4.16E-09	9.20E-09
2225	648759.38	4198135.37	7.10E-08	7.57E-08	1.47E-07	1.07E-08	1.13E-08	2.20E-08	1.04E-08	1.01E-08	2.06E-08	5.55E-09	4.59E-09	1.01E-08
2226	648770.8	4198157.57	7.79E-08	8.3E-08	1.61E-07	1.17E-08	1.24E-08	2.42E-08	1.14E-08	1.11E-08	2.25E-08	6.08E-09	5.03E-09	1.11E-08
2227	648782.22	4198179.76	8.48E-08	9.04E-08	1.75E-07	1.27E-08	1.36E-08	2.63E-08	1.25E-08	1.21E-08	2.45E-08	6.62E-09	5.48E-09	1.21E-08
2228	648793.65	4198201.95	9.15E-08	9.75E-08	1.89E-07	1.38E-08	1.46E-08	2.84E-08	1.34E-08	1.30E-08	2.65E-08	7.15E-09	5.91E-09	1.31E-08
2229	648805.07	4198224.15	9.77E-08	1.04E-07	2.02E-07	1.47E-08	1.56E-08	3.03E-08	1.44E-08	1.39E-08	2.83E-08	7.63E-09	6.31E-09	1.39E-08
2230	648816.5	4198246.34	1.03E-07	1.1E-07	2.13E-07	1.55E-08	1.65E-08	3.20E-08	1.52E-08	1.47E-08	2.99E-08	8.06E-09	6.66E-09	1.47E-08
2231	648827.92	4198268.54	1.08E-07	1.15E-07	2.22E-07	1.62E-08	1.72E-08	3.34E-08	1.58E-08	1.53E-08	3.12E-08	8.41E-09	6.96E-09	1.54E-08
2232	648839.34	4198290.73	1.11E-07	1.19E-07	2.30E-07	1.67E-08	1.78E-08	3.45E-08	1.64E-08	1.59E-08	3.22E-08	8.69E-09	7.19E-09	1.59E-08
2233	648850.77	4198312.92	1.14E-07	1.21E-07	2.35E-07	1.71E-08	1.82E-08	3.53E-08	1.67E-08	1.62E-08	3.29E-08	8.88E-09	7.35E-09	1.62E-08
2234	648862.19	4198335.12	1.15E-07	1.23E-07	2.38E-07	1.73E-08	1.84E-08	3.57E-08	1.69E-08	1.64E-08	3.33E-08	8.99E-09	7.43E-09	1.64E-08
2235	648873.61	4198357.31	1.15E-07	1.23E-07	2.38E-07	1.73E-08	1.84E-08	3.58E-08	1.69E-08	1.64E-08	3.34E-08	9.00E-09	7.45E-09	1.64E-08
2236	648885.04	4198379.51	1.14E-07	1.22E-07	2.36E-07	1.72E-08	1.83E-08	3.55E-08	1.68E-08	1.63E-08	3.31E-08	8.93E-09	7.39E-09	1.63E-08
2237	648691.08	4198091.06	4.71E-08	5.02E-08	9.74E-08	7.09E-09	7.53E-09	1.46E-08	6.93E-09	6.72E-09	1.36E-08	3.68E-09	3.05E-09	6.73E-09
2238	648690.09	4198068.25	4.50E-08	4.79E-08	9.29E-08	6.76E-09	7.19E-09	1.39E-08	6.61E-09	6.41E-09	1.30E-08	3.51E-09	2.91E-09	6.42E-09
2239	648689.09	4198045.44	4.28E-08	4.56E-08	8.84E-08	6.44E-09	6.84E-09	1.33E-08	6.29E-09	6.10E-09	1.24E-08	3.34E-09	2.77E-09	6.11E-09
2240	648688.1	4198022.64	4.07E-08	4.34E-08	8.40E-08	6.12E-09	6.50E-09	1.26E-08	5.98E-09	5.80E-09	1.18E-08	3.18E-09	2.63E-09	5.80E-09
2241	648687.11	4197999.83	3.86E-08	4.12E-08	7.98E-08	5.81E-09	6.17E-09	1.20E-08	5.68E-09	5.50E-09	1.12E-08	3.02E-09	2.49E-09	5.51E-09
2242	648686.11	4197977.02	3.67E-08	3.91E-08	7.57E-08	5.51E-09	5.86E-09	1.14E-08	5.39E-09	5.22E-09	1.06E-08	2.86E-09	2.37E-09	5.23E-09
2243	648685.12	4197954.21	3.48E-08	3.71E-08	7.19E-08	5.24E-09	5.57E-09	1.08E-08	5.12E-09	4.96E-09	1.01E-08	2.72E-09	2.25E-09	4.97E-09
2244	648684.13	4197931.4	3.31E-08	3.53E-08	6.84E-08	4.98E-09	5.30E-09	1.03E-08	4.87E-09	4.72E-09	9.59E-09	2.59E-09	2.14E-09	4.73E-09
2245	648683.13	4197908.6	3.16E-08	3.37E-08	6.52E-08	4.75E-09	5.05E-09	9.79E-09	4.64E-09	4.50E-09	9.14E-09	2.47E-09	2.04E-09	4.51E-09
2246	648682.14	4197885.79	3.01E-08	3.21E-08	6.22E-08	4.53E-09	4.82E-09	9.35E-09	4.43E-09	4.29E-09	8.72E-09	2.35E-09	1.95E-09	4.30E-09
2247	648692.07	4198113.87	4.93E-08	5.25E-08	1.02E-07	7.41E-09	7.88E-09	1.53E-08	7.24E-09	7.02E-09	1.43E-08	3.85E-09	3.18E-09	7.03E-09
2248	648703.5	4198136.06	5.38E-08	5.73E-08	1.11E-07	8.08E-09	8.60E-09	1.67E-08	7.91E-09	7.66E-09	1.56E-08	4.20E-09	3.47E-09	7.67E-09
2249	648714.92	4198158.26	5.86E-08	6.25E-08	1.21E-07	8.81E-09	9.37E-09	1.82E-08	8.61E-09	8.35E-09	1.70E-08	4.58E-09	3.79E-09	8.36E-09
2250	648726.34	4198180.45	6.36E-08	6.78E-08	1.31E-07	9.57E-09	1.02E-08	1.97E-08	9.36E-09	9.07E-09	1.84E-08	4.97E-09	4.11E-09	9.08E-09
2251	648737.77	4198202.64	6.88E-08	7.33E-08	1.42E-07	1.03E-08	1.10E-08	2.13E-08	1.01E-08	9.80E-09	1.99E-08	5.37E-09	4.45E-09	9.82E-09
2252	648749.19	4198224.84	7.39E-08	7.88E-08	1.53E-07	1.11E-08	1.18E-08	2.29E-08	1.09E-08	1.05E-08	2.14E-08	5.77E-09	4.77E-09	1.05E-08
2253	648760.61	4198247.03	7.87E-08	8.39E-08	1.63E-07	1.18E-08	1.26E-08	2.44E-08	1.16E-08	1.12E-08	2.28E-08	6.15E-09	5.08E-09	1.12E-08
2254	648772.04	4198269.23	8.31E-08	8.85E-08	1.72E-07	1.25E-08	1.33E-08	2.58E-08	1.22E-08	1.18E-08	2.40E-08	6.49E-09	5.37E-09	1.19E-08
2255	648783.46	4198291.42	8.68E-08	9.26E-08	1.79E-07	1.31E-08	1.39E-08	2.69E-08	1.28E-08	1.24E-08	2.51E-08	6.78E-09	5.61E-09	1.24E-08
2256	648794.89	4198313.61	8.99E-08	9.59E-08	1.86E-07	1.35E-08	1.44E-08	2.79E-08	1.32E-08	1.28E-08	2.60E-08	7.03E-09	5.81E-09	1.28E-08
2257	648806.31	4198335.81	9.23E-08	9.84E-08	1.91E-07	1.39E-08	1.48E-08	2.86E-08	1.36E-08	1.32E-08	2.67E-08	7.21E-09	5.96E-09	1.32E-08
2258	648817.73	4198358	9.38E-08	1E-07	1.94E-07	1.41E-08	1.50E-08	2.91E-08	1.38E-08	1.34E-08	2.72E-08	7.33E-09	6.06E-09	1.34E-08
2259	648829.16	4198380.19	9.46E-08	1.01E-07	1.95E-07	1.42E-08	1.51E-08	2.93E-08	1.39E-08	1.35E-08	2.74E-08	7.39E-09	6.11E-09	1.35E-08
2260	648840.58	4198402.39	9.45E-08	1.01E-07	1.95E-07	1.42E-08	1.51E-08	2.93E-08	1.39E-08	1.35E-08	2.74E-08	7.38E-09	6.11E-09	1.35E-08
2261	648602.12	4198135.74	3.58E-08	3.82E-08	7.40E-08	5.38E-09	5.72E-09	1.11E-08	5.26E-09	5.10E-09	1.04E-08	2.80E-09	2.31E-09	5.11E-09
2262	648601.08	4198111.85	3.44E-08	3.67E-08	7.10E-08	5.17E-09	5.50E-09	1.07E-08	5.06E-09	4.90E-09	9.96E-09	2.69E-09	2.22E-09	4.91E-09
2263	648600.04	4198087.95	3.30E-08	3.51E-08	6.81E-08	4.96E-09	5.27E-09	1.02E-08	4.85E-09	4.70E-09	9.54E-09	2.57E-09	2.13E-09	4.70E-09
2264	648599	4198064.06	3.15E-08	3.36E-08	6.52E-08	4.74E-09	5.04E-09	9.79E-09	4.64E-09	4.50E-09	9.13E-09	2.46E-09	2.04E-09	4.50E-09
2265	648597.96	4198040.16	3.02E-08	3.22E-08	6.23E-08	4.54E-09	4.82E-09	9.36E-09	4.43E-09	4.30E-09	8.73E-09	2.36E-09	1.95E-09	4.30E-09
2266	648596.92	4198016.27	2.88E-08	3.07E-08	5.95E-08	4.33E-09	4.61E-09	8.94E-09	4.24E-09	4.11E-09	8.35E-09	2.25E-09	1.86E-09	4.11E-09
2267	648595.88	4197992.38	2.76E-08	2.94E-08	5.69E-08	4.14E-09	4.41E-09	8.55E-09	4.05E-09	3.93E-09	7.98E-09	2.15E-09	1.78E-09	3.93E-09
2268	648594.83	4197968.48	2.64E-08	2.81E-08	5.45E-08	3.97E-09	4.22E-09	8.18E-09	3.88E-09	3.76E-09	7.64E-09	2.06E-09	1.70E-09	3.76E-09
2269	648593.79	4197944.59	2.53E-08	2.69E-08	5.22E-08	3.80E-09	4.04E-09	7.84E-09	3.72E-09	3.60E-09	7.32E-09	1.97E-09	1.63E-09	3.61E-09
2270	648592.75	4197920.69	2.43E-08	2.59E-08	5.01E-08	3.65E-09	3.88E-09	7.53E-09	3.57E-09	3.46E-09	7.03E-09	1.90E-09	1.57E-09	3.46E-09
2271	648591.71	4197896.8	2.34E-08	2.49E-08	4.83E-08	3.51E-09	3.73E-09	7.25E-09	3.43E-09	3.33E-09	6.76E-09	1.82E-09	1.51E-09	3.33E-09
2272	648590.67	4197872.91	2.25E-08	2.4E-08	4.65E-08	3.38E-09	3.60E-09	6.98E-09	3.31E-09	3.21E-09	6.52E-09	1.76E-09	1.45E-09	3.21E-09
2273	648589.63	4197849.01	2.17E-08	2.31E-08	4.49E-08	3.27E-09	3.47E-09	6.74E-09	3.19E-09	3.09E-09	6.29E-09	1.70E-09	1.40E-09	3.10E-09
2274	648603.16	4198159.63	3.72E-08	3.97E-08	7.68E-08	5.59E-09	5.95E-09	1.15E-08	5.47E-09	5.30E-09	1.08E-08	2.91E-09	2.40E-09	5.31E-09
2275	648614.58	4198181.83	3.99E-08	4.26E-08	8.25E-08	6.00E-09	6.38E-09	1.24E-08	5.87E-09	5.69E-09	1.16E-08	3.12E-09	2.58E-09	5.70E-09
2276	648626.01	4198204.02	4.28E-08	4.56E-08	8.84E-08	6.44E-09	6.84E-09	1.33E-08	6.29E-09	6.10E-09	1.24E-08	3.34E-09	2.77E-09	6.11E-09

2277	648637.43	4198226.22	4.58E-08	4.88E-08	9.46E-08	6.89E-09	7.32E-09	1.42E-08	6.73E-09	6.53E-09	1.33E-08	3.58E-09	2.96E-09	6.54E-09
2278	648648.85	4198248.41	4.89E-08	5.21E-08	1.01E-07	7.35E-09	7.81E-09	1.52E-08	7.18E-09	6.96E-09	1.41E-08	3.82E-09	3.16E-09	6.97E-09
2279	648660.28	4198270.6	5.19E-08	5.53E-08	1.07E-07	7.81E-09	8.30E-09	1.61E-08	7.63E-09	7.40E-09	1.50E-08	4.05E-09	3.35E-09	7.41E-09
2280	648671.7	4198292.8	5.49E-08	5.85E-08	1.13E-07	8.25E-09	8.77E-09	1.70E-08	8.07E-09	7.82E-09	1.59E-08	4.29E-09	3.55E-09	7.83E-09
2281	648683.13	4198314.99	5.77E-08	6.15E-08	1.19E-07	8.67E-09	9.22E-09	1.79E-08	8.48E-09	8.22E-09	1.67E-08	4.50E-09	3.73E-09	8.23E-09
2282	648694.55	4198337.19	6.02E-08	6.42E-08	1.24E-07	9.06E-09	9.63E-09	1.87E-08	8.85E-09	8.58E-09	1.74E-08	4.70E-09	3.89E-09	8.60E-09
2283	648705.97	4198359.38	6.25E-08	6.66E-08	1.29E-07	9.39E-09	9.99E-09	1.94E-08	9.18E-09	8.90E-09	1.81E-08	4.88E-09	4.04E-09	8.92E-09
2284	648717.4	4198381.57	6.44E-08	6.86E-08	1.33E-07	9.68E-09	1.03E-08	2.00E-08	9.46E-09	9.17E-09	1.86E-08	5.03E-09	4.16E-09	9.19E-09
2285	648728.82	4198403.77	6.58E-08	7.02E-08	1.36E-07	9.90E-09	1.05E-08	2.04E-08	9.68E-09	9.38E-09	1.91E-08	5.14E-09	4.25E-09	9.40E-09
2286	648740.25	4198425.96	6.69E-08	7.13E-08	1.38E-07	1.01E-08	1.07E-08	2.08E-08	9.84E-09	9.54E-09	1.94E-08	5.23E-09	4.32E-09	9.55E-09
2287	648751.67	4198448.15	6.76E-08	7.2E-08	1.40E-07	1.02E-08	1.08E-08	2.10E-08	9.93E-09	9.63E-09	1.96E-08	5.28E-09	4.37E-09	9.64E-09
2288	648513.18	4198180.8	2.86E-08	3.05E-08	5.92E-08	4.31E-09	4.58E-09	8.89E-09	4.21E-09	4.08E-09	8.29E-09	2.24E-09	1.85E-09	4.09E-09
2289	648512.1	4198156.21	2.77E-08	2.95E-08	5.71E-08	4.16E-09	4.42E-09	8.58E-09	4.07E-09	3.94E-09	8.01E-09	2.16E-09	1.79E-09	3.95E-09
2290	648511.03	4198131.61	2.66E-08	2.84E-08	5.50E-08	4.01E-09	4.26E-09	8.27E-09	3.92E-09	3.80E-09	7.71E-09	2.08E-09	1.72E-09	3.80E-09
2291	648509.96	4198107.01	2.56E-08	2.73E-08	5.30E-08	3.85E-09	4.10E-09	7.95E-09	3.77E-09	3.65E-09	7.42E-09	2.00E-09	1.66E-09	3.66E-09
2292	648508.89	4198082.42	2.46E-08	2.63E-08	5.09E-08	3.70E-09	3.94E-09	7.64E-09	3.62E-09	3.51E-09	7.13E-09	1.92E-09	1.59E-09	3.52E-09
2293	648507.82	4198057.82	2.37E-08	2.52E-08	4.89E-08	3.56E-09	3.78E-09	7.34E-09	3.48E-09	3.37E-09	6.85E-09	1.85E-09	1.53E-09	3.38E-09
2294	648506.75	4198033.22	2.27E-08	2.42E-08	4.69E-08	3.42E-09	3.63E-09	7.05E-09	3.34E-09	3.24E-09	6.58E-09	1.77E-09	1.47E-09	3.24E-09
2295	648505.68	4198008.63	2.18E-08	2.33E-08	4.51E-08	3.28E-09	3.49E-09	6.77E-09	3.21E-09	3.11E-09	6.32E-09	1.70E-09	1.41E-09	3.11E-09
2296	648504.61	4197984.03	2.10E-08	2.24E-08	4.34E-08	3.16E-09	3.35E-09	6.51E-09	3.09E-09	2.99E-09	6.08E-09	1.64E-09	1.36E-09	3.00E-09
2297	648503.53	4197959.43	2.02E-08	2.15E-08	4.18E-08	3.04E-09	3.23E-09	6.27E-09	2.97E-09	2.88E-09	5.85E-09	1.58E-09	1.31E-09	2.88E-09
2298	648502.46	4197934.83	1.95E-08	2.08E-08	4.03E-08	2.93E-09	3.12E-09	6.05E-09	2.87E-09	2.78E-09	5.64E-09	1.52E-09	1.26E-09	2.78E-09
2299	648501.39	4197910.24	1.88E-08	2.01E-08	3.89E-08	2.83E-09	3.01E-09	5.85E-09	2.77E-09	2.69E-09	5.46E-09	1.47E-09	1.22E-09	2.69E-09
2300	648500.32	4197885.64	1.83E-08	1.95E-08	3.77E-08	2.74E-09	2.92E-09	5.66E-09	2.68E-09	2.60E-09	5.28E-09	1.43E-09	1.18E-09	2.60E-09
2301	648499.25	4197861.04	1.77E-08	1.89E-08	3.66E-08	2.66E-09	2.83E-09	5.49E-09	2.60E-09	2.52E-09	5.13E-09	1.38E-09	1.14E-09	2.53E-09
2302	648498.18	4197836.45	1.72E-08	1.83E-08	3.55E-08	2.59E-09	2.75E-09	5.33E-09	2.53E-09	2.45E-09	4.98E-09	1.34E-09	1.11E-09	2.45E-09
2303	648497.11	4197811.85	1.67E-08	1.78E-08	3.45E-08	2.51E-09	2.67E-09	5.18E-09	2.46E-09	2.38E-09	4.84E-09	1.30E-09	1.08E-09	2.38E-09
2304	648514.25	4198205.4	2.96E-08	3.16E-08	6.12E-08	4.45E-09	4.73E-09	9.18E-09	4.35E-09	4.22E-09	8.57E-09	2.31E-09	1.91E-09	4.23E-09
2305	648525.67	4198227.59	3.14E-08	3.35E-08	6.49E-08	4.72E-09	5.02E-09	9.74E-09	4.62E-09	4.47E-09	9.09E-09	2.45E-09	2.03E-09	4.48E-09
2306	648537.09	4198249.79	3.32E-08	3.54E-08	6.87E-08	5.00E-09	5.31E-09	1.03E-08	4.89E-09	4.74E-09	9.63E-09	2.60E-09	2.15E-09	4.75E-09
2307	648548.52	4198271.98	3.51E-08	3.75E-08	7.26E-08	5.28E-09	5.62E-09	1.09E-08	5.17E-09	5.01E-09	1.02E-08	2.75E-09	2.27E-09	5.02E-09
2308	648559.94	4198294.18	3.71E-08	3.95E-08	7.66E-08	5.58E-09	5.93E-09	1.15E-08	5.45E-09	5.28E-09	1.07E-08	2.90E-09	2.40E-09	5.29E-09
2309	648571.37	4198316.37	3.90E-08	4.16E-08	8.06E-08	5.87E-09	6.24E-09	1.21E-08	5.74E-09	5.56E-09	1.13E-08	3.05E-09	2.52E-09	5.57E-09
2310	648582.79	4198338.56	4.09E-08	4.36E-08	8.46E-08	6.15E-09	6.54E-09	1.27E-08	6.02E-09	5.83E-09	1.19E-08	3.20E-09	2.65E-09	5.84E-09
2311	648594.21	4198360.76	4.28E-08	4.56E-08	8.84E-08	6.43E-09	6.84E-09	1.33E-08	6.29E-09	6.10E-09	1.24E-08	3.34E-09	2.76E-09	6.11E-09
2312	648605.64	4198382.95	4.45E-08	4.75E-08	9.20E-08	6.70E-09	7.12E-09	1.38E-08	6.55E-09	6.35E-09	1.29E-08	3.48E-09	2.88E-09	6.36E-09
2313	648617.06	4198405.14	4.61E-08	4.92E-08	9.53E-08	6.94E-09	7.38E-09	1.43E-08	6.78E-09	6.58E-09	1.34E-08	3.60E-09	2.98E-09	6.59E-09
2314	648628.48	4198427.34	4.76E-08	5.07E-08	9.83E-08	7.15E-09	7.61E-09	1.48E-08	7.00E-09	6.78E-09	1.38E-08	3.72E-09	3.07E-09	6.79E-09
2315	648639.91	4198449.53	4.88E-08	5.2E-08	1.01E-07	7.34E-09	7.80E-09	1.51E-08	7.18E-09	6.96E-09	1.41E-08	3.81E-09	3.15E-09	6.97E-09
2316	648651.33	4198471.73	4.98E-08	5.31E-08	1.03E-07	7.49E-09	7.97E-09	1.55E-08	7.33E-09	7.10E-09	1.44E-08	3.89E-09	3.22E-09	7.11E-09
2317	648662.76	4198493.92	5.06E-08	5.39E-08	1.05E-07	7.61E-09	8.09E-09	1.57E-08	7.44E-09	7.21E-09	1.47E-08	3.95E-09	3.27E-09	7.22E-09
2318	648424.29	4198227.27	2.37E-08	2.53E-08	4.91E-08	3.57E-09	3.80E-09	7.37E-09	3.49E-09	3.38E-09	6.88E-09	1.86E-09	1.53E-09	3.39E-09
2319	648423.25	4198203.38	2.31E-08	2.46E-08	4.77E-08	3.47E-09	3.69E-09	7.16E-09	3.39E-09	3.29E-09	6.68E-09	1.80E-09	1.49E-09	3.30E-09
2320	648422.21	4198179.48	2.24E-08	2.39E-08	4.63E-08	3.37E-09	3.58E-09	6.95E-09	3.29E-09	3.19E-09	6.48E-09	1.75E-09	1.45E-09	3.20E-09
2321	648421.17	4198155.59	2.17E-08	2.31E-08	4.48E-08	3.26E-09	3.47E-09	6.73E-09	3.19E-09	3.09E-09	6.28E-09	1.69E-09	1.40E-09	3.09E-09
2322	648420.13	4198131.7	2.10E-08	2.23E-08	4.33E-08	3.15E-09	3.35E-09	6.50E-09	3.08E-09	2.99E-09	6.07E-09	1.64E-09	1.35E-09	2.99E-09
2323	648419.09	4198107.8	2.02E-08	2.16E-08	4.18E-08	3.04E-09	3.24E-09	6.28E-09	2.98E-09	2.88E-09	5.86E-09	1.58E-09	1.31E-09	2.89E-09
2324	648418.05	4198083.91	1.95E-08	2.08E-08	4.04E-08	2.94E-09	3.12E-09	6.06E-09	2.87E-09	2.78E-09	5.66E-09	1.53E-09	1.26E-09	2.79E-09
2325	648417.01	4198060.01	1.89E-08	2.01E-08	3.89E-08	2.83E-09	3.01E-09	5.85E-09	2.77E-09	2.69E-09	5.46E-09	1.47E-09	1.22E-09	2.69E-09
2326	648415.97	4198036.12	1.82E-08	1.94E-08	3.76E-08	2.74E-09	2.91E-09	5.65E-09	2.68E-09	2.59E-09	5.27E-09	1.42E-09	1.18E-09	2.60E-09
2327	648414.93	4198012.23	1.76E-08	1.87E-08	3.63E-08	2.64E-09	2.81E-09	5.46E-09	2.59E-09	2.51E-09	5.09E-09	1.37E-09	1.14E-09	2.51E-09
2328	648413.89	4197988.33	1.70E-08	1.81E-08	3.51E-08	2.56E-09	2.72E-09	5.28E-09	2.50E-09	2.42E-09	4.92E-09	1.33E-09	1.10E-09	2.43E-09
2329	648412.85	4197964.44	1.65E-08	1.76E-08	3.40E-08	2.48E-09	2.63E-09	5.11E-09	2.42E-09	2.35E-09	4.77E-09	1.29E-09	1.06E-09	2.35E-09
2330	648411.81	4197940.54	1.60E-08	1.7E-08	3.30E-08	2.40E-09	2.55E-09	4.96E-09	2.35E-09	2.28E-09	4.63E-09	1.25E-09	1.03E-09	2.28E-09
2331	648410.77	4197916.65	1.55E-08	1.66E-08	3.21E-08	2.34E-09	2.48E-09	4.82E-09	2.28E-09	2.21E-09	4.50E-09	1.21E-09	1.00E-09	2.22E-09
2332	648409.73	4197892.75	1.51E-08	1.61E-08	3.12E-08	2.27E-09	2.42E-09	4.69E-09	2.22E-09	2.15E-09	4.38E-09	1.18E-09	9.77E-10	2.16E-09
2333	648408.68	4197868.86	1.47E-08	1.57E-08	3.04E-08	2.22E-09	2.36E-09	4.57E-09	2.17E-09	2.10E-09	4.27E-09	1.15E-09	9.52E-10	2.10E-09
2334	648407.64	4197844.97	1.44E-08	1.53E-08	2.97E-08	2.16E-09	2.30E-09	4.46E-09	2.12E-09	2.05E-09	4.17E-09	1.12E-09	9.30E-10	2.05E-09
2335	648406.6	4197821.07	1.40E-08	1.5E-08	2.90E-08	2.11E-09	2.25E-09	4.36E-09	2.07E-09	2.00E-09	4.07E-09	1.10E-09	9.08E-10	2.01E-09
2336	648405.56	4197797.18	1.37E-08	1.46E-08	2.84E-08	2.06E-09	2.19E-09	4.26E-09	2.02E-09	1.96E-09	3.97E-09	1.07E-09	8.87E-10	1.96E-09
2337	648404.52	4197773.28	1.34E-08	1.43E-08	2.77E-08	2.02E-09	2.14E-09	4.16E-09	1.97E-09	1.91E-09	3.88E-09	1.05E-09	8.66E-10	1.91E-09
2338	648425.33	4198251.17	2.44E-08	2.6E-08	5.04E-08	3.67E-09	3.90E-09	7.56E-09	3.58E-09	3.47E-09	7.06E-09	1.90E-09	1.58E-09	3.48E-09
2339	648436.76	4198273.36	2.56E-08	2.73E-08	5.29E-08	3.85E-09	4.09E-09	7.94E-09	3.76E-09	3.65E-09	7.41E-09	2.00E-09	1.65E-09	3.65E-09
2340	648448.18	4198295.55	2.69E-08	2.86E-08	5.55E-08	4.04E-09	4.29E-09	8.33E-09	3.95E-09	3.83E-09	7.77E-09	2.10E-09	1.74E-09	3.83E-09
2341	648459.61	4198317.75	2.81E-08	3E-08	5.81E-08	4.23E-09	4.50E-09	8.72E-09	4.13E-09	4.01E-09	8.14E-09	2.20E-09	1.82E-09	4.01E-09
2342	648471.03	4198339.94	2.94E-08	3.14E-08	6.08E-08	4.42E-09	4.70E-09	9.12E-09	4.32E-09	4.19E-09	8.52E-09	2.30E-09	1.90E-09	4.20E-09
2343	648482.45	4198362.14	3.07E-08	3.27E-08	6.34E-08	4.62E-09	4.91E-09	9.53E-09	4.52E-09	4.38E-09	8.89E-09	2.40E-09	1.98E-09	4.38E-09
2344	648493.88	4198384.33	3.20E-08	3.41E-08	6.61E-08	4.81E-09	5.12E-09	9.93E-09	4.71E-09	4.56E-09	9.27E-09	2.50E-09	2.07E-09	4.57E-09
2345	648505.3	4198406.52	3.33E-08	3.55E-08	6.88E-08	5.00E-09	5.32E-09	1.03E-08	4.89E-09	4.74E-09	9.64E-09	2.60E-09	2.15E-09	4.75E-09
2346	648516.72	4198428.72	3.45E-08	3.68E-08	7.13E-08	5.19E-09	5.52E-09	1.07E-08	5.07E-09	4.92E-09	9.99E-09	2.70E-09	2.23E-09	4.93E-09
2347	648528.15	4198450.91	3.57E-08	3.8E-08	7.37E-08	5.37E-09	5.70E-09	1.11E-08	5.25E-09	5.09E-09	1.03E-08	2.79E-09	2.31E-09	5.09E-09
2348	648539.57	4198473.1	3.68E-08	3.92E-08	7.60E-08	5.53E-09	5.88E-09	1.14E-08	5.41E-09	5.24E-09	1.06E-08	2.87E-09	2.38E-09	5.25E-09
2349	648551	4198495.3	3.78E-08	4.03E-08	7.80E-08	5.68E-09	6.04E-09	1.17E-08	5.55E-09	5.38E-09	1.09E-08	2.95E-09	2.44E-09	5.39E-09
2350	648562.42	4198517.49	3.86E-08	4.12E-08	7.98E-08	5.81E-09	6.17E-09	1.20E-08	5.68E-09	5.50E-09	1.12E-08	3.02E-09	2.50E-09	5.51E-09
2351	648573.84	4198539.69	3.94E-08	4.2E-08	8.13E-08	5.92E-09	6.29E-09	1.22E-08	5.79E-09	5.61E-09	1.14E-08	3.07E-09	2.54E-09	5.62E-09
2352	648335.36	4198272.54	2.01E-08	2.14E-08	4.16E-08	3.02E-09	3.22E-09	6.24E-09	2.96E-09	2.87E-09	5.82E-09	1.57E-09	1.30E-09	2.87E-09

2353	648334.3	4198248.15	1.96E-08	2.09E-08	4.06E-08	2.95E-09	3.14E-09	6.10E-09	2.89E-09	2.80E-09	5.69E-09	1.53E-09	1.27E-09	2.80E-09
2354	648333.23	4198223.76	1.91E-08	2.04E-08	3.96E-08	2.88E-09	3.06E-09	5.94E-09	2.82E-09	2.73E-09	5.54E-09	1.50E-09	1.24E-09	2.73E-09
2355	648332.17	4198199.36	1.86E-08	1.98E-08	3.85E-08	2.80E-09	2.98E-09	5.78E-09	2.74E-09	2.65E-09	5.39E-09	1.45E-09	1.20E-09	2.66E-09
2356	648331.11	4198174.97	1.81E-08	1.93E-08	3.73E-08	2.72E-09	2.89E-09	5.61E-09	2.66E-09	2.57E-09	5.23E-09	1.41E-09	1.17E-09	2.58E-09
2357	648330.05	4198150.58	1.75E-08	1.87E-08	3.62E-08	2.63E-09	2.80E-09	5.43E-09	2.57E-09	2.49E-09	5.07E-09	1.37E-09	1.13E-09	2.50E-09
2358	648328.99	4198126.19	1.69E-08	1.81E-08	3.50E-08	2.55E-09	2.71E-09	5.26E-09	2.49E-09	2.41E-09	4.91E-09	1.32E-09	1.09E-09	2.42E-09
2359	648327.92	4198101.8	1.64E-08	1.75E-08	3.39E-08	2.46E-09	2.62E-09	5.09E-09	2.41E-09	2.34E-09	4.75E-09	1.28E-09	1.06E-09	2.34E-09
2360	648326.86	4198077.41	1.59E-08	1.69E-08	3.28E-08	2.38E-09	2.53E-09	4.92E-09	2.33E-09	2.26E-09	4.59E-09	1.24E-09	1.02E-09	2.26E-09
2361	648325.8	4198053.01	1.53E-08	1.63E-08	3.17E-08	2.31E-09	2.45E-09	4.76E-09	2.25E-09	2.19E-09	4.44E-09	1.20E-09	9.91E-10	2.19E-09
2362	648324.74	4198028.62	1.48E-08	1.58E-08	3.07E-08	2.23E-09	2.37E-09	4.61E-09	2.18E-09	2.12E-09	4.30E-09	1.16E-09	9.59E-10	2.12E-09
2363	648323.67	4198004.23	1.44E-08	1.53E-08	2.97E-08	2.16E-09	2.30E-09	4.46E-09	2.12E-09	2.05E-09	4.17E-09	1.12E-09	9.30E-10	2.05E-09
2364	648322.61	4197979.84	1.40E-08	1.49E-08	2.89E-08	2.10E-09	2.23E-09	4.33E-09	2.05E-09	1.99E-09	4.04E-09	1.09E-09	9.03E-10	1.99E-09
2365	648321.55	4197955.45	1.36E-08	1.45E-08	2.81E-08	2.04E-09	2.17E-09	4.21E-09	2.00E-09	1.94E-09	3.93E-09	1.06E-09	8.78E-10	1.94E-09
2366	648320.49	4197931.05	1.32E-08	1.41E-08	2.73E-08	1.99E-09	2.11E-09	4.10E-09	1.95E-09	1.89E-09	3.83E-09	1.03E-09	8.55E-10	1.89E-09
2367	648319.43	4197906.66	1.29E-08	1.38E-08	2.67E-08	1.94E-09	2.06E-09	4.00E-09	1.90E-09	1.84E-09	3.74E-09	1.01E-09	8.34E-10	1.84E-09
2368	648318.36	4197882.27	1.26E-08	1.34E-08	2.61E-08	1.90E-09	2.02E-09	3.91E-09	1.85E-09	1.80E-09	3.65E-09	9.85E-10	8.15E-10	1.80E-09
2369	648317.3	4197857.88	1.23E-08	1.32E-08	2.55E-08	1.85E-09	1.97E-09	3.83E-09	1.81E-09	1.76E-09	3.57E-09	9.64E-10	7.97E-10	1.76E-09
2370	648316.24	4197833.49	1.21E-08	1.29E-08	2.50E-08	1.82E-09	1.93E-09	3.75E-09	1.78E-09	1.72E-09	3.50E-09	9.44E-10	7.81E-10	1.72E-09
2371	648315.18	4197809.09	1.18E-08	1.26E-08	2.45E-08	1.78E-09	1.89E-09	3.67E-09	1.74E-09	1.69E-09	3.43E-09	9.24E-10	7.65E-10	1.69E-09
2372	648314.11	4197784.7	1.16E-08	1.24E-08	2.40E-08	1.74E-09	1.85E-09	3.60E-09	1.70E-09	1.65E-09	3.36E-09	9.06E-10	7.49E-10	1.66E-09
2373	648313.05	4197760.31	1.14E-08	1.21E-08	2.35E-08	1.71E-09	1.82E-09	3.52E-09	1.67E-09	1.62E-09	3.29E-09	8.87E-10	7.34E-10	1.62E-09
2374	648311.99	4197735.92	1.11E-08	1.19E-08	2.30E-08	1.67E-09	1.78E-09	3.45E-09	1.64E-09	1.58E-09	3.22E-09	8.69E-10	7.19E-10	1.59E-09
2375	648336.42	4198296.93	2.06E-08	2.19E-08	4.25E-08	3.09E-09	3.29E-09	6.38E-09	3.02E-09	2.93E-09	5.95E-09	1.61E-09	1.33E-09	2.93E-09
2376	648347.84	4198319.13	2.14E-08	2.28E-08	4.42E-08	3.22E-09	3.42E-09	6.64E-09	3.15E-09	3.05E-09	6.20E-09	1.67E-09	1.38E-09	3.06E-09
2377	648359.27	4198341.32	2.23E-08	2.38E-08	4.61E-08	3.35E-09	3.56E-09	6.92E-09	3.28E-09	3.18E-09	6.45E-09	1.74E-09	1.44E-09	3.18E-09
2378	648370.69	4198363.51	2.32E-08	2.47E-08	4.79E-08	3.49E-09	3.71E-09	7.19E-09	3.41E-09	3.30E-09	6.71E-09	1.81E-09	1.50E-09	3.31E-09
2379	648382.12	4198385.71	2.41E-08	2.57E-08	4.98E-08	3.62E-09	3.85E-09	7.47E-09	3.54E-09	3.43E-09	6.97E-09	1.88E-09	1.56E-09	3.44E-09
2380	648393.54	4198407.9	2.50E-08	2.66E-08	5.16E-08	3.76E-09	4.00E-09	7.75E-09	3.67E-09	3.56E-09	7.24E-09	1.95E-09	1.62E-09	3.57E-09
2381	648404.96	4198430.1	2.59E-08	2.76E-08	5.35E-08	3.90E-09	4.14E-09	8.04E-09	3.81E-09	3.69E-09	7.50E-09	2.02E-09	1.67E-09	3.70E-09
2382	648416.39	4198452.29	2.68E-08	2.86E-08	5.54E-08	4.03E-09	4.29E-09	8.32E-09	3.94E-09	3.82E-09	7.76E-09	2.09E-09	1.73E-09	3.83E-09
2383	648427.81	4198474.48	2.77E-08	2.95E-08	5.73E-08	4.17E-09	4.43E-09	8.60E-09	4.07E-09	3.95E-09	8.02E-09	2.16E-09	1.79E-09	3.96E-09
2384	648439.24	4198496.68	2.86E-08	3.05E-08	5.91E-08	4.30E-09	4.57E-09	8.87E-09	4.20E-09	4.07E-09	8.28E-09	2.23E-09	1.85E-09	4.08E-09
2385	648450.66	4198518.87	2.94E-08	3.14E-08	6.08E-08	4.42E-09	4.70E-09	9.13E-09	4.32E-09	4.19E-09	8.52E-09	2.30E-09	1.90E-09	4.20E-09
2386	648462.08	4198541.06	3.02E-08	3.22E-08	6.24E-08	4.54E-09	4.83E-09	9.37E-09	4.44E-09	4.30E-09	8.74E-09	2.36E-09	1.95E-09	4.31E-09
2387	648473.51	4198563.26	3.09E-08	3.29E-08	6.39E-08	4.65E-09	4.94E-09	9.59E-09	4.54E-09	4.40E-09	8.95E-09	2.41E-09	2.00E-09	4.41E-09
2388	648484.93	4198585.45	3.15E-08	3.36E-08	6.52E-08	4.74E-09	5.04E-09	9.79E-09	4.64E-09	4.50E-09	9.13E-09	2.46E-09	2.04E-09	4.50E-09
2389	648157.54	4198364.19	1.51E-08	1.61E-08	3.13E-08	2.27E-09	2.42E-09	4.69E-09	2.22E-09	2.16E-09	4.38E-09	1.18E-09	9.77E-10	2.16E-09
2390	648156.48	4198339.91	1.49E-08	1.59E-08	3.08E-08	2.24E-09	2.38E-09	4.62E-09	2.19E-09	2.12E-09	4.31E-09	1.16E-09	9.63E-10	2.13E-09
2391	648155.42	4198315.63	1.46E-08	1.56E-08	3.03E-08	2.20E-09	2.34E-09	4.54E-09	2.15E-09	2.09E-09	4.24E-09	1.14E-09	9.46E-10	2.09E-09
2392	648154.37	4198291.35	1.44E-08	1.53E-08	2.97E-08	2.16E-09	2.30E-09	4.46E-09	2.11E-09	2.05E-09	4.16E-09	1.12E-09	9.29E-10	2.05E-09
2393	648153.31	4198267.07	1.41E-08	1.5E-08	2.91E-08	2.12E-09	2.25E-09	4.37E-09	2.07E-09	2.01E-09	4.08E-09	1.10E-09	9.10E-10	2.01E-09
2394	648152.25	4198242.79	1.38E-08	1.47E-08	2.85E-08	2.07E-09	2.20E-09	4.27E-09	2.03E-09	1.96E-09	3.99E-09	1.08E-09	8.90E-10	1.97E-09
2395	648151.19	4198218.51	1.35E-08	1.43E-08	2.78E-08	2.02E-09	2.15E-09	4.17E-09	1.98E-09	1.92E-09	3.90E-09	1.05E-09	8.69E-10	1.92E-09
2396	648150.14	4198194.23	1.31E-08	1.4E-08	2.71E-08	1.97E-09	2.10E-09	4.07E-09	1.93E-09	1.87E-09	3.80E-09	1.02E-09	8.47E-10	1.87E-09
2397	648149.08	4198169.95	1.28E-08	1.36E-08	2.64E-08	1.92E-09	2.04E-09	3.96E-09	1.88E-09	1.82E-09	3.70E-09	9.97E-10	8.25E-10	1.82E-09
2398	648148.02	4198145.67	1.24E-08	1.32E-08	2.56E-08	1.87E-09	1.98E-09	3.85E-09	1.82E-09	1.77E-09	3.59E-09	9.69E-10	8.02E-10	1.77E-09
2399	648146.96	4198121.39	1.21E-08	1.29E-08	2.49E-08	1.81E-09	1.93E-09	3.74E-09	1.77E-09	1.72E-09	3.49E-09	9.42E-10	7.79E-10	1.72E-09
2400	648145.91	4198097.11	1.17E-08	1.25E-08	2.42E-08	1.76E-09	1.87E-09	3.63E-09	1.72E-09	1.67E-09	3.39E-09	9.15E-10	7.57E-10	1.67E-09
2401	648144.85	4198072.83	1.14E-08	1.21E-08	2.35E-08	1.71E-09	1.82E-09	3.53E-09	1.67E-09	1.62E-09	3.29E-09	8.89E-10	7.35E-10	1.62E-09
2402	648143.79	4198048.55	1.11E-08	1.18E-08	2.28E-08	1.66E-09	1.77E-09	3.43E-09	1.63E-09	1.58E-09	3.20E-09	8.64E-10	7.14E-10	1.58E-09
2403	648142.74	4198024.27	1.08E-08	1.15E-08	2.22E-08	1.62E-09	1.72E-09	3.34E-09	1.58E-09	1.53E-09	3.12E-09	8.41E-10	6.95E-10	1.54E-09
2404	648141.68	4197999.99	1.05E-08	1.12E-08	2.17E-08	1.58E-09	1.68E-09	3.25E-09	1.54E-09	1.49E-09	3.04E-09	8.19E-10	6.78E-10	1.50E-09
2405	648140.62	4197975.71	1.02E-08	1.09E-08	2.11E-08	1.54E-09	1.64E-09	3.17E-09	1.50E-09	1.46E-09	2.96E-09	7.99E-10	6.61E-10	1.46E-09
2406	648139.56	4197951.43	1.00E-08	1.07E-08	2.07E-08	1.50E-09	1.60E-09	3.10E-09	1.47E-09	1.43E-09	2.90E-09	7.82E-10	6.47E-10	1.43E-09
2407	648138.51	4197927.15	9.80E-09	1.04E-08	2.02E-08	1.47E-09	1.57E-09	3.04E-09	1.44E-09	1.40E-09	2.84E-09	7.66E-10	6.33E-10	1.40E-09
2408	648137.45	4197902.87	9.62E-09	1.03E-08	1.99E-08	1.45E-09	1.54E-09	2.98E-09	1.41E-09	1.37E-09	2.78E-09	7.51E-10	6.21E-10	1.37E-09
2409	648136.39	4197878.6	9.45E-09	1.01E-08	1.95E-08	1.42E-09	1.51E-09	2.93E-09	1.39E-09	1.35E-09	2.74E-09	7.38E-10	6.11E-10	1.35E-09
2410	648135.33	4197854.32	9.30E-09	9.91E-09	1.92E-08	1.40E-09	1.49E-09	2.88E-09	1.37E-09	1.32E-09	2.69E-09	7.26E-10	6.01E-10	1.33E-09
2411	648134.28	4197830.04	9.16E-09	9.76E-09	1.89E-08	1.38E-09	1.46E-09	2.84E-09	1.35E-09	1.30E-09	2.65E-09	7.15E-10	5.92E-10	1.31E-09
2412	648133.22	4197805.76	9.02E-09	9.61E-09	1.86E-08	1.36E-09	1.44E-09	2.80E-09	1.33E-09	1.29E-09	2.61E-09	7.04E-10	5.83E-10	1.29E-09
2413	648132.16	4197781.48	8.88E-09	9.47E-09	1.83E-08	1.34E-09	1.42E-09	2.76E-09	1.31E-09	1.27E-09	2.57E-09	6.94E-10	5.74E-10	1.27E-09
2414	648131.1	4197757.2	8.74E-09	9.32E-09	1.81E-08	1.31E-09	1.40E-09	2.71E-09	1.29E-09	1.25E-09	2.53E-09	6.83E-10	5.65E-10	1.25E-09
2415	648130.05	4197732.92	8.60E-09	9.17E-09	1.78E-08	1.29E-09	1.38E-09	2.67E-09	1.26E-09	1.23E-09	2.49E-09	6.72E-10	5.56E-10	1.23E-09
2416	648128.99	4197708.64	8.46E-09	9.01E-09	1.75E-08	1.27E-09	1.35E-09	2.62E-09	1.24E-09	1.21E-09	2.45E-09	6.61E-10	5.46E-10	1.21E-09
2417	648127.93	4197684.36	8.31E-09	8.86E-09	1.72E-08	1.25E-09	1.33E-09	2.58E-09	1.22E-09	1.18E-09	2.41E-09	6.49E-10	5.37E-10	1.19E-09
2418	648126.88	4197660.08	8.15E-09	8.69E-09	1.68E-08	1.23E-09	1.30E-09	2.53E-09	1.20E-09	1.16E-09	2.36E-09	6.37E-10	5.27E-10	1.16E-09
2419	648158.6	4198388.46	1.53E-08	1.64E-08	3.17E-08	2.31E-09	2.45E-09	4.76E-09	2.26E-09	2.19E-09	4.44E-09	1.20E-09	9.91E-10	2.19E-09
2420	648170.02	4198410.66	1.58E-08	1.69E-08	3.27E-08	2.38E-09	2.53E-09	4.90E-09	2.32E-09	2.25E-09	4.58E-09	1.23E-09	1.02E-09	2.26E-09
2421	648181.44	4198432.85	1.63E-08	1.74E-08	3.36E-08	2.45E-09	2.60E-09	5.05E-09	2.39E-09	2.32E-09	4.71E-09	1.27E-09	1.05E-09	2.32E-09
2422	648192.87	4198455.05	1.68E-08	1.79E-08	3.46E-08	2.52E-09	2.68E-09	5.20E-09	2.47E-09	2.39E-09	4.85E-09	1.31E-09	1.08E-09	2.39E-09
2423	648204.29	4198477.24	1.73E-08	1.84E-08	3.57E-08	2.60E-09	2.76E-09	5.35E-09	2.54E-09	2.46E-09	5.00E-09	1.35E-09	1.12E-09	2.46E-09
2424	648215.71	4198499.43	1.78E-08	1.89E-08	3.67E-08	2.67E-09	2.84E-09	5.51E-09	2.61E-09	2.53E-09	5.14E-09	1.39E-09	1.15E-09	2.53E-09
2425	648227.14	4198521.63	1.83E-08	1.95E-08	3.77E-08	2.75E-09	2.92E-09	5.67E-09	2.69E-09	2.60E-09	5.29E-09	1.43E-09	1.18E-09	2.61E-09
2426	648238.56	4198543.82	1.88E-08	2E-08	3.88E-08	2.82E-09	3.00E-09	5.83E-09	2.76E-09	2.68E-09	5.44E-09	1.47E-09	1.21E-09	2.68E-09
2427	648249.99	4198566.02	1.93E-08	2.06E-08	3.99E-08	2.90E-09	3.08E-09	5.99E-09	2.84E-09	2.75E-09	5.59E-09	1.51E-09	1.25E-09	2.75E-09
2428	648261.41	4198588.21	1.98E-08	2.11E-08	4.09E-08	2.98E-09	3.17E-09	6.15E-09	2.91E-09	2.82E-09	5.74E-09	1.55E-09	1.28E-09	2.83E-09

2429	648272.83	4198610.4	2.03E-08	2.17E-08	4.20E-08	3.06E-09	3.25E-09	6.30E-09	2.99E-09	2.90E-09	5.88E-09	1.59E-09	1.31E-09	2.90E-09
2430	648284.26	4198632.6	2.08E-08	2.22E-08	4.30E-08	3.13E-09	3.33E-09	6.46E-09	3.06E-09	2.97E-09	6.03E-09	1.63E-09	1.34E-09	2.97E-09
2431	648295.68	4198654.79	2.13E-08	2.27E-08	4.40E-08	3.20E-09	3.40E-09	6.61E-09	3.13E-09	3.03E-09	6.16E-09	1.66E-09	1.38E-09	3.04E-09
2432	648307.11	4198676.98	2.17E-08	2.32E-08	4.49E-08	3.27E-09	3.48E-09	6.75E-09	3.20E-09	3.10E-09	6.30E-09	1.70E-09	1.41E-09	3.10E-09
2433	647979.69	4198455.13	1.19E-08	1.27E-08	2.45E-08	1.79E-09	1.90E-09	3.68E-09	1.75E-09	1.69E-09	3.44E-09	9.28E-10	7.67E-10	1.70E-09
2434	647978.6	4198430.27	1.18E-08	1.25E-08	2.43E-08	1.77E-09	1.88E-09	3.65E-09	1.73E-09	1.67E-09	3.40E-09	9.18E-10	7.59E-10	1.68E-09
2435	647977.52	4198405.41	1.16E-08	1.24E-08	2.40E-08	1.75E-09	1.86E-09	3.60E-09	1.71E-09	1.66E-09	3.36E-09	9.07E-10	7.51E-10	1.66E-09
2436	647976.44	4198380.55	1.15E-08	1.22E-08	2.37E-08	1.72E-09	1.83E-09	3.56E-09	1.69E-09	1.63E-09	3.32E-09	8.96E-10	7.41E-10	1.64E-09
2437	647975.36	4198355.68	1.13E-08	1.21E-08	2.34E-08	1.70E-09	1.81E-09	3.51E-09	1.66E-09	1.61E-09	3.28E-09	8.84E-10	7.31E-10	1.61E-09
2438	647974.27	4198330.82	1.11E-08	1.19E-08	2.30E-08	1.67E-09	1.78E-09	3.46E-09	1.64E-09	1.59E-09	3.22E-09	8.70E-10	7.20E-10	1.59E-09
2439	647973.19	4198305.96	1.10E-08	1.17E-08	2.26E-08	1.65E-09	1.75E-09	3.40E-09	1.61E-09	1.56E-09	3.17E-09	8.56E-10	7.08E-10	1.56E-09
2440	647972.11	4198281.09	1.08E-08	1.15E-08	2.22E-08	1.62E-09	1.72E-09	3.34E-09	1.58E-09	1.53E-09	3.11E-09	8.40E-10	6.95E-10	1.54E-09
2441	647971.03	4198256.23	1.05E-08	1.12E-08	2.18E-08	1.59E-09	1.69E-09	3.27E-09	1.55E-09	1.50E-09	3.05E-09	8.23E-10	6.81E-10	1.50E-09
2442	647969.94	4198231.37	1.03E-08	1.1E-08	2.13E-08	1.55E-09	1.65E-09	3.20E-09	1.52E-09	1.47E-09	2.99E-09	8.06E-10	6.67E-10	1.47E-09
2443	647968.86	4198206.51	1.01E-08	1.08E-08	2.08E-08	1.52E-09	1.61E-09	3.13E-09	1.48E-09	1.44E-09	2.92E-09	7.88E-10	6.52E-10	1.44E-09
2444	647967.78	4198181.64	9.84E-09	1.05E-08	2.03E-08	1.48E-09	1.57E-09	3.05E-09	1.45E-09	1.40E-09	2.85E-09	7.69E-10	6.36E-10	1.40E-09
2445	647966.69	4198156.78	9.59E-09	1.02E-08	1.98E-08	1.44E-09	1.53E-09	2.98E-09	1.41E-09	1.37E-09	2.78E-09	7.49E-10	6.20E-10	1.37E-09
2446	647965.61	4198131.92	9.35E-09	9.96E-09	1.93E-08	1.41E-09	1.49E-09	2.90E-09	1.37E-09	1.33E-09	2.71E-09	7.30E-10	6.04E-10	1.33E-09
2447	647964.53	4198107.06	9.10E-09	9.7E-09	1.88E-08	1.37E-09	1.45E-09	2.82E-09	1.34E-09	1.30E-09	2.63E-09	7.11E-10	5.88E-10	1.30E-09
2448	647963.45	4198082.19	8.86E-09	9.45E-09	1.83E-08	1.33E-09	1.42E-09	2.75E-09	1.30E-09	1.26E-09	2.57E-09	6.92E-10	5.73E-10	1.26E-09
2449	647962.36	4198057.33	8.63E-09	9.2E-09	1.78E-08	1.30E-09	1.38E-09	2.68E-09	1.27E-09	1.23E-09	2.50E-09	6.74E-10	5.58E-10	1.23E-09
2450	647961.28	4198032.47	8.42E-09	8.97E-09	1.74E-08	1.27E-09	1.35E-09	2.61E-09	1.24E-09	1.20E-09	2.44E-09	6.57E-10	5.44E-10	1.20E-09
2451	647960.2	4198007.6	8.21E-09	8.76E-09	1.70E-08	1.24E-09	1.31E-09	2.55E-09	1.21E-09	1.17E-09	2.38E-09	6.42E-10	5.31E-10	1.17E-09
2452	647959.12	4197982.74	8.03E-09	8.56E-09	1.66E-08	1.21E-09	1.28E-09	2.49E-09	1.18E-09	1.14E-09	2.33E-09	6.27E-10	5.19E-10	1.15E-09
2453	647958.03	4197957.88	7.87E-09	8.39E-09	1.63E-08	1.18E-09	1.26E-09	2.44E-09	1.16E-09	1.12E-09	2.28E-09	6.15E-10	5.08E-10	1.12E-09
2454	647956.95	4197933.02	7.72E-09	8.23E-09	1.60E-08	1.16E-09	1.23E-09	2.40E-09	1.14E-09	1.10E-09	2.24E-09	6.03E-10	4.99E-10	1.10E-09
2455	647955.87	4197908.15	7.60E-09	8.1E-09	1.57E-08	1.14E-09	1.21E-09	2.36E-09	1.12E-09	1.08E-09	2.20E-09	5.93E-10	4.91E-10	1.08E-09
2456	647954.78	4197883.29	7.48E-09	7.98E-09	1.55E-08	1.13E-09	1.20E-09	2.32E-09	1.10E-09	1.07E-09	2.17E-09	5.85E-10	4.84E-10	1.07E-09
2457	647953.7	4197858.43	7.39E-09	7.88E-09	1.53E-08	1.11E-09	1.18E-09	2.29E-09	1.09E-09	1.05E-09	2.14E-09	5.77E-10	4.77E-10	1.05E-09
2458	647952.62	4197833.56	7.30E-09	7.78E-09	1.51E-08	1.10E-09	1.17E-09	2.26E-09	1.07E-09	1.04E-09	2.11E-09	5.70E-10	4.72E-10	1.04E-09
2459	647951.54	4197808.7	7.22E-09	7.69E-09	1.49E-08	1.09E-09	1.15E-09	2.24E-09	1.06E-09	1.03E-09	2.09E-09	5.64E-10	4.66E-10	1.03E-09
2460	647950.45	4197783.84	7.14E-09	7.61E-09	1.47E-08	1.07E-09	1.14E-09	2.21E-09	1.05E-09	1.02E-09	2.07E-09	5.58E-10	4.61E-10	1.02E-09
2461	647949.37	4197758.98	7.06E-09	7.52E-09	1.46E-08	1.06E-09	1.13E-09	2.19E-09	1.04E-09	1.01E-09	2.04E-09	5.51E-10	4.56E-10	1.01E-09
2462	647948.29	4197734.11	6.97E-09	7.43E-09	1.44E-08	1.05E-09	1.11E-09	2.16E-09	1.03E-09	9.94E-10	2.02E-09	5.45E-10	4.51E-10	9.95E-10
2463	647947.2	4197709.25	6.88E-09	7.34E-09	1.42E-08	1.03E-09	1.10E-09	2.13E-09	1.01E-09	9.81E-10	1.99E-09	5.37E-10	4.45E-10	9.82E-10
2464	647946.12	4197684.39	6.78E-09	7.23E-09	1.40E-08	1.02E-09	1.08E-09	2.10E-09	9.97E-10	9.67E-10	1.96E-09	5.30E-10	4.38E-10	9.68E-10
2465	647945.04	4197659.52	6.68E-09	7.12E-09	1.38E-08	1.00E-09	1.07E-09	2.07E-09	9.82E-10	9.52E-10	1.93E-09	5.22E-10	4.32E-10	9.53E-10
2466	647943.96	4197634.66	6.57E-09	7E-09	1.36E-08	9.88E-10	1.05E-09	2.04E-09	9.66E-10	9.36E-10	1.90E-09	5.13E-10	4.25E-10	9.38E-10
2467	647942.87	4197609.8	6.46E-09	6.89E-09	1.33E-08	9.71E-10	1.03E-09	2.00E-09	9.50E-10	9.20E-10	1.87E-09	5.05E-10	4.17E-10	9.22E-10
2468	647941.79	4197584.94	6.35E-09	6.76E-09	1.31E-08	9.54E-10	1.01E-09	1.97E-09	9.33E-10	9.04E-10	1.84E-09	4.96E-10	4.10E-10	9.06E-10
2469	647980.77	4198480	1.20E-08	1.28E-08	2.48E-08	1.80E-09	1.92E-09	3.72E-09	1.76E-09	1.71E-09	3.47E-09	9.37E-10	7.75E-10	1.71E-09
2470	647992.19	4198502.19	1.23E-08	1.31E-08	2.54E-08	1.85E-09	1.96E-09	3.81E-09	1.81E-09	1.75E-09	3.55E-09	9.59E-10	7.93E-10	1.75E-09
2471	648003.62	4198524.38	1.26E-08	1.34E-08	2.60E-08	1.89E-09	2.01E-09	3.90E-09	1.85E-09	1.79E-09	3.64E-09	9.81E-10	8.12E-10	1.79E-09
2472	648015.04	4198546.58	1.29E-08	1.37E-08	2.66E-08	1.93E-09	2.06E-09	3.99E-09	1.89E-09	1.83E-09	3.72E-09	1.00E-09	8.31E-10	1.84E-09
2473	648026.47	4198568.77	1.32E-08	1.4E-08	2.72E-08	1.98E-09	2.10E-09	4.08E-09	1.93E-09	1.88E-09	3.81E-09	1.03E-09	8.50E-10	1.88E-09
2474	648037.89	4198590.97	1.35E-08	1.44E-08	2.78E-08	2.02E-09	2.15E-09	4.18E-09	1.98E-09	1.92E-09	3.90E-09	1.05E-09	8.70E-10	1.92E-09
2475	648049.31	4198613.16	1.38E-08	1.47E-08	2.85E-08	2.07E-09	2.20E-09	4.27E-09	2.03E-09	1.96E-09	3.99E-09	1.08E-09	8.90E-10	1.97E-09
2476	648060.74	4198635.35	1.41E-08	1.5E-08	2.91E-08	2.12E-09	2.25E-09	4.37E-09	2.07E-09	2.01E-09	4.08E-09	1.10E-09	9.11E-10	2.01E-09
2477	648072.16	4198657.55	1.44E-08	1.54E-08	2.98E-08	2.17E-09	2.31E-09	4.47E-09	2.12E-09	2.06E-09	4.18E-09	1.13E-09	9.32E-10	2.06E-09
2478	648083.58	4198679.74	1.48E-08	1.57E-08	3.05E-08	2.22E-09	2.36E-09	4.58E-09	2.17E-09	2.10E-09	4.27E-09	1.15E-09	9.53E-10	2.11E-09
2479	648095.01	4198701.94	1.51E-08	1.61E-08	3.12E-08	2.27E-09	2.41E-09	4.68E-09	2.22E-09	2.15E-09	4.37E-09	1.18E-09	9.75E-10	2.15E-09
2480	648106.43	4198724.13	1.54E-08	1.64E-08	3.19E-08	2.32E-09	2.46E-09	4.78E-09	2.27E-09	2.20E-09	4.46E-09	1.20E-09	9.96E-10	2.20E-09
2481	648117.86	4198746.32	1.58E-08	1.68E-08	3.25E-08	2.37E-09	2.52E-09	4.89E-09	2.32E-09	2.24E-09	4.56E-09	1.23E-09	1.02E-09	2.25E-09
2482	648129.28	4198768.52	1.61E-08	1.71E-08	3.32E-08	2.42E-09	2.57E-09	4.99E-09	2.36E-09	2.29E-09	4.65E-09	1.26E-09	1.04E-09	2.29E-09
2483	647801.87	4198546.82	9.64E-09	1.03E-08	1.99E-08	1.45E-09	1.54E-09	2.99E-09	1.42E-09	1.37E-09	2.79E-09	7.53E-10	6.23E-10	1.38E-09
2484	647800.79	4198522.11	9.57E-09	1.02E-08	1.98E-08	1.44E-09	1.53E-09	2.97E-09	1.41E-09	1.36E-09	2.77E-09	7.47E-10	6.18E-10	1.37E-09
2485	647799.72	4198497.4	9.49E-09	1.01E-08	1.96E-08	1.43E-09	1.52E-09	2.94E-09	1.40E-09	1.35E-09	2.75E-09	7.41E-10	6.13E-10	1.35E-09
2486	647798.64	4198472.69	9.41E-09	1E-08	1.94E-08	1.41E-09	1.50E-09	2.92E-09	1.38E-09	1.34E-09	2.72E-09	7.35E-10	6.08E-10	1.34E-09
2487	647797.56	4198447.99	9.32E-09	9.94E-09	1.93E-08	1.40E-09	1.49E-09	2.89E-09	1.37E-09	1.33E-09	2.70E-09	7.28E-10	6.02E-10	1.33E-09
2488	647796.49	4198423.28	9.22E-09	9.83E-09	1.91E-08	1.39E-09	1.47E-09	2.86E-09	1.36E-09	1.31E-09	2.67E-09	7.20E-10	5.96E-10	1.32E-09
2489	647795.41	4198398.57	9.12E-09	9.72E-09	1.88E-08	1.37E-09	1.46E-09	2.83E-09	1.34E-09	1.30E-09	2.64E-09	7.12E-10	5.89E-10	1.30E-09
2490	647794.34	4198373.86	9.01E-09	9.6E-09	1.86E-08	1.35E-09	1.44E-09	2.80E-09	1.32E-09	1.28E-09	2.61E-09	7.04E-10	5.82E-10	1.29E-09
2491	647793.26	4198349.15	8.89E-09	9.48E-09	1.84E-08	1.34E-09	1.42E-09	2.76E-09	1.31E-09	1.27E-09	2.57E-09	6.94E-10	5.74E-10	1.27E-09
2492	647792.18	4198324.44	8.76E-09	9.34E-09	1.81E-08	1.32E-09	1.40E-09	2.72E-09	1.29E-09	1.25E-09	2.54E-09	6.84E-10	5.66E-10	1.25E-09
2493	647791.11	4198299.73	8.62E-09	9.19E-09	1.78E-08	1.30E-09	1.38E-09	2.67E-09	1.27E-09	1.23E-09	2.50E-09	6.73E-10	5.57E-10	1.23E-09
2494	647790.03	4198275.02	8.47E-09	9.03E-09	1.75E-08	1.27E-09	1.35E-09	2.63E-09	1.25E-09	1.21E-09	2.45E-09	6.62E-10	5.48E-10	1.21E-09
2495	647788.96	4198250.32	8.32E-09	8.87E-09	1.72E-08	1.25E-09	1.33E-09	2.58E-09	1.22E-09	1.19E-09	2.41E-09	6.50E-10	5.38E-10	1.19E-09
2496	647787.88	4198225.61	8.15E-09	8.69E-09	1.68E-08	1.23E-09	1.30E-09	2.53E-09	1.20E-09	1.16E-09	2.36E-09	6.37E-10	5.27E-10	1.16E-09
2497	647786.8	4198200.9	7.98E-09	8.51E-09	1.65E-08	1.20E-09	1.28E-09	2.48E-09	1.17E-09	1.14E-09	2.31E-09	6.24E-10	5.16E-10	1.14E-09
2498	647785.73	4198176.19	7.81E-09	8.33E-09	1.61E-08	1.17E-09	1.25E-09	2.42E-09	1.15E-09	1.11E-09	2.26E-09	6.10E-10	5.05E-10	1.12E-09
2499	647784.65	4198151.48	7.63E-09	8.14E-09	1.58E-08	1.15E-09	1.22E-09	2.37E-09	1.12E-09	1.09E-09	2.21E-09	5.96E-10	4.93E-10	1.09E-09
2500	647783.58	4198126.77	7.45E-09	7.95E-09	1.54E-08	1.12E-09	1.19E-09	2.31E-09	1.10E-09	1.06E-09	2.16E-09	5.82E-10	4.82E-10	1.06E-09
2501	647782.5	4198102.06	7.28E-09	7.76E-09	1.50E-08	1.09E-09	1.16E-09	2.26E-09	1.07E-09	1.04E-09	2.11E-09	5.68E-10	4.70E-10	1.04E-09
2502	647781.42	4198077.36	7.10E-09	7.57E-09	1.47E-08	1.07E-09	1.14E-09	2.20E-09	1.04E-09	1.01E-09	2.06E-09	5.55E-10	4.59E-10	1.01E-09
2503	647780.35	4198052.65	6.94E-09	7.39E-09	1.43E-08	1.04E-09	1.11E-09	2.15E-09	1.02E-09	9.88E-10	2.01E-09	5.42E-10	4.48E-10	9.90E-10
2504	647779.27	4198027.94	6.78E-09	7.23E-09	1.40E-08	1.02E-09	1.08E-09	2.10E-09	9.97E-10	9.66E-10	1.96E-09	5.29E-10	4.38E-10	9.68E-10

2505	647778.2	4198003.23	6.63E-09	7.07E-09	1.37E-08	9.97E-10	1.06E-09	2.06E-09	9.75E-10	9.45E-10	1.92E-09	5.18E-10	4.29E-10	9.47E-10
2506	647777.12	4197978.52	6.50E-09	6.93E-09	1.34E-08	9.77E-10	1.04E-09	2.02E-09	9.56E-10	9.26E-10	1.88E-09	5.08E-10	4.20E-10	9.28E-10
2507	647776.04	4197953.81	6.38E-09	6.8E-09	1.32E-08	9.59E-10	1.02E-09	1.98E-09	9.38E-10	9.09E-10	1.85E-09	4.98E-10	4.12E-10	9.11E-10
2508	647774.97	4197929.1	6.28E-09	6.69E-09	1.30E-08	9.44E-10	1.00E-09	1.95E-09	9.23E-10	8.95E-10	1.82E-09	4.90E-10	4.06E-10	8.96E-10
2509	647773.89	4197904.39	6.19E-09	6.6E-09	1.28E-08	9.30E-10	9.89E-10	1.92E-09	9.10E-10	8.82E-10	1.79E-09	4.83E-10	4.00E-10	8.83E-10
2510	647772.82	4197879.69	6.11E-09	6.51E-09	1.26E-08	9.19E-10	9.77E-10	1.90E-09	8.98E-10	8.71E-10	1.77E-09	4.77E-10	3.95E-10	8.72E-10
2511	647771.74	4197854.98	6.04E-09	6.44E-09	1.25E-08	9.09E-10	9.66E-10	1.87E-09	8.89E-10	8.61E-10	1.75E-09	4.72E-10	3.91E-10	8.63E-10
2512	647770.66	4197830.27	5.99E-09	6.38E-09	1.24E-08	9.00E-10	9.57E-10	1.86E-09	8.80E-10	8.53E-10	1.73E-09	4.68E-10	3.87E-10	8.55E-10
2513	647769.59	4197805.56	5.94E-09	6.33E-09	1.23E-08	8.93E-10	9.49E-10	1.84E-09	8.73E-10	8.46E-10	1.72E-09	4.64E-10	3.84E-10	8.48E-10
2514	647768.51	4197780.85	5.89E-09	6.28E-09	1.22E-08	8.86E-10	9.42E-10	1.83E-09	8.66E-10	8.40E-10	1.71E-09	4.60E-10	3.81E-10	8.41E-10
2515	647767.44	4197756.14	5.84E-09	6.23E-09	1.21E-08	8.79E-10	9.34E-10	1.81E-09	8.59E-10	8.33E-10	1.69E-09	4.57E-10	3.78E-10	8.34E-10
2516	647766.36	4197731.43	5.80E-09	6.18E-09	1.20E-08	8.72E-10	9.27E-10	1.80E-09	8.52E-10	8.26E-10	1.68E-09	4.53E-10	3.75E-10	8.28E-10
2517	647765.28	4197706.73	5.75E-09	6.13E-09	1.19E-08	8.64E-10	9.19E-10	1.78E-09	8.45E-10	8.19E-10	1.66E-09	4.49E-10	3.71E-10	8.20E-10
2518	647764.21	4197682.02	5.69E-09	6.06E-09	1.18E-08	8.55E-10	9.09E-10	1.76E-09	8.36E-10	8.11E-10	1.65E-09	4.44E-10	3.68E-10	8.12E-10
2519	647763.13	4197657.31	5.62E-09	6E-09	1.16E-08	8.46E-10	8.99E-10	1.74E-09	8.27E-10	8.02E-10	1.63E-09	4.39E-10	3.63E-10	8.03E-10
2520	647762.06	4197632.6	5.55E-09	5.92E-09	1.15E-08	8.35E-10	8.88E-10	1.72E-09	8.17E-10	7.92E-10	1.61E-09	4.34E-10	3.59E-10	7.93E-10
2521	647760.98	4197607.89	5.48E-09	5.84E-09	1.13E-08	8.24E-10	8.76E-10	1.70E-09	8.05E-10	7.81E-10	1.59E-09	4.28E-10	3.54E-10	7.82E-10
2522	647759.9	4197583.18	5.40E-09	5.75E-09	1.11E-08	8.11E-10	8.63E-10	1.67E-09	7.93E-10	7.69E-10	1.56E-09	4.22E-10	3.49E-10	7.70E-10
2523	647758.83	4197558.47	5.31E-09	5.66E-09	1.10E-08	7.98E-10	8.49E-10	1.65E-09	7.81E-10	7.57E-10	1.54E-09	4.15E-10	3.43E-10	7.58E-10
2524	647757.75	4197533.76	5.22E-09	5.57E-09	1.08E-08	7.85E-10	8.35E-10	1.62E-09	7.68E-10	7.44E-10	1.51E-09	4.08E-10	3.37E-10	7.45E-10
2525	647756.68	4197509.06	5.13E-09	5.47E-09	1.06E-08	7.72E-10	8.21E-10	1.59E-09	7.55E-10	7.31E-10	1.49E-09	4.01E-10	3.32E-10	7.33E-10
2526	647802.94	4198571.53	9.70E-09	1.03E-08	2.00E-08	1.46E-09	1.55E-09	3.01E-09	1.43E-09	1.38E-09	2.81E-09	7.58E-10	6.27E-10	1.39E-09
2527	647814.37	4198593.72	9.89E-09	1.05E-08	2.04E-08	1.49E-09	1.58E-09	3.07E-09	1.45E-09	1.41E-09	2.86E-09	7.73E-10	6.39E-10	1.41E-09
2528	647825.79	4198615.92	1.01E-08	1.07E-08	2.08E-08	1.52E-09	1.61E-09	3.13E-09	1.48E-09	1.44E-09	2.92E-09	7.87E-10	6.51E-10	1.44E-09
2529	647837.22	4198638.11	1.03E-08	1.1E-08	2.12E-08	1.54E-09	1.64E-09	3.19E-09	1.51E-09	1.46E-09	2.97E-09	8.02E-10	6.64E-10	1.47E-09
2530	647848.64	4198660.3	1.05E-08	1.12E-08	2.16E-08	1.57E-09	1.67E-09	3.25E-09	1.54E-09	1.49E-09	3.03E-09	8.18E-10	6.76E-10	1.49E-09
2531	647860.06	4198682.5	1.07E-08	1.14E-08	2.21E-08	1.60E-09	1.71E-09	3.31E-09	1.57E-09	1.52E-09	3.09E-09	8.34E-10	6.90E-10	1.52E-09
2532	647871.49	4198704.69	1.09E-08	1.16E-08	2.25E-08	1.64E-09	1.74E-09	3.38E-09	1.60E-09	1.55E-09	3.15E-09	8.50E-10	7.03E-10	1.55E-09
2533	647882.91	4198726.89	1.11E-08	1.18E-08	2.29E-08	1.67E-09	1.77E-09	3.44E-09	1.63E-09	1.58E-09	3.21E-09	8.67E-10	7.17E-10	1.58E-09
2534	647894.34	4198749.08	1.13E-08	1.21E-08	2.34E-08	1.70E-09	1.81E-09	3.51E-09	1.66E-09	1.61E-09	3.28E-09	8.84E-10	7.31E-10	1.62E-09
2535	647905.76	4198771.27	1.15E-08	1.23E-08	2.39E-08	1.74E-09	1.85E-09	3.58E-09	1.70E-09	1.65E-09	3.34E-09	9.02E-10	7.46E-10	1.65E-09
2536	647917.18	4198793.47	1.18E-08	1.26E-08	2.43E-08	1.77E-09	1.88E-09	3.65E-09	1.73E-09	1.68E-09	3.41E-09	9.20E-10	7.61E-10	1.68E-09
2537	647928.61	4198815.66	1.20E-08	1.28E-08	2.48E-08	1.81E-09	1.92E-09	3.73E-09	1.77E-09	1.71E-09	3.48E-09	9.38E-10	7.76E-10	1.71E-09
2538	647940.03	4198837.85	1.22E-08	1.31E-08	2.53E-08	1.84E-09	1.96E-09	3.80E-09	1.80E-09	1.75E-09	3.55E-09	9.57E-10	7.92E-10	1.75E-09
2539	647951.45	4198860.05	1.25E-08	1.33E-08	2.58E-08	1.88E-09	2.00E-09	3.87E-09	1.84E-09	1.78E-09	3.61E-09	9.75E-10	8.07E-10	1.78E-09
2540	647624.05	4198638.46	8.02E-09	8.55E-09	1.66E-08	1.21E-09	1.28E-09	2.49E-09	1.18E-09	1.14E-09	2.32E-09	6.26E-10	5.18E-10	1.14E-09
2541	647622.98	4198613.87	7.98E-09	8.5E-09	1.65E-08	1.20E-09	1.28E-09	2.47E-09	1.17E-09	1.14E-09	2.31E-09	6.23E-10	5.15E-10	1.14E-09
2542	647621.91	4198589.27	7.93E-09	8.46E-09	1.64E-08	1.19E-09	1.27E-09	2.46E-09	1.17E-09	1.13E-09	2.30E-09	6.20E-10	5.13E-10	1.13E-09
2543	647620.83	4198564.67	7.88E-09	8.4E-09	1.63E-08	1.19E-09	1.26E-09	2.45E-09	1.16E-09	1.12E-09	2.28E-09	6.16E-10	5.09E-10	1.13E-09
2544	647619.76	4198540.08	7.83E-09	8.35E-09	1.62E-08	1.18E-09	1.25E-09	2.43E-09	1.15E-09	1.12E-09	2.27E-09	6.12E-10	5.06E-10	1.12E-09
2545	647618.69	4198515.48	7.77E-09	8.29E-09	1.61E-08	1.17E-09	1.24E-09	2.41E-09	1.14E-09	1.11E-09	2.25E-09	6.07E-10	5.02E-10	1.11E-09
2546	647617.62	4198490.88	7.71E-09	8.22E-09	1.59E-08	1.16E-09	1.23E-09	2.39E-09	1.13E-09	1.10E-09	2.23E-09	6.02E-10	4.98E-10	1.10E-09
2547	647616.55	4198466.29	7.65E-09	8.15E-09	1.58E-08	1.15E-09	1.22E-09	2.37E-09	1.12E-09	1.09E-09	2.21E-09	5.97E-10	4.94E-10	1.09E-09
2548	647615.48	4198441.69	7.57E-09	8.07E-09	1.56E-08	1.14E-09	1.21E-09	2.35E-09	1.11E-09	1.08E-09	2.19E-09	5.92E-10	4.89E-10	1.08E-09
2549	647614.41	4198417.09	7.49E-09	7.99E-09	1.55E-08	1.13E-09	1.20E-09	2.32E-09	1.10E-09	1.07E-09	2.17E-09	5.85E-10	4.84E-10	1.07E-09
2550	647613.34	4198392.5	7.41E-09	7.9E-09	1.53E-08	1.11E-09	1.19E-09	2.30E-09	1.09E-09	1.06E-09	2.15E-09	5.79E-10	4.79E-10	1.06E-09
2551	647612.27	4198367.9	7.33E-09	7.81E-09	1.51E-08	1.10E-09	1.17E-09	2.27E-09	1.08E-09	1.04E-09	2.12E-09	5.72E-10	4.73E-10	1.05E-09
2552	647611.19	4198343.3	7.24E-09	7.71E-09	1.49E-08	1.09E-09	1.16E-09	2.24E-09	1.06E-09	1.03E-09	2.09E-09	5.65E-10	4.68E-10	1.03E-09
2553	647610.12	4198318.7	7.14E-09	7.61E-09	1.47E-08	1.07E-09	1.14E-09	2.21E-09	1.05E-09	1.02E-09	2.07E-09	5.58E-10	4.61E-10	1.02E-09
2554	647609.05	4198294.11	7.03E-09	7.5E-09	1.45E-08	1.06E-09	1.12E-09	2.18E-09	1.03E-09	1.00E-09	2.04E-09	5.49E-10	4.54E-10	1.00E-09
2555	647607.98	4198269.51	6.92E-09	7.38E-09	1.43E-08	1.04E-09	1.11E-09	2.15E-09	1.02E-09	9.86E-10	2.00E-09	5.41E-10	4.47E-10	9.88E-10
2556	647606.91	4198244.91	6.80E-09	7.25E-09	1.41E-08	1.02E-09	1.09E-09	2.11E-09	1.00E-09	9.70E-10	1.97E-09	5.32E-10	4.40E-10	9.71E-10
2557	647605.84	4198220.32	6.68E-09	7.12E-09	1.38E-08	1.00E-09	1.07E-09	2.07E-09	9.82E-10	9.52E-10	1.93E-09	5.22E-10	4.32E-10	9.53E-10
2558	647604.77	4198195.72	6.55E-09	6.99E-09	1.35E-08	9.85E-10	1.05E-09	2.03E-09	9.63E-10	9.34E-10	1.90E-09	5.12E-10	4.23E-10	9.35E-10
2559	647603.7	4198171.12	6.42E-09	6.85E-09	1.33E-08	9.66E-10	1.03E-09	1.99E-09	9.44E-10	9.15E-10	1.86E-09	5.02E-10	4.15E-10	9.17E-10
2560	647602.62	4198146.53	6.28E-09	6.7E-09	1.30E-08	9.45E-10	1.00E-09	1.95E-09	9.24E-10	8.95E-10	1.82E-09	4.91E-10	4.06E-10	8.97E-10
2561	647601.55	4198121.93	6.14E-09	6.55E-09	1.27E-08	9.24E-10	9.82E-10	1.91E-09	9.03E-10	8.75E-10	1.78E-09	4.80E-10	3.97E-10	8.77E-10
2562	647600.48	4198097.33	6.01E-09	6.41E-09	1.24E-08	9.03E-10	9.61E-10	1.86E-09	8.83E-10	8.56E-10	1.74E-09	4.69E-10	3.88E-10	8.58E-10
2563	647599.41	4198072.74	5.88E-09	6.26E-09	1.21E-08	8.84E-10	9.39E-10	1.82E-09	8.64E-10	8.37E-10	1.70E-09	4.59E-10	3.80E-10	8.39E-10
2564	647598.34	4198048.14	5.75E-09	6.13E-09	1.19E-08	8.65E-10	9.19E-10	1.78E-09	8.46E-10	8.20E-10	1.67E-09	4.49E-10	3.72E-10	8.21E-10
2565	647597.27	4198023.54	5.63E-09	6E-09	1.16E-08	8.47E-10	9.00E-10	1.75E-09	8.28E-10	8.02E-10	1.63E-09	4.40E-10	3.64E-10	8.04E-10
2566	647596.2	4197998.95	5.52E-09	5.88E-09	1.14E-08	8.30E-10	8.82E-10	1.71E-09	8.12E-10	7.87E-10	1.60E-09	4.31E-10	3.57E-10	7.88E-10
2567	647595.13	4197974.35	5.42E-09	5.78E-09	1.12E-08	8.15E-10	8.67E-10	1.68E-09	7.97E-10	7.73E-10	1.57E-09	4.24E-10	3.50E-10	7.74E-10
2568	647594.06	4197949.75	5.33E-09	5.68E-09	1.10E-08	8.01E-10	8.52E-10	1.65E-09	7.84E-10	7.59E-10	1.54E-09	4.16E-10	3.44E-10	7.61E-10
2569	647592.98	4197925.15	5.25E-09	5.6E-09	1.08E-08	7.89E-10	8.39E-10	1.63E-09	7.72E-10	7.48E-10	1.52E-09	4.10E-10	3.39E-10	7.49E-10
2570	647591.91	4197900.56	5.18E-09	5.52E-09	1.07E-08	7.79E-10	8.28E-10	1.61E-09	7.62E-10	7.38E-10	1.50E-09	4.05E-10	3.35E-10	7.39E-10
2571	647590.84	4197875.96	5.12E-09	5.46E-09	1.06E-08	7.70E-10	8.19E-10	1.59E-09	7.53E-10	7.30E-10	1.48E-09	4.00E-10	3.31E-10	7.31E-10
2572	647589.77	4197851.36	5.07E-09	5.41E-09	1.05E-08	7.63E-10	8.11E-10	1.57E-09	7.46E-10	7.23E-10	1.47E-09	3.96E-10	3.28E-10	7.24E-10
2573	647588.7	4197826.77	5.03E-09	5.37E-09	1.04E-08	7.57E-10	8.05E-10	1.56E-09	7.40E-10	7.17E-10	1.46E-09	3.93E-10	3.25E-10	7.18E-10
2574	647587.63	4197802.17	5.00E-09	5.33E-09	1.03E-08	7.52E-10	7.99E-10	1.55E-09	7.35E-10	7.13E-10	1.45E-09	3.91E-10	3.23E-10	7.14E-10
2575	647586.56	4197777.57	4.97E-09	5.3E-09	1.03E-08	7.48E-10	7.95E-10	1.54E-09	7.31E-10	7.09E-10	1.44E-09	3.88E-10	3.21E-10	7.10E-10
2576	647585.49	4197752.98	4.95E-09	5.27E-09	1.02E-08	7.44E-10	7.91E-10	1.53E-09	7.27E-10	7.05E-10	1.43E-09	3.86E-10	3.20E-10	7.06E-10
2577	647584.41	4197728.38	4.92E-09	5.24E-09	1.02E-08	7.40E-10	7.86E-10	1.53E-09	7.23E-10	7.01E-10	1.42E-09	3.84E-10	3.18E-10	7.02E-10
2578	647583.34	4197703.78	4.89E-09	5.22E-09	1.01E-08	7.36E-10	7.82E-10	1.52E-09	7.19E-10	6.97E-10	1.42E-09	3.82E-10	3.16E-10	6.98E-10
2579	647582.27	4197679.19	4.86E-09	5.18E-09	1.00E-08	7.31E-10	7.77E-10	1.51E-09	7.15E-10	6.93E-10	1.41E-09	3.80E-10	3.14E-10	6.94E-10
2580	647581.2	4197654.59	4.83E-09	5.14E-09	9.97E-09	7.26E-10	7.71E-10	1.50E-09	7.09E-10	6.88E-10	1.40E-09	3.77E-10	3.12E-10	6.89E-10

2581	647580.13	4197629.99	4.78E-09	5.1E-09	9.88E-09	7.19E-10	7.64E-10	1.48E-09	7.03E-10	6.81E-10	1.38E-09	3.74E-10	3.09E-10	6.82E-10
2582	647579.06	4197605.4	4.73E-09	5.05E-09	9.78E-09	7.12E-10	7.57E-10	1.47E-09	6.96E-10	6.75E-10	1.37E-09	3.70E-10	3.06E-10	6.76E-10
2583	647577.99	4197580.8	4.68E-09	4.99E-09	9.67E-09	7.04E-10	7.48E-10	1.45E-09	6.88E-10	6.67E-10	1.36E-09	3.66E-10	3.03E-10	6.68E-10
2584	647576.92	4197556.2	4.62E-09	4.93E-09	9.55E-09	6.95E-10	7.39E-10	1.43E-09	6.79E-10	6.58E-10	1.34E-09	3.61E-10	2.99E-10	6.60E-10
2585	647575.85	4197531.61	4.56E-09	4.86E-09	9.41E-09	6.85E-10	7.28E-10	1.41E-09	6.70E-10	6.49E-10	1.32E-09	3.56E-10	2.94E-10	6.50E-10
2586	647574.77	4197507.01	4.49E-09	4.79E-09	9.27E-09	6.75E-10	7.18E-10	1.39E-09	6.60E-10	6.40E-10	1.30E-09	3.51E-10	2.90E-10	6.41E-10
2587	647573.7	4197482.41	4.42E-09	4.71E-09	9.13E-09	6.64E-10	7.06E-10	1.37E-09	6.50E-10	6.30E-10	1.28E-09	3.45E-10	2.86E-10	6.31E-10
2588	647572.63	4197457.81	4.35E-09	4.63E-09	8.98E-09	6.53E-10	6.95E-10	1.35E-09	6.39E-10	6.19E-10	1.26E-09	3.39E-10	2.81E-10	6.20E-10
2589	647571.56	4197433.22	4.27E-09	4.56E-09	8.83E-09	6.43E-10	6.83E-10	1.33E-09	6.29E-10	6.09E-10	1.24E-09	3.34E-10	2.76E-10	6.10E-10
2590	647625.12	4198663.06	8.06E-09	8.6E-09	1.67E-08	1.21E-09	1.29E-09	2.50E-09	1.19E-09	1.15E-09	2.33E-09	6.30E-10	5.21E-10	1.15E-09
2591	647636.54	4198685.25	8.19E-09	8.73E-09	1.69E-08	1.23E-09	1.31E-09	2.54E-09	1.20E-09	1.17E-09	2.37E-09	6.40E-10	5.29E-10	1.17E-09
2592	647647.97	4198707.45	8.32E-09	8.87E-09	1.72E-08	1.25E-09	1.33E-09	2.58E-09	1.22E-09	1.19E-09	2.41E-09	6.50E-10	5.38E-10	1.19E-09
2593	647659.39	4198729.64	8.46E-09	9.01E-09	1.75E-08	1.27E-09	1.35E-09	2.62E-09	1.24E-09	1.21E-09	2.45E-09	6.61E-10	5.46E-10	1.21E-09
2594	647670.81	4198751.84	8.59E-09	9.16E-09	1.78E-08	1.29E-09	1.37E-09	2.67E-09	1.26E-09	1.22E-09	2.49E-09	6.71E-10	5.55E-10	1.23E-09
2595	647682.24	4198774.03	8.74E-09	9.31E-09	1.81E-08	1.31E-09	1.40E-09	2.71E-09	1.28E-09	1.25E-09	2.53E-09	6.83E-10	5.65E-10	1.25E-09
2596	647693.66	4198796.22	8.88E-09	9.47E-09	1.84E-08	1.34E-09	1.42E-09	2.76E-09	1.31E-09	1.27E-09	2.57E-09	6.94E-10	5.74E-10	1.27E-09
2597	647705.09	4198818.42	9.04E-09	9.64E-09	1.87E-08	1.36E-09	1.44E-09	2.80E-09	1.33E-09	1.29E-09	2.62E-09	7.06E-10	5.84E-10	1.29E-09
2598	647716.51	4198840.61	9.20E-09	9.8E-09	1.90E-08	1.38E-09	1.47E-09	2.85E-09	1.35E-09	1.31E-09	2.66E-09	7.18E-10	5.94E-10	1.31E-09
2599	647727.93	4198862.81	9.36E-09	9.98E-09	1.93E-08	1.41E-09	1.50E-09	2.90E-09	1.38E-09	1.33E-09	2.71E-09	7.31E-10	6.05E-10	1.34E-09
2600	647739.36	4198885	9.53E-09	1.02E-08	1.97E-08	1.43E-09	1.52E-09	2.96E-09	1.40E-09	1.36E-09	2.76E-09	7.44E-10	6.16E-10	1.36E-09
2601	647750.78	4198907.19	9.70E-09	1.03E-08	2.00E-08	1.46E-09	1.55E-09	3.01E-09	1.43E-09	1.38E-09	2.81E-09	7.58E-10	6.27E-10	1.39E-09
2602	647762.21	4198929.39	9.88E-09	1.05E-08	2.04E-08	1.49E-09	1.58E-09	3.07E-09	1.45E-09	1.41E-09	2.86E-09	7.72E-10	6.39E-10	1.41E-09
2603	647773.63	4198951.58	1.01E-08	1.07E-08	2.08E-08	1.51E-09	1.61E-09	3.12E-09	1.48E-09	1.43E-09	2.91E-09	7.86E-10	6.50E-10	1.44E-09
2604	649091.08	4198311.15	3.22E-07	3.43E-07	6.64E-07	4.83E-08	5.14E-08	9.97E-08	4.73E-08	4.58E-08	9.31E-08	2.51E-08	2.08E-08	4.59E-08
2605	649089.76	4198337.15	2.55E-07	2.72E-07	5.27E-07	3.84E-08	4.08E-08	7.91E-08	3.75E-08	3.64E-08	7.39E-08	1.99E-08	1.65E-08	3.64E-08
2606	649069.07	4198328.11	2.62E-07	2.79E-07	5.41E-07	3.93E-08	4.18E-08	8.12E-08	3.85E-08	3.73E-08	7.58E-08	2.04E-08	1.69E-08	3.73E-08
2607	649088.45	4198363.16	2.10E-07	2.24E-07	4.34E-07	3.16E-08	3.36E-08	6.52E-08	3.09E-08	2.99E-08	6.08E-08	1.64E-08	1.36E-08	3.00E-08
2608	649067.76	4198354.11	2.17E-07	2.31E-07	4.48E-07	3.26E-08	3.47E-08	6.73E-08	3.19E-08	3.09E-08	6.28E-08	1.70E-08	1.40E-08	3.10E-08
2609	649046.84	4198344.4	2.20E-07	2.35E-07	4.55E-07	3.31E-08	3.52E-08	6.83E-08	3.24E-08	3.14E-08	6.37E-08	1.72E-08	1.42E-08	3.14E-08
2610	649079.28	4198412.31	1.54E-07	1.64E-07	3.18E-07	2.32E-08	2.46E-08	4.78E-08	2.27E-08	2.20E-08	4.46E-08	1.20E-08	9.96E-09	2.20E-08
2611	649058.4	4198403.18	1.60E-07	1.7E-07	3.30E-07	2.40E-08	2.55E-08	4.95E-08	2.35E-08	2.27E-08	4.62E-08	1.25E-08	1.03E-08	2.28E-08
2612	649037.53	4198394.06	1.63E-07	1.74E-07	3.37E-07	2.45E-08	2.61E-08	5.06E-08	2.40E-08	2.33E-08	4.72E-08	1.27E-08	1.05E-08	2.33E-08
2613	649016.98	4198384.5	1.65E-07	1.76E-07	3.40E-07	2.48E-08	2.63E-08	5.11E-08	2.42E-08	2.35E-08	4.77E-08	1.29E-08	1.06E-08	2.35E-08
2614	649002.25	4198367.12	1.72E-07	1.84E-07	3.56E-07	2.59E-08	2.75E-08	5.34E-08	2.53E-08	2.45E-08	4.99E-08	1.35E-08	1.11E-08	2.46E-08
2615	649070.12	4198461.46	1.19E-07	1.27E-07	2.46E-07	1.79E-08	1.90E-08	3.70E-08	1.75E-08	1.70E-08	3.45E-08	9.31E-09	7.70E-09	1.70E-08
2616	649049.29	4198452.36	1.24E-07	1.32E-07	2.55E-07	1.86E-08	1.97E-08	3.83E-08	1.82E-08	1.76E-08	3.58E-08	9.65E-09	7.98E-09	1.76E-08
2617	649028.46	4198443.25	1.27E-07	1.35E-07	2.62E-07	1.91E-08	2.03E-08	3.94E-08	1.87E-08	1.81E-08	3.68E-08	9.92E-09	8.21E-09	1.81E-08
2618	649007.63	4198434.15	1.29E-07	1.38E-07	2.67E-07	1.94E-08	2.07E-08	4.01E-08	1.90E-08	1.84E-08	3.74E-08	1.01E-08	8.35E-09	1.84E-08
2619	648987.13	4198424.61	1.30E-07	1.39E-07	2.69E-07	1.96E-08	2.08E-08	4.04E-08	1.91E-08	1.86E-08	3.77E-08	1.02E-08	8.42E-09	1.86E-08
2620	648972.04	4198406.82	1.35E-07	1.44E-07	2.80E-07	2.04E-08	2.16E-08	4.20E-08	1.99E-08	1.93E-08	3.92E-08	1.06E-08	8.75E-09	1.93E-08
2621	648957.34	4198389.48	1.39E-07	1.48E-07	2.87E-07	2.09E-08	2.22E-08	4.31E-08	2.04E-08	1.98E-08	4.02E-08	1.09E-08	8.98E-09	1.98E-08
2622	649060.95	4198510.62	9.52E-08	1.01E-07	1.97E-07	1.43E-08	1.52E-08	2.95E-08	1.40E-08	1.36E-08	2.76E-08	7.44E-09	6.15E-09	1.36E-08
2623	649040.15	4198501.52	9.89E-08	1.05E-07	2.04E-07	1.49E-08	1.58E-08	3.07E-08	1.45E-08	1.41E-08	2.86E-08	7.72E-09	6.39E-09	1.41E-08
2624	649019.35	4198492.43	1.02E-07	1.09E-07	2.11E-07	1.53E-08	1.63E-08	3.16E-08	1.50E-08	1.45E-08	2.95E-08	7.96E-09	6.59E-09	1.46E-08
2625	648998.55	4198483.34	1.04E-07	1.11E-07	2.16E-07	1.57E-08	1.67E-08	3.24E-08	1.53E-08	1.49E-08	3.02E-08	8.15E-09	6.74E-09	1.49E-08
2626	648977.75	4198474.25	1.06E-07	1.13E-07	2.19E-07	1.59E-08	1.69E-08	3.28E-08	1.56E-08	1.51E-08	3.06E-08	8.26E-09	6.84E-09	1.51E-08
2627	648957.27	4198464.72	1.06E-07	1.14E-07	2.20E-07	1.60E-08	1.70E-08	3.30E-08	1.57E-08	1.52E-08	3.08E-08	8.32E-09	6.88E-09	1.52E-08
2628	648942.21	4198446.95	1.10E-07	1.17E-07	2.28E-07	1.66E-08	1.76E-08	3.42E-08	1.62E-08	1.57E-08	3.19E-08	8.61E-09	7.12E-09	1.57E-08
2629	648927.53	4198429.63	1.13E-07	1.2E-07	2.33E-07	1.70E-08	1.80E-08	3.50E-08	1.66E-08	1.61E-08	3.27E-08	8.82E-09	7.29E-09	1.61E-08
2630	648912.46	4198411.86	1.14E-07	1.22E-07	2.36E-07	1.72E-08	1.83E-08	3.55E-08	1.68E-08	1.63E-08	3.31E-08	8.94E-09	7.39E-09	1.63E-08
2631	649051.79	4198559.77	7.79E-08	8.3E-08	1.61E-07	1.17E-08	1.25E-08	2.42E-08	1.15E-08	1.11E-08	2.26E-08	6.09E-09	5.03E-09	1.11E-08
2632	649030.91	4198550.64	8.10E-08	8.63E-08	1.67E-07	1.22E-08	1.29E-08	2.51E-08	1.19E-08	1.15E-08	2.34E-08	6.33E-09	5.23E-09	1.16E-08
2633	649010.04	4198541.52	8.37E-08	8.93E-08	1.73E-07	1.26E-08	1.34E-08	2.60E-08	1.23E-08	1.19E-08	2.42E-08	6.54E-09	5.41E-09	1.20E-08
2634	648989.16	4198532.39	8.60E-08	9.17E-08	1.78E-07	1.29E-08	1.37E-08	2.67E-08	1.26E-08	1.23E-08	2.49E-08	6.72E-09	5.56E-09	1.23E-08
2635	648968.29	4198523.27	8.77E-08	9.35E-08	1.81E-07	1.32E-08	1.40E-08	2.72E-08	1.29E-08	1.25E-08	2.54E-08	6.85E-09	5.67E-09	1.25E-08
2636	648947.42	4198514.14	8.87E-08	9.46E-08	1.83E-07	1.33E-08	1.42E-08	2.75E-08	1.30E-08	1.26E-08	2.57E-08	6.93E-09	5.73E-09	1.27E-08
2637	648927.03	4198504.37	8.93E-08	9.52E-08	1.84E-07	1.34E-08	1.43E-08	2.77E-08	1.31E-08	1.27E-08	2.59E-08	6.98E-09	5.77E-09	1.27E-08
2638	648912.3	4198486.99	9.20E-08	9.81E-08	1.90E-07	1.38E-08	1.47E-08	2.85E-08	1.35E-08	1.31E-08	2.66E-08	7.19E-09	5.95E-09	1.31E-08
2639	648897.57	4198469.61	9.41E-08	1E-07	1.94E-07	1.41E-08	1.50E-08	2.92E-08	1.38E-08	1.34E-08	2.72E-08	7.35E-09	6.08E-09	1.34E-08
2640	648882.84	4198452.24	9.53E-08	1.02E-07	1.97E-07	1.43E-08	1.52E-08	2.96E-08	1.40E-08	1.36E-08	2.76E-08	7.45E-09	6.16E-09	1.36E-08
2641	648867.72	4198434.4	9.58E-08	1.02E-07	1.98E-07	1.44E-08	1.53E-08	2.97E-08	1.41E-08	1.36E-08	2.77E-08	7.48E-09	6.19E-09	1.37E-08
2642	649033.46	4198658.07	5.48E-08	5.84E-08	1.13E-07	8.24E-09	8.76E-09	1.70E-08	8.06E-09	7.81E-09	1.59E-08	4.28E-09	3.54E-09	7.82E-09
2643	649012.63	4198648.97	5.71E-08	6.09E-08	1.18E-07	8.59E-09	9.13E-09	1.77E-08	8.39E-09	8.14E-09	1.65E-08	4.46E-09	3.69E-09	8.15E-09
2644	648991.8	4198639.87	5.92E-08	6.31E-08	1.22E-07	8.90E-09	9.47E-09	1.84E-08	8.71E-09	8.44E-09	1.71E-08	4.63E-09	3.83E-09	8.45E-09
2645	648970.98	4198630.76	6.11E-08	6.52E-08	1.26E-07	9.19E-09	9.77E-09	1.90E-08	8.99E-09	8.71E-09	1.77E-08	4.78E-09	3.95E-09	8.73E-09
2646	648950.15	4198621.66	6.28E-08	6.69E-08	1.30E-07	9.44E-09	1.00E-08	1.95E-08	9.23E-09	8.95E-09	1.82E-08	4.90E-09	4.06E-09	8.96E-09
2647	648929.32	4198612.55	6.41E-08	6.83E-08	1.32E-07	9.64E-09	1.02E-08	1.99E-08	9.42E-09	9.13E-09	1.86E-08	5.01E-09	4.14E-09	9.15E-09
2648	648908.49	4198603.45	6.51E-08	6.94E-08	1.34E-07	9.78E-09	1.04E-08	2.02E-08	9.57E-09	9.27E-09	1.88E-08	5.08E-09	4.20E-09	9.29E-09
2649	648887.66	4198594.34	6.56E-08	7E-08	1.36E-07	9.87E-09	1.05E-08	2.04E-08	9.65E-09	9.35E-09	1.90E-08	5.13E-09	4.24E-09	9.37E-09
2650	648867.32	4198584.59	6.60E-08	7.03E-08	1.36E-07	9.92E-09	1.05E-08	2.05E-08	9.70E-09	9.40E-09	1.91E-08	5.15E-09	4.26E-09	9.41E-09
2651	648852.62	4198567.25	6.76E-08	7.21E-08	1.40E-07	1.02E-08	1.08E-08	2.10E-08	9.94E-09	9.64E-09	1.96E-08	5.28E-09	4.37E-09	9.65E-09
2652	648837.54	4198549.45	6.89E-08	7.35E-08	1.42E-07	1.04E-08	1.10E-08	2.14E-08	1.01E-08	9.82E-09	2.00E-08	5.38E-09	4.45E-09	9.84E-09
2653	648822.84	4198532.11	6.98E-08	7.44E-08	1.44E-07	1.05E-08	1.12E-08	2.16E-08	1.03E-08	9.94E-09	2.02E-08	5.45E-09	4.51E-09	9.96E-09
2654	648807.75	4198514.32	7.02E-08	7.48E-08	1.45E-07	1.06E-08	1.12E-08	2.18E-08	1.03E-08	1.00E-08	2.03E-08	5.48E-09	4.53E-09	1.00E-08
2655	648793.06	4198496.98	7.01E-08	7.47E-08	1.45E-07	1.05E-08	1.12E-08	2.17E-08	1.03E-08	9.99E-09	2.03E-08	5.48E-09	4.53E-09	1.00E-08
2656	648778.36	4198479.64	6.96E-08	7.42E-08	1.44E-07	1.05E-08	1.11E-08	2.16E-08	1.02E-08	9.91E-09	2.01E-08	5.43E-09	4.50E-09	9.93E-09

2657	649015.13	4198756.38	4.04E-08	4.31E-08	8.35E-08	6.08E-09	6.46E-09	1.25E-08	5.94E-09	5.76E-09	1.17E-08	3.16E-09	2.61E-09	5.77E-09
2658	648994.27	4198747.26	4.22E-08	4.5E-08	8.71E-08	6.34E-09	6.74E-09	1.31E-08	6.20E-09	6.01E-09	1.22E-08	3.29E-09	2.73E-09	6.02E-09
2659	648973.42	4198738.15	4.39E-08	4.68E-08	9.06E-08	6.60E-09	7.01E-09	1.36E-08	6.45E-09	6.25E-09	1.27E-08	3.43E-09	2.83E-09	6.26E-09
2660	648952.56	4198729.03	4.54E-08	4.84E-08	9.39E-08	6.83E-09	7.26E-09	1.41E-08	6.68E-09	6.47E-09	1.32E-08	3.55E-09	2.94E-09	6.48E-09
2661	648931.71	4198719.91	4.69E-08	4.99E-08	9.68E-08	7.05E-09	7.49E-09	1.45E-08	6.89E-09	6.68E-09	1.36E-08	3.66E-09	3.03E-09	6.69E-09
2662	648910.85	4198710.8	4.81E-08	5.13E-08	9.94E-08	7.23E-09	7.69E-09	1.49E-08	7.07E-09	6.86E-09	1.39E-08	3.76E-09	3.11E-09	6.87E-09
2663	648890	4198701.68	4.92E-08	5.24E-08	1.02E-07	7.39E-09	7.86E-09	1.53E-08	7.23E-09	7.01E-09	1.42E-08	3.84E-09	3.18E-09	7.02E-09
2664	648869.14	4198692.56	5.00E-08	5.33E-08	1.03E-07	7.52E-09	7.99E-09	1.55E-08	7.35E-09	7.12E-09	1.45E-08	3.91E-09	3.23E-09	7.14E-09
2665	648848.29	4198683.45	5.06E-08	5.39E-08	1.05E-07	7.61E-09	8.09E-09	1.57E-08	7.44E-09	7.21E-09	1.46E-08	3.95E-09	3.27E-09	7.22E-09
2666	648827.43	4198674.33	5.09E-08	5.43E-08	1.05E-07	7.66E-09	8.14E-09	1.58E-08	7.49E-09	7.26E-09	1.47E-08	3.98E-09	3.29E-09	7.27E-09
2667	648807.22	4198664.35	5.12E-08	5.45E-08	1.06E-07	7.69E-09	8.18E-09	1.59E-08	7.52E-09	7.29E-09	1.48E-08	4.00E-09	3.31E-09	7.30E-09
2668	648792.5	4198646.98	5.23E-08	5.57E-08	1.08E-07	7.86E-09	8.36E-09	1.62E-08	7.69E-09	7.45E-09	1.51E-08	4.08E-09	3.38E-09	7.46E-09
2669	648777.79	4198629.62	5.31E-08	5.66E-08	1.10E-07	7.99E-09	8.49E-09	1.65E-08	7.81E-09	7.57E-09	1.54E-08	4.15E-09	3.43E-09	7.58E-09
2670	648763.07	4198612.26	5.37E-08	5.73E-08	1.11E-07	8.08E-09	8.59E-09	1.67E-08	7.90E-09	7.66E-09	1.56E-08	4.20E-09	3.47E-09	7.67E-09
2671	648748.35	4198594.9	5.41E-08	5.76E-08	1.12E-07	8.13E-09	8.64E-09	1.68E-08	7.95E-09	7.70E-09	1.57E-08	4.22E-09	3.49E-09	7.72E-09
2672	648733.63	4198577.53	5.41E-08	5.77E-08	1.12E-07	8.14E-09	8.65E-09	1.68E-08	7.96E-09	7.71E-09	1.57E-08	4.23E-09	3.50E-09	7.72E-09
2673	648718.92	4198560.17	5.39E-08	5.74E-08	1.11E-07	8.10E-09	8.61E-09	1.67E-08	7.92E-09	7.68E-09	1.56E-08	4.21E-09	3.48E-09	7.69E-09
2674	648704.2	4198542.81	5.34E-08	5.69E-08	1.10E-07	8.02E-09	8.53E-09	1.66E-08	7.85E-09	7.60E-09	1.54E-08	4.17E-09	3.45E-09	7.62E-09
2675	648689.48	4198525.45	5.26E-08	5.61E-08	1.09E-07	7.91E-09	8.41E-09	1.63E-08	7.73E-09	7.49E-09	1.52E-08	4.11E-09	3.40E-09	7.51E-09
2676	648996.8	4198854.69	3.09E-08	3.29E-08	6.38E-08	4.64E-09	4.93E-09	9.58E-09	4.54E-09	4.40E-09	8.94E-09	2.41E-09	1.99E-09	4.41E-09
2677	648975.93	4198845.56	3.23E-08	3.44E-08	6.66E-08	4.85E-09	5.16E-09	1.00E-08	4.74E-09	4.60E-09	9.34E-09	2.52E-09	2.08E-09	4.60E-09
2678	648955.05	4198836.44	3.36E-08	3.58E-08	6.94E-08	5.05E-09	5.37E-09	1.04E-08	4.94E-09	4.79E-09	9.73E-09	2.62E-09	2.17E-09	4.79E-09
2679	648934.18	4198827.31	3.49E-08	3.72E-08	7.20E-08	5.24E-09	5.57E-09	1.08E-08	5.13E-09	4.97E-09	1.01E-08	2.72E-09	2.25E-09	4.98E-09
2680	648913.31	4198818.19	3.61E-08	3.85E-08	7.45E-08	5.42E-09	5.77E-09	1.12E-08	5.30E-09	5.14E-09	1.04E-08	2.82E-09	2.33E-09	5.15E-09
2681	648892.43	4198809.06	3.72E-08	3.96E-08	7.68E-08	5.59E-09	5.94E-09	1.15E-08	5.47E-09	5.30E-09	1.08E-08	2.90E-09	2.40E-09	5.31E-09
2682	648871.56	4198799.94	3.82E-08	4.07E-08	7.88E-08	5.74E-09	6.10E-09	1.18E-08	5.61E-09	5.44E-09	1.10E-08	2.98E-09	2.47E-09	5.45E-09
2683	648850.68	4198790.81	3.90E-08	4.16E-08	8.06E-08	5.87E-09	6.24E-09	1.21E-08	5.74E-09	5.56E-09	1.13E-08	3.05E-09	2.52E-09	5.57E-09
2684	648829.81	4198781.69	3.97E-08	4.23E-08	8.21E-08	5.97E-09	6.35E-09	1.23E-08	5.84E-09	5.66E-09	1.15E-08	3.10E-09	2.57E-09	5.67E-09
2685	648808.94	4198772.56	4.03E-08	4.29E-08	8.32E-08	6.06E-09	6.44E-09	1.25E-08	5.92E-09	5.74E-09	1.17E-08	3.15E-09	2.60E-09	5.75E-09
2686	648788.06	4198763.44	4.07E-08	4.34E-08	8.40E-08	6.12E-09	6.50E-09	1.26E-08	5.98E-09	5.80E-09	1.18E-08	3.18E-09	2.63E-09	5.81E-09
2687	648767.19	4198754.31	4.09E-08	4.36E-08	8.45E-08	6.15E-09	6.54E-09	1.27E-08	6.02E-09	5.83E-09	1.18E-08	3.20E-09	2.64E-09	5.84E-09
2688	648747.12	4198744.1	4.11E-08	4.38E-08	8.49E-08	6.18E-09	6.57E-09	1.27E-08	6.04E-09	5.86E-09	1.19E-08	3.21E-09	2.66E-09	5.87E-09
2689	648732.39	4198726.73	4.19E-08	4.46E-08	8.65E-08	6.30E-09	6.69E-09	1.30E-08	6.16E-09	5.97E-09	1.21E-08	3.27E-09	2.71E-09	5.98E-09
2690	648717.27	4198708.89	4.25E-08	4.53E-08	8.78E-08	6.39E-09	6.80E-09	1.32E-08	6.25E-09	6.06E-09	1.23E-08	3.32E-09	2.75E-09	6.07E-09
2691	648702.54	4198691.51	4.30E-08	4.58E-08	8.88E-08	6.46E-09	6.87E-09	1.33E-08	6.32E-09	6.12E-09	1.24E-08	3.36E-09	2.78E-09	6.13E-09
2692	648687.81	4198674.14	4.32E-08	4.61E-08	8.93E-08	6.50E-09	6.91E-09	1.34E-08	6.36E-09	6.16E-09	1.25E-08	3.38E-09	2.79E-09	6.17E-09
2693	648673.08	4198656.76	4.33E-08	4.62E-08	8.95E-08	6.51E-09	6.92E-09	1.34E-08	6.37E-09	6.17E-09	1.25E-08	3.38E-09	2.80E-09	6.18E-09
2694	648658.35	4198639.38	4.32E-08	4.61E-08	8.93E-08	6.50E-09	6.91E-09	1.34E-08	6.35E-09	6.16E-09	1.25E-08	3.37E-09	2.79E-09	6.17E-09
2695	648643.62	4198622	4.29E-08	4.57E-08	8.87E-08	6.45E-09	6.86E-09	1.33E-08	6.31E-09	6.12E-09	1.24E-08	3.35E-09	2.77E-09	6.13E-09
2696	648628.89	4198604.62	4.24E-08	4.53E-08	8.77E-08	6.38E-09	6.79E-09	1.32E-08	6.24E-09	6.05E-09	1.23E-08	3.32E-09	2.74E-09	6.06E-09
2697	648614.16	4198587.25	4.18E-08	4.46E-08	8.64E-08	6.29E-09	6.68E-09	1.30E-08	6.15E-09	5.96E-09	1.21E-08	3.27E-09	2.70E-09	5.97E-09
2698	648599.43	4198569.87	4.10E-08	4.37E-08	8.48E-08	6.17E-09	6.56E-09	1.27E-08	6.03E-09	5.85E-09	1.19E-08	3.21E-09	2.65E-09	5.86E-09
2699	648978.47	4198952.99	2.43E-08	2.59E-08	5.02E-08	3.65E-09	3.88E-09	7.53E-09	3.57E-09	3.46E-09	7.03E-09	1.90E-09	1.57E-09	3.47E-09
2700	648957.59	4198943.86	2.54E-08	2.7E-08	5.24E-08	3.81E-09	4.06E-09	7.87E-09	3.73E-09	3.61E-09	7.34E-09	1.98E-09	1.64E-09	3.62E-09
2701	648936.7	4198934.73	2.64E-08	2.82E-08	5.46E-08	3.98E-09	4.23E-09	8.20E-09	3.89E-09	3.77E-09	7.65E-09	2.07E-09	1.71E-09	3.77E-09
2702	648915.81	4198925.6	2.75E-08	2.93E-08	5.68E-08	4.13E-09	4.39E-09	8.52E-09	4.04E-09	3.92E-09	7.96E-09	2.15E-09	1.78E-09	3.92E-09
2703	648894.92	4198916.47	2.85E-08	3.04E-08	5.88E-08	4.28E-09	4.55E-09	8.83E-09	4.19E-09	4.06E-09	8.24E-09	2.22E-09	1.84E-09	4.06E-09
2704	648874.04	4198907.34	2.94E-08	3.14E-08	6.08E-08	4.42E-09	4.70E-09	9.12E-09	4.32E-09	4.19E-09	8.52E-09	2.30E-09	1.90E-09	4.20E-09
2705	648853.15	4198898.21	3.03E-08	3.23E-08	6.26E-08	4.55E-09	4.84E-09	9.39E-09	4.45E-09	4.31E-09	8.77E-09	2.37E-09	1.96E-09	4.32E-09
2706	648832.26	4198889.08	3.11E-08	3.31E-08	6.42E-08	4.67E-09	4.97E-09	9.64E-09	4.57E-09	4.43E-09	8.99E-09	2.43E-09	2.01E-09	4.43E-09
2707	648811.38	4198879.95	3.18E-08	3.39E-08	6.56E-08	4.78E-09	5.08E-09	9.86E-09	4.67E-09	4.53E-09	9.20E-09	2.48E-09	2.05E-09	4.53E-09
2708	648790.49	4198870.82	3.24E-08	3.45E-08	6.69E-08	4.87E-09	5.18E-09	1.00E-08	4.76E-09	4.61E-09	9.37E-09	2.53E-09	2.09E-09	4.62E-09
2709	648769.6	4198861.69	3.29E-08	3.5E-08	6.79E-08	4.94E-09	5.26E-09	1.02E-08	4.83E-09	4.68E-09	9.52E-09	2.57E-09	2.12E-09	4.69E-09
2710	648748.71	4198852.56	3.33E-08	3.55E-08	6.87E-08	5.00E-09	5.32E-09	1.03E-08	4.89E-09	4.74E-09	9.63E-09	2.60E-09	2.15E-09	4.75E-09
2711	648727.83	4198843.43	3.36E-08	3.58E-08	6.93E-08	5.05E-09	5.36E-09	1.04E-08	4.93E-09	4.78E-09	9.71E-09	2.62E-09	2.17E-09	4.79E-09
2712	648706.94	4198834.3	3.37E-08	3.59E-08	6.97E-08	5.07E-09	5.39E-09	1.05E-08	4.96E-09	4.81E-09	9.76E-09	2.63E-09	2.18E-09	4.81E-09
2713	648687.02	4198823.86	3.39E-08	3.61E-08	7.00E-08	5.09E-09	5.42E-09	1.05E-08	4.98E-09	4.83E-09	9.81E-09	2.65E-09	2.19E-09	4.84E-09
2714	648672.28	4198806.47	3.45E-08	3.67E-08	7.12E-08	5.18E-09	5.51E-09	1.07E-08	5.07E-09	4.91E-09	9.98E-09	2.69E-09	2.23E-09	4.92E-09
2715	648657.54	4198789.08	3.49E-08	3.72E-08	7.22E-08	5.25E-09	5.59E-09	1.08E-08	5.14E-09	4.98E-09	1.01E-08	2.73E-09	2.26E-09	4.99E-09
2716	648642.8	4198771.7	3.53E-08	3.76E-08	7.29E-08	5.31E-09	5.64E-09	1.10E-08	5.19E-09	5.03E-09	1.02E-08	2.76E-09	2.28E-09	5.04E-09
2717	648628.06	4198754.31	3.55E-08	3.79E-08	7.34E-08	5.34E-09	5.68E-09	1.10E-08	5.22E-09	5.06E-09	1.03E-08	2.78E-09	2.30E-09	5.07E-09
2718	648613.32	4198736.92	3.56E-08	3.8E-08	7.36E-08	5.36E-09	5.70E-09	1.11E-08	5.24E-09	5.08E-09	1.03E-08	2.78E-09	2.30E-09	5.09E-09
2719	648598.58	4198719.53	3.56E-08	3.8E-08	7.36E-08	5.36E-09	5.69E-09	1.11E-08	5.24E-09	5.08E-09	1.03E-08	2.78E-09	2.30E-09	5.08E-09
2720	648583.84	4198702.14	3.55E-08	3.78E-08	7.33E-08	5.33E-09	5.67E-09	1.10E-08	5.21E-09	5.05E-09	1.03E-08	2.77E-09	2.29E-09	5.06E-09
2721	648569.1	4198684.75	3.52E-08	3.75E-08	7.27E-08	5.29E-09	5.63E-09	1.09E-08	5.17E-09	5.01E-09	1.02E-08	2.75E-09	2.27E-09	5.02E-09
2722	648554.36	4198667.36	3.48E-08	3.71E-08	7.19E-08	5.23E-09	5.56E-09	1.08E-08	5.11E-09	4.96E-09	1.01E-08	2.72E-09	2.25E-09	4.97E-09
2723	648539.62	4198649.97	3.43E-08	3.65E-08	7.08E-08	5.15E-09	5.48E-09	1.06E-08	5.04E-09	4.88E-09	9.92E-09	2.68E-09	2.21E-09	4.89E-09
2724	648524.88	4198632.59	3.37E-08	3.59E-08	6.95E-08	5.06E-09	5.38E-09	1.04E-08	4.95E-09	4.80E-09	9.74E-09	2.63E-09	2.17E-09	4.80E-09
2725	648510.14	4198615.2	3.29E-08	3.51E-08	6.81E-08	4.95E-09	5.27E-09	1.02E-08	4.84E-09	4.69E-09	9.54E-09	2.57E-09	2.13E-09	4.70E-09
2726	648941.82	4199149.6	1.61E-08	1.72E-08	3.33E-08	2.43E-09	2.58E-09	5.01E-09	2.37E-09	2.30E-09	4.67E-09	1.26E-09	1.04E-09	2.30E-09
2727	648920.94	4199140.48	1.68E-08	1.79E-08	3.48E-08	2.53E-09	2.69E-09	5.22E-09	2.47E-09	2.40E-09	4.87E-09	1.31E-09	1.09E-09	2.40E-09
2728	648900.07	4199131.35	1.75E-08	1.87E-08	3.62E-08	2.63E-09	2.80E-09	5.44E-09	2.58E-09	2.50E-09	5.07E-09	1.37E-09	1.13E-09	2.50E-09
2729	648879.19	4199122.23	1.82E-08	1.94E-08	3.76E-08	2.74E-09	2.91E-09	5.65E-09	2.68E-09	2.59E-09	5.27E-09	1.42E-09	1.18E-09	2.60E-09
2730	648858.32	4199113.11	1.89E-08	2.01E-08	3.90E-08	2.84E-09	3.02E-09	5.86E-09	2.78E-09	2.69E-09	5.47E-09	1.47E-09	1.22E-09	2.69E-09
2731	648837.45	4199103.98	1.95E-08	2.08E-08	4.03E-08	2.94E-09	3.12E-09	6.06E-09	2.87E-09	2.78E-09	5.65E-09	1.53E-09	1.26E-09	2.79E-09
2732	648816.57	4199094.86	2.02E-08	2.15E-08	4.16E-08	3.03E-09	3.22E-09	6.25E-09	2.96E-09	2.87E-09	5.84E-09	1.57E-09	1.30E-09	2.88E-09

2733	648795.7	4199085.73	2.08E-08	2.21E-08	4.29E-08	3.12E-09	3.32E-09	6.44E-09	3.05E-09	2.96E-09	6.01E-09	1.62E-09	1.34E-09	2.96E-09
2734	648774.83	4199076.61	2.13E-08	2.27E-08	4.40E-08	3.21E-09	3.41E-09	6.61E-09	3.13E-09	3.04E-09	6.17E-09	1.67E-09	1.38E-09	3.04E-09
2735	648753.95	4199067.48	2.18E-08	2.33E-08	4.51E-08	3.29E-09	3.49E-09	6.78E-09	3.21E-09	3.11E-09	6.33E-09	1.71E-09	1.41E-09	3.12E-09
2736	648733.08	4199058.36	2.23E-08	2.38E-08	4.61E-08	3.36E-09	3.57E-09	6.93E-09	3.28E-09	3.18E-09	6.46E-09	1.74E-09	1.44E-09	3.19E-09
2737	648712.2	4199049.23	2.28E-08	2.43E-08	4.70E-08	3.42E-09	3.64E-09	7.06E-09	3.35E-09	3.24E-09	6.59E-09	1.78E-09	1.47E-09	3.25E-09
2738	648691.33	4199040.11	2.31E-08	2.47E-08	4.78E-08	3.48E-09	3.70E-09	7.18E-09	3.40E-09	3.30E-09	6.70E-09	1.81E-09	1.50E-09	3.30E-09
2739	648670.46	4199030.98	2.35E-08	2.5E-08	4.85E-08	3.53E-09	3.75E-09	7.29E-09	3.45E-09	3.35E-09	6.80E-09	1.83E-09	1.52E-09	3.35E-09
2740	648649.58	4199021.86	2.38E-08	2.53E-08	4.91E-08	3.57E-09	3.80E-09	7.37E-09	3.49E-09	3.39E-09	6.88E-09	1.86E-09	1.54E-09	3.39E-09
2741	648628.71	4199012.73	2.40E-08	2.56E-08	4.96E-08	3.61E-09	3.84E-09	7.44E-09	3.53E-09	3.42E-09	6.95E-09	1.87E-09	1.55E-09	3.42E-09
2742	648607.83	4199003.61	2.42E-08	2.58E-08	4.99E-08	3.63E-09	3.86E-09	7.50E-09	3.55E-09	3.44E-09	7.00E-09	1.89E-09	1.56E-09	3.45E-09
2743	648586.96	4198994.48	2.43E-08	2.59E-08	5.02E-08	3.65E-09	3.88E-09	7.53E-09	3.57E-09	3.46E-09	7.03E-09	1.90E-09	1.57E-09	3.47E-09
2744	648566.83	4198983.38	2.44E-08	2.6E-08	5.04E-08	3.67E-09	3.90E-09	7.57E-09	3.59E-09	3.48E-09	7.07E-09	1.91E-09	1.58E-09	3.48E-09
2745	648552.1	4198966	2.48E-08	2.64E-08	5.12E-08	3.73E-09	3.96E-09	7.69E-09	3.64E-09	3.53E-09	7.17E-09	1.94E-09	1.60E-09	3.54E-09
2746	648537.37	4198948.63	2.51E-08	2.68E-08	5.18E-08	3.77E-09	4.01E-09	7.78E-09	3.69E-09	3.58E-09	7.27E-09	1.96E-09	1.62E-09	3.58E-09
2747	648522.64	4198931.25	2.53E-08	2.7E-08	5.24E-08	3.81E-09	4.05E-09	7.86E-09	3.73E-09	3.61E-09	7.34E-09	1.98E-09	1.64E-09	3.62E-09
2748	648507.52	4198913.41	2.55E-08	2.72E-08	5.28E-08	3.84E-09	4.08E-09	7.92E-09	3.76E-09	3.64E-09	7.40E-09	2.00E-09	1.65E-09	3.65E-09
2749	648492.79	4198896.04	2.57E-08	2.74E-08	5.30E-08	3.86E-09	4.10E-09	7.96E-09	3.77E-09	3.66E-09	7.43E-09	2.00E-09	1.66E-09	3.66E-09
2750	648478.06	4198878.66	2.57E-08	2.74E-08	5.31E-08	3.87E-09	4.11E-09	7.98E-09	3.78E-09	3.66E-09	7.44E-09	2.01E-09	1.66E-09	3.67E-09
2751	648463.33	4198861.28	2.57E-08	2.74E-08	5.31E-08	3.86E-09	4.11E-09	7.97E-09	3.78E-09	3.66E-09	7.44E-09	2.01E-09	1.66E-09	3.67E-09
2752	648448.6	4198843.9	2.56E-08	2.73E-08	5.29E-08	3.85E-09	4.09E-09	7.94E-09	3.76E-09	3.65E-09	7.41E-09	2.00E-09	1.65E-09	3.65E-09
2753	648433.87	4198826.53	2.54E-08	2.71E-08	5.26E-08	3.82E-09	4.07E-09	7.89E-09	3.74E-09	3.62E-09	7.36E-09	1.99E-09	1.64E-09	3.63E-09
2754	648419.14	4198809.15	2.52E-08	2.69E-08	5.21E-08	3.79E-09	4.03E-09	7.82E-09	3.71E-09	3.59E-09	7.30E-09	1.97E-09	1.63E-09	3.60E-09
2755	648404.41	4198791.77	2.49E-08	2.66E-08	5.15E-08	3.75E-09	3.98E-09	7.73E-09	3.66E-09	3.55E-09	7.21E-09	1.95E-09	1.61E-09	3.56E-09
2756	648389.67	4198774.39	2.46E-08	2.62E-08	5.07E-08	3.69E-09	3.92E-09	7.62E-09	3.61E-09	3.50E-09	7.11E-09	1.92E-09	1.59E-09	3.50E-09
2757	648374.94	4198757.01	2.41E-08	2.57E-08	4.99E-08	3.63E-09	3.86E-09	7.49E-09	3.55E-09	3.44E-09	6.99E-09	1.89E-09	1.56E-09	3.45E-09
2758	648360.21	4198739.64	2.37E-08	2.52E-08	4.89E-08	3.56E-09	3.79E-09	7.35E-09	3.48E-09	3.38E-09	6.86E-09	1.85E-09	1.53E-09	3.38E-09
2759	648345.1	4198721.8	2.32E-08	2.47E-08	4.79E-08	3.48E-09	3.70E-09	7.19E-09	3.41E-09	3.30E-09	6.71E-09	1.81E-09	1.50E-09	3.31E-09
2760	648330.36	4198704.42	2.26E-08	2.41E-08	4.68E-08	3.40E-09	3.62E-09	7.02E-09	3.33E-09	3.23E-09	6.55E-09	1.77E-09	1.46E-09	3.23E-09
2761	648905.16	4199346.22	1.16E-08	1.23E-08	2.39E-08	1.74E-09	1.85E-09	3.59E-09	1.70E-09	1.65E-09	3.35E-09	9.03E-10	7.47E-10	1.65E-09
2762	648884.27	4199337.08	1.20E-08	1.28E-08	2.49E-08	1.81E-09	1.92E-09	3.73E-09	1.77E-09	1.71E-09	3.48E-09	9.40E-10	7.77E-10	1.72E-09
2763	648863.38	4199327.95	1.25E-08	1.33E-08	2.58E-08	1.88E-09	2.00E-09	3.88E-09	1.84E-09	1.78E-09	3.62E-09	9.76E-10	8.07E-10	1.78E-09
2764	648842.49	4199318.82	1.30E-08	1.38E-08	2.68E-08	1.95E-09	2.07E-09	4.02E-09	1.90E-09	1.85E-09	3.75E-09	1.01E-09	8.37E-10	1.85E-09
2765	648821.6	4199309.69	1.34E-08	1.43E-08	2.77E-08	2.02E-09	2.14E-09	4.16E-09	1.97E-09	1.91E-09	3.88E-09	1.05E-09	8.67E-10	1.91E-09
2766	648800.71	4199300.56	1.39E-08	1.48E-08	2.87E-08	2.09E-09	2.22E-09	4.30E-09	2.04E-09	1.98E-09	4.02E-09	1.08E-09	8.96E-10	1.98E-09
2767	648779.82	4199291.42	1.43E-08	1.53E-08	2.96E-08	2.15E-09	2.29E-09	4.44E-09	2.10E-09	2.04E-09	4.14E-09	1.12E-09	9.25E-10	2.04E-09
2768	648758.92	4199282.29	1.47E-08	1.57E-08	3.05E-08	2.22E-09	2.36E-09	4.57E-09	2.17E-09	2.10E-09	4.27E-09	1.15E-09	9.53E-10	2.10E-09
2769	648738.03	4199273.16	1.52E-08	1.62E-08	3.13E-08	2.28E-09	2.42E-09	4.70E-09	2.23E-09	2.16E-09	4.39E-09	1.18E-09	9.80E-10	2.16E-09
2770	648717.14	4199264.03	1.56E-08	1.66E-08	3.22E-08	2.34E-09	2.49E-09	4.83E-09	2.29E-09	2.22E-09	4.51E-09	1.22E-09	1.01E-09	2.22E-09
2771	648696.25	4199254.9	1.59E-08	1.7E-08	3.29E-08	2.40E-09	2.55E-09	4.95E-09	2.34E-09	2.27E-09	4.62E-09	1.25E-09	1.03E-09	2.28E-09
2772	648675.36	4199245.76	1.63E-08	1.74E-08	3.37E-08	2.45E-09	2.61E-09	5.06E-09	2.40E-09	2.32E-09	4.72E-09	1.27E-09	1.05E-09	2.33E-09
2773	648654.47	4199236.63	1.66E-08	1.77E-08	3.44E-08	2.50E-09	2.66E-09	5.16E-09	2.45E-09	2.37E-09	4.82E-09	1.30E-09	1.08E-09	2.38E-09
2774	648633.58	4199227.5	1.70E-08	1.81E-08	3.50E-08	2.55E-09	2.71E-09	5.26E-09	2.49E-09	2.42E-09	4.91E-09	1.32E-09	1.10E-09	2.42E-09
2775	648612.69	4199218.37	1.73E-08	1.84E-08	3.56E-08	2.59E-09	2.76E-09	5.35E-09	2.54E-09	2.46E-09	5.00E-09	1.35E-09	1.11E-09	2.46E-09
2776	648591.8	4199209.24	1.75E-08	1.87E-08	3.62E-08	2.63E-09	2.80E-09	5.43E-09	2.58E-09	2.50E-09	5.07E-09	1.37E-09	1.13E-09	2.50E-09
2777	648570.91	4199200.1	1.78E-08	1.89E-08	3.67E-08	2.67E-09	2.84E-09	5.51E-09	2.61E-09	2.53E-09	5.14E-09	1.39E-09	1.15E-09	2.53E-09
2778	648550.02	4199190.97	1.80E-08	1.91E-08	3.71E-08	2.70E-09	2.87E-09	5.57E-09	2.64E-09	2.56E-09	5.20E-09	1.40E-09	1.16E-09	2.56E-09
2779	648529.13	4199181.84	1.81E-08	1.93E-08	3.75E-08	2.73E-09	2.90E-09	5.63E-09	2.67E-09	2.58E-09	5.25E-09	1.42E-09	1.17E-09	2.59E-09
2780	648508.24	4199172.71	1.83E-08	1.95E-08	3.78E-08	2.75E-09	2.92E-09	5.67E-09	2.69E-09	2.61E-09	5.30E-09	1.43E-09	1.18E-09	2.61E-09
2781	648487.35	4199163.58	1.84E-08	1.96E-08	3.80E-08	2.77E-09	2.94E-09	5.71E-09	2.71E-09	2.62E-09	5.33E-09	1.44E-09	1.19E-09	2.63E-09
2782	648466.45	4199154.44	1.85E-08	1.97E-08	3.82E-08	2.78E-09	2.96E-09	5.74E-09	2.72E-09	2.64E-09	5.35E-09	1.44E-09	1.20E-09	2.64E-09
2783	648446.63	4199142.9	1.86E-08	1.98E-08	3.84E-08	2.80E-09	2.98E-09	5.77E-09	2.74E-09	2.65E-09	5.39E-09	1.45E-09	1.20E-09	2.66E-09
2784	648431.89	4199125.51	1.89E-08	2.01E-08	3.90E-08	2.84E-09	3.02E-09	5.85E-09	2.77E-09	2.69E-09	5.46E-09	1.47E-09	1.22E-09	2.69E-09
2785	648417.15	4199108.11	1.91E-08	2.04E-08	3.95E-08	2.87E-09	3.05E-09	5.93E-09	2.81E-09	2.72E-09	5.53E-09	1.49E-09	1.23E-09	2.73E-09
2786	648402.4	4199090.72	1.93E-08	2.06E-08	3.99E-08	2.90E-09	3.08E-09	5.99E-09	2.84E-09	2.75E-09	5.59E-09	1.51E-09	1.25E-09	2.75E-09
2787	648387.27	4199072.87	1.95E-08	2.07E-08	4.02E-08	2.93E-09	3.11E-09	6.04E-09	2.86E-09	2.77E-09	5.63E-09	1.52E-09	1.26E-09	2.78E-09
2788	648372.53	4199055.48	1.96E-08	2.09E-08	4.04E-08	2.94E-09	3.13E-09	6.07E-09	2.88E-09	2.79E-09	5.67E-09	1.53E-09	1.26E-09	2.79E-09
2789	648357.79	4199038.09	1.96E-08	2.09E-08	4.06E-08	2.95E-09	3.14E-09	6.10E-09	2.89E-09	2.80E-09	5.69E-09	1.53E-09	1.27E-09	2.80E-09
2790	648343.05	4199020.7	1.97E-08	2.1E-08	4.07E-08	2.96E-09	3.15E-09	6.11E-09	2.89E-09	2.80E-09	5.70E-09	1.54E-09	1.27E-09	2.81E-09
2791	648328.3	4199003.31	1.97E-08	2.1E-08	4.06E-08	2.96E-09	3.14E-09	6.10E-09	2.89E-09	2.80E-09	5.70E-09	1.54E-09	1.27E-09	2.81E-09
2792	648313.56	4198985.91	1.96E-08	2.09E-08	4.05E-08	2.95E-09	3.14E-09	6.09E-09	2.88E-09	2.80E-09	5.68E-09	1.53E-09	1.27E-09	2.80E-09
2793	648298.82	4198968.52	1.95E-08	2.08E-08	4.03E-08	2.94E-09	3.12E-09	6.06E-09	2.87E-09	2.78E-09	5.65E-09	1.52E-09	1.26E-09	2.79E-09
2794	648284.08	4198951.13	1.94E-08	2.07E-08	4.00E-08	2.91E-09	3.10E-09	6.01E-09	2.85E-09	2.76E-09	5.61E-09	1.51E-09	1.25E-09	2.77E-09
2795	648269.33	4198933.74	1.92E-08	2.05E-08	3.97E-08	2.89E-09	3.07E-09	5.96E-09	2.82E-09	2.74E-09	5.56E-09	1.50E-09	1.24E-09	2.74E-09
2796	648254.59	4198916.35	1.90E-08	2.02E-08	3.92E-08	2.85E-09	3.03E-09	5.89E-09	2.79E-09	2.71E-09	5.50E-09	1.48E-09	1.23E-09	2.71E-09
2797	648239.85	4198898.96	1.87E-08	2E-08	3.87E-08	2.82E-09	2.99E-09	5.81E-09	2.75E-09	2.67E-09	5.42E-09	1.46E-09	1.21E-09	2.67E-09
2798	648225.11	4198881.56	1.84E-08	1.97E-08	3.81E-08	2.77E-09	2.95E-09	5.72E-09	2.71E-09	2.63E-09	5.34E-09	1.44E-09	1.19E-09	2.63E-09
2799	648210.36	4198864.17	1.81E-08	1.93E-08	3.75E-08	2.73E-09	2.90E-09	5.62E-09	2.67E-09	2.58E-09	5.25E-09	1.42E-09	1.17E-09	2.59E-09
2800	648195.62	4198846.78	1.78E-08	1.9E-08	3.68E-08	2.67E-09	2.84E-09	5.52E-09	2.62E-09	2.53E-09	5.15E-09	1.39E-09	1.15E-09	2.54E-09
2801	648180.88	4198829.39	1.74E-08	1.86E-08	3.60E-08	2.62E-09	2.79E-09	5.41E-09	2.56E-09	2.48E-09	5.05E-09	1.36E-09	1.13E-09	2.49E-09
2802	648166.14	4198812	1.71E-08	1.82E-08	3.52E-08	2.56E-09	2.73E-09	5.29E-09	2.51E-09	2.43E-09	4.94E-09	1.33E-09	1.10E-09	2.43E-09
2803	648151.39	4198794.6	1.67E-08	1.78E-08	3.44E-08	2.51E-09	2.66E-09	5.17E-09	2.45E-09	2.38E-09	4.83E-09	1.30E-09	1.08E-09	2.38E-09
2804	648868.5	4199542.83	8.78E-09	9.36E-09	1.81E-08	1.32E-09	1.40E-09	2.72E-09	1.29E-09	1.25E-09	2.54E-09	6.86E-10	5.67E-10	1.25E-09
2805	648847.62	4199533.7	9.10E-09	9.7E-09	1.88E-08	1.37E-09	1.45E-09	2.82E-09	1.34E-09	1.30E-09	2.63E-09	7.11E-10	5.88E-10	1.30E-09
2806	648826.74	4199524.57	9.42E-09	1E-08	1.95E-08	1.42E-09	1.51E-09	2.92E-09	1.39E-09	1.34E-09	2.73E-09	7.36E-10	6.09E-10	1.34E-09
2807	648805.86	4199515.44	9.75E-09	1.04E-08	2.01E-08	1.47E-09	1.56E-09	3.02E-09	1.43E-09	1.39E-09	2.82E-09	7.61E-10	6.30E-10	1.39E-09
2808	648784.98	4199506.32	1.01E-08	1.07E-08	2.08E-08	1.51E-09	1.61E-09	3.12E-09	1.48E-09	1.43E-09	2.92E-09	7.87E-10	6.51E-10	1.44E-09

2809	648764.1	4199497.19	1.04E-08	1.11E-08	2.15E-08	1.56E-09	1.66E-09	3.22E-09	1.53E-09	1.48E-09	3.01E-09	8.12E-10	6.72E-10	1.48E-09
2810	648743.22	4199488.06	1.07E-08	1.14E-08	2.21E-08	1.61E-09	1.71E-09	3.32E-09	1.57E-09	1.53E-09	3.10E-09	8.36E-10	6.92E-10	1.53E-09
2811	648722.34	4199478.93	1.10E-08	1.17E-08	2.28E-08	1.66E-09	1.76E-09	3.42E-09	1.62E-09	1.57E-09	3.19E-09	8.61E-10	7.12E-10	1.57E-09
2812	648701.46	4199469.81	1.13E-08	1.21E-08	2.34E-08	1.70E-09	1.81E-09	3.51E-09	1.67E-09	1.61E-09	3.28E-09	8.85E-10	7.32E-10	1.62E-09
2813	648680.57	4199460.68	1.16E-08	1.24E-08	2.40E-08	1.75E-09	1.86E-09	3.61E-09	1.71E-09	1.66E-09	3.37E-09	9.08E-10	7.51E-10	1.66E-09
2814	648659.69	4199451.55	1.19E-08	1.27E-08	2.46E-08	1.79E-09	1.91E-09	3.70E-09	1.75E-09	1.70E-09	3.45E-09	9.31E-10	7.70E-10	1.70E-09
2815	648638.81	4199442.42	1.22E-08	1.3E-08	2.52E-08	1.83E-09	1.95E-09	3.78E-09	1.79E-09	1.74E-09	3.53E-09	9.53E-10	7.88E-10	1.74E-09
2816	648617.93	4199433.29	1.25E-08	1.33E-08	2.58E-08	1.87E-09	1.99E-09	3.87E-09	1.83E-09	1.78E-09	3.61E-09	9.74E-10	8.05E-10	1.78E-09
2817	648597.05	4199424.17	1.27E-08	1.36E-08	2.63E-08	1.91E-09	2.03E-09	3.95E-09	1.87E-09	1.81E-09	3.68E-09	9.94E-10	8.22E-10	1.82E-09
2818	648576.17	4199415.04	1.30E-08	1.38E-08	2.68E-08	1.95E-09	2.07E-09	4.02E-09	1.91E-09	1.85E-09	3.75E-09	1.01E-09	8.38E-10	1.85E-09
2819	648555.29	4199405.91	1.32E-08	1.41E-08	2.73E-08	1.98E-09	2.11E-09	4.09E-09	1.94E-09	1.88E-09	3.82E-09	1.03E-09	8.53E-10	1.88E-09
2820	648534.41	4199396.78	1.34E-08	1.43E-08	2.77E-08	2.02E-09	2.14E-09	4.16E-09	1.97E-09	1.91E-09	3.88E-09	1.05E-09	8.67E-10	1.91E-09
2821	648513.53	4199387.66	1.36E-08	1.45E-08	2.81E-08	2.05E-09	2.18E-09	4.23E-09	2.00E-09	1.94E-09	3.94E-09	1.06E-09	8.80E-10	1.94E-09
2822	648492.65	4199378.53	1.38E-08	1.47E-08	2.85E-08	2.08E-09	2.21E-09	4.28E-09	2.03E-09	1.97E-09	4.00E-09	1.08E-09	8.92E-10	1.97E-09
2823	648471.76	4199369.4	1.40E-08	1.49E-08	2.89E-08	2.10E-09	2.24E-09	4.34E-09	2.06E-09	1.99E-09	4.05E-09	1.09E-09	9.04E-10	2.00E-09
2824	648450.88	4199360.27	1.41E-08	1.51E-08	2.92E-08	2.13E-09	2.26E-09	4.39E-09	2.08E-09	2.02E-09	4.09E-09	1.10E-09	9.14E-10	2.02E-09
2825	648430	4199351.15	1.43E-08	1.52E-08	2.95E-08	2.15E-09	2.28E-09	4.43E-09	2.10E-09	2.04E-09	4.14E-09	1.12E-09	9.23E-10	2.04E-09
2826	648409.12	4199342.02	1.44E-08	1.54E-08	2.98E-08	2.17E-09	2.30E-09	4.47E-09	2.12E-09	2.05E-09	4.17E-09	1.13E-09	9.31E-10	2.06E-09
2827	648388.24	4199332.89	1.45E-08	1.55E-08	3.00E-08	2.18E-09	2.32E-09	4.50E-09	2.13E-09	2.07E-09	4.20E-09	1.13E-09	9.38E-10	2.07E-09
2828	648367.36	4199323.76	1.46E-08	1.56E-08	3.02E-08	2.20E-09	2.33E-09	4.53E-09	2.15E-09	2.08E-09	4.23E-09	1.14E-09	9.44E-10	2.08E-09
2829	648346.48	4199314.63	1.47E-08	1.56E-08	3.03E-08	2.21E-09	2.35E-09	4.55E-09	2.16E-09	2.09E-09	4.25E-09	1.15E-09	9.48E-10	2.09E-09
2830	648326.83	4199302.88	1.48E-08	1.57E-08	3.05E-08	2.22E-09	2.36E-09	4.58E-09	2.17E-09	2.11E-09	4.28E-09	1.15E-09	9.55E-10	2.11E-09
2831	648312.09	4199285.49	1.50E-08	1.6E-08	3.09E-08	2.25E-09	2.39E-09	4.64E-09	2.20E-09	2.13E-09	4.33E-09	1.17E-09	9.67E-10	2.14E-09
2832	648297.35	4199268.11	1.51E-08	1.61E-08	3.13E-08	2.28E-09	2.42E-09	4.70E-09	2.23E-09	2.16E-09	4.38E-09	1.18E-09	9.79E-10	2.16E-09
2833	648282.62	4199250.72	1.53E-08	1.63E-08	3.16E-08	2.30E-09	2.45E-09	4.75E-09	2.25E-09	2.18E-09	4.43E-09	1.20E-09	9.89E-10	2.18E-09
2834	648267.88	4199233.34	1.54E-08	1.64E-08	3.19E-08	2.32E-09	2.47E-09	4.79E-09	2.27E-09	2.20E-09	4.47E-09	1.21E-09	9.97E-10	2.20E-09
2835	648253.15	4199215.96	1.55E-08	1.66E-08	3.21E-08	2.34E-09	2.48E-09	4.82E-09	2.28E-09	2.21E-09	4.50E-09	1.21E-09	1.00E-09	2.22E-09
2836	648238.41	4199198.57	1.56E-08	1.67E-08	3.23E-08	2.35E-09	2.50E-09	4.85E-09	2.30E-09	2.23E-09	4.52E-09	1.22E-09	1.01E-09	2.23E-09
2837	648223.68	4199181.19	1.57E-08	1.67E-08	3.24E-08	2.36E-09	2.51E-09	4.86E-09	2.31E-09	2.23E-09	4.54E-09	1.22E-09	1.01E-09	2.24E-09
2838	648208.94	4199163.81	1.57E-08	1.67E-08	3.24E-08	2.36E-09	2.51E-09	4.87E-09	2.31E-09	2.24E-09	4.55E-09	1.23E-09	1.01E-09	2.24E-09
2839	648194.21	4199146.42	1.57E-08	1.67E-08	3.25E-08	2.36E-09	2.51E-09	4.87E-09	2.31E-09	2.24E-09	4.55E-09	1.23E-09	1.02E-09	2.24E-09
2840	648179.47	4199129.04	1.57E-08	1.67E-08	3.24E-08	2.36E-09	2.51E-09	4.86E-09	2.31E-09	2.23E-09	4.54E-09	1.22E-09	1.01E-09	2.24E-09
2841	648164.73	4199111.66	1.56E-08	1.67E-08	3.23E-08	2.35E-09	2.50E-09	4.85E-09	2.30E-09	2.23E-09	4.52E-09	1.22E-09	1.01E-09	2.23E-09
2842	648150	4199094.27	1.55E-08	1.66E-08	3.21E-08	2.34E-09	2.48E-09	4.82E-09	2.28E-09	2.21E-09	4.50E-09	1.21E-09	1.00E-09	2.22E-09
2843	648135.26	4199076.89	1.54E-08	1.64E-08	3.19E-08	2.32E-09	2.47E-09	4.79E-09	2.27E-09	2.20E-09	4.47E-09	1.21E-09	9.97E-10	2.20E-09
2844	648120.53	4199059.5	1.53E-08	1.63E-08	3.16E-08	2.30E-09	2.44E-09	4.74E-09	2.25E-09	2.18E-09	4.43E-09	1.19E-09	9.88E-10	2.18E-09
2845	648105.79	4199042.12	1.51E-08	1.61E-08	3.13E-08	2.27E-09	2.42E-09	4.69E-09	2.22E-09	2.16E-09	4.38E-09	1.18E-09	9.78E-10	2.16E-09
2846	648091.06	4199024.74	1.49E-08	1.59E-08	3.09E-08	2.25E-09	2.39E-09	4.64E-09	2.20E-09	2.13E-09	4.33E-09	1.17E-09	9.66E-10	2.13E-09
2847	648076.32	4199007.35	1.47E-08	1.57E-08	3.04E-08	2.22E-09	2.36E-09	4.57E-09	2.17E-09	2.10E-09	4.27E-09	1.15E-09	9.52E-10	2.10E-09
2848	648061.58	4198989.97	1.45E-08	1.55E-08	3.00E-08	2.18E-09	2.32E-09	4.50E-09	2.13E-09	2.07E-09	4.20E-09	1.13E-09	9.38E-10	2.07E-09
2849	648046.85	4198972.59	1.43E-08	1.52E-08	2.95E-08	2.15E-09	2.28E-09	4.43E-09	2.10E-09	2.03E-09	4.13E-09	1.11E-09	9.22E-10	2.04E-09
2850	648032.11	4198955.2	1.40E-08	1.49E-08	2.90E-08	2.11E-09	2.24E-09	4.35E-09	2.06E-09	2.00E-09	4.06E-09	1.09E-09	9.06E-10	2.00E-09
2851	648017.38	4198937.82	1.38E-08	1.47E-08	2.84E-08	2.07E-09	2.20E-09	4.27E-09	2.02E-09	1.96E-09	3.98E-09	1.07E-09	8.89E-10	1.96E-09
2852	648002.64	4198920.43	1.35E-08	1.44E-08	2.78E-08	2.03E-09	2.15E-09	4.18E-09	1.98E-09	1.92E-09	3.90E-09	1.05E-09	8.71E-10	1.92E-09
2853	647987.91	4198903.05	1.32E-08	1.41E-08	2.73E-08	1.98E-09	2.11E-09	4.09E-09	1.94E-09	1.88E-09	3.82E-09	1.03E-09	8.52E-10	1.88E-09
2854	647973.17	4198885.67	1.29E-08	1.38E-08	2.67E-08	1.94E-09	2.06E-09	4.00E-09	1.90E-09	1.84E-09	3.74E-09	1.01E-09	8.34E-10	1.84E-09
2855	648831.85	4199739.44	6.96E-09	7.42E-09	1.44E-08	1.05E-09	1.11E-09	2.16E-09	1.02E-09	9.91E-10	2.01E-09	5.43E-10	4.50E-10	9.93E-10
2856	648810.95	4199730.31	7.19E-09	7.67E-09	1.49E-08	1.08E-09	1.15E-09	2.23E-09	1.06E-09	1.02E-09	2.08E-09	5.62E-10	4.65E-10	1.03E-09
2857	648790.06	4199721.17	7.43E-09	7.92E-09	1.53E-08	1.12E-09	1.19E-09	2.30E-09	1.09E-09	1.06E-09	2.15E-09	5.80E-10	4.80E-10	1.06E-09
2858	648769.17	4199712.04	7.66E-09	8.17E-09	1.58E-08	1.15E-09	1.22E-09	2.38E-09	1.13E-09	1.09E-09	2.22E-09	5.98E-10	4.95E-10	1.09E-09
2859	648748.28	4199702.91	7.90E-09	8.42E-09	1.63E-08	1.19E-09	1.26E-09	2.45E-09	1.16E-09	1.13E-09	2.29E-09	6.17E-10	5.10E-10	1.13E-09
2860	648727.38	4199693.78	8.13E-09	8.67E-09	1.68E-08	1.22E-09	1.30E-09	2.52E-09	1.20E-09	1.16E-09	2.35E-09	6.35E-10	5.25E-10	1.16E-09
2861	648706.49	4199684.64	8.37E-09	8.92E-09	1.73E-08	1.26E-09	1.34E-09	2.60E-09	1.23E-09	1.19E-09	2.42E-09	6.53E-10	5.41E-10	1.19E-09
2862	648685.6	4199675.51	8.59E-09	9.16E-09	1.78E-08	1.29E-09	1.37E-09	2.67E-09	1.26E-09	1.22E-09	2.49E-09	6.71E-10	5.55E-10	1.23E-09
2863	648664.71	4199666.38	8.82E-09	9.4E-09	1.82E-08	1.33E-09	1.41E-09	2.74E-09	1.30E-09	1.26E-09	2.55E-09	6.89E-10	5.70E-10	1.26E-09
2864	648643.81	4199657.25	9.05E-09	9.64E-09	1.87E-08	1.36E-09	1.45E-09	2.81E-09	1.33E-09	1.29E-09	2.62E-09	7.07E-10	5.85E-10	1.29E-09
2865	648622.92	4199648.11	9.27E-09	9.88E-09	1.91E-08	1.39E-09	1.48E-09	2.88E-09	1.36E-09	1.32E-09	2.68E-09	7.24E-10	5.99E-10	1.32E-09
2866	648602.03	4199638.98	9.48E-09	1.01E-08	1.96E-08	1.43E-09	1.52E-09	2.94E-09	1.39E-09	1.35E-09	2.75E-09	7.41E-10	6.13E-10	1.35E-09
2867	648581.14	4199629.85	9.69E-09	1.03E-08	2.00E-08	1.46E-09	1.55E-09	3.01E-09	1.42E-09	1.38E-09	2.81E-09	7.57E-10	6.26E-10	1.38E-09
2868	648560.25	4199620.71	9.89E-09	1.05E-08	2.04E-08	1.49E-09	1.58E-09	3.07E-09	1.45E-09	1.41E-09	2.86E-09	7.73E-10	6.39E-10	1.41E-09
2869	648539.35	4199611.58	1.01E-08	1.08E-08	2.08E-08	1.52E-09	1.61E-09	3.13E-09	1.48E-09	1.44E-09	2.92E-09	7.88E-10	6.52E-10	1.44E-09
2870	648518.46	4199602.45	1.03E-08	1.1E-08	2.12E-08	1.55E-09	1.64E-09	3.19E-09	1.51E-09	1.46E-09	2.98E-09	8.03E-10	6.64E-10	1.47E-09
2871	648497.57	4199593.32	1.05E-08	1.11E-08	2.16E-08	1.57E-09	1.67E-09	3.24E-09	1.54E-09	1.49E-09	3.03E-09	8.17E-10	6.76E-10	1.49E-09
2872	648476.68	4199584.18	1.06E-08	1.13E-08	2.20E-08	1.60E-09	1.70E-09	3.30E-09	1.56E-09	1.52E-09	3.08E-09	8.31E-10	6.87E-10	1.52E-09
2873	648455.78	4199575.05	1.08E-08	1.15E-08	2.23E-08	1.62E-09	1.73E-09	3.35E-09	1.59E-09	1.54E-09	3.13E-09	8.43E-10	6.98E-10	1.54E-09
2874	648434.89	4199565.92	1.10E-08	1.17E-08	2.26E-08	1.65E-09	1.75E-09	3.40E-09	1.61E-09	1.56E-09	3.17E-09	8.56E-10	7.08E-10	1.56E-09
2875	648414	4199556.79	1.11E-08	1.18E-08	2.29E-08	1.67E-09	1.77E-09	3.44E-09	1.63E-09	1.58E-09	3.21E-09	8.67E-10	7.17E-10	1.58E-09
2876	648393.11	4199547.65	1.12E-08	1.2E-08	2.32E-08	1.69E-09	1.80E-09	3.49E-09	1.65E-09	1.60E-09	3.26E-09	8.78E-10	7.27E-10	1.60E-09
2877	648372.21	4199538.52	1.14E-08	1.21E-08	2.35E-08	1.71E-09	1.82E-09	3.53E-09	1.67E-09	1.62E-09	3.29E-09	8.88E-10	7.35E-10	1.62E-09
2878	648351.32	4199529.39	1.15E-08	1.23E-08	2.37E-08	1.73E-09	1.84E-09	3.57E-09	1.69E-09	1.64E-09	3.33E-09	8.98E-10	7.43E-10	1.64E-09
2879	648330.43	4199520.25	1.16E-08	1.24E-08	2.40E-08	1.75E-09	1.86E-09	3.60E-09	1.71E-09	1.65E-09	3.36E-09	9.07E-10	7.50E-10	1.66E-09
2880	648309.54	4199511.12	1.17E-08	1.25E-08	2.42E-08	1.76E-09	1.87E-09	3.63E-09	1.72E-09	1.67E-09	3.39E-09	9.15E-10	7.57E-10	1.67E-09
2881	648288.64	4199501.99	1.18E-08	1.26E-08	2.44E-08	1.77E-09	1.89E-09	3.66E-09	1.74E-09	1.68E-09	3.42E-09	9.22E-10	7.63E-10	1.68E-09
2882	648267.75	4199492.86	1.19E-08	1.27E-08	2.46E-08	1.79E-09	1.90E-09	3.69E-09	1.75E-09	1.69E-09	3.44E-09	9.28E-10	7.68E-10	1.70E-09
2883	648246.86	4199483.72	1.20E-08	1.27E-08	2.47E-08	1.80E-09	1.91E-09	3.71E-09	1.76E-09	1.70E-09	3.46E-09	9.34E-10	7.73E-10	1.71E-09
2884	648225.97	4199474.59	1.20E-08	1.28E-08	2.48E-08	1.81E-09	1.92E-09	3.73E-09	1.77E-09	1.71E-09	3.48E-09	9.38E-10	7.76E-10	1.71E-09

2885	648206.63	4199462.39	1.21E-08	1.29E-08	2.50E-08	1.82E-09	1.93E-09	3.75E-09	1.78E-09	1.72E-09	3.50E-09	9.45E-10	7.82E-10	1.73E-09
2886	648191.88	4199445	1.23E-08	1.31E-08	2.53E-08	1.84E-09	1.96E-09	3.80E-09	1.80E-09	1.75E-09	3.55E-09	9.57E-10	7.92E-10	1.75E-09
2887	648177.14	4199427.61	1.24E-08	1.32E-08	2.56E-08	1.86E-09	1.98E-09	3.84E-09	1.82E-09	1.77E-09	3.59E-09	9.68E-10	8.01E-10	1.77E-09
2888	648162.4	4199410.21	1.25E-08	1.33E-08	2.58E-08	1.88E-09	2.00E-09	3.88E-09	1.84E-09	1.78E-09	3.62E-09	9.77E-10	8.08E-10	1.79E-09
2889	648147.65	4199392.82	1.26E-08	1.35E-08	2.61E-08	1.90E-09	2.02E-09	3.92E-09	1.86E-09	1.80E-09	3.65E-09	9.86E-10	8.16E-10	1.80E-09
2890	648132.91	4199375.43	1.27E-08	1.36E-08	2.63E-08	1.91E-09	2.03E-09	3.95E-09	1.87E-09	1.81E-09	3.68E-09	9.93E-10	8.22E-10	1.82E-09
2891	648118.17	4199358.03	1.28E-08	1.36E-08	2.64E-08	1.92E-09	2.05E-09	3.97E-09	1.88E-09	1.82E-09	3.70E-09	9.99E-10	8.27E-10	1.83E-09
2892	648103.42	4199340.64	1.29E-08	1.37E-08	2.66E-08	1.93E-09	2.06E-09	3.99E-09	1.89E-09	1.83E-09	3.72E-09	1.00E-09	8.31E-10	1.84E-09
2893	648088.68	4199323.25	1.29E-08	1.38E-08	2.67E-08	1.94E-09	2.06E-09	4.00E-09	1.90E-09	1.84E-09	3.74E-09	1.01E-09	8.34E-10	1.84E-09
2894	648073.94	4199305.85	1.29E-08	1.38E-08	2.67E-08	1.94E-09	2.07E-09	4.01E-09	1.90E-09	1.84E-09	3.74E-09	1.01E-09	8.35E-10	1.85E-09
2895	648059.19	4199288.46	1.29E-08	1.38E-08	2.67E-08	1.94E-09	2.07E-09	4.01E-09	1.90E-09	1.84E-09	3.74E-09	1.01E-09	8.36E-10	1.85E-09
2896	648044.45	4199271.07	1.29E-08	1.38E-08	2.67E-08	1.94E-09	2.07E-09	4.01E-09	1.90E-09	1.84E-09	3.74E-09	1.01E-09	8.35E-10	1.84E-09
2897	648029.7	4199253.67	1.29E-08	1.37E-08	2.66E-08	1.94E-09	2.06E-09	4.00E-09	1.90E-09	1.84E-09	3.73E-09	1.01E-09	8.33E-10	1.84E-09
2898	648014.96	4199236.28	1.28E-08	1.37E-08	2.65E-08	1.93E-09	2.05E-09	3.98E-09	1.89E-09	1.83E-09	3.72E-09	1.00E-09	8.30E-10	1.83E-09
2899	648000.22	4199218.89	1.28E-08	1.36E-08	2.64E-08	1.92E-09	2.04E-09	3.96E-09	1.88E-09	1.82E-09	3.70E-09	9.97E-10	8.25E-10	1.82E-09
2900	647985.47	4199201.49	1.27E-08	1.35E-08	2.62E-08	1.91E-09	2.03E-09	3.93E-09	1.86E-09	1.81E-09	3.67E-09	9.90E-10	8.19E-10	1.81E-09
2901	647970.73	4199184.1	1.26E-08	1.34E-08	2.60E-08	1.89E-09	2.01E-09	3.90E-09	1.85E-09	1.79E-09	3.64E-09	9.82E-10	8.12E-10	1.79E-09
2902	647955.99	4199166.71	1.24E-08	1.33E-08	2.57E-08	1.87E-09	1.99E-09	3.86E-09	1.83E-09	1.77E-09	3.60E-09	9.72E-10	8.04E-10	1.78E-09
2903	647941.24	4199149.31	1.23E-08	1.31E-08	2.54E-08	1.85E-09	1.97E-09	3.82E-09	1.81E-09	1.75E-09	3.56E-09	9.61E-10	7.95E-10	1.76E-09
2904	647926.5	4199131.92	1.22E-08	1.3E-08	2.51E-08	1.83E-09	1.94E-09	3.77E-09	1.79E-09	1.73E-09	3.52E-09	9.49E-10	7.85E-10	1.73E-09
2905	647911.75	4199114.53	1.20E-08	1.28E-08	2.48E-08	1.80E-09	1.92E-09	3.72E-09	1.76E-09	1.71E-09	3.47E-09	9.36E-10	7.74E-10	1.71E-09
2906	647897.01	4199097.13	1.18E-08	1.26E-08	2.44E-08	1.77E-09	1.89E-09	3.66E-09	1.74E-09	1.68E-09	3.42E-09	9.22E-10	7.63E-10	1.68E-09
2907	647882.27	4199079.74	1.16E-08	1.24E-08	2.40E-08	1.75E-09	1.86E-09	3.60E-09	1.71E-09	1.65E-09	3.36E-09	9.07E-10	7.50E-10	1.66E-09
2908	647867.52	4199062.35	1.14E-08	1.22E-08	2.36E-08	1.72E-09	1.82E-09	3.54E-09	1.68E-09	1.63E-09	3.30E-09	8.92E-10	7.38E-10	1.63E-09
2909	647852.78	4199044.95	1.12E-08	1.19E-08	2.32E-08	1.69E-09	1.79E-09	3.48E-09	1.65E-09	1.60E-09	3.25E-09	8.76E-10	7.24E-10	1.60E-09
2910	647838.04	4199027.56	1.10E-08	1.17E-08	2.27E-08	1.65E-09	1.76E-09	3.41E-09	1.62E-09	1.57E-09	3.18E-09	8.59E-10	7.11E-10	1.57E-09
2911	647823.29	4199010.17	1.08E-08	1.15E-08	2.23E-08	1.62E-09	1.72E-09	3.35E-09	1.59E-09	1.54E-09	3.12E-09	8.42E-10	6.97E-10	1.54E-09
2912	647808.55	4198992.78	1.06E-08	1.13E-08	2.18E-08	1.59E-09	1.69E-09	3.28E-09	1.55E-09	1.51E-09	3.06E-09	8.26E-10	6.83E-10	1.51E-09
2913	647793.81	4198975.38	1.04E-08	1.1E-08	2.14E-08	1.56E-09	1.66E-09	3.21E-09	1.52E-09	1.48E-09	3.00E-09	8.09E-10	6.69E-10	1.48E-09
2914	649078.35	4198561.56	7.66E-08	8.17E-08	1.58E-07	1.15E-08	1.22E-08	2.38E-08	1.13E-08	1.09E-08	2.22E-08	5.98E-09	4.95E-09	1.09E-08
2915	649075.27	4198660.73	5.27E-08	5.62E-08	1.09E-07	7.93E-09	8.43E-09	1.64E-08	7.75E-09	7.51E-09	1.53E-08	4.12E-09	3.41E-09	7.53E-09
2916	649076.48	4198760.15	3.76E-08	4.01E-08	7.77E-08	5.66E-09	6.01E-09	1.17E-08	5.53E-09	5.36E-09	1.09E-08	2.94E-09	2.43E-09	5.37E-09
2917	649049.72	4198758.63	3.89E-08	4.15E-08	8.04E-08	5.85E-09	6.22E-09	1.21E-08	5.72E-09	5.54E-09	1.13E-08	3.04E-09	2.51E-09	5.55E-09
2918	649070.89	4198859.17	2.80E-08	2.99E-08	5.79E-08	4.21E-09	4.48E-09	8.69E-09	4.12E-09	3.99E-09	8.11E-09	2.19E-09	1.81E-09	4.00E-09
2919	649044.36	4198857.67	2.91E-08	3.1E-08	6.01E-08	4.37E-09	4.65E-09	9.02E-09	4.27E-09	4.14E-09	8.42E-09	2.27E-09	1.88E-09	4.15E-09
2920	649068.59	4198958.39	2.14E-08	2.28E-08	4.42E-08	3.22E-09	3.42E-09	6.63E-09	3.14E-09	3.05E-09	6.19E-09	1.67E-09	1.38E-09	3.05E-09
2921	649041.21	4198956.84	2.23E-08	2.38E-08	4.61E-08	3.35E-09	3.56E-09	6.92E-09	3.28E-09	3.18E-09	6.46E-09	1.74E-09	1.44E-09	3.18E-09
2922	649013.83	4198955.28	2.32E-08	2.47E-08	4.79E-08	3.48E-09	3.70E-09	7.19E-09	3.41E-09	3.30E-09	6.71E-09	1.81E-09	1.50E-09	3.31E-09
2923	649064.08	4199156.83	1.35E-08	1.44E-08	2.79E-08	2.03E-09	2.16E-09	4.19E-09	1.99E-09	1.92E-09	3.91E-09	1.05E-09	8.72E-10	1.93E-09
2924	649037.17	4199155.3	1.41E-08	1.5E-08	2.91E-08	2.12E-09	2.25E-09	4.37E-09	2.07E-09	2.01E-09	4.08E-09	1.10E-09	9.10E-10	2.01E-09
2925	649010.25	4199153.77	1.47E-08	1.56E-08	3.03E-08	2.21E-09	2.35E-09	4.55E-09	2.16E-09	2.09E-09	4.25E-09	1.15E-09	9.48E-10	2.09E-09
2926	648983.33	4199152.24	1.53E-08	1.63E-08	3.15E-08	2.29E-09	2.44E-09	4.73E-09	2.24E-09	2.17E-09	4.42E-09	1.19E-09	9.86E-10	2.18E-09
2927	649063.17	4199355.46	9.25E-09	9.86E-09	1.91E-08	1.39E-09	1.48E-09	2.87E-09	1.36E-09	1.32E-09	2.68E-09	7.22E-10	5.98E-10	1.32E-09
2928	649035.89	4199353.92	9.64E-09	1.03E-08	1.99E-08	1.45E-09	1.54E-09	2.99E-09	1.42E-09	1.37E-09	2.79E-09	7.53E-10	6.23E-10	1.38E-09
2929	649008.61	4199352.37	1.00E-08	1.07E-08	2.07E-08	1.51E-09	1.60E-09	3.11E-09	1.48E-09	1.43E-09	2.91E-09	7.84E-10	6.49E-10	1.43E-09
2930	648981.33	4199350.82	1.04E-08	1.11E-08	2.16E-08	1.57E-09	1.67E-09	3.24E-09	1.54E-09	1.49E-09	3.02E-09	8.16E-10	6.75E-10	1.49E-09
2931	648954.04	4199349.27	1.08E-08	1.16E-08	2.24E-08	1.63E-09	1.73E-09	3.37E-09	1.60E-09	1.55E-09	3.14E-09	8.47E-10	7.01E-10	1.55E-09
2932	649055.54	4199553.72	6.83E-09	7.29E-09	1.41E-08	1.03E-09	1.09E-09	2.12E-09	1.00E-09	9.74E-10	1.98E-09	5.34E-10	4.42E-10	9.75E-10
2933	649028	4199552.16	7.11E-09	7.58E-09	1.47E-08	1.07E-09	1.14E-09	2.21E-09	1.05E-09	1.01E-09	2.06E-09	5.55E-10	4.59E-10	1.01E-09
2934	649000.46	4199550.6	7.39E-09	7.88E-09	1.53E-08	1.11E-09	1.18E-09	2.29E-09	1.09E-09	1.05E-09	2.14E-09	5.77E-10	4.78E-10	1.05E-09
2935	648972.92	4199549.04	7.68E-09	8.18E-09	1.59E-08	1.15E-09	1.23E-09	2.38E-09	1.13E-09	1.09E-09	2.22E-09	6.00E-10	4.96E-10	1.10E-09
2936	648945.38	4199547.47	7.97E-09	8.49E-09	1.65E-08	1.20E-09	1.27E-09	2.47E-09	1.17E-09	1.14E-09	2.31E-09	6.22E-10	5.15E-10	1.14E-09
2937	648917.84	4199545.91	8.26E-09	8.81E-09	1.71E-08	1.24E-09	1.32E-09	2.56E-09	1.21E-09	1.18E-09	2.39E-09	6.45E-10	5.34E-10	1.18E-09
2938	649050.89	4199752.15	5.29E-09	5.63E-09	1.09E-08	7.95E-10	8.45E-10	1.64E-09	7.77E-10	7.53E-10	1.53E-09	4.13E-10	3.42E-10	7.54E-10
2939	649023.65	4199750.61	5.48E-09	5.84E-09	1.13E-08	8.24E-10	8.76E-10	1.70E-09	8.05E-10	7.81E-10	1.59E-09	4.28E-10	3.54E-10	7.82E-10
2940	648996.41	4199749.06	5.68E-09	6.05E-09	1.17E-08	8.54E-10	9.08E-10	1.76E-09	8.35E-10	8.09E-10	1.64E-09	4.43E-10	3.67E-10	8.10E-10
2941	648969.18	4199747.52	5.89E-09	6.27E-09	1.22E-08	8.85E-10	9.41E-10	1.83E-09	8.65E-10	8.39E-10	1.70E-09	4.60E-10	3.80E-10	8.40E-10
2942	648941.94	4199745.97	6.10E-09	6.5E-09	1.26E-08	9.17E-10	9.75E-10	1.89E-09	8.96E-10	8.69E-10	1.77E-09	4.76E-10	3.94E-10	8.70E-10
2943	648914.7	4199744.43	6.31E-09	6.72E-09	1.30E-08	9.48E-10	1.01E-09	1.96E-09	9.27E-10	8.99E-10	1.83E-09	4.93E-10	4.08E-10	9.00E-10
2944	648887.46	4199742.88	6.52E-09	6.95E-09	1.35E-08	9.81E-10	1.04E-09	2.02E-09	9.59E-10	9.29E-10	1.89E-09	5.09E-10	4.21E-10	9.31E-10
2945	648860.22	4199741.34	6.73E-09	7.18E-09	1.39E-08	1.01E-09	1.08E-09	2.09E-09	9.90E-10	9.60E-10	1.95E-09	5.26E-10	4.35E-10	9.61E-10

EXHIBIT 1

			T2		T2L3		T4i		T4f	
			39	649127.70						
			1.31E-04	1.39E-04	1.96E-05	2.09E-05	1.92E-05	1.86E-05	1.02E-05	8.44E-06
			Yr 1	Yr 2	Yr 1	Yr 2	Yr 1	Yr 2	Yr 1	Yr 2
1	649114.1	4198290	2.26E-03	2.41E-03	3.40E-04	3.61E-04	3.32E-04	3.22E-04	1.76E-04	1.46E-04
2	649113.4	4198315	1.67E-03	1.78E-03	2.51E-04	2.67E-04	2.45E-04	2.38E-04	1.30E-04	1.08E-04
3	649112.7	4198340	1.32E-03	1.41E-03	1.99E-04	2.11E-04	1.94E-04	1.88E-04	1.03E-04	8.54E-05
4	649112	4198365	1.09E-03	1.16E-03	1.64E-04	1.74E-04	1.60E-04	1.55E-04	8.51E-05	7.04E-05
5	649110.6	4198415	7.89E-04	8.42E-04	1.19E-04	1.26E-04	1.16E-04	1.13E-04	6.17E-05	5.10E-05
6	649109.2	4198465	6.03E-04	6.43E-04	9.06E-05	9.64E-05	8.86E-05	8.59E-05	4.71E-05	3.89E-05
7	649107.8	4198515	4.75E-04	5.07E-04	7.14E-05	7.60E-05	6.99E-05	6.77E-05	3.71E-05	3.07E-05
8	649106.5	4198565	3.83E-04	4.08E-04	5.76E-05	6.12E-05	5.63E-05	5.46E-05	2.99E-05	2.47E-05
9	649103.7	4198665	2.60E-04	2.78E-04	3.92E-05	4.16E-05	3.83E-05	3.71E-05	2.03E-05	1.68E-05
10	649100.9	4198765	1.85E-04	1.97E-04	2.78E-05	2.96E-05	2.72E-05	2.64E-05	1.45E-05	1.20E-05
11	649098.1	4198864	1.37E-04	1.46E-04	2.05E-05	2.18E-05	2.01E-05	1.95E-05	1.07E-05	8.82E-06
12	649095.3	4198964	1.04E-04	1.11E-04	1.56E-05	1.66E-05	1.53E-05	1.48E-05	8.13E-06	6.72E-06
13	649089.8	4199164	6.57E-05	7.00E-05	9.88E-06	1.05E-05	9.66E-06	9.36E-06	5.13E-06	4.25E-06
14	649084.2	4199364	4.54E-05	4.84E-05	6.83E-06	7.26E-06	6.68E-06	6.47E-06	3.55E-06	2.93E-06
15	649078.6	4199564	3.35E-05	3.58E-05	5.04E-06	5.36E-06	4.93E-06	4.78E-06	2.62E-06	2.17E-06
16	649073.1	4199764	2.60E-05	2.77E-05	3.91E-06	4.16E-06	3.83E-06	3.71E-06	2.03E-06	1.68E-06
17	649150.6	4198290	2.41E-03	2.57E-03	3.62E-04	3.85E-04	3.54E-04	3.43E-04	1.88E-04	1.56E-04
18	649193.6	4198290	2.51E-03	2.67E-03	3.77E-04	4.01E-04	3.69E-04	3.57E-04	1.96E-04	1.62E-04
19	649150.6	4198315	1.73E-03	1.84E-03	2.60E-04	2.77E-04	2.54E-04	2.47E-04	1.35E-04	1.12E-04
20	649193.5	4198315	1.78E-03	1.90E-03	2.68E-04	2.85E-04	2.62E-04	2.54E-04	1.39E-04	1.15E-04
21	649150.5	4198340	1.35E-03	1.44E-03	2.03E-04	2.16E-04	1.99E-04	1.93E-04	1.06E-04	8.73E-05
22	649193.5	4198340	1.37E-03	1.47E-03	2.07E-04	2.20E-04	2.02E-04	1.96E-04	1.07E-04	8.88E-05
23	649150.4	4198365	1.10E-03	1.18E-03	1.66E-04	1.76E-04	1.62E-04	1.57E-04	8.61E-05	7.12E-05
24	649193.4	4198365	1.11E-03	1.18E-03	1.67E-04	1.77E-04	1.63E-04	1.58E-04	8.67E-05	7.17E-05
25	649150.3	4198415	7.87E-04	8.39E-04	1.18E-04	1.26E-04	1.16E-04	1.12E-04	6.15E-05	5.09E-05
26	649193.3	4198415	7.80E-04	8.32E-04	1.17E-04	1.25E-04	1.15E-04	1.11E-04	6.09E-05	5.04E-05
27	649150.2	4198465	5.94E-04	6.33E-04	8.93E-05	9.50E-05	8.74E-05	8.47E-05	4.64E-05	3.84E-05
28	649193.2	4198465	5.82E-04	6.20E-04	8.75E-05	9.30E-05	8.55E-05	8.29E-05	4.54E-05	3.76E-05
29	649150.1	4198515	4.64E-04	4.94E-04	6.97E-05	7.41E-05	6.82E-05	6.61E-05	3.62E-05	3.00E-05
30	649193.1	4198515	4.49E-04	4.79E-04	6.75E-05	7.18E-05	6.60E-05	6.40E-05	3.51E-05	2.90E-05
31	649149.9	4198565	3.70E-04	3.94E-04	5.56E-05	5.92E-05	5.44E-05	5.27E-05	2.89E-05	2.39E-05
32	649192.9	4198565	3.55E-04	3.79E-04	5.34E-05	5.68E-05	5.22E-05	5.06E-05	2.78E-05	2.30E-05
33	649128.2	4198665	2.53E-04	2.70E-04	3.81E-05	4.05E-05	3.73E-05	3.61E-05	1.98E-05	1.64E-05
34	649171.2	4198665	2.41E-04	2.57E-04	3.62E-05	3.85E-05	3.54E-05	3.43E-05	1.88E-05	1.56E-05
35	649214.2	4198665	2.27E-04	2.42E-04	3.41E-05	3.63E-05	3.34E-05	3.23E-05	1.77E-05	1.47E-05
36	649128	4198765	1.78E-04	1.90E-04	2.68E-05	2.85E-05	2.62E-05	2.54E-05	1.39E-05	1.15E-05
37	649170.9	4198765	1.68E-04	1.79E-04	2.52E-05	2.68E-05	2.47E-05	2.39E-05	1.31E-05	1.08E-05
38	649213.9	4198765	1.57E-04	1.67E-04	2.36E-05	2.51E-05	2.30E-05	2.23E-05	1.22E-05	1.01E-05
39	649127.7	4198865	1.31E-04	1.39E-04	1.96E-05	2.09E-05	1.92E-05	1.86E-05	1.02E-05	8.44E-06
40	649170.7	4198865	1.22E-04	1.30E-04	1.84E-05	1.95E-05	1.79E-05	1.74E-05	9.53E-06	7.89E-06
41	649213.7	4198865	1.14E-04	1.21E-04	1.71E-05	1.82E-05	1.67E-05	1.62E-05	8.87E-06	7.34E-06
42	649127.5	4198965	9.89E-05	1.05E-04	1.49E-05	1.58E-05	1.45E-05	1.41E-05	7.72E-06	6.39E-06
43	649170.5	4198965	9.22E-05	9.83E-05	1.39E-05	1.47E-05	1.36E-05	1.31E-05	7.21E-06	5.96E-06
44	649213.5	4198965	8.58E-05	9.15E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.70E-06	5.55E-06
45	649115.6	4199165	6.31E-05	6.73E-05	9.49E-06	1.01E-05	9.28E-06	8.99E-06	4.93E-06	4.08E-06
46	649148.5	4199165	5.99E-05	6.39E-05	9.01E-06	9.58E-06	8.81E-06	8.54E-06	4.68E-06	3.87E-06
47	649191.5	4199165	5.60E-05	5.97E-05	8.42E-06	8.95E-06	8.23E-06	7.98E-06	4.37E-06	3.62E-06
48	649112.5	4199365	4.35E-05	4.64E-05	6.55E-06	6.96E-06	6.40E-06	6.20E-06	3.40E-06	2.81E-06
49	649148	4199365	4.13E-05	4.41E-05	6.21E-06	6.61E-06	6.08E-06	5.89E-06	3.23E-06	2.67E-06
50	649191	4199365	3.88E-05	4.14E-05	5.84E-06	6.21E-06	5.71E-06	5.54E-06	3.03E-06	2.51E-06
51	649109.5	4199565	3.21E-05	3.43E-05	4.83E-06	5.14E-06	4.73E-06	4.58E-06	2.51E-06	2.08E-06
52	649147.5	4199565	3.06E-05	3.26E-05	4.60E-06	4.89E-06	4.49E-06	4.35E-06	2.39E-06	1.97E-06

53	649190.5	4199565	2.89E-05	3.08E-05	4.35E-06	4.62E-06	4.25E-06	4.12E-06	2.26E-06	1.87E-06
54	649106.5	4199765	2.50E-05	2.66E-05	3.76E-06	3.99E-06	3.67E-06	3.56E-06	1.95E-06	1.61E-06
55	649147	4199765	2.38E-05	2.54E-05	3.58E-06	3.80E-06	3.50E-06	3.39E-06	1.86E-06	1.54E-06
56	649190	4199765	2.26E-05	2.41E-05	3.40E-06	3.62E-06	3.33E-06	3.23E-06	1.77E-06	1.46E-06
57	649236.8	4198291	2.54E-03	2.71E-03	3.82E-04	4.06E-04	3.73E-04	3.62E-04	1.98E-04	1.64E-04
58	649281.5	4198292	2.52E-03	2.69E-03	3.80E-04	4.03E-04	3.71E-04	3.60E-04	1.97E-04	1.63E-04
59	649236.1	4198316	1.80E-03	1.92E-03	2.71E-04	2.88E-04	2.65E-04	2.56E-04	1.41E-04	1.16E-04
60	649280.8	4198317	1.79E-03	1.91E-03	2.69E-04	2.86E-04	2.63E-04	2.55E-04	1.40E-04	1.15E-04
61	649235.3	4198341	1.38E-03	1.47E-03	2.07E-04	2.20E-04	2.03E-04	1.97E-04	1.08E-04	8.91E-05
62	649280	4198342	1.36E-03	1.45E-03	2.05E-04	2.18E-04	2.00E-04	1.94E-04	1.07E-04	8.81E-05
63	649234.6	4198366	1.10E-03	1.18E-03	1.66E-04	1.77E-04	1.62E-04	1.57E-04	8.63E-05	7.14E-05
64	649279.3	4198367	1.09E-03	1.16E-03	1.63E-04	1.74E-04	1.60E-04	1.55E-04	8.48E-05	7.02E-05
65	649233.1	4198416	7.66E-04	8.17E-04	1.15E-04	1.23E-04	1.13E-04	1.09E-04	5.99E-05	4.95E-05
66	649277.8	4198417	7.43E-04	7.92E-04	1.12E-04	1.19E-04	1.09E-04	1.06E-04	5.81E-05	4.80E-05
67	649231.6	4198466	5.66E-04	6.03E-04	8.50E-05	9.04E-05	8.31E-05	8.06E-05	4.42E-05	3.65E-05
68	649276.4	4198467	5.42E-04	5.77E-04	8.14E-05	8.66E-05	7.96E-05	7.72E-05	4.23E-05	3.50E-05
69	649230.2	4198516	4.33E-04	4.62E-04	6.52E-05	6.93E-05	6.37E-05	6.18E-05	3.38E-05	2.80E-05
70	649274.9	4198517	4.10E-04	4.37E-04	6.17E-05	6.56E-05	6.03E-05	5.85E-05	3.21E-05	2.65E-05
71	649228.7	4198566	3.41E-04	3.63E-04	5.12E-05	5.45E-05	5.01E-05	4.86E-05	2.66E-05	2.20E-05
72	649273.4	4198567	3.20E-04	3.41E-04	4.81E-05	5.11E-05	4.70E-05	4.56E-05	2.50E-05	2.07E-05
73	649248.1	4198666	2.14E-04	2.29E-04	3.23E-05	3.43E-05	3.15E-05	3.06E-05	1.68E-05	1.39E-05
74	649292.8	4198668	1.98E-04	2.11E-04	2.98E-05	3.16E-05	2.91E-05	2.82E-05	1.55E-05	1.28E-05
75	649245.2	4198766	1.48E-04	1.58E-04	2.23E-05	2.37E-05	2.18E-05	2.11E-05	1.16E-05	9.57E-06
76	649289.9	4198768	1.36E-04	1.45E-04	2.05E-05	2.18E-05	2.00E-05	1.94E-05	1.06E-05	8.80E-06
77	649242.2	4198866	1.08E-04	1.15E-04	1.62E-05	1.72E-05	1.58E-05	1.54E-05	8.42E-06	6.97E-06
78	649287	4198868	9.91E-05	1.06E-04	1.49E-05	1.58E-05	1.46E-05	1.41E-05	7.74E-06	6.41E-06
79	649239.3	4198966	8.19E-05	8.73E-05	1.23E-05	1.31E-05	1.20E-05	1.17E-05	6.40E-06	5.29E-06
80	649284	4198968	7.56E-05	8.06E-05	1.14E-05	1.21E-05	1.11E-05	1.08E-05	5.90E-06	4.88E-06
81	649233.4	4199166	5.23E-05	5.58E-05	7.87E-06	8.37E-06	7.69E-06	7.46E-06	4.09E-06	3.38E-06
82	649278.1	4199168	4.87E-05	5.20E-05	7.33E-06	7.79E-06	7.17E-06	6.94E-06	3.81E-06	3.15E-06
83	649227.5	4199366	3.69E-05	3.93E-05	5.54E-06	5.89E-06	5.42E-06	5.25E-06	2.88E-06	2.38E-06
84	649272.3	4199367	3.47E-05	3.69E-05	5.21E-06	5.54E-06	5.09E-06	4.94E-06	2.71E-06	2.24E-06
85	649221.7	4199566	2.78E-05	2.96E-05	4.18E-06	4.44E-06	4.09E-06	3.96E-06	2.17E-06	1.80E-06
86	649266.4	4199567	2.63E-05	2.81E-05	3.96E-06	4.21E-06	3.87E-06	3.75E-06	2.06E-06	1.70E-06
87	649215.8	4199766	2.20E-05	2.35E-05	3.31E-06	3.52E-06	3.24E-06	3.14E-06	1.72E-06	1.42E-06
88	649260.5	4199767	2.10E-05	2.24E-05	3.16E-06	3.36E-06	3.09E-06	3.00E-06	1.64E-06	1.36E-06
89	649304.1	4198293	2.51E-03	2.68E-03	3.78E-04	4.02E-04	3.69E-04	3.58E-04	1.96E-04	1.62E-04
90	649347.2	4198294	2.49E-03	2.66E-03	3.75E-04	3.98E-04	3.66E-04	3.55E-04	1.95E-04	1.61E-04
91	649390.3	4198295	2.46E-03	2.62E-03	3.70E-04	3.93E-04	3.61E-04	3.50E-04	1.92E-04	1.59E-04
92	649303.5	4198318	1.78E-03	1.89E-03	2.67E-04	2.84E-04	2.61E-04	2.53E-04	1.39E-04	1.15E-04
93	649346.6	4198319	1.75E-03	1.87E-03	2.63E-04	2.80E-04	2.58E-04	2.50E-04	1.37E-04	1.13E-04
94	649389.7	4198320	1.71E-03	1.83E-03	2.58E-04	2.74E-04	2.52E-04	2.44E-04	1.34E-04	1.11E-04
95	649303	4198343	1.35E-03	1.44E-03	2.03E-04	2.16E-04	1.99E-04	1.93E-04	1.06E-04	8.73E-05
96	649346.1	4198344	1.32E-03	1.41E-03	1.99E-04	2.12E-04	1.95E-04	1.89E-04	1.03E-04	8.56E-05
97	649389.2	4198345	1.29E-03	1.37E-03	1.94E-04	2.06E-04	1.89E-04	1.83E-04	1.01E-04	8.32E-05
98	649302.5	4198368	1.07E-03	1.14E-03	1.61E-04	1.72E-04	1.58E-04	1.53E-04	8.38E-05	6.93E-05
99	649345.6	4198369	1.05E-03	1.11E-03	1.57E-04	1.67E-04	1.54E-04	1.49E-04	8.16E-05	6.75E-05
100	649388.7	4198370	1.01E-03	1.07E-03	1.52E-04	1.61E-04	1.48E-04	1.44E-04	7.87E-05	6.51E-05
101	649301.4	4198418	7.29E-04	7.77E-04	1.10E-04	1.17E-04	1.07E-04	1.04E-04	5.70E-05	4.71E-05
102	649344.5	4198419	7.01E-04	7.48E-04	1.05E-04	1.12E-04	1.03E-04	9.99E-05	5.48E-05	4.53E-05
103	649387.6	4198420	6.67E-04	7.11E-04	1.00E-04	1.07E-04	9.80E-05	9.50E-05	5.21E-05	4.31E-05
104	649300.4	4198468	5.27E-04	5.62E-04	7.93E-05	8.43E-05	7.75E-05	7.52E-05	4.12E-05	3.41E-05
105	649343.5	4198469	5.00E-04	5.33E-04	7.52E-05	8.00E-05	7.36E-05	7.13E-05	3.91E-05	3.23E-05
106	649386.6	4198470	4.69E-04	5.00E-04	7.06E-05	7.50E-05	6.90E-05	6.69E-05	3.67E-05	3.03E-05
107	649299.3	4198518	3.97E-04	4.23E-04	5.97E-05	6.34E-05	5.83E-05	5.65E-05	3.10E-05	2.56E-05
108	649342.4	4198519	3.72E-04	3.96E-04	5.59E-05	5.95E-05	5.47E-05	5.30E-05	2.91E-05	2.40E-05

109	649385.5	4198520	3.45E-04	3.68E-04	5.19E-05	5.51E-05	5.07E-05	4.92E-05	2.69E-05	2.23E-05
110	649298.3	4198568	3.07E-04	3.28E-04	4.62E-05	4.91E-05	4.52E-05	4.38E-05	2.40E-05	1.99E-05
111	649341.4	4198569	2.85E-04	3.04E-04	4.29E-05	4.56E-05	4.19E-05	4.06E-05	2.23E-05	1.84E-05
112	649384.5	4198570	2.62E-04	2.80E-04	3.95E-05	4.19E-05	3.86E-05	3.74E-05	2.05E-05	1.70E-05
113	649317.7	4198668	1.89E-04	2.01E-04	2.84E-05	3.02E-05	2.77E-05	2.69E-05	1.47E-05	1.22E-05
114	649360.8	4198669	1.73E-04	1.84E-04	2.60E-05	2.76E-05	2.54E-05	2.46E-05	1.35E-05	1.12E-05
115	649315.6	4198768	1.29E-04	1.38E-04	1.95E-05	2.07E-05	1.90E-05	1.85E-05	1.01E-05	8.37E-06
116	649358.7	4198769	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.69E-05	9.28E-06	7.67E-06
117	649313.5	4198868	9.43E-05	1.01E-04	1.42E-05	1.51E-05	1.39E-05	1.34E-05	7.37E-06	6.09E-06
118	649356.6	4198869	8.69E-05	9.27E-05	1.31E-05	1.39E-05	1.28E-05	1.24E-05	6.79E-06	5.62E-06
119	649311.4	4198968	7.20E-05	7.68E-05	1.08E-05	1.15E-05	1.06E-05	1.03E-05	5.62E-06	4.65E-06
120	649354.5	4198969	6.68E-05	7.12E-05	1.00E-05	1.07E-05	9.82E-06	9.52E-06	5.22E-06	4.31E-06
121	649307.1	4199168	4.66E-05	4.97E-05	7.01E-06	7.45E-06	6.86E-06	6.64E-06	3.64E-06	3.01E-06
122	649350.2	4199169	4.38E-05	4.67E-05	6.58E-06	7.00E-06	6.44E-06	6.24E-06	3.42E-06	2.83E-06
123	649302.9	4199368	3.33E-05	3.55E-05	5.01E-06	5.33E-06	4.90E-06	4.75E-06	2.60E-06	2.15E-06
124	649346	4199369	3.16E-05	3.37E-05	4.75E-06	5.05E-06	4.65E-06	4.50E-06	2.47E-06	2.04E-06
125	649298.7	4199568	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
126	649341.8	4199569	2.43E-05	2.60E-05	3.66E-06	3.89E-06	3.58E-06	3.47E-06	1.90E-06	1.57E-06
127	649294.5	4199768	2.04E-05	2.17E-05	3.06E-06	3.25E-06	2.99E-06	2.90E-06	1.59E-06	1.32E-06
128	649337.6	4199769	1.96E-05	2.09E-05	2.95E-06	3.14E-06	2.88E-06	2.80E-06	1.53E-06	1.27E-06
129	649426	4198295	2.46E-03	2.62E-03	3.69E-04	3.93E-04	3.61E-04	3.50E-04	1.92E-04	1.59E-04
130	649426.1	4198320	1.69E-03	1.80E-03	2.54E-04	2.70E-04	2.49E-04	2.41E-04	1.32E-04	1.09E-04
131	649426.2	4198345	1.26E-03	1.34E-03	1.89E-04	2.01E-04	1.85E-04	1.79E-04	9.81E-05	8.12E-05
132	649426.3	4198370	9.74E-04	1.04E-03	1.47E-04	1.56E-04	1.43E-04	1.39E-04	7.61E-05	6.30E-05
133	649426.5	4198420	6.33E-04	6.75E-04	9.52E-05	1.01E-04	9.31E-05	9.03E-05	4.95E-05	4.09E-05
134	649409.1	4198470	4.53E-04	4.83E-04	6.81E-05	7.24E-05	6.66E-05	6.46E-05	3.54E-05	2.93E-05
135	649444.2	4198470	4.25E-04	4.53E-04	6.40E-05	6.80E-05	6.25E-05	6.06E-05	3.32E-05	2.75E-05
136	649409.3	4198520	3.30E-04	3.52E-04	4.97E-05	5.28E-05	4.86E-05	4.71E-05	2.58E-05	2.13E-05
137	649444.4	4198520	3.08E-04	3.28E-04	4.63E-05	4.92E-05	4.53E-05	4.39E-05	2.41E-05	1.99E-05
138	649409.5	4198570	2.50E-04	2.66E-04	3.75E-05	3.99E-05	3.67E-05	3.56E-05	1.95E-05	1.61E-05
139	649444.6	4198570	2.32E-04	2.47E-04	3.49E-05	3.71E-05	3.41E-05	3.31E-05	1.81E-05	1.50E-05
140	649392.4	4198670	1.62E-04	1.72E-04	2.43E-05	2.59E-05	2.38E-05	2.31E-05	1.26E-05	1.05E-05
141	649427.4	4198670	1.50E-04	1.60E-04	2.26E-05	2.40E-05	2.21E-05	2.14E-05	1.17E-05	9.72E-06
142	649392.8	4198770	1.11E-04	1.18E-04	1.67E-05	1.77E-05	1.63E-05	1.58E-05	8.66E-06	7.16E-06
143	649427.8	4198770	1.03E-04	1.10E-04	1.56E-05	1.65E-05	1.52E-05	1.47E-05	8.08E-06	6.68E-06
144	649393.2	4198870	8.12E-05	8.65E-05	1.22E-05	1.30E-05	1.19E-05	1.16E-05	6.34E-06	5.25E-06
145	649428.2	4198870	7.63E-05	8.13E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.96E-06	4.93E-06
146	649384.8	4198970	6.34E-05	6.76E-05	9.54E-06	1.01E-05	9.32E-06	9.04E-06	4.95E-06	4.10E-06
147	649411.1	4198970	6.08E-05	6.48E-05	9.14E-06	9.72E-06	8.94E-06	8.66E-06	4.75E-06	3.93E-06
148	649446.2	4198970	5.76E-05	6.14E-05	8.67E-06	9.21E-06	8.47E-06	8.21E-06	4.50E-06	3.72E-06
149	649383.1	4199170	4.18E-05	4.46E-05	6.29E-06	6.69E-06	6.15E-06	5.96E-06	3.27E-06	2.70E-06
150	649411.9	4199170	4.04E-05	4.30E-05	6.07E-06	6.45E-06	5.93E-06	5.75E-06	3.15E-06	2.61E-06
151	649447	4199170	3.87E-05	4.13E-05	5.83E-06	6.19E-06	5.70E-06	5.52E-06	3.03E-06	2.50E-06
152	649381.4	4199370	3.04E-05	3.24E-05	4.57E-06	4.86E-06	4.47E-06	4.33E-06	2.37E-06	1.96E-06
153	649412.7	4199370	2.95E-05	3.14E-05	4.43E-06	4.71E-06	4.33E-06	4.20E-06	2.30E-06	1.90E-06
154	649447.8	4199370	2.85E-05	3.04E-05	4.29E-06	4.56E-06	4.20E-06	4.07E-06	2.23E-06	1.84E-06
155	649379.7	4199570	2.35E-05	2.51E-05	3.54E-06	3.76E-06	3.46E-06	3.35E-06	1.84E-06	1.52E-06
156	649413.5	4199570	2.29E-05	2.44E-05	3.44E-06	3.66E-06	3.37E-06	3.26E-06	1.79E-06	1.48E-06
157	649448.6	4199570	2.23E-05	2.38E-05	3.36E-06	3.57E-06	3.29E-06	3.18E-06	1.75E-06	1.44E-06
158	649384.2	4199770	1.90E-05	2.02E-05	2.85E-06	3.03E-06	2.79E-06	2.70E-06	1.48E-06	1.23E-06
159	649414.3	4199770	1.86E-05	1.98E-05	2.80E-06	2.97E-06	2.73E-06	2.65E-06	1.45E-06	1.20E-06
160	649449.4	4199770	1.82E-05	1.94E-05	2.74E-06	2.91E-06	2.68E-06	2.60E-06	1.42E-06	1.18E-06
161	649467	4198296	2.39E-03	2.55E-03	3.59E-04	3.82E-04	3.51E-04	3.41E-04	1.87E-04	1.54E-04
162	649491.7	4198297	2.30E-03	2.46E-03	3.46E-04	3.68E-04	3.39E-04	3.28E-04	1.80E-04	1.49E-04
163	649466	4198321	1.62E-03	1.73E-03	2.44E-04	2.59E-04	2.39E-04	2.31E-04	1.27E-04	1.05E-04
164	649490.7	4198322	1.55E-03	1.66E-03	2.33E-04	2.48E-04	2.28E-04	2.21E-04	1.21E-04	1.00E-04

165	649465	4198346	1.19E-03	1.27E-03	1.79E-04	1.91E-04	1.75E-04	1.70E-04	9.32E-05	7.71E-05
166	649489.7	4198347	1.14E-03	1.21E-03	1.71E-04	1.82E-04	1.67E-04	1.62E-04	8.87E-05	7.34E-05
167	649464	4198370	9.19E-04	9.80E-04	1.38E-04	1.47E-04	1.35E-04	1.31E-04	7.18E-05	5.94E-05
168	649488.6	4198372	8.71E-04	9.28E-04	1.31E-04	1.39E-04	1.28E-04	1.24E-04	6.80E-05	5.63E-05
169	649461.9	4198420	5.92E-04	6.31E-04	8.90E-05	9.47E-05	8.71E-05	8.44E-05	4.62E-05	3.83E-05
170	649486.6	4198421	5.58E-04	5.95E-04	8.39E-05	8.92E-05	8.20E-05	7.95E-05	4.36E-05	3.61E-05
171	649484.5	4198471	3.85E-04	4.10E-04	5.79E-05	6.15E-05	5.66E-05	5.48E-05	3.01E-05	2.49E-05
172	649482.5	4198521	2.80E-04	2.98E-04	4.21E-05	4.47E-05	4.11E-05	3.99E-05	2.19E-05	1.81E-05
173	649480.4	4198571	2.12E-04	2.26E-04	3.19E-05	3.39E-05	3.12E-05	3.02E-05	1.66E-05	1.37E-05
174	649451.6	4198670	1.43E-04	1.52E-04	2.14E-05	2.28E-05	2.10E-05	2.03E-05	1.11E-05	9.21E-06
175	649476.3	4198671	1.35E-04	1.44E-04	2.03E-05	2.15E-05	1.98E-05	1.92E-05	1.05E-05	8.71E-06
176	649472.2	4198771	9.45E-05	1.01E-04	1.42E-05	1.51E-05	1.39E-05	1.35E-05	7.38E-06	6.11E-06
177	649468.1	4198871	7.10E-05	7.57E-05	1.07E-05	1.13E-05	1.04E-05	1.01E-05	5.55E-06	4.59E-06
178	649509.3	4198471	3.62E-04	3.86E-04	5.45E-05	5.79E-05	5.33E-05	5.16E-05	2.83E-05	2.34E-05
179	649510	4198521	2.62E-04	2.79E-04	3.94E-05	4.19E-05	3.85E-05	3.73E-05	2.05E-05	1.69E-05
180	649510.7	4198571	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.91E-05	2.82E-05	1.55E-05	1.28E-05
181	649512.2	4198671	1.25E-04	1.33E-04	1.88E-05	2.00E-05	1.84E-05	1.78E-05	9.78E-06	8.09E-06
182	649500.1	4198772	8.97E-05	9.56E-05	1.35E-05	1.43E-05	1.32E-05	1.28E-05	7.01E-06	5.80E-06
183	649501.6	4198872	6.72E-05	7.17E-05	1.01E-05	1.07E-05	9.89E-06	9.58E-06	5.25E-06	4.35E-06
184	649490.1	4198971	5.39E-05	5.75E-05	8.11E-06	8.62E-06	7.93E-06	7.68E-06	4.21E-06	3.48E-06
185	649516.6	4198971	5.21E-05	5.55E-05	7.83E-06	8.33E-06	7.66E-06	7.43E-06	4.07E-06	3.37E-06
186	649493.5	4199171	3.68E-05	3.92E-05	5.53E-06	5.88E-06	5.41E-06	5.24E-06	2.87E-06	2.38E-06
187	649519.6	4199171	3.59E-05	3.83E-05	5.40E-06	5.74E-06	5.28E-06	5.12E-06	2.80E-06	2.32E-06
188	649496.7	4199371	2.74E-05	2.92E-05	4.12E-06	4.38E-06	4.03E-06	3.90E-06	2.14E-06	1.77E-06
189	649472.1	4199371	2.79E-05	2.98E-05	4.20E-06	4.46E-06	4.11E-06	3.98E-06	2.18E-06	1.80E-06
190	649522.5	4199371	2.69E-05	2.87E-05	4.05E-06	4.30E-06	3.96E-06	3.84E-06	2.10E-06	1.74E-06
191	649499.8	4199571	2.16E-05	2.30E-05	3.25E-06	3.45E-06	3.18E-06	3.08E-06	1.69E-06	1.40E-06
192	649475.6	4199571	2.19E-05	2.34E-05	3.30E-06	3.50E-06	3.22E-06	3.12E-06	1.71E-06	1.42E-06
193	649525.5	4199571	2.13E-05	2.27E-05	3.20E-06	3.41E-06	3.13E-06	3.04E-06	1.66E-06	1.38E-06
194	649502.9	4199771	1.77E-05	1.89E-05	2.67E-06	2.83E-06	2.61E-06	2.53E-06	1.38E-06	1.15E-06
195	649479	4199771	1.79E-05	1.91E-05	2.69E-06	2.86E-06	2.63E-06	2.55E-06	1.40E-06	1.16E-06
196	649528.4	4199771	1.75E-05	1.87E-05	2.64E-06	2.80E-06	2.58E-06	2.50E-06	1.37E-06	1.13E-06
197	649519.6	4198295	2.26E-03	2.41E-03	3.40E-04	3.62E-04	3.33E-04	3.23E-04	1.77E-04	1.46E-04
198	649521.9	4198320	1.50E-03	1.60E-03	2.25E-04	2.39E-04	2.20E-04	2.13E-04	1.17E-04	9.68E-05
199	649513.3	4198346	1.09E-03	1.16E-03	1.64E-04	1.74E-04	1.60E-04	1.55E-04	8.52E-05	7.05E-05
200	649515.6	4198371	8.27E-04	8.81E-04	1.24E-04	1.32E-04	1.22E-04	1.18E-04	6.46E-05	5.34E-05
201	649514.4	4198421	5.24E-04	5.58E-04	7.88E-05	8.37E-05	7.70E-05	7.46E-05	4.09E-05	3.38E-05
202	649535.8	4198470	3.42E-04	3.65E-04	5.15E-05	5.47E-05	5.03E-05	4.88E-05	2.67E-05	2.21E-05
203	649540.5	4198519	2.46E-04	2.62E-04	3.70E-05	3.93E-05	3.62E-05	3.51E-05	1.92E-05	1.59E-05
204	649534.2	4198570	1.89E-04	2.01E-04	2.84E-05	3.02E-05	2.78E-05	2.69E-05	1.48E-05	1.22E-05
205	649543.5	4198670	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.69E-05	9.28E-06	7.68E-06
206	649543	4198770	8.40E-05	8.95E-05	1.26E-05	1.34E-05	1.24E-05	1.20E-05	6.56E-06	5.43E-06
207	649552.7	4198869	6.29E-05	6.71E-05	9.46E-06	1.01E-05	9.25E-06	8.97E-06	4.92E-06	4.07E-06
208	649524.6	4198871	6.51E-05	6.94E-05	9.79E-06	1.04E-05	9.57E-06	9.28E-06	5.09E-06	4.21E-06
209	649562.3	4198969	4.97E-05	5.29E-05	7.47E-06	7.94E-06	7.30E-06	7.08E-06	3.88E-06	3.21E-06
210	649580	4199168	3.43E-05	3.66E-05	5.16E-06	5.49E-06	5.05E-06	4.89E-06	2.68E-06	2.22E-06
211	649549.8	4199170	3.51E-05	3.74E-05	5.27E-06	5.61E-06	5.16E-06	5.00E-06	2.74E-06	2.27E-06
212	649597.9	4199367	2.59E-05	2.76E-05	3.89E-06	4.13E-06	3.80E-06	3.69E-06	2.02E-06	1.67E-06
213	649565.6	4199369	2.63E-05	2.80E-05	3.95E-06	4.20E-06	3.86E-06	3.75E-06	2.05E-06	1.70E-06
214	649617	4199566	2.06E-05	2.19E-05	3.09E-06	3.29E-06	3.02E-06	2.93E-06	1.61E-06	1.33E-06
215	649586.5	4199568	2.08E-05	2.22E-05	3.12E-06	3.32E-06	3.06E-06	2.96E-06	1.62E-06	1.34E-06
216	649556	4199570	2.10E-05	2.24E-05	3.16E-06	3.36E-06	3.09E-06	3.00E-06	1.64E-06	1.36E-06
217	649635.1	4199765	1.70E-05	1.81E-05	2.55E-06	2.72E-06	2.50E-06	2.42E-06	1.33E-06	1.10E-06
218	649603.1	4199767	1.71E-05	1.83E-05	2.57E-06	2.74E-06	2.52E-06	2.44E-06	1.34E-06	1.11E-06
219	649571.1	4199769	1.73E-05	1.84E-05	2.60E-06	2.76E-06	2.54E-06	2.46E-06	1.35E-06	1.12E-06
220	649545.1	4198342	1.06E-03	1.13E-03	1.59E-04	1.69E-04	1.56E-04	1.51E-04	8.27E-05	6.84E-05

221	649548.5	4198367	7.91E-04	8.43E-04	1.19E-04	1.26E-04	1.16E-04	1.13E-04	6.18E-05	5.11E-05
222	649537.7	4198419	5.00E-04	5.33E-04	7.52E-05	8.00E-05	7.36E-05	7.13E-05	3.91E-05	3.23E-05
223	649562.1	4198466	3.26E-04	3.47E-04	4.90E-05	5.21E-05	4.79E-05	4.64E-05	2.54E-05	2.10E-05
224	649568.9	4198516	2.34E-04	2.50E-04	3.52E-05	3.74E-05	3.44E-05	3.34E-05	1.83E-05	1.51E-05
225	649558.1	4198568	1.81E-04	1.93E-04	2.73E-05	2.90E-05	2.67E-05	2.59E-05	1.42E-05	1.17E-05
226	649571.7	4198667	1.14E-04	1.22E-04	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.94E-06	7.40E-06
227	649574.5	4198767	8.09E-05	8.63E-05	1.22E-05	1.29E-05	1.19E-05	1.15E-05	6.32E-06	5.23E-06
228	649602.9	4198763	7.90E-05	8.42E-05	1.19E-05	1.26E-05	1.16E-05	1.13E-05	6.17E-06	5.10E-06
229	649586	4198866	6.09E-05	6.49E-05	9.16E-06	9.73E-06	8.95E-06	8.68E-06	4.76E-06	3.93E-06
230	649616.6	4198862	5.96E-05	6.35E-05	8.95E-06	9.52E-06	8.76E-06	8.49E-06	4.65E-06	3.85E-06
231	649597.5	4198966	4.83E-05	5.14E-05	7.26E-06	7.71E-06	7.09E-06	6.88E-06	3.77E-06	3.12E-06
232	649630.2	4198961	4.73E-05	5.04E-05	7.11E-06	7.55E-06	6.95E-06	6.73E-06	3.69E-06	3.05E-06
233	649626.9	4199163	3.34E-05	3.56E-05	5.03E-06	5.34E-06	4.92E-06	4.76E-06	2.61E-06	2.16E-06
234	649657.4	4199160	3.30E-05	3.51E-05	4.96E-06	5.27E-06	4.85E-06	4.70E-06	2.58E-06	2.13E-06
235	649651.2	4199362	2.53E-05	2.70E-05	3.81E-06	4.05E-06	3.73E-06	3.61E-06	1.98E-06	1.64E-06
236	649684.7	4199358	2.51E-05	2.67E-05	3.77E-06	4.01E-06	3.69E-06	3.57E-06	1.96E-06	1.62E-06
237	649680.3	4199560	2.02E-05	2.16E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
238	649652.2	4199563	2.04E-05	2.17E-05	3.06E-06	3.25E-06	2.99E-06	2.90E-06	1.59E-06	1.32E-06
239	649711.9	4199556	2.01E-05	2.14E-05	3.02E-06	3.21E-06	2.95E-06	2.86E-06	1.57E-06	1.30E-06
240	649705.4	4199758	1.68E-05	1.79E-05	2.52E-06	2.68E-06	2.46E-06	2.39E-06	1.31E-06	1.08E-06
241	649672.9	4199762	1.69E-05	1.80E-05	2.53E-06	2.69E-06	2.48E-06	2.40E-06	1.32E-06	1.09E-06
242	649739.2	4199754	1.67E-05	1.78E-05	2.51E-06	2.67E-06	2.45E-06	2.38E-06	1.30E-06	1.08E-06
243	649554	4198291	2.29E-03	2.44E-03	3.44E-04	3.66E-04	3.36E-04	3.26E-04	1.79E-04	1.48E-04
244	649556.9	4198316	1.47E-03	1.57E-03	2.22E-04	2.36E-04	2.17E-04	2.10E-04	1.15E-04	9.53E-05
245	649576.1	4198339	1.01E-03	1.08E-03	1.52E-04	1.62E-04	1.49E-04	1.44E-04	7.90E-05	6.54E-05
246	649579	4198363	7.46E-04	7.95E-04	1.12E-04	1.19E-04	1.10E-04	1.06E-04	5.83E-05	4.82E-05
247	649568.7	4198415	4.71E-04	5.02E-04	7.08E-05	7.53E-05	6.92E-05	6.71E-05	3.68E-05	3.04E-05
248	649590.8	4198463	3.07E-04	3.27E-04	4.61E-05	4.91E-05	4.51E-05	4.37E-05	2.40E-05	1.98E-05
249	649596.7	4198512	2.23E-04	2.38E-04	3.35E-05	3.56E-05	3.28E-05	3.18E-05	1.74E-05	1.44E-05
250	649586.4	4198564	1.74E-04	1.86E-04	2.62E-05	2.78E-05	2.56E-05	2.48E-05	1.36E-05	1.12E-05
251	649598.3	4198663	1.11E-04	1.19E-04	1.67E-05	1.78E-05	1.64E-05	1.59E-05	8.70E-06	7.19E-06
252	649626.2	4198761	7.76E-05	8.27E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.06E-06	5.01E-06
253	649584.9	4198287	2.26E-03	2.40E-03	3.39E-04	3.61E-04	3.32E-04	3.21E-04	1.76E-04	1.46E-04
254	649587.4	4198312	1.42E-03	1.51E-03	2.13E-04	2.27E-04	2.09E-04	2.02E-04	1.11E-04	9.17E-05
255	649605	4198336	9.43E-04	1.00E-03	1.42E-04	1.51E-04	1.39E-04	1.34E-04	7.36E-05	6.09E-05
256	649607.5	4198361	6.90E-04	7.35E-04	1.04E-04	1.10E-04	1.01E-04	9.83E-05	5.39E-05	4.46E-05
257	649597.3	4198412	4.39E-04	4.68E-04	6.61E-05	7.02E-05	6.46E-05	6.26E-05	3.43E-05	2.84E-05
258	649617.4	4198460	2.90E-04	3.09E-04	4.36E-05	4.63E-05	4.26E-05	4.13E-05	2.26E-05	1.87E-05
259	649622.4	4198510	2.13E-04	2.27E-04	3.21E-05	3.41E-05	3.14E-05	3.04E-05	1.67E-05	1.38E-05
260	649612.2	4198561	1.68E-04	1.79E-04	2.52E-05	2.68E-05	2.47E-05	2.39E-05	1.31E-05	1.08E-05
261	649622.1	4198661	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.50E-06	7.03E-06
262	649642	4198860	5.86E-05	6.24E-05	8.81E-06	9.36E-06	8.61E-06	8.35E-06	4.58E-06	3.79E-06
263	649667.1	4198958	4.63E-05	4.94E-05	6.96E-06	7.40E-06	6.81E-06	6.60E-06	3.62E-06	2.99E-06
264	649687	4199157	3.25E-05	3.47E-05	4.89E-06	5.20E-06	4.78E-06	4.64E-06	2.54E-06	2.10E-06
265	649616	4198287	2.06E-03	2.20E-03	3.10E-04	3.30E-04	3.04E-04	2.94E-04	1.61E-04	1.33E-04
266	649615.4	4198312	1.29E-03	1.37E-03	1.94E-04	2.06E-04	1.89E-04	1.84E-04	1.01E-04	8.32E-05
267	649633.8	4198337	8.09E-04	8.62E-04	1.22E-04	1.29E-04	1.19E-04	1.15E-04	6.32E-05	5.22E-05
268	649633.2	4198362	6.07E-04	6.47E-04	9.13E-05	9.70E-05	8.92E-05	8.65E-05	4.74E-05	3.92E-05
269	649631.8	4198412	3.90E-04	4.15E-04	5.86E-05	6.23E-05	5.73E-05	5.55E-05	3.04E-05	2.52E-05
270	649655.5	4198287	1.64E-03	1.75E-03	2.47E-04	2.63E-04	2.42E-04	2.34E-04	1.28E-04	1.06E-04
271	649695.4	4198288	1.15E-03	1.23E-03	1.73E-04	1.84E-04	1.69E-04	1.64E-04	8.98E-05	7.43E-05
272	649655.3	4198312	1.02E-03	1.08E-03	1.53E-04	1.63E-04	1.50E-04	1.45E-04	7.95E-05	6.58E-05
273	649695.2	4198313	7.88E-04	8.40E-04	1.18E-04	1.26E-04	1.16E-04	1.12E-04	6.15E-05	5.09E-05
274	649675	4198337	6.50E-04	6.93E-04	9.77E-05	1.04E-04	9.55E-05	9.26E-05	5.07E-05	4.20E-05
275	649674.7	4198362	5.06E-04	5.40E-04	7.61E-05	8.10E-05	7.45E-05	7.22E-05	3.96E-05	3.27E-05
276	649674.2	4198412	3.41E-04	3.64E-04	5.13E-05	5.46E-05	5.02E-05	4.86E-05	2.67E-05	2.21E-05

277	649653.7	4198462	2.61E-04	2.78E-04	3.92E-05	4.17E-05	3.83E-05	3.72E-05	2.04E-05	1.68E-05
278	649693.6	4198463	2.39E-04	2.55E-04	3.60E-05	3.83E-05	3.52E-05	3.41E-05	1.87E-05	1.55E-05
279	649653.2	4198512	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.91E-05	2.82E-05	1.55E-05	1.28E-05
280	649693.1	4198513	1.85E-04	1.97E-04	2.78E-05	2.96E-05	2.72E-05	2.64E-05	1.45E-05	1.20E-05
281	649652.7	4198562	1.56E-04	1.66E-04	2.35E-05	2.49E-05	2.29E-05	2.22E-05	1.22E-05	1.01E-05
282	649692.6	4198563	1.48E-04	1.57E-04	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.54E-06
283	649651.7	4198662	1.04E-04	1.11E-04	1.57E-05	1.67E-05	1.54E-05	1.49E-05	8.16E-06	6.75E-06
284	649691.6	4198663	1.00E-04	1.07E-04	1.51E-05	1.60E-05	1.48E-05	1.43E-05	7.84E-06	6.49E-06
285	649650.7	4198762	7.54E-05	8.04E-05	1.13E-05	1.21E-05	1.11E-05	1.07E-05	5.89E-06	4.87E-06
286	649690.6	4198763	7.30E-05	7.78E-05	1.10E-05	1.17E-05	1.07E-05	1.04E-05	5.70E-06	4.72E-06
287	649669.6	4198862	5.69E-05	6.07E-05	8.56E-06	9.10E-06	8.37E-06	8.11E-06	4.45E-06	3.68E-06
288	649624.6	4199362	2.57E-05	2.74E-05	3.86E-06	4.10E-06	3.77E-06	3.66E-06	2.01E-06	1.66E-06
289	649720.7	4198264	1.51E-03	1.61E-03	2.28E-04	2.42E-04	2.23E-04	2.16E-04	1.18E-04	9.78E-05
290	649722.9	4198220	3.33E-03	3.55E-03	5.01E-04	5.32E-04	4.89E-04	4.74E-04	2.60E-04	2.15E-04
291	649737.8	4198282	9.41E-04	1.00E-03	1.42E-04	1.50E-04	1.38E-04	1.34E-04	7.35E-05	6.08E-05
292	649746.7	4198243	1.57E-03	1.68E-03	2.37E-04	2.52E-04	2.31E-04	2.24E-04	1.23E-04	1.02E-04
293	649762.7	4198283	7.86E-04	8.38E-04	1.18E-04	1.26E-04	1.16E-04	1.12E-04	6.14E-05	5.08E-05
294	649729.7	4198324	5.94E-04	6.33E-04	8.93E-05	9.50E-05	8.73E-05	8.46E-05	4.64E-05	3.84E-05
295	649771.7	4198244	1.15E-03	1.23E-03	1.74E-04	1.85E-04	1.70E-04	1.65E-04	9.02E-05	7.46E-05
296	649787.7	4198285	6.69E-04	7.13E-04	1.01E-04	1.07E-04	9.83E-05	9.53E-05	5.22E-05	4.32E-05
297	649772	4198319	5.29E-04	5.64E-04	7.96E-05	8.46E-05	7.78E-05	7.54E-05	4.13E-05	3.42E-05
298	649746.8	4198342	4.73E-04	5.04E-04	7.12E-05	7.57E-05	6.96E-05	6.74E-05	3.70E-05	3.06E-05
299	649712	4198356	4.71E-04	5.02E-04	7.09E-05	7.54E-05	6.93E-05	6.72E-05	3.68E-05	3.05E-05
300	649796.7	4198246	9.12E-04	9.72E-04	1.37E-04	1.46E-04	1.34E-04	1.30E-04	7.13E-05	5.89E-05
301	649837.7	4198287	5.08E-04	5.41E-04	7.64E-05	8.12E-05	7.47E-05	7.24E-05	3.97E-05	3.28E-05
302	649822	4198321	4.27E-04	4.55E-04	6.42E-05	6.82E-05	6.28E-05	6.08E-05	3.33E-05	2.76E-05
303	649806.3	4198355	3.58E-04	3.82E-04	5.39E-05	5.73E-05	5.27E-05	5.11E-05	2.80E-05	2.32E-05
304	649781.1	4198379	3.30E-04	3.51E-04	4.96E-05	5.27E-05	4.85E-05	4.70E-05	2.57E-05	2.13E-05
305	649746.3	4198392	3.28E-04	3.50E-04	4.93E-05	5.25E-05	4.82E-05	4.68E-05	2.56E-05	2.12E-05
306	649711.5	4198406	3.25E-04	3.47E-04	4.89E-05	5.20E-05	4.78E-05	4.63E-05	2.54E-05	2.10E-05
307	649846.6	4198248	6.38E-04	6.80E-04	9.59E-05	1.02E-04	9.38E-05	9.09E-05	4.98E-05	4.12E-05
308	649886.5	4198292	4.00E-04	4.27E-04	6.02E-05	6.40E-05	5.88E-05	5.70E-05	3.13E-05	2.59E-05
309	649868.5	4198331	3.41E-04	3.64E-04	5.13E-05	5.46E-05	5.02E-05	4.86E-05	2.67E-05	2.21E-05
310	649850.6	4198370	2.90E-04	3.09E-04	4.36E-05	4.64E-05	4.27E-05	4.14E-05	2.27E-05	1.88E-05
311	649812.8	4198416	2.48E-04	2.64E-04	3.72E-05	3.96E-05	3.64E-05	3.53E-05	1.93E-05	1.60E-05
312	649773.1	4198432	2.46E-04	2.62E-04	3.70E-05	3.93E-05	3.62E-05	3.51E-05	1.92E-05	1.59E-05
313	649733.4	4198447	2.43E-04	2.59E-04	3.65E-05	3.88E-05	3.57E-05	3.46E-05	1.90E-05	1.57E-05
314	649896.6	4198251	4.84E-04	5.16E-04	7.28E-05	7.74E-05	7.12E-05	6.90E-05	3.78E-05	3.13E-05
315	649897.7	4198229	5.42E-04	5.78E-04	8.15E-05	8.67E-05	7.97E-05	7.73E-05	4.23E-05	3.50E-05
316	649936.6	4198294	3.30E-04	3.52E-04	4.96E-05	5.28E-05	4.85E-05	4.70E-05	2.58E-05	2.13E-05
317	649919.2	4198332	2.90E-04	3.09E-04	4.36E-05	4.64E-05	4.27E-05	4.14E-05	2.27E-05	1.88E-05
318	649901.8	4198370	2.54E-04	2.71E-04	3.82E-05	4.06E-05	3.73E-05	3.62E-05	1.98E-05	1.64E-05
319	649884.4	4198407	2.22E-04	2.37E-04	3.34E-05	3.55E-05	3.27E-05	3.17E-05	1.74E-05	1.44E-05
320	649847.7	4198452	1.95E-04	2.08E-04	2.93E-05	3.12E-05	2.87E-05	2.78E-05	1.52E-05	1.26E-05
321	649809	4198467	1.94E-04	2.07E-04	2.92E-05	3.10E-05	2.85E-05	2.76E-05	1.52E-05	1.25E-05
322	649770.4	4198483	1.91E-04	2.04E-04	2.88E-05	3.06E-05	2.81E-05	2.73E-05	1.50E-05	1.24E-05
323	649731.8	4198498	1.88E-04	2.01E-04	2.83E-05	3.01E-05	2.77E-05	2.68E-05	1.47E-05	1.22E-05
324	649946.5	4198253	3.86E-04	4.12E-04	5.81E-05	6.18E-05	5.68E-05	5.51E-05	3.02E-05	2.50E-05
325	649947.6	4198231	4.25E-04	4.53E-04	6.39E-05	6.79E-05	6.25E-05	6.05E-05	3.32E-05	2.74E-05
326	649986.7	4198296	2.78E-04	2.97E-04	4.18E-05	4.45E-05	4.09E-05	3.96E-05	2.17E-05	1.80E-05
327	649969.6	4198333	2.50E-04	2.66E-04	3.75E-05	3.99E-05	3.67E-05	3.56E-05	1.95E-05	1.61E-05
328	649952.5	4198370	2.23E-04	2.37E-04	3.35E-05	3.56E-05	3.27E-05	3.17E-05	1.74E-05	1.44E-05
329	649935.4	4198407	1.99E-04	2.12E-04	2.99E-05	3.18E-05	2.92E-05	2.83E-05	1.55E-05	1.28E-05
330	649918.3	4198444	1.78E-04	1.90E-04	2.67E-05	2.84E-05	2.61E-05	2.53E-05	1.39E-05	1.15E-05
331	649882.3	4198489	1.59E-04	1.69E-04	2.39E-05	2.54E-05	2.34E-05	2.27E-05	1.24E-05	1.03E-05
332	649844.3	4198503	1.58E-04	1.68E-04	2.38E-05	2.53E-05	2.32E-05	2.25E-05	1.23E-05	1.02E-05

333	649806.4	4198518	1.56E-04	1.66E-04	2.35E-05	2.49E-05	2.29E-05	2.22E-05	1.22E-05	1.01E-05
334	649768.5	4198533	1.53E-04	1.64E-04	2.31E-05	2.45E-05	2.26E-05	2.19E-05	1.20E-05	9.91E-06
335	649730.6	4198548	1.50E-04	1.60E-04	2.26E-05	2.40E-05	2.21E-05	2.14E-05	1.18E-05	9.72E-06
336	649996.4	4198256	3.18E-04	3.39E-04	4.78E-05	5.09E-05	4.68E-05	4.53E-05	2.49E-05	2.06E-05
337	650086.2	4198302	2.07E-04	2.21E-04	3.11E-05	3.31E-05	3.04E-05	2.95E-05	1.62E-05	1.34E-05
338	650068.3	4198341	1.90E-04	2.02E-04	2.85E-05	3.03E-05	2.79E-05	2.70E-05	1.48E-05	1.22E-05
339	650050.4	4198380	1.72E-04	1.84E-04	2.59E-05	2.76E-05	2.53E-05	2.46E-05	1.35E-05	1.11E-05
340	650032.5	4198419	1.57E-04	1.67E-04	2.35E-05	2.50E-05	2.30E-05	2.23E-05	1.22E-05	1.01E-05
341	650014.5	4198457	1.43E-04	1.52E-04	2.14E-05	2.28E-05	2.10E-05	2.03E-05	1.11E-05	9.22E-06
342	649996.6	4198496	1.30E-04	1.39E-04	1.96E-05	2.08E-05	1.91E-05	1.86E-05	1.02E-05	8.41E-06
343	649978.7	4198535	1.19E-04	1.27E-04	1.79E-05	1.90E-05	1.75E-05	1.69E-05	9.27E-06	7.67E-06
344	649949.9	4198562	1.13E-04	1.21E-04	1.70E-05	1.81E-05	1.66E-05	1.61E-05	8.85E-06	7.32E-06
345	649910.1	4198577	1.13E-04	1.20E-04	1.69E-05	1.80E-05	1.65E-05	1.60E-05	8.79E-06	7.27E-06
346	649870.4	4198593	1.11E-04	1.18E-04	1.67E-05	1.77E-05	1.63E-05	1.58E-05	8.66E-06	7.16E-06
347	649830.7	4198608	1.09E-04	1.16E-04	1.63E-05	1.74E-05	1.60E-05	1.55E-05	8.49E-06	7.03E-06
348	649790.9	4198624	1.06E-04	1.13E-04	1.60E-05	1.70E-05	1.56E-05	1.51E-05	8.30E-06	6.87E-06
349	649751.2	4198639	1.04E-04	1.11E-04	1.56E-05	1.66E-05	1.53E-05	1.48E-05	8.11E-06	6.71E-06
350	650096.3	4198261	2.30E-04	2.45E-04	3.46E-05	3.68E-05	3.39E-05	3.28E-05	1.80E-05	1.49E-05
351	650185.8	4198308	1.62E-04	1.73E-04	2.44E-05	2.59E-05	2.39E-05	2.31E-05	1.27E-05	1.05E-05
352	650167.4	4198348	1.51E-04	1.61E-04	2.27E-05	2.41E-05	2.22E-05	2.15E-05	1.18E-05	9.75E-06
353	650148.9	4198388	1.39E-04	1.48E-04	2.09E-05	2.23E-05	2.05E-05	1.98E-05	1.09E-05	9.00E-06
354	650130.5	4198428	1.28E-04	1.37E-04	1.93E-05	2.05E-05	1.88E-05	1.83E-05	1.00E-05	8.28E-06
355	650112	4198468	1.18E-04	1.26E-04	1.78E-05	1.89E-05	1.74E-05	1.68E-05	9.22E-06	7.63E-06
356	650093.6	4198507	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.52E-06	7.05E-06
357	650075.1	4198547	1.01E-04	1.08E-04	1.52E-05	1.62E-05	1.49E-05	1.44E-05	7.90E-06	6.53E-06
358	650056.7	4198587	9.36E-05	9.97E-05	1.41E-05	1.50E-05	1.38E-05	1.33E-05	7.31E-06	6.05E-06
359	650017.8	4198635	8.62E-05	9.19E-05	1.30E-05	1.38E-05	1.27E-05	1.23E-05	6.73E-06	5.57E-06
360	649976.9	4198651	8.54E-05	9.10E-05	1.28E-05	1.36E-05	1.26E-05	1.22E-05	6.67E-06	5.52E-06
361	649936	4198667	8.40E-05	8.96E-05	1.26E-05	1.34E-05	1.24E-05	1.20E-05	6.57E-06	5.43E-06
362	649895.1	4198683	8.24E-05	8.78E-05	1.24E-05	1.32E-05	1.21E-05	1.17E-05	6.43E-06	5.32E-06
363	649854.2	4198699	8.04E-05	8.57E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.28E-06	5.19E-06
364	649813.3	4198715	7.83E-05	8.35E-05	1.18E-05	1.25E-05	1.15E-05	1.12E-05	6.12E-06	5.06E-06
365	649772.4	4198731	7.63E-05	8.13E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.96E-06	4.93E-06
366	649731.5	4198747	7.45E-05	7.94E-05	1.12E-05	1.19E-05	1.10E-05	1.06E-05	5.82E-06	4.81E-06
367	650196.2	4198266	1.77E-04	1.89E-04	2.66E-05	2.83E-05	2.61E-05	2.52E-05	1.38E-05	1.14E-05
368	650285.9	4198313	1.32E-04	1.41E-04	1.98E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.52E-06
369	650268	4198351	1.24E-04	1.33E-04	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.71E-06	8.04E-06
370	650250.1	4198390	1.17E-04	1.24E-04	1.75E-05	1.86E-05	1.71E-05	1.66E-05	9.11E-06	7.53E-06
371	650232.2	4198429	1.09E-04	1.16E-04	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.51E-06	7.04E-06
372	650214.3	4198467	1.02E-04	1.08E-04	1.53E-05	1.62E-05	1.49E-05	1.45E-05	7.94E-06	6.57E-06
373	650196.4	4198506	9.49E-05	1.01E-04	1.43E-05	1.52E-05	1.40E-05	1.35E-05	7.42E-06	6.14E-06
374	650178.4	4198545	8.89E-05	9.48E-05	1.34E-05	1.42E-05	1.31E-05	1.27E-05	6.95E-06	5.75E-06
375	650160.5	4198584	8.35E-05	8.91E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.53E-06	5.40E-06
376	650142.6	4198622	7.85E-05	8.37E-05	1.18E-05	1.26E-05	1.15E-05	1.12E-05	6.13E-06	5.07E-06
377	650124.7	4198661	7.37E-05	7.85E-05	1.11E-05	1.18E-05	1.08E-05	1.05E-05	5.75E-06	4.76E-06
378	650086.9	4198708	6.87E-05	7.32E-05	1.03E-05	1.10E-05	1.01E-05	9.79E-06	5.36E-06	4.44E-06
379	650047.2	4198723	6.80E-05	7.25E-05	1.02E-05	1.09E-05	9.99E-06	9.69E-06	5.31E-06	4.39E-06
380	650007.4	4198739	6.69E-05	7.13E-05	1.01E-05	1.07E-05	9.84E-06	9.53E-06	5.23E-06	4.32E-06
381	649967.7	4198754	6.55E-05	6.99E-05	9.85E-06	1.05E-05	9.63E-06	9.34E-06	5.12E-06	4.23E-06
382	649928	4198770	6.39E-05	6.82E-05	9.62E-06	1.02E-05	9.40E-06	9.11E-06	5.00E-06	4.13E-06
383	649888.2	4198785	6.24E-05	6.65E-05	9.38E-06	9.97E-06	9.17E-06	8.89E-06	4.87E-06	4.03E-06
384	649848.5	4198801	6.08E-05	6.48E-05	9.14E-06	9.72E-06	8.94E-06	8.66E-06	4.75E-06	3.93E-06
385	649808.8	4198816	5.93E-05	6.32E-05	8.91E-06	9.48E-06	8.72E-06	8.45E-06	4.63E-06	3.83E-06
386	649769	4198832	5.80E-05	6.18E-05	8.71E-06	9.27E-06	8.52E-06	8.26E-06	4.53E-06	3.75E-06
387	649729.3	4198847	5.69E-05	6.06E-05	8.55E-06	9.09E-06	8.36E-06	8.11E-06	4.44E-06	3.68E-06
388	650296	4198271	1.42E-04	1.51E-04	2.14E-05	2.27E-05	2.09E-05	2.02E-05	1.11E-05	9.18E-06

389	650385.6	4198318	1.10E-04	1.17E-04	1.65E-05	1.76E-05	1.62E-05	1.57E-05	8.58E-06	7.10E-06
390	650367.3	4198358	1.04E-04	1.11E-04	1.57E-05	1.67E-05	1.54E-05	1.49E-05	8.16E-06	6.75E-06
391	650349	4198397	9.87E-05	1.05E-04	1.48E-05	1.58E-05	1.45E-05	1.41E-05	7.71E-06	6.38E-06
392	650330.8	4198437	9.30E-05	9.91E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.26E-06	6.01E-06
393	650312.5	4198476	8.74E-05	9.32E-05	1.31E-05	1.40E-05	1.29E-05	1.25E-05	6.83E-06	5.65E-06
394	650294.2	4198516	8.22E-05	8.76E-05	1.24E-05	1.31E-05	1.21E-05	1.17E-05	6.42E-06	5.31E-06
395	650275.9	4198555	7.74E-05	8.26E-05	1.16E-05	1.24E-05	1.14E-05	1.10E-05	6.05E-06	5.00E-06
396	650257.6	4198595	7.32E-05	7.80E-05	1.10E-05	1.17E-05	1.08E-05	1.04E-05	5.71E-06	4.73E-06
397	650239.3	4198634	6.93E-05	7.38E-05	1.04E-05	1.11E-05	1.02E-05	9.87E-06	5.41E-06	4.48E-06
398	650221	4198674	6.56E-05	7.00E-05	9.87E-06	1.05E-05	9.65E-06	9.35E-06	5.13E-06	4.24E-06
399	650202.7	4198713	6.21E-05	6.62E-05	9.34E-06	9.93E-06	9.13E-06	8.85E-06	4.85E-06	4.01E-06
400	650184.4	4198753	5.85E-05	6.24E-05	8.80E-06	9.35E-06	8.60E-06	8.34E-06	4.57E-06	3.78E-06
401	650155	4198781	5.65E-05	6.02E-05	8.50E-06	9.03E-06	8.31E-06	8.05E-06	4.41E-06	3.65E-06
402	650114.4	4198796	5.59E-05	5.96E-05	8.40E-06	8.93E-06	8.22E-06	7.96E-06	4.37E-06	3.61E-06
403	650073.9	4198812	5.49E-05	5.85E-05	8.26E-06	8.78E-06	8.07E-06	7.83E-06	4.29E-06	3.55E-06
404	650033.3	4198828	5.37E-05	5.73E-05	8.08E-06	8.59E-06	7.90E-06	7.66E-06	4.20E-06	3.47E-06
405	649992.8	4198844	5.24E-05	5.58E-05	7.88E-06	8.38E-06	7.70E-06	7.47E-06	4.09E-06	3.39E-06
406	649952.2	4198860	5.10E-05	5.44E-05	7.67E-06	8.15E-06	7.50E-06	7.27E-06	3.98E-06	3.30E-06
407	649911.6	4198876	4.97E-05	5.29E-05	7.47E-06	7.94E-06	7.30E-06	7.08E-06	3.88E-06	3.21E-06
408	649871.1	4198891	4.84E-05	5.16E-05	7.28E-06	7.74E-06	7.12E-06	6.90E-06	3.78E-06	3.13E-06
409	649830.5	4198907	4.74E-05	5.05E-05	7.12E-06	7.57E-06	6.97E-06	6.75E-06	3.70E-06	3.06E-06
410	649790	4198923	4.65E-05	4.95E-05	6.99E-06	7.43E-06	6.83E-06	6.62E-06	3.63E-06	3.00E-06
411	649749.4	4198939	4.58E-05	4.88E-05	6.88E-06	7.32E-06	6.73E-06	6.52E-06	3.58E-06	2.96E-06
412	649708.8	4198955	4.53E-05	4.83E-05	6.81E-06	7.24E-06	6.66E-06	6.46E-06	3.54E-06	2.93E-06
413	650395.9	4198276	1.17E-04	1.25E-04	1.76E-05	1.87E-05	1.72E-05	1.67E-05	9.15E-06	7.57E-06
414	650397	4198254	1.22E-04	1.30E-04	1.83E-05	1.95E-05	1.79E-05	1.74E-05	9.52E-06	7.87E-06
415	650585.4	4198328	8.09E-05	8.62E-05	1.22E-05	1.29E-05	1.19E-05	1.15E-05	6.32E-06	5.23E-06
416	650567.2	4198368	7.78E-05	8.29E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.08E-06	5.03E-06
417	650549	4198407	7.46E-05	7.95E-05	1.12E-05	1.19E-05	1.10E-05	1.06E-05	5.83E-06	4.82E-06
418	650530.8	4198446	7.14E-05	7.61E-05	1.07E-05	1.14E-05	1.05E-05	1.02E-05	5.57E-06	4.61E-06
419	650512.6	4198486	6.81E-05	7.26E-05	1.02E-05	1.09E-05	1.00E-05	9.70E-06	5.32E-06	4.40E-06
420	650494.4	4198525	6.48E-05	6.91E-05	9.75E-06	1.04E-05	9.53E-06	9.24E-06	5.07E-06	4.19E-06
421	650476.2	4198564	6.17E-05	6.58E-05	9.28E-06	9.87E-06	9.08E-06	8.80E-06	4.82E-06	3.99E-06
422	650458	4198604	5.88E-05	6.27E-05	8.85E-06	9.41E-06	8.65E-06	8.39E-06	4.60E-06	3.80E-06
423	650439.8	4198643	5.62E-05	5.99E-05	8.45E-06	8.98E-06	8.26E-06	8.01E-06	4.39E-06	3.63E-06
424	650421.5	4198682	5.38E-05	5.73E-05	8.09E-06	8.60E-06	7.91E-06	7.66E-06	4.20E-06	3.47E-06
425	650403.3	4198722	5.16E-05	5.50E-05	7.76E-06	8.25E-06	7.59E-06	7.35E-06	4.03E-06	3.33E-06
426	650385.1	4198761	4.95E-05	5.28E-05	7.45E-06	7.92E-06	7.28E-06	7.06E-06	3.87E-06	3.20E-06
427	650366.9	4198800	4.75E-05	5.07E-05	7.15E-06	7.60E-06	6.99E-06	6.77E-06	3.71E-06	3.07E-06
428	650348.7	4198840	4.55E-05	4.85E-05	6.84E-06	7.27E-06	6.69E-06	6.48E-06	3.55E-06	2.94E-06
429	650330.5	4198879	4.34E-05	4.63E-05	6.53E-06	6.94E-06	6.38E-06	6.19E-06	3.39E-06	2.80E-06
430	650292.1	4198926	4.10E-05	4.37E-05	6.17E-06	6.56E-06	6.03E-06	5.84E-06	3.20E-06	2.65E-06
431	650251.7	4198942	4.05E-05	4.32E-05	6.09E-06	6.47E-06	5.95E-06	5.77E-06	3.16E-06	2.62E-06
432	650211.4	4198958	3.98E-05	4.24E-05	5.98E-06	6.36E-06	5.85E-06	5.67E-06	3.11E-06	2.57E-06
433	650171	4198973	3.89E-05	4.15E-05	5.85E-06	6.22E-06	5.72E-06	5.54E-06	3.04E-06	2.51E-06
434	650130.6	4198989	3.79E-05	4.05E-05	5.71E-06	6.07E-06	5.58E-06	5.41E-06	2.96E-06	2.45E-06
435	650090.3	4199005	3.70E-05	3.94E-05	5.56E-06	5.91E-06	5.44E-06	5.27E-06	2.89E-06	2.39E-06
436	650049.9	4199021	3.60E-05	3.84E-05	5.41E-06	5.76E-06	5.29E-06	5.13E-06	2.81E-06	2.33E-06
437	650009.5	4199037	3.51E-05	3.74E-05	5.28E-06	5.61E-06	5.16E-06	5.00E-06	2.74E-06	2.27E-06
438	649969.1	4199052	3.43E-05	3.66E-05	5.16E-06	5.49E-06	5.05E-06	4.89E-06	2.68E-06	2.22E-06
439	649928.8	4199068	3.37E-05	3.59E-05	5.06E-06	5.38E-06	4.95E-06	4.80E-06	2.63E-06	2.18E-06
440	649888.4	4199084	3.31E-05	3.53E-05	4.98E-06	5.30E-06	4.87E-06	4.72E-06	2.59E-06	2.14E-06
441	649848	4199100	3.28E-05	3.49E-05	4.93E-06	5.24E-06	4.82E-06	4.67E-06	2.56E-06	2.12E-06
442	649807.6	4199115	3.25E-05	3.46E-05	4.89E-06	5.20E-06	4.78E-06	4.63E-06	2.54E-06	2.10E-06
443	649767.3	4199131	3.23E-05	3.45E-05	4.86E-06	5.17E-06	4.76E-06	4.61E-06	2.53E-06	2.09E-06
444	649726.9	4199147	3.23E-05	3.44E-05	4.85E-06	5.16E-06	4.74E-06	4.60E-06	2.52E-06	2.08E-06

445	650595.6	4198286	8.50E-05	9.06E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.64E-06	5.49E-06
446	650785.2	4198338	6.29E-05	6.70E-05	9.45E-06	1.01E-05	9.24E-06	8.96E-06	4.91E-06	4.06E-06
447	650767	4198378	6.10E-05	6.50E-05	9.17E-06	9.74E-06	8.96E-06	8.69E-06	4.76E-06	3.94E-06
448	650748.9	4198417	5.90E-05	6.29E-05	8.87E-06	9.43E-06	8.67E-06	8.40E-06	4.61E-06	3.81E-06
449	650730.7	4198456	5.70E-05	6.07E-05	8.57E-06	9.11E-06	8.38E-06	8.12E-06	4.45E-06	3.68E-06
450	650712.6	4198495	5.49E-05	5.86E-05	8.26E-06	8.78E-06	8.08E-06	7.83E-06	4.29E-06	3.55E-06
451	650694.4	4198535	5.29E-05	5.64E-05	7.95E-06	8.45E-06	7.78E-06	7.54E-06	4.13E-06	3.42E-06
452	650676.3	4198574	5.08E-05	5.42E-05	7.64E-06	8.13E-06	7.47E-06	7.24E-06	3.97E-06	3.28E-06
453	650658.1	4198613	4.88E-05	5.20E-05	7.34E-06	7.81E-06	7.18E-06	6.96E-06	3.81E-06	3.15E-06
454	650639.9	4198652	4.69E-05	5.00E-05	7.05E-06	7.50E-06	6.90E-06	6.68E-06	3.66E-06	3.03E-06
455	650621.8	4198691	4.51E-05	4.81E-05	6.78E-06	7.21E-06	6.63E-06	6.43E-06	3.52E-06	2.91E-06
456	650603.6	4198731	4.35E-05	4.63E-05	6.53E-06	6.95E-06	6.39E-06	6.19E-06	3.39E-06	2.81E-06
457	650585.5	4198770	4.20E-05	4.47E-05	6.31E-06	6.71E-06	6.17E-06	5.98E-06	3.28E-06	2.71E-06
458	650567.3	4198809	4.06E-05	4.33E-05	6.11E-06	6.49E-06	5.97E-06	5.79E-06	3.17E-06	2.62E-06
459	650549.2	4198848	3.93E-05	4.19E-05	5.91E-06	6.29E-06	5.78E-06	5.60E-06	3.07E-06	2.54E-06
460	650531	4198887	3.81E-05	4.06E-05	5.72E-06	6.09E-06	5.60E-06	5.42E-06	2.97E-06	2.46E-06
461	650512.9	4198927	3.68E-05	3.92E-05	5.53E-06	5.88E-06	5.41E-06	5.24E-06	2.87E-06	2.38E-06
462	650494.7	4198966	3.55E-05	3.78E-05	5.34E-06	5.67E-06	5.22E-06	5.06E-06	2.77E-06	2.29E-06
463	650476.6	4199005	3.41E-05	3.63E-05	5.13E-06	5.45E-06	5.01E-06	4.86E-06	2.66E-06	2.20E-06
464	650458.4	4199044	3.26E-05	3.48E-05	4.91E-06	5.22E-06	4.80E-06	4.65E-06	2.55E-06	2.11E-06
465	650429.2	4199072	3.17E-05	3.38E-05	4.77E-06	5.07E-06	4.66E-06	4.52E-06	2.48E-06	2.05E-06
466	650388.9	4199088	3.13E-05	3.33E-05	4.70E-06	5.00E-06	4.60E-06	4.46E-06	2.44E-06	2.02E-06
467	650348.7	4199103	3.07E-05	3.27E-05	4.62E-06	4.91E-06	4.52E-06	4.38E-06	2.40E-06	1.98E-06
468	650308.4	4199119	3.01E-05	3.20E-05	4.52E-06	4.81E-06	4.42E-06	4.28E-06	2.35E-06	1.94E-06
469	650268.2	4199135	2.94E-05	3.13E-05	4.41E-06	4.69E-06	4.32E-06	4.18E-06	2.29E-06	1.90E-06
470	650227.9	4199150	2.86E-05	3.05E-05	4.31E-06	4.58E-06	4.21E-06	4.08E-06	2.24E-06	1.85E-06
471	650187.7	4199166	2.79E-05	2.98E-05	4.20E-06	4.46E-06	4.11E-06	3.98E-06	2.18E-06	1.80E-06
472	650147.4	4199182	2.73E-05	2.91E-05	4.10E-06	4.36E-06	4.01E-06	3.89E-06	2.13E-06	1.76E-06
473	650107.2	4199198	2.67E-05	2.84E-05	4.01E-06	4.26E-06	3.92E-06	3.80E-06	2.08E-06	1.72E-06
474	650066.9	4199213	2.62E-05	2.79E-05	3.93E-06	4.18E-06	3.85E-06	3.73E-06	2.04E-06	1.69E-06
475	650026.6	4199229	2.57E-05	2.74E-05	3.87E-06	4.12E-06	3.79E-06	3.67E-06	2.01E-06	1.66E-06
476	649986.4	4199245	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
477	649946.1	4199260	2.52E-05	2.69E-05	3.79E-06	4.03E-06	3.71E-06	3.59E-06	1.97E-06	1.63E-06
478	649905.9	4199276	2.51E-05	2.67E-05	3.77E-06	4.00E-06	3.68E-06	3.57E-06	1.96E-06	1.62E-06
479	649865.6	4199292	2.50E-05	2.66E-05	3.75E-06	3.99E-06	3.67E-06	3.56E-06	1.95E-06	1.61E-06
480	649825.4	4199308	2.49E-05	2.66E-05	3.75E-06	3.98E-06	3.66E-06	3.55E-06	1.95E-06	1.61E-06
481	649785.1	4199323	2.49E-05	2.65E-05	3.74E-06	3.98E-06	3.66E-06	3.55E-06	1.95E-06	1.61E-06
482	649744.9	4199339	2.49E-05	2.66E-05	3.75E-06	3.98E-06	3.66E-06	3.55E-06	1.95E-06	1.61E-06
483	650795.4	4198297	6.55E-05	6.99E-05	9.85E-06	1.05E-05	9.63E-06	9.34E-06	5.12E-06	4.23E-06
484	650984.7	4198349	5.09E-05	5.42E-05	7.65E-06	8.13E-06	7.48E-06	7.25E-06	3.97E-06	3.29E-06
485	650966.2	4198389	4.95E-05	5.28E-05	7.45E-06	7.92E-06	7.28E-06	7.06E-06	3.87E-06	3.20E-06
486	650947.7	4198429	4.82E-05	5.13E-05	7.24E-06	7.70E-06	7.08E-06	6.86E-06	3.76E-06	3.11E-06
487	650929.1	4198469	4.68E-05	4.99E-05	7.04E-06	7.48E-06	6.88E-06	6.67E-06	3.66E-06	3.02E-06
488	650910.6	4198509	4.54E-05	4.84E-05	6.83E-06	7.26E-06	6.68E-06	6.47E-06	3.55E-06	2.93E-06
489	650892.1	4198549	4.40E-05	4.69E-05	6.62E-06	7.04E-06	6.47E-06	6.27E-06	3.44E-06	2.84E-06
490	650873.6	4198589	4.26E-05	4.54E-05	6.41E-06	6.81E-06	6.26E-06	6.07E-06	3.33E-06	2.75E-06
491	650855	4198629	4.12E-05	4.39E-05	6.19E-06	6.58E-06	6.05E-06	5.87E-06	3.22E-06	2.66E-06
492	650836.5	4198669	3.98E-05	4.24E-05	5.98E-06	6.36E-06	5.85E-06	5.67E-06	3.11E-06	2.57E-06
493	650818	4198709	3.84E-05	4.09E-05	5.77E-06	6.14E-06	5.64E-06	5.47E-06	3.00E-06	2.48E-06
494	650799.4	4198749	3.71E-05	3.95E-05	5.57E-06	5.93E-06	5.45E-06	5.28E-06	2.90E-06	2.40E-06
495	650780.9	4198789	3.59E-05	3.83E-05	5.40E-06	5.74E-06	5.28E-06	5.12E-06	2.80E-06	2.32E-06
496	650762.4	4198829	3.48E-05	3.71E-05	5.24E-06	5.57E-06	5.12E-06	4.96E-06	2.72E-06	2.25E-06
497	650743.9	4198869	3.38E-05	3.61E-05	5.09E-06	5.41E-06	4.98E-06	4.82E-06	2.64E-06	2.19E-06
498	650725.3	4198909	3.29E-05	3.51E-05	4.95E-06	5.27E-06	4.84E-06	4.69E-06	2.57E-06	2.13E-06
499	650706.8	4198949	3.21E-05	3.42E-05	4.82E-06	5.13E-06	4.72E-06	4.57E-06	2.51E-06	2.07E-06
500	650688.3	4198989	3.12E-05	3.33E-05	4.69E-06	4.99E-06	4.59E-06	4.45E-06	2.44E-06	2.02E-06

501	650669.7	4199030	3.03E-05	3.24E-05	4.56E-06	4.85E-06	4.46E-06	4.32E-06	2.37E-06	1.96E-06
502	650651.2	4199070	2.94E-05	3.14E-05	4.42E-06	4.70E-06	4.32E-06	4.19E-06	2.30E-06	1.90E-06
503	650632.7	4199110	2.84E-05	3.03E-05	4.28E-06	4.55E-06	4.18E-06	4.05E-06	2.22E-06	1.84E-06
504	650614.1	4199150	2.74E-05	2.92E-05	4.12E-06	4.38E-06	4.03E-06	3.90E-06	2.14E-06	1.77E-06
505	650595.6	4199190	2.63E-05	2.80E-05	3.95E-06	4.20E-06	3.87E-06	3.75E-06	2.05E-06	1.70E-06
506	650565.8	4199218	2.56E-05	2.73E-05	3.85E-06	4.09E-06	3.76E-06	3.64E-06	2.00E-06	1.65E-06
507	650524.7	4199234	2.52E-05	2.69E-05	3.79E-06	4.03E-06	3.71E-06	3.59E-06	1.97E-06	1.63E-06
508	650483.6	4199250	2.48E-05	2.64E-05	3.72E-06	3.96E-06	3.64E-06	3.53E-06	1.93E-06	1.60E-06
509	650442.6	4199266	2.43E-05	2.59E-05	3.65E-06	3.88E-06	3.57E-06	3.46E-06	1.89E-06	1.57E-06
510	650401.5	4199282	2.37E-05	2.53E-05	3.57E-06	3.79E-06	3.49E-06	3.38E-06	1.85E-06	1.53E-06
511	650360.4	4199298	2.31E-05	2.47E-05	3.48E-06	3.70E-06	3.40E-06	3.30E-06	1.81E-06	1.50E-06
512	650319.3	4199314	2.26E-05	2.41E-05	3.40E-06	3.61E-06	3.32E-06	3.22E-06	1.77E-06	1.46E-06
513	650278.2	4199330	2.21E-05	2.35E-05	3.32E-06	3.53E-06	3.25E-06	3.15E-06	1.72E-06	1.43E-06
514	650237.1	4199346	2.16E-05	2.30E-05	3.25E-06	3.45E-06	3.18E-06	3.08E-06	1.69E-06	1.40E-06
515	650196	4199362	2.12E-05	2.26E-05	3.19E-06	3.39E-06	3.12E-06	3.02E-06	1.66E-06	1.37E-06
516	650154.9	4199378	2.09E-05	2.22E-05	3.14E-06	3.34E-06	3.07E-06	2.97E-06	1.63E-06	1.35E-06
517	650113.9	4199394	2.06E-05	2.20E-05	3.10E-06	3.30E-06	3.03E-06	2.94E-06	1.61E-06	1.33E-06
518	650072.8	4199410	2.04E-05	2.18E-05	3.07E-06	3.27E-06	3.01E-06	2.91E-06	1.60E-06	1.32E-06
519	650031.7	4199426	2.03E-05	2.17E-05	3.06E-06	3.25E-06	2.99E-06	2.90E-06	1.59E-06	1.31E-06
520	649990.6	4199442	2.03E-05	2.16E-05	3.05E-06	3.24E-06	2.98E-06	2.89E-06	1.58E-06	1.31E-06
521	649949.5	4199458	2.02E-05	2.16E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
522	649908.4	4199474	2.02E-05	2.15E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
523	649867.3	4199490	2.02E-05	2.15E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
524	649826.2	4199506	2.02E-05	2.16E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
525	649785.2	4199523	2.02E-05	2.16E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
526	649744.1	4199539	2.02E-05	2.15E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06
527	650995.1	4198307	5.27E-05	5.62E-05	7.92E-06	8.42E-06	7.75E-06	7.51E-06	4.12E-06	3.40E-06
528	651184.5	4198359	4.24E-05	4.52E-05	6.37E-06	6.78E-06	6.23E-06	6.04E-06	3.31E-06	2.74E-06
529	651166.1	4198399	4.14E-05	4.41E-05	6.23E-06	6.62E-06	6.09E-06	5.90E-06	3.23E-06	2.68E-06
530	651147.6	4198439	4.04E-05	4.31E-05	6.08E-06	6.46E-06	5.94E-06	5.76E-06	3.16E-06	2.61E-06
531	651129.2	4198479	3.95E-05	4.21E-05	5.93E-06	6.31E-06	5.80E-06	5.62E-06	3.08E-06	2.55E-06
532	651110.7	4198519	3.85E-05	4.11E-05	5.79E-06	6.16E-06	5.66E-06	5.49E-06	3.01E-06	2.49E-06
533	651092.3	4198558	3.76E-05	4.00E-05	5.65E-06	6.00E-06	5.52E-06	5.35E-06	2.93E-06	2.43E-06
534	651073.8	4198598	3.66E-05	3.90E-05	5.50E-06	5.85E-06	5.38E-06	5.21E-06	2.86E-06	2.36E-06
535	651055.4	4198638	3.56E-05	3.79E-05	5.35E-06	5.69E-06	5.23E-06	5.07E-06	2.78E-06	2.30E-06
536	651036.9	4198678	3.46E-05	3.69E-05	5.20E-06	5.53E-06	5.08E-06	4.93E-06	2.70E-06	2.23E-06
537	651018.5	4198718	3.36E-05	3.58E-05	5.05E-06	5.36E-06	4.93E-06	4.78E-06	2.62E-06	2.17E-06
538	651000.1	4198758	3.26E-05	3.47E-05	4.90E-06	5.20E-06	4.79E-06	4.64E-06	2.54E-06	2.10E-06
539	650981.6	4198797	3.16E-05	3.37E-05	4.75E-06	5.05E-06	4.64E-06	4.50E-06	2.47E-06	2.04E-06
540	650963.2	4198837	3.07E-05	3.27E-05	4.61E-06	4.90E-06	4.51E-06	4.37E-06	2.40E-06	1.98E-06
541	650944.7	4198877	2.99E-05	3.18E-05	4.49E-06	4.77E-06	4.39E-06	4.25E-06	2.33E-06	1.93E-06
542	650926.3	4198917	2.91E-05	3.10E-05	4.38E-06	4.65E-06	4.28E-06	4.15E-06	2.27E-06	1.88E-06
543	650907.8	4198957	2.84E-05	3.03E-05	4.27E-06	4.54E-06	4.18E-06	4.05E-06	2.22E-06	1.84E-06
544	650889.4	4198997	2.78E-05	2.96E-05	4.18E-06	4.44E-06	4.09E-06	3.96E-06	2.17E-06	1.80E-06
545	650870.9	4199037	2.72E-05	2.90E-05	4.09E-06	4.35E-06	4.00E-06	3.88E-06	2.12E-06	1.76E-06
546	650852.5	4199076	2.66E-05	2.84E-05	4.00E-06	4.25E-06	3.91E-06	3.79E-06	2.08E-06	1.72E-06
547	650834.1	4199116	2.60E-05	2.77E-05	3.91E-06	4.15E-06	3.82E-06	3.70E-06	2.03E-06	1.68E-06
548	650815.6	4199156	2.53E-05	2.70E-05	3.81E-06	4.05E-06	3.73E-06	3.61E-06	1.98E-06	1.64E-06
549	650797.2	4199196	2.46E-05	2.63E-05	3.71E-06	3.94E-06	3.62E-06	3.51E-06	1.93E-06	1.59E-06
550	650778.7	4199236	2.39E-05	2.55E-05	3.59E-06	3.82E-06	3.52E-06	3.41E-06	1.87E-06	1.54E-06
551	650760.3	4199276	2.31E-05	2.46E-05	3.48E-06	3.69E-06	3.40E-06	3.29E-06	1.81E-06	1.49E-06
552	650741.8	4199315	2.23E-05	2.38E-05	3.35E-06	3.56E-06	3.28E-06	3.18E-06	1.74E-06	1.44E-06
553	650702.9	4199363	2.13E-05	2.27E-05	3.20E-06	3.41E-06	3.13E-06	3.04E-06	1.66E-06	1.38E-06
554	650662	4199379	2.10E-05	2.24E-05	3.16E-06	3.36E-06	3.09E-06	2.99E-06	1.64E-06	1.36E-06
555	650621.1	4199395	2.06E-05	2.20E-05	3.10E-06	3.30E-06	3.03E-06	2.94E-06	1.61E-06	1.33E-06
556	650580.2	4199411	2.02E-05	2.16E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.31E-06

557	650539.3	4199427	1.98E-05	2.11E-05	2.98E-06	3.17E-06	2.92E-06	2.83E-06	1.55E-06	1.28E-06
558	650498.4	4199443	1.94E-05	2.07E-05	2.92E-06	3.10E-06	2.85E-06	2.76E-06	1.51E-06	1.25E-06
559	650457.5	4199459	1.90E-05	2.02E-05	2.85E-06	3.03E-06	2.79E-06	2.70E-06	1.48E-06	1.23E-06
560	650416.6	4199475	1.86E-05	1.98E-05	2.79E-06	2.97E-06	2.73E-06	2.65E-06	1.45E-06	1.20E-06
561	650375.7	4199491	1.82E-05	1.94E-05	2.74E-06	2.91E-06	2.67E-06	2.59E-06	1.42E-06	1.18E-06
562	650334.8	4199507	1.79E-05	1.90E-05	2.69E-06	2.86E-06	2.63E-06	2.55E-06	1.40E-06	1.15E-06
563	650293.9	4199523	1.76E-05	1.87E-05	2.64E-06	2.81E-06	2.58E-06	2.50E-06	1.37E-06	1.14E-06
564	650253	4199539	1.73E-05	1.85E-05	2.61E-06	2.77E-06	2.55E-06	2.47E-06	1.36E-06	1.12E-06
565	650212.1	4199555	1.72E-05	1.83E-05	2.58E-06	2.74E-06	2.52E-06	2.45E-06	1.34E-06	1.11E-06
566	650171.2	4199571	1.70E-05	1.82E-05	2.56E-06	2.73E-06	2.51E-06	2.43E-06	1.33E-06	1.10E-06
567	650130.3	4199587	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.50E-06	2.42E-06	1.33E-06	1.10E-06
568	650089.4	4199603	1.69E-05	1.81E-05	2.55E-06	2.71E-06	2.49E-06	2.41E-06	1.32E-06	1.09E-06
569	650048.5	4199619	1.69E-05	1.80E-05	2.55E-06	2.71E-06	2.49E-06	2.41E-06	1.32E-06	1.09E-06
570	650007.6	4199635	1.69E-05	1.81E-05	2.55E-06	2.71E-06	2.49E-06	2.41E-06	1.32E-06	1.09E-06
571	649966.7	4199651	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.49E-06	2.42E-06	1.32E-06	1.10E-06
572	649925.8	4199667	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.49E-06	2.42E-06	1.32E-06	1.10E-06
573	649884.9	4199683	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.50E-06	2.42E-06	1.33E-06	1.10E-06
574	649844	4199699	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.49E-06	2.42E-06	1.32E-06	1.10E-06
575	649803.1	4199715	1.69E-05	1.80E-05	2.55E-06	2.71E-06	2.49E-06	2.41E-06	1.32E-06	1.09E-06
576	649762.2	4199731	1.69E-05	1.80E-05	2.54E-06	2.70E-06	2.48E-06	2.41E-06	1.32E-06	1.09E-06
577	651194.9	4198317	4.37E-05	4.66E-05	6.58E-06	6.99E-06	6.43E-06	6.23E-06	3.42E-06	2.83E-06
578	649707	4198197	4.97E-03	5.29E-03	7.47E-04	7.94E-04	7.30E-04	7.08E-04	3.88E-04	3.21E-04
579	649681.3	4198193	7.80E-03	8.32E-03	1.17E-03	1.25E-03	1.15E-03	1.11E-03	6.10E-04	5.04E-04
580	649710	4198174	4.79E-03	5.11E-03	7.21E-04	7.66E-04	7.05E-04	6.83E-04	3.74E-04	3.10E-04
581	649738.8	4198196	2.82E-03	3.01E-03	4.25E-04	4.52E-04	4.15E-04	4.02E-04	2.21E-04	1.83E-04
582	649681.3	4198168	7.98E-03	8.51E-03	1.20E-03	1.28E-03	1.17E-03	1.14E-03	6.23E-04	5.16E-04
583	649711.5	4198149	4.48E-03	4.78E-03	6.74E-04	7.16E-04	6.59E-04	6.38E-04	3.50E-04	2.89E-04
584	649738.7	4198161	3.07E-03	3.27E-03	4.62E-04	4.91E-04	4.52E-04	4.38E-04	2.40E-04	1.99E-04
585	649757.4	4198181	2.30E-03	2.45E-03	3.46E-04	3.68E-04	3.38E-04	3.28E-04	1.80E-04	1.49E-04
586	649767.7	4198208	1.72E-03	1.83E-03	2.58E-04	2.75E-04	2.53E-04	2.45E-04	1.34E-04	1.11E-04
587	649681.3	4198143	6.67E-03	7.11E-03	1.00E-03	1.07E-03	9.81E-04	9.50E-04	5.21E-04	4.31E-04
588	649712.4	4198125	3.78E-03	4.03E-03	5.68E-04	6.04E-04	5.56E-04	5.38E-04	2.95E-04	2.44E-04
589	649741.4	4198137	2.91E-03	3.10E-03	4.38E-04	4.65E-04	4.28E-04	4.15E-04	2.27E-04	1.88E-04
590	649775.9	4198164	1.94E-03	2.07E-03	2.92E-04	3.11E-04	2.86E-04	2.77E-04	1.52E-04	1.26E-04
591	649786.9	4198194	1.51E-03	1.61E-03	2.28E-04	2.42E-04	2.23E-04	2.16E-04	1.18E-04	9.78E-05
592	649681.3	4198118	4.58E-03	4.88E-03	6.88E-04	7.32E-04	6.73E-04	6.52E-04	3.57E-04	2.96E-04
593	649711.5	4198074	2.68E-03	2.85E-03	4.03E-04	4.28E-04	3.94E-04	3.82E-04	2.09E-04	1.73E-04
594	649738.7	4198086	2.45E-03	2.61E-03	3.69E-04	3.92E-04	3.60E-04	3.49E-04	1.91E-04	1.58E-04
595	649765.9	4198098	2.12E-03	2.26E-03	3.18E-04	3.39E-04	3.11E-04	3.02E-04	1.65E-04	1.37E-04
596	649793.1	4198109	1.75E-03	1.86E-03	2.63E-04	2.79E-04	2.57E-04	2.49E-04	1.36E-04	1.13E-04
597	649811.8	4198129	1.49E-03	1.59E-03	2.24E-04	2.38E-04	2.19E-04	2.12E-04	1.16E-04	9.61E-05
598	649822.1	4198157	1.28E-03	1.36E-03	1.92E-04	2.04E-04	1.88E-04	1.82E-04	9.99E-05	8.26E-05
599	649832.3	4198184	1.04E-03	1.11E-03	1.57E-04	1.67E-04	1.54E-04	1.49E-04	8.16E-05	6.75E-05
600	649842.6	4198212	8.27E-04	8.82E-04	1.24E-04	1.32E-04	1.22E-04	1.18E-04	6.46E-05	5.35E-05
601	649681.3	4198068	2.95E-03	3.14E-03	4.43E-04	4.71E-04	4.34E-04	4.20E-04	2.30E-04	1.91E-04
602	649712.4	4198025	2.10E-03	2.24E-03	3.15E-04	3.35E-04	3.08E-04	2.99E-04	1.64E-04	1.35E-04
603	649741.4	4198037	1.97E-03	2.10E-03	2.96E-04	3.14E-04	2.89E-04	2.80E-04	1.54E-04	1.27E-04
604	649770.4	4198050	1.79E-03	1.91E-03	2.70E-04	2.87E-04	2.64E-04	2.56E-04	1.40E-04	1.16E-04
605	649799.4	4198062	1.58E-03	1.69E-03	2.38E-04	2.53E-04	2.32E-04	2.25E-04	1.24E-04	1.02E-04
606	649828.4	4198074	1.35E-03	1.44E-03	2.03E-04	2.16E-04	1.98E-04	1.92E-04	1.05E-04	8.72E-05
607	649848.4	4198095	1.18E-03	1.26E-03	1.78E-04	1.89E-04	1.74E-04	1.69E-04	9.25E-05	7.65E-05
608	649859.4	4198125	1.05E-03	1.12E-03	1.58E-04	1.68E-04	1.55E-04	1.50E-04	8.22E-05	6.80E-05
609	649870.3	4198155	8.96E-04	9.55E-04	1.35E-04	1.43E-04	1.32E-04	1.28E-04	7.00E-05	5.79E-05
610	649881.3	4198184	7.40E-04	7.89E-04	1.11E-04	1.18E-04	1.09E-04	1.06E-04	5.78E-05	4.78E-05
611	649681.3	4198018	2.29E-03	2.44E-03	3.44E-04	3.65E-04	3.36E-04	3.26E-04	1.79E-04	1.48E-04
612	649713	4197975	1.75E-03	1.87E-03	2.63E-04	2.80E-04	2.58E-04	2.50E-04	1.37E-04	1.13E-04

613	649743.3	4197988	1.65E-03	1.76E-03	2.48E-04	2.63E-04	2.42E-04	2.35E-04	1.29E-04	1.06E-04
614	649773.5	4198001	1.53E-03	1.63E-03	2.30E-04	2.45E-04	2.25E-04	2.18E-04	1.20E-04	9.90E-05
615	649803.7	4198014	1.40E-03	1.49E-03	2.10E-04	2.24E-04	2.06E-04	1.99E-04	1.09E-04	9.05E-05
616	649833.9	4198027	1.25E-03	1.33E-03	1.88E-04	2.00E-04	1.84E-04	1.78E-04	9.77E-05	8.09E-05
617	649864.1	4198040	1.09E-03	1.16E-03	1.64E-04	1.74E-04	1.60E-04	1.55E-04	8.52E-05	7.05E-05
618	649884.9	4198062	9.77E-04	1.04E-03	1.47E-04	1.56E-04	1.44E-04	1.39E-04	7.63E-05	6.31E-05
619	649896.3	4198092	8.88E-04	9.47E-04	1.34E-04	1.42E-04	1.31E-04	1.27E-04	6.94E-05	5.74E-05
620	649907.7	4198123	7.80E-04	8.32E-04	1.17E-04	1.25E-04	1.15E-04	1.11E-04	6.10E-05	5.04E-05
621	649919.1	4198154	6.67E-04	7.11E-04	1.00E-04	1.07E-04	9.80E-05	9.50E-05	5.21E-05	4.31E-05
622	649930.5	4198185	5.59E-04	5.96E-04	8.41E-05	8.94E-05	8.23E-05	7.97E-05	4.37E-05	3.62E-05
623	649681.3	4197968	1.90E-03	2.03E-03	2.86E-04	3.04E-04	2.79E-04	2.71E-04	1.48E-04	1.23E-04
624	649712.4	4197925	1.51E-03	1.61E-03	2.26E-04	2.41E-04	2.21E-04	2.15E-04	1.18E-04	9.73E-05
625	649741.4	4197937	1.43E-03	1.52E-03	2.14E-04	2.28E-04	2.10E-04	2.03E-04	1.11E-04	9.21E-05
626	649770.4	4197950	1.34E-03	1.43E-03	2.02E-04	2.14E-04	1.97E-04	1.91E-04	1.05E-04	8.67E-05
627	649799.4	4197962	1.25E-03	1.34E-03	1.89E-04	2.01E-04	1.84E-04	1.79E-04	9.80E-05	8.11E-05
628	649828.4	4197974	1.17E-03	1.25E-03	1.76E-04	1.87E-04	1.72E-04	1.66E-04	9.12E-05	7.55E-05
629	649857.4	4197987	1.07E-03	1.14E-03	1.61E-04	1.71E-04	1.57E-04	1.52E-04	8.34E-05	6.90E-05
630	649886.4	4197999	9.60E-04	1.02E-03	1.44E-04	1.54E-04	1.41E-04	1.37E-04	7.50E-05	6.21E-05
631	649920.9	4198027	8.28E-04	8.82E-04	1.24E-04	1.32E-04	1.22E-04	1.18E-04	6.47E-05	5.35E-05
632	649931.8	4198056	7.71E-04	8.22E-04	1.16E-04	1.23E-04	1.13E-04	1.10E-04	6.02E-05	4.98E-05
633	649942.8	4198086	7.00E-04	7.46E-04	1.05E-04	1.12E-04	1.03E-04	9.98E-05	5.47E-05	4.52E-05
634	649953.7	4198115	6.22E-04	6.63E-04	9.35E-05	9.94E-05	9.15E-05	8.86E-05	4.86E-05	4.02E-05
635	649964.7	4198145	5.43E-04	5.79E-04	8.17E-05	8.68E-05	7.99E-05	7.74E-05	4.24E-05	3.51E-05
636	649975.7	4198175	4.69E-04	5.00E-04	7.05E-05	7.50E-05	6.90E-05	6.68E-05	3.66E-05	3.03E-05
637	649986.6	4198204	4.03E-04	4.29E-04	6.06E-05	6.44E-05	5.92E-05	5.74E-05	3.15E-05	2.60E-05
638	649681.3	4197918	1.63E-03	1.73E-03	2.44E-04	2.60E-04	2.39E-04	2.32E-04	1.27E-04	1.05E-04
639	649713.2	4197825	1.11E-03	1.19E-03	1.68E-04	1.78E-04	1.64E-04	1.59E-04	8.71E-05	7.20E-05
640	649743.7	4197838	1.07E-03	1.14E-03	1.61E-04	1.72E-04	1.58E-04	1.53E-04	8.38E-05	6.93E-05
641	649774.3	4197851	1.03E-03	1.10E-03	1.55E-04	1.65E-04	1.51E-04	1.47E-04	8.04E-05	6.65E-05
642	649804.8	4197864	9.81E-04	1.05E-03	1.48E-04	1.57E-04	1.44E-04	1.40E-04	7.67E-05	6.34E-05
643	649835.3	4197877	9.32E-04	9.93E-04	1.40E-04	1.49E-04	1.37E-04	1.33E-04	7.28E-05	6.02E-05
644	649865.8	4197891	8.85E-04	9.43E-04	1.33E-04	1.41E-04	1.30E-04	1.26E-04	6.91E-05	5.72E-05
645	649896.3	4197904	8.32E-04	8.87E-04	1.25E-04	1.33E-04	1.22E-04	1.19E-04	6.50E-05	5.37E-05
646	649926.9	4197917	7.70E-04	8.20E-04	1.16E-04	1.23E-04	1.13E-04	1.10E-04	6.01E-05	4.97E-05
647	649957.4	4197930	7.03E-04	7.49E-04	1.06E-04	1.12E-04	1.03E-04	1.00E-04	5.49E-05	4.54E-05
648	649993.7	4197958	6.22E-04	6.64E-04	9.36E-05	9.95E-05	9.15E-05	8.87E-05	4.86E-05	4.02E-05
649	650005.2	4197990	5.91E-04	6.30E-04	8.88E-05	9.44E-05	8.68E-05	8.42E-05	4.61E-05	3.82E-05
650	650016.7	4198021	5.51E-04	5.87E-04	8.28E-05	8.80E-05	8.10E-05	7.85E-05	4.30E-05	3.56E-05
651	650028.3	4198052	5.05E-04	5.38E-04	7.59E-05	8.07E-05	7.42E-05	7.19E-05	3.94E-05	3.26E-05
652	650039.8	4198083	4.56E-04	4.86E-04	6.86E-05	7.29E-05	6.70E-05	6.50E-05	3.56E-05	2.95E-05
653	650051.3	4198114	4.07E-04	4.34E-04	6.12E-05	6.51E-05	5.98E-05	5.80E-05	3.18E-05	2.63E-05
654	650062.8	4198145	3.60E-04	3.84E-04	5.41E-05	5.76E-05	5.29E-05	5.13E-05	2.81E-05	2.33E-05
655	650074.4	4198177	3.17E-04	3.38E-04	4.77E-05	5.07E-05	4.66E-05	4.52E-05	2.48E-05	2.05E-05
656	650085.9	4198208	2.79E-04	2.97E-04	4.19E-05	4.46E-05	4.10E-05	3.97E-05	2.18E-05	1.80E-05
657	649681.3	4197818	1.18E-03	1.26E-03	1.78E-04	1.89E-04	1.74E-04	1.69E-04	9.25E-05	7.65E-05
658	649713	4197725	8.68E-04	9.25E-04	1.31E-04	1.39E-04	1.28E-04	1.24E-04	6.78E-05	5.61E-05
659	649743.3	4197738	8.55E-04	9.11E-04	1.29E-04	1.37E-04	1.26E-04	1.22E-04	6.68E-05	5.52E-05
660	649773.5	4197751	8.30E-04	8.85E-04	1.25E-04	1.33E-04	1.22E-04	1.18E-04	6.49E-05	5.37E-05
661	649803.7	4197764	8.06E-04	8.59E-04	1.21E-04	1.29E-04	1.19E-04	1.15E-04	6.30E-05	5.21E-05
662	649833.9	4197777	7.76E-04	8.28E-04	1.17E-04	1.24E-04	1.14E-04	1.11E-04	6.06E-05	5.02E-05
663	649864.1	4197790	7.40E-04	7.89E-04	1.11E-04	1.18E-04	1.09E-04	1.05E-04	5.78E-05	4.78E-05
664	649894.3	4197803	7.05E-04	7.51E-04	1.06E-04	1.13E-04	1.04E-04	1.00E-04	5.51E-05	4.55E-05
665	649924.5	4197816	6.69E-04	7.14E-04	1.01E-04	1.07E-04	9.84E-05	9.54E-05	5.23E-05	4.33E-05
666	649954.7	4197829	6.31E-04	6.73E-04	9.49E-05	1.01E-04	9.28E-05	8.99E-05	4.93E-05	4.08E-05
667	649984.9	4197842	5.94E-04	6.33E-04	8.94E-05	9.50E-05	8.74E-05	8.47E-05	4.64E-05	3.84E-05
668	650015.1	4197855	5.60E-04	5.97E-04	8.42E-05	8.95E-05	8.23E-05	7.98E-05	4.37E-05	3.62E-05

669	650045.3	4197868	5.19E-04	5.53E-04	7.80E-05	8.30E-05	7.63E-05	7.40E-05	4.05E-05	3.35E-05
670	650066.1	4197889	4.90E-04	5.23E-04	7.37E-05	7.84E-05	7.21E-05	6.99E-05	3.83E-05	3.17E-05
671	650077.5	4197920	4.72E-04	5.03E-04	7.10E-05	7.54E-05	6.94E-05	6.73E-05	3.69E-05	3.05E-05
672	650088.9	4197951	4.49E-04	4.79E-04	6.75E-05	7.18E-05	6.60E-05	6.40E-05	3.51E-05	2.90E-05
673	650100.3	4197982	4.22E-04	4.50E-04	6.35E-05	6.75E-05	6.21E-05	6.01E-05	3.30E-05	2.73E-05
674	650111.7	4198013	3.92E-04	4.18E-04	5.90E-05	6.27E-05	5.77E-05	5.59E-05	3.06E-05	2.53E-05
675	650123.1	4198044	3.60E-04	3.84E-04	5.42E-05	5.76E-05	5.30E-05	5.14E-05	2.82E-05	2.33E-05
676	650134.6	4198074	3.29E-04	3.50E-04	4.94E-05	5.25E-05	4.83E-05	4.68E-05	2.57E-05	2.12E-05
677	650146	4198105	2.98E-04	3.18E-04	4.48E-05	4.77E-05	4.38E-05	4.25E-05	2.33E-05	1.93E-05
678	650157.4	4198136	2.69E-04	2.87E-04	4.05E-05	4.30E-05	3.96E-05	3.83E-05	2.10E-05	1.74E-05
679	650168.8	4198167	2.43E-04	2.59E-04	3.65E-05	3.88E-05	3.57E-05	3.46E-05	1.90E-05	1.57E-05
680	650180.2	4198198	2.19E-04	2.33E-04	3.29E-05	3.50E-05	3.22E-05	3.12E-05	1.71E-05	1.41E-05
681	650191.6	4198229	1.97E-04	2.10E-04	2.96E-05	3.15E-05	2.89E-05	2.81E-05	1.54E-05	1.27E-05
682	649681.3	4197718	8.95E-04	9.54E-04	1.35E-04	1.43E-04	1.32E-04	1.28E-04	6.99E-05	5.78E-05
683	649712.9	4197625	6.35E-04	6.76E-04	9.54E-05	1.01E-04	9.33E-05	9.04E-05	4.96E-05	4.10E-05
684	649742.9	4197638	6.41E-04	6.84E-04	9.64E-05	1.03E-04	9.43E-05	9.14E-05	5.01E-05	4.14E-05
685	649772.9	4197651	6.43E-04	6.85E-04	9.66E-05	1.03E-04	9.45E-05	9.16E-05	5.02E-05	4.15E-05
686	649802.9	4197664	6.39E-04	6.81E-04	9.61E-05	1.02E-04	9.40E-05	9.11E-05	4.99E-05	4.13E-05
687	649832.9	4197676	6.31E-04	6.73E-04	9.49E-05	1.01E-04	9.28E-05	9.00E-05	4.93E-05	4.08E-05
688	649862.9	4197689	6.19E-04	6.60E-04	9.31E-05	9.90E-05	9.11E-05	8.83E-05	4.84E-05	4.00E-05
689	649892.9	4197702	6.03E-04	6.43E-04	9.06E-05	9.64E-05	8.86E-05	8.59E-05	4.71E-05	3.90E-05
690	649922.9	4197715	5.84E-04	6.23E-04	8.78E-05	9.34E-05	8.59E-05	8.32E-05	4.56E-05	3.77E-05
691	649952.9	4197728	5.62E-04	5.99E-04	8.44E-05	8.98E-05	8.26E-05	8.00E-05	4.39E-05	3.63E-05
692	649982.9	4197741	5.35E-04	5.70E-04	8.04E-05	8.55E-05	7.87E-05	7.62E-05	4.18E-05	3.46E-05
693	650012.9	4197754	5.07E-04	5.40E-04	7.62E-05	8.10E-05	7.45E-05	7.22E-05	3.96E-05	3.28E-05
694	650042.9	4197767	4.80E-04	5.12E-04	7.22E-05	7.68E-05	7.06E-05	6.85E-05	3.75E-05	3.10E-05
695	650072.9	4197779	4.54E-04	4.84E-04	6.82E-05	7.25E-05	6.67E-05	6.46E-05	3.54E-05	2.93E-05
696	650102.9	4197792	4.26E-04	4.54E-04	6.40E-05	6.80E-05	6.26E-05	6.07E-05	3.32E-05	2.75E-05
697	650138.6	4197820	3.97E-04	4.23E-04	5.97E-05	6.35E-05	5.84E-05	5.66E-05	3.10E-05	2.57E-05
698	650149.9	4197851	3.87E-04	4.13E-04	5.82E-05	6.19E-05	5.69E-05	5.51E-05	3.02E-05	2.50E-05
699	650161.2	4197882	3.73E-04	3.97E-04	5.61E-05	5.96E-05	5.48E-05	5.31E-05	2.91E-05	2.41E-05
700	650172.5	4197912	3.56E-04	3.80E-04	5.36E-05	5.69E-05	5.24E-05	5.08E-05	2.78E-05	2.30E-05
701	650183.9	4197943	3.37E-04	3.60E-04	5.07E-05	5.39E-05	4.96E-05	4.81E-05	2.63E-05	2.18E-05
702	650195.2	4197974	3.17E-04	3.38E-04	4.76E-05	5.06E-05	4.66E-05	4.51E-05	2.47E-05	2.05E-05
703	650206.5	4198004	2.94E-04	3.14E-04	4.43E-05	4.71E-05	4.33E-05	4.20E-05	2.30E-05	1.90E-05
704	650217.9	4198035	2.73E-04	2.91E-04	4.10E-05	4.36E-05	4.01E-05	3.88E-05	2.13E-05	1.76E-05
705	650229.2	4198065	2.51E-04	2.68E-04	3.78E-05	4.02E-05	3.69E-05	3.58E-05	1.96E-05	1.62E-05
706	650240.5	4198096	2.31E-04	2.46E-04	3.47E-05	3.69E-05	3.40E-05	3.29E-05	1.80E-05	1.49E-05
707	650251.8	4198127	2.12E-04	2.26E-04	3.19E-05	3.39E-05	3.12E-05	3.02E-05	1.65E-05	1.37E-05
708	650263.2	4198157	1.94E-04	2.07E-04	2.92E-05	3.10E-05	2.85E-05	2.76E-05	1.52E-05	1.25E-05
709	650274.5	4198188	1.77E-04	1.89E-04	2.67E-05	2.84E-05	2.61E-05	2.53E-05	1.39E-05	1.15E-05
710	650285.8	4198218	1.62E-04	1.73E-04	2.44E-05	2.60E-05	2.39E-05	2.32E-05	1.27E-05	1.05E-05
711	649681.3	4197618	6.37E-04	6.79E-04	9.58E-05	1.02E-04	9.37E-05	9.08E-05	4.98E-05	4.12E-05
712	649712.9	4197525	4.55E-04	4.85E-04	6.84E-05	7.27E-05	6.68E-05	6.48E-05	3.55E-05	2.94E-05
713	649742.7	4197538	4.70E-04	5.01E-04	7.06E-05	7.51E-05	6.91E-05	6.70E-05	3.67E-05	3.04E-05
714	649772.6	4197550	4.81E-04	5.13E-04	7.24E-05	7.69E-05	7.08E-05	6.86E-05	3.76E-05	3.11E-05
715	649802.4	4197563	4.89E-04	5.21E-04	7.35E-05	7.81E-05	7.18E-05	6.96E-05	3.82E-05	3.16E-05
716	649832.3	4197576	4.92E-04	5.25E-04	7.40E-05	7.87E-05	7.24E-05	7.02E-05	3.85E-05	3.18E-05
717	649862.1	4197589	4.93E-04	5.25E-04	7.41E-05	7.88E-05	7.25E-05	7.02E-05	3.85E-05	3.19E-05
718	649892	4197602	4.90E-04	5.23E-04	7.37E-05	7.84E-05	7.21E-05	6.99E-05	3.83E-05	3.17E-05
719	649921.8	4197615	4.85E-04	5.17E-04	7.29E-05	7.75E-05	7.13E-05	6.91E-05	3.79E-05	3.13E-05
720	649951.7	4197627	4.77E-04	5.08E-04	7.17E-05	7.62E-05	7.01E-05	6.79E-05	3.72E-05	3.08E-05
721	649981.5	4197640	4.66E-04	4.96E-04	7.00E-05	7.45E-05	6.85E-05	6.64E-05	3.64E-05	3.01E-05
722	650011.4	4197653	4.53E-04	4.82E-04	6.81E-05	7.24E-05	6.65E-05	6.45E-05	3.54E-05	2.92E-05
723	650041.2	4197666	4.37E-04	4.66E-04	6.57E-05	6.98E-05	6.42E-05	6.22E-05	3.41E-05	2.82E-05
724	650071.1	4197679	4.17E-04	4.45E-04	6.28E-05	6.67E-05	6.14E-05	5.95E-05	3.26E-05	2.70E-05

725	650100.9	4197691	3.98E-04	4.24E-04	5.99E-05	6.37E-05	5.85E-05	5.67E-05	3.11E-05	2.57E-05
726	650130.8	4197704	3.79E-04	4.04E-04	5.69E-05	6.05E-05	5.57E-05	5.40E-05	2.96E-05	2.45E-05
727	650160.6	4197717	3.59E-04	3.83E-04	5.40E-05	5.74E-05	5.28E-05	5.12E-05	2.81E-05	2.32E-05
728	650190.5	4197730	3.40E-04	3.62E-04	5.11E-05	5.43E-05	5.00E-05	4.84E-05	2.66E-05	2.20E-05
729	650211	4197752	3.28E-04	3.49E-04	4.92E-05	5.24E-05	4.82E-05	4.67E-05	2.56E-05	2.12E-05
730	650222.3	4197782	3.21E-04	3.42E-04	4.83E-05	5.13E-05	4.72E-05	4.58E-05	2.51E-05	2.08E-05
731	650233.6	4197812	3.13E-04	3.34E-04	4.71E-05	5.01E-05	4.61E-05	4.47E-05	2.45E-05	2.02E-05
732	650244.8	4197843	3.04E-04	3.24E-04	4.57E-05	4.86E-05	4.47E-05	4.33E-05	2.37E-05	1.96E-05
733	650256.1	4197873	2.91E-04	3.11E-04	4.38E-05	4.66E-05	4.28E-05	4.15E-05	2.28E-05	1.88E-05
734	650267.4	4197904	2.77E-04	2.96E-04	4.17E-05	4.43E-05	4.08E-05	3.95E-05	2.17E-05	1.79E-05
735	650278.7	4197934	2.62E-04	2.80E-04	3.95E-05	4.20E-05	3.86E-05	3.74E-05	2.05E-05	1.70E-05
736	650289.9	4197965	2.47E-04	2.63E-04	3.71E-05	3.95E-05	3.63E-05	3.52E-05	1.93E-05	1.60E-05
737	650301.2	4197995	2.31E-04	2.46E-04	3.48E-05	3.70E-05	3.40E-05	3.29E-05	1.81E-05	1.49E-05
738	650312.5	4198026	2.16E-04	2.30E-04	3.24E-05	3.45E-05	3.17E-05	3.07E-05	1.68E-05	1.39E-05
739	650323.8	4198056	2.00E-04	2.14E-04	3.01E-05	3.20E-05	2.95E-05	2.85E-05	1.56E-05	1.29E-05
740	650335	4198087	1.86E-04	1.98E-04	2.79E-05	2.97E-05	2.73E-05	2.65E-05	1.45E-05	1.20E-05
741	650346.3	4198117	1.72E-04	1.84E-04	2.59E-05	2.75E-05	2.53E-05	2.46E-05	1.35E-05	1.11E-05
742	650357.6	4198148	1.60E-04	1.70E-04	2.40E-05	2.55E-05	2.35E-05	2.27E-05	1.25E-05	1.03E-05
743	650368.9	4198178	1.48E-04	1.57E-04	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.53E-06
744	650380.1	4198208	1.37E-04	1.46E-04	2.05E-05	2.18E-05	2.01E-05	1.95E-05	1.07E-05	8.83E-06
745	649681.3	4197518	4.48E-04	4.77E-04	6.73E-05	7.16E-05	6.58E-05	6.38E-05	3.50E-05	2.89E-05
746	649713.1	4197325	2.36E-04	2.52E-04	3.55E-05	3.77E-05	3.47E-05	3.36E-05	1.84E-05	1.52E-05
747	649743.5	4197338	2.50E-04	2.67E-04	3.76E-05	4.00E-05	3.68E-05	3.57E-05	1.96E-05	1.62E-05
748	649773.8	4197351	2.64E-04	2.81E-04	3.97E-05	4.22E-05	3.88E-05	3.76E-05	2.06E-05	1.70E-05
749	649804.2	4197364	2.76E-04	2.95E-04	4.16E-05	4.42E-05	4.06E-05	3.94E-05	2.16E-05	1.79E-05
750	649834.5	4197377	2.87E-04	3.06E-04	4.32E-05	4.59E-05	4.22E-05	4.09E-05	2.24E-05	1.86E-05
751	649864.8	4197390	2.96E-04	3.16E-04	4.45E-05	4.74E-05	4.36E-05	4.22E-05	2.31E-05	1.91E-05
752	649895.2	4197403	3.04E-04	3.24E-04	4.57E-05	4.85E-05	4.47E-05	4.33E-05	2.37E-05	1.96E-05
753	649925.5	4197416	3.10E-04	3.30E-04	4.65E-05	4.95E-05	4.55E-05	4.41E-05	2.42E-05	2.00E-05
754	649955.9	4197429	3.14E-04	3.34E-04	4.72E-05	5.02E-05	4.61E-05	4.47E-05	2.45E-05	2.03E-05
755	649986.2	4197442	3.16E-04	3.37E-04	4.75E-05	5.05E-05	4.65E-05	4.51E-05	2.47E-05	2.04E-05
756	650016.6	4197455	3.17E-04	3.38E-04	4.76E-05	5.06E-05	4.66E-05	4.51E-05	2.47E-05	2.05E-05
757	650046.9	4197468	3.16E-04	3.37E-04	4.75E-05	5.05E-05	4.65E-05	4.50E-05	2.47E-05	2.04E-05
758	650077.3	4197481	3.14E-04	3.35E-04	4.72E-05	5.02E-05	4.61E-05	4.47E-05	2.45E-05	2.03E-05
759	650107.6	4197494	3.10E-04	3.30E-04	4.66E-05	4.95E-05	4.55E-05	4.41E-05	2.42E-05	2.00E-05
760	650138	4197507	3.04E-04	3.24E-04	4.58E-05	4.86E-05	4.47E-05	4.34E-05	2.38E-05	1.97E-05
761	650168.3	4197520	2.97E-04	3.17E-04	4.47E-05	4.76E-05	4.37E-05	4.24E-05	2.32E-05	1.92E-05
762	650198.6	4197533	2.90E-04	3.09E-04	4.35E-05	4.63E-05	4.26E-05	4.13E-05	2.26E-05	1.87E-05
763	650229	4197546	2.81E-04	2.99E-04	4.22E-05	4.49E-05	4.13E-05	4.00E-05	2.19E-05	1.81E-05
764	650259.3	4197559	2.71E-04	2.89E-04	4.07E-05	4.33E-05	3.98E-05	3.86E-05	2.12E-05	1.75E-05
765	650289.7	4197572	2.61E-04	2.78E-04	3.92E-05	4.17E-05	3.83E-05	3.72E-05	2.04E-05	1.68E-05
766	650320	4197585	2.50E-04	2.67E-04	3.76E-05	4.00E-05	3.68E-05	3.57E-05	1.96E-05	1.62E-05
767	650356.1	4197614	2.39E-04	2.55E-04	3.59E-05	3.82E-05	3.51E-05	3.40E-05	1.87E-05	1.54E-05
768	650367.6	4197645	2.36E-04	2.52E-04	3.55E-05	3.78E-05	3.47E-05	3.37E-05	1.84E-05	1.53E-05
769	650379	4197676	2.32E-04	2.48E-04	3.49E-05	3.71E-05	3.42E-05	3.31E-05	1.81E-05	1.50E-05
770	650390.5	4197707	2.27E-04	2.42E-04	3.42E-05	3.63E-05	3.34E-05	3.24E-05	1.78E-05	1.47E-05
771	650401.9	4197738	2.21E-04	2.36E-04	3.33E-05	3.54E-05	3.25E-05	3.15E-05	1.73E-05	1.43E-05
772	650413.4	4197769	2.14E-04	2.29E-04	3.22E-05	3.43E-05	3.15E-05	3.06E-05	1.67E-05	1.39E-05
773	650424.9	4197800	2.07E-04	2.20E-04	3.11E-05	3.30E-05	3.04E-05	2.95E-05	1.61E-05	1.34E-05
774	650436.3	4197831	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.92E-05	2.83E-05	1.55E-05	1.28E-05
775	650447.8	4197862	1.89E-04	2.02E-04	2.85E-05	3.03E-05	2.78E-05	2.70E-05	1.48E-05	1.22E-05
776	650459.2	4197893	1.80E-04	1.92E-04	2.71E-05	2.88E-05	2.65E-05	2.57E-05	1.41E-05	1.16E-05
777	650470.7	4197924	1.71E-04	1.82E-04	2.57E-05	2.73E-05	2.51E-05	2.43E-05	1.33E-05	1.10E-05
778	650482.2	4197955	1.61E-04	1.72E-04	2.43E-05	2.58E-05	2.37E-05	2.30E-05	1.26E-05	1.04E-05
779	650493.6	4197986	1.52E-04	1.62E-04	2.29E-05	2.44E-05	2.24E-05	2.17E-05	1.19E-05	9.84E-06
780	650505.1	4198017	1.44E-04	1.53E-04	2.16E-05	2.29E-05	2.11E-05	2.05E-05	1.12E-05	9.27E-06

781	650516.5	4198048	1.35E-04	1.44E-04	2.03E-05	2.16E-05	1.99E-05	1.92E-05	1.05E-05	8.73E-06
782	650528	4198079	1.27E-04	1.35E-04	1.91E-05	2.03E-05	1.87E-05	1.81E-05	9.92E-06	8.21E-06
783	650539.5	4198110	1.19E-04	1.27E-04	1.80E-05	1.91E-05	1.76E-05	1.70E-05	9.33E-06	7.72E-06
784	650550.9	4198140	1.12E-04	1.20E-04	1.69E-05	1.80E-05	1.65E-05	1.60E-05	8.77E-06	7.26E-06
785	650562.4	4198171	1.06E-04	1.13E-04	1.59E-05	1.69E-05	1.55E-05	1.50E-05	8.25E-06	6.82E-06
786	650573.9	4198202	9.93E-05	1.06E-04	1.49E-05	1.59E-05	1.46E-05	1.41E-05	7.75E-06	6.41E-06
787	650585.3	4198233	9.33E-05	9.95E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.29E-06	6.03E-06
788	649681.3	4197318	2.25E-04	2.40E-04	3.39E-05	3.60E-05	3.31E-05	3.21E-05	1.76E-05	1.46E-05
789	649713	4197125	1.31E-04	1.40E-04	1.97E-05	2.10E-05	1.93E-05	1.87E-05	1.02E-05	8.48E-06
790	649743.1	4197138	1.40E-04	1.49E-04	2.11E-05	2.24E-05	2.06E-05	2.00E-05	1.10E-05	9.06E-06
791	649773.2	4197151	1.49E-04	1.59E-04	2.25E-05	2.39E-05	2.20E-05	2.13E-05	1.17E-05	9.65E-06
792	649803.3	4197164	1.58E-04	1.69E-04	2.38E-05	2.53E-05	2.33E-05	2.26E-05	1.24E-05	1.02E-05
793	649833.4	4197177	1.67E-04	1.78E-04	2.52E-05	2.67E-05	2.46E-05	2.38E-05	1.31E-05	1.08E-05
794	649863.4	4197189	1.76E-04	1.88E-04	2.65E-05	2.81E-05	2.59E-05	2.51E-05	1.37E-05	1.14E-05
795	649893.5	4197202	1.84E-04	1.96E-04	2.77E-05	2.94E-05	2.71E-05	2.62E-05	1.44E-05	1.19E-05
796	649923.6	4197215	1.92E-04	2.04E-04	2.88E-05	3.06E-05	2.82E-05	2.73E-05	1.50E-05	1.24E-05
797	649953.7	4197228	1.99E-04	2.12E-04	2.99E-05	3.17E-05	2.92E-05	2.83E-05	1.55E-05	1.28E-05
798	649983.8	4197241	2.05E-04	2.18E-04	3.08E-05	3.27E-05	3.01E-05	2.92E-05	1.60E-05	1.32E-05
799	650013.9	4197254	2.10E-04	2.24E-04	3.16E-05	3.36E-05	3.09E-05	2.99E-05	1.64E-05	1.36E-05
800	650044	4197267	2.14E-04	2.28E-04	3.22E-05	3.43E-05	3.15E-05	3.05E-05	1.67E-05	1.38E-05
801	650074.1	4197280	2.18E-04	2.32E-04	3.27E-05	3.48E-05	3.20E-05	3.10E-05	1.70E-05	1.41E-05
802	650104.2	4197293	2.20E-04	2.35E-04	3.31E-05	3.52E-05	3.24E-05	3.14E-05	1.72E-05	1.42E-05
803	650134.3	4197306	2.22E-04	2.36E-04	3.33E-05	3.54E-05	3.26E-05	3.16E-05	1.73E-05	1.43E-05
804	650164.4	4197319	2.22E-04	2.37E-04	3.34E-05	3.55E-05	3.27E-05	3.17E-05	1.74E-05	1.44E-05
805	650194.4	4197332	2.22E-04	2.37E-04	3.34E-05	3.55E-05	3.26E-05	3.16E-05	1.73E-05	1.43E-05
806	650224.5	4197344	2.21E-04	2.35E-04	3.32E-05	3.53E-05	3.25E-05	3.15E-05	1.72E-05	1.43E-05
807	650254.6	4197357	2.19E-04	2.33E-04	3.29E-05	3.50E-05	3.22E-05	3.12E-05	1.71E-05	1.41E-05
808	650284.7	4197370	2.16E-04	2.30E-04	3.25E-05	3.45E-05	3.17E-05	3.08E-05	1.69E-05	1.39E-05
809	650314.8	4197383	2.12E-04	2.26E-04	3.19E-05	3.39E-05	3.12E-05	3.02E-05	1.66E-05	1.37E-05
810	650344.9	4197396	2.08E-04	2.22E-04	3.13E-05	3.32E-05	3.06E-05	2.96E-05	1.62E-05	1.34E-05
811	650375	4197409	2.03E-04	2.17E-04	3.05E-05	3.25E-05	2.99E-05	2.89E-05	1.59E-05	1.31E-05
812	650405.1	4197422	1.98E-04	2.11E-04	2.98E-05	3.17E-05	2.91E-05	2.82E-05	1.55E-05	1.28E-05
813	650435.2	4197435	1.93E-04	2.05E-04	2.90E-05	3.08E-05	2.83E-05	2.75E-05	1.50E-05	1.25E-05
814	650465.3	4197448	1.87E-04	1.99E-04	2.81E-05	2.99E-05	2.75E-05	2.66E-05	1.46E-05	1.21E-05
815	650501	4197476	1.81E-04	0.000193	2.72E-05	2.89E-05	2.66E-05	2.58E-05	1.41E-05	1.17E-05
816	650512.4	4197507	1.80E-04	0.000192	2.71E-05	2.88E-05	2.65E-05	2.57E-05	1.41E-05	1.17E-05
817	650523.8	4197538	1.79E-04	0.000191	2.69E-05	2.86E-05	2.63E-05	2.55E-05	1.40E-05	1.16E-05
818	650535.1	4197568	1.77E-04	0.000189	2.66E-05	2.83E-05	2.60E-05	2.52E-05	1.38E-05	1.14E-05
819	650546.5	4197599	1.74E-04	0.000186	2.62E-05	2.78E-05	2.56E-05	2.48E-05	1.36E-05	1.13E-05
820	650557.9	4197630	1.71E-04	0.000182	2.57E-05	2.73E-05	2.51E-05	2.43E-05	1.33E-05	1.10E-05
821	650569.2	4197660	1.67E-04	0.000178	2.51E-05	2.67E-05	2.45E-05	2.38E-05	1.30E-05	1.08E-05
822	650580.6	4197691	1.62E-04	0.000173	2.44E-05	2.60E-05	2.39E-05	2.31E-05	1.27E-05	1.05E-05
823	650592	4197722	1.58E-04	0.000168	2.37E-05	2.52E-05	2.32E-05	2.24E-05	1.23E-05	1.02E-05
824	650603.3	4197752	1.52E-04	0.000162	2.29E-05	2.43E-05	2.24E-05	2.17E-05	1.19E-05	9.83E-06
825	650614.7	4197783	1.47E-04	0.000156	2.20E-05	2.34E-05	2.15E-05	2.09E-05	1.14E-05	9.47E-06
826	650626	4197814	1.41E-04	0.00015	2.12E-05	2.25E-05	2.07E-05	2.01E-05	1.10E-05	9.09E-06
827	650637.4	4197845	1.35E-04	0.000144	2.03E-05	2.15E-05	1.98E-05	1.92E-05	1.05E-05	8.71E-06
828	650648.8	4197875	1.29E-04	0.000137	1.94E-05	2.06E-05	1.89E-05	1.84E-05	1.01E-05	8.32E-06
829	650660.1	4197906	1.23E-04	0.000131	1.85E-05	1.96E-05	1.81E-05	1.75E-05	9.60E-06	7.94E-06
830	650671.5	4197937	1.17E-04	0.000125	1.76E-05	1.87E-05	1.72E-05	1.67E-05	9.14E-06	7.56E-06
831	650682.9	4197967	1.11E-04	0.000119	1.68E-05	1.78E-05	1.64E-05	1.59E-05	8.71E-06	7.20E-06
832	650694.2	4197998	1.06E-04	0.000113	1.59E-05	1.70E-05	1.56E-05	1.51E-05	8.28E-06	6.85E-06
833	650705.6	4198029	1.01E-04	0.000108	1.52E-05	1.61E-05	1.48E-05	1.44E-05	7.88E-06	6.52E-06
834	650717	4198060	9.59E-05	0.000102	1.44E-05	1.53E-05	1.41E-05	1.37E-05	7.49E-06	6.20E-06
835	650728.3	4198090	9.12E-05	9.73E-05	1.37E-05	1.46E-05	1.34E-05	1.30E-05	7.13E-06	5.90E-06
836	650739.7	4198121	8.67E-05	9.25E-05	1.30E-05	1.39E-05	1.28E-05	1.24E-05	6.78E-06	5.61E-06

837	650751.1	4198152	8.25E-05	8.79E-05	1.24E-05	1.32E-05	1.21E-05	1.17E-05	6.44E-06	5.33E-06
838	650762.4	4198182	7.84E-05	8.35E-05	1.18E-05	1.25E-05	1.15E-05	1.12E-05	6.12E-06	5.06E-06
839	650773.8	4198213	7.45E-05	7.94E-05	1.12E-05	1.19E-05	1.10E-05	1.06E-05	5.82E-06	4.81E-06
840	650785.1	4198244	7.08E-05	7.54E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.53E-06	4.57E-06
841	649681.3	4197118	1.24E-04	0.000132	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.71E-06	8.03E-06
842	649713.1	4196925	8.05E-05	8.58E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.29E-06	5.20E-06
843	649743.5	4196938	8.58E-05	9.14E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.70E-06	5.54E-06
844	649773.9	4196951	9.13E-05	9.73E-05	1.37E-05	1.46E-05	1.34E-05	1.30E-05	7.13E-06	5.90E-06
845	649804.3	4196964	9.71E-05	0.000104	1.46E-05	1.55E-05	1.43E-05	1.38E-05	7.58E-06	6.27E-06
846	649834.7	4196977	1.03E-04	0.00011	1.55E-05	1.65E-05	1.51E-05	1.47E-05	8.05E-06	6.66E-06
847	649865.1	4196990	1.09E-04	0.000116	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.51E-06	7.04E-06
848	649895.5	4197003	1.15E-04	0.000123	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.98E-06	7.43E-06
849	649925.9	4197016	1.21E-04	0.000129	1.82E-05	1.93E-05	1.78E-05	1.72E-05	9.44E-06	7.81E-06
850	649956.3	4197029	1.27E-04	0.000135	1.90E-05	2.02E-05	1.86E-05	1.80E-05	9.89E-06	8.18E-06
851	649986.7	4197042	1.32E-04	0.000141	1.99E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.54E-06
852	650017.1	4197055	1.38E-04	0.000147	2.07E-05	2.20E-05	2.02E-05	1.96E-05	1.07E-05	8.89E-06
853	650047.5	4197069	1.43E-04	0.000152	2.15E-05	2.28E-05	2.10E-05	2.03E-05	1.11E-05	9.22E-06
854	650077.9	4197082	1.47E-04	0.000157	2.21E-05	2.35E-05	2.17E-05	2.10E-05	1.15E-05	9.52E-06
855	650108.3	4197095	1.51E-04	0.000161	2.28E-05	2.42E-05	2.23E-05	2.16E-05	1.18E-05	9.79E-06
856	650138.7	4197108	1.55E-04	0.000165	2.33E-05	2.48E-05	2.28E-05	2.21E-05	1.21E-05	1.00E-05
857	650169.1	4197121	1.58E-04	0.000169	2.38E-05	2.53E-05	2.33E-05	2.25E-05	1.24E-05	1.02E-05
858	650199.5	4197134	1.61E-04	0.000171	2.41E-05	2.57E-05	2.36E-05	2.29E-05	1.25E-05	1.04E-05
859	650229.9	4197147	1.62E-04	0.000173	2.44E-05	2.60E-05	2.39E-05	2.32E-05	1.27E-05	1.05E-05
860	650260.3	4197160	1.64E-04	0.000175	2.46E-05	2.62E-05	2.41E-05	2.34E-05	1.28E-05	1.06E-05
861	650290.7	4197173	1.65E-04	0.000176	2.48E-05	2.63E-05	2.42E-05	2.35E-05	1.29E-05	1.06E-05
862	650321.1	4197186	1.65E-04	0.000176	2.48E-05	2.64E-05	2.43E-05	2.35E-05	1.29E-05	1.07E-05
863	650351.5	4197199	1.65E-04	0.000176	2.48E-05	2.64E-05	2.43E-05	2.35E-05	1.29E-05	1.07E-05
864	650381.9	4197212	1.64E-04	0.000175	2.47E-05	2.62E-05	2.41E-05	2.34E-05	1.28E-05	1.06E-05
865	650412.3	4197225	1.63E-04	0.000173	2.45E-05	2.60E-05	2.39E-05	2.32E-05	1.27E-05	1.05E-05
866	650442.7	4197238	1.61E-04	0.000172	2.42E-05	2.57E-05	2.37E-05	2.29E-05	1.26E-05	1.04E-05
867	650473.1	4197251	1.59E-04	0.000169	2.39E-05	2.54E-05	2.34E-05	2.26E-05	1.24E-05	1.03E-05
868	650503.5	4197264	1.56E-04	0.000167	2.35E-05	2.50E-05	2.30E-05	2.23E-05	1.22E-05	1.01E-05
869	650533.9	4197277	1.54E-04	0.000164	2.31E-05	2.46E-05	2.26E-05	2.19E-05	1.20E-05	9.93E-06
870	650564.3	4197290	1.51E-04	0.000161	2.26E-05	2.41E-05	2.21E-05	2.15E-05	1.18E-05	9.73E-06
871	650594.7	4197303	1.47E-04	0.000157	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.52E-06
872	650625.1	4197316	1.44E-04	0.000153	2.16E-05	2.30E-05	2.11E-05	2.05E-05	1.12E-05	9.29E-06
873	650646.1	4197338	1.42E-04	0.000152	2.14E-05	2.27E-05	2.09E-05	2.03E-05	1.11E-05	9.19E-06
874	650657.6	4197370	1.42E-04	0.000152	2.14E-05	2.28E-05	2.09E-05	2.03E-05	1.11E-05	9.20E-06
875	650669	4197401	1.42E-04	0.000152	2.14E-05	2.27E-05	2.09E-05	2.03E-05	1.11E-05	9.19E-06
876	650680.5	4197432	1.41E-04	0.000151	2.13E-05	2.26E-05	2.08E-05	2.02E-05	1.10E-05	9.14E-06
877	650692	4197463	1.40E-04	0.00015	2.11E-05	2.24E-05	2.06E-05	2.00E-05	1.10E-05	9.06E-06
878	650703.5	4197494	1.39E-04	0.000148	2.09E-05	2.22E-05	2.04E-05	1.98E-05	1.08E-05	8.96E-06
879	650715	4197525	1.37E-04	0.000146	2.05E-05	2.18E-05	2.01E-05	1.95E-05	1.07E-05	8.83E-06
880	650726.4	4197556	1.34E-04	0.000143	2.02E-05	2.15E-05	1.97E-05	1.91E-05	1.05E-05	8.67E-06
881	650737.9	4197587	1.31E-04	0.00014	1.98E-05	2.10E-05	1.93E-05	1.87E-05	1.03E-05	8.49E-06
882	650749.4	4197618	1.28E-04	0.000137	1.93E-05	2.05E-05	1.88E-05	1.83E-05	1.00E-05	8.28E-06
883	650760.9	4197649	1.25E-04	0.000133	1.88E-05	1.99E-05	1.83E-05	1.78E-05	9.74E-06	8.06E-06
884	650772.4	4197680	1.21E-04	0.000129	1.82E-05	1.94E-05	1.78E-05	1.73E-05	9.46E-06	7.83E-06
885	650783.9	4197711	1.17E-04	0.000125	1.76E-05	1.87E-05	1.72E-05	1.67E-05	9.16E-06	7.58E-06
886	650795.3	4197742	1.13E-04	0.000121	1.70E-05	1.81E-05	1.66E-05	1.61E-05	8.84E-06	7.32E-06
887	650806.8	4197773	1.09E-04	0.000116	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.52E-06	7.05E-06
888	650818.3	4197804	1.05E-04	0.000112	1.58E-05	1.68E-05	1.54E-05	1.50E-05	8.20E-06	6.78E-06
889	650829.8	4197835	1.01E-04	0.000107	1.52E-05	1.61E-05	1.48E-05	1.44E-05	7.87E-06	6.51E-06
890	650841.3	4197866	9.67E-05	0.000103	1.45E-05	1.55E-05	1.42E-05	1.38E-05	7.55E-06	6.25E-06
891	650852.7	4197897	9.27E-05	9.88E-05	1.39E-05	1.48E-05	1.36E-05	1.32E-05	7.24E-06	5.99E-06
892	650864.2	4197928	8.89E-05	9.47E-05	1.34E-05	1.42E-05	1.31E-05	1.27E-05	6.94E-06	5.74E-06

893	650875.7	4197959	8.52E-05	9.08E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.65E-06	5.50E-06
894	650887.2	4197990	8.16E-05	8.7E-05	1.23E-05	1.30E-05	1.20E-05	1.16E-05	6.37E-06	5.27E-06
895	650898.7	4198021	7.82E-05	8.33E-05	1.18E-05	1.25E-05	1.15E-05	1.11E-05	6.11E-06	5.05E-06
896	650910.1	4198052	7.49E-05	7.98E-05	1.13E-05	1.20E-05	1.10E-05	1.07E-05	5.85E-06	4.84E-06
897	650921.6	4198083	7.17E-05	7.64E-05	1.08E-05	1.15E-05	1.05E-05	1.02E-05	5.60E-06	4.63E-06
898	650933.1	4198114	6.87E-05	7.32E-05	1.03E-05	1.10E-05	1.01E-05	9.78E-06	5.36E-06	4.44E-06
899	650944.6	4198145	6.57E-05	7.01E-05	9.88E-06	1.05E-05	9.66E-06	9.37E-06	5.13E-06	4.25E-06
900	650956.1	4198176	6.29E-05	6.7E-05	9.46E-06	1.01E-05	9.25E-06	8.96E-06	4.91E-06	4.06E-06
901	650967.5	4198207	6.02E-05	6.42E-05	9.05E-06	9.62E-06	8.85E-06	8.58E-06	4.70E-06	3.89E-06
902	650979	4198238	5.76E-05	6.14E-05	8.66E-06	9.21E-06	8.47E-06	8.21E-06	4.50E-06	3.72E-06
903	650990.5	4198269	5.51E-05	5.87E-05	8.28E-06	8.81E-06	8.10E-06	7.85E-06	4.30E-06	3.56E-06
904	649681.3	4196918	7.65E-05	8.15E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.98E-06	4.94E-06
905	649713	4196725	5.45E-05	5.8E-05	8.19E-06	8.70E-06	8.01E-06	7.76E-06	4.25E-06	3.52E-06
906	649743.3	4196738	5.74E-05	6.12E-05	8.64E-06	9.18E-06	8.44E-06	8.18E-06	4.49E-06	3.71E-06
907	649773.5	4196751	6.06E-05	6.46E-05	9.12E-06	9.69E-06	8.92E-06	8.64E-06	4.74E-06	3.92E-06
908	649803.7	4196764	6.40E-05	6.83E-05	9.63E-06	1.02E-05	9.42E-06	9.13E-06	5.00E-06	4.14E-06
909	649833.9	4196777	6.76E-05	7.21E-05	1.02E-05	1.08E-05	9.94E-06	9.64E-06	5.28E-06	4.37E-06
910	649864.1	4196790	7.14E-05	7.61E-05	1.07E-05	1.14E-05	1.05E-05	1.02E-05	5.58E-06	4.61E-06
911	649894.3	4196803	7.53E-05	8.03E-05	1.13E-05	1.20E-05	1.11E-05	1.07E-05	5.88E-06	4.87E-06
912	649924.5	4196816	7.93E-05	8.45E-05	1.19E-05	1.27E-05	1.17E-05	1.13E-05	6.19E-06	5.12E-06
913	649954.7	4196829	8.34E-05	8.89E-05	1.25E-05	1.33E-05	1.23E-05	1.19E-05	6.51E-06	5.39E-06
914	649984.9	4196842	8.75E-05	9.33E-05	1.32E-05	1.40E-05	1.29E-05	1.25E-05	6.84E-06	5.66E-06
915	650015.1	4196855	9.16E-05	9.77E-05	1.38E-05	1.47E-05	1.35E-05	1.31E-05	7.16E-06	5.92E-06
916	650045.3	4196868	9.58E-05	0.000102	1.44E-05	1.53E-05	1.41E-05	1.36E-05	7.48E-06	6.19E-06
917	650075.5	4196881	9.98E-05	0.000106	1.50E-05	1.60E-05	1.47E-05	1.42E-05	7.80E-06	6.45E-06
918	650105.7	4196893	1.04E-04	0.000111	1.56E-05	1.66E-05	1.52E-05	1.48E-05	8.10E-06	6.70E-06
919	650135.9	4196906	1.07E-04	0.000114	1.61E-05	1.72E-05	1.58E-05	1.53E-05	8.39E-06	6.94E-06
920	650166.1	4196919	1.11E-04	0.000118	1.67E-05	1.77E-05	1.63E-05	1.58E-05	8.66E-06	7.17E-06
921	650196.3	4196932	1.14E-04	0.000122	1.72E-05	1.82E-05	1.68E-05	1.63E-05	8.91E-06	7.37E-06
922	650226.5	4196945	1.17E-04	0.000125	1.76E-05	1.87E-05	1.72E-05	1.67E-05	9.14E-06	7.56E-06
923	650256.7	4196958	1.20E-04	0.000128	1.80E-05	1.91E-05	1.76E-05	1.71E-05	9.35E-06	7.73E-06
924	650286.9	4196971	1.22E-04	0.00013	1.83E-05	1.95E-05	1.79E-05	1.74E-05	9.53E-06	7.88E-06
925	650317.1	4196984	1.24E-04	0.000132	1.86E-05	1.98E-05	1.82E-05	1.76E-05	9.67E-06	8.00E-06
926	650347.4	4196997	1.25E-04	0.000134	1.88E-05	2.00E-05	1.84E-05	1.79E-05	9.79E-06	8.10E-06
927	650377.6	4197010	1.27E-04	0.000135	1.91E-05	2.03E-05	1.86E-05	1.81E-05	9.91E-06	8.19E-06
928	650407.8	4197023	1.28E-04	0.000136	1.92E-05	2.04E-05	1.88E-05	1.82E-05	9.98E-06	8.25E-06
929	650438	4197036	1.28E-04	0.000137	1.93E-05	2.05E-05	1.89E-05	1.83E-05	1.00E-05	8.29E-06
930	650468.2	4197049	1.28E-04	0.000137	1.93E-05	2.05E-05	1.89E-05	1.83E-05	1.00E-05	8.30E-06
931	650498.4	4197062	1.28E-04	0.000137	1.93E-05	2.05E-05	1.88E-05	1.83E-05	1.00E-05	8.28E-06
932	650528.6	4197075	1.28E-04	0.000136	1.92E-05	2.04E-05	1.88E-05	1.82E-05	9.98E-06	8.26E-06
933	650558.8	4197088	1.27E-04	0.000135	1.91E-05	2.03E-05	1.87E-05	1.81E-05	9.93E-06	8.21E-06
934	650589	4197101	1.26E-04	0.000134	1.90E-05	2.02E-05	1.85E-05	1.80E-05	9.85E-06	8.15E-06
935	650619.2	4197114	1.25E-04	0.000133	1.88E-05	2.00E-05	1.84E-05	1.78E-05	9.76E-06	8.07E-06
936	650649.4	4197127	1.23E-04	0.000132	1.86E-05	1.97E-05	1.82E-05	1.76E-05	9.64E-06	7.98E-06
937	650679.6	4197140	1.22E-04	0.00013	1.83E-05	1.95E-05	1.79E-05	1.74E-05	9.51E-06	7.87E-06
938	650709.8	4197153	1.20E-04	0.000128	1.80E-05	1.92E-05	1.76E-05	1.71E-05	9.37E-06	7.75E-06
939	650740	4197166	1.18E-04	0.000126	1.77E-05	1.89E-05	1.73E-05	1.68E-05	9.21E-06	7.62E-06
940	650770.2	4197179	1.16E-04	0.000123	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.05E-06	7.48E-06
941	650791	4197201	1.15E-04	0.000123	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.99E-06	7.43E-06
942	650802.4	4197231	1.16E-04	0.000123	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.03E-06	7.47E-06
943	650813.8	4197262	1.16E-04	0.000123	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.05E-06	7.48E-06
944	650825.3	4197293	1.16E-04	0.000123	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.04E-06	7.48E-06
945	650836.7	4197324	1.15E-04	0.000123	1.74E-05	1.85E-05	1.70E-05	1.64E-05	9.02E-06	7.46E-06
946	650848.1	4197355	1.15E-04	0.000122	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.97E-06	7.42E-06
947	650859.5	4197386	1.14E-04	0.000121	1.71E-05	1.82E-05	1.67E-05	1.62E-05	8.90E-06	7.36E-06
948	650870.9	4197416	1.13E-04	0.00012	1.69E-05	1.80E-05	1.66E-05	1.61E-05	8.80E-06	7.28E-06

949	650882.3	4197447	1.11E-04	0.000119	1.67E-05	1.78E-05	1.64E-05	1.59E-05	8.69E-06	7.19E-06
950	650893.7	4197478	1.09E-04	0.000117	1.65E-05	1.75E-05	1.61E-05	1.56E-05	8.55E-06	7.08E-06
951	650905.1	4197509	1.07E-04	0.000115	1.62E-05	1.72E-05	1.58E-05	1.53E-05	8.40E-06	6.95E-06
952	650916.5	4197540	1.05E-04	0.000112	1.58E-05	1.68E-05	1.55E-05	1.50E-05	8.22E-06	6.80E-06
953	650927.9	4197571	1.03E-04	0.00011	1.55E-05	1.64E-05	1.51E-05	1.46E-05	8.03E-06	6.64E-06
954	650939.3	4197601	1.00E-04	0.000107	1.51E-05	1.60E-05	1.47E-05	1.43E-05	7.82E-06	6.47E-06
955	650950.7	4197632	9.74E-05	0.000104	1.46E-05	1.56E-05	1.43E-05	1.39E-05	7.61E-06	6.29E-06
956	650962.1	4197663	9.46E-05	0.000101	1.42E-05	1.51E-05	1.39E-05	1.35E-05	7.39E-06	6.11E-06
957	650973.5	4197694	9.17E-05	9.77E-05	1.38E-05	1.47E-05	1.35E-05	1.31E-05	7.16E-06	5.92E-06
958	650985	4197725	8.87E-05	9.45E-05	1.33E-05	1.42E-05	1.30E-05	1.26E-05	6.93E-06	5.73E-06
959	650996.4	4197756	8.57E-05	9.13E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.69E-06	5.54E-06
960	651007.8	4197786	8.27E-05	8.81E-05	1.24E-05	1.32E-05	1.22E-05	1.18E-05	6.46E-06	5.34E-06
961	651019.2	4197817	7.98E-05	8.5E-05	1.20E-05	1.28E-05	1.17E-05	1.14E-05	6.23E-06	5.15E-06
962	651030.6	4197848	7.69E-05	8.2E-05	1.16E-05	1.23E-05	1.13E-05	1.10E-05	6.01E-06	4.97E-06
963	651042	4197879	7.41E-05	7.9E-05	1.11E-05	1.19E-05	1.09E-05	1.06E-05	5.79E-06	4.79E-06
964	651053.4	4197910	7.15E-05	7.62E-05	1.07E-05	1.14E-05	1.05E-05	1.02E-05	5.58E-06	4.62E-06
965	651064.8	4197940	6.89E-05	7.34E-05	1.04E-05	1.10E-05	1.01E-05	9.82E-06	5.38E-06	4.45E-06
966	651076.2	4197971	6.64E-05	7.08E-05	9.98E-06	1.06E-05	9.76E-06	9.46E-06	5.19E-06	4.29E-06
967	651087.6	4198002	6.40E-05	6.82E-05	9.62E-06	1.02E-05	9.41E-06	9.12E-06	5.00E-06	4.14E-06
968	651099	4198033	6.17E-05	6.57E-05	9.27E-06	9.86E-06	9.07E-06	8.79E-06	4.82E-06	3.99E-06
969	651110.4	4198064	5.94E-05	6.33E-05	8.93E-06	9.50E-06	8.74E-06	8.47E-06	4.64E-06	3.84E-06
970	651121.8	4198095	5.72E-05	6.1E-05	8.61E-06	9.15E-06	8.42E-06	8.16E-06	4.47E-06	3.70E-06
971	651133.3	4198125	5.51E-05	5.87E-05	8.28E-06	8.81E-06	8.10E-06	7.85E-06	4.30E-06	3.56E-06
972	651144.7	4198156	5.30E-05	5.65E-05	7.98E-06	8.48E-06	7.80E-06	7.56E-06	4.14E-06	3.43E-06
973	651156.1	4198187	5.11E-05	5.44E-05	7.68E-06	8.16E-06	7.51E-06	7.27E-06	3.99E-06	3.30E-06
974	651167.5	4198218	4.91E-05	5.24E-05	7.39E-06	7.85E-06	7.22E-06	7.00E-06	3.84E-06	3.17E-06
975	651178.9	4198249	4.73E-05	5.04E-05	7.11E-06	7.55E-06	6.95E-06	6.73E-06	3.69E-06	3.05E-06
976	651190.3	4198280	4.55E-05	4.85E-05	6.84E-06	7.27E-06	6.69E-06	6.48E-06	3.55E-06	2.94E-06
977	649681.3	4196718	5.22E-05	5.56E-05	7.84E-06	8.34E-06	7.67E-06	7.43E-06	4.07E-06	3.37E-06
978	649780.2	4198131	1.95E-03	0.002083	2.94E-04	3.12E-04	2.87E-04	2.78E-04	1.53E-04	1.26E-04
979	649931.3	4198215	4.90E-04	0.000522	7.37E-05	7.83E-05	7.21E-05	6.98E-05	3.83E-05	3.17E-05
980	649930.2	4198129	6.78E-04	0.000723	1.02E-04	1.08E-04	9.97E-05	9.66E-05	5.30E-05	4.38E-05
981	649980.2	4198128	5.30E-04	0.000565	7.96E-05	8.47E-05	7.79E-05	7.55E-05	4.14E-05	3.42E-05
982	650080.2	4198127	3.54E-04	0.000377	5.32E-05	5.66E-05	5.20E-05	5.04E-05	2.76E-05	2.29E-05
983	650180.5	4198147	2.46E-04	0.000262	3.69E-05	3.93E-05	3.61E-05	3.50E-05	1.92E-05	1.59E-05
984	650280.2	4198125	1.98E-04	0.000211	2.98E-05	3.17E-05	2.91E-05	2.82E-05	1.55E-05	1.28E-05
985	650380.5	4198145	1.53E-04	0.000163	2.30E-05	2.44E-05	2.24E-05	2.18E-05	1.19E-05	9.87E-06
986	650580.4	4198143	1.07E-04	0.000114	1.61E-05	1.71E-05	1.57E-05	1.52E-05	8.34E-06	6.90E-06
987	650780.7	4198162	7.84E-05	8.36E-05	1.18E-05	1.25E-05	1.15E-05	1.12E-05	6.13E-06	5.07E-06
988	650780.2	4198118	8.24E-05	8.78E-05	1.24E-05	1.32E-05	1.21E-05	1.17E-05	6.44E-06	5.33E-06
989	650980.9	4198181	6.10E-05	6.5E-05	9.17E-06	9.75E-06	8.96E-06	8.69E-06	4.76E-06	3.94E-06
990	650980.4	4198138	6.37E-05	6.79E-05	9.57E-06	1.02E-05	9.36E-06	9.07E-06	4.97E-06	4.11E-06
991	651181.2	4198200	4.93E-05	5.26E-05	7.42E-06	7.89E-06	7.25E-06	7.03E-06	3.85E-06	3.19E-06
992	651180.7	4198157	5.13E-05	5.47E-05	7.71E-06	8.20E-06	7.54E-06	7.31E-06	4.01E-06	3.31E-06
993	651180.1	4198114	5.33E-05	5.68E-05	8.01E-06	8.51E-06	7.83E-06	7.59E-06	4.16E-06	3.44E-06
994	649747.4	4198111	2.55E-03	0.002721	3.84E-04	4.08E-04	3.75E-04	3.64E-04	1.99E-04	1.65E-04
995	649744.8	4198060	2.12E-03	0.002257	3.18E-04	3.38E-04	3.11E-04	3.02E-04	1.65E-04	1.37E-04
996	649752.5	4198012	1.72E-03	0.001834	2.59E-04	2.75E-04	2.53E-04	2.45E-04	1.34E-04	1.11E-04
997	649781.2	4198026	1.59E-03	0.001699	2.40E-04	2.55E-04	2.34E-04	2.27E-04	1.25E-04	1.03E-04
998	649818.4	4198100	1.45E-03	0.001542	2.18E-04	2.31E-04	2.13E-04	2.06E-04	1.13E-04	9.35E-05
999	649809.4	4197988	1.29E-03	0.001374	1.94E-04	2.06E-04	1.89E-04	1.84E-04	1.01E-04	8.33E-05
1000	649853.9	4198063	1.16E-03	0.001235	1.74E-04	1.85E-04	1.70E-04	1.65E-04	9.05E-05	7.48E-05
1001	649714.3	4197888	1.34E-03	0.001426	2.01E-04	2.14E-04	1.97E-04	1.91E-04	1.05E-04	8.65E-05
1002	649742.4	4197902	1.28E-03	0.001367	1.93E-04	2.05E-04	1.88E-04	1.83E-04	1.00E-04	8.28E-05
1003	649770.6	4197916	1.22E-03	0.001301	1.84E-04	1.95E-04	1.79E-04	1.74E-04	9.53E-05	7.89E-05
1004	649798.8	4197930	1.16E-03	0.001235	1.74E-04	1.85E-04	1.70E-04	1.65E-04	9.05E-05	7.49E-05

1005	649826.9	4197944	1.10E-03	0.001175	1.66E-04	1.76E-04	1.62E-04	1.57E-04	8.61E-05	7.12E-05
1006	649855.1	4197958	1.03E-03	0.001101	1.55E-04	1.65E-04	1.52E-04	1.47E-04	8.06E-05	6.67E-05
1007	649891.6	4198031	9.50E-04	0.001013	1.43E-04	1.52E-04	1.40E-04	1.35E-04	7.42E-05	6.14E-05
1008	649907	4198070	8.61E-04	0.000918	1.30E-04	1.38E-04	1.27E-04	1.23E-04	6.73E-05	5.57E-05
1009	649918.6	4198100	7.74E-04	0.000825	1.16E-04	1.24E-04	1.14E-04	1.10E-04	6.05E-05	5.00E-05
1010	649843.9	4197901	9.56E-04	0.001019	1.44E-04	1.53E-04	1.41E-04	1.36E-04	7.46E-05	6.18E-05
1011	649872.6	4197915	9.09E-04	0.000969	1.37E-04	1.45E-04	1.34E-04	1.29E-04	7.10E-05	5.87E-05
1012	649905.3	4197939	8.47E-04	0.000903	1.27E-04	1.35E-04	1.25E-04	1.21E-04	6.62E-05	5.47E-05
1013	649917.1	4197969	8.32E-04	0.000887	1.25E-04	1.33E-04	1.22E-04	1.19E-04	6.50E-05	5.38E-05
1014	649928.9	4197999	8.01E-04	0.000854	1.20E-04	1.28E-04	1.18E-04	1.14E-04	6.26E-05	5.18E-05
1015	649927.7	4197838	6.85E-04	0.00073	1.03E-04	1.09E-04	1.01E-04	9.76E-05	5.35E-05	4.43E-05
1016	649956.1	4197852	6.47E-04	0.00069	9.73E-05	1.03E-04	9.51E-05	9.22E-05	5.06E-05	4.18E-05
1017	649978.9	4197872	6.25E-04	0.000666	9.40E-05	9.99E-05	9.19E-05	8.91E-05	4.88E-05	4.04E-05
1018	649990.6	4197901	6.20E-04	0.000661	9.32E-05	9.91E-05	9.12E-05	8.83E-05	4.84E-05	4.01E-05
1019	650002.3	4197931	6.03E-04	0.000643	9.07E-05	9.64E-05	8.87E-05	8.60E-05	4.71E-05	3.90E-05
1020	650017.9	4197970	5.69E-04	0.000606	8.55E-05	9.09E-05	8.36E-05	8.10E-05	4.44E-05	3.67E-05
1021	650029.6	4197999	5.35E-04	0.00057	8.04E-05	8.55E-05	7.86E-05	7.62E-05	4.18E-05	3.45E-05
1022	650041.3	4198029	4.95E-04	0.000528	7.45E-05	7.92E-05	7.29E-05	7.06E-05	3.87E-05	3.20E-05
1023	650052.9	4198058	4.53E-04	0.000483	6.82E-05	7.25E-05	6.66E-05	6.46E-05	3.54E-05	2.93E-05
1024	650064.6	4198088	4.10E-04	0.000437	6.16E-05	6.55E-05	6.03E-05	5.84E-05	3.20E-05	2.65E-05
1025	649961.7	4197751	5.67E-04	0.000604	8.52E-05	9.06E-05	8.33E-05	8.07E-05	4.43E-05	3.66E-05
1026	649990.7	4197765	5.39E-04	0.000575	8.11E-05	8.62E-05	7.93E-05	7.68E-05	4.21E-05	3.48E-05
1027	650019.7	4197780	5.13E-04	0.000547	7.71E-05	8.20E-05	7.54E-05	7.31E-05	4.01E-05	3.31E-05
1028	650052.7	4197804	4.86E-04	0.000518	7.31E-05	7.78E-05	7.15E-05	6.93E-05	3.80E-05	3.14E-05
1029	650064.7	4197834	4.84E-04	0.000516	7.28E-05	7.74E-05	7.11E-05	6.90E-05	3.78E-05	3.13E-05
1030	650076.6	4197864	4.74E-04	0.000505	7.13E-05	7.58E-05	6.97E-05	6.76E-05	3.70E-05	3.06E-05
1031	650088.6	4197895	4.58E-04	0.000489	6.89E-05	7.33E-05	6.74E-05	6.53E-05	3.58E-05	2.96E-05
1032	650100.5	4197925	4.38E-04	0.000467	6.59E-05	7.01E-05	6.45E-05	6.25E-05	3.43E-05	2.83E-05
1033	650112.5	4197955	4.15E-04	0.000442	6.24E-05	6.63E-05	6.10E-05	5.91E-05	3.24E-05	2.68E-05
1034	650124.4	4197985	3.89E-04	0.000414	5.84E-05	6.21E-05	5.71E-05	5.54E-05	3.04E-05	2.51E-05
1035	650136.4	4198015	3.60E-04	0.000384	5.42E-05	5.76E-05	5.30E-05	5.13E-05	2.81E-05	2.33E-05
1036	650148.3	4198045	3.31E-04	0.000353	4.98E-05	5.29E-05	4.87E-05	4.72E-05	2.59E-05	2.14E-05
1037	650160.3	4198076	3.02E-04	0.000322	4.55E-05	4.83E-05	4.44E-05	4.31E-05	2.36E-05	1.95E-05
1038	650172.2	4198106	2.75E-04	0.000293	4.13E-05	4.39E-05	4.04E-05	3.92E-05	2.15E-05	1.78E-05
1039	650074.6	4197703	4.24E-04	0.000452	6.37E-05	6.77E-05	6.23E-05	6.04E-05	3.31E-05	2.74E-05
1040	650103.3	4197717	4.04E-04	0.000431	6.08E-05	6.46E-05	5.94E-05	5.76E-05	3.16E-05	2.61E-05
1041	650126.4	4197736	3.90E-04	0.000416	5.86E-05	6.23E-05	5.73E-05	5.56E-05	3.05E-05	2.52E-05
1042	650138.2	4197766	3.87E-04	0.000413	5.82E-05	6.19E-05	5.69E-05	5.52E-05	3.02E-05	2.50E-05
1043	650150	4197796	3.83E-04	0.000408	5.76E-05	6.12E-05	5.63E-05	5.46E-05	2.99E-05	2.47E-05
1044	650161.9	4197826	3.75E-04	0.0004	5.64E-05	5.99E-05	5.51E-05	5.34E-05	2.93E-05	2.42E-05
1045	650173.7	4197856	3.63E-04	0.000387	5.46E-05	5.80E-05	5.34E-05	5.17E-05	2.84E-05	2.35E-05
1046	650185.5	4197886	3.48E-04	0.000371	5.24E-05	5.57E-05	5.12E-05	4.96E-05	2.72E-05	2.25E-05
1047	650197.4	4197916	3.31E-04	0.000353	4.98E-05	5.30E-05	4.87E-05	4.72E-05	2.59E-05	2.14E-05
1048	650209.2	4197945	3.13E-04	0.000334	4.71E-05	5.00E-05	4.60E-05	4.46E-05	2.45E-05	2.02E-05
1049	650221	4197975	2.93E-04	0.000313	4.41E-05	4.69E-05	4.31E-05	4.18E-05	2.29E-05	1.90E-05
1050	650232.9	4198005	2.73E-04	0.000291	4.10E-05	4.36E-05	4.01E-05	3.88E-05	2.13E-05	1.76E-05
1051	650244.7	4198035	2.53E-04	0.00027	3.81E-05	4.05E-05	3.72E-05	3.61E-05	1.98E-05	1.64E-05
1052	650256.5	4198065	2.34E-04	0.000249	3.52E-05	3.74E-05	3.44E-05	3.33E-05	1.83E-05	1.51E-05
1053	650268.4	4198095	2.15E-04	0.00023	3.24E-05	3.44E-05	3.17E-05	3.07E-05	1.68E-05	1.39E-05
1054	649759	4197440	3.45E-04	0.000368	5.18E-05	5.51E-05	5.07E-05	4.91E-05	2.69E-05	2.23E-05
1055	649788.1	4197455	3.59E-04	0.000383	5.40E-05	5.75E-05	5.28E-05	5.12E-05	2.81E-05	2.32E-05
1056	649817.3	4197469	3.72E-04	0.000396	5.59E-05	5.94E-05	5.47E-05	5.30E-05	2.90E-05	2.40E-05
1057	649846.4	4197484	3.82E-04	0.000407	5.74E-05	6.10E-05	5.61E-05	5.44E-05	2.98E-05	2.47E-05
1058	649875.6	4197499	3.89E-04	0.000415	5.85E-05	6.22E-05	5.72E-05	5.55E-05	3.04E-05	2.52E-05
1059	649904.7	4197513	3.94E-04	0.00042	5.93E-05	6.30E-05	5.80E-05	5.62E-05	3.08E-05	2.55E-05
1060	649933.8	4197528	3.97E-04	0.000423	5.97E-05	6.34E-05	5.83E-05	5.66E-05	3.10E-05	2.56E-05

1061	649963	4197542	3.98E-04	0.000424	5.98E-05	6.36E-05	5.85E-05	5.67E-05	3.11E-05	2.57E-05
1062	649992.1	4197557	3.95E-04	0.000422	5.95E-05	6.32E-05	5.81E-05	5.63E-05	3.09E-05	2.56E-05
1063	650021.3	4197572	3.91E-04	0.000417	5.88E-05	6.25E-05	5.75E-05	5.57E-05	3.05E-05	2.53E-05
1064	650050.4	4197586	3.84E-04	0.00041	5.78E-05	6.15E-05	5.65E-05	5.48E-05	3.00E-05	2.48E-05
1065	650079.6	4197601	3.76E-04	0.000401	5.65E-05	6.01E-05	5.53E-05	5.36E-05	2.94E-05	2.43E-05
1066	650108.7	4197615	3.65E-04	0.000389	5.49E-05	5.84E-05	5.37E-05	5.21E-05	2.85E-05	2.36E-05
1067	650137.8	4197630	3.52E-04	0.000375	5.29E-05	5.62E-05	5.17E-05	5.01E-05	2.75E-05	2.27E-05
1068	650167	4197644	3.38E-04	0.00036	5.08E-05	5.40E-05	4.96E-05	4.81E-05	2.64E-05	2.18E-05
1069	650200.1	4197669	3.23E-04	0.000345	4.86E-05	5.17E-05	4.75E-05	4.61E-05	2.53E-05	2.09E-05
1070	650212.1	4197699	3.21E-04	0.000343	4.83E-05	5.14E-05	4.72E-05	4.58E-05	2.51E-05	2.08E-05
1071	650224.1	4197730	3.17E-04	0.000338	4.76E-05	5.06E-05	4.66E-05	4.51E-05	2.47E-05	2.05E-05
1072	650236.1	4197760	3.11E-04	0.000331	4.67E-05	4.97E-05	4.57E-05	4.43E-05	2.43E-05	2.01E-05
1073	650248.1	4197790	3.03E-04	0.000323	4.56E-05	4.84E-05	4.45E-05	4.32E-05	2.37E-05	1.96E-05
1074	650260.1	4197820	2.95E-04	0.000314	4.43E-05	4.71E-05	4.33E-05	4.20E-05	2.30E-05	1.90E-05
1075	650272.2	4197851	2.83E-04	0.000302	4.26E-05	4.53E-05	4.16E-05	4.04E-05	2.21E-05	1.83E-05
1076	650284.2	4197881	2.70E-04	0.000288	4.07E-05	4.32E-05	3.98E-05	3.85E-05	2.11E-05	1.75E-05
1077	650296.2	4197911	2.56E-04	0.000273	3.86E-05	4.10E-05	3.77E-05	3.65E-05	2.00E-05	1.66E-05
1078	650308.2	4197942	2.42E-04	0.000258	3.64E-05	3.87E-05	3.56E-05	3.45E-05	1.89E-05	1.56E-05
1079	650320.2	4197972	2.27E-04	0.000242	3.41E-05	3.63E-05	3.34E-05	3.24E-05	1.77E-05	1.47E-05
1080	650332.2	4198002	2.12E-04	0.000226	3.19E-05	3.39E-05	3.12E-05	3.02E-05	1.66E-05	1.37E-05
1081	650344.2	4198033	1.98E-04	0.000211	2.97E-05	3.16E-05	2.91E-05	2.82E-05	1.54E-05	1.28E-05
1082	650356.2	4198063	1.84E-04	0.000196	2.76E-05	2.94E-05	2.70E-05	2.62E-05	1.44E-05	1.19E-05
1083	650368.2	4198093	1.71E-04	0.000182	2.57E-05	2.73E-05	2.51E-05	2.43E-05	1.33E-05	1.10E-05
1084	649778.7	4197241	1.92E-04	0.000205	2.89E-05	3.07E-05	2.83E-05	2.74E-05	1.50E-05	1.24E-05
1085	649807.9	4197256	2.04E-04	0.000217	3.06E-05	3.26E-05	3.00E-05	2.90E-05	1.59E-05	1.32E-05
1086	649837.2	4197271	2.15E-04	0.000229	3.23E-05	3.43E-05	3.16E-05	3.06E-05	1.68E-05	1.39E-05
1087	649866.4	4197285	2.25E-04	0.00024	3.39E-05	3.60E-05	3.31E-05	3.21E-05	1.76E-05	1.46E-05
1088	649895.6	4197300	2.35E-04	0.00025	3.53E-05	3.75E-05	3.45E-05	3.35E-05	1.83E-05	1.52E-05
1089	649924.8	4197314	2.43E-04	0.000259	3.66E-05	3.89E-05	3.58E-05	3.47E-05	1.90E-05	1.57E-05
1090	649954	4197329	2.51E-04	0.000267	3.77E-05	4.00E-05	3.68E-05	3.57E-05	1.96E-05	1.62E-05
1091	649983.2	4197344	2.57E-04	0.000274	3.86E-05	4.10E-05	3.77E-05	3.66E-05	2.00E-05	1.66E-05
1092	650012.4	4197358	2.61E-04	0.000279	3.93E-05	4.18E-05	3.84E-05	3.72E-05	2.04E-05	1.69E-05
1093	650041.6	4197373	2.65E-04	0.000282	3.98E-05	4.23E-05	3.89E-05	3.77E-05	2.07E-05	1.71E-05
1094	650070.9	4197387	2.67E-04	0.000285	4.02E-05	4.27E-05	3.93E-05	3.81E-05	2.09E-05	1.73E-05
1095	650100.1	4197402	2.68E-04	0.000286	4.03E-05	4.29E-05	3.95E-05	3.82E-05	2.10E-05	1.73E-05
1096	650129.3	4197417	2.68E-04	0.000286	4.03E-05	4.28E-05	3.94E-05	3.82E-05	2.09E-05	1.73E-05
1097	650158.5	4197431	2.66E-04	0.000284	4.01E-05	4.26E-05	3.92E-05	3.80E-05	2.08E-05	1.72E-05
1098	650187.7	4197446	2.64E-04	0.000281	3.96E-05	4.21E-05	3.87E-05	3.76E-05	2.06E-05	1.70E-05
1099	650216.9	4197460	2.60E-04	0.000277	3.90E-05	4.15E-05	3.82E-05	3.70E-05	2.03E-05	1.68E-05
1100	650246.1	4197475	2.55E-04	0.000271	3.83E-05	4.07E-05	3.74E-05	3.63E-05	1.99E-05	1.65E-05
1101	650275.4	4197490	2.49E-04	0.000265	3.74E-05	3.98E-05	3.66E-05	3.55E-05	1.94E-05	1.61E-05
1102	650304.6	4197504	2.42E-04	0.000258	3.64E-05	3.87E-05	3.56E-05	3.45E-05	1.89E-05	1.56E-05
1103	650333.8	4197519	2.35E-04	0.00025	3.53E-05	3.75E-05	3.45E-05	3.35E-05	1.83E-05	1.52E-05
1104	650351.5	4197544	2.33E-04	0.000248	3.50E-05	3.72E-05	3.42E-05	3.31E-05	1.82E-05	1.50E-05
1105	650363.6	4197574	2.32E-04	0.000247	3.49E-05	3.71E-05	3.41E-05	3.31E-05	1.81E-05	1.50E-05
1106	650379.6	4197615	2.29E-04	0.000245	3.45E-05	3.67E-05	3.37E-05	3.27E-05	1.79E-05	1.48E-05
1107	650391.7	4197645	2.26E-04	0.000241	3.40E-05	3.62E-05	3.33E-05	3.22E-05	1.77E-05	1.46E-05
1108	650403.7	4197676	2.22E-04	0.000237	3.34E-05	3.55E-05	3.26E-05	3.16E-05	1.73E-05	1.43E-05
1109	650415.7	4197706	2.17E-04	0.000231	3.26E-05	3.47E-05	3.19E-05	3.09E-05	1.69E-05	1.40E-05
1110	650427.8	4197736	2.11E-04	0.000225	3.17E-05	3.37E-05	3.10E-05	3.00E-05	1.65E-05	1.36E-05
1111	650439.8	4197767	2.04E-04	0.000217	3.06E-05	3.26E-05	2.99E-05	2.90E-05	1.59E-05	1.32E-05
1112	650451.8	4197797	1.96E-04	0.000209	2.95E-05	3.13E-05	2.88E-05	2.79E-05	1.53E-05	1.27E-05
1113	650463.9	4197827	1.88E-04	0.0002	2.83E-05	3.00E-05	2.76E-05	2.68E-05	1.47E-05	1.21E-05
1114	650475.9	4197858	1.79E-04	0.000191	2.70E-05	2.87E-05	2.64E-05	2.56E-05	1.40E-05	1.16E-05
1115	650487.9	4197888	1.71E-04	0.000182	2.57E-05	2.73E-05	2.51E-05	2.43E-05	1.33E-05	1.10E-05
1116	650500	4197919	1.62E-04	0.000173	2.44E-05	2.59E-05	2.38E-05	2.31E-05	1.27E-05	1.05E-05

1117	650512	4197949	1.53E-04	0.000163	2.30E-05	2.45E-05	2.25E-05	2.18E-05	1.20E-05	9.90E-06
1118	650524	4197979	1.45E-04	0.000154	2.18E-05	2.31E-05	2.13E-05	2.06E-05	1.13E-05	9.36E-06
1119	650536.1	4198010	1.37E-04	0.000146	2.05E-05	2.18E-05	2.01E-05	1.95E-05	1.07E-05	8.83E-06
1120	650548.1	4198040	1.29E-04	0.000137	1.94E-05	2.06E-05	1.89E-05	1.84E-05	1.01E-05	8.32E-06
1121	650560.1	4198070	1.21E-04	0.000129	1.83E-05	1.94E-05	1.78E-05	1.73E-05	9.48E-06	7.84E-06
1122	650572.2	4198101	1.14E-04	0.000122	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.93E-06	7.39E-06
1123	649798.5	4197042	1.16E-04	0.000124	1.75E-05	1.86E-05	1.71E-05	1.65E-05	9.07E-06	7.50E-06
1124	649827.7	4197057	1.23E-04	0.000132	1.86E-05	1.97E-05	1.82E-05	1.76E-05	9.65E-06	7.98E-06
1125	649857	4197072	1.31E-04	0.00014	1.97E-05	2.09E-05	1.93E-05	1.87E-05	1.02E-05	8.46E-06
1126	649886.2	4197086	1.38E-04	0.000148	2.08E-05	2.21E-05	2.03E-05	1.97E-05	1.08E-05	8.94E-06
1127	649915.5	4197101	1.46E-04	0.000155	2.19E-05	2.33E-05	2.14E-05	2.08E-05	1.14E-05	9.42E-06
1128	649944.8	4197115	1.53E-04	0.000163	2.30E-05	2.44E-05	2.25E-05	2.18E-05	1.19E-05	9.87E-06
1129	649974	4197130	1.60E-04	0.00017	2.40E-05	2.55E-05	2.35E-05	2.27E-05	1.25E-05	1.03E-05
1130	650003.3	4197145	1.66E-04	0.000177	2.49E-05	2.65E-05	2.44E-05	2.36E-05	1.30E-05	1.07E-05
1131	650032.5	4197159	1.72E-04	0.000183	2.58E-05	2.75E-05	2.53E-05	2.45E-05	1.34E-05	1.11E-05
1132	650061.8	4197174	1.77E-04	0.000189	2.66E-05	2.83E-05	2.60E-05	2.52E-05	1.38E-05	1.14E-05
1133	650091	4197189	1.82E-04	0.000194	2.73E-05	2.90E-05	2.67E-05	2.59E-05	1.42E-05	1.17E-05
1134	650120.3	4197203	1.86E-04	0.000198	2.79E-05	2.97E-05	2.73E-05	2.64E-05	1.45E-05	1.20E-05
1135	650149.6	4197218	1.89E-04	0.000201	2.84E-05	3.02E-05	2.77E-05	2.69E-05	1.47E-05	1.22E-05
1136	650178.8	4197233	1.91E-04	0.000204	2.87E-05	3.06E-05	2.81E-05	2.72E-05	1.49E-05	1.24E-05
1137	650208.1	4197247	1.93E-04	0.000205	2.90E-05	3.08E-05	2.83E-05	2.75E-05	1.51E-05	1.25E-05
1138	650237.3	4197262	1.93E-04	0.000206	2.91E-05	3.09E-05	2.84E-05	2.76E-05	1.51E-05	1.25E-05
1139	650266.6	4197276	1.94E-04	0.000206	2.91E-05	3.10E-05	2.85E-05	2.76E-05	1.51E-05	1.25E-05
1140	650295.9	4197291	1.93E-04	0.000206	2.91E-05	3.09E-05	2.84E-05	2.76E-05	1.51E-05	1.25E-05
1141	650325.1	4197306	1.92E-04	0.000205	2.89E-05	3.07E-05	2.83E-05	2.74E-05	1.50E-05	1.24E-05
1142	650354.4	4197320	1.90E-04	0.000203	2.86E-05	3.04E-05	2.79E-05	2.71E-05	1.48E-05	1.23E-05
1143	650383.6	4197335	1.88E-04	0.0002	2.82E-05	3.00E-05	2.76E-05	2.67E-05	1.46E-05	1.21E-05
1144	650412.9	4197350	1.84E-04	0.000197	2.77E-05	2.95E-05	2.71E-05	2.63E-05	1.44E-05	1.19E-05
1145	650442.2	4197364	1.81E-04	0.000193	2.72E-05	2.89E-05	2.66E-05	2.58E-05	1.41E-05	1.17E-05
1146	650471.4	4197379	1.77E-04	0.000189	2.66E-05	2.83E-05	2.61E-05	2.53E-05	1.38E-05	1.15E-05
1147	650494.9	4197399	1.75E-04	0.000186	2.63E-05	2.79E-05	2.57E-05	2.49E-05	1.37E-05	1.13E-05
1148	650507	4197429	1.75E-04	0.000187	2.64E-05	2.80E-05	2.58E-05	2.50E-05	1.37E-05	1.13E-05
1149	650519	4197460	1.75E-04	0.000187	2.64E-05	2.80E-05	2.58E-05	2.50E-05	1.37E-05	1.13E-05
1150	650531.1	4197490	1.75E-04	0.000186	2.63E-05	2.79E-05	2.57E-05	2.49E-05	1.36E-05	1.13E-05
1151	650543.1	4197520	1.73E-04	0.000185	2.61E-05	2.77E-05	2.55E-05	2.47E-05	1.35E-05	1.12E-05
1152	650555.2	4197551	1.71E-04	0.000183	2.58E-05	2.74E-05	2.52E-05	2.44E-05	1.34E-05	1.11E-05
1153	650567.2	4197581	1.69E-04	0.00018	2.54E-05	2.70E-05	2.48E-05	2.40E-05	1.32E-05	1.09E-05
1154	650579.3	4197612	1.65E-04	0.000176	2.49E-05	2.64E-05	2.43E-05	2.36E-05	1.29E-05	1.07E-05
1155	650591.3	4197642	1.62E-04	0.000172	2.43E-05	2.58E-05	2.38E-05	2.30E-05	1.26E-05	1.04E-05
1156	650603.4	4197672	1.57E-04	0.000168	2.37E-05	2.52E-05	2.31E-05	2.24E-05	1.23E-05	1.02E-05
1157	650615.5	4197703	1.53E-04	0.000163	2.30E-05	2.44E-05	2.24E-05	2.18E-05	1.19E-05	9.87E-06
1158	650627.5	4197733	1.48E-04	0.000157	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.54E-06
1159	650639.6	4197764	1.42E-04	0.000152	2.14E-05	2.27E-05	2.09E-05	2.03E-05	1.11E-05	9.19E-06
1160	650651.6	4197794	1.37E-04	0.000146	2.06E-05	2.19E-05	2.01E-05	1.95E-05	1.07E-05	8.83E-06
1161	650663.7	4197824	1.31E-04	0.00014	1.97E-05	2.10E-05	1.93E-05	1.87E-05	1.02E-05	8.47E-06
1162	650675.7	4197855	1.25E-04	0.000134	1.88E-05	2.00E-05	1.84E-05	1.79E-05	9.79E-06	8.10E-06
1163	650687.8	4197885	1.20E-04	0.000128	1.80E-05	1.91E-05	1.76E-05	1.71E-05	9.35E-06	7.74E-06
1164	650699.8	4197916	1.14E-04	0.000122	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.92E-06	7.38E-06
1165	650711.9	4197946	1.09E-04	0.000116	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.50E-06	7.03E-06
1166	650723.9	4197977	1.04E-04	0.00011	1.56E-05	1.66E-05	1.52E-05	1.48E-05	8.10E-06	6.70E-06
1167	650736	4198007	9.87E-05	0.000105	1.48E-05	1.58E-05	1.45E-05	1.41E-05	7.71E-06	6.38E-06
1168	650748	4198037	9.40E-05	0.0001	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.34E-06	6.07E-06
1169	650760.1	4198068	8.95E-05	9.54E-05	1.35E-05	1.43E-05	1.32E-05	1.27E-05	6.99E-06	5.78E-06
1170	649818.2	4196843	7.59E-05	8.09E-05	1.14E-05	1.21E-05	1.12E-05	1.08E-05	5.93E-06	4.90E-06
1171	649847.5	4196858	8.05E-05	8.58E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.29E-06	5.20E-06
1172	649876.8	4196873	8.52E-05	9.09E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.66E-06	5.51E-06

1173	649906.1	4196887	9.02E-05	9.61E-05	1.36E-05	1.44E-05	1.33E-05	1.28E-05	7.04E-06	5.83E-06
1174	649935.3	4196902	9.51E-05	0.000101	1.43E-05	1.52E-05	1.40E-05	1.36E-05	7.43E-06	6.15E-06
1175	649964.6	4196917	1.00E-04	0.000107	1.51E-05	1.60E-05	1.47E-05	1.43E-05	7.83E-06	6.48E-06
1176	649993.9	4196931	1.05E-04	0.000112	1.58E-05	1.68E-05	1.55E-05	1.50E-05	8.22E-06	6.80E-06
1177	650023.2	4196946	1.10E-04	0.000117	1.66E-05	1.76E-05	1.62E-05	1.57E-05	8.61E-06	7.12E-06
1178	650052.5	4196960	1.15E-04	0.000123	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.99E-06	7.44E-06
1179	650081.8	4196975	1.20E-04	0.000128	1.80E-05	1.92E-05	1.76E-05	1.71E-05	9.36E-06	7.74E-06
1180	650111.1	4196990	1.24E-04	0.000132	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.71E-06	8.03E-06
1181	650140.4	4197004	1.28E-04	0.000137	1.93E-05	2.05E-05	1.89E-05	1.83E-05	1.00E-05	8.30E-06
1182	650169.7	4197019	1.32E-04	0.000141	1.99E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.54E-06
1183	650199	4197034	1.36E-04	0.000145	2.04E-05	2.17E-05	1.99E-05	1.93E-05	1.06E-05	8.76E-06
1184	650228.3	4197048	1.39E-04	0.000148	2.08E-05	2.21E-05	2.04E-05	1.97E-05	1.08E-05	8.95E-06
1185	650257.5	4197063	1.41E-04	0.00015	2.12E-05	2.26E-05	2.08E-05	2.01E-05	1.10E-05	9.12E-06
1186	650286.8	4197078	1.43E-04	0.000153	2.15E-05	2.29E-05	2.11E-05	2.04E-05	1.12E-05	9.26E-06
1187	650316.1	4197092	1.45E-04	0.000155	2.18E-05	2.32E-05	2.13E-05	2.07E-05	1.13E-05	9.37E-06
1188	650345.4	4197107	1.46E-04	0.000156	2.20E-05	2.34E-05	2.15E-05	2.09E-05	1.14E-05	9.46E-06
1189	650374.7	4197122	1.47E-04	0.000157	2.21E-05	2.35E-05	2.17E-05	2.10E-05	1.15E-05	9.52E-06
1190	650404	4197136	1.48E-04	0.000157	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.54E-06
1191	650433.3	4197151	1.47E-04	0.000157	2.22E-05	2.36E-05	2.17E-05	2.10E-05	1.15E-05	9.52E-06
1192	650462.6	4197166	1.47E-04	0.000157	2.21E-05	2.35E-05	2.16E-05	2.09E-05	1.15E-05	9.49E-06
1193	650491.9	4197180	1.46E-04	0.000156	2.19E-05	2.33E-05	2.15E-05	2.08E-05	1.14E-05	9.43E-06
1194	650521.2	4197195	1.45E-04	0.000154	2.18E-05	2.31E-05	2.13E-05	2.06E-05	1.13E-05	9.35E-06
1195	650550.4	4197209	1.43E-04	0.000153	2.15E-05	2.29E-05	2.10E-05	2.04E-05	1.12E-05	9.25E-06
1196	650579.7	4197224	1.41E-04	0.000151	2.12E-05	2.26E-05	2.08E-05	2.01E-05	1.10E-05	9.13E-06
1197	650609	4197239	1.39E-04	0.000148	2.09E-05	2.22E-05	2.04E-05	1.98E-05	1.09E-05	8.99E-06
1198	650642.3	4197264	1.37E-04	0.000146	2.06E-05	2.19E-05	2.01E-05	1.95E-05	1.07E-05	8.85E-06
1199	650654.4	4197294	1.38E-04	0.000147	2.07E-05	2.20E-05	2.03E-05	1.96E-05	1.08E-05	8.90E-06
1200	650666.5	4197324	1.38E-04	0.000147	2.08E-05	2.21E-05	2.03E-05	1.97E-05	1.08E-05	8.93E-06
1201	650678.5	4197355	1.38E-04	0.000147	2.08E-05	2.21E-05	2.03E-05	1.97E-05	1.08E-05	8.93E-06
1202	650690.6	4197385	1.38E-04	0.000147	2.07E-05	2.20E-05	2.03E-05	1.97E-05	1.08E-05	8.91E-06
1203	650702.7	4197416	1.37E-04	0.000146	2.06E-05	2.19E-05	2.02E-05	1.95E-05	1.07E-05	8.86E-06
1204	650714.7	4197446	1.36E-04	0.000145	2.04E-05	2.17E-05	2.00E-05	1.94E-05	1.06E-05	8.79E-06
1205	650726.8	4197477	1.34E-04	0.000143	2.02E-05	2.15E-05	1.98E-05	1.92E-05	1.05E-05	8.69E-06
1206	650738.9	4197507	1.32E-04	0.000141	1.99E-05	2.12E-05	1.95E-05	1.89E-05	1.03E-05	8.56E-06
1207	650750.9	4197538	1.30E-04	0.000139	1.96E-05	2.08E-05	1.91E-05	1.85E-05	1.02E-05	8.41E-06
1208	650763	4197568	1.27E-04	0.000136	1.92E-05	2.04E-05	1.87E-05	1.82E-05	9.95E-06	8.23E-06
1209	650775	4197598	1.24E-04	0.000133	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.72E-06	8.04E-06
1210	650787.1	4197629	1.21E-04	0.000129	1.82E-05	1.94E-05	1.78E-05	1.73E-05	9.46E-06	7.83E-06
1211	650799.2	4197659	1.18E-04	0.000125	1.77E-05	1.88E-05	1.73E-05	1.68E-05	9.19E-06	7.60E-06
1212	650811.2	4197690	1.14E-04	0.000122	1.71E-05	1.82E-05	1.68E-05	1.63E-05	8.91E-06	7.37E-06
1213	650823.3	4197720	1.10E-04	0.000117	1.66E-05	1.76E-05	1.62E-05	1.57E-05	8.61E-06	7.12E-06
1214	650835.4	4197751	1.06E-04	0.000113	1.60E-05	1.70E-05	1.56E-05	1.52E-05	8.30E-06	6.87E-06
1215	650847.4	4197781	1.02E-04	0.000109	1.54E-05	1.64E-05	1.51E-05	1.46E-05	8.00E-06	6.62E-06
1216	650859.5	4197812	9.84E-05	0.000105	1.48E-05	1.57E-05	1.45E-05	1.40E-05	7.69E-06	6.36E-06
1217	650871.6	4197842	9.46E-05	0.000101	1.42E-05	1.51E-05	1.39E-05	1.35E-05	7.39E-06	6.11E-06
1218	650883.6	4197872	9.08E-05	9.68E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.09E-06	5.87E-06
1219	650895.7	4197903	8.71E-05	9.28E-05	1.31E-05	1.39E-05	1.28E-05	1.24E-05	6.80E-06	5.63E-06
1220	650907.8	4197933	8.35E-05	8.91E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.53E-06	5.40E-06
1221	650919.8	4197964	8.01E-05	8.54E-05	1.21E-05	1.28E-05	1.18E-05	1.14E-05	6.26E-06	5.18E-06
1222	650931.9	4197994	7.69E-05	8.2E-05	1.16E-05	1.23E-05	1.13E-05	1.10E-05	6.01E-06	4.97E-06
1223	650944	4198025	7.37E-05	7.86E-05	1.11E-05	1.18E-05	1.08E-05	1.05E-05	5.76E-06	4.77E-06
1224	650956	4198055	7.07E-05	7.54E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.53E-06	4.57E-06
1225	650968.1	4198086	6.78E-05	7.23E-05	1.02E-05	1.08E-05	9.97E-06	9.67E-06	5.30E-06	4.38E-06
1226	649837.9	4196644	5.36E-05	5.71E-05	8.06E-06	8.57E-06	7.88E-06	7.64E-06	4.19E-06	3.46E-06
1227	649867.2	4196659	5.64E-05	6.02E-05	8.49E-06	9.02E-06	8.30E-06	8.04E-06	4.41E-06	3.65E-06
1228	649896.5	4196674	5.95E-05	6.34E-05	8.94E-06	9.51E-06	8.74E-06	8.48E-06	4.65E-06	3.84E-06

1229	649925.9	4196688	6.27E-05	6.68E-05	9.42E-06	1.00E-05	9.21E-06	8.93E-06	4.89E-06	4.05E-06
1230	649955.2	4196703	6.60E-05	7.03E-05	9.92E-06	1.05E-05	9.70E-06	9.40E-06	5.15E-06	4.26E-06
1231	649984.5	4196718	6.94E-05	7.4E-05	1.04E-05	1.11E-05	1.02E-05	9.89E-06	5.42E-06	4.48E-06
1232	650013.8	4196732	7.29E-05	7.77E-05	1.10E-05	1.17E-05	1.07E-05	1.04E-05	5.69E-06	4.71E-06
1233	650043.1	4196747	7.65E-05	8.15E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.97E-06	4.94E-06
1234	650072.4	4196762	8.01E-05	8.54E-05	1.20E-05	1.28E-05	1.18E-05	1.14E-05	6.25E-06	5.17E-06
1235	650101.7	4196776	8.37E-05	8.93E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.54E-06	5.41E-06
1236	650131	4196791	8.73E-05	9.3E-05	1.31E-05	1.40E-05	1.28E-05	1.24E-05	6.82E-06	5.64E-06
1237	650160.4	4196806	9.08E-05	9.67E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.09E-06	5.86E-06
1238	650189.7	4196820	9.41E-05	0.0001	1.42E-05	1.50E-05	1.38E-05	1.34E-05	7.35E-06	6.08E-06
1239	650219	4196835	9.73E-05	0.000104	1.46E-05	1.56E-05	1.43E-05	1.39E-05	7.60E-06	6.29E-06
1240	650248.3	4196849	1.00E-04	0.000107	1.51E-05	1.61E-05	1.48E-05	1.43E-05	7.84E-06	6.49E-06
1241	650277.6	4196864	1.03E-04	0.00011	1.55E-05	1.65E-05	1.52E-05	1.47E-05	8.06E-06	6.67E-06
1242	650306.9	4196879	1.06E-04	0.000113	1.59E-05	1.69E-05	1.56E-05	1.51E-05	8.27E-06	6.84E-06
1243	650336.2	4196893	1.08E-04	0.000115	1.63E-05	1.73E-05	1.59E-05	1.54E-05	8.45E-06	6.99E-06
1244	650365.6	4196908	1.10E-04	0.000118	1.66E-05	1.76E-05	1.62E-05	1.57E-05	8.62E-06	7.13E-06
1245	650394.9	4196923	1.12E-04	0.00012	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.76E-06	7.24E-06
1246	650424.2	4196937	1.13E-04	0.000121	1.70E-05	1.81E-05	1.67E-05	1.62E-05	8.86E-06	7.33E-06
1247	650453.5	4196952	1.15E-04	0.000122	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.97E-06	7.42E-06
1248	650482.8	4196967	1.16E-04	0.000123	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.05E-06	7.48E-06
1249	650512.1	4196981	1.16E-04	0.000124	1.75E-05	1.86E-05	1.71E-05	1.66E-05	9.10E-06	7.53E-06
1250	650541.4	4196996	1.17E-04	0.000124	1.75E-05	1.87E-05	1.72E-05	1.66E-05	9.12E-06	7.54E-06
1251	650570.7	4197011	1.17E-04	0.000125	1.76E-05	1.87E-05	1.72E-05	1.66E-05	9.12E-06	7.55E-06
1252	650600.1	4197025	1.17E-04	0.000124	1.75E-05	1.86E-05	1.71E-05	1.66E-05	9.11E-06	7.54E-06
1253	650629.4	4197040	1.16E-04	0.000124	1.75E-05	1.86E-05	1.71E-05	1.66E-05	9.08E-06	7.51E-06
1254	650658.7	4197055	1.16E-04	0.000123	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.03E-06	7.47E-06
1255	650688	4197069	1.15E-04	0.000122	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.95E-06	7.41E-06
1256	650717.3	4197084	1.14E-04	0.000121	1.71E-05	1.81E-05	1.67E-05	1.62E-05	8.87E-06	7.34E-06
1257	650746.6	4197099	1.12E-04	0.00012	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.77E-06	7.25E-06
1258	650775.9	4197113	1.11E-04	0.000118	1.67E-05	1.77E-05	1.63E-05	1.58E-05	8.66E-06	7.16E-06
1259	650793.8	4197139	1.11E-04	0.000118	1.67E-05	1.77E-05	1.63E-05	1.58E-05	8.67E-06	7.17E-06
1260	650805.8	4197169	1.12E-04	0.000119	1.68E-05	1.79E-05	1.64E-05	1.59E-05	8.73E-06	7.22E-06
1261	650817.9	4197199	1.12E-04	0.00012	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.77E-06	7.25E-06
1262	650830	4197230	1.13E-04	0.00012	1.69E-05	1.80E-05	1.66E-05	1.60E-05	8.79E-06	7.27E-06
1263	650842.1	4197260	1.13E-04	0.00012	1.69E-05	1.80E-05	1.66E-05	1.60E-05	8.80E-06	7.28E-06
1264	650854.1	4197291	1.12E-04	0.00012	1.69E-05	1.80E-05	1.65E-05	1.60E-05	8.78E-06	7.26E-06
1265	650866.2	4197321	1.12E-04	0.000119	1.68E-05	1.79E-05	1.65E-05	1.59E-05	8.74E-06	7.23E-06
1266	650878.3	4197352	1.11E-04	0.000118	1.67E-05	1.78E-05	1.63E-05	1.58E-05	8.68E-06	7.18E-06
1267	650890.4	4197382	1.10E-04	0.000117	1.66E-05	1.76E-05	1.62E-05	1.57E-05	8.60E-06	7.11E-06
1268	650902.4	4197413	1.09E-04	0.000116	1.64E-05	1.74E-05	1.60E-05	1.55E-05	8.50E-06	7.03E-06
1269	650914.5	4197443	1.07E-04	0.000114	1.61E-05	1.71E-05	1.58E-05	1.53E-05	8.37E-06	6.93E-06
1270	650926.6	4197474	1.05E-04	0.000112	1.59E-05	1.69E-05	1.55E-05	1.50E-05	8.23E-06	6.81E-06
1271	650938.6	4197504	1.03E-04	0.00011	1.55E-05	1.65E-05	1.52E-05	1.47E-05	8.07E-06	6.68E-06
1272	650950.7	4197535	1.01E-04	0.000108	1.52E-05	1.62E-05	1.49E-05	1.44E-05	7.90E-06	6.53E-06
1273	650962.8	4197565	9.87E-05	0.000105	1.48E-05	1.58E-05	1.45E-05	1.41E-05	7.71E-06	6.38E-06
1274	650974.9	4197596	9.61E-05	0.000102	1.45E-05	1.54E-05	1.41E-05	1.37E-05	7.51E-06	6.21E-06
1275	650986.9	4197626	9.34E-05	9.96E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.30E-06	6.04E-06
1276	650999	4197656	9.07E-05	9.67E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.09E-06	5.86E-06
1277	651011.1	4197687	8.79E-05	9.37E-05	1.32E-05	1.40E-05	1.29E-05	1.25E-05	6.86E-06	5.68E-06
1278	651023.2	4197717	8.50E-05	9.06E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.64E-06	5.49E-06
1279	651035.2	4197748	8.21E-05	8.75E-05	1.23E-05	1.31E-05	1.21E-05	1.17E-05	6.41E-06	5.31E-06
1280	651047.3	4197778	7.93E-05	8.45E-05	1.19E-05	1.27E-05	1.17E-05	1.13E-05	6.19E-06	5.12E-06
1281	651059.4	4197809	7.65E-05	8.15E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.98E-06	4.94E-06
1282	651071.5	4197839	7.38E-05	7.87E-05	1.11E-05	1.18E-05	1.09E-05	1.05E-05	5.76E-06	4.77E-06
1283	651083.5	4197870	7.12E-05	7.59E-05	1.07E-05	1.14E-05	1.05E-05	1.01E-05	5.56E-06	4.60E-06
1284	651095.6	4197900	6.87E-05	7.32E-05	1.03E-05	1.10E-05	1.01E-05	9.78E-06	5.36E-06	4.44E-06

1285	651107.7	4197931	6.62E-05	7.06E-05	9.96E-06	1.06E-05	9.74E-06	9.44E-06	5.17E-06	4.28E-06
1286	651119.8	4197961	6.39E-05	6.81E-05	9.61E-06	1.02E-05	9.39E-06	9.10E-06	4.99E-06	4.13E-06
1287	651131.8	4197992	6.16E-05	6.57E-05	9.27E-06	9.85E-06	9.06E-06	8.78E-06	4.81E-06	3.98E-06
1288	651143.9	4198022	5.94E-05	6.34E-05	8.94E-06	9.50E-06	8.74E-06	8.47E-06	4.64E-06	3.84E-06
1289	651156	4198053	5.73E-05	6.11E-05	8.62E-06	9.16E-06	8.43E-06	8.17E-06	4.48E-06	3.70E-06
1290	651168.1	4198083	5.53E-05	5.89E-05	8.31E-06	8.83E-06	8.13E-06	7.88E-06	4.32E-06	3.57E-06
1291	649653.7	4198103	4.40E-03	0.004693	6.62E-04	7.04E-04	6.47E-04	6.27E-04	3.44E-04	2.84E-04
1292	649614.2	4198097	4.91E-03	0.005239	7.39E-04	7.86E-04	7.23E-04	7.00E-04	3.84E-04	3.18E-04
1293	649574.7	4198090	5.69E-03	0.00607	8.56E-04	9.10E-04	8.37E-04	8.11E-04	4.45E-04	3.68E-04
1294	649657.8	4198078	3.47E-03	0.003704	5.22E-04	5.55E-04	5.11E-04	4.95E-04	2.71E-04	2.25E-04
1295	649618.3	4198072	3.91E-03	0.004165	5.87E-04	6.25E-04	5.74E-04	5.57E-04	3.05E-04	2.52E-04
1296	649578.8	4198065	4.51E-03	0.004803	6.77E-04	7.20E-04	6.62E-04	6.42E-04	3.52E-04	2.91E-04
1297	649661.8	4198054	2.91E-03	0.003107	4.38E-04	4.66E-04	4.28E-04	4.15E-04	2.28E-04	1.88E-04
1298	649622.3	4198047	3.28E-03	0.0035	4.94E-04	5.25E-04	4.83E-04	4.68E-04	2.56E-04	2.12E-04
1299	649582.8	4198041	3.77E-03	0.004014	5.66E-04	6.02E-04	5.54E-04	5.37E-04	2.94E-04	2.43E-04
1300	649646.2	4198026	2.68E-03	0.002859	4.03E-04	4.29E-04	3.94E-04	3.82E-04	2.10E-04	1.73E-04
1301	649606.7	4198019	3.04E-03	0.003236	4.56E-04	4.85E-04	4.46E-04	4.33E-04	2.37E-04	1.96E-04
1302	649654.3	4197976	2.14E-03	0.002277	3.21E-04	3.42E-04	3.14E-04	3.04E-04	1.67E-04	1.38E-04
1303	649614.8	4197970	2.40E-03	0.002553	3.60E-04	3.83E-04	3.52E-04	3.41E-04	1.87E-04	1.55E-04
1304	649642.7	4197924	1.86E-03	0.001984	2.80E-04	2.98E-04	2.74E-04	2.65E-04	1.45E-04	1.20E-04
1305	649603.2	4197917	2.07E-03	0.002203	3.11E-04	3.30E-04	3.04E-04	2.94E-04	1.61E-04	1.34E-04
1306	649690.4	4197881	1.41E-03	0.001502	2.12E-04	2.25E-04	2.07E-04	2.01E-04	1.10E-04	9.10E-05
1307	649650.9	4197875	1.55E-03	0.001653	2.33E-04	2.48E-04	2.28E-04	2.21E-04	1.21E-04	1.00E-04
1308	649611.4	4197868	1.70E-03	0.001808	2.55E-04	2.71E-04	2.49E-04	2.42E-04	1.33E-04	1.10E-04
1309	649659.1	4197825	1.27E-03	0.001358	1.91E-04	2.04E-04	1.87E-04	1.81E-04	9.95E-05	8.23E-05
1310	649619.6	4197819	1.37E-03	0.001463	2.06E-04	2.19E-04	2.02E-04	1.96E-04	1.07E-04	8.87E-05
1311	649655.6	4197723	9.45E-04	0.001008	1.42E-04	1.51E-04	1.39E-04	1.35E-04	7.38E-05	6.11E-05
1312	649652.2	4197621	6.57E-04	0.0007	9.88E-05	1.05E-04	9.66E-05	9.36E-05	5.13E-05	4.24E-05
1313	649724.4	4197431	3.33E-04	0.000355	5.01E-05	5.32E-05	4.90E-05	4.75E-05	2.60E-05	2.15E-05
1314	649684.9	4197424	3.21E-04	0.000343	4.83E-05	5.14E-05	4.73E-05	4.58E-05	2.51E-05	2.08E-05
1315	649757	4197233	1.85E-04	0.000197	2.78E-05	2.96E-05	2.72E-05	2.64E-05	1.45E-05	1.20E-05
1316	649717.5	4197227	1.76E-04	0.000187	2.64E-05	2.81E-05	2.58E-05	2.50E-05	1.37E-05	1.13E-05
1317	649848.9	4197046	1.22E-04	0.00013	1.84E-05	1.96E-05	1.80E-05	1.74E-05	9.56E-06	7.91E-06
1318	649769.9	4197033	1.10E-04	0.000117	1.66E-05	1.76E-05	1.62E-05	1.57E-05	8.60E-06	7.11E-06
1319	649881.6	4196848	8.15E-05	8.69E-05	1.23E-05	1.30E-05	1.20E-05	1.16E-05	6.37E-06	5.27E-06
1320	649782.8	4196832	7.15E-05	7.63E-05	1.08E-05	1.14E-05	1.05E-05	1.02E-05	5.59E-06	4.62E-06
1321	649914.2	4196651	5.81E-05	6.2E-05	8.74E-06	9.29E-06	8.55E-06	8.28E-06	4.54E-06	3.76E-06
1322	649815.5	4196635	5.16E-05	5.5E-05	7.76E-06	8.25E-06	7.59E-06	7.36E-06	4.03E-06	3.34E-06
1323	649936.4	4197077	1.40E-04	0.000149	2.10E-05	2.23E-05	2.05E-05	1.99E-05	1.09E-05	9.02E-06
1324	650002.9	4196889	9.72E-05	0.000104	1.46E-05	1.55E-05	1.43E-05	1.38E-05	7.59E-06	6.28E-06
1325	650069.4	4196700	7.17E-05	7.65E-05	1.08E-05	1.15E-05	1.05E-05	1.02E-05	5.60E-06	4.64E-06
1326	649546.5	4198075	5.92E-03	0.00631	8.90E-04	9.46E-04	8.70E-04	8.43E-04	4.62E-04	3.82E-04
1327	649558.7	4198053	4.61E-03	0.004913	6.93E-04	7.37E-04	6.78E-04	6.57E-04	3.60E-04	2.98E-04
1328	649583.2	4198010	3.20E-03	0.003413	4.81E-04	5.12E-04	4.71E-04	4.56E-04	2.50E-04	2.07E-04
1329	649705	4197849	1.22E-03	0.001296	1.83E-04	1.94E-04	1.79E-04	1.73E-04	9.49E-05	7.85E-05
1330	649999.1	4197326	2.46E-04	0.000262	3.69E-05	3.92E-05	3.61E-05	3.50E-05	1.92E-05	1.59E-05
1331	649975.3	4197312	2.40E-04	0.000256	3.61E-05	3.84E-05	3.53E-05	3.42E-05	1.88E-05	1.55E-05
1332	650097.1	4197151	1.69E-04	0.00018	2.54E-05	2.70E-05	2.48E-05	2.41E-05	1.32E-05	1.09E-05
1333	650073.3	4197138	1.65E-04	0.000176	2.48E-05	2.63E-05	2.42E-05	2.35E-05	1.29E-05	1.06E-05
1334	650195.1	4196977	1.23E-04	0.000131	1.85E-05	1.97E-05	1.81E-05	1.75E-05	9.62E-06	7.96E-06
1335	650171.4	4196964	1.20E-04	0.000128	1.80E-05	1.92E-05	1.76E-05	1.71E-05	9.37E-06	7.75E-06
1336	650293.2	4196803	9.41E-05	0.0001	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.35E-06	6.08E-06
1337	650269.4	4196789	9.16E-05	9.77E-05	1.38E-05	1.46E-05	1.35E-05	1.31E-05	7.16E-06	5.92E-06
1338	649520.1	4198057	6.04E-03	0.006442	9.09E-04	9.66E-04	8.89E-04	8.61E-04	4.72E-04	3.91E-04
1339	649534.2	4198036	4.72E-03	0.005033	7.10E-04	7.55E-04	6.94E-04	6.73E-04	3.69E-04	3.05E-04
1340	649562.5	4198025	3.81E-03	0.004061	5.73E-04	6.09E-04	5.60E-04	5.43E-04	2.98E-04	2.46E-04

1341	649534.3	4198006	3.95E-03	0.004208	5.93E-04	6.31E-04	5.80E-04	5.62E-04	3.08E-04	2.55E-04
1342	649562.5	4197995	3.27E-03	0.003489	4.92E-04	5.23E-04	4.81E-04	4.66E-04	2.56E-04	2.11E-04
1343	649590.7	4197954	2.46E-03	0.002624	3.70E-04	3.93E-04	3.62E-04	3.51E-04	1.92E-04	1.59E-04
1344	650155.4	4197189	1.79E-04	0.000191	2.69E-05	2.86E-05	2.63E-05	2.55E-05	1.40E-05	1.16E-05
1345	650127.2	4197170	1.74E-04	0.000186	2.62E-05	2.78E-05	2.56E-05	2.48E-05	1.36E-05	1.12E-05
1346	650268.4	4197024	1.33E-04	0.000141	1.99E-05	2.12E-05	1.95E-05	1.89E-05	1.04E-05	8.57E-06
1347	650240.2	4197005	1.29E-04	0.000138	1.94E-05	2.06E-05	1.90E-05	1.84E-05	1.01E-05	8.34E-06
1348	650381.3	4196859	1.03E-04	0.000109	1.54E-05	1.64E-05	1.51E-05	1.46E-05	8.02E-06	6.63E-06
1349	650353.1	4196840	9.99E-05	0.000107	1.50E-05	1.60E-05	1.47E-05	1.42E-05	7.80E-06	6.46E-06
1350	649490.9	4198036	6.26E-03	0.006676	9.42E-04	1.00E-03	9.21E-04	8.92E-04	4.89E-04	4.05E-04
1351	649505.8	4198016	4.89E-03	0.005214	7.35E-04	7.82E-04	7.19E-04	6.97E-04	3.82E-04	3.16E-04
1352	649504.8	4197984	4.09E-03	0.004357	6.15E-04	6.53E-04	6.01E-04	5.82E-04	3.19E-04	2.64E-04
1353	649535.6	4197976	3.38E-03	0.003598	5.08E-04	5.40E-04	4.96E-04	4.81E-04	2.64E-04	2.18E-04
1354	649565.5	4197936	2.52E-03	0.002686	3.79E-04	4.03E-04	3.70E-04	3.59E-04	1.97E-04	1.63E-04
1355	649595.4	4197896	1.96E-03	0.00209	2.95E-04	3.13E-04	2.88E-04	2.79E-04	1.53E-04	1.27E-04
1356	649609.3	4197844	1.56E-03	0.00166	2.34E-04	2.49E-04	2.29E-04	2.22E-04	1.22E-04	1.01E-04
1357	649639.1	4197803	1.24E-03	0.001326	1.87E-04	1.99E-04	1.83E-04	1.77E-04	9.72E-05	8.04E-05
1358	649461.9	4198013	6.48E-03	0.006903	9.74E-04	1.04E-03	9.52E-04	9.23E-04	5.06E-04	4.18E-04
1359	649478.3	4197994	5.04E-03	0.005373	7.58E-04	8.06E-04	7.41E-04	7.18E-04	3.94E-04	3.26E-04
1360	649480.3	4197962	4.15E-03	0.004426	6.24E-04	6.64E-04	6.10E-04	5.92E-04	3.24E-04	2.68E-04
1361	649511.2	4197956	3.44E-03	0.00367	5.18E-04	5.50E-04	5.06E-04	4.91E-04	2.69E-04	2.22E-04
1362	649544	4197918	2.52E-03	0.002691	3.80E-04	4.03E-04	3.71E-04	3.60E-04	1.97E-04	1.63E-04
1363	649576.9	4197881	1.96E-03	0.002095	2.95E-04	3.14E-04	2.89E-04	2.80E-04	1.53E-04	1.27E-04
1364	650314.1	4197064	1.39E-04	0.000148	2.09E-05	2.23E-05	2.05E-05	1.99E-05	1.09E-05	9.00E-06
1365	650445.5	4196913	1.09E-04	0.000117	1.65E-05	1.75E-05	1.61E-05	1.56E-05	8.55E-06	7.07E-06
1366	650416.6	4196888	1.06E-04	0.000113	1.60E-05	1.70E-05	1.57E-05	1.52E-05	8.32E-06	6.88E-06
1367	649435.4	4197986	6.53E-03	0.006965	9.82E-04	1.04E-03	9.61E-04	9.31E-04	5.10E-04	4.22E-04
1368	649406.7	4197953	6.41E-03	0.006831	9.64E-04	1.02E-03	9.42E-04	9.13E-04	5.01E-04	4.14E-04
1369	649378	4197921	6.13E-03	0.006533	9.21E-04	9.80E-04	9.01E-04	8.73E-04	4.79E-04	3.96E-04
1370	649454.2	4197970	5.06E-03	0.005391	7.61E-04	8.09E-04	7.44E-04	7.21E-04	3.95E-04	3.27E-04
1371	649425.5	4197937	4.93E-03	0.005255	7.41E-04	7.88E-04	7.25E-04	7.02E-04	3.85E-04	3.19E-04
1372	649396.8	4197904	4.64E-03	0.004946	6.98E-04	7.42E-04	6.82E-04	6.61E-04	3.62E-04	3.00E-04
1373	649458.6	4197937	4.05E-03	0.004319	6.09E-04	6.48E-04	5.96E-04	5.77E-04	3.16E-04	2.62E-04
1374	649429.9	4197904	3.87E-03	0.004122	5.81E-04	6.18E-04	5.68E-04	5.51E-04	3.02E-04	2.50E-04
1375	649401.2	4197871	3.48E-03	0.003706	5.23E-04	5.56E-04	5.11E-04	4.95E-04	2.72E-04	2.25E-04
1376	649491.8	4197937	3.43E-03	0.003656	5.16E-04	5.48E-04	5.04E-04	4.89E-04	2.68E-04	2.22E-04
1377	649463.1	4197904	3.29E-03	0.003508	4.95E-04	5.26E-04	4.84E-04	4.69E-04	2.57E-04	2.13E-04
1378	649434.4	4197871	3.06E-03	0.003261	4.60E-04	4.89E-04	4.50E-04	4.36E-04	2.39E-04	1.98E-04
1379	649515	4197887	2.42E-03	0.00258	3.64E-04	3.87E-04	3.56E-04	3.45E-04	1.89E-04	1.56E-04
1380	649486.3	4197855	2.24E-03	0.002391	3.37E-04	3.59E-04	3.30E-04	3.20E-04	1.75E-04	1.45E-04
1381	649457.6	4197822	2.02E-03	0.002153	3.04E-04	3.23E-04	2.97E-04	2.88E-04	1.58E-04	1.31E-04
1382	649552.5	4197854	1.91E-03	0.002036	2.87E-04	3.05E-04	2.81E-04	2.72E-04	1.49E-04	1.23E-04
1383	649523.8	4197822	1.77E-03	0.001885	2.66E-04	2.83E-04	2.60E-04	2.52E-04	1.38E-04	1.14E-04
1384	649495.1	4197789	1.57E-03	0.001675	2.36E-04	2.51E-04	2.31E-04	2.24E-04	1.23E-04	1.02E-04
1385	649590.1	4197821	1.49E-03	0.001593	2.25E-04	2.39E-04	2.20E-04	2.13E-04	1.17E-04	9.65E-05
1386	649561.4	4197789	1.39E-03	0.001483	2.09E-04	2.22E-04	2.05E-04	1.98E-04	1.09E-04	8.99E-05
1387	649532.7	4197756	1.28E-03	0.001362	1.92E-04	2.04E-04	1.88E-04	1.82E-04	9.98E-05	8.26E-05
1388	649613.3	4197772	1.18E-03	0.00126	1.78E-04	1.89E-04	1.74E-04	1.68E-04	9.23E-05	7.64E-05
1389	649584.6	4197739	1.10E-03	0.001173	1.65E-04	1.76E-04	1.62E-04	1.57E-04	8.60E-05	7.11E-05
1390	649674.1	4197690	8.21E-04	0.000875	1.23E-04	1.31E-04	1.21E-04	1.17E-04	6.41E-05	5.30E-05
1391	649645.4	4197657	7.53E-04	0.000803	1.13E-04	1.20E-04	1.11E-04	1.07E-04	5.88E-05	4.87E-05
1392	649806.6	4197689	6.77E-04	0.000722	1.02E-04	1.08E-04	9.96E-05	9.65E-05	5.29E-05	4.38E-05
1393	649734.8	4197607	5.88E-04	0.000627	8.85E-05	9.41E-05	8.65E-05	8.38E-05	4.60E-05	3.80E-05
1394	649881.7	4197623	5.21E-04	0.000555	7.83E-05	8.33E-05	7.66E-05	7.42E-05	4.07E-05	3.37E-05
1395	649810	4197541	4.56E-04	0.000486	6.86E-05	7.29E-05	6.71E-05	6.50E-05	3.56E-05	2.95E-05
1396	649885.1	4197475	3.65E-04	0.000389	5.49E-05	5.83E-05	5.37E-05	5.20E-05	2.85E-05	2.36E-05

1397	650107.1	4197425	2.77E-04	0.000295	4.17E-05	4.43E-05	4.08E-05	3.95E-05	2.17E-05	1.79E-05
1398	650035.3	4197343	2.51E-04	0.000267	3.77E-05	4.01E-05	3.69E-05	3.57E-05	1.96E-05	1.62E-05
1399	650185.6	4197211	1.84E-04	0.000196	2.76E-05	2.94E-05	2.70E-05	2.62E-05	1.44E-05	1.19E-05
1400	650407.6	4197161	1.52E-04	0.000162	2.28E-05	2.43E-05	2.23E-05	2.16E-05	1.19E-05	9.80E-06
1401	650335.8	4197079	1.41E-04	0.000151	2.12E-05	2.26E-05	2.08E-05	2.01E-05	1.10E-05	9.13E-06
1402	650557.8	4197029	1.20E-04	0.000128	1.80E-05	1.92E-05	1.76E-05	1.71E-05	9.36E-06	7.74E-06
1403	650471.7	4196931	1.11E-04	0.000119	1.67E-05	1.78E-05	1.64E-05	1.59E-05	8.69E-06	7.19E-06
1404	649362.1	4197903	5.74E-03	0.006116	8.63E-04	9.17E-04	8.44E-04	8.18E-04	4.48E-04	3.71E-04
1405	649379.4	4197885	4.29E-03	0.004574	6.45E-04	6.86E-04	6.31E-04	6.11E-04	3.35E-04	2.77E-04
1406	649381	4197852	3.13E-03	0.003339	4.71E-04	5.01E-04	4.61E-04	4.46E-04	2.45E-04	2.02E-04
1407	649413.8	4197848	2.79E-03	0.002976	4.20E-04	4.46E-04	4.10E-04	3.98E-04	2.18E-04	1.80E-04
1408	649432.7	4197797	1.84E-03	0.001963	2.77E-04	2.94E-04	2.71E-04	2.62E-04	1.44E-04	1.19E-04
1409	649467.2	4197761	1.39E-03	0.001483	2.09E-04	2.22E-04	2.05E-04	1.98E-04	1.09E-04	8.99E-05
1410	649501.7	4197725	1.14E-03	0.001215	1.71E-04	1.82E-04	1.68E-04	1.62E-04	8.90E-05	7.36E-05
1411	649561	4197713	1.02E-03	0.001088	1.53E-04	1.63E-04	1.50E-04	1.45E-04	7.97E-05	6.59E-05
1412	649536.1	4197689	9.32E-04	0.000993	1.40E-04	1.49E-04	1.37E-04	1.33E-04	7.28E-05	6.02E-05
1413	649620.7	4197631	6.94E-04	0.00074	1.04E-04	1.11E-04	1.02E-04	9.89E-05	5.42E-05	4.49E-05
1414	649699.9	4197569	5.32E-04	0.000567	8.00E-05	8.51E-05	7.82E-05	7.58E-05	4.16E-05	3.44E-05
1415	649674	4197544	4.90E-04	0.000523	7.38E-05	7.84E-05	7.21E-05	6.99E-05	3.83E-05	3.17E-05
1416	649770.9	4197499	4.12E-04	0.000439	6.19E-05	6.59E-05	6.06E-05	5.87E-05	3.22E-05	2.66E-05
1417	649743	4197471	3.80E-04	0.000405	5.72E-05	6.08E-05	5.59E-05	5.42E-05	2.97E-05	2.46E-05
1418	649841.9	4197429	3.30E-04	0.000352	4.96E-05	5.27E-05	4.85E-05	4.70E-05	2.58E-05	2.13E-05
1419	649811.9	4197399	3.05E-04	0.000325	4.59E-05	4.88E-05	4.49E-05	4.35E-05	2.38E-05	1.97E-05
1420	649979.3	4197283	2.25E-04	0.00024	3.38E-05	3.60E-05	3.31E-05	3.21E-05	1.76E-05	1.45E-05
1421	649949.8	4197254	2.11E-04	0.000225	3.17E-05	3.37E-05	3.10E-05	3.00E-05	1.65E-05	1.36E-05
1422	650116.9	4197138	1.64E-04	0.000175	2.47E-05	2.63E-05	2.42E-05	2.34E-05	1.28E-05	1.06E-05
1423	650087.7	4197109	1.56E-04	0.000166	2.34E-05	2.49E-05	2.29E-05	2.22E-05	1.22E-05	1.01E-05
1424	650294.7	4197035	1.34E-04	0.000143	2.02E-05	2.14E-05	1.97E-05	1.91E-05	1.05E-05	8.66E-06
1425	650241.2	4196979	1.24E-04	0.000132	1.86E-05	1.98E-05	1.82E-05	1.76E-05	9.67E-06	8.00E-06
1426	650405.6	4196862	1.03E-04	0.00011	1.55E-05	1.65E-05	1.51E-05	1.47E-05	8.04E-06	6.65E-06
1427	650379.1	4196834	9.92E-05	0.000106	1.49E-05	1.59E-05	1.46E-05	1.41E-05	7.75E-06	6.41E-06
1428	649338.6	4197883	5.04E-03	0.005376	7.58E-04	8.06E-04	7.41E-04	7.19E-04	3.94E-04	3.26E-04
1429	649347.9	4197860	3.66E-03	0.003901	5.50E-04	5.85E-04	5.38E-04	5.22E-04	2.86E-04	2.36E-04
1430	649357.1	4197836	2.82E-03	0.003011	4.25E-04	4.52E-04	4.15E-04	4.02E-04	2.21E-04	1.83E-04
1431	649382.3	4197823	2.44E-03	0.002596	3.66E-04	3.89E-04	3.58E-04	3.47E-04	1.90E-04	1.57E-04
1432	649347.9	4197806	2.12E-03	0.002265	3.20E-04	3.40E-04	3.12E-04	3.03E-04	1.66E-04	1.37E-04
1433	649400.9	4197777	1.67E-03	0.001777	2.51E-04	2.66E-04	2.45E-04	2.38E-04	1.30E-04	1.08E-04
1434	649366.4	4197759	1.45E-03	0.00155	2.19E-04	2.32E-04	2.14E-04	2.07E-04	1.14E-04	9.39E-05
1435	649419.5	4197731	1.21E-03	0.001288	1.82E-04	1.93E-04	1.78E-04	1.72E-04	9.44E-05	7.81E-05
1436	649385	4197713	1.05E-03	0.001123	1.58E-04	1.68E-04	1.55E-04	1.50E-04	8.23E-05	6.81E-05
1437	649438	4197684	9.11E-04	0.000971	1.37E-04	1.46E-04	1.34E-04	1.30E-04	7.11E-05	5.88E-05
1438	649469.8	4197705	1.03E-03	0.001102	1.55E-04	1.65E-04	1.52E-04	1.47E-04	8.07E-05	6.68E-05
1439	649403.5	4197666	7.94E-04	0.000846	1.19E-04	1.27E-04	1.17E-04	1.13E-04	6.20E-05	5.13E-05
1440	649456.6	4197638	7.07E-04	0.000753	1.06E-04	1.13E-04	1.04E-04	1.01E-04	5.52E-05	4.57E-05
1441	649488.4	4197658	8.03E-04	0.000856	1.21E-04	1.28E-04	1.18E-04	1.14E-04	6.27E-05	5.19E-05
1442	649422.1	4197620	6.17E-04	0.000657	9.27E-05	9.86E-05	9.07E-05	8.79E-05	4.82E-05	3.99E-05
1443	649493.7	4197545	4.55E-04	0.000485	6.84E-05	7.27E-05	6.69E-05	6.48E-05	3.55E-05	2.94E-05
1444	649525.5	4197565	5.16E-04	0.00055	7.76E-05	8.25E-05	7.59E-05	7.36E-05	4.03E-05	3.34E-05
1445	649557.3	4197586	5.76E-04	0.000614	8.66E-05	9.21E-05	8.47E-05	8.21E-05	4.50E-05	3.72E-05
1446	649589.2	4197606	6.32E-04	0.000674	9.51E-05	1.01E-04	9.30E-05	9.01E-05	4.94E-05	4.09E-05
1447	649459.2	4197527	3.99E-04	0.000426	6.01E-05	6.38E-05	5.87E-05	5.69E-05	3.12E-05	2.58E-05
1448	649530.8	4197452	3.14E-04	0.000335	4.73E-05	5.03E-05	4.62E-05	4.48E-05	2.46E-05	2.03E-05
1449	649562.6	4197472	3.55E-04	0.000378	5.33E-05	5.67E-05	5.22E-05	5.06E-05	2.77E-05	2.29E-05
1450	649594.5	4197493	3.96E-04	0.000422	5.95E-05	6.33E-05	5.82E-05	5.64E-05	3.09E-05	2.56E-05
1451	649626.3	4197513	4.36E-04	0.000464	6.55E-05	6.97E-05	6.41E-05	6.21E-05	3.40E-05	2.82E-05
1452	649496.3	4197434	2.78E-04	0.000297	4.18E-05	4.45E-05	4.09E-05	3.97E-05	2.17E-05	1.80E-05

1453	649567.9	4197359	2.30E-04	0.000245	3.45E-05	3.67E-05	3.38E-05	3.27E-05	1.79E-05	1.48E-05
1454	649599.8	4197380	2.57E-04	0.000274	3.87E-05	4.11E-05	3.78E-05	3.66E-05	2.01E-05	1.66E-05
1455	649631.6	4197400	2.85E-04	0.000304	4.29E-05	4.56E-05	4.20E-05	4.07E-05	2.23E-05	1.84E-05
1456	649711.2	4197451	3.55E-04	0.000379	5.34E-05	5.68E-05	5.22E-05	5.06E-05	2.77E-05	2.30E-05
1457	649533.5	4197341	2.05E-04	0.000219	3.08E-05	3.28E-05	3.02E-05	2.92E-05	1.60E-05	1.33E-05
1458	649605.1	4197266	1.75E-04	0.000186	2.63E-05	2.80E-05	2.57E-05	2.49E-05	1.37E-05	1.13E-05
1459	649636.9	4197287	1.94E-04	0.000207	2.92E-05	3.11E-05	2.86E-05	2.77E-05	1.52E-05	1.26E-05
1460	649780.1	4197379	2.87E-04	0.000306	4.31E-05	4.59E-05	4.22E-05	4.09E-05	2.24E-05	1.85E-05
1461	649570.6	4197249	1.58E-04	0.000168	2.37E-05	2.52E-05	2.32E-05	2.25E-05	1.23E-05	1.02E-05
1462	649679.3	4197081	1.12E-04	0.00012	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.76E-06	7.24E-06
1463	649711.1	4197101	1.23E-04	0.000131	1.85E-05	1.96E-05	1.81E-05	1.75E-05	9.59E-06	7.94E-06
1464	649902.1	4197224	1.94E-04	0.000207	2.92E-05	3.11E-05	2.86E-05	2.77E-05	1.52E-05	1.26E-05
1465	649644.8	4197063	1.03E-04	0.000109	1.54E-05	1.64E-05	1.51E-05	1.46E-05	8.01E-06	6.63E-06
1466	649754.3	4196895	7.91E-05	8.43E-05	1.19E-05	1.26E-05	1.16E-05	1.13E-05	6.18E-06	5.11E-06
1467	649787.6	4196917	8.58E-05	9.15E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.70E-06	5.55E-06
1468	649821	4196938	9.31E-05	9.92E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.27E-06	6.02E-06
1469	649854.3	4196960	1.01E-04	0.000107	1.51E-05	1.61E-05	1.48E-05	1.43E-05	7.86E-06	6.51E-06
1470	649887.7	4196981	1.09E-04	0.000116	1.63E-05	1.74E-05	1.60E-05	1.55E-05	8.48E-06	7.02E-06
1471	649719.1	4196877	7.32E-05	7.8E-05	1.10E-05	1.17E-05	1.08E-05	1.04E-05	5.72E-06	4.73E-06
1472	649828.4	4196710	5.94E-05	6.33E-05	8.93E-06	9.50E-06	8.74E-06	8.47E-06	4.64E-06	3.84E-06
1473	649861.5	4196731	6.37E-05	6.8E-05	9.59E-06	1.02E-05	9.37E-06	9.08E-06	4.98E-06	4.12E-06
1474	649894.6	4196752	6.84E-05	7.29E-05	1.03E-05	1.09E-05	1.01E-05	9.74E-06	5.34E-06	4.42E-06
1475	649927.7	4196773	7.33E-05	7.81E-05	1.10E-05	1.17E-05	1.08E-05	1.04E-05	5.73E-06	4.74E-06
1476	649960.8	4196795	7.85E-05	8.36E-05	1.18E-05	1.25E-05	1.15E-05	1.12E-05	6.13E-06	5.07E-06
1477	649993.9	4196816	8.38E-05	8.94E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.55E-06	5.42E-06
1478	649793.3	4196692	5.56E-05	5.93E-05	8.37E-06	8.89E-06	8.18E-06	7.93E-06	4.35E-06	3.60E-06
1479	649902.6	4196524	4.69E-05	5E-05	7.05E-06	7.49E-06	6.89E-06	6.68E-06	3.66E-06	3.03E-06
1480	649935.5	4196545	4.98E-05	5.31E-05	7.49E-06	7.96E-06	7.32E-06	7.10E-06	3.89E-06	3.22E-06
1481	649968.4	4196566	5.30E-05	5.65E-05	7.96E-06	8.47E-06	7.79E-06	7.55E-06	4.14E-06	3.42E-06
1482	650001.4	4196587	5.63E-05	6E-05	8.47E-06	9.00E-06	8.28E-06	8.03E-06	4.40E-06	3.64E-06
1483	650034.3	4196608	5.99E-05	6.38E-05	9.00E-06	9.57E-06	8.80E-06	8.53E-06	4.68E-06	3.87E-06
1484	650067.2	4196629	6.36E-05	6.78E-05	9.56E-06	1.02E-05	9.35E-06	9.06E-06	4.97E-06	4.11E-06
1485	650100.1	4196651	6.74E-05	7.19E-05	1.01E-05	1.08E-05	9.92E-06	9.61E-06	5.27E-06	4.36E-06
1486	650133.1	4196672	7.14E-05	7.61E-05	1.07E-05	1.14E-05	1.05E-05	1.02E-05	5.57E-06	4.61E-06
1487	650166	4196693	7.53E-05	8.03E-05	1.13E-05	1.20E-05	1.11E-05	1.07E-05	5.88E-06	4.87E-06
1488	650198.9	4196714	7.92E-05	8.44E-05	1.19E-05	1.27E-05	1.16E-05	1.13E-05	6.19E-06	5.12E-06
1489	650231.8	4196735	8.31E-05	8.86E-05	1.25E-05	1.33E-05	1.22E-05	1.18E-05	6.49E-06	5.37E-06
1490	650264.7	4196756	8.69E-05	9.26E-05	1.31E-05	1.39E-05	1.28E-05	1.24E-05	6.78E-06	5.61E-06
1491	650297.7	4196777	9.05E-05	9.65E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.07E-06	5.85E-06
1492	650330.6	4196798	9.39E-05	0.0001	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.34E-06	6.07E-06
1493	649867.6	4196506	4.43E-05	4.72E-05	6.66E-06	7.08E-06	6.51E-06	6.31E-06	3.46E-06	2.86E-06
1494	649316	4197874	4.67E-03	0.00498	7.02E-04	7.47E-04	6.87E-04	6.66E-04	3.65E-04	3.02E-04
1495	649321.2	4197850	3.35E-03	0.003574	5.04E-04	5.36E-04	4.93E-04	4.78E-04	2.62E-04	2.17E-04
1496	649326.5	4197825	2.56E-03	0.002728	3.85E-04	4.09E-04	3.76E-04	3.65E-04	2.00E-04	1.65E-04
1497	649310.9	4197796	1.91E-03	0.002039	2.88E-04	3.06E-04	2.81E-04	2.73E-04	1.49E-04	1.24E-04
1498	649342.2	4197752	1.35E-03	0.001435	2.02E-04	2.15E-04	1.98E-04	1.92E-04	1.05E-04	8.70E-05
1499	649352.7	4197703	9.47E-04	0.001009	1.42E-04	1.51E-04	1.39E-04	1.35E-04	7.39E-05	6.12E-05
1500	649363.2	4197654	6.92E-04	0.000738	1.04E-04	1.11E-04	1.02E-04	9.87E-05	5.41E-05	4.47E-05
1501	649389.8	4197610	5.54E-04	0.000591	8.34E-05	8.86E-05	8.15E-05	7.90E-05	4.33E-05	3.58E-05
1502	649352.9	4197601	4.88E-04	0.00052	7.34E-05	7.80E-05	7.18E-05	6.96E-05	3.81E-05	3.15E-05
1503	649410.8	4197512	3.42E-04	0.000364	5.14E-05	5.47E-05	5.03E-05	4.87E-05	2.67E-05	2.21E-05
1504	649373.8	4197503	3.03E-04	0.000323	4.55E-05	4.84E-05	4.45E-05	4.31E-05	2.36E-05	1.96E-05
1505	649435.8	4197416	2.32E-04	0.000247	3.49E-05	3.71E-05	3.41E-05	3.31E-05	1.81E-05	1.50E-05
1506	649394.8	4197405	2.05E-04	0.000219	3.08E-05	3.28E-05	3.01E-05	2.92E-05	1.60E-05	1.32E-05
1507	649456	4197318	1.66E-04	0.000177	2.49E-05	2.65E-05	2.43E-05	2.36E-05	1.29E-05	1.07E-05
1508	649494.7	4197330	1.85E-04	0.000197	2.78E-05	2.95E-05	2.72E-05	2.63E-05	1.44E-05	1.19E-05

1509	649415.8	4197308	1.48E-04	0.000158	2.23E-05	2.37E-05	2.18E-05	2.12E-05	1.16E-05	9.60E-06
1510	649476.4	4197220	1.24E-04	0.000133	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.72E-06	8.04E-06
1511	649514.1	4197231	1.37E-04	0.000146	2.06E-05	2.19E-05	2.01E-05	1.95E-05	1.07E-05	8.85E-06
1512	649436.8	4197210	1.13E-04	0.000121	1.70E-05	1.81E-05	1.66E-05	1.61E-05	8.84E-06	7.31E-06
1513	649517.7	4197024	7.90E-05	8.42E-05	1.19E-05	1.26E-05	1.16E-05	1.13E-05	6.17E-06	5.10E-06
1514	649554	4197035	8.50E-05	9.07E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.64E-06	5.50E-06
1515	649590.3	4197046	9.16E-05	9.76E-05	1.38E-05	1.46E-05	1.35E-05	1.31E-05	7.15E-06	5.92E-06
1516	649478.7	4197014	7.34E-05	7.82E-05	1.10E-05	1.17E-05	1.08E-05	1.05E-05	5.73E-06	4.74E-06
1517	649561.2	4196829	5.60E-05	5.97E-05	8.42E-06	8.95E-06	8.23E-06	7.98E-06	4.37E-06	3.62E-06
1518	649600.7	4196841	5.97E-05	6.37E-05	8.98E-06	9.55E-06	8.78E-06	8.51E-06	4.67E-06	3.86E-06
1519	649640.1	4196853	6.38E-05	6.8E-05	9.59E-06	1.02E-05	9.38E-06	9.09E-06	4.98E-06	4.12E-06
1520	649679.6	4196865	6.83E-05	7.28E-05	1.03E-05	1.09E-05	1.00E-05	9.73E-06	5.34E-06	4.41E-06
1521	649520.7	4196819	5.27E-05	5.62E-05	7.93E-06	8.43E-06	7.75E-06	7.51E-06	4.12E-06	3.41E-06
1522	649602.5	4196633	4.25E-05	4.53E-05	6.39E-06	6.79E-06	6.25E-06	6.05E-06	3.32E-06	2.74E-06
1523	649640.7	4196645	4.47E-05	4.76E-05	6.72E-06	7.14E-06	6.57E-06	6.37E-06	3.49E-06	2.89E-06
1524	649678.8	4196657	4.71E-05	5.02E-05	7.08E-06	7.52E-06	6.92E-06	6.71E-06	3.68E-06	3.04E-06
1525	649717	4196668	4.97E-05	5.3E-05	7.47E-06	7.94E-06	7.31E-06	7.08E-06	3.88E-06	3.21E-06
1526	649755.2	4196680	5.26E-05	5.6E-05	7.90E-06	8.40E-06	7.73E-06	7.49E-06	4.11E-06	3.40E-06
1527	649562.6	4196623	4.05E-05	4.32E-05	6.09E-06	6.48E-06	5.96E-06	5.77E-06	3.17E-06	2.62E-06
1528	649645.5	4196438	3.40E-05	3.63E-05	5.12E-06	5.44E-06	5.00E-06	4.85E-06	2.66E-06	2.20E-06
1529	649685.9	4196450	3.55E-05	3.79E-05	5.34E-06	5.68E-06	5.23E-06	5.06E-06	2.78E-06	2.30E-06
1530	649726.3	4196463	3.72E-05	3.96E-05	5.59E-06	5.95E-06	5.47E-06	5.30E-06	2.91E-06	2.40E-06
1531	649766.6	4196475	3.90E-05	4.16E-05	5.86E-06	6.23E-06	5.73E-06	5.56E-06	3.05E-06	2.52E-06
1532	649807	4196487	4.10E-05	4.37E-05	6.16E-06	6.55E-06	6.03E-06	5.84E-06	3.20E-06	2.65E-06
1533	649604.6	4196428	3.27E-05	3.49E-05	4.92E-06	5.23E-06	4.81E-06	4.66E-06	2.56E-06	2.11E-06
1534	649291.1	4197869	4.38E-03	0.004664	6.58E-04	6.99E-04	6.43E-04	6.24E-04	3.42E-04	2.83E-04
1535	649292.2	4197844	3.13E-03	0.003335	4.70E-04	5.00E-04	4.60E-04	4.46E-04	2.44E-04	2.02E-04
1536	649293.3	4197819	2.36E-03	0.002521	3.56E-04	3.78E-04	3.48E-04	3.37E-04	1.85E-04	1.53E-04
1537	649278.1	4197794	1.79E-03	0.001911	2.70E-04	2.87E-04	2.64E-04	2.55E-04	1.40E-04	1.16E-04
1538	649309.1	4197746	1.23E-03	0.001308	1.84E-04	1.96E-04	1.80E-04	1.75E-04	9.58E-05	7.93E-05
1539	649280.4	4197744	1.14E-03	0.001217	1.72E-04	1.82E-04	1.68E-04	1.63E-04	8.91E-05	7.37E-05
1540	649310	4197696	8.32E-04	0.000887	1.25E-04	1.33E-04	1.22E-04	1.19E-04	6.50E-05	5.37E-05
1541	649282.7	4197694	7.68E-04	0.000818	1.15E-04	1.23E-04	1.13E-04	1.09E-04	6.00E-05	4.96E-05
1542	649315	4197646	5.94E-04	0.000634	8.94E-05	9.50E-05	8.74E-05	8.47E-05	4.64E-05	3.84E-05
1543	649284.9	4197644	5.41E-04	0.000576	8.13E-05	8.64E-05	7.95E-05	7.70E-05	4.22E-05	3.49E-05
1544	649315.9	4197596	4.35E-04	0.000463	6.54E-05	6.95E-05	6.39E-05	6.19E-05	3.40E-05	2.81E-05
1545	649287.2	4197594	3.97E-04	0.000423	5.96E-05	6.34E-05	5.83E-05	5.65E-05	3.10E-05	2.56E-05
1546	649321.2	4197496	2.59E-04	0.000276	3.89E-05	4.14E-05	3.81E-05	3.69E-05	2.02E-05	1.67E-05
1547	649347.5	4197500	2.80E-04	0.000299	4.22E-05	4.48E-05	4.12E-05	4.00E-05	2.19E-05	1.81E-05
1548	649291.7	4197494	2.37E-04	0.000253	3.57E-05	3.79E-05	3.49E-05	3.38E-05	1.85E-05	1.53E-05
1549	649326.3	4197396	1.71E-04	0.000182	2.57E-05	2.73E-05	2.51E-05	2.44E-05	1.34E-05	1.11E-05
1550	649353.7	4197400	1.84E-04	0.000196	2.77E-05	2.94E-05	2.71E-05	2.62E-05	1.44E-05	1.19E-05
1551	649296.2	4197394	1.59E-04	0.000169	2.39E-05	2.54E-05	2.33E-05	2.26E-05	1.24E-05	1.02E-05
1552	649331.2	4197297	1.22E-04	0.00013	1.84E-05	1.96E-05	1.80E-05	1.74E-05	9.56E-06	7.91E-06
1553	649359.4	4197300	1.30E-04	0.000139	1.96E-05	2.09E-05	1.92E-05	1.86E-05	1.02E-05	8.43E-06
1554	649387.6	4197304	1.39E-04	0.000148	2.09E-05	2.23E-05	2.05E-05	1.98E-05	1.09E-05	8.99E-06
1555	649300.8	4197294	1.15E-04	0.000122	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.97E-06	7.42E-06
1556	649336	4197197	9.29E-05	9.9E-05	1.40E-05	1.48E-05	1.37E-05	1.32E-05	7.25E-06	6.00E-06
1557	649364.8	4197200	9.81E-05	0.000105	1.48E-05	1.57E-05	1.44E-05	1.40E-05	7.66E-06	6.34E-06
1558	649393.6	4197204	1.04E-04	0.000111	1.56E-05	1.66E-05	1.53E-05	1.48E-05	8.11E-06	6.71E-06
1559	649305.3	4197194	8.80E-05	9.38E-05	1.32E-05	1.41E-05	1.29E-05	1.25E-05	6.88E-06	5.69E-06
1560	649345.5	4196997	6.04E-05	6.44E-05	9.08E-06	9.65E-06	8.88E-06	8.61E-06	4.72E-06	3.90E-06
1561	649375.1	4197001	6.29E-05	6.71E-05	9.46E-06	1.01E-05	9.25E-06	8.97E-06	4.92E-06	4.07E-06
1562	649404.7	4197005	6.56E-05	6.99E-05	9.86E-06	1.05E-05	9.65E-06	9.35E-06	5.12E-06	4.24E-06
1563	649434.3	4197008	6.85E-05	7.31E-05	1.03E-05	1.10E-05	1.01E-05	9.77E-06	5.35E-06	4.43E-06
1564	649314.4	4196994	5.81E-05	6.19E-05	8.73E-06	9.28E-06	8.54E-06	8.28E-06	4.54E-06	3.75E-06

1565	649354.8	4196797	4.36E-05	4.65E-05	6.56E-06	6.98E-06	6.42E-06	6.22E-06	3.41E-06	2.82E-06
1566	649385	4196801	4.51E-05	4.81E-05	6.78E-06	7.21E-06	6.63E-06	6.42E-06	3.52E-06	2.91E-06
1567	649415.1	4196805	4.66E-05	4.97E-05	7.01E-06	7.45E-06	6.85E-06	6.64E-06	3.64E-06	3.01E-06
1568	649445.3	4196809	4.82E-05	5.14E-05	7.25E-06	7.71E-06	7.09E-06	6.87E-06	3.77E-06	3.12E-06
1569	649475.4	4196813	4.99E-05	5.32E-05	7.51E-06	7.98E-06	7.34E-06	7.11E-06	3.90E-06	3.23E-06
1570	649323.4	4196795	4.23E-05	4.51E-05	6.37E-06	6.77E-06	6.23E-06	6.03E-06	3.31E-06	2.74E-06
1571	649364.1	4196597	3.37E-05	3.6E-05	5.07E-06	5.39E-06	4.96E-06	4.81E-06	2.64E-06	2.18E-06
1572	649394.6	4196601	3.47E-05	3.7E-05	5.21E-06	5.54E-06	5.10E-06	4.94E-06	2.71E-06	2.24E-06
1573	649425.2	4196605	3.56E-05	3.8E-05	5.36E-06	5.70E-06	5.24E-06	5.08E-06	2.78E-06	2.30E-06
1574	649455.7	4196609	3.66E-05	3.91E-05	5.51E-06	5.86E-06	5.39E-06	5.22E-06	2.86E-06	2.37E-06
1575	649486.3	4196613	3.77E-05	4.02E-05	5.67E-06	6.02E-06	5.54E-06	5.37E-06	2.94E-06	2.43E-06
1576	649516.8	4196617	3.88E-05	4.13E-05	5.83E-06	6.20E-06	5.70E-06	5.52E-06	3.03E-06	2.50E-06
1577	649332.5	4196595	3.29E-05	3.51E-05	4.95E-06	5.26E-06	4.84E-06	4.69E-06	2.57E-06	2.13E-06
1578	649373.3	4196398	2.74E-05	2.92E-05	4.11E-06	4.37E-06	4.02E-06	3.90E-06	2.14E-06	1.77E-06
1579	649404.1	4196402	2.80E-05	2.99E-05	4.21E-06	4.48E-06	4.12E-06	3.99E-06	2.19E-06	1.81E-06
1580	649435	4196406	2.87E-05	3.06E-05	4.31E-06	4.59E-06	4.22E-06	4.09E-06	2.24E-06	1.85E-06
1581	649465.8	4196410	2.94E-05	3.13E-05	4.42E-06	4.70E-06	4.32E-06	4.19E-06	2.30E-06	1.90E-06
1582	649496.6	4196414	3.01E-05	3.21E-05	4.52E-06	4.81E-06	4.42E-06	4.29E-06	2.35E-06	1.94E-06
1583	649527.5	4196418	3.08E-05	3.28E-05	4.63E-06	4.92E-06	4.53E-06	4.39E-06	2.41E-06	1.99E-06
1584	649558.3	4196422	3.16E-05	3.36E-05	4.74E-06	5.04E-06	4.64E-06	4.50E-06	2.46E-06	2.04E-06
1585	649341.5	4196395	2.67E-05	2.85E-05	4.02E-06	4.27E-06	3.93E-06	3.81E-06	2.09E-06	1.73E-06
1586	649255.9	4197868	4.25E-03	0.004533	6.39E-04	6.80E-04	6.25E-04	6.06E-04	3.32E-04	2.75E-04
1587	649256.4	4197843	3.01E-03	0.003212	4.53E-04	4.82E-04	4.43E-04	4.29E-04	2.35E-04	1.95E-04
1588	649257	4197818	2.25E-03	0.002397	3.38E-04	3.59E-04	3.31E-04	3.20E-04	1.76E-04	1.45E-04
1589	649239.3	4197793	1.66E-03	0.001772	2.50E-04	2.66E-04	2.44E-04	2.37E-04	1.30E-04	1.07E-04
1590	649240.3	4197743	1.03E-03	0.001094	1.54E-04	1.64E-04	1.51E-04	1.46E-04	8.02E-05	6.63E-05
1591	649259.5	4197693	7.17E-04	0.000765	1.08E-04	1.15E-04	1.05E-04	1.02E-04	5.60E-05	4.64E-05
1592	649260.5	4197643	5.01E-04	0.000534	7.53E-05	8.01E-05	7.36E-05	7.14E-05	3.91E-05	3.24E-05
1593	649261.5	4197593	3.66E-04	0.00039	5.51E-05	5.85E-05	5.38E-05	5.22E-05	2.86E-05	2.37E-05
1594	649263.6	4197493	2.20E-04	0.000234	3.30E-05	3.51E-05	3.23E-05	3.13E-05	1.72E-05	1.42E-05
1595	649265.6	4197393	1.48E-04	0.000158	2.22E-05	2.36E-05	2.17E-05	2.11E-05	1.16E-05	9.56E-06
1596	649267.6	4197293	1.08E-04	0.000115	1.62E-05	1.73E-05	1.59E-05	1.54E-05	8.43E-06	6.98E-06
1597	649269.7	4197193	8.34E-05	8.89E-05	1.25E-05	1.33E-05	1.23E-05	1.19E-05	6.51E-06	5.39E-06
1598	649273.7	4196993	5.55E-05	5.92E-05	8.35E-06	8.88E-06	8.16E-06	7.91E-06	4.34E-06	3.59E-06
1599	649296	4196794	4.13E-05	4.4E-05	6.21E-06	6.60E-06	6.07E-06	5.89E-06	3.23E-06	2.67E-06
1600	649259.6	4196793	4.00E-05	4.27E-05	6.02E-06	6.40E-06	5.89E-06	5.71E-06	3.13E-06	2.59E-06
1601	649300.1	4196594	3.21E-05	3.42E-05	4.82E-06	5.13E-06	4.72E-06	4.57E-06	2.51E-06	2.07E-06
1602	649263.7	4196593	3.12E-05	3.33E-05	4.70E-06	4.99E-06	4.59E-06	4.45E-06	2.44E-06	2.02E-06
1603	649316.6	4196394	2.63E-05	2.8E-05	3.95E-06	4.20E-06	3.86E-06	3.74E-06	2.05E-06	1.70E-06
1604	649285.9	4196393	2.57E-05	2.74E-05	3.87E-06	4.11E-06	3.78E-06	3.67E-06	2.01E-06	1.66E-06
1605	649211.2	4197869	4.26E-03	0.004536	6.40E-04	6.80E-04	6.26E-04	6.06E-04	3.32E-04	2.75E-04
1606	649209.7	4197844	2.92E-03	0.003114	4.39E-04	4.67E-04	4.29E-04	4.16E-04	2.28E-04	1.89E-04
1607	649232.7	4197818	2.16E-03	0.002307	3.25E-04	3.46E-04	3.18E-04	3.08E-04	1.69E-04	1.40E-04
1608	649208.2	4197819	2.11E-03	0.002246	3.17E-04	3.37E-04	3.10E-04	3.00E-04	1.65E-04	1.36E-04
1609	649206.7	4197794	1.57E-03	0.001669	2.35E-04	2.50E-04	2.30E-04	2.23E-04	1.22E-04	1.01E-04
1610	649203.7	4197744	9.25E-04	0.000986	1.39E-04	1.48E-04	1.36E-04	1.32E-04	7.23E-05	5.98E-05
1611	649225.2	4197693	6.41E-04	0.000684	9.64E-05	1.03E-04	9.43E-05	9.14E-05	5.01E-05	4.14E-05
1612	649200.7	4197695	5.91E-04	0.000631	8.89E-05	9.46E-05	8.70E-05	8.43E-05	4.62E-05	3.82E-05
1613	649222.2	4197643	4.40E-04	0.000469	6.62E-05	7.04E-05	6.48E-05	6.28E-05	3.44E-05	2.85E-05
1614	649197.7	4197645	4.06E-04	0.000433	6.10E-05	6.49E-05	5.97E-05	5.78E-05	3.17E-05	2.62E-05
1615	649219.1	4197593	3.20E-04	0.000341	4.80E-05	5.11E-05	4.70E-05	4.55E-05	2.50E-05	2.06E-05
1616	649194.6	4197595	2.96E-04	0.000316	4.45E-05	4.73E-05	4.35E-05	4.22E-05	2.31E-05	1.91E-05
1617	649229.2	4197493	2.00E-04	0.000213	3.01E-05	3.20E-05	2.94E-05	2.85E-05	1.56E-05	1.29E-05
1618	649188.6	4197495	1.81E-04	0.000193	2.72E-05	2.89E-05	2.66E-05	2.58E-05	1.41E-05	1.17E-05
1619	649227.2	4197393	1.36E-04	0.000145	2.05E-05	2.18E-05	2.00E-05	1.94E-05	1.06E-05	8.80E-06
1620	649182.6	4197395	1.25E-04	0.000133	1.88E-05	2.00E-05	1.84E-05	1.78E-05	9.76E-06	8.07E-06

1621	649225.2	4197293	1.00E-04	0.000107	1.51E-05	1.61E-05	1.48E-05	1.43E-05	7.85E-06	6.49E-06
1622	649201.1	4197294	9.66E-05	0.000103	1.45E-05	1.54E-05	1.42E-05	1.38E-05	7.55E-06	6.24E-06
1623	649176.6	4197295	9.32E-05	9.94E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.28E-06	6.02E-06
1624	649213.8	4197194	7.72E-05	8.23E-05	1.16E-05	1.23E-05	1.14E-05	1.10E-05	6.03E-06	4.99E-06
1625	649170.5	4197195	7.32E-05	7.8E-05	1.10E-05	1.17E-05	1.08E-05	1.04E-05	5.72E-06	4.73E-06
1626	649207.2	4196994	5.20E-05	5.54E-05	7.81E-06	8.31E-06	7.64E-06	7.41E-06	4.06E-06	3.36E-06
1627	649231.3	4196993	5.32E-05	5.67E-05	8.00E-06	8.50E-06	7.82E-06	7.58E-06	4.15E-06	3.44E-06
1628	649183	4196994	5.08E-05	5.42E-05	7.64E-06	8.12E-06	7.47E-06	7.24E-06	3.97E-06	3.28E-06
1629	649158.5	4196996	4.98E-05	5.3E-05	7.48E-06	7.95E-06	7.32E-06	7.09E-06	3.89E-06	3.22E-06
1630	649193.1	4196794	3.80E-05	4.05E-05	5.72E-06	6.08E-06	5.59E-06	5.42E-06	2.97E-06	2.46E-06
1631	649146.4	4196796	3.68E-05	3.92E-05	5.54E-06	5.89E-06	5.41E-06	5.25E-06	2.88E-06	2.38E-06
1632	649179.8	4196595	2.95E-05	3.15E-05	4.44E-06	4.72E-06	4.34E-06	4.21E-06	2.31E-06	1.91E-06
1633	649221.7	4196594	3.04E-05	3.24E-05	4.57E-06	4.85E-06	4.46E-06	4.33E-06	2.37E-06	1.96E-06
1634	649134.3	4196597	2.88E-05	3.07E-05	4.33E-06	4.61E-06	4.24E-06	4.11E-06	2.25E-06	1.86E-06
1635	649171	4196395	2.40E-05	2.56E-05	3.61E-06	3.84E-06	3.53E-06	3.42E-06	1.88E-06	1.55E-06
1636	649195.2	4196394	2.43E-05	2.6E-05	3.66E-06	3.89E-06	3.58E-06	3.47E-06	1.90E-06	1.57E-06
1637	649219.4	4196394	2.47E-05	2.63E-05	3.71E-06	3.94E-06	3.63E-06	3.52E-06	1.93E-06	1.59E-06
1638	649243.5	4196393	2.50E-05	2.67E-05	3.76E-06	4.00E-06	3.68E-06	3.57E-06	1.96E-06	1.62E-06
1639	649146.8	4196395	2.37E-05	2.53E-05	3.57E-06	3.79E-06	3.49E-06	3.38E-06	1.85E-06	1.53E-06
1640	649122.3	4196397	2.35E-05	2.5E-05	3.53E-06	3.75E-06	3.45E-06	3.34E-06	1.83E-06	1.52E-06
1641	649168.8	4197867	4.00E-03	0.004266	6.02E-04	6.40E-04	5.88E-04	5.70E-04	3.13E-04	2.59E-04
1642	649146.4	4197865	3.74E-03	0.003986	5.62E-04	5.98E-04	5.50E-04	5.33E-04	2.92E-04	2.42E-04
1643	649123.9	4197863	3.42E-03	0.003644	5.14E-04	5.47E-04	5.03E-04	4.87E-04	2.67E-04	2.21E-04
1644	649101.4	4197861	3.01E-03	0.003209	4.53E-04	4.81E-04	4.43E-04	4.29E-04	2.35E-04	1.95E-04
1645	649078.9	4197859	2.48E-03	0.002643	3.73E-04	3.96E-04	3.65E-04	3.53E-04	1.94E-04	1.60E-04
1646	649056.4	4197857	1.83E-03	0.001953	2.75E-04	2.93E-04	2.69E-04	2.61E-04	1.43E-04	1.18E-04
1647	649033.9	4197854	1.23E-03	0.001313	1.85E-04	1.97E-04	1.81E-04	1.75E-04	9.62E-05	7.96E-05
1648	649171.2	4197842	2.66E-03	0.00284	4.01E-04	4.26E-04	3.92E-04	3.80E-04	2.08E-04	1.72E-04
1649	649148.7	4197840	2.43E-03	0.002593	3.66E-04	3.89E-04	3.58E-04	3.47E-04	1.90E-04	1.57E-04
1650	649126.2	4197838	2.16E-03	0.002303	3.25E-04	3.45E-04	3.18E-04	3.08E-04	1.69E-04	1.40E-04
1651	649103.7	4197836	1.84E-03	0.001963	2.77E-04	2.94E-04	2.71E-04	2.62E-04	1.44E-04	1.19E-04
1652	649081.2	4197834	1.49E-03	0.001584	2.23E-04	2.37E-04	2.18E-04	2.12E-04	1.16E-04	9.60E-05
1653	649058.8	4197832	1.13E-03	0.001207	1.70E-04	1.81E-04	1.66E-04	1.61E-04	8.84E-05	7.32E-05
1654	649036.3	4197830	8.46E-04	0.000902	1.27E-04	1.35E-04	1.24E-04	1.21E-04	6.61E-05	5.47E-05
1655	649173.5	4197817	1.88E-03	0.002008	2.83E-04	3.01E-04	2.77E-04	2.68E-04	1.47E-04	1.22E-04
1656	649151	4197815	1.69E-03	0.001801	2.54E-04	2.70E-04	2.48E-04	2.41E-04	1.32E-04	1.09E-04
1657	649128.6	4197813	1.47E-03	0.001572	2.22E-04	2.36E-04	2.17E-04	2.10E-04	1.15E-04	9.53E-05
1658	649106.1	4197811	1.24E-03	0.001325	1.87E-04	1.99E-04	1.83E-04	1.77E-04	9.71E-05	8.03E-05
1659	649083.6	4197809	1.01E-03	0.001078	1.52E-04	1.62E-04	1.49E-04	1.44E-04	7.90E-05	6.54E-05
1660	649061.1	4197807	8.04E-04	0.000857	1.21E-04	1.28E-04	1.18E-04	1.15E-04	6.28E-05	5.19E-05
1661	649038.6	4197805	6.40E-04	0.000682	9.62E-05	1.02E-04	9.41E-05	9.12E-05	5.00E-05	4.14E-05
1662	649175.9	4197792	1.39E-03	0.00148	2.09E-04	2.22E-04	2.04E-04	1.98E-04	1.08E-04	8.97E-05
1663	649153.4	4197790	1.23E-03	0.001313	1.85E-04	1.97E-04	1.81E-04	1.75E-04	9.62E-05	7.96E-05
1664	649130.9	4197788	1.07E-03	0.001137	1.60E-04	1.71E-04	1.57E-04	1.52E-04	8.33E-05	6.89E-05
1665	649108.4	4197786	9.02E-04	0.000962	1.36E-04	1.44E-04	1.33E-04	1.29E-04	7.05E-05	5.83E-05
1666	649085.9	4197784	7.48E-04	0.000797	1.12E-04	1.20E-04	1.10E-04	1.07E-04	5.84E-05	4.83E-05
1667	649063.5	4197782	6.16E-04	0.000656	9.26E-05	9.84E-05	9.05E-05	8.77E-05	4.81E-05	3.98E-05
1668	649041	4197780	5.11E-04	0.000545	7.68E-05	8.17E-05	7.51E-05	7.28E-05	3.99E-05	3.30E-05
1669	649180.6	4197743	8.29E-04	0.000884	1.25E-04	1.33E-04	1.22E-04	1.18E-04	6.48E-05	5.36E-05
1670	649158.1	4197741	7.32E-04	0.00078	1.10E-04	1.17E-04	1.08E-04	1.04E-04	5.72E-05	4.73E-05
1671	649135.6	4197738	6.38E-04	0.00068	9.59E-05	1.02E-04	9.38E-05	9.09E-05	4.98E-05	4.12E-05
1672	649113.1	4197736	5.51E-04	0.000587	8.28E-05	8.81E-05	8.10E-05	7.85E-05	4.30E-05	3.56E-05
1673	649090.6	4197734	4.74E-04	0.000505	7.13E-05	7.58E-05	6.97E-05	6.76E-05	3.70E-05	3.06E-05
1674	649068.1	4197732	4.10E-04	0.000437	6.16E-05	6.55E-05	6.02E-05	5.84E-05	3.20E-05	2.65E-05
1675	649045.7	4197730	3.57E-04	0.000381	5.37E-05	5.71E-05	5.25E-05	5.09E-05	2.79E-05	2.31E-05
1676	649162.8	4197691	4.88E-04	0.00052	7.33E-05	7.80E-05	7.17E-05	6.95E-05	3.81E-05	3.15E-05

1677	649140.3	4197689	4.32E-04	0.00046	6.49E-05	6.90E-05	6.35E-05	6.15E-05	3.37E-05	2.79E-05
1678	649117.8	4197687	3.81E-04	0.000407	5.74E-05	6.10E-05	5.61E-05	5.44E-05	2.98E-05	2.46E-05
1679	649095.3	4197684	3.38E-04	0.00036	5.08E-05	5.40E-05	4.97E-05	4.81E-05	2.64E-05	2.18E-05
1680	649072.8	4197682	3.01E-04	0.00032	4.52E-05	4.80E-05	4.42E-05	4.28E-05	2.35E-05	1.94E-05
1681	649050.4	4197680	2.69E-04	0.000287	4.05E-05	4.30E-05	3.96E-05	3.84E-05	2.10E-05	1.74E-05
1682	649167.5	4197641	3.52E-04	0.000375	5.29E-05	5.62E-05	5.17E-05	5.01E-05	2.75E-05	2.27E-05
1683	649145	4197639	3.17E-04	0.000338	4.76E-05	5.06E-05	4.66E-05	4.51E-05	2.47E-05	2.05E-05
1684	649122.5	4197637	2.85E-04	0.000304	4.29E-05	4.56E-05	4.20E-05	4.07E-05	2.23E-05	1.84E-05
1685	649100	4197635	2.58E-04	0.000275	3.88E-05	4.12E-05	3.79E-05	3.67E-05	2.01E-05	1.67E-05
1686	649077.5	4197633	2.34E-04	0.000249	3.52E-05	3.74E-05	3.44E-05	3.34E-05	1.83E-05	1.51E-05
1687	649055.1	4197630	2.13E-04	0.000228	3.21E-05	3.41E-05	3.14E-05	3.04E-05	1.67E-05	1.38E-05
1688	649172.2	4197591	2.69E-04	0.000286	4.04E-05	4.29E-05	3.95E-05	3.83E-05	2.10E-05	1.74E-05
1689	649149.7	4197589	2.45E-04	0.000262	3.69E-05	3.92E-05	3.61E-05	3.50E-05	1.92E-05	1.59E-05
1690	649127.2	4197587	2.25E-04	0.000239	3.38E-05	3.59E-05	3.30E-05	3.20E-05	1.75E-05	1.45E-05
1691	649104.7	4197585	2.06E-04	0.00022	3.10E-05	3.30E-05	3.03E-05	2.94E-05	1.61E-05	1.33E-05
1692	649082.2	4197583	1.90E-04	0.000202	2.85E-05	3.03E-05	2.79E-05	2.70E-05	1.48E-05	1.23E-05
1693	649059.8	4197581	1.75E-04	0.000187	2.64E-05	2.80E-05	2.58E-05	2.50E-05	1.37E-05	1.13E-05
1694	649159.1	4197490	1.64E-04	0.000175	2.46E-05	2.62E-05	2.41E-05	2.33E-05	1.28E-05	1.06E-05
1695	649136.6	4197487	1.53E-04	0.000164	2.31E-05	2.45E-05	2.26E-05	2.19E-05	1.20E-05	9.91E-06
1696	649114.1	4197485	1.44E-04	0.000153	2.16E-05	2.30E-05	2.12E-05	2.05E-05	1.12E-05	9.30E-06
1697	649091.6	4197483	1.35E-04	0.000144	2.03E-05	2.16E-05	1.99E-05	1.93E-05	1.06E-05	8.73E-06
1698	649069.1	4197481	1.27E-04	0.000136	1.91E-05	2.03E-05	1.87E-05	1.81E-05	9.93E-06	8.22E-06
1699	649146	4197388	1.14E-04	0.000121	1.71E-05	1.82E-05	1.67E-05	1.62E-05	8.87E-06	7.34E-06
1700	649123.5	4197386	1.08E-04	0.000115	1.63E-05	1.73E-05	1.59E-05	1.54E-05	8.44E-06	6.99E-06
1701	649101	4197384	1.03E-04	0.00011	1.55E-05	1.65E-05	1.51E-05	1.47E-05	8.04E-06	6.65E-06
1702	649078.5	4197382	9.81E-05	0.000105	1.48E-05	1.57E-05	1.44E-05	1.40E-05	7.66E-06	6.34E-06
1703	649132.9	4197286	8.51E-05	9.07E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.65E-06	5.50E-06
1704	649110.4	4197284	8.18E-05	8.73E-05	1.23E-05	1.31E-05	1.20E-05	1.17E-05	6.39E-06	5.29E-06
1705	649087.9	4197282	7.87E-05	8.39E-05	1.18E-05	1.26E-05	1.16E-05	1.12E-05	6.15E-06	5.09E-06
1706	649142.3	4197187	6.93E-05	7.39E-05	1.04E-05	1.11E-05	1.02E-05	9.88E-06	5.41E-06	4.48E-06
1707	649119.8	4197185	6.71E-05	7.15E-05	1.01E-05	1.07E-05	9.86E-06	9.56E-06	5.24E-06	4.33E-06
1708	649097.3	4197182	6.50E-05	6.93E-05	9.77E-06	1.04E-05	9.55E-06	9.26E-06	5.07E-06	4.20E-06
1709	649116.1	4196983	4.69E-05	5E-05	7.06E-06	7.50E-06	6.90E-06	6.69E-06	3.67E-06	3.03E-06
1710	649224.8	4196793	3.89E-05	4.15E-05	5.85E-06	6.22E-06	5.72E-06	5.54E-06	3.04E-06	2.51E-06
1711	649153.7	4196585	2.88E-05	3.07E-05	4.33E-06	4.60E-06	4.23E-06	4.10E-06	2.25E-06	1.86E-06
1712	649015.8	4197805	5.34E-04	0.000569	8.02E-05	8.53E-05	7.85E-05	7.60E-05	4.17E-05	3.45E-05
1713	649014	4197780	4.28E-04	0.000457	6.44E-05	6.85E-05	6.30E-05	6.10E-05	3.35E-05	2.77E-05
1714	649020.8	4197730	3.15E-04	0.000335	4.73E-05	5.03E-05	4.63E-05	4.48E-05	2.46E-05	2.03E-05
1715	649025.5	4197680	2.43E-04	0.000259	3.65E-05	3.88E-05	3.57E-05	3.46E-05	1.90E-05	1.57E-05
1716	649024	4197630	1.91E-04	0.000204	2.88E-05	3.06E-05	2.81E-05	2.73E-05	1.50E-05	1.24E-05
1717	649019.9	4197580	1.55E-04	0.000166	2.34E-05	2.48E-05	2.28E-05	2.21E-05	1.21E-05	1.00E-05
1718	649012.3	4197480	1.11E-04	0.000118	1.67E-05	1.78E-05	1.63E-05	1.58E-05	8.67E-06	7.18E-06
1719	649040.7	4197481	1.19E-04	0.000127	1.79E-05	1.90E-05	1.75E-05	1.69E-05	9.27E-06	7.67E-06
1720	649006	4197381	8.55E-05	9.12E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.68E-06	5.53E-06
1721	649037.1	4197381	9.07E-05	9.66E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.08E-06	5.86E-06
1722	648998.4	4197281	6.88E-05	7.33E-05	1.03E-05	1.10E-05	1.01E-05	9.80E-06	5.37E-06	4.44E-06
1723	649028.2	4197281	7.19E-05	7.67E-05	1.08E-05	1.15E-05	1.06E-05	1.02E-05	5.62E-06	4.65E-06
1724	649058.1	4197282	7.52E-05	8.02E-05	1.13E-05	1.20E-05	1.11E-05	1.07E-05	5.88E-06	4.86E-06
1725	648990.9	4197181	5.71E-05	6.08E-05	8.58E-06	9.12E-06	8.39E-06	8.13E-06	4.46E-06	3.69E-06
1726	649019.9	4197182	5.91E-05	6.3E-05	8.88E-06	9.45E-06	8.69E-06	8.42E-06	4.62E-06	3.82E-06
1727	649048.9	4197182	6.12E-05	6.52E-05	9.20E-06	9.78E-06	9.00E-06	8.72E-06	4.78E-06	3.96E-06
1728	648976.8	4196982	4.19E-05	4.47E-05	6.30E-06	6.70E-06	6.16E-06	5.97E-06	3.27E-06	2.71E-06
1729	649006.6	4196982	4.29E-05	4.57E-05	6.45E-06	6.85E-06	6.30E-06	6.11E-06	3.35E-06	2.77E-06
1730	649036.5	4196982	4.39E-05	4.68E-05	6.60E-06	7.02E-06	6.45E-06	6.25E-06	3.43E-06	2.84E-06
1731	649066.4	4196983	4.50E-05	4.79E-05	6.76E-06	7.19E-06	6.61E-06	6.41E-06	3.51E-06	2.91E-06
1732	648962.6	4196782	3.25E-05	3.47E-05	4.89E-06	5.20E-06	4.78E-06	4.64E-06	2.54E-06	2.10E-06

1733	648993	4196783	3.30E-05	3.52E-05	4.97E-06	5.28E-06	4.86E-06	4.71E-06	2.58E-06	2.13E-06
1734	649023.4	4196783	3.36E-05	3.58E-05	5.05E-06	5.36E-06	4.93E-06	4.78E-06	2.62E-06	2.17E-06
1735	649053.8	4196783	3.41E-05	3.64E-05	5.13E-06	5.46E-06	5.02E-06	4.86E-06	2.67E-06	2.21E-06
1736	649084.2	4196784	3.48E-05	3.71E-05	5.23E-06	5.56E-06	5.11E-06	4.95E-06	2.71E-06	2.25E-06
1737	649114.6	4196784	3.54E-05	3.78E-05	5.33E-06	5.67E-06	5.21E-06	5.05E-06	2.77E-06	2.29E-06
1738	648948.3	4196583	2.63E-05	2.8E-05	3.95E-06	4.20E-06	3.86E-06	3.75E-06	2.05E-06	1.70E-06
1739	648979.1	4196583	2.65E-05	2.83E-05	3.99E-06	4.24E-06	3.90E-06	3.78E-06	2.07E-06	1.72E-06
1740	649009.9	4196583	2.68E-05	2.86E-05	4.03E-06	4.29E-06	3.94E-06	3.82E-06	2.10E-06	1.73E-06
1741	649040.7	4196584	2.72E-05	2.9E-05	4.08E-06	4.34E-06	3.99E-06	3.87E-06	2.12E-06	1.75E-06
1742	649071.5	4196584	2.75E-05	2.93E-05	4.14E-06	4.40E-06	4.05E-06	3.92E-06	2.15E-06	1.78E-06
1743	649102.3	4196584	2.79E-05	2.98E-05	4.20E-06	4.47E-06	4.11E-06	3.98E-06	2.18E-06	1.81E-06
1744	648934	4196383	2.19E-05	2.33E-05	3.29E-06	3.50E-06	3.22E-06	3.12E-06	1.71E-06	1.41E-06
1745	648965.1	4196384	2.20E-05	2.35E-05	3.31E-06	3.52E-06	3.24E-06	3.14E-06	1.72E-06	1.42E-06
1746	648996.2	4196384	2.22E-05	2.36E-05	3.33E-06	3.55E-06	3.26E-06	3.16E-06	1.73E-06	1.43E-06
1747	649027.3	4196384	2.24E-05	2.39E-05	3.36E-06	3.58E-06	3.29E-06	3.19E-06	1.75E-06	1.45E-06
1748	649058.4	4196385	2.26E-05	2.41E-05	3.40E-06	3.61E-06	3.32E-06	3.22E-06	1.77E-06	1.46E-06
1749	649089.5	4196385	2.29E-05	2.44E-05	3.44E-06	3.66E-06	3.36E-06	3.26E-06	1.79E-06	1.48E-06
1750	649004.5	4197860	8.64E-04	0.000921	1.30E-04	1.38E-04	1.27E-04	1.23E-04	6.75E-05	5.58E-05
1751	649010.8	4197832	6.64E-04	0.000707	9.98E-05	1.06E-04	9.76E-05	9.46E-05	5.18E-05	4.29E-05
1752	648987.4	4197813	4.60E-04	0.00049	6.92E-05	7.36E-05	6.76E-05	6.56E-05	3.59E-05	2.97E-05
1753	648987	4197786	3.79E-04	0.000404	5.70E-05	6.06E-05	5.57E-05	5.40E-05	2.96E-05	2.45E-05
1754	648978	4197737	2.70E-04	0.000288	4.06E-05	4.32E-05	3.97E-05	3.85E-05	2.11E-05	1.75E-05
1755	648960.5	4197690	2.01E-04	0.000214	3.02E-05	3.22E-05	2.96E-05	2.87E-05	1.57E-05	1.30E-05
1756	648983.6	4197686	2.13E-04	0.000227	3.21E-05	3.41E-05	3.14E-05	3.04E-05	1.67E-05	1.38E-05
1757	648944.1	4197643	1.58E-04	0.000168	2.37E-05	2.52E-05	2.32E-05	2.25E-05	1.23E-05	1.02E-05
1758	648969.4	4197638	1.66E-04	0.000177	2.50E-05	2.66E-05	2.45E-05	2.37E-05	1.30E-05	1.08E-05
1759	648994.8	4197633	1.76E-04	0.000188	2.65E-05	2.81E-05	2.59E-05	2.51E-05	1.37E-05	1.14E-05
1760	648926.7	4197596	1.28E-04	0.000136	1.92E-05	2.04E-05	1.88E-05	1.82E-05	9.98E-06	8.26E-06
1761	648951	4197591	1.34E-04	0.000142	2.01E-05	2.14E-05	1.97E-05	1.90E-05	1.04E-05	8.64E-06
1762	648975.3	4197586	1.40E-04	0.000149	2.10E-05	2.24E-05	2.06E-05	1.99E-05	1.09E-05	9.05E-06
1763	648892.7	4197502	9.07E-05	9.67E-05	1.36E-05	1.45E-05	1.33E-05	1.29E-05	7.08E-06	5.86E-06
1764	648917.6	4197497	9.43E-05	0.000101	1.42E-05	1.51E-05	1.39E-05	1.34E-05	7.36E-06	6.09E-06
1765	648942.5	4197492	9.81E-05	0.000105	1.47E-05	1.57E-05	1.44E-05	1.40E-05	7.66E-06	6.34E-06
1766	648967.5	4197486	1.02E-04	0.000109	1.53E-05	1.63E-05	1.50E-05	1.45E-05	7.97E-06	6.60E-06
1767	648858.6	4197408	6.91E-05	7.37E-05	1.04E-05	1.10E-05	1.02E-05	9.85E-06	5.40E-06	4.47E-06
1768	648883.9	4197403	7.17E-05	7.64E-05	1.08E-05	1.15E-05	1.05E-05	1.02E-05	5.60E-06	4.63E-06
1769	648909.2	4197398	7.43E-05	7.92E-05	1.12E-05	1.19E-05	1.09E-05	1.06E-05	5.80E-06	4.80E-06
1770	648934.6	4197392	7.69E-05	8.2E-05	1.16E-05	1.23E-05	1.13E-05	1.10E-05	6.01E-06	4.97E-06
1771	648959.9	4197387	7.97E-05	8.49E-05	1.20E-05	1.27E-05	1.17E-05	1.14E-05	6.22E-06	5.15E-06
1772	648824.1	4197315	5.54E-05	5.9E-05	8.32E-06	8.85E-06	8.14E-06	7.89E-06	4.32E-06	3.58E-06
1773	648848.4	4197309	5.72E-05	6.1E-05	8.60E-06	9.14E-06	8.41E-06	8.15E-06	4.47E-06	3.70E-06
1774	648872.7	4197304	5.91E-05	6.3E-05	8.88E-06	9.44E-06	8.69E-06	8.42E-06	4.61E-06	3.82E-06
1775	648897	4197299	6.09E-05	6.49E-05	9.16E-06	9.74E-06	8.95E-06	8.68E-06	4.76E-06	3.94E-06
1776	648921.3	4197294	6.27E-05	6.68E-05	9.43E-06	1.00E-05	9.22E-06	8.93E-06	4.90E-06	4.05E-06
1777	648945.6	4197289	6.45E-05	6.87E-05	9.69E-06	1.03E-05	9.48E-06	9.19E-06	5.04E-06	4.17E-06
1778	648969.9	4197283	6.62E-05	7.06E-05	9.96E-06	1.06E-05	9.74E-06	9.44E-06	5.17E-06	4.28E-06
1779	648790	4197221	4.60E-05	4.9E-05	6.92E-06	7.36E-06	6.76E-06	6.56E-06	3.59E-06	2.97E-06
1780	648814.6	4197215	4.75E-05	5.06E-05	7.14E-06	7.59E-06	6.98E-06	6.77E-06	3.71E-06	3.07E-06
1781	648839.3	4197210	4.90E-05	5.22E-05	7.36E-06	7.83E-06	7.20E-06	6.98E-06	3.82E-06	3.16E-06
1782	648864	4197205	5.04E-05	5.37E-05	7.57E-06	8.05E-06	7.41E-06	7.18E-06	3.93E-06	3.26E-06
1783	648888.6	4197199	5.17E-05	5.51E-05	7.78E-06	8.27E-06	7.60E-06	7.37E-06	4.04E-06	3.34E-06
1784	648913.3	4197194	5.30E-05	5.65E-05	7.97E-06	8.47E-06	7.79E-06	7.55E-06	4.14E-06	3.43E-06
1785	648937.9	4197189	5.42E-05	5.78E-05	8.15E-06	8.67E-06	7.97E-06	7.73E-06	4.24E-06	3.50E-06
1786	648962.6	4197184	5.54E-05	5.91E-05	8.33E-06	8.86E-06	8.15E-06	7.89E-06	4.33E-06	3.58E-06
1787	648721.7	4197033	3.43E-05	3.65E-05	5.15E-06	5.48E-06	5.04E-06	4.88E-06	2.68E-06	2.21E-06
1788	648746.9	4197027	3.53E-05	3.76E-05	5.31E-06	5.64E-06	5.19E-06	5.03E-06	2.76E-06	2.28E-06

1789	648772	4197022	3.62E-05	3.86E-05	5.45E-06	5.79E-06	5.33E-06	5.17E-06	2.83E-06	2.34E-06
1790	648797.2	4197016	3.71E-05	3.96E-05	5.59E-06	5.94E-06	5.46E-06	5.29E-06	2.90E-06	2.40E-06
1791	648822.3	4197011	3.80E-05	4.05E-05	5.71E-06	6.07E-06	5.59E-06	5.41E-06	2.97E-06	2.45E-06
1792	648847.5	4197006	3.87E-05	4.13E-05	5.83E-06	6.19E-06	5.70E-06	5.52E-06	3.03E-06	2.50E-06
1793	648872.6	4197000	3.94E-05	4.2E-05	5.93E-06	6.30E-06	5.80E-06	5.62E-06	3.08E-06	2.55E-06
1794	648897.8	4196995	4.01E-05	4.27E-05	6.02E-06	6.40E-06	5.89E-06	5.71E-06	3.13E-06	2.59E-06
1795	648922.9	4196990	4.06E-05	4.33E-05	6.11E-06	6.49E-06	5.97E-06	5.79E-06	3.17E-06	2.62E-06
1796	648948.1	4196984	4.11E-05	4.38E-05	6.18E-06	6.57E-06	6.05E-06	5.86E-06	3.21E-06	2.66E-06
1797	648653.4	4196845	2.72E-05	2.9E-05	4.09E-06	4.35E-06	4.00E-06	3.88E-06	2.13E-06	1.76E-06
1798	648678.9	4196839	2.80E-05	2.98E-05	4.20E-06	4.47E-06	4.11E-06	3.98E-06	2.18E-06	1.81E-06
1799	648704.4	4196834	2.86E-05	3.05E-05	4.31E-06	4.58E-06	4.21E-06	4.08E-06	2.24E-06	1.85E-06
1800	648729.8	4196828	2.92E-05	3.12E-05	4.40E-06	4.68E-06	4.30E-06	4.17E-06	2.28E-06	1.89E-06
1801	648755.3	4196823	2.98E-05	3.18E-05	4.48E-06	4.77E-06	4.38E-06	4.25E-06	2.33E-06	1.93E-06
1802	648780.8	4196817	3.03E-05	3.23E-05	4.56E-06	4.85E-06	4.46E-06	4.32E-06	2.37E-06	1.96E-06
1803	648806.2	4196812	3.08E-05	3.28E-05	4.62E-06	4.92E-06	4.52E-06	4.38E-06	2.40E-06	1.99E-06
1804	648831.7	4196806	3.11E-05	3.32E-05	4.68E-06	4.98E-06	4.58E-06	4.44E-06	2.43E-06	2.01E-06
1805	648857.2	4196801	3.15E-05	3.35E-05	4.73E-06	5.03E-06	4.63E-06	4.48E-06	2.46E-06	2.03E-06
1806	648882.6	4196796	3.17E-05	3.38E-05	4.77E-06	5.07E-06	4.67E-06	4.52E-06	2.48E-06	2.05E-06
1807	648908.1	4196790	3.20E-05	3.41E-05	4.81E-06	5.11E-06	4.70E-06	4.56E-06	2.50E-06	2.07E-06
1808	648933.6	4196785	3.22E-05	3.43E-05	4.84E-06	5.14E-06	4.73E-06	4.58E-06	2.51E-06	2.08E-06
1809	648584.9	4196657	2.26E-05	2.4E-05	3.39E-06	3.61E-06	3.32E-06	3.21E-06	1.76E-06	1.46E-06
1810	648610	4196651	2.31E-05	2.46E-05	3.47E-06	3.69E-06	3.39E-06	3.29E-06	1.80E-06	1.49E-06
1811	648635.1	4196646	2.35E-05	2.51E-05	3.54E-06	3.76E-06	3.46E-06	3.36E-06	1.84E-06	1.52E-06
1812	648660.1	4196641	2.40E-05	2.56E-05	3.61E-06	3.83E-06	3.53E-06	3.42E-06	1.87E-06	1.55E-06
1813	648685.2	4196635	2.44E-05	2.6E-05	3.67E-06	3.90E-06	3.59E-06	3.48E-06	1.91E-06	1.58E-06
1814	648710.3	4196630	2.48E-05	2.64E-05	3.72E-06	3.96E-06	3.64E-06	3.53E-06	1.93E-06	1.60E-06
1815	648735.4	4196625	2.51E-05	2.67E-05	3.77E-06	4.00E-06	3.68E-06	3.57E-06	1.96E-06	1.62E-06
1816	648760.5	4196619	2.53E-05	2.7E-05	3.81E-06	4.05E-06	3.72E-06	3.61E-06	1.98E-06	1.64E-06
1817	648785.5	4196614	2.55E-05	2.72E-05	3.84E-06	4.08E-06	3.75E-06	3.64E-06	1.99E-06	1.65E-06
1818	648810.6	4196608	2.57E-05	2.74E-05	3.87E-06	4.11E-06	3.78E-06	3.66E-06	2.01E-06	1.66E-06
1819	648835.7	4196603	2.58E-05	2.76E-05	3.89E-06	4.13E-06	3.80E-06	3.68E-06	2.02E-06	1.67E-06
1820	648860.8	4196598	2.60E-05	2.77E-05	3.90E-06	4.15E-06	3.82E-06	3.70E-06	2.03E-06	1.68E-06
1821	648885.9	4196592	2.60E-05	2.77E-05	3.91E-06	4.16E-06	3.83E-06	3.71E-06	2.03E-06	1.68E-06
1822	648910.9	4196587	2.61E-05	2.78E-05	3.93E-06	4.17E-06	3.84E-06	3.72E-06	2.04E-06	1.69E-06
1823	648516.6	4196469	1.92E-05	2.05E-05	2.89E-06	3.07E-06	2.82E-06	2.74E-06	1.50E-06	1.24E-06
1824	648541.9	4196463	1.96E-05	2.09E-05	2.95E-06	3.13E-06	2.88E-06	2.79E-06	1.53E-06	1.27E-06
1825	648567.2	4196458	2.00E-05	2.13E-05	3.00E-06	3.19E-06	2.94E-06	2.85E-06	1.56E-06	1.29E-06
1826	648592.5	4196452	2.03E-05	2.16E-05	3.05E-06	3.24E-06	2.98E-06	2.89E-06	1.59E-06	1.31E-06
1827	648617.9	4196447	2.06E-05	2.2E-05	3.10E-06	3.29E-06	3.03E-06	2.94E-06	1.61E-06	1.33E-06
1828	648643.2	4196442	2.09E-05	2.22E-05	3.14E-06	3.34E-06	3.07E-06	2.97E-06	1.63E-06	1.35E-06
1829	648668.5	4196436	2.11E-05	2.25E-05	3.17E-06	3.37E-06	3.10E-06	3.01E-06	1.65E-06	1.36E-06
1830	648693.8	4196431	2.13E-05	2.27E-05	3.20E-06	3.40E-06	3.13E-06	3.03E-06	1.66E-06	1.38E-06
1831	648719.2	4196425	2.15E-05	2.29E-05	3.23E-06	3.43E-06	3.15E-06	3.06E-06	1.68E-06	1.39E-06
1832	648744.5	4196420	2.16E-05	0.000023	3.24E-06	3.45E-06	3.17E-06	3.07E-06	1.69E-06	1.39E-06
1833	648769.8	4196415	2.17E-05	2.31E-05	3.26E-06	3.46E-06	3.19E-06	3.09E-06	1.69E-06	1.40E-06
1834	648795.1	4196409	2.17E-05	2.32E-05	3.27E-06	3.48E-06	3.20E-06	3.10E-06	1.70E-06	1.40E-06
1835	648820.4	4196404	2.18E-05	2.32E-05	3.28E-06	3.48E-06	3.20E-06	3.10E-06	1.70E-06	1.41E-06
1836	648845.8	4196398	2.18E-05	2.32E-05	3.28E-06	3.49E-06	3.21E-06	3.11E-06	1.70E-06	1.41E-06
1837	648871.1	4196393	2.18E-05	2.32E-05	3.28E-06	3.49E-06	3.21E-06	3.11E-06	1.70E-06	1.41E-06
1838	648896.4	4196388	2.18E-05	2.32E-05	3.28E-06	3.49E-06	3.21E-06	3.11E-06	1.70E-06	1.41E-06
1839	648989.1	4197839	5.85E-04	0.000623	8.79E-05	9.35E-05	8.60E-05	8.33E-05	4.57E-05	3.78E-05
1840	648965.2	4197795	3.55E-04	0.000379	5.34E-05	5.68E-05	5.22E-05	5.06E-05	2.78E-05	2.30E-05
1841	648948.1	4197748	2.52E-04	0.000269	3.79E-05	4.03E-05	3.70E-05	3.59E-05	1.97E-05	1.63E-05
1842	648924.2	4197704	1.89E-04	0.000201	2.84E-05	3.02E-05	2.78E-05	2.69E-05	1.48E-05	1.22E-05
1843	648900.2	4197660	1.48E-04	0.000158	2.23E-05	2.37E-05	2.18E-05	2.11E-05	1.16E-05	9.59E-06
1844	648920.7	4197651	1.52E-04	0.000162	2.28E-05	2.43E-05	2.23E-05	2.16E-05	1.19E-05	9.81E-06

1845	648877.7	4197616	1.21E-04	0.000128	1.81E-05	1.93E-05	1.77E-05	1.72E-05	9.41E-06	7.79E-06
1846	648902.2	4197605	1.24E-04	0.000132	1.86E-05	1.98E-05	1.82E-05	1.76E-05	9.65E-06	7.98E-06
1847	648829.5	4197528	8.49E-05	9.05E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.63E-06	5.49E-06
1848	648852.8	4197518	8.67E-05	9.24E-05	1.30E-05	1.39E-05	1.27E-05	1.24E-05	6.77E-06	5.60E-06
1849	648781.4	4197441	6.39E-05	6.81E-05	9.61E-06	1.02E-05	9.40E-06	9.11E-06	4.99E-06	4.13E-06
1850	648804.1	4197430	6.52E-05	6.95E-05	9.80E-06	1.04E-05	9.59E-06	9.29E-06	5.09E-06	4.21E-06
1851	648826.9	4197420	6.66E-05	7.1E-05	1.00E-05	1.07E-05	9.80E-06	9.49E-06	5.20E-06	4.31E-06
1852	648734.2	4197352	5.05E-05	5.38E-05	7.59E-06	8.07E-06	7.42E-06	7.19E-06	3.94E-06	3.26E-06
1853	648758.7	4197341	5.16E-05	5.5E-05	7.76E-06	8.25E-06	7.59E-06	7.35E-06	4.03E-06	3.33E-06
1854	648783.3	4197330	5.29E-05	5.63E-05	7.95E-06	8.45E-06	7.77E-06	7.53E-06	4.13E-06	3.42E-06
1855	648686.1	4197265	4.12E-05	4.4E-05	6.20E-06	6.59E-06	6.06E-06	5.88E-06	3.22E-06	2.67E-06
1856	648710	4197254	4.22E-05	4.5E-05	6.34E-06	6.74E-06	6.20E-06	6.01E-06	3.29E-06	2.73E-06
1857	648733.8	4197243	4.32E-05	4.61E-05	6.50E-06	6.91E-06	6.35E-06	6.16E-06	3.38E-06	2.79E-06
1858	648757.7	4197232	4.43E-05	4.73E-05	6.67E-06	7.09E-06	6.52E-06	6.32E-06	3.46E-06	2.86E-06
1859	648590.7	4197089	2.98E-05	3.18E-05	4.48E-06	4.76E-06	4.38E-06	4.25E-06	2.33E-06	1.93E-06
1860	648615.2	4197078	3.05E-05	3.25E-05	4.59E-06	4.88E-06	4.49E-06	4.35E-06	2.38E-06	1.97E-06
1861	648639.8	4197067	3.13E-05	3.34E-05	4.71E-06	5.01E-06	4.61E-06	4.46E-06	2.45E-06	2.02E-06
1862	648664.3	4197056	3.22E-05	3.43E-05	4.84E-06	5.14E-06	4.73E-06	4.59E-06	2.51E-06	2.08E-06
1863	648688.8	4197045	3.31E-05	3.52E-05	4.97E-06	5.28E-06	4.86E-06	4.71E-06	2.58E-06	2.14E-06
1864	648495.2	4196913	2.31E-05	2.46E-05	3.48E-06	3.69E-06	3.40E-06	3.29E-06	1.81E-06	1.49E-06
1865	648520.2	4196902	2.37E-05	2.53E-05	3.56E-06	3.79E-06	3.48E-06	3.38E-06	1.85E-06	1.53E-06
1866	648545.2	4196891	2.43E-05	2.59E-05	3.66E-06	3.89E-06	3.58E-06	3.47E-06	1.90E-06	1.57E-06
1867	648570.2	4196879	2.50E-05	2.67E-05	3.76E-06	4.00E-06	3.68E-06	3.56E-06	1.95E-06	1.62E-06
1868	648595.1	4196868	2.57E-05	2.74E-05	3.86E-06	4.10E-06	3.77E-06	3.66E-06	2.01E-06	1.66E-06
1869	648620.1	4196857	2.63E-05	2.81E-05	3.96E-06	4.21E-06	3.87E-06	3.75E-06	2.06E-06	1.70E-06
1870	648399.6	4196738	1.88E-05	2.01E-05	2.83E-06	3.01E-06	2.77E-06	2.68E-06	1.47E-06	1.22E-06
1871	648424.9	4196726	1.93E-05	2.06E-05	2.90E-06	3.09E-06	2.84E-06	2.75E-06	1.51E-06	1.25E-06
1872	648450.3	4196715	1.98E-05	2.11E-05	2.98E-06	3.17E-06	2.91E-06	2.82E-06	1.55E-06	1.28E-06
1873	648475.6	4196703	2.03E-05	2.17E-05	3.06E-06	3.25E-06	2.99E-06	2.90E-06	1.59E-06	1.31E-06
1874	648500.9	4196692	2.09E-05	2.22E-05	3.14E-06	3.33E-06	3.07E-06	2.97E-06	1.63E-06	1.35E-06
1875	648526.2	4196680	2.14E-05	2.28E-05	3.21E-06	3.42E-06	3.14E-06	3.05E-06	1.67E-06	1.38E-06
1876	648551.5	4196669	2.19E-05	2.33E-05	3.29E-06	3.50E-06	3.22E-06	3.12E-06	1.71E-06	1.41E-06
1877	648303.7	4196562	1.59E-05	1.69E-05	2.38E-06	2.54E-06	2.33E-06	2.26E-06	1.24E-06	1.02E-06
1878	648328.2	4196551	1.62E-05	1.73E-05	2.44E-06	2.59E-06	2.38E-06	2.31E-06	1.27E-06	1.05E-06
1879	648352.8	4196540	1.66E-05	1.77E-05	2.50E-06	2.66E-06	2.44E-06	2.37E-06	1.30E-06	1.07E-06
1880	648377.3	4196529	1.70E-05	1.81E-05	2.56E-06	2.72E-06	2.50E-06	2.42E-06	1.33E-06	1.10E-06
1881	648401.8	4196518	1.74E-05	1.86E-05	2.62E-06	2.79E-06	2.56E-06	2.48E-06	1.36E-06	1.13E-06
1882	648426.4	4196507	1.78E-05	1.9E-05	2.68E-06	2.85E-06	2.62E-06	2.54E-06	1.39E-06	1.15E-06
1883	648450.9	4196496	1.82E-05	1.94E-05	2.74E-06	2.91E-06	2.68E-06	2.60E-06	1.42E-06	1.18E-06
1884	648475.4	4196485	1.86E-05	1.98E-05	2.80E-06	2.97E-06	2.73E-06	2.65E-06	1.45E-06	1.20E-06
1885	648979	4197877	7.72E-04	0.000823	1.16E-04	1.23E-04	1.14E-04	1.10E-04	6.03E-05	4.99E-05
1886	648962.9	4197857	5.47E-04	0.000584	8.23E-05	8.75E-05	8.05E-05	7.80E-05	4.28E-05	3.54E-05
1887	648962.7	4197826	4.29E-04	0.000458	6.46E-05	6.87E-05	6.31E-05	6.12E-05	3.35E-05	2.78E-05
1888	648940.2	4197811	3.41E-04	0.000364	5.13E-05	5.46E-05	5.02E-05	4.87E-05	2.67E-05	2.21E-05
1889	648916.3	4197767	2.43E-04	0.000259	3.65E-05	3.88E-05	3.57E-05	3.46E-05	1.90E-05	1.57E-05
1890	648898.3	4197781	2.41E-04	0.000257	3.62E-05	3.85E-05	3.54E-05	3.43E-05	1.88E-05	1.56E-05
1891	648884	4197729	1.83E-04	0.000195	2.76E-05	2.93E-05	2.70E-05	2.61E-05	1.43E-05	1.18E-05
1892	648866	4197743	1.83E-04	0.000195	2.75E-05	2.92E-05	2.69E-05	2.61E-05	1.43E-05	1.18E-05
1893	648851.7	4197691	1.45E-04	0.000154	2.18E-05	2.32E-05	2.13E-05	2.06E-05	1.13E-05	9.36E-06
1894	648876.9	4197674	1.46E-04	0.000155	2.19E-05	2.33E-05	2.14E-05	2.08E-05	1.14E-05	9.43E-06
1895	648833.7	4197705	1.45E-04	0.000155	2.18E-05	2.32E-05	2.13E-05	2.07E-05	1.13E-05	9.38E-06
1896	648821.1	4197652	1.18E-04	0.000126	1.78E-05	1.89E-05	1.74E-05	1.69E-05	9.24E-06	7.64E-06
1897	648841.2	4197638	1.18E-04	0.000126	1.78E-05	1.89E-05	1.74E-05	1.69E-05	9.25E-06	7.66E-06
1898	648801.3	4197667	1.19E-04	0.000127	1.79E-05	1.90E-05	1.75E-05	1.69E-05	9.29E-06	7.68E-06
1899	648756	4197576	8.42E-05	8.98E-05	1.27E-05	1.35E-05	1.24E-05	1.20E-05	6.58E-06	5.44E-06
1900	648775.2	4197562	8.39E-05	8.94E-05	1.26E-05	1.34E-05	1.23E-05	1.20E-05	6.55E-06	5.42E-06

1901	648794.3	4197549	8.38E-05	8.94E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.55E-06	5.42E-06
1902	648736.7	4197590	8.51E-05	9.07E-05	1.28E-05	1.36E-05	1.25E-05	1.21E-05	6.65E-06	5.50E-06
1903	648691.1	4197499	6.39E-05	6.81E-05	9.61E-06	1.02E-05	9.39E-06	9.10E-06	4.99E-06	4.13E-06
1904	648709.7	4197487	6.34E-05	6.76E-05	9.53E-06	1.01E-05	9.32E-06	9.04E-06	4.95E-06	4.10E-06
1905	648737.7	4197468	6.31E-05	6.73E-05	9.49E-06	1.01E-05	9.28E-06	8.99E-06	4.93E-06	4.08E-06
1906	648672.1	4197514	6.48E-05	6.91E-05	9.74E-06	1.04E-05	9.53E-06	9.23E-06	5.06E-06	4.19E-06
1907	648627.2	4197423	5.06E-05	5.39E-05	7.61E-06	8.09E-06	7.44E-06	7.21E-06	3.95E-06	3.27E-06
1908	648647.4	4197409	5.01E-05	5.34E-05	7.53E-06	8.00E-06	7.36E-06	7.13E-06	3.91E-06	3.23E-06
1909	648667.5	4197395	4.97E-05	5.3E-05	7.48E-06	7.95E-06	7.31E-06	7.09E-06	3.88E-06	3.21E-06
1910	648687.6	4197381	4.96E-05	5.29E-05	7.46E-06	7.93E-06	7.30E-06	7.07E-06	3.88E-06	3.21E-06
1911	648707.8	4197367	4.97E-05	5.3E-05	7.48E-06	7.95E-06	7.31E-06	7.09E-06	3.89E-06	3.21E-06
1912	648607.5	4197438	5.15E-05	5.49E-05	7.74E-06	8.23E-06	7.57E-06	7.34E-06	4.02E-06	3.33E-06
1913	648562.3	4197347	4.14E-05	4.42E-05	6.23E-06	6.62E-06	6.09E-06	5.90E-06	3.24E-06	2.68E-06
1914	648581.9	4197333	4.09E-05	4.36E-05	6.15E-06	6.54E-06	6.01E-06	5.83E-06	3.20E-06	2.64E-06
1915	648601.5	4197320	4.06E-05	4.32E-05	6.10E-06	6.48E-06	5.96E-06	5.78E-06	3.17E-06	2.62E-06
1916	648621.1	4197306	4.04E-05	4.3E-05	6.07E-06	6.46E-06	5.94E-06	5.75E-06	3.15E-06	2.61E-06
1917	648640.6	4197293	4.04E-05	4.31E-05	6.07E-06	6.46E-06	5.94E-06	5.76E-06	3.16E-06	2.61E-06
1918	648660.2	4197279	4.06E-05	4.33E-05	6.10E-06	6.49E-06	5.97E-06	5.78E-06	3.17E-06	2.62E-06
1919	648542.9	4197361	4.22E-05	4.5E-05	6.35E-06	6.75E-06	6.21E-06	6.02E-06	3.30E-06	2.73E-06
1920	648433.4	4197194	2.98E-05	3.17E-05	4.48E-06	4.76E-06	4.38E-06	4.24E-06	2.32E-06	1.92E-06
1921	648453.5	4197180	2.93E-05	3.13E-05	4.41E-06	4.69E-06	4.31E-06	4.18E-06	2.29E-06	1.89E-06
1922	648473.7	4197166	2.90E-05	3.09E-05	4.36E-06	4.64E-06	4.27E-06	4.13E-06	2.27E-06	1.87E-06
1923	648493.8	4197152	2.88E-05	3.07E-05	4.33E-06	4.61E-06	4.24E-06	4.11E-06	2.25E-06	1.86E-06
1924	648513.9	4197139	2.88E-05	3.07E-05	4.33E-06	4.60E-06	4.23E-06	4.10E-06	2.25E-06	1.86E-06
1925	648534.1	4197125	2.88E-05	3.07E-05	4.34E-06	4.61E-06	4.24E-06	4.11E-06	2.25E-06	1.86E-06
1926	648554.2	4197111	2.91E-05	3.1E-05	4.37E-06	4.64E-06	4.27E-06	4.14E-06	2.27E-06	1.88E-06
1927	648413.7	4197209	3.04E-05	3.24E-05	4.57E-06	4.85E-06	4.46E-06	4.33E-06	2.37E-06	1.96E-06
1928	648304.3	4197041	2.28E-05	2.43E-05	3.43E-06	3.65E-06	3.36E-06	3.25E-06	1.78E-06	1.47E-06
1929	648324.8	4197027	2.25E-05	2.4E-05	3.38E-06	3.59E-06	3.30E-06	3.20E-06	1.76E-06	1.45E-06
1930	648345.4	4197013	2.22E-05	2.37E-05	3.34E-06	3.55E-06	3.27E-06	3.16E-06	1.73E-06	1.44E-06
1931	648365.9	4196999	2.20E-05	2.35E-05	3.31E-06	3.52E-06	3.24E-06	3.14E-06	1.72E-06	1.42E-06
1932	648386.4	4196985	2.20E-05	2.34E-05	3.31E-06	3.51E-06	3.23E-06	3.13E-06	1.72E-06	1.42E-06
1933	648406.9	4196971	2.20E-05	2.34E-05	3.31E-06	3.52E-06	3.23E-06	3.13E-06	1.72E-06	1.42E-06
1934	648427.4	4196957	2.21E-05	2.36E-05	3.33E-06	3.54E-06	3.25E-06	3.15E-06	1.73E-06	1.43E-06
1935	648447.9	4196943	2.23E-05	2.38E-05	3.36E-06	3.57E-06	3.28E-06	3.18E-06	1.74E-06	1.44E-06
1936	648468.4	4196929	2.26E-05	2.41E-05	3.40E-06	3.61E-06	3.32E-06	3.22E-06	1.77E-06	1.46E-06
1937	648284.4	4197056	2.33E-05	2.48E-05	3.50E-06	3.72E-06	3.42E-06	3.32E-06	1.82E-06	1.51E-06
1938	648175.2	4196888	1.83E-05	1.95E-05	2.75E-06	2.93E-06	2.69E-06	2.61E-06	1.43E-06	1.18E-06
1939	648196	4196874	1.80E-05	1.92E-05	2.71E-06	2.88E-06	2.65E-06	2.57E-06	1.41E-06	1.17E-06
1940	648216.8	4196860	1.78E-05	1.9E-05	2.68E-06	2.85E-06	2.62E-06	2.54E-06	1.39E-06	1.15E-06
1941	648237.6	4196845	1.77E-05	1.89E-05	2.66E-06	2.83E-06	2.60E-06	2.52E-06	1.38E-06	1.14E-06
1942	648258.3	4196831	1.76E-05	1.88E-05	2.65E-06	2.82E-06	2.59E-06	2.51E-06	1.38E-06	1.14E-06
1943	648279.1	4196817	1.76E-05	1.88E-05	2.65E-06	2.82E-06	2.59E-06	2.51E-06	1.38E-06	1.14E-06
1944	648299.9	4196803	1.77E-05	1.88E-05	2.66E-06	2.83E-06	2.60E-06	2.52E-06	1.38E-06	1.14E-06
1945	648320.7	4196789	1.78E-05	1.9E-05	2.68E-06	2.85E-06	2.62E-06	2.54E-06	1.39E-06	1.15E-06
1946	648341.5	4196774	1.80E-05	1.92E-05	2.71E-06	2.88E-06	2.65E-06	2.57E-06	1.41E-06	1.16E-06
1947	648362.2	4196760	1.83E-05	1.95E-05	2.74E-06	2.92E-06	2.68E-06	2.60E-06	1.43E-06	1.18E-06
1948	648155.2	4196903	1.87E-05	1.99E-05	2.81E-06	2.98E-06	2.75E-06	2.66E-06	1.46E-06	1.21E-06
1949	648045.7	4196736	1.52E-05	1.62E-05	2.29E-06	2.43E-06	2.23E-06	2.17E-06	1.19E-06	9.82E-07
1950	648065.8	4196722	1.50E-05	1.6E-05	2.25E-06	2.40E-06	2.20E-06	2.14E-06	1.17E-06	9.68E-07
1951	648086	4196708	1.48E-05	1.58E-05	2.23E-06	2.37E-06	2.18E-06	2.11E-06	1.16E-06	9.58E-07
1952	648106.1	4196694	1.47E-05	1.57E-05	2.21E-06	2.35E-06	2.16E-06	2.09E-06	1.15E-06	9.50E-07
1953	648126.2	4196681	1.46E-05	1.56E-05	2.20E-06	2.34E-06	2.15E-06	2.09E-06	1.14E-06	9.46E-07
1954	648146.4	4196667	1.46E-05	1.56E-05	2.20E-06	2.34E-06	2.15E-06	2.08E-06	1.14E-06	9.44E-07
1955	648166.5	4196653	1.46E-05	1.56E-05	2.20E-06	2.34E-06	2.15E-06	2.09E-06	1.14E-06	9.46E-07
1956	648186.7	4196639	1.47E-05	1.57E-05	2.21E-06	2.35E-06	2.16E-06	2.09E-06	1.15E-06	9.50E-07

1957	648206.8	4196625	1.48E-05	1.58E-05	2.23E-06	2.37E-06	2.18E-06	2.11E-06	1.16E-06	9.58E-07
1958	648226.9	4196612	1.50E-05	1.6E-05	2.25E-06	2.39E-06	2.20E-06	2.13E-06	1.17E-06	9.67E-07
1959	648247.1	4196598	1.52E-05	1.62E-05	2.28E-06	2.42E-06	2.23E-06	2.16E-06	1.18E-06	9.80E-07
1960	648267.2	4196584	1.54E-05	1.64E-05	2.31E-06	2.46E-06	2.26E-06	2.19E-06	1.20E-06	9.94E-07
1961	648026	4196751	1.55E-05	1.65E-05	2.32E-06	2.47E-06	2.27E-06	2.20E-06	1.21E-06	9.99E-07
1962	648964.3	4197898	8.08E-04	0.000861	1.21E-04	1.29E-04	1.19E-04	1.15E-04	6.31E-05	5.22E-05
1963	648943	4197885	5.70E-04	0.000608	8.58E-05	9.12E-05	8.39E-05	8.13E-05	4.46E-05	3.69E-05
1964	648939.1	4197847	4.24E-04	0.000452	6.38E-05	6.78E-05	6.24E-05	6.05E-05	3.31E-05	2.74E-05
1965	648921.8	4197872	4.39E-04	0.000468	6.60E-05	7.02E-05	6.46E-05	6.26E-05	3.43E-05	2.84E-05
1966	648920.4	4197831	3.44E-04	0.000366	5.17E-05	5.49E-05	5.05E-05	4.90E-05	2.68E-05	2.22E-05
1967	648900.5	4197859	3.56E-04	0.000379	5.35E-05	5.68E-05	5.23E-05	5.07E-05	2.78E-05	2.30E-05
1968	648877.9	4197805	2.47E-04	0.000263	3.71E-05	3.94E-05	3.63E-05	3.51E-05	1.93E-05	1.59E-05
1969	648858	4197832	2.55E-04	0.000272	3.83E-05	4.08E-05	3.75E-05	3.63E-05	1.99E-05	1.65E-05
1970	648835.3	4197779	1.90E-04	0.000203	2.86E-05	3.04E-05	2.80E-05	2.71E-05	1.49E-05	1.23E-05
1971	648815.5	4197806	1.97E-04	0.00021	2.96E-05	3.14E-05	2.89E-05	2.80E-05	1.54E-05	1.27E-05
1972	648792.8	4197752	1.54E-04	0.000164	2.31E-05	2.46E-05	2.26E-05	2.19E-05	1.20E-05	9.93E-06
1973	648813.2	4197729	1.50E-04	0.000159	2.25E-05	2.39E-05	2.20E-05	2.13E-05	1.17E-05	9.66E-06
1974	648773	4197780	1.59E-04	0.000169	2.39E-05	2.54E-05	2.34E-05	2.26E-05	1.24E-05	1.03E-05
1975	648750.3	4197726	1.28E-04	0.000137	1.93E-05	2.05E-05	1.88E-05	1.83E-05	1.00E-05	8.28E-06
1976	648770.7	4197702	1.25E-04	0.000133	1.87E-05	1.99E-05	1.83E-05	1.78E-05	9.74E-06	8.05E-06
1977	648730.5	4197753	1.32E-04	0.000141	1.99E-05	2.12E-05	1.95E-05	1.89E-05	1.03E-05	8.56E-06
1978	648666.7	4197672	9.51E-05	0.000101	1.43E-05	1.52E-05	1.40E-05	1.36E-05	7.43E-06	6.15E-06
1979	648690.1	4197645	9.21E-05	9.82E-05	1.38E-05	1.47E-05	1.35E-05	1.31E-05	7.19E-06	5.95E-06
1980	648713.4	4197617	8.86E-05	9.45E-05	1.33E-05	1.42E-05	1.30E-05	1.26E-05	6.92E-06	5.73E-06
1981	648645.4	4197701	9.81E-05	0.000105	1.48E-05	1.57E-05	1.44E-05	1.40E-05	7.67E-06	6.34E-06
1982	648581.4	4197619	7.51E-05	8E-05	1.13E-05	1.20E-05	1.10E-05	1.07E-05	5.86E-06	4.85E-06
1983	648604.1	4197593	7.29E-05	7.78E-05	1.10E-05	1.17E-05	1.07E-05	1.04E-05	5.70E-06	4.71E-06
1984	648626.8	4197567	7.04E-05	7.5E-05	1.06E-05	1.12E-05	1.03E-05	1.00E-05	5.50E-06	4.55E-06
1985	648649.4	4197540	6.75E-05	7.2E-05	1.02E-05	1.08E-05	9.93E-06	9.62E-06	5.28E-06	4.36E-06
1986	648560.4	4197648	7.70E-05	8.21E-05	1.16E-05	1.23E-05	1.13E-05	1.10E-05	6.02E-06	4.98E-06
1987	648496.2	4197567	6.16E-05	6.56E-05	9.26E-06	9.84E-06	9.05E-06	8.77E-06	4.81E-06	3.98E-06
1988	648518.4	4197541	6.01E-05	6.41E-05	9.04E-06	9.61E-06	8.84E-06	8.56E-06	4.69E-06	3.88E-06
1989	648540.7	4197515	5.82E-05	6.2E-05	8.75E-06	9.30E-06	8.56E-06	8.29E-06	4.55E-06	3.76E-06
1990	648563	4197489	5.60E-05	5.97E-05	8.42E-06	8.95E-06	8.23E-06	7.98E-06	4.37E-06	3.62E-06
1991	648585.2	4197464	5.37E-05	5.72E-05	8.07E-06	8.58E-06	7.89E-06	7.65E-06	4.19E-06	3.47E-06
1992	648475.4	4197595	6.28E-05	6.7E-05	9.45E-06	1.00E-05	9.24E-06	8.96E-06	4.91E-06	4.06E-06
1993	648411.9	4197513	5.18E-05	5.53E-05	7.80E-06	8.29E-06	7.62E-06	7.39E-06	4.05E-06	3.35E-06
1994	648435.7	4197486	5.07E-05	5.41E-05	7.63E-06	8.11E-06	7.46E-06	7.23E-06	3.96E-06	3.28E-06
1995	648459.5	4197458	4.92E-05	5.24E-05	7.39E-06	7.86E-06	7.23E-06	7.01E-06	3.84E-06	3.18E-06
1996	648483.3	4197430	4.73E-05	5.04E-05	7.11E-06	7.56E-06	6.95E-06	6.74E-06	3.69E-06	3.05E-06
1997	648507.2	4197403	4.52E-05	4.82E-05	6.80E-06	7.23E-06	6.65E-06	6.44E-06	3.53E-06	2.92E-06
1998	648390.3	4197543	5.27E-05	5.62E-05	7.93E-06	8.43E-06	7.75E-06	7.52E-06	4.12E-06	3.41E-06
1999	648241.4	4197409	3.90E-05	4.16E-05	5.87E-06	6.24E-06	5.74E-06	5.56E-06	3.05E-06	2.52E-06
2000	648264.4	4197382	3.85E-05	4.1E-05	5.79E-06	6.16E-06	5.66E-06	5.49E-06	3.01E-06	2.49E-06
2001	648287.3	4197355	3.77E-05	4.02E-05	5.67E-06	6.03E-06	5.54E-06	5.37E-06	2.94E-06	2.44E-06
2002	648310.3	4197329	3.66E-05	3.9E-05	5.50E-06	5.85E-06	5.38E-06	5.22E-06	2.86E-06	2.37E-06
2003	648333.3	4197302	3.53E-05	3.76E-05	5.31E-06	5.65E-06	5.19E-06	5.03E-06	2.76E-06	2.28E-06
2004	648356.2	4197275	3.39E-05	3.61E-05	5.09E-06	5.41E-06	4.98E-06	4.83E-06	2.65E-06	2.19E-06
2005	648379.2	4197249	3.24E-05	3.45E-05	4.87E-06	5.18E-06	4.77E-06	4.62E-06	2.53E-06	2.09E-06
2006	648220.3	4197438	3.94E-05	4.2E-05	5.92E-06	6.30E-06	5.79E-06	5.61E-06	3.08E-06	2.55E-06
2007	648071.7	4197303	3.09E-05	3.3E-05	4.65E-06	4.95E-06	4.55E-06	4.41E-06	2.42E-06	2.00E-06
2008	648095.3	4197276	3.07E-05	3.27E-05	4.62E-06	4.91E-06	4.51E-06	4.37E-06	2.40E-06	1.98E-06
2009	648119	4197248	3.02E-05	3.22E-05	4.55E-06	4.83E-06	4.44E-06	4.31E-06	2.36E-06	1.95E-06
2010	648142.6	4197221	2.95E-05	3.15E-05	4.44E-06	4.72E-06	4.34E-06	4.21E-06	2.31E-06	1.91E-06
2011	648166.2	4197193	2.87E-05	3.06E-05	4.31E-06	4.58E-06	4.21E-06	4.08E-06	2.24E-06	1.85E-06
2012	648189.9	4197166	2.76E-05	2.95E-05	4.16E-06	4.42E-06	4.06E-06	3.94E-06	2.16E-06	1.79E-06

2013	648213.5	4197138	2.65E-05	2.83E-05	3.99E-06	4.24E-06	3.90E-06	3.78E-06	2.07E-06	1.71E-06
2014	648237.2	4197111	2.54E-05	2.7E-05	3.81E-06	4.06E-06	3.73E-06	3.62E-06	1.98E-06	1.64E-06
2015	648260.8	4197084	2.43E-05	2.59E-05	3.65E-06	3.88E-06	3.57E-06	3.46E-06	1.90E-06	1.57E-06
2016	648050.2	4197332	3.11E-05	3.31E-05	4.67E-06	4.97E-06	4.57E-06	4.43E-06	2.43E-06	2.01E-06
2017	647901.4	4197198	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
2018	647924.4	4197171	2.54E-05	2.7E-05	3.81E-06	4.05E-06	3.73E-06	3.61E-06	1.98E-06	1.64E-06
2019	647947.5	4197144	2.51E-05	2.68E-05	3.78E-06	4.02E-06	3.69E-06	3.58E-06	1.96E-06	1.62E-06
2020	647970.6	4197118	2.47E-05	2.64E-05	3.72E-06	3.95E-06	3.64E-06	3.52E-06	1.93E-06	1.60E-06
2021	647993.7	4197091	2.42E-05	2.58E-05	3.64E-06	3.87E-06	3.56E-06	3.45E-06	1.89E-06	1.56E-06
2022	648016.7	4197064	2.35E-05	2.51E-05	3.54E-06	3.76E-06	3.46E-06	3.35E-06	1.84E-06	1.52E-06
2023	648039.8	4197037	2.27E-05	2.43E-05	3.42E-06	3.64E-06	3.34E-06	3.24E-06	1.78E-06	1.47E-06
2024	648062.9	4197011	2.19E-05	2.34E-05	3.29E-06	3.50E-06	3.22E-06	3.12E-06	1.71E-06	1.42E-06
2025	648086	4196984	2.10E-05	2.24E-05	3.16E-06	3.36E-06	3.09E-06	3.00E-06	1.64E-06	1.36E-06
2026	648109	4196957	2.02E-05	2.15E-05	3.04E-06	3.23E-06	2.97E-06	2.88E-06	1.58E-06	1.30E-06
2027	648132.1	4196930	1.94E-05	2.07E-05	2.91E-06	3.10E-06	2.85E-06	2.76E-06	1.51E-06	1.25E-06
2028	647880.2	4197227	2.54E-05	2.71E-05	3.83E-06	4.07E-06	3.74E-06	3.63E-06	1.99E-06	1.64E-06
2029	647731.5	4197093	2.15E-05	2.29E-05	3.23E-06	3.43E-06	3.15E-06	3.06E-06	1.68E-06	1.39E-06
2030	647755.1	4197065	2.15E-05	2.29E-05	3.23E-06	3.43E-06	3.15E-06	3.06E-06	1.68E-06	1.39E-06
2031	647778.6	4197038	2.14E-05	2.28E-05	3.21E-06	3.41E-06	3.14E-06	3.04E-06	1.67E-06	1.38E-06
2032	647802.2	4197011	2.11E-05	2.25E-05	3.17E-06	3.37E-06	3.10E-06	3.01E-06	1.65E-06	1.36E-06
2033	647825.8	4196983	2.07E-05	2.21E-05	3.12E-06	3.32E-06	3.05E-06	2.96E-06	1.62E-06	1.34E-06
2034	647849.3	4196956	2.03E-05	2.16E-05	3.05E-06	3.24E-06	2.98E-06	2.89E-06	1.58E-06	1.31E-06
2035	647872.9	4196929	1.97E-05	2.1E-05	2.96E-06	3.15E-06	2.90E-06	2.81E-06	1.54E-06	1.27E-06
2036	647896.4	4196901	1.91E-05	2.03E-05	2.87E-06	3.05E-06	2.80E-06	2.72E-06	1.49E-06	1.23E-06
2037	647920	4196874	1.84E-05	1.96E-05	2.76E-06	2.94E-06	2.70E-06	2.62E-06	1.44E-06	1.19E-06
2038	647943.5	4196847	1.77E-05	1.88E-05	2.66E-06	2.83E-06	2.60E-06	2.52E-06	1.38E-06	1.14E-06
2039	647967.1	4196819	1.70E-05	1.81E-05	2.55E-06	2.71E-06	2.50E-06	2.42E-06	1.33E-06	1.10E-06
2040	647990.6	4196792	1.63E-05	1.74E-05	2.45E-06	2.61E-06	2.40E-06	2.33E-06	1.28E-06	1.05E-06
2041	647710.1	4197122	2.14E-05	2.28E-05	3.22E-06	3.42E-06	3.15E-06	3.05E-06	1.67E-06	1.38E-06
2042	648953.5	4197924	9.04E-04	0.000964	1.36E-04	1.45E-04	1.33E-04	1.29E-04	7.06E-05	5.84E-05
2043	648944.6	4197945	9.75E-04	0.001039	1.47E-04	1.56E-04	1.43E-04	1.39E-04	7.61E-05	6.30E-05
2044	648935.7	4197967	1.02E-03	0.001087	1.53E-04	1.63E-04	1.50E-04	1.45E-04	7.96E-05	6.59E-05
2045	648930.4	4197914	6.29E-04	0.000671	9.46E-05	1.01E-04	9.25E-05	8.96E-05	4.91E-05	4.07E-05
2046	648921.4	4197936	6.72E-04	0.000716	1.01E-04	1.07E-04	9.88E-05	9.57E-05	5.25E-05	4.34E-05
2047	648912.5	4197958	7.05E-04	0.000752	1.06E-04	1.13E-04	1.04E-04	1.00E-04	5.51E-05	4.56E-05
2048	648907.2	4197905	4.80E-04	0.000512	7.22E-05	7.68E-05	7.06E-05	6.84E-05	3.75E-05	3.10E-05
2049	648898.3	4197926	5.08E-04	0.000542	7.64E-05	8.12E-05	7.47E-05	7.24E-05	3.97E-05	3.28E-05
2050	648889.4	4197948	5.32E-04	0.000567	8.00E-05	8.50E-05	7.82E-05	7.58E-05	4.15E-05	3.44E-05
2051	648884.1	4197895	3.87E-04	0.000413	5.82E-05	6.19E-05	5.69E-05	5.52E-05	3.02E-05	2.50E-05
2052	648875.2	4197917	4.06E-04	0.000433	6.11E-05	6.50E-05	5.98E-05	5.79E-05	3.18E-05	2.63E-05
2053	648866.3	4197939	4.23E-04	0.000451	6.37E-05	6.77E-05	6.23E-05	6.03E-05	3.31E-05	2.74E-05
2054	648846.7	4197854	2.65E-04	0.000283	3.99E-05	4.24E-05	3.90E-05	3.78E-05	2.07E-05	1.71E-05
2055	648837.8	4197876	2.77E-04	0.000295	4.16E-05	4.42E-05	4.07E-05	3.94E-05	2.16E-05	1.79E-05
2056	648828.9	4197898	2.87E-04	0.000306	4.32E-05	4.59E-05	4.22E-05	4.09E-05	2.24E-05	1.86E-05
2057	648820	4197920	2.96E-04	0.000316	4.46E-05	4.74E-05	4.36E-05	4.22E-05	2.32E-05	1.92E-05
2058	648800.4	4197836	2.06E-04	0.00022	3.10E-05	3.29E-05	3.03E-05	2.93E-05	1.61E-05	1.33E-05
2059	648791.5	4197857	2.13E-04	0.000227	3.21E-05	3.41E-05	3.13E-05	3.04E-05	1.67E-05	1.38E-05
2060	648782.6	4197879	2.19E-04	0.000234	3.30E-05	3.51E-05	3.23E-05	3.13E-05	1.71E-05	1.42E-05
2061	648773.7	4197901	2.25E-04	0.00024	3.38E-05	3.59E-05	3.31E-05	3.20E-05	1.76E-05	1.45E-05
2062	648754.2	4197817	1.67E-04	0.000178	2.51E-05	2.67E-05	2.46E-05	2.38E-05	1.31E-05	1.08E-05
2063	648745.2	4197838	1.72E-04	0.000183	2.59E-05	2.75E-05	2.53E-05	2.45E-05	1.34E-05	1.11E-05
2064	648736.3	4197860	1.76E-04	0.000188	2.65E-05	2.81E-05	2.59E-05	2.51E-05	1.37E-05	1.14E-05
2065	648727.4	4197882	1.79E-04	0.000191	2.70E-05	2.87E-05	2.64E-05	2.55E-05	1.40E-05	1.16E-05
2066	648715.4	4197783	1.38E-04	0.000147	2.07E-05	2.20E-05	2.02E-05	1.96E-05	1.08E-05	8.90E-06
2067	648699	4197819	1.43E-04	0.000153	2.15E-05	2.29E-05	2.10E-05	2.04E-05	1.12E-05	9.25E-06
2068	648690.1	4197841	1.46E-04	0.000155	2.19E-05	2.33E-05	2.14E-05	2.08E-05	1.14E-05	9.42E-06

2069	648681.2	4197863	1.48E-04	0.000158	2.22E-05	2.36E-05	2.17E-05	2.11E-05	1.15E-05	9.55E-06
2070	648625.4	4197740	1.02E-04	0.000109	1.54E-05	1.63E-05	1.50E-05	1.46E-05	7.99E-06	6.61E-06
2071	648606.4	4197782	1.05E-04	0.000112	1.58E-05	1.68E-05	1.55E-05	1.50E-05	8.23E-06	6.81E-06
2072	648597.5	4197803	1.07E-04	0.000114	1.60E-05	1.71E-05	1.57E-05	1.52E-05	8.33E-06	6.89E-06
2073	648588.6	4197825	1.08E-04	0.000115	1.62E-05	1.72E-05	1.58E-05	1.53E-05	8.41E-06	6.96E-06
2074	648532.2	4197703	8.05E-05	8.58E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.29E-06	5.20E-06
2075	648513.9	4197744	8.21E-05	8.75E-05	1.23E-05	1.31E-05	1.21E-05	1.17E-05	6.41E-06	5.31E-06
2076	648505	4197765	8.28E-05	8.83E-05	1.25E-05	1.32E-05	1.22E-05	1.18E-05	6.47E-06	5.35E-06
2077	648496	4197787	8.34E-05	8.89E-05	1.25E-05	1.33E-05	1.23E-05	1.19E-05	6.51E-06	5.39E-06
2078	648439.2	4197666	6.55E-05	6.99E-05	9.85E-06	1.05E-05	9.63E-06	9.34E-06	5.12E-06	4.23E-06
2079	648457.3	4197631	6.45E-05	6.87E-05	9.69E-06	1.03E-05	9.48E-06	9.19E-06	5.03E-06	4.17E-06
2080	648421.3	4197706	6.65E-05	7.08E-05	9.99E-06	1.06E-05	9.77E-06	9.47E-06	5.19E-06	4.29E-06
2081	648412.4	4197728	6.69E-05	7.13E-05	1.01E-05	1.07E-05	9.84E-06	9.53E-06	5.23E-06	4.32E-06
2082	648403.5	4197749	6.73E-05	7.17E-05	1.01E-05	1.08E-05	9.89E-06	9.59E-06	5.25E-06	4.35E-06
2083	648348.2	4197626	5.47E-05	5.83E-05	8.22E-06	8.74E-06	8.04E-06	7.79E-06	4.27E-06	3.53E-06
2084	648358.7	4197605	5.44E-05	5.8E-05	8.18E-06	8.69E-06	7.99E-06	7.75E-06	4.25E-06	3.51E-06
2085	648369.3	4197584	5.40E-05	5.75E-05	8.11E-06	8.63E-06	7.93E-06	7.69E-06	4.21E-06	3.49E-06
2086	648379.8	4197563	5.34E-05	5.69E-05	8.03E-06	8.54E-06	7.85E-06	7.61E-06	4.17E-06	3.45E-06
2087	648337.7	4197646	5.49E-05	5.86E-05	8.26E-06	8.78E-06	8.08E-06	7.83E-06	4.29E-06	3.55E-06
2088	648328.8	4197668	5.53E-05	5.9E-05	8.32E-06	8.84E-06	8.13E-06	7.88E-06	4.32E-06	3.58E-06
2089	648319.8	4197690	5.56E-05	5.93E-05	8.37E-06	8.89E-06	8.18E-06	7.93E-06	4.35E-06	3.60E-06
2090	648310.9	4197712	5.59E-05	5.96E-05	8.41E-06	8.94E-06	8.22E-06	7.97E-06	4.37E-06	3.61E-06
2091	648162.2	4197551	4.04E-05	4.3E-05	6.07E-06	6.46E-06	5.94E-06	5.75E-06	3.15E-06	2.61E-06
2092	648181.6	4197514	4.02E-05	4.28E-05	6.04E-06	6.42E-06	5.91E-06	5.73E-06	3.14E-06	2.60E-06
2093	648200.9	4197476	3.99E-05	4.25E-05	6.00E-06	6.38E-06	5.86E-06	5.68E-06	3.12E-06	2.58E-06
2094	648143.6	4197592	4.07E-05	4.34E-05	6.12E-06	6.50E-06	5.98E-06	5.80E-06	3.18E-06	2.63E-06
2095	648134.7	4197614	4.09E-05	4.36E-05	6.15E-06	6.54E-06	6.01E-06	5.83E-06	3.20E-06	2.64E-06
2096	648125.8	4197636	4.11E-05	4.38E-05	6.18E-06	6.57E-06	6.05E-06	5.86E-06	3.21E-06	2.66E-06
2097	647977.8	4197474	3.14E-05	3.35E-05	4.73E-06	5.02E-06	4.62E-06	4.48E-06	2.46E-06	2.03E-06
2098	647988.1	4197454	3.14E-05	3.35E-05	4.72E-06	5.02E-06	4.62E-06	4.47E-06	2.45E-06	2.03E-06
2099	647998.5	4197434	3.14E-05	3.34E-05	4.72E-06	5.01E-06	4.61E-06	4.47E-06	2.45E-06	2.03E-06
2100	648008.8	4197414	3.13E-05	3.34E-05	4.71E-06	5.01E-06	4.61E-06	4.47E-06	2.45E-06	2.03E-06
2101	648019.2	4197393	3.13E-05	3.34E-05	4.71E-06	5.01E-06	4.61E-06	4.46E-06	2.45E-06	2.02E-06
2102	648029.5	4197373	3.13E-05	3.33E-05	4.70E-06	5.00E-06	4.60E-06	4.46E-06	2.44E-06	2.02E-06
2103	648039.9	4197353	3.12E-05	3.32E-05	4.69E-06	4.99E-06	4.59E-06	4.44E-06	2.44E-06	2.02E-06
2104	647967.4	4197495	3.15E-05	3.36E-05	4.74E-06	5.03E-06	4.63E-06	4.49E-06	2.46E-06	2.03E-06
2105	647958.5	4197517	3.17E-05	3.37E-05	4.76E-06	5.06E-06	4.65E-06	4.51E-06	2.47E-06	2.05E-06
2106	647949.6	4197538	3.18E-05	3.39E-05	4.79E-06	5.09E-06	4.68E-06	4.54E-06	2.49E-06	2.06E-06
2107	647940.7	4197560	3.20E-05	3.41E-05	4.82E-06	5.12E-06	4.71E-06	4.56E-06	2.50E-06	2.07E-06
2108	647792.1	4197400	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
2109	647811.7	4197361	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.73E-06	3.62E-06	1.98E-06	1.64E-06
2110	647831.3	4197323	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
2111	647850.8	4197285	2.55E-05	2.72E-05	3.83E-06	4.07E-06	3.75E-06	3.63E-06	1.99E-06	1.65E-06
2112	647773.4	4197441	2.56E-05	2.73E-05	3.85E-06	4.09E-06	3.77E-06	3.65E-06	2.00E-06	1.65E-06
2113	647764.5	4197463	2.58E-05	2.75E-05	3.87E-06	4.12E-06	3.79E-06	3.67E-06	2.01E-06	1.66E-06
2114	647755.6	4197484	2.59E-05	2.77E-05	3.90E-06	4.15E-06	3.81E-06	3.70E-06	2.03E-06	1.68E-06
2115	647607.5	4197323	2.11E-05	2.25E-05	3.18E-06	3.38E-06	3.11E-06	3.01E-06	1.65E-06	1.37E-06
2116	647628	4197283	2.11E-05	2.25E-05	3.17E-06	3.37E-06	3.10E-06	3.01E-06	1.65E-06	1.36E-06
2117	647638.3	4197263	2.11E-05	2.25E-05	3.18E-06	3.38E-06	3.11E-06	3.01E-06	1.65E-06	1.37E-06
2118	647648.5	4197243	2.12E-05	2.26E-05	3.18E-06	3.38E-06	3.11E-06	3.01E-06	1.65E-06	1.37E-06
2119	647669.1	4197202	2.13E-05	2.27E-05	3.20E-06	3.40E-06	3.13E-06	3.03E-06	1.66E-06	1.37E-06
2120	647679.3	4197182	2.13E-05	2.27E-05	3.21E-06	3.41E-06	3.13E-06	3.04E-06	1.67E-06	1.38E-06
2121	647597.2	4197343	2.12E-05	2.26E-05	3.19E-06	3.39E-06	3.12E-06	3.02E-06	1.66E-06	1.37E-06
2122	647588.3	4197365	2.13E-05	2.27E-05	3.21E-06	3.41E-06	3.13E-06	3.04E-06	1.67E-06	1.38E-06
2123	647579.4	4197387	2.15E-05	2.29E-05	3.23E-06	3.43E-06	3.15E-06	3.06E-06	1.68E-06	1.39E-06
2124	647570.5	4197409	2.16E-05	2.3E-05	3.25E-06	3.46E-06	3.18E-06	3.08E-06	1.69E-06	1.40E-06

2125	648948	4198010	1.70E-03	0.001813	2.56E-04	2.72E-04	2.50E-04	2.42E-04	1.33E-04	1.10E-04
2126	648959.4	4198032	2.17E-03	0.00231	3.26E-04	3.46E-04	3.19E-04	3.09E-04	1.69E-04	1.40E-04
2127	648970.9	4198055	2.41E-03	0.002573	3.63E-04	3.86E-04	3.55E-04	3.44E-04	1.89E-04	1.56E-04
2128	648982.3	4198077	2.56E-03	0.002728	3.85E-04	4.09E-04	3.76E-04	3.65E-04	2.00E-04	1.65E-04
2129	648993.7	4198099	2.66E-03	0.002832	4.00E-04	4.25E-04	3.91E-04	3.79E-04	2.08E-04	1.72E-04
2130	649005.1	4198121	2.73E-03	0.002905	4.10E-04	4.36E-04	4.01E-04	3.88E-04	2.13E-04	1.76E-04
2131	649016.6	4198143	2.77E-03	0.002955	4.17E-04	4.43E-04	4.08E-04	3.95E-04	2.17E-04	1.79E-04
2132	649028	4198166	2.80E-03	0.002983	4.21E-04	4.47E-04	4.11E-04	3.99E-04	2.19E-04	1.81E-04
2133	649039.4	4198188	2.80E-03	0.00299	4.22E-04	4.48E-04	4.12E-04	4.00E-04	2.19E-04	1.81E-04
2134	649050.8	4198210	2.79E-03	0.002969	4.19E-04	4.45E-04	4.10E-04	3.97E-04	2.18E-04	1.80E-04
2135	649062.2	4198232	2.73E-03	0.002911	4.11E-04	4.36E-04	4.01E-04	3.89E-04	2.13E-04	1.76E-04
2136	649073.7	4198254	2.61E-03	0.002784	3.93E-04	4.17E-04	3.84E-04	3.72E-04	2.04E-04	1.69E-04
2137	649085.1	4198277	2.34E-03	0.002499	3.52E-04	3.75E-04	3.45E-04	3.34E-04	1.83E-04	1.51E-04
2138	648914.4	4197999	9.17E-04	0.000978	1.38E-04	1.47E-04	1.35E-04	1.31E-04	7.17E-05	5.93E-05
2139	648925.8	4198022	1.19E-03	0.001265	1.78E-04	1.90E-04	1.74E-04	1.69E-04	9.27E-05	7.67E-05
2140	648937.2	4198044	1.46E-03	0.001561	2.20E-04	2.34E-04	2.15E-04	2.09E-04	1.14E-04	9.46E-05
2141	648948.6	4198066	1.67E-03	0.001783	2.52E-04	2.67E-04	2.46E-04	2.38E-04	1.31E-04	1.08E-04
2142	648960.1	4198088	1.81E-03	0.001929	2.72E-04	2.89E-04	2.66E-04	2.58E-04	1.41E-04	1.17E-04
2143	648971.5	4198110	1.90E-03	0.002029	2.86E-04	3.04E-04	2.80E-04	2.71E-04	1.49E-04	1.23E-04
2144	648982.9	4198133	1.97E-03	0.0021	2.96E-04	3.15E-04	2.90E-04	2.81E-04	1.54E-04	1.27E-04
2145	648994.3	4198155	2.02E-03	0.002149	3.03E-04	3.22E-04	2.96E-04	2.87E-04	1.57E-04	1.30E-04
2146	649005.7	4198177	2.04E-03	0.002179	3.07E-04	3.27E-04	3.01E-04	2.91E-04	1.60E-04	1.32E-04
2147	649017.2	4198199	2.05E-03	0.00219	3.09E-04	3.28E-04	3.02E-04	2.93E-04	1.60E-04	1.33E-04
2148	649028.6	4198221	2.04E-03	0.00218	3.07E-04	3.27E-04	3.01E-04	2.91E-04	1.60E-04	1.32E-04
2149	649040	4198244	2.01E-03	0.002142	3.02E-04	3.21E-04	2.95E-04	2.86E-04	1.57E-04	1.30E-04
2150	649051.4	4198266	1.93E-03	0.002062	2.91E-04	3.09E-04	2.84E-04	2.76E-04	1.51E-04	1.25E-04
2151	649062.9	4198288	1.79E-03	0.001911	2.70E-04	2.87E-04	2.64E-04	2.55E-04	1.40E-04	1.16E-04
2152	648891.2	4197990	6.69E-04	0.000713	1.01E-04	1.07E-04	9.83E-05	9.53E-05	5.22E-05	4.32E-05
2153	648903.6	4198033	9.11E-04	0.000971	1.37E-04	1.46E-04	1.34E-04	1.30E-04	7.12E-05	5.89E-05
2154	648915	4198055	1.09E-03	0.001166	1.64E-04	1.75E-04	1.61E-04	1.56E-04	8.54E-05	7.07E-05
2155	648926.4	4198077	1.25E-03	0.001337	1.89E-04	2.00E-04	1.84E-04	1.79E-04	9.79E-05	8.10E-05
2156	648937.8	4198100	1.38E-03	0.001466	2.07E-04	2.20E-04	2.02E-04	1.96E-04	1.07E-04	8.89E-05
2157	648949.2	4198122	1.46E-03	0.00156	2.20E-04	2.34E-04	2.15E-04	2.09E-04	1.14E-04	9.46E-05
2158	648960.7	4198144	1.53E-03	0.001629	2.30E-04	2.44E-04	2.25E-04	2.18E-04	1.19E-04	9.87E-05
2159	648972.1	4198166	1.57E-03	0.001677	2.37E-04	2.51E-04	2.31E-04	2.24E-04	1.23E-04	1.02E-04
2160	648983.5	4198188	1.60E-03	0.001708	2.41E-04	2.56E-04	2.36E-04	2.28E-04	1.25E-04	1.04E-04
2161	648994.9	4198211	1.62E-03	0.001723	2.43E-04	2.58E-04	2.38E-04	2.30E-04	1.26E-04	1.04E-04
2162	649006.4	4198233	1.61E-03	0.001721	2.43E-04	2.58E-04	2.37E-04	2.30E-04	1.26E-04	1.04E-04
2163	649017.8	4198255	1.59E-03	0.001697	2.39E-04	2.55E-04	2.34E-04	2.27E-04	1.24E-04	1.03E-04
2164	649029.2	4198277	1.54E-03	0.001645	2.32E-04	2.47E-04	2.27E-04	2.20E-04	1.21E-04	9.97E-05
2165	649040.6	4198299	1.46E-03	0.001552	2.19E-04	2.33E-04	2.14E-04	2.08E-04	1.14E-04	9.41E-05
2166	648869	4198001	5.68E-04	0.000606	8.54E-05	9.08E-05	8.35E-05	8.10E-05	4.44E-05	3.67E-05
2167	648881.3	4198045	7.38E-04	0.000787	1.11E-04	1.18E-04	1.09E-04	1.05E-04	5.77E-05	4.77E-05
2168	648892.7	4198067	8.67E-04	0.000924	1.30E-04	1.39E-04	1.27E-04	1.24E-04	6.77E-05	5.60E-05
2169	648904.2	4198089	9.89E-04	0.001055	1.49E-04	1.58E-04	1.45E-04	1.41E-04	7.73E-05	6.39E-05
2170	648915.6	4198111	1.09E-03	0.001164	1.64E-04	1.75E-04	1.61E-04	1.56E-04	8.53E-05	7.06E-05
2171	648927	4198133	1.17E-03	0.00125	1.76E-04	1.87E-04	1.72E-04	1.67E-04	9.16E-05	7.58E-05
2172	648938.4	4198156	1.23E-03	0.001315	1.85E-04	1.97E-04	1.81E-04	1.76E-04	9.63E-05	7.97E-05
2173	648949.9	4198178	1.28E-03	0.001362	1.92E-04	2.04E-04	1.88E-04	1.82E-04	9.98E-05	8.26E-05
2174	648961.3	4198200	1.31E-03	0.001394	1.97E-04	2.09E-04	1.92E-04	1.86E-04	1.02E-04	8.45E-05
2175	648972.7	4198222	1.32E-03	0.001412	1.99E-04	2.12E-04	1.95E-04	1.89E-04	1.03E-04	8.56E-05
2176	648984.1	4198244	1.33E-03	0.001416	2.00E-04	2.12E-04	1.95E-04	1.89E-04	1.04E-04	8.58E-05
2177	648995.6	4198266	1.31E-03	0.001402	1.98E-04	2.10E-04	1.93E-04	1.87E-04	1.03E-04	8.50E-05
2178	649007	4198289	1.28E-03	0.001366	1.93E-04	2.05E-04	1.88E-04	1.83E-04	1.00E-04	8.28E-05
2179	649018.4	4198311	1.22E-03	0.001306	1.84E-04	1.96E-04	1.80E-04	1.75E-04	9.57E-05	7.91E-05
2180	648824.5	4198024	4.33E-04	0.000461	6.51E-05	6.92E-05	6.36E-05	6.17E-05	3.38E-05	2.80E-05

2181	648822.7	4197983	3.74E-04	0.000399	5.63E-05	5.98E-05	5.50E-05	5.33E-05	2.92E-05	2.42E-05
2182	648836.9	4198067	5.30E-04	0.000565	7.98E-05	8.48E-05	7.80E-05	7.56E-05	4.14E-05	3.43E-05
2183	648848.3	4198090	6.05E-04	0.000645	9.09E-05	9.67E-05	8.89E-05	8.62E-05	4.72E-05	3.91E-05
2184	648859.7	4198112	6.80E-04	0.000725	1.02E-04	1.09E-04	9.99E-05	9.69E-05	5.31E-05	4.39E-05
2185	648871.1	4198134	7.50E-04	0.0008	1.13E-04	1.20E-04	1.10E-04	1.07E-04	5.86E-05	4.85E-05
2186	648882.6	4198156	8.12E-04	0.000866	1.22E-04	1.30E-04	1.19E-04	1.16E-04	6.34E-05	5.25E-05
2187	648894	4198178	8.63E-04	0.00092	1.30E-04	1.38E-04	1.27E-04	1.23E-04	6.74E-05	5.58E-05
2188	648905.4	4198201	9.04E-04	0.000964	1.36E-04	1.45E-04	1.33E-04	1.29E-04	7.06E-05	5.84E-05
2189	648916.8	4198223	9.34E-04	0.000996	1.40E-04	1.49E-04	1.37E-04	1.33E-04	7.30E-05	6.04E-05
2190	648928.3	4198245	9.54E-04	0.001017	1.44E-04	1.53E-04	1.40E-04	1.36E-04	7.45E-05	6.17E-05
2191	648939.7	4198267	9.64E-04	0.001027	1.45E-04	1.54E-04	1.42E-04	1.37E-04	7.53E-05	6.23E-05
2192	648951.1	4198289	9.62E-04	0.001025	1.45E-04	1.54E-04	1.41E-04	1.37E-04	7.51E-05	6.21E-05
2193	648962.5	4198312	9.47E-04	0.00101	1.42E-04	1.51E-04	1.39E-04	1.35E-04	7.40E-05	6.12E-05
2194	648974	4198334	9.20E-04	0.000981	1.38E-04	1.47E-04	1.35E-04	1.31E-04	7.19E-05	5.95E-05
2195	648779.9	4198044	3.44E-04	0.000366	5.17E-05	5.49E-05	5.05E-05	4.90E-05	2.68E-05	2.22E-05
2196	648778.9	4198020	3.22E-04	0.000343	4.83E-05	5.14E-05	4.73E-05	4.58E-05	2.51E-05	2.08E-05
2197	648777.9	4197996	3.00E-04	0.00032	4.51E-05	4.79E-05	4.41E-05	4.27E-05	2.34E-05	1.94E-05
2198	648776.8	4197973	2.79E-04	0.000297	4.19E-05	4.46E-05	4.10E-05	3.97E-05	2.18E-05	1.80E-05
2199	648775.8	4197949	2.59E-04	0.000276	3.90E-05	4.15E-05	3.81E-05	3.70E-05	2.03E-05	1.68E-05
2200	648774.7	4197925	2.41E-04	0.000257	3.63E-05	3.86E-05	3.55E-05	3.44E-05	1.89E-05	1.56E-05
2201	648781	4198068	3.65E-04	0.000389	5.49E-05	5.84E-05	5.37E-05	5.20E-05	2.85E-05	2.36E-05
2202	648792.4	4198090	4.10E-04	0.000437	6.16E-05	6.55E-05	6.02E-05	5.84E-05	3.20E-05	2.65E-05
2203	648803.8	4198112	4.58E-04	0.000488	6.88E-05	7.32E-05	6.73E-05	6.52E-05	3.58E-05	2.96E-05
2204	648815.3	4198135	5.08E-04	0.000541	7.63E-05	8.12E-05	7.47E-05	7.24E-05	3.97E-05	3.28E-05
2205	648826.7	4198157	5.57E-04	0.000594	8.37E-05	8.90E-05	8.19E-05	7.94E-05	4.35E-05	3.60E-05
2206	648838.1	4198179	6.03E-04	0.000643	9.07E-05	9.64E-05	8.87E-05	8.59E-05	4.71E-05	3.90E-05
2207	648849.5	4198201	6.44E-04	0.000686	9.68E-05	1.03E-04	9.47E-05	9.18E-05	5.03E-05	4.16E-05
2208	648861	4198223	6.78E-04	0.000723	1.02E-04	1.08E-04	9.97E-05	9.67E-05	5.30E-05	4.38E-05
2209	648872.4	4198246	7.06E-04	0.000753	1.06E-04	1.13E-04	1.04E-04	1.01E-04	5.51E-05	4.56E-05
2210	648883.8	4198268	7.26E-04	0.000774	1.09E-04	1.16E-04	1.07E-04	1.03E-04	5.67E-05	4.69E-05
2211	648895.2	4198290	7.38E-04	0.000787	1.11E-04	1.18E-04	1.08E-04	1.05E-04	5.76E-05	4.77E-05
2212	648906.7	4198312	7.42E-04	0.000791	1.12E-04	1.19E-04	1.09E-04	1.06E-04	5.79E-05	4.79E-05
2213	648918.1	4198334	7.37E-04	0.000786	1.11E-04	1.18E-04	1.08E-04	1.05E-04	5.76E-05	4.77E-05
2214	648929.5	4198357	7.25E-04	0.000773	1.09E-04	1.16E-04	1.07E-04	1.03E-04	5.66E-05	4.68E-05
2215	648735.5	4198068	2.85E-04	0.000304	4.28E-05	4.56E-05	4.19E-05	4.06E-05	2.23E-05	1.84E-05
2216	648734.5	4198045	2.70E-04	0.000288	4.06E-05	4.31E-05	3.97E-05	3.85E-05	2.11E-05	1.74E-05
2217	648733.5	4198021	2.55E-04	0.000272	3.83E-05	4.07E-05	3.75E-05	3.63E-05	1.99E-05	1.65E-05
2218	648732.5	4197998	2.40E-04	0.000256	3.61E-05	3.84E-05	3.53E-05	3.42E-05	1.88E-05	1.55E-05
2219	648731.5	4197975	2.26E-04	0.000241	3.40E-05	3.61E-05	3.32E-05	3.22E-05	1.77E-05	1.46E-05
2220	648730.5	4197952	2.13E-04	0.000227	3.20E-05	3.40E-05	3.13E-05	3.03E-05	1.66E-05	1.38E-05
2221	648729.5	4197928	2.01E-04	0.000214	3.02E-05	3.21E-05	2.95E-05	2.86E-05	1.57E-05	1.30E-05
2222	648728.4	4197905	1.90E-04	0.000202	2.85E-05	3.03E-05	2.79E-05	2.70E-05	1.48E-05	1.23E-05
2223	648736.5	4198091	3.00E-04	0.00032	4.51E-05	4.79E-05	4.41E-05	4.27E-05	2.34E-05	1.94E-05
2224	648748	4198113	3.31E-04	0.000353	4.98E-05	5.29E-05	4.87E-05	4.72E-05	2.59E-05	2.14E-05
2225	648759.4	4198135	3.65E-04	0.000389	5.49E-05	5.83E-05	5.36E-05	5.20E-05	2.85E-05	2.36E-05
2226	648770.8	4198158	4.00E-04	0.000426	6.02E-05	6.40E-05	5.88E-05	5.70E-05	3.12E-05	2.59E-05
2227	648782.2	4198180	4.36E-04	0.000464	6.55E-05	6.96E-05	6.40E-05	6.21E-05	3.40E-05	2.82E-05
2228	648793.7	4198202	4.70E-04	0.000501	7.07E-05	7.51E-05	6.91E-05	6.70E-05	3.67E-05	3.04E-05
2229	648805.1	4198224	5.02E-04	0.000535	7.55E-05	8.02E-05	7.38E-05	7.15E-05	3.92E-05	3.24E-05
2230	648816.5	4198246	5.30E-04	0.000565	7.97E-05	8.47E-05	7.79E-05	7.55E-05	4.14E-05	3.42E-05
2231	648827.9	4198269	5.53E-04	0.00059	8.32E-05	8.85E-05	8.14E-05	7.89E-05	4.32E-05	3.58E-05
2232	648839.3	4198291	5.72E-04	0.000609	8.60E-05	9.14E-05	8.40E-05	8.15E-05	4.47E-05	3.69E-05
2233	648850.8	4198313	5.84E-04	0.000623	8.79E-05	9.34E-05	8.59E-05	8.33E-05	4.56E-05	3.78E-05
2234	648862.2	4198335	5.91E-04	0.00063	8.89E-05	9.45E-05	8.69E-05	8.42E-05	4.62E-05	3.82E-05
2235	648873.6	4198357	5.92E-04	0.000631	8.90E-05	9.47E-05	8.71E-05	8.44E-05	4.63E-05	3.83E-05
2236	648885	4198380	5.88E-04	0.000626	8.83E-05	9.39E-05	8.64E-05	8.37E-05	4.59E-05	3.80E-05

2237	648691.1	4198091	2.42E-04	0.000258	3.64E-05	3.87E-05	3.56E-05	3.45E-05	1.89E-05	1.56E-05
2238	648690.1	4198068	2.31E-04	0.000246	3.47E-05	3.69E-05	3.40E-05	3.29E-05	1.80E-05	1.49E-05
2239	648689.1	4198045	2.20E-04	0.000234	3.31E-05	3.52E-05	3.23E-05	3.13E-05	1.72E-05	1.42E-05
2240	648688.1	4198023	2.09E-04	0.000223	3.14E-05	3.34E-05	3.07E-05	2.98E-05	1.63E-05	1.35E-05
2241	648687.1	4198000	1.98E-04	0.000211	2.98E-05	3.17E-05	2.92E-05	2.83E-05	1.55E-05	1.28E-05
2242	648686.1	4197977	1.88E-04	0.000201	2.83E-05	3.01E-05	2.77E-05	2.68E-05	1.47E-05	1.22E-05
2243	648685.1	4197954	1.79E-04	0.000191	2.69E-05	2.86E-05	2.63E-05	2.55E-05	1.40E-05	1.16E-05
2244	648684.1	4197931	1.70E-04	0.000181	2.56E-05	2.72E-05	2.50E-05	2.43E-05	1.33E-05	1.10E-05
2245	648683.1	4197909	1.62E-04	0.000173	2.44E-05	2.59E-05	2.39E-05	2.31E-05	1.27E-05	1.05E-05
2246	648682.1	4197886	1.55E-04	0.000165	2.33E-05	2.47E-05	2.28E-05	2.21E-05	1.21E-05	1.00E-05
2247	648692.1	4198114	2.53E-04	0.00027	3.81E-05	4.05E-05	3.72E-05	3.61E-05	1.98E-05	1.64E-05
2248	648703.5	4198136	2.76E-04	0.000295	4.15E-05	4.42E-05	4.06E-05	3.94E-05	2.16E-05	1.79E-05
2249	648714.9	4198158	3.01E-04	0.000321	4.53E-05	4.81E-05	4.43E-05	4.29E-05	2.35E-05	1.95E-05
2250	648726.3	4198180	3.27E-04	0.000349	4.92E-05	5.23E-05	4.81E-05	4.66E-05	2.55E-05	2.11E-05
2251	648737.8	4198203	3.54E-04	0.000377	5.32E-05	5.65E-05	5.20E-05	5.04E-05	2.76E-05	2.28E-05
2252	648749.2	4198225	3.80E-04	0.000405	5.71E-05	6.07E-05	5.58E-05	5.41E-05	2.97E-05	2.45E-05
2253	648760.6	4198247	4.04E-04	0.000431	6.08E-05	6.46E-05	5.94E-05	5.76E-05	3.16E-05	2.61E-05
2254	648772	4198269	4.27E-04	0.000455	6.42E-05	6.82E-05	6.28E-05	6.08E-05	3.33E-05	2.76E-05
2255	648783.5	4198291	4.46E-04	0.000476	6.71E-05	7.13E-05	6.56E-05	6.36E-05	3.49E-05	2.88E-05
2256	648794.9	4198314	4.62E-04	0.000493	6.95E-05	7.39E-05	6.80E-05	6.59E-05	3.61E-05	2.99E-05
2257	648806.3	4198336	4.74E-04	0.000506	7.13E-05	7.58E-05	6.97E-05	6.76E-05	3.70E-05	3.06E-05
2258	648817.7	4198358	4.82E-04	0.000514	7.25E-05	7.71E-05	7.09E-05	6.87E-05	3.77E-05	3.12E-05
2259	648829.2	4198380	4.86E-04	0.000518	7.31E-05	7.77E-05	7.15E-05	6.93E-05	3.80E-05	3.14E-05
2260	648840.6	4198402	4.86E-04	0.000518	7.30E-05	7.77E-05	7.14E-05	6.92E-05	3.79E-05	3.14E-05
2261	648602.1	4198136	1.84E-04	0.000196	2.77E-05	2.94E-05	2.70E-05	2.62E-05	1.44E-05	1.19E-05
2262	648601.1	4198112	1.77E-04	0.000188	2.66E-05	2.82E-05	2.60E-05	2.52E-05	1.38E-05	1.14E-05
2263	648600	4198088	1.69E-04	0.000181	2.55E-05	2.71E-05	2.49E-05	2.41E-05	1.32E-05	1.09E-05
2264	648599	4198064	1.62E-04	0.000173	2.44E-05	2.59E-05	2.38E-05	2.31E-05	1.27E-05	1.05E-05
2265	648598	4198040	1.55E-04	0.000165	2.33E-05	2.48E-05	2.28E-05	2.21E-05	1.21E-05	1.00E-05
2266	648596.9	4198016	1.48E-04	0.000158	2.23E-05	2.37E-05	2.18E-05	2.11E-05	1.16E-05	9.57E-06
2267	648595.9	4197992	1.42E-04	0.000151	2.13E-05	2.26E-05	2.08E-05	2.02E-05	1.11E-05	9.15E-06
2268	648594.8	4197968	1.36E-04	0.000144	2.04E-05	2.17E-05	1.99E-05	1.93E-05	1.06E-05	8.76E-06
2269	648593.8	4197945	1.30E-04	0.000138	1.95E-05	2.08E-05	1.91E-05	1.85E-05	1.01E-05	8.39E-06
2270	648592.8	4197921	1.25E-04	0.000133	1.88E-05	1.99E-05	1.83E-05	1.78E-05	9.74E-06	8.06E-06
2271	648591.7	4197897	1.20E-04	0.000128	1.80E-05	1.92E-05	1.76E-05	1.71E-05	9.37E-06	7.76E-06
2272	648590.7	4197873	1.16E-04	0.000123	1.74E-05	1.85E-05	1.70E-05	1.65E-05	9.03E-06	7.47E-06
2273	648589.6	4197849	1.12E-04	0.000119	1.68E-05	1.78E-05	1.64E-05	1.59E-05	8.72E-06	7.21E-06
2274	648603.2	4198160	1.91E-04	0.000204	2.87E-05	3.06E-05	2.81E-05	2.72E-05	1.49E-05	1.24E-05
2275	648614.6	4198182	2.05E-04	0.000219	3.09E-05	3.28E-05	3.02E-05	2.92E-05	1.60E-05	1.33E-05
2276	648626	4198204	2.20E-04	0.000235	3.31E-05	3.52E-05	3.23E-05	3.13E-05	1.72E-05	1.42E-05
2277	648637.4	4198226	2.35E-04	0.000251	3.54E-05	3.76E-05	3.46E-05	3.35E-05	1.84E-05	1.52E-05
2278	648648.9	4198248	2.51E-04	0.000268	3.78E-05	4.01E-05	3.69E-05	3.58E-05	1.96E-05	1.62E-05
2279	648660.3	4198271	2.67E-04	0.000284	4.01E-05	4.26E-05	3.92E-05	3.80E-05	2.08E-05	1.72E-05
2280	648671.7	4198293	2.82E-04	0.000301	4.24E-05	4.51E-05	4.15E-05	4.02E-05	2.20E-05	1.82E-05
2281	648683.1	4198315	2.96E-04	0.000316	4.46E-05	4.74E-05	4.36E-05	4.22E-05	2.31E-05	1.91E-05
2282	648694.6	4198337	3.09E-04	0.00033	4.65E-05	4.95E-05	4.55E-05	4.41E-05	2.42E-05	2.00E-05
2283	648706	4198359	3.21E-04	0.000342	4.83E-05	5.13E-05	4.72E-05	4.57E-05	2.51E-05	2.07E-05
2284	648717.4	4198382	3.31E-04	0.000353	4.97E-05	5.29E-05	4.86E-05	4.71E-05	2.58E-05	2.14E-05
2285	648728.8	4198404	3.38E-04	0.000361	5.09E-05	5.41E-05	4.97E-05	4.82E-05	2.64E-05	2.19E-05
2286	648740.3	4198426	3.44E-04	0.000367	5.17E-05	5.50E-05	5.06E-05	4.90E-05	2.69E-05	2.22E-05
2287	648751.7	4198448	3.47E-04	0.00037	5.22E-05	5.55E-05	5.10E-05	4.95E-05	2.71E-05	2.24E-05
2288	648513.2	4198181	1.47E-04	0.000157	2.21E-05	2.35E-05	2.16E-05	2.10E-05	1.15E-05	9.51E-06
2289	648512.1	4198156	1.42E-04	0.000151	2.14E-05	2.27E-05	2.09E-05	2.03E-05	1.11E-05	9.18E-06
2290	648511	4198132	1.37E-04	0.000146	2.06E-05	2.19E-05	2.01E-05	1.95E-05	1.07E-05	8.85E-06
2291	648510	4198107	1.32E-04	0.00014	1.98E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.51E-06
2292	648508.9	4198082	1.27E-04	0.000135	1.90E-05	2.02E-05	1.86E-05	1.80E-05	9.89E-06	8.18E-06

2293	648507.8	4198058	1.22E-04	0.00013	1.83E-05	1.94E-05	1.79E-05	1.73E-05	9.49E-06	7.85E-06
2294	648506.8	4198033	1.17E-04	0.000124	1.75E-05	1.87E-05	1.72E-05	1.66E-05	9.12E-06	7.54E-06
2295	648505.7	4198009	1.12E-04	0.00012	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.76E-06	7.25E-06
2296	648504.6	4197984	1.08E-04	0.000115	1.62E-05	1.72E-05	1.59E-05	1.54E-05	8.42E-06	6.97E-06
2297	648503.5	4197959	1.04E-04	0.000111	1.56E-05	1.66E-05	1.53E-05	1.48E-05	8.11E-06	6.71E-06
2298	648502.5	4197935	1.00E-04	0.000107	1.51E-05	1.60E-05	1.47E-05	1.43E-05	7.82E-06	6.47E-06
2299	648501.4	4197910	9.68E-05	0.000103	1.46E-05	1.55E-05	1.42E-05	1.38E-05	7.56E-06	6.26E-06
2300	648500.3	4197886	9.38E-05	1E-04	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.33E-06	6.06E-06
2301	648499.3	4197861	9.10E-05	9.7E-05	1.37E-05	1.45E-05	1.34E-05	1.30E-05	7.11E-06	5.88E-06
2302	648498.2	4197836	8.83E-05	9.42E-05	1.33E-05	1.41E-05	1.30E-05	1.26E-05	6.90E-06	5.71E-06
2303	648497.1	4197812	8.58E-05	9.15E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.71E-06	5.55E-06
2304	648514.3	4198205	1.52E-04	0.000162	2.29E-05	2.43E-05	2.24E-05	2.17E-05	1.19E-05	9.83E-06
2305	648525.7	4198228	1.61E-04	0.000172	2.43E-05	2.58E-05	2.37E-05	2.30E-05	1.26E-05	1.04E-05
2306	648537.1	4198250	1.71E-04	0.000182	2.57E-05	2.73E-05	2.51E-05	2.43E-05	1.33E-05	1.10E-05
2307	648548.5	4198272	1.81E-04	0.000193	2.72E-05	2.89E-05	2.66E-05	2.57E-05	1.41E-05	1.17E-05
2308	648559.9	4198294	1.91E-04	0.000203	2.86E-05	3.05E-05	2.80E-05	2.72E-05	1.49E-05	1.23E-05
2309	648571.4	4198316	2.01E-04	0.000214	3.01E-05	3.21E-05	2.95E-05	2.86E-05	1.57E-05	1.30E-05
2310	648582.8	4198339	2.10E-04	0.000224	3.16E-05	3.36E-05	3.09E-05	3.00E-05	1.64E-05	1.36E-05
2311	648594.2	4198361	2.20E-04	0.000234	3.31E-05	3.51E-05	3.23E-05	3.13E-05	1.72E-05	1.42E-05
2312	648605.6	4198383	2.29E-04	0.000244	3.44E-05	3.66E-05	3.36E-05	3.26E-05	1.79E-05	1.48E-05
2313	648617.1	4198405	2.37E-04	0.000253	3.57E-05	3.79E-05	3.49E-05	3.38E-05	1.85E-05	1.53E-05
2314	648628.5	4198427	2.44E-04	0.000261	3.68E-05	3.91E-05	3.59E-05	3.48E-05	1.91E-05	1.58E-05
2315	648639.9	4198450	2.51E-04	0.000267	3.77E-05	4.01E-05	3.69E-05	3.57E-05	1.96E-05	1.62E-05
2316	648651.3	4198472	2.56E-04	0.000273	3.85E-05	4.09E-05	3.76E-05	3.65E-05	2.00E-05	1.65E-05
2317	648662.8	4198494	2.60E-04	0.000277	3.91E-05	4.16E-05	3.82E-05	3.71E-05	2.03E-05	1.68E-05
2318	648424.3	4198227	1.22E-04	0.00013	1.83E-05	1.95E-05	1.79E-05	1.74E-05	9.53E-06	7.89E-06
2319	648423.3	4198203	1.19E-04	0.000126	1.78E-05	1.90E-05	1.74E-05	1.69E-05	9.27E-06	7.67E-06
2320	648422.2	4198179	1.15E-04	0.000123	1.73E-05	1.84E-05	1.69E-05	1.64E-05	8.99E-06	7.44E-06
2321	648421.2	4198156	1.11E-04	0.000119	1.68E-05	1.78E-05	1.64E-05	1.59E-05	8.70E-06	7.20E-06
2322	648420.1	4198132	1.08E-04	0.000115	1.62E-05	1.72E-05	1.58E-05	1.53E-05	8.41E-06	6.96E-06
2323	648419.1	4198108	1.04E-04	0.000111	1.56E-05	1.66E-05	1.53E-05	1.48E-05	8.12E-06	6.72E-06
2324	648418.1	4198084	1.00E-04	0.000107	1.51E-05	1.60E-05	1.48E-05	1.43E-05	7.84E-06	6.49E-06
2325	648417	4198060	9.69E-05	0.000103	1.46E-05	1.55E-05	1.42E-05	1.38E-05	7.57E-06	6.26E-06
2326	648416	4198036	9.35E-05	9.97E-05	1.41E-05	1.50E-05	1.38E-05	1.33E-05	7.31E-06	6.04E-06
2327	648414.9	4198012	9.04E-05	9.63E-05	1.36E-05	1.44E-05	1.33E-05	1.29E-05	7.06E-06	5.84E-06
2328	648413.9	4197988	8.74E-05	9.32E-05	1.31E-05	1.40E-05	1.29E-05	1.25E-05	6.83E-06	5.65E-06
2329	648412.9	4197964	8.46E-05	9.02E-05	1.27E-05	1.35E-05	1.24E-05	1.21E-05	6.61E-06	5.47E-06
2330	648411.8	4197941	8.21E-05	8.75E-05	1.23E-05	1.31E-05	1.21E-05	1.17E-05	6.41E-06	5.31E-06
2331	648410.8	4197917	7.98E-05	8.51E-05	1.20E-05	1.28E-05	1.17E-05	1.14E-05	6.23E-06	5.16E-06
2332	648409.7	4197893	7.77E-05	8.28E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.07E-06	5.02E-06
2333	648408.7	4197869	7.57E-05	8.07E-05	1.14E-05	1.21E-05	1.11E-05	1.08E-05	5.92E-06	4.89E-06
2334	648407.6	4197845	7.39E-05	7.88E-05	1.11E-05	1.18E-05	1.09E-05	1.05E-05	5.77E-06	4.78E-06
2335	648406.6	4197821	7.22E-05	7.7E-05	1.09E-05	1.15E-05	1.06E-05	1.03E-05	5.64E-06	4.66E-06
2336	648405.6	4197797	7.05E-05	7.52E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.51E-06	4.56E-06
2337	648404.5	4197773	6.89E-05	7.34E-05	1.04E-05	1.10E-05	1.01E-05	9.82E-06	5.38E-06	4.45E-06
2338	648425.3	4198251	1.25E-04	0.000134	1.88E-05	2.00E-05	1.84E-05	1.79E-05	9.79E-06	8.10E-06
2339	648436.8	4198273	1.32E-04	0.00014	1.98E-05	2.10E-05	1.93E-05	1.87E-05	1.03E-05	8.50E-06
2340	648448.2	4198296	1.38E-04	0.000147	2.07E-05	2.21E-05	2.03E-05	1.97E-05	1.08E-05	8.92E-06
2341	648459.6	4198318	1.45E-04	0.000154	2.17E-05	2.31E-05	2.12E-05	2.06E-05	1.13E-05	9.34E-06
2342	648471	4198340	1.51E-04	0.000161	2.27E-05	2.42E-05	2.22E-05	2.15E-05	1.18E-05	9.77E-06
2343	648482.5	4198362	1.58E-04	0.000168	2.37E-05	2.52E-05	2.32E-05	2.25E-05	1.23E-05	1.02E-05
2344	648493.9	4198384	1.64E-04	0.000175	2.47E-05	2.63E-05	2.42E-05	2.34E-05	1.28E-05	1.06E-05
2345	648505.3	4198407	1.71E-04	0.000182	2.57E-05	2.73E-05	2.51E-05	2.44E-05	1.34E-05	1.11E-05
2346	648516.7	4198429	1.77E-04	0.000189	2.67E-05	2.84E-05	2.61E-05	2.53E-05	1.39E-05	1.15E-05
2347	648528.2	4198451	1.83E-04	0.000195	2.76E-05	2.93E-05	2.70E-05	2.61E-05	1.43E-05	1.18E-05
2348	648539.6	4198473	1.89E-04	0.000201	2.84E-05	3.02E-05	2.78E-05	2.69E-05	1.48E-05	1.22E-05

2349	648551	4198495	1.94E-04	0.000207	2.92E-05	3.10E-05	2.85E-05	2.76E-05	1.52E-05	1.25E-05
2350	648562.4	4198517	1.98E-04	0.000212	2.98E-05	3.17E-05	2.92E-05	2.83E-05	1.55E-05	1.28E-05
2351	648573.8	4198540	2.02E-04	0.000216	3.04E-05	3.23E-05	2.97E-05	2.88E-05	1.58E-05	1.31E-05
2352	648335.4	4198273	1.03E-04	0.00011	1.55E-05	1.65E-05	1.52E-05	1.47E-05	8.07E-06	6.68E-06
2353	648334.3	4198248	1.01E-04	0.000108	1.52E-05	1.61E-05	1.48E-05	1.44E-05	7.89E-06	6.52E-06
2354	648333.2	4198224	9.84E-05	0.000105	1.48E-05	1.57E-05	1.45E-05	1.40E-05	7.69E-06	6.36E-06
2355	648332.2	4198199	9.57E-05	0.000102	1.44E-05	1.53E-05	1.41E-05	1.36E-05	7.47E-06	6.18E-06
2356	648331.1	4198175	9.28E-05	9.9E-05	1.40E-05	1.48E-05	1.37E-05	1.32E-05	7.25E-06	6.00E-06
2357	648330.1	4198151	9.00E-05	9.59E-05	1.35E-05	1.44E-05	1.32E-05	1.28E-05	7.03E-06	5.81E-06
2358	648329	4198126	8.71E-05	9.28E-05	1.31E-05	1.39E-05	1.28E-05	1.24E-05	6.80E-06	5.63E-06
2359	648327.9	4198102	8.42E-05	8.98E-05	1.27E-05	1.35E-05	1.24E-05	1.20E-05	6.58E-06	5.44E-06
2360	648326.9	4198077	8.15E-05	8.68E-05	1.22E-05	1.30E-05	1.20E-05	1.16E-05	6.36E-06	5.26E-06
2361	648325.8	4198053	7.88E-05	8.4E-05	1.18E-05	1.26E-05	1.16E-05	1.12E-05	6.16E-06	5.09E-06
2362	648324.7	4198029	7.63E-05	8.13E-05	1.15E-05	1.22E-05	1.12E-05	1.09E-05	5.96E-06	4.93E-06
2363	648323.7	4198004	7.39E-05	7.88E-05	1.11E-05	1.18E-05	1.09E-05	1.05E-05	5.78E-06	4.78E-06
2364	648322.6	4197980	7.18E-05	7.65E-05	1.08E-05	1.15E-05	1.06E-05	1.02E-05	5.61E-06	4.64E-06
2365	648321.6	4197955	6.98E-05	7.44E-05	1.05E-05	1.12E-05	1.03E-05	9.95E-06	5.45E-06	4.51E-06
2366	648320.5	4197931	6.80E-05	7.25E-05	1.02E-05	1.09E-05	9.99E-06	9.69E-06	5.31E-06	4.39E-06
2367	648319.4	4197907	6.63E-05	7.07E-05	9.97E-06	1.06E-05	9.75E-06	9.45E-06	5.18E-06	4.29E-06
2368	648318.4	4197882	6.48E-05	6.91E-05	9.74E-06	1.04E-05	9.53E-06	9.23E-06	5.06E-06	4.19E-06
2369	648317.3	4197858	6.34E-05	6.76E-05	9.53E-06	1.01E-05	9.32E-06	9.03E-06	4.95E-06	4.10E-06
2370	648316.2	4197833	6.21E-05	6.62E-05	9.33E-06	9.92E-06	9.13E-06	8.85E-06	4.85E-06	4.01E-06
2371	648315.2	4197809	6.08E-05	6.48E-05	9.14E-06	9.72E-06	8.94E-06	8.67E-06	4.75E-06	3.93E-06
2372	648314.1	4197785	5.96E-05	6.35E-05	8.96E-06	9.52E-06	8.76E-06	8.49E-06	4.65E-06	3.85E-06
2373	648313.1	4197760	5.84E-05	6.22E-05	8.78E-06	9.33E-06	8.58E-06	8.32E-06	4.56E-06	3.77E-06
2374	648312	4197736	5.71E-05	6.09E-05	8.59E-06	9.14E-06	8.40E-06	8.14E-06	4.46E-06	3.69E-06
2375	648336.4	4198297	1.06E-04	0.000113	1.59E-05	1.69E-05	1.55E-05	1.50E-05	8.25E-06	6.82E-06
2376	648347.8	4198319	1.10E-04	0.000117	1.65E-05	1.76E-05	1.62E-05	1.57E-05	8.60E-06	7.11E-06
2377	648359.3	4198341	1.15E-04	0.000122	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.95E-06	7.40E-06
2378	648370.7	4198364	1.19E-04	0.000127	1.79E-05	1.90E-05	1.75E-05	1.70E-05	9.30E-06	7.70E-06
2379	648382.1	4198386	1.24E-04	0.000132	1.86E-05	1.98E-05	1.82E-05	1.76E-05	9.67E-06	8.00E-06
2380	648393.5	4198408	1.28E-04	0.000137	1.93E-05	2.05E-05	1.89E-05	1.83E-05	1.00E-05	8.30E-06
2381	648405	4198430	1.33E-04	0.000142	2.00E-05	2.13E-05	1.96E-05	1.90E-05	1.04E-05	8.60E-06
2382	648416.4	4198452	1.38E-04	0.000147	2.07E-05	2.20E-05	2.03E-05	1.96E-05	1.08E-05	8.90E-06
2383	648427.8	4198474	1.42E-04	0.000152	2.14E-05	2.28E-05	2.09E-05	2.03E-05	1.11E-05	9.20E-06
2384	648439.2	4198497	1.47E-04	0.000157	2.21E-05	2.35E-05	2.16E-05	2.09E-05	1.15E-05	9.49E-06
2385	648450.7	4198519	1.51E-04	0.000161	2.27E-05	2.42E-05	2.22E-05	2.15E-05	1.18E-05	9.77E-06
2386	648462.1	4198541	1.55E-04	0.000165	2.33E-05	2.48E-05	2.28E-05	2.21E-05	1.21E-05	1.00E-05
2387	648473.5	4198563	1.59E-04	0.000169	2.39E-05	2.54E-05	2.34E-05	2.26E-05	1.24E-05	1.03E-05
2388	648484.9	4198585	1.62E-04	0.000173	2.44E-05	2.59E-05	2.38E-05	2.31E-05	1.27E-05	1.05E-05
2389	648157.5	4198364	7.77E-05	8.29E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.07E-06	5.02E-06
2390	648156.5	4198340	7.65E-05	8.16E-05	1.15E-05	1.22E-05	1.13E-05	1.09E-05	5.98E-06	4.95E-06
2391	648155.4	4198316	7.53E-05	8.02E-05	1.13E-05	1.20E-05	1.11E-05	1.07E-05	5.88E-06	4.86E-06
2392	648154.4	4198291	7.39E-05	7.88E-05	1.11E-05	1.18E-05	1.09E-05	1.05E-05	5.77E-06	4.77E-06
2393	648153.3	4198267	7.24E-05	7.72E-05	1.09E-05	1.16E-05	1.06E-05	1.03E-05	5.65E-06	4.68E-06
2394	648152.3	4198243	7.08E-05	7.55E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.53E-06	4.58E-06
2395	648151.2	4198219	6.91E-05	7.37E-05	1.04E-05	1.11E-05	1.02E-05	9.85E-06	5.40E-06	4.47E-06
2396	648150.1	4198194	6.74E-05	7.18E-05	1.01E-05	1.08E-05	9.91E-06	9.60E-06	5.26E-06	4.35E-06
2397	648149.1	4198170	6.56E-05	6.99E-05	9.86E-06	1.05E-05	9.64E-06	9.35E-06	5.12E-06	4.24E-06
2398	648148	4198146	6.38E-05	6.8E-05	9.59E-06	1.02E-05	9.38E-06	9.09E-06	4.98E-06	4.12E-06
2399	648147	4198121	6.19E-05	6.6E-05	9.31E-06	9.90E-06	9.11E-06	8.83E-06	4.84E-06	4.00E-06
2400	648145.9	4198097	6.02E-05	6.41E-05	9.05E-06	9.62E-06	8.85E-06	8.57E-06	4.70E-06	3.89E-06
2401	648144.9	4198073	5.85E-05	6.23E-05	8.79E-06	9.34E-06	8.59E-06	8.33E-06	4.57E-06	3.78E-06
2402	648143.8	4198049	5.68E-05	6.06E-05	8.54E-06	9.08E-06	8.35E-06	8.10E-06	4.44E-06	3.67E-06
2403	648142.7	4198024	5.53E-05	5.89E-05	8.31E-06	8.84E-06	8.13E-06	7.88E-06	4.32E-06	3.57E-06
2404	648141.7	4198000	5.39E-05	5.74E-05	8.10E-06	8.61E-06	7.92E-06	7.68E-06	4.21E-06	3.48E-06

2405	648140.6	4197976	5.26E-05	5.61E-05	7.91E-06	8.41E-06	7.73E-06	7.49E-06	4.11E-06	3.40E-06
2406	648139.6	4197951	5.14E-05	5.48E-05	7.73E-06	8.22E-06	7.56E-06	7.33E-06	4.02E-06	3.32E-06
2407	648138.5	4197927	5.04E-05	5.37E-05	7.57E-06	8.05E-06	7.40E-06	7.18E-06	3.93E-06	3.25E-06
2408	648137.5	4197903	4.94E-05	5.27E-05	7.43E-06	7.90E-06	7.26E-06	7.04E-06	3.86E-06	3.19E-06
2409	648136.4	4197879	4.86E-05	5.18E-05	7.30E-06	7.76E-06	7.14E-06	6.92E-06	3.79E-06	3.14E-06
2410	648135.3	4197854	4.78E-05	5.09E-05	7.18E-06	7.64E-06	7.02E-06	6.81E-06	3.73E-06	3.09E-06
2411	648134.3	4197830	4.70E-05	5.02E-05	7.07E-06	7.52E-06	6.92E-06	6.70E-06	3.68E-06	3.04E-06
2412	648133.2	4197806	4.63E-05	4.94E-05	6.97E-06	7.41E-06	6.81E-06	6.60E-06	3.62E-06	2.99E-06
2413	648132.2	4197781	4.56E-05	4.86E-05	6.86E-06	7.30E-06	6.71E-06	6.50E-06	3.56E-06	2.95E-06
2414	648131.1	4197757	4.49E-05	4.79E-05	6.76E-06	7.18E-06	6.61E-06	6.40E-06	3.51E-06	2.90E-06
2415	648130.1	4197733	4.42E-05	4.71E-05	6.65E-06	7.07E-06	6.50E-06	6.30E-06	3.45E-06	2.86E-06
2416	648129	4197709	4.35E-05	4.63E-05	6.53E-06	6.95E-06	6.39E-06	6.19E-06	3.39E-06	2.81E-06
2417	648127.9	4197684	4.27E-05	4.55E-05	6.42E-06	6.82E-06	6.28E-06	6.08E-06	3.33E-06	2.76E-06
2418	648126.9	4197660	4.19E-05	4.47E-05	6.30E-06	6.70E-06	6.16E-06	5.97E-06	3.27E-06	2.71E-06
2419	648158.6	4198388	7.88E-05	8.4E-05	1.19E-05	1.26E-05	1.16E-05	1.12E-05	6.16E-06	5.09E-06
2420	648170	4198411	8.12E-05	8.66E-05	1.22E-05	1.30E-05	1.19E-05	1.16E-05	6.35E-06	5.25E-06
2421	648181.4	4198433	8.37E-05	8.92E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.54E-06	5.41E-06
2422	648192.9	4198455	8.62E-05	9.18E-05	1.30E-05	1.38E-05	1.27E-05	1.23E-05	6.73E-06	5.57E-06
2423	648204.3	4198477	8.87E-05	9.45E-05	1.33E-05	1.42E-05	1.30E-05	1.26E-05	6.93E-06	5.73E-06
2424	648215.7	4198499	9.13E-05	9.73E-05	1.37E-05	1.46E-05	1.34E-05	1.30E-05	7.13E-06	5.90E-06
2425	648227.1	4198522	9.39E-05	0.0001	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.33E-06	6.06E-06
2426	648238.6	4198544	9.65E-05	0.000103	1.45E-05	1.54E-05	1.42E-05	1.38E-05	7.54E-06	6.24E-06
2427	648250	4198566	9.92E-05	0.000106	1.49E-05	1.59E-05	1.46E-05	1.41E-05	7.75E-06	6.41E-06
2428	648261.4	4198588	1.02E-04	0.000109	1.53E-05	1.63E-05	1.50E-05	1.45E-05	7.95E-06	6.58E-06
2429	648272.8	4198610	1.04E-04	0.000111	1.57E-05	1.67E-05	1.54E-05	1.49E-05	8.16E-06	6.75E-06
2430	648284.3	4198633	1.07E-04	0.000114	1.61E-05	1.71E-05	1.57E-05	1.52E-05	8.35E-06	6.91E-06
2431	648295.7	4198655	1.09E-04	0.000117	1.65E-05	1.75E-05	1.61E-05	1.56E-05	8.55E-06	7.07E-06
2432	648307.1	4198677	1.12E-04	0.000119	1.68E-05	1.79E-05	1.64E-05	1.59E-05	8.73E-06	7.22E-06
2433	647979.7	4198455	6.10E-05	6.51E-05	9.18E-06	9.76E-06	8.97E-06	8.70E-06	4.77E-06	3.94E-06
2434	647978.6	4198430	6.04E-05	6.44E-05	9.08E-06	9.65E-06	8.88E-06	8.60E-06	4.72E-06	3.90E-06
2435	647977.5	4198405	5.97E-05	6.36E-05	8.98E-06	9.54E-06	8.78E-06	8.51E-06	4.66E-06	3.86E-06
2436	647976.4	4198381	5.89E-05	6.28E-05	8.86E-06	9.42E-06	8.67E-06	8.40E-06	4.60E-06	3.81E-06
2437	647975.4	4198356	5.81E-05	6.2E-05	8.74E-06	9.29E-06	8.55E-06	8.28E-06	4.54E-06	3.76E-06
2438	647974.3	4198331	5.72E-05	6.1E-05	8.61E-06	9.15E-06	8.42E-06	8.16E-06	4.47E-06	3.70E-06
2439	647973.2	4198306	5.63E-05	6E-05	8.46E-06	9.00E-06	8.28E-06	8.02E-06	4.40E-06	3.64E-06
2440	647972.1	4198281	5.53E-05	5.89E-05	8.31E-06	8.83E-06	8.13E-06	7.88E-06	4.32E-06	3.57E-06
2441	647971	4198256	5.42E-05	5.77E-05	8.14E-06	8.66E-06	7.96E-06	7.72E-06	4.23E-06	3.50E-06
2442	647969.9	4198231	5.30E-05	5.65E-05	7.97E-06	8.48E-06	7.80E-06	7.56E-06	4.14E-06	3.43E-06
2443	647968.9	4198207	5.18E-05	5.52E-05	7.79E-06	8.28E-06	7.62E-06	7.38E-06	4.05E-06	3.35E-06
2444	647967.8	4198182	5.06E-05	5.39E-05	7.60E-06	8.08E-06	7.44E-06	7.21E-06	3.95E-06	3.27E-06
2445	647966.7	4198157	4.93E-05	5.25E-05	7.41E-06	7.88E-06	7.25E-06	7.02E-06	3.85E-06	3.19E-06
2446	647965.6	4198132	4.80E-05	5.12E-05	7.22E-06	7.68E-06	7.06E-06	6.84E-06	3.75E-06	3.10E-06
2447	647964.5	4198107	4.68E-05	4.98E-05	7.03E-06	7.48E-06	6.88E-06	6.66E-06	3.65E-06	3.02E-06
2448	647963.5	4198082	4.55E-05	4.85E-05	6.85E-06	7.28E-06	6.69E-06	6.49E-06	3.56E-06	2.94E-06
2449	647962.4	4198057	4.44E-05	4.73E-05	6.67E-06	7.09E-06	6.52E-06	6.32E-06	3.46E-06	2.87E-06
2450	647961.3	4198032	4.32E-05	4.61E-05	6.50E-06	6.91E-06	6.36E-06	6.16E-06	3.38E-06	2.79E-06
2451	647960.2	4198008	4.22E-05	4.5E-05	6.35E-06	6.75E-06	6.21E-06	6.01E-06	3.30E-06	2.73E-06
2452	647959.1	4197983	4.13E-05	4.4E-05	6.21E-06	6.60E-06	6.07E-06	5.88E-06	3.22E-06	2.67E-06
2453	647958	4197958	4.04E-05	4.31E-05	6.08E-06	6.46E-06	5.94E-06	5.76E-06	3.16E-06	2.61E-06
2454	647957	4197933	3.97E-05	4.23E-05	5.97E-06	6.35E-06	5.84E-06	5.66E-06	3.10E-06	2.56E-06
2455	647955.9	4197908	3.90E-05	4.16E-05	5.87E-06	6.24E-06	5.74E-06	5.56E-06	3.05E-06	2.52E-06
2456	647954.8	4197883	3.85E-05	4.1E-05	5.78E-06	6.15E-06	5.65E-06	5.48E-06	3.00E-06	2.49E-06
2457	647953.7	4197858	3.80E-05	4.05E-05	5.71E-06	6.07E-06	5.58E-06	5.41E-06	2.97E-06	2.45E-06
2458	647952.6	4197834	3.75E-05	4E-05	5.64E-06	6.00E-06	5.52E-06	5.35E-06	2.93E-06	2.42E-06
2459	647951.5	4197809	3.71E-05	3.95E-05	5.58E-06	5.93E-06	5.45E-06	5.29E-06	2.90E-06	2.40E-06
2460	647950.5	4197784	3.67E-05	3.91E-05	5.52E-06	5.86E-06	5.39E-06	5.23E-06	2.87E-06	2.37E-06

2461	647949.4	4197759	3.63E-05	3.87E-05	5.45E-06	5.80E-06	5.33E-06	5.17E-06	2.83E-06	2.34E-06
2462	647948.3	4197734	3.58E-05	3.82E-05	5.39E-06	5.73E-06	5.27E-06	5.11E-06	2.80E-06	2.31E-06
2463	647947.2	4197709	3.54E-05	3.77E-05	5.32E-06	5.65E-06	5.20E-06	5.04E-06	2.76E-06	2.28E-06
2464	647946.1	4197684	3.49E-05	3.72E-05	5.24E-06	5.57E-06	5.13E-06	4.97E-06	2.72E-06	2.25E-06
2465	647945	4197660	3.43E-05	3.66E-05	5.16E-06	5.49E-06	5.05E-06	4.89E-06	2.68E-06	2.22E-06
2466	647944	4197635	3.38E-05	3.6E-05	5.08E-06	5.40E-06	4.96E-06	4.81E-06	2.64E-06	2.18E-06
2467	647942.9	4197610	3.32E-05	3.54E-05	4.99E-06	5.31E-06	4.88E-06	4.73E-06	2.59E-06	2.14E-06
2468	647941.8	4197585	3.26E-05	3.48E-05	4.90E-06	5.21E-06	4.79E-06	4.65E-06	2.55E-06	2.11E-06
2469	647980.8	4198480	6.16E-05	6.57E-05	9.27E-06	9.85E-06	9.06E-06	8.78E-06	4.81E-06	3.98E-06
2470	647992.2	4198502	6.31E-05	6.73E-05	9.49E-06	1.01E-05	9.28E-06	8.99E-06	4.93E-06	4.08E-06
2471	648003.6	4198524	6.46E-05	6.88E-05	9.71E-06	1.03E-05	9.49E-06	9.20E-06	5.04E-06	4.17E-06
2472	648015	4198547	6.61E-05	7.04E-05	9.93E-06	1.06E-05	9.71E-06	9.41E-06	5.16E-06	4.27E-06
2473	648026.5	4198569	6.76E-05	7.21E-05	1.02E-05	1.08E-05	9.94E-06	9.64E-06	5.28E-06	4.37E-06
2474	648037.9	4198591	6.92E-05	7.37E-05	1.04E-05	1.11E-05	1.02E-05	9.86E-06	5.40E-06	4.47E-06
2475	648049.3	4198613	7.08E-05	7.55E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.53E-06	4.57E-06
2476	648060.7	4198635	7.24E-05	7.72E-05	1.09E-05	1.16E-05	1.06E-05	1.03E-05	5.66E-06	4.68E-06
2477	648072.2	4198658	7.41E-05	7.9E-05	1.11E-05	1.18E-05	1.09E-05	1.06E-05	5.79E-06	4.79E-06
2478	648083.6	4198680	7.58E-05	8.08E-05	1.14E-05	1.21E-05	1.11E-05	1.08E-05	5.92E-06	4.90E-06
2479	648095	4198702	7.75E-05	8.26E-05	1.17E-05	1.24E-05	1.14E-05	1.10E-05	6.06E-06	5.01E-06
2480	648106.4	4198724	7.92E-05	8.45E-05	1.19E-05	1.27E-05	1.16E-05	1.13E-05	6.19E-06	5.12E-06
2481	648117.9	4198746	8.09E-05	8.63E-05	1.22E-05	1.29E-05	1.19E-05	1.15E-05	6.32E-06	5.23E-06
2482	648129.3	4198769	8.26E-05	8.81E-05	1.24E-05	1.32E-05	1.21E-05	1.18E-05	6.45E-06	5.34E-06
2483	647801.9	4198547	4.95E-05	5.28E-05	7.45E-06	7.92E-06	7.28E-06	7.06E-06	3.87E-06	3.20E-06
2484	647800.8	4198522	4.92E-05	5.24E-05	7.39E-06	7.86E-06	7.23E-06	7.00E-06	3.84E-06	3.18E-06
2485	647799.7	4198497	4.88E-05	5.2E-05	7.33E-06	7.80E-06	7.17E-06	6.95E-06	3.81E-06	3.15E-06
2486	647798.6	4198473	4.83E-05	5.15E-05	7.27E-06	7.73E-06	7.11E-06	6.89E-06	3.78E-06	3.12E-06
2487	647797.6	4198448	4.79E-05	5.11E-05	7.20E-06	7.66E-06	7.04E-06	6.82E-06	3.74E-06	3.09E-06
2488	647796.5	4198423	4.74E-05	5.05E-05	7.13E-06	7.58E-06	6.97E-06	6.75E-06	3.70E-06	3.06E-06
2489	647795.4	4198399	4.69E-05	5E-05	7.05E-06	7.49E-06	6.89E-06	6.68E-06	3.66E-06	3.03E-06
2490	647794.3	4198374	4.63E-05	4.94E-05	6.96E-06	7.40E-06	6.81E-06	6.60E-06	3.62E-06	2.99E-06
2491	647793.3	4198349	4.57E-05	4.87E-05	6.87E-06	7.30E-06	6.72E-06	6.51E-06	3.57E-06	2.95E-06
2492	647792.2	4198324	4.50E-05	4.8E-05	6.77E-06	7.20E-06	6.62E-06	6.42E-06	3.52E-06	2.91E-06
2493	647791.1	4198300	4.43E-05	4.72E-05	6.66E-06	7.08E-06	6.51E-06	6.31E-06	3.46E-06	2.86E-06
2494	647790	4198275	4.35E-05	4.64E-05	6.55E-06	6.96E-06	6.40E-06	6.21E-06	3.40E-06	2.81E-06
2495	647789	4198250	4.27E-05	4.56E-05	6.43E-06	6.83E-06	6.28E-06	6.09E-06	3.34E-06	2.76E-06
2496	647787.9	4198226	4.19E-05	4.47E-05	6.30E-06	6.70E-06	6.16E-06	5.97E-06	3.27E-06	2.71E-06
2497	647786.8	4198201	4.10E-05	4.37E-05	6.17E-06	6.56E-06	6.03E-06	5.85E-06	3.21E-06	2.65E-06
2498	647785.7	4198176	4.01E-05	4.28E-05	6.04E-06	6.42E-06	5.90E-06	5.72E-06	3.14E-06	2.59E-06
2499	647784.7	4198151	3.92E-05	4.18E-05	5.90E-06	6.27E-06	5.77E-06	5.59E-06	3.06E-06	2.53E-06
2500	647783.6	4198127	3.83E-05	4.08E-05	5.76E-06	6.12E-06	5.63E-06	5.46E-06	2.99E-06	2.48E-06
2501	647782.5	4198102	3.74E-05	3.99E-05	5.62E-06	5.98E-06	5.50E-06	5.33E-06	2.92E-06	2.42E-06
2502	647781.4	4198077	3.65E-05	3.89E-05	5.49E-06	5.84E-06	5.37E-06	5.20E-06	2.85E-06	2.36E-06
2503	647780.4	4198053	3.56E-05	3.8E-05	5.36E-06	5.70E-06	5.24E-06	5.08E-06	2.78E-06	2.30E-06
2504	647779.3	4198028	3.48E-05	3.71E-05	5.24E-06	5.57E-06	5.12E-06	4.96E-06	2.72E-06	2.25E-06
2505	647778.2	4198003	3.41E-05	3.63E-05	5.12E-06	5.45E-06	5.01E-06	4.86E-06	2.66E-06	2.20E-06
2506	647777.1	4197979	3.34E-05	3.56E-05	5.02E-06	5.34E-06	4.91E-06	4.76E-06	2.61E-06	2.16E-06
2507	647776	4197954	3.28E-05	3.49E-05	4.93E-06	5.24E-06	4.82E-06	4.67E-06	2.56E-06	2.12E-06
2508	647775	4197929	3.23E-05	3.44E-05	4.85E-06	5.16E-06	4.74E-06	4.60E-06	2.52E-06	2.08E-06
2509	647773.9	4197904	3.18E-05	3.39E-05	4.78E-06	5.08E-06	4.67E-06	4.53E-06	2.48E-06	2.05E-06
2510	647772.8	4197880	3.14E-05	3.35E-05	4.72E-06	5.02E-06	4.62E-06	4.47E-06	2.45E-06	2.03E-06
2511	647771.7	4197855	3.11E-05	3.31E-05	4.67E-06	4.96E-06	4.57E-06	4.43E-06	2.43E-06	2.01E-06
2512	647770.7	4197830	3.08E-05	3.28E-05	4.63E-06	4.92E-06	4.52E-06	4.38E-06	2.40E-06	1.99E-06
2513	647769.6	4197806	3.05E-05	3.25E-05	4.59E-06	4.88E-06	4.49E-06	4.35E-06	2.38E-06	1.97E-06
2514	647768.5	4197781	3.03E-05	3.23E-05	4.55E-06	4.84E-06	4.45E-06	4.31E-06	2.36E-06	1.96E-06
2515	647767.4	4197756	3.00E-05	3.2E-05	4.52E-06	4.80E-06	4.42E-06	4.28E-06	2.35E-06	1.94E-06
2516	647766.4	4197731	2.98E-05	3.18E-05	4.48E-06	4.76E-06	4.38E-06	4.25E-06	2.33E-06	1.93E-06

2517	647765.3	4197707	2.95E-05	3.15E-05	4.44E-06	4.72E-06	4.34E-06	4.21E-06	2.31E-06	1.91E-06
2518	647764.2	4197682	2.92E-05	3.12E-05	4.40E-06	4.67E-06	4.30E-06	4.17E-06	2.28E-06	1.89E-06
2519	647763.1	4197657	2.89E-05	3.08E-05	4.35E-06	4.62E-06	4.25E-06	4.12E-06	2.26E-06	1.87E-06
2520	647762.1	4197633	2.85E-05	3.04E-05	4.29E-06	4.56E-06	4.20E-06	4.07E-06	2.23E-06	1.84E-06
2521	647761	4197608	2.82E-05	3E-05	4.23E-06	4.50E-06	4.14E-06	4.01E-06	2.20E-06	1.82E-06
2522	647759.9	4197583	2.77E-05	2.96E-05	4.17E-06	4.43E-06	4.08E-06	3.95E-06	2.17E-06	1.79E-06
2523	647758.8	4197558	2.73E-05	2.91E-05	4.10E-06	4.36E-06	4.01E-06	3.89E-06	2.13E-06	1.76E-06
2524	647757.8	4197534	2.68E-05	2.86E-05	4.03E-06	4.29E-06	3.94E-06	3.82E-06	2.10E-06	1.73E-06
2525	647756.7	4197509	2.64E-05	2.81E-05	3.97E-06	4.22E-06	3.88E-06	3.76E-06	2.06E-06	1.70E-06
2526	647802.9	4198572	4.99E-05	5.32E-05	7.50E-06	7.97E-06	7.33E-06	7.11E-06	3.89E-06	3.22E-06
2527	647814.4	4198594	5.08E-05	5.42E-05	7.64E-06	8.13E-06	7.47E-06	7.24E-06	3.97E-06	3.28E-06
2528	647825.8	4198616	5.18E-05	5.52E-05	7.79E-06	8.28E-06	7.61E-06	7.38E-06	4.05E-06	3.35E-06
2529	647837.2	4198638	5.28E-05	5.63E-05	7.94E-06	8.44E-06	7.76E-06	7.52E-06	4.12E-06	3.41E-06
2530	647848.6	4198660	5.38E-05	5.73E-05	8.09E-06	8.60E-06	7.91E-06	7.67E-06	4.20E-06	3.48E-06
2531	647860.1	4198683	5.48E-05	5.85E-05	8.25E-06	8.77E-06	8.06E-06	7.82E-06	4.28E-06	3.54E-06
2532	647871.5	4198705	5.59E-05	5.96E-05	8.41E-06	8.94E-06	8.22E-06	7.97E-06	4.37E-06	3.61E-06
2533	647882.9	4198727	5.70E-05	6.08E-05	8.57E-06	9.12E-06	8.38E-06	8.13E-06	4.45E-06	3.68E-06
2534	647894.3	4198749	5.82E-05	6.2E-05	8.74E-06	9.30E-06	8.55E-06	8.29E-06	4.54E-06	3.76E-06
2535	647905.8	4198771	5.93E-05	6.32E-05	8.92E-06	9.48E-06	8.72E-06	8.45E-06	4.63E-06	3.83E-06
2536	647917.2	4198793	6.05E-05	6.45E-05	9.10E-06	9.67E-06	8.90E-06	8.62E-06	4.73E-06	3.91E-06
2537	647928.6	4198816	6.17E-05	6.58E-05	9.28E-06	9.87E-06	9.07E-06	8.80E-06	4.82E-06	3.99E-06
2538	647940	4198838	6.29E-05	6.71E-05	9.46E-06	1.01E-05	9.25E-06	8.97E-06	4.92E-06	4.07E-06
2539	647951.5	4198860	6.42E-05	6.84E-05	9.65E-06	1.03E-05	9.43E-06	9.14E-06	5.01E-06	4.15E-06
2540	647624.1	4198638	4.12E-05	4.39E-05	6.20E-06	6.59E-06	6.06E-06	5.87E-06	3.22E-06	2.66E-06
2541	647623	4198614	4.10E-05	4.37E-05	6.16E-06	6.55E-06	6.03E-06	5.84E-06	3.20E-06	2.65E-06
2542	647621.9	4198589	4.08E-05	4.34E-05	6.13E-06	6.52E-06	5.99E-06	5.81E-06	3.18E-06	2.63E-06
2543	647620.8	4198565	4.05E-05	4.32E-05	6.09E-06	6.48E-06	5.96E-06	5.77E-06	3.16E-06	2.62E-06
2544	647619.8	4198540	4.02E-05	4.29E-05	6.05E-06	6.43E-06	5.92E-06	5.73E-06	3.14E-06	2.60E-06
2545	647618.7	4198515	3.99E-05	4.26E-05	6.01E-06	6.39E-06	5.87E-06	5.69E-06	3.12E-06	2.58E-06
2546	647617.6	4198491	3.96E-05	4.22E-05	5.96E-06	6.34E-06	5.83E-06	5.65E-06	3.10E-06	2.56E-06
2547	647616.6	4198466	3.93E-05	4.19E-05	5.91E-06	6.28E-06	5.78E-06	5.60E-06	3.07E-06	2.54E-06
2548	647615.5	4198442	3.89E-05	4.15E-05	5.85E-06	6.22E-06	5.72E-06	5.55E-06	3.04E-06	2.52E-06
2549	647614.4	4198417	3.85E-05	4.1E-05	5.79E-06	6.16E-06	5.66E-06	5.49E-06	3.01E-06	2.49E-06
2550	647613.3	4198393	3.81E-05	4.06E-05	5.73E-06	6.09E-06	5.60E-06	5.43E-06	2.98E-06	2.46E-06
2551	647612.3	4198368	3.76E-05	4.01E-05	5.66E-06	6.02E-06	5.53E-06	5.36E-06	2.94E-06	2.43E-06
2552	647611.2	4198343	3.72E-05	3.96E-05	5.59E-06	5.94E-06	5.47E-06	5.30E-06	2.90E-06	2.40E-06
2553	647610.1	4198319	3.67E-05	3.91E-05	5.52E-06	5.86E-06	5.39E-06	5.23E-06	2.87E-06	2.37E-06
2554	647609.1	4198294	3.61E-05	3.85E-05	5.43E-06	5.78E-06	5.31E-06	5.15E-06	2.82E-06	2.34E-06
2555	647608	4198270	3.56E-05	3.79E-05	5.35E-06	5.69E-06	5.23E-06	5.07E-06	2.78E-06	2.30E-06
2556	647606.9	4198245	3.50E-05	3.73E-05	5.26E-06	5.59E-06	5.14E-06	4.98E-06	2.73E-06	2.26E-06
2557	647605.8	4198220	3.43E-05	3.66E-05	5.16E-06	5.49E-06	5.05E-06	4.89E-06	2.68E-06	2.22E-06
2558	647604.8	4198196	3.37E-05	3.59E-05	5.06E-06	5.38E-06	4.95E-06	4.80E-06	2.63E-06	2.18E-06
2559	647603.7	4198171	3.30E-05	3.52E-05	4.96E-06	5.27E-06	4.85E-06	4.70E-06	2.58E-06	2.13E-06
2560	647602.6	4198147	3.23E-05	3.44E-05	4.86E-06	5.16E-06	4.75E-06	4.60E-06	2.52E-06	2.09E-06
2561	647601.6	4198122	3.16E-05	3.37E-05	4.75E-06	5.05E-06	4.64E-06	4.50E-06	2.47E-06	2.04E-06
2562	647600.5	4198097	3.09E-05	3.29E-05	4.64E-06	4.94E-06	4.54E-06	4.40E-06	2.41E-06	2.00E-06
2563	647599.4	4198073	3.02E-05	3.22E-05	4.54E-06	4.83E-06	4.44E-06	4.30E-06	2.36E-06	1.95E-06
2564	647598.3	4198048	2.95E-05	3.15E-05	4.44E-06	4.72E-06	4.34E-06	4.21E-06	2.31E-06	1.91E-06
2565	647597.3	4198024	2.89E-05	3.08E-05	4.35E-06	4.63E-06	4.25E-06	4.12E-06	2.26E-06	1.87E-06
2566	647596.2	4197999	2.84E-05	3.02E-05	4.26E-06	4.53E-06	4.17E-06	4.04E-06	2.22E-06	1.83E-06
2567	647595.1	4197974	2.79E-05	2.97E-05	4.19E-06	4.45E-06	4.10E-06	3.97E-06	2.18E-06	1.80E-06
2568	647594.1	4197950	2.74E-05	2.92E-05	4.12E-06	4.38E-06	4.03E-06	3.90E-06	2.14E-06	1.77E-06
2569	647593	4197925	2.70E-05	2.88E-05	4.06E-06	4.31E-06	3.97E-06	3.84E-06	2.11E-06	1.74E-06
2570	647591.9	4197901	2.66E-05	2.84E-05	4.00E-06	4.25E-06	3.91E-06	3.79E-06	2.08E-06	1.72E-06
2571	647590.8	4197876	2.63E-05	2.81E-05	3.96E-06	4.21E-06	3.87E-06	3.75E-06	2.06E-06	1.70E-06
2572	647589.8	4197851	2.61E-05	2.78E-05	3.92E-06	4.17E-06	3.83E-06	3.72E-06	2.04E-06	1.68E-06

2573	647588.7	4197827	2.59E-05	2.76E-05	3.89E-06	4.13E-06	3.80E-06	3.69E-06	2.02E-06	1.67E-06
2574	647587.6	4197802	2.57E-05	2.74E-05	3.86E-06	4.11E-06	3.78E-06	3.66E-06	2.01E-06	1.66E-06
2575	647586.6	4197778	2.55E-05	2.72E-05	3.84E-06	4.08E-06	3.76E-06	3.64E-06	2.00E-06	1.65E-06
2576	647585.5	4197753	2.54E-05	2.71E-05	3.82E-06	4.06E-06	3.74E-06	3.62E-06	1.99E-06	1.64E-06
2577	647584.4	4197728	2.53E-05	2.69E-05	3.80E-06	4.04E-06	3.72E-06	3.60E-06	1.97E-06	1.63E-06
2578	647583.3	4197704	2.51E-05	2.68E-05	3.78E-06	4.02E-06	3.70E-06	3.58E-06	1.96E-06	1.62E-06
2579	647582.3	4197679	2.50E-05	2.66E-05	3.76E-06	3.99E-06	3.67E-06	3.56E-06	1.95E-06	1.61E-06
2580	647581.2	4197655	2.48E-05	2.64E-05	3.73E-06	3.96E-06	3.65E-06	3.53E-06	1.94E-06	1.60E-06
2581	647580.1	4197630	2.46E-05	2.62E-05	3.69E-06	3.93E-06	3.61E-06	3.50E-06	1.92E-06	1.59E-06
2582	647579.1	4197605	2.43E-05	2.59E-05	3.66E-06	3.89E-06	3.58E-06	3.47E-06	1.90E-06	1.57E-06
2583	647578	4197581	2.41E-05	2.56E-05	3.62E-06	3.85E-06	3.54E-06	3.43E-06	1.88E-06	1.55E-06
2584	647576.9	4197556	2.37E-05	2.53E-05	3.57E-06	3.80E-06	3.49E-06	3.38E-06	1.85E-06	1.53E-06
2585	647575.9	4197532	2.34E-05	2.5E-05	3.52E-06	3.74E-06	3.44E-06	3.34E-06	1.83E-06	1.51E-06
2586	647574.8	4197507	2.31E-05	2.46E-05	3.47E-06	3.69E-06	3.39E-06	3.29E-06	1.80E-06	1.49E-06
2587	647573.7	4197482	2.27E-05	2.42E-05	3.41E-06	3.63E-06	3.34E-06	3.24E-06	1.77E-06	1.47E-06
2588	647572.6	4197458	2.23E-05	2.38E-05	3.36E-06	3.57E-06	3.28E-06	3.18E-06	1.74E-06	1.44E-06
2589	647571.6	4197433	2.20E-05	2.34E-05	3.30E-06	3.51E-06	3.23E-06	3.13E-06	1.72E-06	1.42E-06
2590	647625.1	4198663	4.14E-05	4.42E-05	6.23E-06	6.62E-06	6.09E-06	5.90E-06	3.24E-06	2.68E-06
2591	647636.5	4198685	4.21E-05	4.49E-05	6.33E-06	6.73E-06	6.19E-06	6.00E-06	3.29E-06	2.72E-06
2592	647648	4198707	4.28E-05	4.56E-05	6.43E-06	6.84E-06	6.29E-06	6.09E-06	3.34E-06	2.76E-06
2593	647659.4	4198730	4.35E-05	4.63E-05	6.53E-06	6.95E-06	6.39E-06	6.19E-06	3.39E-06	2.81E-06
2594	647670.8	4198752	4.42E-05	4.71E-05	6.64E-06	7.06E-06	6.49E-06	6.29E-06	3.45E-06	2.85E-06
2595	647682.2	4198774	4.49E-05	4.79E-05	6.75E-06	7.18E-06	6.60E-06	6.40E-06	3.51E-06	2.90E-06
2596	647693.7	4198796	4.56E-05	4.87E-05	6.86E-06	7.30E-06	6.71E-06	6.51E-06	3.57E-06	2.95E-06
2597	647705.1	4198818	4.64E-05	4.95E-05	6.98E-06	7.43E-06	6.83E-06	6.62E-06	3.63E-06	3.00E-06
2598	647716.5	4198841	4.73E-05	5.04E-05	7.11E-06	7.55E-06	6.95E-06	6.73E-06	3.69E-06	3.05E-06
2599	647727.9	4198863	4.81E-05	5.13E-05	7.23E-06	7.69E-06	7.07E-06	6.85E-06	3.76E-06	3.11E-06
2600	647739.4	4198885	4.90E-05	5.22E-05	7.36E-06	7.83E-06	7.20E-06	6.98E-06	3.83E-06	3.16E-06
2601	647750.8	4198907	4.99E-05	5.32E-05	7.50E-06	7.97E-06	7.33E-06	7.11E-06	3.89E-06	3.22E-06
2602	647762.2	4198929	5.08E-05	5.41E-05	7.64E-06	8.12E-06	7.47E-06	7.24E-06	3.97E-06	3.28E-06
2603	647773.6	4198952	5.17E-05	5.51E-05	7.77E-06	8.26E-06	7.60E-06	7.37E-06	4.04E-06	3.34E-06
2604	649091.1	4198311	1.65E-03	0.001761	2.48E-04	2.64E-04	2.43E-04	2.35E-04	1.29E-04	1.07E-04
2605	649089.8	4198337	1.31E-03	0.001397	1.97E-04	2.10E-04	1.93E-04	1.87E-04	1.02E-04	8.47E-05
2606	649069.1	4198328	1.34E-03	0.001433	2.02E-04	2.15E-04	1.98E-04	1.92E-04	1.05E-04	8.69E-05
2607	649088.5	4198363	1.08E-03	0.001151	1.62E-04	1.73E-04	1.59E-04	1.54E-04	8.43E-05	6.98E-05
2608	649067.8	4198354	1.12E-03	0.001189	1.68E-04	1.78E-04	1.64E-04	1.59E-04	8.71E-05	7.21E-05
2609	649046.8	4198344	1.13E-03	0.001206	1.70E-04	1.81E-04	1.66E-04	1.61E-04	8.83E-05	7.31E-05
2610	649079.3	4198412	7.92E-04	0.000844	1.19E-04	1.27E-04	1.16E-04	1.13E-04	6.19E-05	5.12E-05
2611	649058.4	4198403	8.20E-04	0.000874	1.23E-04	1.31E-04	1.21E-04	1.17E-04	6.41E-05	5.30E-05
2612	649037.5	4198394	8.39E-04	0.000894	1.26E-04	1.34E-04	1.23E-04	1.19E-04	6.55E-05	5.42E-05
2613	649017	4198385	8.47E-04	0.000903	1.27E-04	1.35E-04	1.24E-04	1.21E-04	6.61E-05	5.47E-05
2614	649002.3	4198367	8.85E-04	0.000943	1.33E-04	1.41E-04	1.30E-04	1.26E-04	6.91E-05	5.72E-05
2615	649070.1	4198461	6.12E-04	0.000653	9.20E-05	9.79E-05	9.00E-05	8.72E-05	4.78E-05	3.96E-05
2616	649049.3	4198452	6.35E-04	0.000677	9.54E-05	1.01E-04	9.33E-05	9.05E-05	4.96E-05	4.10E-05
2617	649028.5	4198443	6.53E-04	0.000696	9.81E-05	1.04E-04	9.60E-05	9.30E-05	5.10E-05	4.22E-05
2618	649007.6	4198434	6.64E-04	0.000708	9.98E-05	1.06E-04	9.76E-05	9.46E-05	5.19E-05	4.29E-05
2619	648987.1	4198425	6.69E-04	0.000713	1.01E-04	1.07E-04	9.84E-05	9.54E-05	5.23E-05	4.32E-05
2620	648972	4198407	6.96E-04	0.000742	1.05E-04	1.11E-04	1.02E-04	9.91E-05	5.43E-05	4.50E-05
2621	648957.3	4198389	7.14E-04	0.000761	1.07E-04	1.14E-04	1.05E-04	1.02E-04	5.58E-05	4.61E-05
2622	649061	4198511	4.89E-04	0.000522	7.36E-05	7.82E-05	7.19E-05	6.97E-05	3.82E-05	3.16E-05
2623	649040.2	4198502	5.08E-04	0.000541	7.64E-05	8.12E-05	7.47E-05	7.24E-05	3.97E-05	3.28E-05
2624	649019.4	4198492	5.24E-04	0.000558	7.88E-05	8.37E-05	7.70E-05	7.47E-05	4.09E-05	3.39E-05
2625	648998.6	4198483	5.36E-04	0.000571	8.06E-05	8.57E-05	7.88E-05	7.64E-05	4.19E-05	3.46E-05
2626	648977.8	4198474	5.44E-04	0.00058	8.17E-05	8.69E-05	7.99E-05	7.75E-05	4.25E-05	3.51E-05
2627	648957.3	4198465	5.47E-04	0.000583	8.23E-05	8.75E-05	8.05E-05	7.80E-05	4.27E-05	3.54E-05
2628	648942.2	4198447	5.66E-04	0.000604	8.52E-05	9.05E-05	8.33E-05	8.07E-05	4.42E-05	3.66E-05

2629	648927.5	4198430	5.80E-04	0.000618	8.72E-05	9.27E-05	8.53E-05	8.26E-05	4.53E-05	3.75E-05
2630	648912.5	4198412	5.88E-04	0.000627	8.84E-05	9.40E-05	8.65E-05	8.38E-05	4.59E-05	3.80E-05
2631	649051.8	4198560	4.00E-04	0.000427	6.02E-05	6.40E-05	5.89E-05	5.70E-05	3.13E-05	2.59E-05
2632	649030.9	4198551	4.16E-04	0.000444	6.26E-05	6.65E-05	6.12E-05	5.93E-05	3.25E-05	2.69E-05
2633	649010	4198542	4.30E-04	0.000459	6.47E-05	6.88E-05	6.33E-05	6.13E-05	3.36E-05	2.78E-05
2634	648989.2	4198532	4.42E-04	0.000471	6.64E-05	7.06E-05	6.50E-05	6.30E-05	3.45E-05	2.86E-05
2635	648968.3	4198523	4.51E-04	0.00048	6.78E-05	7.20E-05	6.63E-05	6.42E-05	3.52E-05	2.91E-05
2636	648947.4	4198514	4.56E-04	0.000486	6.86E-05	7.29E-05	6.70E-05	6.50E-05	3.56E-05	2.95E-05
2637	648927	4198504	4.59E-04	0.000489	6.90E-05	7.34E-05	6.75E-05	6.54E-05	3.58E-05	2.97E-05
2638	648912.3	4198487	4.73E-04	0.000504	7.11E-05	7.56E-05	6.95E-05	6.74E-05	3.69E-05	3.06E-05
2639	648897.6	4198470	4.83E-04	0.000515	7.27E-05	7.73E-05	7.11E-05	6.89E-05	3.78E-05	3.12E-05
2640	648882.8	4198452	4.90E-04	0.000522	7.37E-05	7.83E-05	7.20E-05	6.98E-05	3.83E-05	3.17E-05
2641	648867.7	4198434	4.92E-04	0.000525	7.40E-05	7.87E-05	7.24E-05	7.01E-05	3.84E-05	3.18E-05
2642	649033.5	4198658	2.82E-04	0.0003	4.23E-05	4.50E-05	4.14E-05	4.01E-05	2.20E-05	1.82E-05
2643	649012.6	4198649	2.93E-04	0.000313	4.41E-05	4.69E-05	4.31E-05	4.18E-05	2.29E-05	1.90E-05
2644	648991.8	4198640	3.04E-04	0.000324	4.58E-05	4.86E-05	4.47E-05	4.34E-05	2.38E-05	1.97E-05
2645	648971	4198631	3.14E-04	0.000335	4.72E-05	5.02E-05	4.62E-05	4.48E-05	2.45E-05	2.03E-05
2646	648950.2	4198622	3.23E-04	0.000344	4.85E-05	5.16E-05	4.74E-05	4.60E-05	2.52E-05	2.08E-05
2647	648929.3	4198613	3.29E-04	0.000351	4.95E-05	5.27E-05	4.84E-05	4.69E-05	2.57E-05	2.13E-05
2648	648908.5	4198603	3.34E-04	0.000356	5.03E-05	5.34E-05	4.92E-05	4.76E-05	2.61E-05	2.16E-05
2649	648887.7	4198594	3.37E-04	0.00036	5.07E-05	5.39E-05	4.96E-05	4.81E-05	2.63E-05	2.18E-05
2650	648867.3	4198585	3.39E-04	0.000361	5.10E-05	5.42E-05	4.98E-05	4.83E-05	2.65E-05	2.19E-05
2651	648852.6	4198567	3.47E-04	0.00037	5.22E-05	5.55E-05	5.11E-05	4.95E-05	2.71E-05	2.25E-05
2652	648837.5	4198549	3.54E-04	0.000378	5.33E-05	5.66E-05	5.21E-05	5.05E-05	2.77E-05	2.29E-05
2653	648822.8	4198532	3.58E-04	0.000382	5.39E-05	5.73E-05	5.27E-05	5.11E-05	2.80E-05	2.32E-05
2654	648807.8	4198514	3.61E-04	0.000384	5.42E-05	5.76E-05	5.30E-05	5.14E-05	2.82E-05	2.33E-05
2655	648793.1	4198497	3.60E-04	0.000384	5.42E-05	5.76E-05	5.30E-05	5.13E-05	2.81E-05	2.33E-05
2656	648778.4	4198480	3.57E-04	0.000381	5.38E-05	5.71E-05	5.26E-05	5.09E-05	2.79E-05	2.31E-05
2657	649015.1	4198756	2.08E-04	0.000221	3.12E-05	3.32E-05	3.05E-05	2.96E-05	1.62E-05	1.34E-05
2658	648994.3	4198747	2.17E-04	0.000231	3.26E-05	3.46E-05	3.19E-05	3.09E-05	1.69E-05	1.40E-05
2659	648973.4	4198738	2.25E-04	0.00024	3.39E-05	3.60E-05	3.31E-05	3.21E-05	1.76E-05	1.46E-05
2660	648952.6	4198729	2.33E-04	0.000249	3.51E-05	3.73E-05	3.43E-05	3.33E-05	1.82E-05	1.51E-05
2661	648931.7	4198720	2.41E-04	0.000257	3.62E-05	3.85E-05	3.54E-05	3.43E-05	1.88E-05	1.56E-05
2662	648910.9	4198711	2.47E-04	0.000264	3.72E-05	3.95E-05	3.63E-05	3.52E-05	1.93E-05	1.60E-05
2663	648890	4198702	2.53E-04	0.000269	3.80E-05	4.04E-05	3.71E-05	3.60E-05	1.97E-05	1.63E-05
2664	648869.1	4198693	2.57E-04	0.000274	3.86E-05	4.11E-05	3.78E-05	3.66E-05	2.01E-05	1.66E-05
2665	648848.3	4198683	2.60E-04	0.000277	3.91E-05	4.16E-05	3.82E-05	3.70E-05	2.03E-05	1.68E-05
2666	648827.4	4198674	2.62E-04	0.000279	3.94E-05	4.18E-05	3.85E-05	3.73E-05	2.04E-05	1.69E-05
2667	648807.2	4198664	2.63E-04	0.00028	3.95E-05	4.20E-05	3.87E-05	3.75E-05	2.05E-05	1.70E-05
2668	648792.5	4198647	2.69E-04	0.000286	4.04E-05	4.29E-05	3.95E-05	3.83E-05	2.10E-05	1.74E-05
2669	648777.8	4198630	2.73E-04	0.000291	4.11E-05	4.36E-05	4.01E-05	3.89E-05	2.13E-05	1.76E-05
2670	648763.1	4198612	2.76E-04	0.000294	4.15E-05	4.41E-05	4.06E-05	3.93E-05	2.16E-05	1.78E-05
2671	648748.4	4198595	2.78E-04	0.000296	4.18E-05	4.44E-05	4.08E-05	3.96E-05	2.17E-05	1.80E-05
2672	648733.6	4198578	2.78E-04	0.000296	4.18E-05	4.44E-05	4.09E-05	3.96E-05	2.17E-05	1.80E-05
2673	648718.9	4198560	2.77E-04	0.000295	4.16E-05	4.43E-05	4.07E-05	3.94E-05	2.16E-05	1.79E-05
2674	648704.2	4198543	2.74E-04	0.000292	4.12E-05	4.38E-05	4.03E-05	3.91E-05	2.14E-05	1.77E-05
2675	648689.5	4198525	2.70E-04	0.000288	4.06E-05	4.32E-05	3.97E-05	3.85E-05	2.11E-05	1.75E-05
2676	648996.8	4198855	1.59E-04	0.000169	2.39E-05	2.54E-05	2.33E-05	2.26E-05	1.24E-05	1.02E-05
2677	648975.9	4198846	1.66E-04	0.000177	2.49E-05	2.65E-05	2.44E-05	2.36E-05	1.29E-05	1.07E-05
2678	648955.1	4198836	1.73E-04	0.000184	2.60E-05	2.76E-05	2.54E-05	2.46E-05	1.35E-05	1.12E-05
2679	648934.2	4198827	1.79E-04	0.000191	2.69E-05	2.86E-05	2.63E-05	2.55E-05	1.40E-05	1.16E-05
2680	648913.3	4198818	1.85E-04	0.000198	2.79E-05	2.96E-05	2.73E-05	2.64E-05	1.45E-05	1.20E-05
2681	648892.4	4198809	1.91E-04	0.000204	2.87E-05	3.05E-05	2.81E-05	2.72E-05	1.49E-05	1.23E-05
2682	648871.6	4198800	1.96E-04	0.000209	2.95E-05	3.13E-05	2.88E-05	2.79E-05	1.53E-05	1.27E-05
2683	648850.7	4198791	2.00E-04	0.000214	3.01E-05	3.20E-05	2.95E-05	2.86E-05	1.57E-05	1.30E-05
2684	648829.8	4198782	2.04E-04	0.000218	3.07E-05	3.26E-05	3.00E-05	2.91E-05	1.59E-05	1.32E-05

2685	648808.9	4198773	2.07E-04	0.000221	3.11E-05	3.31E-05	3.04E-05	2.95E-05	1.62E-05	1.34E-05
2686	648788.1	4198763	2.09E-04	0.000223	3.14E-05	3.34E-05	3.07E-05	2.98E-05	1.63E-05	1.35E-05
2687	648767.2	4198754	2.10E-04	0.000224	3.16E-05	3.36E-05	3.09E-05	3.00E-05	1.64E-05	1.36E-05
2688	648747.1	4198744	2.11E-04	0.000225	3.18E-05	3.38E-05	3.10E-05	3.01E-05	1.65E-05	1.36E-05
2689	648732.4	4198727	2.15E-04	0.000229	3.24E-05	3.44E-05	3.16E-05	3.07E-05	1.68E-05	1.39E-05
2690	648717.3	4198709	2.18E-04	0.000233	3.28E-05	3.49E-05	3.21E-05	3.11E-05	1.71E-05	1.41E-05
2691	648702.5	4198692	2.21E-04	0.000235	3.32E-05	3.53E-05	3.25E-05	3.15E-05	1.72E-05	1.43E-05
2692	648687.8	4198674	2.22E-04	0.000237	3.34E-05	3.55E-05	3.27E-05	3.17E-05	1.74E-05	1.44E-05
2693	648673.1	4198657	2.23E-04	0.000237	3.35E-05	3.56E-05	3.27E-05	3.17E-05	1.74E-05	1.44E-05
2694	648658.4	4198639	2.22E-04	0.000237	3.34E-05	3.55E-05	3.26E-05	3.16E-05	1.73E-05	1.43E-05
2695	648643.6	4198622	2.21E-04	0.000235	3.32E-05	3.53E-05	3.24E-05	3.14E-05	1.72E-05	1.42E-05
2696	648628.9	4198605	2.18E-04	0.000233	3.28E-05	3.49E-05	3.21E-05	3.11E-05	1.70E-05	1.41E-05
2697	648614.2	4198587	2.15E-04	0.000229	3.23E-05	3.43E-05	3.16E-05	3.06E-05	1.68E-05	1.39E-05
2698	648599.4	4198570	2.11E-04	0.000225	3.17E-05	3.37E-05	3.10E-05	3.00E-05	1.65E-05	1.36E-05
2699	648978.5	4198953	1.25E-04	0.000133	1.88E-05	1.99E-05	1.83E-05	1.78E-05	9.74E-06	8.06E-06
2700	648957.6	4198944	1.30E-04	0.000139	1.96E-05	2.08E-05	1.92E-05	1.86E-05	1.02E-05	8.42E-06
2701	648936.7	4198935	1.36E-04	0.000145	2.04E-05	2.17E-05	2.00E-05	1.94E-05	1.06E-05	8.78E-06
2702	648915.8	4198926	1.41E-04	0.000151	2.12E-05	2.26E-05	2.08E-05	2.01E-05	1.10E-05	9.12E-06
2703	648894.9	4198916	1.46E-04	0.000156	2.20E-05	2.34E-05	2.15E-05	2.08E-05	1.14E-05	9.45E-06
2704	648874	4198907	1.51E-04	0.000161	2.27E-05	2.42E-05	2.22E-05	2.15E-05	1.18E-05	9.77E-06
2705	648853.2	4198898	1.56E-04	0.000166	2.34E-05	2.49E-05	2.29E-05	2.22E-05	1.22E-05	1.01E-05
2706	648832.3	4198889	1.60E-04	0.00017	2.40E-05	2.55E-05	2.35E-05	2.27E-05	1.25E-05	1.03E-05
2707	648811.4	4198880	1.63E-04	0.000174	2.45E-05	2.61E-05	2.40E-05	2.33E-05	1.28E-05	1.05E-05
2708	648790.5	4198871	1.66E-04	0.000177	2.50E-05	2.66E-05	2.45E-05	2.37E-05	1.30E-05	1.07E-05
2709	648769.6	4198862	1.69E-04	0.00018	2.54E-05	2.70E-05	2.48E-05	2.41E-05	1.32E-05	1.09E-05
2710	648748.7	4198853	1.71E-04	0.000182	2.57E-05	2.73E-05	2.51E-05	2.44E-05	1.34E-05	1.10E-05
2711	648727.8	4198843	1.72E-04	0.000184	2.59E-05	2.76E-05	2.53E-05	2.46E-05	1.35E-05	1.11E-05
2712	648706.9	4198834	1.73E-04	0.000185	2.61E-05	2.77E-05	2.55E-05	2.47E-05	1.35E-05	1.12E-05
2713	648687	4198824	1.74E-04	0.000186	2.62E-05	2.78E-05	2.56E-05	2.48E-05	1.36E-05	1.13E-05
2714	648672.3	4198806	1.77E-04	0.000189	2.66E-05	2.83E-05	2.60E-05	2.52E-05	1.38E-05	1.14E-05
2715	648657.5	4198789	1.80E-04	0.000191	2.70E-05	2.87E-05	2.64E-05	2.56E-05	1.40E-05	1.16E-05
2716	648642.8	4198772	1.81E-04	0.000193	2.73E-05	2.90E-05	2.67E-05	2.58E-05	1.42E-05	1.17E-05
2717	648628.1	4198754	1.83E-04	0.000195	2.75E-05	2.92E-05	2.68E-05	2.60E-05	1.43E-05	1.18E-05
2718	648613.3	4198737	1.83E-04	0.000195	2.75E-05	2.93E-05	2.69E-05	2.61E-05	1.43E-05	1.18E-05
2719	648598.6	4198720	1.83E-04	0.000195	2.75E-05	2.93E-05	2.69E-05	2.61E-05	1.43E-05	1.18E-05
2720	648583.8	4198702	1.82E-04	0.000194	2.74E-05	2.91E-05	2.68E-05	2.60E-05	1.42E-05	1.18E-05
2721	648569.1	4198685	1.81E-04	0.000193	2.72E-05	2.89E-05	2.66E-05	2.58E-05	1.41E-05	1.17E-05
2722	648554.4	4198667	1.79E-04	0.000191	2.69E-05	2.86E-05	2.63E-05	2.55E-05	1.40E-05	1.16E-05
2723	648539.6	4198650	1.76E-04	0.000188	2.65E-05	2.82E-05	2.59E-05	2.51E-05	1.38E-05	1.14E-05
2724	648524.9	4198633	1.73E-04	0.000184	2.60E-05	2.76E-05	2.54E-05	2.46E-05	1.35E-05	1.12E-05
2725	648510.1	4198615	1.69E-04	0.00018	2.55E-05	2.71E-05	2.49E-05	2.41E-05	1.32E-05	1.09E-05
2726	648941.8	4199150	8.29E-05	8.84E-05	1.25E-05	1.33E-05	1.22E-05	1.18E-05	6.48E-06	5.36E-06
2727	648920.9	4199140	8.65E-05	9.22E-05	1.30E-05	1.38E-05	1.27E-05	1.23E-05	6.75E-06	5.59E-06
2728	648900.1	4199131	9.00E-05	9.6E-05	1.35E-05	1.44E-05	1.32E-05	1.28E-05	7.03E-06	5.82E-06
2729	648879.2	4199122	9.35E-05	9.97E-05	1.41E-05	1.50E-05	1.38E-05	1.33E-05	7.31E-06	6.04E-06
2730	648858.3	4199113	9.70E-05	0.000103	1.46E-05	1.55E-05	1.43E-05	1.38E-05	7.58E-06	6.27E-06
2731	648837.5	4199104	1.00E-04	0.000107	1.51E-05	1.60E-05	1.48E-05	1.43E-05	7.84E-06	6.49E-06
2732	648816.6	4199095	1.04E-04	0.00011	1.56E-05	1.66E-05	1.52E-05	1.48E-05	8.09E-06	6.69E-06
2733	648795.7	4199086	1.07E-04	0.000114	1.60E-05	1.71E-05	1.57E-05	1.52E-05	8.33E-06	6.89E-06
2734	648774.8	4199077	1.10E-04	0.000117	1.65E-05	1.75E-05	1.61E-05	1.56E-05	8.56E-06	7.08E-06
2735	648754	4199067	1.12E-04	0.00012	1.69E-05	1.79E-05	1.65E-05	1.60E-05	8.77E-06	7.25E-06
2736	648733.1	4199058	1.15E-04	0.000122	1.73E-05	1.83E-05	1.69E-05	1.63E-05	8.96E-06	7.41E-06
2737	648712.2	4199049	1.17E-04	0.000125	1.76E-05	1.87E-05	1.72E-05	1.67E-05	9.14E-06	7.56E-06
2738	648691.3	4199040	1.19E-04	0.000127	1.79E-05	1.90E-05	1.75E-05	1.70E-05	9.29E-06	7.69E-06
2739	648670.5	4199031	1.21E-04	0.000129	1.81E-05	1.93E-05	1.77E-05	1.72E-05	9.43E-06	7.80E-06
2740	648649.6	4199022	1.22E-04	0.00013	1.84E-05	1.95E-05	1.80E-05	1.74E-05	9.54E-06	7.89E-06

2741	648628.7	4199013	1.23E-04	0.000131	1.85E-05	1.97E-05	1.81E-05	1.76E-05	9.63E-06	7.97E-06
2742	648607.8	4199004	1.24E-04	0.000132	1.87E-05	1.99E-05	1.83E-05	1.77E-05	9.70E-06	8.02E-06
2743	648587	4198994	1.25E-04	0.000133	1.88E-05	1.99E-05	1.83E-05	1.78E-05	9.74E-06	8.06E-06
2744	648566.8	4198983	1.25E-04	0.000134	1.89E-05	2.01E-05	1.84E-05	1.79E-05	9.80E-06	8.11E-06
2745	648552.1	4198966	1.27E-04	0.000136	1.91E-05	2.04E-05	1.87E-05	1.81E-05	9.95E-06	8.23E-06
2746	648537.4	4198949	1.29E-04	0.000137	1.94E-05	2.06E-05	1.90E-05	1.84E-05	1.01E-05	8.33E-06
2747	648522.6	4198931	1.30E-04	0.000139	1.96E-05	2.08E-05	1.92E-05	1.86E-05	1.02E-05	8.42E-06
2748	648507.5	4198913	1.31E-04	0.00014	1.97E-05	2.10E-05	1.93E-05	1.87E-05	1.03E-05	8.48E-06
2749	648492.8	4198896	1.32E-04	0.000141	1.98E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.52E-06
2750	648478.1	4198879	1.32E-04	0.000141	1.99E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.54E-06
2751	648463.3	4198861	1.32E-04	0.000141	1.99E-05	2.11E-05	1.94E-05	1.88E-05	1.03E-05	8.53E-06
2752	648448.6	4198844	1.32E-04	0.00014	1.98E-05	2.10E-05	1.93E-05	1.87E-05	1.03E-05	8.50E-06
2753	648433.9	4198827	1.31E-04	0.000139	1.97E-05	2.09E-05	1.92E-05	1.86E-05	1.02E-05	8.45E-06
2754	648419.1	4198809	1.30E-04	0.000138	1.95E-05	2.07E-05	1.90E-05	1.85E-05	1.01E-05	8.37E-06
2755	648404.4	4198792	1.28E-04	0.000136	1.92E-05	2.05E-05	1.88E-05	1.82E-05	1.00E-05	8.27E-06
2756	648389.7	4198774	1.26E-04	0.000134	1.90E-05	2.02E-05	1.85E-05	1.80E-05	9.86E-06	8.15E-06
2757	648374.9	4198757	1.24E-04	0.000132	1.87E-05	1.98E-05	1.82E-05	1.77E-05	9.69E-06	8.02E-06
2758	648360.2	4198740	1.22E-04	0.00013	1.83E-05	1.95E-05	1.79E-05	1.73E-05	9.51E-06	7.86E-06
2759	648345.1	4198722	1.19E-04	0.000127	1.79E-05	1.90E-05	1.75E-05	1.70E-05	9.30E-06	7.69E-06
2760	648330.4	4198704	1.16E-04	0.000124	1.75E-05	1.86E-05	1.71E-05	1.66E-05	9.09E-06	7.52E-06
2761	648905.2	4199346	5.94E-05	6.34E-05	8.94E-06	9.50E-06	8.74E-06	8.47E-06	4.64E-06	3.84E-06
2762	648884.3	4199337	6.18E-05	6.59E-05	9.29E-06	9.88E-06	9.09E-06	8.81E-06	4.83E-06	3.99E-06
2763	648863.4	4199328	6.42E-05	6.84E-05	9.65E-06	1.03E-05	9.44E-06	9.15E-06	5.01E-06	4.15E-06
2764	648842.5	4199319	6.66E-05	7.1E-05	1.00E-05	1.06E-05	9.79E-06	9.49E-06	5.20E-06	4.30E-06
2765	648821.6	4199310	6.89E-05	7.35E-05	1.04E-05	1.10E-05	1.01E-05	9.82E-06	5.38E-06	4.45E-06
2766	648800.7	4199301	7.13E-05	7.6E-05	1.07E-05	1.14E-05	1.05E-05	1.02E-05	5.57E-06	4.60E-06
2767	648779.8	4199291	7.35E-05	7.84E-05	1.11E-05	1.18E-05	1.08E-05	1.05E-05	5.74E-06	4.75E-06
2768	648758.9	4199282	7.58E-05	8.08E-05	1.14E-05	1.21E-05	1.11E-05	1.08E-05	5.92E-06	4.90E-06
2769	648738	4199273	7.79E-05	8.31E-05	1.17E-05	1.25E-05	1.15E-05	1.11E-05	6.09E-06	5.03E-06
2770	648717.1	4199264	8.00E-05	8.52E-05	1.20E-05	1.28E-05	1.18E-05	1.14E-05	6.25E-06	5.17E-06
2771	648696.3	4199255	8.19E-05	8.73E-05	1.23E-05	1.31E-05	1.20E-05	1.17E-05	6.40E-06	5.29E-06
2772	648675.4	4199246	8.38E-05	8.93E-05	1.26E-05	1.34E-05	1.23E-05	1.19E-05	6.55E-06	5.41E-06
2773	648654.5	4199237	8.55E-05	9.12E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.68E-06	5.53E-06
2774	648633.6	4199228	8.72E-05	9.29E-05	1.31E-05	1.39E-05	1.28E-05	1.24E-05	6.81E-06	5.63E-06
2775	648612.7	4199218	8.86E-05	9.45E-05	1.33E-05	1.42E-05	1.30E-05	1.26E-05	6.92E-06	5.73E-06
2776	648591.8	4199209	9.00E-05	9.59E-05	1.35E-05	1.44E-05	1.32E-05	1.28E-05	7.03E-06	5.82E-06
2777	648570.9	4199200	9.12E-05	9.72E-05	1.37E-05	1.46E-05	1.34E-05	1.30E-05	7.13E-06	5.89E-06
2778	648550	4199191	9.23E-05	9.84E-05	1.39E-05	1.48E-05	1.36E-05	1.32E-05	7.21E-06	5.96E-06
2779	648529.1	4199182	9.32E-05	9.94E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.28E-06	6.02E-06
2780	648508.2	4199173	9.40E-05	0.0001	1.41E-05	1.50E-05	1.38E-05	1.34E-05	7.34E-06	6.07E-06
2781	648487.4	4199164	9.46E-05	0.000101	1.42E-05	1.51E-05	1.39E-05	1.35E-05	7.39E-06	6.11E-06
2782	648466.5	4199154	9.50E-05	0.000101	1.43E-05	1.52E-05	1.40E-05	1.35E-05	7.42E-06	6.14E-06
2783	648446.6	4199143	9.56E-05	0.000102	1.44E-05	1.53E-05	1.41E-05	1.36E-05	7.47E-06	6.18E-06
2784	648431.9	4199126	9.70E-05	0.000103	1.46E-05	1.55E-05	1.43E-05	1.38E-05	7.57E-06	6.27E-06
2785	648417.2	4199108	9.81E-05	0.000105	1.48E-05	1.57E-05	1.44E-05	1.40E-05	7.67E-06	6.34E-06
2786	648402.4	4199091	9.91E-05	0.000106	1.49E-05	1.58E-05	1.46E-05	1.41E-05	7.74E-06	6.41E-06
2787	648387.3	4199073	1.00E-04	0.000107	1.50E-05	1.60E-05	1.47E-05	1.42E-05	7.81E-06	6.46E-06
2788	648372.5	4199055	1.01E-04	0.000107	1.51E-05	1.61E-05	1.48E-05	1.43E-05	7.86E-06	6.50E-06
2789	648357.8	4199038	1.01E-04	0.000108	1.52E-05	1.61E-05	1.48E-05	1.44E-05	7.89E-06	6.52E-06
2790	648343.1	4199021	1.01E-04	0.000108	1.52E-05	1.62E-05	1.49E-05	1.44E-05	7.90E-06	6.54E-06
2791	648328.3	4199003	1.01E-04	0.000108	1.52E-05	1.62E-05	1.49E-05	1.44E-05	7.90E-06	6.53E-06
2792	648313.6	4198986	1.01E-04	0.000107	1.52E-05	1.61E-05	1.48E-05	1.44E-05	7.87E-06	6.51E-06
2793	648298.8	4198969	1.00E-04	0.000107	1.51E-05	1.60E-05	1.47E-05	1.43E-05	7.84E-06	6.48E-06
2794	648284.1	4198951	9.96E-05	0.000106	1.50E-05	1.59E-05	1.46E-05	1.42E-05	7.78E-06	6.44E-06
2795	648269.3	4198934	9.87E-05	0.000105	1.48E-05	1.58E-05	1.45E-05	1.41E-05	7.71E-06	6.38E-06
2796	648254.6	4198916	9.75E-05	0.000104	1.47E-05	1.56E-05	1.43E-05	1.39E-05	7.62E-06	6.30E-06

2797	648239.9	4198899	9.62E-05	0.000103	1.45E-05	1.54E-05	1.42E-05	1.37E-05	7.52E-06	6.22E-06
2798	648225.1	4198882	9.48E-05	0.000101	1.43E-05	1.52E-05	1.39E-05	1.35E-05	7.40E-06	6.12E-06
2799	648210.4	4198864	9.31E-05	9.93E-05	1.40E-05	1.49E-05	1.37E-05	1.33E-05	7.28E-06	6.02E-06
2800	648195.6	4198847	9.14E-05	9.74E-05	1.37E-05	1.46E-05	1.34E-05	1.30E-05	7.14E-06	5.91E-06
2801	648180.9	4198829	8.96E-05	9.55E-05	1.35E-05	1.43E-05	1.32E-05	1.28E-05	7.00E-06	5.79E-06
2802	648166.1	4198812	8.76E-05	9.34E-05	1.32E-05	1.40E-05	1.29E-05	1.25E-05	6.84E-06	5.66E-06
2803	648151.4	4198795	8.56E-05	9.13E-05	1.29E-05	1.37E-05	1.26E-05	1.22E-05	6.69E-06	5.53E-06
2804	648868.5	4199543	4.51E-05	4.81E-05	6.78E-06	7.21E-06	6.63E-06	6.43E-06	3.52E-06	2.91E-06
2805	648847.6	4199534	4.68E-05	4.98E-05	7.03E-06	7.48E-06	6.88E-06	6.66E-06	3.65E-06	3.02E-06
2806	648826.7	4199525	4.84E-05	5.16E-05	7.28E-06	7.74E-06	7.12E-06	6.90E-06	3.78E-06	3.13E-06
2807	648805.9	4199515	5.01E-05	5.34E-05	7.53E-06	8.01E-06	7.36E-06	7.14E-06	3.91E-06	3.24E-06
2808	648785	4199506	5.17E-05	5.52E-05	7.78E-06	8.27E-06	7.61E-06	7.37E-06	4.04E-06	3.34E-06
2809	648764.1	4199497	5.34E-05	5.69E-05	8.03E-06	8.54E-06	7.85E-06	7.61E-06	4.17E-06	3.45E-06
2810	648743.2	4199488	5.50E-05	5.87E-05	8.27E-06	8.80E-06	8.09E-06	7.84E-06	4.30E-06	3.56E-06
2811	648722.3	4199479	5.66E-05	6.04E-05	8.52E-06	9.05E-06	8.33E-06	8.07E-06	4.42E-06	3.66E-06
2812	648701.5	4199470	5.82E-05	6.21E-05	8.75E-06	9.31E-06	8.56E-06	8.30E-06	4.55E-06	3.76E-06
2813	648680.6	4199461	5.97E-05	6.37E-05	8.98E-06	9.55E-06	8.78E-06	8.51E-06	4.67E-06	3.86E-06
2814	648659.7	4199452	6.12E-05	6.53E-05	9.21E-06	9.79E-06	9.00E-06	8.73E-06	4.78E-06	3.96E-06
2815	648638.8	4199442	6.27E-05	6.68E-05	9.42E-06	1.00E-05	9.21E-06	8.93E-06	4.90E-06	4.05E-06
2816	648617.9	4199433	6.40E-05	6.83E-05	9.63E-06	1.02E-05	9.42E-06	9.13E-06	5.00E-06	4.14E-06
2817	648597.1	4199424	6.54E-05	6.97E-05	9.83E-06	1.05E-05	9.61E-06	9.32E-06	5.11E-06	4.22E-06
2818	648576.2	4199415	6.66E-05	7.1E-05	1.00E-05	1.07E-05	9.80E-06	9.50E-06	5.21E-06	4.31E-06
2819	648555.3	4199406	6.78E-05	7.23E-05	1.02E-05	1.08E-05	9.97E-06	9.67E-06	5.30E-06	4.38E-06
2820	648534.4	4199397	6.89E-05	7.35E-05	1.04E-05	1.10E-05	1.01E-05	9.82E-06	5.39E-06	4.45E-06
2821	648513.5	4199388	7.00E-05	7.46E-05	1.05E-05	1.12E-05	1.03E-05	9.97E-06	5.47E-06	4.52E-06
2822	648492.7	4199379	7.10E-05	7.56E-05	1.07E-05	1.13E-05	1.04E-05	1.01E-05	5.54E-06	4.59E-06
2823	648471.8	4199369	7.19E-05	7.66E-05	1.08E-05	1.15E-05	1.06E-05	1.02E-05	5.61E-06	4.64E-06
2824	648450.9	4199360	7.27E-05	7.75E-05	1.09E-05	1.16E-05	1.07E-05	1.04E-05	5.68E-06	4.70E-06
2825	648430	4199351	7.34E-05	7.82E-05	1.10E-05	1.17E-05	1.08E-05	1.05E-05	5.73E-06	4.74E-06
2826	648409.1	4199342	7.40E-05	7.89E-05	1.11E-05	1.18E-05	1.09E-05	1.06E-05	5.78E-06	4.78E-06
2827	648388.2	4199333	7.46E-05	7.95E-05	1.12E-05	1.19E-05	1.10E-05	1.06E-05	5.83E-06	4.82E-06
2828	648367.4	4199324	7.50E-05	8E-05	1.13E-05	1.20E-05	1.10E-05	1.07E-05	5.86E-06	4.85E-06
2829	648346.5	4199315	7.54E-05	8.04E-05	1.13E-05	1.21E-05	1.11E-05	1.07E-05	5.89E-06	4.87E-06
2830	648326.8	4199303	7.59E-05	8.09E-05	1.14E-05	1.21E-05	1.12E-05	1.08E-05	5.93E-06	4.91E-06
2831	648312.1	4199285	7.69E-05	8.2E-05	1.16E-05	1.23E-05	1.13E-05	1.10E-05	6.01E-06	4.97E-06
2832	648297.4	4199268	7.78E-05	8.3E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.08E-06	5.03E-06
2833	648282.6	4199251	7.86E-05	8.38E-05	1.18E-05	1.26E-05	1.16E-05	1.12E-05	6.14E-06	5.08E-06
2834	648267.9	4199233	7.93E-05	8.45E-05	1.19E-05	1.27E-05	1.17E-05	1.13E-05	6.19E-06	5.12E-06
2835	648253.2	4199216	7.98E-05	8.51E-05	1.20E-05	1.28E-05	1.17E-05	1.14E-05	6.24E-06	5.16E-06
2836	648238.4	4199199	8.03E-05	8.56E-05	1.21E-05	1.28E-05	1.18E-05	1.14E-05	6.27E-06	5.19E-06
2837	648223.7	4199181	8.06E-05	8.59E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.29E-06	5.21E-06
2838	648208.9	4199164	8.07E-05	8.6E-05	1.21E-05	1.29E-05	1.19E-05	1.15E-05	6.30E-06	5.22E-06
2839	648194.2	4199146	8.07E-05	8.6E-05	1.21E-05	1.29E-05	1.19E-05	1.15E-05	6.31E-06	5.22E-06
2840	648179.5	4199129	8.06E-05	8.59E-05	1.21E-05	1.29E-05	1.18E-05	1.15E-05	6.29E-06	5.21E-06
2841	648164.7	4199112	8.03E-05	8.56E-05	1.21E-05	1.28E-05	1.18E-05	1.14E-05	6.27E-06	5.19E-06
2842	648150	4199094	7.98E-05	8.51E-05	1.20E-05	1.28E-05	1.17E-05	1.14E-05	6.24E-06	5.16E-06
2843	648135.3	4199077	7.93E-05	8.45E-05	1.19E-05	1.27E-05	1.17E-05	1.13E-05	6.19E-06	5.12E-06
2844	648120.5	4199060	7.86E-05	8.38E-05	1.18E-05	1.26E-05	1.16E-05	1.12E-05	6.14E-06	5.08E-06
2845	648105.8	4199042	7.77E-05	8.29E-05	1.17E-05	1.24E-05	1.14E-05	1.11E-05	6.07E-06	5.02E-06
2846	648091.1	4199025	7.68E-05	8.19E-05	1.15E-05	1.23E-05	1.13E-05	1.09E-05	6.00E-06	4.96E-06
2847	648076.3	4199007	7.57E-05	8.07E-05	1.14E-05	1.21E-05	1.11E-05	1.08E-05	5.92E-06	4.89E-06
2848	648061.6	4198990	7.46E-05	7.95E-05	1.12E-05	1.19E-05	1.10E-05	1.06E-05	5.83E-06	4.82E-06
2849	648046.9	4198973	7.33E-05	7.82E-05	1.10E-05	1.17E-05	1.08E-05	1.05E-05	5.73E-06	4.74E-06
2850	648032.1	4198955	7.20E-05	7.68E-05	1.08E-05	1.15E-05	1.06E-05	1.03E-05	5.63E-06	4.65E-06
2851	648017.4	4198938	7.07E-05	7.53E-05	1.06E-05	1.13E-05	1.04E-05	1.01E-05	5.52E-06	4.57E-06
2852	648002.6	4198920	6.92E-05	7.38E-05	1.04E-05	1.11E-05	1.02E-05	9.87E-06	5.41E-06	4.47E-06

2853	647987.9	4198903	6.78E-05	7.23E-05	1.02E-05	1.08E-05	9.97E-06	9.66E-06	5.29E-06	4.38E-06
2854	647973.2	4198886	6.63E-05	7.07E-05	9.97E-06	1.06E-05	9.75E-06	9.45E-06	5.18E-06	4.29E-06
2855	648831.9	4199739	3.57E-05	3.81E-05	5.38E-06	5.72E-06	5.26E-06	5.09E-06	2.79E-06	2.31E-06
2856	648811	4199730	3.70E-05	3.94E-05	5.56E-06	5.91E-06	5.43E-06	5.27E-06	2.89E-06	2.39E-06
2857	648790.1	4199721	3.82E-05	4.07E-05	5.74E-06	6.10E-06	5.61E-06	5.44E-06	2.98E-06	2.47E-06
2858	648769.2	4199712	3.94E-05	4.2E-05	5.92E-06	6.29E-06	5.79E-06	5.61E-06	3.07E-06	2.54E-06
2859	648748.3	4199703	4.06E-05	4.33E-05	6.10E-06	6.49E-06	5.97E-06	5.78E-06	3.17E-06	2.62E-06
2860	648727.4	4199694	4.18E-05	4.45E-05	6.28E-06	6.68E-06	6.14E-06	5.95E-06	3.26E-06	2.70E-06
2861	648706.5	4199685	4.30E-05	4.58E-05	6.46E-06	6.87E-06	6.32E-06	6.13E-06	3.36E-06	2.78E-06
2862	648685.6	4199676	4.42E-05	4.71E-05	6.64E-06	7.06E-06	6.49E-06	6.29E-06	3.45E-06	2.85E-06
2863	648664.7	4199666	4.53E-05	4.83E-05	6.82E-06	7.25E-06	6.67E-06	6.46E-06	3.54E-06	2.93E-06
2864	648643.8	4199657	4.65E-05	4.96E-05	6.99E-06	7.43E-06	6.84E-06	6.63E-06	3.63E-06	3.00E-06
2865	648622.9	4199648	4.76E-05	5.08E-05	7.16E-06	7.61E-06	7.00E-06	6.79E-06	3.72E-06	3.08E-06
2866	648602	4199639	4.87E-05	5.19E-05	7.33E-06	7.79E-06	7.16E-06	6.94E-06	3.81E-06	3.15E-06
2867	648581.1	4199630	4.98E-05	5.31E-05	7.49E-06	7.96E-06	7.32E-06	7.09E-06	3.89E-06	3.22E-06
2868	648560.3	4199621	5.08E-05	5.42E-05	7.64E-06	8.13E-06	7.47E-06	7.24E-06	3.97E-06	3.29E-06
2869	648539.4	4199612	5.18E-05	5.53E-05	7.79E-06	8.29E-06	7.62E-06	7.39E-06	4.05E-06	3.35E-06
2870	648518.5	4199602	5.28E-05	5.63E-05	7.94E-06	8.44E-06	7.76E-06	7.53E-06	4.13E-06	3.41E-06
2871	648497.6	4199593	5.37E-05	5.73E-05	8.08E-06	8.59E-06	7.90E-06	7.66E-06	4.20E-06	3.47E-06
2872	648476.7	4199584	5.46E-05	5.82E-05	8.21E-06	8.73E-06	8.03E-06	7.79E-06	4.27E-06	3.53E-06
2873	648455.8	4199575	5.55E-05	5.91E-05	8.34E-06	8.87E-06	8.16E-06	7.91E-06	4.33E-06	3.58E-06
2874	648434.9	4199566	5.63E-05	6E-05	8.46E-06	9.00E-06	8.28E-06	8.02E-06	4.40E-06	3.64E-06
2875	648414	4199557	5.71E-05	6.08E-05	8.58E-06	9.12E-06	8.39E-06	8.13E-06	4.46E-06	3.69E-06
2876	648393.1	4199548	5.78E-05	6.16E-05	8.69E-06	9.24E-06	8.49E-06	8.23E-06	4.51E-06	3.73E-06
2877	648372.2	4199539	5.84E-05	6.23E-05	8.79E-06	9.34E-06	8.59E-06	8.33E-06	4.56E-06	3.78E-06
2878	648351.3	4199529	5.91E-05	6.3E-05	8.88E-06	9.44E-06	8.69E-06	8.42E-06	4.61E-06	3.82E-06
2879	648330.4	4199520	5.97E-05	6.36E-05	8.97E-06	9.54E-06	8.77E-06	8.50E-06	4.66E-06	3.86E-06
2880	648309.5	4199511	6.02E-05	6.42E-05	9.05E-06	9.62E-06	8.85E-06	8.58E-06	4.70E-06	3.89E-06
2881	648288.6	4199502	6.06E-05	6.47E-05	9.12E-06	9.70E-06	8.92E-06	8.64E-06	4.74E-06	3.92E-06
2882	648267.8	4199493	6.11E-05	6.51E-05	9.18E-06	9.76E-06	8.98E-06	8.70E-06	4.77E-06	3.95E-06
2883	648246.9	4199484	6.14E-05	6.55E-05	9.24E-06	9.82E-06	9.03E-06	8.75E-06	4.80E-06	3.97E-06
2884	648226	4199475	6.17E-05	6.58E-05	9.28E-06	9.87E-06	9.07E-06	8.80E-06	4.82E-06	3.99E-06
2885	648206.6	4199462	6.22E-05	6.63E-05	9.35E-06	9.94E-06	9.14E-06	8.86E-06	4.86E-06	4.02E-06
2886	648191.9	4199445	6.30E-05	6.71E-05	9.47E-06	1.01E-05	9.26E-06	8.97E-06	4.92E-06	4.07E-06
2887	648177.1	4199428	6.37E-05	6.79E-05	9.57E-06	1.02E-05	9.36E-06	9.07E-06	4.97E-06	4.11E-06
2888	648162.4	4199410	6.43E-05	6.85E-05	9.67E-06	1.03E-05	9.45E-06	9.16E-06	5.02E-06	4.15E-06
2889	648147.7	4199393	6.49E-05	6.91E-05	9.75E-06	1.04E-05	9.54E-06	9.24E-06	5.07E-06	4.19E-06
2890	648132.9	4199375	6.53E-05	6.97E-05	9.83E-06	1.04E-05	9.61E-06	9.31E-06	5.10E-06	4.22E-06
2891	648118.2	4199358	6.57E-05	7.01E-05	9.89E-06	1.05E-05	9.67E-06	9.37E-06	5.14E-06	4.25E-06
2892	648103.4	4199341	6.61E-05	7.04E-05	9.93E-06	1.06E-05	9.71E-06	9.41E-06	5.16E-06	4.27E-06
2893	648088.7	4199323	6.63E-05	7.07E-05	9.97E-06	1.06E-05	9.75E-06	9.45E-06	5.18E-06	4.28E-06
2894	648073.9	4199306	6.64E-05	7.08E-05	9.99E-06	1.06E-05	9.77E-06	9.47E-06	5.19E-06	4.29E-06
2895	648059.2	4199288	6.65E-05	7.08E-05	9.99E-06	1.06E-05	9.77E-06	9.47E-06	5.19E-06	4.29E-06
2896	648044.5	4199271	6.64E-05	7.08E-05	9.98E-06	1.06E-05	9.76E-06	9.46E-06	5.19E-06	4.29E-06
2897	648029.7	4199254	6.62E-05	7.06E-05	9.96E-06	1.06E-05	9.74E-06	9.44E-06	5.17E-06	4.28E-06
2898	648015	4199236	6.60E-05	7.03E-05	9.92E-06	1.05E-05	9.70E-06	9.40E-06	5.15E-06	4.26E-06
2899	648000.2	4199219	6.56E-05	6.99E-05	9.86E-06	1.05E-05	9.64E-06	9.35E-06	5.12E-06	4.24E-06
2900	647985.5	4199201	6.51E-05	6.94E-05	9.79E-06	1.04E-05	9.58E-06	9.28E-06	5.09E-06	4.21E-06
2901	647970.7	4199184	6.46E-05	6.88E-05	9.71E-06	1.03E-05	9.49E-06	9.20E-06	5.04E-06	4.17E-06
2902	647956	4199167	6.39E-05	6.82E-05	9.62E-06	1.02E-05	9.40E-06	9.11E-06	5.00E-06	4.13E-06
2903	647941.2	4199149	6.32E-05	6.74E-05	9.51E-06	1.01E-05	9.30E-06	9.01E-06	4.94E-06	4.09E-06
2904	647926.5	4199132	6.24E-05	6.66E-05	9.39E-06	9.98E-06	9.18E-06	8.90E-06	4.88E-06	4.03E-06
2905	647911.8	4199115	6.16E-05	6.56E-05	9.26E-06	9.84E-06	9.05E-06	8.77E-06	4.81E-06	3.98E-06
2906	647897	4199097	6.06E-05	6.47E-05	9.12E-06	9.70E-06	8.92E-06	8.64E-06	4.74E-06	3.92E-06
2907	647882.3	4199080	5.97E-05	6.36E-05	8.97E-06	9.54E-06	8.77E-06	8.50E-06	4.66E-06	3.86E-06
2908	647867.5	4199062	5.86E-05	6.25E-05	8.82E-06	9.38E-06	8.62E-06	8.36E-06	4.58E-06	3.79E-06

2909	647852.8	4199045	5.76E-05	6.14E-05	8.66E-06	9.21E-06	8.47E-06	8.21E-06	4.50E-06	3.72E-06
2910	647838	4199028	5.65E-05	6.02E-05	8.50E-06	9.03E-06	8.31E-06	8.05E-06	4.41E-06	3.65E-06
2911	647823.3	4199010	5.54E-05	5.91E-05	8.33E-06	8.86E-06	8.15E-06	7.90E-06	4.33E-06	3.58E-06
2912	647808.6	4198993	5.43E-05	5.79E-05	8.17E-06	8.68E-06	7.99E-06	7.74E-06	4.24E-06	3.51E-06
2913	647793.8	4198975	5.32E-05	5.67E-05	8.00E-06	8.51E-06	7.82E-06	7.58E-06	4.16E-06	3.44E-06
2914	649078.4	4198562	3.94E-04	0.00042	5.92E-05	6.29E-05	5.79E-05	5.61E-05	3.08E-05	2.54E-05
2915	649075.3	4198661	2.71E-04	0.000289	4.07E-05	4.33E-05	3.98E-05	3.86E-05	2.12E-05	1.75E-05
2916	649076.5	4198760	1.93E-04	0.000206	2.91E-05	3.09E-05	2.84E-05	2.75E-05	1.51E-05	1.25E-05
2917	649049.7	4198759	2.00E-04	0.000213	3.01E-05	3.20E-05	2.94E-05	2.85E-05	1.56E-05	1.29E-05
2918	649070.9	4198859	1.44E-04	0.000153	2.16E-05	2.30E-05	2.12E-05	2.05E-05	1.12E-05	9.30E-06
2919	649044.4	4198858	1.49E-04	0.000159	2.25E-05	2.39E-05	2.20E-05	2.13E-05	1.17E-05	9.65E-06
2920	649068.6	4198958	1.10E-04	0.000117	1.65E-05	1.76E-05	1.62E-05	1.57E-05	8.58E-06	7.10E-06
2921	649041.2	4198957	1.15E-04	0.000122	1.72E-05	1.83E-05	1.68E-05	1.63E-05	8.95E-06	7.40E-06
2922	649013.8	4198955	1.19E-04	0.000127	1.79E-05	1.90E-05	1.75E-05	1.70E-05	9.30E-06	7.70E-06
2923	649064.1	4199157	6.94E-05	7.4E-05	1.04E-05	1.11E-05	1.02E-05	9.89E-06	5.42E-06	4.48E-06
2924	649037.2	4199155	7.24E-05	7.71E-05	1.09E-05	1.16E-05	1.06E-05	1.03E-05	5.65E-06	4.68E-06
2925	649010.3	4199154	7.54E-05	8.04E-05	1.13E-05	1.21E-05	1.11E-05	1.07E-05	5.89E-06	4.87E-06
2926	648983.3	4199152	7.84E-05	8.35E-05	1.18E-05	1.25E-05	1.15E-05	1.12E-05	6.12E-06	5.06E-06
2927	649063.2	4199355	4.75E-05	5.07E-05	7.14E-06	7.60E-06	6.99E-06	6.77E-06	3.71E-06	3.07E-06
2928	649035.9	4199354	4.95E-05	5.28E-05	7.45E-06	7.92E-06	7.28E-06	7.06E-06	3.87E-06	3.20E-06
2929	649008.6	4199352	5.16E-05	5.5E-05	7.76E-06	8.25E-06	7.58E-06	7.35E-06	4.03E-06	3.33E-06
2930	648981.3	4199351	5.37E-05	5.72E-05	8.07E-06	8.58E-06	7.89E-06	7.65E-06	4.19E-06	3.47E-06
2931	648954	4199349	5.57E-05	5.94E-05	8.38E-06	8.91E-06	8.20E-06	7.94E-06	4.35E-06	3.60E-06
2932	649055.5	4199554	3.51E-05	3.74E-05	5.28E-06	5.61E-06	5.16E-06	5.00E-06	2.74E-06	2.27E-06
2933	649028	4199552	3.65E-05	3.89E-05	5.49E-06	5.84E-06	5.37E-06	5.21E-06	2.85E-06	2.36E-06
2934	649000.5	4199551	3.80E-05	4.05E-05	5.71E-06	6.07E-06	5.58E-06	5.41E-06	2.97E-06	2.45E-06
2935	648972.9	4199549	3.94E-05	4.21E-05	5.93E-06	6.31E-06	5.80E-06	5.62E-06	3.08E-06	2.55E-06
2936	648945.4	4199547	4.09E-05	4.36E-05	6.16E-06	6.54E-06	6.02E-06	5.83E-06	3.20E-06	2.65E-06
2937	648917.8	4199546	4.24E-05	4.52E-05	6.38E-06	6.79E-06	6.24E-06	6.05E-06	3.32E-06	2.74E-06
2938	649050.9	4199752	2.72E-05	2.9E-05	4.08E-06	4.34E-06	3.99E-06	3.87E-06	2.12E-06	1.75E-06
2939	649023.7	4199751	2.82E-05	3E-05	4.23E-06	4.50E-06	4.14E-06	4.01E-06	2.20E-06	1.82E-06
2940	648996.4	4199749	2.92E-05	3.11E-05	4.39E-06	4.66E-06	4.29E-06	4.16E-06	2.28E-06	1.89E-06
2941	648969.2	4199748	3.02E-05	3.22E-05	4.55E-06	4.83E-06	4.45E-06	4.31E-06	2.36E-06	1.95E-06
2942	648941.9	4199746	3.13E-05	3.34E-05	4.71E-06	5.01E-06	4.61E-06	4.46E-06	2.45E-06	2.02E-06
2943	648914.7	4199744	3.24E-05	3.45E-05	4.87E-06	5.18E-06	4.77E-06	4.62E-06	2.53E-06	2.09E-06
2944	648887.5	4199743	3.35E-05	3.57E-05	5.04E-06	5.36E-06	4.93E-06	4.77E-06	2.62E-06	2.17E-06
2945	648860.2	4199741	3.46E-05	3.69E-05	5.20E-06	5.53E-06	5.09E-06	4.93E-06	2.70E-06	2.24E-06

EXHIBIT 1

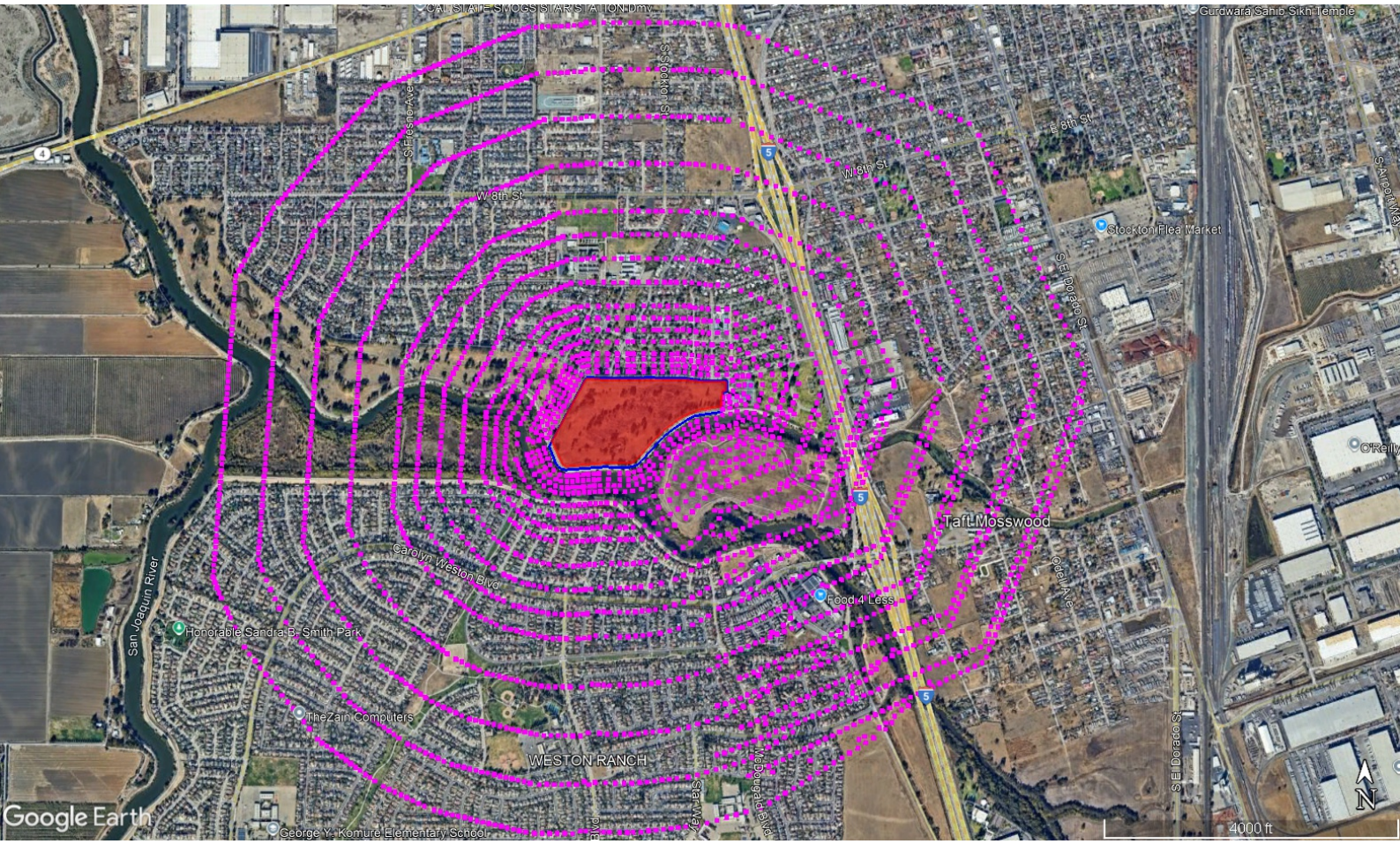

Gurdwara Sahib Sikh Temple
S Stockton St
W 8th St
E 8th St
Stockton Flea Market
S El Dorado St
Taft Mosswood
Carolyn Weston Blvd
Food 4 Less
San Joaquin River
Honorable Sandra B. Smith Park
TheZain Computers
WESTON RANCH
George Y. Komure Elementary School
Google Earth
4000 ft
N

EXHIBIT 1

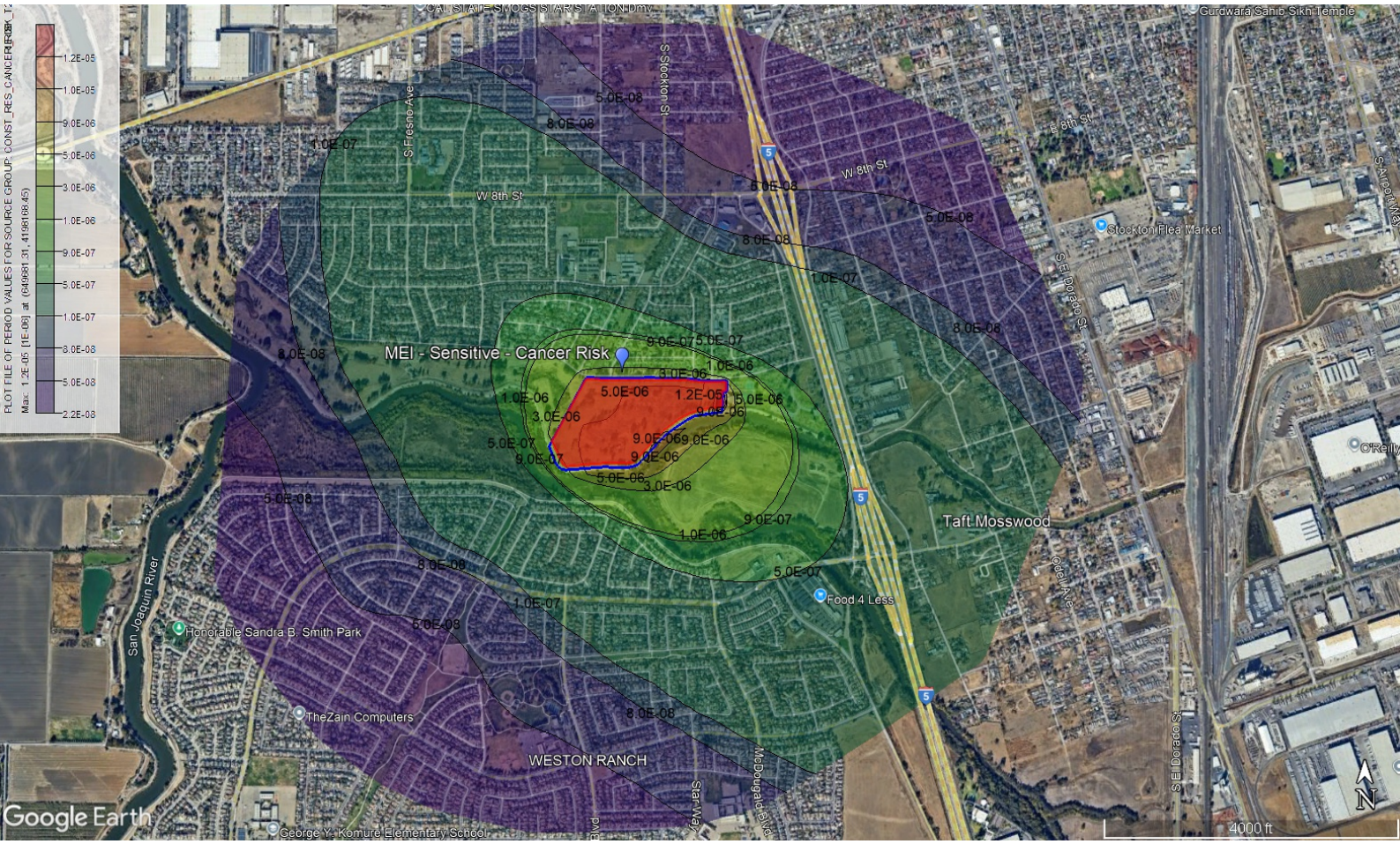

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_RES_CANCER_RISK_T2
Max: 1.2E-05 [1E-06] at (649661.31, 4196168.45)
1.2E-05
1.0E-05
9.0E-06
5.0E-06
3.0E-06
1.0E-06
9.0E-07
5.0E-07
1.0E-07
8.0E-08
5.0E-08
2.2E-08
MEI - Sensitive - Cancer Risk
Gurdwara Sahib Sikh Temple
Stockton Flea Market
Taft Mosswood
Food 4 Less
Honorable Sandra B. Smith Park
San Joaquin River
TheZain Computers
WESTON RANCH
George Y. Komure Elementary School
W 8th St
E 8th St
S Stockton St
S Fresno Ave
S El Dorado St
Lodi Ave
McDougald Blvd
Star Way
O'Reilly
Google Earth
4000 ft
N

EXHIBIT 1

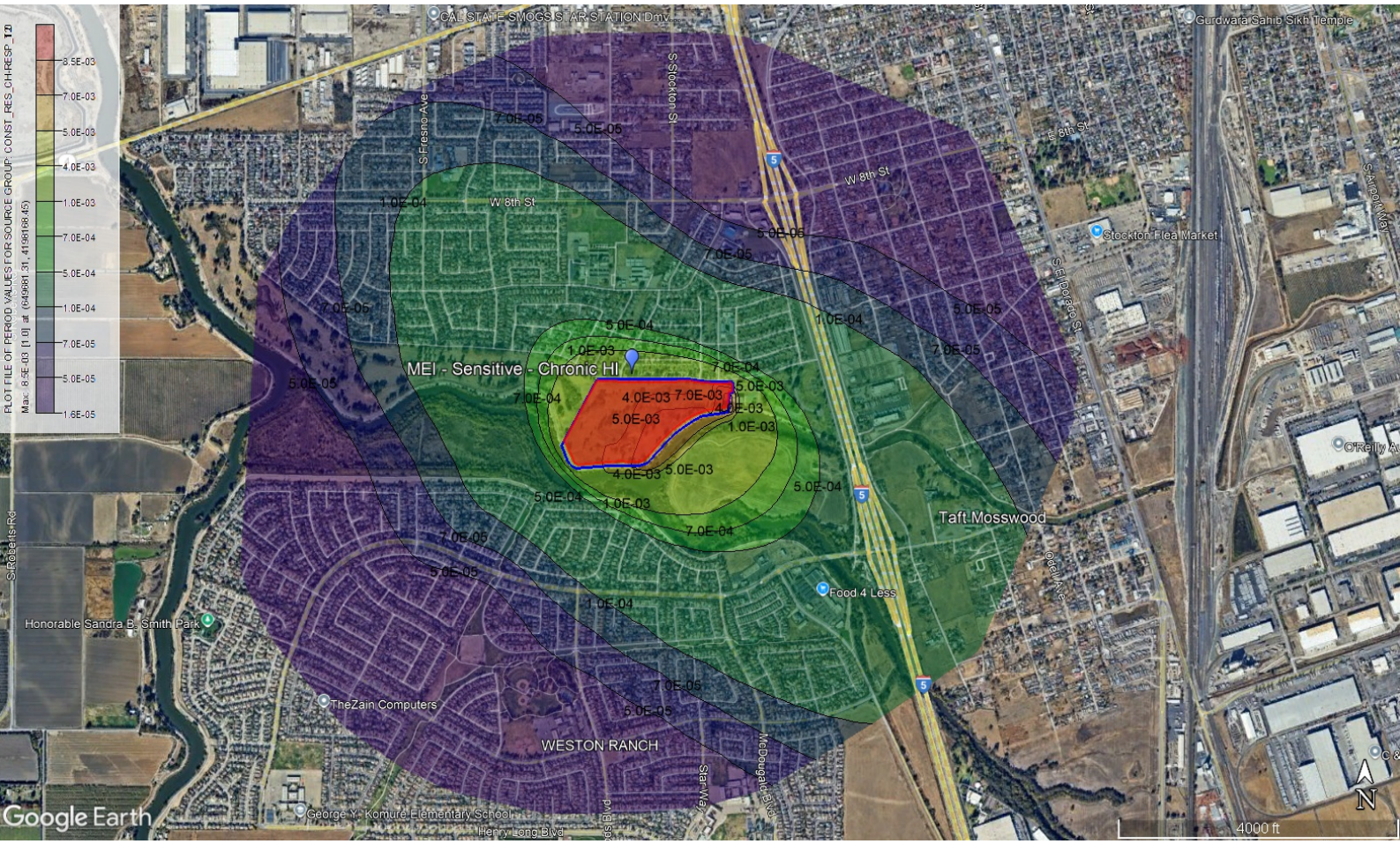

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_RES_CH+RESP_12
Max: 8.5E-03 [1.0] at (649681.31, 4196168.45)
8.5E-03
7.0E-03
5.0E-03
4.0E-03
1.0E-03
7.0E-04
5.0E-04
1.0E-04
7.0E-05
5.0E-05
1.6E-05
CALSTATE SMOOS STAR STATION Dmv
Gurdwara Sahib Sikh Temple
S Fresno Ave
S Stockton St
W 8th St
W 6th St
Stockton Flea Market
S Airport Way
MEI - Sensitive - Chronic HI
Taft Mosswood
Food 4 Less
Honorable Sandra B. Smith Park
TheZain Computers
WESTON RANCH
George Y. Komure Elementary School
Henry Long Blvd
Star Way
McDougald Blvd
Google Earth
4000 ft
N

EXHIBIT 1

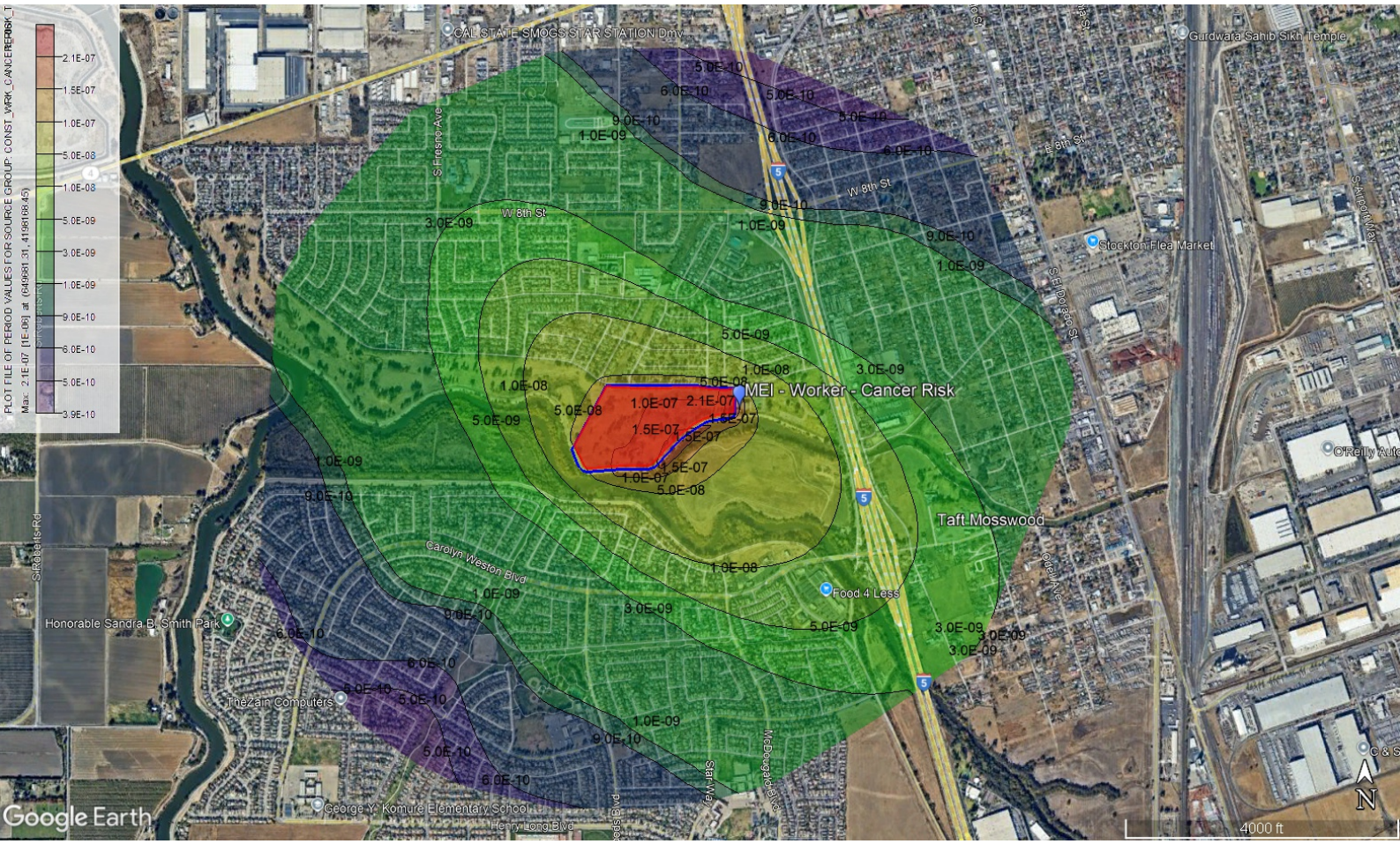

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_WRK_CANCERRISK
Max: 2.1E-07 [1E-06] at (649661.31, 4196168.45)
2.1E-07
1.5E-07
1.0E-07
5.0E-08
1.0E-08
5.0E-09
3.0E-09
1.0E-09
9.0E-10
6.0E-10
5.0E-10
3.9E-10
MEI - Worker - Cancer Risk
CAL STATE SMOGS STAR STATION Dmv
Gurdwara Sahib Sikh Temple
Stockton Flea Market
Taft Mosswood
Food 4 Less
Honorable Sandra B. Smith Park
TheZain Computers
George Y. Komure Elementary School
S Fresno Ave
W 8th St
E 8th St
S El Dorado St
Carolyn Weston Blvd
Henry Long Blvd
Google Earth
4000 ft
N

EXHIBIT 1

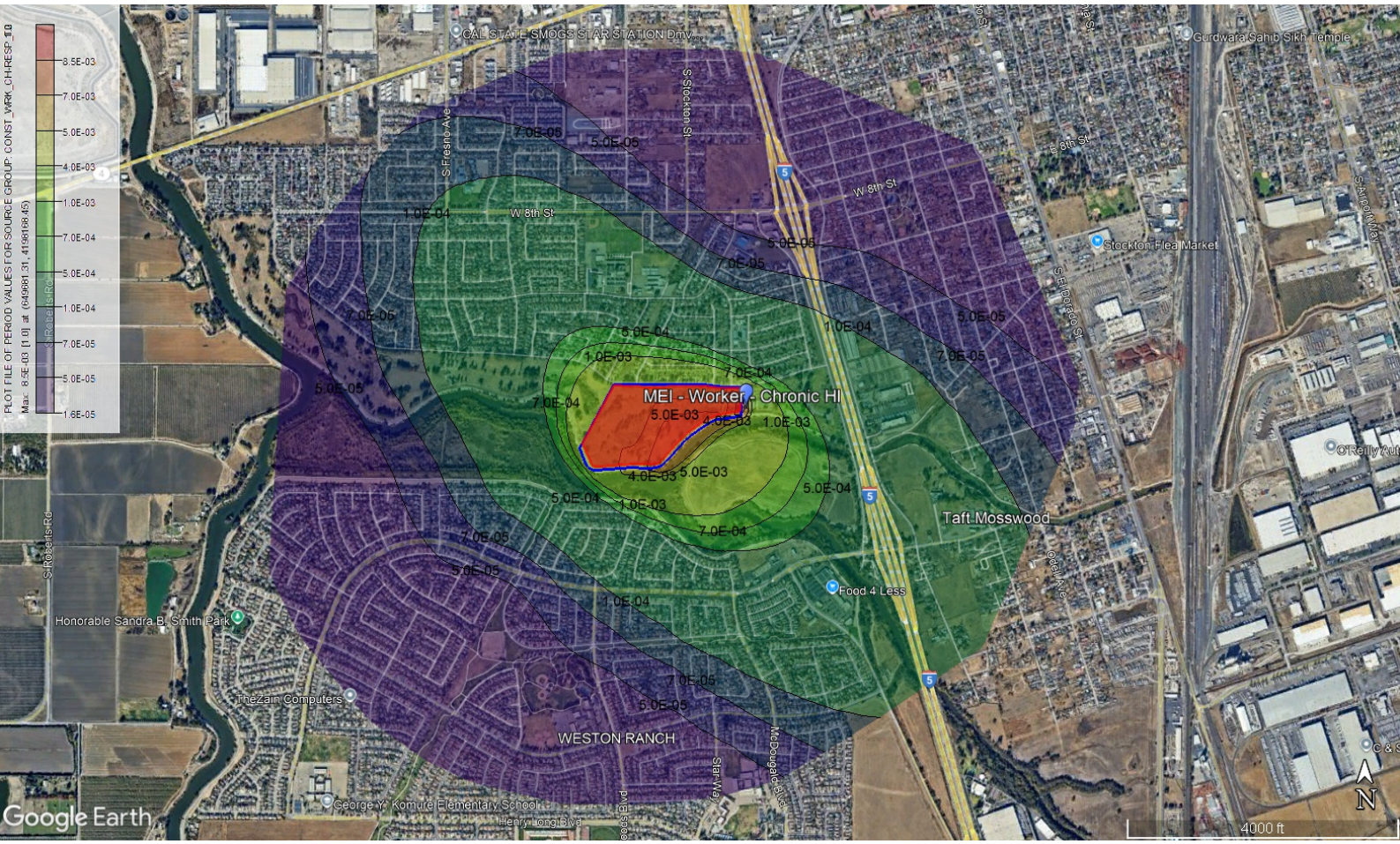

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_WRK_CHRESP_TG
Max: 8.5E-03 [1.0] at (649661.31, 4196168.45)
8.5E-03
7.0E-03
5.0E-03
4.0E-03
1.0E-03
7.0E-04
5.0E-04
1.0E-04
7.0E-05
5.0E-05
1.6E-05
MEI - Worker - Chronic HI
CAL STATE SMOGS STAR STATION Dmv
Gurdwara Sahib Sikh Temple
Stockton Flea Market
Taft Mosswood
Food 4 Less
Honorable Sandra B. Smith Park
The Zain Computers
WESTON RANCH
George Y. Komure Elementary School
S Stockton St
S Fresno Ave
W 8th St
S Roberts Rd
Google Earth
4000 ft
N

EXHIBIT 1

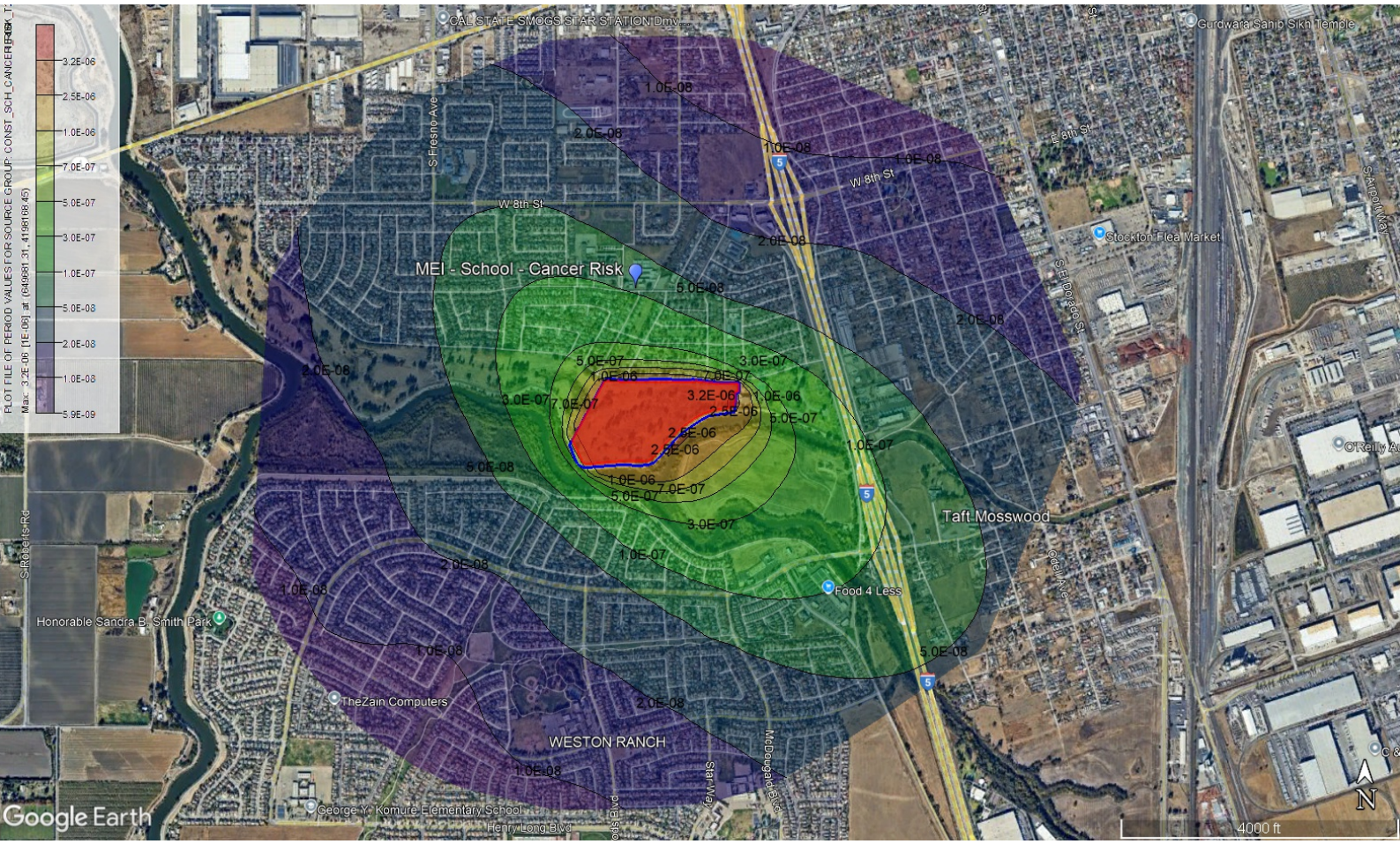
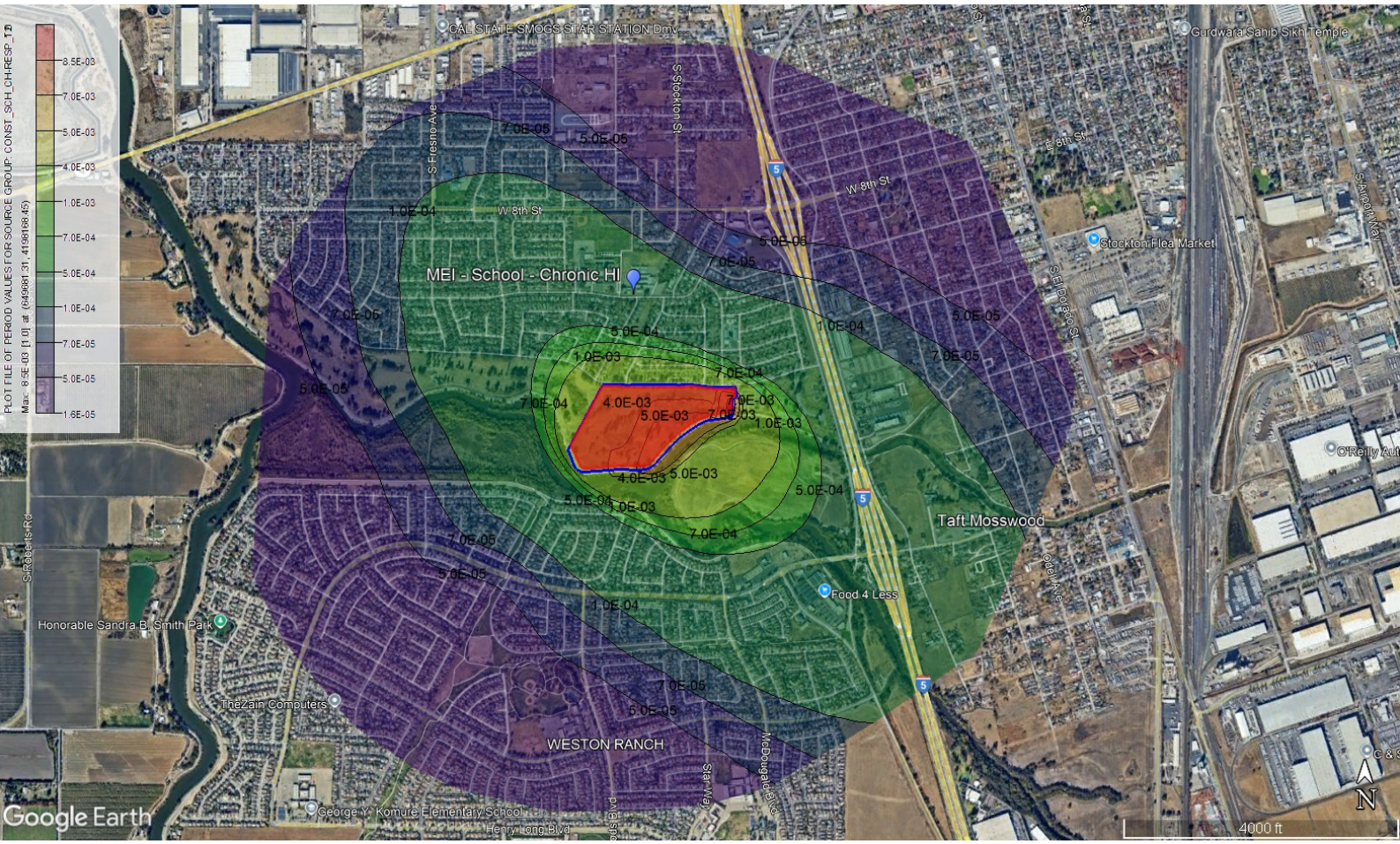

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_SCH_CANCERRISK_T...
Max: 3.2E-06 [1E-06] at (649661.31, 4196168.45)
3.2E-06
2.5E-06
1.0E-06
7.0E-07
5.0E-07
3.0E-07
1.0E-07
5.0E-08
2.0E-08
1.0E-08
5.9E-09
MEI - School - Cancer Risk
CAL STATE SMOG STAR STATION Dmv...
Gurdwara Sahib Sikh Temple
Stockton Flea Market
Taft Mosswood
Food 4 Less
Honorable Sandra B. Smith Park
TheZain Computers
WESTON RANCH
George Y. Komure Elementary School
S Fresno Ave
W 8th St
Sargents Rd
Henry Long Blvd
Star Way
McDougald Blvd
Google Earth
4000 ft
N

EXHIBIT 1


PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_SCH_CHRESP_12
Max.: 8.5E-03 [1.0] at (649661.31, 4196168.45)
8.5E-03
7.0E-03
5.0E-03
4.0E-03
1.0E-03
7.0E-04
5.0E-04
1.0E-04
7.0E-05
5.0E-05
1.6E-05
MEI - School - Chronic HI
CAL STATE SMOGS STAR STATION Dmv...
Gurdwara Sahib Sikh Temple
S Stockton St
S Fresno Ave
W 8th St
E 8th St
Stockton Flea Market
S El Dorado St
Taft Mosswood
Food 4 Less
Honorable Sandra B. Smith Park
Thezain Computers
WESTON RANCH
George Y. Komure Elementary School
Henry Long Blvd
Shroeders Rd
Starr Ave
McDougald Ave
O'Reilly Aut
Google Earth
4000 ft
N

PM 10				
Tons/Yr	T2	T2L3	T4i	T4f
Year 1	0.0674	0.010135	0.00991	0.005265
Year 2	0.07185	0.010775	0.009605	0.004356
Year 3	0	0	0	0
Year 4	0	0	0	0

PM 10				
Lbs /Yr	T2	T2L3	T4i	T4f
Year 1	134.8	20.27	19.82	10.53
Year 2	143.7	21.55	19.21	8.711
Year 3	0	0	0	0
Year 4	0	0	0	0

PM 10				
% Chng	T2	T2L3	T4i	T4f
Year 1	100%	15%	15%	8%
Year 2	100%	15%	13%	6%
Year 3	0%	0%	0%	0%
Year 4	0%	0%	0%	0%

HARP Adjustment						
24	X	7	X	52	=	3.88
9		5		50		

```
** Lakes Environmental AERMOD MPI
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 5/25/2025
** File: D:\LSA\2025\20252166 Van Buskirk\Construction\Construction.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE D:\LSA\2025\20252166 Van Buskirk\Construction\Construction.isc
   MODELOPT DFAULT CONC
   AVERTIME 1 PERIOD
   URBANOPT 319543
   POLLUTID OTHER
   RUNORNOT RUN
   ERRORFIL Construction.err
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION CONST        AREAPOLY   649691.633  4198259.576        2.130
** Source Parameters **
   SRCPARAM CONST        5.8946E-06     3.048        31
   AREAVERT CONST        649691.633 4198259.576 649692.491 4198220.676
   AREAVERT CONST        649677.332 4198220.390 649676.760 4198155.747
   AREAVERT CONST        649578.938 4198136.298 649539.752 4198121.996
   AREAVERT CONST        649495.418 4198095.395 649435.924 4198049.631
   AREAVERT CONST        649390.159 4198001.292 649364.131 4197971.259
   AREAVERT CONST        649330.951 4197932.359 649317.222 4197919.488
   AREAVERT CONST        649309.213 4197914.339 649283.757 4197910.049
   AREAVERT CONST        649270.027 4197910.621 649208.817 4197911.193
   AREAVERT CONST        649175.352 4197908.047 649112.425 4197902.040
   AREAVERT CONST        649052.359 4197895.175 649031.193 4197894.317
   AREAVERT CONST        649016.034 4197901.468 648970.841 4197996.144
   AREAVERT CONST        648971.127 4197999.004 649106.705 4198259.576
   AREAVERT CONST        649229.125 4198255.857 649328.949 4198257.574
   AREAVERT CONST        649460.236 4198261.864 649514.868 4198264.152
   AREAVERT CONST        649563.778 4198258.432 649619.840 4198255.285
   AREAVERT CONST        649669.895 4198257.288
```

```
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Const"
** WeekDays:
   EMISFACT CONST        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT CONST        HRDOW 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT CONST        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT CONST        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT CONST        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT CONST        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT CONST        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT CONST        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT CONST        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT CONST        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT CONST        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT CONST        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED Construction.rou
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE "D:\LSA\Met_Data\SJV\23237 - Stockton Arpt\23237_Stockton_Arpt_2020-2024.SFC"
   PROFFILE "D:\LSA\Met_Data\SJV\23237 - Stockton Arpt\23237_Stockton_Arpt_2020-2024.PFL"
   SURFDATA 23237 2020 Stockton_Arpt
   UAIRDATA 72493 2020
   PROFBASE 8.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST Construction.AD\01H1GALL.PLT 31
   PLOTFILE PERIOD ALL Construction.AD\PE00GALL.PLT 32
```

EXHIBIT 1

```
   SUMMFILE Construction.sum
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      97       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used          0.50
 ME W187      97       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 **********************************
 *** SETUP Finishes Successfully ***
 **********************************
```

```
*** AERMOD - VERSION 24142  ***   *** D:\LSA\2025\20252166 Van Buskirk\Construction\Construction.isc       ***       05/25/25
*** AERMET - VERSION  24142 ***   ***                                                                      ***       12:42:09
                                                                                                                    PAGE   1
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                        ***     MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

** Model Options Selected:
     * Model Uses Regulatory DEFAULT Options
     * Model Is Setup For Calculation of Average CONCentration Values.
     * NO GAS DEPOSITION Data Provided.
     * NO PARTICLE DEPOSITION Data Provided.
     * Model Uses NO DRY DEPLETION. DDPLETE  =  F
     * Model Uses NO WET DEPLETION. WETDPLT  =  F
     * Stack-tip Downwash.
     * Model Accounts for ELEVated Terrain Effects.
     * Use Calms Processing Routine.
     * Use Missing Data Processing Routine.
     * No Exponential Decay.
     * Model Uses URBAN Dispersion Algorithm for the SBL for     1 Source(s),
       for Total of    1 Urban Area(s):
  Urban Population =    319543.0 ;  Urban Roughness Length =  1.000 m
     * Urban Roughness Length of 1.0 Meter Used.
     * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Assumes No FLAGPOLE Receptor Heights.
     * The User Specified a Pollutant Type of: OTHER

**Model Calculates  1 Short Term Average(s) of:   1-HR
    and Calculates PERIOD Averages

**This Run Includes:      1 Source(s);       1 Source Group(s); and    2945 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:      0 VOLUME source(s)
                and:      1 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  24142

**Output Options Selected:
         Model Outputs Tables of PERIOD Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)
```

```
**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =     8.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                 ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.8 MB of RAM.

**Input Runstream File:          aermod.inp
**Output Print File:             aermod.out

**Detailed Error/Message File:   Construction.err
**File for Summary of Results:   Construction.sum
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
CONST	0	0.58946E-05	649691.6	4198259.6	2.1	3.05	31	0.00	YES	HRDOW	NO

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	CONST ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs
	319543.	CONST ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = CONST ; SOURCE TYPE = AREAPOLY :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
						DAY OF WEEK = WEEKDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = SATURDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = SUNDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1	1 1 1 1 1			

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: D:\LSA\Met_Data\SJV\23237 - Stockton Arpt\23237_Stockton_Arpt_2020-2024.SFC Met Version: 24142
Profile file: D:\LSA\Met_Data\SJV\23237 - Stockton Arpt\23237_Stockton_Arpt_2020-2024.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 23237 Upper air station no.: 72493
Name: STOCKTON_ARPT Name: UNKNOWN
Year: 2020 Year: 2020

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
20	01	01	1	01	-5.4	0.101	-9.000	-9.000	-999.	77.	17.1	0.11	0.75	1.00	1.25	81.	10.0	285.9	2.0
20	01	01	1	02	-18.6	0.191	-9.000	-9.000	-999.	201.	40.2	0.14	0.75	1.00	2.16	105.	10.0	283.1	2.0
20	01	01	1	03	-11.3	0.149	-9.000	-9.000	-999.	139.	26.7	0.19	0.75	1.00	1.59	150.	10.0	282.5	2.0
20	01	01	1	04	-11.5	0.150	-9.000	-9.000	-999.	140.	26.9	0.19	0.75	1.00	1.60	171.	10.0	282.0	2.0
20	01	01	1	05	-19.2	0.196	-9.000	-9.000	-999.	209.	42.5	0.19	0.75	1.00	2.05	154.	10.0	282.0	2.0
20	01	01	1	06	-15.7	0.174	-9.000	-9.000	-999.	174.	33.1	0.12	0.75	1.00	2.06	121.	10.0	281.4	2.0
20	01	01	1	07	-11.1	0.145	-9.000	-9.000	-999.	132.	24.7	0.11	0.75	1.00	1.76	71.	10.0	280.3	2.0
20	01	01	1	08	-16.3	0.177	-9.000	-9.000	-999.	179.	34.5	0.12	0.75	0.73	2.10	124.	10.0	280.9	2.0
20	01	01	1	09	-1.4	0.212	-9.000	-9.000	-999.	234.	617.8	0.19	0.75	0.39	2.08	153.	10.0	279.8	2.0
20	01	01	1	10	38.3	0.267	0.545	0.014	154.	331.	-45.2	0.12	0.75	0.27	2.64	132.	10.0	279.2	2.0
20	01	01	1	11	68.5	0.209	0.820	0.016	293.	231.	-12.2	0.14	0.75	0.23	1.72	100.	10.0	278.8	2.0
20	01	01	1	12	85.1	0.229	0.924	0.014	337.	262.	-12.8	0.20	0.75	0.22	1.69	227.	10.0	278.1	2.0
20	01	01	1	13	87.2	0.195	0.967	0.014	377.	206.	-7.7	0.15	0.75	0.21	1.47	287.	10.0	278.8	2.0
20	01	01	1	14	74.6	0.225	0.942	0.014	408.	256.	-13.9	0.10	0.75	0.22	2.08	321.	10.0	278.8	2.0
20	01	01	1	15	48.1	0.370	0.827	0.014	427.	539.	-95.5	0.10	0.75	0.26	4.00	325.	10.0	279.8	2.0
20	01	01	1	16	10.0	0.329	0.491	0.014	431.	454.	-324.5	0.10	0.75	0.35	3.71	328.	10.0	279.2	2.0
20	01	01	1	17	-18.8	0.205	-9.000	-9.000	-999.	232.	46.4	0.09	0.75	0.60	2.57	352.	10.0	279.8	2.0
20	01	01	1	18	-27.2	0.270	-9.000	-9.000	-999.	336.	80.0	0.09	0.75	1.00	3.34	337.	10.0	283.1	2.0
20	01	01	1	19	-20.9	0.208	-9.000	-9.000	-999.	229.	47.7	0.09	0.75	1.00	2.61	353.	10.0	284.8	2.0
20	01	01	1	20	-18.7	0.189	-9.000	-9.000	-999.	198.	39.4	0.10	0.75	1.00	2.33	322.	10.0	286.4	2.0
20	01	01	1	21	-25.2	0.254	-9.000	-9.000	-999.	307.	71.0	0.15	0.75	1.00	2.78	285.	10.0	287.5	2.0
20	01	01	1	22	-23.5	0.238	-9.000	-9.000	-999.	279.	62.5	0.17	0.75	1.00	2.54	254.	10.0	288.8	2.0
20	01	01	1	23	-21.9	0.222	-9.000	-9.000	-999.	251.	54.3	0.10	0.75	1.00	2.71	305.	10.0	288.8	2.0
20	01	01	1	24	-21.2	0.215	-9.000	-9.000	-999.	239.	50.9	0.09	0.75	1.00	2.69	336.	10.0	288.8	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
20	01	01	01	10.0	1	81.	1.25	286.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	5.30486 AT (649681.31, 4198168.45, 1.83, 1.83, 0.00)	DC	
	2ND HIGHEST VALUE IS	5.18659 AT (649681.31, 4198193.45, 1.91, 1.91, 0.00)	DC	
	3RD HIGHEST VALUE IS	4.43254 AT (649681.31, 4198143.45, 1.83, 1.83, 0.00)	DC	
	4TH HIGHEST VALUE IS	4.34243 AT (649435.44, 4197986.05, 1.62, 1.62, 0.00)	DC	
	5TH HIGHEST VALUE IS	4.30366 AT (649461.92, 4198012.66, 1.54, 1.54, 0.00)	DC	
	6TH HIGHEST VALUE IS	4.25896 AT (649406.73, 4197953.38, 1.60, 1.60, 0.00)	DC	
	7TH HIGHEST VALUE IS	4.16255 AT (649490.86, 4198035.96, 1.53, 1.53, 0.00)	DC	
	8TH HIGHEST VALUE IS	4.07304 AT (649378.02, 4197920.71, 1.78, 1.78, 0.00)	DC	
	9TH HIGHEST VALUE IS	4.01667 AT (649520.12, 4198056.91, 1.55, 1.55, 0.00)	DC	
	10TH HIGHEST VALUE IS	3.93392 AT (649546.46, 4198075.06, 1.62, 1.62, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS 221.42772	ON 22121308:	AT (649681.31, 4198193.45, 1.91, 1.91, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 1672 Informational Message(s)

A Total of 43848 Hours Were Processed

A Total of 713 Calm Hours Identified

A Total of 959 Missing Hours Identified (2.19 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********
ME W186 97 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
ME W187 97 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

****
*** AERMOD Finishes Successfully ***
****

HARP2 - HRACalc (dated 22118) 5/25/2025 3:49:07 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: True
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: ON
16 years to 70 years: ON

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
FISH PATHWAY SETTINGS

Surface area (m^2): 207411.4
Volume (kg): 3.004555E+08
Volume changes per year: 5287.636
Fraction from contaminated source: 0.15

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Sensitive_Year1_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Sensitive_Year1_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Sensitive_Year1_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Sensitive_Year1_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Sensitive_Year1_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Sensitive_Year1_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 5/25/2025 4:13:25 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 1
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: True
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: ON
16 years to 70 years: ON

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
FISH PATHWAY SETTINGS

Surface area (m^2): 207411.4
Volume (kg): 3.004555E+08
Volume changes per year: 5287.636
Fraction from contaminated source: 0.15

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Sensitive_Year2_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Sensitive_Year2_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Sensitive_Year2_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Sensitive_Year2_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Sensitive_Year2_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Sensitive_Year2_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 5/25/2025 4:36:51 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 1
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****

TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Worker_Year1_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Worker_Year1_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Worker_Year1_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Worker_Year1_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Worker_Year1_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Worker_Year1_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 5/25/2025 4:40:19 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 17
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 1
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****

TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Worker_Year2_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Worker_Year2_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Worker_Year2_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Worker_Year2_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Worker_Year2_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_Worker_Year2_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 5/25/2025 4:27:37 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 4
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 1
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: True
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
FISH PATHWAY SETTINGS

Surface area (m^2): 207411.4
Volume (kg): 3.004555E+08
Volume changes per year: 5287.636
Fraction from contaminated source: 0.15

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_School_Year1_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_School_Year1_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_School_Year1_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_School_Year1_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_School_Year1_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_School_Year1_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 5/25/2025 4:23:52 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 5
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 1
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: True
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
FISH PATHWAY SETTINGS

Surface area (m^2): 207411.4
Volume (kg): 3.004555E+08
Volume changes per year: 5287.636
Fraction from contaminated source: 0.15

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_School_Year2_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_School_Year2_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_School_Year2_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_School_Year2_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_School_Year2_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST\hra\Const_School_Year2_NCAcuteRiskSumByRec.csv
HRA ran successfully

Water Area sqft	2,232,558
Water Volume Area Ft3	10,610,486
Water Volume Flow FT3/yr	56,104,385,612
Change Outs / Year	5,288
Liters	300,455,506

HARP Project Summary Report 5/25/2025 5:23:10 PM

PROJECT INFORMATION
HARP Version: 22118
Project Name: HARP_CONST
Project Output Directory: D:\LSA\2025\20252166 Van Buskirk\HARP_CONST
HARP Database: NA

POLLUTANT HEALTH INFORMATION
Health Database: D:\HARP2\Tables\HEALTH17320.mdb
Health Table Version: HEALTH22013
Official: True

PolID	PolAbbrev	InhCancer	OralCancer	AcuteREL	InhChronicREL	OralChronicREL	InhChronic8HRREL
9901	DieselExhPM	1.1			5		

APPENDIX C

NOISE MONITORING RESULTS

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EXHIBIT 1

Noise Measurement Survey – 24 HR

Project Number: 20252166
Project Name: Van Buskirk Park EIR

Test Personnel: Dana Kwan
Equipment: Spark 706RC (SN:18906)

Site Number: LT-1 Date: 4/22/25

Time: From 3:00 p.m. To 3:00 p.m.

Site Location: 734 Houston Avenue, Stockton, CA 95206. In a tree, approximately 53 feet south of the Houston Avenue centerline and 1,244 feet west of Manthey Road.

Primary Noise Sources: Occasional cars on Houston Avenue, occasional cars entering and exiting Van Buskirk Community Center parking lot, occasional aircraft.

Comments: Light construction noise at property north of Houston Avenue.

Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-1

Start Time	Date	Noise Level (dBA)		
		L_{eq}	L_{max}	L_{min}
3:00 PM	4/22/25	62.0	90.4	42.7
4:00 PM	4/22/25	59.7	76.9	44.0
5:00 PM	4/22/25	60.7	84.6	45.1
6:00 PM	4/22/25	58.1	73.2	45.9
7:00 PM	4/22/25	58.1	75.2	44.8
8:00 PM	4/22/25	58.5	72.2	46.7
9:00 PM	4/22/25	57.2	71.5	45.4
10:00 PM	4/22/25	56.3	74.3	44.3
11:00 PM	4/22/25	53.6	70.3	43.2
12:00 AM	4/23/25	50.5	69.4	41.8
1:00 AM	4/23/25	51.2	77.7	41.5
2:00 AM	4/23/25	52.8	75.6	42.6
3:00 AM	4/23/25	53.7	80.5	43.8
4:00 AM	4/23/25	52.8	70.5	43.9
5:00 AM	4/23/25	56.4	73.6	47.4
6:00 AM	4/23/25	58.0	75.4	48.0
7:00 AM	4/23/25	60.9	75.0	49.3
8:00 AM	4/23/25	62.2	75.6	49.2
9:00 AM	4/23/25	60.4	74.5	48.4
10:00 AM	4/23/25	60.9	71.7	45.5
11:00 AM	4/23/25	60.7	77.1	47.5
12:00 PM	4/23/25	60.8	79.6	49.6
1:00 PM	4/23/25	61.2	81.5	45.7
2:00 PM	4/23/25	60.5	79.3	42.3

Source: Compiled by LSA Associates, Inc. (2025).
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum measured sound level

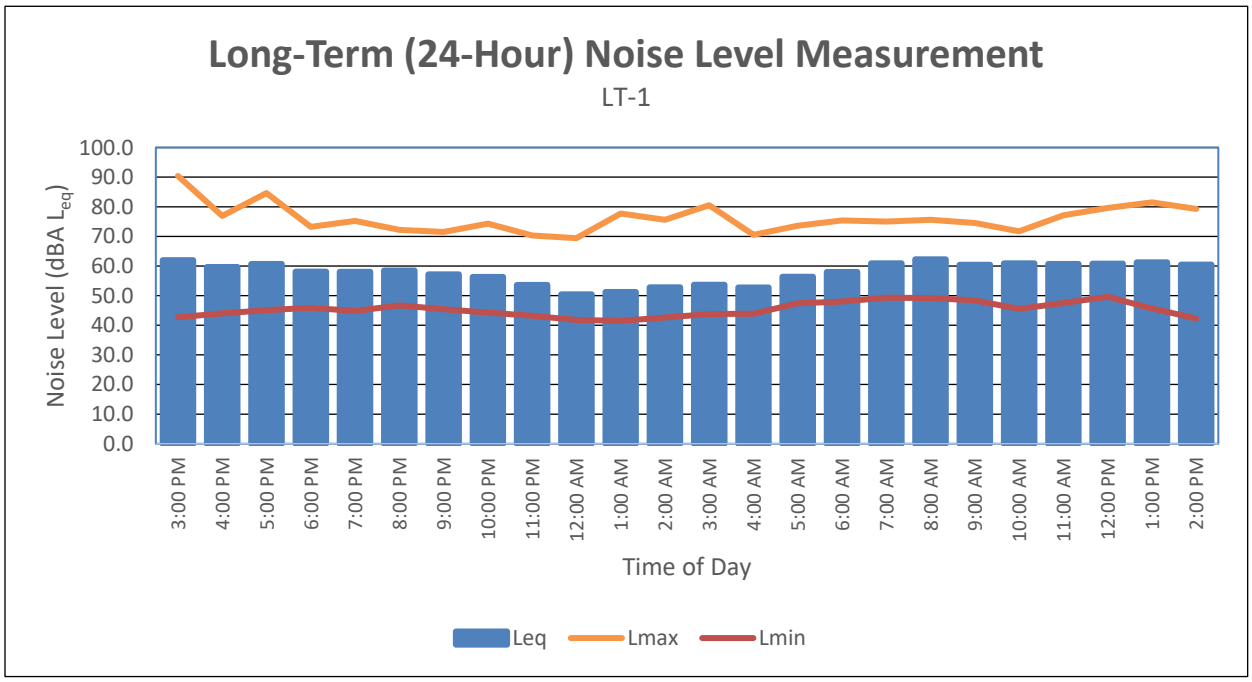


EXHIBIT 1

Noise Measurement Survey – 24 HR

Project Number: 20252166
Project Name: Van Buskirk Park EIR
Test Personnel: Dana Kwan
Equipment: Spark 706RC (SN:18907)

Site Number: LT-2 Date: 4/22/25
Time: From 3:00 p.m. To 3:00 p.m.

Site Location: 2772 South Fresno Avenue, Stockton, CA 95206. In a tree, approximately 23 feet south of the Houston Avenue centerline and 4,166 feet southeast of CA-4.

Primary Noise Sources: Occasional cars on Houston Avenue and South Fresno Avenue, occasional aircraft.

Comments:

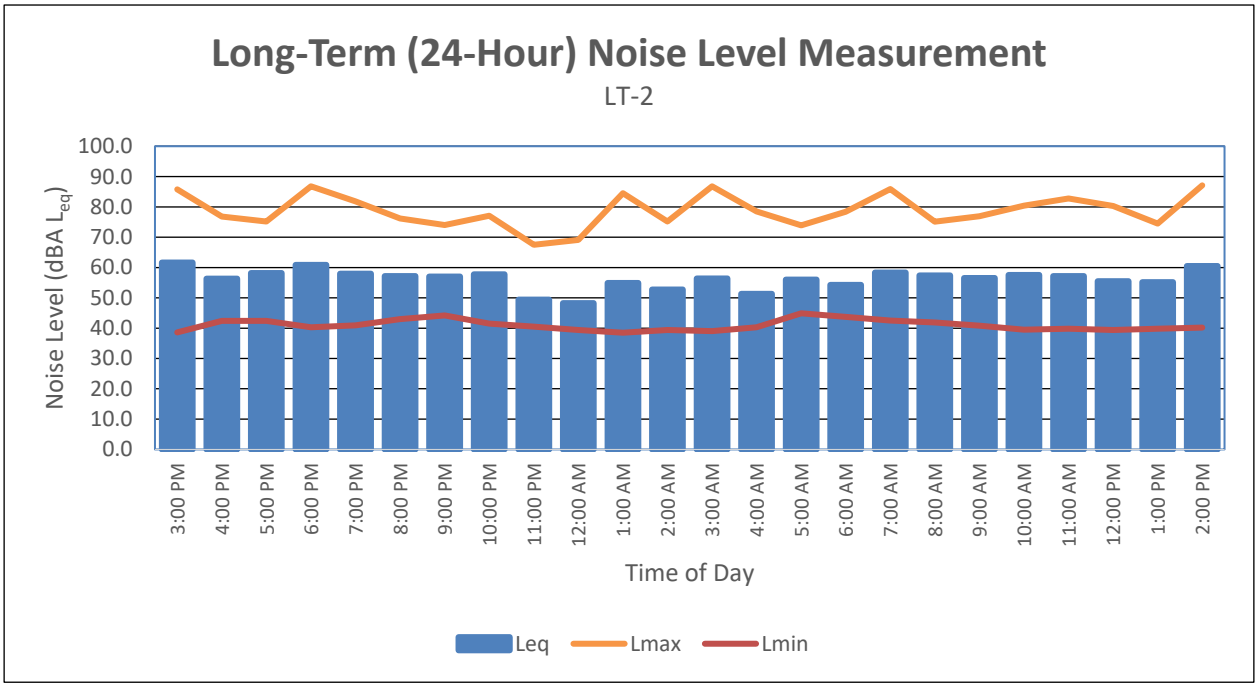
Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-2

Start Time	Date	Noise Level (dBA)		
		L_{eq}	L_{max}	L_{min}
3:00 PM	4/22/25	61.6	85.8	38.6
4:00 PM	4/22/25	56.3	76.8	42.4
5:00 PM	4/22/25	58.2	75.2	42.4
6:00 PM	4/22/25	60.9	86.8	40.3
7:00 PM	4/22/25	57.9	81.8	40.9
8:00 PM	4/22/25	57.2	76.2	43.0
9:00 PM	4/22/25	57.0	74.0	44.2
10:00 PM	4/22/25	57.8	77.1	41.5
11:00 PM	4/22/25	49.4	67.5	40.5
12:00 AM	4/23/25	48.3	69.1	39.4
1:00 AM	4/23/25	54.9	84.5	38.5
2:00 AM	4/23/25	52.8	75.2	39.4
3:00 AM	4/23/25	56.4	86.8	39.0
4:00 AM	4/23/25	51.3	78.5	40.3
5:00 AM	4/23/25	56.0	73.9	44.9
6:00 AM	4/23/25	54.3	78.4	43.7
7:00 AM	4/23/25	58.3	85.9	42.5
8:00 AM	4/23/25	57.4	75.1	41.9
9:00 AM	4/23/25	56.5	76.9	40.8
10:00 AM	4/23/25	57.6	80.4	39.5
11:00 AM	4/23/25	57.2	82.8	39.8
12:00 PM	4/23/25	55.5	80.3	39.4
1:00 PM	4/23/25	55.2	74.5	39.8
2:00 PM	4/23/25	60.5	87.1	40.2

Source: Compiled by LSA Associates, Inc. (2025).
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum measured sound level



APPENDIX D

RESPONSE TO COMMENTS

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MEMORANDUM

DATE: August 14, 2025

TO: Liszet Burgueño, Junior Engineer, CIP, City of Stockton Public Works Department
Shalilah Bess, Program Manager III, City of Stockon City Manager's Office

FROM: Theresa Wallace, AICP, Principal
Shanna Guiler, AICP, Associate/Senior Environmental Planner

SUBJECT: Van Buskirk Park Revitalization Project Initial Study/Mitigated Negative Declaration - Response to Comments

In accordance with Section 15074 of the CEQA Guidelines, prior to approving a project, the decision-making body of the lead agency shall consider the proposed environmental document together with any comments received during the public review process. Although there is no legal requirement to formally respond to comments on a proposed Mitigated Negative Declaration (MND) as there is for an Environmental Impact Report (EIR), this memorandum provides a response to the written comments received on the Van Buskirk Park Revitalization Project Initial Study/Mitigated Negative Declaration (IS/MND) to aid the City of Stockton decision-makers in their review of the Project.

The IS/MND was circulated for public review for a period of 30 days, from June 26, 2025 to July 25, 2025. Five comment letters were received during the public review period. Three comment letters were received from State/regional agencies and two were received from local organizations and individuals. In the following pages, the comments and responses are enumerated to allow for cross-referencing of CEQA-related comments. The enumerated comment letters are included in this memorandum, followed by the respective responses.

As noted above, CEQA does not require or provide guidance on responding to comments on MNDs; therefore, this memorandum follows CEQA Guidelines Section 15088, applicable to responses to comments on EIRs, which requires that agencies respond only to significant environmental issues raised in connection with the project. Therefore, this document focuses primarily on responding to comments that relate to the adequacy of the information and environmental analysis provided in the IS/MND.

Written responses to all written comments on the Draft IS/MND are provided below. A reproduction of each comment letter received on the Draft IS/MND is provided as an attachment to this memorandum (Attachment A). Mitigation measures identified in the Draft IS/MND are incorporated into the Mitigation Monitoring and Reporting Program (MMRP). The MMRP will be adopted by the City if the IS/MND is adopted.

COMMENTS AND RESPONSES

This section includes responses to each substantive CEQA-related comment. Each comment letter is assigned a letter (A, B, C, etc.) and individual comments within each letter are numbered consecutively. For instance, comment A-1 is the first numbered comment in Letter A. Please note that text within individual letters that has not been numbered does not raise environmental issues or relate to the adequacy of the information or analysis within the IS/MND, and therefore, no comment is enumerated or response required, per CEQA Guidelines Section 15132.

The following comment letters were submitted:

LETTER A
California Department of Fish and Wildlife, Erin Chappell, Regional Manager, Bay Delta Region, July 18, 2025

LETTER B
California Department of Conservation, Geologic Energy Management Division, May Soe, Supervising Oil & Gas Engineer
July 22, 2025

LETTER C
Central Valley Regional Water Quality Control Board, Peter G. Minkel, Engineering Geologist
July 17, 2025

LETTER D
American Rivers and Restore the Delta, Teague Tran, American Rivers, Associate Director, Central Valley River Restoration and Artie Valencia, Restore The Delta, Flood and Land Restoration Manager
July 25, 2025

LETTER E
Patrisia Avelar
July 12, 2025

Where revisions to the Draft IS/MND text are called for, the page is set forth followed by the appropriate revision. Added text is indicated with double underlined text, and deleted text is shown in ~~strikeout~~. As described herein, these changes have been made to clarify, amplify, or make minor edits to the IS/MND text for the proposed Project. Such changes are a result of further review of, and public comments related to, the IS/MND. The changes are generally minor changes that do not constitute significant new information, change the conclusions of the environmental analysis, or require recirculation of the document (*State CEQA Guidelines* Section 15073.5).

LETTER A

Erin Chappell, Regional Manager, Bay Delta Region, California Department of Fish and Wildlife (CDFW)
July 18, 2025

Response A-1 This comment is introductory, provides CDFW's role as a Trustee Agency, and does not address the adequacy of the information or analysis in the Draft IS/MND. Therefore, no further response is required.

Response A-2 This comment summarizes the proposed Project and does not address the adequacy of the information or analysis in the Draft IS/MND. Therefore, no further response is required.

Response A-3 This comment summarizes various regulatory requirements that are under the purview of CDFW, including the California Endangered Species Act and the Native Plant Protection Act, California Fish and Game Code protection for fully protected species, raptors and nesting birds and Lake or Streambed Alteration Notification. Potential impacts to special-status species and riparian areas under the jurisdiction of the CDFW are described in Section 4.4 of the Draft IS/MND. As described in Draft IS/MND, potential impacts to biological resources would be reduced to less than significant with implementation of identified mitigation measures. This comment does not address the adequacy of the information or analysis in the Draft IS/MND. Therefore, no further response is required.

Response A-4 This comment states that Table 4.D in the Draft IS/MND does not identify burrowing owl as a candidate species for listing under the California Endangered Species Act (CESA). Further, the comment states that Mitigation Measure BIO-4 does not adequately mitigate impacts to burrowing owl to less-than-significant.

In response to this comment, Table 4.D on page 4-17 of the Draft IS/MND has been revised as shown on the following page and page 4-37 of the Draft IS/MND has been revised as follows:

> ***Burrowing Owl.*** In 2024, ~~B~~burrowing owl ~~is a California Species of Special Concern~~ was designated as a Candidate species under the California Endangered Species Act. As a Candidate species, the burrowing owl receives the same legal protection afforded to Endangered or Threatened species.[1] Burrowing owl is a small ground-dwelling owl that generally inhabits gently sloping areas characterized by low, sparse vegetation.

[1] California Fish and Game Code Sections 2074.2 & 2085 (2023).

Table 4.D: Special-Status Species and Sensitive Natural Communities Occurring within 1 Mile of the Project Site

Common Name/Scientific Name	Federal Status[1]	State Status[2]	Global Rank[3,4]	State Rank[5]	Rare Plant Rank[6]	CDFW Status	Habitat	Potential to Occur
Plants								
Alkali milk-vetch *Astragalus tener* var. *tener*	None	None	G2G1	S1	1B.2		Playas, vernal-pools, freshwater wetlands, alkali sink, valley grassland, and wetland-riparian.	No suitable habitat.
Heartscale *Atriplex cordulata* var. *cordulata*	None	None	G3T2	S2	1B.2		Shadescale scrub, valley grassland, and wetland-riparian.	No suitable habitat.
Big tarplant *Blepharizonia plumosa*	None	None	G1G2	S1S2	1B.1		Valley and foothill grassland, and clay (usually).	No suitable habitat.
Watershield *Brasenia schreberi*	None	None	G5	S3	2B.3		Still or slow-moving water of ponds, shallow lakes, margins of deeper lakes and manmade reservoirs, freshwater marshes, sloughs, and canals.	No suitable habitat, but potential habitat is adjacent to Project area.
Palmate-bracted bird's-beak *Chloropyron palmatum*	FE	CE	G1	S1	1B.1		Chenopod scrub, valley and foothill grassland, and alkaline.	No suitable habitat.
San Joaquin spearscale *Extriplex joaquinana*	None	None	G2	S2	1B.2		Chenopod scrub, meadows and seeps, playas, valley and foothill grassland, and alkaline.	No suitable habitat.
Woolly rose-mallow *Hibiscus lasiocarpos* var. *occidentalis*	None	None	G5T3	S3	1B.2		Marshes and swamps (freshwater); often in riprap on the sides of levees.	No suitable habitat.
Delta tule pea *Lathyrus jepsonii* var. *jepsonii*	None	None	G5T2	S2	1B.2		Marshes and swamps (brackish and freshwater).	No suitable habitat.
Sanford's arrowhead *Sagittaria sanfordii*	None	None	G3	S3	1B.2		Marshes and swamps (shallow freshwater).	No suitable habitat.
Suisun marsh aster *Symphyotrichum lentum*	None	None	G2	S2	1B.2		Marshes and swamps (brackish and freshwater).	No suitable habitat.
Saline clover *Trifolium hydrophilum*	None	None	G2	S2	1B.2		Marshes and swamps, valley and foothill grassland (mesic and alkaline), and vernal pools.	No suitable habitat.
Insects								
Monarch butterfly *Danaus plexippus*	FC		G4	None			Milkweed species (A*sclepias* spp.) are the sole larval host plants.	High to moderate.

Table 4.D: Special-Status Species and Sensitive Natural Communities Occurring within 1 Mile of the Project Site

Common Name/Scientific Name	Federal Status[1]	State Status[2]	Global Rank[3,4]	State Rank[5]	Rare Plant Rank[6]	CDFW Status	Habitat	Potential to Occur
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT	None	G3T2	S2			Riparian habitat; requires elderberry bushes.	Present.
Crotch's bumble bee *Bombus crotchii*	None	CC	G2	S1			Open grassland and scrub habitats. Nesting occurs underground.	~~No suitable~~ Suitable habitat present. Recent CNDDB observations near Tracy.
Western bumble bee *Bombus occidentalis*	None	CC	G2	S1			Open grassland and scrub habitats. Nesting occurs underground.	~~No suitable~~ Suitable habitat present, but species was last observed in San Joaquin County in 1962.
Fish								
Steelhead (Central Valley DPS) *Oncorhynchus mykiss*	FT	None	G5T2Q	S2			Inland streams and rivers.	No suitable habitat, but critical habitat is adjacent to Project area.
Green sturgeon (Southern DPS) *Acipenser medirostris*	FT	None	G2T1	S1			Inland streams and rivers.	No suitable habitat, but critical habitat is adjacent to Project area.
Amphibians								
Western spadefoot toad *Spea hammodii*	FT	CT	G2G3	S2S3		WL	Vernal pool grasslands.	No suitable habitat.
California tiger salamander (*Ambystoma californiense*)	FT, Central California DPS	CT, Central California DPS	G2G3T3	S3		WL	Vernal pool grasslands.	No suitable habitat.
Reptiles								
Northwestern pond turtle *Actinemys marmorata*	None	CC	G5	S4		SSC	Permanent and intermittent waters of rivers, creeks, small lakes and ponds, marshes, irrigation ditches, and reservoirs. Turtles bask on land or near water on logs, branches or boulders. Nesting and overwintering in uplands.	Suitable habitat is present; no observations.

Table 4.D: Special-Status Species and Sensitive Natural Communities Occurring within 1 Mile of the Project Site

Common Name/Scientific Name	Federal Status[1]	State Status[2]	Global Rank[3,4]	State Rank[5]	Rare Plant Rank[6]	CDFW Status	Habitat	Potential to Occur
Birds								
Burrowing owl *Athene cunicularia*	None	~~None~~CC	G4	S3		SSC	Open, dry, sparsely vegetated land with available burrows, adequate food supply, and perches for horizontal visibility.	Suitable habitat is present; no observations.
Swainson's hawk *Buteo swainsoni*	None	CT	G5	S3			Needs open habitats for foraging; adjusted well to agricultural settings (e.g., hay and alfalfa fields, pastures, grain crops, and row crops). Nests in riparian woodlands and scattered stands of trees near agricultural fields and grasslands.	Present.
Tricolored blackbird *Agelaius tricolor*	None	CT	G1G2	S1S2		SSC	Nests in wetlands with cattails, bulrushes, and willows, triticale fields, and patches of Himalayan blackberry near stock ponds or irrigated pastures. Foraging habitats include cultivated fields, feedlots associated with dairy farms, and wetlands.	No suitable habitat.

Sources: *California Native Plant Society (2020), California Department of Fish and Wildlife (2020), and United States Fish and Wildlife Service (2020).*

[1] Federal Status Codes (USFWS): FE= Listed as Endangered (in danger of extinction) by the Federal Government; FT = Listed as Threatened (likely to become Endangered within the foreseeable future) by the Federal Government; FC = Candidate to become a proposed species; FSC = Federal Species of Concern. May be Endangered or Threatened, but not enough biological information has been gathered to support listing at this time; FC = Candidate to become a proposed species.

[2] State Status Codes (CDFW): CE = Listed as Endangered by the State of California; SSC = California Species of Special Concern; CT = Listed as Threatened by the State of California; CR = California Rare; CC = State Candidate for listing as an Endangered Species; WL = Watch List.

[3] Global Rank: G1: Critically Imperiled – At very high risk of extinction due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors; G2: Imperiled – At high risk of extinction due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors. G3: Vulnerable – At moderate risk of extinction due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors. G4: Apparently Secure – At fairly low risk of extinction due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors. G5: Secure – At very low risk of extinction due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.

[4] Taxa which are subspecies receive a taxon rank (T-rank) in addition to the G-rank. Whereas the G-rank reflects the condition of the entire species, the T-rank reflects the global status of just the subspecies.

[5] State Rank: S1: Critically Imperiled – At very high risk of extirpation in the State due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors. S2: Imperiled – At high risk of extirpation in the State due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors. S3: Vulnerable – At moderate risk of extirpation in the State due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors. S4: Apparently Secure – At a fairly low risk of extirpation in the State due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors. S5: Secure – At very low or no risk of extirpation in the State due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.

Table 4.D: Special-Status Species and Sensitive Natural Communities Occurring within 1 Mile of the Project Site

Common Name/Scientific Name	Federal Status[1]	State Status[2]	Global Rank[3,4]	State Rank[5]	Rare Plant Rank[6]	CDFW Status	Habitat	Potential to Occur

[6] California Native Plant Society Rare Plant Inventory: Rank 1A: Plants Presumed Extinct in California; Rank 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere; Rank 2: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere; Rank 3: Plants About Which We Need More Information—A Review List; Rank 4: Plants of Limited Distribution—A Watch List.

CDFW = California Department of Fish and Wildlife

DPS = Distinct Population Segment

USFWS = United States Fish and Wildlife Service

In addition, Item 3 as identified in Mitigation Measure BIO-4 on pages 4-28 and 4-29 of the Draft IS/MND has been revised as follows:

Mitigation Measure BIO-4 **Preconstruction and Construction Monitoring.** The City shall avoid and minimize effects to special-status species during construction, habitat restoration, and maintenance activities associated with the Project. The following preconstruction and construction monitoring measures shall be implemented:

3. A qualified biologist shall conduct a burrowing owl habitat assessment and surveys, if habitat for burrowing owl is present prior to construction. The habitat assessment and surveys shall follow the Department of Fish and Game State Report on Burrowing Owl Mitigation[2] methodology and the qualified biologist shall prepare a report documenting the survey results, and submit the report to CDFW, and obtain CDFW's written approval of the report prior to Project construction. The habitat assessment and surveys shall encompass the Project site and a sufficient buffer zone to detect owls nearby that may be impacted, which is up to 500 meters (1,640 feet) around the Project site pursuant to above methodology. Habitat assessments and surveys shall occur annually for the duration of the Project, as conditions may change annually and suitable refugia for burrowing owl, such as small mammal burrows, can be created within a few hours or days. Surveys for either non-breeding or breeding burrowing owls shall be spread over four visits during the non-breeding and breeding season. Time lapses between surveys or Project activities shall trigger subsequent surveys including, but not limited to, a final survey within 24 hours prior to ground disturbance. If the habitat assessment does not identify habitat and surveys are not conducted, an additional habitat assessment shall be conducted within 14 days prior to construction. If new refugia are present such as burrows or novel Project infrastructure, surveys shall be conducted as described above. The qualified biologist shall have a minimum of two years of experience implementing the above methodology. ~~preconstruction surveys at the Project site to determine whether any burrowing owls are present at the Project site or within 500 feet from planned work activities, including access roads,~~

[2] California Department of Fish and Game. 2012. *Staff Report on Burrowing Owl Mitigation*. Website: nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843 (accessed July 29, 2021).

~~parking areas, and staging areas. The qualified biologist will determine, to the extent possible, the status of any owls present on or adjacent to the Project site (i.e., resident, nesting, or migrant). All preconstruction surveys shall follow standard CDFW protocols,[3] including a preconstruction survey within 14 days before construction starts and a second survey 24 hours before it starts. If a lapse in Project-related construction work of 14 days or longer occurs during the nesting season, an additional preconstruction survey shall be required within 24 hours before Project work may be reinitiated.~~ The following measures shall be implemented ~~for construction activities~~ should ~~preconstruction~~ surveys find burrowing owls to be present:

a. The City shall immediately notify CDFW if burrowing owl is detected and implement a construction avoidance buffer around any detected burrowing owl pursuant to the buffer distances outlined in the Department of Fish and Game State Report on Burrowing Owl Mitigation. Any detected owl shall be monitored by the qualified biologist to ensure it is not disturbed during construction activities. ~~During the nonbreeding season (September 1 through January 31), a circular exclusion zone with a radius of 250 feet shall be established around occupied burrows.~~

b. If the City cannot ensure burrowing owl and their burrows are fully avoided, the City shall consult with CDFW and obtain a California Endangered Species Act (CESA) take authorization or otherwise demonstrate compliance with CESA. Take is likely to occur and City shall obtain an Incidental Take Permit (ITP) if burrowing owl surveys detect burrowing owl occupancy of burrows or burrow surrogates within the Project site. Occupancy of habitat may also be indicated by burrowing owl sign including molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance or perch site.~~If an adequate buffer cannot be established during the nonbreeding season, resident and migrant wintering burrowing owls may be evicted from the entire construction area using passive relocation techniques and vegetation management provided that suitable alternative burrows are located within 330 feet of occupied burrows and can be protected~~

[3] California Department of Fish and Game. 2012. *Staff Report on Burrowing Owl Mitigation*. Website: nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843 (accessed July 29, 2021).

~~during Project construction. The City shall prepare an Exclusion Plan for review and approval by CDFW.~~

c. If burrowing owl, or their burrows or burrow surrogates are detected within 500 meters (1,640 feet0 of the Project site, but not on the Project site, the City shall consult with CDFW to determine if avoidance is feasible or an ITP is warranted. ~~During the breeding season (February 1 through August 31), a qualified biologist shall establish a circular exclusion zone with radius of 450 feet (150 meters) around each occupied burrow. No construction-related activity (e.g., site grading, staking, surveying, or any use of construction equipment) shall occur in the exclusion zone during the breeding season. Once the breeding season is over (e.g., the young have fledged and are no longer dependent on the adults), passive relocation/eviction may proceed under a CDFW-approved Exclusion Plan.~~

d. To prevent burrowing owl from sheltering or nesting in exposed material; all construction pipes, culverts, hoses or similar materials greater than two inches in diameter stored at the Project site shall be capped or covered before the end of each work day and shall be inspected thoroughly for wildlife before the pipe or similar structure is buried, capped, used, or moved. ~~Construction buffer widths may be reduced from the 450-foot-wide breeding season buffers and 250-foot-wide nonbreeding season buffers if approved by CDFW.~~

The revisions identified above represent a minor change to the Draft IS/MND in order to clarify the Draft IS/MND analysis. These revisions do not change the conclusions or analysis of impacts in the Draft IS/MND necessitating recirculation of the Draft IS/MND.

Response A-5

This comment states that Table 4.D in the Draft IS/MND does not identify Crotch's bumble bees as a Candidate species for listing under the California Endangered Species Act (CESA) and indicates there is no suitable habitat at the site. Further, the comment provides recommended revisions to Mitigation Measure BIO-4 to adequately mitigation for impacts to special-status bee species.

In response to this comment, Table 4.D on page 4-17 of the Draft IS/MND has been revised as shown on the previous pages and Item 4 as identified in Mitigation Measure BIO-4 on pages 4-28 and 4-29 of the Draft IS/MND has been revised as follows:

Mitigation Measure BIO-4 **Preconstruction and Construction Monitoring.** The City shall avoid and minimize effects to special-status species during construction, habitat restoration, and maintenance activities associated with the Project. The following preconstruction and construction monitoring measures shall be implemented:

4. Preconstruction bumble bee surveys shall be conducted in all grassland areas at least 14 days prior to construction, following nonlethal survey protocols and current State and federal guidelines. A minimum of three pre-activity surveys shall be conducted within 30 days during appropriate activity periods (i.e., March through September) prior to the start of ground-disturbing activities to identify bumble bee activity. Surveys should be repeated for each year of the Project activities. The preactivity surveys shall occur when temperatures are above 60°Fahrenheit (15.5°Celsius) and not during wet conditions (e.g., foggy, raining, or drizzling). The survey shall be conducted at least 2 hours after sunrise and 3 hours before sunset, and shall occur at least 1 hour after rain subsides. Preferably, the survey should be conducted during sunny days with low wind speeds (less than 8 miles per hour), but surveying during partially cloudy days or overcast conditions is permissible if the surveyors can still see their own shadows.

   If Crotch's or western bumble bees (since bumble bees can be difficult to identify in the field) are observed within the Project site, a plan to protect ~~Crotch's and/or western~~special-status bumble bee nests and individuals shall be developed and implemented in consultation with CDFW. The plan shall include, but not be limited to, the following measures:

   a. Specifications for construction timing and sequencing requirements (e.g., avoidance of mowing, tilling, or other ground disturbance until late March to protect overwintering queen bumble bees);

   b. Establishment of appropriate no-disturbance buffers for bumble bee nest sites to avoid impacts to the bees and monitoring by a qualified biologist to ensure compliance if bumble bee nests are identified;

   c. Restrictions associated with construction equipment or materials that may harm bumble bees (e.g., avoidance of pesticides/herbicides, BMPs to minimize the spread of invasive plant species);

d. Provisions to avoid western bumble bees, or potential western bumble bees if observed away from a bumble bee nest during Project activity (e.g., ceasing of Project activities until the animal has left the active work area on its own volition); and

e. Prescription of an appropriate restoration seed mix targeted for the western bumble bee, including native plant species known to be visited by native bumble bee species and containing a mix of flowering plant species with continual floral availability through the entire active season of the western bumble bee (March through September).

<u>If Project impacts to special-status bumble bee cannot be completely avoided, the City shall apply obtain an ITP from CDFW.</u>

<u>If the Project will result in permanent impacts to suitable special-status bumble bee habitat, the City shall provide compensatory mitigation at a minimum ratio of 3:1. Floral resources shall be replaced as close to their original location as is feasible. If active special-status bumble bee nests have been identified and floral resources cannot be replaced within 200 meters (656 feet) of their original location, floral resources shall be planted in the most centrally available location relative to identified nests. This location shall be no more than 1.5-kilometer (4,921 feet) from any identified nest. Replaced floral resources may be split into multiple patches to meet distance requirements for multiple nests. Mitigation lands shall be protected in perpetuity under a conservation easement with an endowment established for long-term management of the lands.</u>

The revisions to Mitigation Measure BIO-4 do not change the significance of the environmental issue conclusions within the Draft IS/MND and do not represent significant new information such that recirculation of the Draft IS/MND is required.

Response A-6

This comment recommends that the Draft IS/MND include a thorough analysis of the short-term and long-term impacts, including cumulative impacts of the Lower San Joaquin River Project (LSJR Project), which includes 23 miles of levee improvements and two closure structures proposed by the U.S. Army Corps of Engineers. A portion of the Van Buskirk Project site is proposed for use as mitigation for impacts associated with the LSJR Project. This area is described in Section 2.3.2, Subsequent Phases, on page 2-27 of the Draft IS/MND and shown on Figure 2-3. As described in the

Draft IS/MND, given that detailed design for subsequent phases is not known at this time, the Initial Study evaluates the conceptual elements of these subsequent phases at a programmatic level and identifies the potential environmental impacts and mitigation measures that could be required for development of these improvements by the City when funding becomes available. The City intends that future Project-specific actions pursuant to the Van Buskirk Park Revitalization Project that would implement improvements beyond those considered in the programmatic analysis in the IS/MND would be subject to project-level CEQA analysis and compliance. Prior to implementation of specific improvements, City staff will review recommended projects on a case-by-case basis to determine if any supplemental review under CEQA would be required to address potentially adverse project-specific impacts that are not mitigated through the recommended design guidelines and mitigation measures identified in the IS/MND.

The LSJR Project has undergone extensive NEPA and CEQA review, starting with preparation of the *San Joaquin River Basin, Lower San Joaquin River (LSJR) Integrated Interim Feasibility Report/Environmental Impact Statement/Environmental Impact Report (State Clearinghouse No. 2010012027)* (2018 LSJR FR/EIS/EIR), which was prepared by the San Joaquin Area Flood Control Agency (SJAFCA), Central Valley Flood Protection Board (CVFPB), and U.S. Army Corps of Engineers (USACE) and certified in 2018. The 2018 LSJR FR/EIS/EIR considered seven alternative plans aimed at reducing flood risk in the City of Stockton and surrounding urbanizing areas. Alternative 7a was identified as the recommended plan and is now the authorized LSJR Project. The LSJR Project is divided into several components, which include the Smith Canal Gate structure, Tenmile Slough Reach 30 Left Bank (TS30L), and Phases A through F.

In 2023, a Supplemental EIR (2023 TS30L SEIR)[4] and a Supplemental Environmental Assessment (2023 TS30L SEA)[5] were prepared to evaluate the LSJR Reach TS30L Levee Improvement Project. The TS30L Levee Improvement Project includes staging areas, haul routes, mitigation sites and a final project footprint that were not analyzed in the 2018 LSJR FR/EIS/EIR. In May 2025, a Draft Supplemental Environmental Assessment (EA) II/Subsequent Environmental Impact Report (EIR) (CMP SEA II/SEIR)

[4] ESA. 2023. *Final Lower San Joaquin River Reach TS 30L Levee Improvement Project Supplemental Environmental Impact Report.* March. Website: https://www.sjafca.org/home/showpublisheddocument/1441/638314181951370000 (accessed July 24, 2025).

[5] U.S. Army Corps of Engineers. 2023.

was prepared for the LSJR Project's Compensatory Mitigation Plan,[6] which proposes the establishment of 6 mitigation sites within the project vicinity to address current estimated unavoidable project impacts to biological resources, including the Van Buskirk site.

As described in the CMP SEA II/SEIR, proposed activities at the Van Buskirk site would entail setting back the levee from its current configuration to restore hydrology, grading and planting to establish appropriate elevations for wetland and riparian habitat and removing rock from the remnant levee. There is also a possibility to transplant elderberry to this site as the French Camp mitigation bank is just on the opposite side of French Camp Slough. Development of this mitigation site was evaluated for CEQA at a program-level in the 2023 TS30L SEIR[7] and the CMP SEA II/SEIR determined that the analysis provided by the 2023 TS30L Final SEIR remains applicable and adequately addresses potential impacts related to the construction of the Van Buskirk mitigation site. The construction of the setback levee at the Van Buskirk Park site and a full analysis of its effects will be presented in future supplemental CEQA and NEPA documentation prior to construction. The work is anticipated to start in 2033.

As described in the 2023 TS30L SEIR, site preparation and construction of the Van Buskirk mitigation site would entail vegetation clearing; site grading to establish a construction staging/stockpile area and to create elevations that support wetland and riparian habitat; protection in place and enhancement of existing wetlands, riparian features and elderberry shrubs; planting of appropriate vegetation and transplanting of valley elderberry shrubs, where appropriate; and setting back the levee from its current configuration to restore hydrology and removing rock from the remnant levee. Operation would include monitoring and adaptively managing the mitigation site until success criteria are met as described in the Mitigation, Monitoring and Adaptive Management Plan.

As described in the 2023 TS30L SEIR, development of the Van Buskirk site as a biological mitigation site could provide approximately 10 acres of wetland and 27 acres (9,600 linear feet) of riparian habitat, as well as giant garter

6 U.S. Army Corps of Engineers, Central Valley Flood Protection Board, California Department of Water Resources, and San Joaquin Area Flood Control Agency. 2025. *Draft Supplemental Environmental Assessment II/Subsequent Environmental Impact Report, San Joaquin River Basin, Lower San Joaquin River, California, Project Compensatory Mitigation Plan.* May. Website: https://www.spk.usace.army.mil/Portals/12/documents/civil_works/lower_sj_river/CMP/LSJR_CMP_DraftSEA-SEIR_May2025.pdf?ver=JisZnjlwoNjVilKbASHR6w%3d%3d (accessed July 24, 2025).

7 ESA. 2023. *Lower San Joaquin River Reach TS 30L Levee Improvement Project Supplemental Environmental Impact Report.* March. Website: https://www.sjafca.org/home/showpublisheddocument/1441/638314181951370000 (accessed July 24, 2025).

snake, valley elderberry, and delta smelt habitat (to fulfill mitigation needs of future phases of Alternative 7a of the SLJR).

The 2023 TS30L SEIR identified potential cumulative and significant and unavoidable impacts related to Aesthetics (loss of visual quality), Agriculture and Forestry Resources conversion of farmland), Air Quality (emissions of criteria pollutants), Biological Resources (wetlands, vegetation and wildlife habitat, fisheries resources, special-status species, conflict with the San Joaquin Habitat Conversation Plan), Cultural and Paleontological Resources (cultural resources), Recreation (change in visual quality of the recreational experience), Tribal Cultural Resources, and Wildfire. Other direct impacts were determined to be limited, mitigable, or very localized, or would not cause or contribute to additional cumulative impacts.

As described in Section 4.21, Mandatory Findings of Significance, of the Draft IS/MND (pages 4-144 and 4-145), impacts relevant to the proposed Project are localized, confined to the immediate Project area, and would be less than significant. Implementation of the proposed Project would not result in impacts that are cumulatively considerable when evaluated with the impacts of other current projects or the effects of probable future projects, including the SLJR Project. As described in the Draft IS/MND and the environmental documents prepared for the SLJR Project, implementation of subsequent phases of the Van Buskirk Revitalization Project, including potential development of a portion of the park site as wetland mitigation, would be subject to project-specific CEQA and NEPA review once the design details are finalized. No changes to the Draft IS/MND are required.

Response A-7

The comment, which recommends early coordination with CDFW for the potential need for a Lake and Streambed Alteration Agreement (LSAA) prior to starting construction activities, is noted. The comment further recommends that the IS/MND analyzes all potential temporary, permanent, direct, indirect, and/or cumulative impacts to the ponds on the Project site. As described on page 2-9 of the Draft IS/MND, this Initial Study evaluates the potential environmental effects of implementing Phase 1 of the Van Buskirk Revitalization Project at a Project level. Given that detailed design for subsequent phases is not known at this time, the IS/MND evaluates the conceptual elements of these subsequent phases at a programmatic level and identifies the potential environmental impacts and mitigation measures that could be required for development of these improvements by the City when funding becomes available. The City intends that future Project-specific actions pursuant to the Van Buskirk Park Revitalization Project that would implement improvements beyond those considered in the programmatic analysis in the IS/MND would be subject to project-level CEQA analysis and compliance.

As described in Section 4.4, Biological Resources, of the Draft IS/MND, at this time, the City does not propose any modifications to the existing ponds on the Project site, all of which are located outside of the Phase 1 Project area. Should subsequent phases of the proposed Project result in impacts to these features, the City would consult with CDFW and submit an application for an LSAA in compliance with regulatory requirements. No changes to the Draft IS/MND are required.

Response A-8 The comment, which requests that information regarding special-status species and natural communities be submitted to the California Natural Diversity Database (CNDDB), is noted. Consistent with CDFW requirements, all special-status species and natural communities identified during surveys of the Project site have been reported to the California Natural Diversity Database (CNDDB).

Response A-9 The comment, which describes the requirements for the payment of environmental filing fees, is noted. Consistent with State requirements, the City will pay all CDFW environmental documenting filing fees upon filing the Notice of Determination (NOD), if the Project is approved.

Response A-10 This comment concludes the letter and does not address the adequacy of the information or analysis in the Draft IS/MND. Therefore, no further response is required.

LETTER B

May Soe, Supervising Oil & Gas Engineer, California Department of Conservation, Geologic Energy Management Division
July 22, 2025

Response B-1 This comment describes the role of the California Geologic Energy Management Division (CalGEM) in overseeing oil, gas and geothermal wells that might be affected by property development or construction activities and provides recommendations for development located in proximity to oil, gas, or geothermal wells. The enclosure provided with the comment letter determined that based on CalGEM's Well Finder database, there are no wells in the Project area. As indicated in the comment letter, no oil, gas, or geothermal wells are located on or in the vicinity of the Project site. Therefore, implementation of the proposed Project would not impact such wells. No changes to the Draft IS/MND are required.

LETTER C

Peter G. Minkel, Engineering Geologist, Central Valley Regional Water Quality Control Board (RWQCB)
July 17, 2025

Response C-1

This comment summarizes the regulatory setting related to the Central Valley Regional Water Quality Control Board's (RWQCB's) Basin Plan as well as the Antidegradation Policy (State Water Resources Control Board Resolution 68-16) and Antidegradation Implementation Policy with which all wastewater discharges must comply. The comment further requests that the environmental review document evaluate potential impacts to both surface and groundwater quality. The potential impacts to both surface and groundwater quality are disclosed in Section 4.10, Hydrology and Water Quality, of the Draft IS/MND. As described in pages 4-87 through 4-92 of the Draft IS/MND, construction of the proposed Project is anticipated to disturb the entire 192.71-acre Project site, which could result in an increased potential for pollutants of concern to be transported via stormwater runoff into receiving surface waters (i.e., Walker Slough, French Camp Slough, San Joaquin River, Sacramento–San Joaquin River Delta, and Suisun Bay). Construction may also require limited dewatering, resulting in discharge of extracted groundwater. The proposed Project would be required to comply with the Construction General Permit and City regulations (including preparation of a SWPPP and implementation of Construction BMPs) and the Groundwater Discharge Permit, (including testing and treating stormwater [if required] prior to discharge to surface water). Compliance with these regulatory requirements would ensure that impacts associated with the violation of water quality standards or waste discharge requirements during Project construction would be less than significant.

All stormwater would be directed to bioretention basins and swales, which would treat stormwater before it infiltrates the Project site. The proposed Project would include site design, source control, and volume reduction measures and LID and treatment control best management practices (BMPs), such as catch basins and curb inlets with storm filters to capture trash and debris, in order to reduce pollutants of concern in stormwater prior to it entering the bioretention basins and infiltrating the soil. Furthermore, when stormwater is infiltrated, soil and plants absorb and filter pollutants and reduce the potential for pollutants of concern to reach groundwater. The proposed Project would be required to comply with the Central Valley RWQCB's Region-wide MS4 Permit and the City's Stormwater Quality Control Criteria Plan (SWQCCP), which require preparation of a site-specific Final Stormwater Quality Control Plan (SWQCP) to address pollutants of concern in stormwater runoff, and preparation and implementation of a Maintenance Plan to ensure that the controls detailed in the Final SWQCP are operated and maintained as intended. Compliance

with these regulatory requirements would ensure that potential impacts associated with the violation of water quality standards or waste discharge requirements during operation of the proposed Project would be less than significant. No changes to the Draft IS/MND are required.

Response C-2

This comment summarizes various permitting requirements related to water quality and those under the purview of the Central Valley RWQCB, including the Construction Storm Water General Permit, Clean Water Act Section 404 Permit, Clean Water Act Section 401 Permit (Water Quality Certification), Waste Discharge Requirement Permit, Dewatering Permit, Limited Threat General National Pollutant Discharge Elimination System (NPDES) Permit, and NPDES Permit. As described in Section 4.10, Hydrology and Water Quality, of the Draft IS/MND and referenced in Response C-1, construction and operation of proposed improvements could increase the potential for the release of potential contaminants into receiving waters. The Project would comply with existing NPDES permit requirements, including the Construction General Permit, Groundwater Discharge Permit, and Region-wide MS4 Permit, and would implement construction and operational BMPs to reduce pollutants of concern in stormwater runoff. Compliance with these regulatory requirements would ensure that the proposed Project would not degrade or alter water quality. The Draft IS/MND determined that impacts related to water quality would be less than significant. No changes to the Draft IS/MND are required.

LETTER D

Teague Tran, American Rivers, Associate Director, Central Valley River Restoration and Artie Valencia, Restore The Delta, Flood and Land Restoration Manager
July 25, 2025

Response D-1

This comment is introductory and does not address the adequacy of the information or analysis in the Draft IS/MND. Therefore, no further response is required.

Response D-2

This comment, which expresses general support for the proposed Project and recommends that the City provide infrastructure to promote access and use of the waterways adjacent to the proposed park site, including aquatic recreation (e.g., non-motorized boating) or a levee-top trail along Walker Slough, is noted. The comment offers to assist the City to create more waterway access opportunities. This comment does not address the adequacy of the information or analysis in the Draft IS/MND; rather, it relates to the merits of the proposed Project and recommends features for inclusion in the Project design. Consideration of project merits is important, and the decision makers will consider all comments regarding the project

merits as part of deliberations on the project application, and when choosing to prescribe project-specific conditions of approval. This comment will be considered by City decision-makers prior to making a determination regarding Project approval.

Response D-3 This comment, which expresses support for the levee setback in the northwestern portion of the Project site proposed as part of the LSJR Project described in Response A-6 above, is noted. The comment recommends that the City collaborate closely with the United States Army Corps of Engineers to integrate the proposed levee setback with the Van Buskirk Park Revitalization Project. As described in Response A-6 above, development of the northwestern portion of Van Buskirk Park as a mitigation site for the LSJR Project was evaluated for CEQA at a program-level in the 2023 TS30L SEIR.[8] As the comment correctly states, the details of the proposed levee setback and other restoration efforts are still being developed by the U.S. Army Corps of Engineers in coordination with the San Joaquin Area Flood Control Agency (SJAFCA), Central Valley Flood Protection Board (CVFPB), and the City of Stockton. The construction of the setback levee at the Van Buskirk Park site and a full analysis of its effects will be presented in future supplemental CEQA and NEPA documentation prior to construction. The work is anticipated to start in 2033. The City will continue to coordinate with these other agencies on the design and construction of this portion of the Van Buskirk Park. This comment does not address the adequacy of the information or analysis in the Draft IS/MND. Therefore, no further response is required.

Response D-4 The comment states that Section 4.14.b. in the Draft IS/MND is incomplete because it does not address the displacement of unhoused people that may be affected by the proposed Project. Further, the comment provides recommended best practices to minimize the impact of displacement and recommends that the City work with local non-governmental organizations to ensure that there is adequate temporary and permanent housing for displaced people. The Project site, consisting of the former Van Buskirk golf course, is currently fenced and public access is prohibited. Any encampments currently located on the Project site do not constitute permitted housing and are considered illegal under the City of Stockon Municipal Code (Section 8.100.030). Therefore, their displacement would not be considered a potential significant impact for the purposes of CEQA. However, the City intends to follow established procedures and coordinate

[8] ESA. 2023. *Lower San Joaquin River Reach TS 30L Levee Improvement Project Supplemental Environmental Impact Report.* March. Website: https://www.sjafca.org/home/showpublisheddocument/1441/638314181951370000 (accessed July 24, 2025).

with the necessary agencies to relocate unhoused individuals, as needed, prior to project implementation.

As stated in Section 4.14, Population and Housing, on page 4-116 of the Draft IS/MND, the Project site was previously developed as a golf course and development of the proposed Project would not remove existing housing, necessitating the construction of replacement housing elsewhere. The process and timeline for removal of any unhoused persons present on the Project site prior to Project construction and implementation would be determined by the City. No changes to the Draft IS/MND are required.

Response D-5

The comment states that the proposed Project would induce population growth in the surrounding area by providing park infrastructure/amenities in the South Stockton community, thereby increasing nearby housing costs and leading to green gentrification. Further, the comment recommends that the City engage in a more robust community engagement process related to implementation of the proposed Project.

The issue of green gentrification, as described in the comment, is a social and economic impact, which is not a CEQA impact unless it results in a direct or indirect physical impact on the environment. The comment does not provide a fair argument that a physical environmental impact would result from the potential social and economic impacts related to the provision of park amenities in the Project area. As described in Section 4.14, Population and Housing on page 4-116 of the Draft IS/MND, no new housing, commercial, or industrial space would be developed as part of the proposed Project. Although implementation of the proposed Project would provide additional recreational amenities to serve the existing Stockton community, the proposed Project would renovate a former, public, municipal golf course. It would not result in the conversion of adjacent land uses, provide access to previously inaccessible areas, provide additional major infrastructure or increase the capacity of the existing water system. Therefore, the Draft IS/MND determined that the proposed Project would have no impacts related to population and housing. No changes to the Draft IS/MND are required.

Response D-6

The comment, which encourages the City to continue engaging with the tribes beyond tribal consultation, is noted. The comment further encourages the City to develop gathering and interpretive opportunities within the Project site. As noted in Section 4.18, Tribal Cultural Resources, of the Draft IS/MND, the City will be required, in accordance with Mitigation Measures TCR-1 and TCR-2, to coordinate with the tribes for monitoring and discovery of resources during Project construction. Suggestions for Project design elements about the history and practices of the area relate to the merits of the proposed Project and not to the adequacy of the information or analysis in the Draft IS/MND. Consideration of project merits is

important, and the decision makers will consider all comments regarding the project merits as part of deliberations on the project application, and when choosing to prescribe Project-specific conditions of approval. This comment will be considered by City decision-makers prior to making a determination regarding Project approval.

Response D-7

This comment concludes the letter and does not address the adequacy of the information or analysis in the Draft IS/MND. Therefore, no further response is required.

LETTER E

Patrisia Avelar
July 12, 2025

Response E-1

This comment raises concerns that proposed park features may result in a noticeable increase in noise that could disturb adjacent residents, but does not provide specific comments related to the adequacy of the analysis provided in the IS/MND. The potential impacts related to both construction and operational noise are disclosed in Section 4.13, Noise, of the Draft IS/MND. As described in Section 4.13, Noise, of the Draft IS/MND, Project construction would result in short-term noise impacts on the surrounding sensitive receptors with the closest off-site receptors subject to short-term construction noise levels of 65 dBA Leq and 68 dBA Leq during Phase 1 and subsequent phases, respectively. While construction-related short-term noise levels have the potential to be higher than existing ambient noise levels in the Project area under existing conditions, the noise impacts would no longer occur once Project construction is completed. Compliance with the allowed construction hours in the City's Noise Ordinance would ensure that construction noise does not disturb residents during typical sleeping hours or during hours when ambient noise levels are likely to be lower (i.e., at night). In addition, the proposed Project would implement several best practices for reducing construction noise as required by Mitigation Measure NOI-1. With the incorporation of Mitigation Measure NOI-1, all feasible and reasonable measures to reduce construction noise would be implemented, and a less than significant impact would occur.

As described on page 4-111 of the Draft IS/MND, implementation of Phase 1 of the proposed Project could result in the shifting of noise levels in the vicinity of the Project site associated with proposed recreational improvements, including the additional basketball courts, a skate park, a community garden, a splash pad, and others. Implementation of subsequent phases of the proposed Project could result in a similar shift in noise levels in the vicinity of the Project site with implementation of proposed improvements, including the event lawn, event staging area, community building, and pickleball courts. As stated in the Draft IS/MND, typical

activities at these facilities are not expected to generate excessive noise levels and would occur only during daytime hours. Further, Section 16.60.020 of the Stockton Municipal Code exempts activities conducted on parks and playgrounds and school grounds, between 7:00 a.m. and 10:00 p.m. (except for additional hours that may be granted by the City Manager) from noise regulations. The Draft IS/MND determined that pickleball activity noise levels could exceed the City's exterior daytime (7:00 a.m. to 10:00 p.m.) noise standards of 55 dBA L_{eq}. Because the design of the proposed pickleball courts is not yet known, Mitigation Measure NOI-1 would be required to ensure that the future design of the pickleball courts includes a noise barrier to reduce the noise levels generated during pickleball activities to a less than significant level. This Mitigation Measure was incorrectly numbered, such that there are two mitigation measures identified as "Mitigation Measure NOI-1." As a result, pages 4-111 and 4-112 of the Draft IS/MND have been revised as follows:

> Because the design of the proposed pickleball courts is not yet known, Mitigation Measure NOI-~~1~~2 would be required to ensure that the future design of the pickleball courts includes a noise barrier to reduce the noise levels generated during pickleball activities to a less than significant level.
>
> **Mitigation Measure NOI-~~1~~2** As part of the final design for the subsequent phase(s) of development, the City of Stockton (City) shall require installation of a noise barrier along the northern and eastern boundaries of the proposed pickleball courts. The noise barrier may consist of any solid material, without gaps or holes, that meets a minimum density of 4 pounds/square foot, or is sound rated and has a minimum Sound Transmission Class (STC) rating of 25. The noise barrier shall provide noise reduction sufficient to ensure that noise levels at the nearest residential uses would not exceed the City's exterior daytime noise standard of 55 A-weighted decibels (dBA) equivalent continuous sound level (L_{eq}).
>
> With implementation of Mitigation Measure NOI-~~1~~2, which requires installation of a noise barrier around the pickleball courts, potential long-term noise levels associated with implementation of the proposed Project would be less than significant with mitigation incorporated.

The revisions identified above represent a minor change to the Draft IS/MND in order to clarify the Draft IS/MND analysis. These revisions do not change the conclusions or analysis of impacts in the Draft IS/MND necessitating recirculation of the Draft IS/MND. No further response is required.

Response E-2

This comment raises concerns regarding potential safety and nuisance issues associated with increased use of the Project site and requests additional information on proposed security measures. As described in Section 2.3.3 (page 2-28) of the Draft IS/MND, the proposed park would be open 1 hour before sunrise to 1 hour after sunset, consistent with Section 12.650.020 of the SMC. Lighted recreation areas would be open from 6:00 a.m. to 10:00 p.m. and park hours would be clearly posted and enforced. A daily patrol of the Project site is currently provided by Allied and such patrols would continue with implementation of the proposed Project. Additionally, it is the City's current intention to place a wrought iron fence around the perimeter of the park to deter loitering and use of the park outside of permitted hours. This comment does not address the adequacy of the information or analysis in the Draft IS/MND; rather, it relates to the details of the proposed Project. No further response is required.

Response E-3

This comment requests information on any proposed separation between the park and nearby homes to protect resident privacy, reduce noise and discourage trespassing. As described above in Response D-2, it is the City's current intention to place a wrought iron fence around the perimeter of the park to deter loitering and use of the park outside of permitted hours. In addition, as shown on Figures 2-3 and 2-4 in the Draft IS/MND and described in Section 2.3.1.2 of the Draft IS/MND (page 2-17), a linear park with a Class I multi-use path would be constructed along the northern park boundary parallel to Houston Avenue. This linear park would include preservation of existing trees and planting of additional landscaping that would provide screening of proposed park activities along the northern park boundary. This comment does not address the adequacy of the information or analysis in the Draft IS/MND; rather, it relates to the details of the proposed Project. No further response is required.

Response E-4

This comment indicates that the commenter appreciates the City's investment in community spaces, but requests that the City prioritize neighborhood concerns as part of the process and consider the issues raised during the final planning stages. This comment does not address the adequacy of the information or analysis in the Draft IS/MND; rather, it relates to the merits of the proposed Project. Consideration of project merits is important, and the decision makers will consider all comments regarding the project merits as part of deliberations on the project application, and when choosing to prescribe Project-specific conditions of

approval. This comment will be considered by City decision-makers prior to making a determination regarding Project approval.

ATTACHMENTS

A: Comment letters

ATTACHMENT A

COMMENT LETTERS

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EXHIBIT 1

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

Comment Letter A

July 18, 2025

Liszet Burgueno, Junior Engineer, CIP
City of Stockton
425 North El Dorado Street
Stockton, CA 95202
Liszet.Burgueno@stocktonca.gov

Dear Liszet Burgueno:

Subject: Van Buskirk Park Revitalization Project, Initial Study/Mitigated Negative Declaration, SCH No. 2025061207, San Joaquin County

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to adopt a Initial Study/Mitigated Negative Declaration (IS/MND) from the City of Stockton for the Van Buskirk Park Revitalization Project (Project) in San Joaquin County pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE A-1

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's Lake and Streambed

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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Alteration (LSA) regulatory authority. (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code. A-1 cont.

PROJECT DESCRIPTION SUMMARY

Proponent: City of Stockton

Objective: The City of Stockton proposes to develop a community park on a 192.71-acre former golf course. The expanded Van Buskirk Park would include additional outdoor basketball courts, a new bike and skate park with associated amenities, a community garden, a multi-purpose lawn area, a splash pad/water play area, an 18-hole disc golf course, a golf academy, indoor facilities, an event lawn with outdoor pavilion, a playground, pickleball courts, and a dog park, as well as walking paths, restoration areas, and parking. A-2

Location: The Project site is located at 734 Houston Avenue in the Conway neighborhood of the City of Stockton in San Joaquin County, California. The 192.71-acre Project site (APN 163-07-036) is located southwest of the center of Stockton. The Project site is bounded by Walker Slough and French Camp Slough to the south, the San Joaquin River to the west, Houston Avenue to the north, and the existing Van Buskirk Community Center and Community Park to the east. Regional vehicular access to the Project site is provided by Interstate-5, with the closest on- and off-ramps to the Project site located along Downing Avenue approximately 1.15 miles southeast of the Project site and by State Route (SR) 4 approximately 0.8 miles to the north via South Fresno Avenue. Direct local access to the Project site is via Houston Avenue.

Timeframe: The proposed Project will be constructed in phases. Phase 1 will occur over an approximately 18-month period and is anticipated to begin in June 2026. Construction of subsequent phases will depend on available funding. However, for the purposes of the IS/MND, the environmental analysis assumes that all of the recommended facilities will be constructed in a single phase.

REGULATORY REQUIREMENTS

California Endangered Species Act and Native Plant Protection Act

A CESA Incidental Take Permit (ITP) must be obtained from CDFW if the Project has the potential to result in "take" of plants or animals listed under CESA or the Native Plant Protection Act (NPPA), either during construction or over the life of the Project. Under CESA, "take" means "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." (Fish & G. Code, § 86). CDFW's issuance of an ITP is A-3

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subject to CEQA and to facilitate permit issuance, any project modifications and mitigation measures must be incorporated into the CEQA document analysis, discussion, and mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA permit.

Candidate species for listing under CESA are afforded the same legal protections as CESA-listed species while under review (Fish and Game Code § 2608). Candidate species which may occur within the Project area include, but are not limited to, western burrowing owl (*Athene cunicularia*), white sturgeon (*Acipenser medirostris*), and Crotch's bumble bee (*Bombus crotchii*).

CEQA requires a mandatory finding of significance if a project is likely to substantially impact threatened or endangered species. Pub. Resources Code, §§ 21001, subd. (c) & 21083; CEQA Guidelines, §§ 15380, 15064 & 15065.) In addition, pursuant to CEQA, the Lead Agency cannot approve a project unless all impacts to the environment are avoided or mitigated to less-than-significant levels, or the Lead Agency makes and supports Findings of Overriding Consideration (FOC) for impacts that remain significant despite the implementation of all feasible mitigation. FOC under CEQA, however, does not eliminate the Project proponent's obligation to comply with the Fish and Game Code.

A-3
cont.

Fully Protected Species

Fully protected species, such as white-tailed kite (*Elanus leucurus*), may not be taken or possessed at any time and no licenses or permits may be issued for their take except as follows:

- Take is for necessary scientific research;
- Efforts to recover a fully protected, endangered, or threatened species;
- Live capture and relocation of a bird species for the protection of livestock; or
- They are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan (Fish & G. Code, §§ 3511, 4700, 5050, & 5515).

Specified types of infrastructure projects may be eligible for an ITP for unavoidable impacts to fully protected species if certain conditions are met (Fish & G. Code § 2081.15). Project proponents should consult with CDFW early in the project planning process.

Raptors and Other Nesting Birds

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CDFW has authority over actions that may result in the disturbance or destruction of active bird nest sites or the unauthorized take of birds. Fish and Game Code sections protecting birds, their eggs, and nests include section 3503 (regarding unlawful take, possession, or needless destruction of the nests or eggs of any bird), section 3503.5 (regarding the take, possession, or destruction of any birds-of-prey or their nests or eggs), and section 3513 (regarding unlawful take of any migratory nongame bird). Migratory birds are also protected under the federal Migratory Bird Treaty Act.

Lake or Streambed Alteration Agreement

CDFW requires notification for Lake and Streambed Alteration (LSA), pursuant to Fish and Game Code section 1600 et seq., for Project activities affecting river, lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank (including associated riparian or wetland resources); or deposit or dispose of material where it may pass into a river, lake, or stream. Work within ephemeral streams, drainage ditches, washes, watercourses with a subsurface flow, and floodplains is generally subject to notification requirements. In addition, infrastructure installed beneath such aquatic features, such as horizontal directional drilling, is also generally subject to notification requirements**.** Therefore, any impact to the mainstems, tributaries, or floodplains or associated riparian habitat caused by the proposed Project will likely require an LSA notification. CDFW may not execute a final LSA Agreement until it has considered the IS/MND and complied with its responsibilities as a responsible agency under CEQA.

A-3 cont.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City of Stockton in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

COMMENT 1: Burrowing Owl Avoidance and Minimization

Section: Table 4.D: Special-Status Species and Sensitive Natural Communities Occurring within 1 Mile of the Project site Page 4-18 and Mitigation Measure BIO-4 section 3 on pages 4-27 through 4-28.

A-4

Issue: Table 4.D in the IS/MND shows burrowing owl as a State Species of Special Concern, however burrowing owl is a candidate species for CESA listing and the table should be updated to reflect its current status. Additionally, mitigation measure BIO-4 does not adequately mitigate impacts to burrowing owl to less-than-significant.

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Specific impact: Mitigation Measure BIO-4 (Preconstruction and Construction Monitoring) section 3, is not sufficiently protective to burrowing owl. While multiple preconstruction surveys are proposed to locate burrowing owls should they be within the project site, a 250-foot no-work buffer around occupied burrows is not large enough to avoid disturbing burrowing owl and could cause nest abandonment, injury or death. Eviction using passive relocation techniques during the breeding and nonbreeding season is proposed and could also cause injury and death and is considered take of burrowing owl.

Why impact would occur: Mitigation Measure BIO-4 (Preconstruction and Construction Monitoring) section 3 includes surveys for burrowing owl, however the two preconstruction surveys described in the measure are inconsistent with the surveys recommended in the *Department of Fish and Game* [currently CDFW] *Staff Report on Burrowing Owl Mitigation* (2012) (CDFW 2012 Staff Report), which requires at least four surveys. Additionally, Mitigation Measure BIO-4 subsections b and c discuss passive relocation and the preparation of an Exclusion Plan (page 4-28). CDFW does not consider passive relocation to be a take avoidance measure because the long-term demographic consequences of exclusion techniques have not been thoroughly evaluated, and the survival rate of excluded owls is unknown. Burrowing owl are dependent on burrows at all times of the year for survival or reproduction, therefore eviction from nesting, roosting, overwintering, and satellite burrows or other sheltering features may lead to indirect impacts or "take" which is prohibited under CESA and Fish and Game Code section 3503.5.

A-4
cont.

Evidence impact would be significant: The Project may impact burrowing owl utilizing burrows or burrow surrogates on or within up to 500 meters (1,640 feet) of the Project site. The Project could result in burrowing owl nest abandonment, loss of young, reduced health and vigor of owlets, injury or mortality of adults, and permanent habitat loss. Burrowing owl is a candidate species for CESA listing because the species' population viability and survival are adversely affected by risk factors such as precipitous declines from habitat loss, fragmentation, and degradation; evictions from nesting sites without habitat mitigation; human disturbance; and eradication of California ground squirrel (*Otospermophilus beecheyi*) resulting in a loss of suitable burrows required by burrowing owl for nesting, protection from predators, and shelter (Shuford and Gardali 2008; CDFW 2012 Staff Report). Preliminary analyses of regional patterns for breeding populations of burrowing owl have detected declines both locally in their central and southern coastal breeding areas, and statewide where the species has experienced breeding range retraction (CDFW 2012 Staff Report). Burrowing owl have been extirpated from 16 percent of their former range and are at risk of being extirpated from another 13 percent of their range in the State (CDFW 2024). Therefore, if burrowing owl are on or within 500 meters (1,640 feet) of the Project site, the Project may result in a substantial reduction in the number of a CESA candidate species,

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which is considered a Mandatory Finding of Significance pursuant to CEQA Guidelines sections 15065, subdivision (a)(1) and 15380.

Recommended Mitigation Measures: To reduce potential impacts to burrowing owl to less-than-significant and comply with CESA and Fish and Game Code section 3503 et seq., CDFW recommends including the mitigation measures below in the IS/MND:

Burrowing Owl Habitat Assessment and Surveys. A qualified biologist shall conduct a habitat assessment and surveys, if habitat is present for burrowing owl prior to construction. The habitat assessment and surveys shall follow the Department of Fish and Game Staff Report on Burrowing Owl Mitigation (2012) methodology (https://wildlife.ca.gov/Conservation/Survey-Protocols#377281284-birds) and the qualified biologist shall prepare a report documenting the survey results, and submit the report to CDFW, and obtain CDFW's written approval of the report prior to Project construction. The habitat assessment and surveys shall encompass the Project site and a sufficient buffer zone to detect owls nearby that may be impacted, which is up to 500 meters (1,640 feet) around the Project site pursuant to the above methodology. Habitat assessments and surveys shall occur annually for the duration of the Project, as conditions may change annually and suitable refugia for burrowing owl, such as small mammal burrows, can be created within a few hours or days. Surveys for either non-breeding or breeding burrowing owls shall be spread over four visits during the non-breeding and breeding season. Time lapses between surveys or Project activities shall trigger subsequent surveys including, but not limited to, a final survey within 24 hours prior to ground disturbance. If the habitat assessment does not identify habitat and surveys are not conducted, an additional habitat assessment shall be conducted within 14 days prior to construction. If new refugia are present such as burrows or novel Project infrastructure, surveys shall be conducted as described above. The qualified biologist shall have a minimum of two years of experience implementing the above methodology. The Project shall immediately notify CDFW if burrowing owl is detected and implement a construction avoidance buffer around any detected burrowing owl pursuant to the buffer distances outlined in the Department of Fish and Game Staff Report on Burrowing Owl Mitigation (2012). Any detected owl shall be monitored by the qualified biologist to ensure it is not disturbed during construction activities.

A-4 cont.

If the Project cannot ensure burrowing owl and their burrows are fully avoided, the Project shall consult with CDFW and obtain a CESA take authorization or otherwise demonstrate compliance with CESA. Take is likely to occur and the Project shall obtain an ITP if burrowing owl surveys detect burrowing owl occupancy of burrows or burrow surrogates within the Project site, Occupancy of habitat may also be indicated by burrowing owl sign including molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance or perch site. If

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burrowing owl, or their burrows or burrow surrogates, are detected within 500 meters (1,640 feet) of the Project site during burrowing owl surveys, but not on the Project site, the Project shall consult with CDFW to determine if avoidance is feasible or an ITP is warranted.

A-4 cont.

Cap Pipes and Hoses: To prevent burrowing owl from sheltering or nesting in exposed material; all construction pipes, culverts, hoses or similar materials greater than two inches in diameter stored at the Project site shall be capped or covered before the end of each work day and shall be inspected thoroughly for wildlife before the pipe or similar structure is buried, capped, used, or moved.

COMMENT 2: Crotch's Bumble Bee Avoidance and Minimization

Issue: The Project area is within the current known range of Crotch's bumble bee and suitable nesting and foraging habitat for the species may be present in the Project area. The IS/MND does consider the impact of Project activities on Crotch's bumble bee in the Project area, however Table 4.D does not identify Crotch's bumble bee as a candidate species and indicates there is no suitable habitat at the site. Moreover, on page 4-36 the IS/MND discusses Crotch's bumble bee and recognizes it as a candidate species under CESA (CEQA Guidelines, §15380, subds. (c)(1)). As stated in the IS/MND as candidate species, Crotch's bumble bee receive the same legal protections afforded to endangered or threatened species. This section of the IS/MND also states suitable bumble bee foraging and nesting habitat and nectar plants exist within the Project site, which contradicts information provided in Table 4.D. Unauthorized take of Crotch's bumble bee pursuant to CESA is a violation of California Fish and Game Code section 2080 et seq.

A-5

Evidence impact would be significant: Project activities, such as vegetation removal or ground-disturbing activities could result in permanent and/or temporary loss of floral resources for Crotch's bumble bee and other native pollinator species, loss of bumble bee nesting habitat, crushing, or filling of active bumble bee colonies and hibernating cavities, and reduced reproductive success. Bumble bees are critically important because they pollinate a wide range of plants over the lifecycles of their colonies, which typically live longer than most native solitary bee species.

Recommendation: To reduce impacts to less-than-significant, CDFW recommends including the following mitigation measures in the IS/MND:

If Project impacts to Crotch's bumble bee cannot be completely avoided, CDFW recommends the Project proponent apply for CESA take authorization under an ITP.

Crotch's bumble bee and other bumble species are not covered by the San Joaquin County Multi-Species Open Space and Habitat Conservation Plan (SJMSCP) and therefore alternative mitigation will be required for impacts to Crotch's bumble bee and

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its habitat. If the Project will result in permanent impacts to suitable Crotch's bumble bee habitat, CDFW recommends that the IS/MND include compensatory mitigation for the habitat loss. Bumble bee floral resources should be mitigated at a minimum of a 3:1 ratio for permanent impacts in the absence of information regarding the compensatory mitigation site. Floral resources should be replaced as close to their original location as is feasible. If active Crotch's bumble bee nests have been identified and floral resources cannot be replaced within 200 meters (656 feet) of their original location, floral resources should be planted in the most centrally available location relative to identified nests. This location should be no more than 1.5-kilometer (4,921 feet) from any identified nest. Replaced floral resources may be split into multiple patches to meet distance requirements for multiple nests. The IS/MND should state that mitigation lands will be protected in perpetuity under a conservation easement with an endowment established for long-term management of the lands. A-5 cont.

COMMENT 3: Coordination and Consistency with the San Joaquin River Basin, Lower San Joaquin River Compensatory Mitigation Plan

Issue: CEQA requires analysis of reasonably foreseeable future projects and cumulative impacts. The San Joaquin River Basin, Lower San Joaquin River, California, Project (LSJR Project) is a cooperative flood risk management effort intended to reduce flood risk to the City of Stockton associated with seepage, stability, overtopping, and erosion for levees along the San Joaquin River, Calaveras River, Fourteen-mile Slough, Tenmile Slough, French Camp Slough, Mosher Slough, and Duck Creek. The LSJR Project includes 23 miles of levee improvements and two closure structures. The levee improvements include cutoff walls, deep soil mixing (seismic remediation), a new levee, levee geometry improvements, and erosion protection. The mitigation strategy for the Project initially relied primarily on the purchase of mitigation bank credits to compensate for habitat impacts. However, there are no suitable mitigation banks with both a service area that covers the Project site and appropriate credits in sufficient quantities to meet the Project's compensatory mitigation requirements. Therefore, an updated compensatory mitigation plan proposes the establishment of six mitigation sites within the Project vicinity to address current estimated unavoidable Project impacts to biological resources. A-6

Evidence impact would be significant: A proposed mitigation site for the LSJR Project occurs at Van Buskirk Park. The proposed action for Van Buskirk Park will convert the formerly urban land that was a public golf course into riparian and wetland habitat and restore river hydrology through setback of the existing levee.

Recommendation: CDFW recommends the IS/MND include a thorough analysis of all short-term and long-term impacts, including cumulative impacts, of the LSJR Project, a portion of which is proposed to be located within the Project area.

COMMENT 4: Potential Waters of the US/ Lake and Streambed Alteration Program

Issue: The IS/MND does not discuss the potential need to acquire an LSA Agreement from CDFW. Five ponds associated with the former golf course are present on the Project site, of which some or all may be historical oxbows associated with French Camp Slough. The existing ponds will be preserved and maintained as part of Project implementation. All ponds at the Project site are isolated from the floodplain of French Camp Slough by a levee and are considered managed water features that are jurisdictional wetlands and waters of the United States/waters of the State. Additionally, on page 4-24 in section BIO-3 the IS/MND states that the Project will conduct all in-water construction activities between May 1 and November 30. Activities described in the IS/MND, including potential maintenance activities of the ponds, may require an LSA notification. A-7

Evidence impact would be significant: Riparian habitats, including ponds, are important to watershed integrity because they perform many ecological functions such as enhancing water quality/quantity, biodiversity, habitat connectivity, and flood capacity. Impacts to riparian habitats have potential to cause a wide range of adverse effects to fish and wildlife resources.

Ponds often support greater biodiversity than other freshwater habitats (e.g., lakes and rivers), sustain many rare and endangered aquatic taxa, and act as important "refuges" in heavily modified landscapes. Alongside aquatic species, many terrestrial species—including insect pollinators, birds, bats, and other mammals—rely on ponds for water, food, and habitat. (Hill, 2021).

Recommendation: CDFW recommends early coordination with the CDFW for the potential need of an LSA Agreement prior to starting construction activities. The IS/MND should analyze all potential temporary, permanent, direct, indirect and/or cumulative impacts to the above-mentioned features and associated biological resources.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNDDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals. A-8

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ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.) A-9

CONCLUSION

CDFW appreciates the opportunity to comment on the IS/MND to assist the City of Stockton in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Ben Huffer, Senior Environmental Scientist (Specialist), at Benjamin.Huffer@wildlife.ca.gov or (707) 815-9950; or Brenda Blinn, Senior Environmental Scientist (Supervisory), at Brenda.Blinn@wildlife.ca.gov. A-10

Sincerely,

DocuSigned by:
Erin Chappell
B77E9A6211EF486...

Erin Chappell
Regional Manager
Bay Delta Region

ec: Office of Land Use and Climate Innovation (SCH No. 2025061207)

REFERENCES

CDFW. 2024. Petition Evaluation for Western Burrowing Owl (*Athene cunicularia hypugaea*). Report to the Fish and Game Commission. California Department of Fish and Wildlife, P.O. Box 944209, Sacramento, CA.

CDFW. 2012. Department of Fish and Game Staff Report on Burrowing Owl Mitigation. State of California Natural Resources Agency, Sacramento, CA.

Hill, M. J., H. M. Greaves, C. D. Sayer, C. Hassall, M. Milin, V. S. Milner, L. Marazzi, R.

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Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

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EXHIBIT 1

California
Department of Conservation
Geologic Energy Management Division

Gavin Newsom, Governor
Jennifer Lucchesi, Director
715 P Street, MS 1803
Sacramento, CA. 95814
T: (916) 445-5986

July 22, 2025

Comment Letter B

VIA EMAIL

City of Stockton Public Works Department
Liszet Burgueno
22 E. Weber Avenue, Room 301
Stockton, CA 95202
Liszet.Burgueno@stocktonca.gov

Assessor Parcel Number(s): 163-07-036
Property Owner: City of Stockton
Project Location Address: 1740 Houston Avenue, Stockton CA 95206

PROJECT TITLE: Van Buskirk Park Revitalization Project

Public Resources Code (PRC) section 3208.1 establishes re-abandonment responsibility when previously plugged and abandoned oil, gas or geothermal wells will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near previously abandoned oil, gas, and geothermal wells.

The California Geologic Energy Management Division (CalGEM) has received the above-referenced project dated June 25, 2025. To assist local permitting agencies, property owners, and developers in making safe and practical land use decisions regarding potential development near oil, gas, or geothermal wells, CalGEM provides a table in the attached enclosure of the wells within the parcel boundary or in its vicinity, based on CalGEM's Well Finder database (https://maps.conservation.ca.gov/doggr/wellfinder/). B-1

CalGEM categorically advises against building over, or in any way impeding access to, oil, gas, or geothermal wells. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access including, but not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, roadways, and decking at the landowner's expense if there is a need to access a well. Maintaining sufficient access is considered the ability for a well servicing unit and associated necessary equipment (consisting of well servicing rig, pumping equipment, pipe trailer) to reach a well from a public street or access way, solely over the parcel on which the well is located. A well servicing unit, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access the well without disturbing the integrity of surrounding infrastructure. Impermeable barriers such as asphalt, concrete, and plastic may trap hazardous gases and liquids underneath and could create a safety hazard if built over a well that later develops a leak.

CalGEM recommends that any well for which access is impeded or built over, against CalGEM's

EXHIBIT 1

advice, should be evaluated by a qualified petroleum professional for compliance with the statutory objectives of isolating all hydrocarbon-bearing strata; protecting underground and surface waters; prevention of subsequent damage to life, health, property, and other resources; and prevention of loss of oil, gas, or reservoir energy. CalGEM recommends that wells that do not meet these standards are abandoned or re-abandoned prior to construction. The well information can be accessed through CalGEM's Well Finder database mentioned above. PRC section 3208, subdivision (a), provides the primary statutory authority for CalGEM to oversee adequate abandonment of wells. Additionally, CalGEM has developed the regulatory guidance for operators to be followed during well abandonment, which are listed within California Code of Regulation, title 14 (CCR) section 1723 and associated sub-sections (for onshore wells), and section 1745 and associated sub-sections (for offshore wells).

There is no guarantee that a well abandoned in compliance with current Division requirements as prescribed by law will not start leaking in the future. Due to the inability to predict all subsurface conditions or changes, it always remains a possibility that any well may start to leak oil, gas, and/or water after abandonment, no matter how thoroughly the well was plugged and abandoned. CalGEM acknowledges wells plugged and abandoned to the most current Division requirements as prescribed by law have a lower probability of leaking in the future, however there is no guarantee that such abandoned wells will not leak.

CalGEM advises that all wells identified on the development parcel prior to, or during, development activities be tested for liquid and gas leakage. Surveyed locations in Latitude and Longitude, NAD 83 decimal format, and leak testing results should be provided to CalGEM. CalGEM expects any wells found leaking to be reported to CalGEM immediately. B-1 cont.

PRC section 3208.1 gives CalGEM the authority to order or permit the re-abandonment of any well where it has reason to question the integrity of the previous abandonment. Responsibility for re-abandonment costs may be affected by the choices made by the local permitting agency, property owner, and/or developer in considering the general advice set forth in this letter. The PRC continues to define the person or entity responsible for re-abandonment as:

1. The property owner - If the well was plugged and abandoned in conformance with Division requirements at the time of abandonment, and in its current condition does not pose an immediate danger to life, health, and property, but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived future problem, then the owner of the property on which the well is located shall obtain all rights necessary to re-abandon the well and be responsible for the re-abandonment.

2. The person or entity causing construction over or near the well - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and the property owner, developer, or local agency permitting the construction failed either to obtain an opinion from the supervisor or district deputy as to whether the previously abandoned well is required to be re-abandoned, or to follow the advice of the supervisor or district deputy not to undertake construction that impedes access, then the person or entity causing the construction over or near the well shall obtain all rights necessary to re-abandon the well and be responsible for the re-abandonment.

3. The party or parties responsible for disturbing the integrity of the abandonment - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and after that time someone other than the operator or an affiliate of the operator disturbed the integrity of the abandonment in the course of

developing the property, then the party or parties responsible for disturbing the integrity of the abandonment shall be responsible for the re-abandonment.

Should any wells require abandonment or re-abandonment, the responsible party must submit a Notice of Intention (NOI) to CalGEM through WellSTAR. The NOI form can be accessed in the 'Plugging and Abandonment' section of the following link: https://www.conservation.ca.gov/calgem/for_operators.

No well work may be performed on any oil, gas, or geothermal well without written approval from CalGEM. Well work requiring approval includes, but is not limited to, mitigating leaking gas or other fluids from abandoned wells, modifications to well casings, and/or any other re-abandonment work. CalGEM also regulates the top of a plugged and abandoned well's minimum and maximum depth below final grade. CCR section1723.5 states well casings shall be cut off at least 5 feet but no more than 10 feet below the surface of the ground. If any well needs to be lowered or raised (i.e. casing cut down or casing riser added) to meet this regulation, a permit from CalGEM is required before work can start.

B-1 cont.

CalGEM makes the following additional recommendations to the local permitting agency, property owner, and developer:

1. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements near oil or gas wells, CalGEM recommends that information regarding the below identified well(s), and any other pertinent information obtained after the issuance of this letter, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property.

2. CalGEM recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

As indicated in PRC section 3106, CalGEM has statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil, gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to CalGEM's authority to order work on wells pursuant to PRC sections 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC sections 3236, 3236.5, and 3359 for violations within CalGEM's jurisdictional authority. CalGEM does not regulate grading, excavations, or other land use issues. Should you have any questions, or if any wells are encountered that were not part of this letter, contact CalGEM at 916-322-1110 or via email at *CalGEMNorthern@conservation.ca.gov*.

Sincerely,

May Soe

May Soe
Supervising Oil & Gas Engineer

cc: The State Clearinghouse, state.clearinghouse@opr.ca.gov
Enclosure

Enclosure: The wells listed below are reported to be located within and nearby the parcel boundary and may have future access impeded. B-1 cont

There are no wells within the project area.

CALIFORNIA Water Boards

GAVIN NEWSOM
GOVERNOR

YANA GARCIA
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

Comment Letter C

17 July 2025

Liszet Burgueno
City of Stockton Public Works Department
22 East Weber Avenue, Room 301
Stockton, CA 95202
Liszet.Burgueno@stocktonca.gov

COMMENTS TO REQUEST FOR REVIEW FOR THE MITIGATED NEGATIVE DECLARATION, VAN BUSKIRK PARK REVITALIZATION PROJECT, SCH#2025061207, SAN JOAQUIN COUNTY

Pursuant to the State Clearinghouse's 25 June 2025 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Mitigated Negative Declaration* for the Van Buskirk Park Revitalization Project, located in San Joaquin County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38. C-1

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by

the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website: http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations C-1 cont.

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at: C-2

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

C-2 cont.

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at:

https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

C-2 cont.

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

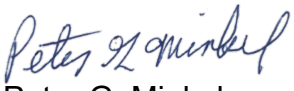
Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4684 or Peter.Minkel2@waterboards.ca.gov.



Peter G. Minkel
Engineering Geologist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento
Shanna Guiler
LSA
shanna.guiler@lsa.net

Comment Letter D

July 25, 2025

Liszet Burgueño, Junior Engineer
CIP, Public Works Department, City of Stockton
22 E. Weber Avenue, Room 301, Stockton, CA 95202

Dear Ms. Burgueño and City of Stockton,

On behalf of American Rivers (AR), Restore the Delta (RTD), we appreciate the opportunity to review the Initial Study/Mitigated Negative Declaration for the Van Buskirk Park Revitalization Project (IS/MND) and submit comments. After reviewing the IS/MND, we have comments on the following topics: park amenities & waterway access, setback levee, unhoused community, green gentrification, community engagement & project communication, and tribal involvement. D-1

Park Amenities and Waterway Access

We are incredibly supportive of the Van Buskirk Park Revitalization project because it creates an accessible greenspace that will allow for a plethora of opportunities in one of the most significant remaining public land parcels in South Stockton. We concur that there will be a dramatic improvement in aesthetics and recreational opportunities (Section 4.1), and climate resilience for thousands of Stockton residents upon completion. In addition to the benefits stated above, research and data have shown that communities with higher quantities of nature and trees, tend to have greater community well-being, which includes happiness, general health, lower stress, less aggression, and increased attention (Jaffe, 2015). Therefore, if done with proper community engagement and planning, the Van Buskirk Park Revitalization project will be a transformative project that will greatly benefit the community in a variety of ways. As exemplified by the support of the recent McKinley Park renovation at the 6/24 City Council Meeting, Stocktonians want improved parks and recreation infrastructure, and we want to help the City of Stockton make the Van Buskirk Park's revitalization great for the community. D-2

Waterways such as Walker Slough, French Camp Slough, and the San Joaquin River all border Van Buskirk Park; however, we noticed that there is no infrastructure that promotes the access and use of these public resources that are so nearby. We want to emphasize that these waterways provide an incredible opportunity for aquatic recreation, which could come in the form of nature viewing, man-powered boats, and fishing. The local community, along with other Stocktonians, are demonstrably interested in aquatic recreation. For example, fishing and fishing ponds are one of the top requested amenities of the Van Buskirk Park Master Plan Online Survey #2. Additionally, a survey conducted by RTD in collaboration with AR (survey results can be provided upon request) with the community surrounding Van Buskirk Park (2023) showed that water recreation was a top priority (35/35

respondents), with the majority of the respondents likely to use a designated area for boating and fishing (29/35 respondents).

In addition to recreation, access to waterscapes have been shown to further promote people's psychological resilience and promote psychological and mental health (Zhang et al. 2021). Access can also be utilized by local organizations to help educate the community on waterways. Local schools can use the waterway access as an educational resource to students of the South Stockton community on riparian habitat and how water affects their local ecosystems. The improved access can also be used to help the community learn about rivers and how they affect their lives. For example, if Walker Slough was accessible through a levee-top trail, community-based organizations, such as RTD, would have the opportunity to lead tours on the levee to educate local residents on the importance of the levee and what it means for flooding in their community. Spreading awareness and educating the community on levees and flood protection would better allow the community to engage with the City on projects, such as other phases of the Lower San Joaquin Project River Project.

D-2 cont.

We would like to continue helping the City of Stockton create more waterway access opportunities in any way we can. For example, we believe that there is a great opportunity to include Van Buskirk Park in a network of paddle sports trails that connects other sites, such as Louis Park and the potential Delta Aquatic Center at the confluence of the Calaveras River and San Joaquin River. Whether it involves brainstorming, fundraising, project management, planning, performing outreach, or any other tasks, we have the expertise and drive to support the City of Stockton to improve waterway accessibility at Van Buskirk Park.

Setback Levee

Stockton is an incredibly resilient city that has been addressing flooding since its founding. However, as of 2024, it is one of the highest flood-vulnerable cities in the United States. With 93% of residential properties at risk of flood damage within the next 30 years (Admin, 2024), it is incredibly important to build infrastructure that protects the community. That is one of the reasons why we are supportive of setting back the levee on the northwestern portion Van Buskirk Park from its current configuration to reconnect the San Joaquin River and French Camp Slough to the historic adjacent floodplain, restore hydrology, grade and plant native vegetation to establish appropriate elevations for wetland and riparian habitat, and remove rock from the remnant levee. A levee setback has multiple ecological and flood risk reduction benefits. According to the National Levee Safety Guidelines (NLSG), ecological benefits include decreased scour and erosion, improved aquatic habitat, increased wetlands, increased overbank flows and inundation areas, improved upland habitat and wildlife connection, and the development of new drainage pathways (Table 1). The new levee will reduce the flood risk to people and property; but a levee set further back from the water will decrease water velocity and erosion, placing less strain on the levee and reducing the risk of failure. By allowing the San Joaquin River to spread out across a larger floodplain, the City of Stockton will reduce flood risk to the South Stockton community, while simultaneously creating the opportunity for USACE to meet mitigation requirements.

D-3

We would like to acknowledge that the details of the environmental mitigation for the northwestern portion of the park, as well as other subsequent phases, still need to be determined. We look forward to reviewing the subsequent, project-level CEQA analyses for those phases. We also acknowledge that USACE is currently creating a conceptual design of the potential setback levee for the portion. However, none of the plans are set yet. Therefore, we would like to emphasize the importance of the City of Stockton promoting a setback levee at the northwestern portion of Van Buskirk Park and collaborating with USACE to effectively integrate the two congruent projects. Having had communications with USACE and city employees on the Van Buskirk Park project and reviewed publicly available information, it is not apparent that the City and USACE are collaborating closely together to integrate the

potential setback levee into the other various phases of the revitalization project. Therefore, we urge the City of Stockton to work more closely with USACE to integrate both projects before USACE breaks ground in 2032. We believe that the future community meeting surrounding the proposed Van Buskirk setback levee, organized by USACE and the City of Stockton, and subsequent integration of community input into the mitigation planning at Van Buskirk Park is great for collaboration and vital to the overall success of the project.

Table 11-1: Levee Removal and Associated Ecological Effects

Potential Effects	Ecological Benefit	Ecological Risk
Decrease in velocity	Reduced scour and bank erosion, improved riverine fish passage and aquatic habitat, increased sediment bedload deposition.	Sedimentation of existing habitat.
Increase in overbank flows and inundation area	Increasing post-removal riparian, wetland, and other floodplain habitat.	Negative impacts of inundation on existing upland habitat and vegetation in overbank areas.
	Increased aquifer recharge in freshwater systems.	
Improve upland habitat and wildlife connection	Improved access and connectivity between upland habitat and the waterbody.	Increased wildlife and human interaction with negative consequences.
Disruption to existing drainage pathways	Development of new drainage pathways, designed to maximize ecological benefit.	Impacts on existing habitat along drainage pathways.

Table 1. Levee removal and associated ecological effects table from the National Levee Safety Guidelines. Though the table title shows only ”levee removal” these benefits also apply to setback levees according to the document.

D-3 cont.

Unhoused Community

Section 4.14 Population and Housing Question B: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

We believe that the City of Stockton’s assessment and response to Section 4.14 Question B is incomplete. Although we concur that no permanent housing is located in Van Buskirk Park, that does not mean that there are no people “existing” in the project area. People experiencing homelessness often use greenspaces, such as Van Buskirk Park and the closed golf course site as a place of refuge and rest. Often-times establishing encampments and in place of increasingly inaccessible housing. These people, who are members of the Stockton community, are incredibly vulnerable to displacement.

D-4

San Joaquin County Continuum of Care found that the number of unhoused individuals in San Joaquin County increased by 104% from 2022 to 2024 (Franco, 2024). 73% of these individuals were unsheltered at the time of their study. If this trend continues the number of people affected by the construction of Van Buskirk would likely be more substantial than it is today, putting strain on temporary shelter and other related services in the county. Although we acknowledge that the City of Stockton has been creating new temporary housing through projects such as the Carol and Henry Zeiter Navigation Center with St. Mary’s Community Services. These projects take time, money, and might not be enough to accommodate the influx of individuals that need shelter.

Therefore, the City of Stockton needs to have a plan to appropriately work with the unhoused community to help them transition out of the project site and prepare the city's infrastructure in a way that safely relocates people with the resources that they need. This plan should include best practices that need to be implemented. Below are a few examples of applicable best practices that are provided in the 19 Strategies for Communities to Address Encampments Humanely and Effectively document written by the U.S. Interagency Council on Homelessness (2024):

- Create timelines for planning, outreach, engagement, notice, closure, and site restoration
- Ask encampment residents what housing and service options they need and want
- Collaborate with the agencies responsible for providing and connecting people to services and housing and connect resources to Coordinated Entry
- Secure and coordinate transportation from encampments to housing and services for every resident
- Provide encampment residents with verbal and written notices in plain and multiple languages of a closure at least 30 days in advance.
- Offer low-barrier shelter, short-term or permanent housing, or residential treatment to every person living in an encampment, and ensure availability on day of closure.
- Communicate clearly with residents early and often about the process, housing and shelter options, and storage, among other things. Provide residents at least two days to sort and pack personal items prior to closure—unless there is an environmental health or urgent safety issue

D-4 cont.

It is imperative to have a plan and timeline with the unhoused community to minimize the impact of displacement. AR strongly urges the City of Stockton to work with local NGOs such as St. Mary's Community Service and Stockton209Cares to get a better understanding of the unhoused community at Van Buskirk, develop a plan/timeline for potential encampment closure, and ensure that there is adequate temporary and permanent housing for the displaced people.

<u>Green Gentrification, Community Engagement, Project Communication</u>

Section 4.14 Population and Housing Question A: Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

We disagree with the City of Stockton's response to Section 4.14 Question A. Although no new housing, commercial, or industrial space will be directly constructed as the result of the project, this project is centered around building park infrastructure that expands upon amenities to the South Stockton community. Furthermore, the project would provide public access to currently-inaccessible areas. For example, this project will likely remove the gates that are currently preventing people from going into the former golf course area.

D-5

This increase of infrastructure and access to the park will very likely affect the nearby community "indirectly". Since people want to have access to the great park infrastructure that will be built as part of this project, they are more incentivized to move to nearby communities, such as Conway Homes, increasing the demand of the area. With increased demands for housing in the surrounding communities and limited space to build housing, nearby housing costs will likely increase, leading to a phenomenon called green gentrification.

Green gentrification, the displacement of typically working-class communities of color as a result of new greenspaces that leads to increased housing costs (Anguelovski et al., 2022), would nullify the positive socioeconomic impact of the Van Buskirk Revitalization project. In many instances, urban green development projects, such as the Van Buskirk Park project have led to increased economic distress in the surrounding area. Green gentrification is well-documented and prevalent with many urban greenspace projects similar to the Van

Buskirk Park and Calaveras River Parcel projects. It has been recorded in Atlanta, GA, with the Atlanta Beltline Project, in Brooklyn, NY with the Gowanus Canal and Prospect Park revitalizations, and many more cases around the world.

Below are some articles, that have documented this phenomenon:

- Literature Review on Green Gentrification (Jelks et al., 2021)
- Atlanta, GA: The Atlanta Beltline Project (Immergluck & Balan, T. 2017)
- Brooklyn, NY: Gowanus Canal & Prospect Park (Gould & Lewis, 2012)
- New York City: Census + Housing Analysis (Du & Zhang, 2020)
- Barcelona, Spain: Spatial Analysis of Green Gentrification (Anguelovski et al., 2017)

The threat of green gentrification does not mean that the Van Buskirk Park Revitalization project should not occur; however, it means it is vital that the project team take the necessary steps to address the potential damage to the community. Figure 1 is a graphic from the Equitable Development Toolkit, written by River Network and NPS (Fullmer & Mazurek, 2024), that shows how green projects can lead to gentrification and potential ways to reduce the risk to communities throughout the process. It is important to note that all solutions to reduce the risk of green gentrification involve authentic community engagement. Endeavors, such as the 11th Street Bridge Project and other projects within the Highline Network, have utilized similar methods to address gentrification (Jacobs, 2017). D-5 cont.

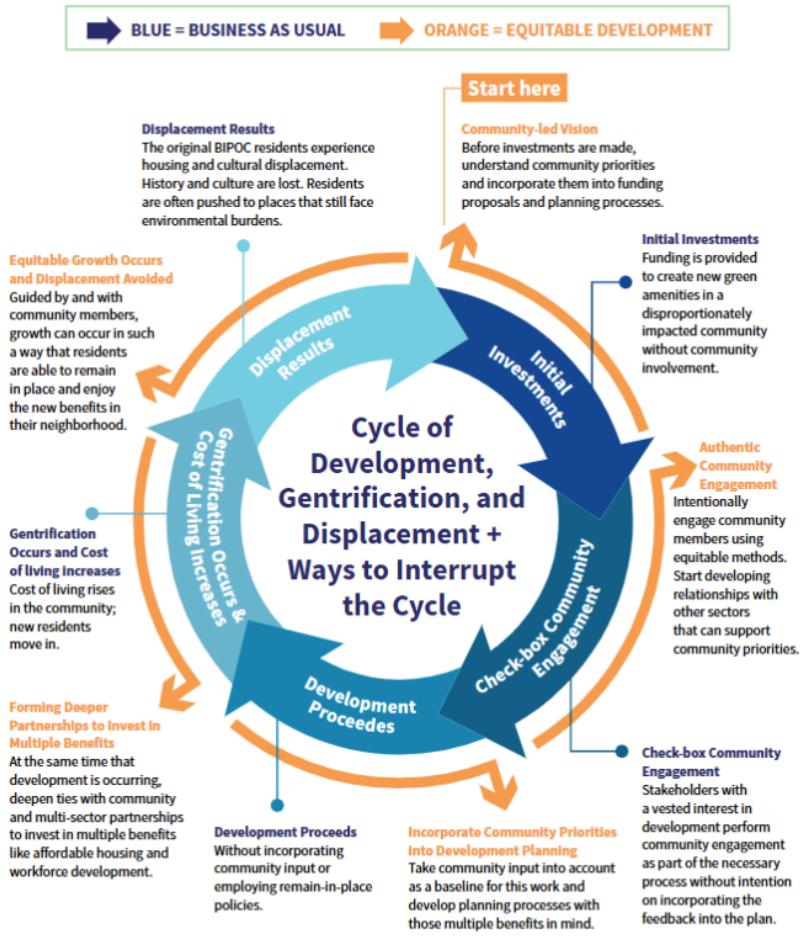


Figure 1. Cycle of Development, Gentrification, and Displacement and Ways to Interrupt the Cycle from the Equity Development Toolkit written by written by River Network and the National Park Service (Fullmer & Mazurek, 2024)

The City of Stockton has already performed projects that work towards addressing green gentrification, such as the Transformative Climate Communities project (TCC). In the TCC, the City of Stockton worked with local partners, community residents, and contractors to develop a variety of plans, including a Community Engagement Plan, to address the potential negative effects of the TCC project. The Community Engagement Plan included resident-centered programs, educational campaigns, quarterly Community Coalition meetings, Stockton Rising summits and bi-annual celebratory Block Parties. The team surrounding the TCC project will also develop a Collaborative Stakeholder Structure to provide stewardship and feedback throughout their grant term.

Currently, the Van Buskirk Park Revitalization project has no publicly-accessible plan to work alongside the community or address green gentrification. Although we greatly appreciate previous outreach efforts and the integration of the community's feedback for the park's design, this project currently has minimal engagement with local partners. In fact, there have been no meetings or outreach on the project since September of 2022. We understand that the TCC project had funds allowed for more robust community engagement. However, we strongly urge the City of Stockton to adopt a similar, active approach to community engagement for the Van Buskirk Revitalization Project. For successful community engagement, there should be a publicly available community engagement plan. We believe this will not only help the overall success of the project, but also secure the support infrastructure and long term funding of the revitalization beyond Phase 1. This plan can include the following: D-5 cont.

- A timeline for the project and its phases
- A strategy to outreach to various communities
- A strategy to maintain regular communication between communities previously outreached (consistent meetings)
- A strategy to work alongside local community-based organizations
- The community engagement plan in various languages such as Spanish and Tagalog

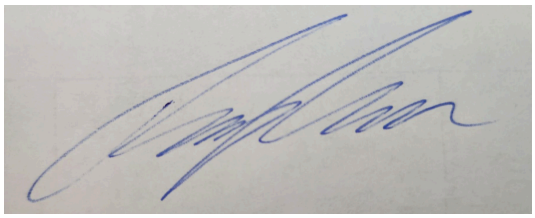
Tribal Involvement

Although we do not represent any tribal entities within Stockon, we encourage the city to continue engaging with the Northern Valley Yokuts Tribe and Nototome Cultural Preservation beyond tribal consultation for cultural resources. It is crucial to continue to coordinate and consult with those with ancestral ties to the area. As the geoarchaeological analysis revealed probable past use for resource extraction (Tule, sedge,etc.), we would also like to encourage the development of gathering opportunities within the project area and encourage the history and practices of the area be shared through interpretive means. D-6

Conclusion

Overall, we are supportive of the Van Buskirk Revitalization Project. If done with authentic community engagement and proper communication, this project and its various phases will have the potential to provide a net benefit for the people of South Stockton that goes beyond recreation. However, it is important to work alongside the community to have an equitable result. We believe that increased access to the waterway, closer partnership with USACE, a plan/timeline of working with the unhoused community, and a community engagement plan will further improve the project and reduce the risk of detrimental effects that might result from this project. D-7

Sincerely,



Teague Tran, American Rivers,
Associate Director, Central Valley River Restoration



Artie Valencia, Restore The Delta,
Flood and Land Restoration Manager

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Comment Letter E

From: Patrisia Avelar <avongirl716@gmail.com>
Sent: Saturday, July 12, 2025 6:33 PM
To: Liszet Burgueno <Liszet.Burgueno@stocktonca.gov>
Subject: Comment on the Van Buskirk Park Revitalization Project

CAUTION: This email originated from outside the City of Stockton. Do not click any links or open attachments if this is unsolicited email.

To the attention of Liszet Burgueño,
Public Works Department, City of Stockton:

I am writing to express my concerns regarding the Van Buskirk Park Revitalization Project, particularly around issues of noise, safety, and the park's impact on the surrounding neighborhood.

While I support the idea of revitalizing and expanding public spaces, I am concerned that new features such as sports courts, a skate park, mini-golf, and event areas may result in a noticeable increase in noise, especially during evenings and weekends. This could disrupt the peace for those of us living nearby. E-1

I am also concerned about the potential for people hanging out in the park after hours, which could raise safety and nuisance issues. With more amenities drawing larger crowds, it's important to know if the City plans to implement security measures. Will there be:

Park rangers, security staff, or police patrols on-site? E-2

Gates or fencing that can be locked after hours?

Clearly posted and enforced park hours?

Measures to deter loitering or overnight presence?

In addition, I'd like to know if there will be any kind of separation between the park and nearby homes—such as fencing, landscaping barriers, or buffer zones—to protect resident privacy, reduce noise, and discourage trespassing. E-3

I appreciate that the City is investing in community spaces, but I urge you to prioritize neighborhood concerns as part of this process. I hope these issues will be considered seriously during the final planning stages. E-4

Thank you for your time and attention. I look forward to your response.

APPENDIX E

MITIGATION MONITORING AND REPORTING PROGRAM

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MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) is formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the Van Buskirk Park Revitalization Project (project). The MMRP, which is presented in Table A, lists mitigation measures recommended in the IS/MND and identifies mitigation monitoring requirements.

This MMRP has been prepared to comply with the requirements of State law (Public Resources Code Section 21081.6). State law requires the Lead Agency to adopt an MMRP when mitigation measures are required to avoid significant impacts. The MMRP is intended to ensure compliance with the mitigation measures identified in the IS/MND during implementation of the project.

The MMRP is organized in a matrix format. The first column identifies the recommended mitigation measures. The second column, entitled *Implementation Actions*, refers to the actions taken by the party responsible for oversight to ensure compliance. The third column, entitled *Timing Requirements,* refers to when the monitoring will occur to ensure that the mitigating action is completed. The fourth column, entitled *Monitoring/Reporting Responsibility* refers to the party responsible for oversight or ensuring that the mitigation measure is implemented. The fifth column, entitled *Verified By and Date*, refers to the party and date the action was verified as complete.

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Table A: Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Actions	Timing Requirements	Monitoring/Reporting Responsibility	Verified By and Date
BIOLOGICAL RESOURCES				
BIO-1: Biological Monitor. A qualified biologist shall be present on site as a Biological Monitor to survey and monitor special-status species during all construction work within the Project site. The Biological Monitor shall conduct all preconstruction surveys and will ensure that any construction barrier fencing and work exclusion zones are established and maintained. The Biological Monitor shall furthermore supervise and monitor all Project activities to ensure that appropriate protective measures are implemented. The Biological Monitor shall conduct clearance surveys at the beginning of each day within or adjacent to suitable special-status species habitat, including wetlands and riparian habitats. The Biological Monitor shall have the authority to halt work activities that may affect special-status species at any life stage. If a special-status species enters the work site, all work shall stop until it leaves on its own volition. If the Biological Monitor finds that any special-status species are present at the work site, all Project work shall stop, and the appropriate regulatory agencies (California Department of Fish and Wildlife [CDFW], United States Fish and Wildlife Service [USFWS], and/or the National Marine Fisheries Service [NMFS]) shall be notified. If there is imminent danger of injury to special-status species from Project-related activities and the special-status species individual(s) do not move out of the work site on their own, the Biological Monitor shall relocate the animal(s) to the nearest suitable habitat outside the work zone and notify the appropriate regulatory agencies within 24 hours.	● Include measure as Condition of Approval. ● Implementation actions are outlined in the measure.	Prior to and throughout the duration of project construction	● The City of Stockton (City) is responsible for incorporating this measure into contract specifications, hiring the Qualified Biologist, and for ensuring compliance prior to and during construction. ● The Qualified Biologist are responsible for implementing this measure.	
BIO-2: Worker Environmental Awareness Training (WEAT). During Project construction, before any work occurs in the Project site, including grading, vegetation removal, and equipment staging, all construction personnel shall participate in WEAT regarding special-status species and sensitive habitats present in the Project area. Any additional construction personnel who are employed following the initial start of construction shall receive the mandatory training before beginning work. As part of the training, an environmental	● Include measure as Condition of Approval. ● Implementation actions are outlined in the measure.	Prior to ground-disturbing activities associated with project construction.	● The City is responsible for incorporating this measure into contract specifications, hiring the Qualified Biologist, and for ensuring compliance during construction.	

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Actions	Timing Requirements	Monitoring/Reporting Responsibility	Verified By and Date
awareness handout shall be provided to all personnel that describes and illustrates sensitive resources (i.e., special-status species and habitat, nesting birds/raptors) to be avoided during the proposed Project construction and lists measures to be followed by personnel for the protection of biological resources.			● The Qualified Biologist and all persons employed or otherwise working on the project site are responsible for implementing this measure.	
BIO-3: Implement General Wildlife Protection Measures During Construction. The City of Stockton (City) and its contractors' employees and volunteers shall implement general wildlife protection measures during construction that shall include, but may not be limited to, the following: ● Limit construction activities to daylight hours to the extent feasible. Conduct all in-water construction activities between May 1 and November 30. ● Confine clearing to the minimal area necessary to facilitate construction activities. ● Clearly delineate the Action Area limits by using fencing, flagging, or other means prior to the start of construction activities. ● Limit the number of new temporary access routes, number and size of staging areas, and total area of construction activities when working in or adjacent to wetlands, streams, and riparian areas. Movement of heavy equipment shall be confined to existing roadways, and excavation equipment shall be operated from the tops of banks to minimize habitat disturbance. ● Keep all fueling and maintenance of vehicles and other mechanized equipment in designated areas at least 100 feet from any aquatic habitat. Each designated fueling/maintenance area shall be protected by a containment barrier designed to prevent any spilled or leaked fuel or other contaminants from running into an aquatic habitat. All workers shall be informed of the	● Include measure as Condition of Approval. ● Implementation actions are outlined in the measure.	Throughout the construction period.	● The City is responsible for incorporating this measure into contract specifications and for ensuring compliance during construction. ● The Construction Contractor is responsible for implementing this measure.	

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Actions	Timing Requirements	Monitoring/Reporting Responsibility	Verified By and Date
importance of preventing spills and of the appropriate measures to take should a spill occur. ● Reduce the risk of spreading harmful pathogens by sanitizing all vehicles and equipment before use in natural areas. All vehicular and equipment cleaning work shall be conducted in self-contained work areas at least 100 feet from any aquatic habitat; wash water shall not be disposed of in any natural areas. ● Avoid wildlife entrapment by completely covering or providing escape ramps for all excavated steep-walled holes or trenches more than 1 foot deep at the end of each work day. ● Inspect the work area and any equipment or material left on site overnight for listed species prior to the start of construction activities each day. ● Dispose of garbage in wildlife-proof containers and remove the garbage from the construction area regularly during the construction period. ● Check under equipment and in staging areas for wildlife species each morning prior to work. ● Stay within designated work areas. ● Maintain exclusion/silt fencing. ● No pets or firearms shall be allowed on site. ● Report to the supervisor on site any observed incident of death or injury to a special-status species or damage to habitat. The supervisor shall immediately notify the Qualified Biologist.				
BIO-4: Preconstruction and Construction Monitoring. The City shall avoid and minimize effects to special-status species during construction, habitat restoration, and maintenance activities associated with the Project. The following preconstruction and construction monitoring measures shall be implemented:	● Include measure as Condition of Approval. ● Implementation actions are	Prior to and throughout the duration of project construction.	● The City is responsible for incorporating this measure into contract specifications, for hiring a Qualified Biologist, consulting with CDFW,	

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Actions	Timing Requirements	Monitoring/Reporting Responsibility	Verified By and Date
1. Preconstruction surveys shall be conducted for nesting Swainson's hawk, following the "Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in the California's Central Valley" ; these surveys shall include a 0.25-mile radius outside the Project area. Nest trees shall only be removed between September 16 and February 1, when nests are unoccupied. Construction work (including grading, earthmoving, surveying, and any operation of construction equipment) shall not occur within a 0.25-mile buffer zone around an active, occupied Swainson's hawk nest with eggs or young. Construction work may commence in the buffer zone when a qualified biologist has confirmed that nesting activity is complete (e.g., Swainson's hawk young have fully fledged, are capable of flight, and have left the nest, or the adults have abandoned the nest for a minimum of 7 days and there is no evidence of re-nesting activity). The size of nest site buffer zones may be reduced only under the following conditions: a. A site-specific analysis prepared by a qualified biologist indicates that the nesting pair under consideration are not likely to be adversely affected by construction activities (e.g., the nest is located in an area where the hawks are habituated to human activity and noise levels are comparable to anticipated construction work). CDFW must approve this analysis before construction may begin within 0.25 mile of a nest. b. Monitoring by a qualified biologist is conducted for a sufficient time (during all construction activities for a minimum of 10 consecutive days following the initiation of construction), and the nesting pair does not exhibit adverse reactions to construction activities (e.g., changes in behavioral patterns, reactions to construction noise). c. Monitoring is continued at least once per week through the nesting cycle at that nest. This longer-term monitoring may be reduced to a minimum of 2 hours in the morning and 2 hours	outlined in the measure.		obtaining any necessary permits, and providing compensatory mitigation, if required. ● The Qualified Biologist is responsible for conducting pre-construction surveys, conducting monitoring, establishing avoidance areas, and halting work, if needed.	

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Actions	Timing Requirements	Monitoring/Reporting Responsibility	Verified By and Date
in the afternoon during construction activities; however, additional and more frequent monitoring may be required if any adverse reactions are noted. d. Weekly monitoring reports shall be submitted to CDFW during construction and monitoring activities. e. If adverse effects are identified, construction activities shall cease immediately and construction shall not resume until the qualified biologist, in consultation with CDFW, has determined that construction may continue under modified restrictions or that nesting activity is complete. 2. Preconstruction surveys for Elderberry bushes shall be conducted at least 14 days prior to any ground disturbance. All areas to be avoided during construction activities shall be fenced and/or flagged. Activities that may damage or kill an elderberry shrub (e.g., trenching, paving, etc.) may need an avoidance area of at least 6 meters (20 feet) from the dripline. 3. A qualified biologist shall conduct a habitat assessment and surveys, if habitat for burrowing owl is present prior to construction. The habitat assessment and surveys shall follow the Department of Fish and Game State Report on Burrowing Owl Mitigation[1] methodology and the qualified biologist shall prepare a report documenting the survey results, and submit the report to CDFW, and obtain CDFW's written approval of the report prior to Project construction. The habitat assessment and surveys shall encompass the Project site and a sufficient buffer zone to detect owls nearby that may be impacted, which is up to 500 meters (1,640 feet) around the Project site pursuant to above methodology. Habitat assessments and surveys shall occur annually for the duration of the Project, as conditions may change annually and suitable refugia for burrowing owl, such as				

[1] California Department of Fish and Game. 2012. *Staff Report on Burrowing Owl Mitigation*. Website: nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843 (accessed July 29, 2021).

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Actions	Timing Requirements	Monitoring/Reporting Responsibility	Verified By and Date
small mammal burrows, can be created within a few hours or days. Surveys for either non-breeding or breeding burrowing owls shall be spread over four visits during the non-breeding and breeding season. Time lapses between surveys or Project activities shall trigger subsequent surveys including, but not limited to, a final survey within 24 hours prior to ground disturbance. If the habitat assessment does not identify habitat and surveys are not conducted, an additional habitat assessment shall be conducted within 14 days prior to construction. If new refugia are present such as burrows or novel Project infrastructure, surveys shall be conducted as described above. The qualified biologist shall have a minimum of two years of experience implementing the above methodology. The following measures shall be implemented should preconstruction surveys find burrowing owls to be present: a. The City shall immediately notify CDFW if burrowing owl is detected and implement a construction avoidance buffer around any detected burrowing owl pursuant to the buffer distances outlined in the Department of Fish and Game State Report on Burrowing Owl Mitigation. Any detected owl shall be monitored by the qualified biologist to ensure it is not disturbed during construction activities. b. If the City cannot ensure burrowing owl and their burrows are fully avoided, the City shall consult with CDFW and obtain a California Endangered Species Act (CESA) take authorization or otherwise demonstrate compliance with CESA. Take is likely to occur and City shall obtain an Incidental Take Permit (ITP) if burrowing owl surveys detect burrowing owl occupancy of burrows or burrow surrogates within the Project site. Occupancy of habitat may also be indicated by burrowing owl sign including molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance or perch site.				

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Actions	Timing Requirements	Monitoring/Reporting Responsibility	Verified By and Date
c. If burrowing owl, or their burrows or burrow surrogates are detected within 500 meters (1,640 feet0 of the Project site, but not on the Project site, the City shall consult with CDFW to determine if avoidance is feasible or an ITP is warranted. d. To prevent burrowing owl from sheltering or nesting in exposed material; all construction pipes, culverts, hoses or similar materials greater than two inches in diameter stored at the Project site shall be capped or covered before the end of each work day and shall be inspected thoroughly for wildlife before the pipe or similar structure is buried, capped, used, or moved. 4. Preconstruction bumble bee surveys shall be conducted in all grassland areas at least 14 days prior to construction, following nonlethal survey protocols and current State and federal guidelines. A minimum of three pre-activity surveys shall be conducted within 30 days during appropriate activity periods (i.e., March through September) prior to the start of ground-disturbing activities to identify bumble bee activity. Surveys should be repeated for each year of the Project activities. The preactivity surveys shall occur when temperatures are above 60°Fahrenheit (15.5°Celsius) and not during wet conditions (e.g., foggy, raining, or drizzling). The survey shall be conducted at least 2 hours after sunrise and 3 hours before sunset, and shall occur at least 1 hour after rain subsides. Preferably, the survey should be conducted during sunny days with low wind speeds (less than 8 miles per hour), but surveying during partially cloudy days or overcast conditions is permissible if the surveyors can still see their own shadows. If western bumble bees, or potential Crotch's or western bumble bees (since bumble bees can be difficult to identify in the field) are observed within the Project site, a plan to protect special-status bumble bee nests and individuals shall be developed and				

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Actions	Timing Requirements	Monitoring/Reporting Responsibility	Verified By and Date
implemented in consultation with CDFW. The plan shall include, but not be limited to, the following measures: a. Specifications for construction timing and sequencing requirements (e.g., avoidance of mowing, tilling, or other ground disturbance until late March to protect overwintering queen bumble bees); b. Establishment of appropriate no-disturbance buffers for bumble bee nest sites to avoid impacts to the bees and monitoring by a qualified biologist to ensure compliance if bumble bee nests are identified; c. Restrictions associated with construction equipment or materials that may harm bumble bees (e.g., avoidance of pesticides/herbicides, BMPs to minimize the spread of invasive plant species); d. Provisions to avoid western bumble bees, or potential western bumble bees if observed away from a bumble bee nest during Project activity (e.g., ceasing of Project activities until the animal has left the active work area on its own volition); and e. Prescription of an appropriate restoration seed mix targeted for the western bumble bee, including native plant species known to be visited by native bumble bee species and containing a mix of flowering plant species with continual floral availability through the entire active season of the western bumble bee (March through September). If Project impacts to special-status bumble bee cannot be completely avoided, the City shall apply obtain an ITP from CDFW. If the Project will result in permanent impacts to suitable special-status bumble bee habitat, the City shall provide compensatory mitigation at a minimum ratio of 3:1. Floral resources shall be replaced as close to their original location as				

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Actions	Timing Requirements	Monitoring/Reporting Responsibility	Verified By and Date
is feasible. If active special-status bumble bee nests have been identified and floral resources cannot be replaced within 200 meters (656 feet) of their original location, floral resources shall be planted in the most centrally available location relative to identified nests. This location shall be no more than 1.5-kilometer (4,921 feet) from any identified nest. Replaced floral resources may be split into multiple patches to meet distance requirements for multiple nests. Mitigation lands shall be protected in perpetuity under a conservation easement with an endowment established for long-term management of the lands. 5. Preconstruction surveys shall be conducted during the monarch breeding season (March 16 through October 31) to determine if milkweed is present on site and is being used for monarch breeding. Surveys shall be conducted by a qualified biologist no more than 14 days prior to ground or vegetation disturbance activities. The biologist will search for evidence of monarch eggs, caterpillars, chrysalises, and adults. 6. Prior to any construction activities, preconstruction surveys for northwestern pond turtle shall be performed by a qualified biologist within the Project area and staging area (including a 50-foot buffer) to determine whether northwestern pond turtles or their active nests are present. Preconstruction surveys for northwestern pond turtles, shall be conducted 24 hours prior to construction activities. Surveys shall be repeated if a lapse in construction activity of 2 weeks or more occurs. 7. Preconstruction breeding bird surveys shall be conducted within 14 days prior to the start of construction. If there is a break in construction of 1 week or more, surveys shall be conducted prior to the reinitiation of construction. If birds or nests are located within this buffer, USFWS will be contacted for further guidance to ensure birds or nests are not disturbed. If surveys determine that the species is present and nesting within this area, an appropriate nest protection buffer shall be established by a				

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Actions	Timing Requirements	Monitoring/Reporting Responsibility	Verified By and Date
qualified biologist based on the species, type of construction or maintenance activities, and line of sight to the work area. Under this measure, nesting birds and offspring would not be disturbed or killed, and nests and eggs would not be destroyed. Work shall be conducted no less than 500 feet from an active raptor nest and 100 feet from an active migratory bird nest, although buffer distances for all nesting birds may differ based on consultation with CDFW and USFWS. To prevent encroachment, the established buffer(s) shall be clearly marked by high-visibility material if it has been determined by the qualified biologist that high-visibility material would not attract predators to the nest site. No construction activities, including tree removal, shall occur within the buffer zone until the young have fledged or the nest is no longer active, as confirmed by the qualified biologist. If construction or maintenance activities must occur within established buffer zones, a qualified biologist shall establish monitoring measures, including frequency and duration, based on species, individual behavior, and type of construction activities. If birds are showing signs of distress within the established buffer(s), construction or maintenance activities shall be modified or the buffer(s) shall be expanded to prevent birds from abandoning their nests. At any time, the biologist shall have the authority to halt work if there are any signs of distress or disturbance that may lead to nest abandonment. Work shall not resume until corrective measures have been taken or it is determined that continued activity would not adversely affect nest success. The monitor shall continue monitoring the nest until construction within 0.5 mile of the nest is completed, or until all chicks have completely fledged and are no longer dependent on the nest.				
BIO-5: Monarch Butterfly Avoidance. The recommended management timing for vegetation management in the Central Valley is October 31 through March 15. If active monarch breeding is identified, any milkweed stand shall be protected from disturbance and maintenance, or until the City develops and implements a	• Include measure as Condition of Approval.	During construction activities	• The City is responsible for ensuring incorporating this measure into contract specifications and developing and	

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Actions	Timing Requirements	Monitoring/Reporting Responsibility	Verified By and Date
salvage and relocation plan that has been reviewed and approved by USFWS. The following general recommendations shall be implemented: ● Spot mowing shall be used and focused on areas with weeds and other target vegetation. Mowing of natural vegetation communities (outside active recreation features) shall be limited to no more than twice per year. Milkweed mowing during the monarch breeding season (March 15 through October 31) shall be avoided and delayed as late as possible (i.e., late summer or early fall) to provide a longer period for monarch caterpillars to develop and extend the availability of nectar plants to monarchs and other pollinators into the late summer. Generally, fall mowing after the first frost is ideal to avoid mowing floral resources and host plants for breeding and migrating monarchs. Existing milkweed patches shall be flagged, when feasible, and mowing avoided to conserve milkweed plants and avoid causing direct mortality to immature stages of monarchs. Mower operators shall be trained to recognize milkweed plants and important native nectar plants so they can be spared during mowing. Mowing shall be at a minimum height of 10 to 12 inches to avoid cutting newly emerged milkweed plants in the spring (March through early June). Mowing should occur during the middle of the day. Monarch adults are typically most active during the warmer parts of the day, which means they are better suited to escaping a mower. If invasive nonnative and/or noxious weeds are present, the mowing equipment shall be cleaned after use and between sites to limit the spread of these weeds. ● Insecticide treatments shall be planned to avoid direct exposure to both juvenile and adult monarchs. Insecticide use and subsequent impacts on pollinators shall be reduced by creating an integrated pest management plan. Conditions that allow pest populations to survive and reproduce shall be prevented. Diverse management techniques (e.g., biological, physical, and cultural) shall be employed and pesticides used only when pests pose an	● Implementation actions are outlined in the measure.		implementing a salvage and relocation plan.	

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Actions	Timing Requirements	Monitoring/Reporting Responsibility	Verified By and Date
economic or public health threat. Pesticides shall be selected and applied to minimize risks to nontarget organisms and applied at the lowest effective application rate specified on the product label. Pesticide applications shall be timed to avoid monarch exposure. Pesticides (especially insecticides) shall not be applied when monarchs (adult and immature) are present (March 15 through October 31). Precautions shall be taken to avoid off-site movement and reduce the risk of drift. Spray nozzles shall be carefully chosen and calibrated. Applications shall be conducted on calm days when wind speed is less than 10 miles per hour. Application shall be avoided during a temperature inversion and when conditions are likely to cause evaporation. Using backpack sprayers and applying from the ground should be considered. On boom sprayers, the lowest effective pressure and largest droplet size possible shall be used. Nozzles shall be set low so they operate just above plant height. Aerial applications and mist blowers shall be avoided whenever possible.				
BIO-6: Pollinator Habitat Restoration. To limit any potential adverse effects on pollinators, all herbaceous vegetation removal activities shall be conducted from September 1 through February 28. This includes any vegetation control with herbicides. When using herbicides, application shall be implemented by a person holding a Qualified Applicator License from the State of California. Any application of pesticides shall be completed in a manner that avoids drift and contamination of nontarget plants and areas. Ecologically invasive weeds shall be treated with spot spraying of an approved herbicide only. Targeted application of herbicides may be used in conjunction with removal of nonnative invasive weeds. Restoration of natural areas shall include establishing native seed mixes containing a diversity of native wildflowers, including milkweed, as appropriate. Native seed mixes shall be applied in bare-soil areas, including those recently cleared, graded, or disturbed. Nesting needs of ground-nesting bees and bumble bees shall be taken into consideration when restoring this habitat.	• Include measure as Condition of Approval. • Implementation actions are outlined in the measure.	During and following completion of construction activities.	• The City is responsible for incorporating this measure into contract specifications, hiring a Qualified Applicator, and implementing this measure.	

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Actions	Timing Requirements	Monitoring/Reporting Responsibility	Verified By and Date
BIO-7: Valley Elderberry Longhorn Beetle (VELB). The following measures shall be implemented to avoid and minimize effects to VELB and/or its habitat: ● Prior to implementation of any activities that may damage or kill an elderberry shrub (e.g., trenching, paving), an avoidance area of at least 6 meters (20 feet) shall be established from the dripline, depending on the type of activity. All areas to be avoided during construction activities shall be fenced and/or flagged as close to the construction limits as feasible. All elderberry plants (with stems greater than 1 inch in diameter at ground level) occurring within the Project area shall be marked with flagging and avoided. No construction shall occur within the protected 20-foot buffer area. No elderberry shrub with one or more stems greater than 1 inch in diameter at ground level shall be removed if it is possible to avoid it (for shrubs that cannot be avoided, see the transplanting procedures below). ● A qualified biologist shall provide training for all contractors, work crews, and any on-site personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance (see Mitigation Measure BIO-2). ● A qualified biologist shall monitor the work area at Project-appropriate intervals to ensure that all avoidance and minimization measures are implemented. The amount and duration of monitoring will depend on the Project specifics and should be discussed with the qualified biologist. ● All activities that could occur within 165 feet of the elderberry shrub shall be conducted outside the flight season of the VELB (March through July). Trimming of elderberry bushes may remove or destroy VELB eggs and/or larvae and may reduce the health and vigor of the elderberry shrub. In order to avoid and minimize adverse effects to VELB when trimming, trimming shall occur between November and February and shall avoid the	● Include measure as Condition of Approval. ● Implementation actions are outlined in the measure.	Prior to, during, and following completion of construction activities	● The City is responsible for hiring a Qualified Biologist and ensuring implementation of this measure. ● The Qualified Biologist is responsible for establishing avoidance areas, providing training, and monitoring during construction. ● The Construction Contractor and Qualified Biologist are responsible for implementing erosion control and transplanting shrubs.	

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removal of any branches or stems that are greater than or equal to 1 inch in diameter. Measures to address regular and/or large-scale maintenance (trimming) shall be established in consultation with the USFWS. Mechanical weed removal within the dripline of the shrub shall be limited to the season when adults are not active (August through February) and shall avoid damaging the elderberry. No flail-type mower shall be used within an elderberry shrub dripline with one or more stems measuring more than 1 inch in diameter at ground level. ● Herbicides shall not be used within the dripline of the shrub. Insecticides shall not be used within 30 meters (98 feet) of an elderberry shrub. All chemicals shall be applied using a backpack sprayer or similar direct application method. ● Erosion control shall be implemented, and the affected area shall be revegetated with appropriate native plants. ● In order to protect VELB larvae to the greatest extent possible, all elderberry shrubs with stems greater than 1 inch in diameter shall be transplanted if the elderberry shrub cannot be avoided or if indirect effects will result in the death of stems or the entire shrub. The removal shall either include the roots or just the removal of the aboveground portion of the plant. It is recommended to remove the entire root ball and transplant the shrub, if possible. In order to minimize the fragmentation of VELB habitat, elderberry shrubs shall be relocated as close as possible to their original location. Elderberry shrubs may be relocated adjacent to the Project footprint if: (1) the planting location is suitable for elderberry growth and reproduction; and (2) the project proponent is able to protect the shrub and ensure the shrub becomes reestablished. If these criteria cannot be met, the shrub may be transplanted to an appropriate USFWS-approved mitigation site. Any elderberry shrub that is unlikely to survive transplanting because of poor condition or location, or any shrub that would be extremely difficult to move because of access problems, may not be appropriate for transplanting. A qualified				

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biologist shall be on site for the duration of transplanting activities to ensure compliance with avoidance and minimization measures and other conservation measures. ● Exit-hole surveys shall be completed immediately before transplanting. The number of exit holes found, the GPS location of the plant to be relocated, and the GPS location of where the plant is transplanted will be reported to the USFWS and the California Natural Diversity Database (CNDDB). ● Elderberry shrubs shall be transplanted when the shrubs are dormant (November through the first 2 weeks in February) and after they have lost their leaves. Transplanting during the nongrowing season will reduce shock to the shrub and increase transplantation success. Transplanting shall follow the most current version of the ANSI A300 (Part 6) guidelines for transplanting (http://www.tcia.org/). ● Trimming shall occur between November and February and shall minimize the removal of branches or stems that exceed 1 inch in diameter. ● Herbicides shall not be used within 100 feet of elderberry plants, but hand removal of invasive weeds may be conducted from August through February. Basal bark or foliar techniques shall be utilized when herbicide application must occur within 100 feet of the dripline of an elderberry shrub with one or more stems measuring greater than or equal to 1 inch in diameter or greater at ground level. Basal application techniques include cutting off a non-elderberry shrub and applying an oil-based herbicide directly to the stump. Foliar application techniques include hand spraying of an herbicide, with a deposition/ retention additive, to control overspray. The application of herbicides shall be completed or supervised by a certified pesticide applicator in compliance with the herbicide application prescription. Herbicide application shall occur from July through April on an as-needed basis.				

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BIO-8: Northwestern Pond Turtle Avoidance. The qualified biologist shall identify all areas of northwestern pond turtle habitat to be avoided in or adjacent to the work area. If necessary, in consultation with CDFW, exclusion fencing shall be used when needed to direct the turtles and move them to an area of suitable habitat outside the construction activity. This fencing will be maintained throughout the duration of construction. The avoided areas shall be flagged, and signage stating "Environmentally Sensitive Area" shall be erected. The Project site shall be inspected daily for the presence of northwestern pond turtles. If a northwestern pond turtle individual or nest is observed in the impact area, construction activities will stop until the Biological Monitor establishes an appropriate buffer or the turtle is no longer in the impact area. A qualified biologist (with pond turtle trapping/handling experience and holding a CDFW Scientific Collecting Permit) may relocate northwestern pond turtles to an appropriate nearby location if authorized by CDFW. Relocation areas and protocols shall be approved by CDFW prior to relocation of any turtles.	• Include measure as Condition of Approval. • Implementation actions are outlined in the measure.	Prior to and during construction activities.	• The City is responsible for hiring a Qualified Biologist and ensuring implementation of this measure. • The Qualified Biologist is responsible for implementing this measure.	
BIO-9: Roosting Bat Protection Measures. Before the spring breeding season and prior to construction, a qualified biologist shall conduct a survey for roosting bat habitat. The survey shall include work areas adjacent to appropriate roosting habitat that are accessible from public or Project areas within 200 feet of a work area. For trees considered to have a high or moderate probability for bat roosting, acoustic monitoring shall be conducted before any construction activities begin during the breeding season to determine if there are any roosting sites present. Surveys shall be conducted at the appropriate times to maximize detectability. If an active roost or maternity roost is found within 100 feet of a work area, the limits of the work area will be clearly marked, and a qualified biological monitor shall remain on site during construction activities within the vicinity of the roost or maternity roost. The biologist shall ensure that construction activities do not encroach upon the 100-foot buffer around an active roost or	• Include measure as Condition of Approval. • Implementation actions are outlined in the measure.	Before the spring breeding season and prior and during project construction.	• The City is responsible for incorporating this measure into contract specifications, hiring a Qualified Biologist, and ensuring compliance during construction. • The Qualified Biologist is responsible for surveys, establishing buffers, monitoring during construction, and evicting bats, if needed.	

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maternity colony site. Buffers shall remain in place until the qualified biologist has determined that bats have vacated the occupied roost sites. If buffer reductions are requested and approved, a monthly report shall be submitted to CDFW with all the information in the buffer reduction requests, monitoring results, and effects on bats. Reports shall be submitted for the duration of construction activities within buffer areas. Trees containing maternity roosts shall not be removed during the breeding season (March 1–August 31) to avoid disturbing females with young that cannot fly. No trees containing maternity roosts may be removed until the qualified biologist determines that breeding is complete and the young are able to fly. If fall/winter hibernacula cannot be avoided, humane techniques may be implemented to passively vacate bats from roosts. Methods to passively evict bats from tree roosts may include incrementally trimming limbs to alter the air flow and temperature around the roost feature where slight changes to the surrounding environment of roost features encourage bats to vacate roost features on their own. If acoustic monitoring detects that bats are using trees that need to be cut down, these trees shall be removed only after it has been confirmed that roosting bats have departed.				
CULTURAL RESOURCES				
CUL-1a: Preparation of a Cultural Resources Management Plan. Prior to ground disturbance, the City of Stockton (City) shall retain an archaeologist that meets the Secretary of the Interior's (SOI) Professional Qualifications Standards in archaeology or is certified by the Register of Professional Archaeologists (RPA) to prepare (or direct the preparation of) a Cultural Resources Management Plan (CRMP) in consultation with the Confederated Villages of Lisjan Nation (CVLN), Northern Valley Yokuts Tribe and the Muwekma Tribe (Tribes). The CRMP shall include (but not be limited to) the following components:	• Include measure as Condition of Approval. • Implementation actions are outlined in the measure.	Prior to ground disturbance.	• The City is responsible for incorporating this measure into contract specifications, hiring a Qualified Archaeologist, and for reviewing the Cultural Resources Management Plan, and ensuring implementation during construction.	

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● As survey of the entire Project area would be unproductive (due to thick, ubiquitous xeric vegetation), a controlled clear-and-grub program shall be developed for the Project in coordination with consulting tribes and the City. ● A qualified professional archaeologist (either SOI- or RPA-certified as indicated above) or an archaeologist supervised by such an archaeologist shall monitor all ground-disturbing activities prior to finish grade associated with Project implementation. Archaeological monitoring shall occur during these excavation activities until the Project Archaeologist, based on their observations, is satisfied that there is little or no potential remaining to encounter in situ archaeological resources. The Project Archaeologist may also determine that it is appropriate to reduce monitoring to a part-time or spot-check basis. ● Communication protocols for notification in the event of the identification of cultural resources shall be defined, as well as methods for treatment of such resources (e.g., avoidance, documentation, collection, identification). ● Methods of protection for cultural resources, including items such as protective fencing, securing temporary on-site storage. and protocol for notifying local authorities (i.e., law enforcement) shall be prescribed in the event looting or other resource damage occurs. The CRMP shall also include a stipulation that, during the course of the monitoring, the frequency of archaeological and Native American monitoring may be reduced based on the conditions and only if the consulting tribes and the qualified archaeologist agree.			● The Qualified Archaeologist is responsible for preparing the Cultural Resources Management Plan and monitoring ground disturbing activities.	
CUL-1b: Cultural Resources and Tribal Cultural Resources Sensitivity Worker Environmental Awareness Program [WEAP] Training. Prior to commencement of any ground-disturbing activity, all personnel involved in Project-related ground-disturbing activities	● Include measure as Condition of Approval.	Prior to commencement of ground disturbing activities.	● The City is responsible for incorporating this measure into contract specifications, hiring a	

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(e.g., on-site construction managers, equipment operators and other crew) shall be required to participate in a workers' environmental awareness program (WEAP) training prior to any such activities (including clear & grub and building foundation removal). The training shall include relevant information regarding cultural resources including applicable regulations and consequences of violating State laws and regulations and will also describe communication and procedural protocols (including avoidance) in the event cultural resources are encountered. The training shall be presented by a professional archaeologist (RPA or RA) and will emphasize the requirement for confidentiality and culturally appropriate treatment of all archaeological discoveries.	• Implementation actions are outlined in the measure.		Qualified Archaeologist, and for ensuring compliance prior to construction. • The Qualified Archaeologist is responsible for implementing this measure.	
CUL-1c: Unanticipated Discovery. In the event that any precontact or historic subsurface cultural resources are discovered during ground-disturbing activities, all work within 50 feet of the resources shall be halted and the City shall consult with a qualified archaeologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified professional archaeologist would meet to determine the appropriate avoidance measures or other appropriate measures, with the ultimate determination to be made by the City. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by the qualified professional according to current professional standards. In considering any suggested measure proposed by the qualified professional, the City shall determine whether avoidance is necessary or feasible in light of factors such as the uniqueness of the find, Project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., extended documentation and/or data recovery) may be required in the event of a significant find. Work may proceed on	• Include measure as Condition of Approval. • Implementation actions are outlined in the measure.	During construction-related ground disturbing activities.	• The City is responsible for incorporating this measure into contract specifications, hiring a Qualified Archaeologist, and for ensuring compliance during construction. • The Qualified Archaeologist and Construction Contractor are responsible for implementing this measure.	

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other parts of the Project site while a treatment plan for cultural resources is developed and carried out. If significant materials are recovered, the qualified professional shall include the findings in the monitoring report for submittal to the Central California Information Center.				
GEOLOGY AND SOILS				
GEO-1: Paleontological Resources Discovery. If paleontological resources are encountered during the course of ground disturbance, work in the immediate area of the find shall be redirected and a paleontologist contacted to assess the find for scientific significance. If determined to be significant, the fossil shall be collected from the field. The paleontologist may also make recommendations regarding additional mitigation measures, such as paleontological monitoring. Scientifically significant resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a museum repository. If scientifically significant paleontological resources are collected, a report of findings shall be prepared to document the collection.	● Include measure as Condition of Approval. ● Implementation actions are outlined in the measure.	During construction-related ground disturbing activities.	● The City is responsible for incorporating this measure into contract specifications, hiring a Qualified Paleontologist, and for ensuring compliance during construction. ● The Qualified Paleontologist and Construction Contractor are responsible for implementing this measure.	
NOISE				
NOI-1: Construction Noise and Vibration. Prior to the issuance of grading permits, the City of Stockton (City) Director of Community Development Department, or designee, shall verify that grading and construction plans include the following requirements: ● Ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved.	● Include measure as Condition of Approval. ● Implementation actions are outlined in the measure.	Prior to issuance of grading permits and throughout the duration of construction activities.	● The City is responsible for verifying that grading and construction plans include the relevant requirements and for ensuring compliance during construction. ● The Construction Contractor is responsible for implementing the	

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• Construction equipment, fixed or mobile, shall be equipped with properly operating and maintained noise mufflers consistent with manufacturers' standards. • Construction staging areas shall be located away from off site sensitive uses during the later phases of Project development. • The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the Project site whenever feasible. • The construction contractor shall use on-site electrical sources to power equipment rather than diesel generators where feasible. • A sign, legible at a distance of 50 feet, shall also be posted at the construction site. All notices and the signs shall indicate the dates and duration of construction activities, as well as provide a telephone number for the "noise disturbance coordinator." • A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler) and shall be required to implement reasonable measures to reduce noise levels. All signs posted at the construction site shall list the telephone number for the disturbance coordinator.			identified measures during construction.	
NOI-2: As part of the final design for the subsequent phase(s) of development, the City of Stockton (City) shall require installation of a noise barrier along the northern and eastern boundaries of the proposed pickleball courts. The noise barrier may consist of any solid material, without gaps or holes, that meets a minimum density of 4 pounds/square foot, or is sound rated and has a minimum Sound Transmission Class (STC) rating of 25. The noise barrier shall provide noise reduction sufficient to ensure that noise levels at the nearest residential uses would not exceed the City's exterior	• Include measure as Condition of Approval. • Implementation actions are outlined in the measure.	During final design.	The City is responsible for ensuring that the appropriate noise barrier is included in the project design.	

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daytime noise standard of 55 A-weighted decibels (dBA) equivalent continuous sound level (Leq).				
TRIBAL CULTURAL RESOURCES				
TCR-1: Native American Monitoring. Prior to ground-disturbing activities, tribal monitor(s) from the Confederated Villages of Lisjan Nation (CVLN), the Northern Valley Yokuts Tribe, and the Muwekma Ohlone Tribe shall be retained. Native American monitoring by a representative of the North Valley Yokuts Tribe, CVLN, and the Muwekma Ohlone Tribe shall be required during all ground disturbing activities associated with project implementation. Monitoring procedures shall follow the Cultural Resources Management Plan prepared under Mitigation Measure CUL-1a. Tribal monitor(s) shall have the authority to halt and redirect work should any archeological or tribal cultural resources be identified during monitoring. If archaeological or tribal cultural resources are encountered during ground-disturbing activities, work within 100 feet of the find must halt and the find be evaluated for listing in the California Register of Historic Resources (California Register) and National Register of Historic Places (National Register). Monitoring may be reduced or halted at the discretion of the tribal monitor(s), in consultation with the lead agency, if site conditions indicate there is little likelihood of encountering intact deposits (e.g., encountering bedrock, sediments being excavated are fill, or negative findings for 50 percent of ground disturbance). If monitoring is reduced to spot checking, spot checking shall occur when ground-disturbing activities moves to a new location within the Project site and when ground disturbance will extend to depths not previously reached (unless those depths are within bedrock).	● Include measure as Condition of Approval. ● Implementation actions are outlined in the measure.	During ground-disturbing activities.	● The City is responsible for incorporating this measure into contract specifications, for contacting the Tribe and for ensuring compliance during construction. ● The Tribal Monitor(s) are responsible for implementing this measure.	
T**CR-2: Unanticipated Discovery of Tribal Cultural Resources.** If cultural resources of Native American origin are identified during grading or excavation of the proposed Project, all ground-disturbing activities within 100 feet must cease until a qualified professional archaeologist (either an archaeologist who meets the Secretary of	● Include measure as Condition of Approval. ● Implementation actions are	During ground-disturbing activities.	● The City is responsible for incorporating this measure into contract specifications, for contacting the Tribe and	

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the Interior's Professional Qualifications Standards for Archeology or an archaeologist supervised by such an archaeologist) has evaluated the nature and significance of the find as a cultural resource, and the City of Stockton (City) representative has consulted a representative from the CVLN, the Northern Valley Yokuts Tribe, and the Muwekma Ohlone Tribe. The archaeologist will stake the area of discovery, placing stakes no more than 10 feet apart, forming a circle with a radius of no less than 100 feet from the point of discovery. If the City, in consultation with the consulting tribe(s), determines the resource is a Tribal Cultural Resource and thus significant under the California Environmental Quality Act (CEQA) and/or to the tribe(s), the entity shall retain a qualified archeologist and a tribal monitor, at the applicant's expense, to prepare and implement a mitigation plan, in accordance with State guidelines and in consultation with the consulting tribe(s). The mitigation plan shall include avoidance of the resource or, if avoidance of the resource is feasible, shall outline appropriate treatment of the resource in coordination with the consulting tribe(s) and, if applicable, the qualified archaeologist. Examples of appropriate mitigation for the tribal cultural resources include, but are not limited to, protecting the cultural character and integrity of the resources, protecting traditional use of the resources, protecting the confidentiality of the resources, or heritage recovery. Curation of Tribal cultural resources is not considered to be appropriate or respectful and materials shall not be permanently curated unless specifically requested by the Tribes. Any Tribal cultural resources discovered as part of the proposed Project shall be recorded in the Sacred Lands File maintained by the Native American Heritage Commission. The City and its contractor(s) shall not photograph, publicize, post, or share information about any discovered Tribal cultural resources.	outlined in the measure.		for ensuring compliance during construction. ● The Tribal Monitor(s), the Qualified Archaeologist, and the Construction Contractor are responsible for implementing this measure.	
T**CR-3: Halt Work/Coroners Evaluation/Impact to Previously Undiscovered Human Remains.** If human remains are encountered during construction and ground disturbing activities, the City or the City's contractor must redirect all work within 100 feet of the	● Include measure as Condition of Approval.	During ground-disturbing activities.	● The City is responsible for incorporating this measure into contract specifications, for	

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remains and immediately contact the County Coroner, the City of Stockton, and a qualified professional archaeologist (either an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archeology or an archaeologist supervised by such an archaeologist) to assess the situation. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification. The NAHC will identify a Native American Most Likely Descendent (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and any associated funerary objects. The archaeologist shall recover scientifically valuable information, as appropriate and in accordance with the recommendations of the MLD. Upon completion of the archaeologist's assessment, a report must be prepared documenting methods and results, as well as recommendations regarding the treatment of the human remains and any associated archaeological materials. The report must be submitted to the City, the Project proponent, the Central California Information Center (CCAIC) and the consulting tribe. Tribal representatives will rebury the Native American human remains and associated funerary objects with the appropriate dignity either in accordance with the recommendations of the MLD, if available, or in the Project vicinity at a location selected in consultation with the tribe, the professional archaeologist, and the City, where the reburial would be accessible to tribal members in perpetuity and would not be subject to further disturbance. The discovery and reburial is to be kept confidential and secure to prevent any further disturbance.	• Implementation actions are outlined in the measure.		contacting the County Coroner, and for ensuring compliance during construction. • The Construction Contractor is responsible for stopping work and contacting the City. • The Qualified Archaeologist is responsible for examining the find and making recommendations. • The MLD is responsible for reviewing the report and making recommendations regarding reburial.	

Source: LSA (2025).