MELITA TRANSGAS PIPELINE

PROJECT OF COMMON INTEREST PCI 5.19

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PRELIMINARY MECHANICAL DESIGN OF PIPELINE REPORT

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INDEX

1 INTRODUCTION

The main policy of the Maltese Government aims at reducing the cost of electricity generation and to minimise the environmental impact of the generation of electricity in Malta through the switching of fuel from liquid fuels to natural gas. To meet these objectives the government's policy is promoting independent investment in Malta's energy infrastructure in the form of new facilities, favouring the import of natural gas and new high efficiency generating plant at the site of Delimara Power Station.

The Studies performed in the previous phases clearly concluded that the most preferable solution in terms of feasibility under present market conditions, is to connect Malta to the European Gas Network by means of a Gas Pipeline. The option of linking Malta to Gela is preferred due to the existence of the required transmission infrastructure on the shoreline (see Figure 1).

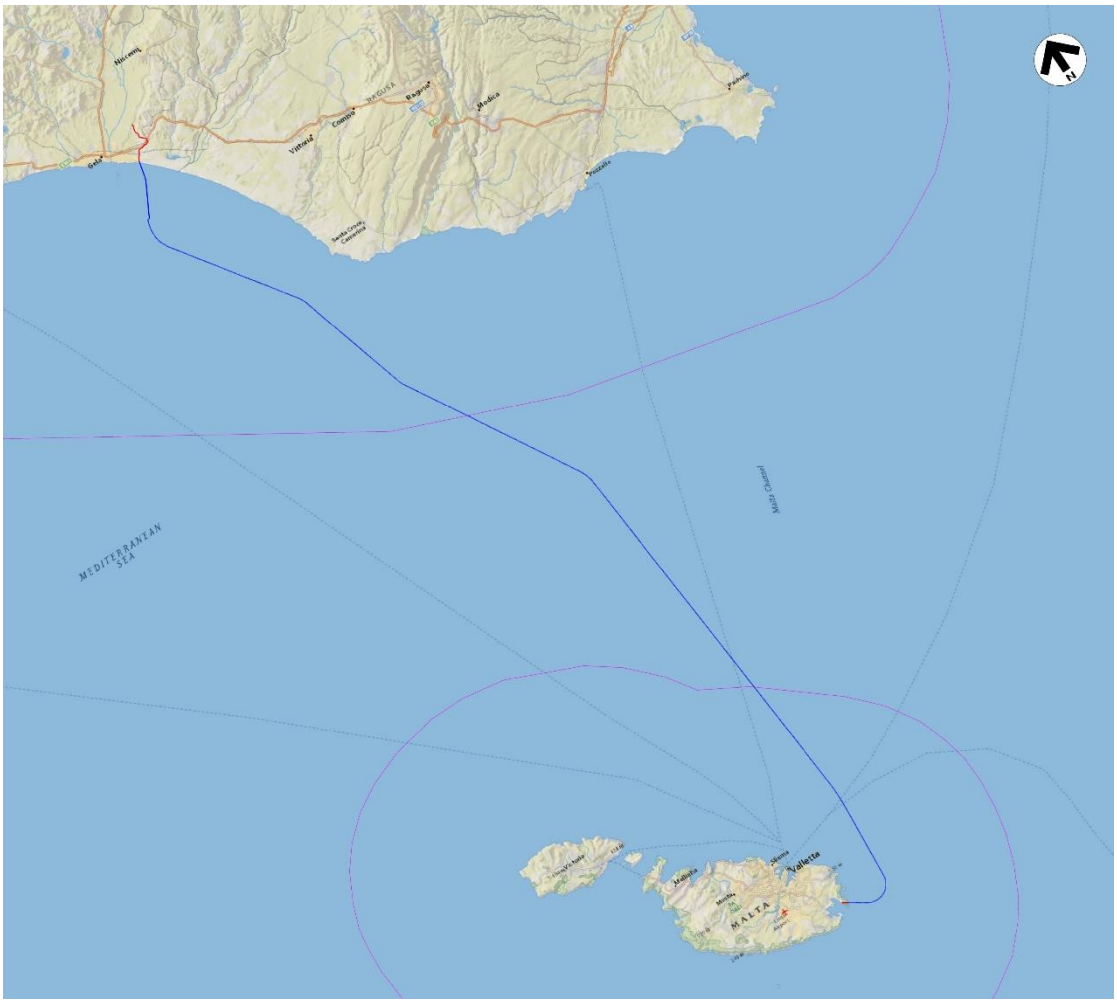


Figure 1 – Overall Pipeline Routing Map

The current phase of the project relates to the Front End Engineering Design study (FEED study).

1.1 Scope of the Document

This document presents the results of wall thickness preliminary calculations according to the applicable standards for the onshore and offshore pipeline routes and relevant plants, and concrete coating thickness for the offshore route based on the preliminary stability calculations.

Please note that the purpose of this preliminary document is to give an indication to the permitting contractor; final wall thickness and CWC thickness will be further verified during the FEED activities on the basis of the survey results (ongoing activity) and using more detailed calculations (i.e. stress analysis verification in different conditions, requirements of the crossed infrastructures owner, etc.).

For the purpose of this preliminary verification the Design Pressure of 93 bar has been taken according to the first results of the Hydraulic Calculations (see Ref. [17]). The final Design Pressure will be confirmed after the finalization of pipeline route. This value will be used in the final wall thickness and CWC thickness calculation to be performed during the FEED design and shown in specific documents.

1.2 Definitions and Abbreviations

1.2.1 Definitions

In this document the following terms will be applied:

Client	(or **Contract Authority**) is the Maltese Ministry for Energy and Water Management
Contractor	is the JV Techfem/SPS, which is responsible for the execution of the Front End Engineering Design (FEED) of the Project.
PROJECT	is the Malta-Italy Pipeline connection (named: Melita Transgas Pipeline) from Gela (Italy) to Delimara (Malta) and the relevant plants/ancillaries.

1.2.2 Abbreviations

ASI	Industrial Development Area
BVS	Block Valve Station
CWC	Concrete Weight Coating
D	Diameter
DF	Design Factor
Dir	Direction
DP	Design Pressure

DPR / DM / DLgs / DA	Italian Decree (Decreto Presidente della Repubblica / Decreto Ministeriale / Decreto Legislativo / Delibera Assemblea Regionale)
EN	European Standard
EPC	Engineering Procurement and Construction
FEED	Front End Engineering Design
HAZID	Hazard Identification Study
HDD	Horizontal Directional Drilling
HFW	High-Frequency Welded Pipe
ID	Internal Diameter
KoM	Kick off Meeting
KP	Kilometre Post
LPE	Layer Polyethylene
LTE	Land Terminal Ends
MIP	Maximum Incidental Pressure
MOP	Maximum Operating Pressure
MSL	Mean Sea Level
ND	Nominal Diameter
NG	Natural Gas
OD	Outside Diameter
PD	Design Pressure
PE	Polyethylene
PMRS	Preliminary Marine Route Survey
ROW	Right Of Way
RP	Return Period
SAWL	Submerged Arc Welded Longitudinally
SCI	Site of Community Importance
SIC	Sito di Interesse Comunitario (Italian translation of SCI)
SMTS	Specified Minimum Tensile Strength
SMYS	Specified Minimum Yield Strength
SRG	Snam Rete Gas
UTM	Universal Transverse of Mercator

WD	Water Depth
y.r.p.	year return period

1.3 References

1.3.1 Project Documents

[1]	10-RX-E-0101	FEED Basis of Design
[2]	10-DT-B-0110	Overall Pipeline Schematics
[3]	10-RT-E-5100	Onshore Pipeline Route Selection Report
[4]	30-R-T-E-6000	Offshore Preliminary Pipeline Route Report
[5]	20-DT-D-5300	Italy Onshore Pipeline Section General Routing Map (1:25,000 Scale)
[6]	20-DT-D-5301	Italy Onshore Pipeline Section Routing Map (1:10,000 Scale)
[7]	40-DT-D-5350	Malta Onshore Pipeline Section General Routing Map (1:25,000 Scale)
[8]	40-DT-D-5351	Malta Onshore Pipeline Section Routing Map (1:10,000 Scale)
[9]	30-D-T-B-6100	Offshore Pipeline Preliminary Route
[10]	10-D-T-D-0120	Overall Pipeline Routing Map (1:100,000 Or 1.250,000)
[11]	10-SM-E-3001	Line Pipe Specification and Data Sheet
[12]	10-S-M-E-3002	Pipeline Anti-Corrosion Coating Specification
[13]	10-S-M-E-3003	Onshore And Offshore Field Joint Coating Specifications and Data Sheets
[14]	30-RT-E-6009	Malta Landfall Preliminary Design Report
[15]	10-RM-E-3000	Material Selection Report
[16]	10-RT-E-0131	Identification of Construction Methodology and Operation/Maintenance Activities
[17]	10-RP-E-1401	Steady State Hydraulic Analysis

1.3.2 Codes and Standards

The following main codes and standards have been considered for the pipeline route definition.

[18]	API Specification 5L	Specification for Line Pipe
[19]	ASME B36.10M	Welded and Seamless Wrought Steel Pipe
[20]	ASME B31.8	Gas Transmission and Distribution Piping Systems

[21]	ASME B16.49	Factory Made Wrought Steel Butt Welding Induction Bends for Transportation and Distribution Systems
[22]	DM 17/04/2008	Technical regulation for the design, construction, testing, operation and supervision of works and natural gas transportation systems with density not exceeding 0.8
[23]	DM 4/4/2014	Technical Standards for the crossings and the paralleling of pipelines liquids and gases with railways and other transportation lines
[24]	DNVGL-ST-F101	Submarine Pipeline Systems
[25]	DNVGL-RP-F109	On-Bottom Stability Design Submarine Pipelines
[26]	EN 1594	Gas infrastructure - Pipelines for maximum operating pressure over 16 bar - Functional requirements
[27]	ISO 3183	Petroleum and natural gas industries – Steel pipe for pipeline transportation system
[28]	ISO 13623	Petroleum and natural gas industries-Pipeline transportation systems
[29]	DM 17/01/2018	Update of Technical Norms for the Constructions
[30]	API RP 1102	Steel Pipeline Crossing Railroads and Highways

1.3.3 Others Feed Design Documents

[31]	MEW001_Pho	GELA-MALTA-Metocean-Rev00

2 CONCLUSIONS AND RECOMMENDATIONS

2.1 Conclusions

2.1.1 Steel Wall Thickness Sizing and Steel Grade

The wall thickness assessment has been done according to the requirements of the following codes:

- Onshore (Italy) - KP 0 to 7+080
  - D.M. 17/04/2008
  - ASME B 31.8
  - ISO 13623
  - D.M. 04/04/2014
  - API RP 1102
- Offshore - KP 7+080 to 158+803
  - DNVGL ST-F101
  - D.M. 17/04/2008 (Only within Italian national water, KP 7+102)
  - ISO 13623
- Onshore (Malta) - KP 158+803 to 159+509
  - EN 1594
  - ASME B 31.8
  - ISO 13623

The 22-inch subsea pipeline route location classification imposed by DNVGL-ST-F101 and considered for analysis purpose is given hereafter:

- Zone-2 (critical zone), conservatively established within 500 m from LTEs (shorelines), according to DNVGL ST F101;
- Zone-1, which prevails for the rest of the pipeline route.

The selected wall thickness for the Melita Transgas Pipeline is reported below.

From KP [km]	To KP [km]	Wall Thk [mm]:
start	54+000	**15.9**
54+000	137+500	**17.5**
137+500	end	**15.9**

Table 2-1 – Offshore Section Selected Wall Thickness

The Steel Grade material ISO 3183 L450, X65 identified in the previous phase of the design is confirmed (see Ref. [15]).

The Italian and Maltese onshore pipeline sections are short in comparison with the offshore pipeline section, and it is therefore practicable to combine material purchase for both onshore and offshore line pipe. For this reason, the thinnest offshore wall thickness has been selected and verified for the onshore routes (15.9 mm).

This selected wall thickness satisfies the requirements of the different applicable codes (DM 17/04/2008, EN 1594, ASME B 31.8 and ISO 13623) and it is also sufficient to guarantee the pipeline integrity at crossings and for bending.

2.1.2 Lateral and Vertical Stability

Vertical and Lateral pipeline stability has been verified according to DNVGL-RP-F109, Generalized Method, which allows a lateral displacement equal to 10 diameters of the pipe. At the current stage of the FEED, the CWC thickness selected during the Basic Design for the Melita Transgas Pipeline can be confirmed, with some differences in KP extension for each range; values are reported in table below.

From KP [km]	To KP [km]	From WD [m]	To WD [m]	min WD in the range [m]	max WD in the range [m]	WT [mm]:	CWC Thk [mm]:	Additional Stabilization Measures Required [-]
6+862 Start HDD Gela	8+362 End HDD Gela	N/A	N/A	N/A	N/A	15.9	**40**	N/A
8+362 End HDD Gela	10+000	-4.0	-8.1	-4.0	-8.1		**40**	**Yes**
10+000	17+200	-8.1	-41.6	-8.1	-41.6		**140**	**No**
17+200	22+000	-41.6	-72.3	-41.6	-72.8		**90**	**No**
22+000	54+000	-72.3	-127.5	-72.3	-127.5		**60**	**No**
54+000	137+500	-127.5	-127.5	-127.1	-154.3	17.5	**40**	**No**
13.+500	156+000	-127.5	-92.6	-70.0	-127.5	15.9	**40**	**No**
156+000	158+241 End Trenchless Malta	-92.6	-40	-40.0	-92.9		**90**	**No**
158+241 End Trenchless Malta	159+491 Start Trenchless Malta	N/A	N/A	N/A	N/A		**40**	N/A

Table 2-2 – Offshore Section Selected CWC Thickness

2.2 Recommendations

To give to the Permitting Contractor an overall view of the project, which is the aim at present stage of the FEED, it's highlighted that near Gela approach additional stability mitigation measures could be required (stability mattresses, concrete counteracts) to be installed before or after installation (based on consideration on installation windows, seasonal waves and directionality), and to be removed when the pipeline will be pulled inside the HDD or buried. See doc. Ref. [16].

In order to investigate if alternative solutions exist, additional detailed analysis will be carried out during specific activities of the FEED when more detailed data will be available, and reported in the Offshore Pipeline On-Bottom Stability Calculation, doc. 30-RT-E-6021. In particular some of the following aspects will be considered:

- The real seabed profile (when complete survey data will be available);
- The real soil properties (when geotechnical data will be available);
- Wave directionality and seasonality;
- Wave specific for the shore approach (up to WD 4m), if available.

In addition, the CWC thickness values along the route will be further optimized based on other aspects to be analysed during the FEED (e.g. layability, protection from impacts, purchasing philosophy, crossing design).

3 DESIGN DATA

The design data used for this analysis are extracted from the FEED Basis of Design (Ref. [1]), unless otherwise stated.

3.1 Pipe Dimensional Data

The Italian and Maltese onshore pipeline sections are short in comparison with the offshore pipeline section, and it is therefore practicable to combine material purchase for both onshore and offshore line pipe in a single activity. Therefore, one line pipe specification is foreseen for the complete pipeline system including both offshore and onshore pipeline sections. For the line pipe specification, reference is made to Ref. [9]. This line pipe specification is based on DNVGL ST-F101 (Ref. [24]).

The Melita Transgas Pipeline is designed based on a constant external diameter (OD) considering the limited number and differences of thicknesses foreseen for the pipeline which will not affect the pigging operations.

The line pipe dimensional data are summarized in Table 3-1.

Description	Symbol	Unit	Value
Pipe nominal outside diameter (constant)	OD	mm / inch	559 / 22
Pipe internal diameter	ID	mm / inch	To be determined
Pipe Thickness (preliminary)	Thk	mm	15.9 / 17.5 To be verified
Internal or external corrosion allowance	C_A	mm	0
Wall thickness fabrication tolerances (Ref. [27])	t_{tol}	mm	± 1.0 (1)

Notes:
(1) Fabrication tolerances value for the Offshore service has been taken also for the Onshore section.

Table 3-1 – Pipe Dimensional Data

3.2 Material Properties

The line pipe material properties of the selected steel grade are summarised in Table 3-2

Description	Symbol	Unit	Value
Steel Grade / SMYS [MPa]		ISO 3183 L450, X65 (1) (2)	
Steel Density		kg/m^3	7850
Modulus of Elasticity (Young's modulus)		MPa	207000
Poisson's Ratio		-	0.3
SMYS		MPa	450

Notes:
(1) Value taken from previous design phase and Ref. [15]; steel grade and relevant thickness has been finally confirmed in this report.
(2) C-Mn steel

Table 3-2 – Steel Properties

3.2.1 Coating Data

External and internal anti-corrosion coating will be confirmed during the FEED. The concrete over weight will be selected in this document. The data reported in the following Table 3-3 are preliminarily selected:

Coating Layer	Description
External Anti-Corrosion Coating	3LPE, thickness 4.2mm, density 950 kg/m^3
Internal Painting	High performance flow epoxy coat with DFT according to the coating manufacturer's instructions
Concrete Coating	CWC, Density 3040 kg/m^3

Table 3-3 – Coating Data

3.3 Operating Parameters

The selected parameters and the associated values, which are used in the wall thickness calculations, are presented in Table 3-2

Description	Unit	Value				
		DM 17/04/2008	EN 1594	ISO 13623	ASME B 31.8	DNVGL ST-F101
Design Pressure; DP	barg	93				
Maximum Operating Pressure; MOP	barg	93				
Maximum Incidental Pressure; MIP	barg	MOPx1.10 = 102.3	MOPx1.15 = 107	MOPx1.10 = 102.3	-	MOPx1.10 = 102.3
Hydrotest Pressure	barg	130.2				
Design Temperature (min/max) (1)	°C	-10 / +60				

Notes:

(1) Temperature limits according to SRG network for pipes, bends and valves

(2) Design Pressure for preliminary calculations according to Ref. [17]

Table 3-4 – Operating Parameters

Here below it is shown that in conservative conditions, for a test pressure of 1.4 MOP and for the selected pipe thickness t_{sel}=15.9mm, considering thickness fabrication tolerance of t_{tol}=1.5mm, the SMYS of material is not exceeded:

$$\sigma_{test\_pressure} = \frac{1.4P \cdot D}{20 \cdot (t_{sel} - t_{tol})} = \frac{1.4 \cdot 93 \cdot 559}{20 \cdot (15.9 - 1.5)} = \frac{70434}{288} = 252.71MPa$$

$$F_{test\_pressure} = \frac{\sigma_{test\_pressure}}{SMYS} = \frac{252.71}{450} = 56.2\%$$

The Factor of utilization of the SMYS equal to $F_{test\_pressure}$=56.2% results plenty verified.

3.4 Design Codes

The design codes applicable for the different pipeline sections are indicated in Table 3-5

Location	Design codes
Onshore (Italy)	D.M. 17/04/2008 D.M. 04/04/2014 ASME B 31.8 API RP 1102 ISO 13623
Offshore	DNVGL ST-F101 D.M. 17/04/2008 (Only within Italian national water) ISO 13623
Onshore (Malta)	EN 1594 ASME B 31.8 ISO 13623

Table 3-5 – Design Codes

With reference to the ASME B 31.8, for the thickness calculation of onshore sections of the gas pipeline in project the location class 2 has been considered both in Italy and Malta (mainly agricultural and low density population area), therefore, a design factor value of 0.60 has been used for design according with table 841.1.6-2 of ASME B31.8 code.

ISO 13623 code also classifies the pipeline location in relation to population density and concentration (Ref. Annex B of [28]). For the thickness calculation of onshore sections of the gas pipeline in project the location class 3 has been considered both in Italy and Malta (areas around cities and towns, and ranches and country estates.), therefore the hoop-stress design factor of 0.67 has been selected according to Table B.2 of ISO 13623 code.

It is highlighted that for the Italian section the referenced law to be applied for the pipeline mechanical sizing is D.M. 17/04/2008. Thickness calculation has been done according to such norm and verified also with the other applicable codes.

3.5 Offshore Geophysical data

Geophysical data will be considered as per PMRS provided data. However, please note that full route data are not available at the present time. Seabed depth profile will be interpolated where data are not provided.

The offshore profile analysed, relevant for the latest optimized route, is shown in figure below.

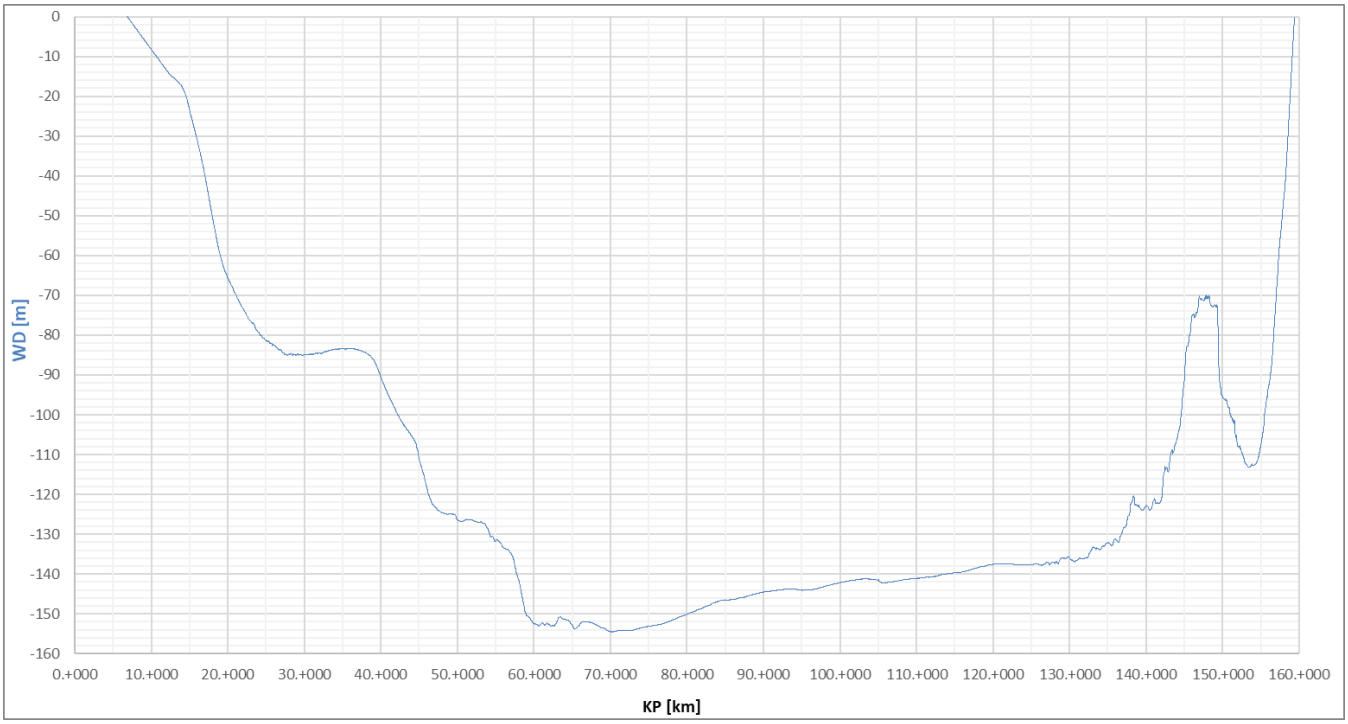


Figure 2 – Offshore Section Seabed Profile

Please note that thickness calculation for the onshore section according to the applicable codes is not affected by the pipeline route profile. For this reason the route profile of the onshore sections were not included in the design data.

3.6 Environmental Data

3.6.1 Metocean data

Data used for this preliminary mechanical sizing are according to Ref. [31].

Water density has been set equal to 1026 kg/m^3, taken from Basic Design since not provided in Ref. [31]. However, variations of this values are negligible for the results.

3.7 Offshore Soil Data

Soil data are required for pipeline lateral stability against the action of waves and currents in the offshore section. Updated geotechnical data are not available during the preliminary phase. Soil will be considered as per previous design phase (Basic Design).

4 ONSHORE PIPELINE WALL THICKNESS SIZING

The mechanical design of the Onshore pipeline in Italy (Gela) requires wall thickness calculations that satisfy the hoop stress as specified in the applicable standard "Technical rule for the design, construction, testing, operation and surveillance of natural gas transport works and plants with density not exceeding 0,8", contained in the D.M. 17 April 2008 of the Ministry of Economic Development (ref. [22]). Verification with codes ASME B31.8 and ISO-13623 will be also performed.

The mechanical design of the Onshore pipeline in Malta is performed in compliance with the EN 1594 "Gas infrastructure – Pipeline for maximum operating pressure over 16 bar – Functional requirements" (ref. [20]). Codes ASME B31.8 and ISO-13623 will be also verified.

4.1 Italy Onshore Section

4.1.1 Line Pipe along the route

DM 17 Aprile 2008

According to Section 2.1 of Ref. [22] hoop stress formula for the thickness calculation along the route is as follow:

$$t_{min} = \frac{P \cdot D}{20 \cdot sp} = \frac{93 \cdot 559}{20 \cdot 256.50} = \frac{51987}{5130} = 10.13mm$$

where:

t_{min}	minimum wall thickness (mm)
P	Design Pressure (barg)
D	Outside Diameter (mm)
sp	admissible hoop stress = $R_{t0,5}$ x f = *256.50 MPa*
$R_{t0,5}$	Specified Minimum Yield Strength (MPa)
f	Utilization Factor f = 0.57 (Ref. [22])

As per Section 2.5.2 and Section 2.5.3 of Ref. [22] the wall thickness of pipeline shall be calculated for a maximum operating pressure which is increased by 25% to account for a distance less than 100m to settlements and/or concentration of people.

Therefore, the minimum wall thickness shall be defined as follows:

$$t_{sel} \geq t_{min} = \frac{1.25 \cdot DP \cdot D}{20 \cdot sp} = \frac{1.25 \cdot 93 \cdot 559}{20 \cdot 256.5} = \frac{64983.75}{5130} = 12.67$$

The wall thickness selected for the onshore pipeline DN 550 equal to t_{sel} = **15.9** mm, considering also the fabrication tolerances (15.9mm - 1.0mm = 14.9 mm), is higher than the t_{min} calculated above and it is moreover higher than the minimum wall thickness required at paragraph 2.1 of the Italian Ministerial Decree DM 14/04/2008.

The thickness calculated according to Ref. [22] has been verified also with the requirements of codes ASME B31.8 and ISO-13623 as here below shown. However, these codes are less conservative being the design factor lower than the Italian norm.

ASME B31.8

Wall thickness calculations for gas pipeline were performed in accordance with clause 841.1.1 of ASME B31.8.

Design factors considerations shall be as per section 2.4 of this document (design factor = 0.60 – Location Class 2).

The design of the pipeline will take into account the longitudinal stresses generated in the system. External interference by third parties is not considered as criteria for minimum pipe wall thickness.

The minimum wall thickness is calculated in accordance with the following equation:

$$t_{nom} = \frac{P \cdot D}{2 \cdot F \cdot E \cdot S \cdot T} = \frac{9.3 \cdot 559}{2 \cdot 0.6 \cdot 1 \cdot 450 \cdot 1} = \frac{5198.7}{540} = 9.63 \ mm$$

where:

t_{nom}: nominal wall thickness satisfying requirements for pressure and allowances

P: internal design pressure (MPa)

D: outside diameter of pipeline (mm)

F: design factor (F=0.6 – ASME B31.8 table 841.1.6-1)

E: longitudinal joint factor (E=1 – ASME B31.8 table 841.1.7-1)

S: Specified Minimum Yield Strength (SMYS) of pipe material (MPa)

T: temperature de-rating factor (T=1 – ASME B31.8 table 841.1.8-1)

Please note that ASME B31.8 is considering the fabrication tolerances included in the safety factor.

ISO 13623

Wall thickness calculations for gas pipeline were performed in accordance with clause 6.4.1.1 of ISO 13623.

Design factors considerations shall be as per section 2.4 of this document (design factor = 0.67 – Location Class 3).

In particular the WT calculation is performed to verify the circumferential stress (hoop stress) due to internal fluid pressure. Therefore, to define the minimum allowable wall thickness it is necessary to define the design pressure, the design factor, the classification of the fluid, and also the derating temperature if design temperature is more than 50°C.

According to the code ISO 13623 (Ref.[28]) the minimum wall thickness for circumferential stress due to internal fluid pressure (hoop stress), for the gas pipelines has been calculated by the following equation:

$$\sigma_{\mathrm{hp}} = (P_i - P_o) \times \frac{(D_o - t_{min})}{2t_{min}}$$

where:

t_{min} = t_{cal} + t_{tol} = sum of calculated wall thickness plus fabrication tolerance (Table 2-1)

P_i = internal design gauge pressure (in MPa)

P_o = minimum external hydrostatic pressure (neglected since for buried onshore)

D_o = outside diameter of pipe (in mm)

σ_{hp} = Hoop stress due to the internal pressure (in MPa)

The maximum hoop stress, $\sigma_{hp,}$ due to fluid pressure shall not exceed:

$$\sigma_{\mathrm{hp}} \leq f_h \times \sigma_y$$

where:

σ_y = specified minimum yield strength (SMYS)

f_h = design factor

According to the code ISO 13623 (Ref.[28]), if design temperature is more than 50°C for the wall thickness calculation it is necessary to consider the de-rating effect.

The maximum hoop stress, $\sigma_{hp,}$ due to the internal pressure shall not exceed:

$$\sigma_{\mathrm{hp}} \leq f_h \cdot (\sigma_y - \sigma_{ydr}) = 0.67 \cdot (450 - 6) = 297.48MPa$$

being:

$$\sigma_{ydr} = \frac{T_i - 50°C}{50°C} \cdot 30MPa = \frac{60 - 50}{50} \cdot 30 = 6MPa$$

where:

σ_y = specified minimum yield strength (SMYS)

σ_{ydr} = specified minimum yield strength derated ($SMYS_{der}$) as per DNV OS F101 (see 2.2.5)

f_h = design factor ($\mathbf{f_h}$=0.67 – ISO 13623 table 2)

T_i = design onshore installation temperature (T_i=60°C – see Table 2-3)

The minimum wall thickness calculation is (for the symbol definition see above):

$$t_{cal} = \frac{(P_i - P_o)D_o}{2\sigma_{hp} + (P_i - P_o)} = \frac{(9.3 - 0) \cdot 559}{2 \cdot 297.48 + (9.3 - 0)} = 8.60mm$$

$$t_{min} = t_{cal} + t_{tol} = 8.60 + 1.00 = 9.60mm$$

Where:

t_{min} = t_{cal} + t_{tol} = sum of calculated wall thickness plus fabrication tolerance (Table 2-1)

t_{cal} = calculated wall thickness

t_{tol} = fabrication tolerance wall thickness (Table 2-1)

4.1.2 Line Pipe at Railway Crossing

Wall thickness calculation for gas pipeline were performed in accordance with Ministerial Decree DM 04 aprile 2014 (Ref. [23]) when pipeline crosses or runs parallel to railways and tramline.

According to *DM 04/04/2014*, gas pipelines wall thickness shall be higher or equal to the calculated thickness t_{min} with the following formula:

$$t_{min} = \frac{\left(\frac{200 \cdot S}{K_S} + P \cdot D\right)}{\left(\frac{200 \cdot S}{K_S} + 2 \cdot P\right)} = \frac{\left(\frac{200 \cdot 45}{2.5} + 93 \cdot 559\right)}{\left(\frac{200 \cdot 45}{2.5} + 2 \cdot 93\right)} = 14.68mm$$

where:

D: outside diameter of pipeline (mm)

P: internal design pressure (daN/cm^2);

K_s: minimun safety factor equal to K_s = 2.5;

S: Specified Minimum Yield Strength (SMYS) of pipe material (daN/mm^2)

By the way, the minimum wall thickness according to DM/04/04/2014 shall not be less than 4 mm.

Although the wall thickness calculated according to the Italian Ministerial Decree of the railways (Ref. [23]) is the highest value among all those calculated, it is noted that even adding the wall thickness manufacturing tolerance (Ref. [27]), the nominal wall thickness remains lower than the selected one (t_{sel} = **15.9** mm):

$$t_{nom} = t_{min} + t_{tol} = 14.68 + 1.0 = 15.68mm$$

According to Ministerial Decree for the railways crossings (Ref. [23]), when pipeline crosses or runs parallel to railways and tramline it must be protected from external loads by a casing pipe (including earth loads). The wall thickness of the casing pipe shall be calculated and verified apart during FEED design in a more detailed document as reported in section 1.1.

4.1.3 Line Pipe at Road Crossing

In case of pipeline installation under the roads without casing pipe, in accordance with the philosophy of the Italian Ministerial Decree DM 17/01/2018 (Ref. [29]) according to which for structures with high flexibility and subject to cyclic loads, the controls of acceptability of perception must be conducted following methods and limitations suggested by standards of proven validity (DM 17/01/2018, Ref. [29], para 4.2.4.2.3.2), further checks are carried out (fatigue stress) for the operating conditions on the pipeline without protection pipe and on welds, in accordance with API code RP 1102 “Recommended Practice for Liquid Petroleum Pipelines Crossing Railroads and Highways” (Ref. [30]).

With the design data defined in chapter 2, assuming some precautionary parameters for the type of soil (Type B) and for the vehicle loads (Tandem Axel Load = 300kN, DM 17/01/2018, Ref. [29] para 5.1.3.3), in the following paragraphs has been checked the pipeline uncased with 15.9 mm of thickness and at the design depth of 2m (top of pipe).

In the following the calculation sheet according to of API RP 1102 (Ref. [30]) is reported. For a more detailed explanation of the values/parameters please refer to Annex A where the detailed calculation is shown.

Input Data				**API RP 1102 reference**
Outside diameter	**D**	559	mm	
Corrosion allowance	**CA**	0	mm	
Wall thickness	**t_w**	15.9	mm	
Corroded wall thickness		15.9	mm	
Internal diameter	**D_i**	527.2	mm	
Operating pressure	**p**	9300	kPa	
Steel grade	**SMYS**	450	MPa	

Design factor	F	0.6	-	
Longitudinal joint factor	E	1	-	
Temperature de-rating factor	T	1	-	
Installation temperature	T_1	-10	°C	
	T_2	60	°C	
Coefficient of thermal expansion	α	0.0000116	$°C^{-1}$	Table A-3
Modulus of elasticity	E_s	207000		Table A-3
Poisson ratio	ν	0.3	-	Table A-3
Bored diameter		559	mm	
Soil type		B		
Modulus of soil reaction	E'	13.8	MPa	Table A-1
Resilient modulus	E_r	138	MPa	Table A-2
Soil unit weight	γ	2000	$kgfm^{-3}$	
Pavement type				
Poisson ratio	ν	0.3		
Singel axle load	SAL	150000	N	
Tandem axle load	TAL	300000	N	
Wheel load	WLS	75000	N	
Wheel load	WLT	75000	N	
Area load acting	ALA	0.16	m^2	
Burial depth	H	2.0	m	

Fatigue (cyclic) stress endurance limits

Circumferential weld fatigue endurance limit	S_{FG}	82.74	MPa	Table 3
Longitudinal weld fatigue endurance limit	S_{FL}	82.74	MPa	Table 3

Check allowable hoop stress

Hoop stress	SH_i	158.831	MPa	
Allowable maximum hoop stress	ASH_i	270.000	MPa	

CHECK

Circumferential stress due to soil load

	t_w/D	0.028		
Stiffness factor	Khe	1300		Figure 3
	H/Bd	3.578		
	B_e	0.78		Figure 4

	Bd/D	1		
	E_e	0.83		Figure 5
Circumferential stress	**SHe**	9.409	MPa	
Cyclic stress from wheel loads				
Impact factor	**Fi**	1.5		Figure 7
Critical axle configuration		Tandem		
Applied design surface pressure	**w**	0.469	MPa	
Cyclic circumferential stress				
Highway stiffnes factor	**KHh**	9		Figure 14
Highway geometry factor	**GHh**	1.2		Figure 15
Highway pavement type factor	**R**	1		Table 2
Highway axle configuration	**L**	1		
Cyclic circumferential stress	**ΔSHh**	7.594	MPa	
Cyclic longitudinal stress				
Highway stiffnes factor	**KLh**	6.5		Figure 16
Highway geometry factor	**GLh**	1.1		Figure 17
Highway pavement type factor	**R**	1		Table 2
Highway axle configuration	**L**	1		
Cyclic longitiudinal stress	**ΔSLh**	5.027	MPa	

4.2 Malta Onshore Section

With regards to the onshore pipeline route in Malta, it is intended to install the pipeline from the shore up to the terminal plant with Trenchless methodology (i.e. HDD or Microtunneling), therefore the onshore section of the pipeline is practically equivalent to the Trenchless.

In this section the mechanical design of Line Pipes for the onshore section Malta is performed in compliance with the applicable codes (EN 1594, ASME B31.8 and ISO 13623), while the verification of the selected thickness for the Trenchless installation is performed in a specific report (see Ref. [12]).

EN 1594

According to Section 7.2 of Ref. [25] hoop stress formula for the thickness calculation along the route is as follow:

$$t_{min} = \frac{P \cdot D}{20 \cdot f_0 \cdot R_{t0.5}(\Theta)} = \frac{93 \cdot 559}{20 \cdot 0.67 \cdot 450} = \frac{51987}{6030} = 8.62mm$$

where:

t_{min} minimum wall thickness (mm)

P Design Pressure (barg)

D Outside Diameter (mm)

f Design Factor f=0.67, in order to include also the line pipes inside station (Ref. [25])

$R_{t0.5}(\theta)$ Specified Minimum Yield Strength at the design temperature. Since the temperature is less or equal to 60°C (Table 2-3) $R_{t0.5}(\theta) = R_{t0.5}$

According to EN 1594 defines the nominal wall tickness as follows:

$$t_{nom} = t_{min} + t_{tol} + t_{CA} = 8.62 + 1.0 + 0 = 9.62mm$$

See Table 2-1 for Corrosion allowance and for wall thickness fabrication tolerance.

Note also that t_{CA}=0 has been shown in the formula according to the code although it is null.

ASME B31.8

Wall thickness calculations for gas pipeline were performed in accordance with clause 841.1.1 of ASME B31.8.

Design factors considerations shall be as per section 2.4 of this document (design factor = 0.60 – Location Class 2).

The design of the pipeline will take into account the longitudinal stresses generated in the system. External interference by third parties is not considered as criteria for minimum pipe wall thickness.

The nominal wall thickness is calculated in accordance with the following equation:

$$t_{nom} = \frac{P \cdot D}{2 \cdot F \cdot E \cdot S \cdot T} = \frac{9.3 \cdot 559}{2 \cdot 0.6 \cdot 1 \cdot 450 \cdot 1} = \frac{5198.7}{540} = 9.63\ mm$$

where:

t_{nom}: nominal wall thickness satisfying requirements for pressure and allowances

P: internal design pressure (MPa)

D: outside diameter of pipeline (mm)

F: design factor (F=0.6 – ASME B31.8 table 841.1.6-1)

E: longitudinal joint factor (E=1 – ASME B31.8 table 841.1.7-1)

S: Specified Minimum Yield Strength (SMYS) of pipe material (MPa)

T: temperature de-rating factor (T=1 – ASME B31.8 table 841.1.8-1)

ISO 13623

Wall thickness calculations for gas pipeline were performed in accordance with clause 6.4.1.1 of ISO 13623.

Design factors considerations shall be as per section 2.4 of this document (design factor = 0.67 – Location Class 3).

In particular the WT calculation is performed to verify the circumferential stress (hoop stress) due to internal fluid pressure. Therefore, to define the minimum allowable wall thickness it is necessary to define the design pressure, the design factor, the classification of the fluid, and also the derating temperature if design temperature is more than 50°C.

According to the code ISO 13623 (Ref.[28]) the minimum wall thickness for circumferential stress due to internal fluid pressure (hoop stress), for the gas pipelines has been calculated by the following equation:

$$\sigma_{\mathrm{hp}} = (P_i - P_o) \times \frac{(D_o - t_{min})}{2t_{min}}$$

where:

t_{min} = t_{cal} + t_{tol} = sum of calculated wall thickness plus facrication tolerance (Table 2-1)

P_i = internal design gauge pressure

P_o = minimum external hydrostatic pressure (neglected since for buried onshore)

D_o = outside diameter of pipe

σ_{hp} = Hoop stress due to the internal pressure

The maximum hoop stress, $\sigma_{hp,}$ due to fluid pressure shall not exceed:

$$\sigma_{\mathrm{hp}} \leq f_h \times \sigma_y$$

where:

σ_y = specified minimum yield strength (SMYS)

f_h = design factor

According to the code ISO 13623 (Ref.[28]), if design temperature is more than 50°C for the wall thickness calculation it is necessary to consider the de-rating effect.

The maximum hoop stress, $\sigma_{hp,}$ due to the internal pressure shall not exceed:

$$\sigma_{\mathrm{hp}} \leq f_h \cdot (\sigma_y - \sigma_{ydr}) = 0.67 \cdot (450 - 6) = 297.48MPa$$

being:

$$\sigma_{ydr} = \frac{T_i - 50°C}{50°C} \cdot 30MPa = \frac{60 - 50}{50} \cdot 30 = 6MPa$$

where:

σ_y = specified minimum yield strength (SMYS)

σ_{ydr} = specified minimum yield strength derated ($SMYS_{der}$) as per DNV OS F101 (see 2.2.5)

f_h = design factor ($\mathbf{f_h}$=0.67 – ISO 13623 table 2)

T_i = design onshore installation temperature (T_i=60°C – see Table 2-3)

The minimum wall thickness calculation is (for the symbol definition see above):

$$t_{cal} = \frac{(P_i - P_o)D_o}{2\sigma_{hp} + (P_i - P_o)} = \frac{(9.3 - 0) \cdot 559}{2 \cdot 297.48 + (9.3 - 0)} = 8.60mm$$

$$t_{min} = t_{cal} + t_{tol} = 8.60 + 1.00 = 9.60mm$$

The wall thickness selected for the onshore pipeline DN 550 equal to t_{sel} = **15.9** mm, is higher than the t_{min} calculated above.

4.3 Bends thickness verification

The onshore pipeline routes contain several bends which are anticipated to be 5D hot (induction) bends and 40D cold (field) bends.

Especially induction bending affects the dimensions of the pipe; distortion of the pipe in the bend area includes a decrease in wall thickness (wall thinning) at the outer bend, the bend extrados, and an increase in wall thickness (wall thickening) at the inner bend, the bend intrados. Actual distortions may vary from predicted values due to the particular induction bending process requirements such as bend angle, radius, diameter, speed of bending, temperature, cooling method, coil design and material type. A larger bend radius will result in a smaller wall thickness variation. For a 5D bend radius, approximately 8% wall thinning in the outer bend is expected (from engineering practice), while for the cold field bending the bend thinning is typically limited to 1.5%.

In addition, the additional circumferential stress component for the bend intrados due to the bending radius shall be taken into account. The minimum required wall thickness shall be calculated using the following factors:

Bend intrados

$t_{min\,Innerbend} = f_{in} \cdot t_{min}$

According to Ref. [25] $f_{in} = \frac{2R-0.5D}{2R-D}$

According to Ref. [21] $f_{in} = \frac{4(R/D)-1}{4(R/D)-2}$

Bend extrados

$t_{min\,Outerbend} = f_{ex} \cdot t_{min}$

According to Ref. [25] $f_{ex} = \frac{2R+0.5D}{2R+D}$

According to Ref. [21] $f_{ex(\phi)} = \frac{4(R/D)+sin\,\phi}{4(R/D)-2\,sin\,\phi}$; for $-180° \leq \Phi \leq 0°$

$f_{ex(\phi)} = 0.9$; for $0° \leq \Phi \leq 180°$

Where

f_{in} wall thickness factor for a bend intrados

f_{ex} wall thickness factor for a bend extrados

R bend radius along the centerline of bend (5D hot bends, 40D cold bends)

D outside diameter

Φ indicates the location according to the annular section (section A-A), i.e. for extrados Φ=90°, for intrados Φ=-90°; the neutral axis is 0° or -180° (see follow Figure, section A-A)

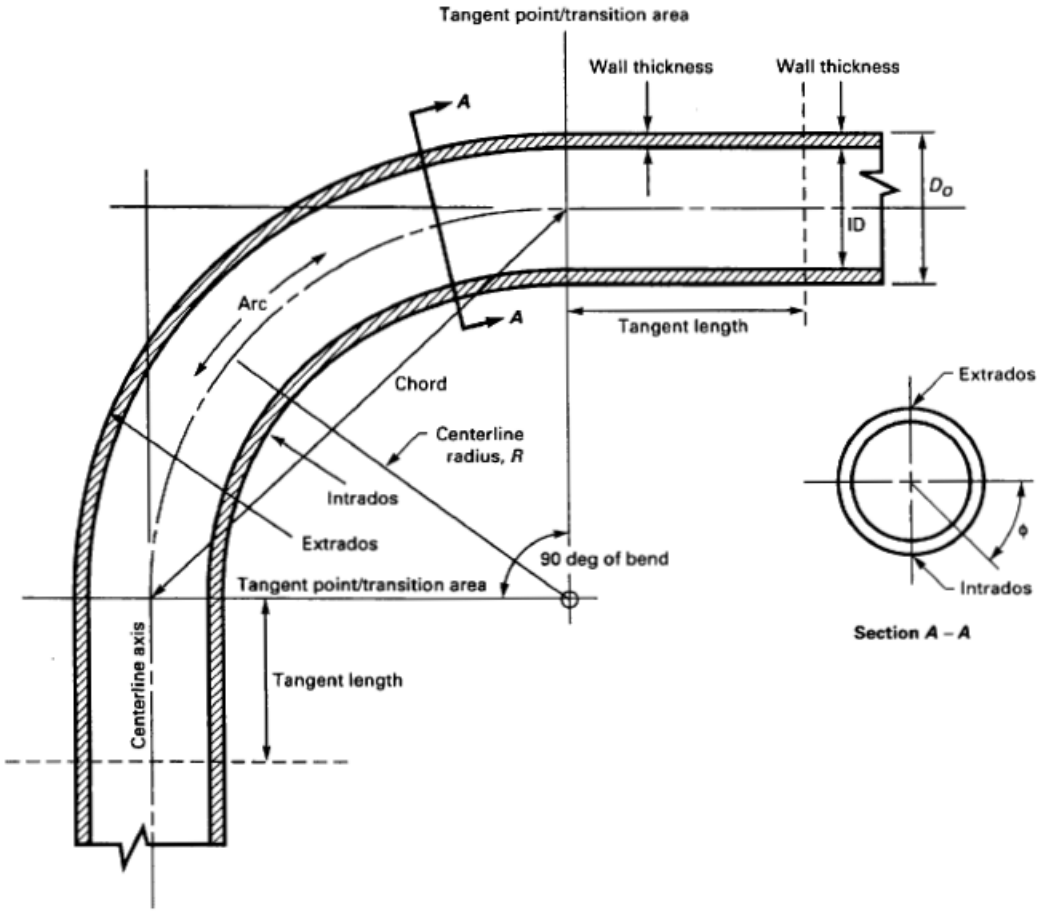


Figure 1 for bends dimensional terms (Ref. [21])

Hence, according to Ref. [25] and Ref. [21] they are:

Norm.	Bend Location	Bend Radius	
		5D	40D
Ref. [25]	intrados	1.055556	1.006329
Ref. [21]	intrados	1.055556	1.006329
Ref. [25]	extrados	0.954545	0.993827
Ref. [21]	extrados	0.9	0.9

Table 4-1 – Wall Thickness Factor for Bends

Both effects (i.e. bend thinning and circumferential stress correction factors according to Ref. [25] being more conservative) shall be accounted for in the wall thickness selection for the bends. Considering the minimum wall thickness required by the most conservative code (13.76 considering also the manufacturing tolerances according to D.M. 17/04/2008,

see section 4.1.1), the minimum required nominal bend wall thickness (after bending), at the intrados and extrados, are presented in the following table:

Bend Radius and Type	Calculated Wall Thickness	
	Intrados (mm)	Extrados (mm)
5D Hot Induction	14.52	13.13
40D Cold Field	13.85	13.68

Table 4-2 – Minimum Nominal Bend Wall Thickness

It is highlighted that bends are not allowed at Railway Crossing in Italy, requiring the applicable design code a straight pipe under the rails.

Accounting for 8% wall thinning in the outer bend for 5D hot induction bends, the minimum nominal wall thickness after bending will be 13.71 mm minimum using mother pipe with a wall thickness of 15.9 mm (considering also the fabrication tolerances). This is acceptable from a design code perspective since the required wall thickness is 13.13 mm for the outer bend according to Table 4-2.

Accounting for wall thickening in the inner bend for 5D hot induction bends, the nominal wall thickness after bending will be 15.65 mm using a mother pipe with wall thickness of 15.9 mm (considering also the fabrication tolerances) and a conservative estimate of 5% increment of wall thickness at the inner bend. This is acceptable from a design code perspective since the required wall thickness is 14.52 mm for the inner bend according to Table 4-2.

During cold field bending the bend thinning is typically limited to 1.5% of the wall thickness which results in a nominal wall thickness in bend extrados of 14.68 mm minimum. This is acceptable from a design code perspective since the required wall thickness is 13.68 mm for the outer bend according to Table 4-2.

5 OFFSHORE PIPELINE DESIGN CRITERIA

5.1 Offshore Steel Wall Thickness Sizing

The minimum wall thickness will be defined according to the following design criteria, stated in DNVGL ST F101 (Ref. [24]):

1) Internal pressure containment;

2) External pressure collapse;

3) Propagation Buckling;

A significant section of the pipeline is laid within the Italian jurisdiction, the mechanical size shall also comply with the Italian Legislation; thus, the minimum wall thickness for pressure containment will be calculated in accordance with Decreto Ministeriale 17 Aprile 2008.

Finally, ISO 13623 will be also applied.

The wall thickness selection takes into account the results of structural integrity analyses in the following conditions:

1) Installation;

2) Hydrotesting;

3) Operating;

4) Shut down.

According to Ref. Decreto Ministeriale 17 Aprile 2008, the pipeline can be classified as “1° Specie” pipeline (operating pressure >24 bar).

Extension of code applicability in the offshore section is shown in the following table:

Design Code	KP [km]	
	from	to
DNVGL ST F101	7+080*	158+803
ISO 13623	7+080*	158+803
D.M. 2008	7+080*	7+102
*shore line		

Table 5-1 – Code applicability in the offshore section

5.1.1 Internal Pressure Containment

The minimum wall thickness for pressure containment will be defined in both operating and in system pressure test conditions.

5.1.1.1 DNVGL ST-F101 Submarine Pipeline Systems

The pressure containment shall comply with the following criterion:

$$p_{lx} - p_e \leq \frac{p_b(t_1)}{\gamma_m \cdot \gamma_{SC}}$$

Where:

p_{lx} : is equal to the local incidental pressure during operation (p_{li}) and to the local test pressure during system pressure test (p_{lt}).

The pressure containment resistance ($p_b(t_1)$) is given by:

$$p_b(t_1) = \frac{2 \cdot t_1}{D - t_1} \cdot f_y \cdot \frac{2}{\sqrt{3}}$$

Where:

$f_y = (\mathrm{SMYS} - f_{y,temp})\alpha_u$

$t_1 = t_{nom} - t_{fab} - t_{CA}$ (Design Condition)

α_u = 0.96

The following safety classes will be utilized:

Location	Bursting	
	Installation	Operating
ZONE 1	LOW	MEDIUM
ZONE 2	LOW	HIGH

Table 5-2 – Safety Classes

5.1.1.2 Decreto Ministeriale 17 Aprile 2008

The following relationship has to be satisfied:

$$t_{min} = \frac{DP \cdot D}{20 \cdot s_p}$$

$$s_p \leq f \cdot R_{t0,5}$$

Were:

DP = design pressure (bar);

s_p = allowable hoop stress (MPa);

D = outside diameter

f = usage factor;

$R_{t0,5}$ = SMYS (MPa)

The nominal wall thickness is based on:

$$t = t_{min} + t_{fab} + t_{CA}$$

Were:

t_{fab} = wall thickness fabrication tolerance (as per Ref. [24]);

t_{CA} = Corrosion Allowance

The usage factors f are shown in the following, where conservatively the same classification for location classes defined in Ref. [24] are adopted

Pipeline System Conditions	f	
	Zone 1	Zone 2
Hydrotesting	1.00	1.00
Operating	0.72	0.57

Table 5-3 –Usage factors for pipeline system (D.M. 17/04/2008)

5.1.1.3 ISO 13623

The following relationship must be satisfied:

$$\sigma_{hp} \leq F_h \cdot SMYS$$

The tensile hoop stress (σ_{hp}) will be calculated as follows:

$$\sigma_{hp} = (P_i - P_e)\frac{OD - t_{min}}{2t_{min}}$$

The hoop stress design factor F_h has been defined for the different route zones as shown below.

Zone	Fh
1	0.77
2	0.67
Hydrotest	0.96

Table 5-4 –Hoop Stress Design Factor

Pressure test at any point in the system shall be calculated as:

p_{test_ISO} = 1.25 * MOP * C1 * C2

Where:

C1 = SMYS/SMYS Derated = 1.014

C2 = $(t_{min}+t_{CA})/t_{min}$ = 1

Since it is found p_{test_ISO} = 1.27 * MOP while the project requirement is 1.4*PD, this latter will be applied.

5.1.2 External Pressure Collapse

The minimum wall thickness against collapse due to external pressure will be defined according Ref. [24]. The following criterion must be fulfilled at any point of the pipeline:

$$p_e - p\frac{p_c(t_1)}{\gamma_{sc} \cdot \gamma_{m_{min}}}$$

Where:

p_{min}: Minimum internal pressure (this is normally taken as zero for as-laid pipeline);

System collapse will be checked for the pipeline in Safety Class Low for "installation", Safety Class Medium for "after commissioning" in zone 1 and High for "after commissioning" in zone 2.

5.1.3 Propagation Buckling

According to Ref. [24], the propagating buckle pressure shall be taken as:

$$p_e < \frac{p_{pr}}{\gamma_m \cdot \gamma_{SC}}$$

$$P_{pr} = 35 f_y \alpha_{fab} \left(\frac{t_2}{OD}\right)^{2.5}$$

Where:

$t_2 = t_{nom}$ (Installation Condition)

$t_2 = t_{nom} - t_{CA}$ (Shut Down Condition)

After commissioning condition propagation buckling will be performed in Safety Class Medium (i.e. pipe depressurized but gas filled).

5.1.4 Applied Factors

The following factors are taken from Ref. [24].

Load Condition	Material Resistance Factor - γ_m Limit State Category ULS
Installation	1.15
Shut down	
Hydrotest	
Operating	

Table 5-5 –Material Resistance Factor

Load Condition	Safety Class Resistance Factor - γ_{sc}	
	LC1	LC2
Installation	1.04	
Shut down	1.14	
Hydrotest	1.046	
Operating	1.138	1.308

Table 5-6 –Safety Class Resistance Factor for Pressure Containment

Material Strength Factor - α_u	
LC1	LC2
0.96	

Table 5-7 – Material Strength Factor

Pipe	Maximum Fabrication Factor - α_{fab}
SAWL	0.85
HFW	0.93
SMLS	1.00

Table 5-8 – Maximum Fabrication Factor

Condition or pipeline system	Incidental Factor-γ_{inc}
Typical pipeline system	1.1

Table 5-9 – Incidental Factor

5.2 Vertical and Lateral On Bottom Stability

On bottom stability analysis will be performed through the use of DNVGL-RP-F109 (Ref. [25]).

5.2.1 Vertical Stability

The vertical stability analysis has to be performed in order to check that the pipeline does not float in empty condition. The following relationship has to be satisfied:

$$\gamma_w \cdot \frac{b}{w_s + b} = \frac{\gamma_w}{s_g} \leq 1$$

Where:

γ_w is the safety factor usually taken equal to 1.1;

b is the pipe buoyancy per unit length;

W_s is the pipe submerged weight per unit length.

s_g is the specific gravity

5.2.2 Lateral On Bottom Stability

Lateral on bottom stability calculations will be carried out through analytical calculations by means of an in-house software in accordance with the Generalized Method presented in DNVGL-RP-F109 (Ref. [25]).

This method allows the calculation of the minimum concrete thickness required to limit the pipeline displacement to a value that most pipelines can experience without problems (i.e. without large strains). This value ranges between less than half a pipe diameter (virtually stable pipe) up to 10 diameters during the given sea state.

The design curves to be considered for the calculation of the minimum required pipe weight are shown in Section 3.5.2 of Ref. [25].

These curves allow the calculation of the following values:

L_{stable} = the weight required for obtaining a virtually stable pipe (i.e. pipeline displacement less than half a pipe diameter);

L_{10} = the weight required for obtaining a 10-pipe diameter displacement.

6 OFFSHORE PIPELINE METHODOLOGY

6.1 Location classes and safety classes

The pipeline system shall be classified into location classes according to Ref. [24]. Location class definition are reported in the below Table:

Classification of location	
Location	**Definition**
ZONE 1 (>500m)	The area where no frequent human activity is anticipated along the pipeline route.
ZONE 2 (<500m)	The part of the pipeline/riser in the near platform (manned) area or in areas with frequent human activity. The extent of location class 2 should be based on appropriate risk analyses. If no such analyses are performed a minimum horizontal distance of 500 m shall be adopted.

Table 6-1 – Classification of Location

Pipeline design shall be based on potential failure consequence. This is implicit by the concept of safety. The safety classes according to Ref. [24] are defined as follow:

Classification of safety classes	
Safety class	**Definition**
Low	Where failure implies insignificant risk of human injury and minor environmental and economic consequences
Medium	Where failure implies low risk of human injury, minor environmental pollution or high economic or political consequences.
High	Classification for operating conditions where failure implies risk of human injury, significant environmental pollution or very high economic or political consequences

Table 6-2 – Classification of Safety Class

The following fluid categories applies:

Category	Description
A	Typical non-flammable water-based fluids (water during hydrotest phase, air during installation phase).
D	Non-toxic, single-phase natural gas (during operating phase).

Table 6-3 – Classification of Fluids (DNVGL ST F101)

The following safety classes have been finally selected

	Fluid category A Location class		Fluid category D Location class	
Phase	1	2	1	2
Temporary	Low	Low	Medium (1)	N/A
Operational	N/A	N/A	Medium	High

(1) for buckling propagation (which is a temporary phase condition, a safety class medium has been selected

Table 6-4 –Safety Class Summary (as per DNVGL ST F101)

6.2 Steel Wall Thickness Sizing

The minimum required wall thickness will be calculated to satisfy the following main condition:

- Installation Condition:
  - Pressure Containment Resistance during Hydrotest
  - System Collapse during Installation
  - Propagation Buckling during Installation
- Long Term Condition
  - Pressure Containment Resistance during Operation
  - System Collapse in case of pipe depressurization
  - Propagation Buckling in case of pipe depressurization

Wall thickness will be defined based on the worst case between the operating and hydrotest condition. De-rating effect will be taken into account according to DNV-ST-F101 for temperature over 50°C.

Atmospheric internal pressure will be considered for the minimum wall thickness calculations against external pressure collapse and propagation buckling.

6.2.1 Available Commercial Wall Thickness Proposal

The final selected wall thickness will be defined comparing the values coming from the results of the above analyses with the available commercial wall thicknesses relevant to the selected OD (22” OD).

6.3 Lateral and Vertical Stability

The methodology applied for the on bottom stability analysis and the concrete thickness selection will be based on the following steps:

- definition of homogeneous sections along the pipeline route;

- calculation of the required concrete weight coating thickness for vertical and lateral stability, both in temporary and operating conditions for each representative section.

A 2% water absorption in concrete weight will be considered in both temporary and operating phase, since for stability the assumption is conservative (respect to 5% which is the maximum absorption of the concrete), since a lower weight makes the pipe less stable.

Wave and current directionality will not be considered along the route (omnidirectional data will be taken perpendicular to pipe), as recommended in the Metocean Report.

In addition, at the Gela shore approach up to 30m water depth, only temporary Metocean data (1year and 10years return period) will be considered, since the pipeline will be buried after installation.

Please also note that about 1km from shore-approach in Gela and approx. 600m from shore approach in Malta the pipeline will be in HDD and/or microtunnel, so lateral stability analysis is not required.

6.3.1 Parameters for the Identification of Homogeneous Route Sections

The following parameters will be considered for the identification of homogeneous route sections:

- Pipe wall thickness;
- Environmental conditions (wave and current sets);
- Water depth;
- Soil type.

For each homogeneous section, the worst condition of wave and current data and the minimum water depth will be selected.

6.3.2 Load Combination

With reference to the pipeline installation condition, the environmental loads relevant to the following wave and current combinations will be analyzed:

- 10 y.r.p. wave – 1 y.r.p. current;
- 1 y.r.p. wave – 10 y.r.p. current.

With reference to the pipeline operating condition the environmental loads relevant to the most severe wave and current combinations, between the following, are analyzed:

- 100 y.r.p. wave – 10 y.r.p. current;
- 10 y.r.p. wave – 100 y.r.p. current.

7 OFFSHORE PIPELINE RESULTS

7.1 Steel Wall Thickness Sizing and Steel Grade

The required steel wall thickness has been calculated along the entire offshore section. See figure Below:

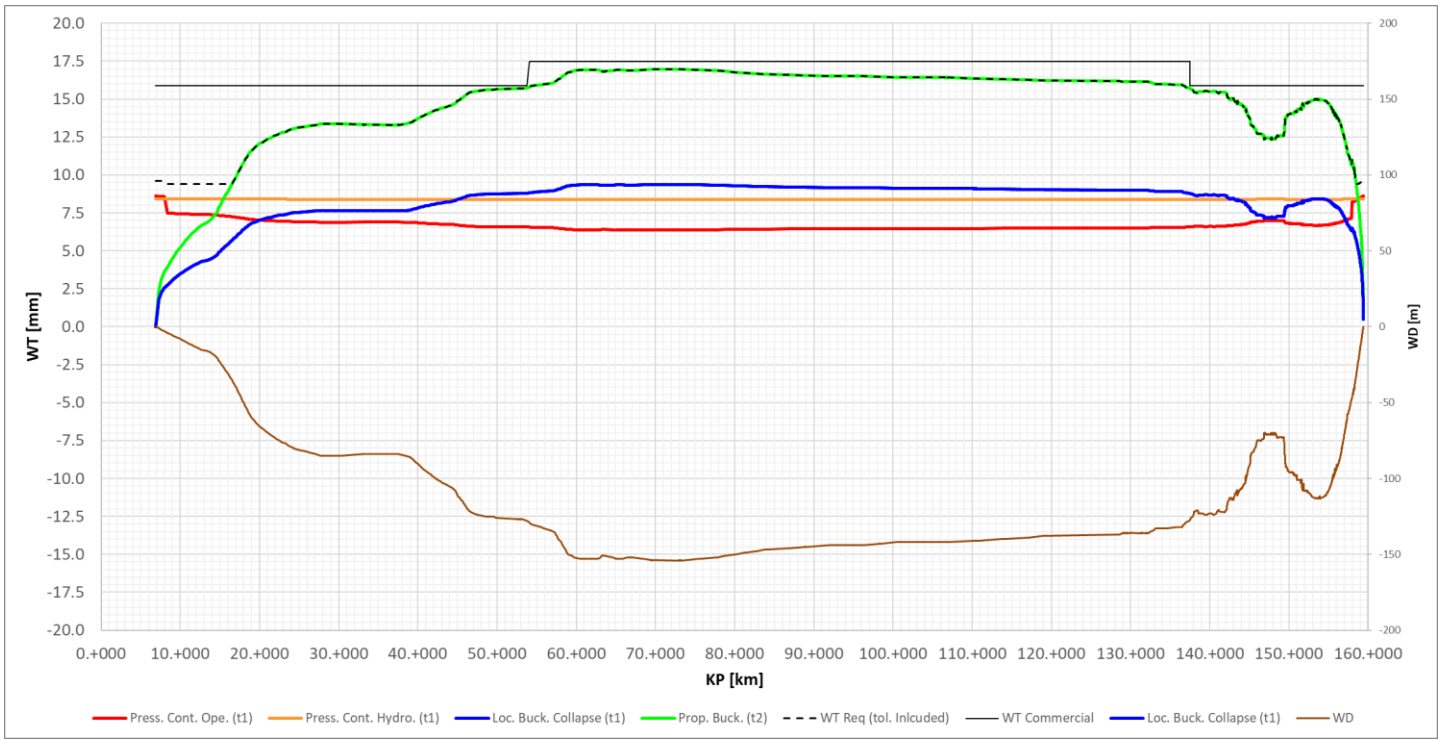


Figure 3 – Offshore Section – Wall Thickness According to DNVGL-ST-F101-

The minimum wall thicknesses required have been summarised in the following tables.

Load Case	S.F.	Thickness	[mm]
DNVGL-ST-F101			
Press. Cont. Ope. (t1)	HIGH	t1	8.60
Press. Cont. Hydro. (t1)			N/A
Loc. Buck. Collapse (t1)			N/A
Prop. Buck. (t2)		t2	N/A
Press. Cont. Ope. (t1)	MEDIUM	t1	7.50
Press. Cont. Hydro. (t1)			N/A
Loc. Buck. Collapse (t1)			9.37
Prop. Buck. (t2)		t2	16.96
Press. Cont. Ope. (t1)	LOW	t1	6.90
Press. Cont. Hydro. (t1)			8.41
Loc. Buck. Collapse (t1)			9.08
Prop. Buck. (t2)		t2	16.34
Decreto Ministeriale 17 Aprile 2008			
Press. Cont. Ope. (t1)	HIGH	t1	10.13
Press. Cont. Ope. (t1)	MEDIUM	t1	8.02
ISO 13623			
Press. Cont. Ope. (t1)	HIGH	t1	8.60
Press. Cont. Ope. (t1)	MEDIUM	t1	7.50

IMPORTANT NOTE:
t_fab + t_corr shall be added to t1
t_corr shall be added to t2

Table 7-1 – Offshore Section – Minimum Wall Thickness

Based on DNVGL ST F101, definition of thickness used in calculation is as follows:

Characteristic thickness	*Prior to operation*[1)]	*Operation*[2)]
t_1	$t\text{-}t_{fab}$	$t\text{-}t_{fab}\text{-}t_{corr}$
t_2	t	$t\text{-}t_{corr}$

1) Is intended when there is negligible corrosion (mill pressure test, construction (installation) and system pressure test condition). If corrosion exist, this shall be subtracted similar to as for operation.
2) Is intended when there is corrosion.

Table 7-2 – Definition of thickness as per DNVGL ST F101

The selected wall thickness for the Melita Transgas Pipeline, based on commercial availability and fabrication tolerances is reported below.

From KP [km]	To KP [km]	Wall Thk [mm]:
start	54+000	**15.9**
54+000	137+500	**17.5**
137+500	end	**15.9**

Table 7-3 – Offshore Section Selected Wall Thickness

The Steel Grade material ISO 3183 L450, X65 identified in the previous phase of the design is confirmed.

7.2 Vertical and Lateral Stability

The required CWC thickness for vertical stability which guarantee a specific gravity larger than 1.1 is 20mm for WT 15.9mm and 14mm for WT 17.5mm. However, please note that a minimum CWC thickness of 40mm is required for offshore pipeline based on DNVGL-ST-F101.

Regarding lateral stability, the required CWC thickness has been calculated along the offshore section from WD 4m at Gela to WD 25m at Malta (where the Trenchless exits are assumed, since survey data are not available). Wave and current data set from P1 to P25 from the Metocean Report have been considered based on the water depths of the following table.

Wave/Current Location Set	Depth from (m)		to
P1	4.0	-	11.1
P2	11.1	-	23.4
P3	23.4	-	41.5
P4	41.5	-	57.9
P5	57.9	-	76.8
P6	76.8	-	79.3
P7	79.3	-	85.8
P8	85.8	-	116.7
P9	116.7	-	144.5
P10	144.5	-	129.7
P11	129.7	-	140.0
P12	140.0	-	154.3
P13	154.3	-	147.9
P14	147.9	-	145.0
P15	145.0	-	142.0
P16	142.0	-	138.6
P17	138.6	-	136.8
P18	136.8	-	132.9
P19	132.9	-	106.5
P20	106.5	-	70.1
P21	70.1	-	89.3
P22	89.3	-	109.7
P23	109.7	-	87.6
P24	87.6	-	35.2
P25	35.2	-	25.0

Table 7-4 – Wave set from Metocean Report

From the Metocean report there's not a perfect correspondence between KP and WD as per the present selected route profile, so the data have been re-distributed along the route KP based on actual WD. In addition, please note that at the present time there is a lack of data near the Gela shore approach (in terms of wave parameters and geophysical survey data): conservatively, the waves/currents of "P1 set" have been applied from 4m to 11m WD. The final waves and current parameters governing the design CWC thickness along the route are reported in the following figure.

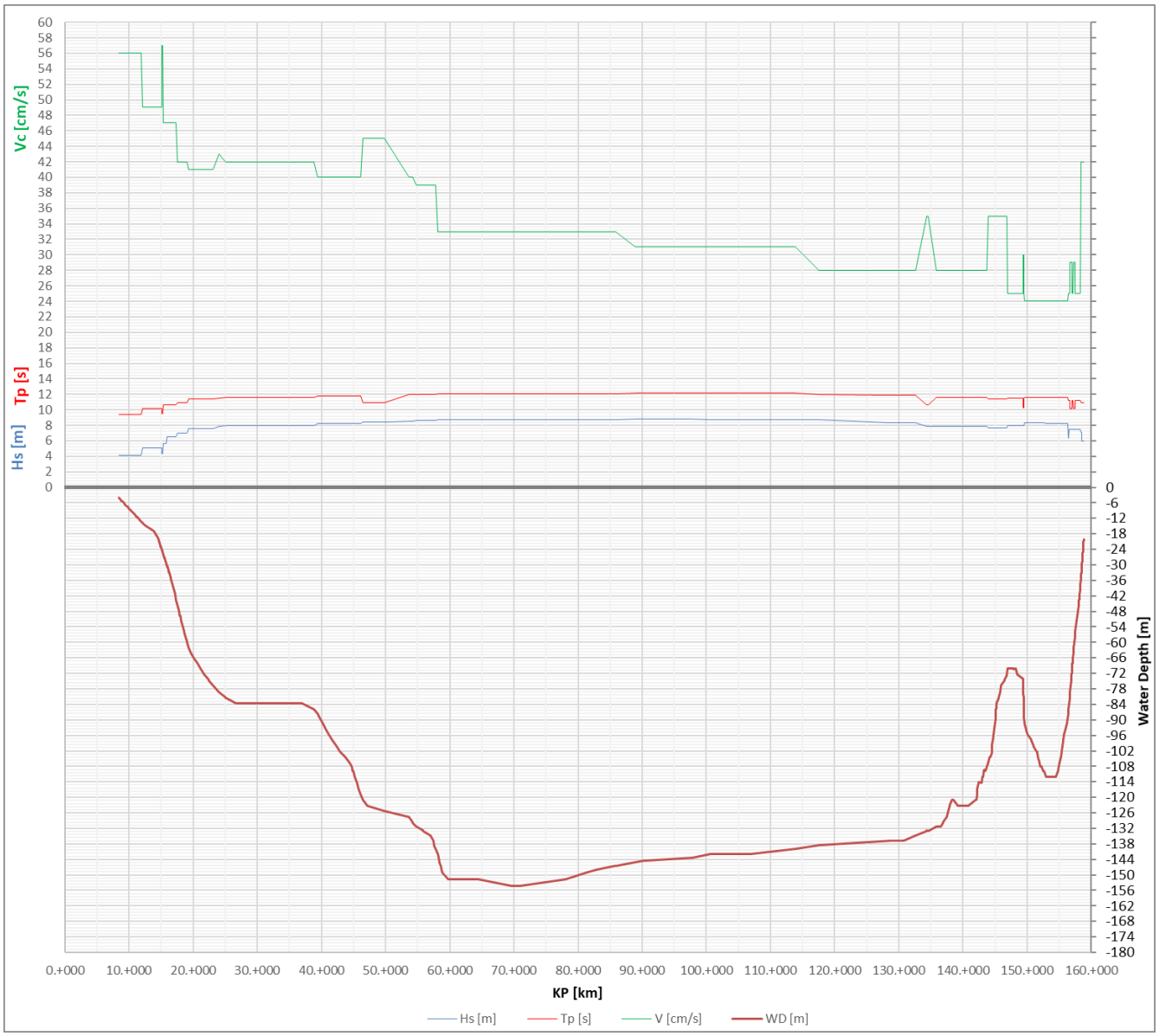


Figure 4 – Offshore Section – Waves and Currents Distribution (Omni)

Legend:
Hs = Significant wave height
Tp = Peak Period
Vc = Velocity of Current
WD = Water Depth

In figure below, the maximum value of CWC thickness between Temporary and Permanent condition has been reported, where relevant, considering also that at Gela the pipeline will be buried up to 30m WD. In fact, pipe burial protects the pipeline from lateral instability in the long-term period, which has been found to be a treat especially at low water depth. The CWC thickness selected in the previous design stage (Basic) is also reported, for comparison.

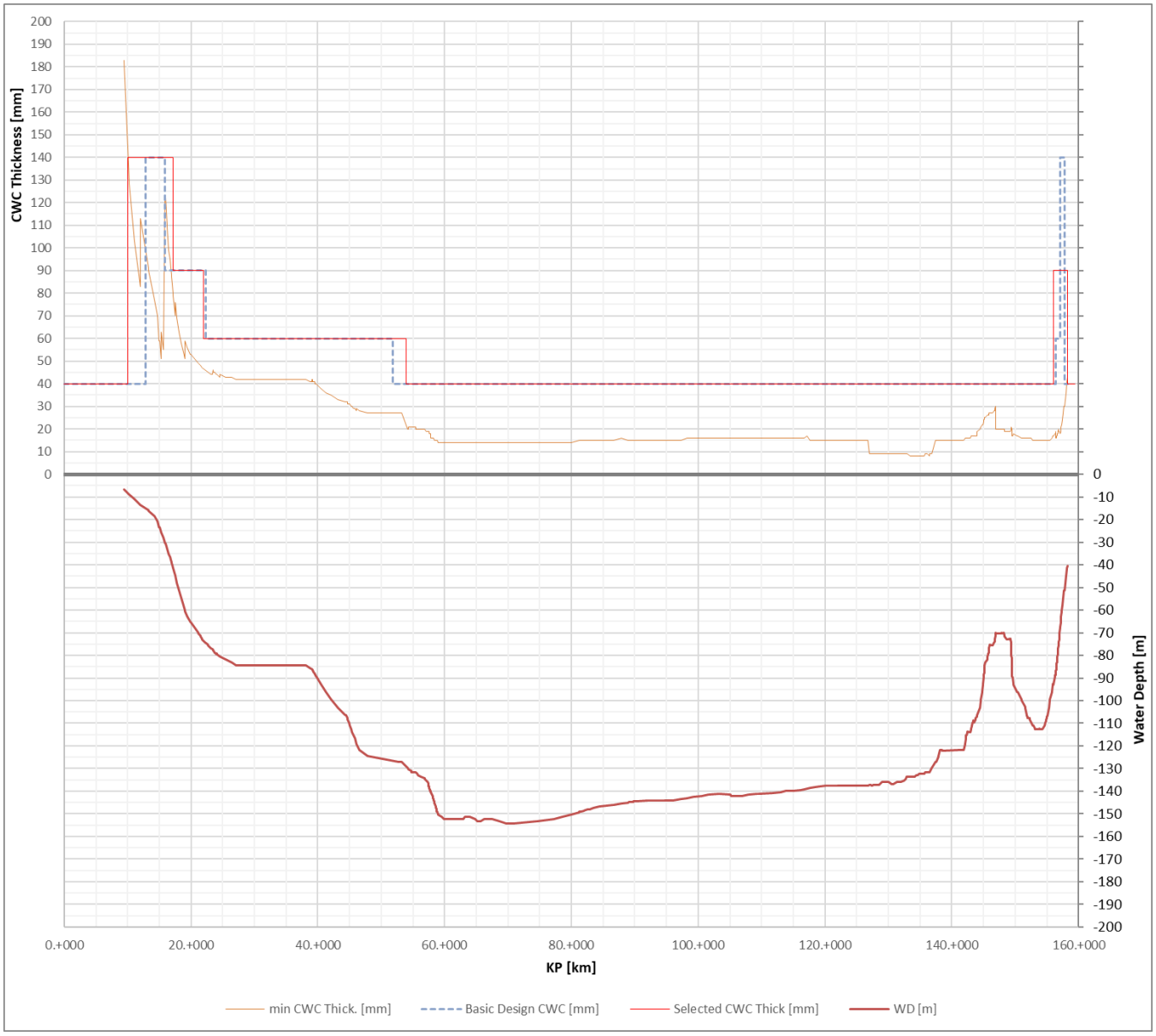


Figure 5 – Offshore Section – CWC Thickness According to DNVGL-RP-F109 – Generalized 10D

Legend:
CWC = Concrete Weight Thickness
WD = Water Depth

The CWC thickness selected during the Basic Design for the Melita Transgas Pipeline can be confirmed, highlighting some differences in KP extension for each range; please note, in fact, that some input data are changed, such as metocean and bathymetric data. For example, please note that in Basic Design, CWC value near Malta at 30m WD was 103mm, while at the present stage the HDD/microtunnel exit is foreseen at deeper seabed (40m WD).

Values are reported in table below.

From KP [km]	To KP [km]	From WD [km]	To WD [km]	WT [mm]:	CWC Thk [mm]:	Additional Temporary Stabilization Measures Required [-]
HDD exit offshore Gela	10.+000	-4.0	-8.1	15.9	**40**	**Yes**
10.+000	17.+200	-8.1	-41.6		**140**	**No**
17.+200	22.+000	-41.6	-72.3		**90**	**No**
22.+000	54.+000	-72.3	-127.5		**60**	**No**
54.+000	137.+500	-127.5	-127.5	17.5	**40**	**No**
137.+500	156.+000	-127.5	-92.6	15.9	**40**	**No**
156.+000	Trenchless exit offshore Malta	-92.6	-40.0		**90**	**No**

Table 7-5 – Offshore Section Selected CWC Thickness

CWC thickness selected is based on concrete density of 3040kg/m3, which is common in Oil and Gas industry. Considering a lower density 2400kg/m3, CWC thickness increase above 200mm, that could make pipeline installation unfeasible.

It has to be noted that, based on currently provided input data and assumptions made, the pipe is not stable from the HDD exit at Gela (KP 8+862) up to about KP10+000 (WD 8m), i.e. the CWC thickness that shall be required is too large. Currently, for this section CWC 40mm has been chosen (which at least ensure no vertical flotation) in combination with other pre or post lay stabilization measures, such as pre-installed concrete blocks or post-lay overweighting mattresses. These items shall be removed just before pipe burial/backfilling, which is considered up to WD 30m.

The analysis for this section can be considered conservative, since:

- The omnidirectional wave loads have been applied perpendicular to the pipe (while, as the waves approach the shore, they generally become parallel to the pipeline)
- Wave data from WD 11m has been applied up to WD 4m (while waves generally decrease near shore)
- Extreme annual waves have been considered (while seasonal/monthly data can be analysed for sensitivity, in order to find proper installation windows for the shore approaches).

In any case, in order to investigate if alternative solutions exist, additional detailed analysis will be carried out during the specific activities of the FEED when more detailed data will

be available, and reported in the Offshore Pipeline On-Bottom Stability Calculation, doc. 30-RT-E-6021. In particular some of the following aspects will be considered:

- The real seabed profile (when complete survey data will be available);
- The real soil properties (when geotechnical data will be available);
- Wave directionality and seasonality;
- Wave specific for the shore approach (up to WD 4m), if available.

In addition, the CWC thickness values along the route will be further optimized based on other aspects to be analysed during the FEED (e.g. layability, protection from impacts, purchasing philosophy, crossings design)

7.2.1 CWC thickness for the Trenchless section

For the trenchless section, CWC is required in order to give both vertical stability and also lateral stability during the installation phase (before the pipe string will be pulled-in. The CWC thickness selected at the present stage is 40mm. In fact, 20mm is the minimum required for vertical stability (i.e. to avoid floatation) but 40mm is the minimum based on DNVGL-ST-F101. Greater CWC thickness is not recommended, in order to avoid problems during pulling activities, however 40mm shall be confirmed to be suitable for lateral stability during temporary/seasonal sea state and will be confirmed when more detailed data will be available (additional stabilization measure could be required, if confirmed, by analysis during the next phases of the design activities).

8 ANNEXES

ANNEX A – DETAILS CALCULATION ACCORDING TO API RP 1102

ANNEX B – DETAILS RESULTS OF OFFSHORE WALL THICKNESS SIZING

ANNEX A – DETAILS CALCULATION ACCORDING TO API RP 1102

Follow the detailed calculation described in section 4.1.3 of this report.

A1 Check Allowable Barlow Stress

Formula 8a (gas) of API RP1102 with:

S_{Hi} (Barlow) = pD/(2 t_w) =**158.21** MPa < FxExTxS = **270** MPa

where:

p= 93 bar

D= 559 mm

t_w= 15.9 mm

F: design factor (F=0.6 – ASME B31.8 table 841.1.6-1)

E: longitudinal joint factor (E=1 – ASME B31.8 table 841.1.7-1)

S: Specified Minimum Yield Strength (SMYS) of pipe material (MPa)

T: temperature de-rating factor (T=1 – ASME B31.8 table 841.1.8-1)

A2 Circumferential Stress Due to Earth Load

Figure 3 of API RP 1102 with:

t_w/D = 0.028 E′ = 13.8 MPa K_{He} = 1300

Figure 4 of API RP 1102 with:

H/B_d = 3.578 B_e = 0.78 Type of soil = “B”

Figure 5 of API RP 1102 with:

B_d/D = 1.0 E_e= 0.83

Formula 1 of API RP 1102 with:

$S_{He}= K_{He}B_eE_e\gamma D$ = **9.409** MPa

A3 Impact Factor, F_i, and Applied Design Surface Pressure, w

Figure 7 of API RP 1102 for highways, tandem load on flexible pavement with:

H = 1.00 F_i = 1.5

Applied design surface pressure, w:

$w = P/A_p$ = **0.469** MPa

A4 Cyclic Stresses, ΔSHh and ΔSLh

Cyclic circumferential stress, ΔS_{Hh}

Figure 14 of API RP 1102 with:

t_w/D =0.028 E_r = 138 MPa K_{Hh} = 9

Figure 15 of API RP 1102 with:

D = 559 mm H = 2.00 m G_{Hh} = 1.2

Table 2 of API RP 1102 with:

Flexible pavement D = 559 mm H = 2.00 m R = 1.00
Tandem axies L=1.00

Formula 5 of API RP 1102:

$\Delta S_{Hh} = K_{Hh}G_{Hh}RLF_iw$ = **7.594** MPa

Cyclic longitudinal stress, ΔSLh

Figure 16 of API RP 1102 with:

t_w/D = 0.028 E_r = 138 MPa K_{Lh} = 6.5

Figure 17 of API RP 1102 with:
D = 559 mm H = 2.00 m G_{Lh} = 1.1

Table 2 of API RP 1102 with:

Flexible pavement D = 559 mm H = 2.00 m R = 1.00
Tandem axies L=1.00

Formula 6 of API RP 1102:

$\Delta S_{Lh} = K_{Lh}G_{Lh}RLF_iw$ = **5.027** MPa

A5 Circumferential Stress Due to Internal Pressurization, SHi

Formula 7 of API RP 1102 with:
p= 93 bar
D= 559 mm
t_w= 15.9 mm

S_{Hi}=**158.831** MPa

A6 Principal stresses S_1, S_2, S_3

Formula 9 of API RP 1102 with:
$S_1 = S_{He} + \Delta S_{Hh} + S_{Hi}$ = **175.834** MPa

Formula 10 of API RP 1102 with:
$S_2 = \Delta S_{Lh} - E_S (T_2-T_1) \alpha t + v_S(S_{He}+S_{Hi})$ = **-112.585** MPa

Formula 11 of API RP 1102 with:
p = 9.30 MPa
S_3 = -p = - MOP (design pressure) = **-9.30** MPa

Effective stress, S_{eff}
Formula 12 of API RP 1102 with:

$$S_{eff} = \sqrt{\left[(S1-S2)^2+(S2-S3)^2+(S3-S1)^2\right]/2} = \mathbf{253.108}\ \text{MPa}$$

A7 Check allowable effective stress

Formula 13 of API RP 1102 with:
S_{eff} = 253.108 MPa SMYS =450 MPa F=0.60
SMYS x F= 270 MPa
S_{eff}<SMYS x F

A8 Check Fatigue

Girth welds F = 0,60
Table 3 of API RP 1102 S_{FG} = 82.74 MPa
Formula 17 of API RP 1102 with:
ΔS_{Lh} = 5.027 MPa
S_{FG} x F = 49.644 MPa
ΔS_{Lh}<S_{FG} x F

Longitudinal welds F = 0,60
Table 3 of API RP 1102 S_{FL} = 82.74 MPa
Formula 20 of API RP 1102 with:
ΔS_{Hh} = 7.594 MPa
S_{FL} x F = 49.644 MPa
ΔS_{Hh} <S_{FL} x F

The verifications are fully satisfied!

Here below t are reported tables and figures of API RP 1102 (Ref. [30]) used for the above calculations

Table A-1—Typical Values for Modulus of Soil Reaction, E'

Soil Description	E', ksi (MPa)
Soft to medium clays and silts with high plasticities	0.2 (1.4)
Soft to medium clays and silts with low to medium plasticities; loose sands and gravels	0.5 (3.4)
Stiff to very stiff clays and silts; medium dense sands and gravels	1.0 (6.9)
Dense to very dense sands and gravels	2.0 (13.8)

Table A-2—Typical Values for Resilient Modulus, E_r

Soil Description	E_r, ksi (MPa)
Soft to medium clays and silts	5 (34)
Stiff to very stiff clays and silts; loose to medium dense sands and gravels	10 (69)
Dense to very dense sands and gravels	20 (138)

Table A-3—Typical Steel Properties

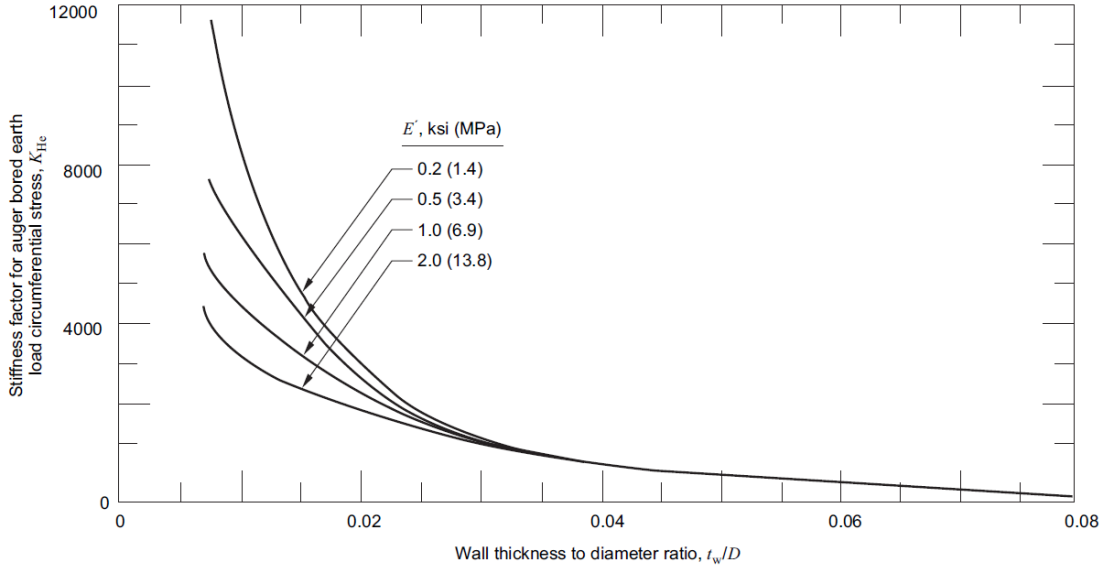
Property	Typical Range
Young's modulus, E_s, psi (kPa)	$28 - 30 \times 10^6$ $(1.9 - 2.1 \times 10^8)$
Poisson's ratio, ν_s	0.25 – 0.30
Coefficient of thermal expansion, α_T, per °F (per °C)	$6 - 7 \times 10^{-6}$ $(1.6 - 1.9 \times 10^{-5})$

Table 2—Highway Pavement Type Factors, R, and Axle Configuration Factors, L

Depth, H, < 4 ft (1.2 m) and diameter, D, ≤ 12 in. (305 mm)			
Pavement Type	Design Axle Configuration	R	L
Flexible pavement	Tandem axle	1.00	1.00
	Single axle	1.00	0.75
No pavement	Tandem axle	1.10	1.00
	Single axle	1.20	0.80
Rigid pavement	Tandem axle	0.90	1.00
	Single axle	0.90	0.65
Depth, H, < 4 ft (1.2 m) and diameter, D, > 12 in. (305 mm) Depth H, ≥ 4 ft (1.2 m) for all diameters			
Pavement Type	Design Axle Configuration	R	L
Flexible pavement	Tandem axle	1.00	1.00
	Single axle	1.00	0.65
No pavement	Tandem axle	1.10	1.00
	Single axle	1.10	0.65
Rigid pavement	Tandem axle	0.90	1.00
	Single axle	0.90	0.65

Table 3—Fatigue Endurance Limits, S_{FG}, and S_{FL}, for Various Steel Grades

Steel Grade	$SMYS$ (psi)	Minimum Ultimate Tensile Strength (psi)	S_{FG} (psi)	S_{FL} (psi)	
			All welds	Seamless and ERW	SAW
A25	25000	45000	12000	21000	12000
A	30000	48000	12000	21000	12000
B	35000	60000	12000	21000	12000
X42	42000	60000	12000	21000	12000
X46	46000	63000	12000	21000	12000
X52	52000	66000	12000	21000	12000
X56	56000	71000	12000	23000	12000
X60	60000	75000	12000	23000	12000
X65	65000	77000	12000	23000	12000
X70	70000	82000	12000	25000	13000
X80	80000	90000	12000	27000	14000
NOTE 1 pound per square inch (psi) = 6.895 kilopascals (kPa).					



NOTE See Table A-1 for soil descriptions.

Figure 3—Stiffness Factor for Earth Load Circumferential Stress, K_{He}

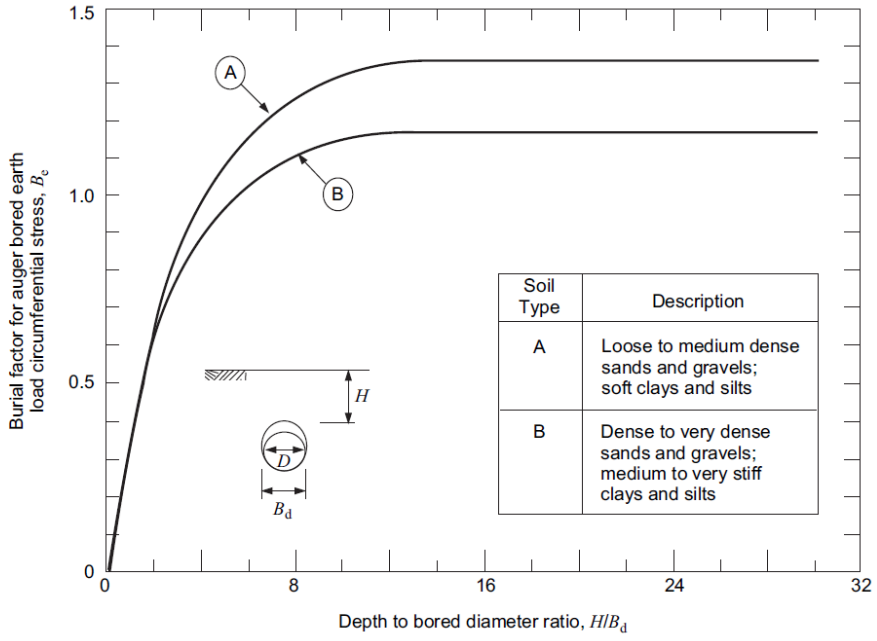


Figure 4—Burial Factor for Earth Load Circumferential Stress, B_e

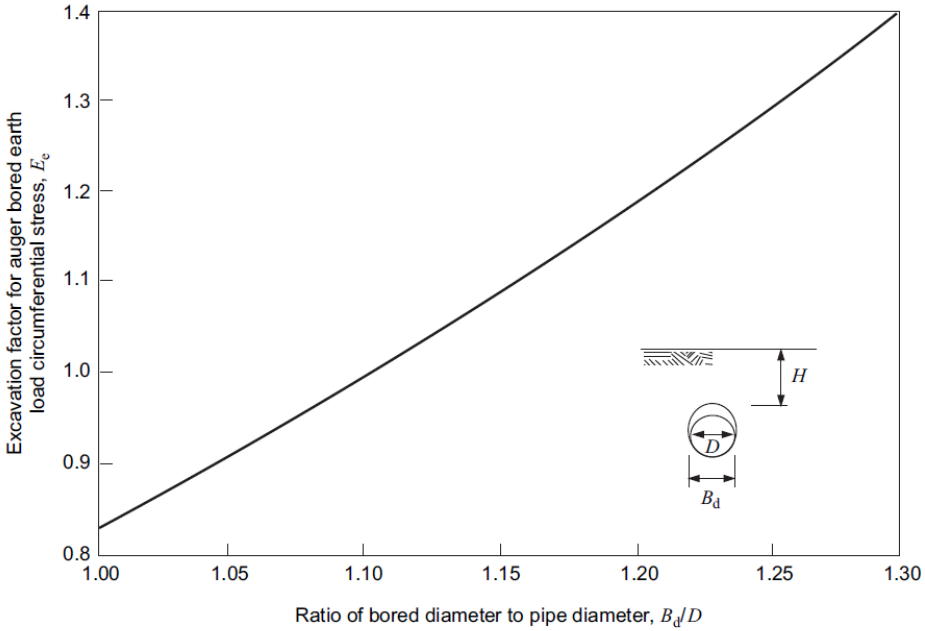


Figure 5—Excavation Factor for Earth Load Circumferential Stress, E_e

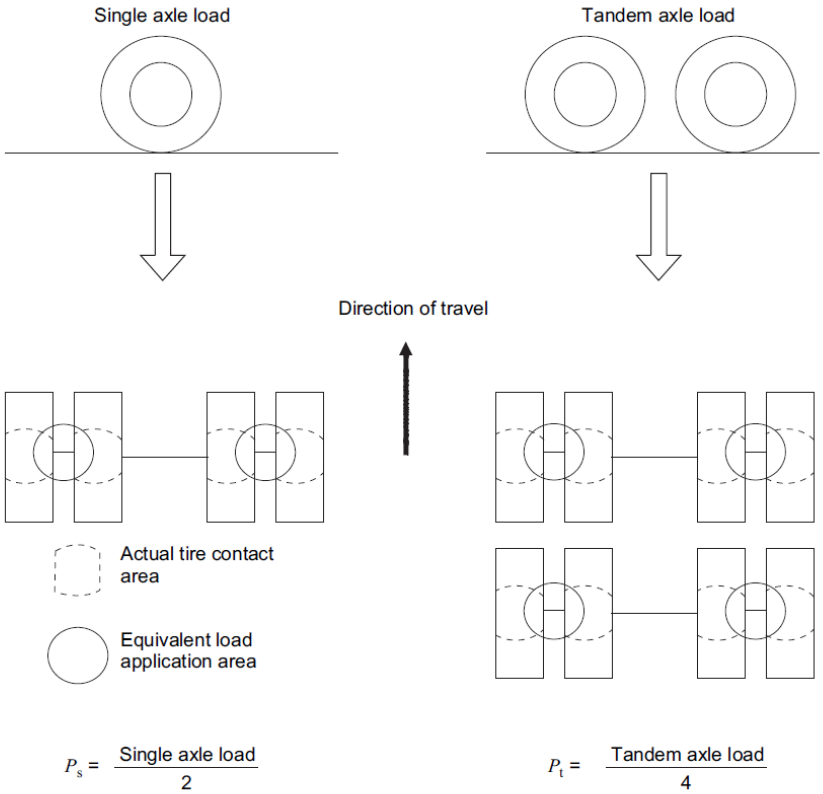


Figure 6—Single and Tandem Wheel Loads, P_s and P_t

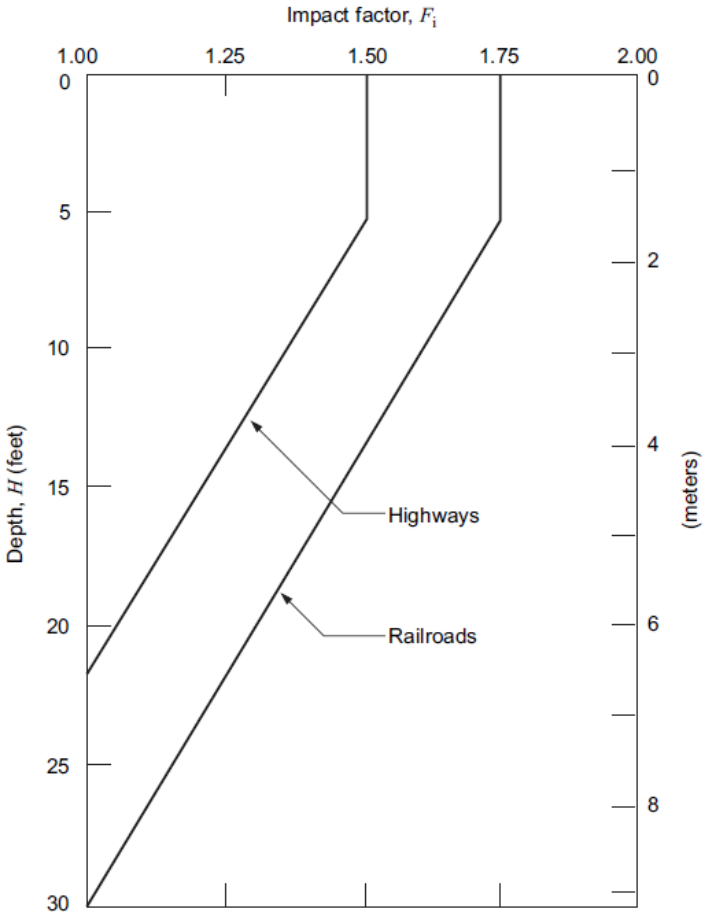


Figure 7—Recommended Impact Factor Versus Depth

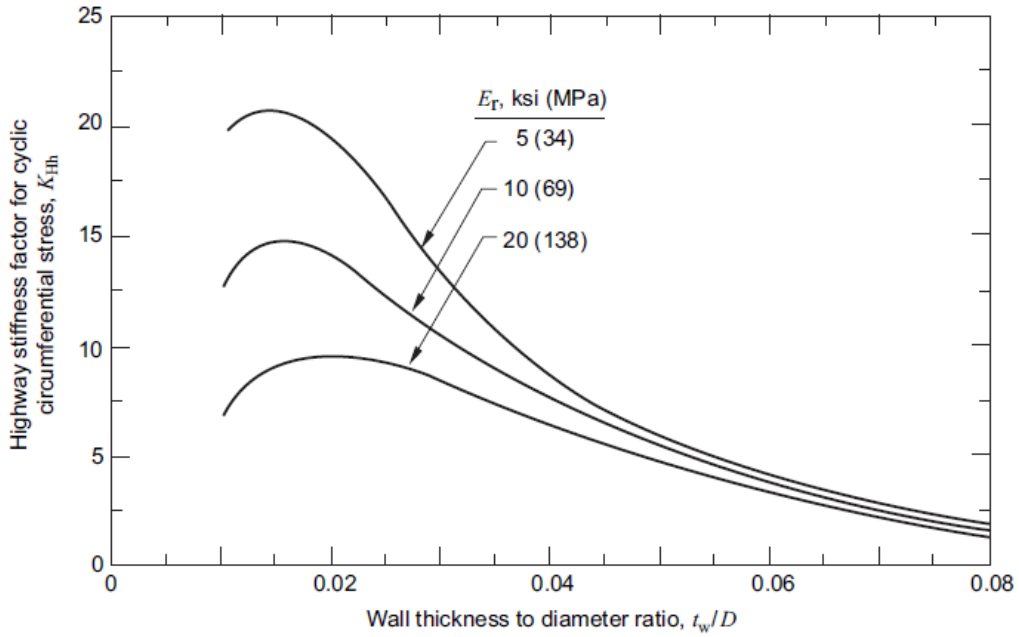


Figure 14—Highway Stiffness Factor for Cyclic Circumferential Stress, K_{Hh}

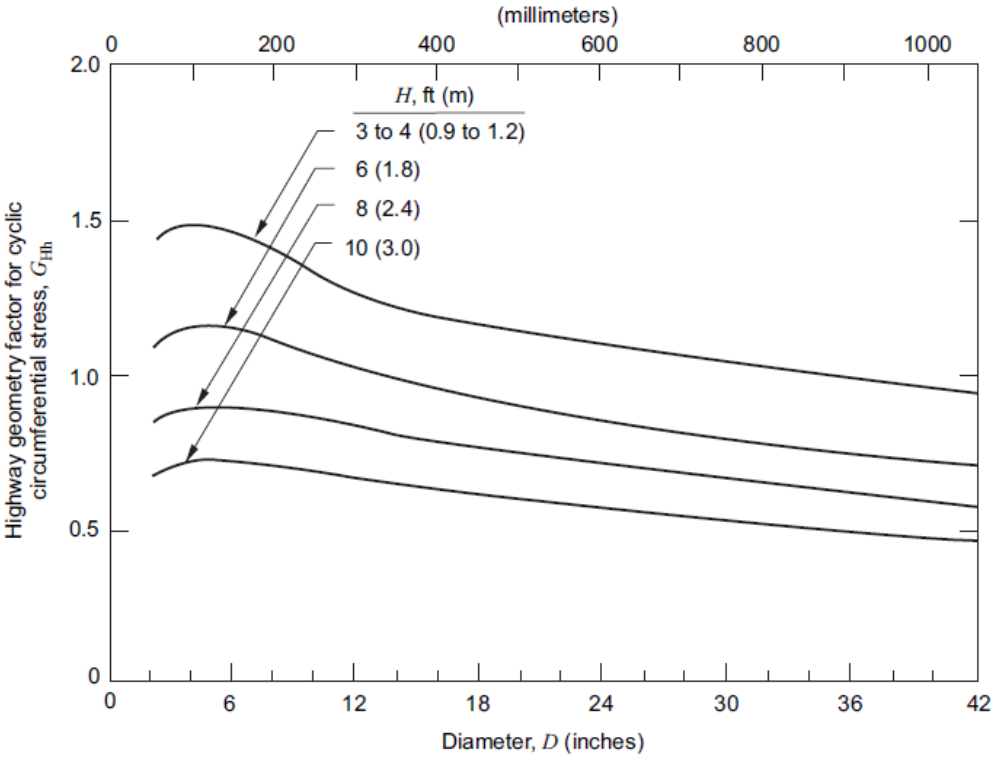


Figure 15—Highway Geometry Factor for Cyclic Circumferential Stress, G_{Hh}

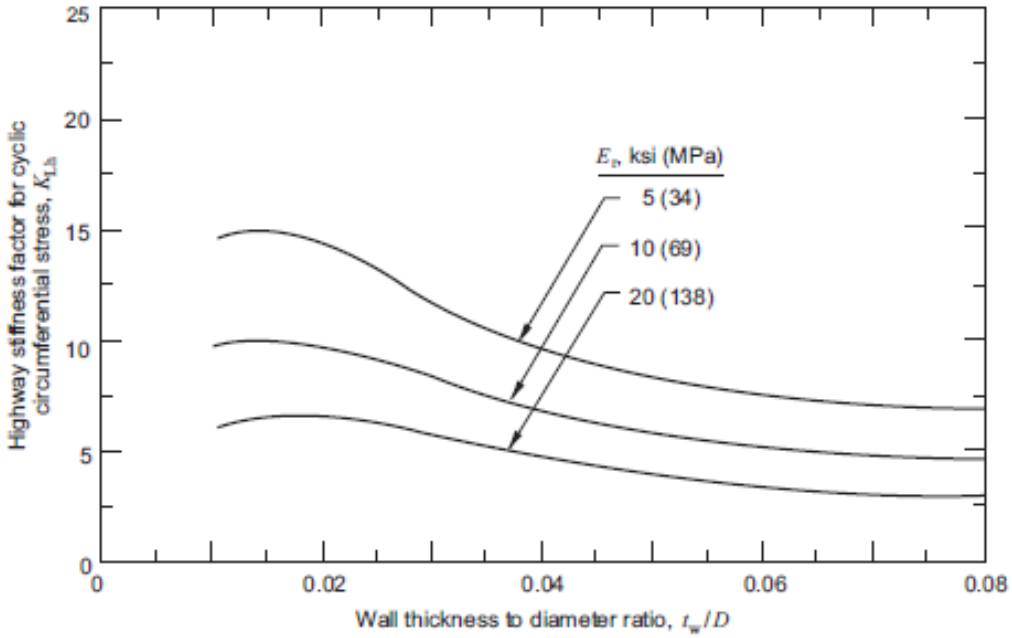


Figure 16—Highway Stiffness Factor for Cyclic Longitudinal Stress, K_{Lh}

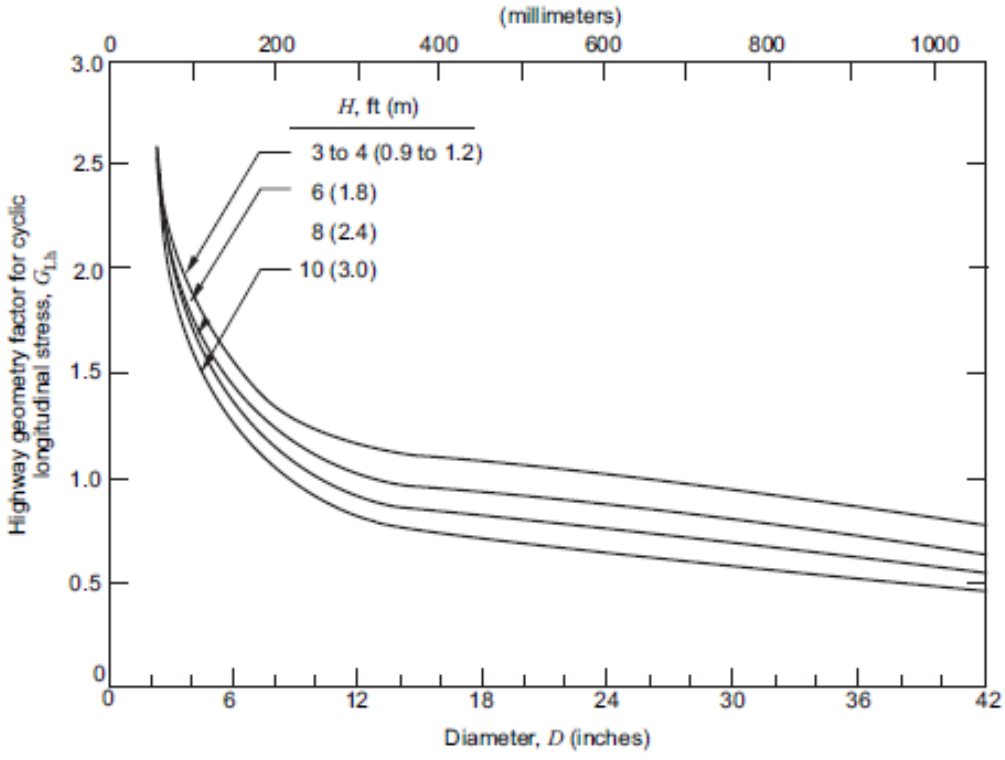


Figure 17—Highway Geometry Factor for Cyclic Longitudinal Stress, G_{Lh}

ANNEX B – DETAILS RESULTS OF OFFSHORE WALL THICKNESS SIZING

Detailed results of Offshore Wall Thickness Sizing are reported below

		HIGH				MEDIUM				LOW			
		t1			t2	t1			t2	t1			t2
KP	WD	PC Op.	PC Hydro	BC	PB	PC Op.	PC Hydro	BC	PB	PC Op.	PC Hydro	BC	PB
km	m	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
6.86	0.00	8.60	8.41	0.00	0.00	7.50	8.41	0.00	0.00	6.90	8.41	0.00	0.00
7.24	-1.00	8.60	8.41	1.78	2.35	7.49	8.41	1.72	2.26	6.90	8.41	1.67	2.17
7.62	-2.00	8.59	8.41	2.25	3.10	7.49	8.41	2.17	2.98	6.89	8.41	2.11	2.87
8.01	-3.00	8.58	8.41	2.57	3.65	7.48	8.41	2.49	3.51	6.88	8.41	2.41	3.38
8.39	-3.99	8.57	8.41	2.83	4.09	7.47	8.41	2.74	3.93	6.88	8.41	2.66	3.79
8.77	-5.00	8.56	8.41	3.05	4.48	7.46	8.41	2.95	4.30	6.87	8.41	2.86	4.15
9.15	-6.00	8.55	8.41	3.25	4.82	7.46	8.41	3.14	4.63	6.86	8.41	3.04	4.46
9.53	-7.00	8.55	8.41	3.42	5.12	7.45	8.41	3.31	4.92	6.85	8.41	3.21	4.75
9.91	-8.00	8.54	8.41	3.57	5.40	7.44	8.41	3.46	5.19	6.85	8.41	3.35	5.01
10.30	-9.00	8.53	8.41	3.72	5.67	7.44	8.41	3.60	5.44	6.84	8.41	3.49	5.25
10.68	-10.00	8.52	8.41	3.85	5.91	7.43	8.41	3.73	5.68	6.83	8.41	3.61	5.47
11.06	-11.00	8.51	8.41	3.98	6.14	7.42	8.41	3.85	5.90	6.83	8.41	3.73	5.69
11.44	-12.00	8.50	8.41	4.10	6.36	7.41	8.41	3.96	6.11	6.82	8.41	3.84	5.89
11.82	-13.00	8.50	8.41	4.21	6.56	7.41	8.41	4.07	6.31	6.81	8.41	3.94	6.08
12.21	-14.00	8.49	8.41	4.31	6.76	7.40	8.41	4.17	6.50	6.81	8.41	4.04	6.26
12.60	-14.99	8.48	8.41	4.41	6.95	7.39	8.41	4.27	6.68	6.80	8.41	4.14	6.44
13.35	-16.00	8.47	8.41	4.51	7.13	7.38	8.41	4.36	6.85	6.79	8.41	4.23	6.61
13.75	-16.99	8.46	8.41	4.60	7.31	7.38	8.41	4.45	7.02	6.79	8.41	4.32	6.77
14.12	-18.00	8.45	8.41	4.69	7.48	7.37	8.41	4.54	7.18	6.78	8.41	4.40	6.92
14.36	-19.00	8.45	8.41	4.78	7.64	7.36	8.41	4.62	7.34	6.77	8.41	4.48	7.08
14.56	-19.98	8.44	8.41	4.86	7.80	7.36	8.41	4.70	7.49	6.77	8.41	4.56	7.22
14.72	-20.95	8.43	8.41	4.94	7.95	7.35	8.41	4.78	7.63	6.76	8.41	4.63	7.36
14.83	-22.00	8.42	8.41	5.02	8.10	7.34	8.41	4.86	7.78	6.75	8.41	4.71	7.50
14.96	-22.99	8.41	8.41	5.10	8.25	7.33	8.41	4.93	7.92	6.75	8.41	4.78	7.64
15.08	-23.98	8.40	8.41	5.17	8.39	7.33	8.41	5.00	8.06	6.74	8.41	4.85	7.77
15.21	-24.98	8.40	8.41	5.24	8.52	7.32	8.41	5.07	8.19	6.73	8.41	4.91	7.89
15.35	-25.98	8.39	8.41	5.31	8.66	7.31	8.41	5.13	8.32	6.73	8.41	4.98	8.02
15.48	-26.99	8.38	8.41	5.38	8.79	7.30	8.41	5.20	8.45	6.72	8.41	5.04	8.14
15.61	-27.98	8.37	8.41	5.45	8.92	7.30	8.41	5.26	8.57	6.71	8.41	5.10	8.26
15.74	-28.99	8.36	8.41	5.51	9.05	7.29	8.41	5.33	8.69	6.71	8.41	5.17	8.38
15.88	-29.99	8.35	8.40	5.57	9.17	7.28	8.40	5.39	8.81	6.70	8.40	5.22	8.49
16.01	-30.98	8.35	8.40	5.63	9.29	7.28	8.40	5.45	8.93	6.69	8.40	5.28	8.60
16.13	-31.98	8.34	8.40	5.70	9.41	7.27	8.40	5.51	9.04	6.69	8.40	5.34	8.72
16.25	-32.99	8.33	8.40	5.76	9.53	7.26	8.40	5.56	9.15	6.68	8.40	5.40	8.82

16.37	-34.00	8.32	8.40	5.81	9.64	7.25	8.40	5.62	9.26	6.67	8.40	5.45	8.93
16.49	-35.00	8.31	8.40	5.87	9.76	7.25	8.40	5.68	9.37	6.67	8.40	5.50	9.04
16.60	-36.00	8.30	8.40	5.93	9.87	7.24	8.40	5.73	9.48	6.66	8.40	5.56	9.14
16.71	-36.99	8.30	8.40	5.98	9.97	7.23	8.40	5.78	9.58	6.65	8.40	5.61	9.24
16.82	-37.98	8.29	8.40	6.04	10.08	7.22	8.40	5.84	9.68	6.65	8.40	5.66	9.34
16.93	-38.99	8.28	8.40	6.09	10.19	7.22	8.40	5.89	9.79	6.64	8.40	5.71	9.43
17.03	-39.97	8.27	8.40	6.14	10.29	7.21	8.40	5.94	9.88	6.63	8.40	5.76	9.53
17.13	-40.99	8.26	8.40	6.19	10.39	7.20	8.40	5.99	9.98	6.63	8.40	5.80	9.62
17.22	-42.00	8.25	8.40	6.24	10.49	7.20	8.40	6.04	10.08	6.62	8.40	5.85	9.72
17.31	-42.98	8.25	8.40	6.29	10.59	7.19	8.40	6.08	10.18	6.61	8.40	5.90	9.81
17.41	-43.96	8.24	8.40	6.34	10.69	7.18	8.40	6.13	10.27	6.61	8.40	5.94	9.90
17.50	-44.99	8.23	8.40	6.39	10.79	7.17	8.40	6.18	10.36	6.60	8.40	5.99	9.99
17.59	-46.00	8.22	8.40	6.44	10.88	7.17	8.40	6.22	10.46	6.59	8.40	6.03	10.08
17.68	-46.99	8.21	8.40	6.48	10.98	7.16	8.40	6.27	10.55	6.59	8.40	6.08	10.16
17.78	-48.00	8.20	8.40	6.53	11.07	7.15	8.40	6.31	10.64	6.58	8.40	6.12	10.25
17.88	-48.98	8.20	8.40	6.58	11.16	7.14	8.40	6.36	10.72	6.57	8.40	6.16	10.34
17.97	-49.99	8.19	8.40	6.62	11.25	7.14	8.40	6.40	10.81	6.57	8.40	6.21	10.42
18.07	-50.98	8.18	8.40	6.67	11.34	7.13	8.40	6.44	10.89	6.56	8.40	6.25	10.50
18.17	-51.99	8.17	8.40	6.71	11.43	7.12	8.40	6.49	10.98	6.55	8.40	6.29	10.58
18.26	-52.99	8.16	8.40	6.75	11.52	7.12	8.40	6.53	11.06	6.55	8.40	6.33	10.67
18.37	-53.98	8.15	8.40	6.80	11.60	7.11	8.40	6.57	11.15	6.54	8.40	6.37	10.74
18.47	-54.99	8.15	8.40	6.84	11.69	7.10	8.40	6.61	11.23	6.53	8.40	6.41	10.83
18.57	-55.98	8.14	8.40	6.88	11.77	7.09	8.40	6.65	11.31	6.53	8.40	6.45	10.90
18.67	-57.00	8.13	8.40	6.92	11.86	7.09	8.40	6.69	11.39	6.52	8.40	6.49	10.98
18.78	-58.00	8.12	8.40	6.96	11.94	7.08	8.40	6.73	11.47	6.51	8.40	6.53	11.06
18.90	-58.98	8.11	8.40	7.00	12.02	7.07	8.40	6.77	11.55	6.51	8.40	6.56	11.13
19.02	-59.98	8.10	8.40	7.04	12.10	7.06	8.40	6.81	11.63	6.50	8.40	6.60	11.21
19.17	-61.00	8.10	8.40	7.08	12.18	7.06	8.40	6.85	11.70	6.49	8.40	6.64	11.28
19.31	-61.99	8.09	8.40	7.12	12.26	7.05	8.40	6.88	11.78	6.49	8.40	6.67	11.36
19.46	-63.00	8.08	8.40	7.16	12.34	7.04	8.40	6.92	11.86	6.48	8.40	6.71	11.43
19.65	-63.98	8.07	8.40	7.20	12.42	7.04	8.40	6.96	11.93	6.47	8.40	6.75	11.50
19.86	-64.97	8.06	8.40	7.23	12.49	7.03	8.40	6.99	12.00	6.47	8.40	6.78	11.57
19.88	-65.01	8.06	8.40	7.24	12.50	7.03	8.40	7.00	12.01	6.47	8.40	6.78	11.57
19.89	-64.97	8.06	8.40	7.23	12.49	7.03	8.40	6.99	12.00	6.47	8.40	6.78	11.57
20.07	-65.96	8.05	8.40	7.27	12.57	7.02	8.40	7.03	12.08	6.46	8.40	6.81	11.64
20.08	-66.01	8.05	8.40	7.27	12.57	7.02	8.40	7.03	12.08	6.46	8.40	6.82	11.65
20.08	-66.00	8.05	8.40	7.27	12.57	7.02	8.40	7.03	12.08	6.46	8.40	6.82	11.64
20.34	-67.00	8.05	8.40	7.31	12.65	7.01	8.40	7.07	12.15	6.45	8.40	6.85	11.71
20.60	-67.99	8.04	8.40	7.35	12.72	7.01	8.40	7.10	12.22	6.45	8.40	6.88	11.78
20.84	-68.99	8.03	8.40	7.38	12.80	7.00	8.40	7.14	12.30	6.44	8.40	6.92	11.85
21.09	-69.97	8.02	8.40	7.42	12.87	6.99	8.40	7.17	12.37	6.43	8.40	6.95	11.92
21.35	-71.00	8.01	8.40	7.45	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99

21.63	-71.97	8.00	8.40	7.49	13.02	6.98	8.40	7.24	12.51	6.42	8.40	7.02	12.05
21.88	-73.00	8.00	8.40	7.52	13.09	6.97	8.40	7.27	12.58	6.41	8.40	7.05	12.12
22.18	-73.98	7.99	8.40	7.56	13.16	6.96	8.40	7.31	12.64	6.41	8.40	7.08	12.19
22.47	-74.98	7.98	8.40	7.59	13.23	6.95	8.40	7.34	12.71	6.40	8.40	7.12	12.25
22.78	-75.98	7.97	8.40	7.63	13.30	6.95	8.40	7.37	12.78	6.39	8.40	7.15	12.32
23.37	-77.00	7.96	8.40	7.66	13.37	6.94	8.40	7.41	12.85	6.39	8.40	7.18	12.39
23.57	-77.98	7.95	8.40	7.69	13.44	6.93	8.40	7.44	12.91	6.38	8.40	7.21	12.45
23.91	-78.99	7.95	8.40	7.73	13.51	6.93	8.40	7.47	12.98	6.37	8.40	7.24	12.51
24.24	-79.98	7.94	8.40	7.76	13.58	6.92	8.40	7.50	13.05	6.37	8.40	7.27	12.57
24.27	-80.01	7.94	8.40	7.76	13.58	6.92	8.40	7.50	13.05	6.37	8.40	7.27	12.58
24.28	-80.00	7.94	8.40	7.76	13.58	6.92	8.40	7.50	13.05	6.37	8.40	7.27	12.58
24.83	-81.00	7.93	8.40	7.79	13.65	6.91	8.40	7.53	13.11	6.36	8.40	7.30	12.64
25.46	-81.98	7.92	8.40	7.83	13.71	6.90	8.40	7.57	13.17	6.35	8.40	7.33	12.70
25.47	-82.00	7.92	8.40	7.83	13.71	6.90	8.40	7.57	13.18	6.35	8.40	7.33	12.70
25.47	-82.00	7.92	8.40	7.83	13.71	6.90	8.40	7.57	13.18	6.35	8.40	7.33	12.70
25.48	-82.00	7.92	8.40	7.83	13.71	6.90	8.40	7.57	13.18	6.35	8.40	7.33	12.70
25.48	-82.00	7.92	8.40	7.83	13.71	6.90	8.40	7.57	13.18	6.35	8.40	7.33	12.70
25.50	-82.00	7.92	8.40	7.83	13.71	6.90	8.40	7.57	13.18	6.35	8.40	7.33	12.70
25.52	-82.00	7.92	8.40	7.83	13.71	6.90	8.40	7.57	13.18	6.35	8.40	7.33	12.70
25.54	-82.01	7.92	8.40	7.83	13.71	6.90	8.40	7.57	13.18	6.35	8.40	7.34	12.70
25.58	-81.98	7.92	8.40	7.83	13.71	6.90	8.40	7.57	13.17	6.35	8.40	7.33	12.70
25.59	-82.01	7.92	8.40	7.83	13.71	6.90	8.40	7.57	13.18	6.35	8.40	7.34	12.70
25.60	-81.99	7.92	8.40	7.83	13.71	6.90	8.40	7.57	13.18	6.35	8.40	7.33	12.70
25.61	-82.00	7.92	8.40	7.83	13.71	6.90	8.40	7.57	13.18	6.35	8.40	7.33	12.70
25.63	-81.98	7.92	8.40	7.83	13.71	6.90	8.40	7.57	13.17	6.35	8.40	7.33	12.70
26.35	-83.00	7.91	8.40	7.86	13.78	6.90	8.40	7.60	13.24	6.35	8.40	7.36	12.76
27.05	-84.00	7.90	8.40	7.89	13.85	6.89	8.40	7.63	13.30	6.34	8.40	7.39	12.82
27.73	-84.99	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
27.83	-85.03	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.43	12.89
28.38	-85.00	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
28.41	-85.00	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
28.42	-84.96	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.36	6.33	8.40	7.42	12.88
28.49	-85.00	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
28.82	-84.99	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
28.89	-85.00	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
28.96	-84.97	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.36	6.33	8.40	7.42	12.88
29.02	-85.04	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.43	12.89
29.26	-84.99	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
29.32	-85.03	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.43	12.89
29.32	-84.98	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
29.35	-85.02	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.43	12.89
29.53	-84.99	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88

29.54	-85.01	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.89
29.54	-85.00	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
29.54	-85.01	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
29.65	-85.00	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
29.84	-85.01	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.89
30.20	-85.00	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
30.21	-85.01	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.89
30.22	-84.99	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
30.22	-85.01	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
30.22	-85.00	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
30.23	-85.01	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.89
33.11	-84.00	7.90	8.40	7.89	13.85	6.89	8.40	7.63	13.30	6.34	8.40	7.39	12.82
33.12	-83.99	7.90	8.40	7.89	13.85	6.89	8.40	7.63	13.30	6.34	8.40	7.39	12.82
33.13	-84.00	7.90	8.40	7.89	13.85	6.89	8.40	7.63	13.30	6.34	8.40	7.39	12.82
33.13	-84.00	7.90	8.40	7.89	13.85	6.89	8.40	7.63	13.30	6.34	8.40	7.39	12.82
33.13	-84.00	7.90	8.40	7.89	13.85	6.89	8.40	7.63	13.30	6.34	8.40	7.39	12.82
37.45	-83.99	7.90	8.40	7.89	13.85	6.89	8.40	7.63	13.30	6.34	8.40	7.39	12.82
37.47	-84.01	7.90	8.40	7.89	13.85	6.89	8.40	7.63	13.30	6.34	8.40	7.40	12.82
37.48	-84.00	7.90	8.40	7.89	13.85	6.89	8.40	7.63	13.30	6.34	8.40	7.39	12.82
37.50	-84.03	7.90	8.40	7.89	13.85	6.89	8.40	7.63	13.31	6.34	8.40	7.40	12.83
37.51	-83.99	7.90	8.40	7.89	13.85	6.89	8.40	7.63	13.30	6.34	8.40	7.39	12.82
38.47	-84.98	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
38.96	-86.00	7.89	8.40	7.95	13.98	6.87	8.40	7.69	13.43	6.33	8.40	7.45	12.94
39.28	-86.99	7.88	8.40	7.98	14.04	6.87	8.40	7.72	13.49	6.32	8.40	7.48	13.00
39.51	-87.99	7.87	8.40	8.02	14.11	6.86	8.40	7.75	13.55	6.31	8.40	7.51	13.06
39.72	-88.99	7.86	8.40	8.05	14.17	6.85	8.40	7.78	13.61	6.31	8.40	7.54	13.12
39.90	-89.98	7.85	8.40	8.08	14.23	6.85	8.40	7.81	13.67	6.30	8.40	7.57	13.18
39.90	-90.00	7.85	8.40	8.08	14.23	6.85	8.40	7.81	13.68	6.30	8.40	7.57	13.18
39.91	-89.98	7.85	8.40	8.08	14.23	6.85	8.40	7.81	13.67	6.30	8.40	7.57	13.18
40.10	-91.00	7.85	8.40	8.11	14.30	6.84	8.40	7.84	13.74	6.29	8.40	7.60	13.24
40.30	-91.98	7.84	8.39	8.14	14.36	6.83	8.39	7.87	13.80	6.28	8.39	7.63	13.30
40.51	-92.99	7.83	8.39	8.17	14.42	6.82	8.39	7.90	13.86	6.28	8.39	7.65	13.36
40.74	-93.98	7.82	8.39	8.20	14.48	6.82	8.39	7.92	13.91	6.27	8.39	7.68	13.41
40.74	-94.01	7.82	8.39	8.20	14.48	6.82	8.39	7.92	13.92	6.27	8.39	7.68	13.41
40.75	-93.98	7.82	8.39	8.20	14.48	6.82	8.39	7.92	13.91	6.27	8.39	7.68	13.41
40.97	-94.98	7.81	8.39	8.23	14.54	6.81	8.39	7.95	13.97	6.26	8.39	7.71	13.47
41.23	-95.98	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.03	6.26	8.39	7.74	13.53
41.47	-96.99	7.80	8.39	8.28	14.67	6.79	8.39	8.01	14.09	6.25	8.39	7.76	13.58
41.72	-97.97	7.79	8.39	8.31	14.73	6.79	8.39	8.04	14.15	6.24	8.39	7.79	13.64
41.72	-98.00	7.79	8.39	8.31	14.73	6.79	8.39	8.04	14.15	6.24	8.39	7.79	13.64
41.73	-98.00	7.79	8.39	8.31	14.73	6.79	8.39	8.04	14.15	6.24	8.39	7.79	13.64
41.97	-98.95	7.78	8.39	8.34	14.78	6.78	8.39	8.06	14.20	6.24	8.39	7.82	13.69

42.21	-99.99	7.77	8.39	8.37	14.85	6.77	8.39	8.09	14.26	6.23	8.39	7.84	13.75
42.21	-100.04	7.77	8.39	8.37	14.85	6.77	8.39	8.09	14.27	6.23	8.39	7.85	13.75
42.22	-99.99	7.77	8.39	8.37	14.85	6.77	8.39	8.09	14.26	6.23	8.39	7.84	13.75
42.51	-100.97	7.76	8.39	8.40	14.90	6.77	8.39	8.12	14.32	6.22	8.39	7.87	13.80
42.82	-101.99	7.75	8.39	8.43	14.96	6.76	8.39	8.15	14.38	6.22	8.39	7.90	13.86
42.82	-102.03	7.75	8.39	8.43	14.97	6.76	8.39	8.15	14.38	6.22	8.39	7.90	13.86
42.82	-102.00	7.75	8.39	8.43	14.97	6.76	8.39	8.15	14.38	6.22	8.39	7.90	13.86
42.83	-102.01	7.75	8.39	8.43	14.97	6.76	8.39	8.15	14.38	6.22	8.39	7.90	13.86
42.83	-102.00	7.75	8.39	8.43	14.97	6.76	8.39	8.15	14.38	6.22	8.39	7.90	13.86
43.15	-103.00	7.75	8.39	8.45	15.02	6.75	8.39	8.17	14.43	6.21	8.39	7.92	13.91
43.16	-103.02	7.74	8.39	8.46	15.02	6.75	8.39	8.17	14.43	6.21	8.39	7.92	13.91
43.16	-103.00	7.75	8.39	8.45	15.02	6.75	8.39	8.17	14.43	6.21	8.39	7.92	13.91
43.54	-103.99	7.74	8.39	8.48	15.08	6.74	8.39	8.20	14.49	6.20	8.39	7.95	13.97
43.93	-104.99	7.73	8.39	8.51	15.14	6.74	8.39	8.23	14.54	6.20	8.39	7.97	14.02
44.23	-106.00	7.72	8.39	8.54	15.20	6.73	8.39	8.25	14.60	6.19	8.39	8.00	14.07
44.53	-106.98	7.71	8.39	8.56	15.25	6.72	8.39	8.28	14.65	6.18	8.39	8.03	14.13
44.68	-107.99	7.70	8.39	8.59	15.31	6.71	8.39	8.31	14.71	6.18	8.39	8.05	14.18
44.83	-109.00	7.70	8.39	8.62	15.37	6.71	8.39	8.33	14.76	6.17	8.39	8.08	14.23
44.92	-109.99	7.69	8.39	8.65	15.42	6.70	8.39	8.36	14.82	6.16	8.39	8.10	14.28
44.99	-110.99	7.68	8.39	8.67	15.48	6.69	8.39	8.38	14.87	6.16	8.39	8.13	14.34
45.14	-111.99	7.67	8.39	8.70	15.54	6.69	8.39	8.41	14.93	6.15	8.39	8.15	14.39
45.30	-113.00	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.18	14.44
45.44	-113.97	7.65	8.39	8.75	15.64	6.67	8.39	8.46	15.03	6.14	8.39	8.20	14.49
45.62	-114.97	7.65	8.39	8.78	15.70	6.66	8.39	8.48	15.08	6.13	8.39	8.22	14.54
45.73	-115.99	7.64	8.39	8.80	15.75	6.66	8.39	8.51	15.14	6.12	8.39	8.25	14.59
45.86	-116.99	7.63	8.39	8.83	15.81	6.65	8.39	8.53	15.19	6.12	8.39	8.27	14.64
45.97	-117.99	7.62	8.39	8.85	15.86	6.64	8.39	8.56	15.24	6.11	8.39	8.30	14.69
46.10	-118.98	7.61	8.39	8.88	15.92	6.63	8.39	8.58	15.29	6.10	8.39	8.32	14.74
46.22	-119.99	7.60	8.39	8.90	15.97	6.63	8.39	8.61	15.34	6.10	8.39	8.34	14.79
46.43	-120.99	7.59	8.39	8.93	16.02	6.62	8.39	8.63	15.39	6.09	8.39	8.37	14.84
46.44	-121.01	7.59	8.39	8.93	16.02	6.62	8.39	8.63	15.39	6.09	8.39	8.37	14.84
46.44	-120.99	7.59	8.39	8.93	16.02	6.62	8.39	8.63	15.39	6.09	8.39	8.37	14.84
46.62	-121.99	7.59	8.39	8.95	16.08	6.61	8.39	8.66	15.44	6.08	8.39	8.39	14.89
47.03	-123.00	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
47.51	-123.98	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.98
47.52	-124.01	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
47.52	-124.00	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
47.53	-124.00	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
47.53	-124.00	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
48.60	-124.99	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
48.84	-125.02	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
48.85	-125.00	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03

48.85	-125.00	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
48.85	-124.99	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
48.86	-125.01	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
49.30	-125.00	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
49.31	-125.00	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
49.32	-124.99	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
49.34	-125.02	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
49.34	-124.97	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.59	6.06	8.39	8.46	15.03
49.35	-125.02	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
49.35	-124.96	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.59	6.06	8.39	8.46	15.03
49.36	-125.02	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
49.41	-125.00	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
49.42	-125.00	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
49.55	-125.00	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
49.55	-125.01	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
49.56	-125.00	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
49.88	-125.99	7.55	8.39	9.05	16.28	6.58	8.39	8.75	15.65	6.06	8.39	8.48	15.08
52.64	-126.98	7.54	8.39	9.08	16.34	6.58	8.39	8.77	15.69	6.05	8.39	8.51	15.13
52.64	-127.01	7.54	8.39	9.08	16.34	6.58	8.39	8.77	15.70	6.05	8.39	8.51	15.13
52.64	-127.00	7.54	8.39	9.08	16.34	6.58	8.39	8.77	15.70	6.05	8.39	8.51	15.13
52.93	-127.00	7.54	8.39	9.08	16.34	6.58	8.39	8.77	15.70	6.05	8.39	8.51	15.13
52.94	-126.99	7.54	8.39	9.08	16.34	6.58	8.39	8.77	15.70	6.05	8.39	8.51	15.13
52.94	-127.02	7.54	8.39	9.08	16.34	6.58	8.39	8.78	15.70	6.05	8.39	8.51	15.13
52.95	-127.00	7.54	8.39	9.08	16.34	6.58	8.39	8.77	15.70	6.05	8.39	8.51	15.13
52.95	-127.00	7.54	8.39	9.08	16.34	6.58	8.39	8.77	15.70	6.05	8.39	8.51	15.13
53.21	-127.00	7.54	8.39	9.08	16.34	6.58	8.39	8.77	15.70	6.05	8.39	8.51	15.13
53.78	-127.95	7.54	8.39	9.10	16.39	6.57	8.39	8.80	15.74	6.04	8.39	8.53	15.17
54.06	-128.96	7.53	8.39	9.12	16.44	6.56	8.39	8.82	15.79	6.04	8.39	8.55	15.22
54.24	-129.97	7.52	8.39	9.15	16.49	6.55	8.39	8.84	15.84	6.03	8.39	8.57	15.27
54.72	-130.98	7.51	8.39	9.17	16.54	6.55	8.39	8.87	15.89	6.02	8.39	8.59	15.32
54.73	-131.04	7.51	8.39	9.17	16.54	6.55	8.39	8.87	15.89	6.02	8.39	8.60	15.32
54.75	-130.98	7.51	8.39	9.17	16.54	6.55	8.39	8.87	15.89	6.02	8.39	8.59	15.32
55.57	-131.99	7.50	8.39	9.20	16.59	6.54	8.39	8.89	15.94	6.02	8.39	8.62	15.36
55.90	-133.00	7.49	8.39	9.22	16.64	6.53	8.39	8.91	15.99	6.01	8.39	8.64	15.41
56.72	-133.97	7.49	8.39	9.24	16.69	6.52	8.39	8.94	16.03	6.00	8.39	8.66	15.46
57.06	-135.00	7.48	8.39	9.27	16.74	6.52	8.39	8.96	16.08	6.00	8.39	8.68	15.50
57.31	-135.98	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
57.44	-136.99	7.46	8.39	9.31	16.84	6.50	8.39	9.00	16.18	5.98	8.39	8.73	15.59
57.53	-137.99	7.45	8.39	9.34	16.89	6.50	8.39	9.03	16.23	5.98	8.39	8.75	15.64
57.64	-138.99	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.69
57.76	-139.97	7.44	8.39	9.38	16.98	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
57.92	-140.95	7.43	8.39	9.40	17.03	6.47	8.39	9.09	16.36	5.96	8.39	8.81	15.77

58.10	-141.98	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
58.21	-142.97	7.41	8.39	9.45	17.13	6.46	8.39	9.13	16.46	5.94	8.39	8.85	15.86
58.30	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
58.40	-144.99	7.39	8.39	9.50	17.23	6.44	8.39	9.18	16.55	5.93	8.39	8.90	15.95
58.50	-146.00	7.39	8.39	9.52	17.27	6.44	8.39	9.20	16.60	5.92	8.39	8.92	16.00
58.62	-146.99	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
58.72	-147.99	7.37	8.39	9.56	17.37	6.42	8.39	9.24	16.69	5.91	8.39	8.96	16.08
58.80	-149.00	7.36	8.39	9.58	17.41	6.42	8.39	9.26	16.73	5.90	8.39	8.98	16.13
58.98	-150.00	7.35	8.39	9.61	17.46	6.41	8.39	9.28	16.78	5.90	8.39	9.00	16.17
59.46	-150.98	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.21
59.46	-151.00	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.21
59.47	-150.98	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.21
59.77	-151.96	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
59.77	-152.03	7.34	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
59.78	-151.99	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
60.56	-152.98	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
60.56	-153.01	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
60.59	-152.98	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
60.60	-153.00	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.87	8.39	9.06	16.30
60.60	-153.00	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.87	8.39	9.06	16.30
60.67	-153.03	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
60.67	-152.99	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
60.68	-153.00	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.87	8.39	9.06	16.30
60.68	-152.98	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
60.69	-153.04	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
62.11	-152.89	7.33	8.39	9.67	17.60	6.39	8.39	9.34	16.90	5.88	8.39	9.06	16.30
62.11	-153.00	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.87	8.39	9.06	16.30
62.11	-152.98	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
62.12	-153.01	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
62.12	-152.99	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
62.13	-153.00	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.87	8.39	9.06	16.30
62.16	-153.00	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.87	8.39	9.06	16.30
62.34	-153.01	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
62.34	-152.98	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
62.35	-153.01	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
62.49	-152.97	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
62.49	-153.01	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
62.65	-152.98	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
62.65	-153.01	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
62.67	-153.00	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.87	8.39	9.06	16.30
62.71	-153.05	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
63.01	-152.04	7.34	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26

63.01	-152.00	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
63.01	-152.04	7.34	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
63.22	-151.02	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.22
63.23	-150.98	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.21
63.23	-151.02	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.22
63.28	-150.93	7.34	8.39	9.63	17.50	6.40	8.39	9.30	16.82	5.89	8.39	9.02	16.21
63.29	-151.01	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.21
63.55	-150.94	7.34	8.39	9.63	17.51	6.40	8.39	9.30	16.82	5.89	8.39	9.02	16.21
63.56	-151.01	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.21
63.57	-150.99	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.21
64.66	-151.96	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
64.66	-152.08	7.33	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
64.67	-151.99	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
64.67	-152.00	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
64.67	-152.00	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
65.04	-152.99	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
65.05	-153.03	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
65.07	-153.00	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.87	8.39	9.06	16.30
65.08	-153.04	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
65.08	-153.00	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.87	8.39	9.06	16.30
65.82	-153.04	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
65.82	-153.00	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.87	8.39	9.06	16.30
65.83	-153.04	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
65.84	-153.00	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.87	8.39	9.06	16.30
65.84	-153.03	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
65.84	-152.97	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
65.85	-153.02	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
65.86	-152.99	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
65.86	-153.01	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
66.35	-152.07	7.34	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
66.35	-151.99	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
66.36	-152.01	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
66.36	-151.98	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
66.36	-152.01	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
66.37	-151.99	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
66.38	-152.03	7.34	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
66.44	-151.97	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
66.44	-152.00	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
66.57	-151.96	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
66.59	-152.00	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
66.59	-151.95	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.25
66.64	-152.03	7.34	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26

66.64	-151.98	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
66.72	-152.02	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
66.72	-151.97	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
66.73	-152.00	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
66.73	-151.99	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
66.76	-152.08	7.33	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
66.76	-151.98	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
66.79	-152.02	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
66.81	-151.99	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
66.82	-152.03	7.34	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
66.84	-151.94	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.25
66.85	-152.08	7.33	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
66.85	-152.00	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
66.85	-152.06	7.34	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
66.96	-152.00	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
66.97	-152.01	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
66.98	-151.99	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
66.98	-152.01	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
67.01	-152.00	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
67.01	-152.00	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
67.05	-151.97	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
67.06	-152.01	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
67.10	-151.99	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
67.11	-152.01	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
67.11	-152.00	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
67.13	-152.05	7.34	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
67.13	-151.99	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
67.14	-152.00	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
67.14	-151.98	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
67.15	-152.01	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
67.15	-152.00	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
67.26	-152.08	7.33	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
67.27	-151.98	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
67.28	-152.01	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
67.28	-151.99	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
68.36	-152.98	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
68.39	-153.02	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
68.39	-152.98	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
68.42	-153.02	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
68.43	-152.99	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
68.46	-153.01	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
68.48	-152.99	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30

68.48	-153.04	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
68.48	-152.98	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
68.49	-153.03	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
68.49	-152.98	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
69.44	-153.95	7.32	8.38	9.69	17.64	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
69.44	-154.03	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
69.47	-153.97	7.32	8.38	9.69	17.64	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
69.48	-154.04	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.96	5.87	8.38	9.08	16.34
69.48	-153.99	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.01	-154.03	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.02	-153.98	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.05	-154.02	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.05	-153.95	7.32	8.38	9.69	17.64	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.06	-154.04	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.96	5.87	8.38	9.08	16.34
73.07	-154.00	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.07	-154.04	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.96	5.87	8.38	9.08	16.34
73.08	-153.99	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.08	-154.04	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.96	5.87	8.38	9.08	16.34
73.08	-153.98	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.10	-154.04	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.96	5.87	8.38	9.08	16.34
73.11	-153.99	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.12	-154.01	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.12	-153.98	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.17	-154.04	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.96	5.87	8.38	9.08	16.34
73.19	-154.00	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.19	-154.02	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.20	-154.00	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.21	-154.01	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.22	-153.98	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
73.22	-154.01	7.32	8.38	9.69	17.65	6.38	8.38	9.37	16.95	5.87	8.38	9.08	16.34
75.39	-153.01	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
75.40	-152.99	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
75.44	-153.00	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.87	8.39	9.06	16.30
75.44	-152.99	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
75.45	-153.07	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
75.46	-152.99	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
75.48	-153.00	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.87	8.39	9.06	16.30
75.48	-152.99	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
75.48	-153.04	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
75.49	-152.95	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
75.50	-153.02	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
75.50	-152.99	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30

75.51	-153.01	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
75.51	-152.96	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
75.51	-153.01	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
75.55	-153.00	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.87	8.39	9.06	16.30
75.55	-153.02	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
75.67	-152.97	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
75.67	-153.03	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
75.68	-152.98	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
75.68	-153.01	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
75.69	-152.99	7.33	8.39	9.67	17.60	6.39	8.39	9.35	16.91	5.88	8.39	9.06	16.30
75.69	-153.01	7.33	8.38	9.67	17.60	6.39	8.38	9.35	16.91	5.87	8.38	9.06	16.30
77.45	-152.06	7.34	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
77.45	-151.97	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
77.46	-152.03	7.34	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
77.46	-152.00	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
77.48	-152.01	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
77.48	-151.99	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
77.49	-152.05	7.34	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
77.49	-151.99	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
77.50	-152.00	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
77.50	-151.98	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
77.50	-152.01	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
77.51	-151.98	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
77.51	-152.04	7.34	8.39	9.65	17.56	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
77.54	-151.95	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
77.54	-152.01	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
77.72	-151.96	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.86	5.88	8.39	9.04	16.26
77.73	-152.01	7.34	8.39	9.65	17.55	6.39	8.39	9.33	16.87	5.88	8.39	9.04	16.26
78.78	-151.02	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.22
78.79	-150.98	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.21
78.80	-151.04	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.22
78.80	-150.98	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.21
78.81	-151.01	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.21
78.82	-150.99	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.21
78.84	-151.02	7.34	8.39	9.63	17.51	6.40	8.39	9.31	16.82	5.89	8.39	9.02	16.22
80.02	-150.01	7.35	8.39	9.61	17.46	6.41	8.39	9.28	16.78	5.90	8.39	9.00	16.17
80.03	-149.96	7.35	8.39	9.61	17.46	6.41	8.39	9.28	16.77	5.90	8.39	9.00	16.17
80.07	-150.03	7.35	8.39	9.61	17.46	6.41	8.39	9.29	16.78	5.89	8.39	9.00	16.17
80.08	-150.00	7.35	8.39	9.61	17.46	6.41	8.39	9.28	16.78	5.90	8.39	9.00	16.17
80.08	-150.00	7.35	8.39	9.61	17.46	6.41	8.39	9.28	16.78	5.90	8.39	9.00	16.17
80.09	-150.00	7.35	8.39	9.61	17.46	6.41	8.39	9.28	16.78	5.90	8.39	9.00	16.17
80.11	-150.02	7.35	8.39	9.61	17.46	6.41	8.39	9.28	16.78	5.89	8.39	9.00	16.17

80.12	-149.99	7.35	8.39	9.61	17.46	6.41	8.39	9.28	16.78	5.90	8.39	9.00	16.17
80.13	-150.02	7.35	8.39	9.61	17.46	6.41	8.39	9.28	16.78	5.89	8.39	9.00	16.17
81.31	-149.03	7.36	8.39	9.58	17.42	6.41	8.39	9.26	16.73	5.90	8.39	8.98	16.13
81.31	-149.00	7.36	8.39	9.58	17.41	6.42	8.39	9.26	16.73	5.90	8.39	8.98	16.13
81.32	-149.00	7.36	8.39	9.58	17.41	6.41	8.39	9.26	16.73	5.90	8.39	8.98	16.13
81.32	-148.99	7.36	8.39	9.58	17.41	6.42	8.39	9.26	16.73	5.90	8.39	8.98	16.13
81.36	-149.01	7.36	8.39	9.58	17.42	6.41	8.39	9.26	16.73	5.90	8.39	8.98	16.13
81.41	-148.99	7.36	8.39	9.58	17.41	6.42	8.39	9.26	16.73	5.90	8.39	8.98	16.13
81.42	-149.01	7.36	8.39	9.58	17.41	6.41	8.39	9.26	16.73	5.90	8.39	8.98	16.13
81.42	-148.98	7.36	8.39	9.58	17.41	6.42	8.39	9.26	16.73	5.90	8.39	8.98	16.13
81.43	-149.05	7.36	8.39	9.58	17.42	6.41	8.39	9.26	16.73	5.90	8.39	8.98	16.13
82.57	-148.02	7.37	8.39	9.56	17.37	6.42	8.39	9.24	16.69	5.91	8.39	8.96	16.09
82.57	-147.96	7.37	8.39	9.56	17.37	6.42	8.39	9.24	16.68	5.91	8.39	8.96	16.08
82.70	-148.01	7.37	8.39	9.56	17.37	6.42	8.39	9.24	16.69	5.91	8.39	8.96	16.08
82.70	-147.97	7.37	8.39	9.56	17.37	6.42	8.39	9.24	16.68	5.91	8.39	8.96	16.08
82.70	-148.02	7.37	8.39	9.56	17.37	6.42	8.39	9.24	16.69	5.91	8.39	8.96	16.09
82.72	-148.00	7.37	8.39	9.56	17.37	6.42	8.39	9.24	16.69	5.91	8.39	8.96	16.08
82.73	-148.01	7.37	8.39	9.56	17.37	6.42	8.39	9.24	16.69	5.91	8.39	8.96	16.08
82.73	-147.97	7.37	8.39	9.56	17.37	6.42	8.39	9.24	16.68	5.91	8.39	8.96	16.08
82.74	-148.03	7.37	8.39	9.56	17.37	6.42	8.39	9.24	16.69	5.91	8.39	8.96	16.09
83.76	-147.03	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
83.76	-147.00	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
83.77	-147.00	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
83.78	-146.99	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
83.78	-147.01	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
83.79	-146.98	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
83.80	-147.02	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
83.80	-146.99	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
83.81	-147.01	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
83.86	-146.98	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
83.87	-147.02	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
84.03	-146.91	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
84.04	-147.03	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
84.05	-147.00	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
84.05	-147.00	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
84.10	-147.00	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
84.10	-147.03	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
84.21	-146.92	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
84.21	-147.00	7.38	8.39	9.54	17.32	6.43	8.39	9.22	16.64	5.92	8.39	8.94	16.04
86.81	-146.01	7.39	8.39	9.52	17.27	6.44	8.39	9.20	16.60	5.92	8.39	8.92	16.00
86.82	-145.96	7.39	8.39	9.52	17.27	6.44	8.39	9.20	16.59	5.92	8.39	8.92	16.00
86.84	-146.03	7.39	8.39	9.52	17.27	6.44	8.39	9.20	16.60	5.92	8.39	8.92	16.00

86.87	-146.00	7.39	8.39	9.52	17.27	6.44	8.39	9.20	16.60	5.92	8.39	8.92	16.00
86.88	-146.03	7.39	8.39	9.52	17.27	6.44	8.39	9.20	16.60	5.92	8.39	8.92	16.00
86.95	-145.94	7.39	8.39	9.52	17.27	6.44	8.39	9.20	16.59	5.92	8.39	8.92	15.99
86.95	-146.00	7.39	8.39	9.52	17.27	6.44	8.39	9.20	16.60	5.92	8.39	8.92	16.00
88.85	-145.07	7.39	8.39	9.50	17.23	6.44	8.39	9.18	16.55	5.93	8.39	8.90	15.96
88.85	-145.00	7.39	8.39	9.50	17.23	6.44	8.39	9.18	16.55	5.93	8.39	8.90	15.95
88.87	-145.05	7.39	8.39	9.50	17.23	6.44	8.39	9.18	16.55	5.93	8.39	8.90	15.96
88.88	-144.99	7.39	8.39	9.50	17.23	6.44	8.39	9.18	16.55	5.93	8.39	8.90	15.95
88.89	-145.04	7.39	8.39	9.50	17.23	6.44	8.39	9.18	16.55	5.93	8.39	8.90	15.95
88.90	-145.00	7.39	8.39	9.50	17.23	6.44	8.39	9.18	16.55	5.93	8.39	8.90	15.95
88.90	-145.03	7.39	8.39	9.50	17.23	6.44	8.39	9.18	16.55	5.93	8.39	8.90	15.95
88.91	-144.98	7.39	8.39	9.50	17.23	6.44	8.39	9.18	16.55	5.93	8.39	8.90	15.95
88.94	-145.01	7.39	8.39	9.50	17.23	6.44	8.39	9.18	16.55	5.93	8.39	8.90	15.95
88.98	-145.00	7.39	8.39	9.50	17.23	6.44	8.39	9.18	16.55	5.93	8.39	8.90	15.95
88.99	-145.03	7.39	8.39	9.50	17.23	6.44	8.39	9.18	16.55	5.93	8.39	8.90	15.95
89.01	-144.99	7.39	8.39	9.50	17.23	6.44	8.39	9.18	16.55	5.93	8.39	8.90	15.95
89.02	-145.03	7.39	8.39	9.50	17.23	6.44	8.39	9.18	16.55	5.93	8.39	8.90	15.95
91.84	-144.05	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
91.84	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
91.87	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
91.87	-143.99	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
91.90	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
91.90	-143.99	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
91.91	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
91.91	-143.99	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
91.91	-144.02	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
91.92	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
91.95	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
91.95	-143.98	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
91.97	-144.02	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
91.98	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
92.03	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
92.03	-143.98	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
92.05	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
92.25	-143.94	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.87	15.91
92.25	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
92.32	-143.95	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.87	15.91
92.33	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
92.37	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
92.37	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
94.57	-143.94	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.87	15.91
94.57	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91

94.57	-143.94	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.87	15.91
94.58	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
94.59	-143.96	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.87	15.91
94.59	-144.02	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
94.61	-143.97	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
94.61	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
94.62	-143.97	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
94.63	-144.04	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
94.65	-143.97	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
94.66	-144.03	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
94.71	-143.97	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
94.73	-144.03	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
94.73	-143.99	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
94.74	-144.04	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
94.74	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
94.79	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
94.80	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
94.82	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
94.83	-143.98	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
94.88	-144.03	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
94.88	-143.96	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.87	15.91
94.91	-144.03	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
94.91	-143.99	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.19	-144.02	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.19	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.24	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.24	-143.98	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.27	-144.03	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.27	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.28	-144.02	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.28	-143.99	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.29	-144.06	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.30	-143.97	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.36	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.36	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.43	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.43	-143.98	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.47	-144.04	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.47	-143.96	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.87	15.91
95.56	-144.05	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.56	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.57	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91

95.57	-143.98	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.60	-144.04	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.60	-143.98	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.61	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.62	-143.99	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.64	-144.03	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.64	-143.97	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.68	-144.03	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.69	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.69	-144.02	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.70	-143.97	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.71	-144.02	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.72	-143.96	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.87	15.91
95.74	-144.02	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.75	-143.99	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.78	-144.02	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.79	-143.96	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.87	15.91
95.82	-144.02	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.82	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.83	-144.03	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.84	-143.98	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.87	-144.02	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.88	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.88	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.93	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.93	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.96	-143.99	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.97	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.97	-143.99	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
95.98	-144.06	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.51	5.94	8.39	8.88	15.91
95.99	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
96.02	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
96.07	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
96.08	-144.00	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
96.20	-143.98	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
96.20	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
96.24	-143.96	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.87	15.91
96.25	-144.01	7.40	8.39	9.47	17.18	6.45	8.39	9.16	16.50	5.94	8.39	8.88	15.91
98.16	-143.03	7.41	8.39	9.45	17.13	6.46	8.39	9.14	16.46	5.94	8.39	8.86	15.87
98.17	-143.00	7.41	8.39	9.45	17.13	6.46	8.39	9.13	16.46	5.94	8.39	8.85	15.86
98.18	-143.01	7.41	8.39	9.45	17.13	6.46	8.39	9.14	16.46	5.94	8.39	8.86	15.87
98.18	-142.98	7.41	8.39	9.45	17.13	6.46	8.39	9.13	16.46	5.94	8.39	8.85	15.86

98.18	-143.03	7.41	8.39	9.45	17.13	6.46	8.39	9.14	16.46	5.94	8.39	8.86	15.87
98.19	-142.99	7.41	8.39	9.45	17.13	6.46	8.39	9.13	16.46	5.94	8.39	8.85	15.86
98.20	-143.04	7.41	8.39	9.45	17.13	6.46	8.39	9.14	16.46	5.94	8.39	8.86	15.87
98.21	-143.00	7.41	8.39	9.45	17.13	6.46	8.39	9.13	16.46	5.94	8.39	8.85	15.86
98.23	-143.03	7.41	8.39	9.45	17.13	6.46	8.39	9.14	16.46	5.94	8.39	8.86	15.87
98.23	-142.99	7.41	8.39	9.45	17.13	6.46	8.39	9.13	16.46	5.94	8.39	8.85	15.86
98.24	-143.04	7.41	8.39	9.45	17.13	6.46	8.39	9.14	16.46	5.94	8.39	8.86	15.87
98.24	-143.00	7.41	8.39	9.45	17.13	6.46	8.39	9.13	16.46	5.94	8.39	8.85	15.86
98.25	-143.03	7.41	8.39	9.45	17.13	6.46	8.39	9.14	16.46	5.94	8.39	8.86	15.87
98.25	-142.97	7.41	8.39	9.45	17.13	6.46	8.39	9.13	16.46	5.94	8.39	8.85	15.86
98.25	-143.02	7.41	8.39	9.45	17.13	6.46	8.39	9.14	16.46	5.94	8.39	8.86	15.87
98.26	-142.94	7.41	8.39	9.45	17.13	6.46	8.39	9.13	16.46	5.94	8.39	8.85	15.86
98.26	-143.01	7.41	8.39	9.45	17.13	6.46	8.39	9.14	16.46	5.94	8.39	8.85	15.87
100.30	-142.01	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.30	-141.99	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.31	-142.06	7.42	8.39	9.43	17.09	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.32	-141.99	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.32	-142.04	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.33	-141.99	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.41	-142.03	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.41	-141.98	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.45	-142.02	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.46	-141.99	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.47	-142.01	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.47	-142.00	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.49	-142.01	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.50	-142.00	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.50	-142.01	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.50	-142.00	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.51	-142.01	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.51	-142.00	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.52	-142.01	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.54	-142.00	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.55	-142.01	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.55	-141.99	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.56	-142.01	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.60	-141.98	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.60	-142.01	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.61	-141.97	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
100.61	-142.02	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
105.26	-141.99	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
105.27	-142.01	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82

105.28	-141.99	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
105.28	-142.03	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
105.28	-141.99	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.57	-142.06	7.42	8.39	9.43	17.09	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.57	-142.00	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.59	-142.04	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.59	-142.00	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.59	-142.03	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.60	-142.00	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.64	-142.04	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.65	-141.96	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.68	-142.03	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.69	-141.96	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.69	-142.03	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.70	-141.97	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.74	-142.00	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.74	-141.99	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.75	-142.01	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.76	-141.98	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.80	-142.03	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.81	-141.95	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.81	-142.02	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.84	-141.98	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.85	-142.03	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.92	-142.00	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
106.93	-142.02	7.42	8.39	9.43	17.08	6.47	8.39	9.11	16.41	5.95	8.39	8.83	15.82
110.16	-141.05	7.43	8.39	9.41	17.04	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.16	-141.00	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.24	-141.03	7.43	8.39	9.41	17.04	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.24	-140.99	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.24	-141.01	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.25	-140.99	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.25	-141.02	7.43	8.39	9.41	17.04	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.26	-140.99	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.43	-141.02	7.43	8.39	9.41	17.04	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.43	-140.99	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.44	-141.05	7.43	8.39	9.41	17.04	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.45	-140.99	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.46	-141.00	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.46	-140.99	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.51	-141.04	7.43	8.39	9.41	17.04	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.51	-140.96	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.36	5.96	8.39	8.81	15.77

110.52	-141.01	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.52	-140.99	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.53	-141.02	7.43	8.39	9.41	17.04	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.58	-141.00	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.59	-141.01	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.60	-140.97	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.36	5.96	8.39	8.81	15.77
110.60	-141.00	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.65	-140.98	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.36	5.96	8.39	8.81	15.77
110.66	-141.00	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.74	-140.99	7.43	8.39	9.41	17.03	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
110.74	-141.02	7.43	8.39	9.41	17.04	6.47	8.39	9.09	16.37	5.96	8.39	8.81	15.78
113.74	-140.06	7.44	8.39	9.38	16.99	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
113.75	-139.98	7.44	8.39	9.38	16.98	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
113.76	-140.00	7.44	8.39	9.38	16.99	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
113.77	-140.00	7.44	8.39	9.38	16.99	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
113.78	-140.01	7.44	8.39	9.38	16.99	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
113.79	-139.98	7.44	8.39	9.38	16.98	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
113.82	-140.02	7.44	8.39	9.38	16.99	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
113.83	-139.99	7.44	8.39	9.38	16.99	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
113.85	-140.01	7.44	8.39	9.38	16.99	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
113.89	-139.99	7.44	8.39	9.38	16.99	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
113.89	-140.01	7.44	8.39	9.38	16.99	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
113.97	-140.00	7.44	8.39	9.38	16.99	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
113.97	-140.00	7.44	8.39	9.38	16.99	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
114.11	-139.95	7.44	8.39	9.38	16.98	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
114.11	-140.01	7.44	8.39	9.38	16.99	6.48	8.39	9.07	16.32	5.96	8.39	8.79	15.73
116.84	-139.06	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.28	5.97	8.39	8.77	15.69
116.85	-138.99	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.69
116.87	-139.03	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.69
116.87	-138.98	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.68
116.88	-139.03	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.69
116.88	-139.00	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.69
116.92	-139.03	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.69
116.92	-138.96	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.68
116.94	-139.02	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.69
116.95	-139.00	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.69
116.95	-139.02	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.69
116.96	-138.94	7.44	8.39	9.36	16.93	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.68
116.97	-139.01	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.69
117.00	-138.99	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.69
117.01	-139.02	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.69
117.05	-138.98	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.27	5.97	8.39	8.77	15.68

117.06	-139.06	7.44	8.39	9.36	16.94	6.49	8.39	9.05	16.28	5.97	8.39	8.77	15.69
118.88	-138.01	7.45	8.39	9.34	16.89	6.50	8.39	9.03	16.23	5.98	8.39	8.75	15.64
118.89	-137.98	7.45	8.39	9.34	16.89	6.50	8.39	9.02	16.22	5.98	8.39	8.75	15.64
118.90	-138.03	7.45	8.39	9.34	16.89	6.50	8.39	9.03	16.23	5.98	8.39	8.75	15.64
118.90	-137.99	7.45	8.39	9.34	16.89	6.50	8.39	9.02	16.23	5.98	8.39	8.75	15.64
118.93	-138.01	7.45	8.39	9.34	16.89	6.50	8.39	9.03	16.23	5.98	8.39	8.75	15.64
118.93	-137.99	7.45	8.39	9.34	16.89	6.50	8.39	9.03	16.23	5.98	8.39	8.75	15.64
118.95	-138.02	7.45	8.39	9.34	16.89	6.50	8.39	9.03	16.23	5.98	8.39	8.75	15.64
118.95	-137.97	7.45	8.39	9.34	16.89	6.50	8.39	9.02	16.22	5.98	8.39	8.75	15.64
118.95	-138.01	7.45	8.39	9.34	16.89	6.50	8.39	9.03	16.23	5.98	8.39	8.75	15.64
118.96	-138.00	7.45	8.39	9.34	16.89	6.50	8.39	9.03	16.23	5.98	8.39	8.75	15.64
118.97	-138.01	7.45	8.39	9.34	16.89	6.50	8.39	9.03	16.23	5.98	8.39	8.75	15.64
119.12	-137.98	7.45	8.39	9.34	16.89	6.50	8.39	9.02	16.22	5.98	8.39	8.75	15.64
119.12	-138.02	7.45	8.39	9.34	16.89	6.50	8.39	9.03	16.23	5.98	8.39	8.75	15.64
127.86	-137.07	7.46	8.39	9.32	16.84	6.50	8.39	9.00	16.18	5.98	8.39	8.73	15.60
127.86	-137.00	7.46	8.39	9.31	16.84	6.50	8.39	9.00	16.18	5.98	8.39	8.73	15.60
127.93	-137.03	7.46	8.39	9.32	16.84	6.50	8.39	9.00	16.18	5.98	8.39	8.73	15.60
127.93	-137.00	7.46	8.39	9.31	16.84	6.50	8.39	9.00	16.18	5.98	8.39	8.73	15.60
127.94	-137.00	7.46	8.39	9.31	16.84	6.50	8.39	9.00	16.18	5.98	8.39	8.73	15.60
127.94	-136.99	7.46	8.39	9.31	16.84	6.50	8.39	9.00	16.18	5.98	8.39	8.73	15.59
128.14	-137.02	7.46	8.39	9.31	16.84	6.50	8.39	9.00	16.18	5.98	8.39	8.73	15.60
128.15	-136.99	7.46	8.39	9.31	16.84	6.50	8.39	9.00	16.18	5.98	8.39	8.73	15.59
128.15	-137.03	7.46	8.39	9.31	16.84	6.50	8.39	9.00	16.18	5.98	8.39	8.73	15.60
128.35	-136.99	7.46	8.39	9.31	16.84	6.50	8.39	9.00	16.18	5.98	8.39	8.73	15.59
128.60	-137.02	7.46	8.39	9.31	16.84	6.50	8.39	9.00	16.18	5.98	8.39	8.73	15.60
128.61	-136.99	7.46	8.39	9.31	16.84	6.50	8.39	9.00	16.18	5.98	8.39	8.73	15.59
128.62	-137.01	7.46	8.39	9.31	16.84	6.50	8.39	9.00	16.18	5.98	8.39	8.73	15.60
128.95	-136.00	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
128.96	-136.00	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
128.96	-136.03	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
128.97	-135.99	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
128.97	-136.03	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
128.98	-135.98	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
129.01	-136.01	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.17	-135.98	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
129.18	-136.02	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.18	-135.99	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.19	-136.07	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.20	-135.99	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.27	-136.05	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.28	-136.00	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.28	-136.04	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55

129.28	-135.98	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
129.29	-136.04	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.32	-135.95	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
129.32	-136.01	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.32	-135.99	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.33	-136.02	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.38	-135.98	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
129.38	-136.05	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.38	-135.99	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
129.53	-136.10	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.14	5.99	8.39	8.71	15.55
129.53	-135.99	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.57	-136.04	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.57	-136.00	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.57	-136.01	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.58	-135.97	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
129.59	-136.01	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.59	-135.98	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
129.60	-136.02	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.61	-136.00	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
129.61	-136.01	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
130.00	-135.96	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
130.01	-136.00	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
130.03	-135.98	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
131.29	-136.03	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
131.30	-135.94	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
131.31	-136.04	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
131.31	-135.93	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
131.33	-136.02	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
131.37	-135.97	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
131.38	-136.04	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
131.38	-135.99	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
131.39	-136.00	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
131.41	-135.98	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
131.93	-136.05	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
131.93	-135.99	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
131.96	-136.01	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
131.97	-135.99	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
131.98	-136.01	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
132.20	-135.95	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.70	15.55
132.21	-136.04	7.47	8.39	9.29	16.79	6.51	8.39	8.98	16.13	5.99	8.39	8.71	15.55
132.54	-135.01	7.48	8.39	9.27	16.74	6.52	8.39	8.96	16.08	6.00	8.39	8.68	15.50
132.89	-134.04	7.49	8.39	9.25	16.69	6.52	8.39	8.94	16.04	6.00	8.39	8.66	15.46

132.91	-133.99	7.49	8.39	9.24	16.69	6.52	8.39	8.94	16.04	6.00	8.39	8.66	15.46
132.91	-134.02	7.49	8.39	9.24	16.69	6.52	8.39	8.94	16.04	6.00	8.39	8.66	15.46
133.13	-133.05	7.49	8.39	9.22	16.64	6.53	8.39	8.91	15.99	6.01	8.39	8.64	15.41
133.13	-132.99	7.49	8.39	9.22	16.64	6.53	8.39	8.91	15.99	6.01	8.39	8.64	15.41
134.29	-133.07	7.49	8.39	9.22	16.64	6.53	8.39	8.91	15.99	6.01	8.39	8.64	15.41
134.41	-133.00	7.49	8.39	9.22	16.64	6.53	8.39	8.91	15.99	6.01	8.39	8.64	15.41
134.41	-133.03	7.49	8.39	9.22	16.64	6.53	8.39	8.91	15.99	6.01	8.39	8.64	15.41
134.42	-132.94	7.49	8.39	9.22	16.64	6.53	8.39	8.91	15.99	6.01	8.39	8.64	15.41
134.42	-133.06	7.49	8.39	9.22	16.64	6.53	8.39	8.91	15.99	6.01	8.39	8.64	15.41
134.44	-132.96	7.49	8.39	9.22	16.64	6.53	8.39	8.91	15.99	6.01	8.39	8.64	15.41
134.59	-133.02	7.49	8.39	9.22	16.64	6.53	8.39	8.91	15.99	6.01	8.39	8.64	15.41
135.74	-132.06	7.50	8.39	9.20	16.59	6.54	8.39	8.89	15.94	6.02	8.39	8.62	15.37
136.32	-131.97	7.50	8.39	9.20	16.59	6.54	8.39	8.89	15.94	6.02	8.39	8.62	15.36
136.33	-132.06	7.50	8.39	9.20	16.59	6.54	8.39	8.89	15.94	6.02	8.39	8.62	15.37
136.33	-131.99	7.50	8.39	9.20	16.59	6.54	8.39	8.89	15.94	6.02	8.39	8.62	15.36
136.35	-132.11	7.50	8.39	9.20	16.60	6.54	8.39	8.89	15.94	6.02	8.39	8.62	15.37
136.35	-131.99	7.50	8.39	9.20	16.59	6.54	8.39	8.89	15.94	6.02	8.39	8.62	15.36
136.46	-132.00	7.50	8.39	9.20	16.59	6.54	8.39	8.89	15.94	6.02	8.39	8.62	15.37
136.47	-131.97	7.50	8.39	9.20	16.59	6.54	8.39	8.89	15.94	6.02	8.39	8.62	15.36
136.47	-132.03	7.50	8.39	9.20	16.59	6.54	8.39	8.89	15.94	6.02	8.39	8.62	15.37
136.48	-131.96	7.50	8.39	9.20	16.59	6.54	8.39	8.89	15.94	6.02	8.39	8.62	15.36
136.48	-132.00	7.50	8.39	9.20	16.59	6.54	8.39	8.89	15.94	6.02	8.39	8.62	15.37
136.57	-131.04	7.51	8.39	9.17	16.54	6.55	8.39	8.87	15.89	6.02	8.39	8.60	15.32
136.81	-130.01	7.52	8.39	9.15	16.49	6.55	8.39	8.84	15.84	6.03	8.39	8.57	15.27
136.96	-129.02	7.53	8.39	9.13	16.44	6.56	8.39	8.82	15.79	6.04	8.39	8.55	15.23
137.38	-128.02	7.54	8.39	9.10	16.39	6.57	8.39	8.80	15.75	6.04	8.39	8.53	15.18
137.50	-127.03	7.54	8.39	9.08	16.34	6.58	8.39	8.78	15.70	6.05	8.39	8.51	15.13
137.50	-126.96	7.54	8.39	9.08	16.33	6.58	8.39	8.77	15.69	6.05	8.39	8.50	15.13
137.50	-127.02	7.54	8.39	9.08	16.34	6.58	8.39	8.77	15.70	6.05	8.39	8.51	15.13
137.57	-126.03	7.55	8.39	9.05	16.29	6.58	8.39	8.75	15.65	6.06	8.39	8.48	15.08
137.86	-125.01	7.56	8.39	9.03	16.23	6.59	8.39	8.73	15.60	6.06	8.39	8.46	15.03
137.92	-124.08	7.57	8.39	9.01	16.19	6.60	8.39	8.71	15.55	6.07	8.39	8.44	14.99
137.96	-123.01	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
138.03	-122.01	7.59	8.39	8.95	16.08	6.61	8.39	8.66	15.45	6.08	8.39	8.39	14.89
138.03	-121.94	7.59	8.39	8.95	16.07	6.61	8.39	8.65	15.44	6.08	8.39	8.39	14.89
138.04	-122.01	7.59	8.39	8.95	16.08	6.61	8.39	8.66	15.45	6.08	8.39	8.39	14.89
138.10	-121.95	7.59	8.39	8.95	16.07	6.61	8.39	8.65	15.44	6.08	8.39	8.39	14.89
138.12	-122.05	7.59	8.39	8.96	16.08	6.61	8.39	8.66	15.45	6.08	8.39	8.39	14.89
138.12	-121.94	7.59	8.39	8.95	16.07	6.61	8.39	8.65	15.44	6.08	8.39	8.39	14.89
138.13	-122.01	7.59	8.39	8.95	16.08	6.61	8.39	8.66	15.45	6.08	8.39	8.39	14.89
138.13	-121.95	7.59	8.39	8.95	16.07	6.61	8.39	8.65	15.44	6.08	8.39	8.39	14.89
138.16	-122.02	7.59	8.39	8.96	16.08	6.61	8.39	8.66	15.45	6.08	8.39	8.39	14.89

138.29	-121.02	7.59	8.39	8.93	16.02	6.62	8.39	8.63	15.40	6.09	8.39	8.37	14.84
138.50	-120.94	7.60	8.39	8.93	16.02	6.62	8.39	8.63	15.39	6.09	8.39	8.37	14.84
138.52	-121.92	7.59	8.39	8.95	16.07	6.61	8.39	8.65	15.44	6.08	8.39	8.39	14.88
138.54	-122.98	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.49	6.08	8.39	8.41	14.94
138.56	-123.04	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
138.92	-123.00	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
138.99	-123.01	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
139.06	-122.99	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
139.07	-123.03	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
139.08	-122.98	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.49	6.08	8.39	8.41	14.94
139.43	-123.98	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.54	6.07	8.39	8.44	14.98
139.44	-124.02	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
139.48	-123.99	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
139.48	-124.01	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
139.50	-123.94	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.54	6.07	8.39	8.44	14.98
139.50	-124.12	7.57	8.39	9.01	16.19	6.60	8.39	8.71	15.55	6.07	8.39	8.44	14.99
139.53	-123.99	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
139.54	-124.01	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
139.54	-123.97	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.54	6.07	8.39	8.44	14.98
139.55	-124.02	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
139.56	-123.99	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
139.56	-124.00	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
139.57	-123.99	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.98
139.58	-124.00	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
139.58	-123.99	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.98
139.61	-124.01	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
139.62	-124.00	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
139.62	-124.01	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
139.63	-123.98	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.54	6.07	8.39	8.44	14.98
139.63	-124.01	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
139.63	-123.99	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
139.66	-124.01	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
139.88	-123.05	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
139.88	-122.99	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
139.94	-123.01	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
139.94	-122.99	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
139.95	-123.00	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
140.23	-122.98	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.49	6.08	8.39	8.41	14.94
140.23	-123.00	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
140.24	-123.00	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
140.24	-123.02	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
140.25	-122.99	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94

140.25	-123.03	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
140.26	-122.96	7.58	8.39	8.98	16.13	6.61	8.39	8.68	15.49	6.08	8.39	8.41	14.94
140.45	-123.95	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.54	6.07	8.39	8.44	14.98
140.46	-124.04	7.57	8.39	9.01	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
140.48	-123.93	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.54	6.07	8.39	8.44	14.98
140.48	-124.00	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
140.49	-123.97	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.54	6.07	8.39	8.44	14.98
140.50	-124.00	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
140.50	-123.96	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.54	6.07	8.39	8.44	14.98
140.50	-124.01	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
140.51	-123.95	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.54	6.07	8.39	8.44	14.98
140.51	-124.02	7.57	8.39	9.00	16.18	6.60	8.39	8.70	15.55	6.07	8.39	8.44	14.99
140.80	-123.05	7.58	8.39	8.98	16.13	6.60	8.39	8.68	15.50	6.08	8.39	8.41	14.94
140.90	-122.04	7.59	8.39	8.96	16.08	6.61	8.39	8.66	15.45	6.08	8.39	8.39	14.89
141.08	-121.11	7.59	8.39	8.93	16.03	6.62	8.39	8.63	15.40	6.09	8.39	8.37	14.84
141.10	-120.81	7.60	8.39	8.92	16.01	6.62	8.39	8.63	15.38	6.09	8.39	8.36	14.83
141.10	-121.02	7.59	8.39	8.93	16.02	6.62	8.39	8.63	15.40	6.09	8.39	8.37	14.84
141.12	-120.94	7.60	8.39	8.93	16.02	6.62	8.39	8.63	15.39	6.09	8.39	8.37	14.84
141.24	-121.81	7.59	8.39	8.95	16.07	6.61	8.39	8.65	15.44	6.08	8.39	8.39	14.88
141.25	-122.02	7.59	8.39	8.96	16.08	6.61	8.39	8.66	15.45	6.08	8.39	8.39	14.89
141.26	-121.93	7.59	8.39	8.95	16.07	6.61	8.39	8.65	15.44	6.08	8.39	8.39	14.89
141.89	-122.14	7.59	8.39	8.96	16.08	6.61	8.39	8.66	15.45	6.08	8.39	8.39	14.90
141.90	-121.96	7.59	8.39	8.95	16.07	6.61	8.39	8.65	15.44	6.08	8.39	8.39	14.89
141.90	-122.02	7.59	8.39	8.96	16.08	6.61	8.39	8.66	15.45	6.08	8.39	8.39	14.89
142.03	-121.04	7.59	8.39	8.93	16.03	6.62	8.39	8.63	15.40	6.09	8.39	8.37	14.84
142.03	-120.97	7.60	8.39	8.93	16.02	6.62	8.39	8.63	15.39	6.09	8.39	8.37	14.84
142.04	-121.03	7.59	8.39	8.93	16.02	6.62	8.39	8.63	15.40	6.09	8.39	8.37	14.84
142.05	-121.00	7.59	8.39	8.93	16.02	6.62	8.39	8.63	15.39	6.09	8.39	8.37	14.84
142.05	-121.01	7.59	8.39	8.93	16.02	6.62	8.39	8.63	15.40	6.09	8.39	8.37	14.84
142.14	-120.09	7.60	8.39	8.91	15.98	6.63	8.39	8.61	15.35	6.10	8.39	8.35	14.79
142.17	-119.05	7.61	8.39	8.88	15.92	6.63	8.39	8.58	15.29	6.10	8.39	8.32	14.74
142.19	-118.02	7.62	8.39	8.85	15.86	6.64	8.39	8.56	15.24	6.11	8.39	8.30	14.69
142.20	-117.13	7.63	8.39	8.83	15.82	6.65	8.39	8.54	15.20	6.12	8.39	8.28	14.65
142.22	-116.12	7.64	8.39	8.81	15.76	6.65	8.39	8.51	15.14	6.12	8.39	8.25	14.60
142.31	-115.01	7.64	8.39	8.78	15.70	6.66	8.39	8.48	15.09	6.13	8.39	8.22	14.54
142.43	-114.02	7.65	8.39	8.75	15.65	6.67	8.39	8.46	15.03	6.14	8.39	8.20	14.49
142.45	-113.04	7.66	8.39	8.73	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.18	14.44
142.51	-112.77	7.66	8.39	8.72	15.58	6.68	8.39	8.43	14.97	6.15	8.39	8.17	14.43
142.66	-113.02	7.66	8.39	8.73	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.18	14.44
142.67	-112.96	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.17	14.44
142.67	-113.02	7.66	8.39	8.73	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.18	14.44
142.69	-112.98	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.17	14.44

142.75	-113.03	7.66	8.39	8.73	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.18	14.44
142.75	-112.98	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.17	14.44
142.77	-113.92	7.65	8.39	8.75	15.64	6.67	8.39	8.46	15.03	6.14	8.39	8.20	14.49
142.79	-114.15	7.65	8.39	8.75	15.65	6.67	8.39	8.46	15.04	6.14	8.39	8.20	14.50
142.79	-113.98	7.65	8.39	8.75	15.64	6.67	8.39	8.46	15.03	6.14	8.39	8.20	14.49
142.80	-114.15	7.65	8.39	8.75	15.65	6.67	8.39	8.46	15.04	6.14	8.39	8.20	14.50
142.82	-114.00	7.65	8.39	8.75	15.65	6.67	8.39	8.46	15.03	6.14	8.39	8.20	14.49
142.84	-114.02	7.65	8.39	8.75	15.65	6.67	8.39	8.46	15.03	6.14	8.39	8.20	14.49
142.85	-114.00	7.65	8.39	8.75	15.65	6.67	8.39	8.46	15.03	6.14	8.39	8.20	14.49
142.98	-114.03	7.65	8.39	8.75	15.65	6.67	8.39	8.46	15.03	6.14	8.39	8.20	14.49
142.98	-113.98	7.65	8.39	8.75	15.64	6.67	8.39	8.46	15.03	6.14	8.39	8.20	14.49
142.99	-114.11	7.65	8.39	8.75	15.65	6.67	8.39	8.46	15.04	6.14	8.39	8.20	14.50
143.03	-113.06	7.66	8.39	8.73	15.59	6.68	8.39	8.44	14.98	6.14	8.39	8.18	14.44
143.03	-112.92	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.97	6.14	8.39	8.17	14.43
143.03	-113.01	7.66	8.39	8.73	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.18	14.44
143.07	-112.01	7.67	8.39	8.70	15.54	6.68	8.39	8.41	14.93	6.15	8.39	8.15	14.39
143.13	-111.07	7.68	8.39	8.67	15.48	6.69	8.39	8.38	14.88	6.16	8.39	8.13	14.34
143.14	-110.99	7.68	8.39	8.67	15.48	6.69	8.39	8.38	14.87	6.16	8.39	8.13	14.34
143.15	-111.02	7.68	8.39	8.67	15.48	6.69	8.39	8.38	14.87	6.16	8.39	8.13	14.34
143.21	-110.03	7.69	8.39	8.65	15.43	6.70	8.39	8.36	14.82	6.16	8.39	8.10	14.29
143.22	-109.66	7.69	8.39	8.64	15.40	6.70	8.39	8.35	14.80	6.17	8.39	8.09	14.27
143.22	-110.01	7.69	8.39	8.65	15.42	6.70	8.39	8.36	14.82	6.16	8.39	8.10	14.29
143.26	-109.96	7.69	8.39	8.64	15.42	6.70	8.39	8.36	14.82	6.16	8.39	8.10	14.28
143.27	-110.07	7.69	8.39	8.65	15.43	6.70	8.39	8.36	14.82	6.16	8.39	8.10	14.29
143.32	-109.21	7.69	8.39	8.62	15.38	6.71	8.39	8.34	14.78	6.17	8.39	8.08	14.24
143.33	-108.84	7.70	8.39	8.61	15.36	6.71	8.39	8.33	14.76	6.17	8.39	8.07	14.22
143.36	-109.07	7.69	8.39	8.62	15.37	6.71	8.39	8.33	14.77	6.17	8.39	8.08	14.24
143.36	-108.91	7.70	8.39	8.62	15.36	6.71	8.39	8.33	14.76	6.17	8.39	8.07	14.23
143.38	-109.12	7.69	8.39	8.62	15.37	6.71	8.39	8.33	14.77	6.17	8.39	8.08	14.24
143.39	-108.35	7.70	8.39	8.60	15.33	6.71	8.39	8.31	14.73	6.18	8.39	8.06	14.20
143.39	-107.96	7.70	8.39	8.59	15.31	6.71	8.39	8.30	14.71	6.18	8.39	8.05	14.18
143.41	-108.88	7.70	8.39	8.62	15.36	6.71	8.39	8.33	14.76	6.17	8.39	8.07	14.23
143.45	-110.00	7.69	8.39	8.65	15.42	6.70	8.39	8.36	14.82	6.16	8.39	8.10	14.28
143.45	-110.11	7.69	8.39	8.65	15.43	6.70	8.39	8.36	14.82	6.16	8.39	8.10	14.29
143.47	-109.28	7.69	8.39	8.63	15.38	6.70	8.39	8.34	14.78	6.17	8.39	8.08	14.25
143.48	-108.12	7.70	8.39	8.60	15.32	6.71	8.39	8.31	14.72	6.18	8.39	8.05	14.19
143.49	-107.50	7.71	8.39	8.58	15.28	6.72	8.39	8.29	14.68	6.18	8.39	8.04	14.15
143.49	-108.47	7.70	8.39	8.60	15.34	6.71	8.39	8.32	14.74	6.17	8.39	8.06	14.20
143.50	-109.58	7.69	8.39	8.63	15.40	6.70	8.39	8.35	14.80	6.17	8.39	8.09	14.26
143.50	-109.58	7.69	8.39	8.63	15.40	6.70	8.39	8.35	14.80	6.17	8.39	8.09	14.26
143.51	-111.17	7.68	8.39	8.68	15.49	6.69	8.39	8.39	14.88	6.16	8.39	8.13	14.34
143.53	-110.10	7.69	8.39	8.65	15.43	6.70	8.39	8.36	14.82	6.16	8.39	8.10	14.29

143.57	-109.21	7.69	8.39	8.62	15.38	6.71	8.39	8.34	14.78	6.17	8.39	8.08	14.24
143.58	-108.86	7.70	8.39	8.61	15.36	6.71	8.39	8.33	14.76	6.17	8.39	8.07	14.22
143.66	-109.20	7.69	8.39	8.62	15.38	6.71	8.39	8.34	14.78	6.17	8.39	8.08	14.24
143.67	-109.00	7.70	8.39	8.62	15.37	6.71	8.39	8.33	14.76	6.17	8.39	8.08	14.23
143.67	-109.01	7.69	8.39	8.62	15.37	6.71	8.39	8.33	14.77	6.17	8.39	8.08	14.23
143.68	-108.90	7.70	8.39	8.62	15.36	6.71	8.39	8.33	14.76	6.17	8.39	8.07	14.23
143.68	-109.06	7.69	8.39	8.62	15.37	6.71	8.39	8.33	14.77	6.17	8.39	8.08	14.24
143.72	-108.37	7.70	8.39	8.60	15.33	6.71	8.39	8.32	14.73	6.17	8.39	8.06	14.20
143.73	-107.94	7.70	8.39	8.59	15.31	6.71	8.39	8.30	14.71	6.18	8.39	8.05	14.18
143.74	-108.10	7.70	8.39	8.59	15.32	6.71	8.39	8.31	14.72	6.18	8.39	8.05	14.19
143.88	-107.01	7.71	8.39	8.57	15.26	6.72	8.39	8.28	14.66	6.18	8.39	8.03	14.13
143.89	-106.96	7.71	8.39	8.56	15.25	6.72	8.39	8.28	14.65	6.18	8.39	8.02	14.13
143.89	-107.07	7.71	8.39	8.57	15.26	6.72	8.39	8.28	14.66	6.18	8.39	8.03	14.13
143.89	-106.98	7.71	8.39	8.56	15.25	6.72	8.39	8.28	14.65	6.18	8.39	8.03	14.13
143.90	-107.09	7.71	8.39	8.57	15.26	6.72	8.39	8.28	14.66	6.18	8.39	8.03	14.13
143.91	-106.86	7.71	8.39	8.56	15.25	6.72	8.39	8.28	14.65	6.19	8.39	8.02	14.12
143.97	-107.19	7.71	8.39	8.57	15.26	6.72	8.39	8.28	14.67	6.18	8.39	8.03	14.14
143.98	-106.96	7.71	8.39	8.56	15.25	6.72	8.39	8.28	14.65	6.18	8.39	8.02	14.13
143.98	-107.02	7.71	8.39	8.57	15.26	6.72	8.39	8.28	14.66	6.18	8.39	8.03	14.13
144.00	-106.06	7.72	8.39	8.54	15.20	6.73	8.39	8.25	14.60	6.19	8.39	8.00	14.08
144.00	-105.77	7.72	8.39	8.53	15.18	6.73	8.39	8.25	14.59	6.19	8.39	7.99	14.06
144.02	-106.02	7.72	8.39	8.54	15.20	6.73	8.39	8.25	14.60	6.19	8.39	8.00	14.08
144.03	-105.76	7.72	8.39	8.53	15.18	6.73	8.39	8.25	14.59	6.19	8.39	7.99	14.06
144.08	-106.24	7.72	8.39	8.54	15.21	6.73	8.39	8.26	14.61	6.19	8.39	8.01	14.09
144.09	-105.98	7.72	8.39	8.54	15.20	6.73	8.39	8.25	14.60	6.19	8.39	8.00	14.07
144.10	-106.04	7.72	8.39	8.54	15.20	6.73	8.39	8.25	14.60	6.19	8.39	8.00	14.08
144.20	-105.03	7.73	8.39	8.51	15.14	6.74	8.39	8.23	14.55	6.20	8.39	7.98	14.02
144.23	-104.21	7.74	8.39	8.49	15.09	6.74	8.39	8.21	14.50	6.20	8.39	7.95	13.98
144.24	-103.74	7.74	8.39	8.48	15.07	6.75	8.39	8.19	14.48	6.21	8.39	7.94	13.95
144.26	-104.19	7.74	8.39	8.49	15.09	6.74	8.39	8.20	14.50	6.20	8.39	7.95	13.98
144.26	-103.86	7.74	8.39	8.48	15.07	6.74	8.39	8.20	14.48	6.21	8.39	7.95	13.96
144.27	-104.07	7.74	8.39	8.48	15.09	6.74	8.39	8.20	14.49	6.20	8.39	7.95	13.97
144.28	-103.89	7.74	8.39	8.48	15.08	6.74	8.39	8.20	14.48	6.21	8.39	7.95	13.96
144.29	-104.07	7.74	8.39	8.48	15.09	6.74	8.39	8.20	14.49	6.20	8.39	7.95	13.97
144.30	-103.96	7.74	8.39	8.48	15.08	6.74	8.39	8.20	14.49	6.20	8.39	7.95	13.97
144.31	-104.02	7.74	8.39	8.48	15.08	6.74	8.39	8.20	14.49	6.20	8.39	7.95	13.97
144.41	-103.16	7.74	8.39	8.46	15.03	6.75	8.39	8.18	14.44	6.21	8.39	7.93	13.92
144.42	-102.96	7.75	8.39	8.45	15.02	6.75	8.39	8.17	14.43	6.21	8.39	7.92	13.91
144.42	-103.05	7.74	8.39	8.46	15.03	6.75	8.39	8.17	14.44	6.21	8.39	7.92	13.92
144.45	-102.92	7.75	8.39	8.45	15.02	6.75	8.39	8.17	14.43	6.21	8.39	7.92	13.91
144.45	-103.06	7.74	8.39	8.46	15.03	6.75	8.39	8.17	14.44	6.21	8.39	7.92	13.92
144.46	-102.89	7.75	8.39	8.45	15.02	6.75	8.39	8.17	14.43	6.21	8.39	7.92	13.91

144.47	-103.04	7.74	8.39	8.46	15.03	6.75	8.39	8.17	14.44	6.21	8.39	7.92	13.92
144.47	-102.86	7.75	8.39	8.45	15.02	6.75	8.39	8.17	14.43	6.21	8.39	7.92	13.91
144.47	-103.02	7.74	8.39	8.46	15.02	6.75	8.39	8.17	14.44	6.21	8.39	7.92	13.91
144.50	-102.44	7.75	8.39	8.44	14.99	6.75	8.39	8.16	14.40	6.21	8.39	7.91	13.88
144.50	-101.98	7.75	8.39	8.43	14.96	6.76	8.39	8.15	14.38	6.22	8.39	7.90	13.86
144.51	-102.04	7.75	8.39	8.43	14.97	6.76	8.39	8.15	14.38	6.22	8.39	7.90	13.86
144.51	-101.30	7.76	8.39	8.41	14.92	6.76	8.39	8.13	14.34	6.22	8.39	7.88	13.82
144.52	-100.09	7.77	8.39	8.37	14.85	6.77	8.39	8.09	14.27	6.23	8.39	7.85	13.76
144.53	-99.28	7.78	8.39	8.35	14.80	6.78	8.39	8.07	14.22	6.24	8.39	7.82	13.71
144.53	-98.97	7.78	8.39	8.34	14.79	6.78	8.39	8.06	14.21	6.24	8.39	7.82	13.69
144.55	-99.73	7.77	8.39	8.36	14.83	6.77	8.39	8.08	14.25	6.23	8.39	7.84	13.74
144.56	-100.90	7.76	8.39	8.40	14.90	6.77	8.39	8.12	14.32	6.23	8.39	7.87	13.80
144.57	-101.11	7.76	8.39	8.40	14.91	6.76	8.39	8.12	14.33	6.22	8.39	7.87	13.81
144.58	-100.13	7.77	8.39	8.37	14.85	6.77	8.39	8.10	14.27	6.23	8.39	7.85	13.76
144.59	-99.68	7.77	8.39	8.36	14.83	6.77	8.39	8.08	14.25	6.23	8.39	7.84	13.73
144.59	-98.40	7.78	8.39	8.32	14.75	6.78	8.39	8.05	14.17	6.24	8.39	7.80	13.66
144.59	-97.93	7.79	8.39	8.31	14.72	6.79	8.39	8.03	14.15	6.25	8.39	7.79	13.64
144.60	-98.01	7.79	8.39	8.31	14.73	6.79	8.39	8.04	14.15	6.24	8.39	7.79	13.64
144.62	-97.85	7.79	8.39	8.31	14.72	6.79	8.39	8.03	14.14	6.25	8.39	7.79	13.63
144.65	-98.96	7.78	8.39	8.34	14.79	6.78	8.39	8.06	14.20	6.24	8.39	7.82	13.69
144.66	-99.01	7.78	8.39	8.34	14.79	6.78	8.39	8.06	14.21	6.24	8.39	7.82	13.70
144.70	-98.10	7.79	8.39	8.32	14.73	6.79	8.39	8.04	14.16	6.24	8.39	7.79	13.65
144.72	-97.26	7.79	8.39	8.29	14.68	6.79	8.39	8.02	14.11	6.25	8.39	7.77	13.60
144.76	-96.02	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.03	6.26	8.39	7.74	13.53
144.79	-95.08	7.81	8.39	8.23	14.55	6.81	8.39	7.95	13.98	6.26	8.39	7.71	13.48
144.81	-94.39	7.82	8.39	8.21	14.51	6.81	8.39	7.93	13.94	6.27	8.39	7.69	13.44
144.81	-93.97	7.82	8.39	8.20	14.48	6.82	8.39	7.92	13.91	6.27	8.39	7.68	13.41
144.83	-94.19	7.82	8.39	8.20	14.50	6.81	8.39	7.93	13.93	6.27	8.39	7.69	13.42
144.83	-93.93	7.82	8.39	8.19	14.48	6.82	8.39	7.92	13.91	6.27	8.39	7.68	13.41
144.83	-94.09	7.82	8.39	8.20	14.49	6.82	8.39	7.93	13.92	6.27	8.39	7.68	13.42
144.84	-93.94	7.82	8.39	8.20	14.48	6.82	8.39	7.92	13.91	6.27	8.39	7.68	13.41
144.84	-94.01	7.82	8.39	8.20	14.48	6.82	8.39	7.92	13.92	6.27	8.39	7.68	13.41
144.90	-93.02	7.83	8.39	8.17	14.42	6.82	8.39	7.90	13.86	6.28	8.39	7.65	13.36
144.96	-92.03	7.84	8.39	8.14	14.36	6.83	8.39	7.87	13.80	6.28	8.39	7.63	13.30
144.97	-91.81	7.84	8.39	8.13	14.35	6.83	8.39	7.86	13.79	6.29	8.39	7.62	13.29
144.98	-92.04	7.84	8.39	8.14	14.36	6.83	8.39	7.87	13.80	6.28	8.39	7.63	13.30
145.03	-91.03	7.85	8.40	8.11	14.30	6.84	8.40	7.84	13.74	6.29	8.40	7.60	13.24
145.06	-90.24	7.85	8.40	8.08	14.25	6.84	8.40	7.82	13.69	6.30	8.40	7.58	13.20
145.09	-89.54	7.86	8.40	8.06	14.20	6.85	8.40	7.79	13.65	6.30	8.40	7.56	13.16
145.11	-88.27	7.87	8.40	8.02	14.12	6.86	8.40	7.76	13.57	6.31	8.40	7.52	13.08
145.13	-87.06	7.88	8.40	7.99	14.05	6.87	8.40	7.72	13.50	6.32	8.40	7.48	13.01
145.14	-86.21	7.89	8.40	7.96	13.99	6.87	8.40	7.70	13.44	6.32	8.40	7.46	12.96

145.16	-85.23	7.89	8.40	7.93	13.93	6.88	8.40	7.67	13.38	6.33	8.40	7.43	12.90
145.17	-84.92	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.36	6.33	8.40	7.42	12.88
145.18	-85.08	7.89	8.40	7.92	13.92	6.88	8.40	7.66	13.37	6.33	8.40	7.43	12.89
145.22	-84.13	7.90	8.40	7.89	13.86	6.89	8.40	7.63	13.31	6.34	8.40	7.40	12.83
145.23	-83.89	7.90	8.40	7.89	13.84	6.89	8.40	7.62	13.30	6.34	8.40	7.39	12.82
145.23	-84.05	7.90	8.40	7.89	13.85	6.89	8.40	7.63	13.31	6.34	8.40	7.40	12.83
145.27	-83.06	7.91	8.40	7.86	13.78	6.90	8.40	7.60	13.24	6.34	8.40	7.37	12.77
145.28	-82.85	7.91	8.40	7.85	13.77	6.90	8.40	7.59	13.23	6.35	8.40	7.36	12.75
145.28	-83.18	7.91	8.40	7.86	13.79	6.90	8.40	7.60	13.25	6.34	8.40	7.37	12.77
145.29	-82.89	7.91	8.40	7.86	13.77	6.90	8.40	7.59	13.23	6.35	8.40	7.36	12.76
145.29	-83.05	7.91	8.40	7.86	13.78	6.90	8.40	7.60	13.24	6.34	8.40	7.37	12.77
145.29	-82.92	7.91	8.40	7.86	13.78	6.90	8.40	7.59	13.23	6.35	8.40	7.36	12.76
145.30	-83.02	7.91	8.40	7.86	13.78	6.90	8.40	7.60	13.24	6.35	8.40	7.37	12.76
145.30	-82.89	7.91	8.40	7.86	13.77	6.90	8.40	7.59	13.23	6.35	8.40	7.36	12.76
145.31	-83.06	7.91	8.40	7.86	13.78	6.90	8.40	7.60	13.24	6.34	8.40	7.37	12.77
145.35	-82.98	7.91	8.40	7.86	13.78	6.90	8.40	7.60	13.24	6.35	8.40	7.36	12.76
145.35	-83.01	7.91	8.40	7.86	13.78	6.90	8.40	7.60	13.24	6.35	8.40	7.37	12.76
145.51	-82.21	7.92	8.40	7.83	13.73	6.90	8.40	7.57	13.19	6.35	8.40	7.34	12.71
145.51	-81.94	7.92	8.40	7.82	13.71	6.90	8.40	7.56	13.17	6.35	8.40	7.33	12.70
145.53	-82.09	7.92	8.40	7.83	13.72	6.90	8.40	7.57	13.18	6.35	8.40	7.34	12.71
145.54	-81.96	7.92	8.40	7.83	13.71	6.90	8.40	7.56	13.17	6.35	8.40	7.33	12.70
145.54	-82.09	7.92	8.40	7.83	13.72	6.90	8.40	7.57	13.18	6.35	8.40	7.34	12.71
145.59	-81.87	7.92	8.40	7.82	13.71	6.90	8.40	7.56	13.17	6.35	8.40	7.33	12.69
145.60	-82.02	7.92	8.40	7.83	13.72	6.90	8.40	7.57	13.18	6.35	8.40	7.34	12.70
145.63	-81.11	7.93	8.40	7.80	13.65	6.91	8.40	7.54	13.12	6.36	8.40	7.31	12.65
145.66	-80.09	7.94	8.40	7.76	13.59	6.92	8.40	7.51	13.05	6.36	8.40	7.28	12.58
145.81	-79.08	7.94	8.40	7.73	13.52	6.93	8.40	7.47	12.99	6.37	8.40	7.25	12.52
145.85	-78.40	7.95	8.40	7.71	13.47	6.93	8.40	7.45	12.94	6.38	8.40	7.22	12.47
145.85	-77.94	7.95	8.40	7.69	13.44	6.93	8.40	7.44	12.91	6.38	8.40	7.21	12.45
145.86	-78.09	7.95	8.40	7.70	13.45	6.93	8.40	7.44	12.92	6.38	8.40	7.21	12.45
145.91	-77.07	7.96	8.40	7.66	13.38	6.94	8.40	7.41	12.85	6.39	8.40	7.18	12.39
145.93	-76.17	7.97	8.40	7.63	13.32	6.95	8.40	7.38	12.79	6.39	8.40	7.15	12.33
145.93	-75.91	7.97	8.40	7.62	13.30	6.95	8.40	7.37	12.77	6.39	8.40	7.15	12.31
145.94	-76.00	7.97	8.40	7.63	13.30	6.95	8.40	7.37	12.78	6.39	8.40	7.15	12.32
145.96	-75.14	7.98	8.40	7.60	13.24	6.95	8.40	7.35	12.72	6.40	8.40	7.12	12.26
146.00	-74.92	7.98	8.40	7.59	13.23	6.96	8.40	7.34	12.71	6.40	8.40	7.11	12.25
146.01	-75.00	7.98	8.40	7.59	13.23	6.95	8.40	7.34	12.71	6.40	8.40	7.12	12.26
146.02	-74.94	7.98	8.40	7.59	13.23	6.96	8.40	7.34	12.71	6.40	8.40	7.12	12.25
146.10	-75.08	7.98	8.40	7.60	13.24	6.95	8.40	7.34	12.72	6.40	8.40	7.12	12.26
146.11	-74.94	7.98	8.40	7.59	13.23	6.96	8.40	7.34	12.71	6.40	8.40	7.12	12.25
146.11	-75.03	7.98	8.40	7.60	13.24	6.95	8.40	7.34	12.72	6.40	8.40	7.12	12.26
146.13	-74.93	7.98	8.40	7.59	13.23	6.96	8.40	7.34	12.71	6.40	8.40	7.11	12.25

146.13	-75.01	7.98	8.40	7.59	13.23	6.95	8.40	7.34	12.71	6.40	8.40	7.12	12.26
146.30	-74.99	7.98	8.40	7.59	13.23	6.95	8.40	7.34	12.71	6.40	8.40	7.12	12.26
146.30	-75.09	7.98	8.40	7.60	13.24	6.95	8.40	7.34	12.72	6.40	8.40	7.12	12.26
146.31	-74.99	7.98	8.40	7.59	13.23	6.95	8.40	7.34	12.71	6.40	8.40	7.12	12.25
146.48	-75.10	7.98	8.40	7.60	13.24	6.95	8.40	7.34	12.72	6.40	8.40	7.12	12.26
146.48	-74.99	7.98	8.40	7.59	13.23	6.95	8.40	7.34	12.71	6.40	8.40	7.12	12.25
146.49	-75.09	7.98	8.40	7.60	13.24	6.95	8.40	7.34	12.72	6.40	8.40	7.12	12.26
146.60	-74.06	7.99	8.40	7.56	13.17	6.96	8.40	7.31	12.65	6.41	8.40	7.09	12.19
146.60	-73.99	7.99	8.40	7.56	13.16	6.96	8.40	7.31	12.65	6.41	8.40	7.08	12.19
146.73	-74.12	7.99	8.40	7.56	13.17	6.96	8.40	7.31	12.65	6.40	8.40	7.09	12.20
146.73	-73.93	7.99	8.40	7.56	13.16	6.96	8.40	7.31	12.64	6.41	8.40	7.08	12.19
146.75	-74.00	7.99	8.40	7.56	13.16	6.96	8.40	7.31	12.65	6.41	8.40	7.08	12.19
146.75	-73.95	7.99	8.40	7.56	13.16	6.96	8.40	7.31	12.64	6.41	8.40	7.08	12.19
146.76	-74.02	7.99	8.40	7.56	13.16	6.96	8.40	7.31	12.65	6.41	8.40	7.09	12.19
146.77	-73.74	7.99	8.40	7.55	13.14	6.96	8.40	7.30	12.63	6.41	8.40	7.08	12.17
146.78	-74.01	7.99	8.40	7.56	13.16	6.96	8.40	7.31	12.65	6.41	8.40	7.09	12.19
146.82	-73.03	8.00	8.40	7.53	13.09	6.97	8.40	7.28	12.58	6.41	8.40	7.05	12.13
146.85	-72.12	8.00	8.40	7.49	13.03	6.98	8.40	7.24	12.52	6.42	8.40	7.02	12.07
146.86	-71.27	8.01	8.40	7.46	12.97	6.98	8.40	7.22	12.46	6.42	8.40	7.00	12.01
146.87	-70.33	8.02	8.40	7.43	12.90	6.99	8.40	7.18	12.39	6.43	8.40	6.96	11.94
146.88	-69.92	8.02	8.40	7.42	12.87	6.99	8.40	7.17	12.36	6.43	8.40	6.95	11.92
146.89	-70.98	8.01	8.40	7.45	12.94	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
146.89	-71.13	8.01	8.40	7.46	12.96	6.98	8.40	7.21	12.45	6.42	8.40	6.99	12.00
146.89	-70.98	8.01	8.40	7.45	12.94	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
146.91	-71.01	8.01	8.40	7.45	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
146.95	-70.17	8.02	8.40	7.42	12.89	6.99	8.40	7.18	12.38	6.43	8.40	6.96	11.93
146.95	-70.00	8.02	8.40	7.42	12.87	6.99	8.40	7.17	12.37	6.43	8.40	6.95	11.92
146.95	-70.10	8.02	8.40	7.42	12.88	6.99	8.40	7.18	12.37	6.43	8.40	6.96	11.93
146.99	-69.94	8.02	8.40	7.42	12.87	6.99	8.40	7.17	12.36	6.43	8.40	6.95	11.92
147.10	-70.93	8.01	8.40	7.45	12.94	6.98	8.40	7.20	12.43	6.43	8.40	6.98	11.98
147.10	-71.00	8.01	8.40	7.45	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.10	-71.00	8.01	8.40	7.45	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.11	-71.03	8.01	8.40	7.46	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.11	-70.91	8.01	8.40	7.45	12.94	6.98	8.40	7.20	12.43	6.43	8.40	6.98	11.98
147.22	-71.14	8.01	8.40	7.46	12.96	6.98	8.40	7.21	12.45	6.42	8.40	6.99	12.00
147.22	-70.95	8.01	8.40	7.45	12.94	6.98	8.40	7.20	12.43	6.43	8.40	6.98	11.99
147.22	-71.01	8.01	8.40	7.45	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.23	-70.99	8.01	8.40	7.45	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.23	-71.04	8.01	8.40	7.46	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.23	-70.96	8.01	8.40	7.45	12.94	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.23	-71.03	8.01	8.40	7.46	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.35	-70.93	8.01	8.40	7.45	12.94	6.98	8.40	7.20	12.43	6.43	8.40	6.98	11.98

147.35	-71.01	8.01	8.40	7.45	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.36	-70.94	8.01	8.40	7.45	12.94	6.98	8.40	7.20	12.43	6.43	8.40	6.98	11.99
147.63	-71.04	8.01	8.40	7.46	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.63	-70.94	8.01	8.40	7.45	12.94	6.98	8.40	7.20	12.43	6.43	8.40	6.98	11.99
147.63	-71.04	8.01	8.40	7.46	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.64	-70.92	8.01	8.40	7.45	12.94	6.98	8.40	7.20	12.43	6.43	8.40	6.98	11.98
147.65	-71.14	8.01	8.40	7.46	12.96	6.98	8.40	7.21	12.45	6.42	8.40	6.99	12.00
147.71	-70.09	8.02	8.40	7.42	12.88	6.99	8.40	7.18	12.37	6.43	8.40	6.96	11.93
147.72	-69.91	8.02	8.40	7.42	12.87	6.99	8.40	7.17	12.36	6.43	8.40	6.95	11.92
147.75	-70.85	8.01	8.40	7.45	12.93	6.99	8.40	7.20	12.43	6.43	8.40	6.98	11.98
147.76	-71.03	8.01	8.40	7.46	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.76	-70.91	8.01	8.40	7.45	12.94	6.98	8.40	7.20	12.43	6.43	8.40	6.98	11.98
147.78	-71.18	8.01	8.40	7.46	12.96	6.98	8.40	7.21	12.45	6.42	8.40	6.99	12.00
147.84	-70.01	8.02	8.40	7.42	12.87	6.99	8.40	7.17	12.37	6.43	8.40	6.95	11.92
147.87	-69.87	8.02	8.40	7.41	12.86	6.99	8.40	7.17	12.36	6.43	8.40	6.95	11.91
147.88	-70.57	8.02	8.40	7.44	12.91	6.99	8.40	7.19	12.41	6.43	8.40	6.97	11.96
147.88	-71.19	8.01	8.40	7.46	12.96	6.98	8.40	7.21	12.45	6.42	8.40	6.99	12.00
147.88	-70.84	8.01	8.40	7.45	12.93	6.99	8.40	7.20	12.43	6.43	8.40	6.98	11.98
147.92	-71.06	8.01	8.40	7.46	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.92	-71.00	8.01	8.40	7.45	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.93	-71.07	8.01	8.40	7.46	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.94	-70.93	8.01	8.40	7.45	12.94	6.98	8.40	7.20	12.43	6.43	8.40	6.98	11.98
147.95	-71.05	8.01	8.40	7.46	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
147.99	-70.22	8.02	8.40	7.43	12.89	6.99	8.40	7.18	12.38	6.43	8.40	6.96	11.94
148.00	-69.99	8.02	8.40	7.42	12.87	6.99	8.40	7.17	12.37	6.43	8.40	6.95	11.92
148.04	-70.06	8.02	8.40	7.42	12.88	6.99	8.40	7.17	12.37	6.43	8.40	6.95	11.93
148.04	-69.95	8.02	8.40	7.42	12.87	6.99	8.40	7.17	12.36	6.43	8.40	6.95	11.92
148.08	-70.83	8.01	8.40	7.45	12.93	6.99	8.40	7.20	12.43	6.43	8.40	6.98	11.98
148.08	-71.03	8.01	8.40	7.46	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
148.09	-70.88	8.01	8.40	7.45	12.94	6.98	8.40	7.20	12.43	6.43	8.40	6.98	11.98
148.11	-71.05	8.01	8.40	7.46	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
148.12	-70.97	8.01	8.40	7.45	12.94	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
148.14	-71.02	8.01	8.40	7.46	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
148.15	-70.98	8.01	8.40	7.45	12.94	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
148.16	-71.07	8.01	8.40	7.46	12.95	6.98	8.40	7.21	12.44	6.43	8.40	6.99	11.99
148.20	-70.13	8.02	8.40	7.42	12.88	6.99	8.40	7.18	12.38	6.43	8.40	6.96	11.93
148.25	-69.93	8.02	8.40	7.42	12.87	6.99	8.40	7.17	12.36	6.43	8.40	6.95	11.92
148.25	-70.06	8.02	8.40	7.42	12.88	6.99	8.40	7.17	12.37	6.43	8.40	6.95	11.93
148.26	-69.94	8.02	8.40	7.42	12.87	6.99	8.40	7.17	12.36	6.43	8.40	6.95	11.92
148.27	-70.11	8.02	8.40	7.42	12.88	6.99	8.40	7.18	12.38	6.43	8.40	6.96	11.93
148.27	-69.99	8.02	8.40	7.42	12.87	6.99	8.40	7.17	12.37	6.43	8.40	6.95	11.92
148.32	-70.91	8.01	8.40	7.45	12.94	6.98	8.40	7.20	12.43	6.43	8.40	6.98	11.98

148.38	-71.72	8.01	8.40	7.48	13.00	6.98	8.40	7.23	12.49	6.42	8.40	7.01	12.04
148.39	-72.18	8.00	8.40	7.50	13.03	6.98	8.40	7.25	12.52	6.42	8.40	7.03	12.07
148.39	-71.98	8.00	8.40	7.49	13.02	6.98	8.40	7.24	12.51	6.42	8.40	7.02	12.06
148.53	-72.88	8.00	8.40	7.52	13.08	6.97	8.40	7.27	12.57	6.41	8.40	7.05	12.12
148.53	-73.35	7.99	8.40	7.54	13.12	6.97	8.40	7.29	12.60	6.41	8.40	7.06	12.15
148.56	-72.98	8.00	8.40	7.52	13.09	6.97	8.40	7.27	12.58	6.41	8.40	7.05	12.12
148.56	-73.19	7.99	8.40	7.53	13.10	6.97	8.40	7.28	12.59	6.41	8.40	7.06	12.14
148.63	-72.96	8.00	8.40	7.52	13.09	6.97	8.40	7.27	12.57	6.41	8.40	7.05	12.12
148.63	-73.09	7.99	8.40	7.53	13.10	6.97	8.40	7.28	12.58	6.41	8.40	7.06	12.13
148.66	-72.81	8.00	8.40	7.52	13.08	6.97	8.40	7.27	12.56	6.41	8.40	7.05	12.11
148.66	-73.05	8.00	8.40	7.53	13.09	6.97	8.40	7.28	12.58	6.41	8.40	7.05	12.13
148.69	-72.92	8.00	8.40	7.52	13.09	6.97	8.40	7.27	12.57	6.41	8.40	7.05	12.12
148.69	-73.01	8.00	8.40	7.53	13.09	6.97	8.40	7.27	12.58	6.41	8.40	7.05	12.12
148.72	-72.90	8.00	8.40	7.52	13.08	6.97	8.40	7.27	12.57	6.41	8.40	7.05	12.12
148.73	-73.02	8.00	8.40	7.53	13.09	6.97	8.40	7.28	12.58	6.41	8.40	7.05	12.12
148.78	-72.81	8.00	8.40	7.52	13.08	6.97	8.40	7.27	12.56	6.41	8.40	7.05	12.11
148.79	-73.01	8.00	8.40	7.53	13.09	6.97	8.40	7.27	12.58	6.41	8.40	7.05	12.12
149.13	-72.91	8.00	8.40	7.52	13.08	6.97	8.40	7.27	12.57	6.41	8.40	7.05	12.12
149.13	-73.05	8.00	8.40	7.53	13.09	6.97	8.40	7.28	12.58	6.41	8.40	7.05	12.13
149.14	-72.84	8.00	8.40	7.52	13.08	6.97	8.40	7.27	12.57	6.41	8.40	7.05	12.11
149.14	-73.04	8.00	8.40	7.53	13.09	6.97	8.40	7.28	12.58	6.41	8.40	7.05	12.13
149.14	-72.97	8.00	8.40	7.52	13.09	6.97	8.40	7.27	12.58	6.41	8.40	7.05	12.12
149.15	-73.08	7.99	8.40	7.53	13.10	6.97	8.40	7.28	12.58	6.41	8.40	7.05	12.13
149.16	-72.91	8.00	8.40	7.52	13.08	6.97	8.40	7.27	12.57	6.41	8.40	7.05	12.12
149.17	-73.10	7.99	8.40	7.53	13.10	6.97	8.40	7.28	12.58	6.41	8.40	7.06	12.13
149.18	-72.97	8.00	8.40	7.52	13.09	6.97	8.40	7.27	12.57	6.41	8.40	7.05	12.12
149.19	-73.07	8.00	8.40	7.53	13.10	6.97	8.40	7.28	12.58	6.41	8.40	7.05	12.13
149.20	-73.00	8.00	8.40	7.52	13.09	6.97	8.40	7.27	12.58	6.41	8.40	7.05	12.12
149.21	-73.05	8.00	8.40	7.53	13.09	6.97	8.40	7.28	12.58	6.41	8.40	7.05	12.13
149.31	-72.92	8.00	8.40	7.52	13.08	6.97	8.40	7.27	12.57	6.41	8.40	7.05	12.12
149.32	-73.10	7.99	8.40	7.53	13.10	6.97	8.40	7.28	12.58	6.41	8.40	7.06	12.13
149.32	-72.91	8.00	8.40	7.52	13.08	6.97	8.40	7.27	12.57	6.41	8.40	7.05	12.12
149.35	-73.92	7.99	8.40	7.56	13.16	6.96	8.40	7.31	12.64	6.41	8.40	7.08	12.18
149.36	-74.07	7.99	8.40	7.56	13.17	6.96	8.40	7.31	12.65	6.41	8.40	7.09	12.19
149.36	-73.98	7.99	8.40	7.56	13.16	6.96	8.40	7.31	12.64	6.41	8.40	7.08	12.19
149.38	-74.91	7.98	8.40	7.59	13.23	6.96	8.40	7.34	12.71	6.40	8.40	7.11	12.25
149.39	-75.68	7.97	8.40	7.62	13.28	6.95	8.40	7.36	12.76	6.39	8.40	7.14	12.30
149.40	-76.95	7.96	8.40	7.66	13.37	6.94	8.40	7.41	12.84	6.39	8.40	7.18	12.38
149.41	-77.93	7.95	8.40	7.69	13.44	6.93	8.40	7.44	12.91	6.38	8.40	7.21	12.44
149.42	-78.97	7.95	8.40	7.73	13.51	6.93	8.40	7.47	12.98	6.37	8.40	7.24	12.51
149.43	-79.72	7.94	8.40	7.75	13.56	6.92	8.40	7.49	13.03	6.37	8.40	7.27	12.56
149.44	-80.66	7.93	8.40	7.78	13.62	6.91	8.40	7.52	13.09	6.36	8.40	7.29	12.62

149.45	-81.90	7.92	8.40	7.82	13.71	6.90	8.40	7.56	13.17	6.35	8.40	7.33	12.69
149.46	-82.61	7.92	8.40	7.85	13.75	6.90	8.40	7.59	13.21	6.35	8.40	7.35	12.74
149.47	-83.93	7.90	8.40	7.89	13.84	6.89	8.40	7.63	13.30	6.34	8.40	7.39	12.82
149.48	-84.98	7.90	8.40	7.92	13.91	6.88	8.40	7.66	13.37	6.33	8.40	7.42	12.88
149.49	-85.91	7.89	8.40	7.95	13.97	6.88	8.40	7.69	13.42	6.33	8.40	7.45	12.94
149.50	-86.59	7.88	8.40	7.97	14.02	6.87	8.40	7.71	13.47	6.32	8.40	7.47	12.98
149.52	-87.98	7.87	8.40	8.02	14.11	6.86	8.40	7.75	13.55	6.31	8.40	7.51	13.06
149.52	-88.53	7.87	8.40	8.03	14.14	6.86	8.40	7.76	13.59	6.31	8.40	7.53	13.10
149.54	-89.61	7.86	8.40	8.07	14.21	6.85	8.40	7.80	13.65	6.30	8.40	7.56	13.16
149.54	-90.13	7.85	8.40	8.08	14.24	6.84	8.40	7.81	13.68	6.30	8.40	7.57	13.19
149.54	-89.94	7.85	8.40	8.08	14.23	6.85	8.40	7.81	13.67	6.30	8.40	7.57	13.18
149.55	-90.06	7.85	8.40	8.08	14.24	6.85	8.40	7.81	13.68	6.30	8.40	7.57	13.19
149.55	-89.97	7.85	8.40	8.08	14.23	6.85	8.40	7.81	13.67	6.30	8.40	7.57	13.18
149.55	-90.41	7.85	8.40	8.09	14.26	6.84	8.40	7.82	13.70	6.30	8.40	7.58	13.21
149.56	-91.04	7.84	8.40	8.11	14.30	6.84	8.40	7.84	13.74	6.29	8.40	7.60	13.24
149.57	-90.65	7.85	8.40	8.10	14.28	6.84	8.40	7.83	13.72	6.29	8.40	7.59	13.22
149.61	-91.90	7.84	8.39	8.13	14.35	6.83	8.39	7.86	13.79	6.29	8.39	7.62	13.29
149.62	-92.25	7.83	8.39	8.15	14.38	6.83	8.39	7.87	13.81	6.28	8.39	7.63	13.31
149.62	-91.75	7.84	8.39	8.13	14.34	6.83	8.39	7.86	13.78	6.29	8.39	7.62	13.28
149.63	-92.20	7.84	8.39	8.14	14.37	6.83	8.39	7.87	13.81	6.28	8.39	7.63	13.31
149.64	-91.88	7.84	8.39	8.13	14.35	6.83	8.39	7.86	13.79	6.29	8.39	7.62	13.29
149.70	-92.81	7.83	8.39	8.16	14.41	6.82	8.39	7.89	13.85	6.28	8.39	7.65	13.35
149.71	-93.02	7.83	8.39	8.17	14.42	6.82	8.39	7.90	13.86	6.28	8.39	7.65	13.36
149.72	-92.96	7.83	8.39	8.17	14.42	6.82	8.39	7.89	13.85	6.28	8.39	7.65	13.35
149.72	-93.20	7.83	8.39	8.17	14.43	6.82	8.39	7.90	13.87	6.28	8.39	7.66	13.37
149.73	-92.94	7.83	8.39	8.17	14.42	6.82	8.39	7.89	13.85	6.28	8.39	7.65	13.35
149.74	-93.05	7.83	8.39	8.17	14.43	6.82	8.39	7.90	13.86	6.28	8.39	7.66	13.36
149.74	-92.97	7.83	8.39	8.17	14.42	6.82	8.39	7.89	13.85	6.28	8.39	7.65	13.36
149.83	-93.98	7.82	8.39	8.20	14.48	6.82	8.39	7.92	13.91	6.27	8.39	7.68	13.41
149.84	-94.89	7.81	8.39	8.22	14.54	6.81	8.39	7.95	13.97	6.27	8.39	7.71	13.46
149.88	-95.35	7.81	8.39	8.24	14.57	6.81	8.39	7.96	14.00	6.26	8.39	7.72	13.49
149.88	-94.93	7.81	8.39	8.22	14.54	6.81	8.39	7.95	13.97	6.27	8.39	7.71	13.47
149.89	-95.12	7.81	8.39	8.23	14.55	6.81	8.39	7.96	13.98	6.26	8.39	7.71	13.48
149.90	-94.96	7.81	8.39	8.23	14.54	6.81	8.39	7.95	13.97	6.26	8.39	7.71	13.47
150.04	-95.95	7.80	8.39	8.25	14.60	6.80	8.39	7.98	14.03	6.26	8.39	7.74	13.52
150.05	-96.04	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.04	6.26	8.39	7.74	13.53
150.07	-95.83	7.80	8.39	8.25	14.60	6.80	8.39	7.98	14.02	6.26	8.39	7.73	13.52
150.08	-96.06	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.04	6.26	8.39	7.74	13.53
150.14	-95.98	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.03	6.26	8.39	7.74	13.53
150.15	-96.06	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.04	6.26	8.39	7.74	13.53
150.16	-95.92	7.80	8.39	8.25	14.60	6.80	8.39	7.98	14.03	6.26	8.39	7.73	13.52
150.17	-96.07	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.04	6.26	8.39	7.74	13.53

150.18	-95.99	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.03	6.26	8.39	7.74	13.53
150.19	-96.10	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.04	6.26	8.39	7.74	13.53
150.20	-95.94	7.80	8.39	8.25	14.60	6.80	8.39	7.98	14.03	6.26	8.39	7.73	13.52
150.20	-96.10	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.04	6.26	8.39	7.74	13.53
150.20	-95.95	7.80	8.39	8.25	14.60	6.80	8.39	7.98	14.03	6.26	8.39	7.74	13.52
150.21	-96.12	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.04	6.26	8.39	7.74	13.53
150.21	-95.97	7.80	8.39	8.25	14.60	6.80	8.39	7.98	14.03	6.26	8.39	7.74	13.53
150.26	-96.08	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.04	6.26	8.39	7.74	13.53
150.26	-95.92	7.80	8.39	8.25	14.60	6.80	8.39	7.98	14.03	6.26	8.39	7.73	13.52
150.26	-96.05	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.04	6.26	8.39	7.74	13.53
150.27	-95.96	7.80	8.39	8.25	14.60	6.80	8.39	7.98	14.03	6.26	8.39	7.74	13.53
150.29	-96.02	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.03	6.26	8.39	7.74	13.53
150.30	-95.76	7.81	8.39	8.25	14.59	6.80	8.39	7.97	14.02	6.26	8.39	7.73	13.51
150.46	-96.04	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.04	6.26	8.39	7.74	13.53
150.46	-95.94	7.80	8.39	8.25	14.60	6.80	8.39	7.98	14.03	6.26	8.39	7.73	13.52
150.47	-96.07	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.04	6.26	8.39	7.74	13.53
150.49	-95.91	7.80	8.39	8.25	14.60	6.80	8.39	7.98	14.03	6.26	8.39	7.73	13.52
150.49	-96.00	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.03	6.26	8.39	7.74	13.53
150.49	-95.95	7.80	8.39	8.25	14.60	6.80	8.39	7.98	14.03	6.26	8.39	7.74	13.52
150.54	-96.81	7.80	8.39	8.28	14.66	6.80	8.39	8.00	14.08	6.25	8.39	7.76	13.57
150.55	-97.28	7.79	8.39	8.29	14.68	6.79	8.39	8.02	14.11	6.25	8.39	7.77	13.60
150.58	-96.62	7.80	8.39	8.27	14.64	6.80	8.39	8.00	14.07	6.25	8.39	7.75	13.56
150.62	-97.02	7.80	8.39	8.29	14.67	6.79	8.39	8.01	14.09	6.25	8.39	7.76	13.58
150.63	-96.82	7.80	8.39	8.28	14.66	6.80	8.39	8.00	14.08	6.25	8.39	7.76	13.57
150.66	-97.23	7.79	8.39	8.29	14.68	6.79	8.39	8.02	14.10	6.25	8.39	7.77	13.60
150.67	-96.83	7.80	8.39	8.28	14.66	6.80	8.39	8.00	14.08	6.25	8.39	7.76	13.57
150.68	-97.54	7.79	8.39	8.30	14.70	6.79	8.39	8.02	14.12	6.25	8.39	7.78	13.61
150.68	-98.03	7.79	8.39	8.31	14.73	6.79	8.39	8.04	14.15	6.24	8.39	7.79	13.64
150.68	-97.91	7.79	8.39	8.31	14.72	6.79	8.39	8.03	14.14	6.25	8.39	7.79	13.63
150.70	-98.04	7.79	8.39	8.31	14.73	6.79	8.39	8.04	14.15	6.24	8.39	7.79	13.64
150.72	-97.97	7.79	8.39	8.31	14.73	6.79	8.39	8.04	14.15	6.24	8.39	7.79	13.64
150.75	-98.23	7.78	8.39	8.32	14.74	6.79	8.39	8.04	14.16	6.24	8.39	7.80	13.65
150.75	-97.99	7.79	8.39	8.31	14.73	6.79	8.39	8.04	14.15	6.24	8.39	7.79	13.64
150.78	-98.05	7.79	8.39	8.32	14.73	6.79	8.39	8.04	14.15	6.24	8.39	7.79	13.64
150.79	-97.94	7.79	8.39	8.31	14.72	6.79	8.39	8.03	14.15	6.24	8.39	7.79	13.64
150.82	-98.06	7.79	8.39	8.32	14.73	6.79	8.39	8.04	14.15	6.24	8.39	7.79	13.64
150.83	-97.79	7.79	8.39	8.31	14.71	6.79	8.39	8.03	14.14	6.25	8.39	7.79	13.63
150.90	-98.32	7.78	8.39	8.32	14.75	6.78	8.39	8.05	14.17	6.24	8.39	7.80	13.66
150.92	-97.84	7.79	8.39	8.31	14.72	6.79	8.39	8.03	14.14	6.25	8.39	7.79	13.63
150.93	-98.65	7.78	8.39	8.33	14.77	6.78	8.39	8.05	14.19	6.24	8.39	7.81	13.68
150.96	-99.05	7.78	8.39	8.34	14.79	6.78	8.39	8.07	14.21	6.24	8.39	7.82	13.70
150.96	-98.93	7.78	8.39	8.34	14.78	6.78	8.39	8.06	14.20	6.24	8.39	7.82	13.69

150.98	-99.36	7.78	8.39	8.35	14.81	6.78	8.39	8.07	14.23	6.24	8.39	7.83	13.71
150.98	-98.99	7.78	8.39	8.34	14.79	6.78	8.39	8.06	14.21	6.24	8.39	7.82	13.69
150.98	-99.25	7.78	8.39	8.35	14.80	6.78	8.39	8.07	14.22	6.24	8.39	7.82	13.71
150.99	-98.27	7.78	8.39	8.32	14.74	6.79	8.39	8.04	14.16	6.24	8.39	7.80	13.65
150.99	-97.87	7.79	8.39	8.31	14.72	6.79	8.39	8.03	14.14	6.25	8.39	7.79	13.63
150.99	-98.71	7.78	8.39	8.33	14.77	6.78	8.39	8.06	14.19	6.24	8.39	7.81	13.68
151.00	-99.41	7.78	8.39	8.35	14.81	6.78	8.39	8.08	14.23	6.24	8.39	7.83	13.72
151.01	-100.83	7.76	8.39	8.39	14.90	6.77	8.39	8.11	14.31	6.23	8.39	7.87	13.80
151.01	-101.05	7.76	8.39	8.40	14.91	6.76	8.39	8.12	14.32	6.22	8.39	7.87	13.81
151.09	-100.94	7.76	8.39	8.40	14.90	6.77	8.39	8.12	14.32	6.22	8.39	7.87	13.80
151.09	-101.08	7.76	8.39	8.40	14.91	6.76	8.39	8.12	14.33	6.22	8.39	7.87	13.81
151.25	-100.98	7.76	8.39	8.40	14.90	6.77	8.39	8.12	14.32	6.22	8.39	7.87	13.80
151.27	-101.04	7.76	8.39	8.40	14.91	6.76	8.39	8.12	14.32	6.22	8.39	7.87	13.81
151.27	-101.00	7.76	8.39	8.40	14.91	6.77	8.39	8.12	14.32	6.22	8.39	7.87	13.80
151.41	-101.11	7.76	8.39	8.40	14.91	6.76	8.39	8.12	14.33	6.22	8.39	7.87	13.81
151.44	-100.95	7.76	8.39	8.40	14.90	6.77	8.39	8.12	14.32	6.22	8.39	7.87	13.80
151.45	-101.54	7.76	8.39	8.41	14.94	6.76	8.39	8.13	14.35	6.22	8.39	7.88	13.83
151.46	-102.85	7.75	8.39	8.45	15.01	6.75	8.39	8.17	14.43	6.21	8.39	7.92	13.91
151.47	-103.13	7.74	8.39	8.46	15.03	6.75	8.39	8.18	14.44	6.21	8.39	7.93	13.92
151.53	-102.04	7.75	8.39	8.43	14.97	6.76	8.39	8.15	14.38	6.22	8.39	7.90	13.86
151.56	-101.18	7.76	8.39	8.40	14.92	6.76	8.39	8.12	14.33	6.22	8.39	7.88	13.81
151.57	-100.88	7.76	8.39	8.40	14.90	6.77	8.39	8.12	14.31	6.23	8.39	7.87	13.80
151.57	-101.02	7.76	8.39	8.40	14.91	6.77	8.39	8.12	14.32	6.22	8.39	7.87	13.81
151.58	-100.72	7.76	8.39	8.39	14.89	6.77	8.39	8.11	14.31	6.23	8.39	7.86	13.79
151.59	-101.93	7.75	8.39	8.43	14.96	6.76	8.39	8.14	14.37	6.22	8.39	7.89	13.86
151.59	-102.18	7.75	8.39	8.43	14.98	6.76	8.39	8.15	14.39	6.22	8.39	7.90	13.87
151.60	-101.13	7.76	8.39	8.40	14.91	6.76	8.39	8.12	14.33	6.22	8.39	7.87	13.81
151.60	-100.98	7.76	8.39	8.40	14.90	6.77	8.39	8.12	14.32	6.22	8.39	7.87	13.80
151.61	-101.75	7.76	8.39	8.42	14.95	6.76	8.39	8.14	14.36	6.22	8.39	7.89	13.85
151.65	-102.85	7.75	8.39	8.45	15.02	6.75	8.39	8.17	14.43	6.21	8.39	7.92	13.91
151.65	-103.81	7.74	8.39	8.48	15.07	6.74	8.39	8.19	14.48	6.21	8.39	7.94	13.96
151.65	-104.44	7.73	8.39	8.49	15.11	6.74	8.39	8.21	14.51	6.20	8.39	7.96	13.99
151.66	-105.20	7.73	8.39	8.52	15.15	6.73	8.39	8.23	14.56	6.20	8.39	7.98	14.03
151.67	-106.14	7.72	8.39	8.54	15.21	6.73	8.39	8.26	14.61	6.19	8.39	8.00	14.08
151.67	-107.62	7.71	8.39	8.58	15.29	6.72	8.39	8.30	14.69	6.18	8.39	8.04	14.16
151.67	-108.18	7.70	8.39	8.60	15.32	6.71	8.39	8.31	14.72	6.18	8.39	8.06	14.19
151.68	-107.25	7.71	8.39	8.57	15.27	6.72	8.39	8.29	14.67	6.18	8.39	8.03	14.14
151.68	-106.04	7.72	8.39	8.54	15.20	6.73	8.39	8.25	14.60	6.19	8.39	8.00	14.08
151.77	-105.76	7.72	8.39	8.53	15.18	6.73	8.39	8.25	14.59	6.19	8.39	7.99	14.06
151.78	-106.33	7.72	8.39	8.55	15.22	6.73	8.39	8.26	14.62	6.19	8.39	8.01	14.09
151.79	-106.00	7.72	8.39	8.54	15.20	6.73	8.39	8.25	14.60	6.19	8.39	8.00	14.07
151.79	-106.06	7.72	8.39	8.54	15.20	6.73	8.39	8.25	14.60	6.19	8.39	8.00	14.08

151.86	-105.09	7.73	8.39	8.51	15.14	6.74	8.39	8.23	14.55	6.20	8.39	7.98	14.03
151.87	-104.15	7.74	8.39	8.49	15.09	6.74	8.39	8.20	14.50	6.20	8.39	7.95	13.98
151.87	-103.63	7.74	8.39	8.47	15.06	6.75	8.39	8.19	14.47	6.21	8.39	7.94	13.95
151.88	-104.87	7.73	8.39	8.51	15.13	6.74	8.39	8.22	14.54	6.20	8.39	7.97	14.01
151.88	-105.32	7.73	8.39	8.52	15.16	6.73	8.39	8.23	14.56	6.20	8.39	7.98	14.04
151.88	-106.14	7.72	8.39	8.54	15.20	6.73	8.39	8.26	14.61	6.19	8.39	8.00	14.08
151.88	-107.04	7.71	8.39	8.57	15.26	6.72	8.39	8.28	14.66	6.18	8.39	8.03	14.13
151.89	-106.99	7.71	8.39	8.56	15.25	6.72	8.39	8.28	14.66	6.18	8.39	8.03	14.13
151.89	-107.21	7.71	8.39	8.57	15.27	6.72	8.39	8.28	14.67	6.18	8.39	8.03	14.14
151.89	-106.97	7.71	8.39	8.56	15.25	6.72	8.39	8.28	14.65	6.18	8.39	8.02	14.13
151.90	-107.71	7.71	8.39	8.58	15.29	6.72	8.39	8.30	14.69	6.18	8.39	8.04	14.16
151.91	-108.32	7.70	8.39	8.60	15.33	6.71	8.39	8.31	14.73	6.18	8.39	8.06	14.20
151.95	-107.90	7.70	8.39	8.59	15.31	6.71	8.39	8.30	14.70	6.18	8.39	8.05	14.17
151.95	-108.17	7.70	8.39	8.60	15.32	6.71	8.39	8.31	14.72	6.18	8.39	8.06	14.19
151.96	-107.89	7.70	8.39	8.59	15.31	6.71	8.39	8.30	14.70	6.18	8.39	8.05	14.17
151.96	-108.19	7.70	8.39	8.60	15.32	6.71	8.39	8.31	14.72	6.18	8.39	8.06	14.19
151.97	-107.99	7.70	8.39	8.59	15.31	6.71	8.39	8.31	14.71	6.18	8.39	8.05	14.18
151.98	-108.14	7.70	8.39	8.60	15.32	6.71	8.39	8.31	14.72	6.18	8.39	8.05	14.19
151.99	-107.79	7.71	8.39	8.59	15.30	6.72	8.39	8.30	14.70	6.18	8.39	8.05	14.17
152.00	-108.07	7.70	8.39	8.59	15.32	6.71	8.39	8.31	14.71	6.18	8.39	8.05	14.18
152.02	-107.93	7.70	8.39	8.59	15.31	6.71	8.39	8.30	14.71	6.18	8.39	8.05	14.18
152.04	-108.03	7.70	8.39	8.59	15.31	6.71	8.39	8.31	14.71	6.18	8.39	8.05	14.18
152.04	-107.98	7.70	8.39	8.59	15.31	6.71	8.39	8.31	14.71	6.18	8.39	8.05	14.18
152.04	-108.02	7.70	8.39	8.59	15.31	6.71	8.39	8.31	14.71	6.18	8.39	8.05	14.18
152.04	-107.98	7.70	8.39	8.59	15.31	6.71	8.39	8.30	14.71	6.18	8.39	8.05	14.18
152.13	-108.14	7.70	8.39	8.60	15.32	6.71	8.39	8.31	14.72	6.18	8.39	8.05	14.19
152.14	-107.97	7.70	8.39	8.59	15.31	6.71	8.39	8.30	14.71	6.18	8.39	8.05	14.18
152.16	-108.18	7.70	8.39	8.60	15.32	6.71	8.39	8.31	14.72	6.18	8.39	8.06	14.19
152.17	-107.99	7.70	8.39	8.59	15.31	6.71	8.39	8.31	14.71	6.18	8.39	8.05	14.18
152.21	-108.20	7.70	8.39	8.60	15.32	6.71	8.39	8.31	14.72	6.18	8.39	8.06	14.19
152.21	-107.97	7.70	8.39	8.59	15.31	6.71	8.39	8.30	14.71	6.18	8.39	8.05	14.18
152.23	-108.05	7.70	8.39	8.59	15.31	6.71	8.39	8.31	14.71	6.18	8.39	8.05	14.18
152.24	-107.92	7.70	8.39	8.59	15.31	6.71	8.39	8.30	14.71	6.18	8.39	8.05	14.18
152.25	-108.11	7.70	8.39	8.59	15.32	6.71	8.39	8.31	14.72	6.18	8.39	8.05	14.19
152.31	-107.93	7.70	8.39	8.59	15.31	6.71	8.39	8.30	14.71	6.18	8.39	8.05	14.18
152.31	-108.01	7.70	8.39	8.59	15.31	6.71	8.39	8.31	14.71	6.18	8.39	8.05	14.18
152.32	-107.99	7.70	8.39	8.59	15.31	6.71	8.39	8.31	14.71	6.18	8.39	8.05	14.18
152.34	-109.00	7.70	8.39	8.62	15.37	6.71	8.39	8.33	14.76	6.17	8.39	8.08	14.23
152.35	-109.11	7.69	8.39	8.62	15.37	6.71	8.39	8.33	14.77	6.17	8.39	8.08	14.24
152.36	-108.84	7.70	8.39	8.61	15.36	6.71	8.39	8.33	14.76	6.17	8.39	8.07	14.22
152.36	-109.22	7.69	8.39	8.62	15.38	6.71	8.39	8.34	14.78	6.17	8.39	8.08	14.24
152.37	-108.77	7.70	8.39	8.61	15.35	6.71	8.39	8.33	14.75	6.17	8.39	8.07	14.22

152.38	-109.01	7.69	8.39	8.62	15.37	6.71	8.39	8.33	14.77	6.17	8.39	8.08	14.23
152.45	-108.74	7.70	8.39	8.61	15.35	6.71	8.39	8.32	14.75	6.17	8.39	8.07	14.22
152.57	-109.61	7.69	8.39	8.64	15.40	6.70	8.39	8.35	14.80	6.17	8.39	8.09	14.26
152.58	-110.01	7.69	8.39	8.65	15.42	6.70	8.39	8.36	14.82	6.16	8.39	8.10	14.28
152.61	-109.96	7.69	8.39	8.64	15.42	6.70	8.39	8.36	14.82	6.16	8.39	8.10	14.28
152.61	-110.12	7.69	8.39	8.65	15.43	6.70	8.39	8.36	14.83	6.16	8.39	8.10	14.29
152.61	-109.90	7.69	8.39	8.64	15.42	6.70	8.39	8.35	14.81	6.16	8.39	8.10	14.28
152.62	-110.04	7.69	8.39	8.65	15.43	6.70	8.39	8.36	14.82	6.16	8.39	8.10	14.29
152.63	-109.86	7.69	8.39	8.64	15.42	6.70	8.39	8.35	14.81	6.16	8.39	8.10	14.28
152.77	-110.74	7.68	8.39	8.67	15.47	6.69	8.39	8.38	14.86	6.16	8.39	8.12	14.32
152.77	-111.16	7.68	8.39	8.68	15.49	6.69	8.39	8.39	14.88	6.16	8.39	8.13	14.34
152.80	-111.00	7.68	8.39	8.67	15.48	6.69	8.39	8.38	14.87	6.16	8.39	8.13	14.34
152.80	-111.03	7.68	8.39	8.67	15.48	6.69	8.39	8.38	14.87	6.16	8.39	8.13	14.34
152.81	-110.92	7.68	8.39	8.67	15.48	6.69	8.39	8.38	14.87	6.16	8.39	8.12	14.33
152.82	-111.17	7.68	8.39	8.68	15.49	6.69	8.39	8.39	14.88	6.16	8.39	8.13	14.35
152.82	-110.98	7.68	8.39	8.67	15.48	6.69	8.39	8.38	14.87	6.16	8.39	8.13	14.34
152.90	-111.99	7.67	8.39	8.70	15.53	6.69	8.39	8.41	14.93	6.15	8.39	8.15	14.39
152.91	-112.04	7.67	8.39	8.70	15.54	6.68	8.39	8.41	14.93	6.15	8.39	8.15	14.39
152.93	-112.00	7.67	8.39	8.70	15.54	6.69	8.39	8.41	14.93	6.15	8.39	8.15	14.39
152.94	-112.13	7.67	8.39	8.70	15.54	6.68	8.39	8.41	14.93	6.15	8.39	8.15	14.39
152.94	-111.90	7.67	8.39	8.70	15.53	6.69	8.39	8.41	14.92	6.15	8.39	8.15	14.38
153.23	-112.97	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.17	14.44
153.24	-113.07	7.66	8.39	8.73	15.59	6.68	8.39	8.44	14.98	6.14	8.39	8.18	14.44
153.27	-112.81	7.66	8.39	8.72	15.58	6.68	8.39	8.43	14.97	6.15	8.39	8.17	14.43
153.27	-113.04	7.66	8.39	8.73	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.18	14.44
153.30	-112.98	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.17	14.44
153.31	-113.05	7.66	8.39	8.73	15.59	6.68	8.39	8.44	14.98	6.14	8.39	8.18	14.44
153.31	-112.86	7.66	8.39	8.72	15.58	6.68	8.39	8.43	14.97	6.14	8.39	8.17	14.43
153.31	-113.02	7.66	8.39	8.73	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.18	14.44
153.32	-112.98	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.18	14.44
153.33	-113.06	7.66	8.39	8.73	15.59	6.68	8.39	8.44	14.98	6.14	8.39	8.18	14.44
153.33	-112.94	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.17	14.44
153.33	-113.07	7.66	8.39	8.73	15.59	6.68	8.39	8.44	14.98	6.14	8.39	8.18	14.44
153.34	-112.98	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.17	14.44
153.34	-113.05	7.66	8.39	8.73	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.18	14.44
153.35	-112.86	7.66	8.39	8.72	15.58	6.68	8.39	8.43	14.97	6.14	8.39	8.17	14.43
153.35	-113.10	7.66	8.39	8.73	15.60	6.68	8.39	8.44	14.98	6.14	8.39	8.18	14.44
153.35	-113.00	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.18	14.44
153.37	-113.15	7.66	8.39	8.73	15.60	6.68	8.39	8.44	14.99	6.14	8.39	8.18	14.45
153.37	-112.97	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.17	14.44
153.52	-113.04	7.66	8.39	8.73	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.18	14.44
153.52	-112.87	7.66	8.39	8.72	15.58	6.68	8.39	8.43	14.97	6.14	8.39	8.17	14.43

153.63	-113.11	7.66	8.39	8.73	15.60	6.68	8.39	8.44	14.99	6.14	8.39	8.18	14.44
153.64	-112.90	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.97	6.14	8.39	8.17	14.43
153.67	-113.14	7.66	8.39	8.73	15.60	6.68	8.39	8.44	14.99	6.14	8.39	8.18	14.45
153.67	-112.97	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.17	14.44
153.68	-113.01	7.66	8.39	8.73	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.18	14.44
153.70	-112.95	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.17	14.44
153.70	-113.15	7.66	8.39	8.73	15.60	6.68	8.39	8.44	14.99	6.14	8.39	8.18	14.45
153.86	-112.24	7.67	8.39	8.70	15.55	6.68	8.39	8.41	14.94	6.15	8.39	8.16	14.40
153.87	-111.77	7.67	8.39	8.69	15.52	6.69	8.39	8.40	14.91	6.15	8.39	8.15	14.38
153.88	-112.96	7.66	8.39	8.72	15.59	6.68	8.39	8.43	14.98	6.14	8.39	8.17	14.44
153.88	-113.14	7.66	8.39	8.73	15.60	6.68	8.39	8.44	14.99	6.14	8.39	8.18	14.45
154.40	-112.09	7.67	8.39	8.70	15.54	6.68	8.39	8.41	14.93	6.15	8.39	8.15	14.39
154.40	-111.96	7.67	8.39	8.70	15.53	6.69	8.39	8.41	14.92	6.15	8.39	8.15	14.39
154.42	-112.07	7.67	8.39	8.70	15.54	6.68	8.39	8.41	14.93	6.15	8.39	8.15	14.39
154.42	-111.93	7.67	8.39	8.70	15.53	6.69	8.39	8.41	14.92	6.15	8.39	8.15	14.38
154.43	-112.03	7.67	8.39	8.70	15.54	6.68	8.39	8.41	14.93	6.15	8.39	8.15	14.39
154.43	-111.98	7.67	8.39	8.70	15.53	6.69	8.39	8.41	14.93	6.15	8.39	8.15	14.39
154.44	-112.10	7.67	8.39	8.70	15.54	6.68	8.39	8.41	14.93	6.15	8.39	8.15	14.39
154.45	-111.95	7.67	8.39	8.70	15.53	6.69	8.39	8.41	14.92	6.15	8.39	8.15	14.39
154.45	-112.08	7.67	8.39	8.70	15.54	6.68	8.39	8.41	14.93	6.15	8.39	8.15	14.39
154.46	-111.91	7.67	8.39	8.70	15.53	6.69	8.39	8.41	14.92	6.15	8.39	8.15	14.38
154.46	-112.04	7.67	8.39	8.70	15.54	6.68	8.39	8.41	14.93	6.15	8.39	8.15	14.39
154.63	-111.06	7.68	8.39	8.67	15.48	6.69	8.39	8.38	14.88	6.16	8.39	8.13	14.34
154.64	-110.96	7.68	8.39	8.67	15.48	6.69	8.39	8.38	14.87	6.16	8.39	8.13	14.33
154.65	-111.15	7.68	8.39	8.68	15.49	6.69	8.39	8.39	14.88	6.16	8.39	8.13	14.34
154.66	-110.88	7.68	8.39	8.67	15.47	6.69	8.39	8.38	14.87	6.16	8.39	8.12	14.33
154.66	-111.07	7.68	8.39	8.67	15.48	6.69	8.39	8.38	14.88	6.16	8.39	8.13	14.34
154.76	-110.01	7.69	8.39	8.65	15.42	6.70	8.39	8.36	14.82	6.16	8.39	8.10	14.29
154.77	-109.99	7.69	8.39	8.65	15.42	6.70	8.39	8.36	14.82	6.16	8.39	8.10	14.28
154.78	-110.06	7.69	8.39	8.65	15.43	6.70	8.39	8.36	14.82	6.16	8.39	8.10	14.29
154.87	-109.11	7.69	8.39	8.62	15.37	6.71	8.39	8.33	14.77	6.17	8.39	8.08	14.24
154.87	-109.00	7.70	8.39	8.62	15.37	6.71	8.39	8.33	14.76	6.17	8.39	8.08	14.23
154.87	-109.12	7.69	8.39	8.62	15.37	6.71	8.39	8.33	14.77	6.17	8.39	8.08	14.24
154.88	-108.74	7.70	8.39	8.61	15.35	6.71	8.39	8.32	14.75	6.17	8.39	8.07	14.22
154.88	-109.09	7.69	8.39	8.62	15.37	6.71	8.39	8.33	14.77	6.17	8.39	8.08	14.24
154.89	-108.95	7.70	8.39	8.62	15.37	6.71	8.39	8.33	14.76	6.17	8.39	8.08	14.23
154.89	-109.02	7.69	8.39	8.62	15.37	6.71	8.39	8.33	14.77	6.17	8.39	8.08	14.23
154.96	-108.18	7.70	8.39	8.60	15.32	6.71	8.39	8.31	14.72	6.18	8.39	8.06	14.19
155.04	-107.23	7.71	8.39	8.57	15.27	6.72	8.39	8.29	14.67	6.18	8.39	8.03	14.14
155.04	-106.83	7.71	8.39	8.56	15.24	6.72	8.39	8.27	14.65	6.19	8.39	8.02	14.12
155.05	-107.06	7.71	8.39	8.57	15.26	6.72	8.39	8.28	14.66	6.18	8.39	8.03	14.13
155.07	-106.92	7.71	8.39	8.56	15.25	6.72	8.39	8.28	14.65	6.18	8.39	8.02	14.12

155.07	-107.01	7.71	8.39	8.57	15.25	6.72	8.39	8.28	14.66	6.18	8.39	8.03	14.13
155.13	-106.15	7.72	8.39	8.54	15.21	6.73	8.39	8.26	14.61	6.19	8.39	8.00	14.08
155.13	-105.98	7.72	8.39	8.54	15.20	6.73	8.39	8.25	14.60	6.19	8.39	8.00	14.07
155.15	-106.05	7.72	8.39	8.54	15.20	6.73	8.39	8.25	14.60	6.19	8.39	8.00	14.08
155.16	-105.72	7.72	8.39	8.53	15.18	6.73	8.39	8.25	14.59	6.19	8.39	7.99	14.06
155.16	-106.08	7.72	8.39	8.54	15.20	6.73	8.39	8.26	14.61	6.19	8.39	8.00	14.08
155.20	-105.21	7.73	8.39	8.52	15.15	6.73	8.39	8.23	14.56	6.20	8.39	7.98	14.03
155.20	-104.94	7.73	8.39	8.51	15.14	6.74	8.39	8.22	14.54	6.20	8.39	7.97	14.02
155.21	-105.40	7.73	8.39	8.52	15.16	6.73	8.39	8.24	14.57	6.19	8.39	7.98	14.04
155.22	-104.74	7.73	8.39	8.50	15.12	6.74	8.39	8.22	14.53	6.20	8.39	7.97	14.01
155.23	-105.31	7.73	8.39	8.52	15.16	6.73	8.39	8.23	14.56	6.20	8.39	7.98	14.04
155.25	-104.98	7.73	8.39	8.51	15.14	6.74	8.39	8.23	14.54	6.20	8.39	7.97	14.02
155.25	-105.18	7.73	8.39	8.52	15.15	6.73	8.39	8.23	14.56	6.20	8.39	7.98	14.03
155.29	-104.25	7.73	8.39	8.49	15.10	6.74	8.39	8.21	14.50	6.20	8.39	7.96	13.98
155.29	-103.94	7.74	8.39	8.48	15.08	6.74	8.39	8.20	14.49	6.20	8.39	7.95	13.96
155.30	-104.05	7.74	8.39	8.48	15.08	6.74	8.39	8.20	14.49	6.20	8.39	7.95	13.97
155.30	-104.00	7.74	8.39	8.48	15.08	6.74	8.39	8.20	14.49	6.20	8.39	7.95	13.97
155.31	-104.06	7.74	8.39	8.48	15.09	6.74	8.39	8.20	14.49	6.20	8.39	7.95	13.97
155.31	-103.85	7.74	8.39	8.48	15.07	6.74	8.39	8.20	14.48	6.21	8.39	7.95	13.96
155.32	-104.09	7.74	8.39	8.49	15.09	6.74	8.39	8.20	14.49	6.20	8.39	7.95	13.97
155.34	-103.90	7.74	8.39	8.48	15.08	6.74	8.39	8.20	14.48	6.20	8.39	7.95	13.96
155.35	-104.17	7.74	8.39	8.49	15.09	6.74	8.39	8.20	14.50	6.20	8.39	7.95	13.98
155.35	-103.66	7.74	8.39	8.47	15.06	6.75	8.39	8.19	14.47	6.21	8.39	7.94	13.95
155.35	-102.66	7.75	8.39	8.45	15.00	6.75	8.39	8.16	14.41	6.21	8.39	7.91	13.90
155.37	-103.15	7.74	8.39	8.46	15.03	6.75	8.39	8.18	14.44	6.21	8.39	7.93	13.92
155.38	-102.84	7.75	8.39	8.45	15.01	6.75	8.39	8.17	14.43	6.21	8.39	7.92	13.91
155.39	-103.23	7.74	8.39	8.46	15.04	6.75	8.39	8.18	14.45	6.21	8.39	7.93	13.93
155.39	-102.55	7.75	8.39	8.44	15.00	6.75	8.39	8.16	14.41	6.21	8.39	7.91	13.89
155.40	-103.06	7.74	8.39	8.46	15.03	6.75	8.39	8.17	14.44	6.21	8.39	7.92	13.92
155.42	-102.20	7.75	8.39	8.43	14.98	6.76	8.39	8.15	14.39	6.22	8.39	7.90	13.87
155.43	-101.72	7.76	8.39	8.42	14.95	6.76	8.39	8.14	14.36	6.22	8.39	7.89	13.84
155.43	-102.04	7.75	8.39	8.43	14.97	6.76	8.39	8.15	14.38	6.22	8.39	7.90	13.86
155.46	-101.26	7.76	8.39	8.41	14.92	6.76	8.39	8.13	14.34	6.22	8.39	7.88	13.82
155.48	-100.39	7.77	8.39	8.38	14.87	6.77	8.39	8.10	14.29	6.23	8.39	7.85	13.77
155.49	-99.91	7.77	8.39	8.37	14.84	6.77	8.39	8.09	14.26	6.23	8.39	7.84	13.74
155.50	-100.24	7.77	8.39	8.38	14.86	6.77	8.39	8.10	14.28	6.23	8.39	7.85	13.76
155.50	-99.98	7.77	8.39	8.37	14.85	6.77	8.39	8.09	14.26	6.23	8.39	7.84	13.75
155.51	-100.20	7.77	8.39	8.38	14.86	6.77	8.39	8.10	14.28	6.23	8.39	7.85	13.76
155.51	-99.34	7.78	8.39	8.35	14.81	6.78	8.39	8.07	14.23	6.24	8.39	7.83	13.71
155.52	-98.62	7.78	8.39	8.33	14.76	6.78	8.39	8.05	14.19	6.24	8.39	7.81	13.67
155.53	-99.45	7.77	8.39	8.36	14.81	6.78	8.39	8.08	14.23	6.23	8.39	7.83	13.72
155.55	-98.22	7.79	8.39	8.32	14.74	6.79	8.39	8.04	14.16	6.24	8.39	7.80	13.65

155.55	-97.87	7.79	8.39	8.31	14.72	6.79	8.39	8.03	14.14	6.25	8.39	7.79	13.63
155.56	-98.45	7.78	8.39	8.33	14.75	6.78	8.39	8.05	14.18	6.24	8.39	7.80	13.66
155.56	-97.81	7.79	8.39	8.31	14.72	6.79	8.39	8.03	14.14	6.25	8.39	7.79	13.63
155.57	-98.26	7.78	8.39	8.32	14.74	6.79	8.39	8.04	14.16	6.24	8.39	7.80	13.65
155.57	-97.78	7.79	8.39	8.31	14.71	6.79	8.39	8.03	14.14	6.25	8.39	7.78	13.63
155.57	-98.21	7.79	8.39	8.32	14.74	6.79	8.39	8.04	14.16	6.24	8.39	7.80	13.65
155.57	-98.21	7.79	8.39	8.32	14.74	6.79	8.39	8.04	14.16	6.24	8.39	7.80	13.65
155.58	-100.39	7.77	8.39	8.38	14.87	6.77	8.39	8.10	14.29	6.23	8.39	7.85	13.77
155.59	-99.21	7.78	8.39	8.35	14.80	6.78	8.39	8.07	14.22	6.24	8.39	7.82	13.71
155.60	-98.08	7.79	8.39	8.32	14.73	6.79	8.39	8.04	14.15	6.24	8.39	7.79	13.64
155.61	-97.51	7.79	8.39	8.30	14.70	6.79	8.39	8.02	14.12	6.25	8.39	7.78	13.61
155.61	-96.99	7.80	8.39	8.28	14.67	6.79	8.39	8.01	14.09	6.25	8.39	7.76	13.58
155.62	-97.60	7.79	8.39	8.30	14.70	6.79	8.39	8.03	14.13	6.25	8.39	7.78	13.62
155.63	-98.74	7.78	8.39	8.33	14.77	6.78	8.39	8.06	14.19	6.24	8.39	7.81	13.68
155.63	-99.51	7.77	8.39	8.36	14.82	6.78	8.39	8.08	14.24	6.23	8.39	7.83	13.72
155.64	-98.04	7.79	8.39	8.31	14.73	6.79	8.39	8.04	14.15	6.24	8.39	7.79	13.64
155.67	-97.17	7.79	8.39	8.29	14.68	6.79	8.39	8.01	14.10	6.25	8.39	7.77	13.59
155.68	-96.87	7.80	8.39	8.28	14.66	6.80	8.39	8.01	14.08	6.25	8.39	7.76	13.58
155.69	-97.66	7.79	8.39	8.30	14.71	6.79	8.39	8.03	14.13	6.25	8.39	7.78	13.62
155.70	-98.43	7.78	8.39	8.33	14.75	6.78	8.39	8.05	14.17	6.24	8.39	7.80	13.66
155.71	-97.30	7.79	8.39	8.29	14.69	6.79	8.39	8.02	14.11	6.25	8.39	7.77	13.60
155.72	-96.63	7.80	8.39	8.27	14.64	6.80	8.39	8.00	14.07	6.25	8.39	7.75	13.56
155.73	-97.20	7.79	8.39	8.29	14.68	6.79	8.39	8.01	14.10	6.25	8.39	7.77	13.59
155.74	-96.29	7.80	8.39	8.26	14.62	6.80	8.39	7.99	14.05	6.26	8.39	7.74	13.54
155.75	-95.44	7.81	8.39	8.24	14.57	6.81	8.39	7.96	14.00	6.26	8.39	7.72	13.50
155.75	-94.67	7.81	8.39	8.22	14.53	6.81	8.39	7.94	13.96	6.27	8.39	7.70	13.45
155.75	-95.50	7.81	8.39	8.24	14.58	6.81	8.39	7.97	14.00	6.26	8.39	7.72	13.50
155.77	-96.04	7.80	8.39	8.26	14.61	6.80	8.39	7.98	14.04	6.26	8.39	7.74	13.53
155.77	-95.81	7.81	8.39	8.25	14.59	6.80	8.39	7.98	14.02	6.26	8.39	7.73	13.52
155.78	-96.29	7.80	8.39	8.26	14.62	6.80	8.39	7.99	14.05	6.26	8.39	7.74	13.54
155.78	-95.66	7.81	8.39	8.25	14.59	6.80	8.39	7.97	14.01	6.26	8.39	7.73	13.51
155.79	-96.50	7.80	8.39	8.27	14.64	6.80	8.39	7.99	14.06	6.25	8.39	7.75	13.56
155.79	-97.16	7.79	8.39	8.29	14.68	6.79	8.39	8.01	14.10	6.25	8.39	7.77	13.59
155.80	-96.20	7.80	8.39	8.26	14.62	6.80	8.39	7.99	14.05	6.26	8.39	7.74	13.54
155.80	-96.20	7.80	8.39	8.26	14.62	6.80	8.39	7.99	14.05	6.26	8.39	7.74	13.54
155.80	-94.50	7.82	8.39	8.21	14.52	6.81	8.39	7.94	13.95	6.27	8.39	7.70	13.44
155.80	-93.93	7.82	8.39	8.20	14.48	6.82	8.39	7.92	13.91	6.27	8.39	7.68	13.41
155.80	-93.93	7.82	8.39	8.20	14.48	6.82	8.39	7.92	13.91	6.27	8.39	7.68	13.41
155.81	-95.10	7.81	8.39	8.23	14.55	6.81	8.39	7.96	13.98	6.26	8.39	7.71	13.48
155.81	-94.07	7.82	8.39	8.20	14.49	6.82	8.39	7.93	13.92	6.27	8.39	7.68	13.42
155.82	-93.63	7.82	8.39	8.19	14.46	6.82	8.39	7.91	13.89	6.27	8.39	7.67	13.39
155.83	-94.98	7.81	8.39	8.23	14.54	6.81	8.39	7.95	13.97	6.26	8.39	7.71	13.47

155.85	-95.08	7.81	8.39	8.23	14.55	6.81	8.39	7.95	13.98	6.26	8.39	7.71	13.48
155.85	-94.99	7.81	8.39	8.23	14.54	6.81	8.39	7.95	13.97	6.26	8.39	7.71	13.47
155.86	-95.46	7.81	8.39	8.24	14.57	6.81	8.39	7.97	14.00	6.26	8.39	7.72	13.50
155.87	-96.27	7.80	8.39	8.26	14.62	6.80	8.39	7.99	14.05	6.26	8.39	7.74	13.54
155.88	-95.19	7.81	8.39	8.23	14.56	6.81	8.39	7.96	13.99	6.26	8.39	7.71	13.48
155.90	-94.21	7.82	8.39	8.20	14.50	6.81	8.39	7.93	13.93	6.27	8.39	7.69	13.43
155.90	-93.09	7.83	8.39	8.17	14.43	6.82	8.39	7.90	13.86	6.28	8.39	7.66	13.36
155.91	-92.77	7.83	8.39	8.16	14.41	6.83	8.39	7.89	13.84	6.28	8.39	7.65	13.34
155.91	-93.40	7.83	8.39	8.18	14.45	6.82	8.39	7.91	13.88	6.28	8.39	7.66	13.38
155.92	-92.83	7.83	8.39	8.16	14.41	6.82	8.39	7.89	13.85	6.28	8.39	7.65	13.35
155.92	-93.91	7.82	8.39	8.19	14.48	6.82	8.39	7.92	13.91	6.27	8.39	7.68	13.41
155.93	-94.30	7.82	8.39	8.21	14.50	6.81	8.39	7.93	13.93	6.27	8.39	7.69	13.43
155.94	-93.61	7.82	8.39	8.19	14.46	6.82	8.39	7.91	13.89	6.27	8.39	7.67	13.39
155.94	-94.39	7.82	8.39	8.21	14.51	6.81	8.39	7.94	13.94	6.27	8.39	7.69	13.44
155.95	-95.10	7.81	8.39	8.23	14.55	6.81	8.39	7.96	13.98	6.26	8.39	7.71	13.48
155.96	-94.33	7.82	8.39	8.21	14.50	6.81	8.39	7.93	13.94	6.27	8.39	7.69	13.43
155.97	-93.15	7.83	8.39	8.17	14.43	6.82	8.39	7.90	13.86	6.28	8.39	7.66	13.37
155.99	-92.68	7.83	8.39	8.16	14.40	6.83	8.39	7.89	13.84	6.28	8.39	7.64	13.34
156.00	-93.25	7.83	8.39	8.17	14.44	6.82	8.39	7.90	13.87	6.28	8.39	7.66	13.37
156.00	-92.76	7.83	8.39	8.16	14.41	6.83	8.39	7.89	13.84	6.28	8.39	7.65	13.34
156.00	-91.40	7.84	8.39	8.12	14.32	6.84	8.39	7.85	13.76	6.29	8.39	7.61	13.26
156.01	-90.67	7.85	8.40	8.10	14.28	6.84	8.40	7.83	13.72	6.29	8.40	7.59	13.22
156.02	-91.74	7.84	8.39	8.13	14.34	6.83	8.39	7.86	13.78	6.29	8.39	7.62	13.28
156.03	-92.77	7.83	8.39	8.16	14.41	6.83	8.39	7.89	13.84	6.28	8.39	7.65	13.34
156.03	-93.55	7.82	8.39	8.18	14.46	6.82	8.39	7.91	13.89	6.27	8.39	7.67	13.39
156.04	-94.25	7.82	8.39	8.20	14.50	6.81	8.39	7.93	13.93	6.27	8.39	7.69	13.43
156.05	-93.03	7.83	8.39	8.17	14.42	6.82	8.39	7.90	13.86	6.28	8.39	7.65	13.36
156.08	-92.05	7.84	8.39	8.14	14.36	6.83	8.39	7.87	13.80	6.28	8.39	7.63	13.30
156.08	-91.86	7.84	8.39	8.13	14.35	6.83	8.39	7.86	13.79	6.29	8.39	7.62	13.29
156.10	-92.39	7.83	8.39	8.15	14.38	6.83	8.39	7.88	13.82	6.28	8.39	7.64	13.32
156.11	-91.89	7.84	8.39	8.13	14.35	6.83	8.39	7.86	13.79	6.29	8.39	7.62	13.29
156.12	-92.03	7.84	8.39	8.14	14.36	6.83	8.39	7.87	13.80	6.28	8.39	7.63	13.30
156.12	-91.95	7.84	8.39	8.14	14.36	6.83	8.39	7.86	13.79	6.29	8.39	7.62	13.30
156.12	-92.02	7.84	8.39	8.14	14.36	6.83	8.39	7.87	13.80	6.28	8.39	7.63	13.30
156.13	-91.49	7.84	8.39	8.12	14.33	6.83	8.39	7.85	13.77	6.29	8.39	7.61	13.27
156.14	-92.09	7.84	8.39	8.14	14.37	6.83	8.39	7.87	13.80	6.28	8.39	7.63	13.30
156.19	-91.04	7.85	8.40	8.11	14.30	6.84	8.40	7.84	13.74	6.29	8.40	7.60	13.24
156.20	-90.92	7.85	8.40	8.11	14.29	6.84	8.40	7.84	13.73	6.29	8.40	7.60	13.24
156.21	-91.17	7.84	8.40	8.11	14.31	6.84	8.40	7.84	13.75	6.29	8.40	7.60	13.25
156.24	-90.21	7.85	8.40	8.08	14.25	6.84	8.40	7.81	13.69	6.30	8.40	7.58	13.19
156.24	-89.98	7.85	8.40	8.08	14.23	6.85	8.40	7.81	13.67	6.30	8.40	7.57	13.18
156.25	-90.05	7.85	8.40	8.08	14.24	6.85	8.40	7.81	13.68	6.30	8.40	7.57	13.19

156.26	-89.93	7.85	8.40	8.08	14.23	6.85	8.40	7.81	13.67	6.30	8.40	7.57	13.18
156.26	-90.18	7.85	8.40	8.08	14.25	6.84	8.40	7.81	13.69	6.30	8.40	7.57	13.19
156.32	-89.18	7.86	8.40	8.05	14.18	6.85	8.40	7.78	13.63	6.30	8.40	7.55	13.13
156.33	-88.95	7.86	8.40	8.05	14.17	6.85	8.40	7.78	13.61	6.31	8.40	7.54	13.12
156.33	-89.01	7.86	8.40	8.05	14.17	6.85	8.40	7.78	13.62	6.30	8.40	7.54	13.12
156.34	-88.79	7.86	8.40	8.04	14.16	6.85	8.40	7.77	13.60	6.31	8.40	7.53	13.11
156.34	-89.19	7.86	8.40	8.05	14.18	6.85	8.40	7.78	13.63	6.30	8.40	7.55	13.14
156.36	-88.21	7.87	8.40	8.02	14.12	6.86	8.40	7.76	13.57	6.31	8.40	7.52	13.08
156.36	-87.91	7.87	8.40	8.01	14.10	6.86	8.40	7.75	13.55	6.31	8.40	7.51	13.06
156.38	-88.02	7.87	8.40	8.02	14.11	6.86	8.40	7.75	13.55	6.31	8.40	7.51	13.07
156.38	-88.00	7.87	8.40	8.02	14.11	6.86	8.40	7.75	13.55	6.31	8.40	7.51	13.06
156.39	-88.11	7.87	8.40	8.02	14.11	6.86	8.40	7.75	13.56	6.31	8.40	7.52	13.07
156.40	-87.86	7.87	8.40	8.01	14.10	6.86	8.40	7.74	13.54	6.31	8.40	7.51	13.06
156.41	-88.06	7.87	8.40	8.02	14.11	6.86	8.40	7.75	13.56	6.31	8.40	7.51	13.07
156.41	-87.11	7.88	8.40	7.99	14.05	6.87	8.40	7.72	13.50	6.32	8.40	7.49	13.01
156.41	-86.97	7.88	8.40	7.98	14.04	6.87	8.40	7.72	13.49	6.32	8.40	7.48	13.00
156.43	-87.30	7.88	8.40	7.99	14.06	6.87	8.40	7.73	13.51	6.32	8.40	7.49	13.02
156.44	-86.94	7.88	8.40	7.98	14.04	6.87	8.40	7.72	13.49	6.32	8.40	7.48	13.00
156.44	-87.10	7.88	8.40	7.99	14.05	6.87	8.40	7.72	13.50	6.32	8.40	7.49	13.01
156.48	-86.01	7.89	8.40	7.95	13.98	6.87	8.40	7.69	13.43	6.33	8.40	7.45	12.95
156.52	-85.28	7.89	8.40	7.93	13.93	6.88	8.40	7.67	13.38	6.33	8.40	7.43	12.90
156.55	-84.42	7.90	8.40	7.90	13.87	6.89	8.40	7.64	13.33	6.34	8.40	7.41	12.85
156.55	-83.93	7.90	8.40	7.89	13.84	6.89	8.40	7.63	13.30	6.34	8.40	7.39	12.82
156.56	-84.12	7.90	8.40	7.89	13.85	6.89	8.40	7.63	13.31	6.34	8.40	7.40	12.83
156.59	-83.13	7.91	8.40	7.86	13.79	6.90	8.40	7.60	13.25	6.34	8.40	7.37	12.77
156.61	-82.39	7.92	8.40	7.84	13.74	6.90	8.40	7.58	13.20	6.35	8.40	7.35	12.72
156.61	-81.92	7.92	8.40	7.82	13.71	6.90	8.40	7.56	13.17	6.35	8.40	7.33	12.70
156.62	-82.24	7.92	8.40	7.83	13.73	6.90	8.40	7.57	13.19	6.35	8.40	7.34	12.72
156.65	-81.16	7.93	8.40	7.80	13.66	6.91	8.40	7.54	13.12	6.36	8.40	7.31	12.65
156.67	-80.17	7.94	8.40	7.77	13.59	6.92	8.40	7.51	13.06	6.36	8.40	7.28	12.59
156.68	-79.96	7.94	8.40	7.76	13.58	6.92	8.40	7.50	13.04	6.37	8.40	7.27	12.57
156.68	-80.02	7.94	8.40	7.76	13.58	6.92	8.40	7.50	13.05	6.37	8.40	7.27	12.58
156.72	-79.19	7.94	8.40	7.73	13.52	6.92	8.40	7.48	12.99	6.37	8.40	7.25	12.52
156.74	-78.17	7.95	8.40	7.70	13.45	6.93	8.40	7.44	12.93	6.38	8.40	7.22	12.46
156.78	-77.11	7.96	8.40	7.67	13.38	6.94	8.40	7.41	12.86	6.38	8.40	7.18	12.39
156.80	-76.17	7.97	8.40	7.63	13.32	6.95	8.40	7.38	12.79	6.39	8.40	7.15	12.33
156.85	-75.01	7.98	8.40	7.59	13.23	6.95	8.40	7.34	12.71	6.40	8.40	7.12	12.26
156.88	-74.07	7.99	8.40	7.56	13.17	6.96	8.40	7.31	12.65	6.41	8.40	7.09	12.19
156.89	-73.98	7.99	8.40	7.56	13.16	6.96	8.40	7.31	12.64	6.41	8.40	7.08	12.19
156.90	-74.03	7.99	8.40	7.56	13.16	6.96	8.40	7.31	12.65	6.41	8.40	7.09	12.19
156.93	-73.18	7.99	8.40	7.53	13.10	6.97	8.40	7.28	12.59	6.41	8.40	7.06	12.14
156.93	-72.99	8.00	8.40	7.52	13.09	6.97	8.40	7.27	12.58	6.41	8.40	7.05	12.12

156.94	-73.05	8.00	8.40	7.53	13.09	6.97	8.40	7.28	12.58	6.41	8.40	7.05	12.13
156.94	-72.98	8.00	8.40	7.52	13.09	6.97	8.40	7.27	12.58	6.41	8.40	7.05	12.12
156.95	-73.03	8.00	8.40	7.53	13.09	6.97	8.40	7.28	12.58	6.41	8.40	7.05	12.13
156.96	-72.15	8.00	8.40	7.50	13.03	6.98	8.40	7.25	12.52	6.42	8.40	7.02	12.07
156.99	-71.20	8.01	8.40	7.46	12.96	6.98	8.40	7.21	12.45	6.42	8.40	6.99	12.00
157.00	-70.20	8.02	8.40	7.43	12.89	6.99	8.40	7.18	12.38	6.43	8.40	6.96	11.94
157.02	-69.05	8.03	8.40	7.38	12.80	7.00	8.40	7.14	12.30	6.44	8.40	6.92	11.86
157.05	-68.93	8.03	8.40	7.38	12.79	7.00	8.40	7.13	12.29	6.44	8.40	6.92	11.85
157.05	-69.05	8.03	8.40	7.38	12.80	7.00	8.40	7.14	12.30	6.44	8.40	6.92	11.86
157.08	-68.09	8.04	8.40	7.35	12.73	7.01	8.40	7.11	12.23	6.45	8.40	6.89	11.79
157.08	-67.96	8.04	8.40	7.34	12.72	7.01	8.40	7.10	12.22	6.45	8.40	6.88	11.78
157.08	-68.03	8.04	8.40	7.35	12.73	7.01	8.40	7.10	12.23	6.45	8.40	6.89	11.79
157.11	-67.09	8.04	8.40	7.31	12.66	7.01	8.40	7.07	12.16	6.45	8.40	6.85	11.72
157.16	-66.06	8.05	8.40	7.28	12.58	7.02	8.40	7.03	12.08	6.46	8.40	6.82	11.65
157.20	-65.01	8.06	8.40	7.24	12.50	7.03	8.40	6.99	12.01	6.47	8.40	6.78	11.57
157.22	-64.03	8.07	8.40	7.20	12.42	7.03	8.40	6.96	11.93	6.47	8.40	6.75	11.50
157.23	-63.31	8.08	8.40	7.17	12.37	7.04	8.40	6.93	11.88	6.48	8.40	6.72	11.45
157.24	-62.92	8.08	8.40	7.16	12.34	7.04	8.40	6.92	11.85	6.48	8.40	6.71	11.42
157.26	-63.20	8.08	8.40	7.17	12.36	7.04	8.40	6.93	11.87	6.48	8.40	6.72	11.44
157.27	-62.08	8.09	8.40	7.12	12.27	7.05	8.40	6.89	11.79	6.49	8.40	6.68	11.36
157.27	-61.87	8.09	8.40	7.12	12.25	7.05	8.40	6.88	11.77	6.49	8.40	6.67	11.35
157.28	-62.21	8.09	8.40	7.13	12.28	7.05	8.40	6.89	11.80	6.48	8.40	6.68	11.37
157.28	-61.93	8.09	8.40	7.12	12.26	7.05	8.40	6.88	11.78	6.49	8.40	6.67	11.35
157.29	-62.01	8.09	8.40	7.12	12.26	7.05	8.40	6.88	11.78	6.49	8.40	6.67	11.36
157.31	-61.16	8.09	8.40	7.09	12.20	7.06	8.40	6.85	11.72	6.49	8.40	6.64	11.30
157.33	-60.27	8.10	8.40	7.05	12.12	7.06	8.40	6.82	11.65	6.50	8.40	6.61	11.23
157.35	-59.04	8.11	8.40	7.00	12.03	7.07	8.40	6.77	11.55	6.51	8.40	6.56	11.14
157.36	-58.21	8.12	8.40	6.97	11.96	7.08	8.40	6.74	11.49	6.51	8.40	6.53	11.07
157.37	-57.81	8.12	8.40	6.95	11.92	7.08	8.40	6.72	11.46	6.51	8.40	6.52	11.04
157.38	-58.13	8.12	8.40	6.97	11.95	7.08	8.40	6.74	11.48	6.51	8.40	6.53	11.07
157.47	-57.25	8.13	8.40	6.93	11.88	7.08	8.40	6.70	11.41	6.52	8.40	6.50	11.00
157.49	-56.24	8.14	8.40	6.89	11.79	7.09	8.40	6.66	11.33	6.52	8.40	6.46	10.92
157.49	-55.96	8.14	8.40	6.88	11.77	7.09	8.40	6.65	11.31	6.53	8.40	6.45	10.90
157.51	-56.14	8.14	8.40	6.89	11.79	7.09	8.40	6.66	11.32	6.53	8.40	6.45	10.91
157.51	-56.00	8.14	8.40	6.88	11.77	7.09	8.40	6.65	11.31	6.53	8.40	6.45	10.90
157.52	-56.00	8.14	8.40	6.88	11.77	7.09	8.40	6.65	11.31	6.53	8.40	6.45	10.90
157.55	-55.10	8.14	8.40	6.84	11.70	7.10	8.40	6.61	11.24	6.53	8.40	6.41	10.83
157.57	-54.92	8.15	8.40	6.83	11.68	7.10	8.40	6.61	11.22	6.53	8.40	6.41	10.82
157.59	-55.15	8.14	8.40	6.84	11.70	7.10	8.40	6.62	11.24	6.53	8.40	6.42	10.84
157.62	-54.13	8.15	8.40	6.80	11.62	7.11	8.40	6.58	11.16	6.54	8.40	6.38	10.76
157.67	-53.07	8.16	8.40	6.76	11.52	7.11	8.40	6.53	11.07	6.55	8.40	6.33	10.67
157.71	-52.18	8.17	8.40	6.72	11.45	7.12	8.40	6.49	11.00	6.55	8.40	6.30	10.60

157.76	-51.07	8.18	8.40	6.67	11.35	7.13	8.40	6.45	10.90	6.56	8.40	6.25	10.51
157.80	-50.01	8.19	8.40	6.62	11.25	7.14	8.40	6.40	10.81	6.57	8.40	6.21	10.42
157.84	-49.10	8.19	8.40	6.58	11.17	7.14	8.40	6.36	10.73	6.57	8.40	6.17	10.34
157.89	-48.03	8.20	8.40	6.53	11.07	7.15	8.40	6.32	10.64	6.58	8.40	6.12	10.25
157.94	-47.03	8.21	8.40	6.49	10.98	7.16	8.40	6.27	10.55	6.59	8.40	6.08	10.17
157.98	-46.18	8.22	8.40	6.45	10.90	7.16	8.40	6.23	10.47	6.59	8.40	6.04	10.09
158.03	-45.22	8.23	8.40	6.40	10.81	7.17	8.40	6.19	10.38	6.60	8.40	6.00	10.01
158.04	-44.92	8.23	8.40	6.39	10.78	7.17	8.40	6.17	10.36	6.60	8.40	5.99	9.98
158.04	-45.05	8.23	8.40	6.39	10.79	7.17	8.40	6.18	10.37	6.60	8.40	5.99	10.00
158.07	-44.07	8.24	8.40	6.35	10.70	7.18	8.40	6.13	10.28	6.61	8.40	5.95	9.91
158.08	-44.00	8.24	8.40	6.34	10.69	7.18	8.40	6.13	10.27	6.61	8.40	5.94	9.90
158.09	-44.12	8.24	8.40	6.35	10.70	7.18	8.40	6.14	10.28	6.61	8.40	5.95	9.91
158.15	-43.09	8.25	8.40	6.30	10.60	7.19	8.40	6.09	10.19	6.61	8.40	5.90	9.82
158.16	-42.32	8.25	8.40	6.26	10.53	7.19	8.40	6.05	10.11	6.62	8.40	5.87	9.75
158.16	-41.67	8.26	8.40	6.23	10.46	7.20	8.40	6.02	10.05	6.62	8.40	5.84	9.69
158.18	-42.00	8.25	8.40	6.24	10.49	7.20	8.40	6.04	10.08	6.62	8.40	5.85	9.72
158.20	-41.95	8.25	8.40	6.24	10.49	7.20	8.40	6.03	10.08	6.62	8.40	5.85	9.71
158.21	-42.09	8.25	8.40	6.25	10.50	7.19	8.40	6.04	10.09	6.62	8.40	5.86	9.73
158.23	-41.13	8.26	8.40	6.20	10.41	7.20	8.40	5.99	10.00	6.63	8.40	5.81	9.64
158.24	-40.90	8.26	8.40	6.19	10.38	7.20	8.40	5.98	9.98	6.63	8.40	5.80	9.62
158.24	-41.07	8.26	8.40	6.20	10.40	7.20	8.40	5.99	9.99	6.63	8.40	5.81	9.63
158.24	-40.55	8.27	8.40	6.17	10.35	7.21	8.40	5.97	9.94	6.63	8.40	5.78	9.58
158.25	-39.86	8.27	8.40	6.13	10.28	7.21	8.40	5.93	9.87	6.63	8.40	5.75	9.52
158.25	-40.55	8.27	8.40	6.17	10.35	7.21	8.40	5.97	9.94	6.63	8.40	5.78	9.58
158.26	-41.11	8.26	8.40	6.20	10.40	7.20	8.40	5.99	10.00	6.63	8.40	5.81	9.64
158.27	-40.10	8.27	8.40	6.15	10.30	7.21	8.40	5.94	9.90	6.63	8.40	5.76	9.54
158.28	-39.69	8.27	8.40	6.13	10.26	7.21	8.40	5.92	9.86	6.64	8.40	5.74	9.50
158.28	-40.27	8.27	8.40	6.16	10.32	7.21	8.40	5.95	9.91	6.63	8.40	5.77	9.56
158.29	-39.03	8.28	8.40	6.09	10.19	7.22	8.40	5.89	9.79	6.64	8.40	5.71	9.44
158.32	-38.06	8.29	8.40	6.04	10.09	7.22	8.40	5.84	9.69	6.65	8.40	5.66	9.34
158.35	-37.00	8.30	8.40	5.98	9.98	7.23	8.40	5.78	9.58	6.65	8.40	5.61	9.24
158.38	-36.04	8.30	8.40	5.93	9.87	7.24	8.40	5.73	9.48	6.66	8.40	5.56	9.14
158.40	-35.07	8.31	8.40	5.88	9.76	7.25	8.40	5.68	9.38	6.67	8.40	5.51	9.04
158.43	-34.01	8.32	8.40	5.81	9.64	7.25	8.40	5.62	9.27	6.67	8.40	5.45	8.93
158.46	-33.04	8.33	8.40	5.76	9.53	7.26	8.40	5.57	9.16	6.68	8.40	5.40	8.83
158.49	-32.07	8.34	8.40	5.70	9.42	7.27	8.40	5.51	9.05	6.69	8.40	5.34	8.72
158.52	-31.02	8.35	8.40	5.64	9.30	7.28	8.40	5.45	8.93	6.69	8.40	5.28	8.61
158.55	-30.05	8.35	8.40	5.58	9.18	7.28	8.40	5.39	8.82	6.70	8.40	5.23	8.50
158.57	-29.08	8.36	8.41	5.52	9.06	7.29	8.41	5.33	8.70	6.71	8.41	5.17	8.39
158.60	-28.02	8.37	8.41	5.45	8.93	7.30	8.41	5.27	8.58	6.71	8.41	5.11	8.27
158.63	-27.05	8.38	8.41	5.38	8.80	7.30	8.41	5.21	8.46	6.72	8.41	5.05	8.15
158.66	-26.08	8.39	8.41	5.32	8.67	7.31	8.41	5.14	8.33	6.73	8.41	4.99	8.03

158.69	-25.03	8.40	8.41	5.24	8.53	7.32	8.41	5.07	8.20	6.73	8.41	4.92	7.90
158.72	-24.06	8.40	8.41	5.18	8.40	7.33	8.41	5.00	8.07	6.74	8.41	4.85	7.78
158.75	-23.00	8.41	8.41	5.10	8.25	7.33	8.41	4.93	7.92	6.75	8.41	4.78	7.64
158.77	-22.03	8.42	8.41	5.02	8.11	7.34	8.41	4.86	7.79	6.75	8.41	4.71	7.51
158.80	-21.07	8.43	8.41	4.95	7.96	7.35	8.41	4.78	7.65	6.76	8.41	4.64	7.37
158.83	-20.01	8.44	8.41	4.86	7.80	7.36	8.41	4.70	7.49	6.77	8.41	4.56	7.22
158.86	-19.04	8.45	8.41	4.78	7.65	7.36	8.41	4.62	7.35	6.77	8.41	4.48	7.08
158.89	-18.07	8.45	8.41	4.70	7.49	7.37	8.41	4.54	7.20	6.78	8.41	4.41	6.94
158.92	-17.01	8.46	8.41	4.61	7.31	7.38	8.41	4.45	7.02	6.79	8.41	4.32	6.77
158.94	-16.05	8.47	8.41	4.52	7.14	7.38	8.41	4.37	6.86	6.79	8.41	4.23	6.61
158.97	-15.08	8.48	8.41	4.42	6.97	7.39	8.41	4.28	6.69	6.80	8.41	4.15	6.45
159.00	-14.02	8.49	8.41	4.32	6.77	7.40	8.41	4.17	6.50	6.81	8.41	4.05	6.27
159.03	-13.05	8.50	8.41	4.21	6.58	7.41	8.41	4.07	6.32	6.81	8.41	3.95	6.09
159.06	-12.08	8.50	8.41	4.11	6.38	7.41	8.41	3.97	6.13	6.82	8.41	3.85	5.90
159.09	-11.03	8.51	8.41	3.98	6.15	7.42	8.41	3.85	5.90	6.83	8.41	3.73	5.69
159.11	-10.06	8.52	8.41	3.86	5.92	7.43	8.41	3.73	5.69	6.83	8.41	3.62	5.49
159.14	-9.09	8.53	8.41	3.73	5.69	7.43	8.41	3.61	5.47	6.84	8.41	3.50	5.27
159.17	-8.03	8.54	8.41	3.58	5.41	7.44	8.41	3.46	5.20	6.85	8.41	3.36	5.01
159.20	-7.06	8.55	8.41	3.43	5.14	7.45	8.41	3.32	4.94	6.85	8.41	3.21	4.76
159.23	-6.01	8.55	8.41	3.25	4.82	7.46	8.41	3.14	4.63	6.86	8.41	3.04	4.46
159.26	-5.04	8.56	8.41	3.06	4.49	7.46	8.41	2.96	4.32	6.87	8.41	2.87	4.16
159.28	-4.07	8.57	8.41	2.85	4.13	7.47	8.41	2.76	3.96	6.87	8.41	2.67	3.82
159.31	-3.01	8.58	8.41	2.58	3.66	7.48	8.41	2.49	3.51	6.88	8.41	2.42	3.39
159.34	-2.04	8.59	8.41	2.26	3.13	7.49	8.41	2.19	3.01	6.89	8.41	2.12	2.90
159.37	-1.07	8.60	8.41	1.82	2.42	7.49	8.41	1.76	2.33	6.89	8.41	1.71	2.24
159.40	-0.02	8.60	8.41	0.47	0.47	7.50	8.41	0.45	0.45	6.90	8.41	0.44	0.44

ANNEX C

Detailed results of On Bottom Stability are reported below

WD	KP	Hs	Tp	V	Us	Tu	Vc	teta_w	teta_c	Uw	Vc_red	Gc	M	N	K	Y_tau	L10	Sg	Ws	Weight	D_ext	t_concr
[m]	[m]	[m]	[s]	[m/s]	[m/s]	[s]	[m/s]	[deg]	[deg]	[m/s]	[m/s]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[N/m]	[N/m]	[m]	[mm]
-6.653	9.402	4.110	9.400	0.560	2.082	8.015	0.501	-14.340	-14.340	2.082	0.501	0.000	0.241	0.026	17.881	13.301	0.753	2.139	7840.9	7858.1	0.933	183
-6.679	9.412	4.110	9.400	0.560	2.076	8.018	0.501	-14.340	-14.340	2.076	0.501	0.000	0.241	0.026	17.877	13.296	0.753	2.137	7789.9	7802.1	0.931	182
-8.880	10.252	4.110	9.400	0.560	1.699	8.229	0.494	-24.816	-24.816	1.699	0.494	0.000	0.291	0.021	16.948	12.968	0.777	1.926	4982.0	5007.3	0.825	129
-8.906	10.262	4.110	9.400	0.560	1.696	8.232	0.494	-25.171	-25.171	1.696	0.494	0.000	0.291	0.021	16.957	12.964	0.777	1.925	4955.0	4957.8	0.823	128
-11.080	11.092	4.110	9.400	0.560	1.436	8.414	0.491	-25.171	-25.171	1.436	0.491	0.000	0.342	0.017	15.627	12.694	0.833	1.791	3736.8	3759.6	0.773	103
-11.106	11.102	4.110	9.400	0.560	1.433	8.416	0.491	-25.171	-25.171	1.433	0.491	0.000	0.342	0.017	15.602	12.691	0.834	1.789	3729.5	3759.6	0.773	103
-13.542	12.032	4.110	9.400	0.560	1.218	8.597	0.488	-25.171	-25.171	1.218	0.488	0.000	0.400	0.014	14.280	12.434	0.886	1.670	2846.6	2855.0	0.733	83
-13.568	12.042	5.110	10.200	0.490	1.604	9.214	0.430	-25.171	-25.171	1.604	0.430	0.000	0.268	0.018	18.630	11.636	0.785	1.851	4228.9	4229.8	0.793	113
-16.001	13.352	5.110	10.200	0.490	1.400	9.373	0.428	-27.263	-27.263	1.400	0.428	0.000	0.305	0.015	17.516	11.447	0.794	1.717	3181.7	3211.1	0.749	91
-16.040	13.362	5.110	10.200	0.490	1.397	9.375	0.428	-27.919	-27.919	1.397	0.428	0.000	0.306	0.015	17.531	11.444	0.795	1.717	3163.6	3166.1	0.747	90
-18.457	14.242	5.110	10.200	0.490	1.235	9.518	0.426	-27.921	-27.921	1.235	0.426	0.000	0.345	0.013	16.303	11.279	0.833	1.629	2586.3	2593.0	0.721	77
-18.490	14.252	5.110	10.200	0.490	1.233	9.520	0.426	-27.923	-27.923	1.233	0.426	0.000	0.345	0.013	16.280	11.277	0.834	1.628	2581.8	2593.0	0.721	77
-20.860	14.702	5.110	10.200	0.490	1.102	9.649	0.425	-27.434	-27.434	1.102	0.425	0.000	0.386	0.012	15.036	11.133	0.906	1.575	2272.1	2292.8	0.707	70
-20.949	14.712	5.110	10.200	0.490	1.098	9.654	0.425	-25.624	-25.624	1.098	0.425	0.000	0.387	0.012	14.982	11.128	0.908	1.572	2261.9	2292.8	0.707	70
-23.337	15.002	5.110	10.200	0.490	0.986	9.774	0.423	-23.903	-23.903	0.986	0.423	0.000	0.429	0.010	14.071	10.997	0.900	1.490	1816.5	1833.0	0.685	59
-23.428	15.012	5.110	10.200	0.490	0.983	9.778	0.423	-22.185	-22.185	0.983	0.423	0.000	0.431	0.010	14.022	10.992	0.898	1.486	1801.5	1833.0	0.685	59
-25.692	15.312	4.280	9.500	0.570	0.681	9.360	0.491	-20.409	-20.409	0.681	0.491	0.000	0.721	0.007	9.523	11.461	1.274	1.424	1501.5	1507.7	0.669	51
-25.781	15.322	5.620	10.600	0.470	1.023	10.191	0.407	-18.631	-18.631	1.023	0.407	0.000	0.398	0.010	15.038	10.568	0.925	1.521	1978.6	1998.5	0.693	63
-28.062	15.622	5.620	10.600	0.470	0.936	10.291	0.406	-16.856	-16.856	0.936	0.406	0.000	0.433	0.009	14.220	10.470	0.913	1.454	1645.3	1669.4	0.677	55
-28.159	15.632	5.620	10.600	0.470	0.932	10.295	0.406	-15.080	-15.080	0.932	0.406	0.000	0.435	0.009	14.173	10.466	0.912	1.450	1632.6	1669.4	0.677	55
-30.429	15.942	6.490	11.400	0.540	1.075	10.985	0.487	-13.247	-13.247	1.075	0.487	0.170	0.452	0.010	14.527	9.840	1.654	1.918	4799.9	4819.1	0.813	123
-30.501	15.952	6.490	11.400	0.540	1.073	10.988	0.487	-11.413	-11.413	1.073	0.487	0.170	0.453	0.010	14.531	9.837	1.654	1.917	4769.6	4770.3	0.811	122
-32.795	16.232	6.490	11.400	0.540	0.993	11.081	0.485	-9.751	-9.751	0.993	0.485	0.175	0.488	0.009	13.983	9.759	1.688	1.850	4164.3	4194.5	0.787	110
-32.891	16.242	6.490	11.400	0.540	0.990	11.085	0.485	-8.093	-8.093	0.990	0.485	0.176	0.490	0.009	13.979	9.756	1.688	1.848	4133.7	4147.2	0.785	109
-35.170	16.512	6.490	11.400	0.540	0.920	11.172	0.484	-6.486	-6.486	0.920	0.484	0.180	0.526	0.008	13.426	9.684	1.738	1.796	3681.7	3681.8	0.765	99
-35.247	16.522	6.490	11.400	0.540	0.917	11.175	0.484	-4.882	-4.882	0.917	0.484	0.180	0.528	0.008	13.396	9.681	1.740	1.794	3672.4	3681.8	0.765	99
-36.424	16.652	6.490	11.400	0.540	0.884	11.219	0.483	-4.079	-4.079	0.884	0.483	0.182	0.547	0.008	13.092	9.645	1.773	1.770	3488.0	3498.9	0.757	95
-36.499	16.662	6.490	11.400	0.540	0.882	11.221	0.483	-3.278	-3.278	0.882	0.483	0.182	0.548	0.008	13.064	9.643	1.775	1.768	3479.7	3498.9	0.757	95
-37.683	16.792	6.490	11.400	0.540	0.849	11.264	0.483	-2.475	-2.475	0.849	0.483	0.184	0.569	0.008	12.771	9.608	1.809	1.746	3309.0	3318.0	0.749	91
-37.779	16.802	6.490	11.400	0.540	0.847	11.268	0.483	-1.672	-1.672	0.847	0.483	0.184	0.570	0.008	12.737	9.606	1.812	1.744	3299.3	3318.0	0.749	91
-38.954	16.922	6.490	11.400	0.540	0.817	11.309	0.483	-0.928	-0.928	0.817	0.483	0.186	0.591	0.007	12.427	9.572	1.847	1.722	3153.0	3183.6	0.743	88
-39.029	16.932	6.490	11.400	0.540	0.815	11.312	0.483	-0.182	-0.182	0.815	0.483	0.186	0.592	0.007	12.435	9.570	1.849	1.722	3135.9	3139.0	0.741	87
-40.174	17.052	6.490	11.400	0.540	0.787	11.352	0.482	-179.438	-179.438	0.787	0.482	0.188	0.613	0.007	12.148	9.538	1.873	1.699	2984.6	3006.1	0.735	84
-40.289	17.062	6.490	11.400	0.540	0.784	11.356	0.482	-178.693	-178.693	0.784	0.482	0.188	0.615	0.007	12.109	9.535	1.875	1.696	2971.6	3006.1	0.735	84
-41.443	17.162	6.490	11.400	0.540	0.757	11.395	0.482	-178.063	-178.063	0.757	0.482	0.190	0.636	0.007	11.864	9.504	1.889	1.672	2808.2	2830.4	0.727	80
-41.562	17.172	6.490	11.400	0.540	0.754	11.399	0.482	-177.431	-177.431	0.754	0.482	0.190	0.638	0.007	11.859	9.501	1.890	1.670	2786.5	2786.8	0.725	79
-44.748	17.482	6.490	11.400	0.540	0.687	11.503	0.480	-175.600	-175.600	0.687	0.480	0.195	0.700	0.006	11.167	9.419	1.924	1.607	2397.5	2399.8	0.707	70

-44.837	17.492	6.950	11.700	0.490	0.766	11.732	0.437	-173.766	-173.766	0.766	0.437	0.192	0.570	0.007	12.497	9.245	1.855	1.649	2652.7	2656.7	0.719	76
-47.999	17.782	6.950	11.700	0.490	0.701	11.830	0.436	-172.047	-172.047	0.701	0.436	0.196	0.621	0.006	11.766	9.173	1.928	1.600	2357.4	2357.4	0.705	69
-48.108	17.792	6.950	11.700	0.490	0.699	11.833	0.436	-170.329	-170.329	0.699	0.436	0.196	0.623	0.006	11.734	9.171	1.929	1.598	2348.3	2357.4	0.705	69
-51.317	18.102	6.950	11.700	0.490	0.641	11.928	0.435	-168.495	-168.495	0.641	0.435	0.199	0.679	0.005	11.024	9.102	2.001	1.552	2096.3	2105.5	0.693	63
-51.412	18.112	6.950	11.700	0.490	0.639	11.931	0.435	-166.660	-166.660	0.639	0.435	0.199	0.681	0.005	10.998	9.100	2.003	1.551	2090.7	2105.5	0.693	63
-54.561	18.422	6.950	11.700	0.490	0.587	12.020	0.435	-164.828	-164.828	0.587	0.435	0.202	0.740	0.005	10.335	9.036	2.077	1.511	1885.3	1898.9	0.683	58
-54.643	18.432	6.950	11.700	0.490	0.586	12.022	0.435	-162.993	-162.993	0.586	0.435	0.202	0.741	0.005	10.315	9.034	2.079	1.510	1881.4	1898.9	0.683	58
-57.890	18.772	6.950	11.700	0.490	0.538	12.112	0.434	-160.989	-160.989	0.538	0.434	0.204	0.806	0.005	9.655	8.971	2.164	1.475	1710.7	1735.7	0.675	54
-57.998	18.782	6.950	11.700	0.490	0.537	12.115	0.434	-158.980	-158.980	0.537	0.434	0.204	0.809	0.005	9.630	8.969	2.169	1.474	1707.2	1735.7	0.675	54
-60.308	19.062	6.950	11.700	0.490	0.506	12.177	0.434	-157.322	-157.322	0.506	0.434	0.206	0.858	0.004	9.200	8.926	2.252	1.456	1614.2	1614.6	0.669	51
-60.358	19.072	7.620	12.300	0.480	0.611	12.641	0.426	-155.658	-155.658	0.611	0.426	0.201	0.697	0.005	11.272	8.616	2.016	1.519	1924.0	1939.9	0.685	59
-62.745	19.422	7.620	12.300	0.480	0.577	12.705	0.425	-153.598	-153.598	0.577	0.425	0.203	0.737	0.005	10.797	8.576	2.067	1.493	1798.0	1817.1	0.679	56
-62.814	19.432	7.620	12.300	0.480	0.576	12.706	0.425	-151.536	-151.536	0.576	0.425	0.203	0.738	0.005	10.781	8.575	2.069	1.492	1795.2	1817.1	0.679	56
-65.217	19.922	7.620	12.300	0.480	0.545	12.769	0.425	-148.670	-148.670	0.545	0.425	0.205	0.781	0.004	10.329	8.535	2.123	1.469	1681.2	1695.2	0.673	53
-65.271	19.932	7.620	12.300	0.480	0.544	12.770	0.425	-145.806	-145.806	0.544	0.425	0.205	0.782	0.004	10.317	8.534	2.125	1.469	1679.3	1695.2	0.673	53
-67.637	20.522	7.620	12.300	0.480	0.515	12.830	0.425	-145.635	-145.635	0.515	0.425	0.206	0.826	0.004	9.868	8.497	2.192	1.450	1591.7	1614.6	0.669	51
-67.684	20.532	7.620	12.300	0.480	0.514	12.832	0.425	-145.639	-145.639	0.514	0.425	0.206	0.826	0.004	9.858	8.496	2.194	1.449	1590.4	1614.6	0.669	51
-70.031	21.112	7.620	12.300	0.480	0.487	12.890	0.425	-145.634	-145.634	0.487	0.425	0.207	0.872	0.004	9.438	8.460	2.268	1.433	1514.2	1534.5	0.665	49
-70.156	21.122	7.620	12.300	0.480	0.486	12.893	0.425	-145.635	-145.635	0.486	0.425	0.207	0.874	0.004	9.413	8.458	2.272	1.432	1510.9	1534.5	0.665	49
-71.389	21.462	7.620	12.300	0.480	0.472	12.924	0.425	-145.634	-145.634	0.472	0.425	0.208	0.899	0.004	9.200	8.439	2.311	1.424	1473.1	1494.6	0.663	48
-71.484	21.472	7.620	12.300	0.480	0.471	12.926	0.425	-145.631	-145.631	0.471	0.425	0.208	0.901	0.004	9.182	8.437	2.314	1.423	1470.8	1494.6	0.663	48
-72.740	21.782	7.620	12.300	0.480	0.458	12.957	0.424	-145.634	-145.634	0.458	0.424	0.209	0.927	0.004	8.971	8.419	2.354	1.415	1433.7	1454.9	0.661	47
-72.780	21.792	7.620	12.300	0.480	0.457	12.958	0.424	-145.635	-145.635	0.457	0.424	0.209	0.928	0.004	8.964	8.418	2.355	1.415	1432.7	1454.9	0.661	47
-74.100	22.232	7.620	12.300	0.480	0.444	12.990	0.424	-145.634	-145.634	0.444	0.424	0.209	0.956	0.003	8.747	8.399	2.397	1.406	1395.4	1415.2	0.659	46
-74.160	22.242	7.620	12.300	0.480	0.443	12.991	0.424	-145.639	-145.639	0.443	0.424	0.209	0.957	0.003	8.737	8.398	2.399	1.406	1394.0	1415.2	0.659	46
-75.393	22.632	7.620	12.300	0.480	0.431	13.021	0.424	-145.634	-145.634	0.431	0.424	0.210	0.984	0.003	8.542	8.380	2.437	1.398	1360.0	1375.7	0.657	45
-75.534	22.642	7.620	12.300	0.480	0.430	13.024	0.424	-145.635	-145.635	0.430	0.424	0.210	0.987	0.003	8.517	8.378	2.442	1.398	1356.9	1375.7	0.657	45
-76.783	23.102	7.620	12.300	0.480	0.418	13.054	0.424	-145.634	-145.634	0.418	0.424	0.211	1.015	0.003	8.326	8.360	2.478	1.390	1322.2	1336.3	0.655	44
-76.800	23.112	7.620	12.300	0.480	0.418	13.054	0.424	-145.631	-145.631	0.418	0.424	0.211	1.015	0.003	8.323	8.359	2.479	1.390	1321.8	1336.3	0.655	44
-77.277	23.432	7.620	12.300	0.480	0.413	13.066	0.424	-145.634	-145.634	0.413	0.424	0.211	1.026	0.003	8.242	8.353	2.493	1.386	1310.7	1336.3	0.655	44
-77.380	23.442	7.840	12.400	0.490	0.433	13.135	0.433	-145.635	-145.635	0.433	0.433	0.209	0.999	0.003	8.637	8.311	2.425	1.404	1386.1	1415.2	0.659	46
-77.786	23.532	7.840	12.400	0.490	0.430	13.144	0.433	-145.634	-145.634	0.430	0.433	0.210	1.008	0.003	8.592	8.306	2.434	1.401	1370.2	1375.7	0.657	45
-77.851	23.542	7.840	12.400	0.490	0.429	13.146	0.433	-145.635	-145.635	0.429	0.433	0.210	1.009	0.003	8.581	8.305	2.436	1.401	1368.6	1375.7	0.657	45
-78.274	23.642	7.840	12.400	0.490	0.425	13.156	0.433	-145.634	-145.634	0.425	0.433	0.210	1.019	0.003	8.507	8.299	2.448	1.398	1358.4	1375.7	0.657	45
-78.318	23.652	7.840	12.400	0.490	0.425	13.157	0.433	-145.635	-145.635	0.425	0.433	0.210	1.020	0.003	8.500	8.298	2.449	1.398	1357.3	1375.7	0.657	45
-78.795	23.762	7.840	12.400	0.490	0.420	13.168	0.433	-145.634	-145.634	0.420	0.433	0.210	1.031	0.003	8.418	8.292	2.463	1.394	1346.1	1375.7	0.657	45
-78.803	23.772	7.840	12.400	0.490	0.420	13.168	0.433	-145.639	-145.639	0.420	0.433	0.210	1.031	0.003	8.417	8.292	2.463	1.394	1345.9	1375.7	0.657	45
-78.763	23.782	7.840	12.400	0.490	0.420	13.167	0.433	-145.631	-145.631	0.420	0.433	0.210	1.030	0.003	8.423	8.292	2.462	1.395	1346.8	1375.7	0.657	45
-78.811	23.792	7.840	12.400	0.490	0.420	13.168	0.433	-145.631	-145.631	0.420	0.433	0.210	1.031	0.003	8.415	8.292	2.463	1.394	1345.7	1375.7	0.657	45
-79.264	23.982	7.840	12.400	0.490	0.416	13.179	0.433	-145.634	-145.634	0.416	0.433	0.211	1.041	0.003	8.364	8.285	2.474	1.392	1329.6	1336.3	0.655	44
-79.305	23.992	7.840	12.400	0.490	0.415	13.180	0.433	-145.635	-145.635	0.415	0.433	0.211	1.042	0.003	8.357	8.285	2.475	1.392	1328.7	1336.3	0.655	44
-79.340	24.002	7.840	12.400	0.490	0.415	13.180	0.433	-145.631	-145.631	0.415	0.433	0.211	1.043	0.003	8.351	8.284	2.476	1.391	1327.9	1336.3	0.655	44

-79.273	24.012	7.840	12.400	0.490	0.416	13.179	0.433	-145.639	-145.639	0.416	0.433	0.211	1.041	0.003	8.362	8.285	2.474	1.392	1329.4	1336.3	0.655	44
-79.251	24.042	7.840	12.400	0.490	0.416	13.178	0.433	-145.632	-145.632	0.416	0.433	0.211	1.041	0.003	8.366	8.286	2.473	1.392	1329.9	1336.3	0.655	44
-79.339	24.052	7.840	12.400	0.490	0.415	13.180	0.433	-145.639	-145.639	0.415	0.433	0.211	1.043	0.003	8.351	8.284	2.476	1.391	1328.0	1336.3	0.655	44
-80.565	24.522	7.840	12.400	0.490	0.404	13.209	0.433	-145.634	-145.634	0.404	0.433	0.211	1.071	0.003	8.172	8.268	2.511	1.384	1296.0	1297.0	0.653	43
-80.623	24.532	7.910	12.500	0.490	0.415	13.293	0.433	-145.639	-145.639	0.415	0.433	0.211	1.043	0.003	8.422	8.219	2.470	1.390	1324.3	1336.3	0.655	44
-81.857	25.452	7.910	12.500	0.490	0.404	13.321	0.433	-145.634	-145.634	0.404	0.433	0.211	1.071	0.003	8.243	8.202	2.504	1.383	1292.8	1297.0	0.653	43
-81.938	25.462	7.910	12.500	0.490	0.403	13.323	0.433	-145.635	-145.635	0.403	0.433	0.211	1.073	0.003	8.230	8.201	2.507	1.383	1291.1	1297.0	0.653	43
-83.150	26.422	7.910	12.500	0.490	0.393	13.351	0.433	-145.634	-145.634	0.393	0.433	0.211	1.101	0.003	8.035	8.185	2.545	1.376	1267.5	1297.0	0.653	43
-83.200	26.432	7.910	12.500	0.490	0.393	13.352	0.433	-145.635	-145.635	0.393	0.433	0.211	1.102	0.003	8.027	8.184	2.547	1.376	1266.5	1297.0	0.653	43
-83.193	26.442	7.910	12.500	0.490	0.393	13.352	0.433	-145.636	-145.636	0.393	0.433	0.211	1.102	0.003	8.028	8.184	2.547	1.376	1266.7	1297.0	0.653	43
-83.203	26.452	7.910	12.500	0.490	0.393	13.352	0.433	-145.635	-145.635	0.393	0.433	0.211	1.102	0.003	8.027	8.184	2.547	1.376	1266.4	1297.0	0.653	43
-84.480	27.152	7.910	12.500	0.490	0.382	13.381	0.433	-145.634	-145.634	0.382	0.433	0.212	1.132	0.003	7.851	8.168	2.573	1.367	1231.2	1257.9	0.651	42
-84.536	27.162	7.910	12.500	0.490	0.382	13.382	0.433	-145.631	-145.631	0.382	0.433	0.212	1.134	0.003	7.843	8.167	2.574	1.367	1229.9	1257.9	0.651	42
-84.576	27.182	7.910	12.500	0.490	0.381	13.383	0.433	-145.633	-145.633	0.381	0.433	0.212	1.135	0.003	7.837	8.166	2.575	1.367	1229.0	1257.9	0.651	42
-84.491	27.192	7.910	12.500	0.490	0.382	13.381	0.433	-145.635	-145.635	0.382	0.433	0.212	1.133	0.003	7.850	8.168	2.573	1.367	1230.9	1257.9	0.651	42
-84.481	27.232	7.910	12.500	0.490	0.382	13.381	0.433	-145.634	-145.634	0.382	0.433	0.212	1.132	0.003	7.851	8.168	2.573	1.367	1231.2	1257.9	0.651	42
-84.510	27.242	7.910	12.500	0.490	0.382	13.382	0.433	-145.631	-145.631	0.382	0.433	0.212	1.133	0.003	7.847	8.167	2.574	1.367	1230.5	1257.9	0.651	42
-84.421	27.252	7.910	12.500	0.490	0.383	13.380	0.433	-145.639	-145.639	0.383	0.433	0.212	1.131	0.003	7.861	8.168	2.572	1.368	1232.6	1257.9	0.651	42
-84.473	27.372	7.910	12.500	0.490	0.382	13.381	0.433	-145.633	-145.633	0.382	0.433	0.212	1.132	0.003	7.852	8.168	2.573	1.367	1231.4	1257.9	0.651	42
-84.504	27.382	7.910	12.500	0.490	0.382	13.381	0.433	-145.635	-145.635	0.382	0.433	0.212	1.133	0.003	7.848	8.167	2.573	1.367	1230.7	1257.9	0.651	42
-84.548	28.252	7.910	12.500	0.490	0.382	13.382	0.433	-145.634	-145.634	0.382	0.433	0.212	1.134	0.003	7.841	8.167	2.574	1.367	1229.6	1257.9	0.651	42
-84.480	28.262	7.910	12.500	0.490	0.382	13.381	0.433	-145.631	-145.631	0.382	0.433	0.212	1.132	0.003	7.851	8.168	2.573	1.367	1231.2	1257.9	0.651	42
-84.506	28.272	7.910	12.500	0.490	0.382	13.381	0.433	-145.635	-145.635	0.382	0.433	0.212	1.133	0.003	7.847	8.167	2.573	1.367	1230.6	1257.9	0.651	42
-84.473	28.282	7.910	12.500	0.490	0.382	13.381	0.433	-145.631	-145.631	0.382	0.433	0.212	1.132	0.003	7.852	8.168	2.573	1.367	1231.4	1257.9	0.651	42
-84.530	28.292	7.910	12.500	0.490	0.382	13.382	0.433	-145.635	-145.635	0.382	0.433	0.212	1.133	0.003	7.844	8.167	2.574	1.367	1230.1	1257.9	0.651	42
-84.517	31.452	7.910	12.500	0.490	0.382	13.382	0.433	-145.634	-145.634	0.382	0.433	0.212	1.133	0.003	7.846	8.167	2.574	1.367	1230.4	1257.9	0.651	42
-84.492	31.462	7.910	12.500	0.490	0.382	13.381	0.433	-145.631	-145.631	0.382	0.433	0.212	1.133	0.003	7.850	8.168	2.573	1.367	1230.9	1257.9	0.651	42
-84.487	31.512	7.910	12.500	0.490	0.382	13.381	0.433	-145.634	-145.634	0.382	0.433	0.212	1.132	0.003	7.850	8.168	2.573	1.367	1231.0	1257.9	0.651	42
-84.548	31.522	7.910	12.500	0.490	0.382	13.382	0.433	-145.631	-145.631	0.382	0.433	0.212	1.134	0.003	7.841	8.167	2.574	1.367	1229.6	1257.9	0.651	42
-84.508	31.952	7.910	12.500	0.490	0.382	13.381	0.433	-145.634	-145.634	0.382	0.433	0.212	1.133	0.003	7.847	8.167	2.574	1.367	1230.6	1257.9	0.651	42
-84.493	31.962	7.910	12.500	0.490	0.382	13.381	0.433	-145.635	-145.635	0.382	0.433	0.212	1.133	0.003	7.849	8.168	2.573	1.367	1230.9	1257.9	0.651	42
-84.489	31.972	7.910	12.500	0.490	0.382	13.381	0.433	-145.636	-145.636	0.382	0.433	0.212	1.132	0.003	7.850	8.168	2.573	1.367	1231.0	1257.9	0.651	42
-84.539	31.982	7.910	12.500	0.490	0.382	13.382	0.433	-145.635	-145.635	0.382	0.433	0.212	1.134	0.003	7.842	8.167	2.574	1.367	1229.8	1257.9	0.651	42
-84.521	32.072	7.910	12.500	0.490	0.382	13.382	0.433	-145.634	-145.634	0.382	0.433	0.212	1.133	0.003	7.845	8.167	2.574	1.367	1230.3	1257.9	0.651	42
-84.499	32.082	7.910	12.500	0.490	0.382	13.381	0.433	-145.635	-145.635	0.382	0.433	0.212	1.133	0.003	7.848	8.167	2.573	1.367	1230.8	1257.9	0.651	42
-84.520	32.092	7.910	12.500	0.490	0.382	13.382	0.433	-145.631	-145.631	0.382	0.433	0.212	1.133	0.003	7.845	8.167	2.574	1.367	1230.3	1257.9	0.651	42
-84.525	32.102	7.910	12.500	0.490	0.382	13.382	0.433	-145.631	-145.631	0.382	0.433	0.212	1.133	0.003	7.844	8.167	2.574	1.367	1230.2	1257.9	0.651	42
-84.490	32.112	7.910	12.500	0.490	0.382	13.381	0.433	-145.639	-145.639	0.382	0.433	0.212	1.133	0.003	7.850	8.168	2.573	1.367	1231.0	1257.9	0.651	42
-84.470	32.132	7.910	12.500	0.490	0.382	13.381	0.433	-145.633	-145.633	0.382	0.433	0.212	1.132	0.003	7.853	8.168	2.573	1.367	1231.4	1257.9	0.651	42
-84.517	32.142	7.910	12.500	0.490	0.382	13.382	0.433	-145.631	-145.631	0.382	0.433	0.212	1.133	0.003	7.846	8.167	2.574	1.367	1230.4	1257.9	0.651	42
-84.525	32.342	7.910	12.500	0.490	0.382	13.382	0.433	-145.634	-145.634	0.382	0.433	0.212	1.133	0.003	7.844	8.167	2.574	1.367	1230.2	1257.9	0.651	42
-84.493	32.352	7.910	12.500	0.490	0.382	13.381	0.433	-145.636	-145.636	0.382	0.433	0.212	1.133	0.003	7.849	8.168	2.573	1.367	1230.9	1257.9	0.651	42

-84.484	38.092	7.910	12.500	0.490	0.382	13.381	0.433	-145.634	-145.634	0.382	0.433	0.212	1.132	0.003	7.851	8.168	2.573	1.367	1231.1	1257.9	0.651	42
-84.520	38.102	7.910	12.500	0.490	0.382	13.382	0.433	-145.631	-145.631	0.382	0.433	0.212	1.133	0.003	7.845	8.167	2.574	1.367	1230.3	1257.9	0.651	42
-85.781	38.852	7.910	12.500	0.490	0.372	13.410	0.433	-146.797	-146.797	0.372	0.433	0.212	1.164	0.003	7.677	8.151	2.600	1.359	1197.1	1218.8	0.649	41
-85.802	38.862	7.910	12.500	0.490	0.371	13.411	0.433	-150.165	-150.165	0.371	0.433	0.212	1.164	0.003	7.674	8.151	2.600	1.359	1196.6	1218.8	0.649	41
-86.155	39.022	7.910	12.500	0.490	0.369	13.419	0.433	-151.136	-151.136	0.369	0.433	0.212	1.173	0.003	7.621	8.146	2.608	1.357	1188.9	1218.8	0.649	41
-86.180	39.032	8.210	12.700	0.470	0.399	13.567	0.415	-152.112	-152.112	0.399	0.415	0.212	1.040	0.003	8.313	8.062	2.511	1.368	1234.4	1257.9	0.651	42
-86.496	39.142	8.210	12.700	0.470	0.396	13.574	0.415	-152.798	-152.798	0.396	0.415	0.212	1.047	0.003	8.263	8.059	2.518	1.366	1227.1	1257.9	0.651	42
-86.524	39.152	8.210	12.700	0.470	0.396	13.575	0.415	-153.483	-153.483	0.396	0.415	0.212	1.047	0.003	8.258	8.058	2.519	1.366	1226.4	1257.9	0.651	42
-86.822	39.242	8.210	12.700	0.470	0.394	13.581	0.415	-154.058	-154.058	0.394	0.415	0.212	1.054	0.003	8.237	8.054	2.522	1.365	1214.4	1218.8	0.649	41
-86.896	39.252	8.210	12.700	0.470	0.393	13.583	0.415	-154.631	-154.631	0.393	0.415	0.212	1.055	0.003	8.225	8.054	2.524	1.364	1212.7	1218.8	0.649	41
-87.198	39.322	8.210	12.700	0.470	0.391	13.590	0.415	-155.089	-155.089	0.391	0.415	0.212	1.062	0.003	8.178	8.050	2.530	1.362	1205.9	1218.8	0.649	41
-87.247	39.332	8.210	12.700	0.470	0.390	13.591	0.415	-155.551	-155.551	0.390	0.415	0.212	1.063	0.003	8.170	8.049	2.531	1.362	1204.8	1218.8	0.649	41
-87.577	39.422	8.210	12.700	0.470	0.388	13.598	0.415	-156.121	-156.121	0.388	0.415	0.212	1.070	0.003	8.119	8.045	2.539	1.360	1197.4	1218.8	0.649	41
-87.624	39.432	8.210	12.700	0.470	0.387	13.599	0.415	-156.691	-156.691	0.387	0.415	0.212	1.071	0.003	8.112	8.045	2.540	1.359	1196.4	1218.8	0.649	41
-87.914	39.492	8.210	12.700	0.470	0.385	13.606	0.415	-157.095	-157.095	0.385	0.415	0.212	1.078	0.003	8.067	8.041	2.546	1.357	1190.0	1218.8	0.649	41
-87.962	39.502	8.210	12.700	0.470	0.385	13.607	0.415	-157.496	-157.496	0.385	0.415	0.212	1.079	0.003	8.060	8.040	2.547	1.357	1188.9	1218.8	0.649	41
-88.263	39.562	8.210	12.700	0.470	0.382	13.613	0.415	-157.897	-157.897	0.382	0.415	0.213	1.085	0.003	8.039	8.037	2.551	1.356	1177.4	1179.9	0.647	40
-88.304	39.572	8.210	12.700	0.470	0.382	13.614	0.415	-158.298	-158.298	0.382	0.415	0.213	1.086	0.003	8.032	8.036	2.552	1.355	1176.5	1179.9	0.647	40
-88.620	39.632	8.210	12.700	0.470	0.379	13.621	0.415	-158.699	-158.699	0.379	0.415	0.213	1.093	0.003	7.984	8.032	2.559	1.353	1169.8	1179.9	0.647	40
-88.674	39.642	8.210	12.700	0.470	0.379	13.622	0.415	-159.102	-159.102	0.379	0.415	0.213	1.094	0.003	7.976	8.032	2.560	1.353	1168.6	1179.9	0.647	40
-88.949	39.702	8.210	12.700	0.470	0.377	13.628	0.415	-159.501	-159.501	0.377	0.415	0.213	1.101	0.003	7.934	8.028	2.566	1.351	1162.8	1179.9	0.647	40
-88.970	39.712	8.210	12.700	0.470	0.377	13.629	0.415	-159.900	-159.900	0.377	0.415	0.213	1.101	0.003	7.931	8.028	2.566	1.351	1162.4	1179.9	0.647	40
-89.253	39.772	8.210	12.700	0.470	0.374	13.635	0.415	-160.304	-160.304	0.374	0.415	0.213	1.108	0.003	7.889	8.025	2.572	1.349	1156.4	1179.9	0.647	40
-89.302	39.782	8.210	12.700	0.470	0.374	13.636	0.415	-160.708	-160.708	0.374	0.415	0.213	1.109	0.003	7.881	8.024	2.573	1.349	1155.4	1179.9	0.647	40
-92.708	40.452	8.210	12.700	0.470	0.349	13.711	0.415	-161.686	-161.686	0.349	0.415	0.214	1.188	0.003	7.437	7.983	2.644	1.330	1079.2	1102.4	0.643	38
-92.754	40.462	8.210	12.700	0.470	0.349	13.712	0.415	-161.753	-161.753	0.349	0.415	0.214	1.189	0.003	7.430	7.983	2.645	1.330	1078.4	1102.4	0.643	38
-96.176	41.272	8.210	12.700	0.470	0.325	13.785	0.414	-161.750	-161.750	0.325	0.414	0.216	1.274	0.002	7.013	7.943	2.719	1.313	1010.5	1025.4	0.639	36
-96.206	41.282	8.210	12.700	0.470	0.325	13.786	0.414	-161.751	-161.751	0.325	0.414	0.216	1.275	0.002	7.009	7.942	2.719	1.313	1010.0	1025.4	0.639	36
-99.548	42.122	8.210	12.700	0.470	0.304	13.857	0.414	-161.750	-161.750	0.304	0.414	0.216	1.363	0.002	6.609	7.904	2.796	1.297	954.4	987.1	0.637	35
-99.625	42.132	8.210	12.700	0.470	0.303	13.859	0.414	-161.748	-161.748	0.303	0.414	0.216	1.365	0.002	6.599	7.903	2.798	1.297	953.3	987.1	0.637	35
-103.049	43.182	8.210	12.700	0.470	0.283	13.931	0.414	-161.750	-161.750	0.283	0.414	0.218	1.460	0.002	6.236	7.865	2.878	1.284	899.2	910.8	0.633	33
-103.070	43.192	8.210	12.700	0.470	0.283	13.931	0.414	-161.748	-161.748	0.283	0.414	0.218	1.461	0.002	6.233	7.865	2.878	1.284	899.0	910.8	0.633	33
-106.483	44.392	8.210	12.700	0.470	0.265	14.002	0.414	-166.299	-166.299	0.265	0.414	0.219	1.562	0.002	5.876	7.827	2.963	1.271	854.2	872.8	0.631	32
-106.554	44.402	8.210	12.700	0.470	0.264	14.004	0.414	-177.692	-177.692	0.264	0.414	0.219	1.564	0.002	5.868	7.826	2.965	1.271	853.4	872.8	0.631	32
-107.116	44.562	8.210	12.700	0.470	0.262	14.016	0.414	-179.640	-179.640	0.262	0.414	0.219	1.582	0.002	5.809	7.820	2.979	1.269	847.0	872.8	0.631	32
-107.174	44.572	8.210	12.700	0.470	0.261	14.017	0.414	-1.585	-1.585	0.261	0.414	0.219	1.584	0.002	5.802	7.820	2.981	1.269	846.3	872.8	0.631	32
-107.729	44.652	8.210	12.700	0.470	0.258	14.028	0.414	-2.619	-2.619	0.258	0.414	0.219	1.601	0.002	5.744	7.814	2.995	1.267	840.1	872.8	0.631	32
-107.791	44.662	8.210	12.700	0.470	0.258	14.030	0.414	-3.648	-3.648	0.258	0.414	0.219	1.603	0.002	5.738	7.813	2.997	1.267	839.4	872.8	0.631	32
-108.372	44.732	8.210	12.700	0.470	0.255	14.042	0.414	-4.567	-4.567	0.255	0.414	0.219	1.621	0.002	5.696	7.807	3.012	1.265	830.3	835.0	0.629	31
-108.442	44.742	8.210	12.700	0.470	0.255	14.043	0.414	-5.487	-5.487	0.255	0.414	0.219	1.623	0.002	5.689	7.806	3.014	1.265	829.6	835.0	0.629	31
-109.028	44.832	8.210	12.700	0.470	0.252	14.055	0.414	-6.629	-6.629	0.252	0.414	0.219	1.642	0.002	5.629	7.800	3.029	1.263	823.3	835.0	0.629	31
-109.084	44.842	8.210	12.700	0.470	0.252	14.056	0.414	-7.772	-7.772	0.252	0.414	0.219	1.643	0.002	5.623	7.799	3.031	1.263	822.7	835.0	0.629	31

-109.674	44.892	8.210	12.700	0.470	0.249	14.068	0.414	-8.463	-8.463	0.249	0.414	0.219	1.662	0.002	5.564	7.793	3.046	1.261	816.5	835.0	0.629	31
-109.792	44.902	8.210	12.700	0.470	0.248	14.071	0.414	-9.146	-9.146	0.248	0.414	0.219	1.666	0.002	5.552	7.792	3.049	1.261	815.3	835.0	0.629	31
-111.033	44.992	8.210	12.700	0.470	0.242	14.096	0.414	-9.222	-9.222	0.242	0.414	0.219	1.707	0.002	5.429	7.779	3.081	1.257	802.6	835.0	0.629	31
-111.102	45.002	8.210	12.700	0.470	0.242	14.098	0.414	-9.224	-9.224	0.242	0.414	0.219	1.709	0.002	5.422	7.778	3.083	1.256	801.9	835.0	0.629	31
-112.485	45.232	8.210	12.700	0.470	0.236	14.126	0.414	-9.223	-9.223	0.236	0.414	0.220	1.755	0.002	5.306	7.763	3.121	1.253	786.0	797.3	0.627	30
-112.570	45.242	8.210	12.700	0.470	0.235	14.128	0.414	-9.224	-9.224	0.235	0.414	0.220	1.758	0.002	5.298	7.762	3.123	1.253	785.2	797.3	0.627	30
-113.817	45.422	8.210	12.700	0.470	0.230	14.153	0.414	-9.222	-9.222	0.230	0.414	0.220	1.801	0.002	5.182	7.749	3.156	1.249	773.6	797.3	0.627	30
-113.902	45.432	8.210	12.700	0.470	0.229	14.155	0.414	-9.223	-9.223	0.229	0.414	0.220	1.804	0.002	5.174	7.748	3.158	1.249	772.8	797.3	0.627	30
-115.262	45.652	8.210	12.700	0.470	0.223	14.182	0.413	-9.223	-9.223	0.223	0.413	0.221	1.851	0.002	5.066	7.734	3.197	1.246	758.4	759.7	0.625	29
-115.349	45.662	8.210	12.700	0.470	0.223	14.184	0.413	-9.223	-9.223	0.223	0.413	0.221	1.854	0.002	5.058	7.734	3.199	1.245	757.7	759.7	0.625	29
-116.661	45.812	8.210	12.700	0.470	0.217	14.210	0.413	-9.222	-9.222	0.217	0.413	0.221	1.902	0.002	4.942	7.720	3.217	1.240	742.3	759.7	0.625	29
-116.716	45.822	8.210	12.700	0.470	0.217	14.212	0.413	-9.223	-9.223	0.217	0.413	0.221	1.904	0.002	4.937	7.719	3.217	1.240	741.5	759.7	0.625	29
-119.236	46.122	8.210	12.700	0.470	0.207	14.262	0.413	-9.223	-9.223	0.207	0.413	0.221	1.997	0.001	4.737	7.694	3.223	1.230	705.2	722.2	0.623	28
-119.310	46.132	8.460	12.900	0.450	0.225	14.415	0.396	-9.224	-9.224	0.225	0.396	0.221	1.760	0.002	5.186	7.618	3.162	1.235	725.2	759.7	0.625	29
-121.860	46.602	8.460	12.900	0.450	0.215	14.466	0.396	-4.021	-4.021	0.215	0.396	0.221	1.845	0.002	4.979	7.593	3.224	1.228	701.1	722.2	0.623	28
-121.922	46.612	8.460	12.900	0.450	0.214	14.467	0.396	-178.523	-178.523	0.214	0.396	0.221	1.847	0.002	4.974	7.592	3.224	1.228	700.3	722.2	0.623	28
-124.495	47.862	8.460	12.900	0.450	0.204	14.517	0.396	-164.710	-164.710	0.204	0.396	0.222	1.936	0.001	4.776	7.567	3.231	1.218	665.9	684.8	0.621	27
-124.520	47.872	8.460	12.900	0.450	0.204	14.518	0.396	-155.770	-155.770	0.204	0.396	0.222	1.937	0.001	4.774	7.567	3.231	1.218	665.6	684.8	0.621	27
-127.087	52.752	8.490	13.000	0.460	0.201	14.659	0.404	-156.521	-156.521	0.201	0.404	0.222	2.011	0.001	4.745	7.499	3.231	1.220	669.7	684.8	0.621	27
-127.113	52.762	8.490	13.000	0.460	0.201	14.660	0.404	-164.986	-164.986	0.201	0.404	0.222	2.012	0.001	4.743	7.499	3.231	1.220	669.4	684.8	0.621	27
-127.105	52.832	8.490	13.000	0.460	0.201	14.659	0.404	-165.047	-165.047	0.201	0.404	0.222	2.012	0.001	4.744	7.499	3.231	1.220	669.5	684.8	0.621	27
-127.097	52.842	8.490	13.000	0.460	0.201	14.659	0.404	-165.048	-165.048	0.201	0.404	0.222	2.011	0.001	4.744	7.499	3.231	1.220	669.6	684.8	0.621	27
-127.083	53.252	8.490	13.000	0.460	0.201	14.659	0.404	-165.047	-165.047	0.201	0.404	0.222	2.011	0.001	4.746	7.499	3.231	1.220	669.8	684.8	0.621	27
-127.106	53.262	8.490	13.000	0.460	0.201	14.659	0.404	-165.048	-165.048	0.201	0.404	0.222	2.012	0.001	4.744	7.499	3.231	1.220	669.5	684.8	0.621	27
-129.691	54.192	8.490	13.000	0.460	0.192	14.710	0.404	-160.963	-160.963	0.192	0.404	0.227	2.103	0.001	4.649	7.475	3.234	1.214	624.4	628.7	0.607	20
-129.775	54.202	8.490	13.000	0.460	0.192	14.711	0.404	-155.662	-155.662	0.192	0.404	0.227	2.106	0.001	4.642	7.474	3.234	1.214	623.5	628.7	0.607	20
-130.287	54.282	8.490	13.000	0.460	0.190	14.721	0.404	-155.144	-155.144	0.190	0.404	0.227	2.125	0.001	4.603	7.469	3.234	1.212	618.0	628.7	0.607	20
-130.345	54.292	8.610	13.100	0.460	0.198	14.799	0.404	-154.630	-154.630	0.198	0.404	0.226	2.041	0.001	4.804	7.433	3.234	1.220	645.5	665.2	0.609	21
-130.976	54.742	8.610	13.100	0.460	0.196	14.811	0.404	-152.783	-152.783	0.196	0.404	0.226	2.064	0.001	4.755	7.427	3.234	1.218	638.4	665.2	0.609	21
-131.038	54.752	8.610	13.100	0.460	0.195	14.812	0.404	-152.269	-152.269	0.195	0.404	0.226	2.066	0.001	4.750	7.427	3.234	1.217	637.7	665.2	0.609	21
-131.580	54.822	8.610	13.100	0.460	0.194	14.823	0.404	-152.268	-152.268	0.194	0.404	0.226	2.086	0.001	4.708	7.422	3.234	1.215	631.7	665.2	0.609	21
-131.637	54.832	8.610	13.100	0.460	0.193	14.824	0.404	-152.270	-152.270	0.193	0.404	0.226	2.088	0.001	4.704	7.421	3.234	1.215	631.1	665.2	0.609	21
-131.620	55.052	8.610	13.100	0.460	0.193	14.823	0.404	-152.269	-152.269	0.193	0.404	0.226	2.087	0.001	4.705	7.422	3.234	1.215	631.3	665.2	0.609	21
-131.576	55.062	8.610	13.100	0.460	0.194	14.822	0.404	-152.266	-152.266	0.194	0.404	0.226	2.086	0.001	4.708	7.422	3.234	1.215	631.8	665.2	0.609	21
-131.616	55.412	8.610	13.100	0.460	0.193	14.823	0.404	-152.268	-152.268	0.193	0.404	0.226	2.087	0.001	4.705	7.422	3.234	1.215	631.3	665.2	0.609	21
-131.676	55.422	8.610	13.100	0.460	0.193	14.824	0.404	-152.271	-152.271	0.193	0.404	0.227	2.089	0.001	4.716	7.421	3.234	1.216	628.5	628.7	0.607	20
-132.255	55.682	8.610	13.100	0.460	0.191	14.836	0.404	-152.268	-152.268	0.191	0.404	0.227	2.110	0.001	4.672	7.416	3.234	1.214	622.3	628.7	0.607	20
-132.283	55.692	8.610	13.100	0.460	0.191	14.836	0.404	-152.267	-152.267	0.191	0.404	0.227	2.111	0.001	4.670	7.416	3.234	1.213	622.0	628.7	0.607	20
-132.872	55.862	8.610	13.100	0.460	0.189	14.847	0.404	-152.268	-152.268	0.189	0.404	0.227	2.133	0.001	4.625	7.410	3.234	1.211	615.8	628.7	0.607	20
-132.923	55.872	8.610	13.100	0.460	0.189	14.848	0.404	-152.271	-152.271	0.189	0.404	0.227	2.135	0.001	4.621	7.410	3.234	1.211	615.2	628.7	0.607	20
-133.664	56.332	8.610	13.100	0.460	0.187	14.863	0.404	-152.268	-152.268	0.187	0.404	0.227	2.163	0.001	4.566	7.403	3.234	1.209	607.6	628.7	0.607	20
-133.684	56.342	8.610	13.100	0.460	0.186	14.863	0.404	-152.270	-152.270	0.186	0.404	0.227	2.164	0.001	4.564	7.403	3.234	1.208	607.3	628.7	0.607	20

-134.415	56.832	8.610	13.100	0.460	0.184	14.877	0.404	-152.868	-152.868	0.184	0.404	0.227	2.192	0.001	4.510	7.397	3.234	1.206	599.9	628.7	0.607	20
-134.463	56.842	8.610	13.100	0.460	0.184	14.878	0.404	-156.049	-156.049	0.184	0.404	0.227	2.194	0.001	4.507	7.396	3.234	1.206	599.4	628.7	0.607	20
-135.228	57.132	8.610	13.100	0.460	0.181	14.892	0.403	-159.490	-159.490	0.181	0.403	0.228	2.223	0.001	4.466	7.389	3.235	1.204	589.8	592.3	0.605	19
-135.259	57.142	8.610	13.100	0.460	0.181	14.893	0.403	-162.930	-162.930	0.181	0.403	0.228	2.224	0.001	4.464	7.389	3.235	1.204	589.5	592.3	0.605	19
-135.978	57.302	8.610	13.100	0.460	0.179	14.907	0.403	-164.876	-164.876	0.179	0.403	0.228	2.252	0.001	4.412	7.383	3.235	1.201	582.5	592.3	0.605	19
-136.029	57.312	8.610	13.100	0.460	0.179	14.908	0.403	-166.822	-166.822	0.179	0.403	0.228	2.254	0.001	4.408	7.382	3.235	1.201	582.1	592.3	0.605	19
-136.727	57.412	8.610	13.100	0.460	0.177	14.921	0.403	-168.085	-168.085	0.177	0.403	0.228	2.282	0.001	4.359	7.376	3.235	1.199	575.5	592.3	0.605	19
-136.823	57.422	8.610	13.100	0.460	0.176	14.923	0.403	-169.342	-169.342	0.176	0.403	0.228	2.286	0.001	4.352	7.375	3.235	1.198	574.6	592.3	0.605	19
-137.120	57.452	8.610	13.100	0.460	0.176	14.928	0.403	-169.803	-169.803	0.176	0.403	0.228	2.297	0.001	4.331	7.373	3.235	1.198	571.8	592.3	0.605	19
-137.268	57.462	8.610	13.100	0.460	0.175	14.931	0.403	-170.261	-170.261	0.175	0.403	0.228	2.303	0.001	4.321	7.371	3.235	1.197	570.4	592.3	0.605	19
-137.511	57.482	8.610	13.100	0.460	0.174	14.936	0.403	-170.607	-170.607	0.174	0.403	0.228	2.313	0.001	4.304	7.369	3.235	1.196	568.2	592.3	0.605	19
-137.614	57.492	8.610	13.100	0.460	0.174	14.938	0.403	-170.951	-170.951	0.174	0.403	0.228	2.317	0.001	4.297	7.368	3.235	1.196	567.2	592.3	0.605	19
-137.783	57.512	8.610	13.100	0.460	0.174	14.941	0.403	-171.292	-171.292	0.174	0.403	0.228	2.324	0.001	4.285	7.367	3.235	1.195	565.7	592.3	0.605	19
-137.894	57.522	8.610	13.100	0.460	0.173	14.943	0.403	-171.636	-171.636	0.173	0.403	0.228	2.329	0.001	4.277	7.366	3.235	1.195	564.7	592.3	0.605	19
-138.208	57.562	8.610	13.100	0.460	0.172	14.949	0.403	-172.210	-172.210	0.172	0.403	0.228	2.341	0.001	4.256	7.363	3.235	1.194	561.8	592.3	0.605	19
-138.313	57.572	8.610	13.100	0.460	0.172	14.951	0.403	-172.781	-172.781	0.172	0.403	0.228	2.346	0.001	4.249	7.362	3.235	1.194	560.9	592.3	0.605	19
-138.580	57.602	8.610	13.100	0.460	0.171	14.956	0.403	-173.241	-173.241	0.171	0.403	0.228	2.357	0.001	4.230	7.360	3.235	1.193	558.5	592.3	0.605	19
-138.675	57.612	8.610	13.100	0.460	0.171	14.958	0.403	-173.699	-173.699	0.171	0.403	0.229	2.360	0.001	4.238	7.359	3.235	1.193	555.7	556.0	0.603	18
-138.794	57.622	8.610	13.100	0.460	0.171	14.960	0.403	-173.929	-173.929	0.171	0.403	0.229	2.365	0.001	4.230	7.358	3.235	1.193	554.7	556.0	0.603	18
-138.928	57.632	8.610	13.100	0.460	0.170	14.963	0.403	-174.159	-174.159	0.170	0.403	0.229	2.370	0.001	4.221	7.357	3.235	1.192	553.5	556.0	0.603	18
-139.118	57.652	8.610	13.100	0.460	0.170	14.966	0.403	-174.502	-174.502	0.170	0.403	0.229	2.378	0.001	4.208	7.355	3.235	1.192	551.8	556.0	0.603	18
-139.210	57.662	8.610	13.100	0.460	0.169	14.968	0.403	-174.844	-174.844	0.169	0.403	0.229	2.382	0.001	4.201	7.355	3.235	1.192	551.0	556.0	0.603	18
-139.434	57.682	8.610	13.100	0.460	0.169	14.972	0.403	-174.986	-174.986	0.169	0.403	0.229	2.391	0.001	4.186	7.353	3.235	1.191	549.1	556.0	0.603	18
-139.520	57.692	8.610	13.100	0.460	0.168	14.974	0.403	-174.986	-174.986	0.168	0.403	0.229	2.395	0.001	4.181	7.352	3.235	1.191	548.3	556.0	0.603	18
-139.621	57.702	8.610	13.100	0.460	0.168	14.976	0.403	-174.986	-174.986	0.168	0.403	0.229	2.399	0.001	4.174	7.351	3.235	1.190	547.4	556.0	0.603	18
-139.741	57.712	8.610	13.100	0.460	0.168	14.978	0.403	-174.986	-174.986	0.168	0.403	0.229	2.404	0.001	4.166	7.350	3.235	1.190	546.4	556.0	0.603	18
-139.978	57.752	8.610	13.100	0.460	0.167	14.982	0.403	-174.987	-174.987	0.167	0.403	0.229	2.414	0.001	4.150	7.348	3.235	1.189	544.4	556.0	0.603	18
-140.046	57.762	8.610	13.100	0.460	0.167	14.984	0.403	-174.986	-174.986	0.167	0.403	0.229	2.417	0.001	4.145	7.347	3.235	1.189	543.8	556.0	0.603	18
-140.397	57.832	8.690	13.100	0.410	0.167	14.977	0.359	-174.987	-174.987	0.167	0.359	0.230	2.146	0.001	4.183	7.350	3.236	1.169	479.0	483.8	0.599	16
-140.463	57.842	8.690	13.100	0.410	0.167	14.978	0.359	-174.986	-174.986	0.167	0.359	0.230	2.149	0.001	4.179	7.350	3.236	1.169	478.5	483.8	0.599	16
-140.767	57.892	8.690	13.100	0.410	0.166	14.984	0.359	-174.987	-174.987	0.166	0.359	0.230	2.160	0.001	4.158	7.347	3.236	1.168	476.1	483.8	0.599	16
-140.812	57.902	8.690	13.100	0.410	0.166	14.985	0.359	-174.986	-174.986	0.166	0.359	0.230	2.162	0.001	4.155	7.347	3.236	1.168	475.7	483.8	0.599	16
-141.179	57.962	8.690	13.100	0.410	0.165	14.992	0.359	-174.987	-174.987	0.165	0.359	0.230	2.176	0.001	4.131	7.344	3.236	1.167	472.8	483.8	0.599	16
-141.218	57.972	8.690	13.100	0.410	0.165	14.993	0.359	-174.986	-174.986	0.165	0.359	0.230	2.177	0.001	4.128	7.343	3.236	1.167	472.5	483.8	0.599	16
-141.574	58.032	8.690	13.100	0.410	0.164	14.999	0.359	-174.987	-174.987	0.164	0.359	0.230	2.191	0.001	4.105	7.340	3.236	1.166	469.7	483.8	0.599	16
-141.625	58.042	8.690	13.100	0.410	0.164	15.000	0.359	-174.986	-174.986	0.164	0.359	0.230	2.193	0.001	4.101	7.340	3.236	1.165	469.3	483.8	0.599	16
-141.977	58.092	8.690	13.100	0.410	0.163	15.007	0.359	-174.987	-174.987	0.163	0.359	0.230	2.206	0.001	4.078	7.337	3.236	1.164	466.6	483.8	0.599	16
-142.059	58.102	8.690	13.100	0.410	0.163	15.008	0.359	-174.986	-174.986	0.163	0.359	0.230	2.209	0.001	4.073	7.336	3.236	1.164	466.0	483.8	0.599	16
-142.474	58.152	8.690	13.100	0.410	0.161	15.016	0.359	-174.987	-174.987	0.161	0.359	0.230	2.225	0.001	4.046	7.333	3.236	1.163	462.8	483.8	0.599	16
-142.582	58.162	8.690	13.100	0.410	0.161	15.018	0.359	-174.986	-174.986	0.161	0.359	0.230	2.229	0.001	4.039	7.332	3.236	1.163	462.0	483.8	0.599	16
-142.903	58.202	8.690	13.100	0.410	0.160	15.024	0.359	-174.987	-174.987	0.160	0.359	0.230	2.242	0.001	4.018	7.329	3.236	1.162	459.6	483.8	0.599	16
-143.013	58.212	8.690	13.100	0.410	0.160	15.026	0.359	-174.986	-174.986	0.160	0.359	0.230	2.246	0.001	4.011	7.328	3.236	1.162	458.8	483.8	0.599	16

-143.443	58.252	8.690	13.100	0.410	0.159	15.034	0.359	-174.987	-174.987	0.159	0.359	0.230	2.262	0.001	3.984	7.324	3.236	1.161	455.6	483.8	0.599	16
-143.537	58.262	8.690	13.100	0.410	0.159	15.036	0.359	-174.986	-174.986	0.159	0.359	0.230	2.266	0.001	3.978	7.324	3.236	1.160	454.9	483.8	0.599	16
-143.991	58.302	8.690	13.100	0.410	0.157	15.044	0.359	-174.987	-174.987	0.157	0.359	0.230	2.284	0.001	3.949	7.320	3.236	1.159	451.6	483.8	0.599	16
-144.086	58.312	8.690	13.100	0.410	0.157	15.046	0.359	-174.986	-174.986	0.157	0.359	0.230	2.288	0.001	3.943	7.319	3.236	1.159	450.9	483.8	0.599	16
-144.467	58.352	8.690	13.100	0.410	0.156	15.053	0.359	-174.987	-174.987	0.156	0.359	0.231	2.302	0.001	3.932	7.316	3.237	1.158	446.6	447.9	0.597	15
-144.589	58.362	8.690	13.100	0.410	0.156	15.056	0.359	-174.986	-174.986	0.156	0.359	0.231	2.307	0.001	3.924	7.315	3.237	1.158	445.7	447.9	0.597	15
-144.676	58.372	8.690	13.100	0.410	0.155	15.057	0.359	-174.986	-174.986	0.155	0.359	0.231	2.310	0.001	3.919	7.314	3.237	1.158	445.1	447.9	0.597	15
-144.781	58.382	8.690	13.100	0.410	0.155	15.059	0.359	-174.986	-174.986	0.155	0.359	0.231	2.315	0.001	3.912	7.313	3.237	1.158	444.3	447.9	0.597	15
-144.878	58.392	8.690	13.100	0.410	0.155	15.061	0.359	-174.989	-174.989	0.155	0.359	0.231	2.318	0.001	3.906	7.312	3.237	1.157	443.7	447.9	0.597	15
-144.988	58.402	8.690	13.100	0.410	0.155	15.063	0.359	-174.986	-174.986	0.155	0.359	0.231	2.323	0.001	3.899	7.311	3.237	1.157	442.9	447.9	0.597	15
-145.103	58.412	8.690	13.100	0.410	0.154	15.065	0.359	-174.986	-174.986	0.154	0.359	0.231	2.327	0.001	3.892	7.310	3.237	1.157	442.1	447.9	0.597	15
-145.507	58.452	8.690	13.100	0.410	0.153	15.073	0.359	-174.987	-174.987	0.153	0.359	0.231	2.344	0.001	3.867	7.307	3.237	1.156	439.3	447.9	0.597	15
-145.618	58.462	8.690	13.100	0.410	0.153	15.075	0.359	-174.986	-174.986	0.153	0.359	0.231	2.348	0.001	3.860	7.306	3.237	1.156	438.5	447.9	0.597	15
-146.130	58.522	8.690	13.100	0.410	0.152	15.084	0.359	-174.987	-174.987	0.152	0.359	0.231	2.369	0.001	3.829	7.302	3.237	1.154	435.0	447.9	0.597	15
-146.229	58.532	8.690	13.100	0.410	0.151	15.086	0.359	-174.986	-174.986	0.151	0.359	0.231	2.373	0.001	3.823	7.301	3.237	1.154	434.3	447.9	0.597	15
-146.687	58.582	8.690	13.100	0.410	0.150	15.094	0.359	-174.987	-174.987	0.150	0.359	0.231	2.391	0.001	3.795	7.297	3.237	1.153	431.2	447.9	0.597	15
-146.753	58.592	8.690	13.100	0.410	0.150	15.096	0.359	-174.989	-174.989	0.150	0.359	0.231	2.394	0.001	3.791	7.297	3.237	1.153	430.8	447.9	0.597	15
-147.259	58.652	8.690	13.100	0.410	0.149	15.105	0.359	-174.986	-174.986	0.149	0.359	0.231	2.415	0.001	3.761	7.292	3.237	1.152	427.4	447.9	0.597	15
-147.356	58.662	8.690	13.100	0.410	0.148	15.107	0.359	-174.989	-174.989	0.148	0.359	0.231	2.419	0.001	3.755	7.292	3.237	1.151	426.7	447.9	0.597	15
-147.845	58.712	8.690	13.100	0.410	0.147	15.116	0.359	-174.944	-174.944	0.147	0.359	0.231	2.439	0.001	3.726	7.288	3.237	1.150	423.5	447.9	0.597	15
-147.962	58.722	8.690	13.100	0.410	0.147	15.118	0.359	-174.565	-174.565	0.147	0.359	0.231	2.444	0.001	3.719	7.287	3.237	1.150	422.8	447.9	0.597	15
-148.062	58.732	8.690	13.100	0.410	0.147	15.120	0.359	-174.329	-174.329	0.147	0.359	0.231	2.448	0.001	3.714	7.286	3.237	1.150	422.1	447.9	0.597	15
-148.174	58.742	8.690	13.100	0.410	0.146	15.122	0.359	-174.105	-174.105	0.146	0.359	0.231	2.453	0.001	3.707	7.285	3.237	1.150	421.4	447.9	0.597	15
-148.319	58.752	8.690	13.100	0.410	0.146	15.125	0.359	-173.874	-173.874	0.146	0.359	0.231	2.459	0.001	3.698	7.284	3.237	1.149	420.5	447.9	0.597	15
-148.468	58.762	8.690	13.100	0.410	0.146	15.127	0.359	-173.646	-173.646	0.146	0.359	0.231	2.465	0.001	3.690	7.282	3.237	1.149	419.5	447.9	0.597	15
-148.588	58.772	8.690	13.100	0.410	0.145	15.130	0.359	-173.417	-173.417	0.145	0.359	0.231	2.470	0.001	3.683	7.281	3.237	1.149	418.7	447.9	0.597	15
-148.738	58.782	8.690	13.100	0.410	0.145	15.132	0.359	-173.188	-173.188	0.145	0.359	0.231	2.477	0.001	3.674	7.280	3.237	1.148	417.8	447.9	0.597	15
-148.892	58.792	8.690	13.100	0.410	0.145	15.135	0.359	-172.957	-172.957	0.145	0.359	0.231	2.483	0.001	3.665	7.279	3.237	1.148	416.8	447.9	0.597	15
-149.022	58.802	8.690	13.100	0.410	0.144	15.137	0.359	-172.728	-172.728	0.144	0.359	0.231	2.489	0.001	3.657	7.278	3.237	1.148	416.0	447.9	0.597	15
-149.155	58.812	8.690	13.100	0.410	0.144	15.140	0.359	-172.498	-172.498	0.144	0.359	0.231	2.494	0.001	3.650	7.277	3.237	1.147	415.2	447.9	0.597	15
-149.242	58.822	8.690	13.100	0.410	0.144	15.142	0.359	-172.271	-172.271	0.144	0.359	0.231	2.498	0.001	3.645	7.276	3.237	1.147	414.6	447.9	0.597	15
-150.172	59.002	8.690	13.100	0.410	0.141	15.159	0.359	-170.093	-170.093	0.141	0.359	0.232	2.537	0.001	3.604	7.268	3.237	1.146	407.4	412.1	0.595	14
-150.226	59.012	8.690	13.100	0.410	0.141	15.160	0.359	-167.918	-167.918	0.141	0.359	0.232	2.539	0.001	3.601	7.268	3.237	1.145	407.1	412.1	0.595	14
-151.239	59.542	8.690	13.100	0.410	0.139	15.178	0.359	-161.728	-161.728	0.139	0.359	0.232	2.583	0.001	3.544	7.260	3.237	1.143	401.0	412.1	0.595	14
-151.266	59.552	8.690	13.100	0.410	0.139	15.179	0.359	-155.542	-155.542	0.139	0.359	0.232	2.585	0.001	3.542	7.260	3.237	1.143	400.8	412.1	0.595	14
-152.254	59.902	8.690	13.100	0.410	0.137	15.197	0.359	-151.741	-151.741	0.137	0.359	0.232	2.628	0.001	3.488	7.251	3.237	1.141	395.0	412.1	0.595	14
-152.272	59.912	8.690	13.100	0.410	0.137	15.197	0.359	-149.696	-149.696	0.137	0.359	0.232	2.629	0.001	3.487	7.251	3.237	1.141	394.9	412.1	0.595	14
-152.279	61.672	8.690	13.100	0.410	0.137	15.197	0.359	-149.695	-149.695	0.137	0.359	0.232	2.629	0.001	3.486	7.251	3.237	1.141	394.9	412.1	0.595	14
-152.255	61.682	8.690	13.100	0.410	0.137	15.197	0.359	-149.694	-149.694	0.137	0.359	0.232	2.628	0.001	3.487	7.251	3.237	1.141	395.0	412.1	0.595	14
-152.239	61.722	8.690	13.100	0.410	0.137	15.196	0.359	-149.694	-149.694	0.137	0.359	0.232	2.627	0.001	3.488	7.252	3.237	1.141	395.1	412.1	0.595	14
-152.300	61.732	8.690	13.100	0.410	0.136	15.198	0.359	-149.696	-149.696	0.136	0.359	0.232	2.630	0.001	3.485	7.251	3.237	1.141	394.8	412.1	0.595	14
-152.282	62.962	8.690	13.100	0.410	0.137	15.197	0.359	-148.576	-148.576	0.137	0.359	0.232	2.629	0.001	3.486	7.251	3.237	1.141	394.9	412.1	0.595	14

-152.243	62.972	8.690	13.100	0.410	0.137	15.196	0.359	-141.638	-141.638	0.137	0.359	0.232	2.628	0.001	3.488	7.252	3.237	1.141	395.1	412.1	0.595	14
-151.258	63.162	8.690	13.100	0.410	0.139	15.178	0.359	-140.474	-140.474	0.139	0.359	0.232	2.584	0.001	3.543	7.260	3.237	1.143	400.9	412.1	0.595	14
-151.210	63.172	8.690	13.100	0.410	0.139	15.178	0.359	-140.302	-140.302	0.139	0.359	0.232	2.582	0.001	3.545	7.260	3.237	1.143	401.1	412.1	0.595	14
-151.228	63.692	8.690	13.100	0.410	0.139	15.178	0.359	-140.303	-140.303	0.139	0.359	0.232	2.583	0.001	3.544	7.260	3.237	1.143	401.0	412.1	0.595	14
-151.241	63.702	8.690	13.100	0.410	0.139	15.178	0.359	-140.304	-140.304	0.139	0.359	0.232	2.583	0.001	3.544	7.260	3.237	1.143	401.0	412.1	0.595	14
-151.246	63.962	8.690	13.100	0.410	0.139	15.178	0.359	-140.303	-140.303	0.139	0.359	0.232	2.584	0.001	3.543	7.260	3.237	1.143	400.9	412.1	0.595	14
-151.207	63.972	8.690	13.100	0.410	0.139	15.178	0.359	-140.302	-140.302	0.139	0.359	0.232	2.582	0.001	3.545	7.260	3.237	1.143	401.2	412.1	0.595	14
-151.227	64.022	8.690	13.100	0.410	0.139	15.178	0.359	-140.304	-140.304	0.139	0.359	0.232	2.583	0.001	3.544	7.260	3.237	1.143	401.0	412.1	0.595	14
-151.268	64.032	8.690	13.100	0.410	0.139	15.179	0.359	-140.303	-140.303	0.139	0.359	0.232	2.585	0.001	3.542	7.259	3.237	1.143	400.8	412.1	0.595	14
-152.246	64.792	8.690	13.100	0.410	0.137	15.197	0.359	-140.303	-140.303	0.137	0.359	0.232	2.628	0.001	3.488	7.252	3.237	1.141	395.1	412.1	0.595	14
-152.263	64.802	8.690	13.100	0.410	0.137	15.197	0.359	-140.302	-140.302	0.137	0.359	0.232	2.629	0.001	3.487	7.251	3.237	1.141	395.0	412.1	0.595	14
-153.274	65.142	8.690	13.100	0.410	0.134	15.215	0.359	-140.303	-140.303	0.134	0.359	0.232	2.674	0.001	3.432	7.243	3.237	1.139	389.2	412.1	0.595	14
-153.317	65.152	8.690	13.100	0.410	0.134	15.216	0.359	-140.304	-140.304	0.134	0.359	0.232	2.676	0.001	3.430	7.243	3.237	1.139	389.0	412.1	0.595	14
-153.293	65.692	8.690	13.100	0.410	0.134	15.216	0.359	-140.303	-140.303	0.134	0.359	0.232	2.675	0.001	3.431	7.243	3.237	1.139	389.1	412.1	0.595	14
-153.272	65.702	8.690	13.100	0.410	0.134	15.215	0.359	-140.303	-140.303	0.134	0.359	0.232	2.674	0.001	3.432	7.243	3.237	1.139	389.2	412.1	0.595	14
-152.261	66.182	8.690	13.100	0.410	0.137	15.197	0.359	-141.250	-141.250	0.137	0.359	0.232	2.628	0.001	3.487	7.251	3.237	1.141	395.0	412.1	0.595	14
-152.240	66.192	8.690	13.100	0.410	0.137	15.196	0.359	-144.981	-144.981	0.137	0.359	0.232	2.628	0.001	3.488	7.252	3.237	1.141	395.1	412.1	0.595	14
-152.256	67.572	8.690	13.100	0.410	0.137	15.197	0.359	-149.061	-149.061	0.137	0.359	0.232	2.628	0.001	3.487	7.251	3.237	1.141	395.0	412.1	0.595	14
-152.270	67.582	8.690	13.100	0.410	0.137	15.197	0.359	-149.346	-149.346	0.137	0.359	0.232	2.629	0.001	3.487	7.251	3.237	1.141	394.9	412.1	0.595	14
-153.267	68.652	8.690	13.100	0.410	0.134	15.215	0.359	-149.346	-149.346	0.134	0.359	0.232	2.673	0.001	3.432	7.243	3.237	1.139	389.3	412.1	0.595	14
-153.330	68.662	8.690	13.100	0.410	0.134	15.216	0.359	-149.348	-149.348	0.134	0.359	0.232	2.676	0.001	3.429	7.243	3.237	1.139	388.9	412.1	0.595	14
-154.299	69.732	8.690	13.100	0.410	0.132	15.234	0.359	-149.346	-149.346	0.132	0.359	0.232	2.720	0.001	3.377	7.235	3.237	1.137	383.5	412.1	0.595	14
-154.304	69.742	8.690	13.100	0.410	0.132	15.234	0.359	-149.346	-149.346	0.132	0.359	0.232	2.721	0.001	3.377	7.235	3.237	1.137	383.5	412.1	0.595	14
-154.310	70.852	8.690	13.100	0.410	0.132	15.234	0.359	-149.346	-149.346	0.132	0.359	0.232	2.721	0.001	3.377	7.235	3.237	1.137	383.5	412.1	0.595	14
-154.293	70.862	8.690	13.100	0.410	0.132	15.234	0.359	-149.350	-149.350	0.132	0.359	0.232	2.720	0.001	3.378	7.235	3.237	1.137	383.6	412.1	0.595	14
-153.281	74.492	8.690	13.100	0.410	0.134	15.215	0.359	-149.346	-149.346	0.134	0.359	0.232	2.674	0.001	3.432	7.243	3.237	1.139	389.2	412.1	0.595	14
-153.280	74.502	8.690	13.100	0.410	0.134	15.215	0.359	-149.348	-149.348	0.134	0.359	0.232	2.674	0.001	3.432	7.243	3.237	1.139	389.2	412.1	0.595	14
-153.280	74.512	8.690	13.100	0.410	0.134	15.215	0.359	-149.346	-149.346	0.134	0.359	0.232	2.674	0.001	3.432	7.243	3.237	1.139	389.2	412.1	0.595	14
-153.280	74.522	8.690	13.100	0.410	0.134	15.215	0.359	-149.346	-149.346	0.134	0.359	0.232	2.674	0.001	3.432	7.243	3.237	1.139	389.2	412.1	0.595	14
-152.276	77.212	8.690	13.100	0.410	0.137	15.197	0.359	-149.346	-149.346	0.137	0.359	0.232	2.629	0.001	3.486	7.251	3.237	1.141	394.9	412.1	0.595	14
-152.252	77.222	8.690	13.100	0.410	0.137	15.197	0.359	-149.346	-149.346	0.137	0.359	0.232	2.628	0.001	3.488	7.251	3.237	1.141	395.0	412.1	0.595	14
-151.241	78.572	8.690	13.100	0.410	0.139	15.178	0.359	-149.346	-149.346	0.139	0.359	0.232	2.583	0.001	3.544	7.260	3.237	1.143	401.0	412.1	0.595	14
-151.234	78.582	8.690	13.100	0.410	0.139	15.178	0.359	-149.345	-149.345	0.139	0.359	0.232	2.583	0.001	3.544	7.260	3.237	1.143	401.0	412.1	0.595	14
-150.235	79.912	8.690	13.100	0.410	0.141	15.160	0.359	-149.346	-149.346	0.141	0.359	0.232	2.540	0.001	3.600	7.268	3.237	1.145	407.0	412.1	0.595	14
-150.213	79.922	8.690	13.100	0.410	0.141	15.159	0.359	-149.347	-149.347	0.141	0.359	0.232	2.539	0.001	3.601	7.268	3.237	1.145	407.1	412.1	0.595	14
-149.200	81.222	8.700	13.100	0.420	0.144	15.139	0.368	-149.346	-149.346	0.144	0.368	0.231	2.554	0.001	3.651	7.277	3.237	1.151	426.6	447.9	0.597	15
-149.188	81.232	8.700	13.100	0.420	0.144	15.139	0.368	-149.349	-149.349	0.144	0.368	0.231	2.554	0.001	3.651	7.277	3.237	1.151	426.7	447.9	0.597	15
-148.947	81.482	8.700	13.100	0.420	0.145	15.134	0.368	-149.346	-149.346	0.145	0.368	0.231	2.543	0.001	3.665	7.279	3.237	1.152	428.2	447.9	0.597	15
-148.937	81.492	8.700	13.100	0.420	0.145	15.134	0.368	-149.343	-149.343	0.145	0.368	0.231	2.543	0.001	3.666	7.279	3.237	1.152	428.3	447.9	0.597	15
-148.686	81.892	8.700	13.100	0.420	0.145	15.130	0.368	-149.346	-149.346	0.145	0.368	0.231	2.532	0.001	3.681	7.281	3.237	1.153	429.9	447.9	0.597	15
-148.671	81.902	8.700	13.100	0.420	0.145	15.129	0.368	-149.348	-149.348	0.145	0.368	0.231	2.531	0.001	3.681	7.282	3.237	1.153	430.0	447.9	0.597	15
-148.430	82.212	8.700	13.100	0.420	0.146	15.125	0.368	-149.346	-149.346	0.146	0.368	0.231	2.521	0.001	3.696	7.283	3.237	1.153	431.5	447.9	0.597	15

-148.414	82.222	8.700	13.100	0.420	0.146	15.125	0.368	-149.343	-149.343	0.146	0.368	0.231	2.520	0.001	3.696	7.284	3.237	1.153	431.7	447.9	0.597	15
-148.169	82.472	8.700	13.100	0.420	0.147	15.120	0.368	-149.346	-149.346	0.147	0.368	0.231	2.510	0.001	3.711	7.286	3.237	1.154	433.2	447.9	0.597	15
-148.155	82.482	8.700	13.100	0.420	0.147	15.120	0.368	-149.346	-149.346	0.147	0.368	0.231	2.509	0.001	3.712	7.286	3.237	1.154	433.3	447.9	0.597	15
-147.907	82.882	8.710	13.100	0.420	0.147	15.114	0.368	-149.649	-149.649	0.147	0.368	0.231	2.496	0.001	3.730	7.289	3.237	1.154	435.4	447.9	0.597	15
-147.885	82.892	8.710	13.100	0.420	0.147	15.113	0.368	-151.068	-151.068	0.147	0.368	0.231	2.495	0.001	3.731	7.289	3.237	1.155	435.5	447.9	0.597	15
-147.322	83.412	8.710	13.100	0.420	0.149	15.103	0.368	-154.105	-154.105	0.149	0.368	0.231	2.471	0.001	3.765	7.293	3.237	1.156	439.3	447.9	0.597	15
-147.306	83.422	8.710	13.100	0.420	0.149	15.103	0.368	-157.141	-157.141	0.149	0.368	0.231	2.470	0.001	3.766	7.294	3.237	1.156	439.4	447.9	0.597	15
-146.746	84.332	8.710	13.100	0.420	0.150	15.092	0.368	-162.413	-162.413	0.150	0.368	0.231	2.447	0.001	3.799	7.298	3.237	1.157	443.2	447.9	0.597	15
-146.710	84.342	8.710	13.100	0.420	0.150	15.092	0.368	-167.683	-167.683	0.150	0.368	0.231	2.445	0.001	3.801	7.299	3.237	1.157	443.4	447.9	0.597	15
-146.160	86.552	8.710	13.100	0.420	0.152	15.081	0.368	-175.324	-175.324	0.152	0.368	0.231	2.422	0.001	3.835	7.303	3.237	1.159	447.2	447.9	0.597	15
-146.154	86.562	8.710	13.100	0.420	0.152	15.081	0.368	-177.025	-177.025	0.152	0.368	0.231	2.422	0.001	3.835	7.303	3.237	1.159	447.3	447.9	0.597	15
-146.162	86.572	8.710	13.100	0.420	0.152	15.081	0.368	-177.025	-177.025	0.152	0.368	0.231	2.423	0.001	3.835	7.303	3.237	1.159	447.2	447.9	0.597	15
-146.151	86.582	8.710	13.100	0.420	0.152	15.081	0.368	-177.019	-177.019	0.152	0.368	0.231	2.422	0.001	3.835	7.303	3.237	1.159	447.3	447.9	0.597	15
-145.587	87.852	8.710	13.100	0.420	0.153	15.071	0.368	-177.023	-177.023	0.153	0.368	0.230	2.400	0.001	3.857	7.308	3.236	1.160	452.8	483.8	0.599	16
-145.570	87.862	8.710	13.100	0.420	0.153	15.070	0.368	-177.025	-177.025	0.153	0.368	0.230	2.399	0.001	3.858	7.308	3.236	1.160	452.9	483.8	0.599	16
-145.018	88.912	8.780	13.200	0.390	0.161	15.145	0.342	-177.023	-177.023	0.161	0.342	0.231	2.123	0.001	4.081	7.275	3.237	1.155	436.5	447.9	0.597	15
-144.996	88.922	8.780	13.200	0.390	0.161	15.144	0.342	-177.019	-177.019	0.161	0.342	0.231	2.122	0.001	4.082	7.275	3.237	1.155	436.6	447.9	0.597	15
-144.907	89.082	8.780	13.200	0.390	0.161	15.142	0.342	-177.023	-177.023	0.161	0.342	0.231	2.119	0.001	4.088	7.276	3.237	1.155	437.3	447.9	0.597	15
-144.895	89.092	8.780	13.200	0.390	0.161	15.142	0.342	-177.019	-177.019	0.161	0.342	0.231	2.118	0.001	4.089	7.276	3.237	1.155	437.3	447.9	0.597	15
-144.800	89.282	8.780	13.200	0.390	0.162	15.140	0.342	-177.023	-177.023	0.162	0.342	0.231	2.115	0.001	4.095	7.277	3.237	1.155	438.0	447.9	0.597	15
-144.800	89.292	8.780	13.200	0.390	0.162	15.140	0.342	-177.019	-177.019	0.162	0.342	0.231	2.115	0.001	4.095	7.277	3.237	1.155	438.0	447.9	0.597	15
-144.706	89.522	8.780	13.200	0.390	0.162	15.139	0.342	-177.023	-177.023	0.162	0.342	0.231	2.111	0.001	4.101	7.277	3.237	1.156	438.7	447.9	0.597	15
-144.689	89.532	8.780	13.200	0.390	0.162	15.138	0.342	-177.025	-177.025	0.162	0.342	0.231	2.111	0.001	4.102	7.277	3.237	1.156	438.8	447.9	0.597	15
-144.606	89.722	8.780	13.200	0.390	0.162	15.137	0.342	-177.023	-177.023	0.162	0.342	0.231	2.108	0.001	4.108	7.278	3.237	1.156	439.4	447.9	0.597	15
-144.600	89.732	8.780	13.200	0.390	0.162	15.137	0.342	-177.025	-177.025	0.162	0.342	0.231	2.108	0.001	4.108	7.278	3.237	1.156	439.5	447.9	0.597	15
-144.500	90.132	8.780	13.200	0.390	0.162	15.135	0.342	-177.023	-177.023	0.162	0.342	0.231	2.104	0.001	4.114	7.279	3.237	1.156	440.2	447.9	0.597	15
-144.497	90.142	8.780	13.200	0.390	0.162	15.135	0.342	-177.025	-177.025	0.162	0.342	0.231	2.104	0.001	4.115	7.279	3.237	1.156	440.2	447.9	0.597	15
-144.497	90.162	8.780	13.200	0.390	0.162	15.135	0.342	-177.022	-177.022	0.162	0.342	0.231	2.104	0.001	4.115	7.279	3.237	1.156	440.2	447.9	0.597	15
-144.505	90.172	8.780	13.200	0.390	0.162	15.135	0.342	-177.025	-177.025	0.162	0.342	0.231	2.104	0.001	4.114	7.279	3.237	1.156	440.2	447.9	0.597	15
-144.499	90.182	8.780	13.200	0.390	0.162	15.135	0.342	-177.019	-177.019	0.162	0.342	0.231	2.104	0.001	4.114	7.279	3.237	1.156	440.2	447.9	0.597	15
-144.491	90.192	8.780	13.200	0.390	0.162	15.135	0.342	-177.025	-177.025	0.162	0.342	0.231	2.104	0.001	4.115	7.279	3.237	1.156	440.3	447.9	0.597	15
-144.504	90.202	8.780	13.200	0.390	0.162	15.135	0.342	-177.025	-177.025	0.162	0.342	0.231	2.104	0.001	4.114	7.279	3.237	1.156	440.2	447.9	0.597	15
-144.508	90.262	8.780	13.200	0.390	0.162	15.135	0.342	-177.022	-177.022	0.162	0.342	0.231	2.104	0.001	4.114	7.279	3.237	1.156	440.1	447.9	0.597	15
-144.495	90.272	8.780	13.200	0.390	0.162	15.135	0.342	-177.025	-177.025	0.162	0.342	0.231	2.104	0.001	4.115	7.279	3.237	1.156	440.2	447.9	0.597	15
-144.000	92.032	8.780	13.200	0.390	0.164	15.126	0.342	-177.023	-177.023	0.164	0.342	0.231	2.086	0.001	4.147	7.283	3.237	1.157	443.9	447.9	0.597	15
-143.990	92.042	8.780	13.200	0.390	0.164	15.125	0.342	-177.025	-177.025	0.164	0.342	0.231	2.086	0.001	4.148	7.283	3.237	1.158	444.0	447.9	0.597	15
-143.990	94.702	8.780	13.200	0.390	0.164	15.125	0.342	-177.023	-177.023	0.164	0.342	0.231	2.086	0.001	4.148	7.283	3.237	1.158	444.0	447.9	0.597	15
-144.000	94.712	8.780	13.200	0.390	0.164	15.126	0.342	-177.019	-177.019	0.164	0.342	0.231	2.086	0.001	4.147	7.283	3.237	1.157	443.9	447.9	0.597	15
-144.000	95.862	8.780	13.200	0.390	0.164	15.126	0.342	-177.023	-177.023	0.164	0.342	0.231	2.086	0.001	4.147	7.283	3.237	1.157	443.9	447.9	0.597	15
-144.000	95.872	8.780	13.200	0.390	0.164	15.126	0.342	-177.025	-177.025	0.164	0.342	0.231	2.086	0.001	4.147	7.283	3.237	1.157	443.9	447.9	0.597	15
-143.990	95.942	8.780	13.200	0.390	0.164	15.125	0.342	-177.023	-177.023	0.164	0.342	0.231	2.086	0.001	4.148	7.283	3.237	1.158	444.0	447.9	0.597	15
-144.000	95.952	8.780	13.200	0.390	0.164	15.126	0.342	-177.025	-177.025	0.164	0.342	0.231	2.086	0.001	4.147	7.283	3.237	1.157	443.9	447.9	0.597	15

-144.001	96.002	8.780	13.200	0.390	0.164	15.126	0.342	-177.023	-177.023	0.164	0.342	0.231	2.086	0.001	4.147	7.283	3.237	1.157	443.9	447.9	0.597	15
-143.995	96.012	8.780	13.200	0.390	0.164	15.126	0.342	-177.019	-177.019	0.164	0.342	0.231	2.086	0.001	4.147	7.283	3.237	1.158	443.9	447.9	0.597	15
-143.510	97.242	8.780	13.200	0.390	0.165	15.116	0.342	-177.023	-177.023	0.165	0.342	0.231	2.069	0.001	4.179	7.287	3.237	1.159	447.5	447.9	0.597	15
-143.494	97.252	8.780	13.200	0.390	0.165	15.116	0.342	-177.019	-177.019	0.165	0.342	0.231	2.068	0.001	4.180	7.287	3.237	1.159	447.6	447.9	0.597	15
-143.000	98.242	8.780	13.200	0.390	0.167	15.107	0.342	-177.023	-177.023	0.167	0.342	0.230	2.052	0.001	4.199	7.292	3.236	1.160	453.0	483.8	0.599	16
-142.990	98.252	8.780	13.200	0.390	0.167	15.107	0.342	-177.025	-177.025	0.167	0.342	0.230	2.051	0.001	4.200	7.292	3.236	1.160	453.0	483.8	0.599	16
-142.500	99.242	8.780	13.200	0.390	0.168	15.098	0.342	-177.023	-177.023	0.168	0.342	0.230	2.034	0.001	4.232	7.296	3.236	1.161	456.8	483.8	0.599	16
-142.498	99.252	8.780	13.200	0.390	0.168	15.098	0.342	-177.025	-177.025	0.168	0.342	0.230	2.034	0.001	4.232	7.296	3.236	1.161	456.8	483.8	0.599	16
-142.002	100.542	8.760	13.200	0.390	0.169	15.092	0.342	-177.023	-177.023	0.169	0.342	0.230	2.021	0.001	4.257	7.298	3.236	1.162	459.7	483.8	0.599	16
-141.986	100.552	8.760	13.200	0.390	0.169	15.091	0.342	-177.025	-177.025	0.169	0.342	0.230	2.021	0.001	4.258	7.299	3.236	1.162	459.8	483.8	0.599	16
-141.610	101.552	8.760	13.200	0.390	0.170	15.084	0.342	-177.023	-177.023	0.170	0.342	0.230	2.008	0.001	4.284	7.302	3.236	1.163	462.7	483.8	0.599	16
-141.599	101.562	8.760	13.200	0.390	0.170	15.084	0.342	-177.025	-177.025	0.170	0.342	0.230	2.008	0.001	4.285	7.302	3.236	1.163	462.8	483.8	0.599	16
-141.599	101.572	8.760	13.200	0.390	0.170	15.084	0.342	-177.025	-177.025	0.170	0.342	0.230	2.008	0.001	4.285	7.302	3.236	1.163	462.8	483.8	0.599	16
-141.608	101.582	8.760	13.200	0.390	0.170	15.084	0.342	-177.019	-177.019	0.170	0.342	0.230	2.008	0.001	4.284	7.302	3.236	1.163	462.8	483.8	0.599	16
-141.600	101.592	8.760	13.200	0.390	0.170	15.084	0.342	-177.025	-177.025	0.170	0.342	0.230	2.008	0.001	4.285	7.302	3.236	1.163	462.8	483.8	0.599	16
-141.590	101.602	8.760	13.200	0.390	0.170	15.084	0.342	-177.019	-177.019	0.170	0.342	0.230	2.007	0.001	4.285	7.302	3.236	1.163	462.9	483.8	0.599	16
-141.593	101.622	8.760	13.200	0.390	0.170	15.084	0.342	-177.025	-177.025	0.170	0.342	0.230	2.007	0.001	4.285	7.302	3.236	1.163	462.9	483.8	0.599	16
-141.600	101.632	8.760	13.200	0.390	0.170	15.084	0.342	-177.019	-177.019	0.170	0.342	0.230	2.008	0.001	4.285	7.302	3.236	1.163	462.8	483.8	0.599	16
-141.594	101.642	8.760	13.200	0.390	0.170	15.084	0.342	-177.025	-177.025	0.170	0.342	0.230	2.007	0.001	4.285	7.302	3.236	1.163	462.9	483.8	0.599	16
-141.208	103.292	8.760	13.200	0.390	0.171	15.077	0.342	-177.023	-177.023	0.171	0.342	0.230	1.994	0.001	4.311	7.305	3.236	1.164	465.9	483.8	0.599	16
-141.200	103.302	8.760	13.200	0.390	0.171	15.077	0.342	-177.025	-177.025	0.171	0.342	0.230	1.994	0.001	4.312	7.305	3.236	1.164	466.0	483.8	0.599	16
-141.190	103.312	8.760	13.200	0.390	0.171	15.076	0.342	-177.025	-177.025	0.171	0.342	0.230	1.994	0.001	4.312	7.305	3.236	1.164	466.1	483.8	0.599	16
-141.200	103.322	8.760	13.200	0.390	0.171	15.077	0.342	-177.019	-177.019	0.171	0.342	0.230	1.994	0.001	4.312	7.305	3.236	1.164	466.0	483.8	0.599	16
-141.596	105.082	8.760	13.200	0.390	0.170	15.084	0.342	-177.023	-177.023	0.170	0.342	0.230	2.007	0.001	4.285	7.302	3.236	1.163	462.8	483.8	0.599	16
-141.652	105.092	8.760	13.200	0.390	0.170	15.085	0.342	-177.019	-177.019	0.170	0.342	0.230	2.009	0.001	4.281	7.301	3.236	1.163	462.4	483.8	0.599	16
-141.996	105.262	8.760	13.200	0.390	0.169	15.092	0.342	-177.023	-177.023	0.169	0.342	0.230	2.021	0.001	4.258	7.299	3.236	1.162	459.7	483.8	0.599	16
-142.008	105.272	8.760	13.200	0.390	0.169	15.092	0.342	-177.025	-177.025	0.169	0.342	0.230	2.022	0.001	4.257	7.298	3.236	1.162	459.6	483.8	0.599	16
-142.005	106.792	8.760	13.200	0.390	0.169	15.092	0.342	-177.023	-177.023	0.169	0.342	0.230	2.022	0.001	4.257	7.298	3.236	1.162	459.6	483.8	0.599	16
-141.980	106.802	8.760	13.200	0.390	0.169	15.091	0.342	-177.019	-177.019	0.169	0.342	0.230	2.021	0.001	4.259	7.299	3.236	1.162	459.8	483.8	0.599	16
-141.997	106.822	8.760	13.200	0.390	0.169	15.092	0.342	-177.025	-177.025	0.169	0.342	0.230	2.021	0.001	4.258	7.299	3.236	1.162	459.7	483.8	0.599	16
-142.000	106.832	8.760	13.200	0.390	0.169	15.092	0.342	-177.019	-177.019	0.169	0.342	0.230	2.021	0.001	4.257	7.298	3.236	1.162	459.7	483.8	0.599	16
-142.000	106.842	8.760	13.200	0.390	0.169	15.092	0.342	-177.025	-177.025	0.169	0.342	0.230	2.021	0.001	4.257	7.298	3.236	1.162	459.7	483.8	0.599	16
-141.990	106.852	8.760	13.200	0.390	0.169	15.091	0.342	-177.020	-177.020	0.169	0.342	0.230	2.021	0.001	4.258	7.299	3.236	1.162	459.8	483.8	0.599	16
-141.603	107.912	8.760	13.200	0.390	0.170	15.084	0.342	-177.023	-177.023	0.170	0.342	0.230	2.008	0.001	4.284	7.302	3.236	1.163	462.8	483.8	0.599	16
-141.578	107.922	8.760	13.200	0.390	0.170	15.084	0.342	-177.020	-177.020	0.170	0.342	0.230	2.007	0.001	4.286	7.302	3.236	1.163	463.0	483.8	0.599	16
-141.210	109.232	8.760	13.200	0.390	0.171	15.077	0.342	-177.023	-177.023	0.171	0.342	0.230	1.994	0.001	4.311	7.305	3.236	1.164	465.9	483.8	0.599	16
-141.199	109.242	8.760	13.200	0.390	0.171	15.077	0.342	-177.019	-177.019	0.171	0.342	0.230	1.994	0.001	4.312	7.305	3.236	1.164	466.0	483.8	0.599	16
-141.189	109.602	8.760	13.200	0.390	0.171	15.076	0.342	-177.023	-177.023	0.171	0.342	0.230	1.994	0.001	4.313	7.305	3.236	1.164	466.1	483.8	0.599	16
-141.201	109.612	8.760	13.200	0.390	0.171	15.077	0.342	-177.019	-177.019	0.171	0.342	0.230	1.994	0.001	4.312	7.305	3.236	1.164	466.0	483.8	0.599	16
-141.193	109.622	8.760	13.200	0.390	0.171	15.076	0.342	-177.025	-177.025	0.171	0.342	0.230	1.994	0.001	4.312	7.305	3.236	1.164	466.0	483.8	0.599	16
-140.800	111.712	8.760	13.200	0.390	0.173	15.069	0.342	-177.023	-177.023	0.173	0.342	0.230	1.980	0.001	4.339	7.309	3.236	1.165	469.2	483.8	0.599	16
-140.793	111.722	8.760	13.200	0.390	0.173	15.069	0.342	-177.025	-177.025	0.173	0.342	0.230	1.980	0.001	4.340	7.309	3.236	1.165	469.3	483.8	0.599	16

-140.410	112.892	8.760	13.200	0.390	0.174	15.062	0.342	-177.023	-177.023	0.174	0.342	0.230	1.967	0.001	4.366	7.312	3.236	1.166	472.4	483.8	0.599	16
-140.397	112.902	8.760	13.200	0.390	0.174	15.062	0.342	-177.019	-177.019	0.174	0.342	0.230	1.967	0.001	4.367	7.312	3.236	1.167	472.5	483.8	0.599	16
-140.000	113.832	8.760	13.200	0.390	0.175	15.054	0.342	-177.023	-177.023	0.175	0.342	0.230	1.953	0.001	4.395	7.315	3.236	1.168	475.7	483.8	0.599	16
-139.996	113.842	8.760	13.200	0.390	0.175	15.054	0.342	-177.020	-177.020	0.175	0.342	0.230	1.953	0.001	4.395	7.315	3.236	1.168	475.8	483.8	0.599	16
-139.993	113.862	8.760	13.200	0.390	0.175	15.054	0.342	-177.025	-177.025	0.175	0.342	0.230	1.953	0.001	4.395	7.315	3.236	1.168	475.8	483.8	0.599	16
-140.000	113.872	8.760	13.200	0.390	0.175	15.054	0.342	-177.019	-177.019	0.175	0.342	0.230	1.953	0.001	4.395	7.315	3.236	1.168	475.7	483.8	0.599	16
-139.999	113.882	8.760	13.200	0.390	0.175	15.054	0.342	-177.025	-177.025	0.175	0.342	0.230	1.953	0.001	4.395	7.315	3.236	1.168	475.7	483.8	0.599	16
-139.720	114.962	8.760	13.200	0.390	0.176	15.049	0.342	-177.023	-177.023	0.176	0.342	0.230	1.944	0.001	4.414	7.318	3.236	1.168	478.1	483.8	0.599	16
-139.718	114.972	8.760	13.200	0.390	0.176	15.049	0.342	-177.025	-177.025	0.176	0.342	0.230	1.944	0.001	4.415	7.318	3.236	1.168	478.1	483.8	0.599	16
-139.447	116.112	8.760	13.200	0.390	0.177	15.044	0.342	-177.023	-177.023	0.177	0.342	0.230	1.935	0.001	4.434	7.320	3.236	1.169	480.3	483.8	0.599	16
-139.436	116.122	8.760	13.200	0.390	0.177	15.044	0.342	-177.025	-177.025	0.177	0.342	0.230	1.935	0.001	4.434	7.320	3.236	1.169	480.4	483.8	0.599	16
-139.436	116.142	8.760	13.200	0.390	0.177	15.044	0.342	-177.022	-177.022	0.177	0.342	0.230	1.935	0.001	4.434	7.320	3.236	1.169	480.4	483.8	0.599	16
-139.440	116.152	8.760	13.200	0.390	0.177	15.044	0.342	-177.025	-177.025	0.177	0.342	0.230	1.935	0.001	4.434	7.320	3.236	1.169	480.4	483.8	0.599	16
-139.440	116.162	8.760	13.200	0.390	0.177	15.044	0.342	-177.019	-177.019	0.177	0.342	0.230	1.935	0.001	4.434	7.320	3.236	1.169	480.4	483.8	0.599	16
-139.430	116.172	8.760	13.200	0.390	0.177	15.043	0.342	-177.025	-177.025	0.177	0.342	0.230	1.934	0.001	4.435	7.320	3.236	1.169	480.5	483.8	0.599	16
-139.160	116.692	8.760	13.200	0.390	0.177	15.038	0.342	-177.023	-177.023	0.177	0.342	0.230	1.925	0.001	4.454	7.323	3.236	1.170	482.8	483.8	0.599	16
-139.150	116.702	8.760	13.200	0.390	0.177	15.038	0.342	-177.019	-177.019	0.177	0.342	0.230	1.925	0.001	4.455	7.323	3.236	1.170	482.8	483.8	0.599	16
-138.884	117.192	8.760	13.200	0.390	0.178	15.033	0.342	-177.023	-177.023	0.178	0.342	0.229	1.917	0.001	4.459	7.325	3.236	1.170	486.8	519.8	0.601	17
-138.859	117.202	8.760	13.200	0.390	0.178	15.033	0.342	-177.019	-177.019	0.178	0.342	0.229	1.916	0.001	4.460	7.325	3.236	1.170	487.0	519.8	0.601	17
-138.610	117.632	8.700	13.100	0.350	0.173	14.942	0.307	-177.023	-177.023	0.173	0.307	0.231	1.774	0.001	4.324	7.367	3.237	1.150	421.8	447.9	0.597	15
-138.591	117.642	8.700	13.100	0.350	0.173	14.942	0.307	-177.025	-177.025	0.173	0.307	0.231	1.773	0.001	4.325	7.367	3.237	1.150	421.9	447.9	0.597	15
-138.240	118.292	8.700	13.100	0.350	0.174	14.935	0.307	-177.023	-177.023	0.174	0.307	0.231	1.762	0.001	4.350	7.370	3.237	1.151	424.7	447.9	0.597	15
-138.235	118.302	8.700	13.100	0.350	0.174	14.935	0.307	-177.019	-177.019	0.174	0.307	0.231	1.762	0.001	4.350	7.370	3.237	1.151	424.7	447.9	0.597	15
-137.880	119.172	8.700	13.100	0.350	0.175	14.928	0.307	-177.023	-177.023	0.175	0.307	0.231	1.751	0.001	4.375	7.373	3.237	1.152	427.5	447.9	0.597	15
-137.875	119.182	8.700	13.100	0.350	0.175	14.928	0.307	-177.025	-177.025	0.175	0.307	0.231	1.751	0.001	4.376	7.373	3.237	1.152	427.6	447.9	0.597	15
-137.522	120.082	8.700	13.100	0.350	0.176	14.921	0.307	-177.023	-177.023	0.176	0.307	0.231	1.740	0.001	4.401	7.376	3.237	1.153	430.4	447.9	0.597	15
-137.514	120.092	8.700	13.100	0.350	0.176	14.921	0.307	-177.019	-177.019	0.176	0.307	0.231	1.740	0.001	4.401	7.376	3.237	1.153	430.5	447.9	0.597	15
-137.510	122.022	8.700	13.100	0.350	0.176	14.921	0.307	-177.023	-177.023	0.176	0.307	0.231	1.740	0.001	4.402	7.376	3.237	1.153	430.5	447.9	0.597	15
-137.520	122.032	8.700	13.100	0.350	0.176	14.921	0.307	-177.019	-177.019	0.176	0.307	0.231	1.740	0.001	4.401	7.376	3.237	1.153	430.4	447.9	0.597	15
-137.521	122.082	8.700	13.100	0.350	0.176	14.921	0.307	-177.023	-177.023	0.176	0.307	0.231	1.740	0.001	4.401	7.376	3.237	1.153	430.4	447.9	0.597	15
-137.520	122.092	8.700	13.100	0.350	0.176	14.921	0.307	-177.025	-177.025	0.176	0.307	0.231	1.740	0.001	4.401	7.376	3.237	1.153	430.4	447.9	0.597	15
-137.510	122.102	8.700	13.100	0.350	0.176	14.921	0.307	-177.019	-177.019	0.176	0.307	0.231	1.740	0.001	4.402	7.376	3.237	1.153	430.5	447.9	0.597	15
-137.520	122.112	8.700	13.100	0.350	0.176	14.921	0.307	-177.025	-177.025	0.176	0.307	0.231	1.740	0.001	4.401	7.376	3.237	1.153	430.4	447.9	0.597	15
-137.530	125.372	8.700	13.100	0.350	0.176	14.921	0.307	-177.023	-177.023	0.176	0.307	0.231	1.741	0.001	4.400	7.376	3.237	1.153	430.3	447.9	0.597	15
-137.517	125.382	8.700	13.100	0.350	0.176	14.921	0.307	-177.025	-177.025	0.176	0.307	0.231	1.740	0.001	4.401	7.376	3.237	1.153	430.4	447.9	0.597	15
-137.517	125.752	8.700	13.100	0.350	0.176	14.921	0.307	-177.023	-177.023	0.176	0.307	0.231	1.740	0.001	4.401	7.376	3.237	1.153	430.4	447.9	0.597	15
-137.524	125.762	8.700	13.100	0.350	0.176	14.921	0.307	-177.019	-177.019	0.176	0.307	0.231	1.740	0.001	4.401	7.376	3.237	1.153	430.4	447.9	0.597	15
-137.523	126.732	8.700	13.100	0.350	0.176	14.921	0.307	-177.023	-177.023	0.176	0.307	0.231	1.740	0.001	4.401	7.376	3.237	1.153	430.4	447.9	0.597	15
-137.498	126.742	8.700	13.100	0.350	0.176	14.921	0.307	-177.025	-177.025	0.176	0.307	0.231	1.740	0.001	4.403	7.376	3.237	1.153	430.6	447.9	0.597	15
-137.181	126.992	8.700	13.100	0.350	0.177	14.915	0.297	-177.023	-177.023	0.177	0.297	0.000	1.676	0.001	4.516	7.379	1.835	1.086	233.7	234.9	0.585	9
-137.155	127.002	8.700	13.100	0.350	0.177	14.914	0.297	-177.019	-177.019	0.177	0.297	0.000	1.675	0.001	4.518	7.379	1.835	1.086	233.8	234.9	0.585	9
-137.142	127.212	8.300	12.800	0.350	0.155	14.693	0.297	-177.023	-177.023	0.155	0.297	0.000	1.920	0.001	3.883	7.483	1.884	1.077	207.9	234.9	0.585	9

-137.163	127.222	8.300	12.800	0.350	0.155	14.693	0.297	-177.025	-177.025	0.155	0.297	0.000	1.921	0.001	3.882	7.483	1.884	1.077	207.8	234.9	0.585	9
-137.489	127.342	8.300	12.800	0.350	0.154	14.700	0.297	-177.023	-177.023	0.154	0.297	0.000	1.932	0.001	3.860	7.480	1.886	1.076	206.8	234.9	0.585	9
-137.528	127.352	8.300	12.800	0.350	0.154	14.700	0.297	-177.019	-177.019	0.154	0.297	0.000	1.934	0.001	3.858	7.479	1.887	1.076	206.7	234.9	0.585	9
-137.543	127.462	8.300	12.800	0.350	0.154	14.701	0.297	-177.023	-177.023	0.154	0.297	0.000	1.934	0.001	3.857	7.479	1.887	1.076	206.7	234.9	0.585	9
-137.517	127.472	8.300	12.800	0.350	0.154	14.700	0.297	-177.020	-177.020	0.154	0.297	0.000	1.933	0.001	3.859	7.480	1.887	1.076	206.7	234.9	0.585	9
-137.164	127.642	8.300	12.800	0.350	0.155	14.693	0.297	-177.023	-177.023	0.155	0.297	0.000	1.921	0.001	3.881	7.483	1.884	1.077	207.8	234.9	0.585	9
-137.160	127.652	8.300	12.800	0.350	0.155	14.693	0.297	-177.019	-177.019	0.155	0.297	0.000	1.921	0.001	3.882	7.483	1.884	1.077	207.8	234.9	0.585	9
-137.119	128.012	8.300	12.800	0.350	0.155	14.693	0.297	-177.023	-177.023	0.155	0.297	0.000	1.919	0.001	3.884	7.483	1.884	1.077	207.9	234.9	0.585	9
-137.170	128.022	8.300	12.800	0.350	0.155	14.694	0.297	-177.019	-177.019	0.155	0.297	0.000	1.921	0.001	3.881	7.483	1.884	1.077	207.8	234.9	0.585	9
-137.214	128.122	8.300	12.800	0.350	0.154	14.694	0.297	-177.023	-177.023	0.154	0.297	0.000	1.923	0.001	3.878	7.482	1.885	1.077	207.7	234.9	0.585	9
-137.148	128.132	8.300	12.800	0.350	0.155	14.693	0.297	-177.025	-177.025	0.155	0.297	0.000	1.920	0.001	3.882	7.483	1.884	1.077	207.9	234.9	0.585	9
-137.117	128.362	8.300	12.800	0.350	0.155	14.693	0.297	-177.023	-177.023	0.155	0.297	0.000	1.919	0.001	3.885	7.483	1.884	1.077	208.0	234.9	0.585	9
-137.172	128.372	8.300	12.800	0.350	0.155	14.694	0.297	-177.019	-177.019	0.155	0.297	0.000	1.921	0.001	3.881	7.483	1.884	1.077	207.8	234.9	0.585	9
-137.173	128.572	8.300	12.800	0.350	0.155	14.694	0.297	-177.023	-177.023	0.155	0.297	0.000	1.921	0.001	3.881	7.483	1.884	1.077	207.8	234.9	0.585	9
-137.118	128.582	8.300	12.800	0.350	0.155	14.693	0.297	-177.025	-177.025	0.155	0.297	0.000	1.919	0.001	3.884	7.483	1.884	1.077	207.9	234.9	0.585	9
-136.815	128.642	8.300	12.800	0.350	0.156	14.687	0.297	-177.022	-177.022	0.156	0.297	0.000	1.909	0.001	3.904	7.486	1.882	1.077	208.9	234.9	0.585	9
-136.781	128.652	8.300	12.800	0.350	0.156	14.686	0.297	-177.025	-177.025	0.156	0.297	0.000	1.908	0.001	3.906	7.486	1.882	1.077	209.0	234.9	0.585	9
-136.023	128.952	8.300	12.800	0.350	0.158	14.672	0.297	-177.023	-177.023	0.158	0.297	0.000	1.882	0.001	3.956	7.493	1.876	1.078	211.4	234.9	0.585	9
-136.018	128.962	8.300	12.800	0.350	0.158	14.672	0.297	-177.025	-177.025	0.158	0.297	0.000	1.881	0.001	3.957	7.493	1.876	1.078	211.4	234.9	0.585	9
-136.008	129.192	8.300	12.800	0.350	0.158	14.671	0.297	-177.023	-177.023	0.158	0.297	0.000	1.881	0.001	3.957	7.493	1.876	1.078	211.4	234.9	0.585	9
-136.035	129.202	8.300	12.800	0.350	0.158	14.672	0.297	-177.025	-177.025	0.158	0.297	0.000	1.882	0.001	3.956	7.493	1.876	1.078	211.3	234.9	0.585	9
-136.024	129.272	8.300	12.800	0.350	0.158	14.672	0.297	-177.023	-177.023	0.158	0.297	0.000	1.882	0.001	3.956	7.493	1.876	1.078	211.4	234.9	0.585	9
-135.997	129.282	8.300	12.800	0.350	0.158	14.671	0.297	-177.025	-177.025	0.158	0.297	0.000	1.881	0.001	3.958	7.493	1.876	1.078	211.4	234.9	0.585	9
-136.006	129.362	8.300	12.800	0.350	0.158	14.671	0.297	-177.023	-177.023	0.158	0.297	0.000	1.881	0.001	3.958	7.493	1.876	1.078	211.4	234.9	0.585	9
-136.033	129.372	8.300	12.800	0.350	0.158	14.672	0.297	-177.019	-177.019	0.158	0.297	0.000	1.882	0.001	3.956	7.493	1.876	1.078	211.3	234.9	0.585	9
-136.029	129.572	8.300	12.800	0.350	0.158	14.672	0.297	-177.023	-177.023	0.158	0.297	0.000	1.882	0.001	3.956	7.493	1.876	1.078	211.3	234.9	0.585	9
-136.011	129.582	8.300	12.800	0.350	0.158	14.671	0.297	-177.025	-177.025	0.158	0.297	0.000	1.881	0.001	3.957	7.493	1.876	1.078	211.4	234.9	0.585	9
-136.003	130.022	8.300	12.800	0.350	0.158	14.671	0.297	-177.023	-177.023	0.158	0.297	0.000	1.881	0.001	3.958	7.493	1.876	1.078	211.4	234.9	0.585	9
-136.043	130.032	8.300	12.800	0.350	0.158	14.672	0.297	-177.025	-177.025	0.158	0.297	0.000	1.882	0.001	3.955	7.493	1.876	1.078	211.3	234.9	0.585	9
-136.795	130.532	8.300	12.800	0.350	0.156	14.686	0.297	-177.023	-177.023	0.156	0.297	0.000	1.908	0.001	3.906	7.486	1.882	1.077	208.9	234.9	0.585	9
-136.809	130.542	8.300	12.800	0.350	0.156	14.687	0.297	-177.025	-177.025	0.156	0.297	0.000	1.909	0.001	3.905	7.486	1.882	1.077	208.9	234.9	0.585	9
-136.817	130.782	8.300	12.800	0.350	0.156	14.687	0.297	-177.023	-177.023	0.156	0.297	0.000	1.909	0.001	3.904	7.486	1.882	1.077	208.9	234.9	0.585	9
-136.788	130.792	8.300	12.800	0.350	0.156	14.686	0.297	-177.025	-177.025	0.156	0.297	0.000	1.908	0.001	3.906	7.486	1.882	1.077	209.0	234.9	0.585	9
-136.048	131.302	8.300	12.800	0.350	0.158	14.672	0.297	-177.023	-177.023	0.158	0.297	0.000	1.883	0.001	3.955	7.493	1.877	1.078	211.3	234.9	0.585	9
-136.011	131.312	8.300	12.800	0.350	0.158	14.671	0.297	-177.019	-177.019	0.158	0.297	0.000	1.881	0.001	3.957	7.493	1.876	1.078	211.4	234.9	0.585	9
-136.010	131.422	8.300	12.800	0.350	0.158	14.671	0.297	-177.023	-177.023	0.158	0.297	0.000	1.881	0.001	3.957	7.493	1.876	1.078	211.4	234.9	0.585	9
-136.020	131.432	8.300	12.800	0.350	0.158	14.672	0.297	-177.019	-177.019	0.158	0.297	0.000	1.882	0.001	3.957	7.493	1.876	1.078	211.4	234.9	0.585	9
-136.048	131.932	8.300	12.800	0.350	0.158	14.672	0.297	-177.023	-177.023	0.158	0.297	0.000	1.883	0.001	3.955	7.493	1.877	1.078	211.3	234.9	0.585	9
-136.017	131.942	8.300	12.800	0.350	0.158	14.672	0.297	-177.025	-177.025	0.158	0.297	0.000	1.881	0.001	3.957	7.493	1.876	1.078	211.4	234.9	0.585	9
-135.306	132.512	8.300	12.800	0.350	0.160	14.658	0.297	-177.023	-177.023	0.160	0.297	0.000	1.857	0.001	4.004	7.500	1.871	1.079	213.7	234.9	0.585	9
-135.167	132.522	8.300	12.800	0.350	0.160	14.655	0.297	-177.019	-177.019	0.160	0.297	0.000	1.853	0.001	4.014	7.501	1.871	1.079	214.1	234.9	0.585	9
-134.481	132.702	8.300	12.800	0.350	0.162	14.642	0.297	-177.051	-177.051	0.162	0.297	0.000	1.830	0.001	4.060	7.507	1.866	1.080	216.4	234.9	0.585	9

-134.459	132.712	8.300	12.800	0.350	0.162	14.642	0.297	-177.420	-177.420	0.162	0.297	0.000	1.829	0.001	4.062	7.507	1.866	1.080	216.4	234.9	0.585	9
-133.696	132.922	8.300	12.800	0.350	0.165	14.627	0.297	-178.633	-178.633	0.165	0.297	0.000	1.804	0.001	4.114	7.514	1.861	1.081	219.0	234.9	0.585	9
-133.583	132.932	8.300	12.800	0.350	0.165	14.625	0.297	-179.416	-179.416	0.165	0.297	0.000	1.800	0.001	4.122	7.515	1.860	1.081	219.4	234.9	0.585	9
-133.652	133.402	7.890	12.500	0.350	0.143	14.409	0.297	-179.415	-179.415	0.143	0.297	0.000	2.081	0.001	3.524	7.621	1.908	1.072	193.5	199.8	0.583	8
-133.696	133.412	7.890	12.500	0.350	0.143	14.410	0.297	-179.414	-179.414	0.143	0.297	0.000	2.082	0.001	3.522	7.620	1.908	1.072	193.3	199.8	0.583	8
-133.681	133.442	7.890	12.500	0.350	0.143	14.409	0.297	-179.414	-179.414	0.143	0.297	0.000	2.082	0.001	3.523	7.620	1.908	1.072	193.4	199.8	0.583	8
-133.670	133.452	7.890	12.500	0.350	0.143	14.409	0.297	-179.416	-179.416	0.143	0.297	0.000	2.081	0.001	3.523	7.620	1.908	1.072	193.4	199.8	0.583	8
-133.676	133.552	7.890	12.500	0.350	0.143	14.409	0.297	-179.414	-179.414	0.143	0.297	0.000	2.082	0.001	3.523	7.620	1.908	1.072	193.4	199.8	0.583	8
-133.680	133.562	7.890	12.500	0.350	0.143	14.409	0.297	-179.416	-179.416	0.143	0.297	0.000	2.082	0.001	3.523	7.620	1.908	1.072	193.4	199.8	0.583	8
-133.661	133.572	7.890	12.500	0.350	0.143	14.409	0.297	-179.416	-179.416	0.143	0.297	0.000	2.081	0.001	3.524	7.621	1.908	1.072	193.4	199.8	0.583	8
-133.680	133.742	7.890	12.500	0.350	0.143	14.409	0.297	-179.415	-179.415	0.143	0.297	0.000	2.082	0.001	3.523	7.620	1.908	1.072	193.4	199.8	0.583	8
-133.685	133.752	7.890	12.500	0.350	0.143	14.409	0.297	-179.414	-179.414	0.143	0.297	0.000	2.082	0.001	3.522	7.620	1.908	1.072	193.3	199.8	0.583	8
-133.725	134.142	7.890	12.500	0.350	0.142	14.410	0.297	-179.415	-179.415	0.142	0.297	0.000	2.084	0.001	3.520	7.620	1.908	1.072	193.2	199.8	0.583	8
-133.678	134.152	7.890	12.500	0.350	0.143	14.409	0.297	-179.416	-179.416	0.143	0.297	0.000	2.082	0.001	3.523	7.620	1.908	1.072	193.4	199.8	0.583	8
-132.900	134.332	7.890	12.500	0.350	0.145	14.394	0.297	-179.414	-179.414	0.145	0.297	0.000	2.052	0.001	3.571	7.628	1.905	1.073	195.9	199.8	0.583	8
-132.874	134.342	7.890	12.500	0.350	0.145	14.394	0.297	-179.416	-179.416	0.145	0.297	0.000	2.051	0.001	3.573	7.628	1.905	1.073	195.9	199.8	0.583	8
-132.879	134.352	7.890	12.500	0.350	0.145	14.394	0.297	-179.416	-179.416	0.145	0.297	0.000	2.051	0.001	3.572	7.628	1.905	1.073	195.9	199.8	0.583	8
-132.904	134.362	7.890	12.500	0.350	0.145	14.394	0.297	-179.414	-179.414	0.145	0.297	0.000	2.052	0.001	3.571	7.628	1.905	1.073	195.8	199.8	0.583	8
-132.923	134.612	7.890	12.500	0.350	0.145	14.395	0.297	-179.414	-179.414	0.145	0.297	0.000	2.052	0.001	3.570	7.628	1.905	1.073	195.8	199.8	0.583	8
-132.883	134.622	7.890	12.500	0.350	0.145	14.394	0.297	-179.416	-179.416	0.145	0.297	0.000	2.051	0.001	3.572	7.628	1.905	1.073	195.9	199.8	0.583	8
-132.269	134.902	7.890	12.500	0.350	0.146	14.382	0.297	-179.415	-179.415	0.146	0.297	0.000	2.027	0.001	3.611	7.634	1.903	1.074	197.9	199.8	0.583	8
-132.249	134.912	7.890	12.500	0.350	0.146	14.382	0.297	-179.416	-179.416	0.146	0.297	0.000	2.027	0.001	3.612	7.634	1.903	1.074	198.0	199.8	0.583	8
-132.243	135.152	7.890	12.500	0.350	0.146	14.381	0.297	-179.415	-179.415	0.146	0.297	0.000	2.026	0.001	3.612	7.634	1.903	1.074	198.0	199.8	0.583	8
-132.262	135.162	7.890	12.500	0.350	0.146	14.382	0.297	-179.416	-179.416	0.146	0.297	0.000	2.027	0.001	3.611	7.634	1.903	1.074	197.9	199.8	0.583	8
-132.290	135.692	7.890	12.500	0.350	0.146	14.382	0.297	-179.415	-179.415	0.146	0.297	0.000	2.028	0.001	3.609	7.634	1.903	1.074	197.9	199.8	0.583	8
-132.241	135.702	7.890	12.500	0.350	0.146	14.381	0.297	-179.414	-179.414	0.146	0.297	0.000	2.026	0.001	3.612	7.634	1.903	1.074	198.0	199.8	0.583	8
-131.674	135.782	7.890	12.500	0.350	0.148	14.370	0.297	-179.414	-179.414	0.148	0.297	0.000	2.006	0.001	3.636	7.640	1.901	1.074	200.7	234.9	0.585	9
-131.580	135.792	7.890	12.500	0.350	0.148	14.368	0.297	-179.416	-179.416	0.148	0.297	0.000	2.002	0.001	3.642	7.641	1.900	1.074	201.0	234.9	0.585	9
-131.602	136.162	7.890	12.500	0.350	0.148	14.369	0.297	-179.415	-179.415	0.148	0.297	0.000	2.003	0.001	3.641	7.640	1.900	1.074	200.9	234.9	0.585	9
-131.628	136.172	7.890	12.500	0.350	0.148	14.369	0.297	-179.412	-179.412	0.148	0.297	0.000	2.004	0.001	3.639	7.640	1.900	1.074	200.8	234.9	0.585	9
-131.706	136.512	7.890	12.500	0.350	0.148	14.371	0.297	-179.415	-179.415	0.148	0.297	0.000	2.006	0.001	3.646	7.639	1.901	1.074	199.8	199.8	0.583	8
-131.607	136.522	7.890	12.500	0.350	0.148	14.369	0.297	-179.416	-179.416	0.148	0.297	0.000	2.003	0.001	3.640	7.640	1.900	1.074	200.9	234.9	0.585	9
-131.018	136.572	7.890	12.500	0.350	0.150	14.358	0.297	-179.414	-179.414	0.150	0.297	0.000	1.981	0.001	3.678	7.646	1.896	1.075	202.7	234.9	0.585	9
-130.912	136.582	7.890	12.500	0.350	0.150	14.355	0.297	-179.416	-179.416	0.150	0.297	0.000	1.977	0.001	3.685	7.647	1.895	1.075	203.0	234.9	0.585	9
-130.348	136.702	7.890	12.500	0.350	0.152	14.344	0.297	-179.414	-179.414	0.152	0.297	0.000	1.956	0.001	3.722	7.653	1.891	1.076	204.8	234.9	0.585	9
-130.329	136.712	7.890	12.500	0.350	0.152	14.344	0.297	-179.416	-179.416	0.152	0.297	0.000	1.955	0.001	3.723	7.653	1.891	1.076	204.8	234.9	0.585	9
-129.742	136.862	7.890	12.500	0.350	0.154	14.333	0.297	-179.415	-179.415	0.154	0.297	0.000	1.934	0.001	3.761	7.659	1.887	1.076	206.7	234.9	0.585	9
-129.682	136.872	7.890	12.500	0.350	0.154	14.331	0.297	-179.414	-179.414	0.154	0.297	0.000	1.931	0.001	3.765	7.659	1.886	1.076	206.9	234.9	0.585	9
-127.206	137.482	7.890	12.500	0.350	0.161	14.283	0.298	-179.438	-179.438	0.161	0.298	0.000	1.847	0.001	3.854	7.684	1.869	1.078	220.1	245.9	0.597	15
-127.095	137.492	7.890	12.500	0.350	0.162	14.280	0.298	-0.048	-0.048	0.162	0.298	0.000	1.843	0.001	3.862	7.685	1.869	1.078	220.5	245.9	0.597	15
-124.649	137.882	7.890	12.500	0.350	0.169	14.232	0.298	-1.028	-1.028	0.169	0.298	0.000	1.759	0.001	4.033	7.709	1.852	1.081	229.6	245.9	0.597	15
-124.492	137.892	7.890	12.500	0.350	0.170	14.229	0.298	-1.152	-1.152	0.170	0.298	0.000	1.753	0.001	4.044	7.711	1.851	1.082	230.2	245.9	0.597	15

-121.916	138.172	7.890	12.500	0.350	0.178	14.178	0.298	-1.150	-1.150	0.178	0.298	0.000	1.669	0.001	4.235	7.737	1.834	1.085	240.6	245.9	0.597	15
-121.896	138.182	7.890	12.500	0.350	0.178	14.177	0.298	-1.152	-1.152	0.178	0.298	0.000	1.668	0.001	4.236	7.737	1.834	1.085	240.7	245.9	0.597	15
-121.696	138.502	7.890	12.500	0.350	0.179	14.173	0.298	-1.151	-1.151	0.179	0.298	0.000	1.662	0.001	4.251	7.739	1.832	1.086	241.5	245.9	0.597	15
-122.003	138.512	7.890	12.500	0.350	0.178	14.179	0.298	-1.149	-1.149	0.178	0.298	0.000	1.671	0.001	4.228	7.736	1.834	1.085	240.2	245.9	0.597	15
-121.960	140.902	7.890	12.500	0.350	0.178	14.178	0.298	-1.151	-1.151	0.178	0.298	0.000	1.670	0.001	4.231	7.736	1.834	1.085	240.4	245.9	0.597	15
-121.874	140.912	7.890	12.500	0.350	0.179	14.177	0.298	-1.152	-1.152	0.179	0.298	0.000	1.667	0.001	4.238	7.737	1.833	1.085	240.8	245.9	0.597	15
-121.887	141.232	7.890	12.500	0.350	0.178	14.177	0.298	-1.150	-1.150	0.178	0.298	0.000	1.668	0.001	4.237	7.737	1.834	1.085	240.7	245.9	0.597	15
-121.957	141.242	7.890	12.500	0.350	0.178	14.178	0.298	-1.152	-1.152	0.178	0.298	0.000	1.670	0.001	4.232	7.736	1.834	1.085	240.4	245.9	0.597	15
-121.902	141.912	7.890	12.500	0.350	0.178	14.177	0.298	-1.151	-1.151	0.178	0.298	0.000	1.668	0.001	4.236	7.737	1.834	1.085	240.6	245.9	0.597	15
-121.830	141.922	7.890	12.500	0.350	0.179	14.176	0.298	-1.149	-1.149	0.179	0.298	0.000	1.666	0.001	4.241	7.738	1.833	1.085	240.9	245.9	0.597	15
-119.304	142.152	7.890	12.500	0.350	0.188	14.125	0.298	-1.151	-1.151	0.188	0.298	0.000	1.587	0.001	4.423	7.764	1.817	1.089	253.1	281.8	0.599	16
-118.911	142.162	7.890	12.500	0.350	0.189	14.117	0.298	-1.149	-1.149	0.189	0.298	0.000	1.575	0.001	4.455	7.768	1.815	1.090	254.9	281.8	0.599	16
-117.029	142.202	7.890	12.500	0.350	0.196	14.079	0.298	-1.151	-1.151	0.196	0.298	0.000	1.518	0.001	4.609	7.787	1.804	1.093	264.0	281.8	0.599	16
-116.612	142.212	7.890	12.500	0.350	0.198	14.070	0.298	-1.149	-1.149	0.198	0.298	0.000	1.506	0.001	4.644	7.792	1.801	1.094	266.1	281.8	0.599	16
-115.351	142.282	7.890	12.500	0.350	0.203	14.045	0.298	-1.151	-1.151	0.203	0.298	0.000	1.469	0.001	4.751	7.805	1.788	1.096	271.7	281.8	0.599	16
-115.187	142.292	7.890	12.500	0.350	0.203	14.041	0.298	-1.152	-1.152	0.203	0.298	0.000	1.464	0.001	4.765	7.807	1.786	1.096	272.4	281.8	0.599	16
-113.921	142.422	7.890	12.500	0.350	0.208	14.016	0.298	-1.150	-1.150	0.208	0.298	0.000	1.428	0.002	4.877	7.820	1.771	1.098	278.1	281.8	0.599	16
-113.596	142.432	7.890	12.500	0.350	0.210	14.009	0.298	-1.152	-1.152	0.210	0.298	0.000	1.419	0.002	4.906	7.824	1.768	1.099	279.6	281.8	0.599	16
-113.856	142.792	7.890	12.500	0.350	0.209	14.014	0.298	-1.151	-1.151	0.209	0.298	0.000	1.426	0.002	4.882	7.821	1.771	1.098	278.4	281.8	0.599	16
-113.933	142.802	7.890	12.500	0.350	0.208	14.016	0.298	-1.149	-1.149	0.208	0.298	0.000	1.429	0.002	4.875	7.820	1.771	1.098	278.1	281.8	0.599	16
-113.948	142.982	7.890	12.500	0.350	0.208	14.016	0.298	-1.151	-1.151	0.208	0.298	0.000	1.429	0.002	4.874	7.820	1.772	1.098	278.0	281.8	0.599	16
-113.774	142.992	7.890	12.500	0.350	0.209	14.013	0.298	-1.152	-1.152	0.209	0.298	0.000	1.424	0.002	4.890	7.822	1.770	1.098	278.8	281.8	0.599	16
-112.591	143.042	7.890	12.500	0.350	0.214	13.988	0.298	-1.151	-1.151	0.214	0.298	0.000	1.392	0.002	4.980	7.835	1.757	1.100	285.5	317.8	0.601	17
-112.339	143.052	7.890	12.500	0.350	0.215	13.983	0.298	-1.149	-1.149	0.215	0.298	0.000	1.385	0.002	5.003	7.837	1.754	1.100	286.7	317.8	0.601	17
-111.182	143.132	7.890	12.500	0.350	0.220	13.959	0.298	-1.151	-1.151	0.220	0.298	0.000	1.353	0.002	5.110	7.850	1.739	1.102	292.2	317.8	0.601	17
-111.042	143.142	7.890	12.500	0.350	0.221	13.956	0.298	-1.152	-1.152	0.221	0.298	0.000	1.350	0.002	5.123	7.851	1.737	1.103	292.8	317.8	0.601	17
-109.707	143.272	7.890	12.500	0.350	0.227	13.929	0.298	-1.150	-1.150	0.227	0.298	0.000	1.314	0.002	5.251	7.866	1.721	1.105	299.4	317.8	0.601	17
-109.586	143.282	7.890	12.500	0.350	0.227	13.926	0.298	-1.152	-1.152	0.227	0.298	0.000	1.311	0.002	5.262	7.867	1.719	1.105	300.0	317.8	0.601	17
-109.185	143.352	7.890	12.500	0.350	0.229	13.918	0.298	-1.150	-1.150	0.229	0.298	0.000	1.301	0.002	5.301	7.872	1.714	1.106	302.1	317.8	0.601	17
-108.906	143.362	7.890	12.500	0.350	0.230	13.912	0.298	-1.149	-1.149	0.230	0.298	0.000	1.294	0.002	5.329	7.875	1.711	1.106	303.5	317.8	0.601	17
-109.050	143.392	7.890	12.500	0.350	0.230	13.915	0.298	-1.151	-1.151	0.230	0.298	0.000	1.297	0.002	5.314	7.873	1.713	1.106	302.8	317.8	0.601	17
-109.188	143.402	7.890	12.500	0.350	0.229	13.918	0.298	-1.149	-1.149	0.229	0.298	0.000	1.301	0.002	5.301	7.872	1.714	1.106	302.1	317.8	0.601	17
-109.428	143.442	7.890	12.500	0.350	0.228	13.923	0.298	-1.151	-1.151	0.228	0.298	0.000	1.307	0.002	5.278	7.869	1.717	1.105	300.8	317.8	0.601	17
-109.050	143.452	7.890	12.500	0.350	0.230	13.915	0.298	-1.149	-1.149	0.230	0.298	0.000	1.297	0.002	5.314	7.873	1.713	1.106	302.8	317.8	0.601	17
-108.794	143.462	7.890	12.500	0.350	0.231	13.910	0.298	-1.152	-1.152	0.231	0.298	0.000	1.291	0.002	5.340	7.876	1.709	1.106	304.1	317.8	0.601	17
-109.277	143.472	7.890	12.500	0.350	0.229	13.920	0.298	-1.152	-1.152	0.229	0.298	0.000	1.303	0.002	5.292	7.871	1.715	1.106	301.6	317.8	0.601	17
-109.752	143.482	7.890	12.500	0.350	0.226	13.930	0.298	-1.152	-1.152	0.226	0.298	0.000	1.316	0.002	5.246	7.866	1.721	1.105	299.2	317.8	0.601	17
-109.818	143.522	7.890	12.500	0.350	0.226	13.931	0.298	-1.150	-1.150	0.226	0.298	0.000	1.317	0.002	5.240	7.865	1.722	1.105	298.9	317.8	0.601	17
-109.658	143.532	7.890	12.500	0.350	0.227	13.928	0.298	-1.152	-1.152	0.227	0.298	0.000	1.313	0.002	5.255	7.867	1.720	1.105	299.7	317.8	0.601	17
-109.116	143.652	7.890	12.500	0.350	0.229	13.916	0.298	-1.150	-1.150	0.229	0.298	0.000	1.299	0.002	5.308	7.873	1.713	1.106	302.4	317.8	0.601	17
-109.018	143.662	7.890	12.500	0.350	0.230	13.914	0.298	-1.152	-1.152	0.230	0.298	0.000	1.296	0.002	5.318	7.874	1.712	1.106	302.9	317.8	0.601	17
-108.440	143.712	7.890	12.500	0.350	0.232	13.902	0.298	-1.151	-1.151	0.232	0.298	0.000	1.282	0.002	5.375	7.880	1.705	1.107	305.9	317.8	0.601	17

-108.236	143.722	7.890	12.500	0.350	0.233	13.898	0.298	-1.152	-1.152	0.233	0.298	0.000	1.276	0.002	5.395	7.882	1.703	1.107	307.0	317.8	0.601	17
-107.898	143.742	7.890	12.500	0.350	0.235	13.891	0.298	-1.150	-1.150	0.235	0.298	0.000	1.268	0.002	5.429	7.886	1.699	1.108	308.8	317.8	0.601	17
-107.760	143.752	7.890	12.500	0.350	0.236	13.888	0.298	-1.149	-1.149	0.236	0.298	0.000	1.264	0.002	5.443	7.888	1.697	1.108	309.6	317.8	0.601	17
-107.160	143.952	7.890	12.500	0.350	0.238	13.876	0.298	-1.151	-1.151	0.238	0.298	0.000	1.249	0.002	5.504	7.894	1.690	1.110	312.8	317.8	0.601	17
-107.048	143.962	7.890	12.500	0.350	0.239	13.873	0.298	-1.152	-1.152	0.239	0.298	0.000	1.246	0.002	5.515	7.895	1.688	1.110	313.4	317.8	0.601	17
-106.518	143.992	7.700	12.300	0.440	0.223	13.702	0.375	-1.151	-1.151	0.223	0.375	0.000	1.677	0.002	5.060	7.988	1.834	1.133	384.5	390.3	0.605	19
-106.369	144.002	7.700	12.300	0.440	0.224	13.699	0.375	-1.149	-1.149	0.224	0.375	0.000	1.672	0.002	5.074	7.990	1.833	1.133	385.5	390.3	0.605	19
-103.092	144.412	7.700	12.300	0.440	0.240	13.630	0.375	-1.151	-1.151	0.240	0.375	0.000	1.563	0.002	5.385	8.028	1.805	1.141	410.7	426.7	0.607	20
-103.059	144.422	7.700	12.300	0.440	0.240	13.629	0.375	-1.152	-1.152	0.240	0.375	0.000	1.562	0.002	5.388	8.028	1.805	1.141	410.9	426.7	0.607	20
-100.099	144.562	7.700	12.300	0.440	0.255	13.566	0.375	-1.150	-1.150	0.255	0.375	0.000	1.469	0.002	5.686	8.063	1.774	1.148	434.9	463.2	0.609	21
-99.507	144.572	7.700	12.300	0.440	0.259	13.554	0.375	-1.152	-1.152	0.259	0.375	0.000	1.451	0.002	5.751	8.070	1.765	1.150	439.0	463.2	0.609	21
-96.256	144.752	7.700	12.300	0.440	0.277	13.484	0.375	-1.150	-1.150	0.277	0.375	0.000	1.355	0.002	6.107	8.109	1.720	1.158	465.3	499.8	0.611	22
-95.965	144.762	7.700	12.300	0.440	0.279	13.477	0.375	-1.152	-1.152	0.279	0.375	0.000	1.347	0.002	6.142	8.113	1.716	1.158	467.6	499.8	0.611	22
-92.787	144.912	7.700	12.300	0.440	0.298	13.408	0.375	-1.151	-1.151	0.298	0.375	0.000	1.259	0.002	6.537	8.152	1.673	1.168	494.7	499.8	0.611	22
-92.633	144.922	7.700	12.300	0.440	0.299	13.405	0.375	-1.152	-1.152	0.299	0.375	0.000	1.255	0.002	6.557	8.154	1.671	1.168	496.1	499.8	0.611	22
-89.522	145.072	7.700	12.300	0.440	0.320	13.336	0.375	-1.151	-1.151	0.320	0.375	0.000	1.174	0.002	6.951	8.193	1.631	1.178	528.0	536.6	0.613	23
-89.220	145.082	7.700	12.300	0.440	0.322	13.329	0.375	-1.149	-1.149	0.322	0.375	0.000	1.167	0.002	6.993	8.197	1.627	1.179	531.1	536.6	0.613	23
-88.812	145.092	7.700	12.300	0.440	0.325	13.320	0.375	-1.149	-1.149	0.325	0.375	0.000	1.156	0.002	7.050	8.203	1.622	1.180	535.3	536.6	0.613	23
-88.309	145.102	7.700	12.300	0.440	0.328	13.309	0.375	-1.152	-1.152	0.328	0.375	0.000	1.144	0.003	7.098	8.209	1.616	1.181	542.8	573.5	0.615	24
-87.743	145.112	7.700	12.300	0.440	0.332	13.296	0.375	-1.152	-1.152	0.332	0.375	0.000	1.130	0.003	7.179	8.216	1.609	1.184	548.9	573.5	0.615	24
-87.198	145.122	7.700	12.300	0.440	0.336	13.284	0.375	-1.152	-1.152	0.336	0.375	0.000	1.117	0.003	7.257	8.223	1.602	1.186	554.8	573.5	0.615	24
-86.705	145.132	7.700	12.300	0.440	0.340	13.273	0.375	-1.149	-1.149	0.340	0.375	0.000	1.105	0.003	7.330	8.230	1.595	1.187	560.4	573.5	0.615	24
-86.282	145.142	7.700	12.300	0.440	0.343	13.264	0.375	-1.149	-1.149	0.343	0.375	0.000	1.095	0.003	7.392	8.235	1.590	1.189	565.2	573.5	0.615	24
-85.919	145.152	7.700	12.300	0.440	0.346	13.256	0.375	-1.152	-1.152	0.346	0.375	0.000	1.086	0.003	7.446	8.240	1.586	1.190	569.3	573.5	0.615	24
-85.627	145.162	7.700	12.300	0.440	0.348	13.249	0.375	-1.152	-1.152	0.348	0.375	0.000	1.080	0.003	7.490	8.244	1.582	1.191	572.7	573.5	0.615	24
-84.729	145.202	7.700	12.300	0.440	0.355	13.229	0.376	-1.150	-1.150	0.355	0.376	0.000	1.059	0.003	7.602	8.256	1.572	1.195	585.7	610.5	0.617	25
-84.489	145.212	7.700	12.300	0.440	0.357	13.223	0.376	-1.152	-1.152	0.357	0.376	0.000	1.053	0.003	7.639	8.259	1.569	1.196	588.7	610.5	0.617	25
-83.241	145.282	7.700	12.300	0.440	0.366	13.195	0.376	-1.150	-1.150	0.366	0.376	0.000	1.025	0.003	7.834	8.276	1.553	1.201	604.3	610.5	0.617	25
-83.146	145.292	7.700	12.300	0.440	0.367	13.193	0.376	-1.152	-1.152	0.367	0.376	0.000	1.023	0.003	7.849	8.277	1.552	1.201	605.5	610.5	0.617	25
-81.924	145.572	7.700	12.300	0.440	0.377	13.165	0.376	-1.151	-1.151	0.377	0.376	0.000	0.996	0.003	8.020	8.294	1.533	1.205	621.9	647.6	0.619	26
-81.820	145.582	7.700	12.300	0.440	0.378	13.162	0.376	-1.149	-1.149	0.378	0.376	0.000	0.994	0.003	8.037	8.295	1.528	1.205	622.0	647.6	0.619	26
-80.716	145.632	7.700	12.300	0.440	0.387	13.137	0.376	-1.151	-1.151	0.387	0.376	0.000	0.970	0.003	8.219	8.310	1.486	1.206	624.8	647.6	0.619	26
-80.497	145.642	7.700	12.300	0.440	0.389	13.132	0.376	-1.152	-1.152	0.389	0.376	0.000	0.965	0.003	8.256	8.313	1.478	1.206	625.6	647.6	0.619	26
-79.375	145.782	7.700	12.300	0.440	0.399	13.106	0.376	-1.150	-1.150	0.399	0.376	0.000	0.941	0.003	8.448	8.328	1.443	1.208	631.6	647.6	0.619	26
-79.251	145.792	7.700	12.300	0.440	0.400	13.103	0.376	-1.152	-1.152	0.400	0.376	0.000	0.939	0.003	8.469	8.330	1.439	1.209	632.5	647.6	0.619	26
-78.945	145.812	7.700	12.300	0.440	0.403	13.096	0.376	-1.152	-1.152	0.403	0.376	0.000	0.933	0.003	8.522	8.334	1.431	1.209	634.7	647.6	0.619	26
-78.745	145.822	7.700	12.300	0.440	0.405	13.091	0.376	-1.149	-1.149	0.405	0.376	0.000	0.928	0.003	8.557	8.337	1.426	1.210	636.3	647.6	0.619	26
-78.396	145.842	7.700	12.300	0.440	0.408	13.083	0.376	-1.150	-1.150	0.408	0.376	0.000	0.921	0.003	8.619	8.342	1.417	1.211	639.3	647.6	0.619	26
-78.215	145.852	7.700	12.300	0.440	0.410	13.079	0.376	-1.152	-1.152	0.410	0.376	0.000	0.917	0.003	8.651	8.345	1.413	1.212	641.0	647.6	0.619	26
-77.842	145.872	7.700	12.300	0.440	0.413	13.070	0.376	-1.150	-1.150	0.413	0.376	0.000	0.910	0.003	8.718	8.350	1.405	1.213	644.7	647.6	0.619	26
-77.561	145.882	7.700	12.300	0.440	0.416	13.064	0.376	-1.149	-1.149	0.416	0.376	0.000	0.904	0.003	8.740	8.354	1.399	1.213	649.7	684.8	0.621	27
-77.274	145.892	7.700	12.300	0.440	0.418	13.057	0.376	-1.152	-1.152	0.418	0.376	0.000	0.899	0.003	8.792	8.358	1.394	1.214	653.0	684.8	0.621	27

-76.912	145.902	7.700	12.300	0.440	0.422	13.049	0.376	-1.152	-1.152	0.422	0.376	0.000	0.891	0.003	8.858	8.363	1.388	1.216	657.5	684.8	0.621	27
-76.575	145.912	7.700	12.300	0.440	0.425	13.041	0.376	-1.152	-1.152	0.425	0.376	0.000	0.885	0.003	8.919	8.368	1.383	1.217	662.1	684.8	0.621	27
-75.617	145.942	7.700	12.300	0.440	0.434	13.018	0.376	-1.150	-1.150	0.434	0.376	0.000	0.866	0.003	9.098	8.381	1.372	1.222	676.9	684.8	0.621	27
-75.395	145.952	7.700	12.300	0.440	0.436	13.013	0.376	-1.152	-1.152	0.436	0.376	0.000	0.862	0.003	9.140	8.385	1.371	1.223	680.8	684.8	0.621	27
-75.437	146.342	7.700	12.300	0.440	0.436	13.014	0.376	-177.143	-177.143	0.436	0.376	0.000	0.862	0.003	9.132	8.384	1.371	1.223	680.1	684.8	0.621	27
-75.514	146.352	7.700	12.300	0.440	0.435	13.016	0.376	-172.571	-172.571	0.435	0.376	0.000	0.864	0.003	9.117	8.383	1.371	1.223	678.7	684.8	0.621	27
-75.464	146.432	7.700	12.300	0.440	0.436	13.014	0.376	-171.540	-171.540	0.436	0.376	0.000	0.863	0.003	9.126	8.384	1.371	1.223	679.6	684.8	0.621	27
-75.413	146.442	7.700	12.300	0.440	0.436	13.013	0.376	-170.511	-170.511	0.436	0.376	0.000	0.862	0.003	9.136	8.384	1.371	1.223	680.5	684.8	0.621	27
-74.145	146.732	7.700	12.300	0.440	0.449	12.983	0.376	-168.672	-168.672	0.449	0.376	0.000	0.838	0.004	9.350	8.403	1.363	1.230	707.1	722.2	0.623	28
-74.058	146.742	7.700	12.300	0.440	0.450	12.981	0.376	-168.361	-168.361	0.450	0.376	0.000	0.836	0.004	9.367	8.404	1.363	1.231	709.0	722.2	0.623	28
-73.000	146.812	7.700	12.300	0.440	0.461	12.956	0.376	-168.361	-168.361	0.461	0.376	0.000	0.817	0.004	9.545	8.419	1.363	1.238	735.9	759.7	0.625	29
-72.740	146.822	7.700	12.300	0.440	0.463	12.949	0.376	-168.361	-168.361	0.463	0.376	0.000	0.812	0.004	9.597	8.423	1.365	1.241	742.9	759.7	0.625	29
-71.443	146.862	7.700	12.300	0.440	0.477	12.918	0.376	-168.361	-168.361	0.477	0.376	0.000	0.788	0.004	9.829	8.442	1.370	1.251	780.7	797.3	0.627	30
-71.345	146.872	7.700	12.300	0.440	0.478	12.916	0.376	-168.361	-168.361	0.478	0.376	0.000	0.787	0.004	9.850	8.444	1.370	1.252	783.5	797.3	0.627	30
-70.125	146.942	8.000	12.500	0.300	0.530	13.036	0.256	-168.361	-168.361	0.530	0.256	0.000	0.482	0.004	11.376	8.371	0.770	1.142	414.9	426.7	0.607	20
-70.052	146.952	8.000	12.500	0.300	0.531	13.034	0.256	-168.361	-168.361	0.531	0.256	0.000	0.482	0.004	11.393	8.372	0.770	1.143	416.3	426.7	0.607	20
-70.054	146.962	8.000	12.500	0.300	0.531	13.034	0.256	-168.361	-168.361	0.531	0.256	0.000	0.482	0.004	11.392	8.372	0.770	1.143	416.2	426.7	0.607	20
-70.156	146.972	8.000	12.500	0.300	0.530	13.037	0.256	-168.361	-168.361	0.530	0.256	0.000	0.483	0.004	11.369	8.370	0.770	1.142	414.3	426.7	0.607	20
-70.175	147.822	8.000	12.500	0.300	0.529	13.037	0.256	-169.670	-169.670	0.529	0.256	0.000	0.483	0.004	11.364	8.370	0.769	1.142	413.9	426.7	0.607	20
-70.015	147.832	8.000	12.500	0.300	0.531	13.033	0.256	-175.619	-175.619	0.531	0.256	0.000	0.481	0.004	11.402	8.372	0.771	1.143	417.0	426.7	0.607	20
-70.062	147.842	8.000	12.500	0.300	0.531	13.034	0.256	-175.848	-175.848	0.531	0.256	0.000	0.482	0.004	11.390	8.372	0.770	1.143	416.1	426.7	0.607	20
-70.311	147.852	8.000	12.500	0.300	0.528	13.040	0.256	-176.081	-176.081	0.528	0.256	0.000	0.484	0.004	11.332	8.368	0.768	1.141	411.4	426.7	0.607	20
-70.110	148.192	8.000	12.500	0.300	0.530	13.035	0.256	-179.805	-179.805	0.530	0.256	0.000	0.482	0.004	11.379	8.371	0.770	1.142	415.1	426.7	0.607	20
-69.986	148.202	8.000	12.500	0.300	0.532	13.032	0.256	-1.880	-1.880	0.532	0.256	0.000	0.481	0.004	11.408	8.373	0.771	1.143	417.5	426.7	0.607	20
-70.093	148.252	8.000	12.500	0.300	0.530	13.035	0.256	-1.882	-1.882	0.530	0.256	0.000	0.482	0.004	11.383	8.371	0.770	1.143	415.5	426.7	0.607	20
-70.144	148.262	8.000	12.500	0.300	0.530	13.036	0.256	-1.885	-1.885	0.530	0.256	0.000	0.483	0.004	11.371	8.370	0.770	1.142	414.5	426.7	0.607	20
-71.428	148.352	8.000	12.500	0.300	0.515	13.067	0.256	-1.882	-1.882	0.515	0.256	0.000	0.497	0.004	11.075	8.352	0.761	1.134	391.1	426.7	0.607	20
-71.583	148.362	8.000	12.500	0.300	0.513	13.071	0.256	-1.880	-1.880	0.513	0.256	0.000	0.498	0.004	11.077	8.349	0.762	1.134	388.3	390.3	0.605	19
-72.779	148.622	8.000	12.500	0.300	0.499	13.100	0.256	-1.882	-1.882	0.499	0.256	0.000	0.512	0.004	10.809	8.332	0.797	1.134	389.2	390.3	0.605	19
-72.808	148.632	8.000	12.500	0.300	0.499	13.101	0.256	-1.880	-1.880	0.499	0.256	0.000	0.512	0.004	10.803	8.332	0.798	1.135	389.3	390.3	0.605	19
-72.800	148.812	8.000	12.500	0.300	0.499	13.100	0.256	-1.882	-1.882	0.499	0.256	0.000	0.512	0.004	10.805	8.332	0.798	1.134	389.3	390.3	0.605	19
-72.780	148.822	8.000	12.500	0.300	0.499	13.100	0.256	-1.884	-1.884	0.499	0.256	0.000	0.512	0.004	10.809	8.332	0.797	1.134	389.2	390.3	0.605	19
-72.768	149.102	8.000	12.500	0.300	0.500	13.100	0.256	-1.882	-1.882	0.500	0.256	0.000	0.512	0.004	10.812	8.332	0.796	1.134	389.1	390.3	0.605	19
-72.821	149.112	8.000	12.500	0.300	0.499	13.101	0.256	-1.880	-1.880	0.499	0.256	0.000	0.512	0.004	10.800	8.332	0.798	1.135	389.4	390.3	0.605	19
-72.849	149.192	8.000	12.500	0.300	0.499	13.102	0.256	-1.882	-1.882	0.499	0.256	0.000	0.512	0.004	10.794	8.331	0.799	1.135	389.5	390.3	0.605	19
-72.768	149.202	8.000	12.500	0.300	0.499	13.100	0.256	-1.885	-1.885	0.499	0.256	0.000	0.512	0.004	10.812	8.332	0.796	1.134	389.1	390.3	0.605	19
-72.733	149.292	8.000	12.500	0.300	0.500	13.099	0.256	-1.882	-1.882	0.500	0.256	0.000	0.511	0.004	10.819	8.333	0.795	1.134	389.0	390.3	0.605	19
-72.865	149.302	8.000	12.500	0.300	0.498	13.102	0.256	-1.880	-1.880	0.498	0.256	0.000	0.513	0.004	10.790	8.331	0.800	1.135	389.6	390.3	0.605	19
-74.103	149.352	8.000	12.500	0.300	0.485	13.131	0.256	-1.882	-1.882	0.485	0.256	0.000	0.527	0.004	10.487	8.313	0.851	1.137	397.9	426.7	0.607	20
-74.581	149.362	8.000	12.500	0.300	0.480	13.143	0.256	-1.885	-1.885	0.480	0.256	0.000	0.533	0.004	10.386	8.307	0.873	1.138	401.5	426.7	0.607	20
-75.128	149.372	8.000	12.500	0.300	0.474	13.156	0.256	-1.880	-1.880	0.474	0.256	0.000	0.539	0.004	10.271	8.299	0.900	1.139	406.0	426.7	0.607	20
-75.798	149.382	8.000	12.500	0.300	0.467	13.171	0.256	-1.880	-1.880	0.467	0.256	0.000	0.547	0.004	10.133	8.290	0.935	1.141	412.2	426.7	0.607	20

-76.555	149.392	8.000	12.500	0.300	0.459	13.189	0.256	-1.885	-1.885	0.459	0.256	0.000	0.556	0.004	9.979	8.279	0.976	1.144	419.3	426.7	0.607	20
-77.381	149.402	8.000	12.500	0.300	0.451	13.208	0.256	-1.880	-1.880	0.451	0.256	0.000	0.567	0.003	9.815	8.268	1.015	1.145	423.9	426.7	0.607	20
-78.191	149.412	8.000	12.500	0.300	0.443	13.227	0.256	-1.884	-1.884	0.443	0.256	0.000	0.577	0.003	9.625	8.257	1.052	1.146	429.1	463.2	0.609	21
-79.084	149.422	8.000	12.500	0.300	0.435	13.248	0.256	-1.881	-1.881	0.435	0.256	0.000	0.588	0.003	9.454	8.245	1.096	1.148	433.6	463.2	0.609	21
-80.121	149.432	8.000	12.500	0.300	0.425	13.272	0.256	-1.880	-1.880	0.425	0.256	0.000	0.602	0.003	9.260	8.231	1.141	1.149	436.0	463.2	0.609	21
-81.165	149.442	8.000	12.500	0.300	0.416	13.296	0.256	-1.885	-1.885	0.416	0.256	0.000	0.615	0.003	9.099	8.217	1.139	1.144	419.1	426.7	0.607	20
-82.161	149.452	8.000	12.500	0.300	0.407	13.318	0.256	-1.880	-1.880	0.407	0.256	0.000	0.628	0.003	8.921	8.204	1.136	1.139	404.3	426.7	0.607	20
-83.216	149.462	8.000	12.500	0.300	0.398	13.342	0.256	-1.880	-1.880	0.398	0.256	0.000	0.643	0.003	8.766	8.190	1.134	1.134	388.7	390.3	0.605	19
-84.238	149.472	8.000	12.500	0.300	0.389	13.365	0.256	-1.885	-1.885	0.389	0.256	0.000	0.657	0.003	8.591	8.177	1.130	1.129	374.8	390.3	0.605	19
-85.112	149.482	8.000	12.500	0.300	0.382	13.385	0.256	-1.880	-1.880	0.382	0.256	0.000	0.669	0.003	8.444	8.165	1.127	1.126	363.3	390.3	0.605	19
-86.082	149.492	8.000	12.500	0.300	0.374	13.406	0.255	-1.884	-1.884	0.374	0.255	0.000	0.683	0.003	8.312	8.153	1.125	1.122	350.5	354.0	0.603	18
-86.876	149.502	8.000	12.500	0.300	0.368	13.424	0.255	-1.881	-1.881	0.368	0.255	0.000	0.695	0.003	8.184	8.143	1.122	1.119	340.8	354.0	0.603	18
-87.612	149.512	8.000	12.500	0.300	0.362	13.440	0.255	-1.880	-1.880	0.362	0.255	0.000	0.706	0.003	8.067	8.134	1.118	1.115	332.0	354.0	0.603	18
-88.299	149.522	8.000	12.500	0.300	0.357	13.456	0.255	-1.885	-1.885	0.357	0.255	0.000	0.716	0.003	7.959	8.125	1.115	1.113	324.1	354.0	0.603	18
-88.854	149.532	8.000	12.500	0.300	0.353	13.468	0.255	-1.880	-1.880	0.353	0.255	0.000	0.724	0.003	7.900	8.118	1.115	1.111	317.4	317.8	0.601	17
-89.385	149.542	8.000	12.500	0.300	0.349	13.479	0.255	-1.880	-1.880	0.349	0.255	0.000	0.732	0.003	7.819	8.112	1.113	1.109	311.6	317.8	0.601	17
-89.817	149.552	8.000	12.500	0.300	0.346	13.489	0.255	-1.885	-1.885	0.346	0.255	0.000	0.739	0.003	7.753	8.106	1.111	1.107	306.9	317.8	0.601	17
-92.652	149.692	8.300	12.800	0.290	0.361	13.791	0.247	-1.882	-1.882	0.361	0.247	0.000	0.685	0.003	8.245	7.940	1.120	1.113	324.8	354.0	0.603	18
-92.796	149.702	8.300	12.800	0.290	0.360	13.794	0.247	-1.880	-1.880	0.360	0.247	0.000	0.687	0.003	8.223	7.938	1.119	1.112	323.3	354.0	0.603	18
-96.159	150.302	8.300	12.800	0.290	0.336	13.866	0.247	-1.882	-1.882	0.336	0.247	0.000	0.734	0.002	7.753	7.899	1.108	1.101	288.6	317.8	0.601	17
-96.263	150.312	8.300	12.800	0.290	0.335	13.868	0.247	-1.880	-1.880	0.335	0.247	0.000	0.736	0.002	7.738	7.898	1.107	1.101	287.6	317.8	0.601	17
-96.287	150.432	8.300	12.800	0.290	0.335	13.869	0.247	-1.882	-1.882	0.335	0.247	0.000	0.736	0.002	7.735	7.898	1.107	1.101	287.4	317.8	0.601	17
-96.157	150.442	8.300	12.800	0.290	0.336	13.866	0.247	-1.880	-1.880	0.336	0.247	0.000	0.734	0.002	7.754	7.899	1.108	1.101	288.6	317.8	0.601	17
-96.075	150.462	8.300	12.800	0.290	0.337	13.864	0.247	-1.882	-1.882	0.337	0.247	0.000	0.733	0.002	7.765	7.900	1.108	1.101	289.4	317.8	0.601	17
-96.184	150.472	8.300	12.800	0.290	0.336	13.867	0.247	-1.880	-1.880	0.336	0.247	0.000	0.735	0.002	7.750	7.899	1.108	1.101	288.4	317.8	0.601	17
-99.605	150.982	8.300	12.800	0.290	0.314	13.940	0.247	-6.485	-6.485	0.314	0.247	0.000	0.786	0.002	7.303	7.860	1.095	1.091	257.4	281.8	0.599	16
-99.787	150.992	8.300	12.800	0.290	0.313	13.944	0.247	-12.371	-12.371	0.313	0.247	0.000	0.789	0.002	7.279	7.858	1.094	1.090	255.8	281.8	0.599	16
-102.766	151.622	8.300	12.800	0.290	0.295	14.006	0.247	-19.703	-19.703	0.295	0.247	0.000	0.836	0.002	6.896	7.825	1.150	1.087	247.5	281.8	0.599	16
-103.508	151.632	8.300	12.800	0.290	0.291	14.022	0.247	-27.037	-27.037	0.291	0.247	0.000	0.849	0.002	6.804	7.817	1.173	1.087	247.4	281.8	0.599	16
-106.409	151.872	8.300	12.800	0.290	0.275	14.082	0.247	-29.902	-29.902	0.275	0.247	0.000	0.898	0.002	6.458	7.786	1.285	1.088	250.4	281.8	0.599	16
-106.679	151.882	8.300	12.800	0.290	0.273	14.088	0.247	-32.768	-32.768	0.273	0.247	0.000	0.903	0.002	6.427	7.783	1.296	1.088	250.9	281.8	0.599	16
-106.983	151.902	8.300	12.800	0.290	0.272	14.094	0.247	-33.113	-33.113	0.272	0.247	0.000	0.908	0.002	6.392	7.780	1.310	1.089	251.5	281.8	0.599	16
-107.181	151.912	8.300	12.800	0.290	0.271	14.098	0.247	-33.451	-33.451	0.271	0.247	0.000	0.911	0.002	6.369	7.778	1.319	1.089	251.9	281.8	0.599	16
-107.770	151.962	8.300	12.800	0.290	0.268	14.110	0.247	-34.142	-34.142	0.268	0.247	0.000	0.922	0.002	6.302	7.771	1.347	1.089	253.2	281.8	0.599	16
-107.797	151.972	8.300	12.800	0.290	0.267	14.111	0.247	-34.829	-34.829	0.267	0.247	0.000	0.922	0.002	6.299	7.771	1.348	1.089	253.3	281.8	0.599	16
-107.854	152.242	8.300	12.800	0.290	0.267	14.112	0.247	-38.038	-38.038	0.267	0.247	0.000	0.923	0.002	6.293	7.770	1.351	1.089	253.4	281.8	0.599	16
-107.746	152.252	8.300	12.800	0.290	0.268	14.110	0.247	-41.249	-41.249	0.268	0.247	0.000	0.921	0.002	6.305	7.771	1.346	1.089	253.1	281.8	0.599	16
-107.709	152.282	8.300	12.800	0.290	0.268	14.109	0.247	-41.704	-41.704	0.268	0.247	0.000	0.921	0.002	6.309	7.772	1.344	1.089	253.1	281.8	0.599	16
-107.856	152.292	8.300	12.800	0.290	0.267	14.112	0.247	-42.165	-42.165	0.267	0.247	0.000	0.923	0.002	6.293	7.770	1.351	1.089	253.4	281.8	0.599	16
-108.393	152.322	8.300	12.800	0.290	0.264	14.123	0.247	-42.621	-42.621	0.264	0.247	0.000	0.933	0.002	6.233	7.765	1.378	1.090	254.8	281.8	0.599	16
-108.498	152.332	8.300	12.800	0.290	0.264	14.125	0.247	-43.082	-43.082	0.264	0.247	0.000	0.935	0.002	6.221	7.763	1.383	1.090	255.0	281.8	0.599	16
-108.997	152.442	8.300	12.800	0.290	0.261	14.136	0.247	-44.455	-44.455	0.261	0.247	0.000	0.944	0.002	6.166	7.758	1.409	1.090	256.4	281.8	0.599	16

-109.102	152.452	8.300	12.800	0.290	0.261	14.138	0.247	-45.829	-45.829	0.261	0.247	0.000	0.946	0.002	6.154	7.757	1.414	1.090	256.7	281.8	0.599	16
-109.689	152.562	8.300	12.800	0.290	0.258	14.150	0.247	-47.205	-47.205	0.258	0.247	0.000	0.957	0.002	6.090	7.751	1.446	1.091	258.5	281.8	0.599	16
-109.737	152.572	8.300	12.800	0.290	0.258	14.151	0.247	-48.579	-48.579	0.258	0.247	0.000	0.957	0.002	6.085	7.750	1.449	1.091	258.6	281.8	0.599	16
-111.087	152.822	8.200	12.800	0.280	0.248	14.194	0.238	-51.560	-51.560	0.248	0.238	0.000	0.961	0.002	5.892	7.729	1.457	1.085	240.4	245.9	0.597	15
-111.138	152.832	8.200	12.800	0.280	0.248	14.195	0.238	-54.539	-54.539	0.248	0.238	0.000	0.961	0.002	5.886	7.728	1.460	1.085	240.6	245.9	0.597	15
-112.447	153.092	8.200	12.800	0.280	0.242	14.222	0.238	-57.633	-57.633	0.242	0.238	0.000	0.986	0.002	5.752	7.714	1.539	1.087	245.2	245.9	0.597	15
-112.517	153.102	8.200	12.800	0.280	0.241	14.223	0.238	-60.728	-60.728	0.241	0.238	0.000	0.987	0.002	5.745	7.714	1.543	1.087	245.4	245.9	0.597	15
-112.543	153.802	8.200	12.800	0.280	0.241	14.224	0.238	-68.863	-68.863	0.241	0.238	0.000	0.988	0.002	5.742	7.713	1.545	1.087	245.5	245.9	0.597	15
-112.489	153.812	8.200	12.800	0.280	0.241	14.223	0.238	-77.000	-77.000	0.241	0.238	0.000	0.987	0.002	5.748	7.714	1.541	1.087	245.3	245.9	0.597	15
-112.362	153.842	8.200	12.800	0.280	0.242	14.220	0.238	-77.458	-77.458	0.242	0.238	0.000	0.984	0.002	5.761	7.715	1.533	1.087	244.9	245.9	0.597	15
-112.510	153.852	8.200	12.800	0.280	0.241	14.223	0.238	-77.916	-77.916	0.241	0.238	0.000	0.987	0.002	5.746	7.714	1.543	1.087	245.4	245.9	0.597	15
-112.500	154.272	8.200	12.800	0.280	0.241	14.223	0.238	-82.843	-82.843	0.241	0.238	0.000	0.987	0.002	5.747	7.714	1.542	1.087	245.4	245.9	0.597	15
-112.496	154.282	8.200	12.800	0.280	0.241	14.223	0.238	-87.768	-87.768	0.241	0.238	0.000	0.987	0.002	5.747	7.714	1.542	1.087	245.4	245.9	0.597	15
-111.105	154.632	8.200	12.800	0.280	0.248	14.194	0.238	88.104	88.104	0.248	0.238	0.000	0.961	0.002	5.890	7.728	1.458	1.085	240.5	245.9	0.597	15
-111.020	154.642	8.200	12.800	0.280	0.248	14.192	0.238	83.976	83.976	0.248	0.238	0.000	0.959	0.002	5.899	7.729	1.453	1.085	240.2	245.9	0.597	15
-109.773	154.792	8.200	12.800	0.280	0.254	14.167	0.238	82.145	82.145	0.254	0.238	0.000	0.937	0.002	6.031	7.742	1.384	1.084	236.4	245.9	0.597	15
-109.656	154.802	8.200	12.800	0.280	0.255	14.164	0.238	80.314	80.314	0.255	0.238	0.000	0.935	0.002	6.043	7.744	1.378	1.084	236.0	245.9	0.597	15
-109.099	154.862	8.200	12.800	0.280	0.258	14.153	0.238	79.510	79.510	0.258	0.238	0.000	0.925	0.002	6.103	7.749	1.349	1.083	234.5	245.9	0.597	15
-108.981	154.872	8.200	12.800	0.280	0.258	14.150	0.238	78.705	78.705	0.258	0.238	0.000	0.923	0.002	6.116	7.751	1.343	1.083	234.2	245.9	0.597	15
-108.496	154.922	8.200	12.800	0.280	0.261	14.140	0.238	78.020	78.020	0.261	0.238	0.000	0.914	0.002	6.169	7.756	1.319	1.083	233.0	245.9	0.597	15
-108.379	154.932	8.200	12.800	0.280	0.261	14.138	0.238	77.330	77.330	0.261	0.238	0.000	0.912	0.002	6.182	7.757	1.314	1.083	232.7	245.9	0.597	15
-107.825	154.982	8.200	12.800	0.280	0.264	14.126	0.238	76.645	76.645	0.264	0.238	0.000	0.902	0.002	6.243	7.763	1.287	1.082	231.4	245.9	0.597	15
-107.756	154.992	8.200	12.800	0.280	0.264	14.125	0.238	75.957	75.957	0.264	0.238	0.000	0.901	0.002	6.251	7.764	1.284	1.082	231.3	245.9	0.597	15
-107.196	155.042	8.200	12.800	0.280	0.267	14.113	0.238	75.270	75.270	0.267	0.238	0.000	0.891	0.002	6.314	7.770	1.259	1.082	230.1	245.9	0.597	15
-107.029	155.052	8.200	12.800	0.280	0.268	14.110	0.238	74.583	74.583	0.268	0.238	0.000	0.888	0.002	6.332	7.772	1.252	1.082	229.8	245.9	0.597	15
-106.601	155.092	8.200	12.800	0.280	0.270	14.101	0.238	74.010	74.010	0.270	0.238	0.000	0.881	0.002	6.381	7.776	1.233	1.081	229.0	245.9	0.597	15
-106.485	155.102	8.200	12.800	0.280	0.271	14.098	0.238	73.434	73.434	0.271	0.238	0.000	0.879	0.002	6.394	7.777	1.228	1.081	228.9	245.9	0.597	15
-103.105	155.372	8.200	12.800	0.280	0.289	14.028	0.238	70.228	70.228	0.289	0.238	0.000	0.823	0.002	6.794	7.814	1.107	1.080	226.2	245.9	0.597	15
-102.972	155.382	8.200	12.800	0.280	0.290	14.025	0.238	67.019	67.019	0.290	0.238	0.000	0.821	0.002	6.811	7.816	1.103	1.080	226.3	245.9	0.597	15
-99.877	155.502	8.200	12.800	0.280	0.308	13.959	0.238	65.529	65.529	0.308	0.238	0.000	0.773	0.002	7.203	7.850	1.076	1.085	240.6	245.9	0.597	15
-99.565	155.512	8.200	12.800	0.280	0.310	13.952	0.238	64.042	64.042	0.310	0.238	0.000	0.768	0.002	7.244	7.854	1.077	1.086	243.1	245.9	0.597	15
-96.302	155.762	8.200	12.800	0.280	0.331	13.882	0.238	61.060	61.060	0.331	0.238	0.000	0.720	0.002	7.663	7.891	1.089	1.096	271.0	281.8	0.599	16
-95.988	155.772	8.200	12.800	0.280	0.333	13.876	0.238	58.087	58.087	0.333	0.238	0.000	0.716	0.002	7.707	7.894	1.091	1.097	273.9	281.8	0.599	16
-92.888	155.972	8.200	12.800	0.280	0.354	13.808	0.238	56.121	56.121	0.354	0.238	0.000	0.673	0.003	8.133	7.930	1.101	1.106	304.2	317.8	0.601	17
-92.541	155.982	8.200	12.800	0.280	0.357	13.800	0.238	55.407	55.407	0.357	0.238	0.000	0.668	0.003	8.185	7.935	1.102	1.108	307.7	317.8	0.601	17
-92.577	155.992	8.200	12.800	0.280	0.356	13.801	0.238	55.406	55.406	0.356	0.238	0.000	0.669	0.003	8.180	7.934	1.102	1.108	307.3	317.8	0.601	17
-92.893	156.002	8.200	12.800	0.280	0.354	13.808	0.238	55.404	55.404	0.354	0.238	0.000	0.673	0.003	8.132	7.930	1.101	1.106	304.1	317.8	0.601	17
-92.759	156.032	8.200	12.800	0.280	0.355	13.805	0.238	55.406	55.406	0.355	0.238	0.000	0.671	0.003	8.152	7.932	1.101	1.107	305.5	317.8	0.601	17
-92.657	156.042	8.200	12.800	0.280	0.356	13.803	0.238	55.406	55.406	0.356	0.238	0.000	0.670	0.003	8.168	7.933	1.102	1.107	306.5	317.8	0.601	17
-89.398	156.302	8.200	12.800	0.280	0.380	13.731	0.238	55.406	55.406	0.380	0.238	0.000	0.627	0.003	8.649	7.972	1.111	1.119	342.7	354.0	0.603	18
-89.293	156.312	8.200	12.800	0.280	0.381	13.729	0.238	55.406	55.406	0.381	0.238	0.000	0.626	0.003	8.666	7.973	1.112	1.120	344.0	354.0	0.603	18
-89.059	156.322	8.200	12.800	0.280	0.383	13.723	0.238	55.407	55.407	0.383	0.238	0.000	0.623	0.003	8.704	7.976	1.113	1.121	346.7	354.0	0.603	18

-88.885	156.332	8.200	12.800	0.280	0.384	13.720	0.238	55.406	55.406	0.384	0.238	0.000	0.621	0.003	8.732	7.978	1.113	1.121	348.8	354.0	0.603	18
-88.735	156.342	8.200	12.800	0.280	0.385	13.716	0.238	55.404	55.404	0.385	0.238	0.000	0.619	0.003	8.756	7.980	1.114	1.122	350.6	354.0	0.603	18
-88.572	156.352	8.200	12.800	0.280	0.386	13.713	0.238	55.406	55.406	0.386	0.238	0.000	0.617	0.003	8.783	7.982	1.114	1.123	352.5	354.0	0.603	18
-88.376	156.362	8.200	12.800	0.280	0.388	13.708	0.238	55.404	55.404	0.388	0.238	0.000	0.615	0.003	8.786	7.985	1.113	1.123	355.4	390.3	0.605	19
-88.228	156.372	8.200	12.800	0.280	0.389	13.705	0.238	55.407	55.407	0.389	0.238	0.000	0.613	0.003	8.811	7.986	1.113	1.123	357.2	390.3	0.605	19
-88.032	156.382	8.200	12.800	0.280	0.391	13.700	0.238	55.406	55.406	0.391	0.238	0.000	0.610	0.003	8.843	7.989	1.114	1.124	359.6	390.3	0.605	19
-87.872	156.392	8.200	12.800	0.280	0.392	13.697	0.238	55.407	55.407	0.392	0.238	0.000	0.609	0.003	8.870	7.991	1.114	1.125	361.6	390.3	0.605	19
-87.696	156.402	6.300	11.200	0.340	0.204	12.477	0.289	55.406	55.406	0.204	0.289	0.000	1.419	0.002	4.244	8.723	1.768	1.093	263.9	281.8	0.599	16
-87.439	156.412	6.300	11.200	0.340	0.205	12.472	0.289	55.407	55.407	0.205	0.289	0.000	1.410	0.002	4.269	8.727	1.764	1.094	265.3	281.8	0.599	16
-87.275	156.422	6.300	11.200	0.340	0.206	12.468	0.289	55.406	55.406	0.206	0.289	0.000	1.404	0.002	4.286	8.729	1.762	1.094	266.3	281.8	0.599	16
-87.054	156.432	6.300	11.200	0.340	0.207	12.463	0.289	55.404	55.404	0.207	0.289	0.000	1.397	0.002	4.307	8.733	1.759	1.094	267.5	281.8	0.599	16
-86.856	156.442	6.300	11.200	0.340	0.208	12.458	0.289	55.407	55.407	0.208	0.289	0.000	1.390	0.002	4.327	8.736	1.756	1.095	268.6	281.8	0.599	16
-86.628	156.452	6.300	11.200	0.340	0.209	12.453	0.289	55.406	55.406	0.209	0.289	0.000	1.382	0.002	4.350	8.739	1.753	1.095	270.0	281.8	0.599	16
-86.396	156.462	6.300	11.200	0.340	0.211	12.447	0.289	55.407	55.407	0.211	0.289	0.000	1.374	0.002	4.373	8.743	1.750	1.096	271.3	281.8	0.599	16
-86.223	156.472	6.300	11.200	0.340	0.211	12.443	0.289	55.406	55.406	0.211	0.289	0.000	1.368	0.002	4.391	8.745	1.747	1.096	272.4	281.8	0.599	16
-86.021	156.482	6.300	11.200	0.340	0.212	12.438	0.289	55.407	55.407	0.212	0.289	0.000	1.361	0.002	4.411	8.749	1.744	1.096	273.6	281.8	0.599	16
-85.748	156.492	6.300	11.200	0.340	0.214	12.432	0.289	55.406	55.406	0.214	0.289	0.000	1.352	0.002	4.439	8.753	1.741	1.097	275.2	281.8	0.599	16
-84.692	156.532	6.300	11.200	0.340	0.220	12.407	0.289	55.406	55.406	0.220	0.289	0.000	1.317	0.002	4.549	8.769	1.727	1.099	281.8	281.8	0.599	16
-84.383	156.542	6.300	11.200	0.340	0.221	12.400	0.289	55.406	55.406	0.221	0.289	0.000	1.307	0.002	4.566	8.774	1.723	1.100	284.8	317.8	0.601	17
-83.488	156.572	7.500	12.200	0.290	0.347	13.134	0.247	55.407	55.407	0.347	0.247	0.000	0.712	0.003	7.578	8.312	1.075	1.103	293.3	317.8	0.601	17
-83.166	156.582	7.500	12.200	0.290	0.349	13.126	0.247	55.406	55.406	0.349	0.247	0.000	0.706	0.003	7.628	8.316	1.077	1.104	296.9	317.8	0.601	17
-81.913	156.622	7.500	12.200	0.290	0.359	13.097	0.247	55.406	55.406	0.359	0.247	0.000	0.687	0.003	7.826	8.334	1.082	1.109	311.0	317.8	0.601	17
-81.580	156.632	7.500	12.200	0.290	0.362	13.090	0.247	55.406	55.406	0.362	0.247	0.000	0.682	0.003	7.880	8.338	1.084	1.110	314.9	317.8	0.601	17
-80.661	156.662	7.500	12.200	0.290	0.369	13.068	0.247	55.407	55.407	0.369	0.247	0.000	0.668	0.003	8.004	8.351	1.086	1.114	326.4	354.0	0.603	18
-80.323	156.672	7.500	12.200	0.290	0.372	13.060	0.247	55.406	55.406	0.372	0.247	0.000	0.663	0.003	8.060	8.356	1.087	1.115	330.6	354.0	0.603	18
-79.359	156.702	7.500	12.200	0.290	0.380	13.038	0.247	55.405	55.405	0.380	0.247	0.000	0.649	0.003	8.222	8.369	1.091	1.119	342.8	354.0	0.603	18
-79.049	156.712	7.500	12.200	0.290	0.383	13.031	0.247	55.407	55.407	0.383	0.247	0.000	0.645	0.003	8.275	8.374	1.092	1.121	346.9	354.0	0.603	18
-78.745	156.722	7.500	12.200	0.290	0.386	13.023	0.247	55.406	55.406	0.386	0.247	0.000	0.640	0.003	8.327	8.378	1.094	1.122	350.9	354.0	0.603	18
-78.441	156.732	7.500	12.200	0.290	0.388	13.016	0.247	55.407	55.407	0.388	0.247	0.000	0.636	0.003	8.352	8.382	1.093	1.123	355.4	390.3	0.605	19
-78.142	156.742	7.500	12.200	0.290	0.391	13.009	0.247	55.406	55.406	0.391	0.247	0.000	0.632	0.003	8.404	8.387	1.094	1.124	359.5	390.3	0.605	19
-77.829	156.752	7.500	12.200	0.290	0.394	13.002	0.247	55.407	55.407	0.394	0.247	0.000	0.627	0.003	8.459	8.391	1.095	1.126	363.8	390.3	0.605	19
-77.511	156.762	7.500	12.200	0.290	0.397	12.994	0.247	55.406	55.406	0.397	0.247	0.000	0.623	0.003	8.515	8.396	1.096	1.127	368.2	390.3	0.605	19
-77.135	156.772	7.500	12.200	0.290	0.400	12.985	0.247	55.404	55.404	0.400	0.247	0.000	0.618	0.003	8.582	8.401	1.098	1.129	373.6	390.3	0.605	19
-76.762	156.782	7.500	12.200	0.290	0.403	12.977	0.247	55.409	55.409	0.403	0.247	0.000	0.612	0.003	8.649	8.407	1.099	1.131	378.9	390.3	0.605	19
-75.595	156.822	7.500	12.200	0.290	0.414	12.949	0.247	55.406	55.406	0.414	0.247	0.000	0.597	0.003	8.833	8.424	1.087	1.134	391.7	426.7	0.607	20
-75.316	156.832	7.500	12.200	0.290	0.417	12.942	0.247	55.406	55.406	0.417	0.247	0.000	0.593	0.003	8.914	8.428	1.074	1.135	389.4	390.3	0.605	19
-74.218	156.882	7.500	12.200	0.290	0.427	12.916	0.247	55.406	55.406	0.427	0.247	0.000	0.578	0.003	9.122	8.444	1.018	1.133	383.5	390.3	0.605	19
-74.007	156.892	7.500	12.200	0.290	0.429	12.911	0.247	55.407	55.407	0.429	0.247	0.000	0.575	0.003	9.162	8.447	1.007	1.132	382.3	390.3	0.605	19
-72.945	156.932	7.500	12.200	0.290	0.440	12.885	0.247	55.406	55.406	0.440	0.247	0.000	0.561	0.003	9.369	8.463	0.954	1.130	376.2	390.3	0.605	19
-72.627	156.942	7.500	12.200	0.290	0.443	12.877	0.247	55.406	55.406	0.443	0.247	0.000	0.557	0.004	9.432	8.468	0.938	1.129	374.2	390.3	0.605	19
-71.879	156.962	7.500	12.200	0.290	0.451	12.859	0.247	55.406	55.406	0.451	0.247	0.000	0.548	0.004	9.583	8.479	0.901	1.128	369.5	390.3	0.605	19
-71.435	156.972	7.500	12.200	0.290	0.456	12.848	0.247	55.406	55.406	0.456	0.247	0.000	0.542	0.004	9.673	8.486	0.880	1.127	366.6	390.3	0.605	19

-70.151	157.002	7.500	12.200	0.290	0.469	12.816	0.247	55.407	55.407	0.469	0.247	0.000	0.526	0.004	9.941	8.505	0.819	1.124	357.7	390.3	0.605	19
-69.873	157.012	7.500	12.200	0.290	0.472	12.809	0.247	55.402	55.402	0.472	0.247	0.000	0.523	0.004	10.000	8.510	0.806	1.123	355.6	390.3	0.605	19
-67.666	157.092	7.500	12.200	0.290	0.497	12.754	0.247	55.406	55.406	0.497	0.247	0.000	0.496	0.004	10.518	8.544	0.723	1.120	344.8	354.0	0.603	18
-67.427	157.102	7.500	12.200	0.290	0.500	12.748	0.247	55.406	55.406	0.500	0.247	0.000	0.494	0.004	10.573	8.548	0.724	1.121	348.7	354.0	0.603	18
-65.500	157.182	7.500	12.200	0.290	0.524	12.699	0.247	55.406	55.406	0.524	0.247	0.000	0.472	0.004	10.985	8.579	0.736	1.132	382.4	390.3	0.605	19
-65.124	157.192	7.500	12.200	0.290	0.528	12.690	0.247	55.406	55.406	0.528	0.247	0.000	0.468	0.004	11.075	8.585	0.738	1.135	389.4	390.3	0.605	19
-63.031	157.252	7.500	12.200	0.290	0.555	12.635	0.247	55.406	55.406	0.555	0.247	0.000	0.445	0.004	11.515	8.620	0.750	1.147	431.8	463.2	0.609	21
-62.716	157.262	7.500	12.200	0.290	0.559	12.627	0.247	55.406	55.406	0.559	0.247	0.000	0.442	0.005	11.595	8.625	0.752	1.150	438.6	463.2	0.609	21
-60.803	157.312	7.500	12.200	0.290	0.586	12.577	0.247	55.406	55.406	0.586	0.247	0.000	0.422	0.005	12.053	8.658	0.766	1.164	483.2	499.8	0.611	22
-60.312	157.322	7.500	12.200	0.290	0.593	12.563	0.247	55.407	55.407	0.593	0.247	0.000	0.417	0.005	12.184	8.667	0.770	1.168	495.4	499.8	0.611	22
-57.921	157.422	7.500	12.200	0.290	0.628	12.499	0.247	55.406	55.406	0.628	0.247	0.000	0.394	0.005	12.766	8.709	0.783	1.187	559.2	573.5	0.615	24
-57.807	157.432	7.500	12.200	0.290	0.630	12.496	0.247	55.407	55.407	0.630	0.247	0.000	0.393	0.005	12.798	8.711	0.784	1.188	562.2	573.5	0.615	24
-54.723	157.592	7.500	12.200	0.290	0.680	12.409	0.248	55.406	55.406	0.680	0.248	0.000	0.364	0.006	13.587	8.768	0.791	1.214	651.6	684.8	0.621	27
-54.511	157.602	7.500	12.200	0.290	0.684	12.403	0.248	55.406	55.406	0.684	0.248	0.000	0.362	0.006	13.652	8.772	0.792	1.216	658.3	684.8	0.621	27
-51.404	157.742	7.500	12.200	0.290	0.740	12.313	0.248	55.406	55.406	0.740	0.248	0.000	0.335	0.006	14.519	8.832	0.800	1.247	768.0	797.3	0.627	30
-51.174	157.752	7.500	12.200	0.290	0.744	12.307	0.248	55.407	55.407	0.744	0.248	0.000	0.333	0.006	14.597	8.837	0.801	1.250	776.9	797.3	0.627	30
-48.166	157.882	7.500	12.200	0.290	0.804	12.216	0.248	55.406	55.406	0.804	0.248	0.000	0.309	0.007	15.510	8.899	0.787	1.278	880.6	910.8	0.633	33
-47.956	157.892	7.500	12.200	0.290	0.808	12.209	0.248	55.407	55.407	0.808	0.248	0.000	0.307	0.007	15.587	8.903	0.785	1.280	886.8	910.8	0.633	33
-44.814	158.042	7.500	12.200	0.290	0.878	12.110	0.249	55.406	55.406	0.878	0.249	0.000	0.283	0.007	16.643	8.972	0.765	1.312	1008.7	1025.4	0.639	36
-44.664	158.052	7.500	12.200	0.290	0.882	12.105	0.249	55.409	55.409	0.882	0.249	0.000	0.282	0.007	16.703	8.976	0.764	1.314	1015.3	1025.4	0.639	36
-41.665	158.202	7.500	12.200	0.290	0.957	12.006	0.249	55.406	55.406	0.957	0.249	0.000	0.260	0.008	17.697	9.046	0.762	1.357	1187.5	1218.8	0.649	41
-41.361	158.212	7.500	12.200	0.290	0.965	11.995	0.249	55.406	55.406	0.965	0.249	0.000	0.258	0.008	17.831	9.053	0.764	1.362	1207.4	1218.8	0.649	41
-40.439	158.252	7.500	12.200	0.290	0.990	11.964	0.249	55.404	55.404	0.990	0.249	0.000	0.252	0.008	18.133	9.076	0.766	1.378	1276.0	1297.0	0.653	43