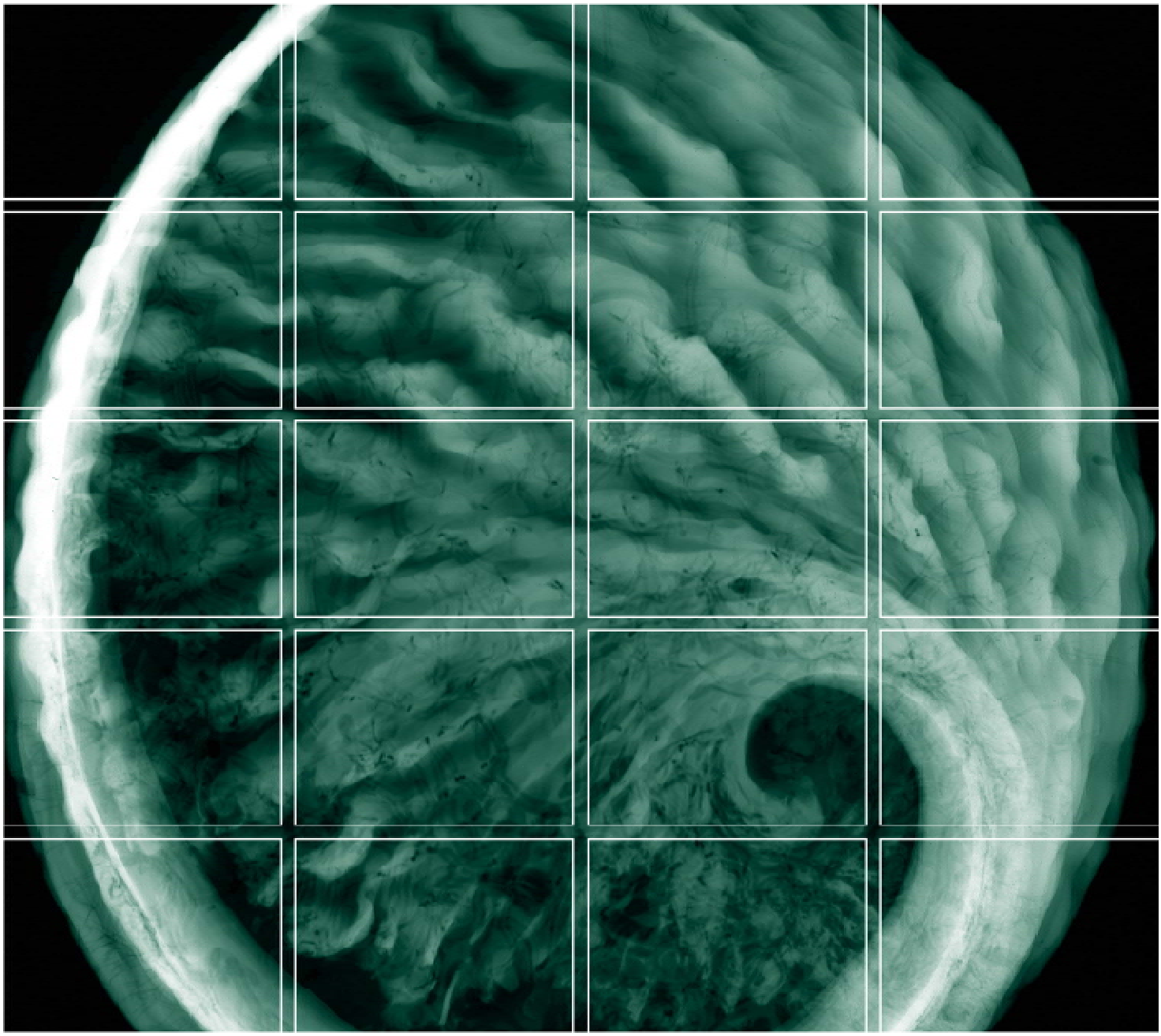

Central Victoria Livestock Exchange
Odour Impact Assessment

Expect Witness
Planning Panels Victoria Ref No C185

RLX Investment Company

June 2015

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ERM

Central Victoria Livestock Exchange

Odour Impact Assessment

Expert Witness

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Prepared by:	*Dr Iain Cowan*
Position	*Principal Air Quality Consultant*
Signed:	
Date:	*11 June 2015*
Approved by:	*Mitchell Thompson*
Position:	Partner
Signed:	
Date:	*11 June 2015*

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1 PLANNING PANELS VICTORIA STATEMENT

Dr. Iain Cowan of Environmental Resources Management Australia Pty Ltd (ERM) was engaged by Harwood Andrews on behalf of RLX Investment Trust (RLX) to assess the potential odour impact to the surrounding land use from the development of the proposed Central Victorian Livestock Exchange at Miners Rest.

1.1 Name and Address

Dr. Iain Cowan
c/- ERM
Level 3, Tower 3, World Trade Centre
18-38 Siddeley Street
Docklands
Victoria, 3005

1.2 Qualifications, Experience And Areas Of Expertise

Details of my qualifications, experience and areas of expertise are detailed in my curriculum vitae which may be found in *Annex A*.

1.3 Expertise in preparing this report

I have undertaken numerous studies over fourteen years in the field of atmospheric dispersion modelling. This has incorporated projects in relation to odorous emissions from compost facilities, broiler farms, wastewater treatment plants and landfills.

1.4 Relationship Between The Expert Witness And The Party For Who The Report Is Prepared

I am employed by Environmental Resources Management (ERM) Australia Pty Ltd, who has a commercial relationship for the provision of this expert witness statement with RLX. This statement has been prepared independently of RLX, and forms my opinion of the potential for impact related to odour from the proposed CVLX at Miners Rest.

1.5 Instructions that define the report

Copies of instructions received to prepare this report are included in *Annex B*.

1.6 Facts, matters and all assumptions on which the report proceeds

This statement has been prepared with reliance placed on the following documents:

- Central Victoria Livestock Exchange Odour Impact Assessment, prepared by The Odour Unit and dated August 2014; and
- Water Cycle Management Report for the Central Victorian Livestock Exchange, prepared by Geolyse and dated December 2014.

1.7 Referenced documents

A list of documents referenced in this expert witness report may be found in *Section 9* of this statement.

1.8 Identity and qualifications of the person who carried out any tests or experiments upon which the expert relied in making the report

Whilst no emissions testing was undertaken in the preparation of this expert witness statement, emissions test results undertaken by The Odour Unit at the Central Tablelands Livestock Exchange, as listed in the Odour Unit report dated August 2014 were used.

1.9 Statement

I, Dr. Iain Cowan of ERM was engaged by Harwood Andrews on behalf of RLX Investment Trust (RLX) to assess the potential odour impact to the surrounding land use from the development of the proposed Central Victorian Livestock Exchange at Miners Rest.

The odour impact assessment has been completed using the CALPUFF dispersion model and odour measurements completed by The Odour Unit at a similar designed facility (Central Tablelands Livestock Exchange) in New South Wales. The CALPUFF dispersion model was selected in preference to the Regulatory dispersion model (AERMOD) as it provides a more conservative, and realistic, approach to calm wind conditions which are likely to result in the highest odour concentrations.

With the exception of the selected model, the modelling was completed in accordance with the requirements of the SEPP(AQM). I have been instructed to undertake the modelling on the basis of the most recent development plan. The odour dispersion modelling adopted a conservative approach by assuming that all odour sources are present at all times, thereby testing the likely worst case odour emissions against five years of meteorology for the local area. This approach determined that the 99.9th percentile odour concentrations would be likely to be in excess of the SEPP(AQM) design criterion of 5 OU at the boundary with 99.9th percentile concentrations at sensitive receptors of 5 OU.

An odour concentration of 5 OU is generally considered to be the concentration at which the population will begin to recognise and detect odour in the ambient environment. These results therefore indicate that where worst case emissions and worst case dispersion coincide there is potential for off-site recognition of odour.

In accordance with the SEPP(AQM), a risk assessment was therefore completed to determine whether the odour levels would pose an unacceptable risk to the beneficial use of the atmosphere.

Annoyance by odour is assessed by considering the impact in accordance with:

- Frequency;
- Intensity (concentration);
- Duration;
- Offensiveness (criteria); and
- Location (sensitive receptors or farm land).

Consideration of these factors is known as the FIDOL approach to odour assessment.

As a PEM for odour risk assessment has not been published by EPA. Three published odour risk assessment methodologies were adopted to consider the risk of odour impact to the surrounding land use:

- VCAT Risk Matrix - developed by Presiding Senior Member Tonia Komesaroff and Member Ian Potts in Barac v Strathbogie SC [2011] VCAT 1146;
- EPA Risk Matrix – developed by EPA and currently included in a discussion paper on the methodology of risk assessment for odour from broiler farms, provides the risk matrix for odour risk at sensitive receptors; and
- United Kingdom Institute of Air Quality Management Risk Matrix – developed by the IAQM and published in "Guidance on the assessment of odour for planning" (IAQM, 2014).

The VCAT and EPA risk matrices concentrate on impact to sensitive receptors, whilst the IAQM also considers impact to farm land as a low risk receptor. Each of the risk assessment methodologies used adopt the FIDOL approach. The three independent risk assessments indicate that there is a low risk of harm to the beneficial use of the atmosphere both at the sensitive receptors and for the surrounding farm land nearer to the proposed CVLX.

Given the conservative assumptions in the emission estimation and source selection, it is therefore concluded that the proposed location of the CVLX is appropriate and that the risk of odour impact to the surrounding land use is low. A low risk of odour impact is considered to represent a level at which there is no impact to the beneficial use of the atmosphere for the surrounding land use. This does not mean that odour will never be detected, rather that the frequency at which odour may occur is not at a level which will impact the surrounding land use.

1.10 Declaration

Preparation of this expert witness statement has been made in accordance with the requirements of Planning Panel Victoria Guide to Expert Evidence.

I have made all the inquiries that I believe are desirable and appropriate and that no matters of significance, which I regard as relevant, have to my knowledge been withheld from the Panel.

2 *INTRODUCTION*

RLX Investment Trust (RLX) proposes to relocate the Central Victorian Livestock Exchange (CVLX) from its existing site in central Ballarat to the north-west outskirts of the city. The proposed site for the CVLX is located at:

- Lot 1 and 2 TP840697, Lot 2 PS341031 and adjoining road reserve, Sunraysia Highway, Miners Rest, 3352.

The Site is located approximately 10.5 kilometres from the centre of Ballarat. The closest residentially zoned land (General Residential) is approximately 512 metres to the north-east of the Site, whilst the nearest observed residential receptor is 280 meters east of the site.

Dr. Iain Cowan of Environmental Resources Management Pty Ltd (ERM) was instructed by Harwood Andrews, acting on behalf of RLX Investment Company Pty Ltd as trustee for RLX Investment Trust (RLX), to provide expert odour and air quality assessment in relation to the proposed development.

In order to determine the potential for air quality impact to the surrounding land use associated with the proposed relocation of the CVLX, this expert witness statement has adopted the following approach:

- Determination of the environmental setting
- Site visit;
- Dispersion model selection;
- Meteorological modelling;
- Estimation of emissions from the Site sources using odour testing results;
- Dispersion modelling of the proposed odour emissions from the associated sources;
- An air quality impact assessment to the surrounding land use and to specific sensitive receptors for normal operations; and
- Consideration of upset conditions.

3 ENVIRONMENTAL SETTING

This section provides a description of the environmental setting of the Site in the context of air quality and provides a description of:

- Climate;
- Existing ambient air quality; and
- Additional sources of emissions.

3.1 CLIMATE

The Site is located in a temperate environment. *Table 3-1* provides an overview of the climatic extremes as recorded by the Bureau of Meteorology between the years 1908 to 2010. Overall, the local area is characterised by:

- Annual average rainfall of 689.8 mm;
- Average maximum temperature of 25.1 °C in January and February;
- Average minimum temperature of 3.2°C in July;
- Average maximum 9am relative humidity of 90% in June and July; and
- Average minimum 3pm relative humidity of 42% in January.

3.1.1 *Typical wind conditions*

Figure 3-1 provides wind roses showing the frequency of strength and direction of winds for the past five years (2009 to 2013 inclusive) at the Site. The data has been divided to show annual trends.

The wind roses indicate that typically winds at the subject Site are:

- Most frequently from the northerly and north-easterly directions;
- Occur often from the southern direction;
- Moderately from the western direction;
- Rarely from the east; and
- Less than 2.5% of calm conditions (less than 0.5 m/sec).

Table 3-1 Mean climatic conditions for nearest Bureau of Meteorology observation station at Ballarat Aerodrome

Statistic Element	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Start Year	End Year
Mean maximum temperature (°C)	25.1	25.1	22.2	17.7	13.6	10.8	10.1	11.4	13.9	16.6	19.6	22.6	17.4	1908	2015
Mean minimum temperature (°C)	10.9	11.5	10.0	7.5	5.7	4.0	3.2	3.7	4.8	6.2	7.8	9.4	7.1	1908	2015
Mean rainfall (mm)	39.4	44.3	42.4	51.2	64.1	63.0	66.4	74.6	71.3	66.7	56.1	50.3	689.8	1908	2015
Mean number of clear days	7.7	7.4	6.8	5.6	3.2	3.0	2.6	2.7	2.9	3.8	4.0	5.5	55.2	1957	2010
Mean number of cloudy days	10.2	8.2	11.5	14.1	18.1	18.5	19.2	18.9	16.1	16.5	15.0	13.9	180.2	1957	2010
Mean 9am temperature (°C)	17.2	17.0	15.1	11.9	8.9	6.4	5.6	6.6	9.0	11.6	13.7	15.8	11.6	1908	2010
Mean 9am relative humidity (%)	62	67	71	78	86	90	90	85	78	72	68	64	76	1908	2010
Mean 9am wind speed (km/h)	20.5	19.3	17.7	16.2	13.7	14.7	14.5	16.7	19.3	20.7	19.6	19.7	17.7	1957	2010
Mean 3pm temperature (° C)	23.4	23.5	20.8	16.5	12.6	9.9	9.1	10.3	12.7	15.2	18.0	20.9	16.1	1908	2010
Mean 3pm relative humidity (%)	42	44	48	57	69	76	75	70	63	59	54	47	59	1908	2010
Mean 3pm wind speed (km/h)	21.4	20.9	20.0	19.6	18.6	19.8	20.7	22.0	22.2	21.3	20.6	20.8	20.7	1957	2010

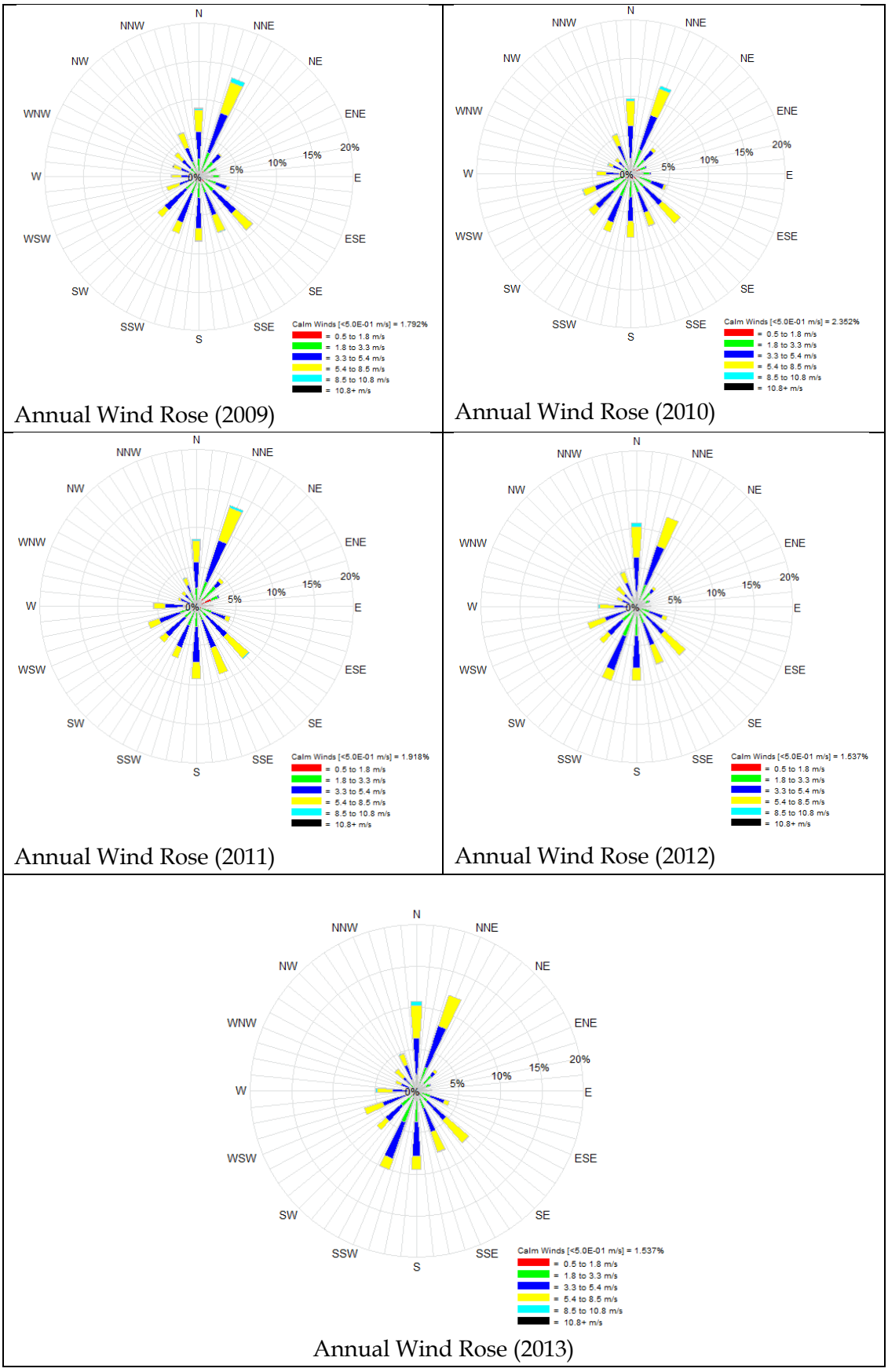

Figure 3-1 Site-Specific annual wind roses (2009-2013)

3.1.2 Atmospheric stability

Atmospheric stability is one of the key parameters that effects dispersion and dilution of emissions away from source. In essence it describes the degree of thermal and mechanical mixing of the atmosphere that occurs due to wind and thermal heating. Higher stability of the atmosphere typically results in poor dispersion conditions and higher ground level concentrations, whilst unstable atmospheres typically have the opposite impact.

Atmospheric stability is described by the Pasquil-Gifford classification where:

- Category A describes a very unstable atmosphere;
- Category B describes an unstable atmosphere;
- Category C describe a moderately unstable atmosphere;
- Category D describes a neutral atmosphere;
- Category E describes a stable atmosphere;
- Category F describes a very stable atmosphere; and
- Category G describes a very very stable atmosphere.

Usually, categories F and G are combined when describing the frequency of these categories.

Typically, these atmospheric conditions occur under the following conditions:

- Category A – very sunny and very windy conditions;
- Category B – Very sunny but less windy conditions;
- Category C – Moderately sunny and moderately windy conditions;
- Category D – Cloudy conditions;
- Category E, F and G – Mostly clear or clear night time conditions with decreasing wind speed.

Figure 3-2 shows the predicted frequency of stability categories at the Site. Stability categories have been predicted using the methodology outlined in Section *5.3*.

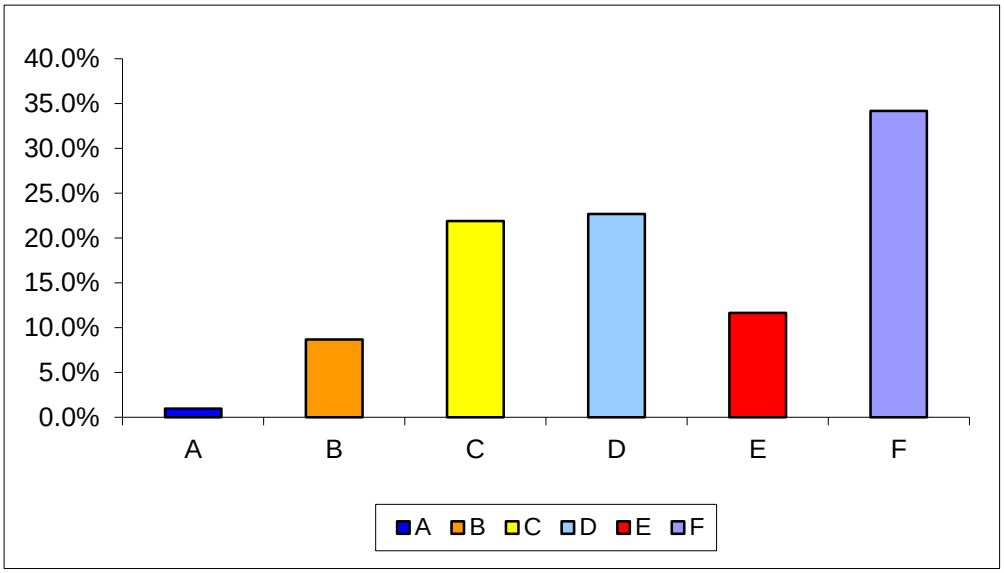

Figure 3-2 Frequency of atmospheric stability categories predicted for the Site

The distribution of stability categories indicates that there are:

- Relatively few windy days with high solar insolation (category A);
- A relatively low amount of sunny days with lighter winds (category B) and calm clear night time conditions (category E);
- A moderate amount of moderately sunny days with moderate wind conditions (category C) and over cast days and nights (category D);
- A high percentage of very calm clear night time conditions (category F).

3.2 EXISTING AMBIENT AIR QUALITY

The Site is surrounded by the area zoned Farming Zone under the Ballarat Planning Scheme. With respect to odour, local conditions would tend to indicate a low odour environment.

3.3 SENSITIVE RECEPTORS

Sensitive receptors are locations where the general population is likely to be exposed to the resultant ground level concentrations from the atmospheric emissions. These locations include:

- Residential housing;
- Hospitals;

- Schools;
- Aged care facilities; and
- Child day care facilities.

A review of the modelled area identified the sensitive receptors shown in *Figure 3-3* and described in *Table 3-2*.

Figure 3-3 Modelled sensitive receptor locations

The selected sensitive receptors are all residential dwellings. It should be noted that the selected sensitive receptors have been selected on the basis of proximity to Site. These sensitive receptors are intended to be representative of the general residential area. The modelled grid will provide assessment for all other residential addresses not specifically included in the dispersion model.

Table 3-2 Modelled sensitive receptors surrounding the Site (MGA zone 54S)

Receptor Number	X (m)	Y (m)
1	744816	5847403
2	744900	5847615
3	744929	5848232
4	745297	5848600
5	746719	5848375
6	746925	5848294
7	747047	5848065
8	746665	5847239
9	745297	5848815
10	745050	5848841
11	745109	5849181
12	744630	5849023
13	744288	5847323
14	744393	5846973
15	746790	5846731
16	746825	5846666
17	746844	5846592
18	747027	5846525
19	746939	5846458
20	746991	5846325

4 LEGISLATIVE CONTEXT

This section defines the legislative context of the project in relation to air quality impacts, and discusses the adopted assessment criteria.

In Victoria, The Environment Protection Act, 1970 (the Act) provides the main legislative instrument for the protection of the environment within the State of Victoria. The Act provides for the development of Regulations and State Environment Protection Policies (SEPPs) that specify the requirements for compliance under the Act.

The SEPP(AQM) is the main policy document for the protection of local air quality as a result of industrial emissions. The intent of the SEPP(AQM) is the protection of the beneficial use of the atmosphere, which in part is defined as ensuring aesthetic enjoyment of the atmosphere. The SEPP(AQM) is a policy guideline that the planning authority must consider as relevant as part of a planning application. The stated policy intent of SEPP(AQM) is the management of "*Emissions to the air environment…so that the beneficial uses of the air environment are protected*". The SEPP(AQM) defines the beneficial uses as including protection of local amenity and aesthetic enjoyment (Environment Protection Authority of Victoria, 2001).

In defining acceptable criteria for modelling assessment purposes the protection of local amenity and aesthetic enjoyment, the SEPP(AQM) has defined the following odour criteria:

- 1 OU 3-minute average 99.9th percentile for general odour sources; and
- 5 OU 3-minute average 99.9th percentile for industries involving intensive animal husbandry where the following set of integrated criteria may be applied:
    - Location with a low density of sensitive land uses. That is, premises must be located in a rural zone;
    - The location is consistent with integrated land use planning considerations such as the long term future of the surrounding land and the likely use of intervening land between the proposal and sensitive uses;
    - Works are designed in accordance with a set of industry performance standards approved by the relevant authorities;
    - Operations conducted in accordance with an environmental management plan (EMP) approved by the relevant authorities; and

- Completion of a risk assessment that includes modelling of emissions showing that the predicted maximum odour levels modelling in accordance with Schedule C do not exceed five times the odour detection threshold (5 OU) (3-minute averaging time, 99.9 percentile) at and beyond the property boundary.

4.1.1 Relevance of the SEPP(AQM) to the Application

Given that the CVLX complies with the set of integrated criteria, a design criterion of 5 OU is specified by the SEPP(AQM) to be applied at the property boundary.

Where compliance with the SEPP(AQM) design criterion cannot be met, Schedule C, Part C, Section 2d allows the use of a risk assessment to demonstrate that there will be harm to the beneficial use of the atmosphere from the proposal. It should be noted that 'no harm to the beneficial use of the atmosphere' does not mean that odour may never be detected off-site; rather the frequency of odour detection must be at a level that does not result in nuisance to the surrounding residents. This frequency is determined through a risk assessment process.

5 METHODOLOGY

In order to determine the predicted ground level concentrations that result from the project, the following approach was adopted:

- Site visit;
- Dispersion model selection;
- Meteorological modelling;
- Estimation of emissions from the Site sources using the odour testing results;
- Dispersion modelling of the proposed odour emissions from the associated sources; and
- An air quality impact assessment to the surrounding land use and to specific sensitive receptors.

5.1 SITE VISIT

A Site visit was undertaken on the 3rd of June 2015. The Site visit was used to understand the environmental setting of the Site and to visit the nearest sensitive receptors to the Site.

5.2 DISPERSION MODEL SELECTION

Several different dispersion models are routinely used in Australia for the assessment of air quality impacts from industrial releases. These include:

- AERMOD;
- CALPUFF;
- TAPM; and
- Ausplume.

For this assessment, the CALPUFF dispersion model has been used. CALPUFF was selected as it is the only model, of those commonly used in Australia, to be able to account for calm conditions (wind speeds of less 0.5 m/sec). Calm conditions are especially important in odour dispersion modelling as they provide the conditions when worst case impacts typically occur.

5.3 METEOROLOGICAL MODELLING

Meteorological modelling was completed for a five year period (2009 to 2013 inclusive). This was undertaken to provide sufficient data to the dispersion modelling to understand the inter-annual variation in predicted impacts as a result of inter-annual meteorology.

Meteorological modelling was undertaken through a two-step process:

- Prognostic modelling using TAPM (developed by CSIRO); and
- Diagnostic modelling using CALMET (the meteorological pre-processor for the CALPUFF dispersion model).

5.3.1 TAPM

Initially, the prognostic meteorological model TAPM was run to provide surface and upper air data either missing, or not collected, at the nearest Bureau of Meteorology Station (Ballarat Aerodrome).

TAPM was run adopting the setup prescribed by Environment Protection Authority of Victoria (EPA) in generating AERMOD compatible meteorological files (EPA Victoria, 2013) and used the following parameters:

- Four nests of 30 km, 10 km and 1 km.
- Grid centre of 37°29′ S, 143°47′ E (MGA Zone 54 745708m E, 5847635m N);
- Grid of 41 X 41 cells;
- Observation file for observations from Ballarat Aerodrome with area of influence of 4km with 4 layers of the atmosphere influenced by the readings;
- 25 vertical levels (10 m, 25 m, 50 m, 100 m, 150 m, 200 m, 250 m, 300 m, 400 m, 500 m, 600 m, 750 m, 1000 m, 1250 m, 1500 m, 1750 m, 2000 m, 2500 m, 3000 m, 3500 m, 4000 m, 5000 m, 6000 m, 7000 m and 8000 m)

5.3.2 CALMET

TAPM output was extracted at location 746708m E, 5844635m N (MGA Zone 54), was used to generate a pseudo observation station for surface and upper air data within the modelled grid. For the surface data where data was missing from Ballarat Aerodrome records for a particular hour, data was included from the TAPM generated surface information file.

Figure 5-1 show the meteorological grid used in dispersion modelling.

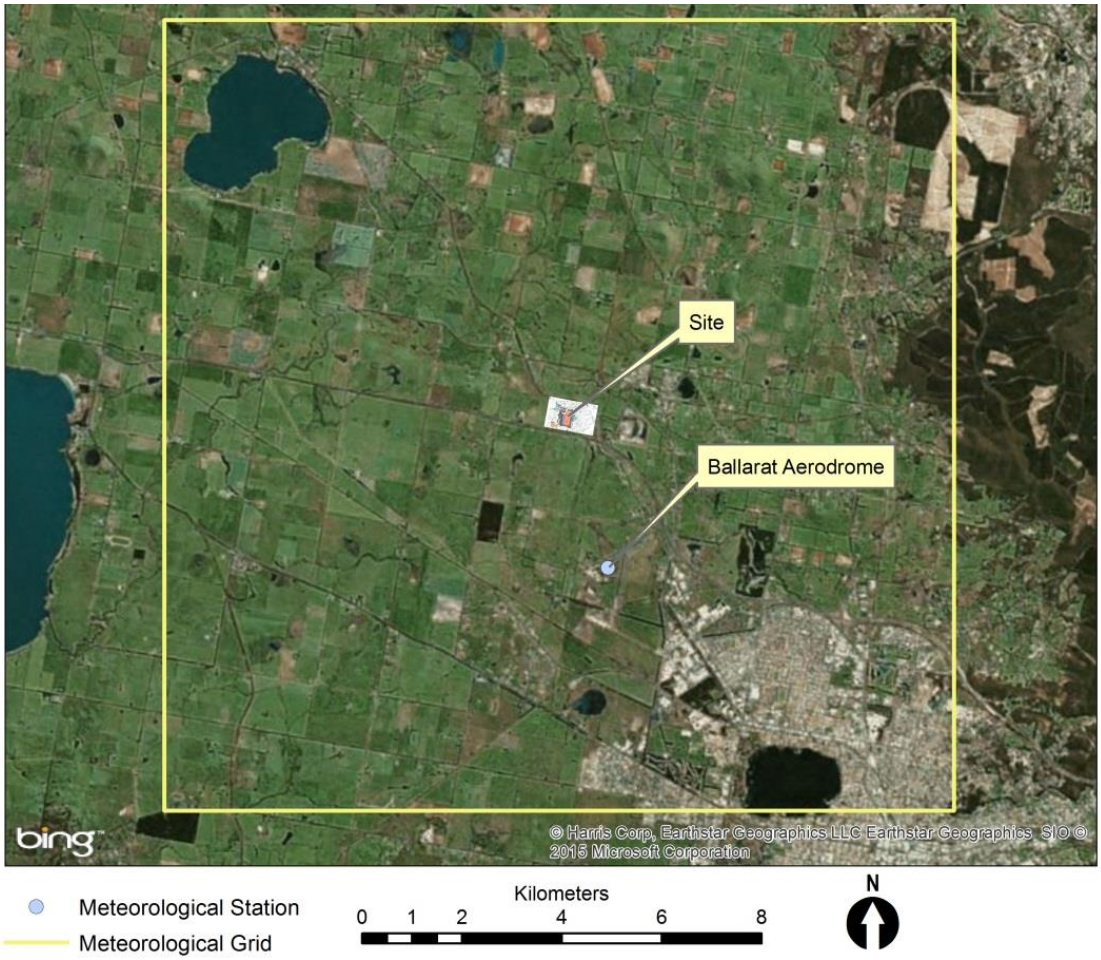

Figure 5-1 Meteorological grid used in dispersion modelling

The CALMET model was set up using the system default settings with the exception of those shown in *Table 5-1*. An example CALMET input file for one of the modelled years is included in Annex C.

Table 5-1 Non-standard settings selected in CALPUFF

Parameter	Outer Grid
Period Modelled	January 1 2009 to 31 December 2013 inclusive
TAPM 3D Data used as input	Yes
UTM Zone	54 South
Grid south-west corner (MGA Zone 54)	737.7080 km E, 5839.6350 km N
Grid Spacing	0.2 km
Grid points	80 X 80
Cell face heights (m)	0, 20, 30, 40, 50, 70, 90, 100, 250, 500, 1000, 1500, 2000
Coriolis Frequency	8.9×10^{-5}
Bias adjustment for cell face heights	-1 , -.983 , -.971 , -.96 , -.943 , -.92, -.902, -.81, -.58, -.149, .425, 1
Terrad (km)[1]	1
RMAX 1 (km) [1]	3
RMAX2 (km) [1]	5
RMAX3 (km) [1]	20
RMIN (km) [1]	0.1
R1 (km) [1]	1
R2 (km) [1]	2
Surface Observation Station location	Ballarat (746.689km E, 5844.589km N), TAPM extraction for missing data only from Ballarat Station (746.708km E, 5844.635km N)
Terrain data	SRTM 90m Digital Elevation Model
Land use data	Victorian Land Use Information System[2]

1. Selected in accordance with (Barclay & Scire, 2011)
2. (Department of Agriculture, 2014)

Meteorological Model Verification

To assess if the meteorological data provided to the dispersion model represents the likely conditions surrounding the Site, wind roses were extracted for the site and compared to the nearest BoM station with hourly observation data. The results are shown in *Figure 5-2*Figure 5-2.

It is considered that the predicted site meteorology provides a good representation of the wind speeds and directions in comparison to those measured at Ballarat Aerodrome, taking account of the site specific factors. The predicted wind speeds are marginally lighter than those measured at Ballarat Aerodrome and this will result in a more conservative assessment. The wind directions predicted for the site show a slight variation from those measured at Ballarat aerodrome, however this is considered to be the result of modification of the air flows by the small rises and falls in topography surrounding the proposed Site.

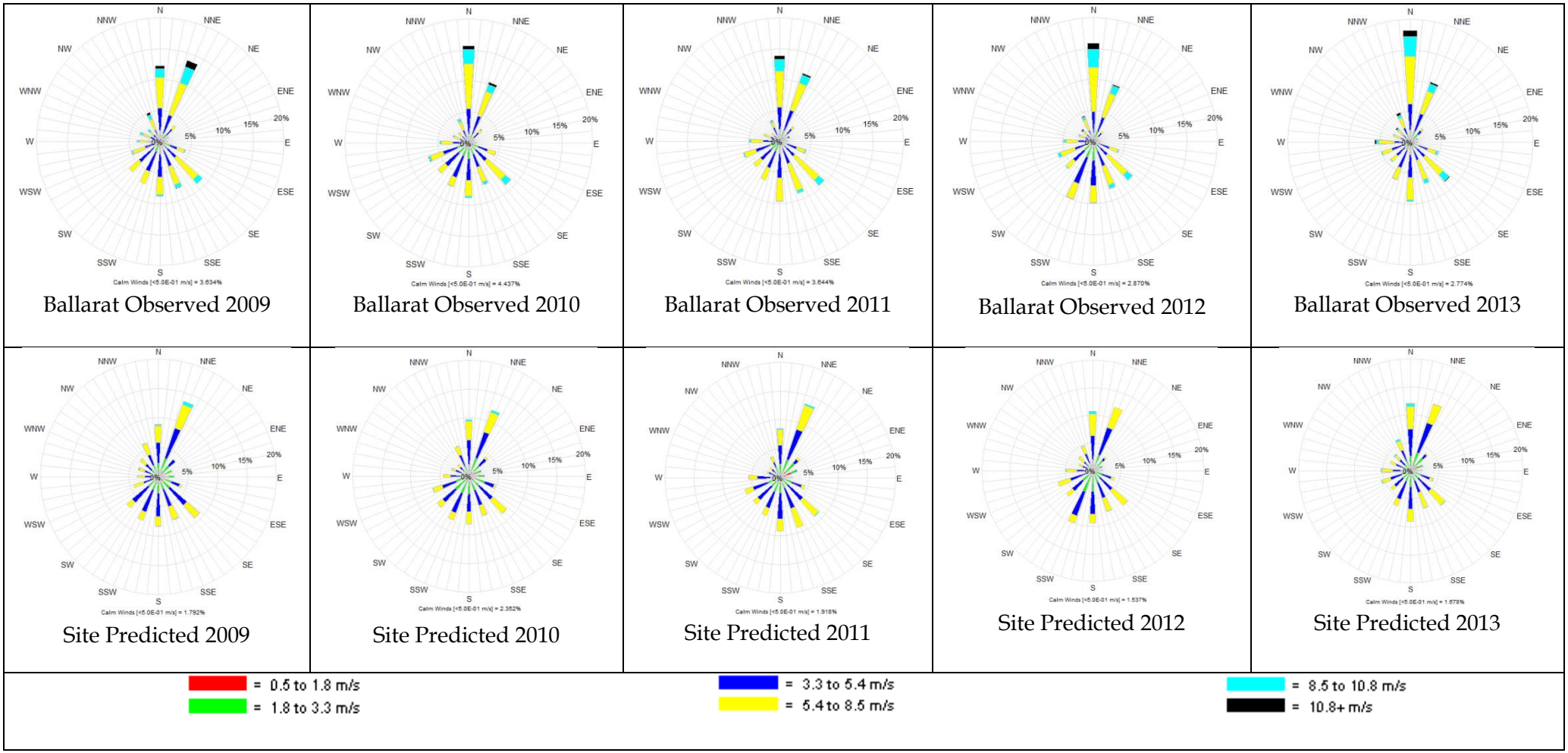

Figure 5-2 Comparison of observed wind roses at the nearest meteorological stations and as predicted at Site

5.4 EMISSIONS ESTIMATION

Emissions rates used in the dispersion modelling were estimated from the odour emissions testing results provided in the TOU Odour Impact Assessment report, dated August 2014 (*Table 5-2*).

Table 5-2 Odour Emission Testing Results

Source	Date	SOER ($OU.m^3/m^2/s$)	Maximum ($OU.m^3/m^2/s$)	Average ($OU.m^3/m^2/s$)
Sheep Stock Yard (Dry)	1/05/2014	0.160 0.195 0.112	0.195	0.16
Sheep Stock Yard (Wet)	1/05/2014	0.458 0.384 0.491	0.491	0.44
Cattle Stock Yard Dry	2/03/2011	0.064 0.052	0.064	0.05
	30/04/2014	0.029		
Cattle Stock Yard Wet	2/03/2011	0.101 0.104	0.217	0.14
	30/04/2014	0.217		
Facultative Pond	2/03/2011	0.037 0.056 0.034 0.032	0.056	0.040
Truck Wash Bay Waste	30/04/2014	0.252	0.252	0.252
Manure stock pile	30/04/2014	0.048	0.048	0.048

This air quality assessment adopted the following odour emission rates:

- Maximum measured wet odour emission rates for animal stock yards not under cover and for a small strip on the external edge of the covered area;
- Maximum measured dry odour emission rates for animal stock yards under cover (with the exception of the edge of the covered area where rain can access the covered area);
- Maximum measured odour emission rate for two facultative ponds;
- Average measured facultative pond odour emission rate for aerobic pond and first flush pond;
- Measured odour emission rate for truck wash bay waste;
- Maximum measured odour concentrations of sheep and cattle dry stock yards for sheep and cattle waste piles respectively.

It is considered that this is a conservative approach to the estimation of emissions as in actual use:

- Maximum measured odour emission rates will not occur over the entire area at all times;
- The outdoor areas will not be wet at all times;
- Only one or two edges of the undercover area have the potential to be wet during rainy or damp periods as a result of the wind direction

The odour emission rates used in this dispersion modelling are provided in *Table 5-3*.

Table 5-3 Emission Rates used in Dispersion Modelling

Source	Emission Rate ($OU.m^3/m^2/sec$)
Dry Area Sheep Stock Yard	0.195
Wet Area Sheep Stock Yard	0.491
Dry Area Cattle Stock Yard	0.064
Wet Area Cattle Stock Yard	0.217
First Flush Pond	0.056
Facultative Ponds 1 and 2	0.056
Aerobic pond	0.04
Truck Wash Waste and Drain	0.252
Soft floor waste stockpile	0.217
Sheep waste pile	0.491

5.5 DISPERSION MODELLING

Dispersion modelling was undertaken using the CALPUFF dispersion model. The model was set-up using the default settings[1]. Each modelled year was split into quarters so as to take advantage of the 24 cores available on the modelling computer. An example CALPUFF input file for the first quarter of 2009 is included in Annex D. Subsequent quarters within each year were modelled with at two day 'spin up' to allow for flows of emissions within the model to be established. The two 'spin-up' days were ignored when processing the results from the modelling.

[1] Default settings are those provided in the CALPUFF View Graphical User Interface (GUI) as published by Lakes Environmental with atmospheric chemistry and deposition switched off

5.5.1 *Emission Parameters*

The emission sources were configured in the dispersion model as area sources using the parameters shown in *Table 5-4* together with the results of the emission estimation (Section *5.4*).

Table 5-4 Emission parameters used in dispersion model

Source Name	Source Description	Area (m^2)	Base Elevation (m)	Effective Height (m)	Initial Sigma z (m)	Emissions Rate ($OU.m^3/m2/sec$)
FACC_1	Faccultative Pond 1	420.1	415.35	0.0	0.1	0.056
FACC_2	Faccultative Pond 2	420.1	415.24			0.056
AEROB1	Aerobic Pond Section 1	2151.6	414.65			0.04
AEROB2	Aerobic Pond Section 2	833.8	414.65			0.04
AEROB3	Aerobic Pond Section 3	760.9	414.42			0.04
AEROB4	Aerobic Pond Section 4	1474.7	414.24			0.04
DSHEEP	Sheep Stockyard under cover (Dry)	18094.8	417.48			0.195
WSHEEP1	Sheep Stockyard outdoors (Wet) Sections 1 to 4	923.6	417.47			0.491
WSHEEP2		9180.3	416.98			0.491
WSHEEP3		2337.9	417.82			0.491
WSHEEP4		1081.2	419.64			0.491
DCATTLE	Cattle Stockyard under cover (Dry)	6198.4	417.77			0.064
WCATTLE1	Cattle Stockyard outdoors (Wet) Section 1	419.2	420.82			0.217
WCATTLE2		2522.1	417.88			0.217
WCATTLE3		418.4	415.65			0.217
WCATTLE4		2517.2	421.56			0.217
WCATTLE5		545.4	417.71			0.217
WCATTLE6		333.7	415.25			0.217
FLUSH	First Flush Pond	362.6	414.58			0.056
WASH	Truck Wash Solids stockpile	100	415.48			0.252
TWDRAIN	Truck Wash Drain	66.6	415.1			0.252
SOFT	Cattle Floor Waste stockpile	262.4	415.25			0.217
SWASTE	Sheep Waste Stockpile	160.6	415.34			0.491

The sources described in *Table 5-3* and *Table 5-4* were positioned as shown in *Figure 5-3*.

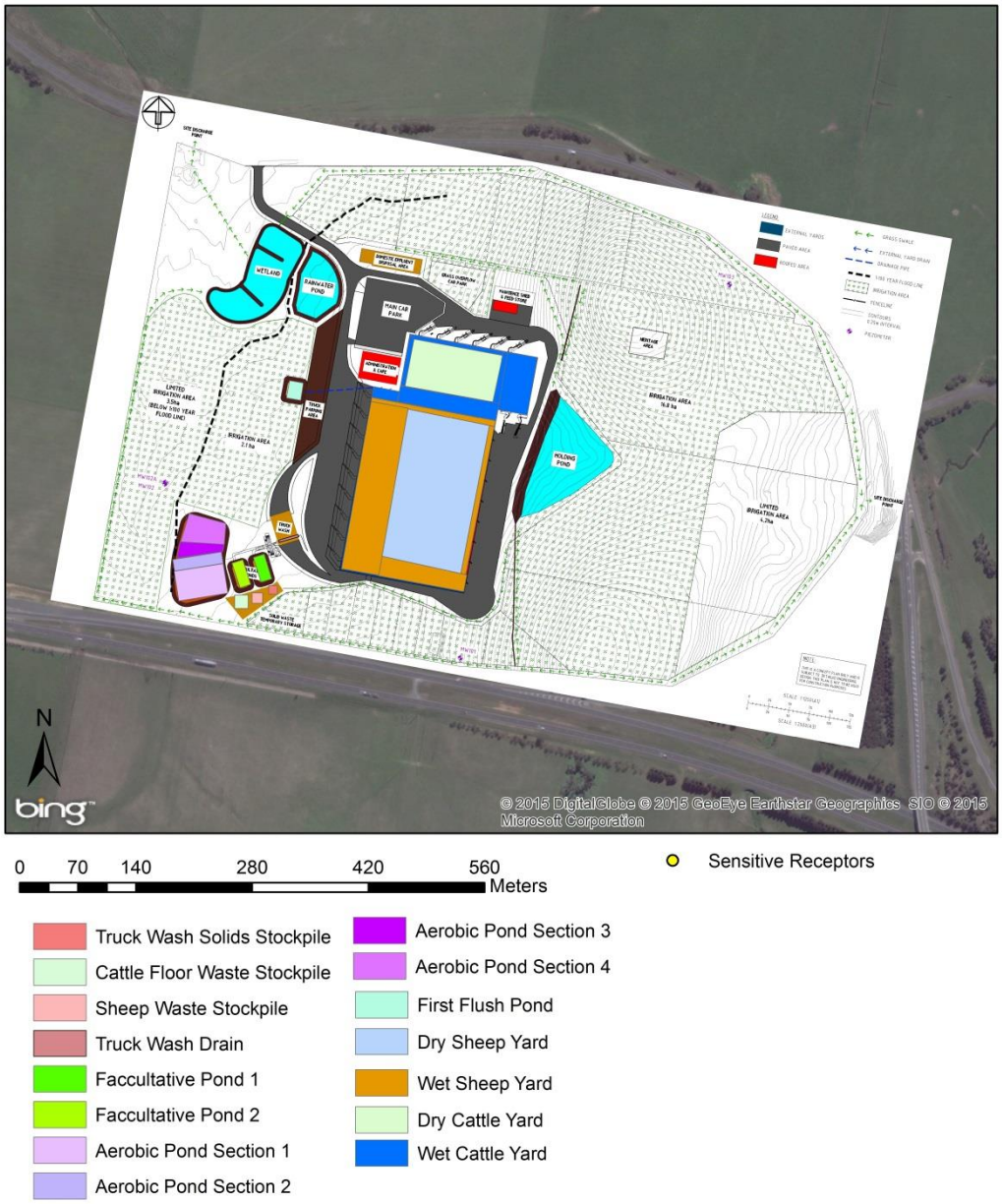

Figure 5-3 Sources as configured in the CALPUFF dispersion model

5.5.2 Receptor Grid

The CALPUFF receptor grid was set with southwest corner coordinates of 739008m E and 5840935m N. To provide a reasonable model run time the receptor grid was run using 200m resolution (*Figure 5-4*).

The receptor grid included 20 sensitive receptors identified in *Table 3-2*.

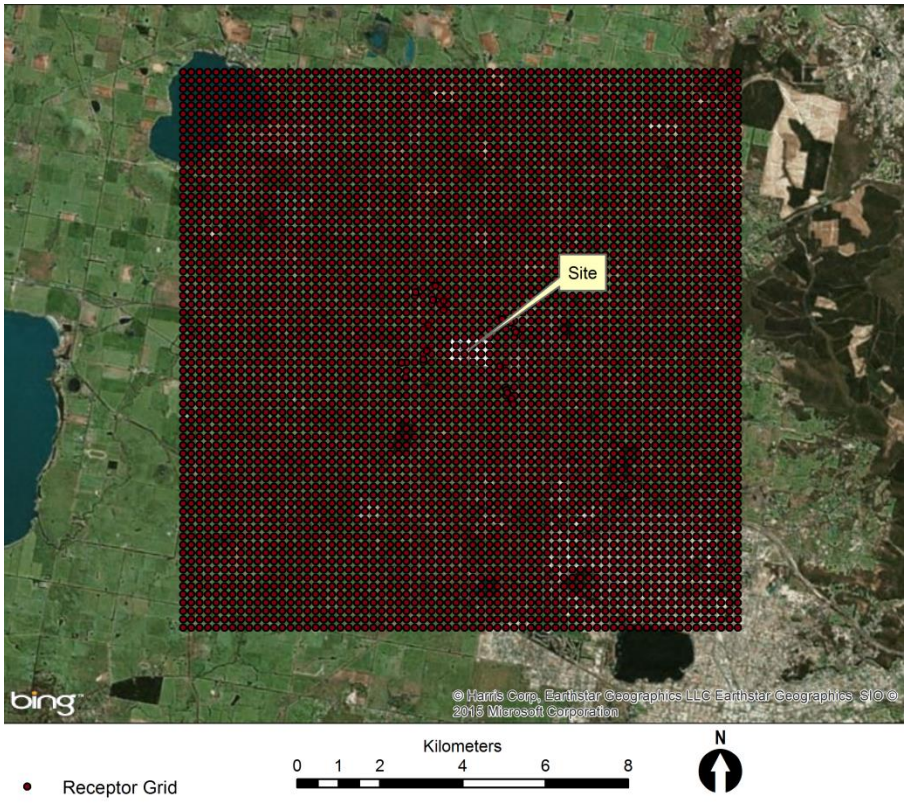

Figure 5-4 Receptor grid used in dispersion modelling

5.5.3 Post-Processing

Post processing has been used to take the hourly modelled results and process them to extract the 99.9th. Results for the 99.9th percentile were converted to a three-minute average using the peak to mean ratio provided in the EPA guidance for AERMOD (*Equation 5-1*).

Equation 5-1 Peak to mean ratio for converting one hour model results to 3-minute concentrations (Environment Protection Authority of Victoria, 2013)

$$Conc_{3-min} = Conc_{1hour} \times \left(\frac{60}{3}\right)^{0.2}$$

The maximum modelled result from the five modelled years has then been considered against the assessment criterion. The results therefore represent the maximum odour concentrations that are likely to occur over a five year period.

5.6 ASSESSMENT

The modelling results have been compared to the criteria contained in the SEPP(AQM) at the maximum modelled concentration in an off-site location and at the nearest sensitive receptor as required by the SEPP(AQM).

6 RESULTS

6.1 CONTOUR PLOTS

Figure 6-1 shows the contour plot for the maximum modelled 99.9th percentile 3-minute average odour concentrations over five years of modelled meteorology. This indicates the maximum modelled concentration over five years for all locations in one plot. The figure does not indicate that these levels of odour will occur all the time, but will occur once over a five year period in each location, where the conservative emission assumptions in this report coincide with poor dispersion meteorology.

The contour plots indicate that the highest concentrations are likely occur to the south of the site. Maximum modelled concentrations beyond the site boundary are greater than 5 OU and therefore above the relevant SEPP(AQM) Design Criteria for off-site locations. The land use immediately surrounding the proposed site is, however, farm land and the risk of harm to the beneficial use of the atmosphere over this land use is low. It is important, therefore to consider the impact at the nearest sensitive receptors.

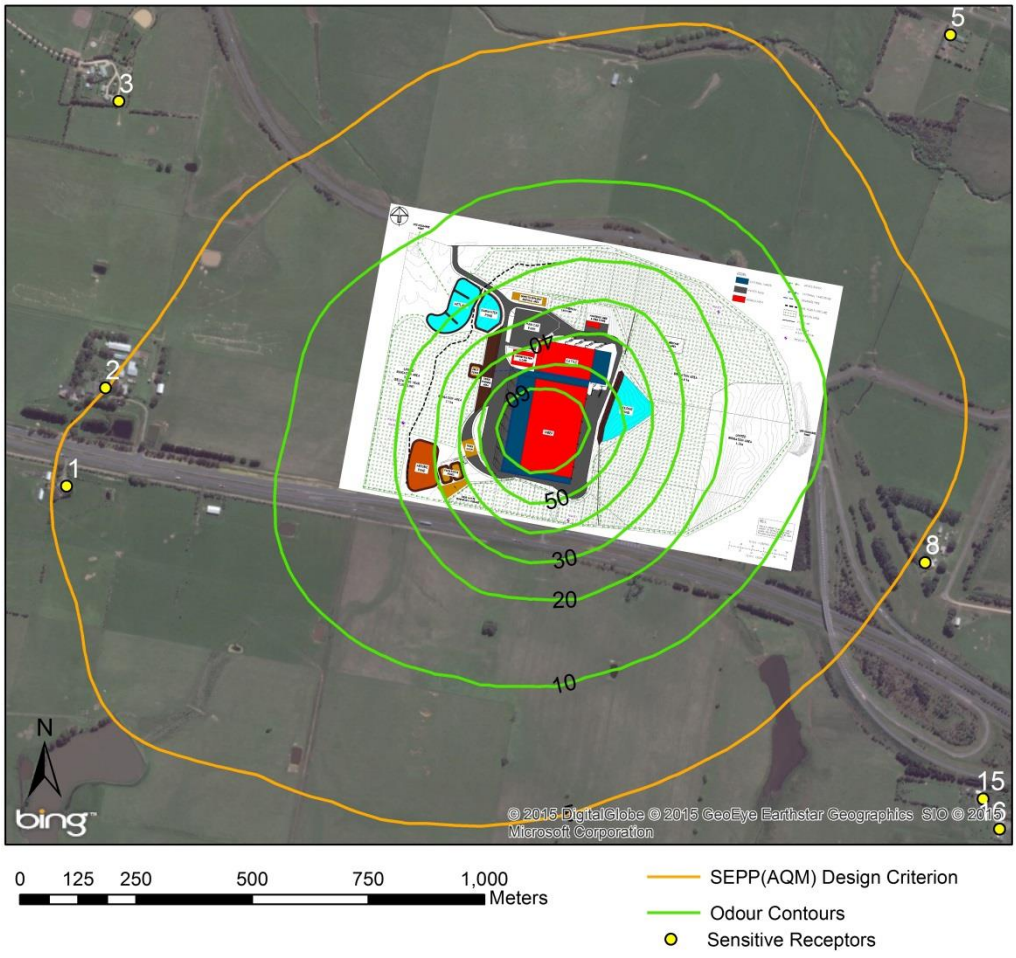

Figure 6-1 Maximum 99.9th Percentile Contour Plot for the five modelled years

6.2 SENSITIVE RECEPTORS

Table 6-1 shows the maximum predicted 99.9th percentile 3-minute odour concentrations for the proposed relocation of CVLX for the five modelled years. The results indicate that at the identified sensitive receptors odour is likely to have maximum concentrations at three receptors (receptor 1, 2 and 8) where the odour of the Saleyards may be faintly detectable on approximately one occasion per year.

It is considered that as the odour emission rates used in the assessment are inherently conservative, it is likely that odour at all sensitive receptors would be below 5 OU at all times. This is a concentration at which odour would be unlikely to be detectable and recognisable in the ambient environment.

Table 6-1 Predicted odour concentration (OU) at the identified sensitive receptors expressed at the 99.9th Percentile 3-minute average

Receptor Number	Odour concentration (OU)	Receptor Number	Odour concentration (OU)
1	5	11	1
2	5	12	1
3	2	13	3
4	3	14	3
5	2	15	2
6	2	16	2
7	2	17	1
8	5	18	1
9	2	19	1
10	2	20	1
Criterion	5	Criterion	5

6.3 RISK ASSESSMENT

The 99.9th percentile off-site concentration is predicted to be above the SEPP(AQM) design criterion. The predicted 99.9th percentile concentrations at the nearest sensitive receptors are predicted to be at the design criterion. Given the predicted exceedance outside of the site boundary, Schedule C, Part C, Section 2(d) of the SEPP(AQM) allows for a risk assessment to demonstrate that there will be no adverse impact from the proposal.

Whilst Clause 16 of the SEPP(AQM) states that:

"*The Authority will develop a protocol for environmental management in accordance with this policy on the use of risk assessment in air quality management*"

such a protocol has not been issued by EPA.

Odour impact, does not, however occur as a result of a once a year odour detection and recognition, unless that odour level is particularly high. Rather, odour impact is typically considered to occur as a result of the:

- Frequency;
- Intensity (level of concentration)
- Duration;
- Offensiveness; and
- Location of odour impact.

Together this is known as the FIDOL system of odour impact.

Odour environmental risk assessment must attempt to account for the majority if not all of the FIDOL elements that relate to impact.

The Odour Environmental Risk Assessment undertaken for the proposed CVLX have been undertaken using three approaches to risk matrices:

- VCAT Risk Matrix provided in decision for Barac v Strathbogie SC [2011] VCAT 1146;
- The EPA discussion paper on odour environmental risk assessment (Environment Protection Authority of Victoria, 2012); and
- The United Kingdom Institute of Air Quality Management Guidance on the assessment of odour for planning (IAQM, 2014).

The first two risk matrices were developed for cases involving emissions broiler farm odour. It is considered, however, that as the proposed CVLX also presents odours generated by intensive livestock in a rural setting the matrices are equally valid.

It is considered that together these three methods provide a complete understanding of the likely impacts of odour from the CVLX.

6.3.1 VCAT Risk Matrix

The VCAT Risk Matrix was developed by Presiding Senior Member Tonia Komesaroff and Member Ian Potts in Barac v Strathbogie SC [2011] VCAT 1146. The matrix considers the number of odour events per year above a given concentration (*Table 6-2*).

Table 6-2 *VCAT Odour Risk Matrix provided in decision on Barac v Strathbogie SC [2011] VCAT 1146*

Peak OU Concentrations	**>40**	**>20 i.e. >20 but </=40**	**>10 i.e. >10 but </= 20**	**>5 i.e. .5 but </= 10**
Mean OU Concentrations	**(mean >20)**	**(Mean >10 but <20)**	**(Mean >5 but < 10)**	**(Mean >2 but <5)**
Description of odour concentration impact	**Very annoying**	**Annoying**	**Noticeable and identifiable**	**May notice**
More than once per week (>52)	High	High	High	Low
1 per week to 1 per fortnight (<52, >26)	High	High	Medium	Low
1 per fortnight to 1 per month (<26, >12)	High	High	Medium	Low
1 per month to 1 per 2 months (<12, >6)	Medium	Medium	Low	Low
Every 2 months to every 4 months (<6, >4)	Medium	Medium	Low	Negligible
Once to 3 times (<3, >1)	Low	Low	Low	Negligible

1. Peak odour concentrations are model results expressed as a 3-minute average using the peak to mean ratio (*Equation 5-1)*
2. Mean odour concentration are the model results as obtained directly from the model in 1-hour average concentrations

In their decision, VCAT considered that:

- Negligible or low risk could be discounted from further assessment;
- Medium risk requires further consideration to account for the frequency of the intensity of the odour, the setting of the sensitive use, the land use zoning, characterisation of the receptors and the impacts of other odour emitting sources;
- High risk represents an unacceptable level of impact to amenity.

Results from the dispersion model for the existing and existing plus proposed farms have been output for each sensitive receptor as a time series for the five modelled years. The number of occurrences of the designated concentration bands have then been calculated for each year. For each receptor the year for the existing farms that had the highest number of odour concentrations within all bands was considered to be the worst case year. For this year, the data was fitted to the VCAT matrix and the highest risk ranking reported.

Table 6-3 Count of mean (1-hour average) concentrations for the worst year as modelled at each sensitive receptor and associated risk ranking for proposed CVLX

Receptor	Worst Modelled Year	>40	>20 but <=40	>10 but <=20	>5 but <=10	Risk Ranking
1	2010	0	0	0	12	Low
2	2010	0	0	0	8	Low
3	2009	0	0	0	0	Negligible
4	2009	0	0	0	0	Negligible
5	2009	0	0	0	0	Negligible
6	2009	0	0	0	0	Negligible
7	2009	0	0	0	0	Negligible
8	2010	0	0	0	3	Negligible
9	2009	0	0	0	0	Negligible
10	2009	0	0	0	0	Negligible
11	2009	0	0	0	0	Negligible
12	2009	0	0	0	0	Negligible
13	2009	0	0	0	0	Negligible
14	2009	0	0	0	1	Negligible
15	2009	0	0	0	0	Negligible
16	2009	0	0	0	0	Negligible
17	2009	0	0	0	0	Negligible
18	2009	0	0	0	0	Negligible
19	2009	0	0	0	0	Negligible
20	2009	0	0	0	0	Negligible

The results of the VCAT Risk Matrix indicates that concentrations will be at levels considered to be Low or Negligible risk at the identified sensitive receptors surrounding the proposed CVLX. This impact is considered to be acceptable under this assessment matrix.

6.3.2 EPA Risk Matrix

The EPA discussion paper on the methodology of risk assessment for odour from broiler farms, provides the risk matrix for odour risk at sensitive receptors as shown in *Table 6-4*. This matrix shown in *Table 6-4* is based on a comprehensive review of acceptable standards and the available literature on odour concentration levels and nuisance (Environmental Resources Management Australia Pty Ltd, 2012).

As discussed in the EPA discussion paper, a risk ranking of:

- Low – no change in project required;
- Moderate – Mitigation technologies or changes in practices required to render the risk low;
- High – Project is unlikely to be able to proceed without substantial mitigation or resiting.

Table 6-4 ***Risk matrix for sensitive receptors provided in EPA Broiler Farm Risk Assessment Discussion Paper (Victorian Environment Protection Authority, 2012)***

Frequency		Odour concentration (OU CEN) (Committé Européen de Normalisation)			
Percentile	**Occurrences (3 min averaging time) per annum**	**15+ OU**	**10<15 OU**	**5<10 OU**	**1<5 OU**
99.9th	0-9	H	M	L	L
99.5th	10-44	H	H	M	L
98th	45-175	H	H	H	M
Outside 98th	>175	H	H	H	H

The EPA matrix relies on the use of percentiles to consider the frequency of odour impact to a sensitive receptor. For each receptor and year, the 99.9th, 99.8th and 98th percentiles were extracted from the model results and converted to three minute averages using *Equation 5-1*. The highest result of the five years for each percentile and receptor was used and applied to the risk matrix.

EPA Risk Matrix Results

Table 6-5 shows the predicted concentrations for the 99.9th percentile, the 99.5th percentile and the 98th Percentile for all modelled sensitive receptors, along with the highest risk ranking for each receptor.

Table 6-5 ***Predicted odour concentrations at the three percentiles and EPA Risk of impact for each identified sensitive receptor***

Receptor	99.9th Percentile	99.5th Percentile	98th Percentile	Risk Ranking
1	5.2	3.3	0.9	Low
2	4.8	3.1	1.3	Moderate
3	2.3	1.5	0.6	Low
4	2.9	1.7	0.6	Low
5	2.4	1.3	0.5	Low
6	1.8	1.0	0.4	Low
7	1.9	1.0	0.3	Low
8	4.5	2.8	0.5	Low
9	2.1	1.4	0.5	Low
10	1.7	1.1	0.4	Low
11	1.5	0.9	0.3	Low
12	0.7	0.4	0.2	Low
13	3.4	1.5	0.3	Low
14	2.9	1.8	0.4	Low
15	1.9	1.1	0.2	Low
16	1.7	0.9	0.2	Low
17	1.5	0.8	0.2	Low
18	1.2	0.6	0.1	Low
19	1.1	0.6	0.1	Low
20	0.9	0.5	0.1	Low

1. Type any additional notes or Sources.
2. Or simply delete these lines of text if not required

The results indicate that there is potential for a moderate risk of impact to receptor 2 due to the modelled 98th percentile concentration being 1.3 OU in comparison to a threshold of 1 OU. Given, however that the 99.9th percentile concentration is less than the level at which odour can be discerned in the ambient environment (5 OU), it is considered that the risk of impact for this receptor should also be considered as low.

6.3.3 IAQM Risk Matrix

The United Kingdom Institute of Air Quality Management (IAQM) has recently published "Guidance on the assessment of odour for planning" (IAQM, 2014). This document provides a detailed discussion on the process of deriving an odour risk matrix that is based in the best available literature and odour impact studies at the present time. The odour risk matrix is shown in *Table 6-6*.

Table 6-6 ***Odour risk assessment from IAQM based on the 98th percentile 1 hour concentrations (IAQM, 2014)***

Odour Exposure C_{98} OU/m³	Receptor Sensitivity Low	Medium	High
≥ 10	Moderate	Substantial	Substantial
5 ≤ 10	Moderate	Moderate	Substantial
3 ≤ 5	Slight	Moderate	Moderate
1.5 ≤ 3	Negligible	Slight	Moderate
0.5 ≤ 1.5	Negligible	Negligible	Slight
< 0.5	Negligible	Negligible	Negligible

It should be noted that in applying the risk matrix proposed by the IAQM, the 98th percentile of 1 hour model results is used rather than the 3-minute 99.9th percentile. This means that the allowable exposure level is lower than typically observed for odour risk matrices typically used in Victoria.

The IAQM matrix only considers the 98th percentile as, in the opinion of the guidance, the 98th percentile provides a good representation of the likelihood of complaint.

Unlike the VCAT and the EPA matrices, the IAQM guidance designates receptor sensitivity for receptors other than residences, schools and hospitals with locations designated as:

- Low:
  - The enjoyment of amenity would not reasonably be expected; or
  - There is transient exposure where the people would reasonably be expected to be present only for limited periods of time as part of the normal pattern of use of the land;
  - Examples may include industrial, farms, footpaths and roads.
- Medium:
  - Users would expect to enjoy a reasonable level of amenity, but wouldn't reasonably expect to enjoy the same level of amenity as in their home; or
  - People wouldn't reasonably be expected to be present here continuously or regularly for extended periods as part of the normal pattern of use of the land;
  - Examples may include places of work, commercial/retail premises and playing / recreation fields.

- High:
  - Users can reasonably expect enjoyment of a high level of amenity; and
  - The people would reasonably be expected to be present here continuously, or at least regularly for extended periods as part of the normal pattern of the use of the land;
  - Examples may include residential dwellings, hospitals, schools/education and tourist/cultural.

Based on these descriptions, it is considered that the identified sensitive receptors are designated as high, with farmland designated as low.

It is considered that a risk of moderate or higher is an unacceptable risk to the beneficial use of the atmosphere.

To provide data to this matrix, 98th percentile 1 hour average concentrations were extracted from the model for each sensitive receptor and across the receptor grid for each modelled year. The highest 98th percentile 1-hour average concentration across the five years was used in the matrix for each sensitive receptor and the 98th percentile 1 hour average concentrations plotted on a contour map.

IAQM Risk Matrix Results

Table 6-7 shows the risk rankings for each of the identified sensitive receptors according to the EPA risk matrix shown in *Table 6-6*. The results indicate that the impact to the surrounding sensitive receptors is likely to be at acceptable concentrations.

Table 6-7 IAQM Risk of impact for each identified sensitive receptor

Receptor Number	Predicted Concentration (OU)	Impact Risk	Receptor Number	Predicted Concentration (OU)	Impact Risk
1	0.5	Negligible	11	0.2	Negligible
2	0.7	Slight	12	0.1	Negligible
3	0.3	Negligible	13	0.2	Negligible
4	0.3	Negligible	14	0.2	Negligible
5	0.3	Negligible	15	0.1	Negligible
6	0.2	Negligible	16	0.1	Negligible
7	0.2	Negligible	17	0.1	Negligible
8	0.3	Negligible	18	0.1	Negligible
9	0.3	Negligible	19	0.1	Negligible
10	0.2	Negligible	20	0.1	Negligible

IAQM Risk Assessment Contour Plots

Figure 6-2 shows the 98th percentile 1 hour average odour concentrations for comparison with the IAQM risk matrix.

The green contour on *Figure 6-2* shows the area of moderate risk for high risk sensitive receptors such as houses. There are no high risk sensitive receptors within the green contour indicating a low risk of impact to these sensitive receptors.

The orange contour on *Figure 6-2* shows the moderate risk of complaint for low risk areas such as farm land. This indicates that there is a moderate risk of impact off-site to the south of the proposed CVLX. The area of moderate risk extends over the Western Freeway to a small section of the farmland beyond. Given the likely frequency of a farmer being within that area close to the freeway, and the transient nature of people passing on the freeway, it is considered unlikely that any impact to the beneficial use of the atmosphere would occur in this location.

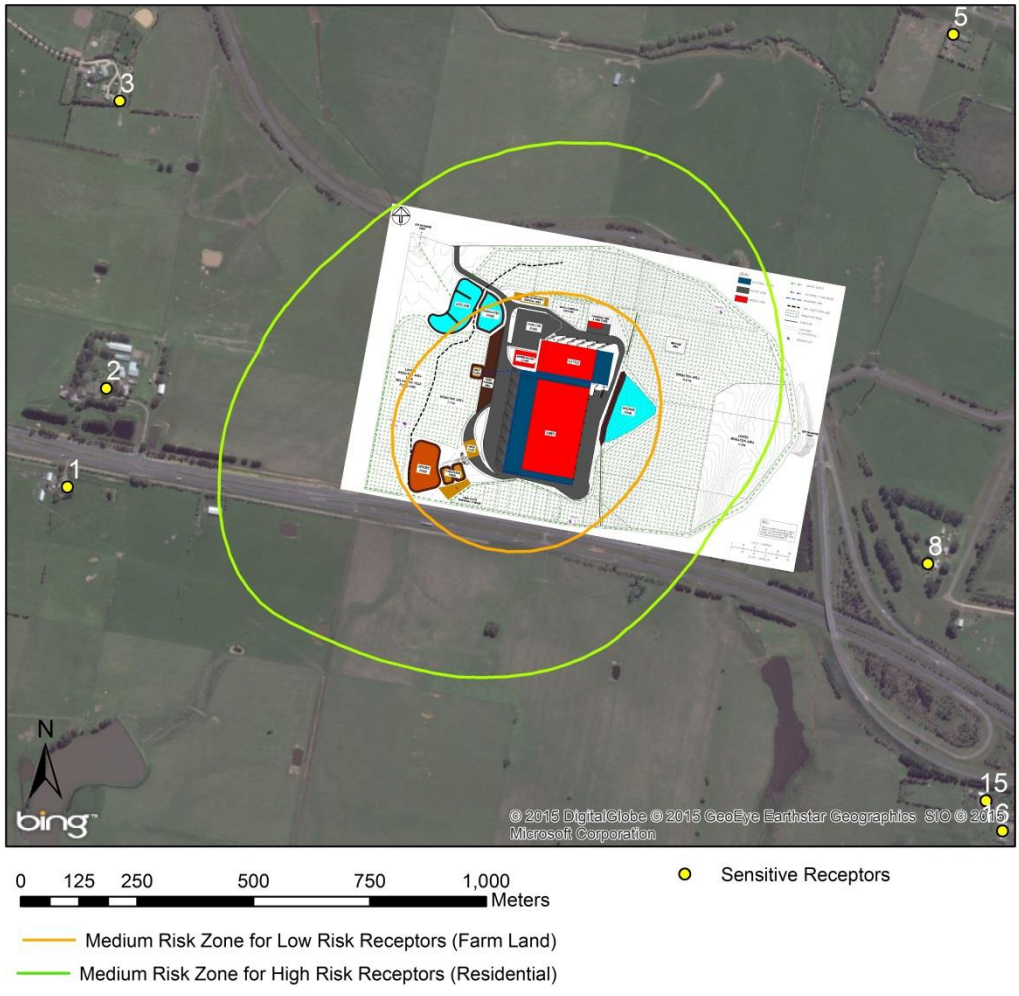

Figure 6-2 ***Medium risk contours for low risk receptors (green) and high risk receptors (orange) according to the IAQM risk matrix***

7 *UPSET CONDITIONS*

Upset conditions can occur either as a result of:

- Unusual meteorological conditions under normal operations resulting in poor dispersion of odours; or
- A process upset such as the aerators within the facultative ponds all malfunctioning simultaneously.

EPA Publication 1518, "Recommended separation distances for industrial residual air emissions" states that:

"*It needs to be recognised that where there are industrial air emissions from premises, even with good pollution control technology and practice, there may still be unintended emissions which must be anticipated and allowed for. While it is an objective of the SEPP(AQM) that such emissions should be eliminated, it is recognised that even 'state of the art' facilities are not always guaranteed to achieve this goal 100 percent of the time. Equipment failure, accidents and abnormal weather conditions are among the causes that can lead to emissions affecting sensitive land uses beyond the boundary of the source premises*"

Given that five years of meteorology were modelled in the assessment, it is considered likely that the potential for impact under unusual meteorological conditions with normal operations is considered within the dispersion modelling discussed above. Consequently under these conditions, the risk of impact to the surrounding sensitive receptors is low.

EPA Publication 1518 provides a separation distance of 500 m as a relevant separation distance to contain odour impacts as a result of upset conditions. In a rural setting the separation distance must be applied on an activity to activity basis. Figure shows a 500 m separation distance as measured from the edge of the odorous sources on at the proposed CVLX facility.

The 500 m separation distance is slightly larger than the area enclosed by the medium risk contour for low risk receptors under the IAQM matrix. The separation distance does not cross any of the activity boundaries of the surrounding sensitive receptors. This indicates that under an upset condition, there would not be harm to the beneficial use of the atmosphere as there is sufficient separation between the planned use and the surrounding sensitive uses.

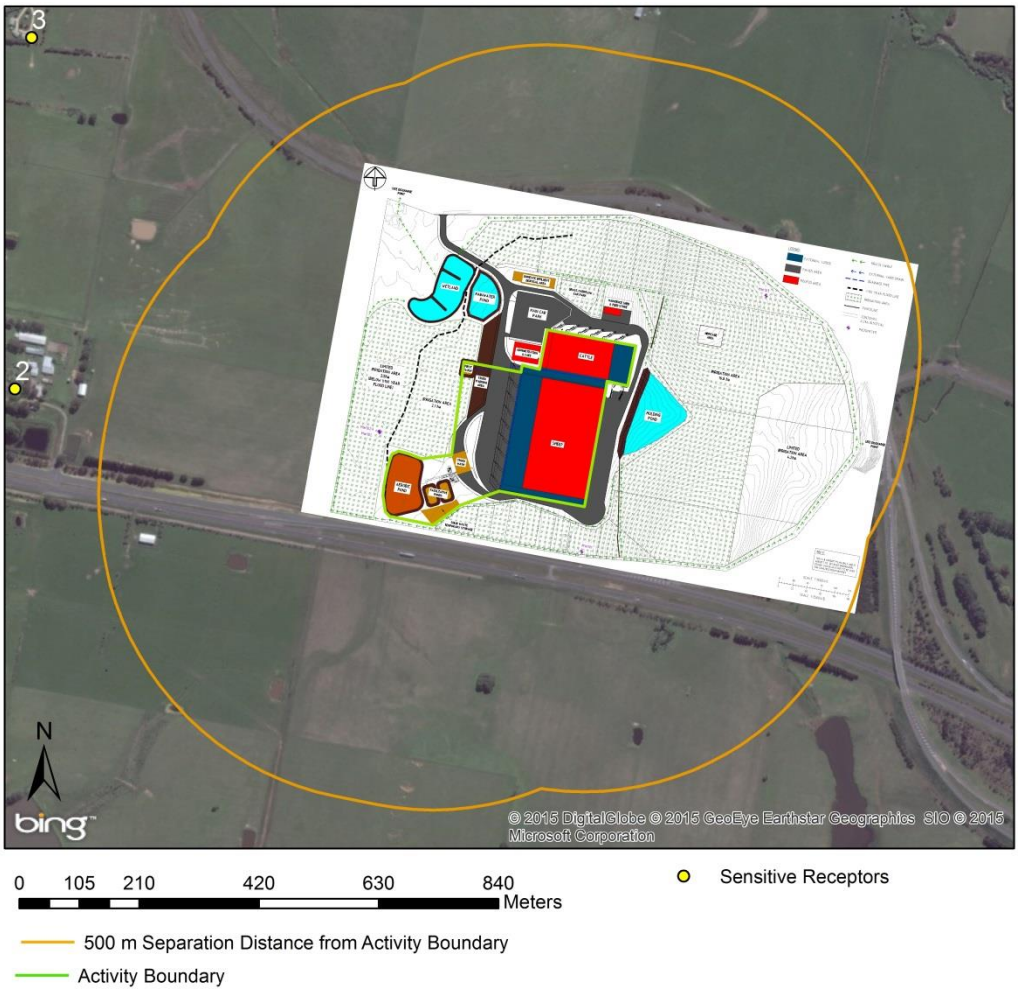

Figure 7-1 ***CVLX Activity Boundary and a 500m separation distance as prescribed by EPA Publication 1518***

8 CONCLUSION

Dr. Iain Cowan of ERM was engaged by Harwood Andrews on behalf of RLX Investment Trust (RLX) to assess the potential odour impact to the surrounding land use from the development of the proposed Central Victorian Livestock Exchange at Miners Rest.

The odour impact assessment has been completed using the CALPUFF dispersion model and odour measurements completed by The Odour Unit at a similar designed facility (Central Tablelands Livestock Exchange) in New South Wales. The CALPUFF dispersion model was selected in preference to the Regulatory dispersion model (AERMOD) as it provides a more conservative, and realistic, approach to calm wind conditions which are likely to result in the highest odour concentrations.

With the exception of the selected model, the modelling was completed in accordance with the requirements of the SEPP(AQM). The odour dispersion modelling adopted a conservative approach by assuming that all odour sources are present at all times, thereby testing the likely worst case odour emissions against five years of meteorology for the local area. This approach determined that the 99.9th percentile odour concentrations would be likely to be in excess of the SEPP(AQM) design criterion of 5 OU at the boundary.

An odour concentration of 5 OU is generally considered to be the concentration at which the population will begin to recognise and detect odour in the ambient environment. These results therefore indicate that where worst case emissions and worst case dispersion coincide there is potential for off-site recognition of odour. In practice this will occur near to never.

In accordance with the SEPP(AQM), a risk assessment was therefore completed to determine whether the odour levels would pose an unacceptable risk to the beneficial use of the atmosphere.

As a PEM for odour risk assessment has not been published by EPA, three published odour risk assessment methodologies were adopted to consider the risk of odour impact to the surrounding land use. Each of the risk assessment methodologies used adopt the FIDOL approach. The three independent risk assessments indicate that there is a low risk of harm to the beneficial use of the atmosphere.

Given the conservative assumptions in the emission estimation and source selection, it is therefore concluded that the proposed location of the CVLX is appropriate and that the risk of odour impact to the surrounding land use is low. A low risk of odour impact is considered to represent a level at which there is no impact to the beneficial use of the atmosphere for the surrounding land use. This does not mean that odour will never be detected, rather that the frequency at which odour may occur is not at a level which will impact the surrounding land use.

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Annex A

Curriculum Vitae

Dr. Iain Cowan

Principal Consultant, Air Quality
ERM Melbourne Australia

Dr. Iain Cowan provides more than 13 years experience in the modelling and monitoring of ambient air quality and odour. Iain has extensive experience with several advanced dispersion modelling packages including CALPUFF, Ausplume, AERMOD, TAPM, ADMS-Urban, EDMS, CHARM, and AusRoads.

Whilst working on projects throughout south-east Asia, Australia and New Zealand, Dr. Cowan has predominantly used the CALPUFF model to determine impacts to the ambient air environment. In using CALPUFF over the past seven years, Dr. Cowan has used the model for a variety of projects. These projects have included consideration of regional impacts resulting from cumulative impact between proposed and exisiting industries, with proposed industries being located both off and on-shore, as well as more local projects for the consideration of odorous emissions. Dr. Cowan has experience in the modelling of a variety of sources using CALPUFF including natural gas processing / transportation, power generation, petroleum industry, mining, metals refining, landfills, aircraft, road traffic and trains.

In general terms, this modelling has been undertaken in preparation for expert wintess testimony, environmental statements, environmental impact assessments as part of regulatory compliance and the planning process. Dr. Cowan has modelled and monitored air quality for many prestigious projects and clients including ExxonMobil, Chevron, Santos, AGL, Australian Pipeline Association, Origin Energy, Lihir Gold, CSL, Melbourne Airport in Australia as well as the London Olympic Bid, the Welsh Development Agency, the Highways Agency and the London Development Agency in the UK.

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Memberships

- Member of the Clean Air Socity of Australia and New Zealand

Fields of Competence

- Dispersion modeling using CALPUFF, AERMOD, TAPM, Ausplume, AusRoads, ADMS and Charm.
- Industrial emissions
- Transport related emissions
- Odorous emissions
- Emissions Inventory Generation
- Expert witness testimony
- Flux hood measurements

Education

- PhD Environmental Engineering, University of Surrey, UK, 2004
- BSc Honours, Environmental Geology, Royal Holloway College, University of London, UK, 2000

Languages

- English, native speaker
- French, conversational

Key Industry Sectors

- Oil and gas
- Mining
- Power generation
- Chemical production
- Manufacturing
- Transporation
- Contaminated land
- Waste (landfills, composting and water)
- Expert Wintess Testimony

Honors and Awards

- Clean Air Society Young Achiever Award
- EPSRC Stipend for PhD Research

Publications

- Cowan, I.M., Lo, S., 2013. Development of an odour environmental risk assessment methodology for the evaluation of broiler farm impacts. Clean Air Society for Australia and New Zealand Conference, 7 – 11 September, 2013.
- Cowan, I.M., Radford, A.L. and Grynberg, H., 2011. Use of Dispersion Models in the Assessment of Impacts from Spray Evaporation. Clean Air Society for Australia and New Zealand Conference, 31 July – 2 August 2011, Auckland, New Zealand
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- Corbet, L.C; Cowan, I.M; Stella, N. and Brooke. A.; 2009, The Integration of two regulatory dispersion models for a holistic approach to air quality assessment; Clean Air Society for Australia and New Zealand Conference, 6th – 10th September 2009; Perth, Australia
- Cowan, I.M.; 2007, Use of GIS as an air quality screening tool for planners and policy makers – Partnerships between local government and academia; International Union of Air Pollution Professionals World Congress, 10th-13th September 2007; Brisbane, Australia
- Cowan, I.M.; 2004; The Development and Application of and Advanced Screening Model to Predict Air Quality Thesis (PhD). University of Surrey

Key Projects

Expert Witness Testimony

- Midfield Co-Products – Expert witness at VCAT regarding odour emissions from a proposed upgrade to the waste water treatment system at Midfield Co-Products facility in Warrnambool. Preparation of the evidence included the use of odour dispersion modelling of residual hydrogen sulphide and sulphur dioxide emissions from the WWTP and the boilers.
- Rigby Cooke – Provision of expert witness reports to VCAT for a hearing reagarding dust emission from a proposed concrete batching plant and rock crushing facility in Rockbank, Victoria. An experts conference meant that the experts were able to agree mitigation measures and remove the issue of air quality from the proposed development.
- Anonymous – Expert witness at VCAT regarding three proposed broiler farms in Barringhup Victoria. Preparation of evidence included the use of odour dispersion modelling of three broiler farms using the CALPUFF dispersion model.
- Anonymous – Expert witness at VCAT regarding a proposed broiler farm in Strathlea Victoria. Preparation of evidence included the use of odour dispersion modelling of broiler sheds using the CALPUFF dispersion Model.
- Autralian Tallow Producers – Expert witness at the Victorian Magistrates Court regarding alledged odour incidents from ATP's plant in western Melbourne.
- Biomix Pty Ltd – Expert witness at VCAT regarding potential for odour generation from a proposed composting facility in northern Victoria.
- Maddingley Brown Coal – Expert witness at VCAT regarding potential for odour generation from composting activities for permit amendment application.

- Wodonga Shire Council – Expert witness at VCAT regarding odour generation from a composting and waste handling facility.
- Baker & McKenzie – Expert witness at NSW land and environment court regarding potential for odour generation from a proposed composting and waste handling facility.
- Graincorp – Expert witness in County Court regarding a nuisance lawsuit brought against Graincorp for an operation in Western Victoria
- Gadens Lawyers – Expert witness at Planning Panels Victoria regarding the requirement of a buffer for an exisiting egg laying farm within the urban growth boundary.
- Innova Soil Techology – Expert witness at VCAT for proposed thermal soil remediation facility. Services included review of the application and opinion as to whether the application met the legislative requirements for meeting control of emissions to best practice and maximum extent achievable.
- White – Expert witness at VCAT regarding proposed free range broiler farm development in Melbourne's south-east.
- EPA – Expert witness at VCAT hearing for two proposed broiler farms adjacent to four existing broiler farms near to Nagambie, Victoria. Dispersion modelling using CALPUFF of odour from the existing and proposed broiler farms was undertaken to demonstrate existing and future impact with the proposed farms. Dispersion modelling of odour from the broiler farms was undertaken using the CALPUFF modelling system to take advantage of the lower thresholds for wind speed that can result in high odour impact. Modelling using five years of meteorology was undertaken to assess the impact from highly variable broiler growth cycles.
- Brimbank City Council – Expert witness at VCAT for a proposed solid inert waste landfill adjacent to an existing concrete batching / crushing plant in north-east Melbourne. In preparation for the VCAT hearing. Three months of dust deposition monitoring were undertaken, and dispersion modelling using CALPUFF of the existing concrete crushing / batching plant and proposed development of a solid inert waste landfill.
- Yarra Ranges Shire Council – Expert witness at VCAT hearing for compost odour impacting a local community. Flux hood measurements of odour emissions from compost piles were used with dispersion modelling using CALPUFF of odour from the compost facility to determine impact to the surrounding community.
- Otway Shire Council – Expert witness at VCAT hearing for proposed broiler farm with potential to impact on local community. Review of dispersion modelling undertaken by the proponent and dispersion modelling to show impact using alternative modelling methodologies.
- Grinders Coffee – Expert witness at VCAT hearing for proposed expansion of operation at a coffee roasting facility. Preparation of expert witness testimony included dispersion modelling of proposed emissions from the facility, and assessment of impacts on the surrounding community.

Odour Assessments

- EPA Victoria – Development of an guideline for undertaking a environmental odour risk assessment for proposed broiler farms.
- Anonymous – Industrial odour assessment for a Halal Abattoir within Melbourne. Assessment required the generation of a site odour emissions inventory and modelling using Ausplume.

- Mobil Oil Australia – Works Approval Application for Mobil Oil Australia for odour treatment system for delivery and storage of fuel oil. Dispersion modelling was completed using Ausplume.
- Mobil Oil Australia – Numerous odour dispersion modelling studies using Ausplume for different grades of fuel oil delivered to terminal, to determine potential impact on surrounding community.
- Norfolk Environment Waste Services – Odour assessment for landfill site. Odour emissions inventory for open and capped cells and landfill gas turbines. Modelled and assessed the impacts of odour using Aermod.

Contaminated Land Management

- Jemena – Evaluation of emissions from contaminated sediments during remediation activities to evaluate potential for odour impacts during remediation activities. Project included measurement of odorous emissions from the contaminated sediments using flux measurements and dispersion modelling using CALPUFF.
- Anonymous – Evaluation of emissions from land contaminated with TCE during renewal of a concrete slab within an industrial facility. Assessment of impact undertaken using dispersion modeling to determine impact on surrounding sensitive receptors.
- Exxon Mobil – Evaluation of emissions from an air stripper and thermal oxidiser for the remediation of contaminated ground water in Melbourne. Evaluation included the use of Ausplume to demonstrate potential for impacts to surrounding land use.
- Shell – Evaluation of emissions from a mobile thermal oxidiser used to treat contaminated ground water in rural New South Wales.
- Anonymous – Evaluation of emissions from contaminated land during remediation activities for the construction of a new hardware store. Assessment included fluxhood mornitoring of emissions from the contaminated soil, dispersion modelling and recommendation for minimisation of impact during remediation.

Emissions Estimation

- Qantas Airways Ltd –NPI reporting for Qantas Airways for sites across Australia since 2009. Annual reviews product usage at all Qantas facilities across Australia to determine the reporting requirements. Emission estimation of NPI species to air, land, water and transfers are then reported to NPI on behalf of Qantas.
- Shell Australia Pty –NPI reporting for Shell's distribution and airport terminals for the 2008/2009 reporting year. Review of product usage at all Shell facilities across Australia to determine the reporting requirements. Emission estimation of NPI species to air, land, water and transfers are then reported to NPI on behalf of Shell.
- Ford Motor Company of Australia –NPI reporting for Ford's Geelong facility. Review of product usage to determine reporting requirements and estimates emission of NPI species to air, land, water and transfers. The emission estimates are then reported to NPI on behalf of Ford.
- South-East Water –NPI reporting for South-East Water. Reviews of processes at all of South-East Water's treatment plants and estimates emissions to air, land and water for reporting to NPI.

Industrial

- Origin Energy – Dispersion modelling using the CALPUFF dispersion model for the Otway gas plant for emissions from two pieces of equipment during normal operations and during process upset conditions.

- Solar Systems Pty Ltd – Evaluation of visibility and dust deposition related to a proposed bioenergy plant near Mildura, Victoria.
- BPFL – Impact assessment of acid deposition resulting from emissions from a proposed ammonium nitrate plant on the Burrup Peninsula, WA. The study included consideration of atmospheric chemistry within CALPUFF, dry and wet deposition in addition to atmospheric formation of secondary particulate matter.
- Holcim Cement – Impact assessment of emissions from a concrete batching plant in Margaret River, WA. Emissions estimation of particulate matter arising from material deliveries, movement and loading of concrete to the mixture trucks was undertaken and dispersion modelling completed using CALPUFF.
- Orica Mining Services – Impact assessment of emissions from a proposed Ammonium Nitrate Emulsion plant near to Port Hedland, WA. Emission estimation was completed using manufacturer guarantees and dispersion modelling completed using CALPUFF.
- Sun Metals Limited – Impact assessment of spray drift on surrounding land use from the use of spray evaporators within tailings ponds to reduce pond levels. Dispersion modelling was conducted using the CALPUFF modelling system on a sub-hourly basis using local ground level and upper air meteorological observations as a basis for dispersion modelling.
- Holcim Cement – Impact assessment of emissions from a cement manufacture plant in New Zealand. Local terrain with a bluff adjacent to the stack meant that complex dispersion modelling using the CALPUFF modelling system was required. Local surface and upper air meteorological observations were used with terrain and land use to develop a CALPUFF compatible meteorological file that was able to account for the local geography.
- CSL Limited – Generation of emissions inventory and completion of dispersion modelling using Ausplume in the assessment of formaldehyde release to atmosphere following the sterilisation of laboratories at two facilities.

Power Generation

- AGL Limited – Assessment of proposed peak loading gas fired power station in the west of Victoria. Advanced dispersion modelling used the CALPUFF modelling system, and has incorporated observed ground level and upper air observed meteorological conditions. The assessment has considered start-up conditions on a sub-hourly basis and base load operations on an hourly basis, in addition to taking account of a further proposed base load power station by another operator in the vicinity. Following submission of the Works Approval Application to EPA, a presentation of the potential impacts was made to the Victorian Planning Panel.
- SCB PTES – Assessment of a proposed expansion to a based load and peak load power generation facility in Sulawesi Selatan.
- AGL Limited– Assessment of proposed change in operating hours from peak loading to base load capacity for a gas fired power station in northern Melbourne using Ausplume.

- Origin Energy – Impact assessment of a proposed change in fuel use and construction of a new turbine at a facility in northern Queensland using the Ausplume dispersion model. The assessment incorporated the generation of a meteorological dataset, dispersion modelling and assessment and the use of a regulatory airshed model for the local city.
- Origin Energy – Determination of minimum stack height for the redevelopment of a gas fired power station in central Queensland. The assessment incorporated the development of a meteorological dataset and the modelling of emissions from a variety of stack heights, taking in to account building downwash to finalise the redevelopment design.

LNG Facilities

- ExxonMobil – Screening assessment of coastline impact from a proposed FLNG. Dispersion modelling used CALPUFF with a coarse grid at sea and fine resolution grids around the coastline to demonstrate potential for impact from NOx emissions.
- Anonymous – Air Quality assessment as part of EIS for new LNG plant in Queensland. TAPM and CALMET used to generate local meteorological conditions with CALPUFF used for dispersion modelling.
- PNG LNG – Air quality dispersion modelling using CALPUFF for two potential suppliers to the PNG LNG facility to the west of Port Moresby in Papua New Guinea. The assessment comprised sourcing local meteorology and land use information. Developing appropriate meteorological files for the site through the use of TAPM and CALMET, and dispersion modelling of all sources using CALPUFF.
- BHP –Screening assessment of the proposed Macedon LNG facility in northern WA was undertaken to determine the potential impact from operation on surrounding facilities using Ausplume.
- BOC –Air quality impact assessment of a proposed LNG facility in northern Tasmania as part of an effect statement. TAPM was used with locally measured meteorological data to generate inputs to Ausplume and Ausroads. Assessments of emissions from industry were undertaken using Ausplume, whilst emissions from vehicles using the local road network were modelled using AusRoads. The combination of results from Ausplume and AusRoads, for a small local network, enabled the provision of a cumulative impact assessment for sources with changed emissions.
- Santos – GLNG Plume rise assessment. Internal technical review for potential for impact buoyant plume rise from the Gladstone LNG facility on avaiation in the local area.

Transport

- Brent Cross Shopping Centre – Assessment of traffic impacts on roads as a result of road realignment and construction of new roads for a shopping centre upgrade in north London. The assessment used the emission estimation model published by the UK Department of Transport together with ADMS-Roads to predict impacts at nearby sensitive receptors.
- Goodman – Assessment of a traffic impacts on roads surrounding a proposed transport interchange depot (rail to road) in Slough, UK. The assessment UK emission factors for the vehicle fleet together with ADMS-Roads to assess the impacts of the increase in trucks to the air quality in the local environment.
- Cikampek-Palimanan Toll Road – Assessment of a proposed toll road in Indonesia. Modelling included determination of diurnal emission rates followed by dispersion modelling using CALQ3HCR.

- Hoddle Street Study – High level qualitative option review and detailed dispersion modelling of options for the redevelopment of Hoddle Street in Melbourne. Qualitative review of multiple options based on vehicle numbers / traffic mix and expected relative emissions from the options. Detailed modelling undertaken using AusRoads and AusVeh emission factors for anticipated traffic volumes for three potential route options.
- Melbourne Airport Limited – Undertook complete modelling exercise of airport pollution sources including the aircraft, roads, parking facilities, jet engine testing and training fires to develop a concentration map of pollution using US FAA dispersion model EDMS. Modelling incorporated all aircraft movements from the terminals to the runway, take-off and landing and use of runway / taxiways varying with wind direction.
- Bankstown Airport - Assessment of the impact on local air quality of moving the engine run-up bay from the current position to a new location at the north-eastern end of Bankstown airport. The assessment has used the regulatory dispersion model AUSPLUME to model concentrations of oxides of nitrogen (NO_X), carbon monoxide (CO) and oxides of sulphur (SO_X).
- London Development Agency – Assessment of the impacts of traffic generation, construction and on site sources of the London Olympic Bid to the surrounding population. Modelling undertaken using ADMS-Roads.
- Highways Agency – Design Manual for Roads and Bridges (DMRB) Impact assessment of the extension of the M6 to the Scottish border.
- Welsh Development Agency – Guidance on Multi-Modal Assessment (GOMMS) Impact assessment for the construction of a bypass
- Wiltshire County Council – Development of a specialised emissions inventory for modelling of transport emissions in a town with roads at high gradient. Modelling was undertaken using ADMS-Roads and used to assess options for reducing ground level concentrations by changing traffic flows on the road network.
- Highways Agency – Secondment to the Highways Agency (major road regulator within England) to assist with the implementation and development of policy with regard to the assessment of the impacts of road projects on local air quality.
- Bristol NHS Trust – Impact assessment using ADMS-Roads of the redevelopment of two hospitals on local air quality incorporating the increase in vehicle numbers and the use of emissions control technologies for new generators.

Mining

- Weda Bay Nickel – Dispersion modelling study as part of ESIA to determine impact from mining and process plant activities. Dispersion modelling considered multiple scenarios for variation throughout the mining schedule and included deposition of metals associated with particulate matter within the ore on the surrounding land area.
- Rio Tinto –Review of potential climate and meteorological impacts determined by the UK Meteorological office as a result of the proposed mine adjacent to the Simandou Ridge in Guinea, West Africa.
- Cedar Point –Assessment of impact from dust for a proposed quarry in New South Wales. Dispersion modelling used the CALPUFF modelling system and required development of a meteorological model for the local area followed by emission estimation and dispersion modelling.

- Xstrata Zinc – Internal technical peer review and guidance for an impact assessment for a five million tonne per annum zinc-lead and silver deposit.
- Lihir Gold Limited – Comprehensive impact assessment as part of an EIA for expansion of the mine processing area. The project included emissions inventory generation and modelling for power generation, process plant, unmade road dust generation, tailpipe emissions. Complex dispersion modelling was undertaken using the CALPUFF modelling system to account for steep terrain surrounding the site on three sides and the ocean on the fourth side.
- Bendigo Mining Limited – Revised operational procedures required the modelling of particulate and hydrogen cyanide emissions using Ausplume from operations at a proposed mine for comparison with the approved program.
- BHPB – Dispersion modelling of dust generation for a proposed mine expansion in Queensland. Dispersion modelling included development of a meteorological model for the local area, emissions estimation for a number of sources and dispersion modelling using Calpuff.

Domestic Gas Facilities

- Anonymous – An initial screening assessment for a proposed domestic gas facility in northern WA was undertaken to determine the potential impact from operation on surrounding facilities using Ausplume.

Emergency Release Modelling

- Orica – Emergency release assessment of emissions from the nitric acid stack and consideration of potential of impact on other site buildings through the use of near field dispersion modelling at an ammonium nitrate plant.
- Anonymous – Emergency release modelling of CO_2 storage facility to determine potential impact from the puncture of CO_2 tanks on surrounding housing, roads, stock, fauna and flora.
- Gasnet Pty Ltd – Emergency release modelling of natural gas from a gas compression station on a second by second basis to define the development of the plume area over the period of the release and classify the extent of the hazardous area.
- Australian Pipeline Association – Emergency release modelling of natural gas at a gas compression station from within a building. The study was used to determine the time taken for gas to exit the building during an accidental release, and to determine whether concentrations would be elevated in locations where sensors had been placed as part of the emergency shut-down mechanism.

Annex B

Instructions

Our ref: 3JMH:8JEB 21406061
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19 May 2015

Dr Iain Cowan
ERM
Email: Iain.Cowan@erm.com

Dear Iain,

Ballarat Saleyards

We act for RLX Investment Company Pty Ltd as trustee for RLX Investment Trust (**RLX**).

We seek your appearance to provide evidence at a planning panel scheduled for the week beginning 22 June 2015 in relation to potential odour from the proposed relocated Central Victorian Livestock Exchange (**CVLX**).

Background

RLX proposes to relocate the Central Victorian Livestock Exchange (**CVLX**) from its existing site in central Ballarat to the north-west outskirts of the city. The proposed move will require a planning scheme amendment to rezone the new site from Farming Zone to a Special Use Zone (Schedule 15) in order to facilitate the establishment of a regional livestock exchange (saleyard).

The amendment will provide the policy framework to facilitate the relocation of the existing CVLX from its current location in Latrobe Street, Ballarat. While the existing controls in the Farming Zone enable the development of the site for a saleyard as a Section 2 use, the regionally significant nature and scope of the activities proposed for the new CVLX warrant a tailored zoning approach to recognise the use and development of the land for its specific purpose.

Council resolution to request a planning panel

In its meeting of 22 April 2015, the City of Ballarat (**Council**) relevantly resolved to:

- Amend the proposed SUZ15 to ensure any Development Plan prepared under these provisions is to the satisfaction of relevant statutory authorities including VicRoads, Central Highlands Water and Southern Rural Water.
- Request the Minister for Planning to appoint a joint independent Planning Panel to consider submissions received to combined Planning Scheme Amendment C185 Central Victorian Livestock Exchange and Environmental Protection Agency Works Approval.

By letter to Planning Panels Victoria dated 23 April 2015, Council requested that a Panel be appointed under Part 8 of the Planning and Environment Act 1987.

The Panel is scheduled to begin on the week commencing 22 June 2015 and expected to continue into the week commencing 29 June 2015 and possibly into the week commencing 6 July 2015. Council has requested that the Panel hearing take place at the Ballarat Turf Club in Miners Rest.

A directions hearing was held on 18 May 2015.

Land

The proposed new location for CVLX is approximately 10.5km from the centre of Ballarat, 4 kilometres from the perimeter of Ballarat, more than 1km from the Miners Rest township situated to the north east. The land the subject of proposed planning scheme amendment C185 is more particularly described in certificate of title volume 09369 folio 420 being Lots 1 and 2 on TP840697G; volume 11458 folio 790 being Lot 2 on PS341031L; and a road reserve in volume 11413 folio 187 being Lot 1 on TP944606J (**Land**).

The Land bounded by the Sunraysia Highway to the north and east and the Western Highway to the south. The land to the west is private property used for grazing.

The Land is currently within the Farming Zone and is presently used for grazing. No overlays affect the Land. The area surrounding the Land is typically used for agricultural purposes especially grazing and there are scattered rural dwellings. A disused quarry is located to the east of the site, across the Sunraysia Highway. The Ballarat Airport is located approximately 2 kilometres southeast of the site across the Western Freeway.

There is a small stand of trees in the central north east area of the site and an isolated tree in the south-east of the site but there is otherwise no native vegetation on the Land. . There are stands of trees within the roadside along the northern and eastern site boundaries.

The vegetation and fauna habitat of the Land has been highly modified by past disturbances which have included cattle grazing, hay cutting and fertilizer application. Most of the Land has been significantly degraded and supports predominantly introduced vegetation that is of limited value for native fauna. Ecological values identified within the study area include a small area remnant vegetation (Plains Grassy Wetland Ecological Vegetation Class) and one remnant tree.

The Land generally slopes from south-east to north-west with an approximate difference of 15 metres. There is a large rise in the north east of the site and a smaller rise in the south east of the site.

The western boundary of the Land is located in a floodplain. The Land is proximate to two Declared Water Supply Catchments and within a Water Supply Protection Area.

The Land is well positioned with respect to road infrastructure with the Sunraysia Highway and Western Highways in close proximity. The site is not currently services by potable water, electricity or telephone but services are readily available in the area. The site is not constrained by servicing infrastructure.

The eastern part of the Land is affected by areas of Aboriginal Cultural Sensitivity. Consultants preparing a Cultural Heritage Management Plan identified two areas of Aboriginal Cultural Heritage likelihood: the crest and upper slope of the large rise in the northeast of the Land and the crest and upper slope of the smaller rise in the southeast of the activity Land.

Planning Scheme Amendment

The proposed Special Use Zone Schedule 15 (**SUZ15**) will require completion of a Development Plan before the use can commence, with no further public consultation required if the Development Plan meets the requirements of SUZ15.

The amendment also seeks to introduce the “Central Victoria Livestock Exchange, Ballarat December 2014” incorporated document into the schedule to clauses 53.02 and 81.01 of the Ballarat Planning Scheme. This incorporated document seeks to exclude the land from certain controls contained within the Ballarat Planning Scheme in order to facilitate the ongoing use and development of the land for a livestock exchange facility.

Draft SUZ15 includes requirements for several plans to be prepared to ensure that all environmental requirements are addressed appropriately before the planning permit would be granted. These include a development plan that must be generally in accordance with the concept plan in section 8.0 of SUZ15. The development plan must also include the following to the satisfaction of the responsible authority:

- an existing conditions plan;
- a site layout plan;
- landscape master plan;

- vegetation management plan;
- car parking and traffic management plan;
- flood investigation;
- stormwater management plan; and
- operations and environmental management plan.

A consolidated schedule of conditions and requirements that must be observed by the use and development of the land for the purpose of a saleyards is also required.

The amendment is a combined planning scheme amendment and Environment Protection Authority (**EPA**) works approval application. The works approval application is required as a livestock saleyards is a scheduled premise under the Environment Protection (Scheduled Premises and Exemptions) Regulations 2007. The Planning Panel Hearing will be a joint hearing for Amendment C191 and EPA Works Approval Application Service Order Reference: 1001580.

A Memorandum of Understanding between Department of Transport, Planning and Local Infrastructure (**DTPLI**) and EPA dated 19 December 2013 provides for the joint processing of a Planning Scheme Amendment under the Planning and Environment Act 1987 and an application for a Works Approval under section 19B of the environment Protection act 1970.

Works Approval

The Works Approval requires the following reports:

- Water cycle management report.
- Draft environmental improvement plan.
- Land capability assessment.
- Noise assessment.
- Odour assessment.
- Stormwater investigation.
- Strategic assessment of the amendment.

These reports assess the environmental assets on the site and surrounds and provide that such assets will not be compromised as a result of the future use of the Land for the CVLX.

Proposed use of facilities

The facility is proposed to accommodate 70,000 cattle and 1.6 million sheep annually. The proposed facilities on the Land required to accommodate this capacity include the following:

- 12,800m² of roofed sheep yards;
- 19,800m² of external sheep yards;
- 4,200m² (approximately) of roofed cattle yards;
- 6,800m² (approximately) of external cattle yards;
- truck wash down area able to cater for four trucks (24 hour/7 day access);
- 3,800m² of truck parking area;
- 216 car parking spaces for vehicles;
- an office and administrative complex covering approximately 1,400m²;
- a water storage dam able to capture 5 ML of irrigation water;
- a series of water treatment ponds designed to capture and treat all water runoff from the operational area of the site;
- night lighting and CCTV camera security;
- a maintenance and hay shed; and
- numerous speciality loading and unloading ramps.

The balance of the Land will be used as irrigated grazing land.

RLX anticipates the new CVLX will cater for 17 staff, 48 personnel, six livestock contractors, 12 drovers and up to 100 patrons on peak event days. CVLX is scheduled to host 48 prime cattle sales per year (weekly on Mondays), 51 sheep sales per year (weekly on Tuesdays) and 13 store cattle sales per year (monthly on Fridays). It is proposed 24 hour, seven day a week access to the facility be provided to retain access to truck

wash-down facilities and satisfy pick-up/drop-off requirements. Closed Circuit Television (CCTV) surveillance will be installed at the entry and various other locations on the site.

The proposed CVLX will include the following key elements:

- Efficient network of livestock, yards, scales, crushes that will facilitate enhanced livestock movements, penning, scanning, identification and classification;
- Effluent management systems enabling animal and human waste to be entirely managed on site;
- Complex network of walkways, elevated platforms/catwalks and remotely operated gates, ramps and crushes permitting livestock and human separation enhancing workplace health and safety systems and outcomes;
- Extensive use of low bruise panels and gates and yard designs that eliminate points of potential animal harm;
- Animal enclosures and pavilions built to optimise animal comfort and presentation for sale, including roofed yards for cattle and sheep;
- Facilities designed to provide all necessary support services for users and patrons including offices and meeting rooms, Information Technology and media access, cafeteria, hygiene services and an attractive and competitive market for livestock buyers and sellers;
- Facilities and infrastructure for heavy vehicles, all other forms of livestock delivery vehicles and general user traffic including parking (cars to b-triple heavy vehicles), extensive network of loading and unloading ramps and a modern highly efficient multi-bay truck wash facility;
- Maintenance workshop and feed storage shed;
- Perimeter paddocks to facilitate longer term storage/agistment of livestock;
- On-site water capture to reduce dependence on external sources of water; and
- Advanced livestock processing and tracking IT infrastructure to enhance food security and commercial security outcomes and landscaping.

Submissions/objections

The formal Exhibition period for the proposed planning scheme amendment was from 12 February 2015 to 20 March 2015, with a total of 95 submissions received (40 of these were late submissions); 88 submissions were from community members, generally opposing the proposed saleyards and seven were from referral/public authorities. Further late submissions have also been received and copies of these submissions are in your folder of materials.

The key concerns expressed in submissions can be summarised as follows:

- Proximity to houses and Miners Rest;
- Odour and noise;
- Trucks and traffic;
- Operational matters;
- Flooding and water quality concerns;
- Current saleyards;
- Other issues; and
- Referral Authority responses.

Proximity to Miners Rest

Most submitters raised concerns regarding the proximity of the proposed CVLX to houses and Miners Rest. Concerns relate to the impact CVLX may have on property values; the potential that it will stall the growth of the township; its impact on the quality of life of residents; and its failure to provide any net community benefit to Miners Rest.

The closest dwelling to the proposed saleyards is 890m, with the Miners Rest Township approximately 1.2km away. As a comparison, the current saleyards is located 230m from dwellings.

Odour and noise

Submitters are concerned that CVLX will produce unreasonable odours, impacting people in surrounding houses and Miners Rest. The concerns about odour and noise relate both to the proposed saleyards and also to truck traffic associated with the yards.

Trucks and Traffic

The truck and traffic concerns include which roads trucks will use to access CVLX, with the potential for trucks to travel through Miners Rest or on roads near housing and the Miners Rest Primary School, and related safety and amenity issues. Truck and traffic concerns in the submissions extend to the impact of trucks on roads and degradation of road infrastructure quality and managing and enforcing usage of designated truck routes.

The Development Plan in SUZ15 requires a Car Parking and Traffic Management Plan to be completed, which includes the designation of truck routes to be approved by Council.

Operational matters

Submitters raised a variety of operational concerns, including impacts of lighting from the site; hours of operation and access provisions; loading and unloading arrangements, and compliance with planning requirements.

Water issues

Water related concerns included risk of the site flooding and associated water quality and contamination issues, along with risks of the proposed saleyards exacerbating floods in the Miners Rest area. The potential of surface water contamination arising from uses, water and effluent management on site were also raised. It will be a condition of the Development Plan that these issues are resolved to the satisfaction of the relevant Statutory Authority.

Referral Authorities

The referral authorities that provided submissions were the Country Fire Authority (**CFA**), Glenelg Hopkins Catchment Management Authority (**GHCMA**), Central Highlands Water (**CHW**), VicRoads and the Department of Economic Development, Jobs, Transport and Resources (**DEDJTR**).

CFA state that the proposed development will not increase the risk of fire to adjoining properties and if anything the layout will mitigate grassfire risk. It supports the proposed amendment in its current form.

GHCMA recommends that the development layout plan be modified to account for flood plain management issues relating to:

- the access roadway;
- location of the rainwater pond (detention basin);
- wetland and holding pond embankment freeboard; and
- management of post development water runoff.

CHW's concerns relate to:

1. Environmental impact and risk assessments:
    1.1. the potential for onsite waste water systems failure causing impacts for groundwater quality; and
    1.2. in the event of such failure, the proponent may need to seek an unplanned connection to CHW's reticulated sewer system.
2. Connection to potable water.
3. Proposed planning process.

In the event that the concerns relating to 1.1 are resolved, this also resolves concerns in 1.2. The potable water concern relates to potential future expense for the proponent and is not properly a matter for a planning panel and the concerns regarding planning process are resolved provided the development plan (required by the proposed SUZ15) is referred to CHW for its approval prior to Council's approval.

VicRoads seek a concept plan for the access to the site from the Sunraysia Highway that would be referred to in the development plan. VicRoads also seek a road safety audit of the interchange for southbound traffic heading to the Western Freeway westbound to ensure that it is suitable for a B double.

VicRoads preference is that vehicles can reach the site without passing through Miners Rest. This could be achieved for example, by diverting large vehicles from the Ballarat-Maryborough Road onto the Learmonth-Sulky Road and heading west until the Learmonth-Sulky Road intersects with the Sunraysia Highway.

This bypass and the interchange are requested to be part of a road safety audit.

DEDJTR seeks to have the impact of the CVLX assessed pursuant to the National Airports Safeguarding Framework. In particular, DEDJTR is concerned to have the matter assessed in relation to Guideline C "Managing the risk of wildlife strikes in the vicinity of airports" and Guideline E "Managing the risks of distractions to pilots from lighting in the vicinity of airports".

Instructions

Enclosed is a brief of materials for your consideration.

You are instructed to:

1. Review the exhibited materials and submissions;

2. Review the proposed SUZ15 and advise if you consider any changes are necessary to the development plan requirements as they relate to your discipline;

3. Undertake the dispersion modelling described as Option A in your letter of 14 May 2015;

4. Undertake any further testing or modelling that you consider would assist the panel or assist in responding to submissions;

5. Provide any further relevant information; and

6. Prepare a written report and appear at a planning panel proposed for the week beginning 22 June 2015.

We also attach a copy of Victorian Planning Panels Guide to Expert Evidence and ask that you review its contents and present any evidence consistent with the principles contained in that document. You should act in accordance with that document given the possibility you may be asked to provide evidence in the matter in the future. To be clear, you are being briefed for an independent opinion, and you should evaluate the material as such without recourse or regard to our client's position in the matter.

Our client will be directly responsible for payment of your fees, and has requested that an estimate of your range of fees is provided with (if possible) an upper/maximum limit.

Any invoices should be sent to us and also to:

Mr Paul Brown
Executive Director and General Manager
RLX Operating Company Pty Ltd
Level 35, 60 Margaret Street
SYDNEY NSW 2000,

by email: paul.brown@palisadepartners.com.au.

If you have any questions please call John Hannagan on 5225 5202 or Greg Tobin on 5225 5252.

Yours faithfully,

HARWOOD ANDREWS

Encl.

Annex C

CALMET Input File Sample

```
CALMET.INP      2.2             Hour Start and End Times with Seconds
CVLX_CALMET
2009

---------------- Run title (3 lines) ------------------------------------------

                    CALMET MODEL CONTROL FILE
                    -------------------------

--------------------------------------------------------------------------------

INPUT GROUP: 0 -- Input and Output File Names


Subgroup (a)
------------
Default Name  Type          File Name
------------  ----          ---------
GEO.DAT       input    ! GEODAT =
C:\ERM-Data\CVLX_Ballarat\CVLX_Ballarat\CVLX_Ballarat_geo\CVLX.Geo !
SURF.DAT      input    ! SRFDAT =
C:\ERM-Data\CVLX_Ballarat\CVLX_Ballarat\CVLX_Ballarat.dat\BALL.SUR !
CLOUD.DAT     input    * CLDDAT = *
PRECIP.DAT    input    * PRCDAT = *
WT.DAT        input    * WTDAT = *

CALMET.LST    output   ! METLST = CALMET_2009.LST !
CALMET.DAT    output   ! METDAT = CALMET_2009.DAT !
PACOUT.DAT    output   * PACDAT = *

All file names will be converted to lower case if LCFILES = T
Otherwise, if LCFILES = F, file names will be converted to UPPER CASE
         T = lower case      ! LCFILES = F !
         F = UPPER CASE

NUMBER OF UPPER AIR & OVERWATER STATIONS:

    Number of upper air stations (NUSTA)  No default     ! NUSTA = 0 !
    Number of overwater met stations
                                (NOWSTA) No default     ! NOWSTA = 0 !

NUMBER OF PROGNOSTIC and IGF-CALMET FILES:

    Number of MM4/MM5/3D.DAT files
                                (NM3D) No default       ! NM3D = 1 !

    Number of IGF-CALMET.DAT files
                                (NIGF)   No default     ! NIGF = 0 !

                        !END!
--------------------------------------------------------------------------------
Subgroup (b)
---------------------------------
Upper air files (one per station)
---------------------------------
Default Name  Type       File Name
------------  ----       ---------

--------------------------------------------------------------------------------
Subgroup (c)
-----------------------------------------
Overwater station files (one per station)
-----------------------------------------
Default Name  Type       File Name
------------  ----       ---------
* OVERWATERFILES = *
--------------------------------------------------------------------------------
Subgroup (d)
```



```
-------------------------------------------------
MM4/MM5/3D.DAT files (consecutive or overlapping)
-------------------------------------------------
Default Name  Type       File Name
------------  ----       ---------
MM41.DAT     input   1  !
M3DDAT=C:\ERM-Data\CVLX_Ballarat\TAPM\2009\CALTAPM_2009.M3D!    !END!

--------------------------------------------------------------------------------
Subgroup (e)
-------------------------------------------------
IGF-CALMET.DAT files (consecutive or overlapping)
-------------------------------------------------
Default Name  Type       File Name
------------  ----       ---------
* IGFDATFILES = *
--------------------------------------------------------------------------------
Subgroup (f)
----------------
Other file names
----------------

Default Name  Type       File Name
------------  ----       ---------
DIAG.DAT      input      * DIADAT = *
PROG.DAT      input      * PRGDAT = *

TEST.PRT      output     * TSTPRT = *
TEST.OUT      output     * TSTOUT = *
TEST.KIN      output     * TSTKIN = *
TEST.FRD      output     * TSTFRD = *
TEST.SLP      output     * TSTSLP = *
DCST.GRD      output     * DCSTGD = *

--------------------------------------------------------------------------------
NOTES: (1) File/path names can be up to 70 characters in length
       (2) Subgroups (a) and (f) must have ONE 'END' (surrounded by
           delimiters) at the end of the group
       (3) Subgroups (b) through (e) are included ONLY if the corresponding
           number of files (NUSTA, NOWSTA, NM3D, NIGF) is not 0, and each must
have
           an 'END' (surround by delimiters) at the end of EACH LINE

                           !END!


--------------------------------------------------------------------------------

INPUT GROUP: 1 -- General run control parameters
--------------

     Starting date:    Year   (IBYR)  --    No default   ! IBYR = 2008 !
                       Month  (IBMO)  --    No default   ! IBMO = 12 !
                       Day    (IBDY)  --    No default   ! IBDY = 31 !
     Starting time:    Hour   (IBHR)  --    No default   ! IBHR = 0 !
                       Second (IBSEC) --    No default   ! IBSEC = 0 !

     Ending date:      Year   (IEYR)  --    No default   ! IEYR = 2010 !
                       Month  (IEMO)  --    No default   ! IEMO = 1 !
                       Day    (IEDY)  --    No default   ! IEDY = 1 !
     Ending time:      Hour   (IEHR)  --    No default   ! IEHR = 0 !
                       Second (IESEC) --    No default   ! IESEC = 0 !

      UTC time zone          (ABTZ) -- No default       ! ABTZ = UTC+1000 !
         (character*8)
         PST = UTC-0800, MST = UTC-0700 , GMT = UTC-0000
         CST = UTC-0600, EST = UTC-0500
```

```
Length of modeling time-step (seconds)
Must divide evenly into 3600 (1 hour)
(NSECDT)                        Default:3600     ! NSECDT = 3600 !
                                Units: seconds

Run type            (IRTYPE) -- Default: 1       ! IRTYPE = 1 !

   0 = Computes wind fields only
   1 = Computes wind fields and micrometeorological variables
       (u*, w*, L, zi, etc.)
   (IRTYPE must be 1 to run CALPUFF or CALGRID)

Compute special data fields required
by CALGRID (i.e., 3-D fields of W wind
components and temperature)
in additional to regular            Default: T    ! LCALGRD = T !
fields ? (LCALGRD)
(LCALGRD must be T to run CALGRID)

 Flag to stop run after
 SETUP phase (ITEST)             Default: 2       ! ITEST = 2 !
 (Used to allow checking
 of the model inputs, files, etc.)
 ITEST = 1 - STOPS program after SETUP phase
 ITEST = 2 - Continues with execution of
             COMPUTATIONAL phase after SETUP


Test options specified to see if
they conform to regulatory
values? (MREG)                  No Default        ! MREG = 0 !

   0 = NO checks are made
   1 = Technical options must conform to USEPA guidance
             IMIXH    -1       Maul-Carson convective mixing height
                               over land; OCD mixing height overwater
             ICOARE   0        OCD deltaT method for overwater fluxes
             THRESHL  0.0      Threshold buoyancy flux over land needed
                               to sustain convective mixing height growth
             ISURFT   > 0    in OBS mode (pick one representative station)
                      -2     in NOOBS mode (itprog=2) (average all
                             surface prognostic temperatures to get
                             a single representative sf. temp)

             IUPT     > 0    in OBS mode (pick one representative station)
                      -2     in NOOBS mode (ITPROG>0) (average all surface
                             prognostic temperatures to get a single
                             representative sf. temp)
             IZICRLX  0      Do NOT use convective mixing height relaxation
                             to equilibrium value

!END!

-------------------------------------------------------------------------------

INPUT GROUP: 2 -- Map Projection and Grid control parameters
--------------

     Projection for all (X,Y):
     -------------------------

     Map projection
     (PMAP)                   Default: UTM    ! PMAP = UTM !

         UTM :  Universal Transverse Mercator
         TTM :  Tangential Transverse Mercator
         LCC :  Lambert Conformal Conic
          PS :  Polar Stereographic
```



```
          EM :  Equatorial Mercator
        LAZA :  Lambert Azimuthal Equal Area

     False Easting and Northing (km) at the projection origin
     (Used only if PMAP= TTM, LCC, or LAZA)
     (FEAST)                    Default=0.0     ! FEAST = 0.0 !
     (FNORTH)                   Default=0.0     ! FNORTH = 0.0 !

     UTM zone (1 to 60)
     (Used only if PMAP=UTM)
     (IUTMZN)                   No Default      ! IUTMZN = 54 !

     Hemisphere for UTM projection?
     (Used only if PMAP=UTM)
     (UTMHEM)                   Default: N      ! UTMHEM = S !
         N   :  Northern hemisphere projection
         S   :  Southern hemisphere projection

     Latitude and Longitude (decimal degrees) of projection origin
     (Used only if PMAP= TTM, LCC, PS, EM, or LAZA)
     (RLAT0)                    No Default      * RLAT0 = *
     (RLON0)                    No Default      * RLON0 = *

         TTM :  RLON0 identifies central (true N/S) meridian of projection
                RLAT0 selected for convenience
         LCC :  RLON0 identifies central (true N/S) meridian of projection
                RLAT0 selected for convenience
         PS  :  RLON0 identifies central (grid N/S) meridian of projection
                RLAT0 selected for convenience
         EM  :  RLON0 identifies central meridian of projection
                RLAT0 is REPLACED by 0.0N (Equator)
         LAZA:  RLON0 identifies longitude of tangent-point of mapping plane
                RLAT0 identifies latitude of tangent-point of mapping plane

     Matching parallel(s) of latitude (decimal degrees) for projection
     (Used only if PMAP= LCC or PS)
     (XLAT1)                    No Default      ! XLAT1 = 30S !
     (XLAT2)                    No Default      ! XLAT2 = 60S !

         LCC :  Projection cone slices through Earth's surface at XLAT1 and
XLAT2
         PS  :  Projection plane slices through Earth at XLAT1
                (XLAT2 is not used)

     ----------
     Note:  Latitudes and longitudes should be positive, and include a
            letter N,S,E, or W indicating north or south latitude, and
            east or west longitude.  For example,
            35.9  N Latitude  =  35.9N
            118.7 E Longitude = 118.7E


     Datum-region
     ------------

     The Datum-Region for the coordinates is identified by a character
     string.  Many mapping products currently available use the model of the
     Earth known as the World Geodetic System 1984 (WGS-84).  Other local
     models may be in use, and their selection in CALMET will make its output
     consistent with local mapping products.  The list of Datum-Regions with
     official transformation parameters is provided by the National Imagery and
     Mapping Agency (NIMA).

     NIMA Datum - Regions(Examples)

-------------------------------------------------------------------------------
     WGS-84    WGS-84 Reference Ellipsoid and Geoid, Global coverage (WGS84)
     NAS-C     NORTH AMERICAN 1927 Clarke 1866 Spheroid, MEAN FOR CONUS (NAD27)
```

```
      NAR-C     NORTH AMERICAN 1983 GRS 80 Spheroid, MEAN FOR CONUS (NAD83)
      NWS-84    NWS 6370KM Radius, Sphere
      ESR-S     ESRI REFERENCE 6371KM Radius, Sphere

      Datum-region for output coordinates
      (DATUM)                    Default: WGS-84     ! DATUM = WGS-84 !


      Horizontal grid definition:
      ---------------------------

      Rectangular grid defined for projection PMAP,
      with X the Easting and Y the Northing coordinate

             No. X grid cells (NX)      No default     ! NX = 80 !
             No. Y grid cells (NY)      No default     ! NY = 80 !

      Grid spacing (DGRIDKM)            No default     ! DGRIDKM = 0.2 !
                                        Units: km

      Reference grid coordinate of
      SOUTHWEST corner of grid cell (1,1)

         X coordinate (XORIGKM)         No default     ! XORIGKM = 737.7080 !
         Y coordinate (YORIGKM)         No default     ! YORIGKM = 5839.6350 !
                                        Units: km


      Vertical grid definition:
      -------------------------

         No. of vertical layers (NZ)    No default     ! NZ = 12 !

         Cell face heights in arbitrary
         vertical grid (ZFACE(NZ+1))    No defaults
                                        Units: m
         ! ZFACE =
0.00,20.00,30.00,40.00,50.00,70.00,90.00,100.00,250.00,500.00,1000.00,1500.00,20
00.00 !

!END!


--------------------------------------------------------------------------------

INPUT GROUP: 3 -- Output Options
--------------


    DISK OUTPUT OPTION

       Save met. fields in an unformatted
       output file ?              (LSAVE)  Default: T     ! LSAVE = T !
       (F = Do not save, T = Save)

       Type of unformatted output file:
       (IFORMO)                            Default: 1    ! IFORMO = 1 !

            1 = CALPUFF/CALGRID type file (CALMET.DAT)
            2 = MESOPUFF-II type file     (PACOUT.DAT)


    LINE PRINTER OUTPUT OPTIONS:

       Print met. fields ?  (LPRINT)       Default: F     ! LPRINT = F !
       (F = Do not print, T = Print)
       (NOTE: parameters below control which
              met. variables are printed)
```



```
      Print interval
      (IPRINF) in hours                  Default: 1     ! IPRINF = 1 !
      (Meteorological fields are printed
       every  6  hours)


      Specify which layers of U, V wind component
      to print (IUVOUT(NZ)) -- NOTE: NZ values must be entered
      (0=Do not print, 1=Print)
      (used only if LPRINT=T)        Defaults: NZ*0
      * IUVOUT = *
      -----------------------


      Specify which levels of the W wind component to print
      (NOTE: W defined at TOP cell face --  6  values)
      (IWOUT(NZ)) -- NOTE: NZ values must be entered
      (0=Do not print, 1=Print)
      (used only if LPRINT=T & LCALGRD=T)
      -----------------------------------
                                          Defaults: NZ*0
       * IWOUT = *


      Specify which levels of the 3-D temperature field to print
      (ITOUT(NZ)) -- NOTE: NZ values must be entered
      (0=Do not print, 1=Print)
      (used only if LPRINT=T & LCALGRD=T)
      -----------------------------------
                                          Defaults: NZ*0
       * ITOUT = *

      Specify which meteorological fields
      to print
      (used only if LPRINT=T)            Defaults: 0 (all variables)
      -----------------------


        Variable            Print ?
                          (0 = do not print,
                           1 = print)
         --------         ------------------

      ! STABILITY = 0 ! - PGT stability class
      ! USTAR = 0 ! - Friction velocity
      ! MONIN = 0 ! - Monin-Obukhov length
      ! MIXHT = 0 ! - Mixing height
      ! WSTAR = 0 ! - Convective velocity scale
      ! PRECIP = 0 ! - Precipitation rate
      ! SENSHEAT = 0 ! - Sensible heat flux
      ! CONVZI = 0 ! - Convective mixing ht.


      Testing and debug print options for micrometeorological module

         Print input meteorological data and
         internal variables (LDB)        Default: F       ! LDB = F !
         (F = Do not print, T = print)
         (NOTE: this option produces large amounts of output)

         First time step for which debug data
         are printed (NN1)               Default: 1       ! NN1 = 1 !

         Last time step for which debug data
         are printed (NN2)               Default: 1       ! NN2 = 1 !

         Print distance to land
```

```
      internal variables (LDBCST)      Default: F       ! LDBCST = F !
      (F = Do not print, T = print)
      (Output in .GRD file DCST.GRD, defined in input group 0)

    Testing and debug print options for wind field module
    (all of the following print options control output to
     wind field module's output files: TEST.PRT, TEST.OUT,
     TEST.KIN, TEST.FRD, and TEST.SLP)

      Control variable for writing the test/debug
      wind fields to disk files (IOUTD)
      (0=Do not write, 1=write)        Default: 0       ! IOUTD = 0 !

      Number of levels, starting at the surface,
      to print (NZPRN2)                Default: 1       ! NZPRN2 = 1 !

      Print the INTERPOLATED wind components ?
      (IPR0) (0=no, 1=yes)             Default: 0       ! IPR0 = 0 !

      Print the TERRAIN ADJUSTED surface wind
      components ?
      (IPR1) (0=no, 1=yes)             Default: 0       ! IPR1 = 0 !

      Print the SMOOTHED wind components and
      the INITIAL DIVERGENCE fields ?
      (IPR2) (0=no, 1=yes)             Default: 0       ! IPR2 = 0 !

      Print the FINAL wind speed and direction
      fields ?
      (IPR3) (0=no, 1=yes)             Default: 0       ! IPR3 = 0 !

      Print the FINAL DIVERGENCE fields ?
      (IPR4) (0=no, 1=yes)             Default: 0       ! IPR4 = 0 !

      Print the winds after KINEMATIC effects
      are added ?
      (IPR5) (0=no, 1=yes)             Default: 0       ! IPR5 = 0 !

      Print the winds after the FROUDE NUMBER
      adjustment is made ?
      (IPR6) (0=no, 1=yes)             Default: 0       ! IPR6 = 0 !

      Print the winds after SLOPE FLOWS
      are added ?
      (IPR7) (0=no, 1=yes)             Default: 0       ! IPR7 = 0 !

      Print the FINAL wind field components ?
      (IPR8) (0=no, 1=yes)             Default: 0       ! IPR8 = 0 !

!END!


-------------------------------------------------------------------------------

INPUT GROUP: 4 -- Meteorological data options
--------------

    NO OBSERVATION MODE            (NOOBS)  Default: 0     ! NOOBS = 1 !
          0 = Use surface, overwater, and upper air stations
          1 = Use surface and overwater stations (no upper air observations)
              Use MM4/MM5/3D for upper air data
          2 = No surface, overwater, or upper air observations
              Use MM4/MM5/3D for surface, overwater, and upper air data

    NUMBER OF SURFACE & PRECIP. METEOROLOGICAL STATIONS

       Number of surface stations   (NSSTA)  No default     ! NSSTA = 2 !
```



```
      Number of precipitation stations
      (NPSTA=-1: flag for use of MM5/3D precip data)
                                  (NPSTA)  No default     ! NPSTA = 0 !

    CLOUD DATA OPTIONS
      Output option - output a CLOUD.DAT file (yes or no)
      0=no, 1=yes
                                  (ICLDOUT) Default:999      ! ICLDOUT = 0 !

      Method to compute cloud fields:
                                  (MCLOUD)  Default: 999     ! MCLOUD = 3 !
      MCLOUD = 1 - Clouds data generated from surface observations
      MCLOUD = 2 - Gridded CLOUD.DAT read from CLOUD.DAT file (no output
                   is possible since already exist)
      MCLOUD = 3 - Gridded cloud cover from Prognostic Rel. Humidity
                   at 850mb (Teixera)
      MCLOUD = 4 - Gridded cloud cover from Prognostic Rel. Humidity
                   at all levels (MM5toGrads algorithm)

    FILE FORMATS

      Surface meteorological data file format
                                  (IFORMS)  Default: 2     ! IFORMS = 2 !
      (1 = unformatted (e.g., SMERGE output))
      (2 = formatted   (free-formatted user input))

      Precipitation data file format
                                  (IFORMP)  Default: 2     ! IFORMP = 2 !
      (1 = unformatted (e.g., PMERGE output))
      (2 = formatted   (free-formatted user input))

      Cloud data file format
                                  (IFORMC)  Default: 2     ! IFORMC = 1 !
      (1 = unformatted - CALMET unformatted output)
      (2 = formatted   - free-formatted CALMET output or user input)

!END!


-------------------------------------------------------------------------------

INPUT GROUP: 5 -- Wind Field Options and Parameters
--------------


    WIND FIELD MODEL OPTIONS
      Model selection variable (IWFCOD)     Default: 1      ! IWFCOD = 1 !
         0 = Objective analysis only
         1 = Diagnostic wind module

      Compute Froude number adjustment
      effects ? (IFRADJ)                    Default: 1      ! IFRADJ = 1 !
      (0 = NO, 1 = YES)

      Compute kinematic effects ? (IKINE)   Default: 0      ! IKINE = 0 !
      (0 = NO, 1 = YES)

      Use O'Brien procedure for adjustment
      of the vertical velocity ? (IOBR)     Default: 0      ! IOBR = 0 !
      (0 = NO, 1 = YES)

      Compute slope flow effects ? (ISLOPE) Default: 1      ! ISLOPE = 1 !
      (0 = NO, 1 = YES)

      Extrapolate surface wind observations
      to upper layers ? (IEXTRP)            Default: -4     ! IEXTRP = 1 !
      (1 = no extrapolation is done,
       2 = power law extrapolation used,
```

```
        3 = user input multiplicative factors
            for layers 2 - NZ used (see FEXTRP array)
        4 = similarity theory used
        -1, -2, -3, -4 = same as above except layer 1 data
            at upper air stations are ignored

       Extrapolate surface winds even
       if calm? (ICALM)                    Default: 0      ! ICALM = 1 !
       (0 = NO, 1 = YES)

       Layer-dependent biases modifying the weights of
       surface and upper air stations (BIAS(NZ))
         -1<=BIAS<=1
       Negative BIAS reduces the weight of upper air stations
         (e.g. BIAS=-0.1 reduces the weight of upper air stations
       by 10%; BIAS= -1, reduces their weight by 100 %)
       Positive BIAS reduces the weight of surface stations
         (e.g. BIAS= 0.2 reduces the weight of surface stations
       by 20%; BIAS=1 reduces their weight by 100%)
       Zero BIAS leaves weights unchanged (1/R**2 interpolation)
       Default: NZ*0
! BIAS = -1.0,-0.983,-0.971,-0.96,-0.943,-0.92,-0.902,-0.81,-0.58,-0.149,0.425,
1.0 !

       Minimum distance from nearest upper air station
       to surface station for which extrapolation
       of surface winds at surface station will be allowed
       (RMIN2: Set to -1 for IEXTRP = 4 or other situations
        where all surface stations should be extrapolated)
                                            Default: 4.    ! RMIN2 = 4 !

       Use gridded prognostic wind field model
       output fields as input to the diagnostic
       wind field model (IPROG)            Default: 0      ! IPROG = 14 !
       (0 = No, [IWFCOD = 0 or 1]
        1 = Yes, use CSUMM prog. winds as Step 1 field, [IWFCOD = 0]
        2 = Yes, use CSUMM prog. winds as initial guess field [IWFCOD = 1]
        3 = Yes, use winds from MM4.DAT file as Step 1 field [IWFCOD = 0]
        4 = Yes, use winds from MM4.DAT file as initial guess field [IWFCOD = 1]
        5 = Yes, use winds from MM4.DAT file as observations [IWFCOD = 1]
        13 = Yes, use winds from MM5/3D.DAT file as Step 1 field [IWFCOD = 0]
        14 = Yes, use winds from MM5/3D.DAT file as initial guess field [IWFCOD
= 1]
        15 = Yes, use winds from MM5/3D.DAT file as observations [IWFCOD = 1]

       Timestep (seconds) of the prognostic
       model input data   (ISTEPPGS)       Default: 3600   ! ISTEPPGS = 3600 !


       Use coarse CALMET fields as initial guess fields (IGFMET)
       (overwrites IGF based on prognostic wind fields if any)
                                           Default: 0      ! IGFMET = 0 !

    RADIUS OF INFLUENCE PARAMETERS

       Use varying radius of influence     Default: F      ! LVARY = F !
       (if no stations are found within RMAX1,RMAX2,
        or RMAX3, then the closest station will be used)

       Maximum radius of influence over land
       in the surface layer (RMAX1)        No default      ! RMAX1 = 3 !
                                           Units: km
       Maximum radius of influence over land
       aloft (RMAX2)                       No default      ! RMAX2 = 5 !
                                           Units: km
       Maximum radius of influence over water
       (RMAX3)                             No default      ! RMAX3 = 20 !
                                           Units: km
```



```
OTHER WIND FIELD INPUT PARAMETERS

   Minimum radius of influence used in
   the wind field interpolation (RMIN)  Default: 0.1    ! RMIN = 0.1 !
                                        Units: km
   Radius of influence of terrain
   features (TERRAD)                    No default      ! TERRAD = 1 !

                                        Units: km
   Relative weighting of the first
   guess field and observations in the
   SURFACE layer (R1)                   No default      ! R1 = 1 !
   (R1 is the distance from an          Units: km
   observational station at which the
   observation and first guess field are
   equally weighted)

   Relative weighting of the first
   guess field and observations in the
   layers ALOFT (R2)                    No default      ! R2 = 2 !
   (R2 is applied in the upper layers   Units: km
   in the same manner as R1 is used in
   the surface layer).

   Relative weighting parameter of the
   prognostic wind field data (RPROG)   No default      ! RPROG = 0 !
   (Used only if IPROG = 1)             Units: km
   ------------------------

   Maximum acceptable divergence in the
   divergence minimization procedure
   (DIVLIM)                             Default: 5.E-6  ! DIVLIM = 5E-6 !

   Maximum number of iterations in the
   divergence min. procedure (NITER)    Default: 50     ! NITER = 50 !

   Number of passes in the smoothing
   procedure (NSMTH(NZ))
   NOTE: NZ values must be entered
        Default: 2,(mxnz-1)*4 ! NSMTH = 2,11*4 !

   Maximum number of stations used in
   each layer for the interpolation of
   data to a grid point (NINTR2(NZ))
   NOTE: NZ values must be entered      Default: 99.    ! NINTR2 = 12*99 !

   Critical Froude number (CRITFN)      Default: 1.0    ! CRITFN = 1 !

   Empirical factor controlling the
   influence of kinematic effects
   (ALPHA)                              Default: 0.1    ! ALPHA = 0.1 !

   Multiplicative scaling factor for
   extrapolation of surface observations
   to upper layers (FEXTR2(NZ))         Default: NZ*0.0
   * FEXTR2 = *
   (Used only if IEXTRP = 3 or -3)


BARRIER INFORMATION

   Number of barriers to interpolation
   of the wind fields (NBAR)            Default: 0      ! NBAR = 0 !

   Level (1 to NZ) up to which barriers
   apply (KBAR)                         Default: NZ     ! KBAR = 12 !
```

```
   THE FOLLOWING 4 VARIABLES ARE INCLUDED
   ONLY IF NBAR > 0
   NOTE: NBAR values must be entered     No defaults
         for each variable               Units: km

      X coordinate of BEGINNING
      of each barrier (XBBAR(NBAR))      ! XBBAR =  !
      Y coordinate of BEGINNING
      of each barrier (YBBAR(NBAR))      ! YBBAR =  !

      X coordinate of ENDING
      of each barrier (XEBAR(NBAR))      ! XEBAR =  !
      Y coordinate of ENDING
      of each barrier (YEBAR(NBAR))      ! YEBAR =  !


DIAGNOSTIC MODULE DATA INPUT OPTIONS

   Surface temperature (IDIOPT1)         Default: 0      ! IDIOPT1 = 0 !
      0 = Compute internally from
          hourly surface observations or prognostic fields
      1 = Read preprocessed values from
          a data file (DIAG.DAT)

      Surface met. station to use for
      the surface temperature (ISURFT)   Default: -1    ! ISURFT = -1 !
      (Must be a value from 1 to NSSTA
       or -1 to use 2-D spatially varying
          surface temperatures).
       or -2 to use a domain-average prognostic
          lapse rate (only with ITPROG=2)
      (Used only if IDIOPT1 = 0)
      --------------------------

   Temperature lapse rate used in the    Default: 0     ! IDIOPT2 = 0 !
      computation of terrain-induced
      circulations (IDIOPT2)
      0 = Compute internally from (at least) twice-daily
          upper air observations or prognostic fields
      1 = Read hourly preprocessed values
          from a data file (DIAG.DAT)

      Upper air station to use for
      the domain-scale lapse rate (IUPT) Default: -1    ! IUPT = -1 !
      (Must be a value from 1 to NUSTA
       or -1 to use 2-D spatially varying lapse rate)
       or -2 to use a domain-average prognostic
          lapse rate (only with ITPROG>0)
      (Used only if IDIOPT2 = 0)
      --------------------------

      Depth through which the domain-scale
      lapse rate is computed (ZUPT)      Default: 200.  ! ZUPT = 200 !
      (Used only if IDIOPT2 = 0)         Units: meters
      --------------------------

   Initial Guess Field Winds
   (IDIOPT3)                             Default: 0     ! IDIOPT3 = 0 !
      0 = Compute internally from
          observations or prognostic wind fields
      1 = Read hourly preprocessed domain-average wind values
          from a data file (DIAG.DAT)

      Upper air station to use for
      the initial guess winds (IUPWND)   Default: -1    ! IUPWND = -1 !
      (Must be a value from -1 to NUSTA, with
      -1 indicating 3-D initial guess fields,
```



```
          and IUPWND>1 domain-scaled (i.e. constant) IGF
          (Used only if IDIOPT3 = 0 and noobs=0)
          ---------------------------------------

          Bottom and top of layer through
          which the domain-scale winds
          are computed
          (ZUPWND(1), ZUPWND(2))        Defaults: 1., 1000. ! ZUPWND= 1.0, 1.00
!
          (Used only if IDIOPT3 = 0, NOOBS>0 and IUPWND>0)    Units: meters
          ------------------------

       Observed surface wind components
       for wind field module (IDIOPT4)  Default: 0     ! IDIOPT4 = 0 !
          0 = Read WS, WD from a surface
              data file (SURF.DAT)
          1 = Read hourly preprocessed U, V from
              a data file (DIAG.DAT)

       Observed upper air wind components
       for wind field module (IDIOPT5)  Default: 0     ! IDIOPT5 = 0 !
          0 = Read WS, WD from an upper
              air data file (UP1.DAT, UP2.DAT, etc.)
          1 = Read hourly preprocessed U, V from
              a data file (DIAG.DAT)

       LAKE BREEZE INFORMATION

          Use Lake Breeze Module  (LLBREZE)
                                             Default: F      ! LLBREZE = F !

           Number of lake breeze regions (NBOX)            ! NBOX = 0 !

        X Grid line 1 defining the region of interest
                                                           ! XG1 =  !
        X Grid line 2 defining the region of interest
                                                           ! XG2 =  !
        Y Grid line 1 defining the region of interest
                                                           ! YG1 =  !
        Y Grid line 2 defining the region of interest
                                                           ! YG2 =  !

         X Point defining the coastline (Straight line)
                   (XBCST)  (KM)   Default: none    ! XBCST =  !

         Y Point defining the coastline (Straight line)
                   (YBCST)  (KM)   Default: none    ! YBCST =  !

         X Point defining the coastline (Straight line)
                   (XECST)  (KM)   Default: none    ! XECST =  !

         Y Point defining the coastline (Straight line)
                   (YECST)  (KM)   Default: none    ! YECST =  !


       Number of stations in the region     Default: none ! NLB =  !
       (Surface stations + upper air stations)

       Station ID's  in the region   (METBXID(NLB))
       (Surface stations first, then upper air stations)
         ! METBXID =  !

!END!


-------------------------------------------------------------------------------

INPUT GROUP: 6 -- Mixing Height, Temperature and Precipitation Parameters
```

```
--------------

    EMPIRICAL MIXING HEIGHT CONSTANTS

       Neutral, mechanical equation
       (CONSTB)                          Default: 1.41   ! CONSTB = 1.41 !
       Convective mixing ht. equation
       (CONSTE)                          Default: 0.15   ! CONSTE = 0.15 !
       Stable mixing ht. equation
       (CONSTN)                          Default: 2400.  ! CONSTN = 2400 !
       Overwater mixing ht. equation
       (CONSTW)                          Default: 0.16   ! CONSTW = 0.16 !
       Absolute value of Coriolis
       parameter (FCORIOL)               Default: 1.E-4  ! FCORIOL = 8.9E-5
!                                        Units: (1/s)

    SPATIAL AVERAGING OF MIXING HEIGHTS

       Conduct spatial averaging
       (IAVEZI)  (0=no, 1=yes)           Default: 1      ! IAVEZI = 1 !

       Max. search radius in averaging
       process (MNMDAV)                  Default: 1      ! MNMDAV = 1 !
                                         Units: Grid
                                                cells
       Half-angle of upwind looking cone
       for averaging (HAFANG)            Default: 30.    ! HAFANG = 30 !
                                         Units: deg.
       Layer of winds used in upwind
       averaging (ILEVZI)                Default: 1      ! ILEVZI = 1 !
       (must be between 1 and NZ)


    CONVECTIVE MIXING HEIGHT OPTIONS:
       Method to compute the convective
       mixing height(IMIHXH)             Default: 1      ! IMIXH = 1 !
           1: Maul-Carson for land and water cells
          -1: Maul-Carson for land cells only -
              OCD mixing height overwater
           2: Batchvarova and Gryning for land and water cells
          -2: Batchvarova and Gryning for land cells only
              OCD mixing height overwater

       Threshold buoyancy flux required to
       sustain convective mixing height growth
       overland (THRESHL)                Default: 0.0    ! THRESHL = 0 !
       (expressed as a heat flux         units: W/m3
        per meter of boundary layer)


       Threshold buoyancy flux required to
       sustain convective mixing height growth
       overwater (THRESHW)               Default: 0.05   ! THRESHW = 0.05 !
       (expressed as a heat flux         units: W/m3
        per meter of boundary layer)


       Option for overwater lapse rates used
       in convective mixing height growth
       (ITWPROG)                         Default: 0      ! ITWPROG = 0 !
       0 : use SEA.DAT lapse rates and deltaT (or assume neutral
           conditions if missing)
       1 : use prognostic lapse rates (only if IPROG>2)
           and SEA.DAT deltaT (or neutral if missing)
       2 : use prognostic lapse rates and prognostic delta T
           (only if iprog>12 and 3D.DAT version# 2.0 or higher)
```



```
       Land Use category ocean in 3D.DAT datasets
       (ILUOC3D)                         Default: 16     ! ILUOC3D = 16 !
       Note: if 3D.DAT from MM5 version 3.0, iluoc3d = 16
             if MM4.DAT,           typically iluoc3d = 7


    OTHER MIXING HEIGHT VARIABLES

       Minimum potential temperature lapse
       rate in the stable layer above the
       current convective mixing ht.     Default: 0.001  ! DPTMIN = 0.001 !
       (DPTMIN)                          Units: deg. K/m
       Depth of layer above current conv.
       mixing height through which lapse Default: 200.   ! DZZI = 200 !
       rate is computed (DZZI)           Units: meters

       Minimum overland mixing height    Default:  50.   ! ZIMIN = 50 !
       (ZIMIN)                           Units: meters
       Maximum overland mixing height    Default: 3000.  ! ZIMAX = 3000 !
       (ZIMAX)                           Units: meters
       Minimum overwater mixing height   Default:   50.  ! ZIMINW = 50 !
       (ZIMINW) -- (Not used if observed Units: meters
       overwater mixing hts. are used)
       Maximum overwater mixing height   Default: 3000.  ! ZIMAXW = 3000 !
       (ZIMAXW) -- (Not used if observed Units: meters
       overwater mixing hts. are used)


    OVERWATER SURFACE FLUXES METHOD and PARAMETERS
          (ICOARE)                       Default: 10     ! ICOARE = 10 !
           0: original deltaT method (OCD)
          10: COARE with no wave parameterization (jwave=0, Charnock)
          11: COARE with wave option jwave=1 (Oost et al.)
              and default wave properties
         -11: COARE with wave option jwave=1 (Oost et al.)
              and observed wave properties (must be in SEA.DAT files)
          12: COARE with wave option 2 (Taylor and Yelland)
               and default wave properties
         -12: COARE with wave option 2 (Taylor and Yelland)
              and observed wave properties (must be in SEA.DAT files)

          Note:  When ICOARE=0, similarity wind profile stability PSI functions
                 based on Van Ulden and Holtslag (1985) are substituted for
                 later formulations used with the COARE module, and temperatures
                 used for surface layer parameters are obtained from either the
                 nearest surface station temperature or prognostic model 2D
                 temperatures (if ITPROG=2).


          Coastal/Shallow water length scale (DSHELF)
          (for modified z0 in shallow water)
          ( COARE fluxes only)
                                         Default : 0.    ! DSHELF = 0 !
                                         units: km

           COARE warm layer computation (IWARM)          ! IWARM = 0 !
           1: on - 0: off (must be off if SST measured with
           IR radiometer)                Default: 0

           COARE cool skin layer computation (ICOOL)     ! ICOOL = 0 !
           1: on - 0: off (must be off if SST measured with
           IR radiometer)                Default: 0

    RELATIVE HUMIDITY PARAMETERS

       3D relative humidity from observations or
       from prognostic data? (IRHPROG)   Default:0       ! IRHPROG = 0 !
```

```
          0 = Use RH from SURF.DAT file
              (only if NOOBS = 0,1)
          1 = Use prognostic RH
              (only if NOOBS = 0,1,2)

    TEMPERATURE PARAMETERS

       3D temperature from observations or
       from prognostic data? (ITPROG)        Default:0        ! ITPROG = 2 !

          0 = Use Surface and upper air stations
              (only if NOOBS = 0)
          1 = Use Surface stations (no upper air observations)
              Use MM5/3D for upper air data
              (only if NOOBS = 0,1)
          2 = No surface or upper air observations
              Use MM5/3D for surface and upper air data
              (only if NOOBS = 0,1,2)

       Interpolation type
       (1 = 1/R ; 2 = 1/R**2)                Default:1         ! IRAD = 1 !

       Radius of influence for temperature
       interpolation (TRADKM)                Default: 500.     ! TRADKM = 50 !
                                             Units: km

       Maximum Number of stations to include
       in temperature interpolation (NUMTS)  Default: 5        ! NUMTS = 5 !

       Conduct spatial averaging of temp-
       eratures (IAVET)  (0=no, 1=yes)       Default: 1        ! IAVET = 1 !
       (will use mixing ht MNMDAV,HAFANG
        so make sure they are correct)

       Default temperature gradient          Default: -.0098 ! TGDEFB = -0.0098
!
       below the mixing height over          Units: K/m
       water (TGDEFB)

       Default temperature gradient          Default: -.0045 ! TGDEFA = -0.0045
!
       above the mixing height over          Units: K/m
       water (TGDEFA)

       Beginning (JWAT1) and ending (JWAT2)
       land use categories for temperature                   ! JWAT1 = 999 !
       interpolation over water -- Make                      ! JWAT2 = 999 !
       bigger than largest land use to disable

   PRECIP INTERPOLATION PARAMETERS

       Method of interpolation (NFLAGP)      Default: 2       ! NFLAGP = 2 !
        (1=1/R,2=1/R**2,3=EXP/R**2)
       Radius of Influence  (SIGMAP)         Default: 100.0 ! SIGMAP = 100. !
        (0.0 => use half dist. btwn          Units: km
         nearest stns w & w/out
         precip when NFLAGP = 3)
       Minimum Precip. Rate Cutoff (CUTP)    Default: 0.01 ! CUTP = 0.01 !
        (values <CUTP = 0.0 mm/hr)          Units: mm/hr
!END!


----------------------------------------------------------------------------

INPUT GROUP: 7 -- Surface meteorological station parameters
--------------

     SURFACE STATION VARIABLES
```



```
     (One record per station --  12  records in all)


              1     2
         Name     ID     X coord.   Y coord.    Time   Anem.
                           (km)       (km)       zone   Ht.(m)
        ------------------------------------------------------------
! SS1  ='BALL'   12345   746.689    5844.589      10    10.000  !
! SS2  ='TAPM'   12346   746.708    5844.635      10    10.000  !

-------------------
      1
        Four character string for station name
        (MUST START IN COLUMN 9)

      2
        Six digit integer for station ID

!END!


----------------------------------------------------------------------------

INPUT GROUP: 8 -- Upper air meteorological station parameters
--------------

     UPPER AIR STATION VARIABLES
     (One record per station --  3  records in all)

              1     2
         Name    ID      X coord.   Y coord.  Time zone
                           (km)       (km)
        ------------------------------------------------

-------------------
      1
        Four character string for station name
        (MUST START IN COLUMN 9)

      2
        Five digit integer for station ID

!END!


----------------------------------------------------------------------------

INPUT GROUP: 9 -- Precipitation station parameters
--------------

     PRECIPITATION STATION VARIABLES
     (One record per station --  2  records in all)
     (NOT INCLUDED IF NPSTA = 0)

            1          2
         Name   Station    X coord.  Y coord.
                  Code       (km)      (km)
         ------------------------------------



-------------------
      1
        Four character string for station name
        (MUST START IN COLUMN 9)

      2
        Six digit station code composed of state
```

code (first 2 digits) and station ID (last
4 digits)

!END!

Annex D

CALPUFF Input File Sample

```
CVLX
Odour Impacts
2009 Jan to Mar
---------------- Run title (3 lines) ------------------------------------------

                   CALPUFF MODEL CONTROL FILE
                   --------------------------

--------------------------------------------------------------------------------

INPUT GROUP: 0 -- Input and Output File Names

--------------
Default Name  Type          File Name
------------  ----          ---------
CALMET.DAT    input    ! METDAT = CALMET_2009.DAT !
    or
ISCMET.DAT    input    * ISCDAT = *
    or
PLMMET.DAT    input    * PLMDAT = *
    or
PROFILE.DAT   input    * PRFDAT = *
SURFACE.DAT   input    * SFCDAT = *
RESTARTB.DAT  input    * RSTARTB = *
--------------------------------------------------------------------------------
CALPUFF.LST   output   ! PUFLST = 2009_Jan_Mar.LST !
CONC.DAT      output   ! CONDAT = 2009_Jan_Mar.CON !
DFLX.DAT      output   * DFDAT = *
WFLX.DAT      output   * WFDAT = *

VISB.DAT      output   * VISDAT = *
TK2D.DAT      output   * T2DDAT = *
RHO2D.DAT     output   * RHODAT = *
RESTARTE.DAT  output   * RSTARTE = *
--------------------------------------------------------------------------------
Emission Files
--------------
PTEMARB.DAT   input    * PTDAT = *
VOLEMARB.DAT  input    * VOLDAT = *
BAEMARB.DAT   input    * ARDAT = *
LNEMARB.DAT   input    * LNDAT = *
--------------------------------------------------------------------------------
Other Files
-----------
OZONE.DAT     input    * OZDAT = *
VD.DAT        input    * VDDAT = *
CHEM.DAT      input    * CHEMDAT = *
AUX           input    * AUXEXT = *
(Extension added to METDAT filename(s) for files
 with auxiliary 2D and 3D data)
H2O2.DAT      input    * H2O2DAT = *
NH3Z.DAT      input    * NH3ZDAT = *
HILL.DAT      input    * HILDAT = *
HILLRCT.DAT   input    * RCTDAT = *
COASTLN.DAT   input    * CSTDAT = *
FLUXBDY.DAT   input    * BDYDAT = *
BCON.DAT      input    * BCNDAT = *
DEBUG.DAT     output   * DEBUG = *
MASSFLX.DAT   output   * FLXDAT = *
MASSBAL.DAT   output   * BALDAT = *
FOG.DAT       output   * FOGDAT = *
RISE.DAT      output   * RISDAT = *
PFTRAK.DAT    output   * TRKDAT = *
--------------------------------------------------------------------------------
All file names will be converted to lower case if LCFILES = T
Otherwise, if LCFILES = F, file names will be converted to UPPER CASE
         T = lower case      ! LCFILES = F !
         F = UPPER CASE
```



```
NOTE: (1) file/path names can be up to 132 characters in length


Provision for multiple input files
----------------------------------
     Number of CALMET.DAT Domains (NMETDOM)
                                        Default: 1       ! NMETDOM = 1 !

     Number of CALMET.DAT files (NMETDAT)
     (Total for ALL Domains)
                                        Default: 1       ! NMETDAT = 1 !

     Number of PTEMARB.DAT files for run (NPTDAT)
                                        Default: 0       ! NPTDAT = 0 !

     Number of BAEMARB.DAT files for run (NARDAT)
                                        Default: 0       ! NARDAT = 0 !

     Number of VOLEMARB.DAT files for run (NVOLDAT)
                                        Default: 0       ! NVOLDAT = 0 !

!END!

-------------
Subgroup (0a)
-------------
  Provide a name for each CALMET domain if NMETDOM > 1
  Enter NMETDOM lines.
                                          a,b
Default Name             Domain Name
------------             ------------
* DOMAINLIST = *


  The following CALMET.DAT filenames are processed in sequence
  if NMETDAT > 1

  Enter NMETDAT lines, 1 line for each file name.

                                          a,c,d
Default Name  Type          File Name
------------  ----          ---------

-------------
    a
     The name for each CALMET domain and each CALMET.DAT file is treated
     as a separate input subgroup and therefore must end with an input
     group terminator.
    b
     Use DOMAIN1= to assign the name for the outermost CALMET domain.
     Use DOMAIN2= to assign the name for the next inner CALMET domain.
     Use DOMAIN3= to assign the name for the next inner CALMET domain, etc.
      ------------------------------------------------------------------------
      |   When inner domains with equal resolution (grid-cell size)      |
      |   overlap, the data from the FIRST such domain in the list will  |
      |   be used if all other criteria for choosing the controlling     |
      |   grid domain are inconclusive.                                  |
      ------------------------------------------------------------------------
    c
     Use METDAT1= to assign the file names for the outermost CALMET domain.
     Use METDAT2= to assign the file names for the next inner CALMET domain.
     Use METDAT3= to assign the file names for the next inner CALMET domain,
etc.
    d
     The filenames for each domain must be provided in sequential order


-------------
```

```
Subgroup (0b)
-------------

  The following PTEMARB.DAT filenames are processed in sequence if NPTDAT>0
  (Each file contains a subset of the sources, for the entire simulation)

Default Name  Type          File Name
------------  ----          ---------
* PTDATLIST = *


-------------
Subgroup (0c)
-------------

  The following BAEMARB.DAT filenames are processed in sequence if NARDAT>0
  (Each file contains a subset of the sources, for the entire simulation)

Default Name  Type          File Name
------------  ----          ---------
* ARDATLIST = *


-------------
Subgroup (0d)
-------------

  The following VOLEMARB.DAT filenames are processed in sequence if NARDAT>0
  (Each file contains a subset of the sources, for the entire simulation)

Default Name  Type          File Name
------------  ----          ---------
* VOLDATLIST = *

------------------------------------------------------------------------------

INPUT GROUP: 1 -- General run control parameters
--------------

    Option to run all periods found
    in the met. file     (METRUN)   Default: 0       ! METRUN = 0 !

         METRUN = 0 - Run period explicitly defined below
         METRUN = 1 - Run all periods in met. file

     Starting date:    Year   (IBYR)  --    No default   ! IBYR = 2008 !
                       Month  (IBMO)  --    No default   ! IBMO = 12 !
                       Day    (IBDY)  --    No default   ! IBDY = 31 !
     Starting time:    Hour   (IBHR)  --    No default   ! IBHR = 0 !
                       Minute (IBMIN) --    No default   ! IBMIN = 0 !
                       Second (IBSEC) --    No default   ! IBSEC = 0 !

     Ending date:      Year   (IEYR)  --    No default   ! IEYR = 2009 !
                       Month  (IEMO)  --    No default   ! IEMO = 4 !
                       Day    (IEDY)  --    No default   ! IEDY = 1 !
     Ending time:      Hour   (IEHR)  --    No default   ! IEHR = 0 !
                       Minute (IEMIN) --    No default   ! IEMIN = 0 !
                       Second (IESEC) --    No default   ! IESEC = 0 !

     (These are only used if METRUN = 0)

     Base time zone:          (ABTZ)  --    No default   ! ABTZ = UTC+1000 !
      (character*8)
     The modeling domain may span multiple time zones.  ABTZ defines the
     base time zone used for the entire simulation.  This must match the
     base time zone of the meteorological data.
     Examples:
         Los Angeles, USA          = UTC-0800
```



```
         New York, USA             = UTC-0500
         Santiago, Chile           = UTC-0400
         Greenwich Mean Time (GMT) = UTC+0000
         Rome, Italy               = UTC+0100
         Cape Town, S.Africa       = UTC+0200
         Sydney, Australia         = UTC+1000

    Length of modeling time-step (seconds)
    Equal to update period in the primary
    meteorological data files, or an
    integer fraction of it (1/2, 1/3 ...)
    Must be no larger than 1 hour
    (NSECDT)                       Default:3600     ! NSECDT = 3600 !
                                   Units: seconds

    Number of chemical species (NSPEC)
                                   Default: 5       ! NSPEC = 1 !

    Number of chemical species
    to be emitted  (NSE)           Default: 3       ! NSE = 1 !

    Flag to stop run after
    SETUP phase (ITEST)            Default: 2       ! ITEST = 2 !
    (Used to allow checking
    of the model inputs, files, etc.)
          ITEST = 1 - STOPS program after SETUP phase
          ITEST = 2 - Continues with execution of program
                      after SETUP

    Restart Configuration:

       Control flag (MRESTART)     Default: 0       ! MRESTART = 0 !

          0 = Do not read or write a restart file
          1 = Read a restart file at the beginning of
              the run
          2 = Write a restart file during run
          3 = Read a restart file at beginning of run
              and write a restart file during run

       Number of periods in Restart
       output cycle (NRESPD)       Default: 0       ! NRESPD = 0 !

          0 = File written only at last period
         >0 = File updated every NRESPD periods

    Meteorological Data Format (METFM)
                                   Default: 1       ! METFM = 1 !

          METFM = 1 - CALMET binary file (CALMET.MET)
          METFM = 2 - ISC ASCII file (ISCMET.MET)
          METFM = 3 - AUSPLUME ASCII file (PLMMET.MET)
          METFM = 4 - CTDM plus tower file (PROFILE.DAT) and
                      surface parameters file (SURFACE.DAT)
          METFM = 5 - AERMET tower file (PROFILE.DAT) and
                      surface parameters file (SURFACE.DAT)

    Meteorological Profile Data Format (MPRFFM)
           (used only for METFM = 1, 2, 3)
                                   Default: 1       ! MPRFFM = 1 !

          MPRFFM = 1 - CTDM plus tower file (PROFILE.DAT)
          MPRFFM = 2 - AERMET tower file (PROFILE.DAT)

    PG sigma-y is adjusted by the factor (AVET/PGTIME)**0.2
    Averaging Time (minutes) (AVET)
                                   Default: 60.0    ! AVET = 60 !
    PG Averaging Time (minutes) (PGTIME)
```

```
                                Default: 60.0    ! PGTIME = 60 !

     Output units for binary concentration and flux files
     written in Dataset v2.2 or later formats
     (IOUTU)                    Default: 1       ! IOUTU = 2 !
         1 = mass      -  g/m3 (conc) or g/m2/s (dep)
         2 = odour     -  odour_units (conc)
         3 = radiation -  Bq/m3 (conc) or Bq/m2/s (dep)


     Output Dataset format for binary concentration
     and flux files (e.g., CONC.DAT)
     (IOVERS)                   Default: 2       ! IOVERS = 2 !
         1 = Dataset Version 2.1
         2 = Dataset Version 2.2

!END!


--------------------------------------------------------------------------------

INPUT GROUP: 2 -- Technical options
--------------


     Vertical distribution used in the
     near field (MGAUSS)                Default: 1     ! MGAUSS = 1 !
        0 = uniform
        1 = Gaussian

     Terrain adjustment method
     (MCTADJ)                           Default: 3     ! MCTADJ = 3 !
        0 = no adjustment
        1 = ISC-type of terrain adjustment
        2 = simple, CALPUFF-type of terrain
            adjustment
        3 = partial plume path adjustment

     Subgrid-scale complex terrain
     flag (MCTSG)                       Default: 0     ! MCTSG = 0 !
        0 = not modeled
        1 = modeled

     Near-field puffs modeled as
     elongated slugs? (MSLUG)           Default: 0     ! MSLUG = 0 !
        0 = no
        1 = yes (slug model used)

     Transitional plume rise modeled?
     (MTRANS)                           Default: 1     ! MTRANS = 1 !
        0 = no  (i.e., final rise only)
        1 = yes (i.e., transitional rise computed)

     Stack tip downwash? (MTIP)         Default: 1     ! MTIP = 1 !
        0 = no  (i.e., no stack tip downwash)
        1 = yes (i.e., use stack tip downwash)

     Method used to compute plume rise for
     point sources not subject to building
     downwash? (MRISE)                  Default: 1     ! MRISE = 1 !
        1 = Briggs plume rise
        2 = Numerical plume rise

     Method used to simulate building
     downwash? (MBDW)                   Default: 1     ! MBDW = 1 !
        1 = ISC method
        2 = PRIME method
```



```
     Vertical wind shear modeled above
     stack top? (MSHEAR)                Default: 0     ! MSHEAR = 0 !
        0 = no  (i.e., vertical wind shear not modeled)
        1 = yes (i.e., vertical wind shear modeled)

     Puff splitting allowed? (MSPLIT)   Default: 0     ! MSPLIT = 0 !
        0 = no (i.e., puffs not split)
        1 = yes (i.e., puffs are split)

     Chemical mechanism flag (MCHEM)    Default: 1     ! MCHEM = 0 !
        0 = chemical transformation not
            modeled
        1 = transformation rates computed
            internally (MESOPUFF II scheme)
        2 = user-specified transformation
            rates used
        3 = transformation rates computed
            internally (RIVAD/ARM3 scheme)
        4 = secondary organic aerosol formation
            computed (MESOPUFF II scheme for OH)
        5 = user-specified half-life with or
            without transfer to child species
        6 = transformation rates computed
            internally (Updated RIVAD scheme with
            ISORROPIA equilibrium)
        7 = transformation rates computed
            internally (Updated RIVAD scheme with
            ISORROPIA equilibrium and CalTech SOA)

     Aqueous phase transformation flag (MAQCHEM)
     (Used only if MCHEM = 6, or 7)     Default: 0     ! MAQCHEM = 0 !
        0 = aqueous phase transformation
            not modeled
        1 = transformation rates and wet
            scavenging coefficients adjusted
            for in-cloud aqueous phase reactions
            (adapted from RADM cloud model
             implementation in CMAQ/SCICHEM)

     Liquid Water Content flag (MLWC)
     (Used only if MAQCHEM = 1)         Default: 1     ! MLWC = 1 !
        0 = water content estimated from cloud cover
            and presence of precipitation
        1 = gridded cloud water data read from CALMET
            water content output files (filenames are
            the CALMET.DAT names PLUS the extension
            AUXEXT provided in Input Group 0)

     Wet removal modeled ? (MWET)       Default: 1     ! MWET = 0 !
        0 = no
        1 = yes

     Dry deposition modeled ? (MDRY)    Default: 1     ! MDRY = 0 !
        0 = no
        1 = yes
        (dry deposition method specified
         for each species in Input Group 3)


     Gravitational settling (plume tilt)
     modeled ? (MTILT)                  Default: 0     ! MTILT = 0 !
        0 = no
        1 = yes
        (puff center falls at the gravitational
         settling velocity for 1 particle species)

     Restrictions:
         - MDRY  = 1
```

```
    - NSPEC = 1  (must be particle species as well)
    - sg    = 0  GEOMETRIC STANDARD DEVIATION in Group 8 is
                 set to zero for a single particle diameter

Method used to compute dispersion
coefficients (MDISP)                  Default: 3     ! MDISP = 3 !

   1 = dispersion coefficients computed from measured values
       of turbulence, sigma v, sigma w
   2 = dispersion coefficients from internally calculated
       sigma v, sigma w using micrometeorological variables
       (u*, w*, L, etc.)
   3 = PG dispersion coefficients for RURAL areas (computed using
       the ISCST multi-segment approximation) and MP coefficients in
       urban areas
   4 = same as 3 except PG coefficients computed using
       the MESOPUFF II eqns.
   5 = CTDM sigmas used for stable and neutral conditions.
       For unstable conditions, sigmas are computed as in
       MDISP = 3, described above.  MDISP = 5 assumes that
       measured values are read

Sigma-v/sigma-theta, sigma-w measurements used? (MTURBVW)
(Used only if MDISP = 1 or 5)         Default: 3     ! MTURBVW = 3 !
   1 = use sigma-v or sigma-theta measurements
       from PROFILE.DAT to compute sigma-y
       (valid for METFM = 1, 2, 3, 4, 5)
   2 = use sigma-w measurements
       from PROFILE.DAT to compute sigma-z
       (valid for METFM = 1, 2, 3, 4, 5)
   3 = use both sigma-(v/theta) and sigma-w
       from PROFILE.DAT to compute sigma-y and sigma-z
       (valid for METFM = 1, 2, 3, 4, 5)
   4 = use sigma-theta measurements
       from PLMMET.DAT to compute sigma-y
       (valid only if METFM = 3)

Back-up method used to compute dispersion
when measured turbulence data are
missing (MDISP2)                      Default: 3     ! MDISP2 = 3 !
(used only if MDISP = 1 or 5)
   2 = dispersion coefficients from internally calculated
       sigma v, sigma w using micrometeorological variables
       (u*, w*, L, etc.)
   3 = PG dispersion coefficients for RURAL areas (computed using
       the ISCST multi-segment approximation) and MP coefficients in
       urban areas
   4 = same as 3 except PG coefficients computed using
       the MESOPUFF II eqns.

[DIAGNOSTIC FEATURE]
Method used for Lagrangian timescale for Sigma-y
(used only if MDISP=1,2 or MDISP2=1,2)
(MTAULY)                              Default: 0     ! MTAULY = 0 !
   0 = Draxler default 617.284 (s)
   1 = Computed as Lag. Length / (.75 q) -- after SCIPUFF
  10 <Direct user input (s)             -- e.g., 306.9


[DIAGNOSTIC FEATURE]
Method used for Advective-Decay timescale for Turbulence
(used only if MDISP=2 or MDISP2=2)
(MTAUADV)                             Default: 0     ! MTAUADV = 0 !
   0 = No turbulence advection
   1 = Computed (OPTION NOT IMPLEMENTED)
  10 <Direct user input (s)   -- e.g., 800
```



```
Method used to compute turbulence sigma-v &
sigma-w using micrometeorological variables
(Used only if MDISP = 2 or MDISP2 = 2)
(MCTURB)                              Default: 1     ! MCTURB = 1 !
   1 = Standard CALPUFF subroutines
   2 = AERMOD subroutines

PG sigma-y,z adj. for roughness?      Default: 0     ! MROUGH = 0 !
(MROUGH)
   0 = no
   1 = yes

Partial plume penetration of          Default: 1     ! MPARTL = 1 !
elevated inversion modeled for
point sources?
(MPARTL)
   0 = no
   1 = yes

Partial plume penetration of          Default: 1     ! MPARTLBA = 0 !
elevated inversion modeled for
buoyant area sources?
(MPARTLBA)
   0 = no
   1 = yes

Strength of temperature inversion     Default: 0     ! MTINV = 0 !
provided in PROFILE.DAT extended records?
(MTINV)
   0 = no (computed from measured/default gradients)
   1 = yes

PDF used for dispersion under convective conditions?
                                      Default: 0     ! MPDF = 0 !
(MPDF)
   0 = no
   1 = yes

Sub-Grid TIBL module used for shore line?
                                      Default: 0     ! MSGTIBL = 0 !
(MSGTIBL)
   0 = no
   1 = yes

Boundary conditions (concentration) modeled?
                                      Default: 0     ! MBCON = 0 !
(MBCON)
   0 = no
   1 = yes, using formatted BCON.DAT file
   2 = yes, using unformatted CONC.DAT file

Note:  MBCON > 0 requires that the last species modeled
       be 'BCON'.  Mass is placed in species BCON when
       generating boundary condition puffs so that clean
       air entering the modeling domain can be simulated
       in the same way as polluted air.  Specify zero
       emission of species BCON for all regular sources.

Individual source contributions saved?
                                      Default: 0     ! MSOURCE = 0 !
(MSOURCE)
   0 = no
   1 = yes


Analyses of fogging and icing impacts due to emissions from
arrays of mechanically-forced cooling towers can be performed
using CALPUFF in conjunction with a cooling tower emissions
```

processor (CTEMISS) and its associated postprocessors. Hourly emissions of water vapor and temperature from each cooling tower cell are computed for the current cell configuration and ambient conditions by CTEMISS. CALPUFF models the dispersion of these emissions and provides cloud information in a specialized format for further analysis. Output to FOG.DAT is provided in either 'plume mode' or 'receptor mode' format.

Configure for FOG Model output?
Default: 0 ! MFOG = 0 !
(MFOG)
0 = no
1 = yes - report results in PLUME Mode format
2 = yes - report results in RECEPTOR Mode format

Test options specified to see if
they conform to regulatory
values? (MREG) Default: 1 ! MREG = 0 !

0 = NO checks are made
1 = Technical options must conform to USEPA
Long Range Transport (LRT) guidance

METFM	1 or 2
AVET	60. (min)
PGTIME	60. (min)
MGAUSS	1
MCTADJ	3
MTRANS	1
MTIP	1
MRISE	1
MCHEM	1 or 3 (if modeling SOx, NOx)
MWET	1
MDRY	1
MDISP	2 or 3
MPDF	0 if MDISP=3 1 if MDISP=2
MROUGH	0
MPARTL	1
MPARTLBA	0
SYTDEP	550. (m)
MHFTSZ	0
SVMIN	0.5 (m/s)

!END!

INPUT GROUP: 3a, 3b -- Species list

Subgroup (3a)

The following species are modeled:

! CSPEC = ODOR ! !END!

GROUP NAME	SPECIES	MODELED (0=NO, 1=YES)	EMITTED (0=NO, 1=YES)	Dry DEPOSITED (0=NO,	OUTPUT GROUP NUMBER (0=NONE,

(Limit: 12 Characters in length)		1=COMPUTED-GAS 2=COMPUTED-PARTICLE 3=USER-SPECIFIED)	1=1st CGRUP, 2=2nd CGRUP, 3= etc.)

! ODOR =	1,	1,	1,	0 !

!END!

Note: The last species in (3a) must be 'BCON' when using the boundary condition option (MBCON > 0). Species BCON should typically be modeled as inert (no chem transformation or removal).

Subgroup (3b)

The following names are used for Species-Groups in which results for certain species are combined (added) prior to output. The CGRUP name will be used as the species name in output files. Use this feature to model specific particle-size distributions by treating each size-range as a separate species. Order must be consistent with 3(a) above.

INPUT GROUP: 4 -- Map Projection and Grid control parameters

Projection for all (X,Y):

Map projection
(PMAP) Default: UTM ! PMAP = UTM !

UTM :	Universal Transverse Mercator
TTM :	Tangential Transverse Mercator
LCC :	Lambert Conformal Conic
PS :	Polar Stereographic
EM :	Equatorial Mercator
LAZA :	Lambert Azimuthal Equal Area

False Easting and Northing (km) at the projection origin
(Used only if PMAP= TTM, LCC, or LAZA)
(FEAST) Default=0.0 ! FEAST = 0 !
(FNORTH) Default=0.0 ! FNORTH = 0 !

UTM zone (1 to 60)
(Used only if PMAP=UTM)
(IUTMZN) No Default ! IUTMZN = 54 !

Hemisphere for UTM projection?
(Used only if PMAP=UTM)
(UTMHEM) Default: N ! UTMHEM = S !
N : Northern hemisphere projection
S : Southern hemisphere projection

Latitude and Longitude (decimal degrees) of projection origin
(Used only if PMAP= TTM, LCC, PS, EM, or LAZA)
(RLAT0) No Default ! RLAT0 = 0.00N !

(RLON0) No Default ! RLON0 = 0.00E !

TTM : RLON0 identifies central (true N/S) meridian of projection
RLAT0 selected for convenience
LCC : RLON0 identifies central (true N/S) meridian of projection
RLAT0 selected for convenience
PS : RLON0 identifies central (grid N/S) meridian of projection
RLAT0 selected for convenience
EM : RLON0 identifies central meridian of projection
RLAT0 is REPLACED by 0.0N (Equator)
LAZA: RLON0 identifies longitude of tangent-point of mapping plane
RLAT0 identifies latitude of tangent-point of mapping plane

Matching parallel(s) of latitude (decimal degrees) for projection
(Used only if PMAP= LCC or PS)
(XLAT1) No Default ! XLAT1 = 30S !
(XLAT2) No Default ! XLAT2 = 60S !

LCC : Projection cone slices through Earth's surface at XLAT1 and XLAT2
PS : Projection plane slices through Earth at XLAT1
(XLAT2 is not used)

Note: Latitudes and longitudes should be positive, and include a letter N,S,E, or W indicating north or south latitude, and east or west longitude. For example,
35.9 N Latitude = 35.9N
118.7 E Longitude = 118.7E

Datum-region

The Datum-Region for the coordinates is identified by a character string. Many mapping products currently available use the model of the Earth known as the World Geodetic System 1984 (WGS-84). Other local models may be in use, and their selection in CALMET will make its output consistent with local mapping products. The list of Datum-Regions with official transformation parameters is provided by the National Imagery and Mapping Agency (NIMA).

NIMA Datum - Regions(Examples)

WGS-84	WGS-84 Reference Ellipsoid and Geoid, Global coverage (WGS84)
NAS-C	NORTH AMERICAN 1927 Clarke 1866 Spheroid, MEAN FOR CONUS (NAD27)
NAR-C	NORTH AMERICAN 1983 GRS 80 Spheroid, MEAN FOR CONUS (NAD83)
NWS-84	NWS 6370KM Radius, Sphere
ESR-S	ESRI REFERENCE 6371KM Radius, Sphere

Datum-region for output coordinates
(DATUM) Default: WGS-84 ! DATUM = WGS-84 !

METEOROLOGICAL Grid (outermost if nested CALMET grids are used):

Rectangular grid defined for projection PMAP,
with X the Easting and Y the Northing coordinate

No. X grid cells (NX) No default ! NX = 80 !
No. Y grid cells (NY) No default ! NY = 80 !
No. vertical layers (NZ) No default ! NZ = 12 !

Grid spacing (DGRIDKM) No default ! DGRIDKM = 0.2 !
Units: km

Cell face heights

(ZFACE(nz+1)) No defaults
Units: m
! ZFACE = 0.0, 20.0, 30.0, 40.0, 50.0, 70.0, 90.0, 100.0, 250.0, 500.0, 1000.0, 1500.0, 2000.0 !

Reference Coordinates
of SOUTHWEST corner of
grid cell(1, 1):

X coordinate (XORIGKM) No default ! XORIGKM = 737.7080 !
Y coordinate (YORIGKM) No default ! YORIGKM = 5839.6350 !
Units: km

COMPUTATIONAL Grid:

The computational grid is identical to or a subset of the MET. grid.
The lower left (LL) corner of the computational grid is at grid point (IBCOMP, JBCOMP) of the MET. grid. The upper right (UR) corner of the computational grid is at grid point (IECOMP, JECOMP) of the MET. grid.
The grid spacing of the computational grid is the same as the MET. grid.

X index of LL corner (IBCOMP) No default ! IBCOMP = 1 !
(1 <= IBCOMP <= NX)

Y index of LL corner (JBCOMP) No default ! JBCOMP = 1 !
(1 <= JBCOMP <= NY)

X index of UR corner (IECOMP) No default ! IECOMP = 80 !
(1 <= IECOMP <= NX)

Y index of UR corner (JECOMP) No default ! JECOMP = 80 !
(1 <= JECOMP <= NY)

SAMPLING Grid (GRIDDED RECEPTORS):

The lower left (LL) corner of the sampling grid is at grid point (IBSAMP, JBSAMP) of the MET. grid. The upper right (UR) corner of the sampling grid is at grid point (IESAMP, JESAMP) of the MET. grid.
The sampling grid must be identical to or a subset of the computational grid. It may be a nested grid inside the computational grid.
The grid spacing of the sampling grid is DGRIDKM/MESHDN.

Logical flag indicating if gridded
receptors are used (LSAMP) Default: T ! LSAMP = F !
(T=yes, F=no)

X index of LL corner (IBSAMP) No default ! IBSAMP = 1 !
(IBCOMP <= IBSAMP <= IECOMP)

Y index of LL corner (JBSAMP) No default ! JBSAMP = 1 !
(JBCOMP <= JBSAMP <= JECOMP)

X index of UR corner (IESAMP) No default ! IESAMP = 2 !
(IBCOMP <= IESAMP <= IECOMP)

Y index of UR corner (JESAMP) No default ! JESAMP = 2 !
(JBCOMP <= JESAMP <= JECOMP)

Nesting factor of the sampling
grid (MESHDN) Default: 1 ! MESHDN = 1 !
(MESHDN is an integer >= 1)

```
!END!

------------------------------------------------------------------------------


INPUT GROUP: 5 -- Output Options
--------------
                                        *                       *
     FILE                          DEFAULT VALUE             VALUE THIS RUN
     ----                          -------------             --------------

   Concentrations (ICON)                1                  ! ICON = 1 !
   Dry Fluxes (IDRY)                    1                  ! IDRY = 0 !
   Wet Fluxes (IWET)                    1                  ! IWET = 0 !
   2D Temperature (IT2D)                0                  ! IT2D = 0 !
   2D Density (IRHO)                    0                  ! IRHO = 0 !
   Relative Humidity (IVIS)             1                  ! IVIS = 0 !
    (relative humidity file is
     required for visibility
     analysis)
   Use data compression option in output file?
   (LCOMPRS)                          Default: T         ! LCOMPRS = T !

   *
    0 = Do not create file, 1 = create file


    QA PLOT FILE OUTPUT OPTION:

       Create a standard series of output files (e.g.
       locations of sources, receptors, grids ...)
       suitable for plotting?
       (IQAPLOT)                      Default: 1         ! IQAPLOT = 0 !
         0 = no
         1 = yes

    DIAGNOSTIC PUFF-TRACKING OUTPUT OPTION:

       Puff locations and properties reported to
       PFTRAK.DAT file for postprocessing?
       (IPFTRAK)                      Default: 0         ! IPFTRAK = 0 !
         0 = no
         1 = yes, update puff output at end of each timestep
         2 = yes, update puff output at end of each sampling step

    DIAGNOSTIC MASS FLUX OUTPUT OPTIONS:

       Mass flux across specified boundaries
       for selected species reported?
       (IMFLX)                        Default: 0         ! IMFLX = 0 !
         0 = no
         1 = yes (FLUXBDY.DAT and MASSFLX.DAT filenames
                  are specified in Input Group 0)

       Mass balance for each species
       reported?
       (IMBAL)                        Default: 0         ! IMBAL = 0 !
         0 = no
         1 = yes (MASSBAL.DAT filename is
              specified in Input Group 0)


    NUMERICAL RISE OUTPUT OPTION:

       Create a file with plume properties for each rise
       increment, for each model timestep?
       This applies to sources modeled with numerical rise
```



```
       and is limited to ONE source in the run.
       (INRISE)                       Default: 0         ! INRISE = 0 !
         0 = no
         1 = yes (RISE.DAT filename is
                  specified in Input Group 0)


    LINE PRINTER OUTPUT OPTIONS:

       Print concentrations (ICPRT)   Default: 0         ! ICPRT = 0 !
       Print dry fluxes (IDPRT)       Default: 0         ! IDPRT = 0 !
       Print wet fluxes (IWPRT)       Default: 0         ! IWPRT = 0 !
       (0 = Do not print, 1 = Print)

       Concentration print interval
       (ICFRQ) in timesteps           Default: 1         ! ICFRQ = 1 !
       Dry flux print interval
       (IDFRQ) in timesteps           Default: 1         ! IDFRQ = 1 !
       Wet flux print interval
       (IWFRQ) in timesteps           Default: 1         ! IWFRQ = 1 !

       Units for Line Printer Output
       (IPRTU)                        Default: 1         ! IPRTU = 5 !
                          for              for
                    Concentration    Deposition
           1 =         g/m**3          g/m**2/s
           2 =        mg/m**3         mg/m**2/s
           3 =        ug/m**3         ug/m**2/s
           4 =        ng/m**3         ng/m**2/s
           5 =       Odour Units
           6 =        TBq/m**3        TBq/m**2/s    TBq=terabecquerel
           7 =        GBq/m**3        GBq/m**2/s    GBq=gigabecquerel
           8 =         Bq/m**3         Bq/m**2/s    Bq=becquerel
(disintegrations/s)

       Messages tracking progress of run
       written to the screen ?
       (IMESG)                        Default: 2         ! IMESG = 2 !
         0 = no
         1 = yes (advection step, puff ID)
         2 = yes (YYYYJJJHH, # old puffs, # emitted puffs)


     SPECIES (or GROUP for combined species) LIST FOR OUTPUT OPTIONS

                    ---- CONCENTRATIONS ----   ------ DRY FLUXES ------   ------
WET FLUXES ------   -- MASS FLUX --
   SPECIES
   /GROUP         PRINTED?  SAVED ON DISK?   PRINTED?  SAVED ON DISK?   PRINTED?
SAVED ON DISK?   SAVED ON DISK?
   -------        ------------------------   ------------------------
-----------------------   ---------------
!         ODOR =     1,           1,           1,           0,           1,
     0,           0   !


  Note:  Species BCON (for MBCON > 0) does not need to be saved on disk.


     OPTIONS FOR PRINTING "DEBUG" QUANTITIES (much output)

       Logical for debug output
       (LDEBUG)                                 Default: F     ! LDEBUG = F !

       First puff to track
       (IPFDEB)                                 Default: 1     ! IPFDEB = 1 !

       Number of puffs to track
```

```
       (NPFDEB)                                Default: 1     ! NPFDEB = 1000 !

       Met. period to start output
       (NN1)                                   Default: 1     ! NN1 = 1 !

       Met. period to end output
       (NN2)                                   Default: 10    ! NN2 = 10 !

!END!


--------------------------------------------------------------------------------


INPUT GROUP: 6a, 6b, & 6c -- Subgrid scale complex terrain inputs
-------------------------

---------------
Subgroup (6a)
---------------
       Number of terrain features (NHILL)      Default: 0     ! NHILL = 0 !

       Number of special complex terrain
       receptors  (NCTREC)                     Default: 0     ! NCTREC = 0 !

       Terrain and CTSG Receptor data for
       CTSG hills input in CTDM format ?
       (MHILL)                                 No Default     ! MHILL = 2 !
       1 = Hill and Receptor data created
           by CTDM processors & read from
           HILL.DAT and HILLRCT.DAT files
       2 = Hill data created by OPTHILL &
           input below in Subgroup (6b);
           Receptor data in Subgroup (6c)

       Factor to convert horizontal dimensions Default: 1.0   ! XHILL2M = 1.0 !
       to meters (MHILL=1)

       Factor to convert vertical dimensions   Default: 1.0   ! ZHILL2M = 1.0 !
       to meters (MHILL=1)

       X-origin of CTDM system relative to     No Default     ! XCTDMKM = 0.0 !
       CALPUFF coordinate system, in Kilometers (MHILL=1)

       Y-origin of CTDM system relative to     No Default     ! YCTDMKM = 0.0 !
       CALPUFF coordinate system, in Kilometers (MHILL=1)

! END !

---------------
Subgroup (6b)
---------------

                     1 **
     HILL information


HILL          XC        YC       THETAH  ZGRID  RELIEF    EXPO 1    EXPO 2
SCALE 1    SCALE 2    AMAX1     AMAX2
 NO.          (km)      (km)      (deg.)   (m)     (m)       (m)       (m)
(m)        (m)       (m)       (m)
----         ----      ----      ------  -----  ------    ------    ------
-------    -------    -----     -----


---------------
Subgroup (6c)
---------------
```



```
    COMPLEX TERRAIN RECEPTOR INFORMATION

                       XRCT         YRCT        ZRCT          XHH
                       (km)         (km)         (m)
                      ------       -----      ------         ----


-------------------
1
     Description of Complex Terrain Variables:
          XC, YC  = Coordinates of center of hill
          THETAH  = Orientation of major axis of hill (clockwise from
                    North)
          ZGRID   = Height of the  0  of the grid above mean sea
                    level
          RELIEF  = Height of the crest of the hill above the grid elevation
          EXPO 1  = Hill-shape exponent for the major axis
          EXPO 2  = Hill-shape exponent for the major axis
          SCALE 1 = Horizontal length scale along the major axis
          SCALE 2 = Horizontal length scale along the minor axis
          AMAX    = Maximum allowed axis length for the major axis
          BMAX    = Maximum allowed axis length for the major axis

          XRCT, YRCT = Coordinates of the complex terrain receptors
          ZRCT    = Height of the ground (MSL) at the complex terrain
                    Receptor
          XHH     = Hill number associated with each complex terrain receptor
                    (NOTE: MUST BE ENTERED AS A REAL NUMBER)

   **
     NOTE: DATA for each hill and CTSG receptor are treated as a separate
           input subgroup and therefore must end with an input group terminator.
--------------------------------------------------------------------------------


INPUT GROUP: 7 -- Chemical parameters for dry deposition of gases
--------------

      SPECIES     DIFFUSIVITY      ALPHA STAR      REACTIVITY    MESOPHYLL
RESISTANCE     HENRY'S LAW COEFFICIENT
       NAME         (cm**2/s)                                          (s/cm)
                 (dimensionless)
       -------     -----------      ----------      ----------
--------------------     ------------------------
* DRYGAS = *

!END!


--------------------------------------------------------------------------------


INPUT GROUP: 8 -- Size parameters for dry deposition of particles
--------------

     For SINGLE SPECIES, the mean and standard deviation are used to
     compute a deposition velocity for NINT (see group 9) size-ranges,
     and these are then averaged to obtain a mean deposition velocity.

     For GROUPED SPECIES, the size distribution should be explicitly
     specified (by the 'species' in the group), and the standard deviation
     for each should be entered as 0.  The model will then use the
     deposition velocity for the stated mean diameter.

      SPECIES      GEOMETRIC MASS MEAN        GEOMETRIC STANDARD
       NAME             DIAMETER                   DEVIATION
```

```
                    (microns)                (microns)
     -------      -------------------      ------------------
* DRYPART = *
!END!


-------------------------------------------------------------------------------


INPUT GROUP: 9 -- Miscellaneous dry deposition parameters
--------------

     Reference cuticle resistance (s/cm)
     (RCUTR)                          Default: 30    ! RCUTR = 30 !
     Reference ground resistance  (s/cm)
     (RGR)                            Default: 10    ! RGR = 10 !
     Reference pollutant reactivity
     (REACTR)                         Default: 8     ! REACTR = 8 !

     Number of particle-size intervals used to
     evaluate effective particle deposition velocity
     (NINT)                           Default: 9     ! NINT = 9 !

     Vegetation state in unirrigated areas
     (IVEG)                           Default: 1     ! IVEG = 1 !
        IVEG=1 for active and unstressed vegetation
        IVEG=2 for active and stressed vegetation
        IVEG=3 for inactive vegetation

!END!


-------------------------------------------------------------------------------


INPUT GROUP: 10 -- Wet Deposition Parameters
---------------


                     Scavenging Coefficient -- Units: (sec)**(-1)

       Pollutant      Liquid Precip.       Frozen Precip.
       ---------      --------------       --------------
* WETDEPOS = *
!END!


-------------------------------------------------------------------------------


INPUT GROUP: 11a, 11b -- Chemistry Parameters
---------------------

---------------
Subgroup (11a)
---------------

     Several parameters are needed for one or more of the chemical
transformation
     mechanisms.  Those used for each mechanism are:
                                      M                   B
                                      A  B  R  R  R     C  B        N
                                   B  V  C  N  N  N  M  K  C  O     D
                                   C  M  G  K  I  I  I  H  H  K  F  V  E
                               M   K  N  N  N  T  T  T  2  2  P  R  C  C
                               O   O  H  H  H  E  E  E  O  O  M  A  N  A
     Mechanism (MCHEM)         Z   3  3  3  3  1  2  3  2  2  F  C  X  Y
     --------------------    ------------------------------------------
```



```
     0 None                    .  .  .  .  .  .  .  .  .  .  .  .  .  .
     1 MESOPUFF II             X  X  .  .  X  X  X  X  .  .  .  .  .  .
     2 User Rates              .  .  .  .  .  .  .  .  .  .  .  .  .  .
     3 RIVAD                   X  X  .  .  X  .  .  .  .  .  .  .  .  .
     4 SOA                     X  X  .  .  .  .  .  .  .  .  X  X  X  .
     5 Radioactive Decay       .  .  .  .  .  .  .  .  .  .  .  .  .  X
     6 RIVAD/ISORRPIA          X  X  X  X  X  X  .  .  X  X  .  .  .  .
     7 RIVAD/ISORRPIA/SOA      X  X  X  X  X  X  .  .  X  X  X  X  .  .


     Ozone data input option (MOZ)     Default: 1            ! MOZ = 1 !
     (Used only if MCHEM = 1,3,4,6 or 7)
        0 = use a monthly background ozone value
        1 = read hourly ozone concentrations from
            the OZONE.DAT data file

     Monthly ozone concentrations in ppb (BCKO3)
     (Used only if MCHEM = 1,3,4,6, or 7 and either
        MOZ = 0, or
        MOZ = 1 and all hourly O3 data missing)
                                       Default: 12*80.
     ! BCKO3 = 80.00, 80.00, 80.00, 80.00, 80.00, 80.00, 80.00, 80.00, 80.00,
80.00, 80.00, 80.00 !

     Ammonia data option (MNH3)        Default: 0            ! MNH3 = 0 !
     (Used only if MCHEM = 6 or 7)
        0 = use monthly background ammonia values (BCKNH3) - no vertical
variation
        1 = read monthly background ammonia values for each layer from
            the NH3Z.DAT data file

     Ammonia vertical averaging option (MAVGNH3)
     (Used only if MCHEM = 6 or 7, and MNH3 = 1)
        0 = use NH3 at puff center height (no averaging is done)
        1 = average NH3 values over vertical extent of puff
                                       Default: 1            ! MAVGNH3 = 1 !

     Monthly ammonia concentrations in ppb (BCKNH3)
     (Used only if MCHEM = 1 or 3, or
                 if MCHEM = 6 or 7, and MNH3 = 0)
                                       Default: 12*10.
     ! BCKNH3 = 10.00, 10.00, 10.00, 10.00, 10.00, 10.00, 10.00, 10.00, 10.00,
10.00, 10.00, 10.00 !

     Nighttime SO2 loss rate in %/hour (RNITE1)
     (Used only if MCHEM = 1, 6 or 7)
     This rate is used only at night for MCHEM=1
     and is added to the computed rate both day
     and night for MCHEM=6,7 (heterogeneous reactions)
                                       Default: 0.2          ! RNITE1 = 0.2 !

     Nighttime NOx loss rate in %/hour (RNITE2)
     (Used only if MCHEM = 1)
                                       Default: 2.0          ! RNITE2 = 2 !

     Nighttime HNO3 formation rate in %/hour (RNITE3)
     (Used only if MCHEM = 1)
                                       Default: 2.0          ! RNITE3 = 2 !

     H2O2 data input option (MH2O2)    Default: 1            ! MH2O2 = 1 !
     (Used only if MCHEM = 6 or 7, and MAQCHEM = 1)
        0 = use a monthly background H2O2 value
        1 = read hourly H2O2 concentrations from
            the H2O2.DAT data file

     Monthly H2O2 concentrations in ppb (BCKH2O2)
     (Used only if MQACHEM = 1 and either
        MH2O2 = 0 or
```

```
      MH2O2 = 1 and all hourly H2O2 data missing)
                                        Default: 12*1.
    ! BCKH2O2 = 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00,
1.00, 1.00 !


  --- Data for SECONDARY ORGANIC AEROSOL (SOA) Options
    (used only if MCHEM = 4 or 7)

    The MCHEM = 4 SOA module uses monthly values of:
         Fine particulate concentration in ug/m^3 (BCKPMF)
         Organic fraction of fine particulate     (OFRAC)
         VOC / NOX ratio (after reaction)         (VCNX)

    The MCHEM = 7 SOA module uses monthly values of:
         Fine particulate concentration in ug/m^3 (BCKPMF)
         Organic fraction of fine particulate     (OFRAC)

    These characterize the air mass when computing
    the formation of SOA from VOC emissions.
    Typical values for several distinct air mass types are:

       Month    1    2    3    4    5    6    7    8    9   10   11   12
                Jan  Feb  Mar  Apr  May  Jun  Jul  Aug  Sep  Oct  Nov  Dec

    Clean Continental
       BCKPMF   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.
       OFRAC  .15  .15  .20  .20  .20  .20  .20  .20  .20  .20  .20  .15
       VCNX    50.  50.  50.  50.  50.  50.  50.  50.  50.  50.  50.  50.

    Clean Marine (surface)
       BCKPMF  .5   .5   .5   .5   .5   .5   .5   .5   .5   .5   .5   .5
       OFRAC  .25  .25  .30  .30  .30  .30  .30  .30  .30  .30  .30  .25
       VCNX    50.  50.  50.  50.  50.  50.  50.  50.  50.  50.  50.  50.

    Urban - low biogenic (controls present)
       BCKPMF  30.  30.  30.  30.  30.  30.  30.  30.  30.  30.  30.  30.
       OFRAC  .20  .20  .25  .25  .25  .25  .25  .25  .20  .20  .20  .20
       VCNX     4.   4.   4.   4.   4.   4.   4.   4.   4.   4.   4.   4.

    Urban - high biogenic (controls present)
       BCKPMF  60.  60.  60.  60.  60.  60.  60.  60.  60.  60.  60.  60.
       OFRAC  .25  .25  .30  .30  .30  .55  .55  .55  .35  .35  .35  .25
       VCNX    15.  15.  15.  15.  15.  15.  15.  15.  15.  15.  15.  15.

    Regional Plume
       BCKPMF  20.  20.  20.  20.  20.  20.  20.  20.  20.  20.  20.  20.
       OFRAC  .20  .20  .25  .35  .25  .40  .40  .40  .30  .30  .30  .20
       VCNX    15.  15.  15.  15.  15.  15.  15.  15.  15.  15.  15.  15.

    Urban - no controls present
       BCKPMF 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100.
       OFRAC  .30  .30  .35  .35  .35  .55  .55  .55  .35  .35  .35  .30
       VCNX     2.   2.   2.   2.   2.   2.   2.   2.   2.   2.   2.   2.

    Default: Clean Continental
    ! BCKPMF = 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00, 1.00,
1.00, 1.00 !
    ! OFRAC = 0.15, 0.15, 0.20, 0.20, 0.20, 0.20, 0.20, 0.20, 0.20, 0.20, 0.20,
0.15 !
    ! VCNX = 50.00, 50.00, 50.00, 50.00, 50.00, 50.00, 50.00, 50.00, 50.00,
50.00, 50.00, 50.00 !

 --- End Data for SECONDARY ORGANIC AEROSOL (SOA) Options


    Number of half-life decay specification blocks provided in Subgroup 11b
    (Used only if MCHEM = 5)
```



```
    (NDECAY)                                  Default: 0      ! NDECAY = 0 !

!END!


--------------
Subgroup (11b)
--------------

    Each species modeled may be assigned a decay half-life (sec), and the
associated
    mass lost may be assigned to one or more other modeled species using a mass
yield
    factor. This information is used only for MCHEM=5.

    Provide NDECAY blocks assigning the half-life for a parent species and mass
yield
    factors for each child species (if any) produced by the decay.
    Set HALF_LIFE=0.0 for NO decay (infinite half-life).

                              a           b
       SPECIES      Half-Life   Mass Yield
        NAME          (sec)       Factor
       -------      ---------   ----------
* SPECHLLIST = *

--------
   a
    Specify a half life that is greater than or equal to zero for 1 parent
species
    in each block, and set the yield factor for this species to -1
   b
    Specify a yield factor that is greater than or equal to zero for 1 or more
child
    species in each block, and set the half-life for each of these species to
-1

    NOTE: Assignments in each block are treated as a separate input
          subgroup and therefore must end with an input group terminator.
          If NDECAY=0, no assignments and input group terminators should
appear.

-------------------------------------------------------------------------------


INPUT GROUP: 12 -- Misc. Dispersion and Computational Parameters
--------------

    Horizontal size of puff (m) beyond which
    time-dependent dispersion equations (Heffter)
    are used to determine sigma-y and
    sigma-z (SYTDEP)                          Default: 550.   ! SYTDEP = 550 !

    Switch for using Heffter equation for sigma z
    as above (0 = Not use Heffter; 1 = use Heffter
    (MHFTSZ)                                  Default: 0      ! MHFTSZ = 0 !

    Stability class used to determine plume
    growth rates for puffs above the boundary
    layer (JSUP)                              Default: 5      ! JSUP = 5 !

    Vertical dispersion constant for stable
    conditions (k1 in Eqn. 2.7-3)  (CONK1)    Default: 0.01   ! CONK1 = 0.01 !

    Vertical dispersion constant for neutral/
    unstable conditions (k2 in Eqn. 2.7-4)
    (CONK2)                                   Default: 0.1    ! CONK2 = 0.1 !
```

```
     Factor for determining Transition-point from
     Schulman-Scire to Huber-Snyder Building Downwash
     scheme (SS used for Hs <Hb + TBD * HL)
     (TBD)                                  Default: 0.5    ! TBD = 0.5 !
        TBD <0   ==> always use Huber-Snyder
        TBD = 1.5 ==> always use Schulman-Scire
        TBD = 0.5 ==> ISC Transition-point

     Range of land use categories for which
     urban dispersion is assumed
     (IURB1, IURB2)                         Default: 10     ! IURB1 = 10 !
                                                     19     ! IURB2 = 19 !

     Site characterization parameters for single-point Met data files ---------
     (needed for METFM = 2,3,4,5)

        Land use category for modeling domain
        (ILANDUIN)                          Default: 20     ! ILANDUIN = 20
!

        Roughness length (m) for modeling domain
        (ZOIN)                              Default: 0.25   ! ZOIN = .25 !

        Leaf area index for modeling domain
        (XLAIIN)                            Default: 3.0    ! XLAIIN = 3.0 !

        Elevation above sea level (m)
        (ELEVIN)                            Default: 0.0    ! ELEVIN = .0 !

        Latitude (degrees) for met location
        (XLATIN)                            Default: -999.  ! XLATIN =
-999.0 !

        Longitude (degrees) for met location
        (XLONIN)                            Default: -999.  ! XLONIN =
-999.0 !

     Specialized information for interpreting single-point Met data files -----

        Anemometer height (m) (Used only if METFM = 2,3)
        (ANEMHT)                            Default: 10.    ! ANEMHT = 10.0
!

        Form of lateral turbulance data in PROFILE.DAT file
        (Used only if METFM = 4,5 or MTURBVW = 1 or 3)
        (ISIGMAV)                           Default: 1      ! ISIGMAV = 1 !
            0 = read sigma-theta
            1 = read sigma-v

        Choice of mixing heights (Used only if METFM = 4)
        (IMIXCTDM)                          Default: 0      ! IMIXCTDM = 0 !
            0 = read PREDICTED mixing heights
            1 = read OBSERVED mixing heights

     Maximum length of a slug (met. grid units)
     (XMXLEN)                               Default: 1.0    ! XMXLEN = 1 !

     Maximum travel distance of a puff/slug (in
     grid units) during one sampling step
     (XSAMLEN)                              Default: 1.0    ! XSAMLEN = 1 !

     Maximum Number of slugs/puffs release from
     one source during one time step
     (MXNEW)                                Default: 99     ! MXNEW = 99 !

     Maximum Number of sampling steps for
     one puff/slug during one time step
     (MXSAM)                                Default: 99     ! MXSAM = 99 !
```



```
     Number of iterations used when computing
     the transport wind for a sampling step
     that includes gradual rise (for CALMET
     and PROFILE winds)
     (NCOUNT)                               Default: 2      ! NCOUNT = 2 !

     Minimum sigma y for a new puff/slug (m)
     (SYMIN)                                Default: 1.0    ! SYMIN = 1 !

     Minimum sigma z for a new puff/slug (m)
     (SZMIN)                                Default: 1.0    ! SZMIN = 1 !

     Maximum sigma z (m) allowed to avoid
     numerical problem in calculating virtual
     time or distance.  Cap should be large
     enough to have no influence on normal events.
     Enter a negative cap to disable.
     (SZCAP_M)                              Default: 5.0e06 ! SZCAP_M =
5000000 !

     Default minimum turbulence velocities sigma-v and sigma-w
     for each stability class over land and over water (m/s)
     (SVMIN(12) and SWMIN(12))

                     ----------  LAND  ----------       ---------  WATER
----------
        Stab Class :  A    B    C    D    E    F         A    B    C    D    E
 F
                     ---  ---  ---  ---  ---  ---       ---  ---  ---  ---  ---
---
     Default SVMIN : .50, .50, .50, .50, .50, .50,      .37, .37, .37, .37, .37,
.37
     Default SWMIN : .20, .12, .08, .06, .03, .016,     .20, .12, .08, .06, .03,
.016

          ! SVMIN = 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.37, 0.37, 0.37, 0.37, 0.37,
0.37 !
          ! SWMIN = 0.2, 0.12, 0.08, 0.06, 0.03, 0.016, 0.2, 0.12, 0.08, 0.06,
0.03, 0.016 !

     Divergence criterion for dw/dz across puff
     used to initiate adjustment for horizontal
     convergence (1/s)
     Partial adjustment starts at CDIV(1), and
     full adjustment is reached at CDIV(2)
     (CDIV(2))                              Default: 0.0,0.0  ! CDIV = 0, 0
!

     Search radius (number of cells) for nearest
     land and water cells used in the subgrid
     TIBL module
     (NLUTIBL)                              Default: 4      ! NLUTIBL = 4 !

     Minimum wind speed (m/s) allowed for
     non-calm conditions. Also used as minimum
     speed returned when using power-law
     extrapolation toward surface
     (WSCALM)                               Default: 0.5    ! WSCALM = 0.5 !

     Maximum mixing height (m)
     (XMAXZI)                               Default: 3000.  ! XMAXZI = 3000
!

     Minimum mixing height (m)
     (XMINZI)                               Default: 50.    ! XMINZI = 50 !

     Default wind speed classes --
```

```
     5 upper bounds (m/s) are entered;
     the 6th class has no upper limit
     (WSCAT(5))                        Default   :
                                       ISC RURAL : 1.54, 3.09, 5.14, 8.23, 10.8
(10.8+)

                                 Wind Speed Class :  1     2     3     4     5
                                                     ---   ---   ---   ---   ---
                                          ! WSCAT = 1.54, 3.09, 5.14, 8.23, 10.8 !

     Default wind speed profile power-law
     exponents for stabilities 1-6
     (PLXO(6))                         Default   : ISC RURAL values
                                       ISC RURAL : .07, .07, .10, .15, .35, .55
                                       ISC URBAN : .15, .15, .20, .25, .30, .30

                                  Stability Class :  A     B     C     D     E
F                                                    ---   ---   ---   ---   ---
---
                                          ! PLXO = 0.07, 0.07, 0.1, 0.15, 0.35,
0.55 !

     Default potential temperature gradient
     for stable classes E, F (degK/m)
     (PTGO(2))                         Default: 0.020, 0.035
                                          ! PTGO = 0.02, 0.035 !

     Default plume path coefficients for
     each stability class (used when option
     for partial plume height terrain adjustment
     is selected -- MCTADJ=3)
     (PPC(6))                     Stability Class :  A     B     C     D     E
F                                    Default  PPC : .50,  .50,  .50,  .50,  .35,
.35
                                                    ---   ---   ---   ---   ---
---
                                          ! PPC = 0.5, 0.5, 0.5, 0.5, 0.35, 0.35
!

     Slug-to-puff transition criterion factor
     equal to sigma-y/length of slug
     (SL2PF)                              Default: 10.        ! SL2PF = 10 !

     Puff-splitting control variables -------------------------

       VERTICAL SPLIT
       --------------

       Number of puffs that result every time a puff
       is split - nsplit=2 means that 1 puff splits
       into 2
       (NSPLIT)                           Default:   3        ! NSPLIT = 3 !

       Time(s) of a day when split puffs are eligible to
       be split once again; this is typically set once
       per day, around sunset before nocturnal shear develops.
       24 values: 0 is midnight (00:00) and 23 is 11 PM (23:00)
       0=do not re-split    1=eligible for re-split
       (IRESPLIT(24))                     Default:  Hour 17 = 1
       ! IRESPLIT = 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,0,0,0,0,0,0 !

       Split is allowed only if last hour's mixing
       height (m) exceeds a minimum value
       (ZISPLIT)                          Default: 100.       ! ZISPLIT = 100 !

       Split is allowed only if ratio of last hour's
```



```
       mixing ht to the maximum mixing ht experienced
       by the puff is less than a maximum value (this
       postpones a split until a nocturnal layer develops)
       (ROLDMAX)                          Default: 0.25       ! ROLDMAX = 0.25
!


       HORIZONTAL SPLIT
       ----------------

       Number of puffs that result every time a puff
       is split - nsplith=5 means that 1 puff splits
       into 5
       (NSPLITH)                          Default:   5        ! NSPLITH = 5 !

       Minimum sigma-y (Grid Cells Units) of puff
       before it may be split
       (SYSPLITH)                         Default:  1.0       ! SYSPLITH = 1 !

       Minimum puff elongation rate (SYSPLITH/hr) due to
       wind shear, before it may be split
       (SHSPLITH)                         Default:  2.        ! SHSPLITH = 2 !

       Minimum concentration (g/m^3) of each
       species in puff before it may be split
       Enter array of NSPEC values; if a single value is
       entered, it will be used for ALL species
       (CNSPLITH)                         Default:  1.0E-07   ! CNSPLITH = 0 !

     Integration control variables ------------------------

       Fractional convergence criterion for numerical SLUG
       sampling integration
       (EPSSLUG)                          Default:   1.0e-04  ! EPSSLUG =
0.0001 !

       Fractional convergence criterion for numerical AREA
       source integration
       (EPSAREA)                          Default:   1.0e-06  ! EPSAREA =
1E-006 !

       Trajectory step-length (m) used for numerical rise
       integration
       (DSRISE)                           Default:   1.0      ! DSRISE = 1 !

       Boundary Condition (BC) Puff control variables -------------------------

       Minimum height (m) to which BC puffs are mixed as they are emitted
       (MBCON=2 ONLY).  Actual height is reset to the current mixing height
       at the release point if greater than this minimum.
       (HTMINBC)                          Default:   500.     ! HTMINBC = 500 !

       Search radius (km) about a receptor for sampling nearest BC puff.
       BC puffs are typically emitted with a spacing of one grid cell
       length, so the search radius should be greater than DGRIDKM.
       (RSAMPBC)                          Default:   10.      ! RSAMPBC = 10 !

       Near-Surface depletion adjustment to concentration profile used when
       sampling BC puffs?
       (MDEPBC)                           Default:   1        ! MDEPBC = 1 !
          0 = Concentration is NOT adjusted for depletion
          1 = Adjust Concentration for depletion

!END!

------------------------------------------------------------------------------
```

```
INPUT GROUPS: 13a, 13b, 13c, 13d -- Point source parameters
---------------------------------

---------------
Subgroup (13a)
---------------

     Number of point sources with
     parameters provided below      (NPT1)  No default  ! NPT1 = 0 !

     Units used for point source
     emissions below                (IPTU)  Default: 1  ! IPTU = 1 !
           1 =        g/s
           2 =       kg/hr
           3 =       lb/hr
           4 =     tons/yr
           5 =     Odour Unit * m**3/s  (vol. flux of odour compound)
           6 =     Odour Unit * m**3/min
           7 =     metric tons/yr
           8 =     Bq/s  (Bq = becquerel = disintegrations/s)
           9 =     GBq/yr

     Number of source-species
     combinations with variable
     emissions scaling factors
     provided below in (13d)        (NSPT1) Default: 0  ! NSPT1 = 0 !

     Number of point sources with
     variable emission parameters
     provided in external file      (NPT2)  No default  ! NPT2 = 0 !

     (If NPT2 > 0, these point
     source emissions are read from
     the file: PTEMARB.DAT)

!END!

---------------
Subgroup (13b)
---------------
                                    a
          POINT SOURCE: CONSTANT DATA
          ---------------------------
                                                                          b
        c
  Source       X         Y       Stack    Base     Stack    Exit  Exit    Bldg.
Emission
   No.     Coordinate Coordinate Height Elevation Diameter  Vel.  Temp.   Dwash
 Rates
            (km)      (km)       (m)      (m)       (m)   (m/s) (deg. K)
  ------   ---------- ---------- ------  ------   -------- ----- -------- -----
--------

--------

    a
     Data for each source are treated as a separate input subgroup
     and therefore must end with an input group terminator.

     SRCNAM  is a 12-character name for a source
             (No default)
     X       is an array holding the source data listed by the column headings
             (No default)
     SIGYZI  is an array holding the initial sigma-y and sigma-z (m)
             (Default: 0.,0.)
     FMFAC   is a vertical momentum flux factor (0. or 1.0) used to represent
             the effect of rain-caps or other physical configurations that
```



```
             reduce momentum rise associated with the actual exit velocity.
             (Default: 1.0  -- full momentum used)
     ZPLTFM  is the platform height (m) for sources influenced by an isolated
             structure that has a significant open area between the surface
             and the bulk of the structure, such as an offshore oil platform.
             The Base Elevation is that of the surface (ground or ocean),
             and the Stack Height is the release height above the Base (not
             above the platform).  Building heights entered in Subgroup 13c
             must be those of the buildings on the platform, measured from
             the platform deck.  ZPLTFM is used only with MBDW=1 (ISC
             downwash method) for sources with building downwash.
             (Default: 0.0)

    b
     0. = No building downwash modeled
     1. = Downwash modeled for buildings resting on the surface
     2. = Downwash modeled for buildings raised above the surface (ZPLTFM > 0.)
     NOTE: must be entered as a REAL number (i.e., with decimal point)

    c
     An emission rate must be entered for every pollutant modeled.
     Enter emission rate of zero for secondary pollutants that are
     modeled, but not emitted.  Units are specified by IPTU
     (e.g. 1 for g/s).

---------------
Subgroup (13c)
---------------

          BUILDING DIMENSION DATA FOR SOURCES SUBJECT TO DOWNWASH
          -------------------------------------------------------
Source                                                                    a
 No.      Effective building height, width, length and X/Y offset (in meters)
          every 10 degrees.  LENGTH, XBADJ, and YBADJ are only needed for
          MBDW=2 (PRIME downwash option)
------    ------------------------------------------------------------------



--------

    a
     Building height, width, length, and X/Y offset from the source are treated
     as a separate input subgroup for each source and therefore must end with
     an input group terminator.  The X/Y offset is the position, relative to the
     stack, of the center of the upwind face of the projected building, with the
     x-axis pointing along the flow direction.

---------------
Subgroup (13d)
---------------
                                          a
          POINT SOURCE: VARIABLE EMISSIONS DATA
          -------------------------------------

     Use this subgroup to describe temporal variations in the emission
     rates given in 13b.  Factors entered multiply the rates in 13b.
     Skip sources here that have constant emissions.  For more elaborate
     variation in source parameters, use PTEMARB.DAT and NPT2 > 0.

     IVARY determines the type of variation, and is source-specific:
     (IVARY)                                  Default: 0
           0 =       Constant
           1 =       Diurnal cycle (24 scaling factors: hours 1-24)
           2 =       Monthly cycle (12 scaling factors: months 1-12)
           3 =       Hour & Season (4 groups of 24 hourly scaling factors,
                                    where first group is DEC-JAN-FEB)
           4 =       Speed & Stab. (6 groups of 6 scaling factors, where
```

first group is Stability Class A,
and the speed classes have upper
bounds (m/s) defined in Group 12
5 = Temperature (12 scaling factors, where temperature
classes have upper bounds (C) of:
0, 5, 10, 15, 20, 25, 30, 35, 40,
45, 50, 50+)

---

a
Data for each species are treated as a separate input subgroup
and therefore must end with an input group terminator.

INPUT GROUPS: 14a, 14b, 14c, 14d -- Area source parameters

Subgroup (14a)

Number of polygon area sources with
parameters specified below (NAR1) No default ! NAR1 = 23 !

Units used for area source
emissions below (IARU) Default: 1 ! IARU = 5 !
1 = g/m**2/s
2 = kg/m**2/hr
3 = lb/m**2/hr
4 = tons/m**2/yr
5 = Odour Unit * m/s (vol. flux/m**2 of odour compound)
6 = Odour Unit * m/min
7 = metric tons/m**2/yr
8 = Bq/m**2/s (Bq = becquerel = disintegrations/s)
9 = GBq/m**2/yr

Number of source-species
combinations with variable
emissions scaling factors
provided below in (14d) (NSAR1) Default: 0 ! NSAR1 = 0 !

Number of buoyant polygon area sources
with variable location and emission
parameters (NAR2) No default ! NAR2 = 0 !
(If NAR2 > 0, ALL parameter data for
these sources are read from the file: BAEMARB.DAT)

!END!

Subgroup (14b)

---

a
AREA SOURCE: CONSTANT DATA
---
b

Source No.	Effect. Height (m)	Base Elevation (m)	Initial Sigma z (m)	Emission Rates
1 ! SRCNAM = WASH !				
1 ! X =	0.0,	415.48,	0.1,	0.252 !

!END!
2 ! SRCNAM = SOFT !
2 ! X = 0.0, 415.25, 0.1, 0.217 !
!END!
3 ! SRCNAM = SWASTE !
3 ! X = 0.0, 415.34, 0.1, 0.491 !
!END!
4 ! SRCNAM = DSHEEP !
4 ! X = 0.0, 417.48, 0.1, 0.195 !
!END!
5 ! SRCNAM = DCATTLE !
5 ! X = 0.0, 417.77, 0.1, 0.064 !
!END!
6 ! SRCNAM = TWDRAIN !
6 ! X = 0.0, 415.1, 0.1, 0.252 !
!END!
7 ! SRCNAM = FACC1 !
7 ! X = 0.0, 415.35, 0.1, 0.056 !
!END!
8 ! SRCNAM = FACC2 !
8 ! X = 0.0, 415.24, 0.1, 0.056 !
!END!
9 ! SRCNAM = AEROB1 !
9 ! X = 0.0, 414.65, 0.1, 0.04 !
!END!
10 ! SRCNAM = AEROB2 !
10 ! X = 0.0, 414.65, 0.1, 0.04 !
!END!
11 ! SRCNAM = AEROB3 !
11 ! X = 0.0, 414.42, 0.1, 0.04 !
!END!
12 ! SRCNAM = AEROB4 !
12 ! X = 0.0, 414.24, 0.1, 0.04 !
!END!
13 ! SRCNAM = FLUSH !
13 ! X = 0.0, 414.58, 0.1, 0.056 !
!END!
14 ! SRCNAM = WSHEEP1 !
14 ! X = 0.0, 417.47, 0.1, 0.491 !
!END!
15 ! SRCNAM = WSHEEP2 !
15 ! X = 0.0, 416.98, 0.1, 0.491 !
!END!
16 ! SRCNAM = WSHEEP3 !
16 ! X = 0.0, 417.82, 0.1, 0.491 !
!END!
17 ! SRCNAM = WCATTLE1 !
17 ! X = 0.0, 420.82, 0.1, 0.217 !
!END!
18 ! SRCNAM = WCATTLE2 !
18 ! X = 0.0, 417.88, 0.1, 0.217 !
!END!
19 ! SRCNAM = WCATTLE3 !
19 ! X = 0.0, 415.65, 0.1, 0.217 !
!END!
20 ! SRCNAM = WCATTLE4 !
20 ! X = 0.0, 421.56, 0.1, 0.217 !
!END!
21 ! SRCNAM = WSHEEP4 !
21 ! X = 0.0, 419.64, 0.1, 0.491 !
!END!
22 ! SRCNAM = WCATTLE5 !
22 ! X = 0.0, 417.71, 0.1, 0.217 !
!END!
23 ! SRCNAM = WCATTLE6 !
23 ! X = 0.0, 415.25, 0.1, 0.217 !
!END!

```
--------
    a
     Data for each source are treated as a separate input subgroup
     and therefore must end with an input group terminator.
    b
     An emission rate must be entered for every pollutant modeled.
     Enter emission rate of zero for secondary pollutants that are
     modeled, but not emitted.  Units are specified by IARU
     (e.g. 1 for g/m**2/s).

---------------
Subgroup (14c)
---------------

          COORDINATES (km) FOR EACH VERTEX(4) OF EACH POLYGON
          ---------------------------------------------------------
Source                                                              a
 No.      Ordered list of X followed by list of Y, grouped by source
------    ---------------------------------------------------------

   1 ! SRCNAM = WASH !
   1 ! XVERT =  745.66574, 745.66574, 745.67574, 745.67574 !
   1 ! YVERT = 5847.40671,5847.41671,5847.41671,5847.40671 !
!END!
   2 ! SRCNAM = SOFT !
   2 ! XVERT =  745.62456, 745.62456, 745.64076, 745.64076 !
   2 ! YVERT = 5847.38955,5847.40575,5847.40575,5847.38955 !
!END!
   3 ! SRCNAM = SWASTE !
   3 ! XVERT =  745.64534, 745.64534, 745.65801, 745.65801 !
   3 ! YVERT = 5847.39557,5847.40824,5847.40824,5847.39557 !
!END!
   4 ! SRCNAM = DSHEEP !
   4 ! XVERT =    745.898, 745.80049, 745.83259, 745.93126 !
   4 ! YVERT = 5847.43082,5847.45233,5847.62914,5847.60911 !
!END!
   5 ! SRCNAM = DCATTLE !
   5 ! XVERT =  745.82974,  745.8405,  745.9473, 745.93528 !
   5 ! YVERT =  5847.6566,5847.71326,5847.69345,5847.63752 !
!END!
   6 ! SRCNAM = TWDRAIN !
   6 ! XVERT =  745.67747, 745.70095,  745.7017, 745.67822 !
   6 ! YVERT = 5847.47135,5847.47808,5847.47546,5847.46873 !
!END!
   7 ! SRCNAM = FACC1 !
   7 ! XVERT =  745.65612, 745.64702, 745.65993, 745.66903 !
   7 ! YVERT = 5847.42097,5847.45073,5847.45468,5847.42492 !
!END!
   8 ! SRCNAM = FACC2 !
   8 ! XVERT =  745.63098, 745.62137, 745.63421, 745.64382 !
   8 ! YVERT = 5847.41414,5847.44373,5847.44791,5847.41831 !
!END!
   9 ! SRCNAM = AEROB1 !
   9 ! XVERT =   745.5517, 745.61061, 745.61625, 745.55734 !
   9 ! YVERT = 5847.43403,5847.44336,5847.40773, 5847.3984 !
!END!
  10 ! SRCNAM = AEROB2 !
  10 ! XVERT =  745.55218, 745.54999, 745.60862, 745.61082 !
  10 ! YVERT = 5847.43427,5847.44815,5847.45743,5847.44356 !
!END!
  11 ! SRCNAM = AEROB3 !
  11 ! XVERT =  745.55896, 745.55485, 745.61027, 745.61196 !
  11 ! YVERT = 5847.46937,5847.45001,5847.45751,5847.46646 !
!END!
  12 ! SRCNAM = AEROB4 !
  12 ! XVERT =  745.56985, 745.55945, 745.61196,  745.6139 !
  12 ! YVERT = 5847.50349,5847.46961,5847.46622,5847.49145 !
!END!
```



```
  13 ! SRCNAM = FLUSH !
  13 ! XVERT =  745.68681, 745.69046, 745.70745, 745.70379 !
  13 ! YVERT = 5847.64263,5847.66333,5847.66034,5847.63963 !
!END!
  14 ! SRCNAM = WSHEEP1 !
  14 ! XVERT =  745.78958, 745.93855, 745.93709, 745.78872 !
  14 ! YVERT = 5847.64307,5847.61498,5847.60798, 5847.6381 !
!END!
  15 ! SRCNAM = WSHEEP2 !
  15 ! XVERT =  745.78876,  745.8326, 745.79634, 745.75173 !
  15 ! YVERT = 5847.63806,5847.62919,5847.42903,5847.43721 !
!END!
  16 ! SRCNAM = WSHEEP3 !
  16 ! XVERT =  745.80056,   745.904,  745.9003, 745.79634 !
  16 ! YVERT = 5847.45245,5847.42989,5847.40982,5847.42903 !
!END!
  17 ! SRCNAM = WCATTLE1 !
  17 ! XVERT =  745.94832, 745.93515, 745.94273,   745.954 !
  17 ! YVERT = 5847.69833,5847.63745,5847.63607, 5847.6974 !
!END!
  18 ! SRCNAM = WCATTLE2 !
  18 ! XVERT =  745.93866, 745.94287, 745.82445,  745.8207 !
  18 ! YVERT = 5847.61509,5847.63609,5847.65755,5847.63735 !
!END!
  19 ! SRCNAM = WCATTLE3 !
  19 ! XVERT =  745.79205, 745.82307,  745.8207, 745.78955 !
  19 ! YVERT = 5847.65611,5847.65054,5847.63741,5847.64323 !
!END!
  20 ! SRCNAM = WCATTLE4 !
  20 ! XVERT =  745.95357, 745.98904,  745.9769, 745.94144 !
  20 ! YVERT = 5847.69733,5847.69108,5847.62224, 5847.6285 !
!END!
  21 ! SRCNAM = WSHEEP4 !
  21 ! XVERT =  745.93131, 745.93713, 745.90398, 745.89807 !
  21 ! YVERT = 5847.60906,5847.60808,  5847.430,5847.43125 !
!END!
  22 ! SRCNAM = WCATTLE5 !
  22 ! XVERT =  745.94821, 745.94725, 745.84045, 745.83585 !
  22 ! YVERT = 5847.69836, 5847.6936,5847.71313,  5847.719 !
!END!
  23 ! SRCNAM = WCATTLE6 !
  23 ! XVERT =  745.83577, 745.84045, 745.82976, 745.82441 !
  23 ! YVERT = 5847.71908,5847.71328,5847.65662,5847.65766 !
!END!

--------
    a
     Data for each source are treated as a separate input subgroup
     and therefore must end with an input group terminator.


---------------
Subgroup (14d)
---------------
                                                    a
          AREA SOURCE: VARIABLE EMISSIONS DATA
          ------------------------------------

     Use this subgroup to describe temporal variations in the emission
     rates given in 14b.  Factors entered multiply the rates in 14b.
     Skip sources here that have constant emissions.  For more elaborate
     variation in source parameters, use BAEMARB.DAT and NAR2 > 0.

     IVARY determines the type of variation, and is source-specific:
     (IVARY)                                  Default: 0
           0 =       Constant
           1 =       Diurnal cycle (24 scaling factors: hours 1-24)
           2 =       Monthly cycle (12 scaling factors: months 1-12)
```

```
            3 =       Hour & Season (4 groups of 24 hourly scaling factors,
                                     where first group is DEC-JAN-FEB)
            4 =       Speed & Stab. (6 groups of 6 scaling factors, where
                                     first group is Stability Class A,
                                     and the speed classes have upper
                                     bounds (m/s) defined in Group 12
            5 =       Temperature   (12 scaling factors, where temperature
                                     classes have upper bounds (C) of:
                                     0, 5, 10, 15, 20, 25, 30, 35, 40,
                                     45, 50, 50+)



--------
    a
     Data for each species are treated as a separate input subgroup
     and therefore must end with an input group terminator.


------------------------------------------------------------------------------

INPUT GROUPS: 15a, 15b, 15c -- Line source parameters
---------------------------

---------------
Subgroup (15a)
---------------

     Number of buoyant line sources
     with variable location and emission
     parameters (NLN2)                              No default  ! NLN2 = 0 !

     (If NLN2 > 0, ALL parameter data for
      these sources are read from the file: LNEMARB.DAT)

     Number of buoyant line sources (NLINES)        No default   ! NLINES = 0 !

     Units used for line source
     emissions below                (ILNU)          Default: 1   ! ILNU = 1 !
           1 =        g/s
           2 =       kg/hr
           3 =       lb/hr
           4 =     tons/yr
           5 =     Odour Unit * m**3/s  (vol. flux of odour compound)
           6 =     Odour Unit * m**3/min
           7 =     metric tons/yr
           8 =     Bq/s  (Bq = becquerel = disintegrations/s)
           9 =     GBq/yr

     Number of source-species
     combinations with variable
     emissions scaling factors
     provided below in (15c)        (NSLN1) Default: 0  ! NSLN1 = 0 !

     Maximum number of segments used to model
     each line (MXNSEG)                             Default: 7   ! MXNSEG = 7 !

     The following variables are required only if NLINES > 0.  They are
     used in the buoyant line source plume rise calculations.

        Number of distances at which                Default: 6   ! NLRISE = 6 !
        transitional rise is computed

        Average building length (XL)                No default   * XL = *
                                                    (in meters)

        Average building height (HBL)               No default   * HBL = *
                                                    (in meters)
```



```
        Average building width (WBL)                No default   * WBL = *
                                                    (in meters)

        Average line source width (WML)             No default   * WML = *
                                                    (in meters)

        Average separation between buildings (DXL)  No default   * DXL = *
                                                    (in meters)

        Average buoyancy parameter (FPRIMEL)        No default   * FPRIMEL = *
                                                    (in m**4/s**3)

!END!

---------------
Subgroup (15b)
---------------

          BUOYANT LINE SOURCE: CONSTANT DATA
          ----------------------------------

         a
Source     Beg. X      Beg. Y      End. X    End. Y     Release    Base
Emission
 No.     Coordinate  Coordinate  Coordinate Coordinate  Height    Elevation
Rates
           (km)        (km)        (km)       (km)       (m)       (m)
------   ----------  ----------  ---------  ----------  -------   ---------
---------

--------

    a
     Data for each source are treated as a separate input subgroup
     and therefore must end with an input group terminator.

    b
     An emission rate must be entered for every pollutant modeled.
     Enter emission rate of zero for secondary pollutants that are
     modeled, but not emitted.  Units are specified by ILNTU
     (e.g. 1 for g/s).

---------------
Subgroup (15c)
---------------
                                                                    a
          BUOYANT LINE SOURCE: VARIABLE EMISSIONS DATA
          --------------------------------------------

     Use this subgroup to describe temporal variations in the emission
     rates given in 15b.  Factors entered multiply the rates in 15b.
     Skip sources here that have constant emissions.

     IVARY determines the type of variation, and is source-specific:
     (IVARY)                                    Default: 0
           0 =       Constant
           1 =       Diurnal cycle (24 scaling factors: hours 1-24)
           2 =       Monthly cycle (12 scaling factors: months 1-12)
           3 =       Hour & Season (4 groups of 24 hourly scaling factors,
                                    where first group is DEC-JAN-FEB)
           4 =       Speed & Stab. (6 groups of 6 scaling factors, where
                                    first group is Stability Class A,
                                    and the speed classes have upper
                                    bounds (m/s) defined in Group 12
           5 =       Temperature   (12 scaling factors, where temperature
                                    classes have upper bounds (C) of:
                                    0, 5, 10, 15, 20, 25, 30, 35, 40,
```

---
a
Data for each species are treated as a separate input subgroup
and therefore must end with an input group terminator.

INPUT GROUPS: 16a, 16b, 16c -- Volume source parameters

Subgroup (16a)

Number of volume sources with
parameters provided in 16b,c (NVL1) No default ! NVL1 = 0 !

Units used for volume source
emissions below in 16b (IVLU) Default: 1 ! IVLU = 1 !
1 = g/s
2 = kg/hr
3 = lb/hr
4 = tons/yr
5 = Odour Unit * m**3/s (vol. flux of odour compound)
6 = Odour Unit * m**3/min
7 = metric tons/yr
8 = Bq/s (Bq = becquerel = disintegrations/s)
9 = GBq/yr

Number of source-species
combinations with variable
emissions scaling factors
provided below in (16c) (NSVL1) Default: 0 ! NSVL1 = 0 !

Number of volume sources with
variable location and emission
parameters (NVL2) No default ! NVL2 = 0 !

(If NVL2 > 0, ALL parameter data for
these sources are read from the VOLEMARB.DAT file(s))

!END!

Subgroup (16b)

a
VOLUME SOURCE: CONSTANT DATA

b

X Coordinate (km)	Y Coordinate (km)	Effect. Height (m)	Base Elevation (m)	Initial Sigma y (m)	Initial Sigma z (m)	Emission Rates

---
a
Data for each source are treated as a separate input subgroup
and therefore must end with an input group terminator.

b

An emission rate must be entered for every pollutant modeled.
Enter emission rate of zero for secondary pollutants that are
modeled, but not emitted. Units are specified by IVLU
(e.g. 1 for g/s).

Subgroup (16c)

---

a
VOLUME SOURCE: VARIABLE EMISSIONS DATA

Use this subgroup to describe temporal variations in the emission
rates given in 16b. Factors entered multiply the rates in 16b.
Skip sources here that have constant emissions. For more elaborate
variation in source parameters, use VOLEMARB.DAT and NVL2 > 0.

IVARY determines the type of variation, and is source-specific:
(IVARY) Default: 0
0 = Constant
1 = Diurnal cycle (24 scaling factors: hours 1-24)
2 = Monthly cycle (12 scaling factors: months 1-12)
3 = Hour & Season (4 groups of 24 hourly scaling factors,
where first group is DEC-JAN-FEB)
4 = Speed & Stab. (6 groups of 6 scaling factors, where
first group is Stability Class A,
and the speed classes have upper
bounds (m/s) defined in Group 12
5 = Temperature (12 scaling factors, where temperature
classes have upper bounds (C) of:
0, 5, 10, 15, 20, 25, 30, 35, 40,
45, 50, 50+)

---
a
Data for each species are treated as a separate input subgroup
and therefore must end with an input group terminator.

INPUT GROUPS: 17a, 17b, 17c -- Non-gridded (discrete) receptor information

---

Subgroup (17a)

Number of non-gridded receptors (NREC) No default ! NREC = 4644 !

Group names can be used to assign receptor locations in
Subgroup 17c and thereby provide an identification that
can be referenced when postprocessing receptors. The
default assignment name X is used when NRGRP = 0.

Number of receptor group names (NRGRP) Default: 0 ! NRGRP = 0 !

!END!

Subgroup (17b)

Provide a name for each receptor group if NRGRP>0.
Enter NRGRP lines.
a,b

Group Name
----
* RGRPNAMLIST = *

---

a
Each group name provided is treated as a separate input subgroup and therefore must end with an input group terminator.

b
Receptor group names must not include blanks.

Subgroup (17c)

---

a

NON-GRIDDED (DISCRETE) RECEPTOR DATA

Receptor No.	c Group Name	X Coordinate (km)	Y Coordinate (km)	Ground Elevation (m)	Height b Above Ground (m)	
1	X =	739.00800,	5840.93500,	425.0,	0.0	!END!
2	X =	739.20800,	5840.93500,	415.0,	0.0	!END!
3	X =	739.40800,	5840.93500,	410.0,	0.0	!END!
4	X =	739.60800,	5840.93500,	416.0,	0.0	!END!
5	X =	739.80800,	5840.93500,	415.0,	0.0	!END!
6	X =	740.00800,	5840.93500,	403.0,	0.0	!END!
7	X =	740.20800,	5840.93500,	398.0,	0.0	!END!
8	X =	740.40800,	5840.93500,	399.0,	0.0	!END!
9	X =	740.60800,	5840.93500,	398.0,	0.0	!END!
10	X =	740.80800,	5840.93500,	403.0,	0.0	!END!
11	X =	741.00800,	5840.93500,	406.0,	0.0	!END!
12	X =	741.20800,	5840.93500,	409.0,	0.0	!END!
13	X =	741.40800,	5840.93500,	408.0,	0.0	!END!
14	X =	741.60800,	5840.93500,	410.0,	0.0	!END!
15	X =	741.80800,	5840.93500,	416.0,	0.0	!END!
16	X =	742.00800,	5840.93500,	419.0,	0.0	!END!
17	X =	742.20800,	5840.93500,	421.0,	0.0	!END!
18	X =	742.40800,	5840.93500,	422.0,	0.0	!END!
19	X =	742.60800,	5840.93500,	423.0,	0.0	!END!
20	X =	742.80800,	5840.93500,	424.0,	0.0	!END!
21	X =	743.00800,	5840.93500,	426.0,	0.0	!END!
22	X =	743.20800,	5840.93500,	428.0,	0.0	!END!
23	X =	743.40800,	5840.93500,	428.0,	0.0	!END!
24	X =	743.60800,	5840.93500,	427.0,	0.0	!END!
25	X =	743.80800,	5840.93500,	431.0,	0.0	!END!
26	X =	744.00800,	5840.93500,	434.0,	0.0	!END!
27	X =	744.20800,	5840.93500,	438.0,	0.0	!END!
28	X =	744.40800,	5840.93500,	441.0,	0.0	!END!
29	X =	744.60800,	5840.93500,	448.0,	0.0	!END!
30	X =	744.80800,	5840.93500,	446.0,	0.0	!END!
31	X =	745.00800,	5840.93500,	448.0,	0.0	!END!
32	X =	745.20800,	5840.93500,	447.0,	0.0	!END!
33	X =	745.40800,	5840.93500,	444.0,	0.0	!END!
34	X =	745.60800,	5840.93500,	449.0,	0.0	!END!
35	X =	745.80800,	5840.93500,	452.0,	0.0	!END!
36	X =	746.00800,	5840.93500,	456.0,	0.0	!END!
37	X =	746.20800,	5840.93500,	457.0,	0.0	!END!
38	X =	746.40800,	5840.93500,	457.0,	0.0	!END!
39	X =	746.60800,	5840.93500,	459.0,	0.0	!END!
40	X =	746.80800,	5840.93500,	460.0,	0.0	!END!
41	X =	747.00800,	5840.93500,	461.0,	0.0	!END!
42	X =	747.20800,	5840.93500,	465.0,	0.0	!END!
43	X =	747.40800,	5840.93500,	463.0,	0.0	!END!
44	X =	747.60800,	5840.93500,	457.0,	0.0	!END!

45	X =	747.80800,	5840.93500,	463.0,	0.0	!END!
46	X =	748.00800,	5840.93500,	466.0,	0.0	!END!
47	X =	748.20800,	5840.93500,	467.0,	0.0	!END!
48	X =	748.40800,	5840.93500,	465.0,	0.0	!END!
49	X =	748.60800,	5840.93500,	468.0,	0.0	!END!
50	X =	748.80800,	5840.93500,	465.0,	0.0	!END!
51	X =	749.00800,	5840.93500,	462.0,	0.0	!END!
52	X =	749.20800,	5840.93500,	459.0,	0.0	!END!
53	X =	749.40800,	5840.93500,	468.0,	0.0	!END!
54	X =	749.60800,	5840.93500,	459.0,	0.0	!END!
55	X =	749.80800,	5840.93500,	455.0,	0.0	!END!
56	X =	750.00800,	5840.93500,	449.0,	0.0	!END!
57	X =	750.20800,	5840.93500,	449.0,	0.0	!END!
58	X =	750.40800,	5840.93500,	449.0,	0.0	!END!
59	X =	750.60800,	5840.93500,	449.0,	0.0	!END!
60	X =	750.80800,	5840.93500,	460.0,	0.0	!END!
61	X =	751.00800,	5840.93500,	460.0,	0.0	!END!
62	X =	751.20800,	5840.93500,	462.0,	0.0	!END!
63	X =	751.40800,	5840.93500,	460.0,	0.0	!END!
64	X =	751.60800,	5840.93500,	455.0,	0.0	!END!
65	X =	751.80800,	5840.93500,	451.0,	0.0	!END!
66	X =	752.00800,	5840.93500,	447.0,	0.0	!END!
67	X =	752.20800,	5840.93500,	453.0,	0.0	!END!
68	X =	752.40800,	5840.93500,	450.0,	0.0	!END!
69	X =	739.00800,	5841.13500,	414.0,	0.0	!END!
70	X =	739.20800,	5841.13500,	410.0,	0.0	!END!
71	X =	739.40800,	5841.13500,	406.0,	0.0	!END!
72	X =	739.60800,	5841.13500,	405.0,	0.0	!END!
73	X =	739.80800,	5841.13500,	404.0,	0.0	!END!
74	X =	740.00800,	5841.13500,	401.0,	0.0	!END!
75	X =	740.20800,	5841.13500,	399.0,	0.0	!END!
76	X =	740.40800,	5841.13500,	400.0,	0.0	!END!
77	X =	740.60800,	5841.13500,	404.0,	0.0	!END!
78	X =	740.80800,	5841.13500,	406.0,	0.0	!END!
79	X =	741.00800,	5841.13500,	407.0,	0.0	!END!
80	X =	741.20800,	5841.13500,	410.0,	0.0	!END!
81	X =	741.40800,	5841.13500,	408.0,	0.0	!END!
82	X =	741.60800,	5841.13500,	409.0,	0.0	!END!
83	X =	741.80800,	5841.13500,	412.0,	0.0	!END!
84	X =	742.00800,	5841.13500,	414.0,	0.0	!END!
85	X =	742.20800,	5841.13500,	416.0,	0.0	!END!
86	X =	742.40800,	5841.13500,	420.0,	0.0	!END!
87	X =	742.60800,	5841.13500,	423.0,	0.0	!END!
88	X =	742.80800,	5841.13500,	423.0,	0.0	!END!
89	X =	743.00800,	5841.13500,	425.0,	0.0	!END!
90	X =	743.20800,	5841.13500,	429.0,	0.0	!END!
91	X =	743.40800,	5841.13500,	432.0,	0.0	!END!
92	X =	743.60800,	5841.13500,	433.0,	0.0	!END!
93	X =	743.80800,	5841.13500,	436.0,	0.0	!END!
94	X =	744.00800,	5841.13500,	442.0,	0.0	!END!
95	X =	744.20800,	5841.13500,	438.0,	0.0	!END!
96	X =	744.40800,	5841.13500,	443.0,	0.0	!END!
97	X =	744.60800,	5841.13500,	445.0,	0.0	!END!
98	X =	744.80800,	5841.13500,	448.0,	0.0	!END!
99	X =	745.00800,	5841.13500,	450.0,	0.0	!END!
100	X =	745.20800,	5841.13500,	449.0,	0.0	!END!
101	X =	745.40800,	5841.13500,	450.0,	0.0	!END!
102	X =	745.60800,	5841.13500,	450.0,	0.0	!END!
103	X =	745.80800,	5841.13500,	453.0,	0.0	!END!
104	X =	746.00800,	5841.13500,	450.0,	0.0	!END!
105	X =	746.20800,	5841.13500,	453.0,	0.0	!END!
106	X =	746.40800,	5841.13500,	458.0,	0.0	!END!
107	X =	746.60800,	5841.13500,	463.0,	0.0	!END!
108	X =	746.80800,	5841.13500,	460.0,	0.0	!END!
109	X =	747.00800,	5841.13500,	457.0,	0.0	!END!
110	X =	747.20800,	5841.13500,	462.0,	0.0	!END!
111	X =	747.40800,	5841.13500,	460.0,	0.0	!END!
112	X =	747.60800,	5841.13500,	457.0,	0.0	!END!

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113 ! X =     747.80800,   5841.13500,       472.0,          0.0 !   !END!
114 ! X =     748.00800,   5841.13500,       465.0,          0.0 !   !END!
115 ! X =     748.20800,   5841.13500,       465.0,          0.0 !   !END!
116 ! X =     748.40800,   5841.13500,       467.0,          0.0 !   !END!
117 ! X =     748.60800,   5841.13500,       467.0,          0.0 !   !END!
118 ! X =     748.80800,   5841.13500,       466.0,          0.0 !   !END!
119 ! X =     749.00800,   5841.13500,       460.0,          0.0 !   !END!
120 ! X =     749.20800,   5841.13500,       460.0,          0.0 !   !END!
121 ! X =     749.40800,   5841.13500,       459.0,          0.0 !   !END!
122 ! X =     749.60800,   5841.13500,       463.0,          0.0 !   !END!
123 ! X =     749.80800,   5841.13500,       458.0,          0.0 !   !END!
124 ! X =     750.00800,   5841.13500,       458.0,          0.0 !   !END!
125 ! X =     750.20800,   5841.13500,       456.0,          0.0 !   !END!
126 ! X =     750.40800,   5841.13500,       458.0,          0.0 !   !END!
127 ! X =     750.60800,   5841.13500,       457.0,          0.0 !   !END!
128 ! X =     750.80800,   5841.13500,       457.0,          0.0 !   !END!
129 ! X =     751.00800,   5841.13500,       460.0,          0.0 !   !END!
130 ! X =     751.20800,   5841.13500,       462.0,          0.0 !   !END!
131 ! X =     751.40800,   5841.13500,       457.0,          0.0 !   !END!
132 ! X =     751.60800,   5841.13500,       454.0,          0.0 !   !END!
133 ! X =     751.80800,   5841.13500,       453.0,          0.0 !   !END!
134 ! X =     752.00800,   5841.13500,       454.0,          0.0 !   !END!
135 ! X =     752.20800,   5841.13500,       453.0,          0.0 !   !END!
136 ! X =     752.40800,   5841.13500,       455.0,          0.0 !   !END!
137 ! X =     739.00800,   5841.33500,       416.0,          0.0 !   !END!
138 ! X =     739.20800,   5841.33500,       409.0,          0.0 !   !END!
139 ! X =     739.40800,   5841.33500,       404.0,          0.0 !   !END!
140 ! X =     739.60800,   5841.33500,       404.0,          0.0 !   !END!
141 ! X =     739.80800,   5841.33500,       404.0,          0.0 !   !END!
142 ! X =     740.00800,   5841.33500,       401.0,          0.0 !   !END!
143 ! X =     740.20800,   5841.33500,       401.0,          0.0 !   !END!
144 ! X =     740.40800,   5841.33500,       403.0,          0.0 !   !END!
145 ! X =     740.60800,   5841.33500,       407.0,          0.0 !   !END!
146 ! X =     740.80800,   5841.33500,       406.0,          0.0 !   !END!
147 ! X =     741.00800,   5841.33500,       410.0,          0.0 !   !END!
148 ! X =     741.20800,   5841.33500,       409.0,          0.0 !   !END!
149 ! X =     741.40800,   5841.33500,       412.0,          0.0 !   !END!
150 ! X =     741.60800,   5841.33500,       413.0,          0.0 !   !END!
151 ! X =     741.80800,   5841.33500,       417.0,          0.0 !   !END!
152 ! X =     742.00800,   5841.33500,       415.0,          0.0 !   !END!
153 ! X =     742.20800,   5841.33500,       418.0,          0.0 !   !END!
154 ! X =     742.40800,   5841.33500,       424.0,          0.0 !   !END!
155 ! X =     742.60800,   5841.33500,       423.0,          0.0 !   !END!
156 ! X =     742.80800,   5841.33500,       424.0,          0.0 !   !END!
157 ! X =     743.00800,   5841.33500,       425.0,          0.0 !   !END!
158 ! X =     743.20800,   5841.33500,       428.0,          0.0 !   !END!
159 ! X =     743.40800,   5841.33500,       431.0,          0.0 !   !END!
160 ! X =     743.60800,   5841.33500,       430.0,          0.0 !   !END!
161 ! X =     743.80800,   5841.33500,       440.0,          0.0 !   !END!
162 ! X =     744.00800,   5841.33500,       438.0,          0.0 !   !END!
163 ! X =     744.20800,   5841.33500,       438.0,          0.0 !   !END!
164 ! X =     744.40800,   5841.33500,       441.0,          0.0 !   !END!
165 ! X =     744.60800,   5841.33500,       444.0,          0.0 !   !END!
166 ! X =     744.80800,   5841.33500,       449.0,          0.0 !   !END!
167 ! X =     745.00800,   5841.33500,       452.0,          0.0 !   !END!
168 ! X =     745.20800,   5841.33500,       452.0,          0.0 !   !END!
169 ! X =     745.40800,   5841.33500,       454.0,          0.0 !   !END!
170 ! X =     745.60800,   5841.33500,       451.0,          0.0 !   !END!
171 ! X =     745.80800,   5841.33500,       449.0,          0.0 !   !END!
172 ! X =     746.00800,   5841.33500,       456.0,          0.0 !   !END!
173 ! X =     746.20800,   5841.33500,       456.0,          0.0 !   !END!
174 ! X =     746.40800,   5841.33500,       458.0,          0.0 !   !END!
175 ! X =     746.60800,   5841.33500,       460.0,          0.0 !   !END!
176 ! X =     746.80800,   5841.33500,       456.0,          0.0 !   !END!
177 ! X =     747.00800,   5841.33500,       456.0,          0.0 !   !END!
178 ! X =     747.20800,   5841.33500,       454.0,          0.0 !   !END!
179 ! X =     747.40800,   5841.33500,       457.0,          0.0 !   !END!
180 ! X =     747.60800,   5841.33500,       462.0,          0.0 !   !END!
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181 ! X =     747.80800,   5841.33500,       464.0,          0.0 !   !END!
182 ! X =     748.00800,   5841.33500,       465.0,          0.0 !   !END!
183 ! X =     748.20800,   5841.33500,       467.0,          0.0 !   !END!
184 ! X =     748.40800,   5841.33500,       468.0,          0.0 !   !END!
185 ! X =     748.60800,   5841.33500,       469.0,          0.0 !   !END!
186 ! X =     748.80800,   5841.33500,       478.0,          0.0 !   !END!
187 ! X =     749.00800,   5841.33500,       474.0,          0.0 !   !END!
188 ! X =     749.20800,   5841.33500,       462.0,          0.0 !   !END!
189 ! X =     749.40800,   5841.33500,       460.0,          0.0 !   !END!
190 ! X =     749.60800,   5841.33500,       460.0,          0.0 !   !END!
191 ! X =     749.80800,   5841.33500,       458.0,          0.0 !   !END!
192 ! X =     750.00800,   5841.33500,       462.0,          0.0 !   !END!
193 ! X =     750.20800,   5841.33500,       459.0,          0.0 !   !END!
194 ! X =     750.40800,   5841.33500,       454.0,          0.0 !   !END!
195 ! X =     750.60800,   5841.33500,       453.0,          0.0 !   !END!
196 ! X =     750.80800,   5841.33500,       455.0,          0.0 !   !END!
197 ! X =     751.00800,   5841.33500,       453.0,          0.0 !   !END!
198 ! X =     751.20800,   5841.33500,       455.0,          0.0 !   !END!
199 ! X =     751.40800,   5841.33500,       457.0,          0.0 !   !END!
200 ! X =     751.60800,   5841.33500,       455.0,          0.0 !   !END!
201 ! X =     751.80800,   5841.33500,       449.0,          0.0 !   !END!
202 ! X =     752.00800,   5841.33500,       440.0,          0.0 !   !END!
203 ! X =     752.20800,   5841.33500,       456.0,          0.0 !   !END!
204 ! X =     752.40800,   5841.33500,       456.0,          0.0 !   !END!
205 ! X =     739.00800,   5841.53500,       412.0,          0.0 !   !END!
206 ! X =     739.20800,   5841.53500,       411.0,          0.0 !   !END!
207 ! X =     739.40800,   5841.53500,       405.0,          0.0 !   !END!
208 ! X =     739.60800,   5841.53500,       403.0,          0.0 !   !END!
209 ! X =     739.80800,   5841.53500,       404.0,          0.0 !   !END!
210 ! X =     740.00800,   5841.53500,       402.0,          0.0 !   !END!
211 ! X =     740.20800,   5841.53500,       402.0,          0.0 !   !END!
212 ! X =     740.40800,   5841.53500,       403.0,          0.0 !   !END!
213 ! X =     740.60800,   5841.53500,       404.0,          0.0 !   !END!
214 ! X =     740.80800,   5841.53500,       407.0,          0.0 !   !END!
215 ! X =     741.00800,   5841.53500,       408.0,          0.0 !   !END!
216 ! X =     741.20800,   5841.53500,       410.0,          0.0 !   !END!
217 ! X =     741.40800,   5841.53500,       414.0,          0.0 !   !END!
218 ! X =     741.60800,   5841.53500,       412.0,          0.0 !   !END!
219 ! X =     741.80800,   5841.53500,       416.0,          0.0 !   !END!
220 ! X =     742.00800,   5841.53500,       417.0,          0.0 !   !END!
221 ! X =     742.20800,   5841.53500,       418.0,          0.0 !   !END!
222 ! X =     742.40800,   5841.53500,       423.0,          0.0 !   !END!
223 ! X =     742.60800,   5841.53500,       423.0,          0.0 !   !END!
224 ! X =     742.80800,   5841.53500,       425.0,          0.0 !   !END!
225 ! X =     743.00800,   5841.53500,       428.0,          0.0 !   !END!
226 ! X =     743.20800,   5841.53500,       429.0,          0.0 !   !END!
227 ! X =     743.40800,   5841.53500,       429.0,          0.0 !   !END!
228 ! X =     743.60800,   5841.53500,       429.0,          0.0 !   !END!
229 ! X =     743.80800,   5841.53500,       430.0,          0.0 !   !END!
230 ! X =     744.00800,   5841.53500,       437.0,          0.0 !   !END!
231 ! X =     744.20800,   5841.53500,       440.0,          0.0 !   !END!
232 ! X =     744.40800,   5841.53500,       440.0,          0.0 !   !END!
233 ! X =     744.60800,   5841.53500,       441.0,          0.0 !   !END!
234 ! X =     744.80800,   5841.53500,       446.0,          0.0 !   !END!
235 ! X =     745.00800,   5841.53500,       450.0,          0.0 !   !END!
236 ! X =     745.20800,   5841.53500,       453.0,          0.0 !   !END!
237 ! X =     745.40800,   5841.53500,       455.0,          0.0 !   !END!
238 ! X =     745.60800,   5841.53500,       455.0,          0.0 !   !END!
239 ! X =     745.80800,   5841.53500,       456.0,          0.0 !   !END!
240 ! X =     746.00800,   5841.53500,       452.0,          0.0 !   !END!
241 ! X =     746.20800,   5841.53500,       454.0,          0.0 !   !END!
242 ! X =     746.40800,   5841.53500,       454.0,          0.0 !   !END!
243 ! X =     746.60800,   5841.53500,       455.0,          0.0 !   !END!
244 ! X =     746.80800,   5841.53500,       456.0,          0.0 !   !END!
245 ! X =     747.00800,   5841.53500,       454.0,          0.0 !   !END!
246 ! X =     747.20800,   5841.53500,       457.0,          0.0 !   !END!
247 ! X =     747.40800,   5841.53500,       458.0,          0.0 !   !END!
248 ! X =     747.60800,   5841.53500,       460.0,          0.0 !   !END!
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249 ! X =     747.80800,   5841.53500,       457.0,          0.0 !   !END!
250 ! X =     748.00800,   5841.53500,       462.0,          0.0 !   !END!
251 ! X =     748.20800,   5841.53500,       461.0,          0.0 !   !END!
252 ! X =     748.40800,   5841.53500,       464.0,          0.0 !   !END!
253 ! X =     748.60800,   5841.53500,       465.0,          0.0 !   !END!
254 ! X =     748.80800,   5841.53500,       465.0,          0.0 !   !END!
255 ! X =     749.00800,   5841.53500,       465.0,          0.0 !   !END!
256 ! X =     749.20800,   5841.53500,       465.0,          0.0 !   !END!
257 ! X =     749.40800,   5841.53500,       463.0,          0.0 !   !END!
258 ! X =     749.60800,   5841.53500,       463.0,          0.0 !   !END!
259 ! X =     749.80800,   5841.53500,       462.0,          0.0 !   !END!
260 ! X =     750.00800,   5841.53500,       463.0,          0.0 !   !END!
261 ! X =     750.20800,   5841.53500,       460.0,          0.0 !   !END!
262 ! X =     750.40800,   5841.53500,       456.0,          0.0 !   !END!
263 ! X =     750.60800,   5841.53500,       451.0,          0.0 !   !END!
264 ! X =     750.80800,   5841.53500,       451.0,          0.0 !   !END!
265 ! X =     751.00800,   5841.53500,       454.0,          0.0 !   !END!
266 ! X =     751.20800,   5841.53500,       450.0,          0.0 !   !END!
267 ! X =     751.40800,   5841.53500,       458.0,          0.0 !   !END!
268 ! X =     751.60800,   5841.53500,       453.0,          0.0 !   !END!
269 ! X =     751.80800,   5841.53500,       453.0,          0.0 !   !END!
270 ! X =     752.00800,   5841.53500,       443.0,          0.0 !   !END!
271 ! X =     752.20800,   5841.53500,       451.0,          0.0 !   !END!
272 ! X =     752.40800,   5841.53500,       465.0,          0.0 !   !END!
273 ! X =     739.00800,   5841.73500,       408.0,          0.0 !   !END!
274 ! X =     739.20800,   5841.73500,       411.0,          0.0 !   !END!
275 ! X =     739.40800,   5841.73500,       409.0,          0.0 !   !END!
276 ! X =     739.60800,   5841.73500,       405.0,          0.0 !   !END!
277 ! X =     739.80800,   5841.73500,       404.0,          0.0 !   !END!
278 ! X =     740.00800,   5841.73500,       401.0,          0.0 !   !END!
279 ! X =     740.20800,   5841.73500,       400.0,          0.0 !   !END!
280 ! X =     740.40800,   5841.73500,       405.0,          0.0 !   !END!
281 ! X =     740.60800,   5841.73500,       403.0,          0.0 !   !END!
282 ! X =     740.80800,   5841.73500,       405.0,          0.0 !   !END!
283 ! X =     741.00800,   5841.73500,       406.0,          0.0 !   !END!
284 ! X =     741.20800,   5841.73500,       407.0,          0.0 !   !END!
285 ! X =     741.40800,   5841.73500,       408.0,          0.0 !   !END!
286 ! X =     741.60800,   5841.73500,       412.0,          0.0 !   !END!
287 ! X =     741.80800,   5841.73500,       410.0,          0.0 !   !END!
288 ! X =     742.00800,   5841.73500,       420.0,          0.0 !   !END!
289 ! X =     742.20800,   5841.73500,       418.0,          0.0 !   !END!
290 ! X =     742.40800,   5841.73500,       423.0,          0.0 !   !END!
291 ! X =     742.60800,   5841.73500,       424.0,          0.0 !   !END!
292 ! X =     742.80800,   5841.73500,       424.0,          0.0 !   !END!
293 ! X =     743.00800,   5841.73500,       425.0,          0.0 !   !END!
294 ! X =     743.20800,   5841.73500,       427.0,          0.0 !   !END!
295 ! X =     743.40800,   5841.73500,       423.0,          0.0 !   !END!
296 ! X =     743.60800,   5841.73500,       428.0,          0.0 !   !END!
297 ! X =     743.80800,   5841.73500,       428.0,          0.0 !   !END!
298 ! X =     744.00800,   5841.73500,       434.0,          0.0 !   !END!
299 ! X =     744.20800,   5841.73500,       438.0,          0.0 !   !END!
300 ! X =     744.40800,   5841.73500,       440.0,          0.0 !   !END!
301 ! X =     744.60800,   5841.73500,       440.0,          0.0 !   !END!
302 ! X =     744.80800,   5841.73500,       447.0,          0.0 !   !END!
303 ! X =     745.00800,   5841.73500,       452.0,          0.0 !   !END!
304 ! X =     745.20800,   5841.73500,       451.0,          0.0 !   !END!
305 ! X =     745.40800,   5841.73500,       457.0,          0.0 !   !END!
306 ! X =     745.60800,   5841.73500,       456.0,          0.0 !   !END!
307 ! X =     745.80800,   5841.73500,       457.0,          0.0 !   !END!
308 ! X =     746.00800,   5841.73500,       450.0,          0.0 !   !END!
309 ! X =     746.20800,   5841.73500,       449.0,          0.0 !   !END!
310 ! X =     746.40800,   5841.73500,       449.0,          0.0 !   !END!
311 ! X =     746.60800,   5841.73500,       452.0,          0.0 !   !END!
312 ! X =     746.80800,   5841.73500,       454.0,          0.0 !   !END!
313 ! X =     747.00800,   5841.73500,       457.0,          0.0 !   !END!
314 ! X =     747.20800,   5841.73500,       457.0,          0.0 !   !END!
315 ! X =     747.40800,   5841.73500,       456.0,          0.0 !   !END!
316 ! X =     747.60800,   5841.73500,       460.0,          0.0 !   !END!
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317 ! X =     747.80800,   5841.73500,       463.0,          0.0 !   !END!
318 ! X =     748.00800,   5841.73500,       462.0,          0.0 !   !END!
319 ! X =     748.20800,   5841.73500,       461.0,          0.0 !   !END!
320 ! X =     748.40800,   5841.73500,       463.0,          0.0 !   !END!
321 ! X =     748.60800,   5841.73500,       470.0,          0.0 !   !END!
322 ! X =     748.80800,   5841.73500,       464.0,          0.0 !   !END!
323 ! X =     749.00800,   5841.73500,       466.0,          0.0 !   !END!
324 ! X =     749.20800,   5841.73500,       465.0,          0.0 !   !END!
325 ! X =     749.40800,   5841.73500,       468.0,          0.0 !   !END!
326 ! X =     749.60800,   5841.73500,       463.0,          0.0 !   !END!
327 ! X =     749.80800,   5841.73500,       462.0,          0.0 !   !END!
328 ! X =     750.00800,   5841.73500,       464.0,          0.0 !   !END!
329 ! X =     750.20800,   5841.73500,       461.0,          0.0 !   !END!
330 ! X =     750.40800,   5841.73500,       456.0,          0.0 !   !END!
331 ! X =     750.60800,   5841.73500,       453.0,          0.0 !   !END!
332 ! X =     750.80800,   5841.73500,       452.0,          0.0 !   !END!
333 ! X =     751.00800,   5841.73500,       453.0,          0.0 !   !END!
334 ! X =     751.20800,   5841.73500,       452.0,          0.0 !   !END!
335 ! X =     751.40800,   5841.73500,       457.0,          0.0 !   !END!
336 ! X =     751.60800,   5841.73500,       450.0,          0.0 !   !END!
337 ! X =     751.80800,   5841.73500,       454.0,          0.0 !   !END!
338 ! X =     752.00800,   5841.73500,       460.0,          0.0 !   !END!
339 ! X =     752.20800,   5841.73500,       466.0,          0.0 !   !END!
340 ! X =     752.40800,   5841.73500,       469.0,          0.0 !   !END!
341 ! X =     739.00800,   5841.93500,       406.0,          0.0 !   !END!
342 ! X =     739.20800,   5841.93500,       408.0,          0.0 !   !END!
343 ! X =     739.40800,   5841.93500,       403.0,          0.0 !   !END!
344 ! X =     739.60800,   5841.93500,       406.0,          0.0 !   !END!
345 ! X =     739.80800,   5841.93500,       405.0,          0.0 !   !END!
346 ! X =     740.00800,   5841.93500,       404.0,          0.0 !   !END!
347 ! X =     740.20800,   5841.93500,       403.0,          0.0 !   !END!
348 ! X =     740.40800,   5841.93500,       413.0,          0.0 !   !END!
349 ! X =     740.60800,   5841.93500,       413.0,          0.0 !   !END!
350 ! X =     740.80800,   5841.93500,       409.0,          0.0 !   !END!
351 ! X =     741.00800,   5841.93500,       407.0,          0.0 !   !END!
352 ! X =     741.20800,   5841.93500,       406.0,          0.0 !   !END!
353 ! X =     741.40800,   5841.93500,       415.0,          0.0 !   !END!
354 ! X =     741.60800,   5841.93500,       415.0,          0.0 !   !END!
355 ! X =     741.80800,   5841.93500,       415.0,          0.0 !   !END!
356 ! X =     742.00800,   5841.93500,       418.0,          0.0 !   !END!
357 ! X =     742.20800,   5841.93500,       418.0,          0.0 !   !END!
358 ! X =     742.40800,   5841.93500,       422.0,          0.0 !   !END!
359 ! X =     742.60800,   5841.93500,       419.0,          0.0 !   !END!
360 ! X =     742.80800,   5841.93500,       422.0,          0.0 !   !END!
361 ! X =     743.00800,   5841.93500,       420.0,          0.0 !   !END!
362 ! X =     743.20800,   5841.93500,       424.0,          0.0 !   !END!
363 ! X =     743.40800,   5841.93500,       424.0,          0.0 !   !END!
364 ! X =     743.60800,   5841.93500,       425.0,          0.0 !   !END!
365 ! X =     743.80800,   5841.93500,       429.0,          0.0 !   !END!
366 ! X =     744.00800,   5841.93500,       434.0,          0.0 !   !END!
367 ! X =     744.20800,   5841.93500,       437.0,          0.0 !   !END!
368 ! X =     744.40800,   5841.93500,       439.0,          0.0 !   !END!
369 ! X =     744.60800,   5841.93500,       442.0,          0.0 !   !END!
370 ! X =     744.80800,   5841.93500,       446.0,          0.0 !   !END!
371 ! X =     745.00800,   5841.93500,       448.0,          0.0 !   !END!
372 ! X =     745.20800,   5841.93500,       449.0,          0.0 !   !END!
373 ! X =     745.40800,   5841.93500,       453.0,          0.0 !   !END!
374 ! X =     745.60800,   5841.93500,       453.0,          0.0 !   !END!
375 ! X =     745.80800,   5841.93500,       455.0,          0.0 !   !END!
376 ! X =     746.00800,   5841.93500,       450.0,          0.0 !   !END!
377 ! X =     746.20800,   5841.93500,       449.0,          0.0 !   !END!
378 ! X =     746.40800,   5841.93500,       450.0,          0.0 !   !END!
379 ! X =     746.60800,   5841.93500,       450.0,          0.0 !   !END!
380 ! X =     746.80800,   5841.93500,       451.0,          0.0 !   !END!
381 ! X =     747.00800,   5841.93500,       452.0,          0.0 !   !END!
382 ! X =     747.20800,   5841.93500,       454.0,          0.0 !   !END!
383 ! X =     747.40800,   5841.93500,       462.0,          0.0 !   !END!
384 ! X =     747.60800,   5841.93500,       464.0,          0.0 !   !END!
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385 ! X =     747.80800,   5841.93500,       463.0,          0.0 !   !END!
386 ! X =     748.00800,   5841.93500,       462.0,          0.0 !   !END!
387 ! X =     748.20800,   5841.93500,       466.0,          0.0 !   !END!
388 ! X =     748.40800,   5841.93500,       468.0,          0.0 !   !END!
389 ! X =     748.60800,   5841.93500,       465.0,          0.0 !   !END!
390 ! X =     748.80800,   5841.93500,       468.0,          0.0 !   !END!
391 ! X =     749.00800,   5841.93500,       466.0,          0.0 !   !END!
392 ! X =     749.20800,   5841.93500,       466.0,          0.0 !   !END!
393 ! X =     749.40800,   5841.93500,       464.0,          0.0 !   !END!
394 ! X =     749.60800,   5841.93500,       462.0,          0.0 !   !END!
395 ! X =     749.80800,   5841.93500,       461.0,          0.0 !   !END!
396 ! X =     750.00800,   5841.93500,       463.0,          0.0 !   !END!
397 ! X =     750.20800,   5841.93500,       461.0,          0.0 !   !END!
398 ! X =     750.40800,   5841.93500,       457.0,          0.0 !   !END!
399 ! X =     750.60800,   5841.93500,       452.0,          0.0 !   !END!
400 ! X =     750.80800,   5841.93500,       450.0,          0.0 !   !END!
401 ! X =     751.00800,   5841.93500,       447.0,          0.0 !   !END!
402 ! X =     751.20800,   5841.93500,       449.0,          0.0 !   !END!
403 ! X =     751.40800,   5841.93500,       449.0,          0.0 !   !END!
404 ! X =     751.60800,   5841.93500,       449.0,          0.0 !   !END!
405 ! X =     751.80800,   5841.93500,       451.0,          0.0 !   !END!
406 ! X =     752.00800,   5841.93500,       457.0,          0.0 !   !END!
407 ! X =     752.20800,   5841.93500,       457.0,          0.0 !   !END!
408 ! X =     752.40800,   5841.93500,       465.0,          0.0 !   !END!
409 ! X =     739.00800,   5842.13500,       405.0,          0.0 !   !END!
410 ! X =     739.20800,   5842.13500,       405.0,          0.0 !   !END!
411 ! X =     739.40800,   5842.13500,       405.0,          0.0 !   !END!
412 ! X =     739.60800,   5842.13500,       406.0,          0.0 !   !END!
413 ! X =     739.80800,   5842.13500,       405.0,          0.0 !   !END!
414 ! X =     740.00800,   5842.13500,       404.0,          0.0 !   !END!
415 ! X =     740.20800,   5842.13500,       405.0,          0.0 !   !END!
416 ! X =     740.40800,   5842.13500,       415.0,          0.0 !   !END!
417 ! X =     740.60800,   5842.13500,       415.0,          0.0 !   !END!
418 ! X =     740.80800,   5842.13500,       411.0,          0.0 !   !END!
419 ! X =     741.00800,   5842.13500,       408.0,          0.0 !   !END!
420 ! X =     741.20800,   5842.13500,       407.0,          0.0 !   !END!
421 ! X =     741.40800,   5842.13500,       411.0,          0.0 !   !END!
422 ! X =     741.60800,   5842.13500,       416.0,          0.0 !   !END!
423 ! X =     741.80800,   5842.13500,       418.0,          0.0 !   !END!
424 ! X =     742.00800,   5842.13500,       416.0,          0.0 !   !END!
425 ! X =     742.20800,   5842.13500,       418.0,          0.0 !   !END!
426 ! X =     742.40800,   5842.13500,       419.0,          0.0 !   !END!
427 ! X =     742.60800,   5842.13500,       419.0,          0.0 !   !END!
428 ! X =     742.80800,   5842.13500,       421.0,          0.0 !   !END!
429 ! X =     743.00800,   5842.13500,       422.0,          0.0 !   !END!
430 ! X =     743.20800,   5842.13500,       423.0,          0.0 !   !END!
431 ! X =     743.40800,   5842.13500,       420.0,          0.0 !   !END!
432 ! X =     743.60800,   5842.13500,       427.0,          0.0 !   !END!
433 ! X =     743.80800,   5842.13500,       431.0,          0.0 !   !END!
434 ! X =     744.00800,   5842.13500,       433.0,          0.0 !   !END!
435 ! X =     744.20800,   5842.13500,       436.0,          0.0 !   !END!
436 ! X =     744.40800,   5842.13500,       438.0,          0.0 !   !END!
437 ! X =     744.60800,   5842.13500,       441.0,          0.0 !   !END!
438 ! X =     744.80800,   5842.13500,       440.0,          0.0 !   !END!
439 ! X =     745.00800,   5842.13500,       445.0,          0.0 !   !END!
440 ! X =     745.20800,   5842.13500,       445.0,          0.0 !   !END!
441 ! X =     745.40800,   5842.13500,       451.0,          0.0 !   !END!
442 ! X =     745.60800,   5842.13500,       453.0,          0.0 !   !END!
443 ! X =     745.80800,   5842.13500,       454.0,          0.0 !   !END!
444 ! X =     746.00800,   5842.13500,       452.0,          0.0 !   !END!
445 ! X =     746.20800,   5842.13500,       450.0,          0.0 !   !END!
446 ! X =     746.40800,   5842.13500,       449.0,          0.0 !   !END!
447 ! X =     746.60800,   5842.13500,       453.0,          0.0 !   !END!
448 ! X =     746.80800,   5842.13500,       452.0,          0.0 !   !END!
449 ! X =     747.00800,   5842.13500,       453.0,          0.0 !   !END!
450 ! X =     747.20800,   5842.13500,       448.0,          0.0 !   !END!
451 ! X =     747.40800,   5842.13500,       453.0,          0.0 !   !END!
452 ! X =     747.60800,   5842.13500,       456.0,          0.0 !   !END!
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453 ! X =     747.80800,   5842.13500,       462.0,          0.0 !   !END!
454 ! X =     748.00800,   5842.13500,       463.0,          0.0 !   !END!
455 ! X =     748.20800,   5842.13500,       465.0,          0.0 !   !END!
456 ! X =     748.40800,   5842.13500,       466.0,          0.0 !   !END!
457 ! X =     748.60800,   5842.13500,       464.0,          0.0 !   !END!
458 ! X =     748.80800,   5842.13500,       459.0,          0.0 !   !END!
459 ! X =     749.00800,   5842.13500,       463.0,          0.0 !   !END!
460 ! X =     749.20800,   5842.13500,       464.0,          0.0 !   !END!
461 ! X =     749.40800,   5842.13500,       464.0,          0.0 !   !END!
462 ! X =     749.60800,   5842.13500,       465.0,          0.0 !   !END!
463 ! X =     749.80800,   5842.13500,       462.0,          0.0 !   !END!
464 ! X =     750.00800,   5842.13500,       464.0,          0.0 !   !END!
465 ! X =     750.20800,   5842.13500,       459.0,          0.0 !   !END!
466 ! X =     750.40800,   5842.13500,       458.0,          0.0 !   !END!
467 ! X =     750.60800,   5842.13500,       455.0,          0.0 !   !END!
468 ! X =     750.80800,   5842.13500,       452.0,          0.0 !   !END!
469 ! X =     751.00800,   5842.13500,       448.0,          0.0 !   !END!
470 ! X =     751.20800,   5842.13500,       444.0,          0.0 !   !END!
471 ! X =     751.40800,   5842.13500,       446.0,          0.0 !   !END!
472 ! X =     751.60800,   5842.13500,       447.0,          0.0 !   !END!
473 ! X =     751.80800,   5842.13500,       451.0,          0.0 !   !END!
474 ! X =     752.00800,   5842.13500,       450.0,          0.0 !   !END!
475 ! X =     752.20800,   5842.13500,       454.0,          0.0 !   !END!
476 ! X =     752.40800,   5842.13500,       462.0,          0.0 !   !END!
477 ! X =     739.00800,   5842.33500,       404.0,          0.0 !   !END!
478 ! X =     739.20800,   5842.33500,       403.0,          0.0 !   !END!
479 ! X =     739.40800,   5842.33500,       409.0,          0.0 !   !END!
480 ! X =     739.60800,   5842.33500,       411.0,          0.0 !   !END!
481 ! X =     739.80800,   5842.33500,       410.0,          0.0 !   !END!
482 ! X =     740.00800,   5842.33500,       404.0,          0.0 !   !END!
483 ! X =     740.20800,   5842.33500,       406.0,          0.0 !   !END!
484 ! X =     740.40800,   5842.33500,       408.0,          0.0 !   !END!
485 ! X =     740.60800,   5842.33500,       414.0,          0.0 !   !END!
486 ! X =     740.80800,   5842.33500,       412.0,          0.0 !   !END!
487 ! X =     741.00800,   5842.33500,       408.0,          0.0 !   !END!
488 ! X =     741.20800,   5842.33500,       407.0,          0.0 !   !END!
489 ! X =     741.40800,   5842.33500,       410.0,          0.0 !   !END!
490 ! X =     741.60800,   5842.33500,       414.0,          0.0 !   !END!
491 ! X =     741.80800,   5842.33500,       418.0,          0.0 !   !END!
492 ! X =     742.00800,   5842.33500,       420.0,          0.0 !   !END!
493 ! X =     742.20800,   5842.33500,       421.0,          0.0 !   !END!
494 ! X =     742.40800,   5842.33500,       423.0,          0.0 !   !END!
495 ! X =     742.60800,   5842.33500,       421.0,          0.0 !   !END!
496 ! X =     742.80800,   5842.33500,       422.0,          0.0 !   !END!
497 ! X =     743.00800,   5842.33500,       423.0,          0.0 !   !END!
498 ! X =     743.20800,   5842.33500,       422.0,          0.0 !   !END!
499 ! X =     743.40800,   5842.33500,       423.0,          0.0 !   !END!
500 ! X =     743.60800,   5842.33500,       426.0,          0.0 !   !END!
501 ! X =     743.80800,   5842.33500,       428.0,          0.0 !   !END!
502 ! X =     744.00800,   5842.33500,       436.0,          0.0 !   !END!
503 ! X =     744.20800,   5842.33500,       438.0,          0.0 !   !END!
504 ! X =     744.40800,   5842.33500,       438.0,          0.0 !   !END!
505 ! X =     744.60800,   5842.33500,       436.0,          0.0 !   !END!
506 ! X =     744.80800,   5842.33500,       439.0,          0.0 !   !END!
507 ! X =     745.00800,   5842.33500,       442.0,          0.0 !   !END!
508 ! X =     745.20800,   5842.33500,       444.0,          0.0 !   !END!
509 ! X =     745.40800,   5842.33500,       449.0,          0.0 !   !END!
510 ! X =     745.60800,   5842.33500,       451.0,          0.0 !   !END!
511 ! X =     745.80800,   5842.33500,       450.0,          0.0 !   !END!
512 ! X =     746.00800,   5842.33500,       450.0,          0.0 !   !END!
513 ! X =     746.20800,   5842.33500,       452.0,          0.0 !   !END!
514 ! X =     746.40800,   5842.33500,       457.0,          0.0 !   !END!
515 ! X =     746.60800,   5842.33500,       449.0,          0.0 !   !END!
516 ! X =     746.80800,   5842.33500,       450.0,          0.0 !   !END!
517 ! X =     747.00800,   5842.33500,       448.0,          0.0 !   !END!
518 ! X =     747.20800,   5842.33500,       452.0,          0.0 !   !END!
519 ! X =     747.40800,   5842.33500,       450.0,          0.0 !   !END!
520 ! X =     747.60800,   5842.33500,       461.0,          0.0 !   !END!
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521 ! X =     747.80800,   5842.33500,       462.0,          0.0 !   !END!
522 ! X =     748.00800,   5842.33500,       459.0,          0.0 !   !END!
523 ! X =     748.20800,   5842.33500,       463.0,          0.0 !   !END!
524 ! X =     748.40800,   5842.33500,       462.0,          0.0 !   !END!
525 ! X =     748.60800,   5842.33500,       462.0,          0.0 !   !END!
526 ! X =     748.80800,   5842.33500,       467.0,          0.0 !   !END!
527 ! X =     749.00800,   5842.33500,       458.0,          0.0 !   !END!
528 ! X =     749.20800,   5842.33500,       459.0,          0.0 !   !END!
529 ! X =     749.40800,   5842.33500,       458.0,          0.0 !   !END!
530 ! X =     749.60800,   5842.33500,       460.0,          0.0 !   !END!
531 ! X =     749.80800,   5842.33500,       464.0,          0.0 !   !END!
532 ! X =     750.00800,   5842.33500,       464.0,          0.0 !   !END!
533 ! X =     750.20800,   5842.33500,       460.0,          0.0 !   !END!
534 ! X =     750.40800,   5842.33500,       456.0,          0.0 !   !END!
535 ! X =     750.60800,   5842.33500,       454.0,          0.0 !   !END!
536 ! X =     750.80800,   5842.33500,       449.0,          0.0 !   !END!
537 ! X =     751.00800,   5842.33500,       447.0,          0.0 !   !END!
538 ! X =     751.20800,   5842.33500,       446.0,          0.0 !   !END!
539 ! X =     751.40800,   5842.33500,       446.0,          0.0 !   !END!
540 ! X =     751.60800,   5842.33500,       449.0,          0.0 !   !END!
541 ! X =     751.80800,   5842.33500,       448.0,          0.0 !   !END!
542 ! X =     752.00800,   5842.33500,       448.0,          0.0 !   !END!
543 ! X =     752.20800,   5842.33500,       458.0,          0.0 !   !END!
544 ! X =     752.40800,   5842.33500,       457.0,          0.0 !   !END!
545 ! X =     739.00800,   5842.53500,       408.0,          0.0 !   !END!
546 ! X =     739.20800,   5842.53500,       405.0,          0.0 !   !END!
547 ! X =     739.40800,   5842.53500,       407.0,          0.0 !   !END!
548 ! X =     739.60800,   5842.53500,       412.0,          0.0 !   !END!
549 ! X =     739.80800,   5842.53500,       413.0,          0.0 !   !END!
550 ! X =     740.00800,   5842.53500,       405.0,          0.0 !   !END!
551 ! X =     740.20800,   5842.53500,       407.0,          0.0 !   !END!
552 ! X =     740.40800,   5842.53500,       412.0,          0.0 !   !END!
553 ! X =     740.60800,   5842.53500,       413.0,          0.0 !   !END!
554 ! X =     740.80800,   5842.53500,       413.0,          0.0 !   !END!
555 ! X =     741.00800,   5842.53500,       410.0,          0.0 !   !END!
556 ! X =     741.20800,   5842.53500,       408.0,          0.0 !   !END!
557 ! X =     741.40800,   5842.53500,       413.0,          0.0 !   !END!
558 ! X =     741.60800,   5842.53500,       413.0,          0.0 !   !END!
559 ! X =     741.80800,   5842.53500,       417.0,          0.0 !   !END!
560 ! X =     742.00800,   5842.53500,       417.0,          0.0 !   !END!
561 ! X =     742.20800,   5842.53500,       418.0,          0.0 !   !END!
562 ! X =     742.40800,   5842.53500,       421.0,          0.0 !   !END!
563 ! X =     742.60800,   5842.53500,       421.0,          0.0 !   !END!
564 ! X =     742.80800,   5842.53500,       422.0,          0.0 !   !END!
565 ! X =     743.00800,   5842.53500,       424.0,          0.0 !   !END!
566 ! X =     743.20800,   5842.53500,       424.0,          0.0 !   !END!
567 ! X =     743.40800,   5842.53500,       423.0,          0.0 !   !END!
568 ! X =     743.60800,   5842.53500,       426.0,          0.0 !   !END!
569 ! X =     743.80800,   5842.53500,       431.0,          0.0 !   !END!
570 ! X =     744.00800,   5842.53500,       431.0,          0.0 !   !END!
571 ! X =     744.20800,   5842.53500,       432.0,          0.0 !   !END!
572 ! X =     744.40800,   5842.53500,       434.0,          0.0 !   !END!
573 ! X =     744.60800,   5842.53500,       436.0,          0.0 !   !END!
574 ! X =     744.80800,   5842.53500,       438.0,          0.0 !   !END!
575 ! X =     745.00800,   5842.53500,       441.0,          0.0 !   !END!
576 ! X =     745.20800,   5842.53500,       447.0,          0.0 !   !END!
577 ! X =     745.40800,   5842.53500,       450.0,          0.0 !   !END!
578 ! X =     745.60800,   5842.53500,       450.0,          0.0 !   !END!
579 ! X =     745.80800,   5842.53500,       449.0,          0.0 !   !END!
580 ! X =     746.00800,   5842.53500,       451.0,          0.0 !   !END!
581 ! X =     746.20800,   5842.53500,       454.0,          0.0 !   !END!
582 ! X =     746.40800,   5842.53500,       454.0,          0.0 !   !END!
583 ! X =     746.60800,   5842.53500,       453.0,          0.0 !   !END!
584 ! X =     746.80800,   5842.53500,       450.0,          0.0 !   !END!
585 ! X =     747.00800,   5842.53500,       449.0,          0.0 !   !END!
586 ! X =     747.20800,   5842.53500,       448.0,          0.0 !   !END!
587 ! X =     747.40800,   5842.53500,       449.0,          0.0 !   !END!
588 ! X =     747.60800,   5842.53500,       459.0,          0.0 !   !END!
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589 ! X =     747.80800,   5842.53500,       458.0,          0.0 !   !END!
590 ! X =     748.00800,   5842.53500,       459.0,          0.0 !   !END!
591 ! X =     748.20800,   5842.53500,       460.0,          0.0 !   !END!
592 ! X =     748.40800,   5842.53500,       461.0,          0.0 !   !END!
593 ! X =     748.60800,   5842.53500,       461.0,          0.0 !   !END!
594 ! X =     748.80800,   5842.53500,       461.0,          0.0 !   !END!
595 ! X =     749.00800,   5842.53500,       459.0,          0.0 !   !END!
596 ! X =     749.20800,   5842.53500,       458.0,          0.0 !   !END!
597 ! X =     749.40800,   5842.53500,       458.0,          0.0 !   !END!
598 ! X =     749.60800,   5842.53500,       457.0,          0.0 !   !END!
599 ! X =     749.80800,   5842.53500,       459.0,          0.0 !   !END!
600 ! X =     750.00800,   5842.53500,       459.0,          0.0 !   !END!
601 ! X =     750.20800,   5842.53500,       458.0,          0.0 !   !END!
602 ! X =     750.40800,   5842.53500,       454.0,          0.0 !   !END!
603 ! X =     750.60800,   5842.53500,       452.0,          0.0 !   !END!
604 ! X =     750.80800,   5842.53500,       448.0,          0.0 !   !END!
605 ! X =     751.00800,   5842.53500,       446.0,          0.0 !   !END!
606 ! X =     751.20800,   5842.53500,       444.0,          0.0 !   !END!
607 ! X =     751.40800,   5842.53500,       447.0,          0.0 !   !END!
608 ! X =     751.60800,   5842.53500,       445.0,          0.0 !   !END!
609 ! X =     751.80800,   5842.53500,       448.0,          0.0 !   !END!
610 ! X =     752.00800,   5842.53500,       449.0,          0.0 !   !END!
611 ! X =     752.20800,   5842.53500,       459.0,          0.0 !   !END!
612 ! X =     752.40800,   5842.53500,       457.0,          0.0 !   !END!
613 ! X =     739.00800,   5842.73500,       410.0,          0.0 !   !END!
614 ! X =     739.20800,   5842.73500,       410.0,          0.0 !   !END!
615 ! X =     739.40800,   5842.73500,       409.0,          0.0 !   !END!
616 ! X =     739.60800,   5842.73500,       407.0,          0.0 !   !END!
617 ! X =     739.80800,   5842.73500,       407.0,          0.0 !   !END!
618 ! X =     740.00800,   5842.73500,       411.0,          0.0 !   !END!
619 ! X =     740.20800,   5842.73500,       410.0,          0.0 !   !END!
620 ! X =     740.40800,   5842.73500,       414.0,          0.0 !   !END!
621 ! X =     740.60800,   5842.73500,       413.0,          0.0 !   !END!
622 ! X =     740.80800,   5842.73500,       416.0,          0.0 !   !END!
623 ! X =     741.00800,   5842.73500,       413.0,          0.0 !   !END!
624 ! X =     741.20800,   5842.73500,       413.0,          0.0 !   !END!
625 ! X =     741.40800,   5842.73500,       410.0,          0.0 !   !END!
626 ! X =     741.60800,   5842.73500,       414.0,          0.0 !   !END!
627 ! X =     741.80800,   5842.73500,       416.0,          0.0 !   !END!
628 ! X =     742.00800,   5842.73500,       418.0,          0.0 !   !END!
629 ! X =     742.20800,   5842.73500,       420.0,          0.0 !   !END!
630 ! X =     742.40800,   5842.73500,       419.0,          0.0 !   !END!
631 ! X =     742.60800,   5842.73500,       425.0,          0.0 !   !END!
632 ! X =     742.80800,   5842.73500,       423.0,          0.0 !   !END!
633 ! X =     743.00800,   5842.73500,       425.0,          0.0 !   !END!
634 ! X =     743.20800,   5842.73500,       421.0,          0.0 !   !END!
635 ! X =     743.40800,   5842.73500,       426.0,          0.0 !   !END!
636 ! X =     743.60800,   5842.73500,       427.0,          0.0 !   !END!
637 ! X =     743.80800,   5842.73500,       430.0,          0.0 !   !END!
638 ! X =     744.00800,   5842.73500,       431.0,          0.0 !   !END!
639 ! X =     744.20800,   5842.73500,       434.0,          0.0 !   !END!
640 ! X =     744.40800,   5842.73500,       438.0,          0.0 !   !END!
641 ! X =     744.60800,   5842.73500,       438.0,          0.0 !   !END!
642 ! X =     744.80800,   5842.73500,       439.0,          0.0 !   !END!
643 ! X =     745.00800,   5842.73500,       444.0,          0.0 !   !END!
644 ! X =     745.20800,   5842.73500,       448.0,          0.0 !   !END!
645 ! X =     745.40800,   5842.73500,       449.0,          0.0 !   !END!
646 ! X =     745.60800,   5842.73500,       449.0,          0.0 !   !END!
647 ! X =     745.80800,   5842.73500,       451.0,          0.0 !   !END!
648 ! X =     746.00800,   5842.73500,       452.0,          0.0 !   !END!
649 ! X =     746.20800,   5842.73500,       456.0,          0.0 !   !END!
650 ! X =     746.40800,   5842.73500,       453.0,          0.0 !   !END!
651 ! X =     746.60800,   5842.73500,       448.0,          0.0 !   !END!
652 ! X =     746.80800,   5842.73500,       447.0,          0.0 !   !END!
653 ! X =     747.00800,   5842.73500,       449.0,          0.0 !   !END!
654 ! X =     747.20800,   5842.73500,       452.0,          0.0 !   !END!
655 ! X =     747.40800,   5842.73500,       453.0,          0.0 !   !END!
656 ! X =     747.60800,   5842.73500,       454.0,          0.0 !   !END!
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657 ! X =     747.80800,   5842.73500,       455.0,          0.0 !   !END!
658 ! X =     748.00800,   5842.73500,       457.0,          0.0 !   !END!
659 ! X =     748.20800,   5842.73500,       461.0,          0.0 !   !END!
660 ! X =     748.40800,   5842.73500,       458.0,          0.0 !   !END!
661 ! X =     748.60800,   5842.73500,       465.0,          0.0 !   !END!
662 ! X =     748.80800,   5842.73500,       459.0,          0.0 !   !END!
663 ! X =     749.00800,   5842.73500,       459.0,          0.0 !   !END!
664 ! X =     749.20800,   5842.73500,       457.0,          0.0 !   !END!
665 ! X =     749.40800,   5842.73500,       455.0,          0.0 !   !END!
666 ! X =     749.60800,   5842.73500,       456.0,          0.0 !   !END!
667 ! X =     749.80800,   5842.73500,       457.0,          0.0 !   !END!
668 ! X =     750.00800,   5842.73500,       456.0,          0.0 !   !END!
669 ! X =     750.20800,   5842.73500,       452.0,          0.0 !   !END!
670 ! X =     750.40800,   5842.73500,       453.0,          0.0 !   !END!
671 ! X =     750.60800,   5842.73500,       448.0,          0.0 !   !END!
672 ! X =     750.80800,   5842.73500,       447.0,          0.0 !   !END!
673 ! X =     751.00800,   5842.73500,       447.0,          0.0 !   !END!
674 ! X =     751.20800,   5842.73500,       446.0,          0.0 !   !END!
675 ! X =     751.40800,   5842.73500,       444.0,          0.0 !   !END!
676 ! X =     751.60800,   5842.73500,       444.0,          0.0 !   !END!
677 ! X =     751.80800,   5842.73500,       446.0,          0.0 !   !END!
678 ! X =     752.00800,   5842.73500,       451.0,          0.0 !   !END!
679 ! X =     752.20800,   5842.73500,       451.0,          0.0 !   !END!
680 ! X =     752.40800,   5842.73500,       455.0,          0.0 !   !END!
681 ! X =     739.00800,   5842.93500,       414.0,          0.0 !   !END!
682 ! X =     739.20800,   5842.93500,       412.0,          0.0 !   !END!
683 ! X =     739.40800,   5842.93500,       410.0,          0.0 !   !END!
684 ! X =     739.60800,   5842.93500,       408.0,          0.0 !   !END!
685 ! X =     739.80800,   5842.93500,       408.0,          0.0 !   !END!
686 ! X =     740.00800,   5842.93500,       409.0,          0.0 !   !END!
687 ! X =     740.20800,   5842.93500,       411.0,          0.0 !   !END!
688 ! X =     740.40800,   5842.93500,       413.0,          0.0 !   !END!
689 ! X =     740.60800,   5842.93500,       415.0,          0.0 !   !END!
690 ! X =     740.80800,   5842.93500,       417.0,          0.0 !   !END!
691 ! X =     741.00800,   5842.93500,       417.0,          0.0 !   !END!
692 ! X =     741.20800,   5842.93500,       412.0,          0.0 !   !END!
693 ! X =     741.40800,   5842.93500,       413.0,          0.0 !   !END!
694 ! X =     741.60800,   5842.93500,       411.0,          0.0 !   !END!
695 ! X =     741.80800,   5842.93500,       414.0,          0.0 !   !END!
696 ! X =     742.00800,   5842.93500,       416.0,          0.0 !   !END!
697 ! X =     742.20800,   5842.93500,       421.0,          0.0 !   !END!
698 ! X =     742.40800,   5842.93500,       423.0,          0.0 !   !END!
699 ! X =     742.60800,   5842.93500,       424.0,          0.0 !   !END!
700 ! X =     742.80800,   5842.93500,       424.0,          0.0 !   !END!
701 ! X =     743.00800,   5842.93500,       424.0,          0.0 !   !END!
702 ! X =     743.20800,   5842.93500,       425.0,          0.0 !   !END!
703 ! X =     743.40800,   5842.93500,       426.0,          0.0 !   !END!
704 ! X =     743.60800,   5842.93500,       425.0,          0.0 !   !END!
705 ! X =     743.80800,   5842.93500,       430.0,          0.0 !   !END!
706 ! X =     744.00800,   5842.93500,       433.0,          0.0 !   !END!
707 ! X =     744.20800,   5842.93500,       437.0,          0.0 !   !END!
708 ! X =     744.40800,   5842.93500,       435.0,          0.0 !   !END!
709 ! X =     744.60800,   5842.93500,       438.0,          0.0 !   !END!
710 ! X =     744.80800,   5842.93500,       440.0,          0.0 !   !END!
711 ! X =     745.00800,   5842.93500,       443.0,          0.0 !   !END!
712 ! X =     745.20800,   5842.93500,       445.0,          0.0 !   !END!
713 ! X =     745.40800,   5842.93500,       446.0,          0.0 !   !END!
714 ! X =     745.60800,   5842.93500,       447.0,          0.0 !   !END!
715 ! X =     745.80800,   5842.93500,       446.0,          0.0 !   !END!
716 ! X =     746.00800,   5842.93500,       448.0,          0.0 !   !END!
717 ! X =     746.20800,   5842.93500,       450.0,          0.0 !   !END!
718 ! X =     746.40800,   5842.93500,       449.0,          0.0 !   !END!
719 ! X =     746.60800,   5842.93500,       445.0,          0.0 !   !END!
720 ! X =     746.80800,   5842.93500,       448.0,          0.0 !   !END!
721 ! X =     747.00800,   5842.93500,       448.0,          0.0 !   !END!
722 ! X =     747.20800,   5842.93500,       455.0,          0.0 !   !END!
723 ! X =     747.40800,   5842.93500,       455.0,          0.0 !   !END!
724 ! X =     747.60800,   5842.93500,       454.0,          0.0 !   !END!
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725 ! X =     747.80800,   5842.93500,       451.0,          0.0 !   !END!
726 ! X =     748.00800,   5842.93500,       454.0,          0.0 !   !END!
727 ! X =     748.20800,   5842.93500,       456.0,          0.0 !   !END!
728 ! X =     748.40800,   5842.93500,       456.0,          0.0 !   !END!
729 ! X =     748.60800,   5842.93500,       455.0,          0.0 !   !END!
730 ! X =     748.80800,   5842.93500,       455.0,          0.0 !   !END!
731 ! X =     749.00800,   5842.93500,       456.0,          0.0 !   !END!
732 ! X =     749.20800,   5842.93500,       455.0,          0.0 !   !END!
733 ! X =     749.40800,   5842.93500,       452.0,          0.0 !   !END!
734 ! X =     749.60800,   5842.93500,       453.0,          0.0 !   !END!
735 ! X =     749.80800,   5842.93500,       456.0,          0.0 !   !END!
736 ! X =     750.00800,   5842.93500,       455.0,          0.0 !   !END!
737 ! X =     750.20800,   5842.93500,       452.0,          0.0 !   !END!
738 ! X =     750.40800,   5842.93500,       449.0,          0.0 !   !END!
739 ! X =     750.60800,   5842.93500,       445.0,          0.0 !   !END!
740 ! X =     750.80800,   5842.93500,       446.0,          0.0 !   !END!
741 ! X =     751.00800,   5842.93500,       444.0,          0.0 !   !END!
742 ! X =     751.20800,   5842.93500,       443.0,          0.0 !   !END!
743 ! X =     751.40800,   5842.93500,       446.0,          0.0 !   !END!
744 ! X =     751.60800,   5842.93500,       445.0,          0.0 !   !END!
745 ! X =     751.80800,   5842.93500,       446.0,          0.0 !   !END!
746 ! X =     752.00800,   5842.93500,       448.0,          0.0 !   !END!
747 ! X =     752.20800,   5842.93500,       451.0,          0.0 !   !END!
748 ! X =     752.40800,   5842.93500,       456.0,          0.0 !   !END!
749 ! X =     739.00800,   5843.13500,       412.0,          0.0 !   !END!
750 ! X =     739.20800,   5843.13500,       411.0,          0.0 !   !END!
751 ! X =     739.40800,   5843.13500,       409.0,          0.0 !   !END!
752 ! X =     739.60800,   5843.13500,       409.0,          0.0 !   !END!
753 ! X =     739.80800,   5843.13500,       409.0,          0.0 !   !END!
754 ! X =     740.00800,   5843.13500,       408.0,          0.0 !   !END!
755 ! X =     740.20800,   5843.13500,       407.0,          0.0 !   !END!
756 ! X =     740.40800,   5843.13500,       410.0,          0.0 !   !END!
757 ! X =     740.60800,   5843.13500,       413.0,          0.0 !   !END!
758 ! X =     740.80800,   5843.13500,       417.0,          0.0 !   !END!
759 ! X =     741.00800,   5843.13500,       418.0,          0.0 !   !END!
760 ! X =     741.20800,   5843.13500,       415.0,          0.0 !   !END!
761 ! X =     741.40800,   5843.13500,       413.0,          0.0 !   !END!
762 ! X =     741.60800,   5843.13500,       415.0,          0.0 !   !END!
763 ! X =     741.80800,   5843.13500,       415.0,          0.0 !   !END!
764 ! X =     742.00800,   5843.13500,       415.0,          0.0 !   !END!
765 ! X =     742.20800,   5843.13500,       415.0,          0.0 !   !END!
766 ! X =     742.40800,   5843.13500,       423.0,          0.0 !   !END!
767 ! X =     742.60800,   5843.13500,       422.0,          0.0 !   !END!
768 ! X =     742.80800,   5843.13500,       422.0,          0.0 !   !END!
769 ! X =     743.00800,   5843.13500,       421.0,          0.0 !   !END!
770 ! X =     743.20800,   5843.13500,       421.0,          0.0 !   !END!
771 ! X =     743.40800,   5843.13500,       425.0,          0.0 !   !END!
772 ! X =     743.60800,   5843.13500,       427.0,          0.0 !   !END!
773 ! X =     743.80800,   5843.13500,       432.0,          0.0 !   !END!
774 ! X =     744.00800,   5843.13500,       433.0,          0.0 !   !END!
775 ! X =     744.20800,   5843.13500,       437.0,          0.0 !   !END!
776 ! X =     744.40800,   5843.13500,       434.0,          0.0 !   !END!
777 ! X =     744.60800,   5843.13500,       437.0,          0.0 !   !END!
778 ! X =     744.80800,   5843.13500,       440.0,          0.0 !   !END!
779 ! X =     745.00800,   5843.13500,       443.0,          0.0 !   !END!
780 ! X =     745.20800,   5843.13500,       445.0,          0.0 !   !END!
781 ! X =     745.40800,   5843.13500,       447.0,          0.0 !   !END!
782 ! X =     745.60800,   5843.13500,       442.0,          0.0 !   !END!
783 ! X =     745.80800,   5843.13500,       445.0,          0.0 !   !END!
784 ! X =     746.00800,   5843.13500,       447.0,          0.0 !   !END!
785 ! X =     746.20800,   5843.13500,       449.0,          0.0 !   !END!
786 ! X =     746.40800,   5843.13500,       449.0,          0.0 !   !END!
787 ! X =     746.60800,   5843.13500,       448.0,          0.0 !   !END!
788 ! X =     746.80800,   5843.13500,       448.0,          0.0 !   !END!
789 ! X =     747.00800,   5843.13500,       449.0,          0.0 !   !END!
790 ! X =     747.20800,   5843.13500,       449.0,          0.0 !   !END!
791 ! X =     747.40800,   5843.13500,       451.0,          0.0 !   !END!
792 ! X =     747.60800,   5843.13500,       455.0,          0.0 !   !END!
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793	! X =	747.80800,	5843.13500,	456.0,	0.0	!END!
794	! X =	748.00800,	5843.13500,	453.0,	0.0	!END!
795	! X =	748.20800,	5843.13500,	456.0,	0.0	!END!
796	! X =	748.40800,	5843.13500,	454.0,	0.0	!END!
797	! X =	748.60800,	5843.13500,	454.0,	0.0	!END!
798	! X =	748.80800,	5843.13500,	452.0,	0.0	!END!
799	! X =	749.00800,	5843.13500,	453.0,	0.0	!END!
800	! X =	749.20800,	5843.13500,	452.0,	0.0	!END!
801	! X =	749.40800,	5843.13500,	449.0,	0.0	!END!
802	! X =	749.60800,	5843.13500,	452.0,	0.0	!END!
803	! X =	749.80800,	5843.13500,	454.0,	0.0	!END!
804	! X =	750.00800,	5843.13500,	455.0,	0.0	!END!
805	! X =	750.20800,	5843.13500,	452.0,	0.0	!END!
806	! X =	750.40800,	5843.13500,	447.0,	0.0	!END!
807	! X =	750.60800,	5843.13500,	446.0,	0.0	!END!
808	! X =	750.80800,	5843.13500,	446.0,	0.0	!END!
809	! X =	751.00800,	5843.13500,	445.0,	0.0	!END!
810	! X =	751.20800,	5843.13500,	444.0,	0.0	!END!
811	! X =	751.40800,	5843.13500,	445.0,	0.0	!END!
812	! X =	751.60800,	5843.13500,	445.0,	0.0	!END!
813	! X =	751.80800,	5843.13500,	447.0,	0.0	!END!
814	! X =	752.00800,	5843.13500,	446.0,	0.0	!END!
815	! X =	752.20800,	5843.13500,	449.0,	0.0	!END!
816	! X =	752.40800,	5843.13500,	451.0,	0.0	!END!
817	! X =	739.00800,	5843.33500,	412.0,	0.0	!END!
818	! X =	739.20800,	5843.33500,	412.0,	0.0	!END!
819	! X =	739.40800,	5843.33500,	412.0,	0.0	!END!
820	! X =	739.60800,	5843.33500,	411.0,	0.0	!END!
821	! X =	739.80800,	5843.33500,	410.0,	0.0	!END!
822	! X =	740.00800,	5843.33500,	409.0,	0.0	!END!
823	! X =	740.20800,	5843.33500,	410.0,	0.0	!END!
824	! X =	740.40800,	5843.33500,	409.0,	0.0	!END!
825	! X =	740.60800,	5843.33500,	409.0,	0.0	!END!
826	! X =	740.80800,	5843.33500,	411.0,	0.0	!END!
827	! X =	741.00800,	5843.33500,	413.0,	0.0	!END!
828	! X =	741.20800,	5843.33500,	413.0,	0.0	!END!
829	! X =	741.40800,	5843.33500,	415.0,	0.0	!END!
830	! X =	741.60800,	5843.33500,	414.0,	0.0	!END!
831	! X =	741.80800,	5843.33500,	415.0,	0.0	!END!
832	! X =	742.00800,	5843.33500,	415.0,	0.0	!END!
833	! X =	742.20800,	5843.33500,	417.0,	0.0	!END!
834	! X =	742.40800,	5843.33500,	420.0,	0.0	!END!
835	! X =	742.60800,	5843.33500,	422.0,	0.0	!END!
836	! X =	742.80800,	5843.33500,	420.0,	0.0	!END!
837	! X =	743.00800,	5843.33500,	419.0,	0.0	!END!
838	! X =	743.20800,	5843.33500,	422.0,	0.0	!END!
839	! X =	743.40800,	5843.33500,	422.0,	0.0	!END!
840	! X =	743.60800,	5843.33500,	425.0,	0.0	!END!
841	! X =	743.80800,	5843.33500,	430.0,	0.0	!END!
842	! X =	744.00800,	5843.33500,	429.0,	0.0	!END!
843	! X =	744.20800,	5843.33500,	434.0,	0.0	!END!
844	! X =	744.40800,	5843.33500,	436.0,	0.0	!END!
845	! X =	744.60800,	5843.33500,	440.0,	0.0	!END!
846	! X =	744.80800,	5843.33500,	443.0,	0.0	!END!
847	! X =	745.00800,	5843.33500,	441.0,	0.0	!END!
848	! X =	745.20800,	5843.33500,	443.0,	0.0	!END!
849	! X =	745.40800,	5843.33500,	441.0,	0.0	!END!
850	! X =	745.60800,	5843.33500,	443.0,	0.0	!END!
851	! X =	745.80800,	5843.33500,	442.0,	0.0	!END!
852	! X =	746.00800,	5843.33500,	447.0,	0.0	!END!
853	! X =	746.20800,	5843.33500,	447.0,	0.0	!END!
854	! X =	746.40800,	5843.33500,	450.0,	0.0	!END!
855	! X =	746.60800,	5843.33500,	449.0,	0.0	!END!
856	! X =	746.80800,	5843.33500,	440.0,	0.0	!END!
857	! X =	747.00800,	5843.33500,	448.0,	0.0	!END!
858	! X =	747.20800,	5843.33500,	447.0,	0.0	!END!
859	! X =	747.40800,	5843.33500,	448.0,	0.0	!END!
860	! X =	747.60800,	5843.33500,	452.0,	0.0	!END!

861	! X =	747.80800,	5843.33500,	456.0,	0.0	!END!
862	! X =	748.00800,	5843.33500,	453.0,	0.0	!END!
863	! X =	748.20800,	5843.33500,	455.0,	0.0	!END!
864	! X =	748.40800,	5843.33500,	451.0,	0.0	!END!
865	! X =	748.60800,	5843.33500,	453.0,	0.0	!END!
866	! X =	748.80800,	5843.33500,	452.0,	0.0	!END!
867	! X =	749.00800,	5843.33500,	454.0,	0.0	!END!
868	! X =	749.20800,	5843.33500,	456.0,	0.0	!END!
869	! X =	749.40800,	5843.33500,	452.0,	0.0	!END!
870	! X =	749.60800,	5843.33500,	451.0,	0.0	!END!
871	! X =	749.80800,	5843.33500,	452.0,	0.0	!END!
872	! X =	750.00800,	5843.33500,	452.0,	0.0	!END!
873	! X =	750.20800,	5843.33500,	448.0,	0.0	!END!
874	! X =	750.40800,	5843.33500,	445.0,	0.0	!END!
875	! X =	750.60800,	5843.33500,	445.0,	0.0	!END!
876	! X =	750.80800,	5843.33500,	446.0,	0.0	!END!
877	! X =	751.00800,	5843.33500,	446.0,	0.0	!END!
878	! X =	751.20800,	5843.33500,	445.0,	0.0	!END!
879	! X =	751.40800,	5843.33500,	447.0,	0.0	!END!
880	! X =	751.60800,	5843.33500,	448.0,	0.0	!END!
881	! X =	751.80800,	5843.33500,	447.0,	0.0	!END!
882	! X =	752.00800,	5843.33500,	448.0,	0.0	!END!
883	! X =	752.20800,	5843.33500,	451.0,	0.0	!END!
884	! X =	752.40800,	5843.33500,	448.0,	0.0	!END!
885	! X =	739.00800,	5843.53500,	410.0,	0.0	!END!
886	! X =	739.20800,	5843.53500,	412.0,	0.0	!END!
887	! X =	739.40800,	5843.53500,	415.0,	0.0	!END!
888	! X =	739.60800,	5843.53500,	418.0,	0.0	!END!
889	! X =	739.80800,	5843.53500,	417.0,	0.0	!END!
890	! X =	740.00800,	5843.53500,	419.0,	0.0	!END!
891	! X =	740.20800,	5843.53500,	413.0,	0.0	!END!
892	! X =	740.40800,	5843.53500,	410.0,	0.0	!END!
893	! X =	740.60800,	5843.53500,	407.0,	0.0	!END!
894	! X =	740.80800,	5843.53500,	412.0,	0.0	!END!
895	! X =	741.00800,	5843.53500,	416.0,	0.0	!END!
896	! X =	741.20800,	5843.53500,	416.0,	0.0	!END!
897	! X =	741.40800,	5843.53500,	412.0,	0.0	!END!
898	! X =	741.60800,	5843.53500,	414.0,	0.0	!END!
899	! X =	741.80800,	5843.53500,	413.0,	0.0	!END!
900	! X =	742.00800,	5843.53500,	413.0,	0.0	!END!
901	! X =	742.20800,	5843.53500,	421.0,	0.0	!END!
902	! X =	742.40800,	5843.53500,	420.0,	0.0	!END!
903	! X =	742.60800,	5843.53500,	421.0,	0.0	!END!
904	! X =	742.80800,	5843.53500,	418.0,	0.0	!END!
905	! X =	743.00800,	5843.53500,	418.0,	0.0	!END!
906	! X =	743.20800,	5843.53500,	421.0,	0.0	!END!
907	! X =	743.40800,	5843.53500,	422.0,	0.0	!END!
908	! X =	743.60800,	5843.53500,	428.0,	0.0	!END!
909	! X =	743.80800,	5843.53500,	431.0,	0.0	!END!
910	! X =	744.00800,	5843.53500,	430.0,	0.0	!END!
911	! X =	744.20800,	5843.53500,	434.0,	0.0	!END!
912	! X =	744.40800,	5843.53500,	437.0,	0.0	!END!
913	! X =	744.60800,	5843.53500,	439.0,	0.0	!END!
914	! X =	744.80800,	5843.53500,	441.0,	0.0	!END!
915	! X =	745.00800,	5843.53500,	440.0,	0.0	!END!
916	! X =	745.20800,	5843.53500,	440.0,	0.0	!END!
917	! X =	745.40800,	5843.53500,	441.0,	0.0	!END!
918	! X =	745.60800,	5843.53500,	440.0,	0.0	!END!
919	! X =	745.80800,	5843.53500,	441.0,	0.0	!END!
920	! X =	746.00800,	5843.53500,	446.0,	0.0	!END!
921	! X =	746.20800,	5843.53500,	447.0,	0.0	!END!
922	! X =	746.40800,	5843.53500,	447.0,	0.0	!END!
923	! X =	746.60800,	5843.53500,	443.0,	0.0	!END!
924	! X =	746.80800,	5843.53500,	447.0,	0.0	!END!
925	! X =	747.00800,	5843.53500,	442.0,	0.0	!END!
926	! X =	747.20800,	5843.53500,	452.0,	0.0	!END!
927	! X =	747.40800,	5843.53500,	457.0,	0.0	!END!
928	! X =	747.60800,	5843.53500,	448.0,	0.0	!END!

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929 ! X =     747.80800,   5843.53500,       453.0,          0.0 !   !END!
930 ! X =     748.00800,   5843.53500,       459.0,          0.0 !   !END!
931 ! X =     748.20800,   5843.53500,       452.0,          0.0 !   !END!
932 ! X =     748.40800,   5843.53500,       447.0,          0.0 !   !END!
933 ! X =     748.60800,   5843.53500,       449.0,          0.0 !   !END!
934 ! X =     748.80800,   5843.53500,       447.0,          0.0 !   !END!
935 ! X =     749.00800,   5843.53500,       448.0,          0.0 !   !END!
936 ! X =     749.20800,   5843.53500,       452.0,          0.0 !   !END!
937 ! X =     749.40800,   5843.53500,       446.0,          0.0 !   !END!
938 ! X =     749.60800,   5843.53500,       449.0,          0.0 !   !END!
939 ! X =     749.80800,   5843.53500,       450.0,          0.0 !   !END!
940 ! X =     750.00800,   5843.53500,       450.0,          0.0 !   !END!
941 ! X =     750.20800,   5843.53500,       449.0,          0.0 !   !END!
942 ! X =     750.40800,   5843.53500,       449.0,          0.0 !   !END!
943 ! X =     750.60800,   5843.53500,       445.0,          0.0 !   !END!
944 ! X =     750.80800,   5843.53500,       446.0,          0.0 !   !END!
945 ! X =     751.00800,   5843.53500,       445.0,          0.0 !   !END!
946 ! X =     751.20800,   5843.53500,       446.0,          0.0 !   !END!
947 ! X =     751.40800,   5843.53500,       447.0,          0.0 !   !END!
948 ! X =     751.60800,   5843.53500,       447.0,          0.0 !   !END!
949 ! X =     751.80800,   5843.53500,       449.0,          0.0 !   !END!
950 ! X =     752.00800,   5843.53500,       449.0,          0.0 !   !END!
951 ! X =     752.20800,   5843.53500,       455.0,          0.0 !   !END!
952 ! X =     752.40800,   5843.53500,       451.0,          0.0 !   !END!
953 ! X =     739.00800,   5843.73500,       408.0,          0.0 !   !END!
954 ! X =     739.20800,   5843.73500,       413.0,          0.0 !   !END!
955 ! X =     739.40800,   5843.73500,       420.0,          0.0 !   !END!
956 ! X =     739.60800,   5843.73500,       421.0,          0.0 !   !END!
957 ! X =     739.80800,   5843.73500,       421.0,          0.0 !   !END!
958 ! X =     740.00800,   5843.73500,       416.0,          0.0 !   !END!
959 ! X =     740.20800,   5843.73500,       411.0,          0.0 !   !END!
960 ! X =     740.40800,   5843.73500,       408.0,          0.0 !   !END!
961 ! X =     740.60800,   5843.73500,       407.0,          0.0 !   !END!
962 ! X =     740.80800,   5843.73500,       411.0,          0.0 !   !END!
963 ! X =     741.00800,   5843.73500,       414.0,          0.0 !   !END!
964 ! X =     741.20800,   5843.73500,       416.0,          0.0 !   !END!
965 ! X =     741.40800,   5843.73500,       414.0,          0.0 !   !END!
966 ! X =     741.60800,   5843.73500,       416.0,          0.0 !   !END!
967 ! X =     741.80800,   5843.73500,       415.0,          0.0 !   !END!
968 ! X =     742.00800,   5843.73500,       417.0,          0.0 !   !END!
969 ! X =     742.20800,   5843.73500,       418.0,          0.0 !   !END!
970 ! X =     742.40800,   5843.73500,       419.0,          0.0 !   !END!
971 ! X =     742.60800,   5843.73500,       420.0,          0.0 !   !END!
972 ! X =     742.80800,   5843.73500,       416.0,          0.0 !   !END!
973 ! X =     743.00800,   5843.73500,       418.0,          0.0 !   !END!
974 ! X =     743.20800,   5843.73500,       418.0,          0.0 !   !END!
975 ! X =     743.40800,   5843.73500,       422.0,          0.0 !   !END!
976 ! X =     743.60800,   5843.73500,       423.0,          0.0 !   !END!
977 ! X =     743.80800,   5843.73500,       427.0,          0.0 !   !END!
978 ! X =     744.00800,   5843.73500,       431.0,          0.0 !   !END!
979 ! X =     744.20800,   5843.73500,       434.0,          0.0 !   !END!
980 ! X =     744.40800,   5843.73500,       438.0,          0.0 !   !END!
981 ! X =     744.60800,   5843.73500,       435.0,          0.0 !   !END!
982 ! X =     744.80800,   5843.73500,       439.0,          0.0 !   !END!
983 ! X =     745.00800,   5843.73500,       438.0,          0.0 !   !END!
984 ! X =     745.20800,   5843.73500,       437.0,          0.0 !   !END!
985 ! X =     745.40800,   5843.73500,       435.0,          0.0 !   !END!
986 ! X =     745.60800,   5843.73500,       437.0,          0.0 !   !END!
987 ! X =     745.80800,   5843.73500,       439.0,          0.0 !   !END!
988 ! X =     746.00800,   5843.73500,       441.0,          0.0 !   !END!
989 ! X =     746.20800,   5843.73500,       445.0,          0.0 !   !END!
990 ! X =     746.40800,   5843.73500,       445.0,          0.0 !   !END!
991 ! X =     746.60800,   5843.73500,       444.0,          0.0 !   !END!
992 ! X =     746.80800,   5843.73500,       445.0,          0.0 !   !END!
993 ! X =     747.00800,   5843.73500,       443.0,          0.0 !   !END!
994 ! X =     747.20800,   5843.73500,       446.0,          0.0 !   !END!
995 ! X =     747.40800,   5843.73500,       446.0,          0.0 !   !END!
996 ! X =     747.60800,   5843.73500,       444.0,          0.0 !   !END!
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997 ! X =     747.80800,   5843.73500,       451.0,          0.0 !   !END!
998 ! X =     748.00800,   5843.73500,       450.0,          0.0 !   !END!
999 ! X =     748.20800,   5843.73500,       449.0,          0.0 !   !END!
1000 ! X =    748.40800,   5843.73500,       446.0,          0.0 !   !END!
1001 ! X =    748.60800,   5843.73500,       448.0,          0.0 !   !END!
1002 ! X =    748.80800,   5843.73500,       449.0,          0.0 !   !END!
1003 ! X =    749.00800,   5843.73500,       447.0,          0.0 !   !END!
1004 ! X =    749.20800,   5843.73500,       447.0,          0.0 !   !END!
1005 ! X =    749.40800,   5843.73500,       446.0,          0.0 !   !END!
1006 ! X =    749.60800,   5843.73500,       447.0,          0.0 !   !END!
1007 ! X =    749.80800,   5843.73500,       447.0,          0.0 !   !END!
1008 ! X =    750.00800,   5843.73500,       448.0,          0.0 !   !END!
1009 ! X =    750.20800,   5843.73500,       448.0,          0.0 !   !END!
1010 ! X =    750.40800,   5843.73500,       445.0,          0.0 !   !END!
1011 ! X =    750.60800,   5843.73500,       444.0,          0.0 !   !END!
1012 ! X =    750.80800,   5843.73500,       443.0,          0.0 !   !END!
1013 ! X =    751.00800,   5843.73500,       443.0,          0.0 !   !END!
1014 ! X =    751.20800,   5843.73500,       443.0,          0.0 !   !END!
1015 ! X =    751.40800,   5843.73500,       448.0,          0.0 !   !END!
1016 ! X =    751.60800,   5843.73500,       446.0,          0.0 !   !END!
1017 ! X =    751.80800,   5843.73500,       448.0,          0.0 !   !END!
1018 ! X =    752.00800,   5843.73500,       447.0,          0.0 !   !END!
1019 ! X =    752.20800,   5843.73500,       450.0,          0.0 !   !END!
1020 ! X =    752.40800,   5843.73500,       449.0,          0.0 !   !END!
1021 ! X =    739.00800,   5843.93500,       410.0,          0.0 !   !END!
1022 ! X =    739.20800,   5843.93500,       415.0,          0.0 !   !END!
1023 ! X =    739.40800,   5843.93500,       420.0,          0.0 !   !END!
1024 ! X =    739.60800,   5843.93500,       417.0,          0.0 !   !END!
1025 ! X =    739.80800,   5843.93500,       415.0,          0.0 !   !END!
1026 ! X =    740.00800,   5843.93500,       411.0,          0.0 !   !END!
1027 ! X =    740.20800,   5843.93500,       408.0,          0.0 !   !END!
1028 ! X =    740.40800,   5843.93500,       406.0,          0.0 !   !END!
1029 ! X =    740.60800,   5843.93500,       407.0,          0.0 !   !END!
1030 ! X =    740.80800,   5843.93500,       411.0,          0.0 !   !END!
1031 ! X =    741.00800,   5843.93500,       415.0,          0.0 !   !END!
1032 ! X =    741.20800,   5843.93500,       415.0,          0.0 !   !END!
1033 ! X =    741.40800,   5843.93500,       416.0,          0.0 !   !END!
1034 ! X =    741.60800,   5843.93500,       420.0,          0.0 !   !END!
1035 ! X =    741.80800,   5843.93500,       417.0,          0.0 !   !END!
1036 ! X =    742.00800,   5843.93500,       418.0,          0.0 !   !END!
1037 ! X =    742.20800,   5843.93500,       418.0,          0.0 !   !END!
1038 ! X =    742.40800,   5843.93500,       415.0,          0.0 !   !END!
1039 ! X =    742.60800,   5843.93500,       420.0,          0.0 !   !END!
1040 ! X =    742.80800,   5843.93500,       417.0,          0.0 !   !END!
1041 ! X =    743.00800,   5843.93500,       416.0,          0.0 !   !END!
1042 ! X =    743.20800,   5843.93500,       418.0,          0.0 !   !END!
1043 ! X =    743.40800,   5843.93500,       421.0,          0.0 !   !END!
1044 ! X =    743.60800,   5843.93500,       427.0,          0.0 !   !END!
1045 ! X =    743.80800,   5843.93500,       430.0,          0.0 !   !END!
1046 ! X =    744.00800,   5843.93500,       432.0,          0.0 !   !END!
1047 ! X =    744.20800,   5843.93500,       432.0,          0.0 !   !END!
1048 ! X =    744.40800,   5843.93500,       434.0,          0.0 !   !END!
1049 ! X =    744.60800,   5843.93500,       438.0,          0.0 !   !END!
1050 ! X =    744.80800,   5843.93500,       437.0,          0.0 !   !END!
1051 ! X =    745.00800,   5843.93500,       438.0,          0.0 !   !END!
1052 ! X =    745.20800,   5843.93500,       436.0,          0.0 !   !END!
1053 ! X =    745.40800,   5843.93500,       438.0,          0.0 !   !END!
1054 ! X =    745.60800,   5843.93500,       440.0,          0.0 !   !END!
1055 ! X =    745.80800,   5843.93500,       439.0,          0.0 !   !END!
1056 ! X =    746.00800,   5843.93500,       445.0,          0.0 !   !END!
1057 ! X =    746.20800,   5843.93500,       446.0,          0.0 !   !END!
1058 ! X =    746.40800,   5843.93500,       441.0,          0.0 !   !END!
1059 ! X =    746.60800,   5843.93500,       444.0,          0.0 !   !END!
1060 ! X =    746.80800,   5843.93500,       443.0,          0.0 !   !END!
1061 ! X =    747.00800,   5843.93500,       443.0,          0.0 !   !END!
1062 ! X =    747.20800,   5843.93500,       444.0,          0.0 !   !END!
1063 ! X =    747.40800,   5843.93500,       446.0,          0.0 !   !END!
1064 ! X =    747.60800,   5843.93500,       443.0,          0.0 !   !END!
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1065 ! X =     747.80800,   5843.93500,       445.0,          0.0 !   !END!
1066 ! X =     748.00800,   5843.93500,       446.0,          0.0 !   !END!
1067 ! X =     748.20800,   5843.93500,       447.0,          0.0 !   !END!
1068 ! X =     748.40800,   5843.93500,       443.0,          0.0 !   !END!
1069 ! X =     748.60800,   5843.93500,       444.0,          0.0 !   !END!
1070 ! X =     748.80800,   5843.93500,       445.0,          0.0 !   !END!
1071 ! X =     749.00800,   5843.93500,       446.0,          0.0 !   !END!
1072 ! X =     749.20800,   5843.93500,       448.0,          0.0 !   !END!
1073 ! X =     749.40800,   5843.93500,       445.0,          0.0 !   !END!
1074 ! X =     749.60800,   5843.93500,       450.0,          0.0 !   !END!
1075 ! X =     749.80800,   5843.93500,       449.0,          0.0 !   !END!
1076 ! X =     750.00800,   5843.93500,       447.0,          0.0 !   !END!
1077 ! X =     750.20800,   5843.93500,       443.0,          0.0 !   !END!
1078 ! X =     750.40800,   5843.93500,       440.0,          0.0 !   !END!
1079 ! X =     750.60800,   5843.93500,       442.0,          0.0 !   !END!
1080 ! X =     750.80800,   5843.93500,       449.0,          0.0 !   !END!
1081 ! X =     751.00800,   5843.93500,       443.0,          0.0 !   !END!
1082 ! X =     751.20800,   5843.93500,       447.0,          0.0 !   !END!
1083 ! X =     751.40800,   5843.93500,       446.0,          0.0 !   !END!
1084 ! X =     751.60800,   5843.93500,       445.0,          0.0 !   !END!
1085 ! X =     751.80800,   5843.93500,       446.0,          0.0 !   !END!
1086 ! X =     752.00800,   5843.93500,       448.0,          0.0 !   !END!
1087 ! X =     752.20800,   5843.93500,       448.0,          0.0 !   !END!
1088 ! X =     752.40800,   5843.93500,       450.0,          0.0 !   !END!
1089 ! X =     739.00800,   5844.13500,       409.0,          0.0 !   !END!
1090 ! X =     739.20800,   5844.13500,       419.0,          0.0 !   !END!
1091 ! X =     739.40800,   5844.13500,       421.0,          0.0 !   !END!
1092 ! X =     739.60800,   5844.13500,       419.0,          0.0 !   !END!
1093 ! X =     739.80800,   5844.13500,       412.0,          0.0 !   !END!
1094 ! X =     740.00800,   5844.13500,       407.0,          0.0 !   !END!
1095 ! X =     740.20800,   5844.13500,       406.0,          0.0 !   !END!
1096 ! X =     740.40800,   5844.13500,       407.0,          0.0 !   !END!
1097 ! X =     740.60800,   5844.13500,       407.0,          0.0 !   !END!
1098 ! X =     740.80800,   5844.13500,       412.0,          0.0 !   !END!
1099 ! X =     741.00800,   5844.13500,       416.0,          0.0 !   !END!
1100 ! X =     741.20800,   5844.13500,       416.0,          0.0 !   !END!
1101 ! X =     741.40800,   5844.13500,       412.0,          0.0 !   !END!
1102 ! X =     741.60800,   5844.13500,       415.0,          0.0 !   !END!
1103 ! X =     741.80800,   5844.13500,       416.0,          0.0 !   !END!
1104 ! X =     742.00800,   5844.13500,       415.0,          0.0 !   !END!
1105 ! X =     742.20800,   5844.13500,       417.0,          0.0 !   !END!
1106 ! X =     742.40800,   5844.13500,       416.0,          0.0 !   !END!
1107 ! X =     742.60800,   5844.13500,       415.0,          0.0 !   !END!
1108 ! X =     742.80800,   5844.13500,       415.0,          0.0 !   !END!
1109 ! X =     743.00800,   5844.13500,       416.0,          0.0 !   !END!
1110 ! X =     743.20800,   5844.13500,       416.0,          0.0 !   !END!
1111 ! X =     743.40800,   5844.13500,       421.0,          0.0 !   !END!
1112 ! X =     743.60800,   5844.13500,       428.0,          0.0 !   !END!
1113 ! X =     743.80800,   5844.13500,       431.0,          0.0 !   !END!
1114 ! X =     744.00800,   5844.13500,       432.0,          0.0 !   !END!
1115 ! X =     744.20800,   5844.13500,       434.0,          0.0 !   !END!
1116 ! X =     744.40800,   5844.13500,       437.0,          0.0 !   !END!
1117 ! X =     744.60800,   5844.13500,       435.0,          0.0 !   !END!
1118 ! X =     744.80800,   5844.13500,       432.0,          0.0 !   !END!
1119 ! X =     745.00800,   5844.13500,       435.0,          0.0 !   !END!
1120 ! X =     745.20800,   5844.13500,       435.0,          0.0 !   !END!
1121 ! X =     745.40800,   5844.13500,       437.0,          0.0 !   !END!
1122 ! X =     745.60800,   5844.13500,       439.0,          0.0 !   !END!
1123 ! X =     745.80800,   5844.13500,       440.0,          0.0 !   !END!
1124 ! X =     746.00800,   5844.13500,       442.0,          0.0 !   !END!
1125 ! X =     746.20800,   5844.13500,       442.0,          0.0 !   !END!
1126 ! X =     746.40800,   5844.13500,       443.0,          0.0 !   !END!
1127 ! X =     746.60800,   5844.13500,       437.0,          0.0 !   !END!
1128 ! X =     746.80800,   5844.13500,       439.0,          0.0 !   !END!
1129 ! X =     747.00800,   5844.13500,       443.0,          0.0 !   !END!
1130 ! X =     747.20800,   5844.13500,       440.0,          0.0 !   !END!
1131 ! X =     747.40800,   5844.13500,       442.0,          0.0 !   !END!
1132 ! X =     747.60800,   5844.13500,       442.0,          0.0 !   !END!
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1133 ! X =     747.80800,   5844.13500,       443.0,          0.0 !   !END!
1134 ! X =     748.00800,   5844.13500,       446.0,          0.0 !   !END!
1135 ! X =     748.20800,   5844.13500,       444.0,          0.0 !   !END!
1136 ! X =     748.40800,   5844.13500,       442.0,          0.0 !   !END!
1137 ! X =     748.60800,   5844.13500,       444.0,          0.0 !   !END!
1138 ! X =     748.80800,   5844.13500,       444.0,          0.0 !   !END!
1139 ! X =     749.00800,   5844.13500,       446.0,          0.0 !   !END!
1140 ! X =     749.20800,   5844.13500,       452.0,          0.0 !   !END!
1141 ! X =     749.40800,   5844.13500,       448.0,          0.0 !   !END!
1142 ! X =     749.60800,   5844.13500,       459.0,          0.0 !   !END!
1143 ! X =     749.80800,   5844.13500,       447.0,          0.0 !   !END!
1144 ! X =     750.00800,   5844.13500,       452.0,          0.0 !   !END!
1145 ! X =     750.20800,   5844.13500,       445.0,          0.0 !   !END!
1146 ! X =     750.40800,   5844.13500,       439.0,          0.0 !   !END!
1147 ! X =     750.60800,   5844.13500,       447.0,          0.0 !   !END!
1148 ! X =     750.80800,   5844.13500,       452.0,          0.0 !   !END!
1149 ! X =     751.00800,   5844.13500,       448.0,          0.0 !   !END!
1150 ! X =     751.20800,   5844.13500,       445.0,          0.0 !   !END!
1151 ! X =     751.40800,   5844.13500,       443.0,          0.0 !   !END!
1152 ! X =     751.60800,   5844.13500,       446.0,          0.0 !   !END!
1153 ! X =     751.80800,   5844.13500,       446.0,          0.0 !   !END!
1154 ! X =     752.00800,   5844.13500,       449.0,          0.0 !   !END!
1155 ! X =     752.20800,   5844.13500,       448.0,          0.0 !   !END!
1156 ! X =     752.40800,   5844.13500,       449.0,          0.0 !   !END!
1157 ! X =     739.00800,   5844.33500,       409.0,          0.0 !   !END!
1158 ! X =     739.20800,   5844.33500,       419.0,          0.0 !   !END!
1159 ! X =     739.40800,   5844.33500,       419.0,          0.0 !   !END!
1160 ! X =     739.60800,   5844.33500,       417.0,          0.0 !   !END!
1161 ! X =     739.80800,   5844.33500,       410.0,          0.0 !   !END!
1162 ! X =     740.00800,   5844.33500,       406.0,          0.0 !   !END!
1163 ! X =     740.20800,   5844.33500,       407.0,          0.0 !   !END!
1164 ! X =     740.40800,   5844.33500,       406.0,          0.0 !   !END!
1165 ! X =     740.60800,   5844.33500,       411.0,          0.0 !   !END!
1166 ! X =     740.80800,   5844.33500,       415.0,          0.0 !   !END!
1167 ! X =     741.00800,   5844.33500,       414.0,          0.0 !   !END!
1168 ! X =     741.20800,   5844.33500,       410.0,          0.0 !   !END!
1169 ! X =     741.40800,   5844.33500,       410.0,          0.0 !   !END!
1170 ! X =     741.60800,   5844.33500,       413.0,          0.0 !   !END!
1171 ! X =     741.80800,   5844.33500,       412.0,          0.0 !   !END!
1172 ! X =     742.00800,   5844.33500,       416.0,          0.0 !   !END!
1173 ! X =     742.20800,   5844.33500,       415.0,          0.0 !   !END!
1174 ! X =     742.40800,   5844.33500,       414.0,          0.0 !   !END!
1175 ! X =     742.60800,   5844.33500,       411.0,          0.0 !   !END!
1176 ! X =     742.80800,   5844.33500,       411.0,          0.0 !   !END!
1177 ! X =     743.00800,   5844.33500,       414.0,          0.0 !   !END!
1178 ! X =     743.20800,   5844.33500,       417.0,          0.0 !   !END!
1179 ! X =     743.40800,   5844.33500,       421.0,          0.0 !   !END!
1180 ! X =     743.60800,   5844.33500,       424.0,          0.0 !   !END!
1181 ! X =     743.80800,   5844.33500,       431.0,          0.0 !   !END!
1182 ! X =     744.00800,   5844.33500,       432.0,          0.0 !   !END!
1183 ! X =     744.20800,   5844.33500,       435.0,          0.0 !   !END!
1184 ! X =     744.40800,   5844.33500,       433.0,          0.0 !   !END!
1185 ! X =     744.60800,   5844.33500,       434.0,          0.0 !   !END!
1186 ! X =     744.80800,   5844.33500,       433.0,          0.0 !   !END!
1187 ! X =     745.00800,   5844.33500,       436.0,          0.0 !   !END!
1188 ! X =     745.20800,   5844.33500,       436.0,          0.0 !   !END!
1189 ! X =     745.40800,   5844.33500,       436.0,          0.0 !   !END!
1190 ! X =     745.60800,   5844.33500,       438.0,          0.0 !   !END!
1191 ! X =     745.80800,   5844.33500,       438.0,          0.0 !   !END!
1192 ! X =     746.00800,   5844.33500,       435.0,          0.0 !   !END!
1193 ! X =     746.20800,   5844.33500,       439.0,          0.0 !   !END!
1194 ! X =     746.40800,   5844.33500,       439.0,          0.0 !   !END!
1195 ! X =     746.60800,   5844.33500,       438.0,          0.0 !   !END!
1196 ! X =     746.80800,   5844.33500,       440.0,          0.0 !   !END!
1197 ! X =     747.00800,   5844.33500,       443.0,          0.0 !   !END!
1198 ! X =     747.20800,   5844.33500,       441.0,          0.0 !   !END!
1199 ! X =     747.40800,   5844.33500,       441.0,          0.0 !   !END!
1200 ! X =     747.60800,   5844.33500,       440.0,          0.0 !   !END!
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1201 ! X =     747.80800,   5844.33500,       445.0,          0.0 !   !END!
1202 ! X =     748.00800,   5844.33500,       448.0,          0.0 !   !END!
1203 ! X =     748.20800,   5844.33500,       444.0,          0.0 !   !END!
1204 ! X =     748.40800,   5844.33500,       442.0,          0.0 !   !END!
1205 ! X =     748.60800,   5844.33500,       440.0,          0.0 !   !END!
1206 ! X =     748.80800,   5844.33500,       443.0,          0.0 !   !END!
1207 ! X =     749.00800,   5844.33500,       444.0,          0.0 !   !END!
1208 ! X =     749.20800,   5844.33500,       449.0,          0.0 !   !END!
1209 ! X =     749.40800,   5844.33500,       452.0,          0.0 !   !END!
1210 ! X =     749.60800,   5844.33500,       445.0,          0.0 !   !END!
1211 ! X =     749.80800,   5844.33500,       455.0,          0.0 !   !END!
1212 ! X =     750.00800,   5844.33500,       446.0,          0.0 !   !END!
1213 ! X =     750.20800,   5844.33500,       442.0,          0.0 !   !END!
1214 ! X =     750.40800,   5844.33500,       443.0,          0.0 !   !END!
1215 ! X =     750.60800,   5844.33500,       449.0,          0.0 !   !END!
1216 ! X =     750.80800,   5844.33500,       448.0,          0.0 !   !END!
1217 ! X =     751.00800,   5844.33500,       451.0,          0.0 !   !END!
1218 ! X =     751.20800,   5844.33500,       446.0,          0.0 !   !END!
1219 ! X =     751.40800,   5844.33500,       446.0,          0.0 !   !END!
1220 ! X =     751.60800,   5844.33500,       446.0,          0.0 !   !END!
1221 ! X =     751.80800,   5844.33500,       448.0,          0.0 !   !END!
1222 ! X =     752.00800,   5844.33500,       448.0,          0.0 !   !END!
1223 ! X =     752.20800,   5844.33500,       448.0,          0.0 !   !END!
1224 ! X =     752.40800,   5844.33500,       448.0,          0.0 !   !END!
1225 ! X =     739.00800,   5844.53500,       409.0,          0.0 !   !END!
1226 ! X =     739.20800,   5844.53500,       414.0,          0.0 !   !END!
1227 ! X =     739.40800,   5844.53500,       419.0,          0.0 !   !END!
1228 ! X =     739.60800,   5844.53500,       415.0,          0.0 !   !END!
1229 ! X =     739.80800,   5844.53500,       410.0,          0.0 !   !END!
1230 ! X =     740.00800,   5844.53500,       409.0,          0.0 !   !END!
1231 ! X =     740.20800,   5844.53500,       409.0,          0.0 !   !END!
1232 ! X =     740.40800,   5844.53500,       407.0,          0.0 !   !END!
1233 ! X =     740.60800,   5844.53500,       409.0,          0.0 !   !END!
1234 ! X =     740.80800,   5844.53500,       412.0,          0.0 !   !END!
1235 ! X =     741.00800,   5844.53500,       412.0,          0.0 !   !END!
1236 ! X =     741.20800,   5844.53500,       413.0,          0.0 !   !END!
1237 ! X =     741.40800,   5844.53500,       409.0,          0.0 !   !END!
1238 ! X =     741.60800,   5844.53500,       410.0,          0.0 !   !END!
1239 ! X =     741.80800,   5844.53500,       410.0,          0.0 !   !END!
1240 ! X =     742.00800,   5844.53500,       411.0,          0.0 !   !END!
1241 ! X =     742.20800,   5844.53500,       414.0,          0.0 !   !END!
1242 ! X =     742.40800,   5844.53500,       414.0,          0.0 !   !END!
1243 ! X =     742.60800,   5844.53500,       411.0,          0.0 !   !END!
1244 ! X =     742.80800,   5844.53500,       413.0,          0.0 !   !END!
1245 ! X =     743.00800,   5844.53500,       413.0,          0.0 !   !END!
1246 ! X =     743.20800,   5844.53500,       415.0,          0.0 !   !END!
1247 ! X =     743.40800,   5844.53500,       421.0,          0.0 !   !END!
1248 ! X =     743.60800,   5844.53500,       424.0,          0.0 !   !END!
1249 ! X =     743.80800,   5844.53500,       429.0,          0.0 !   !END!
1250 ! X =     744.00800,   5844.53500,       430.0,          0.0 !   !END!
1251 ! X =     744.20800,   5844.53500,       432.0,          0.0 !   !END!
1252 ! X =     744.40800,   5844.53500,       434.0,          0.0 !   !END!
1253 ! X =     744.60800,   5844.53500,       431.0,          0.0 !   !END!
1254 ! X =     744.80800,   5844.53500,       433.0,          0.0 !   !END!
1255 ! X =     745.00800,   5844.53500,       437.0,          0.0 !   !END!
1256 ! X =     745.20800,   5844.53500,       435.0,          0.0 !   !END!
1257 ! X =     745.40800,   5844.53500,       438.0,          0.0 !   !END!
1258 ! X =     745.60800,   5844.53500,       436.0,          0.0 !   !END!
1259 ! X =     745.80800,   5844.53500,       438.0,          0.0 !   !END!
1260 ! X =     746.00800,   5844.53500,       435.0,          0.0 !   !END!
1261 ! X =     746.20800,   5844.53500,       436.0,          0.0 !   !END!
1262 ! X =     746.40800,   5844.53500,       440.0,          0.0 !   !END!
1263 ! X =     746.60800,   5844.53500,       440.0,          0.0 !   !END!
1264 ! X =     746.80800,   5844.53500,       439.0,          0.0 !   !END!
1265 ! X =     747.00800,   5844.53500,       440.0,          0.0 !   !END!
1266 ! X =     747.20800,   5844.53500,       442.0,          0.0 !   !END!
1267 ! X =     747.40800,   5844.53500,       441.0,          0.0 !   !END!
1268 ! X =     747.60800,   5844.53500,       439.0,          0.0 !   !END!
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1269 ! X =     747.80800,   5844.53500,       447.0,          0.0 !   !END!
1270 ! X =     748.00800,   5844.53500,       442.0,          0.0 !   !END!
1271 ! X =     748.20800,   5844.53500,       440.0,          0.0 !   !END!
1272 ! X =     748.40800,   5844.53500,       443.0,          0.0 !   !END!
1273 ! X =     748.60800,   5844.53500,       442.0,          0.0 !   !END!
1274 ! X =     748.80800,   5844.53500,       443.0,          0.0 !   !END!
1275 ! X =     749.00800,   5844.53500,       446.0,          0.0 !   !END!
1276 ! X =     749.20800,   5844.53500,       450.0,          0.0 !   !END!
1277 ! X =     749.40800,   5844.53500,       452.0,          0.0 !   !END!
1278 ! X =     749.60800,   5844.53500,       441.0,          0.0 !   !END!
1279 ! X =     749.80800,   5844.53500,       441.0,          0.0 !   !END!
1280 ! X =     750.00800,   5844.53500,       440.0,          0.0 !   !END!
1281 ! X =     750.20800,   5844.53500,       445.0,          0.0 !   !END!
1282 ! X =     750.40800,   5844.53500,       452.0,          0.0 !   !END!
1283 ! X =     750.60800,   5844.53500,       450.0,          0.0 !   !END!
1284 ! X =     750.80800,   5844.53500,       450.0,          0.0 !   !END!
1285 ! X =     751.00800,   5844.53500,       452.0,          0.0 !   !END!
1286 ! X =     751.20800,   5844.53500,       448.0,          0.0 !   !END!
1287 ! X =     751.40800,   5844.53500,       446.0,          0.0 !   !END!
1288 ! X =     751.60800,   5844.53500,       448.0,          0.0 !   !END!
1289 ! X =     751.80800,   5844.53500,       447.0,          0.0 !   !END!
1290 ! X =     752.00800,   5844.53500,       444.0,          0.0 !   !END!
1291 ! X =     752.20800,   5844.53500,       446.0,          0.0 !   !END!
1292 ! X =     752.40800,   5844.53500,       451.0,          0.0 !   !END!
1293 ! X =     739.00800,   5844.73500,       402.0,          0.0 !   !END!
1294 ! X =     739.20800,   5844.73500,       409.0,          0.0 !   !END!
1295 ! X =     739.40800,   5844.73500,       412.0,          0.0 !   !END!
1296 ! X =     739.60800,   5844.73500,       407.0,          0.0 !   !END!
1297 ! X =     739.80800,   5844.73500,       406.0,          0.0 !   !END!
1298 ! X =     740.00800,   5844.73500,       404.0,          0.0 !   !END!
1299 ! X =     740.20800,   5844.73500,       410.0,          0.0 !   !END!
1300 ! X =     740.40800,   5844.73500,       406.0,          0.0 !   !END!
1301 ! X =     740.60800,   5844.73500,       405.0,          0.0 !   !END!
1302 ! X =     740.80800,   5844.73500,       406.0,          0.0 !   !END!
1303 ! X =     741.00800,   5844.73500,       411.0,          0.0 !   !END!
1304 ! X =     741.20800,   5844.73500,       414.0,          0.0 !   !END!
1305 ! X =     741.40800,   5844.73500,       412.0,          0.0 !   !END!
1306 ! X =     741.60800,   5844.73500,       409.0,          0.0 !   !END!
1307 ! X =     741.80800,   5844.73500,       411.0,          0.0 !   !END!
1308 ! X =     742.00800,   5844.73500,       411.0,          0.0 !   !END!
1309 ! X =     742.20800,   5844.73500,       410.0,          0.0 !   !END!
1310 ! X =     742.40800,   5844.73500,       413.0,          0.0 !   !END!
1311 ! X =     742.60800,   5844.73500,       411.0,          0.0 !   !END!
1312 ! X =     742.80800,   5844.73500,       412.0,          0.0 !   !END!
1313 ! X =     743.00800,   5844.73500,       415.0,          0.0 !   !END!
1314 ! X =     743.20800,   5844.73500,       414.0,          0.0 !   !END!
1315 ! X =     743.40800,   5844.73500,       422.0,          0.0 !   !END!
1316 ! X =     743.60800,   5844.73500,       423.0,          0.0 !   !END!
1317 ! X =     743.80800,   5844.73500,       431.0,          0.0 !   !END!
1318 ! X =     744.00800,   5844.73500,       428.0,          0.0 !   !END!
1319 ! X =     744.20800,   5844.73500,       427.0,          0.0 !   !END!
1320 ! X =     744.40800,   5844.73500,       433.0,          0.0 !   !END!
1321 ! X =     744.60800,   5844.73500,       432.0,          0.0 !   !END!
1322 ! X =     744.80800,   5844.73500,       434.0,          0.0 !   !END!
1323 ! X =     745.00800,   5844.73500,       439.0,          0.0 !   !END!
1324 ! X =     745.20800,   5844.73500,       438.0,          0.0 !   !END!
1325 ! X =     745.40800,   5844.73500,       437.0,          0.0 !   !END!
1326 ! X =     745.60800,   5844.73500,       434.0,          0.0 !   !END!
1327 ! X =     745.80800,   5844.73500,       438.0,          0.0 !   !END!
1328 ! X =     746.00800,   5844.73500,       435.0,          0.0 !   !END!
1329 ! X =     746.20800,   5844.73500,       434.0,          0.0 !   !END!
1330 ! X =     746.40800,   5844.73500,       436.0,          0.0 !   !END!
1331 ! X =     746.60800,   5844.73500,       442.0,          0.0 !   !END!
1332 ! X =     746.80800,   5844.73500,       439.0,          0.0 !   !END!
1333 ! X =     747.00800,   5844.73500,       441.0,          0.0 !   !END!
1334 ! X =     747.20800,   5844.73500,       440.0,          0.0 !   !END!
1335 ! X =     747.40800,   5844.73500,       439.0,          0.0 !   !END!
1336 ! X =     747.60800,   5844.73500,       437.0,          0.0 !   !END!
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1337 ! X =     747.80800,   5844.73500,       438.0,          0.0 !   !END!
1338 ! X =     748.00800,   5844.73500,       438.0,          0.0 !   !END!
1339 ! X =     748.20800,   5844.73500,       441.0,          0.0 !   !END!
1340 ! X =     748.40800,   5844.73500,       438.0,          0.0 !   !END!
1341 ! X =     748.60800,   5844.73500,       438.0,          0.0 !   !END!
1342 ! X =     748.80800,   5844.73500,       439.0,          0.0 !   !END!
1343 ! X =     749.00800,   5844.73500,       441.0,          0.0 !   !END!
1344 ! X =     749.20800,   5844.73500,       446.0,          0.0 !   !END!
1345 ! X =     749.40800,   5844.73500,       450.0,          0.0 !   !END!
1346 ! X =     749.60800,   5844.73500,       439.0,          0.0 !   !END!
1347 ! X =     749.80800,   5844.73500,       451.0,          0.0 !   !END!
1348 ! X =     750.00800,   5844.73500,       448.0,          0.0 !   !END!
1349 ! X =     750.20800,   5844.73500,       451.0,          0.0 !   !END!
1350 ! X =     750.40800,   5844.73500,       455.0,          0.0 !   !END!
1351 ! X =     750.60800,   5844.73500,       455.0,          0.0 !   !END!
1352 ! X =     750.80800,   5844.73500,       454.0,          0.0 !   !END!
1353 ! X =     751.00800,   5844.73500,       453.0,          0.0 !   !END!
1354 ! X =     751.20800,   5844.73500,       450.0,          0.0 !   !END!
1355 ! X =     751.40800,   5844.73500,       450.0,          0.0 !   !END!
1356 ! X =     751.60800,   5844.73500,       448.0,          0.0 !   !END!
1357 ! X =     751.80800,   5844.73500,       446.0,          0.0 !   !END!
1358 ! X =     752.00800,   5844.73500,       447.0,          0.0 !   !END!
1359 ! X =     752.20800,   5844.73500,       447.0,          0.0 !   !END!
1360 ! X =     752.40800,   5844.73500,       447.0,          0.0 !   !END!
1361 ! X =     739.00800,   5844.93500,       403.0,          0.0 !   !END!
1362 ! X =     739.20800,   5844.93500,       408.0,          0.0 !   !END!
1363 ! X =     739.40800,   5844.93500,       409.0,          0.0 !   !END!
1364 ! X =     739.60800,   5844.93500,       409.0,          0.0 !   !END!
1365 ! X =     739.80800,   5844.93500,       407.0,          0.0 !   !END!
1366 ! X =     740.00800,   5844.93500,       405.0,          0.0 !   !END!
1367 ! X =     740.20800,   5844.93500,       406.0,          0.0 !   !END!
1368 ! X =     740.40800,   5844.93500,       406.0,          0.0 !   !END!
1369 ! X =     740.60800,   5844.93500,       407.0,          0.0 !   !END!
1370 ! X =     740.80800,   5844.93500,       409.0,          0.0 !   !END!
1371 ! X =     741.00800,   5844.93500,       412.0,          0.0 !   !END!
1372 ! X =     741.20800,   5844.93500,       411.0,          0.0 !   !END!
1373 ! X =     741.40800,   5844.93500,       410.0,          0.0 !   !END!
1374 ! X =     741.60800,   5844.93500,       410.0,          0.0 !   !END!
1375 ! X =     741.80800,   5844.93500,       411.0,          0.0 !   !END!
1376 ! X =     742.00800,   5844.93500,       411.0,          0.0 !   !END!
1377 ! X =     742.20800,   5844.93500,       414.0,          0.0 !   !END!
1378 ! X =     742.40800,   5844.93500,       416.0,          0.0 !   !END!
1379 ! X =     742.60800,   5844.93500,       414.0,          0.0 !   !END!
1380 ! X =     742.80800,   5844.93500,       411.0,          0.0 !   !END!
1381 ! X =     743.00800,   5844.93500,       414.0,          0.0 !   !END!
1382 ! X =     743.20800,   5844.93500,       415.0,          0.0 !   !END!
1383 ! X =     743.40800,   5844.93500,       418.0,          0.0 !   !END!
1384 ! X =     743.60800,   5844.93500,       421.0,          0.0 !   !END!
1385 ! X =     743.80800,   5844.93500,       425.0,          0.0 !   !END!
1386 ! X =     744.00800,   5844.93500,       427.0,          0.0 !   !END!
1387 ! X =     744.20800,   5844.93500,       431.0,          0.0 !   !END!
1388 ! X =     744.40800,   5844.93500,       430.0,          0.0 !   !END!
1389 ! X =     744.60800,   5844.93500,       433.0,          0.0 !   !END!
1390 ! X =     744.80800,   5844.93500,       434.0,          0.0 !   !END!
1391 ! X =     745.00800,   5844.93500,       434.0,          0.0 !   !END!
1392 ! X =     745.20800,   5844.93500,       434.0,          0.0 !   !END!
1393 ! X =     745.40800,   5844.93500,       435.0,          0.0 !   !END!
1394 ! X =     745.60800,   5844.93500,       433.0,          0.0 !   !END!
1395 ! X =     745.80800,   5844.93500,       434.0,          0.0 !   !END!
1396 ! X =     746.00800,   5844.93500,       434.0,          0.0 !   !END!
1397 ! X =     746.20800,   5844.93500,       434.0,          0.0 !   !END!
1398 ! X =     746.40800,   5844.93500,       433.0,          0.0 !   !END!
1399 ! X =     746.60800,   5844.93500,       439.0,          0.0 !   !END!
1400 ! X =     746.80800,   5844.93500,       442.0,          0.0 !   !END!
1401 ! X =     747.00800,   5844.93500,       439.0,          0.0 !   !END!
1402 ! X =     747.20800,   5844.93500,       437.0,          0.0 !   !END!
1403 ! X =     747.40800,   5844.93500,       439.0,          0.0 !   !END!
1404 ! X =     747.60800,   5844.93500,       435.0,          0.0 !   !END!
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1405 ! X =     747.80800,   5844.93500,       439.0,          0.0 !   !END!
1406 ! X =     748.00800,   5844.93500,       438.0,          0.0 !   !END!
1407 ! X =     748.20800,   5844.93500,       436.0,          0.0 !   !END!
1408 ! X =     748.40800,   5844.93500,       435.0,          0.0 !   !END!
1409 ! X =     748.60800,   5844.93500,       439.0,          0.0 !   !END!
1410 ! X =     748.80800,   5844.93500,       437.0,          0.0 !   !END!
1411 ! X =     749.00800,   5844.93500,       438.0,          0.0 !   !END!
1412 ! X =     749.20800,   5844.93500,       445.0,          0.0 !   !END!
1413 ! X =     749.40800,   5844.93500,       449.0,          0.0 !   !END!
1414 ! X =     749.60800,   5844.93500,       439.0,          0.0 !   !END!
1415 ! X =     749.80800,   5844.93500,       445.0,          0.0 !   !END!
1416 ! X =     750.00800,   5844.93500,       449.0,          0.0 !   !END!
1417 ! X =     750.20800,   5844.93500,       455.0,          0.0 !   !END!
1418 ! X =     750.40800,   5844.93500,       457.0,          0.0 !   !END!
1419 ! X =     750.60800,   5844.93500,       459.0,          0.0 !   !END!
1420 ! X =     750.80800,   5844.93500,       457.0,          0.0 !   !END!
1421 ! X =     751.00800,   5844.93500,       451.0,          0.0 !   !END!
1422 ! X =     751.20800,   5844.93500,       450.0,          0.0 !   !END!
1423 ! X =     751.40800,   5844.93500,       448.0,          0.0 !   !END!
1424 ! X =     751.60800,   5844.93500,       447.0,          0.0 !   !END!
1425 ! X =     751.80800,   5844.93500,       447.0,          0.0 !   !END!
1426 ! X =     752.00800,   5844.93500,       447.0,          0.0 !   !END!
1427 ! X =     752.20800,   5844.93500,       447.0,          0.0 !   !END!
1428 ! X =     752.40800,   5844.93500,       446.0,          0.0 !   !END!
1429 ! X =     739.00800,   5845.13500,       404.0,          0.0 !   !END!
1430 ! X =     739.20800,   5845.13500,       407.0,          0.0 !   !END!
1431 ! X =     739.40800,   5845.13500,       408.0,          0.0 !   !END!
1432 ! X =     739.60800,   5845.13500,       407.0,          0.0 !   !END!
1433 ! X =     739.80800,   5845.13500,       407.0,          0.0 !   !END!
1434 ! X =     740.00800,   5845.13500,       402.0,          0.0 !   !END!
1435 ! X =     740.20800,   5845.13500,       405.0,          0.0 !   !END!
1436 ! X =     740.40800,   5845.13500,       406.0,          0.0 !   !END!
1437 ! X =     740.60800,   5845.13500,       408.0,          0.0 !   !END!
1438 ! X =     740.80800,   5845.13500,       408.0,          0.0 !   !END!
1439 ! X =     741.00800,   5845.13500,       413.0,          0.0 !   !END!
1440 ! X =     741.20800,   5845.13500,       409.0,          0.0 !   !END!
1441 ! X =     741.40800,   5845.13500,       410.0,          0.0 !   !END!
1442 ! X =     741.60800,   5845.13500,       411.0,          0.0 !   !END!
1443 ! X =     741.80800,   5845.13500,       413.0,          0.0 !   !END!
1444 ! X =     742.00800,   5845.13500,       414.0,          0.0 !   !END!
1445 ! X =     742.20800,   5845.13500,       414.0,          0.0 !   !END!
1446 ! X =     742.40800,   5845.13500,       414.0,          0.0 !   !END!
1447 ! X =     742.60800,   5845.13500,       413.0,          0.0 !   !END!
1448 ! X =     742.80800,   5845.13500,       414.0,          0.0 !   !END!
1449 ! X =     743.00800,   5845.13500,       413.0,          0.0 !   !END!
1450 ! X =     743.20800,   5845.13500,       418.0,          0.0 !   !END!
1451 ! X =     743.40800,   5845.13500,       421.0,          0.0 !   !END!
1452 ! X =     743.60800,   5845.13500,       423.0,          0.0 !   !END!
1453 ! X =     743.80800,   5845.13500,       425.0,          0.0 !   !END!
1454 ! X =     744.00800,   5845.13500,       432.0,          0.0 !   !END!
1455 ! X =     744.20800,   5845.13500,       435.0,          0.0 !   !END!
1456 ! X =     744.40800,   5845.13500,       435.0,          0.0 !   !END!
1457 ! X =     744.60800,   5845.13500,       432.0,          0.0 !   !END!
1458 ! X =     744.80800,   5845.13500,       435.0,          0.0 !   !END!
1459 ! X =     745.00800,   5845.13500,       434.0,          0.0 !   !END!
1460 ! X =     745.20800,   5845.13500,       434.0,          0.0 !   !END!
1461 ! X =     745.40800,   5845.13500,       434.0,          0.0 !   !END!
1462 ! X =     745.60800,   5845.13500,       436.0,          0.0 !   !END!
1463 ! X =     745.80800,   5845.13500,       434.0,          0.0 !   !END!
1464 ! X =     746.00800,   5845.13500,       431.0,          0.0 !   !END!
1465 ! X =     746.20800,   5845.13500,       436.0,          0.0 !   !END!
1466 ! X =     746.40800,   5845.13500,       433.0,          0.0 !   !END!
1467 ! X =     746.60800,   5845.13500,       435.0,          0.0 !   !END!
1468 ! X =     746.80800,   5845.13500,       439.0,          0.0 !   !END!
1469 ! X =     747.00800,   5845.13500,       442.0,          0.0 !   !END!
1470 ! X =     747.20800,   5845.13500,       440.0,          0.0 !   !END!
1471 ! X =     747.40800,   5845.13500,       437.0,          0.0 !   !END!
1472 ! X =     747.60800,   5845.13500,       435.0,          0.0 !   !END!
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1473 ! X =     747.80800,   5845.13500,       436.0,          0.0 !   !END!
1474 ! X =     748.00800,   5845.13500,       437.0,          0.0 !   !END!
1475 ! X =     748.20800,   5845.13500,       434.0,          0.0 !   !END!
1476 ! X =     748.40800,   5845.13500,       435.0,          0.0 !   !END!
1477 ! X =     748.60800,   5845.13500,       439.0,          0.0 !   !END!
1478 ! X =     748.80800,   5845.13500,       436.0,          0.0 !   !END!
1479 ! X =     749.00800,   5845.13500,       435.0,          0.0 !   !END!
1480 ! X =     749.20800,   5845.13500,       440.0,          0.0 !   !END!
1481 ! X =     749.40800,   5845.13500,       441.0,          0.0 !   !END!
1482 ! X =     749.60800,   5845.13500,       444.0,          0.0 !   !END!
1483 ! X =     749.80800,   5845.13500,       449.0,          0.0 !   !END!
1484 ! X =     750.00800,   5845.13500,       452.0,          0.0 !   !END!
1485 ! X =     750.20800,   5845.13500,       455.0,          0.0 !   !END!
1486 ! X =     750.40800,   5845.13500,       457.0,          0.0 !   !END!
1487 ! X =     750.60800,   5845.13500,       458.0,          0.0 !   !END!
1488 ! X =     750.80800,   5845.13500,       459.0,          0.0 !   !END!
1489 ! X =     751.00800,   5845.13500,       454.0,          0.0 !   !END!
1490 ! X =     751.20800,   5845.13500,       452.0,          0.0 !   !END!
1491 ! X =     751.40800,   5845.13500,       448.0,          0.0 !   !END!
1492 ! X =     751.60800,   5845.13500,       450.0,          0.0 !   !END!
1493 ! X =     751.80800,   5845.13500,       450.0,          0.0 !   !END!
1494 ! X =     752.00800,   5845.13500,       447.0,          0.0 !   !END!
1495 ! X =     752.20800,   5845.13500,       449.0,          0.0 !   !END!
1496 ! X =     752.40800,   5845.13500,       447.0,          0.0 !   !END!
1497 ! X =     739.00800,   5845.33500,       404.0,          0.0 !   !END!
1498 ! X =     739.20800,   5845.33500,       408.0,          0.0 !   !END!
1499 ! X =     739.40800,   5845.33500,       405.0,          0.0 !   !END!
1500 ! X =     739.60800,   5845.33500,       404.0,          0.0 !   !END!
1501 ! X =     739.80800,   5845.33500,       405.0,          0.0 !   !END!
1502 ! X =     740.00800,   5845.33500,       404.0,          0.0 !   !END!
1503 ! X =     740.20800,   5845.33500,       407.0,          0.0 !   !END!
1504 ! X =     740.40800,   5845.33500,       407.0,          0.0 !   !END!
1505 ! X =     740.60800,   5845.33500,       409.0,          0.0 !   !END!
1506 ! X =     740.80800,   5845.33500,       408.0,          0.0 !   !END!
1507 ! X =     741.00800,   5845.33500,       411.0,          0.0 !   !END!
1508 ! X =     741.20800,   5845.33500,       411.0,          0.0 !   !END!
1509 ! X =     741.40800,   5845.33500,       414.0,          0.0 !   !END!
1510 ! X =     741.60800,   5845.33500,       413.0,          0.0 !   !END!
1511 ! X =     741.80800,   5845.33500,       414.0,          0.0 !   !END!
1512 ! X =     742.00800,   5845.33500,       414.0,          0.0 !   !END!
1513 ! X =     742.20800,   5845.33500,       416.0,          0.0 !   !END!
1514 ! X =     742.40800,   5845.33500,       413.0,          0.0 !   !END!
1515 ! X =     742.60800,   5845.33500,       416.0,          0.0 !   !END!
1516 ! X =     742.80800,   5845.33500,       415.0,          0.0 !   !END!
1517 ! X =     743.00800,   5845.33500,       415.0,          0.0 !   !END!
1518 ! X =     743.20800,   5845.33500,       418.0,          0.0 !   !END!
1519 ! X =     743.40800,   5845.33500,       420.0,          0.0 !   !END!
1520 ! X =     743.60800,   5845.33500,       424.0,          0.0 !   !END!
1521 ! X =     743.80800,   5845.33500,       424.0,          0.0 !   !END!
1522 ! X =     744.00800,   5845.33500,       431.0,          0.0 !   !END!
1523 ! X =     744.20800,   5845.33500,       439.0,          0.0 !   !END!
1524 ! X =     744.40800,   5845.33500,       439.0,          0.0 !   !END!
1525 ! X =     744.60800,   5845.33500,       431.0,          0.0 !   !END!
1526 ! X =     744.80800,   5845.33500,       431.0,          0.0 !   !END!
1527 ! X =     745.00800,   5845.33500,       432.0,          0.0 !   !END!
1528 ! X =     745.20800,   5845.33500,       433.0,          0.0 !   !END!
1529 ! X =     745.40800,   5845.33500,       434.0,          0.0 !   !END!
1530 ! X =     745.60800,   5845.33500,       434.0,          0.0 !   !END!
1531 ! X =     745.80800,   5845.33500,       429.0,          0.0 !   !END!
1532 ! X =     746.00800,   5845.33500,       432.0,          0.0 !   !END!
1533 ! X =     746.20800,   5845.33500,       431.0,          0.0 !   !END!
1534 ! X =     746.40800,   5845.33500,       434.0,          0.0 !   !END!
1535 ! X =     746.60800,   5845.33500,       437.0,          0.0 !   !END!
1536 ! X =     746.80800,   5845.33500,       437.0,          0.0 !   !END!
1537 ! X =     747.00800,   5845.33500,       438.0,          0.0 !   !END!
1538 ! X =     747.20800,   5845.33500,       439.0,          0.0 !   !END!
1539 ! X =     747.40800,   5845.33500,       439.0,          0.0 !   !END!
1540 ! X =     747.60800,   5845.33500,       439.0,          0.0 !   !END!
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1541 ! X =     747.80800,   5845.33500,       437.0,          0.0 !   !END!
1542 ! X =     748.00800,   5845.33500,       435.0,          0.0 !   !END!
1543 ! X =     748.20800,   5845.33500,       434.0,          0.0 !   !END!
1544 ! X =     748.40800,   5845.33500,       437.0,          0.0 !   !END!
1545 ! X =     748.60800,   5845.33500,       434.0,          0.0 !   !END!
1546 ! X =     748.80800,   5845.33500,       433.0,          0.0 !   !END!
1547 ! X =     749.00800,   5845.33500,       436.0,          0.0 !   !END!
1548 ! X =     749.20800,   5845.33500,       443.0,          0.0 !   !END!
1549 ! X =     749.40800,   5845.33500,       436.0,          0.0 !   !END!
1550 ! X =     749.60800,   5845.33500,       451.0,          0.0 !   !END!
1551 ! X =     749.80800,   5845.33500,       455.0,          0.0 !   !END!
1552 ! X =     750.00800,   5845.33500,       456.0,          0.0 !   !END!
1553 ! X =     750.20800,   5845.33500,       455.0,          0.0 !   !END!
1554 ! X =     750.40800,   5845.33500,       459.0,          0.0 !   !END!
1555 ! X =     750.60800,   5845.33500,       462.0,          0.0 !   !END!
1556 ! X =     750.80800,   5845.33500,       463.0,          0.0 !   !END!
1557 ! X =     751.00800,   5845.33500,       459.0,          0.0 !   !END!
1558 ! X =     751.20800,   5845.33500,       455.0,          0.0 !   !END!
1559 ! X =     751.40800,   5845.33500,       453.0,          0.0 !   !END!
1560 ! X =     751.60800,   5845.33500,       453.0,          0.0 !   !END!
1561 ! X =     751.80800,   5845.33500,       449.0,          0.0 !   !END!
1562 ! X =     752.00800,   5845.33500,       449.0,          0.0 !   !END!
1563 ! X =     752.20800,   5845.33500,       450.0,          0.0 !   !END!
1564 ! X =     752.40800,   5845.33500,       449.0,          0.0 !   !END!
1565 ! X =     739.00800,   5845.53500,       407.0,          0.0 !   !END!
1566 ! X =     739.20800,   5845.53500,       406.0,          0.0 !   !END!
1567 ! X =     739.40800,   5845.53500,       405.0,          0.0 !   !END!
1568 ! X =     739.60800,   5845.53500,       403.0,          0.0 !   !END!
1569 ! X =     739.80800,   5845.53500,       402.0,          0.0 !   !END!
1570 ! X =     740.00800,   5845.53500,       405.0,          0.0 !   !END!
1571 ! X =     740.20800,   5845.53500,       408.0,          0.0 !   !END!
1572 ! X =     740.40800,   5845.53500,       407.0,          0.0 !   !END!
1573 ! X =     740.60800,   5845.53500,       408.0,          0.0 !   !END!
1574 ! X =     740.80800,   5845.53500,       409.0,          0.0 !   !END!
1575 ! X =     741.00800,   5845.53500,       410.0,          0.0 !   !END!
1576 ! X =     741.20800,   5845.53500,       414.0,          0.0 !   !END!
1577 ! X =     741.40800,   5845.53500,       416.0,          0.0 !   !END!
1578 ! X =     741.60800,   5845.53500,       414.0,          0.0 !   !END!
1579 ! X =     741.80800,   5845.53500,       417.0,          0.0 !   !END!
1580 ! X =     742.00800,   5845.53500,       416.0,          0.0 !   !END!
1581 ! X =     742.20800,   5845.53500,       417.0,          0.0 !   !END!
1582 ! X =     742.40800,   5845.53500,       417.0,          0.0 !   !END!
1583 ! X =     742.60800,   5845.53500,       416.0,          0.0 !   !END!
1584 ! X =     742.80800,   5845.53500,       413.0,          0.0 !   !END!
1585 ! X =     743.00800,   5845.53500,       415.0,          0.0 !   !END!
1586 ! X =     743.20800,   5845.53500,       417.0,          0.0 !   !END!
1587 ! X =     743.40800,   5845.53500,       419.0,          0.0 !   !END!
1588 ! X =     743.60800,   5845.53500,       421.0,          0.0 !   !END!
1589 ! X =     743.80800,   5845.53500,       424.0,          0.0 !   !END!
1590 ! X =     744.00800,   5845.53500,       435.0,          0.0 !   !END!
1591 ! X =     744.20800,   5845.53500,       442.0,          0.0 !   !END!
1592 ! X =     744.40800,   5845.53500,       438.0,          0.0 !   !END!
1593 ! X =     744.60800,   5845.53500,       432.0,          0.0 !   !END!
1594 ! X =     744.80800,   5845.53500,       429.0,          0.0 !   !END!
1595 ! X =     745.00800,   5845.53500,       430.0,          0.0 !   !END!
1596 ! X =     745.20800,   5845.53500,       429.0,          0.0 !   !END!
1597 ! X =     745.40800,   5845.53500,       434.0,          0.0 !   !END!
1598 ! X =     745.60800,   5845.53500,       432.0,          0.0 !   !END!
1599 ! X =     745.80800,   5845.53500,       429.0,          0.0 !   !END!
1600 ! X =     746.00800,   5845.53500,       430.0,          0.0 !   !END!
1601 ! X =     746.20800,   5845.53500,       434.0,          0.0 !   !END!
1602 ! X =     746.40800,   5845.53500,       436.0,          0.0 !   !END!
1603 ! X =     746.60800,   5845.53500,       436.0,          0.0 !   !END!
1604 ! X =     746.80800,   5845.53500,       440.0,          0.0 !   !END!
1605 ! X =     747.00800,   5845.53500,       437.0,          0.0 !   !END!
1606 ! X =     747.20800,   5845.53500,       437.0,          0.0 !   !END!
1607 ! X =     747.40800,   5845.53500,       442.0,          0.0 !   !END!
1608 ! X =     747.60800,   5845.53500,       443.0,          0.0 !   !END!
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1609 ! X =     747.80800,   5845.53500,       437.0,          0.0 !   !END!
1610 ! X =     748.00800,   5845.53500,       440.0,          0.0 !   !END!
1611 ! X =     748.20800,   5845.53500,       438.0,          0.0 !   !END!
1612 ! X =     748.40800,   5845.53500,       436.0,          0.0 !   !END!
1613 ! X =     748.60800,   5845.53500,       435.0,          0.0 !   !END!
1614 ! X =     748.80800,   5845.53500,       431.0,          0.0 !   !END!
1615 ! X =     749.00800,   5845.53500,       435.0,          0.0 !   !END!
1616 ! X =     749.20800,   5845.53500,       439.0,          0.0 !   !END!
1617 ! X =     749.40800,   5845.53500,       445.0,          0.0 !   !END!
1618 ! X =     749.60800,   5845.53500,       449.0,          0.0 !   !END!
1619 ! X =     749.80800,   5845.53500,       453.0,          0.0 !   !END!
1620 ! X =     750.00800,   5845.53500,       457.0,          0.0 !   !END!
1621 ! X =     750.20800,   5845.53500,       464.0,          0.0 !   !END!
1622 ! X =     750.40800,   5845.53500,       467.0,          0.0 !   !END!
1623 ! X =     750.60800,   5845.53500,       470.0,          0.0 !   !END!
1624 ! X =     750.80800,   5845.53500,       478.0,          0.0 !   !END!
1625 ! X =     751.00800,   5845.53500,       478.0,          0.0 !   !END!
1626 ! X =     751.20800,   5845.53500,       466.0,          0.0 !   !END!
1627 ! X =     751.40800,   5845.53500,       460.0,          0.0 !   !END!
1628 ! X =     751.60800,   5845.53500,       456.0,          0.0 !   !END!
1629 ! X =     751.80800,   5845.53500,       453.0,          0.0 !   !END!
1630 ! X =     752.00800,   5845.53500,       450.0,          0.0 !   !END!
1631 ! X =     752.20800,   5845.53500,       449.0,          0.0 !   !END!
1632 ! X =     752.40800,   5845.53500,       448.0,          0.0 !   !END!
1633 ! X =     739.00800,   5845.73500,       404.0,          0.0 !   !END!
1634 ! X =     739.20800,   5845.73500,       407.0,          0.0 !   !END!
1635 ! X =     739.40800,   5845.73500,       404.0,          0.0 !   !END!
1636 ! X =     739.60800,   5845.73500,       400.0,          0.0 !   !END!
1637 ! X =     739.80800,   5845.73500,       403.0,          0.0 !   !END!
1638 ! X =     740.00800,   5845.73500,       404.0,          0.0 !   !END!
1639 ! X =     740.20800,   5845.73500,       408.0,          0.0 !   !END!
1640 ! X =     740.40800,   5845.73500,       410.0,          0.0 !   !END!
1641 ! X =     740.60800,   5845.73500,       411.0,          0.0 !   !END!
1642 ! X =     740.80800,   5845.73500,       407.0,          0.0 !   !END!
1643 ! X =     741.00800,   5845.73500,       408.0,          0.0 !   !END!
1644 ! X =     741.20800,   5845.73500,       411.0,          0.0 !   !END!
1645 ! X =     741.40800,   5845.73500,       413.0,          0.0 !   !END!
1646 ! X =     741.60800,   5845.73500,       411.0,          0.0 !   !END!
1647 ! X =     741.80800,   5845.73500,       413.0,          0.0 !   !END!
1648 ! X =     742.00800,   5845.73500,       416.0,          0.0 !   !END!
1649 ! X =     742.20800,   5845.73500,       418.0,          0.0 !   !END!
1650 ! X =     742.40800,   5845.73500,       415.0,          0.0 !   !END!
1651 ! X =     742.60800,   5845.73500,       412.0,          0.0 !   !END!
1652 ! X =     742.80800,   5845.73500,       412.0,          0.0 !   !END!
1653 ! X =     743.00800,   5845.73500,       415.0,          0.0 !   !END!
1654 ! X =     743.20800,   5845.73500,       415.0,          0.0 !   !END!
1655 ! X =     743.40800,   5845.73500,       415.0,          0.0 !   !END!
1656 ! X =     743.60800,   5845.73500,       423.0,          0.0 !   !END!
1657 ! X =     743.80800,   5845.73500,       428.0,          0.0 !   !END!
1658 ! X =     744.00800,   5845.73500,       431.0,          0.0 !   !END!
1659 ! X =     744.20800,   5845.73500,       443.0,          0.0 !   !END!
1660 ! X =     744.40800,   5845.73500,       441.0,          0.0 !   !END!
1661 ! X =     744.60800,   5845.73500,       433.0,          0.0 !   !END!
1662 ! X =     744.80800,   5845.73500,       435.0,          0.0 !   !END!
1663 ! X =     745.00800,   5845.73500,       434.0,          0.0 !   !END!
1664 ! X =     745.20800,   5845.73500,       430.0,          0.0 !   !END!
1665 ! X =     745.40800,   5845.73500,       432.0,          0.0 !   !END!
1666 ! X =     745.60800,   5845.73500,       435.0,          0.0 !   !END!
1667 ! X =     745.80800,   5845.73500,       430.0,          0.0 !   !END!
1668 ! X =     746.00800,   5845.73500,       429.0,          0.0 !   !END!
1669 ! X =     746.20800,   5845.73500,       434.0,          0.0 !   !END!
1670 ! X =     746.40800,   5845.73500,       435.0,          0.0 !   !END!
1671 ! X =     746.60800,   5845.73500,       436.0,          0.0 !   !END!
1672 ! X =     746.80800,   5845.73500,       439.0,          0.0 !   !END!
1673 ! X =     747.00800,   5845.73500,       439.0,          0.0 !   !END!
1674 ! X =     747.20800,   5845.73500,       441.0,          0.0 !   !END!
1675 ! X =     747.40800,   5845.73500,       443.0,          0.0 !   !END!
1676 ! X =     747.60800,   5845.73500,       441.0,          0.0 !   !END!
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1677 ! X =     747.80800,   5845.73500,       440.0,          0.0 !   !END!
1678 ! X =     748.00800,   5845.73500,       442.0,          0.0 !   !END!
1679 ! X =     748.20800,   5845.73500,       441.0,          0.0 !   !END!
1680 ! X =     748.40800,   5845.73500,       434.0,          0.0 !   !END!
1681 ! X =     748.60800,   5845.73500,       431.0,          0.0 !   !END!
1682 ! X =     748.80800,   5845.73500,       431.0,          0.0 !   !END!
1683 ! X =     749.00800,   5845.73500,       434.0,          0.0 !   !END!
1684 ! X =     749.20800,   5845.73500,       444.0,          0.0 !   !END!
1685 ! X =     749.40800,   5845.73500,       452.0,          0.0 !   !END!
1686 ! X =     749.60800,   5845.73500,       455.0,          0.0 !   !END!
1687 ! X =     749.80800,   5845.73500,       456.0,          0.0 !   !END!
1688 ! X =     750.00800,   5845.73500,       457.0,          0.0 !   !END!
1689 ! X =     750.20800,   5845.73500,       462.0,          0.0 !   !END!
1690 ! X =     750.40800,   5845.73500,       468.0,          0.0 !   !END!
1691 ! X =     750.60800,   5845.73500,       483.0,          0.0 !   !END!
1692 ! X =     750.80800,   5845.73500,       516.0,          0.0 !   !END!
1693 ! X =     751.00800,   5845.73500,       516.0,          0.0 !   !END!
1694 ! X =     751.20800,   5845.73500,       502.0,          0.0 !   !END!
1695 ! X =     751.40800,   5845.73500,       465.0,          0.0 !   !END!
1696 ! X =     751.60800,   5845.73500,       464.0,          0.0 !   !END!
1697 ! X =     751.80800,   5845.73500,       457.0,          0.0 !   !END!
1698 ! X =     752.00800,   5845.73500,       458.0,          0.0 !   !END!
1699 ! X =     752.20800,   5845.73500,       451.0,          0.0 !   !END!
1700 ! X =     752.40800,   5845.73500,       450.0,          0.0 !   !END!
1701 ! X =     739.00800,   5845.93500,       405.0,          0.0 !   !END!
1702 ! X =     739.20800,   5845.93500,       405.0,          0.0 !   !END!
1703 ! X =     739.40800,   5845.93500,       399.0,          0.0 !   !END!
1704 ! X =     739.60800,   5845.93500,       403.0,          0.0 !   !END!
1705 ! X =     739.80800,   5845.93500,       404.0,          0.0 !   !END!
1706 ! X =     740.00800,   5845.93500,       406.0,          0.0 !   !END!
1707 ! X =     740.20800,   5845.93500,       409.0,          0.0 !   !END!
1708 ! X =     740.40800,   5845.93500,       408.0,          0.0 !   !END!
1709 ! X =     740.60800,   5845.93500,       411.0,          0.0 !   !END!
1710 ! X =     740.80800,   5845.93500,       406.0,          0.0 !   !END!
1711 ! X =     741.00800,   5845.93500,       407.0,          0.0 !   !END!
1712 ! X =     741.20800,   5845.93500,       411.0,          0.0 !   !END!
1713 ! X =     741.40800,   5845.93500,       411.0,          0.0 !   !END!
1714 ! X =     741.60800,   5845.93500,       413.0,          0.0 !   !END!
1715 ! X =     741.80800,   5845.93500,       415.0,          0.0 !   !END!
1716 ! X =     742.00800,   5845.93500,       416.0,          0.0 !   !END!
1717 ! X =     742.20800,   5845.93500,       418.0,          0.0 !   !END!
1718 ! X =     742.40800,   5845.93500,       416.0,          0.0 !   !END!
1719 ! X =     742.60800,   5845.93500,       414.0,          0.0 !   !END!
1720 ! X =     742.80800,   5845.93500,       411.0,          0.0 !   !END!
1721 ! X =     743.00800,   5845.93500,       412.0,          0.0 !   !END!
1722 ! X =     743.20800,   5845.93500,       412.0,          0.0 !   !END!
1723 ! X =     743.40800,   5845.93500,       416.0,          0.0 !   !END!
1724 ! X =     743.60800,   5845.93500,       419.0,          0.0 !   !END!
1725 ! X =     743.80800,   5845.93500,       429.0,          0.0 !   !END!
1726 ! X =     744.00800,   5845.93500,       430.0,          0.0 !   !END!
1727 ! X =     744.20800,   5845.93500,       430.0,          0.0 !   !END!
1728 ! X =     744.40800,   5845.93500,       431.0,          0.0 !   !END!
1729 ! X =     744.60800,   5845.93500,       431.0,          0.0 !   !END!
1730 ! X =     744.80800,   5845.93500,       431.0,          0.0 !   !END!
1731 ! X =     745.00800,   5845.93500,       428.0,          0.0 !   !END!
1732 ! X =     745.20800,   5845.93500,       428.0,          0.0 !   !END!
1733 ! X =     745.40800,   5845.93500,       430.0,          0.0 !   !END!
1734 ! X =     745.60800,   5845.93500,       432.0,          0.0 !   !END!
1735 ! X =     745.80800,   5845.93500,       429.0,          0.0 !   !END!
1736 ! X =     746.00800,   5845.93500,       429.0,          0.0 !   !END!
1737 ! X =     746.20800,   5845.93500,       433.0,          0.0 !   !END!
1738 ! X =     746.40800,   5845.93500,       433.0,          0.0 !   !END!
1739 ! X =     746.60800,   5845.93500,       437.0,          0.0 !   !END!
1740 ! X =     746.80800,   5845.93500,       438.0,          0.0 !   !END!
1741 ! X =     747.00800,   5845.93500,       437.0,          0.0 !   !END!
1742 ! X =     747.20800,   5845.93500,       435.0,          0.0 !   !END!
1743 ! X =     747.40800,   5845.93500,       435.0,          0.0 !   !END!
1744 ! X =     747.60800,   5845.93500,       437.0,          0.0 !   !END!
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1745 ! X =     747.80800,   5845.93500,       440.0,          0.0 !   !END!
1746 ! X =     748.00800,   5845.93500,       437.0,          0.0 !   !END!
1747 ! X =     748.20800,   5845.93500,       438.0,          0.0 !   !END!
1748 ! X =     748.40800,   5845.93500,       429.0,          0.0 !   !END!
1749 ! X =     748.60800,   5845.93500,       431.0,          0.0 !   !END!
1750 ! X =     748.80800,   5845.93500,       429.0,          0.0 !   !END!
1751 ! X =     749.00800,   5845.93500,       439.0,          0.0 !   !END!
1752 ! X =     749.20800,   5845.93500,       442.0,          0.0 !   !END!
1753 ! X =     749.40800,   5845.93500,       448.0,          0.0 !   !END!
1754 ! X =     749.60800,   5845.93500,       451.0,          0.0 !   !END!
1755 ! X =     749.80800,   5845.93500,       457.0,          0.0 !   !END!
1756 ! X =     750.00800,   5845.93500,       459.0,          0.0 !   !END!
1757 ! X =     750.20800,   5845.93500,       461.0,          0.0 !   !END!
1758 ! X =     750.40800,   5845.93500,       469.0,          0.0 !   !END!
1759 ! X =     750.60800,   5845.93500,       489.0,          0.0 !   !END!
1760 ! X =     750.80800,   5845.93500,       503.0,          0.0 !   !END!
1761 ! X =     751.00800,   5845.93500,       496.0,          0.0 !   !END!
1762 ! X =     751.20800,   5845.93500,       498.0,          0.0 !   !END!
1763 ! X =     751.40800,   5845.93500,       471.0,          0.0 !   !END!
1764 ! X =     751.60800,   5845.93500,       471.0,          0.0 !   !END!
1765 ! X =     751.80800,   5845.93500,       465.0,          0.0 !   !END!
1766 ! X =     752.00800,   5845.93500,       460.0,          0.0 !   !END!
1767 ! X =     752.20800,   5845.93500,       454.0,          0.0 !   !END!
1768 ! X =     752.40800,   5845.93500,       453.0,          0.0 !   !END!
1769 ! X =     739.00800,   5846.13500,       402.0,          0.0 !   !END!
1770 ! X =     739.20800,   5846.13500,       400.0,          0.0 !   !END!
1771 ! X =     739.40800,   5846.13500,       403.0,          0.0 !   !END!
1772 ! X =     739.60800,   5846.13500,       406.0,          0.0 !   !END!
1773 ! X =     739.80800,   5846.13500,       408.0,          0.0 !   !END!
1774 ! X =     740.00800,   5846.13500,       408.0,          0.0 !   !END!
1775 ! X =     740.20800,   5846.13500,       408.0,          0.0 !   !END!
1776 ! X =     740.40800,   5846.13500,       405.0,          0.0 !   !END!
1777 ! X =     740.60800,   5846.13500,       408.0,          0.0 !   !END!
1778 ! X =     740.80800,   5846.13500,       404.0,          0.0 !   !END!
1779 ! X =     741.00800,   5846.13500,       407.0,          0.0 !   !END!
1780 ! X =     741.20800,   5846.13500,       407.0,          0.0 !   !END!
1781 ! X =     741.40800,   5846.13500,       408.0,          0.0 !   !END!
1782 ! X =     741.60800,   5846.13500,       411.0,          0.0 !   !END!
1783 ! X =     741.80800,   5846.13500,       416.0,          0.0 !   !END!
1784 ! X =     742.00800,   5846.13500,       418.0,          0.0 !   !END!
1785 ! X =     742.20800,   5846.13500,       416.0,          0.0 !   !END!
1786 ! X =     742.40800,   5846.13500,       414.0,          0.0 !   !END!
1787 ! X =     742.60800,   5846.13500,       413.0,          0.0 !   !END!
1788 ! X =     742.80800,   5846.13500,       409.0,          0.0 !   !END!
1789 ! X =     743.00800,   5846.13500,       411.0,          0.0 !   !END!
1790 ! X =     743.20800,   5846.13500,       410.0,          0.0 !   !END!
1791 ! X =     743.40800,   5846.13500,       413.0,          0.0 !   !END!
1792 ! X =     743.60800,   5846.13500,       425.0,          0.0 !   !END!
1793 ! X =     743.80800,   5846.13500,       428.0,          0.0 !   !END!
1794 ! X =     744.00800,   5846.13500,       430.0,          0.0 !   !END!
1795 ! X =     744.20800,   5846.13500,       430.0,          0.0 !   !END!
1796 ! X =     744.40800,   5846.13500,       429.0,          0.0 !   !END!
1797 ! X =     744.60800,   5846.13500,       428.0,          0.0 !   !END!
1798 ! X =     744.80800,   5846.13500,       426.0,          0.0 !   !END!
1799 ! X =     745.00800,   5846.13500,       430.0,          0.0 !   !END!
1800 ! X =     745.20800,   5846.13500,       430.0,          0.0 !   !END!
1801 ! X =     745.40800,   5846.13500,       431.0,          0.0 !   !END!
1802 ! X =     745.60800,   5846.13500,       431.0,          0.0 !   !END!
1803 ! X =     745.80800,   5846.13500,       429.0,          0.0 !   !END!
1804 ! X =     746.00800,   5846.13500,       425.0,          0.0 !   !END!
1805 ! X =     746.20800,   5846.13500,       428.0,          0.0 !   !END!
1806 ! X =     746.40800,   5846.13500,       431.0,          0.0 !   !END!
1807 ! X =     746.60800,   5846.13500,       437.0,          0.0 !   !END!
1808 ! X =     746.80800,   5846.13500,       438.0,          0.0 !   !END!
1809 ! X =     747.00800,   5846.13500,       436.0,          0.0 !   !END!
1810 ! X =     747.20800,   5846.13500,       432.0,          0.0 !   !END!
1811 ! X =     747.40800,   5846.13500,       433.0,          0.0 !   !END!
1812 ! X =     747.60800,   5846.13500,       433.0,          0.0 !   !END!
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1813 ! X =     747.80800,   5846.13500,       438.0,          0.0 !   !END!
1814 ! X =     748.00800,   5846.13500,       436.0,          0.0 !   !END!
1815 ! X =     748.20800,   5846.13500,       431.0,          0.0 !   !END!
1816 ! X =     748.40800,   5846.13500,       435.0,          0.0 !   !END!
1817 ! X =     748.60800,   5846.13500,       431.0,          0.0 !   !END!
1818 ! X =     748.80800,   5846.13500,       431.0,          0.0 !   !END!
1819 ! X =     749.00800,   5846.13500,       434.0,          0.0 !   !END!
1820 ! X =     749.20800,   5846.13500,       441.0,          0.0 !   !END!
1821 ! X =     749.40800,   5846.13500,       450.0,          0.0 !   !END!
1822 ! X =     749.60800,   5846.13500,       448.0,          0.0 !   !END!
1823 ! X =     749.80800,   5846.13500,       457.0,          0.0 !   !END!
1824 ! X =     750.00800,   5846.13500,       462.0,          0.0 !   !END!
1825 ! X =     750.20800,   5846.13500,       463.0,          0.0 !   !END!
1826 ! X =     750.40800,   5846.13500,       473.0,          0.0 !   !END!
1827 ! X =     750.60800,   5846.13500,       481.0,          0.0 !   !END!
1828 ! X =     750.80800,   5846.13500,       486.0,          0.0 !   !END!
1829 ! X =     751.00800,   5846.13500,       487.0,          0.0 !   !END!
1830 ! X =     751.20800,   5846.13500,       483.0,          0.0 !   !END!
1831 ! X =     751.40800,   5846.13500,       472.0,          0.0 !   !END!
1832 ! X =     751.60800,   5846.13500,       473.0,          0.0 !   !END!
1833 ! X =     751.80800,   5846.13500,       465.0,          0.0 !   !END!
1834 ! X =     752.00800,   5846.13500,       459.0,          0.0 !   !END!
1835 ! X =     752.20800,   5846.13500,       461.0,          0.0 !   !END!
1836 ! X =     752.40800,   5846.13500,       454.0,          0.0 !   !END!
1837 ! X =     739.00800,   5846.33500,       399.0,          0.0 !   !END!
1838 ! X =     739.20800,   5846.33500,       402.0,          0.0 !   !END!
1839 ! X =     739.40800,   5846.33500,       404.0,          0.0 !   !END!
1840 ! X =     739.60800,   5846.33500,       406.0,          0.0 !   !END!
1841 ! X =     739.80800,   5846.33500,       408.0,          0.0 !   !END!
1842 ! X =     740.00800,   5846.33500,       409.0,          0.0 !   !END!
1843 ! X =     740.20800,   5846.33500,       405.0,          0.0 !   !END!
1844 ! X =     740.40800,   5846.33500,       405.0,          0.0 !   !END!
1845 ! X =     740.60800,   5846.33500,       403.0,          0.0 !   !END!
1846 ! X =     740.80800,   5846.33500,       405.0,          0.0 !   !END!
1847 ! X =     741.00800,   5846.33500,       406.0,          0.0 !   !END!
1848 ! X =     741.20800,   5846.33500,       409.0,          0.0 !   !END!
1849 ! X =     741.40800,   5846.33500,       410.0,          0.0 !   !END!
1850 ! X =     741.60800,   5846.33500,       416.0,          0.0 !   !END!
1851 ! X =     741.80800,   5846.33500,       415.0,          0.0 !   !END!
1852 ! X =     742.00800,   5846.33500,       415.0,          0.0 !   !END!
1853 ! X =     742.20800,   5846.33500,       416.0,          0.0 !   !END!
1854 ! X =     742.40800,   5846.33500,       412.0,          0.0 !   !END!
1855 ! X =     742.60800,   5846.33500,       412.0,          0.0 !   !END!
1856 ! X =     742.80800,   5846.33500,       410.0,          0.0 !   !END!
1857 ! X =     743.00800,   5846.33500,       408.0,          0.0 !   !END!
1858 ! X =     743.20800,   5846.33500,       409.0,          0.0 !   !END!
1859 ! X =     743.40800,   5846.33500,       412.0,          0.0 !   !END!
1860 ! X =     743.60800,   5846.33500,       425.0,          0.0 !   !END!
1861 ! X =     743.80800,   5846.33500,       429.0,          0.0 !   !END!
1862 ! X =     744.00800,   5846.33500,       435.0,          0.0 !   !END!
1863 ! X =     744.20800,   5846.33500,       443.0,          0.0 !   !END!
1864 ! X =     744.40800,   5846.33500,       430.0,          0.0 !   !END!
1865 ! X =     744.60800,   5846.33500,       429.0,          0.0 !   !END!
1866 ! X =     744.80800,   5846.33500,       427.0,          0.0 !   !END!
1867 ! X =     745.00800,   5846.33500,       429.0,          0.0 !   !END!
1868 ! X =     745.20800,   5846.33500,       425.0,          0.0 !   !END!
1869 ! X =     745.40800,   5846.33500,       428.0,          0.0 !   !END!
1870 ! X =     745.60800,   5846.33500,       426.0,          0.0 !   !END!
1871 ! X =     745.80800,   5846.33500,       426.0,          0.0 !   !END!
1872 ! X =     746.00800,   5846.33500,       426.0,          0.0 !   !END!
1873 ! X =     746.20800,   5846.33500,       427.0,          0.0 !   !END!
1874 ! X =     746.40800,   5846.33500,       427.0,          0.0 !   !END!
1875 ! X =     746.60800,   5846.33500,       430.0,          0.0 !   !END!
1876 ! X =     746.80800,   5846.33500,       434.0,          0.0 !   !END!
1877 ! X =     747.00800,   5846.33500,       436.0,          0.0 !   !END!
1878 ! X =     747.20800,   5846.33500,       434.0,          0.0 !   !END!
1879 ! X =     747.40800,   5846.33500,       431.0,          0.0 !   !END!
1880 ! X =     747.60800,   5846.33500,       428.0,          0.0 !   !END!
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1881 ! X =     747.80800,   5846.33500,       433.0,          0.0 !   !END!
1882 ! X =     748.00800,   5846.33500,       435.0,          0.0 !   !END!
1883 ! X =     748.20800,   5846.33500,       434.0,          0.0 !   !END!
1884 ! X =     748.40800,   5846.33500,       433.0,          0.0 !   !END!
1885 ! X =     748.60800,   5846.33500,       428.0,          0.0 !   !END!
1886 ! X =     748.80800,   5846.33500,       429.0,          0.0 !   !END!
1887 ! X =     749.00800,   5846.33500,       434.0,          0.0 !   !END!
1888 ! X =     749.20800,   5846.33500,       442.0,          0.0 !   !END!
1889 ! X =     749.40800,   5846.33500,       442.0,          0.0 !   !END!
1890 ! X =     749.60800,   5846.33500,       446.0,          0.0 !   !END!
1891 ! X =     749.80800,   5846.33500,       457.0,          0.0 !   !END!
1892 ! X =     750.00800,   5846.33500,       463.0,          0.0 !   !END!
1893 ! X =     750.20800,   5846.33500,       464.0,          0.0 !   !END!
1894 ! X =     750.40800,   5846.33500,       470.0,          0.0 !   !END!
1895 ! X =     750.60800,   5846.33500,       474.0,          0.0 !   !END!
1896 ! X =     750.80800,   5846.33500,       479.0,          0.0 !   !END!
1897 ! X =     751.00800,   5846.33500,       477.0,          0.0 !   !END!
1898 ! X =     751.20800,   5846.33500,       476.0,          0.0 !   !END!
1899 ! X =     751.40800,   5846.33500,       468.0,          0.0 !   !END!
1900 ! X =     751.60800,   5846.33500,       468.0,          0.0 !   !END!
1901 ! X =     751.80800,   5846.33500,       471.0,          0.0 !   !END!
1902 ! X =     752.00800,   5846.33500,       471.0,          0.0 !   !END!
1903 ! X =     752.20800,   5846.33500,       462.0,          0.0 !   !END!
1904 ! X =     752.40800,   5846.33500,       454.0,          0.0 !   !END!
1905 ! X =     739.00800,   5846.53500,       399.0,          0.0 !   !END!
1906 ! X =     739.20800,   5846.53500,       402.0,          0.0 !   !END!
1907 ! X =     739.40800,   5846.53500,       405.0,          0.0 !   !END!
1908 ! X =     739.60800,   5846.53500,       407.0,          0.0 !   !END!
1909 ! X =     739.80800,   5846.53500,       410.0,          0.0 !   !END!
1910 ! X =     740.00800,   5846.53500,       409.0,          0.0 !   !END!
1911 ! X =     740.20800,   5846.53500,       407.0,          0.0 !   !END!
1912 ! X =     740.40800,   5846.53500,       410.0,          0.0 !   !END!
1913 ! X =     740.60800,   5846.53500,       402.0,          0.0 !   !END!
1914 ! X =     740.80800,   5846.53500,       404.0,          0.0 !   !END!
1915 ! X =     741.00800,   5846.53500,       406.0,          0.0 !   !END!
1916 ! X =     741.20800,   5846.53500,       409.0,          0.0 !   !END!
1917 ! X =     741.40800,   5846.53500,       415.0,          0.0 !   !END!
1918 ! X =     741.60800,   5846.53500,       415.0,          0.0 !   !END!
1919 ! X =     741.80800,   5846.53500,       412.0,          0.0 !   !END!
1920 ! X =     742.00800,   5846.53500,       414.0,          0.0 !   !END!
1921 ! X =     742.20800,   5846.53500,       414.0,          0.0 !   !END!
1922 ! X =     742.40800,   5846.53500,       414.0,          0.0 !   !END!
1923 ! X =     742.60800,   5846.53500,       409.0,          0.0 !   !END!
1924 ! X =     742.80800,   5846.53500,       409.0,          0.0 !   !END!
1925 ! X =     743.00800,   5846.53500,       407.0,          0.0 !   !END!
1926 ! X =     743.20800,   5846.53500,       410.0,          0.0 !   !END!
1927 ! X =     743.40800,   5846.53500,       415.0,          0.0 !   !END!
1928 ! X =     743.60800,   5846.53500,       426.0,          0.0 !   !END!
1929 ! X =     743.80800,   5846.53500,       426.0,          0.0 !   !END!
1930 ! X =     744.00800,   5846.53500,       430.0,          0.0 !   !END!
1931 ! X =     744.20800,   5846.53500,       440.0,          0.0 !   !END!
1932 ! X =     744.40800,   5846.53500,       434.0,          0.0 !   !END!
1933 ! X =     744.60800,   5846.53500,       428.0,          0.0 !   !END!
1934 ! X =     744.80800,   5846.53500,       426.0,          0.0 !   !END!
1935 ! X =     745.00800,   5846.53500,       427.0,          0.0 !   !END!
1936 ! X =     745.20800,   5846.53500,       425.0,          0.0 !   !END!
1937 ! X =     745.40800,   5846.53500,       422.0,          0.0 !   !END!
1938 ! X =     745.60800,   5846.53500,       427.0,          0.0 !   !END!
1939 ! X =     745.80800,   5846.53500,       426.0,          0.0 !   !END!
1940 ! X =     746.00800,   5846.53500,       426.0,          0.0 !   !END!
1941 ! X =     746.20800,   5846.53500,       427.0,          0.0 !   !END!
1942 ! X =     746.40800,   5846.53500,       424.0,          0.0 !   !END!
1943 ! X =     746.60800,   5846.53500,       431.0,          0.0 !   !END!
1944 ! X =     746.80800,   5846.53500,       435.0,          0.0 !   !END!
1945 ! X =     747.00800,   5846.53500,       437.0,          0.0 !   !END!
1946 ! X =     747.20800,   5846.53500,       436.0,          0.0 !   !END!
1947 ! X =     747.40800,   5846.53500,       435.0,          0.0 !   !END!
1948 ! X =     747.60800,   5846.53500,       428.0,          0.0 !   !END!
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1949 ! X =     747.80800,   5846.53500,       430.0,          0.0 !   !END!
1950 ! X =     748.00800,   5846.53500,       429.0,          0.0 !   !END!
1951 ! X =     748.20800,   5846.53500,       427.0,          0.0 !   !END!
1952 ! X =     748.40800,   5846.53500,       426.0,          0.0 !   !END!
1953 ! X =     748.60800,   5846.53500,       429.0,          0.0 !   !END!
1954 ! X =     748.80800,   5846.53500,       432.0,          0.0 !   !END!
1955 ! X =     749.00800,   5846.53500,       433.0,          0.0 !   !END!
1956 ! X =     749.20800,   5846.53500,       444.0,          0.0 !   !END!
1957 ! X =     749.40800,   5846.53500,       448.0,          0.0 !   !END!
1958 ! X =     749.60800,   5846.53500,       453.0,          0.0 !   !END!
1959 ! X =     749.80800,   5846.53500,       458.0,          0.0 !   !END!
1960 ! X =     750.00800,   5846.53500,       463.0,          0.0 !   !END!
1961 ! X =     750.20800,   5846.53500,       464.0,          0.0 !   !END!
1962 ! X =     750.40800,   5846.53500,       469.0,          0.0 !   !END!
1963 ! X =     750.60800,   5846.53500,       472.0,          0.0 !   !END!
1964 ! X =     750.80800,   5846.53500,       475.0,          0.0 !   !END!
1965 ! X =     751.00800,   5846.53500,       474.0,          0.0 !   !END!
1966 ! X =     751.20800,   5846.53500,       471.0,          0.0 !   !END!
1967 ! X =     751.40800,   5846.53500,       467.0,          0.0 !   !END!
1968 ! X =     751.60800,   5846.53500,       466.0,          0.0 !   !END!
1969 ! X =     751.80800,   5846.53500,       467.0,          0.0 !   !END!
1970 ! X =     752.00800,   5846.53500,       468.0,          0.0 !   !END!
1971 ! X =     752.20800,   5846.53500,       463.0,          0.0 !   !END!
1972 ! X =     752.40800,   5846.53500,       461.0,          0.0 !   !END!
1973 ! X =     739.00800,   5846.73500,       396.0,          0.0 !   !END!
1974 ! X =     739.20800,   5846.73500,       402.0,          0.0 !   !END!
1975 ! X =     739.40800,   5846.73500,       405.0,          0.0 !   !END!
1976 ! X =     739.60800,   5846.73500,       406.0,          0.0 !   !END!
1977 ! X =     739.80800,   5846.73500,       405.0,          0.0 !   !END!
1978 ! X =     740.00800,   5846.73500,       408.0,          0.0 !   !END!
1979 ! X =     740.20800,   5846.73500,       407.0,          0.0 !   !END!
1980 ! X =     740.40800,   5846.73500,       405.0,          0.0 !   !END!
1981 ! X =     740.60800,   5846.73500,       399.0,          0.0 !   !END!
1982 ! X =     740.80800,   5846.73500,       404.0,          0.0 !   !END!
1983 ! X =     741.00800,   5846.73500,       404.0,          0.0 !   !END!
1984 ! X =     741.20800,   5846.73500,       407.0,          0.0 !   !END!
1985 ! X =     741.40800,   5846.73500,       409.0,          0.0 !   !END!
1986 ! X =     741.60800,   5846.73500,       410.0,          0.0 !   !END!
1987 ! X =     741.80800,   5846.73500,       414.0,          0.0 !   !END!
1988 ! X =     742.00800,   5846.73500,       411.0,          0.0 !   !END!
1989 ! X =     742.20800,   5846.73500,       412.0,          0.0 !   !END!
1990 ! X =     742.40800,   5846.73500,       410.0,          0.0 !   !END!
1991 ! X =     742.60800,   5846.73500,       404.0,          0.0 !   !END!
1992 ! X =     742.80800,   5846.73500,       408.0,          0.0 !   !END!
1993 ! X =     743.00800,   5846.73500,       407.0,          0.0 !   !END!
1994 ! X =     743.20800,   5846.73500,       410.0,          0.0 !   !END!
1995 ! X =     743.40800,   5846.73500,       414.0,          0.0 !   !END!
1996 ! X =     743.60800,   5846.73500,       421.0,          0.0 !   !END!
1997 ! X =     743.80800,   5846.73500,       424.0,          0.0 !   !END!
1998 ! X =     744.00800,   5846.73500,       437.0,          0.0 !   !END!
1999 ! X =     744.20800,   5846.73500,       441.0,          0.0 !   !END!
2000 ! X =     744.40800,   5846.73500,       432.0,          0.0 !   !END!
2001 ! X =     744.60800,   5846.73500,       429.0,          0.0 !   !END!
2002 ! X =     744.80800,   5846.73500,       425.0,          0.0 !   !END!
2003 ! X =     745.00800,   5846.73500,       423.0,          0.0 !   !END!
2004 ! X =     745.20800,   5846.73500,       421.0,          0.0 !   !END!
2005 ! X =     745.40800,   5846.73500,       420.0,          0.0 !   !END!
2006 ! X =     745.60800,   5846.73500,       427.0,          0.0 !   !END!
2007 ! X =     745.80800,   5846.73500,       431.0,          0.0 !   !END!
2008 ! X =     746.00800,   5846.73500,       429.0,          0.0 !   !END!
2009 ! X =     746.20800,   5846.73500,       426.0,          0.0 !   !END!
2010 ! X =     746.40800,   5846.73500,       425.0,          0.0 !   !END!
2011 ! X =     746.60800,   5846.73500,       428.0,          0.0 !   !END!
2012 ! X =     746.80800,   5846.73500,       432.0,          0.0 !   !END!
2013 ! X =     747.00800,   5846.73500,       436.0,          0.0 !   !END!
2014 ! X =     747.20800,   5846.73500,       438.0,          0.0 !   !END!
2015 ! X =     747.40800,   5846.73500,       432.0,          0.0 !   !END!
2016 ! X =     747.60800,   5846.73500,       426.0,          0.0 !   !END!
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2017 ! X =     747.80800,   5846.73500,       429.0,          0.0 !   !END!
2018 ! X =     748.00800,   5846.73500,       427.0,          0.0 !   !END!
2019 ! X =     748.20800,   5846.73500,       426.0,          0.0 !   !END!
2020 ! X =     748.40800,   5846.73500,       427.0,          0.0 !   !END!
2021 ! X =     748.60800,   5846.73500,       431.0,          0.0 !   !END!
2022 ! X =     748.80800,   5846.73500,       434.0,          0.0 !   !END!
2023 ! X =     749.00800,   5846.73500,       434.0,          0.0 !   !END!
2024 ! X =     749.20800,   5846.73500,       444.0,          0.0 !   !END!
2025 ! X =     749.40800,   5846.73500,       448.0,          0.0 !   !END!
2026 ! X =     749.60800,   5846.73500,       454.0,          0.0 !   !END!
2027 ! X =     749.80800,   5846.73500,       458.0,          0.0 !   !END!
2028 ! X =     750.00800,   5846.73500,       461.0,          0.0 !   !END!
2029 ! X =     750.20800,   5846.73500,       464.0,          0.0 !   !END!
2030 ! X =     750.40800,   5846.73500,       468.0,          0.0 !   !END!
2031 ! X =     750.60800,   5846.73500,       469.0,          0.0 !   !END!
2032 ! X =     750.80800,   5846.73500,       476.0,          0.0 !   !END!
2033 ! X =     751.00800,   5846.73500,       471.0,          0.0 !   !END!
2034 ! X =     751.20800,   5846.73500,       466.0,          0.0 !   !END!
2035 ! X =     751.40800,   5846.73500,       466.0,          0.0 !   !END!
2036 ! X =     751.60800,   5846.73500,       462.0,          0.0 !   !END!
2037 ! X =     751.80800,   5846.73500,       462.0,          0.0 !   !END!
2038 ! X =     752.00800,   5846.73500,       463.0,          0.0 !   !END!
2039 ! X =     752.20800,   5846.73500,       460.0,          0.0 !   !END!
2040 ! X =     752.40800,   5846.73500,       465.0,          0.0 !   !END!
2041 ! X =     739.00800,   5846.93500,       397.0,          0.0 !   !END!
2042 ! X =     739.20800,   5846.93500,       402.0,          0.0 !   !END!
2043 ! X =     739.40800,   5846.93500,       407.0,          0.0 !   !END!
2044 ! X =     739.60800,   5846.93500,       406.0,          0.0 !   !END!
2045 ! X =     739.80800,   5846.93500,       408.0,          0.0 !   !END!
2046 ! X =     740.00800,   5846.93500,       408.0,          0.0 !   !END!
2047 ! X =     740.20800,   5846.93500,       405.0,          0.0 !   !END!
2048 ! X =     740.40800,   5846.93500,       402.0,          0.0 !   !END!
2049 ! X =     740.60800,   5846.93500,       399.0,          0.0 !   !END!
2050 ! X =     740.80800,   5846.93500,       401.0,          0.0 !   !END!
2051 ! X =     741.00800,   5846.93500,       403.0,          0.0 !   !END!
2052 ! X =     741.20800,   5846.93500,       402.0,          0.0 !   !END!
2053 ! X =     741.40800,   5846.93500,       405.0,          0.0 !   !END!
2054 ! X =     741.60800,   5846.93500,       411.0,          0.0 !   !END!
2055 ! X =     741.80800,   5846.93500,       411.0,          0.0 !   !END!
2056 ! X =     742.00800,   5846.93500,       409.0,          0.0 !   !END!
2057 ! X =     742.20800,   5846.93500,       409.0,          0.0 !   !END!
2058 ! X =     742.40800,   5846.93500,       407.0,          0.0 !   !END!
2059 ! X =     742.60800,   5846.93500,       406.0,          0.0 !   !END!
2060 ! X =     742.80800,   5846.93500,       405.0,          0.0 !   !END!
2061 ! X =     743.00800,   5846.93500,       405.0,          0.0 !   !END!
2062 ! X =     743.20800,   5846.93500,       406.0,          0.0 !   !END!
2063 ! X =     743.40800,   5846.93500,       411.0,          0.0 !   !END!
2064 ! X =     743.60800,   5846.93500,       420.0,          0.0 !   !END!
2065 ! X =     743.80800,   5846.93500,       430.0,          0.0 !   !END!
2066 ! X =     744.00800,   5846.93500,       437.0,          0.0 !   !END!
2067 ! X =     744.20800,   5846.93500,       447.0,          0.0 !   !END!
2068 ! X =     744.40800,   5846.93500,       450.0,          0.0 !   !END!
2069 ! X =     744.60800,   5846.93500,       432.0,          0.0 !   !END!
2070 ! X =     744.80800,   5846.93500,       429.0,          0.0 !   !END!
2071 ! X =     745.00800,   5846.93500,       418.0,          0.0 !   !END!
2072 ! X =     745.20800,   5846.93500,       420.0,          0.0 !   !END!
2073 ! X =     745.40800,   5846.93500,       419.0,          0.0 !   !END!
2074 ! X =     745.60800,   5846.93500,       425.0,          0.0 !   !END!
2075 ! X =     745.80800,   5846.93500,       424.0,          0.0 !   !END!
2076 ! X =     746.00800,   5846.93500,       426.0,          0.0 !   !END!
2077 ! X =     746.20800,   5846.93500,       425.0,          0.0 !   !END!
2078 ! X =     746.40800,   5846.93500,       425.0,          0.0 !   !END!
2079 ! X =     746.60800,   5846.93500,       431.0,          0.0 !   !END!
2080 ! X =     746.80800,   5846.93500,       431.0,          0.0 !   !END!
2081 ! X =     747.00800,   5846.93500,       440.0,          0.0 !   !END!
2082 ! X =     747.20800,   5846.93500,       436.0,          0.0 !   !END!
2083 ! X =     747.40800,   5846.93500,       433.0,          0.0 !   !END!
2084 ! X =     747.60800,   5846.93500,       426.0,          0.0 !   !END!
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2085 ! X =     747.80800,   5846.93500,       428.0,          0.0 !   !END!
2086 ! X =     748.00800,   5846.93500,       429.0,          0.0 !   !END!
2087 ! X =     748.20800,   5846.93500,       427.0,          0.0 !   !END!
2088 ! X =     748.40800,   5846.93500,       426.0,          0.0 !   !END!
2089 ! X =     748.60800,   5846.93500,       425.0,          0.0 !   !END!
2090 ! X =     748.80800,   5846.93500,       435.0,          0.0 !   !END!
2091 ! X =     749.00800,   5846.93500,       436.0,          0.0 !   !END!
2092 ! X =     749.20800,   5846.93500,       442.0,          0.0 !   !END!
2093 ! X =     749.40800,   5846.93500,       446.0,          0.0 !   !END!
2094 ! X =     749.60800,   5846.93500,       451.0,          0.0 !   !END!
2095 ! X =     749.80800,   5846.93500,       459.0,          0.0 !   !END!
2096 ! X =     750.00800,   5846.93500,       463.0,          0.0 !   !END!
2097 ! X =     750.20800,   5846.93500,       466.0,          0.0 !   !END!
2098 ! X =     750.40800,   5846.93500,       471.0,          0.0 !   !END!
2099 ! X =     750.60800,   5846.93500,       469.0,          0.0 !   !END!
2100 ! X =     750.80800,   5846.93500,       470.0,          0.0 !   !END!
2101 ! X =     751.00800,   5846.93500,       466.0,          0.0 !   !END!
2102 ! X =     751.20800,   5846.93500,       464.0,          0.0 !   !END!
2103 ! X =     751.40800,   5846.93500,       460.0,          0.0 !   !END!
2104 ! X =     751.60800,   5846.93500,       463.0,          0.0 !   !END!
2105 ! X =     751.80800,   5846.93500,       461.0,          0.0 !   !END!
2106 ! X =     752.00800,   5846.93500,       462.0,          0.0 !   !END!
2107 ! X =     752.20800,   5846.93500,       463.0,          0.0 !   !END!
2108 ! X =     752.40800,   5846.93500,       463.0,          0.0 !   !END!
2109 ! X =     739.00800,   5847.13500,       399.0,          0.0 !   !END!
2110 ! X =     739.20800,   5847.13500,       401.0,          0.0 !   !END!
2111 ! X =     739.40800,   5847.13500,       404.0,          0.0 !   !END!
2112 ! X =     739.60800,   5847.13500,       407.0,          0.0 !   !END!
2113 ! X =     739.80800,   5847.13500,       407.0,          0.0 !   !END!
2114 ! X =     740.00800,   5847.13500,       406.0,          0.0 !   !END!
2115 ! X =     740.20800,   5847.13500,       403.0,          0.0 !   !END!
2116 ! X =     740.40800,   5847.13500,       402.0,          0.0 !   !END!
2117 ! X =     740.60800,   5847.13500,       402.0,          0.0 !   !END!
2118 ! X =     740.80800,   5847.13500,       402.0,          0.0 !   !END!
2119 ! X =     741.00800,   5847.13500,       402.0,          0.0 !   !END!
2120 ! X =     741.20800,   5847.13500,       398.0,          0.0 !   !END!
2121 ! X =     741.40800,   5847.13500,       405.0,          0.0 !   !END!
2122 ! X =     741.60800,   5847.13500,       407.0,          0.0 !   !END!
2123 ! X =     741.80800,   5847.13500,       405.0,          0.0 !   !END!
2124 ! X =     742.00800,   5847.13500,       404.0,          0.0 !   !END!
2125 ! X =     742.20800,   5847.13500,       403.0,          0.0 !   !END!
2126 ! X =     742.40800,   5847.13500,       404.0,          0.0 !   !END!
2127 ! X =     742.60800,   5847.13500,       405.0,          0.0 !   !END!
2128 ! X =     742.80800,   5847.13500,       405.0,          0.0 !   !END!
2129 ! X =     743.00800,   5847.13500,       404.0,          0.0 !   !END!
2130 ! X =     743.20800,   5847.13500,       410.0,          0.0 !   !END!
2131 ! X =     743.40800,   5847.13500,       411.0,          0.0 !   !END!
2132 ! X =     743.60800,   5847.13500,       417.0,          0.0 !   !END!
2133 ! X =     743.80800,   5847.13500,       424.0,          0.0 !   !END!
2134 ! X =     744.00800,   5847.13500,       428.0,          0.0 !   !END!
2135 ! X =     744.20800,   5847.13500,       442.0,          0.0 !   !END!
2136 ! X =     744.40800,   5847.13500,       438.0,          0.0 !   !END!
2137 ! X =     744.60800,   5847.13500,       429.0,          0.0 !   !END!
2138 ! X =     744.80800,   5847.13500,       427.0,          0.0 !   !END!
2139 ! X =     745.00800,   5847.13500,       419.0,          0.0 !   !END!
2140 ! X =     745.20800,   5847.13500,       417.0,          0.0 !   !END!
2141 ! X =     745.40800,   5847.13500,       415.0,          0.0 !   !END!
2142 ! X =     745.60800,   5847.13500,       418.0,          0.0 !   !END!
2143 ! X =     745.80800,   5847.13500,       422.0,          0.0 !   !END!
2144 ! X =     746.00800,   5847.13500,       424.0,          0.0 !   !END!
2145 ! X =     746.20800,   5847.13500,       420.0,          0.0 !   !END!
2146 ! X =     746.40800,   5847.13500,       426.0,          0.0 !   !END!
2147 ! X =     746.60800,   5847.13500,       430.0,          0.0 !   !END!
2148 ! X =     746.80800,   5847.13500,       433.0,          0.0 !   !END!
2149 ! X =     747.00800,   5847.13500,       437.0,          0.0 !   !END!
2150 ! X =     747.20800,   5847.13500,       435.0,          0.0 !   !END!
2151 ! X =     747.40800,   5847.13500,       435.0,          0.0 !   !END!
2152 ! X =     747.60800,   5847.13500,       424.0,          0.0 !   !END!
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2153 ! X =     747.80800,   5847.13500,       424.0,          0.0 !   !END!
2154 ! X =     748.00800,   5847.13500,       423.0,          0.0 !   !END!
2155 ! X =     748.20800,   5847.13500,       426.0,          0.0 !   !END!
2156 ! X =     748.40800,   5847.13500,       425.0,          0.0 !   !END!
2157 ! X =     748.60800,   5847.13500,       427.0,          0.0 !   !END!
2158 ! X =     748.80800,   5847.13500,       434.0,          0.0 !   !END!
2159 ! X =     749.00800,   5847.13500,       434.0,          0.0 !   !END!
2160 ! X =     749.20800,   5847.13500,       436.0,          0.0 !   !END!
2161 ! X =     749.40800,   5847.13500,       442.0,          0.0 !   !END!
2162 ! X =     749.60800,   5847.13500,       450.0,          0.0 !   !END!
2163 ! X =     749.80800,   5847.13500,       458.0,          0.0 !   !END!
2164 ! X =     750.00800,   5847.13500,       461.0,          0.0 !   !END!
2165 ! X =     750.20800,   5847.13500,       465.0,          0.0 !   !END!
2166 ! X =     750.40800,   5847.13500,       467.0,          0.0 !   !END!
2167 ! X =     750.60800,   5847.13500,       466.0,          0.0 !   !END!
2168 ! X =     750.80800,   5847.13500,       468.0,          0.0 !   !END!
2169 ! X =     751.00800,   5847.13500,       464.0,          0.0 !   !END!
2170 ! X =     751.20800,   5847.13500,       461.0,          0.0 !   !END!
2171 ! X =     751.40800,   5847.13500,       461.0,          0.0 !   !END!
2172 ! X =     751.60800,   5847.13500,       461.0,          0.0 !   !END!
2173 ! X =     751.80800,   5847.13500,       460.0,          0.0 !   !END!
2174 ! X =     752.00800,   5847.13500,       462.0,          0.0 !   !END!
2175 ! X =     752.20800,   5847.13500,       460.0,          0.0 !   !END!
2176 ! X =     752.40800,   5847.13500,       466.0,          0.0 !   !END!
2177 ! X =     739.00800,   5847.33500,       397.0,          0.0 !   !END!
2178 ! X =     739.20800,   5847.33500,       403.0,          0.0 !   !END!
2179 ! X =     739.40800,   5847.33500,       404.0,          0.0 !   !END!
2180 ! X =     739.60800,   5847.33500,       409.0,          0.0 !   !END!
2181 ! X =     739.80800,   5847.33500,       407.0,          0.0 !   !END!
2182 ! X =     740.00800,   5847.33500,       409.0,          0.0 !   !END!
2183 ! X =     740.20800,   5847.33500,       405.0,          0.0 !   !END!
2184 ! X =     740.40800,   5847.33500,       402.0,          0.0 !   !END!
2185 ! X =     740.60800,   5847.33500,       399.0,          0.0 !   !END!
2186 ! X =     740.80800,   5847.33500,       399.0,          0.0 !   !END!
2187 ! X =     741.00800,   5847.33500,       397.0,          0.0 !   !END!
2188 ! X =     741.20800,   5847.33500,       400.0,          0.0 !   !END!
2189 ! X =     741.40800,   5847.33500,       402.0,          0.0 !   !END!
2190 ! X =     741.60800,   5847.33500,       401.0,          0.0 !   !END!
2191 ! X =     741.80800,   5847.33500,       403.0,          0.0 !   !END!
2192 ! X =     742.00800,   5847.33500,       400.0,          0.0 !   !END!
2193 ! X =     742.20800,   5847.33500,       402.0,          0.0 !   !END!
2194 ! X =     742.40800,   5847.33500,       403.0,          0.0 !   !END!
2195 ! X =     742.60800,   5847.33500,       404.0,          0.0 !   !END!
2196 ! X =     742.80800,   5847.33500,       402.0,          0.0 !   !END!
2197 ! X =     743.00800,   5847.33500,       406.0,          0.0 !   !END!
2198 ! X =     743.20800,   5847.33500,       404.0,          0.0 !   !END!
2199 ! X =     743.40800,   5847.33500,       411.0,          0.0 !   !END!
2200 ! X =     743.60800,   5847.33500,       412.0,          0.0 !   !END!
2201 ! X =     743.80800,   5847.33500,       428.0,          0.0 !   !END!
2202 ! X =     744.00800,   5847.33500,       432.0,          0.0 !   !END!
2203 ! X =     744.20800,   5847.33500,       433.0,          0.0 !   !END!
2204 ! X =     744.40800,   5847.33500,       432.0,          0.0 !   !END!
2205 ! X =     744.60800,   5847.33500,       425.0,          0.0 !   !END!
2206 ! X =     744.80800,   5847.33500,       423.0,          0.0 !   !END!
2207 ! X =     745.00800,   5847.33500,       419.0,          0.0 !   !END!
2208 ! X =     745.20800,   5847.33500,       416.0,          0.0 !   !END!
2209 ! X =     745.40800,   5847.33500,       417.0,          0.0 !   !END!
2210 ! X =     745.60800,   5847.33500,       415.0,          0.0 !   !END!
2211 ! X =     745.80800,   5847.33500,       417.0,          0.0 !   !END!
2212 ! X =     746.00800,   5847.33500,       421.0,          0.0 !   !END!
2213 ! X =     746.20800,   5847.33500,       423.0,          0.0 !   !END!
2214 ! X =     746.40800,   5847.33500,       423.0,          0.0 !   !END!
2215 ! X =     746.60800,   5847.33500,       430.0,          0.0 !   !END!
2216 ! X =     746.80800,   5847.33500,       430.0,          0.0 !   !END!
2217 ! X =     747.00800,   5847.33500,       424.0,          0.0 !   !END!
2218 ! X =     747.20800,   5847.33500,       405.0,          0.0 !   !END!
2219 ! X =     747.40800,   5847.33500,       423.0,          0.0 !   !END!
2220 ! X =     747.60800,   5847.33500,       422.0,          0.0 !   !END!
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2221 ! X =     747.80800,   5847.33500,       424.0,          0.0 !   !END!
2222 ! X =     748.00800,   5847.33500,       424.0,          0.0 !   !END!
2223 ! X =     748.20800,   5847.33500,       424.0,          0.0 !   !END!
2224 ! X =     748.40800,   5847.33500,       427.0,          0.0 !   !END!
2225 ! X =     748.60800,   5847.33500,       426.0,          0.0 !   !END!
2226 ! X =     748.80800,   5847.33500,       431.0,          0.0 !   !END!
2227 ! X =     749.00800,   5847.33500,       431.0,          0.0 !   !END!
2228 ! X =     749.20800,   5847.33500,       434.0,          0.0 !   !END!
2229 ! X =     749.40800,   5847.33500,       436.0,          0.0 !   !END!
2230 ! X =     749.60800,   5847.33500,       447.0,          0.0 !   !END!
2231 ! X =     749.80800,   5847.33500,       456.0,          0.0 !   !END!
2232 ! X =     750.00800,   5847.33500,       462.0,          0.0 !   !END!
2233 ! X =     750.20800,   5847.33500,       459.0,          0.0 !   !END!
2234 ! X =     750.40800,   5847.33500,       463.0,          0.0 !   !END!
2235 ! X =     750.60800,   5847.33500,       464.0,          0.0 !   !END!
2236 ! X =     750.80800,   5847.33500,       466.0,          0.0 !   !END!
2237 ! X =     751.00800,   5847.33500,       461.0,          0.0 !   !END!
2238 ! X =     751.20800,   5847.33500,       462.0,          0.0 !   !END!
2239 ! X =     751.40800,   5847.33500,       459.0,          0.0 !   !END!
2240 ! X =     751.60800,   5847.33500,       458.0,          0.0 !   !END!
2241 ! X =     751.80800,   5847.33500,       462.0,          0.0 !   !END!
2242 ! X =     752.00800,   5847.33500,       459.0,          0.0 !   !END!
2243 ! X =     752.20800,   5847.33500,       461.0,          0.0 !   !END!
2244 ! X =     752.40800,   5847.33500,       466.0,          0.0 !   !END!
2245 ! X =     739.00800,   5847.53500,       395.0,          0.0 !   !END!
2246 ! X =     739.20800,   5847.53500,       403.0,          0.0 !   !END!
2247 ! X =     739.40800,   5847.53500,       402.0,          0.0 !   !END!
2248 ! X =     739.60800,   5847.53500,       406.0,          0.0 !   !END!
2249 ! X =     739.80800,   5847.53500,       408.0,          0.0 !   !END!
2250 ! X =     740.00800,   5847.53500,       405.0,          0.0 !   !END!
2251 ! X =     740.20800,   5847.53500,       401.0,          0.0 !   !END!
2252 ! X =     740.40800,   5847.53500,       399.0,          0.0 !   !END!
2253 ! X =     740.60800,   5847.53500,       398.0,          0.0 !   !END!
2254 ! X =     740.80800,   5847.53500,       398.0,          0.0 !   !END!
2255 ! X =     741.00800,   5847.53500,       397.0,          0.0 !   !END!
2256 ! X =     741.20800,   5847.53500,       399.0,          0.0 !   !END!
2257 ! X =     741.40800,   5847.53500,       397.0,          0.0 !   !END!
2258 ! X =     741.60800,   5847.53500,       397.0,          0.0 !   !END!
2259 ! X =     741.80800,   5847.53500,       399.0,          0.0 !   !END!
2260 ! X =     742.00800,   5847.53500,       399.0,          0.0 !   !END!
2261 ! X =     742.20800,   5847.53500,       399.0,          0.0 !   !END!
2262 ! X =     742.40800,   5847.53500,       402.0,          0.0 !   !END!
2263 ! X =     742.60800,   5847.53500,       403.0,          0.0 !   !END!
2264 ! X =     742.80800,   5847.53500,       402.0,          0.0 !   !END!
2265 ! X =     743.00800,   5847.53500,       404.0,          0.0 !   !END!
2266 ! X =     743.20800,   5847.53500,       407.0,          0.0 !   !END!
2267 ! X =     743.40800,   5847.53500,       408.0,          0.0 !   !END!
2268 ! X =     743.60800,   5847.53500,       412.0,          0.0 !   !END!
2269 ! X =     743.80800,   5847.53500,       422.0,          0.0 !   !END!
2270 ! X =     744.00800,   5847.53500,       424.0,          0.0 !   !END!
2271 ! X =     744.20800,   5847.53500,       424.0,          0.0 !   !END!
2272 ! X =     744.40800,   5847.53500,       424.0,          0.0 !   !END!
2273 ! X =     744.60800,   5847.53500,       423.0,          0.0 !   !END!
2274 ! X =     744.80800,   5847.53500,       423.0,          0.0 !   !END!
2275 ! X =     745.00800,   5847.53500,       421.0,          0.0 !   !END!
2276 ! X =     745.20800,   5847.53500,       417.0,          0.0 !   !END!
2277 ! X =     745.40800,   5847.53500,       412.0,          0.0 !   !END!
2278 ! X =     745.60800,   5847.53500,       414.0,          0.0 !   !END!
2279 ! X =     745.80800,   5847.53500,       417.0,          0.0 !   !END!
2280 ! X =     746.00800,   5847.53500,       421.0,          0.0 !   !END!
2281 ! X =     746.20800,   5847.53500,       426.0,          0.0 !   !END!
2282 ! X =     746.40800,   5847.53500,       421.0,          0.0 !   !END!
2283 ! X =     746.60800,   5847.53500,       418.0,          0.0 !   !END!
2284 ! X =     746.80800,   5847.53500,       422.0,          0.0 !   !END!
2285 ! X =     747.00800,   5847.53500,       416.0,          0.0 !   !END!
2286 ! X =     747.20800,   5847.53500,       413.0,          0.0 !   !END!
2287 ! X =     747.40800,   5847.53500,       425.0,          0.0 !   !END!
2288 ! X =     747.60800,   5847.53500,       421.0,          0.0 !   !END!
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2289 ! X =     747.80800,   5847.53500,       427.0,          0.0 !   !END!
2290 ! X =     748.00800,   5847.53500,       427.0,          0.0 !   !END!
2291 ! X =     748.20800,   5847.53500,       426.0,          0.0 !   !END!
2292 ! X =     748.40800,   5847.53500,       426.0,          0.0 !   !END!
2293 ! X =     748.60800,   5847.53500,       429.0,          0.0 !   !END!
2294 ! X =     748.80800,   5847.53500,       429.0,          0.0 !   !END!
2295 ! X =     749.00800,   5847.53500,       428.0,          0.0 !   !END!
2296 ! X =     749.20800,   5847.53500,       432.0,          0.0 !   !END!
2297 ! X =     749.40800,   5847.53500,       433.0,          0.0 !   !END!
2298 ! X =     749.60800,   5847.53500,       438.0,          0.0 !   !END!
2299 ! X =     749.80800,   5847.53500,       446.0,          0.0 !   !END!
2300 ! X =     750.00800,   5847.53500,       451.0,          0.0 !   !END!
2301 ! X =     750.20800,   5847.53500,       454.0,          0.0 !   !END!
2302 ! X =     750.40800,   5847.53500,       461.0,          0.0 !   !END!
2303 ! X =     750.60800,   5847.53500,       464.0,          0.0 !   !END!
2304 ! X =     750.80800,   5847.53500,       465.0,          0.0 !   !END!
2305 ! X =     751.00800,   5847.53500,       462.0,          0.0 !   !END!
2306 ! X =     751.20800,   5847.53500,       461.0,          0.0 !   !END!
2307 ! X =     751.40800,   5847.53500,       459.0,          0.0 !   !END!
2308 ! X =     751.60800,   5847.53500,       460.0,          0.0 !   !END!
2309 ! X =     751.80800,   5847.53500,       457.0,          0.0 !   !END!
2310 ! X =     752.00800,   5847.53500,       458.0,          0.0 !   !END!
2311 ! X =     752.20800,   5847.53500,       462.0,          0.0 !   !END!
2312 ! X =     752.40800,   5847.53500,       459.0,          0.0 !   !END!
2313 ! X =     739.00800,   5847.73500,       398.0,          0.0 !   !END!
2314 ! X =     739.20800,   5847.73500,       399.0,          0.0 !   !END!
2315 ! X =     739.40800,   5847.73500,       402.0,          0.0 !   !END!
2316 ! X =     739.60800,   5847.73500,       408.0,          0.0 !   !END!
2317 ! X =     739.80800,   5847.73500,       406.0,          0.0 !   !END!
2318 ! X =     740.00800,   5847.73500,       404.0,          0.0 !   !END!
2319 ! X =     740.20800,   5847.73500,       402.0,          0.0 !   !END!
2320 ! X =     740.40800,   5847.73500,       400.0,          0.0 !   !END!
2321 ! X =     740.60800,   5847.73500,       397.0,          0.0 !   !END!
2322 ! X =     740.80800,   5847.73500,       397.0,          0.0 !   !END!
2323 ! X =     741.00800,   5847.73500,       398.0,          0.0 !   !END!
2324 ! X =     741.20800,   5847.73500,       397.0,          0.0 !   !END!
2325 ! X =     741.40800,   5847.73500,       398.0,          0.0 !   !END!
2326 ! X =     741.60800,   5847.73500,       399.0,          0.0 !   !END!
2327 ! X =     741.80800,   5847.73500,       397.0,          0.0 !   !END!
2328 ! X =     742.00800,   5847.73500,       401.0,          0.0 !   !END!
2329 ! X =     742.20800,   5847.73500,       404.0,          0.0 !   !END!
2330 ! X =     742.40800,   5847.73500,       402.0,          0.0 !   !END!
2331 ! X =     742.60800,   5847.73500,       402.0,          0.0 !   !END!
2332 ! X =     742.80800,   5847.73500,       402.0,          0.0 !   !END!
2333 ! X =     743.00800,   5847.73500,       405.0,          0.0 !   !END!
2334 ! X =     743.20800,   5847.73500,       403.0,          0.0 !   !END!
2335 ! X =     743.40800,   5847.73500,       407.0,          0.0 !   !END!
2336 ! X =     743.60800,   5847.73500,       409.0,          0.0 !   !END!
2337 ! X =     743.80800,   5847.73500,       413.0,          0.0 !   !END!
2338 ! X =     744.00800,   5847.73500,       415.0,          0.0 !   !END!
2339 ! X =     744.20800,   5847.73500,       419.0,          0.0 !   !END!
2340 ! X =     744.40800,   5847.73500,       420.0,          0.0 !   !END!
2341 ! X =     744.60800,   5847.73500,       420.0,          0.0 !   !END!
2342 ! X =     744.80800,   5847.73500,       423.0,          0.0 !   !END!
2343 ! X =     745.00800,   5847.73500,       418.0,          0.0 !   !END!
2344 ! X =     745.20800,   5847.73500,       415.0,          0.0 !   !END!
2345 ! X =     745.40800,   5847.73500,       415.0,          0.0 !   !END!
2346 ! X =     745.60800,   5847.73500,       414.0,          0.0 !   !END!
2347 ! X =     745.80800,   5847.73500,       414.0,          0.0 !   !END!
2348 ! X =     746.00800,   5847.73500,       424.0,          0.0 !   !END!
2349 ! X =     746.20800,   5847.73500,       422.0,          0.0 !   !END!
2350 ! X =     746.40800,   5847.73500,       420.0,          0.0 !   !END!
2351 ! X =     746.60800,   5847.73500,       417.0,          0.0 !   !END!
2352 ! X =     746.80800,   5847.73500,       417.0,          0.0 !   !END!
2353 ! X =     747.00800,   5847.73500,       425.0,          0.0 !   !END!
2354 ! X =     747.20800,   5847.73500,       425.0,          0.0 !   !END!
2355 ! X =     747.40800,   5847.73500,       418.0,          0.0 !   !END!
2356 ! X =     747.60800,   5847.73500,       423.0,          0.0 !   !END!
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2357 ! X =     747.80800,   5847.73500,       426.0,          0.0 !   !END!
2358 ! X =     748.00800,   5847.73500,       428.0,          0.0 !   !END!
2359 ! X =     748.20800,   5847.73500,       428.0,          0.0 !   !END!
2360 ! X =     748.40800,   5847.73500,       428.0,          0.0 !   !END!
2361 ! X =     748.60800,   5847.73500,       430.0,          0.0 !   !END!
2362 ! X =     748.80800,   5847.73500,       431.0,          0.0 !   !END!
2363 ! X =     749.00800,   5847.73500,       432.0,          0.0 !   !END!
2364 ! X =     749.20800,   5847.73500,       434.0,          0.0 !   !END!
2365 ! X =     749.40800,   5847.73500,       441.0,          0.0 !   !END!
2366 ! X =     749.60800,   5847.73500,       439.0,          0.0 !   !END!
2367 ! X =     749.80800,   5847.73500,       438.0,          0.0 !   !END!
2368 ! X =     750.00800,   5847.73500,       448.0,          0.0 !   !END!
2369 ! X =     750.20800,   5847.73500,       453.0,          0.0 !   !END!
2370 ! X =     750.40800,   5847.73500,       458.0,          0.0 !   !END!
2371 ! X =     750.60800,   5847.73500,       463.0,          0.0 !   !END!
2372 ! X =     750.80800,   5847.73500,       462.0,          0.0 !   !END!
2373 ! X =     751.00800,   5847.73500,       463.0,          0.0 !   !END!
2374 ! X =     751.20800,   5847.73500,       464.0,          0.0 !   !END!
2375 ! X =     751.40800,   5847.73500,       459.0,          0.0 !   !END!
2376 ! X =     751.60800,   5847.73500,       460.0,          0.0 !   !END!
2377 ! X =     751.80800,   5847.73500,       457.0,          0.0 !   !END!
2378 ! X =     752.00800,   5847.73500,       459.0,          0.0 !   !END!
2379 ! X =     752.20800,   5847.73500,       462.0,          0.0 !   !END!
2380 ! X =     752.40800,   5847.73500,       472.0,          0.0 !   !END!
2381 ! X =     739.00800,   5847.93500,       397.0,          0.0 !   !END!
2382 ! X =     739.20800,   5847.93500,       399.0,          0.0 !   !END!
2383 ! X =     739.40800,   5847.93500,       400.0,          0.0 !   !END!
2384 ! X =     739.60800,   5847.93500,       405.0,          0.0 !   !END!
2385 ! X =     739.80800,   5847.93500,       408.0,          0.0 !   !END!
2386 ! X =     740.00800,   5847.93500,       403.0,          0.0 !   !END!
2387 ! X =     740.20800,   5847.93500,       401.0,          0.0 !   !END!
2388 ! X =     740.40800,   5847.93500,       398.0,          0.0 !   !END!
2389 ! X =     740.60800,   5847.93500,       397.0,          0.0 !   !END!
2390 ! X =     740.80800,   5847.93500,       397.0,          0.0 !   !END!
2391 ! X =     741.00800,   5847.93500,       396.0,          0.0 !   !END!
2392 ! X =     741.20800,   5847.93500,       397.0,          0.0 !   !END!
2393 ! X =     741.40800,   5847.93500,       396.0,          0.0 !   !END!
2394 ! X =     741.60800,   5847.93500,       399.0,          0.0 !   !END!
2395 ! X =     741.80800,   5847.93500,       402.0,          0.0 !   !END!
2396 ! X =     742.00800,   5847.93500,       402.0,          0.0 !   !END!
2397 ! X =     742.20800,   5847.93500,       400.0,          0.0 !   !END!
2398 ! X =     742.40800,   5847.93500,       400.0,          0.0 !   !END!
2399 ! X =     742.60800,   5847.93500,       401.0,          0.0 !   !END!
2400 ! X =     742.80800,   5847.93500,       403.0,          0.0 !   !END!
2401 ! X =     743.00800,   5847.93500,       408.0,          0.0 !   !END!
2402 ! X =     743.20800,   5847.93500,       405.0,          0.0 !   !END!
2403 ! X =     743.40800,   5847.93500,       405.0,          0.0 !   !END!
2404 ! X =     743.60800,   5847.93500,       409.0,          0.0 !   !END!
2405 ! X =     743.80800,   5847.93500,       418.0,          0.0 !   !END!
2406 ! X =     744.00800,   5847.93500,       418.0,          0.0 !   !END!
2407 ! X =     744.20800,   5847.93500,       422.0,          0.0 !   !END!
2408 ! X =     744.40800,   5847.93500,       419.0,          0.0 !   !END!
2409 ! X =     744.60800,   5847.93500,       416.0,          0.0 !   !END!
2410 ! X =     744.80800,   5847.93500,       419.0,          0.0 !   !END!
2411 ! X =     745.00800,   5847.93500,       414.0,          0.0 !   !END!
2412 ! X =     745.20800,   5847.93500,       412.0,          0.0 !   !END!
2413 ! X =     745.40800,   5847.93500,       413.0,          0.0 !   !END!
2414 ! X =     745.60800,   5847.93500,       413.0,          0.0 !   !END!
2415 ! X =     745.80800,   5847.93500,       415.0,          0.0 !   !END!
2416 ! X =     746.00800,   5847.93500,       415.0,          0.0 !   !END!
2417 ! X =     746.20800,   5847.93500,       418.0,          0.0 !   !END!
2418 ! X =     746.40800,   5847.93500,       416.0,          0.0 !   !END!
2419 ! X =     746.60800,   5847.93500,       415.0,          0.0 !   !END!
2420 ! X =     746.80800,   5847.93500,       417.0,          0.0 !   !END!
2421 ! X =     747.00800,   5847.93500,       418.0,          0.0 !   !END!
2422 ! X =     747.20800,   5847.93500,       421.0,          0.0 !   !END!
2423 ! X =     747.40800,   5847.93500,       422.0,          0.0 !   !END!
2424 ! X =     747.60800,   5847.93500,       423.0,          0.0 !   !END!
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2425 ! X =     747.80800,   5847.93500,       429.0,          0.0 !   !END!
2426 ! X =     748.00800,   5847.93500,       428.0,          0.0 !   !END!
2427 ! X =     748.20800,   5847.93500,       428.0,          0.0 !   !END!
2428 ! X =     748.40800,   5847.93500,       430.0,          0.0 !   !END!
2429 ! X =     748.60800,   5847.93500,       430.0,          0.0 !   !END!
2430 ! X =     748.80800,   5847.93500,       431.0,          0.0 !   !END!
2431 ! X =     749.00800,   5847.93500,       434.0,          0.0 !   !END!
2432 ! X =     749.20800,   5847.93500,       432.0,          0.0 !   !END!
2433 ! X =     749.40800,   5847.93500,       441.0,          0.0 !   !END!
2434 ! X =     749.60800,   5847.93500,       443.0,          0.0 !   !END!
2435 ! X =     749.80800,   5847.93500,       441.0,          0.0 !   !END!
2436 ! X =     750.00800,   5847.93500,       450.0,          0.0 !   !END!
2437 ! X =     750.20800,   5847.93500,       456.0,          0.0 !   !END!
2438 ! X =     750.40800,   5847.93500,       459.0,          0.0 !   !END!
2439 ! X =     750.60800,   5847.93500,       460.0,          0.0 !   !END!
2440 ! X =     750.80800,   5847.93500,       464.0,          0.0 !   !END!
2441 ! X =     751.00800,   5847.93500,       460.0,          0.0 !   !END!
2442 ! X =     751.20800,   5847.93500,       460.0,          0.0 !   !END!
2443 ! X =     751.40800,   5847.93500,       456.0,          0.0 !   !END!
2444 ! X =     751.60800,   5847.93500,       458.0,          0.0 !   !END!
2445 ! X =     751.80800,   5847.93500,       454.0,          0.0 !   !END!
2446 ! X =     752.00800,   5847.93500,       452.0,          0.0 !   !END!
2447 ! X =     752.20800,   5847.93500,       466.0,          0.0 !   !END!
2448 ! X =     752.40800,   5847.93500,       468.0,          0.0 !   !END!
2449 ! X =     739.00800,   5848.13500,       400.0,          0.0 !   !END!
2450 ! X =     739.20800,   5848.13500,       398.0,          0.0 !   !END!
2451 ! X =     739.40800,   5848.13500,       401.0,          0.0 !   !END!
2452 ! X =     739.60800,   5848.13500,       405.0,          0.0 !   !END!
2453 ! X =     739.80800,   5848.13500,       406.0,          0.0 !   !END!
2454 ! X =     740.00800,   5848.13500,       405.0,          0.0 !   !END!
2455 ! X =     740.20800,   5848.13500,       401.0,          0.0 !   !END!
2456 ! X =     740.40800,   5848.13500,       398.0,          0.0 !   !END!
2457 ! X =     740.60800,   5848.13500,       397.0,          0.0 !   !END!
2458 ! X =     740.80800,   5848.13500,       398.0,          0.0 !   !END!
2459 ! X =     741.00800,   5848.13500,       396.0,          0.0 !   !END!
2460 ! X =     741.20800,   5848.13500,       399.0,          0.0 !   !END!
2461 ! X =     741.40800,   5848.13500,       399.0,          0.0 !   !END!
2462 ! X =     741.60800,   5848.13500,       401.0,          0.0 !   !END!
2463 ! X =     741.80800,   5848.13500,       400.0,          0.0 !   !END!
2464 ! X =     742.00800,   5848.13500,       399.0,          0.0 !   !END!
2465 ! X =     742.20800,   5848.13500,       396.0,          0.0 !   !END!
2466 ! X =     742.40800,   5848.13500,       400.0,          0.0 !   !END!
2467 ! X =     742.60800,   5848.13500,       402.0,          0.0 !   !END!
2468 ! X =     742.80800,   5848.13500,       403.0,          0.0 !   !END!
2469 ! X =     743.00800,   5848.13500,       402.0,          0.0 !   !END!
2470 ! X =     743.20800,   5848.13500,       408.0,          0.0 !   !END!
2471 ! X =     743.40800,   5848.13500,       408.0,          0.0 !   !END!
2472 ! X =     743.60800,   5848.13500,       410.0,          0.0 !   !END!
2473 ! X =     743.80800,   5848.13500,       424.0,          0.0 !   !END!
2474 ! X =     744.00800,   5848.13500,       424.0,          0.0 !   !END!
2475 ! X =     744.20800,   5848.13500,       426.0,          0.0 !   !END!
2476 ! X =     744.40800,   5848.13500,       420.0,          0.0 !   !END!
2477 ! X =     744.60800,   5848.13500,       416.0,          0.0 !   !END!
2478 ! X =     744.80800,   5848.13500,       414.0,          0.0 !   !END!
2479 ! X =     745.00800,   5848.13500,       415.0,          0.0 !   !END!
2480 ! X =     745.20800,   5848.13500,       412.0,          0.0 !   !END!
2481 ! X =     745.40800,   5848.13500,       412.0,          0.0 !   !END!
2482 ! X =     745.60800,   5848.13500,       415.0,          0.0 !   !END!
2483 ! X =     745.80800,   5848.13500,       414.0,          0.0 !   !END!
2484 ! X =     746.00800,   5848.13500,       412.0,          0.0 !   !END!
2485 ! X =     746.20800,   5848.13500,       415.0,          0.0 !   !END!
2486 ! X =     746.40800,   5848.13500,       415.0,          0.0 !   !END!
2487 ! X =     746.60800,   5848.13500,       419.0,          0.0 !   !END!
2488 ! X =     746.80800,   5848.13500,       417.0,          0.0 !   !END!
2489 ! X =     747.00800,   5848.13500,       419.0,          0.0 !   !END!
2490 ! X =     747.20800,   5848.13500,       422.0,          0.0 !   !END!
2491 ! X =     747.40800,   5848.13500,       422.0,          0.0 !   !END!
2492 ! X =     747.60800,   5848.13500,       432.0,          0.0 !   !END!
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2493 ! X =     747.80800,   5848.13500,       429.0,          0.0 !   !END!
2494 ! X =     748.00800,   5848.13500,       429.0,          0.0 !   !END!
2495 ! X =     748.20800,   5848.13500,       428.0,          0.0 !   !END!
2496 ! X =     748.40800,   5848.13500,       431.0,          0.0 !   !END!
2497 ! X =     748.60800,   5848.13500,       431.0,          0.0 !   !END!
2498 ! X =     748.80800,   5848.13500,       434.0,          0.0 !   !END!
2499 ! X =     749.00800,   5848.13500,       432.0,          0.0 !   !END!
2500 ! X =     749.20800,   5848.13500,       438.0,          0.0 !   !END!
2501 ! X =     749.40800,   5848.13500,       441.0,          0.0 !   !END!
2502 ! X =     749.60800,   5848.13500,       444.0,          0.0 !   !END!
2503 ! X =     749.80800,   5848.13500,       447.0,          0.0 !   !END!
2504 ! X =     750.00800,   5848.13500,       452.0,          0.0 !   !END!
2505 ! X =     750.20800,   5848.13500,       455.0,          0.0 !   !END!
2506 ! X =     750.40800,   5848.13500,       456.0,          0.0 !   !END!
2507 ! X =     750.60800,   5848.13500,       460.0,          0.0 !   !END!
2508 ! X =     750.80800,   5848.13500,       457.0,          0.0 !   !END!
2509 ! X =     751.00800,   5848.13500,       460.0,          0.0 !   !END!
2510 ! X =     751.20800,   5848.13500,       456.0,          0.0 !   !END!
2511 ! X =     751.40800,   5848.13500,       455.0,          0.0 !   !END!
2512 ! X =     751.60800,   5848.13500,       454.0,          0.0 !   !END!
2513 ! X =     751.80800,   5848.13500,       452.0,          0.0 !   !END!
2514 ! X =     752.00800,   5848.13500,       456.0,          0.0 !   !END!
2515 ! X =     752.20800,   5848.13500,       472.0,          0.0 !   !END!
2516 ! X =     752.40800,   5848.13500,       475.0,          0.0 !   !END!
2517 ! X =     739.00800,   5848.33500,       396.0,          0.0 !   !END!
2518 ! X =     739.20800,   5848.33500,       401.0,          0.0 !   !END!
2519 ! X =     739.40800,   5848.33500,       396.0,          0.0 !   !END!
2520 ! X =     739.60800,   5848.33500,       397.0,          0.0 !   !END!
2521 ! X =     739.80800,   5848.33500,       403.0,          0.0 !   !END!
2522 ! X =     740.00800,   5848.33500,       402.0,          0.0 !   !END!
2523 ! X =     740.20800,   5848.33500,       400.0,          0.0 !   !END!
2524 ! X =     740.40800,   5848.33500,       399.0,          0.0 !   !END!
2525 ! X =     740.60800,   5848.33500,       397.0,          0.0 !   !END!
2526 ! X =     740.80800,   5848.33500,       397.0,          0.0 !   !END!
2527 ! X =     741.00800,   5848.33500,       396.0,          0.0 !   !END!
2528 ! X =     741.20800,   5848.33500,       398.0,          0.0 !   !END!
2529 ! X =     741.40800,   5848.33500,       401.0,          0.0 !   !END!
2530 ! X =     741.60800,   5848.33500,       401.0,          0.0 !   !END!
2531 ! X =     741.80800,   5848.33500,       402.0,          0.0 !   !END!
2532 ! X =     742.00800,   5848.33500,       399.0,          0.0 !   !END!
2533 ! X =     742.20800,   5848.33500,       400.0,          0.0 !   !END!
2534 ! X =     742.40800,   5848.33500,       398.0,          0.0 !   !END!
2535 ! X =     742.60800,   5848.33500,       401.0,          0.0 !   !END!
2536 ! X =     742.80800,   5848.33500,       402.0,          0.0 !   !END!
2537 ! X =     743.00800,   5848.33500,       406.0,          0.0 !   !END!
2538 ! X =     743.20800,   5848.33500,       412.0,          0.0 !   !END!
2539 ! X =     743.40800,   5848.33500,       414.0,          0.0 !   !END!
2540 ! X =     743.60800,   5848.33500,       412.0,          0.0 !   !END!
2541 ! X =     743.80800,   5848.33500,       424.0,          0.0 !   !END!
2542 ! X =     744.00800,   5848.33500,       426.0,          0.0 !   !END!
2543 ! X =     744.20800,   5848.33500,       426.0,          0.0 !   !END!
2544 ! X =     744.40800,   5848.33500,       425.0,          0.0 !   !END!
2545 ! X =     744.60800,   5848.33500,       421.0,          0.0 !   !END!
2546 ! X =     744.80800,   5848.33500,       417.0,          0.0 !   !END!
2547 ! X =     745.00800,   5848.33500,       415.0,          0.0 !   !END!
2548 ! X =     745.20800,   5848.33500,       415.0,          0.0 !   !END!
2549 ! X =     745.40800,   5848.33500,       411.0,          0.0 !   !END!
2550 ! X =     745.60800,   5848.33500,       414.0,          0.0 !   !END!
2551 ! X =     745.80800,   5848.33500,       415.0,          0.0 !   !END!
2552 ! X =     746.00800,   5848.33500,       416.0,          0.0 !   !END!
2553 ! X =     746.20800,   5848.33500,       417.0,          0.0 !   !END!
2554 ! X =     746.40800,   5848.33500,       417.0,          0.0 !   !END!
2555 ! X =     746.60800,   5848.33500,       415.0,          0.0 !   !END!
2556 ! X =     746.80800,   5848.33500,       418.0,          0.0 !   !END!
2557 ! X =     747.00800,   5848.33500,       419.0,          0.0 !   !END!
2558 ! X =     747.20800,   5848.33500,       421.0,          0.0 !   !END!
2559 ! X =     747.40800,   5848.33500,       428.0,          0.0 !   !END!
2560 ! X =     747.60800,   5848.33500,       425.0,          0.0 !   !END!
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2561 ! X =     747.80800,   5848.33500,       427.0,          0.0 !   !END!
2562 ! X =     748.00800,   5848.33500,       429.0,          0.0 !   !END!
2563 ! X =     748.20800,   5848.33500,       428.0,          0.0 !   !END!
2564 ! X =     748.40800,   5848.33500,       435.0,          0.0 !   !END!
2565 ! X =     748.60800,   5848.33500,       432.0,          0.0 !   !END!
2566 ! X =     748.80800,   5848.33500,       434.0,          0.0 !   !END!
2567 ! X =     749.00800,   5848.33500,       438.0,          0.0 !   !END!
2568 ! X =     749.20800,   5848.33500,       441.0,          0.0 !   !END!
2569 ! X =     749.40800,   5848.33500,       445.0,          0.0 !   !END!
2570 ! X =     749.60800,   5848.33500,       446.0,          0.0 !   !END!
2571 ! X =     749.80800,   5848.33500,       442.0,          0.0 !   !END!
2572 ! X =     750.00800,   5848.33500,       443.0,          0.0 !   !END!
2573 ! X =     750.20800,   5848.33500,       453.0,          0.0 !   !END!
2574 ! X =     750.40800,   5848.33500,       453.0,          0.0 !   !END!
2575 ! X =     750.60800,   5848.33500,       456.0,          0.0 !   !END!
2576 ! X =     750.80800,   5848.33500,       447.0,          0.0 !   !END!
2577 ! X =     751.00800,   5848.33500,       452.0,          0.0 !   !END!
2578 ! X =     751.20800,   5848.33500,       454.0,          0.0 !   !END!
2579 ! X =     751.40800,   5848.33500,       457.0,          0.0 !   !END!
2580 ! X =     751.60800,   5848.33500,       451.0,          0.0 !   !END!
2581 ! X =     751.80800,   5848.33500,       453.0,          0.0 !   !END!
2582 ! X =     752.00800,   5848.33500,       456.0,          0.0 !   !END!
2583 ! X =     752.20800,   5848.33500,       479.0,          0.0 !   !END!
2584 ! X =     752.40800,   5848.33500,       490.0,          0.0 !   !END!
2585 ! X =     739.00800,   5848.53500,       400.0,          0.0 !   !END!
2586 ! X =     739.20800,   5848.53500,       401.0,          0.0 !   !END!
2587 ! X =     739.40800,   5848.53500,       403.0,          0.0 !   !END!
2588 ! X =     739.60800,   5848.53500,       401.0,          0.0 !   !END!
2589 ! X =     739.80800,   5848.53500,       397.0,          0.0 !   !END!
2590 ! X =     740.00800,   5848.53500,       395.0,          0.0 !   !END!
2591 ! X =     740.20800,   5848.53500,       397.0,          0.0 !   !END!
2592 ! X =     740.40800,   5848.53500,       401.0,          0.0 !   !END!
2593 ! X =     740.60800,   5848.53500,       398.0,          0.0 !   !END!
2594 ! X =     740.80800,   5848.53500,       399.0,          0.0 !   !END!
2595 ! X =     741.00800,   5848.53500,       398.0,          0.0 !   !END!
2596 ! X =     741.20800,   5848.53500,       401.0,          0.0 !   !END!
2597 ! X =     741.40800,   5848.53500,       400.0,          0.0 !   !END!
2598 ! X =     741.60800,   5848.53500,       403.0,          0.0 !   !END!
2599 ! X =     741.80800,   5848.53500,       402.0,          0.0 !   !END!
2600 ! X =     742.00800,   5848.53500,       400.0,          0.0 !   !END!
2601 ! X =     742.20800,   5848.53500,       400.0,          0.0 !   !END!
2602 ! X =     742.40800,   5848.53500,       398.0,          0.0 !   !END!
2603 ! X =     742.60800,   5848.53500,       400.0,          0.0 !   !END!
2604 ! X =     742.80800,   5848.53500,       405.0,          0.0 !   !END!
2605 ! X =     743.00800,   5848.53500,       406.0,          0.0 !   !END!
2606 ! X =     743.20800,   5848.53500,       409.0,          0.0 !   !END!
2607 ! X =     743.40800,   5848.53500,       409.0,          0.0 !   !END!
2608 ! X =     743.60800,   5848.53500,       410.0,          0.0 !   !END!
2609 ! X =     743.80800,   5848.53500,       415.0,          0.0 !   !END!
2610 ! X =     744.00800,   5848.53500,       423.0,          0.0 !   !END!
2611 ! X =     744.20800,   5848.53500,       428.0,          0.0 !   !END!
2612 ! X =     744.40800,   5848.53500,       429.0,          0.0 !   !END!
2613 ! X =     744.60800,   5848.53500,       423.0,          0.0 !   !END!
2614 ! X =     744.80800,   5848.53500,       422.0,          0.0 !   !END!
2615 ! X =     745.00800,   5848.53500,       415.0,          0.0 !   !END!
2616 ! X =     745.20800,   5848.53500,       412.0,          0.0 !   !END!
2617 ! X =     745.40800,   5848.53500,       410.0,          0.0 !   !END!
2618 ! X =     745.60800,   5848.53500,       411.0,          0.0 !   !END!
2619 ! X =     745.80800,   5848.53500,       413.0,          0.0 !   !END!
2620 ! X =     746.00800,   5848.53500,       412.0,          0.0 !   !END!
2621 ! X =     746.20800,   5848.53500,       415.0,          0.0 !   !END!
2622 ! X =     746.40800,   5848.53500,       420.0,          0.0 !   !END!
2623 ! X =     746.60800,   5848.53500,       418.0,          0.0 !   !END!
2624 ! X =     746.80800,   5848.53500,       418.0,          0.0 !   !END!
2625 ! X =     747.00800,   5848.53500,       422.0,          0.0 !   !END!
2626 ! X =     747.20800,   5848.53500,       420.0,          0.0 !   !END!
2627 ! X =     747.40800,   5848.53500,       419.0,          0.0 !   !END!
2628 ! X =     747.60800,   5848.53500,       423.0,          0.0 !   !END!
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2629 ! X =     747.80800,   5848.53500,       425.0,          0.0 !   !END!
2630 ! X =     748.00800,   5848.53500,       428.0,          0.0 !   !END!
2631 ! X =     748.20800,   5848.53500,       430.0,          0.0 !   !END!
2632 ! X =     748.40800,   5848.53500,       434.0,          0.0 !   !END!
2633 ! X =     748.60800,   5848.53500,       433.0,          0.0 !   !END!
2634 ! X =     748.80800,   5848.53500,       436.0,          0.0 !   !END!
2635 ! X =     749.00800,   5848.53500,       439.0,          0.0 !   !END!
2636 ! X =     749.20800,   5848.53500,       444.0,          0.0 !   !END!
2637 ! X =     749.40800,   5848.53500,       446.0,          0.0 !   !END!
2638 ! X =     749.60800,   5848.53500,       445.0,          0.0 !   !END!
2639 ! X =     749.80800,   5848.53500,       446.0,          0.0 !   !END!
2640 ! X =     750.00800,   5848.53500,       442.0,          0.0 !   !END!
2641 ! X =     750.20800,   5848.53500,       446.0,          0.0 !   !END!
2642 ! X =     750.40800,   5848.53500,       445.0,          0.0 !   !END!
2643 ! X =     750.60800,   5848.53500,       447.0,          0.0 !   !END!
2644 ! X =     750.80800,   5848.53500,       446.0,          0.0 !   !END!
2645 ! X =     751.00800,   5848.53500,       450.0,          0.0 !   !END!
2646 ! X =     751.20800,   5848.53500,       451.0,          0.0 !   !END!
2647 ! X =     751.40800,   5848.53500,       450.0,          0.0 !   !END!
2648 ! X =     751.60800,   5848.53500,       450.0,          0.0 !   !END!
2649 ! X =     751.80800,   5848.53500,       453.0,          0.0 !   !END!
2650 ! X =     752.00800,   5848.53500,       457.0,          0.0 !   !END!
2651 ! X =     752.20800,   5848.53500,       467.0,          0.0 !   !END!
2652 ! X =     752.40800,   5848.53500,       478.0,          0.0 !   !END!
2653 ! X =     739.00800,   5848.73500,       403.0,          0.0 !   !END!
2654 ! X =     739.20800,   5848.73500,       404.0,          0.0 !   !END!
2655 ! X =     739.40800,   5848.73500,       401.0,          0.0 !   !END!
2656 ! X =     739.60800,   5848.73500,       399.0,          0.0 !   !END!
2657 ! X =     739.80800,   5848.73500,       398.0,          0.0 !   !END!
2658 ! X =     740.00800,   5848.73500,       399.0,          0.0 !   !END!
2659 ! X =     740.20800,   5848.73500,       398.0,          0.0 !   !END!
2660 ! X =     740.40800,   5848.73500,       397.0,          0.0 !   !END!
2661 ! X =     740.60800,   5848.73500,       398.0,          0.0 !   !END!
2662 ! X =     740.80800,   5848.73500,       397.0,          0.0 !   !END!
2663 ! X =     741.00800,   5848.73500,       398.0,          0.0 !   !END!
2664 ! X =     741.20800,   5848.73500,       399.0,          0.0 !   !END!
2665 ! X =     741.40800,   5848.73500,       399.0,          0.0 !   !END!
2666 ! X =     741.60800,   5848.73500,       403.0,          0.0 !   !END!
2667 ! X =     741.80800,   5848.73500,       406.0,          0.0 !   !END!
2668 ! X =     742.00800,   5848.73500,       404.0,          0.0 !   !END!
2669 ! X =     742.20800,   5848.73500,       400.0,          0.0 !   !END!
2670 ! X =     742.40800,   5848.73500,       402.0,          0.0 !   !END!
2671 ! X =     742.60800,   5848.73500,       404.0,          0.0 !   !END!
2672 ! X =     742.80800,   5848.73500,       405.0,          0.0 !   !END!
2673 ! X =     743.00800,   5848.73500,       405.0,          0.0 !   !END!
2674 ! X =     743.20800,   5848.73500,       403.0,          0.0 !   !END!
2675 ! X =     743.40800,   5848.73500,       405.0,          0.0 !   !END!
2676 ! X =     743.60800,   5848.73500,       406.0,          0.0 !   !END!
2677 ! X =     743.80800,   5848.73500,       417.0,          0.0 !   !END!
2678 ! X =     744.00800,   5848.73500,       425.0,          0.0 !   !END!
2679 ! X =     744.20800,   5848.73500,       431.0,          0.0 !   !END!
2680 ! X =     744.40800,   5848.73500,       433.0,          0.0 !   !END!
2681 ! X =     744.60800,   5848.73500,       426.0,          0.0 !   !END!
2682 ! X =     744.80800,   5848.73500,       422.0,          0.0 !   !END!
2683 ! X =     745.00800,   5848.73500,       416.0,          0.0 !   !END!
2684 ! X =     745.20800,   5848.73500,       413.0,          0.0 !   !END!
2685 ! X =     745.40800,   5848.73500,       410.0,          0.0 !   !END!
2686 ! X =     745.60800,   5848.73500,       411.0,          0.0 !   !END!
2687 ! X =     745.80800,   5848.73500,       415.0,          0.0 !   !END!
2688 ! X =     746.00800,   5848.73500,       413.0,          0.0 !   !END!
2689 ! X =     746.20800,   5848.73500,       413.0,          0.0 !   !END!
2690 ! X =     746.40800,   5848.73500,       415.0,          0.0 !   !END!
2691 ! X =     746.60800,   5848.73500,       418.0,          0.0 !   !END!
2692 ! X =     746.80800,   5848.73500,       416.0,          0.0 !   !END!
2693 ! X =     747.00800,   5848.73500,       414.0,          0.0 !   !END!
2694 ! X =     747.20800,   5848.73500,       420.0,          0.0 !   !END!
2695 ! X =     747.40800,   5848.73500,       418.0,          0.0 !   !END!
2696 ! X =     747.60800,   5848.73500,       419.0,          0.0 !   !END!
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2697 ! X =     747.80800,   5848.73500,       424.0,          0.0 !   !END!
2698 ! X =     748.00800,   5848.73500,       426.0,          0.0 !   !END!
2699 ! X =     748.20800,   5848.73500,       428.0,          0.0 !   !END!
2700 ! X =     748.40800,   5848.73500,       433.0,          0.0 !   !END!
2701 ! X =     748.60800,   5848.73500,       435.0,          0.0 !   !END!
2702 ! X =     748.80800,   5848.73500,       438.0,          0.0 !   !END!
2703 ! X =     749.00800,   5848.73500,       441.0,          0.0 !   !END!
2704 ! X =     749.20800,   5848.73500,       445.0,          0.0 !   !END!
2705 ! X =     749.40800,   5848.73500,       449.0,          0.0 !   !END!
2706 ! X =     749.60800,   5848.73500,       446.0,          0.0 !   !END!
2707 ! X =     749.80800,   5848.73500,       448.0,          0.0 !   !END!
2708 ! X =     750.00800,   5848.73500,       448.0,          0.0 !   !END!
2709 ! X =     750.20800,   5848.73500,       446.0,          0.0 !   !END!
2710 ! X =     750.40800,   5848.73500,       445.0,          0.0 !   !END!
2711 ! X =     750.60800,   5848.73500,       445.0,          0.0 !   !END!
2712 ! X =     750.80800,   5848.73500,       446.0,          0.0 !   !END!
2713 ! X =     751.00800,   5848.73500,       446.0,          0.0 !   !END!
2714 ! X =     751.20800,   5848.73500,       448.0,          0.0 !   !END!
2715 ! X =     751.40800,   5848.73500,       450.0,          0.0 !   !END!
2716 ! X =     751.60800,   5848.73500,       451.0,          0.0 !   !END!
2717 ! X =     751.80800,   5848.73500,       454.0,          0.0 !   !END!
2718 ! X =     752.00800,   5848.73500,       460.0,          0.0 !   !END!
2719 ! X =     752.20800,   5848.73500,       462.0,          0.0 !   !END!
2720 ! X =     752.40800,   5848.73500,       485.0,          0.0 !   !END!
2721 ! X =     739.00800,   5848.93500,       403.0,          0.0 !   !END!
2722 ! X =     739.20800,   5848.93500,       404.0,          0.0 !   !END!
2723 ! X =     739.40800,   5848.93500,       404.0,          0.0 !   !END!
2724 ! X =     739.60800,   5848.93500,       402.0,          0.0 !   !END!
2725 ! X =     739.80800,   5848.93500,       403.0,          0.0 !   !END!
2726 ! X =     740.00800,   5848.93500,       400.0,          0.0 !   !END!
2727 ! X =     740.20800,   5848.93500,       399.0,          0.0 !   !END!
2728 ! X =     740.40800,   5848.93500,       399.0,          0.0 !   !END!
2729 ! X =     740.60800,   5848.93500,       399.0,          0.0 !   !END!
2730 ! X =     740.80800,   5848.93500,       399.0,          0.0 !   !END!
2731 ! X =     741.00800,   5848.93500,       398.0,          0.0 !   !END!
2732 ! X =     741.20800,   5848.93500,       398.0,          0.0 !   !END!
2733 ! X =     741.40800,   5848.93500,       400.0,          0.0 !   !END!
2734 ! X =     741.60800,   5848.93500,       410.0,          0.0 !   !END!
2735 ! X =     741.80800,   5848.93500,       414.0,          0.0 !   !END!
2736 ! X =     742.00800,   5848.93500,       410.0,          0.0 !   !END!
2737 ! X =     742.20800,   5848.93500,       404.0,          0.0 !   !END!
2738 ! X =     742.40800,   5848.93500,       407.0,          0.0 !   !END!
2739 ! X =     742.60800,   5848.93500,       406.0,          0.0 !   !END!
2740 ! X =     742.80800,   5848.93500,       404.0,          0.0 !   !END!
2741 ! X =     743.00800,   5848.93500,       403.0,          0.0 !   !END!
2742 ! X =     743.20800,   5848.93500,       405.0,          0.0 !   !END!
2743 ! X =     743.40800,   5848.93500,       405.0,          0.0 !   !END!
2744 ! X =     743.60800,   5848.93500,       406.0,          0.0 !   !END!
2745 ! X =     743.80800,   5848.93500,       411.0,          0.0 !   !END!
2746 ! X =     744.00800,   5848.93500,       416.0,          0.0 !   !END!
2747 ! X =     744.20800,   5848.93500,       427.0,          0.0 !   !END!
2748 ! X =     744.40800,   5848.93500,       425.0,          0.0 !   !END!
2749 ! X =     744.60800,   5848.93500,       424.0,          0.0 !   !END!
2750 ! X =     744.80800,   5848.93500,       417.0,          0.0 !   !END!
2751 ! X =     745.00800,   5848.93500,       416.0,          0.0 !   !END!
2752 ! X =     745.20800,   5848.93500,       415.0,          0.0 !   !END!
2753 ! X =     745.40800,   5848.93500,       410.0,          0.0 !   !END!
2754 ! X =     745.60800,   5848.93500,       411.0,          0.0 !   !END!
2755 ! X =     745.80800,   5848.93500,       414.0,          0.0 !   !END!
2756 ! X =     746.00800,   5848.93500,       414.0,          0.0 !   !END!
2757 ! X =     746.20800,   5848.93500,       412.0,          0.0 !   !END!
2758 ! X =     746.40800,   5848.93500,       411.0,          0.0 !   !END!
2759 ! X =     746.60800,   5848.93500,       416.0,          0.0 !   !END!
2760 ! X =     746.80800,   5848.93500,       416.0,          0.0 !   !END!
2761 ! X =     747.00800,   5848.93500,       414.0,          0.0 !   !END!
2762 ! X =     747.20800,   5848.93500,       415.0,          0.0 !   !END!
2763 ! X =     747.40800,   5848.93500,       415.0,          0.0 !   !END!
2764 ! X =     747.60800,   5848.93500,       424.0,          0.0 !   !END!
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2765 ! X =     747.80800,   5848.93500,       430.0,          0.0 !   !END!
2766 ! X =     748.00800,   5848.93500,       431.0,          0.0 !   !END!
2767 ! X =     748.20800,   5848.93500,       430.0,          0.0 !   !END!
2768 ! X =     748.40800,   5848.93500,       435.0,          0.0 !   !END!
2769 ! X =     748.60800,   5848.93500,       435.0,          0.0 !   !END!
2770 ! X =     748.80800,   5848.93500,       438.0,          0.0 !   !END!
2771 ! X =     749.00800,   5848.93500,       444.0,          0.0 !   !END!
2772 ! X =     749.20800,   5848.93500,       446.0,          0.0 !   !END!
2773 ! X =     749.40800,   5848.93500,       450.0,          0.0 !   !END!
2774 ! X =     749.60800,   5848.93500,       450.0,          0.0 !   !END!
2775 ! X =     749.80800,   5848.93500,       451.0,          0.0 !   !END!
2776 ! X =     750.00800,   5848.93500,       451.0,          0.0 !   !END!
2777 ! X =     750.20800,   5848.93500,       456.0,          0.0 !   !END!
2778 ! X =     750.40800,   5848.93500,       449.0,          0.0 !   !END!
2779 ! X =     750.60800,   5848.93500,       449.0,          0.0 !   !END!
2780 ! X =     750.80800,   5848.93500,       448.0,          0.0 !   !END!
2781 ! X =     751.00800,   5848.93500,       448.0,          0.0 !   !END!
2782 ! X =     751.20800,   5848.93500,       448.0,          0.0 !   !END!
2783 ! X =     751.40800,   5848.93500,       451.0,          0.0 !   !END!
2784 ! X =     751.60800,   5848.93500,       450.0,          0.0 !   !END!
2785 ! X =     751.80800,   5848.93500,       453.0,          0.0 !   !END!
2786 ! X =     752.00800,   5848.93500,       461.0,          0.0 !   !END!
2787 ! X =     752.20800,   5848.93500,       466.0,          0.0 !   !END!
2788 ! X =     752.40800,   5848.93500,       490.0,          0.0 !   !END!
2789 ! X =     739.00800,   5849.13500,       406.0,          0.0 !   !END!
2790 ! X =     739.20800,   5849.13500,       406.0,          0.0 !   !END!
2791 ! X =     739.40800,   5849.13500,       404.0,          0.0 !   !END!
2792 ! X =     739.60800,   5849.13500,       405.0,          0.0 !   !END!
2793 ! X =     739.80800,   5849.13500,       404.0,          0.0 !   !END!
2794 ! X =     740.00800,   5849.13500,       399.0,          0.0 !   !END!
2795 ! X =     740.20800,   5849.13500,       402.0,          0.0 !   !END!
2796 ! X =     740.40800,   5849.13500,       401.0,          0.0 !   !END!
2797 ! X =     740.60800,   5849.13500,       399.0,          0.0 !   !END!
2798 ! X =     740.80800,   5849.13500,       396.0,          0.0 !   !END!
2799 ! X =     741.00800,   5849.13500,       398.0,          0.0 !   !END!
2800 ! X =     741.20800,   5849.13500,       403.0,          0.0 !   !END!
2801 ! X =     741.40800,   5849.13500,       406.0,          0.0 !   !END!
2802 ! X =     741.60800,   5849.13500,       410.0,          0.0 !   !END!
2803 ! X =     741.80800,   5849.13500,       416.0,          0.0 !   !END!
2804 ! X =     742.00800,   5849.13500,       408.0,          0.0 !   !END!
2805 ! X =     742.20800,   5849.13500,       404.0,          0.0 !   !END!
2806 ! X =     742.40800,   5849.13500,       403.0,          0.0 !   !END!
2807 ! X =     742.60800,   5849.13500,       402.0,          0.0 !   !END!
2808 ! X =     742.80800,   5849.13500,       405.0,          0.0 !   !END!
2809 ! X =     743.00800,   5849.13500,       403.0,          0.0 !   !END!
2810 ! X =     743.20800,   5849.13500,       403.0,          0.0 !   !END!
2811 ! X =     743.40800,   5849.13500,       406.0,          0.0 !   !END!
2812 ! X =     743.60800,   5849.13500,       407.0,          0.0 !   !END!
2813 ! X =     743.80800,   5849.13500,       407.0,          0.0 !   !END!
2814 ! X =     744.00800,   5849.13500,       412.0,          0.0 !   !END!
2815 ! X =     744.20800,   5849.13500,       415.0,          0.0 !   !END!
2816 ! X =     744.40800,   5849.13500,       423.0,          0.0 !   !END!
2817 ! X =     744.60800,   5849.13500,       428.0,          0.0 !   !END!
2818 ! X =     744.80800,   5849.13500,       417.0,          0.0 !   !END!
2819 ! X =     745.00800,   5849.13500,       412.0,          0.0 !   !END!
2820 ! X =     745.20800,   5849.13500,       415.0,          0.0 !   !END!
2821 ! X =     745.40800,   5849.13500,       409.0,          0.0 !   !END!
2822 ! X =     745.60800,   5849.13500,       412.0,          0.0 !   !END!
2823 ! X =     745.80800,   5849.13500,       408.0,          0.0 !   !END!
2824 ! X =     746.00800,   5849.13500,       408.0,          0.0 !   !END!
2825 ! X =     746.20800,   5849.13500,       413.0,          0.0 !   !END!
2826 ! X =     746.40800,   5849.13500,       416.0,          0.0 !   !END!
2827 ! X =     746.60800,   5849.13500,       414.0,          0.0 !   !END!
2828 ! X =     746.80800,   5849.13500,       414.0,          0.0 !   !END!
2829 ! X =     747.00800,   5849.13500,       414.0,          0.0 !   !END!
2830 ! X =     747.20800,   5849.13500,       416.0,          0.0 !   !END!
2831 ! X =     747.40800,   5849.13500,       420.0,          0.0 !   !END!
2832 ! X =     747.60800,   5849.13500,       426.0,          0.0 !   !END!
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2833 ! X =     747.80800,   5849.13500,       432.0,          0.0 !   !END!
2834 ! X =     748.00800,   5849.13500,       434.0,          0.0 !   !END!
2835 ! X =     748.20800,   5849.13500,       435.0,          0.0 !   !END!
2836 ! X =     748.40800,   5849.13500,       433.0,          0.0 !   !END!
2837 ! X =     748.60800,   5849.13500,       439.0,          0.0 !   !END!
2838 ! X =     748.80800,   5849.13500,       445.0,          0.0 !   !END!
2839 ! X =     749.00800,   5849.13500,       446.0,          0.0 !   !END!
2840 ! X =     749.20800,   5849.13500,       450.0,          0.0 !   !END!
2841 ! X =     749.40800,   5849.13500,       453.0,          0.0 !   !END!
2842 ! X =     749.60800,   5849.13500,       452.0,          0.0 !   !END!
2843 ! X =     749.80800,   5849.13500,       453.0,          0.0 !   !END!
2844 ! X =     750.00800,   5849.13500,       452.0,          0.0 !   !END!
2845 ! X =     750.20800,   5849.13500,       452.0,          0.0 !   !END!
2846 ! X =     750.40800,   5849.13500,       451.0,          0.0 !   !END!
2847 ! X =     750.60800,   5849.13500,       449.0,          0.0 !   !END!
2848 ! X =     750.80800,   5849.13500,       448.0,          0.0 !   !END!
2849 ! X =     751.00800,   5849.13500,       448.0,          0.0 !   !END!
2850 ! X =     751.20800,   5849.13500,       450.0,          0.0 !   !END!
2851 ! X =     751.40800,   5849.13500,       448.0,          0.0 !   !END!
2852 ! X =     751.60800,   5849.13500,       452.0,          0.0 !   !END!
2853 ! X =     751.80800,   5849.13500,       453.0,          0.0 !   !END!
2854 ! X =     752.00800,   5849.13500,       462.0,          0.0 !   !END!
2855 ! X =     752.20800,   5849.13500,       476.0,          0.0 !   !END!
2856 ! X =     752.40800,   5849.13500,       496.0,          0.0 !   !END!
2857 ! X =     739.00800,   5849.33500,       406.0,          0.0 !   !END!
2858 ! X =     739.20800,   5849.33500,       407.0,          0.0 !   !END!
2859 ! X =     739.40800,   5849.33500,       405.0,          0.0 !   !END!
2860 ! X =     739.60800,   5849.33500,       404.0,          0.0 !   !END!
2861 ! X =     739.80800,   5849.33500,       405.0,          0.0 !   !END!
2862 ! X =     740.00800,   5849.33500,       402.0,          0.0 !   !END!
2863 ! X =     740.20800,   5849.33500,       402.0,          0.0 !   !END!
2864 ! X =     740.40800,   5849.33500,       403.0,          0.0 !   !END!
2865 ! X =     740.60800,   5849.33500,       400.0,          0.0 !   !END!
2866 ! X =     740.80800,   5849.33500,       397.0,          0.0 !   !END!
2867 ! X =     741.00800,   5849.33500,       397.0,          0.0 !   !END!
2868 ! X =     741.20800,   5849.33500,       399.0,          0.0 !   !END!
2869 ! X =     741.40800,   5849.33500,       412.0,          0.0 !   !END!
2870 ! X =     741.60800,   5849.33500,       413.0,          0.0 !   !END!
2871 ! X =     741.80800,   5849.33500,       408.0,          0.0 !   !END!
2872 ! X =     742.00800,   5849.33500,       402.0,          0.0 !   !END!
2873 ! X =     742.20800,   5849.33500,       401.0,          0.0 !   !END!
2874 ! X =     742.40800,   5849.33500,       404.0,          0.0 !   !END!
2875 ! X =     742.60800,   5849.33500,       402.0,          0.0 !   !END!
2876 ! X =     742.80800,   5849.33500,       403.0,          0.0 !   !END!
2877 ! X =     743.00800,   5849.33500,       403.0,          0.0 !   !END!
2878 ! X =     743.20800,   5849.33500,       403.0,          0.0 !   !END!
2879 ! X =     743.40800,   5849.33500,       406.0,          0.0 !   !END!
2880 ! X =     743.60800,   5849.33500,       405.0,          0.0 !   !END!
2881 ! X =     743.80800,   5849.33500,       404.0,          0.0 !   !END!
2882 ! X =     744.00800,   5849.33500,       405.0,          0.0 !   !END!
2883 ! X =     744.20800,   5849.33500,       409.0,          0.0 !   !END!
2884 ! X =     744.40800,   5849.33500,       413.0,          0.0 !   !END!
2885 ! X =     744.60800,   5849.33500,       427.0,          0.0 !   !END!
2886 ! X =     744.80800,   5849.33500,       419.0,          0.0 !   !END!
2887 ! X =     745.00800,   5849.33500,       409.0,          0.0 !   !END!
2888 ! X =     745.20800,   5849.33500,       409.0,          0.0 !   !END!
2889 ! X =     745.40800,   5849.33500,       412.0,          0.0 !   !END!
2890 ! X =     745.60800,   5849.33500,       413.0,          0.0 !   !END!
2891 ! X =     745.80800,   5849.33500,       410.0,          0.0 !   !END!
2892 ! X =     746.00800,   5849.33500,       415.0,          0.0 !   !END!
2893 ! X =     746.20800,   5849.33500,       412.0,          0.0 !   !END!
2894 ! X =     746.40800,   5849.33500,       416.0,          0.0 !   !END!
2895 ! X =     746.60800,   5849.33500,       413.0,          0.0 !   !END!
2896 ! X =     746.80800,   5849.33500,       415.0,          0.0 !   !END!
2897 ! X =     747.00800,   5849.33500,       414.0,          0.0 !   !END!
2898 ! X =     747.20800,   5849.33500,       416.0,          0.0 !   !END!
2899 ! X =     747.40800,   5849.33500,       423.0,          0.0 !   !END!
2900 ! X =     747.60800,   5849.33500,       425.0,          0.0 !   !END!
```



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2901 ! X =     747.80800,   5849.33500,       431.0,          0.0 !   !END!
2902 ! X =     748.00800,   5849.33500,       433.0,          0.0 !   !END!
2903 ! X =     748.20800,   5849.33500,       439.0,          0.0 !   !END!
2904 ! X =     748.40800,   5849.33500,       442.0,          0.0 !   !END!
2905 ! X =     748.60800,   5849.33500,       441.0,          0.0 !   !END!
2906 ! X =     748.80800,   5849.33500,       447.0,          0.0 !   !END!
2907 ! X =     749.00800,   5849.33500,       451.0,          0.0 !   !END!
2908 ! X =     749.20800,   5849.33500,       455.0,          0.0 !   !END!
2909 ! X =     749.40800,   5849.33500,       456.0,          0.0 !   !END!
2910 ! X =     749.60800,   5849.33500,       458.0,          0.0 !   !END!
2911 ! X =     749.80800,   5849.33500,       457.0,          0.0 !   !END!
2912 ! X =     750.00800,   5849.33500,       455.0,          0.0 !   !END!
2913 ! X =     750.20800,   5849.33500,       457.0,          0.0 !   !END!
2914 ! X =     750.40800,   5849.33500,       454.0,          0.0 !   !END!
2915 ! X =     750.60800,   5849.33500,       451.0,          0.0 !   !END!
2916 ! X =     750.80800,   5849.33500,       452.0,          0.0 !   !END!
2917 ! X =     751.00800,   5849.33500,       452.0,          0.0 !   !END!
2918 ! X =     751.20800,   5849.33500,       451.0,          0.0 !   !END!
2919 ! X =     751.40800,   5849.33500,       455.0,          0.0 !   !END!
2920 ! X =     751.60800,   5849.33500,       454.0,          0.0 !   !END!
2921 ! X =     751.80800,   5849.33500,       453.0,          0.0 !   !END!
2922 ! X =     752.00800,   5849.33500,       471.0,          0.0 !   !END!
2923 ! X =     752.20800,   5849.33500,       495.0,          0.0 !   !END!
2924 ! X =     752.40800,   5849.33500,       488.0,          0.0 !   !END!
2925 ! X =     739.00800,   5849.53500,       407.0,          0.0 !   !END!
2926 ! X =     739.20800,   5849.53500,       407.0,          0.0 !   !END!
2927 ! X =     739.40800,   5849.53500,       406.0,          0.0 !   !END!
2928 ! X =     739.60800,   5849.53500,       408.0,          0.0 !   !END!
2929 ! X =     739.80800,   5849.53500,       403.0,          0.0 !   !END!
2930 ! X =     740.00800,   5849.53500,       403.0,          0.0 !   !END!
2931 ! X =     740.20800,   5849.53500,       404.0,          0.0 !   !END!
2932 ! X =     740.40800,   5849.53500,       403.0,          0.0 !   !END!
2933 ! X =     740.60800,   5849.53500,       401.0,          0.0 !   !END!
2934 ! X =     740.80800,   5849.53500,       399.0,          0.0 !   !END!
2935 ! X =     741.00800,   5849.53500,       399.0,          0.0 !   !END!
2936 ! X =     741.20800,   5849.53500,       397.0,          0.0 !   !END!
2937 ! X =     741.40800,   5849.53500,       404.0,          0.0 !   !END!
2938 ! X =     741.60800,   5849.53500,       403.0,          0.0 !   !END!
2939 ! X =     741.80800,   5849.53500,       402.0,          0.0 !   !END!
2940 ! X =     742.00800,   5849.53500,       403.0,          0.0 !   !END!
2941 ! X =     742.20800,   5849.53500,       401.0,          0.0 !   !END!
2942 ! X =     742.40800,   5849.53500,       403.0,          0.0 !   !END!
2943 ! X =     742.60800,   5849.53500,       403.0,          0.0 !   !END!
2944 ! X =     742.80800,   5849.53500,       402.0,          0.0 !   !END!
2945 ! X =     743.00800,   5849.53500,       404.0,          0.0 !   !END!
2946 ! X =     743.20800,   5849.53500,       404.0,          0.0 !   !END!
2947 ! X =     743.40800,   5849.53500,       405.0,          0.0 !   !END!
2948 ! X =     743.60800,   5849.53500,       405.0,          0.0 !   !END!
2949 ! X =     743.80800,   5849.53500,       405.0,          0.0 !   !END!
2950 ! X =     744.00800,   5849.53500,       406.0,          0.0 !   !END!
2951 ! X =     744.20800,   5849.53500,       407.0,          0.0 !   !END!
2952 ! X =     744.40800,   5849.53500,       408.0,          0.0 !   !END!
2953 ! X =     744.60800,   5849.53500,       411.0,          0.0 !   !END!
2954 ! X =     744.80800,   5849.53500,       408.0,          0.0 !   !END!
2955 ! X =     745.00800,   5849.53500,       410.0,          0.0 !   !END!
2956 ! X =     745.20800,   5849.53500,       412.0,          0.0 !   !END!
2957 ! X =     745.40800,   5849.53500,       411.0,          0.0 !   !END!
2958 ! X =     745.60800,   5849.53500,       410.0,          0.0 !   !END!
2959 ! X =     745.80800,   5849.53500,       409.0,          0.0 !   !END!
2960 ! X =     746.00800,   5849.53500,       412.0,          0.0 !   !END!
2961 ! X =     746.20800,   5849.53500,       415.0,          0.0 !   !END!
2962 ! X =     746.40800,   5849.53500,       413.0,          0.0 !   !END!
2963 ! X =     746.60800,   5849.53500,       411.0,          0.0 !   !END!
2964 ! X =     746.80800,   5849.53500,       414.0,          0.0 !   !END!
2965 ! X =     747.00800,   5849.53500,       416.0,          0.0 !   !END!
2966 ! X =     747.20800,   5849.53500,       418.0,          0.0 !   !END!
2967 ! X =     747.40800,   5849.53500,       422.0,          0.0 !   !END!
2968 ! X =     747.60800,   5849.53500,       435.0,          0.0 !   !END!
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2969 ! X =     747.80800,   5849.53500,       432.0,          0.0 !   !END!
2970 ! X =     748.00800,   5849.53500,       435.0,          0.0 !   !END!
2971 ! X =     748.20800,   5849.53500,       437.0,          0.0 !   !END!
2972 ! X =     748.40800,   5849.53500,       445.0,          0.0 !   !END!
2973 ! X =     748.60800,   5849.53500,       445.0,          0.0 !   !END!
2974 ! X =     748.80800,   5849.53500,       452.0,          0.0 !   !END!
2975 ! X =     749.00800,   5849.53500,       459.0,          0.0 !   !END!
2976 ! X =     749.20800,   5849.53500,       463.0,          0.0 !   !END!
2977 ! X =     749.40800,   5849.53500,       466.0,          0.0 !   !END!
2978 ! X =     749.60800,   5849.53500,       464.0,          0.0 !   !END!
2979 ! X =     749.80800,   5849.53500,       462.0,          0.0 !   !END!
2980 ! X =     750.00800,   5849.53500,       457.0,          0.0 !   !END!
2981 ! X =     750.20800,   5849.53500,       457.0,          0.0 !   !END!
2982 ! X =     750.40800,   5849.53500,       457.0,          0.0 !   !END!
2983 ! X =     750.60800,   5849.53500,       455.0,          0.0 !   !END!
2984 ! X =     750.80800,   5849.53500,       455.0,          0.0 !   !END!
2985 ! X =     751.00800,   5849.53500,       456.0,          0.0 !   !END!
2986 ! X =     751.20800,   5849.53500,       457.0,          0.0 !   !END!
2987 ! X =     751.40800,   5849.53500,       460.0,          0.0 !   !END!
2988 ! X =     751.60800,   5849.53500,       457.0,          0.0 !   !END!
2989 ! X =     751.80800,   5849.53500,       456.0,          0.0 !   !END!
2990 ! X =     752.00800,   5849.53500,       463.0,          0.0 !   !END!
2991 ! X =     752.20800,   5849.53500,       485.0,          0.0 !   !END!
2992 ! X =     752.40800,   5849.53500,       476.0,          0.0 !   !END!
2993 ! X =     739.00800,   5849.73500,       406.0,          0.0 !   !END!
2994 ! X =     739.20800,   5849.73500,       407.0,          0.0 !   !END!
2995 ! X =     739.40800,   5849.73500,       406.0,          0.0 !   !END!
2996 ! X =     739.60800,   5849.73500,       405.0,          0.0 !   !END!
2997 ! X =     739.80800,   5849.73500,       405.0,          0.0 !   !END!
2998 ! X =     740.00800,   5849.73500,       407.0,          0.0 !   !END!
2999 ! X =     740.20800,   5849.73500,       404.0,          0.0 !   !END!
3000 ! X =     740.40800,   5849.73500,       403.0,          0.0 !   !END!
3001 ! X =     740.60800,   5849.73500,       402.0,          0.0 !   !END!
3002 ! X =     740.80800,   5849.73500,       399.0,          0.0 !   !END!
3003 ! X =     741.00800,   5849.73500,       402.0,          0.0 !   !END!
3004 ! X =     741.20800,   5849.73500,       408.0,          0.0 !   !END!
3005 ! X =     741.40800,   5849.73500,       407.0,          0.0 !   !END!
3006 ! X =     741.60800,   5849.73500,       400.0,          0.0 !   !END!
3007 ! X =     741.80800,   5849.73500,       400.0,          0.0 !   !END!
3008 ! X =     742.00800,   5849.73500,       401.0,          0.0 !   !END!
3009 ! X =     742.20800,   5849.73500,       400.0,          0.0 !   !END!
3010 ! X =     742.40800,   5849.73500,       400.0,          0.0 !   !END!
3011 ! X =     742.60800,   5849.73500,       403.0,          0.0 !   !END!
3012 ! X =     742.80800,   5849.73500,       403.0,          0.0 !   !END!
3013 ! X =     743.00800,   5849.73500,       403.0,          0.0 !   !END!
3014 ! X =     743.20800,   5849.73500,       400.0,          0.0 !   !END!
3015 ! X =     743.40800,   5849.73500,       402.0,          0.0 !   !END!
3016 ! X =     743.60800,   5849.73500,       403.0,          0.0 !   !END!
3017 ! X =     743.80800,   5849.73500,       405.0,          0.0 !   !END!
3018 ! X =     744.00800,   5849.73500,       407.0,          0.0 !   !END!
3019 ! X =     744.20800,   5849.73500,       412.0,          0.0 !   !END!
3020 ! X =     744.40800,   5849.73500,       408.0,          0.0 !   !END!
3021 ! X =     744.60800,   5849.73500,       407.0,          0.0 !   !END!
3022 ! X =     744.80800,   5849.73500,       409.0,          0.0 !   !END!
3023 ! X =     745.00800,   5849.73500,       410.0,          0.0 !   !END!
3024 ! X =     745.20800,   5849.73500,       410.0,          0.0 !   !END!
3025 ! X =     745.40800,   5849.73500,       411.0,          0.0 !   !END!
3026 ! X =     745.60800,   5849.73500,       408.0,          0.0 !   !END!
3027 ! X =     745.80800,   5849.73500,       412.0,          0.0 !   !END!
3028 ! X =     746.00800,   5849.73500,       414.0,          0.0 !   !END!
3029 ! X =     746.20800,   5849.73500,       414.0,          0.0 !   !END!
3030 ! X =     746.40800,   5849.73500,       410.0,          0.0 !   !END!
3031 ! X =     746.60800,   5849.73500,       411.0,          0.0 !   !END!
3032 ! X =     746.80800,   5849.73500,       414.0,          0.0 !   !END!
3033 ! X =     747.00800,   5849.73500,       419.0,          0.0 !   !END!
3034 ! X =     747.20800,   5849.73500,       420.0,          0.0 !   !END!
3035 ! X =     747.40800,   5849.73500,       423.0,          0.0 !   !END!
3036 ! X =     747.60800,   5849.73500,       429.0,          0.0 !   !END!
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3037 ! X =     747.80800,   5849.73500,       430.0,          0.0 !   !END!
3038 ! X =     748.00800,   5849.73500,       431.0,          0.0 !   !END!
3039 ! X =     748.20800,   5849.73500,       435.0,          0.0 !   !END!
3040 ! X =     748.40800,   5849.73500,       439.0,          0.0 !   !END!
3041 ! X =     748.60800,   5849.73500,       441.0,          0.0 !   !END!
3042 ! X =     748.80800,   5849.73500,       453.0,          0.0 !   !END!
3043 ! X =     749.00800,   5849.73500,       474.0,          0.0 !   !END!
3044 ! X =     749.20800,   5849.73500,       490.0,          0.0 !   !END!
3045 ! X =     749.40800,   5849.73500,       488.0,          0.0 !   !END!
3046 ! X =     749.60800,   5849.73500,       477.0,          0.0 !   !END!
3047 ! X =     749.80800,   5849.73500,       466.0,          0.0 !   !END!
3048 ! X =     750.00800,   5849.73500,       462.0,          0.0 !   !END!
3049 ! X =     750.20800,   5849.73500,       459.0,          0.0 !   !END!
3050 ! X =     750.40800,   5849.73500,       459.0,          0.0 !   !END!
3051 ! X =     750.60800,   5849.73500,       460.0,          0.0 !   !END!
3052 ! X =     750.80800,   5849.73500,       458.0,          0.0 !   !END!
3053 ! X =     751.00800,   5849.73500,       455.0,          0.0 !   !END!
3054 ! X =     751.20800,   5849.73500,       455.0,          0.0 !   !END!
3055 ! X =     751.40800,   5849.73500,       465.0,          0.0 !   !END!
3056 ! X =     751.60800,   5849.73500,       468.0,          0.0 !   !END!
3057 ! X =     751.80800,   5849.73500,       458.0,          0.0 !   !END!
3058 ! X =     752.00800,   5849.73500,       467.0,          0.0 !   !END!
3059 ! X =     752.20800,   5849.73500,       469.0,          0.0 !   !END!
3060 ! X =     752.40800,   5849.73500,       473.0,          0.0 !   !END!
3061 ! X =     739.00800,   5849.93500,       407.0,          0.0 !   !END!
3062 ! X =     739.20800,   5849.93500,       408.0,          0.0 !   !END!
3063 ! X =     739.40800,   5849.93500,       407.0,          0.0 !   !END!
3064 ! X =     739.60800,   5849.93500,       405.0,          0.0 !   !END!
3065 ! X =     739.80800,   5849.93500,       406.0,          0.0 !   !END!
3066 ! X =     740.00800,   5849.93500,       403.0,          0.0 !   !END!
3067 ! X =     740.20800,   5849.93500,       405.0,          0.0 !   !END!
3068 ! X =     740.40800,   5849.93500,       402.0,          0.0 !   !END!
3069 ! X =     740.60800,   5849.93500,       400.0,          0.0 !   !END!
3070 ! X =     740.80800,   5849.93500,       397.0,          0.0 !   !END!
3071 ! X =     741.00800,   5849.93500,       402.0,          0.0 !   !END!
3072 ! X =     741.20800,   5849.93500,       406.0,          0.0 !   !END!
3073 ! X =     741.40800,   5849.93500,       398.0,          0.0 !   !END!
3074 ! X =     741.60800,   5849.93500,       396.0,          0.0 !   !END!
3075 ! X =     741.80800,   5849.93500,       400.0,          0.0 !   !END!
3076 ! X =     742.00800,   5849.93500,       401.0,          0.0 !   !END!
3077 ! X =     742.20800,   5849.93500,       402.0,          0.0 !   !END!
3078 ! X =     742.40800,   5849.93500,       400.0,          0.0 !   !END!
3079 ! X =     742.60800,   5849.93500,       402.0,          0.0 !   !END!
3080 ! X =     742.80800,   5849.93500,       404.0,          0.0 !   !END!
3081 ! X =     743.00800,   5849.93500,       403.0,          0.0 !   !END!
3082 ! X =     743.20800,   5849.93500,       402.0,          0.0 !   !END!
3083 ! X =     743.40800,   5849.93500,       402.0,          0.0 !   !END!
3084 ! X =     743.60800,   5849.93500,       404.0,          0.0 !   !END!
3085 ! X =     743.80800,   5849.93500,       407.0,          0.0 !   !END!
3086 ! X =     744.00800,   5849.93500,       407.0,          0.0 !   !END!
3087 ! X =     744.20800,   5849.93500,       412.0,          0.0 !   !END!
3088 ! X =     744.40800,   5849.93500,       407.0,          0.0 !   !END!
3089 ! X =     744.60800,   5849.93500,       409.0,          0.0 !   !END!
3090 ! X =     744.80800,   5849.93500,       409.0,          0.0 !   !END!
3091 ! X =     745.00800,   5849.93500,       409.0,          0.0 !   !END!
3092 ! X =     745.20800,   5849.93500,       410.0,          0.0 !   !END!
3093 ! X =     745.40800,   5849.93500,       412.0,          0.0 !   !END!
3094 ! X =     745.60800,   5849.93500,       412.0,          0.0 !   !END!
3095 ! X =     745.80800,   5849.93500,       411.0,          0.0 !   !END!
3096 ! X =     746.00800,   5849.93500,       411.0,          0.0 !   !END!
3097 ! X =     746.20800,   5849.93500,       412.0,          0.0 !   !END!
3098 ! X =     746.40800,   5849.93500,       409.0,          0.0 !   !END!
3099 ! X =     746.60800,   5849.93500,       419.0,          0.0 !   !END!
3100 ! X =     746.80800,   5849.93500,       417.0,          0.0 !   !END!
3101 ! X =     747.00800,   5849.93500,       417.0,          0.0 !   !END!
3102 ! X =     747.20800,   5849.93500,       425.0,          0.0 !   !END!
3103 ! X =     747.40800,   5849.93500,       424.0,          0.0 !   !END!
3104 ! X =     747.60800,   5849.93500,       427.0,          0.0 !   !END!
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3105	! X =	747.80800,	5849.93500,	430.0,	0.0 !	!END!
3106	! X =	748.00800,	5849.93500,	433.0,	0.0 !	!END!
3107	! X =	748.20800,	5849.93500,	434.0,	0.0 !	!END!
3108	! X =	748.40800,	5849.93500,	435.0,	0.0 !	!END!
3109	! X =	748.60800,	5849.93500,	445.0,	0.0 !	!END!
3110	! X =	748.80800,	5849.93500,	466.0,	0.0 !	!END!
3111	! X =	749.00800,	5849.93500,	514.0,	0.0 !	!END!
3112	! X =	749.20800,	5849.93500,	543.0,	0.0 !	!END!
3113	! X =	749.40800,	5849.93500,	533.0,	0.0 !	!END!
3114	! X =	749.60800,	5849.93500,	506.0,	0.0 !	!END!
3115	! X =	749.80800,	5849.93500,	491.0,	0.0 !	!END!
3116	! X =	750.00800,	5849.93500,	470.0,	0.0 !	!END!
3117	! X =	750.20800,	5849.93500,	466.0,	0.0 !	!END!
3118	! X =	750.40800,	5849.93500,	461.0,	0.0 !	!END!
3119	! X =	750.60800,	5849.93500,	459.0,	0.0 !	!END!
3120	! X =	750.80800,	5849.93500,	455.0,	0.0 !	!END!
3121	! X =	751.00800,	5849.93500,	457.0,	0.0 !	!END!
3122	! X =	751.20800,	5849.93500,	459.0,	0.0 !	!END!
3123	! X =	751.40800,	5849.93500,	470.0,	0.0 !	!END!
3124	! X =	751.60800,	5849.93500,	472.0,	0.0 !	!END!
3125	! X =	751.80800,	5849.93500,	458.0,	0.0 !	!END!
3126	! X =	752.00800,	5849.93500,	463.0,	0.0 !	!END!
3127	! X =	752.20800,	5849.93500,	464.0,	0.0 !	!END!
3128	! X =	752.40800,	5849.93500,	469.0,	0.0 !	!END!
3129	! X =	739.00800,	5850.13500,	409.0,	0.0 !	!END!
3130	! X =	739.20800,	5850.13500,	409.0,	0.0 !	!END!
3131	! X =	739.40800,	5850.13500,	408.0,	0.0 !	!END!
3132	! X =	739.60800,	5850.13500,	408.0,	0.0 !	!END!
3133	! X =	739.80800,	5850.13500,	409.0,	0.0 !	!END!
3134	! X =	740.00800,	5850.13500,	404.0,	0.0 !	!END!
3135	! X =	740.20800,	5850.13500,	401.0,	0.0 !	!END!
3136	! X =	740.40800,	5850.13500,	403.0,	0.0 !	!END!
3137	! X =	740.60800,	5850.13500,	399.0,	0.0 !	!END!
3138	! X =	740.80800,	5850.13500,	399.0,	0.0 !	!END!
3139	! X =	741.00800,	5850.13500,	399.0,	0.0 !	!END!
3140	! X =	741.20800,	5850.13500,	402.0,	0.0 !	!END!
3141	! X =	741.40800,	5850.13500,	400.0,	0.0 !	!END!
3142	! X =	741.60800,	5850.13500,	399.0,	0.0 !	!END!
3143	! X =	741.80800,	5850.13500,	401.0,	0.0 !	!END!
3144	! X =	742.00800,	5850.13500,	400.0,	0.0 !	!END!
3145	! X =	742.20800,	5850.13500,	401.0,	0.0 !	!END!
3146	! X =	742.40800,	5850.13500,	401.0,	0.0 !	!END!
3147	! X =	742.60800,	5850.13500,	402.0,	0.0 !	!END!
3148	! X =	742.80800,	5850.13500,	403.0,	0.0 !	!END!
3149	! X =	743.00800,	5850.13500,	401.0,	0.0 !	!END!
3150	! X =	743.20800,	5850.13500,	402.0,	0.0 !	!END!
3151	! X =	743.40800,	5850.13500,	403.0,	0.0 !	!END!
3152	! X =	743.60800,	5850.13500,	403.0,	0.0 !	!END!
3153	! X =	743.80800,	5850.13500,	405.0,	0.0 !	!END!
3154	! X =	744.00800,	5850.13500,	404.0,	0.0 !	!END!
3155	! X =	744.20800,	5850.13500,	411.0,	0.0 !	!END!
3156	! X =	744.40800,	5850.13500,	408.0,	0.0 !	!END!
3157	! X =	744.60800,	5850.13500,	409.0,	0.0 !	!END!
3158	! X =	744.80800,	5850.13500,	407.0,	0.0 !	!END!
3159	! X =	745.00800,	5850.13500,	409.0,	0.0 !	!END!
3160	! X =	745.20800,	5850.13500,	411.0,	0.0 !	!END!
3161	! X =	745.40800,	5850.13500,	411.0,	0.0 !	!END!
3162	! X =	745.60800,	5850.13500,	409.0,	0.0 !	!END!
3163	! X =	745.80800,	5850.13500,	410.0,	0.0 !	!END!
3164	! X =	746.00800,	5850.13500,	413.0,	0.0 !	!END!
3165	! X =	746.20800,	5850.13500,	415.0,	0.0 !	!END!
3166	! X =	746.40800,	5850.13500,	417.0,	0.0 !	!END!
3167	! X =	746.60800,	5850.13500,	418.0,	0.0 !	!END!
3168	! X =	746.80800,	5850.13500,	417.0,	0.0 !	!END!
3169	! X =	747.00800,	5850.13500,	419.0,	0.0 !	!END!
3170	! X =	747.20800,	5850.13500,	426.0,	0.0 !	!END!
3171	! X =	747.40800,	5850.13500,	432.0,	0.0 !	!END!
3172	! X =	747.60800,	5850.13500,	431.0,	0.0 !	!END!

3173	! X =	747.80800,	5850.13500,	433.0,	0.0 !	!END!
3174	! X =	748.00800,	5850.13500,	438.0,	0.0 !	!END!
3175	! X =	748.20800,	5850.13500,	437.0,	0.0 !	!END!
3176	! X =	748.40800,	5850.13500,	438.0,	0.0 !	!END!
3177	! X =	748.60800,	5850.13500,	445.0,	0.0 !	!END!
3178	! X =	748.80800,	5850.13500,	477.0,	0.0 !	!END!
3179	! X =	749.00800,	5850.13500,	539.0,	0.0 !	!END!
3180	! X =	749.20800,	5850.13500,	556.0,	0.0 !	!END!
3181	! X =	749.40800,	5850.13500,	525.0,	0.0 !	!END!
3182	! X =	749.60800,	5850.13500,	514.0,	0.0 !	!END!
3183	! X =	749.80800,	5850.13500,	491.0,	0.0 !	!END!
3184	! X =	750.00800,	5850.13500,	474.0,	0.0 !	!END!
3185	! X =	750.20800,	5850.13500,	467.0,	0.0 !	!END!
3186	! X =	750.40800,	5850.13500,	465.0,	0.0 !	!END!
3187	! X =	750.60800,	5850.13500,	460.0,	0.0 !	!END!
3188	! X =	750.80800,	5850.13500,	458.0,	0.0 !	!END!
3189	! X =	751.00800,	5850.13500,	461.0,	0.0 !	!END!
3190	! X =	751.20800,	5850.13500,	459.0,	0.0 !	!END!
3191	! X =	751.40800,	5850.13500,	463.0,	0.0 !	!END!
3192	! X =	751.60800,	5850.13500,	459.0,	0.0 !	!END!
3193	! X =	751.80800,	5850.13500,	460.0,	0.0 !	!END!
3194	! X =	752.00800,	5850.13500,	464.0,	0.0 !	!END!
3195	! X =	752.20800,	5850.13500,	465.0,	0.0 !	!END!
3196	! X =	752.40800,	5850.13500,	468.0,	0.0 !	!END!
3197	! X =	739.00800,	5850.33500,	412.0,	0.0 !	!END!
3198	! X =	739.20800,	5850.33500,	415.0,	0.0 !	!END!
3199	! X =	739.40800,	5850.33500,	415.0,	0.0 !	!END!
3200	! X =	739.60800,	5850.33500,	415.0,	0.0 !	!END!
3201	! X =	739.80800,	5850.33500,	413.0,	0.0 !	!END!
3202	! X =	740.00800,	5850.33500,	403.0,	0.0 !	!END!
3203	! X =	740.20800,	5850.33500,	404.0,	0.0 !	!END!
3204	! X =	740.40800,	5850.33500,	401.0,	0.0 !	!END!
3205	! X =	740.60800,	5850.33500,	399.0,	0.0 !	!END!
3206	! X =	740.80800,	5850.33500,	400.0,	0.0 !	!END!
3207	! X =	741.00800,	5850.33500,	398.0,	0.0 !	!END!
3208	! X =	741.20800,	5850.33500,	398.0,	0.0 !	!END!
3209	! X =	741.40800,	5850.33500,	400.0,	0.0 !	!END!
3210	! X =	741.60800,	5850.33500,	402.0,	0.0 !	!END!
3211	! X =	741.80800,	5850.33500,	400.0,	0.0 !	!END!
3212	! X =	742.00800,	5850.33500,	401.0,	0.0 !	!END!
3213	! X =	742.20800,	5850.33500,	401.0,	0.0 !	!END!
3214	! X =	742.40800,	5850.33500,	401.0,	0.0 !	!END!
3215	! X =	742.60800,	5850.33500,	403.0,	0.0 !	!END!
3216	! X =	742.80800,	5850.33500,	402.0,	0.0 !	!END!
3217	! X =	743.00800,	5850.33500,	403.0,	0.0 !	!END!
3218	! X =	743.20800,	5850.33500,	403.0,	0.0 !	!END!
3219	! X =	743.40800,	5850.33500,	402.0,	0.0 !	!END!
3220	! X =	743.60800,	5850.33500,	403.0,	0.0 !	!END!
3221	! X =	743.80800,	5850.33500,	405.0,	0.0 !	!END!
3222	! X =	744.00800,	5850.33500,	406.0,	0.0 !	!END!
3223	! X =	744.20800,	5850.33500,	412.0,	0.0 !	!END!
3224	! X =	744.40800,	5850.33500,	411.0,	0.0 !	!END!
3225	! X =	744.60800,	5850.33500,	408.0,	0.0 !	!END!
3226	! X =	744.80800,	5850.33500,	409.0,	0.0 !	!END!
3227	! X =	745.00800,	5850.33500,	408.0,	0.0 !	!END!
3228	! X =	745.20800,	5850.33500,	410.0,	0.0 !	!END!
3229	! X =	745.40800,	5850.33500,	410.0,	0.0 !	!END!
3230	! X =	745.60800,	5850.33500,	410.0,	0.0 !	!END!
3231	! X =	745.80800,	5850.33500,	412.0,	0.0 !	!END!
3232	! X =	746.00800,	5850.33500,	415.0,	0.0 !	!END!
3233	! X =	746.20800,	5850.33500,	417.0,	0.0 !	!END!
3234	! X =	746.40800,	5850.33500,	418.0,	0.0 !	!END!
3235	! X =	746.60800,	5850.33500,	420.0,	0.0 !	!END!
3236	! X =	746.80800,	5850.33500,	424.0,	0.0 !	!END!
3237	! X =	747.00800,	5850.33500,	426.0,	0.0 !	!END!
3238	! X =	747.20800,	5850.33500,	429.0,	0.0 !	!END!
3239	! X =	747.40800,	5850.33500,	436.0,	0.0 !	!END!
3240	! X =	747.60800,	5850.33500,	444.0,	0.0 !	!END!

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3241 ! X =     747.80800,   5850.33500,       440.0,          0.0 !   !END!
3242 ! X =     748.00800,   5850.33500,       441.0,          0.0 !   !END!
3243 ! X =     748.20800,   5850.33500,       443.0,          0.0 !   !END!
3244 ! X =     748.40800,   5850.33500,       442.0,          0.0 !   !END!
3245 ! X =     748.60800,   5850.33500,       448.0,          0.0 !   !END!
3246 ! X =     748.80800,   5850.33500,       475.0,          0.0 !   !END!
3247 ! X =     749.00800,   5850.33500,       505.0,          0.0 !   !END!
3248 ! X =     749.20800,   5850.33500,       540.0,          0.0 !   !END!
3249 ! X =     749.40800,   5850.33500,       514.0,          0.0 !   !END!
3250 ! X =     749.60800,   5850.33500,       498.0,          0.0 !   !END!
3251 ! X =     749.80800,   5850.33500,       489.0,          0.0 !   !END!
3252 ! X =     750.00800,   5850.33500,       482.0,          0.0 !   !END!
3253 ! X =     750.20800,   5850.33500,       472.0,          0.0 !   !END!
3254 ! X =     750.40800,   5850.33500,       468.0,          0.0 !   !END!
3255 ! X =     750.60800,   5850.33500,       463.0,          0.0 !   !END!
3256 ! X =     750.80800,   5850.33500,       461.0,          0.0 !   !END!
3257 ! X =     751.00800,   5850.33500,       462.0,          0.0 !   !END!
3258 ! X =     751.20800,   5850.33500,       458.0,          0.0 !   !END!
3259 ! X =     751.40800,   5850.33500,       456.0,          0.0 !   !END!
3260 ! X =     751.60800,   5850.33500,       457.0,          0.0 !   !END!
3261 ! X =     751.80800,   5850.33500,       458.0,          0.0 !   !END!
3262 ! X =     752.00800,   5850.33500,       457.0,          0.0 !   !END!
3263 ! X =     752.20800,   5850.33500,       461.0,          0.0 !   !END!
3264 ! X =     752.40800,   5850.33500,       467.0,          0.0 !   !END!
3265 ! X =     739.00800,   5850.53500,       415.0,          0.0 !   !END!
3266 ! X =     739.20800,   5850.53500,       417.0,          0.0 !   !END!
3267 ! X =     739.40800,   5850.53500,       417.0,          0.0 !   !END!
3268 ! X =     739.60800,   5850.53500,       417.0,          0.0 !   !END!
3269 ! X =     739.80800,   5850.53500,       414.0,          0.0 !   !END!
3270 ! X =     740.00800,   5850.53500,       409.0,          0.0 !   !END!
3271 ! X =     740.20800,   5850.53500,       405.0,          0.0 !   !END!
3272 ! X =     740.40800,   5850.53500,       404.0,          0.0 !   !END!
3273 ! X =     740.60800,   5850.53500,       401.0,          0.0 !   !END!
3274 ! X =     740.80800,   5850.53500,       401.0,          0.0 !   !END!
3275 ! X =     741.00800,   5850.53500,       399.0,          0.0 !   !END!
3276 ! X =     741.20800,   5850.53500,       399.0,          0.0 !   !END!
3277 ! X =     741.40800,   5850.53500,       401.0,          0.0 !   !END!
3278 ! X =     741.60800,   5850.53500,       400.0,          0.0 !   !END!
3279 ! X =     741.80800,   5850.53500,       398.0,          0.0 !   !END!
3280 ! X =     742.00800,   5850.53500,       401.0,          0.0 !   !END!
3281 ! X =     742.20800,   5850.53500,       402.0,          0.0 !   !END!
3282 ! X =     742.40800,   5850.53500,       402.0,          0.0 !   !END!
3283 ! X =     742.60800,   5850.53500,       401.0,          0.0 !   !END!
3284 ! X =     742.80800,   5850.53500,       402.0,          0.0 !   !END!
3285 ! X =     743.00800,   5850.53500,       403.0,          0.0 !   !END!
3286 ! X =     743.20800,   5850.53500,       404.0,          0.0 !   !END!
3287 ! X =     743.40800,   5850.53500,       404.0,          0.0 !   !END!
3288 ! X =     743.60800,   5850.53500,       406.0,          0.0 !   !END!
3289 ! X =     743.80800,   5850.53500,       405.0,          0.0 !   !END!
3290 ! X =     744.00800,   5850.53500,       409.0,          0.0 !   !END!
3291 ! X =     744.20800,   5850.53500,       411.0,          0.0 !   !END!
3292 ! X =     744.40800,   5850.53500,       413.0,          0.0 !   !END!
3293 ! X =     744.60800,   5850.53500,       411.0,          0.0 !   !END!
3294 ! X =     744.80800,   5850.53500,       408.0,          0.0 !   !END!
3295 ! X =     745.00800,   5850.53500,       409.0,          0.0 !   !END!
3296 ! X =     745.20800,   5850.53500,       410.0,          0.0 !   !END!
3297 ! X =     745.40800,   5850.53500,       410.0,          0.0 !   !END!
3298 ! X =     745.60800,   5850.53500,       410.0,          0.0 !   !END!
3299 ! X =     745.80800,   5850.53500,       412.0,          0.0 !   !END!
3300 ! X =     746.00800,   5850.53500,       418.0,          0.0 !   !END!
3301 ! X =     746.20800,   5850.53500,       419.0,          0.0 !   !END!
3302 ! X =     746.40800,   5850.53500,       425.0,          0.0 !   !END!
3303 ! X =     746.60800,   5850.53500,       428.0,          0.0 !   !END!
3304 ! X =     746.80800,   5850.53500,       436.0,          0.0 !   !END!
3305 ! X =     747.00800,   5850.53500,       439.0,          0.0 !   !END!
3306 ! X =     747.20800,   5850.53500,       438.0,          0.0 !   !END!
3307 ! X =     747.40800,   5850.53500,       441.0,          0.0 !   !END!
3308 ! X =     747.60800,   5850.53500,       441.0,          0.0 !   !END!
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3309 ! X =     747.80800,   5850.53500,       442.0,          0.0 !   !END!
3310 ! X =     748.00800,   5850.53500,       443.0,          0.0 !   !END!
3311 ! X =     748.20800,   5850.53500,       441.0,          0.0 !   !END!
3312 ! X =     748.40800,   5850.53500,       442.0,          0.0 !   !END!
3313 ! X =     748.60800,   5850.53500,       446.0,          0.0 !   !END!
3314 ! X =     748.80800,   5850.53500,       462.0,          0.0 !   !END!
3315 ! X =     749.00800,   5850.53500,       477.0,          0.0 !   !END!
3316 ! X =     749.20800,   5850.53500,       499.0,          0.0 !   !END!
3317 ! X =     749.40800,   5850.53500,       507.0,          0.0 !   !END!
3318 ! X =     749.60800,   5850.53500,       505.0,          0.0 !   !END!
3319 ! X =     749.80800,   5850.53500,       489.0,          0.0 !   !END!
3320 ! X =     750.00800,   5850.53500,       478.0,          0.0 !   !END!
3321 ! X =     750.20800,   5850.53500,       469.0,          0.0 !   !END!
3322 ! X =     750.40800,   5850.53500,       467.0,          0.0 !   !END!
3323 ! X =     750.60800,   5850.53500,       464.0,          0.0 !   !END!
3324 ! X =     750.80800,   5850.53500,       464.0,          0.0 !   !END!
3325 ! X =     751.00800,   5850.53500,       461.0,          0.0 !   !END!
3326 ! X =     751.20800,   5850.53500,       455.0,          0.0 !   !END!
3327 ! X =     751.40800,   5850.53500,       451.0,          0.0 !   !END!
3328 ! X =     751.60800,   5850.53500,       454.0,          0.0 !   !END!
3329 ! X =     751.80800,   5850.53500,       454.0,          0.0 !   !END!
3330 ! X =     752.00800,   5850.53500,       460.0,          0.0 !   !END!
3331 ! X =     752.20800,   5850.53500,       463.0,          0.0 !   !END!
3332 ! X =     752.40800,   5850.53500,       478.0,          0.0 !   !END!
3333 ! X =     739.00800,   5850.73500,       419.0,          0.0 !   !END!
3334 ! X =     739.20800,   5850.73500,       419.0,          0.0 !   !END!
3335 ! X =     739.40800,   5850.73500,       417.0,          0.0 !   !END!
3336 ! X =     739.60800,   5850.73500,       416.0,          0.0 !   !END!
3337 ! X =     739.80800,   5850.73500,       415.0,          0.0 !   !END!
3338 ! X =     740.00800,   5850.73500,       410.0,          0.0 !   !END!
3339 ! X =     740.20800,   5850.73500,       406.0,          0.0 !   !END!
3340 ! X =     740.40800,   5850.73500,       404.0,          0.0 !   !END!
3341 ! X =     740.60800,   5850.73500,       401.0,          0.0 !   !END!
3342 ! X =     740.80800,   5850.73500,       401.0,          0.0 !   !END!
3343 ! X =     741.00800,   5850.73500,       398.0,          0.0 !   !END!
3344 ! X =     741.20800,   5850.73500,       398.0,          0.0 !   !END!
3345 ! X =     741.40800,   5850.73500,       400.0,          0.0 !   !END!
3346 ! X =     741.60800,   5850.73500,       398.0,          0.0 !   !END!
3347 ! X =     741.80800,   5850.73500,       400.0,          0.0 !   !END!
3348 ! X =     742.00800,   5850.73500,       401.0,          0.0 !   !END!
3349 ! X =     742.20800,   5850.73500,       400.0,          0.0 !   !END!
3350 ! X =     742.40800,   5850.73500,       400.0,          0.0 !   !END!
3351 ! X =     742.60800,   5850.73500,       401.0,          0.0 !   !END!
3352 ! X =     742.80800,   5850.73500,       401.0,          0.0 !   !END!
3353 ! X =     743.00800,   5850.73500,       404.0,          0.0 !   !END!
3354 ! X =     743.20800,   5850.73500,       408.0,          0.0 !   !END!
3355 ! X =     743.40800,   5850.73500,       403.0,          0.0 !   !END!
3356 ! X =     743.60800,   5850.73500,       406.0,          0.0 !   !END!
3357 ! X =     743.80800,   5850.73500,       405.0,          0.0 !   !END!
3358 ! X =     744.00800,   5850.73500,       407.0,          0.0 !   !END!
3359 ! X =     744.20800,   5850.73500,       410.0,          0.0 !   !END!
3360 ! X =     744.40800,   5850.73500,       414.0,          0.0 !   !END!
3361 ! X =     744.60800,   5850.73500,       412.0,          0.0 !   !END!
3362 ! X =     744.80800,   5850.73500,       414.0,          0.0 !   !END!
3363 ! X =     745.00800,   5850.73500,       410.0,          0.0 !   !END!
3364 ! X =     745.20800,   5850.73500,       410.0,          0.0 !   !END!
3365 ! X =     745.40800,   5850.73500,       409.0,          0.0 !   !END!
3366 ! X =     745.60800,   5850.73500,       410.0,          0.0 !   !END!
3367 ! X =     745.80800,   5850.73500,       414.0,          0.0 !   !END!
3368 ! X =     746.00800,   5850.73500,       420.0,          0.0 !   !END!
3369 ! X =     746.20800,   5850.73500,       420.0,          0.0 !   !END!
3370 ! X =     746.40800,   5850.73500,       426.0,          0.0 !   !END!
3371 ! X =     746.60800,   5850.73500,       431.0,          0.0 !   !END!
3372 ! X =     746.80800,   5850.73500,       434.0,          0.0 !   !END!
3373 ! X =     747.00800,   5850.73500,       440.0,          0.0 !   !END!
3374 ! X =     747.20800,   5850.73500,       444.0,          0.0 !   !END!
3375 ! X =     747.40800,   5850.73500,       444.0,          0.0 !   !END!
3376 ! X =     747.60800,   5850.73500,       449.0,          0.0 !   !END!
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3377 ! X =     747.80800,   5850.73500,       458.0,          0.0 !   !END!
3378 ! X =     748.00800,   5850.73500,       449.0,          0.0 !   !END!
3379 ! X =     748.20800,   5850.73500,       443.0,          0.0 !   !END!
3380 ! X =     748.40800,   5850.73500,       442.0,          0.0 !   !END!
3381 ! X =     748.60800,   5850.73500,       446.0,          0.0 !   !END!
3382 ! X =     748.80800,   5850.73500,       451.0,          0.0 !   !END!
3383 ! X =     749.00800,   5850.73500,       458.0,          0.0 !   !END!
3384 ! X =     749.20800,   5850.73500,       471.0,          0.0 !   !END!
3385 ! X =     749.40800,   5850.73500,       480.0,          0.0 !   !END!
3386 ! X =     749.60800,   5850.73500,       483.0,          0.0 !   !END!
3387 ! X =     749.80800,   5850.73500,       481.0,          0.0 !   !END!
3388 ! X =     750.00800,   5850.73500,       470.0,          0.0 !   !END!
3389 ! X =     750.20800,   5850.73500,       464.0,          0.0 !   !END!
3390 ! X =     750.40800,   5850.73500,       462.0,          0.0 !   !END!
3391 ! X =     750.60800,   5850.73500,       461.0,          0.0 !   !END!
3392 ! X =     750.80800,   5850.73500,       460.0,          0.0 !   !END!
3393 ! X =     751.00800,   5850.73500,       460.0,          0.0 !   !END!
3394 ! X =     751.20800,   5850.73500,       454.0,          0.0 !   !END!
3395 ! X =     751.40800,   5850.73500,       449.0,          0.0 !   !END!
3396 ! X =     751.60800,   5850.73500,       459.0,          0.0 !   !END!
3397 ! X =     751.80800,   5850.73500,       472.0,          0.0 !   !END!
3398 ! X =     752.00800,   5850.73500,       467.0,          0.0 !   !END!
3399 ! X =     752.20800,   5850.73500,       474.0,          0.0 !   !END!
3400 ! X =     752.40800,   5850.73500,       490.0,          0.0 !   !END!
3401 ! X =     739.00800,   5850.93500,       426.0,          0.0 !   !END!
3402 ! X =     739.20800,   5850.93500,       427.0,          0.0 !   !END!
3403 ! X =     739.40800,   5850.93500,       421.0,          0.0 !   !END!
3404 ! X =     739.60800,   5850.93500,       418.0,          0.0 !   !END!
3405 ! X =     739.80800,   5850.93500,       417.0,          0.0 !   !END!
3406 ! X =     740.00800,   5850.93500,       416.0,          0.0 !   !END!
3407 ! X =     740.20800,   5850.93500,       409.0,          0.0 !   !END!
3408 ! X =     740.40800,   5850.93500,       404.0,          0.0 !   !END!
3409 ! X =     740.60800,   5850.93500,       403.0,          0.0 !   !END!
3410 ! X =     740.80800,   5850.93500,       400.0,          0.0 !   !END!
3411 ! X =     741.00800,   5850.93500,       400.0,          0.0 !   !END!
3412 ! X =     741.20800,   5850.93500,       399.0,          0.0 !   !END!
3413 ! X =     741.40800,   5850.93500,       399.0,          0.0 !   !END!
3414 ! X =     741.60800,   5850.93500,       399.0,          0.0 !   !END!
3415 ! X =     741.80800,   5850.93500,       399.0,          0.0 !   !END!
3416 ! X =     742.00800,   5850.93500,       402.0,          0.0 !   !END!
3417 ! X =     742.20800,   5850.93500,       401.0,          0.0 !   !END!
3418 ! X =     742.40800,   5850.93500,       401.0,          0.0 !   !END!
3419 ! X =     742.60800,   5850.93500,       399.0,          0.0 !   !END!
3420 ! X =     742.80800,   5850.93500,       402.0,          0.0 !   !END!
3421 ! X =     743.00800,   5850.93500,       400.0,          0.0 !   !END!
3422 ! X =     743.20800,   5850.93500,       404.0,          0.0 !   !END!
3423 ! X =     743.40800,   5850.93500,       406.0,          0.0 !   !END!
3424 ! X =     743.60800,   5850.93500,       409.0,          0.0 !   !END!
3425 ! X =     743.80800,   5850.93500,       406.0,          0.0 !   !END!
3426 ! X =     744.00800,   5850.93500,       406.0,          0.0 !   !END!
3427 ! X =     744.20800,   5850.93500,       410.0,          0.0 !   !END!
3428 ! X =     744.40800,   5850.93500,       414.0,          0.0 !   !END!
3429 ! X =     744.60800,   5850.93500,       415.0,          0.0 !   !END!
3430 ! X =     744.80800,   5850.93500,       415.0,          0.0 !   !END!
3431 ! X =     745.00800,   5850.93500,       410.0,          0.0 !   !END!
3432 ! X =     745.20800,   5850.93500,       408.0,          0.0 !   !END!
3433 ! X =     745.40800,   5850.93500,       411.0,          0.0 !   !END!
3434 ! X =     745.60800,   5850.93500,       411.0,          0.0 !   !END!
3435 ! X =     745.80800,   5850.93500,       414.0,          0.0 !   !END!
3436 ! X =     746.00800,   5850.93500,       422.0,          0.0 !   !END!
3437 ! X =     746.20800,   5850.93500,       424.0,          0.0 !   !END!
3438 ! X =     746.40800,   5850.93500,       429.0,          0.0 !   !END!
3439 ! X =     746.60800,   5850.93500,       434.0,          0.0 !   !END!
3440 ! X =     746.80800,   5850.93500,       438.0,          0.0 !   !END!
3441 ! X =     747.00800,   5850.93500,       443.0,          0.0 !   !END!
3442 ! X =     747.20800,   5850.93500,       448.0,          0.0 !   !END!
3443 ! X =     747.40800,   5850.93500,       465.0,          0.0 !   !END!
3444 ! X =     747.60800,   5850.93500,       473.0,          0.0 !   !END!
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3445 ! X =     747.80800,   5850.93500,       493.0,          0.0 !   !END!
3446 ! X =     748.00800,   5850.93500,       459.0,          0.0 !   !END!
3447 ! X =     748.20800,   5850.93500,       446.0,          0.0 !   !END!
3448 ! X =     748.40800,   5850.93500,       441.0,          0.0 !   !END!
3449 ! X =     748.60800,   5850.93500,       443.0,          0.0 !   !END!
3450 ! X =     748.80800,   5850.93500,       444.0,          0.0 !   !END!
3451 ! X =     749.00800,   5850.93500,       450.0,          0.0 !   !END!
3452 ! X =     749.20800,   5850.93500,       458.0,          0.0 !   !END!
3453 ! X =     749.40800,   5850.93500,       462.0,          0.0 !   !END!
3454 ! X =     749.60800,   5850.93500,       462.0,          0.0 !   !END!
3455 ! X =     749.80800,   5850.93500,       466.0,          0.0 !   !END!
3456 ! X =     750.00800,   5850.93500,       464.0,          0.0 !   !END!
3457 ! X =     750.20800,   5850.93500,       461.0,          0.0 !   !END!
3458 ! X =     750.40800,   5850.93500,       459.0,          0.0 !   !END!
3459 ! X =     750.60800,   5850.93500,       458.0,          0.0 !   !END!
3460 ! X =     750.80800,   5850.93500,       456.0,          0.0 !   !END!
3461 ! X =     751.00800,   5850.93500,       457.0,          0.0 !   !END!
3462 ! X =     751.20800,   5850.93500,       452.0,          0.0 !   !END!
3463 ! X =     751.40800,   5850.93500,       447.0,          0.0 !   !END!
3464 ! X =     751.60800,   5850.93500,       464.0,          0.0 !   !END!
3465 ! X =     751.80800,   5850.93500,       480.0,          0.0 !   !END!
3466 ! X =     752.00800,   5850.93500,       475.0,          0.0 !   !END!
3467 ! X =     752.20800,   5850.93500,       469.0,          0.0 !   !END!
3468 ! X =     752.40800,   5850.93500,       478.0,          0.0 !   !END!
3469 ! X =     739.00800,   5851.13500,       435.0,          0.0 !   !END!
3470 ! X =     739.20800,   5851.13500,       435.0,          0.0 !   !END!
3471 ! X =     739.40800,   5851.13500,       426.0,          0.0 !   !END!
3472 ! X =     739.60800,   5851.13500,       422.0,          0.0 !   !END!
3473 ! X =     739.80800,   5851.13500,       417.0,          0.0 !   !END!
3474 ! X =     740.00800,   5851.13500,       414.0,          0.0 !   !END!
3475 ! X =     740.20800,   5851.13500,       409.0,          0.0 !   !END!
3476 ! X =     740.40800,   5851.13500,       405.0,          0.0 !   !END!
3477 ! X =     740.60800,   5851.13500,       407.0,          0.0 !   !END!
3478 ! X =     740.80800,   5851.13500,       403.0,          0.0 !   !END!
3479 ! X =     741.00800,   5851.13500,       399.0,          0.0 !   !END!
3480 ! X =     741.20800,   5851.13500,       398.0,          0.0 !   !END!
3481 ! X =     741.40800,   5851.13500,       401.0,          0.0 !   !END!
3482 ! X =     741.60800,   5851.13500,       400.0,          0.0 !   !END!
3483 ! X =     741.80800,   5851.13500,       401.0,          0.0 !   !END!
3484 ! X =     742.00800,   5851.13500,       401.0,          0.0 !   !END!
3485 ! X =     742.20800,   5851.13500,       402.0,          0.0 !   !END!
3486 ! X =     742.40800,   5851.13500,       399.0,          0.0 !   !END!
3487 ! X =     742.60800,   5851.13500,       398.0,          0.0 !   !END!
3488 ! X =     742.80800,   5851.13500,       400.0,          0.0 !   !END!
3489 ! X =     743.00800,   5851.13500,       398.0,          0.0 !   !END!
3490 ! X =     743.20800,   5851.13500,       401.0,          0.0 !   !END!
3491 ! X =     743.40800,   5851.13500,       408.0,          0.0 !   !END!
3492 ! X =     743.60800,   5851.13500,       408.0,          0.0 !   !END!
3493 ! X =     743.80800,   5851.13500,       408.0,          0.0 !   !END!
3494 ! X =     744.00800,   5851.13500,       410.0,          0.0 !   !END!
3495 ! X =     744.20800,   5851.13500,       411.0,          0.0 !   !END!
3496 ! X =     744.40800,   5851.13500,       415.0,          0.0 !   !END!
3497 ! X =     744.60800,   5851.13500,       415.0,          0.0 !   !END!
3498 ! X =     744.80800,   5851.13500,       413.0,          0.0 !   !END!
3499 ! X =     745.00800,   5851.13500,       410.0,          0.0 !   !END!
3500 ! X =     745.20800,   5851.13500,       410.0,          0.0 !   !END!
3501 ! X =     745.40800,   5851.13500,       411.0,          0.0 !   !END!
3502 ! X =     745.60800,   5851.13500,       413.0,          0.0 !   !END!
3503 ! X =     745.80800,   5851.13500,       415.0,          0.0 !   !END!
3504 ! X =     746.00800,   5851.13500,       418.0,          0.0 !   !END!
3505 ! X =     746.20800,   5851.13500,       425.0,          0.0 !   !END!
3506 ! X =     746.40800,   5851.13500,       434.0,          0.0 !   !END!
3507 ! X =     746.60800,   5851.13500,       436.0,          0.0 !   !END!
3508 ! X =     746.80800,   5851.13500,       442.0,          0.0 !   !END!
3509 ! X =     747.00800,   5851.13500,       451.0,          0.0 !   !END!
3510 ! X =     747.20800,   5851.13500,       462.0,          0.0 !   !END!
3511 ! X =     747.40800,   5851.13500,       468.0,          0.0 !   !END!
3512 ! X =     747.60800,   5851.13500,       488.0,          0.0 !   !END!
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3513 ! X =     747.80800,   5851.13500,       526.0,          0.0 !   !END!
3514 ! X =     748.00800,   5851.13500,       469.0,          0.0 !   !END!
3515 ! X =     748.20800,   5851.13500,       450.0,          0.0 !   !END!
3516 ! X =     748.40800,   5851.13500,       439.0,          0.0 !   !END!
3517 ! X =     748.60800,   5851.13500,       440.0,          0.0 !   !END!
3518 ! X =     748.80800,   5851.13500,       441.0,          0.0 !   !END!
3519 ! X =     749.00800,   5851.13500,       446.0,          0.0 !   !END!
3520 ! X =     749.20800,   5851.13500,       446.0,          0.0 !   !END!
3521 ! X =     749.40800,   5851.13500,       452.0,          0.0 !   !END!
3522 ! X =     749.60800,   5851.13500,       453.0,          0.0 !   !END!
3523 ! X =     749.80800,   5851.13500,       463.0,          0.0 !   !END!
3524 ! X =     750.00800,   5851.13500,       456.0,          0.0 !   !END!
3525 ! X =     750.20800,   5851.13500,       458.0,          0.0 !   !END!
3526 ! X =     750.40800,   5851.13500,       456.0,          0.0 !   !END!
3527 ! X =     750.60800,   5851.13500,       454.0,          0.0 !   !END!
3528 ! X =     750.80800,   5851.13500,       452.0,          0.0 !   !END!
3529 ! X =     751.00800,   5851.13500,       448.0,          0.0 !   !END!
3530 ! X =     751.20800,   5851.13500,       445.0,          0.0 !   !END!
3531 ! X =     751.40800,   5851.13500,       457.0,          0.0 !   !END!
3532 ! X =     751.60800,   5851.13500,       463.0,          0.0 !   !END!
3533 ! X =     751.80800,   5851.13500,       459.0,          0.0 !   !END!
3534 ! X =     752.00800,   5851.13500,       465.0,          0.0 !   !END!
3535 ! X =     752.20800,   5851.13500,       463.0,          0.0 !   !END!
3536 ! X =     752.40800,   5851.13500,       470.0,          0.0 !   !END!
3537 ! X =     739.00800,   5851.33500,       453.0,          0.0 !   !END!
3538 ! X =     739.20800,   5851.33500,       437.0,          0.0 !   !END!
3539 ! X =     739.40800,   5851.33500,       426.0,          0.0 !   !END!
3540 ! X =     739.60800,   5851.33500,       422.0,          0.0 !   !END!
3541 ! X =     739.80800,   5851.33500,       419.0,          0.0 !   !END!
3542 ! X =     740.00800,   5851.33500,       411.0,          0.0 !   !END!
3543 ! X =     740.20800,   5851.33500,       413.0,          0.0 !   !END!
3544 ! X =     740.40800,   5851.33500,       412.0,          0.0 !   !END!
3545 ! X =     740.60800,   5851.33500,       407.0,          0.0 !   !END!
3546 ! X =     740.80800,   5851.33500,       407.0,          0.0 !   !END!
3547 ! X =     741.00800,   5851.33500,       405.0,          0.0 !   !END!
3548 ! X =     741.20800,   5851.33500,       404.0,          0.0 !   !END!
3549 ! X =     741.40800,   5851.33500,       402.0,          0.0 !   !END!
3550 ! X =     741.60800,   5851.33500,       401.0,          0.0 !   !END!
3551 ! X =     741.80800,   5851.33500,       401.0,          0.0 !   !END!
3552 ! X =     742.00800,   5851.33500,       403.0,          0.0 !   !END!
3553 ! X =     742.20800,   5851.33500,       400.0,          0.0 !   !END!
3554 ! X =     742.40800,   5851.33500,       400.0,          0.0 !   !END!
3555 ! X =     742.60800,   5851.33500,       400.0,          0.0 !   !END!
3556 ! X =     742.80800,   5851.33500,       401.0,          0.0 !   !END!
3557 ! X =     743.00800,   5851.33500,       400.0,          0.0 !   !END!
3558 ! X =     743.20800,   5851.33500,       399.0,          0.0 !   !END!
3559 ! X =     743.40800,   5851.33500,       403.0,          0.0 !   !END!
3560 ! X =     743.60800,   5851.33500,       407.0,          0.0 !   !END!
3561 ! X =     743.80800,   5851.33500,       404.0,          0.0 !   !END!
3562 ! X =     744.00800,   5851.33500,       406.0,          0.0 !   !END!
3563 ! X =     744.20800,   5851.33500,       410.0,          0.0 !   !END!
3564 ! X =     744.40800,   5851.33500,       415.0,          0.0 !   !END!
3565 ! X =     744.60800,   5851.33500,       417.0,          0.0 !   !END!
3566 ! X =     744.80800,   5851.33500,       416.0,          0.0 !   !END!
3567 ! X =     745.00800,   5851.33500,       413.0,          0.0 !   !END!
3568 ! X =     745.20800,   5851.33500,       414.0,          0.0 !   !END!
3569 ! X =     745.40800,   5851.33500,       412.0,          0.0 !   !END!
3570 ! X =     745.60800,   5851.33500,       415.0,          0.0 !   !END!
3571 ! X =     745.80800,   5851.33500,       419.0,          0.0 !   !END!
3572 ! X =     746.00800,   5851.33500,       423.0,          0.0 !   !END!
3573 ! X =     746.20800,   5851.33500,       435.0,          0.0 !   !END!
3574 ! X =     746.40800,   5851.33500,       436.0,          0.0 !   !END!
3575 ! X =     746.60800,   5851.33500,       442.0,          0.0 !   !END!
3576 ! X =     746.80800,   5851.33500,       443.0,          0.0 !   !END!
3577 ! X =     747.00800,   5851.33500,       453.0,          0.0 !   !END!
3578 ! X =     747.20800,   5851.33500,       461.0,          0.0 !   !END!
3579 ! X =     747.40800,   5851.33500,       469.0,          0.0 !   !END!
3580 ! X =     747.60800,   5851.33500,       502.0,          0.0 !   !END!
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3581 ! X =     747.80800,   5851.33500,       517.0,          0.0 !   !END!
3582 ! X =     748.00800,   5851.33500,       479.0,          0.0 !   !END!
3583 ! X =     748.20800,   5851.33500,       447.0,          0.0 !   !END!
3584 ! X =     748.40800,   5851.33500,       443.0,          0.0 !   !END!
3585 ! X =     748.60800,   5851.33500,       439.0,          0.0 !   !END!
3586 ! X =     748.80800,   5851.33500,       444.0,          0.0 !   !END!
3587 ! X =     749.00800,   5851.33500,       442.0,          0.0 !   !END!
3588 ! X =     749.20800,   5851.33500,       448.0,          0.0 !   !END!
3589 ! X =     749.40800,   5851.33500,       451.0,          0.0 !   !END!
3590 ! X =     749.60800,   5851.33500,       453.0,          0.0 !   !END!
3591 ! X =     749.80800,   5851.33500,       450.0,          0.0 !   !END!
3592 ! X =     750.00800,   5851.33500,       452.0,          0.0 !   !END!
3593 ! X =     750.20800,   5851.33500,       453.0,          0.0 !   !END!
3594 ! X =     750.40800,   5851.33500,       452.0,          0.0 !   !END!
3595 ! X =     750.60800,   5851.33500,       453.0,          0.0 !   !END!
3596 ! X =     750.80800,   5851.33500,       450.0,          0.0 !   !END!
3597 ! X =     751.00800,   5851.33500,       444.0,          0.0 !   !END!
3598 ! X =     751.20800,   5851.33500,       445.0,          0.0 !   !END!
3599 ! X =     751.40800,   5851.33500,       463.0,          0.0 !   !END!
3600 ! X =     751.60800,   5851.33500,       461.0,          0.0 !   !END!
3601 ! X =     751.80800,   5851.33500,       450.0,          0.0 !   !END!
3602 ! X =     752.00800,   5851.33500,       456.0,          0.0 !   !END!
3603 ! X =     752.20800,   5851.33500,       470.0,          0.0 !   !END!
3604 ! X =     752.40800,   5851.33500,       462.0,          0.0 !   !END!
3605 ! X =     739.00800,   5851.53500,       478.0,          0.0 !   !END!
3606 ! X =     739.20800,   5851.53500,       443.0,          0.0 !   !END!
3607 ! X =     739.40800,   5851.53500,       426.0,          0.0 !   !END!
3608 ! X =     739.60800,   5851.53500,       423.0,          0.0 !   !END!
3609 ! X =     739.80800,   5851.53500,       419.0,          0.0 !   !END!
3610 ! X =     740.00800,   5851.53500,       418.0,          0.0 !   !END!
3611 ! X =     740.20800,   5851.53500,       412.0,          0.0 !   !END!
3612 ! X =     740.40800,   5851.53500,       411.0,          0.0 !   !END!
3613 ! X =     740.60800,   5851.53500,       410.0,          0.0 !   !END!
3614 ! X =     740.80800,   5851.53500,       410.0,          0.0 !   !END!
3615 ! X =     741.00800,   5851.53500,       408.0,          0.0 !   !END!
3616 ! X =     741.20800,   5851.53500,       408.0,          0.0 !   !END!
3617 ! X =     741.40800,   5851.53500,       407.0,          0.0 !   !END!
3618 ! X =     741.60800,   5851.53500,       406.0,          0.0 !   !END!
3619 ! X =     741.80800,   5851.53500,       404.0,          0.0 !   !END!
3620 ! X =     742.00800,   5851.53500,       403.0,          0.0 !   !END!
3621 ! X =     742.20800,   5851.53500,       402.0,          0.0 !   !END!
3622 ! X =     742.40800,   5851.53500,       400.0,          0.0 !   !END!
3623 ! X =     742.60800,   5851.53500,       400.0,          0.0 !   !END!
3624 ! X =     742.80800,   5851.53500,       400.0,          0.0 !   !END!
3625 ! X =     743.00800,   5851.53500,       400.0,          0.0 !   !END!
3626 ! X =     743.20800,   5851.53500,       400.0,          0.0 !   !END!
3627 ! X =     743.40800,   5851.53500,       402.0,          0.0 !   !END!
3628 ! X =     743.60800,   5851.53500,       406.0,          0.0 !   !END!
3629 ! X =     743.80800,   5851.53500,       406.0,          0.0 !   !END!
3630 ! X =     744.00800,   5851.53500,       407.0,          0.0 !   !END!
3631 ! X =     744.20800,   5851.53500,       414.0,          0.0 !   !END!
3632 ! X =     744.40800,   5851.53500,       411.0,          0.0 !   !END!
3633 ! X =     744.60800,   5851.53500,       415.0,          0.0 !   !END!
3634 ! X =     744.80800,   5851.53500,       418.0,          0.0 !   !END!
3635 ! X =     745.00800,   5851.53500,       415.0,          0.0 !   !END!
3636 ! X =     745.20800,   5851.53500,       418.0,          0.0 !   !END!
3637 ! X =     745.40800,   5851.53500,       414.0,          0.0 !   !END!
3638 ! X =     745.60800,   5851.53500,       415.0,          0.0 !   !END!
3639 ! X =     745.80800,   5851.53500,       429.0,          0.0 !   !END!
3640 ! X =     746.00800,   5851.53500,       430.0,          0.0 !   !END!
3641 ! X =     746.20800,   5851.53500,       435.0,          0.0 !   !END!
3642 ! X =     746.40800,   5851.53500,       436.0,          0.0 !   !END!
3643 ! X =     746.60800,   5851.53500,       442.0,          0.0 !   !END!
3644 ! X =     746.80800,   5851.53500,       450.0,          0.0 !   !END!
3645 ! X =     747.00800,   5851.53500,       453.0,          0.0 !   !END!
3646 ! X =     747.20800,   5851.53500,       456.0,          0.0 !   !END!
3647 ! X =     747.40800,   5851.53500,       456.0,          0.0 !   !END!
3648 ! X =     747.60800,   5851.53500,       471.0,          0.0 !   !END!
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3649 ! X =     747.80800,   5851.53500,       471.0,          0.0 !   !END!
3650 ! X =     748.00800,   5851.53500,       459.0,          0.0 !   !END!
3651 ! X =     748.20800,   5851.53500,       442.0,          0.0 !   !END!
3652 ! X =     748.40800,   5851.53500,       437.0,          0.0 !   !END!
3653 ! X =     748.60800,   5851.53500,       442.0,          0.0 !   !END!
3654 ! X =     748.80800,   5851.53500,       445.0,          0.0 !   !END!
3655 ! X =     749.00800,   5851.53500,       451.0,          0.0 !   !END!
3656 ! X =     749.20800,   5851.53500,       452.0,          0.0 !   !END!
3657 ! X =     749.40800,   5851.53500,       454.0,          0.0 !   !END!
3658 ! X =     749.60800,   5851.53500,       454.0,          0.0 !   !END!
3659 ! X =     749.80800,   5851.53500,       453.0,          0.0 !   !END!
3660 ! X =     750.00800,   5851.53500,       453.0,          0.0 !   !END!
3661 ! X =     750.20800,   5851.53500,       447.0,          0.0 !   !END!
3662 ! X =     750.40800,   5851.53500,       447.0,          0.0 !   !END!
3663 ! X =     750.60800,   5851.53500,       447.0,          0.0 !   !END!
3664 ! X =     750.80800,   5851.53500,       445.0,          0.0 !   !END!
3665 ! X =     751.00800,   5851.53500,       443.0,          0.0 !   !END!
3666 ! X =     751.20800,   5851.53500,       448.0,          0.0 !   !END!
3667 ! X =     751.40800,   5851.53500,       449.0,          0.0 !   !END!
3668 ! X =     751.60800,   5851.53500,       450.0,          0.0 !   !END!
3669 ! X =     751.80800,   5851.53500,       446.0,          0.0 !   !END!
3670 ! X =     752.00800,   5851.53500,       442.0,          0.0 !   !END!
3671 ! X =     752.20800,   5851.53500,       449.0,          0.0 !   !END!
3672 ! X =     752.40800,   5851.53500,       449.0,          0.0 !   !END!
3673 ! X =     739.00800,   5851.73500,       444.0,          0.0 !   !END!
3674 ! X =     739.20800,   5851.73500,       429.0,          0.0 !   !END!
3675 ! X =     739.40800,   5851.73500,       421.0,          0.0 !   !END!
3676 ! X =     739.60800,   5851.73500,       418.0,          0.0 !   !END!
3677 ! X =     739.80800,   5851.73500,       420.0,          0.0 !   !END!
3678 ! X =     740.00800,   5851.73500,       417.0,          0.0 !   !END!
3679 ! X =     740.20800,   5851.73500,       418.0,          0.0 !   !END!
3680 ! X =     740.40800,   5851.73500,       413.0,          0.0 !   !END!
3681 ! X =     740.60800,   5851.73500,       412.0,          0.0 !   !END!
3682 ! X =     740.80800,   5851.73500,       411.0,          0.0 !   !END!
3683 ! X =     741.00800,   5851.73500,       409.0,          0.0 !   !END!
3684 ! X =     741.20800,   5851.73500,       406.0,          0.0 !   !END!
3685 ! X =     741.40800,   5851.73500,       407.0,          0.0 !   !END!
3686 ! X =     741.60800,   5851.73500,       405.0,          0.0 !   !END!
3687 ! X =     741.80800,   5851.73500,       407.0,          0.0 !   !END!
3688 ! X =     742.00800,   5851.73500,       408.0,          0.0 !   !END!
3689 ! X =     742.20800,   5851.73500,       400.0,          0.0 !   !END!
3690 ! X =     742.40800,   5851.73500,       403.0,          0.0 !   !END!
3691 ! X =     742.60800,   5851.73500,       401.0,          0.0 !   !END!
3692 ! X =     742.80800,   5851.73500,       401.0,          0.0 !   !END!
3693 ! X =     743.00800,   5851.73500,       401.0,          0.0 !   !END!
3694 ! X =     743.20800,   5851.73500,       401.0,          0.0 !   !END!
3695 ! X =     743.40800,   5851.73500,       404.0,          0.0 !   !END!
3696 ! X =     743.60800,   5851.73500,       405.0,          0.0 !   !END!
3697 ! X =     743.80800,   5851.73500,       408.0,          0.0 !   !END!
3698 ! X =     744.00800,   5851.73500,       409.0,          0.0 !   !END!
3699 ! X =     744.20800,   5851.73500,       409.0,          0.0 !   !END!
3700 ! X =     744.40800,   5851.73500,       416.0,          0.0 !   !END!
3701 ! X =     744.60800,   5851.73500,       415.0,          0.0 !   !END!
3702 ! X =     744.80800,   5851.73500,       418.0,          0.0 !   !END!
3703 ! X =     745.00800,   5851.73500,       418.0,          0.0 !   !END!
3704 ! X =     745.20800,   5851.73500,       417.0,          0.0 !   !END!
3705 ! X =     745.40800,   5851.73500,       412.0,          0.0 !   !END!
3706 ! X =     745.60800,   5851.73500,       415.0,          0.0 !   !END!
3707 ! X =     745.80800,   5851.73500,       424.0,          0.0 !   !END!
3708 ! X =     746.00800,   5851.73500,       426.0,          0.0 !   !END!
3709 ! X =     746.20800,   5851.73500,       433.0,          0.0 !   !END!
3710 ! X =     746.40800,   5851.73500,       436.0,          0.0 !   !END!
3711 ! X =     746.60800,   5851.73500,       440.0,          0.0 !   !END!
3712 ! X =     746.80800,   5851.73500,       450.0,          0.0 !   !END!
3713 ! X =     747.00800,   5851.73500,       450.0,          0.0 !   !END!
3714 ! X =     747.20800,   5851.73500,       452.0,          0.0 !   !END!
3715 ! X =     747.40800,   5851.73500,       448.0,          0.0 !   !END!
3716 ! X =     747.60800,   5851.73500,       452.0,          0.0 !   !END!
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3717 ! X =     747.80800,   5851.73500,       449.0,          0.0 !   !END!
3718 ! X =     748.00800,   5851.73500,       445.0,          0.0 !   !END!
3719 ! X =     748.20800,   5851.73500,       436.0,          0.0 !   !END!
3720 ! X =     748.40800,   5851.73500,       438.0,          0.0 !   !END!
3721 ! X =     748.60800,   5851.73500,       442.0,          0.0 !   !END!
3722 ! X =     748.80800,   5851.73500,       446.0,          0.0 !   !END!
3723 ! X =     749.00800,   5851.73500,       449.0,          0.0 !   !END!
3724 ! X =     749.20800,   5851.73500,       456.0,          0.0 !   !END!
3725 ! X =     749.40800,   5851.73500,       463.0,          0.0 !   !END!
3726 ! X =     749.60800,   5851.73500,       462.0,          0.0 !   !END!
3727 ! X =     749.80800,   5851.73500,       455.0,          0.0 !   !END!
3728 ! X =     750.00800,   5851.73500,       450.0,          0.0 !   !END!
3729 ! X =     750.20800,   5851.73500,       447.0,          0.0 !   !END!
3730 ! X =     750.40800,   5851.73500,       443.0,          0.0 !   !END!
3731 ! X =     750.60800,   5851.73500,       446.0,          0.0 !   !END!
3732 ! X =     750.80800,   5851.73500,       442.0,          0.0 !   !END!
3733 ! X =     751.00800,   5851.73500,       443.0,          0.0 !   !END!
3734 ! X =     751.20800,   5851.73500,       445.0,          0.0 !   !END!
3735 ! X =     751.40800,   5851.73500,       442.0,          0.0 !   !END!
3736 ! X =     751.60800,   5851.73500,       442.0,          0.0 !   !END!
3737 ! X =     751.80800,   5851.73500,       441.0,          0.0 !   !END!
3738 ! X =     752.00800,   5851.73500,       442.0,          0.0 !   !END!
3739 ! X =     752.20800,   5851.73500,       443.0,          0.0 !   !END!
3740 ! X =     752.40800,   5851.73500,       458.0,          0.0 !   !END!
3741 ! X =     739.00800,   5851.93500,       429.0,          0.0 !   !END!
3742 ! X =     739.20800,   5851.93500,       423.0,          0.0 !   !END!
3743 ! X =     739.40800,   5851.93500,       418.0,          0.0 !   !END!
3744 ! X =     739.60800,   5851.93500,       419.0,          0.0 !   !END!
3745 ! X =     739.80800,   5851.93500,       416.0,          0.0 !   !END!
3746 ! X =     740.00800,   5851.93500,       422.0,          0.0 !   !END!
3747 ! X =     740.20800,   5851.93500,       413.0,          0.0 !   !END!
3748 ! X =     740.40800,   5851.93500,       414.0,          0.0 !   !END!
3749 ! X =     740.60800,   5851.93500,       412.0,          0.0 !   !END!
3750 ! X =     740.80800,   5851.93500,       410.0,          0.0 !   !END!
3751 ! X =     741.00800,   5851.93500,       409.0,          0.0 !   !END!
3752 ! X =     741.20800,   5851.93500,       409.0,          0.0 !   !END!
3753 ! X =     741.40800,   5851.93500,       407.0,          0.0 !   !END!
3754 ! X =     741.60800,   5851.93500,       409.0,          0.0 !   !END!
3755 ! X =     741.80800,   5851.93500,       411.0,          0.0 !   !END!
3756 ! X =     742.00800,   5851.93500,       401.0,          0.0 !   !END!
3757 ! X =     742.20800,   5851.93500,       401.0,          0.0 !   !END!
3758 ! X =     742.40800,   5851.93500,       402.0,          0.0 !   !END!
3759 ! X =     742.60800,   5851.93500,       400.0,          0.0 !   !END!
3760 ! X =     742.80800,   5851.93500,       400.0,          0.0 !   !END!
3761 ! X =     743.00800,   5851.93500,       401.0,          0.0 !   !END!
3762 ! X =     743.20800,   5851.93500,       402.0,          0.0 !   !END!
3763 ! X =     743.40800,   5851.93500,       408.0,          0.0 !   !END!
3764 ! X =     743.60800,   5851.93500,       409.0,          0.0 !   !END!
3765 ! X =     743.80800,   5851.93500,       414.0,          0.0 !   !END!
3766 ! X =     744.00800,   5851.93500,       410.0,          0.0 !   !END!
3767 ! X =     744.20800,   5851.93500,       411.0,          0.0 !   !END!
3768 ! X =     744.40800,   5851.93500,       413.0,          0.0 !   !END!
3769 ! X =     744.60800,   5851.93500,       417.0,          0.0 !   !END!
3770 ! X =     744.80800,   5851.93500,       419.0,          0.0 !   !END!
3771 ! X =     745.00800,   5851.93500,       418.0,          0.0 !   !END!
3772 ! X =     745.20800,   5851.93500,       414.0,          0.0 !   !END!
3773 ! X =     745.40800,   5851.93500,       411.0,          0.0 !   !END!
3774 ! X =     745.60800,   5851.93500,       416.0,          0.0 !   !END!
3775 ! X =     745.80800,   5851.93500,       420.0,          0.0 !   !END!
3776 ! X =     746.00800,   5851.93500,       423.0,          0.0 !   !END!
3777 ! X =     746.20800,   5851.93500,       432.0,          0.0 !   !END!
3778 ! X =     746.40800,   5851.93500,       437.0,          0.0 !   !END!
3779 ! X =     746.60800,   5851.93500,       435.0,          0.0 !   !END!
3780 ! X =     746.80800,   5851.93500,       442.0,          0.0 !   !END!
3781 ! X =     747.00800,   5851.93500,       443.0,          0.0 !   !END!
3782 ! X =     747.20800,   5851.93500,       442.0,          0.0 !   !END!
3783 ! X =     747.40800,   5851.93500,       441.0,          0.0 !   !END!
3784 ! X =     747.60800,   5851.93500,       446.0,          0.0 !   !END!
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3785 ! X =     747.80800,   5851.93500,       441.0,          0.0 !   !END!
3786 ! X =     748.00800,   5851.93500,       440.0,          0.0 !   !END!
3787 ! X =     748.20800,   5851.93500,       434.0,          0.0 !   !END!
3788 ! X =     748.40800,   5851.93500,       444.0,          0.0 !   !END!
3789 ! X =     748.60800,   5851.93500,       444.0,          0.0 !   !END!
3790 ! X =     748.80800,   5851.93500,       448.0,          0.0 !   !END!
3791 ! X =     749.00800,   5851.93500,       458.0,          0.0 !   !END!
3792 ! X =     749.20800,   5851.93500,       465.0,          0.0 !   !END!
3793 ! X =     749.40800,   5851.93500,       471.0,          0.0 !   !END!
3794 ! X =     749.60800,   5851.93500,       470.0,          0.0 !   !END!
3795 ! X =     749.80800,   5851.93500,       463.0,          0.0 !   !END!
3796 ! X =     750.00800,   5851.93500,       453.0,          0.0 !   !END!
3797 ! X =     750.20800,   5851.93500,       446.0,          0.0 !   !END!
3798 ! X =     750.40800,   5851.93500,       442.0,          0.0 !   !END!
3799 ! X =     750.60800,   5851.93500,       443.0,          0.0 !   !END!
3800 ! X =     750.80800,   5851.93500,       438.0,          0.0 !   !END!
3801 ! X =     751.00800,   5851.93500,       439.0,          0.0 !   !END!
3802 ! X =     751.20800,   5851.93500,       440.0,          0.0 !   !END!
3803 ! X =     751.40800,   5851.93500,       441.0,          0.0 !   !END!
3804 ! X =     751.60800,   5851.93500,       441.0,          0.0 !   !END!
3805 ! X =     751.80800,   5851.93500,       437.0,          0.0 !   !END!
3806 ! X =     752.00800,   5851.93500,       439.0,          0.0 !   !END!
3807 ! X =     752.20800,   5851.93500,       439.0,          0.0 !   !END!
3808 ! X =     752.40800,   5851.93500,       442.0,          0.0 !   !END!
3809 ! X =     739.00800,   5852.13500,       413.0,          0.0 !   !END!
3810 ! X =     739.20800,   5852.13500,       418.0,          0.0 !   !END!
3811 ! X =     739.40800,   5852.13500,       416.0,          0.0 !   !END!
3812 ! X =     739.60800,   5852.13500,       414.0,          0.0 !   !END!
3813 ! X =     739.80800,   5852.13500,       417.0,          0.0 !   !END!
3814 ! X =     740.00800,   5852.13500,       418.0,          0.0 !   !END!
3815 ! X =     740.20800,   5852.13500,       416.0,          0.0 !   !END!
3816 ! X =     740.40800,   5852.13500,       414.0,          0.0 !   !END!
3817 ! X =     740.60800,   5852.13500,       411.0,          0.0 !   !END!
3818 ! X =     740.80800,   5852.13500,       409.0,          0.0 !   !END!
3819 ! X =     741.00800,   5852.13500,       407.0,          0.0 !   !END!
3820 ! X =     741.20800,   5852.13500,       405.0,          0.0 !   !END!
3821 ! X =     741.40800,   5852.13500,       406.0,          0.0 !   !END!
3822 ! X =     741.60800,   5852.13500,       403.0,          0.0 !   !END!
3823 ! X =     741.80800,   5852.13500,       403.0,          0.0 !   !END!
3824 ! X =     742.00800,   5852.13500,       402.0,          0.0 !   !END!
3825 ! X =     742.20800,   5852.13500,       404.0,          0.0 !   !END!
3826 ! X =     742.40800,   5852.13500,       402.0,          0.0 !   !END!
3827 ! X =     742.60800,   5852.13500,       400.0,          0.0 !   !END!
3828 ! X =     742.80800,   5852.13500,       399.0,          0.0 !   !END!
3829 ! X =     743.00800,   5852.13500,       405.0,          0.0 !   !END!
3830 ! X =     743.20800,   5852.13500,       407.0,          0.0 !   !END!
3831 ! X =     743.40800,   5852.13500,       403.0,          0.0 !   !END!
3832 ! X =     743.60800,   5852.13500,       406.0,          0.0 !   !END!
3833 ! X =     743.80800,   5852.13500,       408.0,          0.0 !   !END!
3834 ! X =     744.00800,   5852.13500,       410.0,          0.0 !   !END!
3835 ! X =     744.20800,   5852.13500,       413.0,          0.0 !   !END!
3836 ! X =     744.40800,   5852.13500,       416.0,          0.0 !   !END!
3837 ! X =     744.60800,   5852.13500,       422.0,          0.0 !   !END!
3838 ! X =     744.80800,   5852.13500,       423.0,          0.0 !   !END!
3839 ! X =     745.00800,   5852.13500,       416.0,          0.0 !   !END!
3840 ! X =     745.20800,   5852.13500,       414.0,          0.0 !   !END!
3841 ! X =     745.40800,   5852.13500,       415.0,          0.0 !   !END!
3842 ! X =     745.60800,   5852.13500,       415.0,          0.0 !   !END!
3843 ! X =     745.80800,   5852.13500,       415.0,          0.0 !   !END!
3844 ! X =     746.00800,   5852.13500,       425.0,          0.0 !   !END!
3845 ! X =     746.20800,   5852.13500,       429.0,          0.0 !   !END!
3846 ! X =     746.40800,   5852.13500,       435.0,          0.0 !   !END!
3847 ! X =     746.60800,   5852.13500,       437.0,          0.0 !   !END!
3848 ! X =     746.80800,   5852.13500,       439.0,          0.0 !   !END!
3849 ! X =     747.00800,   5852.13500,       439.0,          0.0 !   !END!
3850 ! X =     747.20800,   5852.13500,       436.0,          0.0 !   !END!
3851 ! X =     747.40800,   5852.13500,       440.0,          0.0 !   !END!
3852 ! X =     747.60800,   5852.13500,       437.0,          0.0 !   !END!
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3853 ! X =     747.80800,   5852.13500,       435.0,          0.0 !   !END!
3854 ! X =     748.00800,   5852.13500,       436.0,          0.0 !   !END!
3855 ! X =     748.20800,   5852.13500,       437.0,          0.0 !   !END!
3856 ! X =     748.40800,   5852.13500,       446.0,          0.0 !   !END!
3857 ! X =     748.60800,   5852.13500,       450.0,          0.0 !   !END!
3858 ! X =     748.80800,   5852.13500,       463.0,          0.0 !   !END!
3859 ! X =     749.00800,   5852.13500,       480.0,          0.0 !   !END!
3860 ! X =     749.20800,   5852.13500,       489.0,          0.0 !   !END!
3861 ! X =     749.40800,   5852.13500,       490.0,          0.0 !   !END!
3862 ! X =     749.60800,   5852.13500,       490.0,          0.0 !   !END!
3863 ! X =     749.80800,   5852.13500,       480.0,          0.0 !   !END!
3864 ! X =     750.00800,   5852.13500,       463.0,          0.0 !   !END!
3865 ! X =     750.20800,   5852.13500,       449.0,          0.0 !   !END!
3866 ! X =     750.40800,   5852.13500,       448.0,          0.0 !   !END!
3867 ! X =     750.60800,   5852.13500,       441.0,          0.0 !   !END!
3868 ! X =     750.80800,   5852.13500,       439.0,          0.0 !   !END!
3869 ! X =     751.00800,   5852.13500,       437.0,          0.0 !   !END!
3870 ! X =     751.20800,   5852.13500,       438.0,          0.0 !   !END!
3871 ! X =     751.40800,   5852.13500,       447.0,          0.0 !   !END!
3872 ! X =     751.60800,   5852.13500,       435.0,          0.0 !   !END!
3873 ! X =     751.80800,   5852.13500,       438.0,          0.0 !   !END!
3874 ! X =     752.00800,   5852.13500,       435.0,          0.0 !   !END!
3875 ! X =     752.20800,   5852.13500,       440.0,          0.0 !   !END!
3876 ! X =     752.40800,   5852.13500,       443.0,          0.0 !   !END!
3877 ! X =     739.00800,   5852.33500,       406.0,          0.0 !   !END!
3878 ! X =     739.20800,   5852.33500,       406.0,          0.0 !   !END!
3879 ! X =     739.40800,   5852.33500,       409.0,          0.0 !   !END!
3880 ! X =     739.60800,   5852.33500,       413.0,          0.0 !   !END!
3881 ! X =     739.80800,   5852.33500,       414.0,          0.0 !   !END!
3882 ! X =     740.00800,   5852.33500,       414.0,          0.0 !   !END!
3883 ! X =     740.20800,   5852.33500,       415.0,          0.0 !   !END!
3884 ! X =     740.40800,   5852.33500,       413.0,          0.0 !   !END!
3885 ! X =     740.60800,   5852.33500,       413.0,          0.0 !   !END!
3886 ! X =     740.80800,   5852.33500,       410.0,          0.0 !   !END!
3887 ! X =     741.00800,   5852.33500,       408.0,          0.0 !   !END!
3888 ! X =     741.20800,   5852.33500,       406.0,          0.0 !   !END!
3889 ! X =     741.40800,   5852.33500,       404.0,          0.0 !   !END!
3890 ! X =     741.60800,   5852.33500,       404.0,          0.0 !   !END!
3891 ! X =     741.80800,   5852.33500,       402.0,          0.0 !   !END!
3892 ! X =     742.00800,   5852.33500,       402.0,          0.0 !   !END!
3893 ! X =     742.20800,   5852.33500,       403.0,          0.0 !   !END!
3894 ! X =     742.40800,   5852.33500,       406.0,          0.0 !   !END!
3895 ! X =     742.60800,   5852.33500,       403.0,          0.0 !   !END!
3896 ! X =     742.80800,   5852.33500,       403.0,          0.0 !   !END!
3897 ! X =     743.00800,   5852.33500,       406.0,          0.0 !   !END!
3898 ! X =     743.20800,   5852.33500,       403.0,          0.0 !   !END!
3899 ! X =     743.40800,   5852.33500,       406.0,          0.0 !   !END!
3900 ! X =     743.60800,   5852.33500,       407.0,          0.0 !   !END!
3901 ! X =     743.80800,   5852.33500,       406.0,          0.0 !   !END!
3902 ! X =     744.00800,   5852.33500,       409.0,          0.0 !   !END!
3903 ! X =     744.20800,   5852.33500,       413.0,          0.0 !   !END!
3904 ! X =     744.40800,   5852.33500,       416.0,          0.0 !   !END!
3905 ! X =     744.60800,   5852.33500,       421.0,          0.0 !   !END!
3906 ! X =     744.80800,   5852.33500,       423.0,          0.0 !   !END!
3907 ! X =     745.00800,   5852.33500,       420.0,          0.0 !   !END!
3908 ! X =     745.20800,   5852.33500,       414.0,          0.0 !   !END!
3909 ! X =     745.40800,   5852.33500,       414.0,          0.0 !   !END!
3910 ! X =     745.60800,   5852.33500,       415.0,          0.0 !   !END!
3911 ! X =     745.80800,   5852.33500,       415.0,          0.0 !   !END!
3912 ! X =     746.00800,   5852.33500,       420.0,          0.0 !   !END!
3913 ! X =     746.20800,   5852.33500,       428.0,          0.0 !   !END!
3914 ! X =     746.40800,   5852.33500,       434.0,          0.0 !   !END!
3915 ! X =     746.60800,   5852.33500,       435.0,          0.0 !   !END!
3916 ! X =     746.80800,   5852.33500,       437.0,          0.0 !   !END!
3917 ! X =     747.00800,   5852.33500,       434.0,          0.0 !   !END!
3918 ! X =     747.20800,   5852.33500,       431.0,          0.0 !   !END!
3919 ! X =     747.40800,   5852.33500,       429.0,          0.0 !   !END!
3920 ! X =     747.60800,   5852.33500,       432.0,          0.0 !   !END!
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3921 ! X =     747.80800,   5852.33500,       429.0,          0.0 !   !END!
3922 ! X =     748.00800,   5852.33500,       431.0,          0.0 !   !END!
3923 ! X =     748.20800,   5852.33500,       444.0,          0.0 !   !END!
3924 ! X =     748.40800,   5852.33500,       449.0,          0.0 !   !END!
3925 ! X =     748.60800,   5852.33500,       461.0,          0.0 !   !END!
3926 ! X =     748.80800,   5852.33500,       482.0,          0.0 !   !END!
3927 ! X =     749.00800,   5852.33500,       532.0,          0.0 !   !END!
3928 ! X =     749.20800,   5852.33500,       546.0,          0.0 !   !END!
3929 ! X =     749.40800,   5852.33500,       528.0,          0.0 !   !END!
3930 ! X =     749.60800,   5852.33500,       531.0,          0.0 !   !END!
3931 ! X =     749.80800,   5852.33500,       524.0,          0.0 !   !END!
3932 ! X =     750.00800,   5852.33500,       478.0,          0.0 !   !END!
3933 ! X =     750.20800,   5852.33500,       455.0,          0.0 !   !END!
3934 ! X =     750.40800,   5852.33500,       454.0,          0.0 !   !END!
3935 ! X =     750.60800,   5852.33500,       443.0,          0.0 !   !END!
3936 ! X =     750.80800,   5852.33500,       439.0,          0.0 !   !END!
3937 ! X =     751.00800,   5852.33500,       437.0,          0.0 !   !END!
3938 ! X =     751.20800,   5852.33500,       437.0,          0.0 !   !END!
3939 ! X =     751.40800,   5852.33500,       442.0,          0.0 !   !END!
3940 ! X =     751.60800,   5852.33500,       439.0,          0.0 !   !END!
3941 ! X =     751.80800,   5852.33500,       440.0,          0.0 !   !END!
3942 ! X =     752.00800,   5852.33500,       438.0,          0.0 !   !END!
3943 ! X =     752.20800,   5852.33500,       438.0,          0.0 !   !END!
3944 ! X =     752.40800,   5852.33500,       442.0,          0.0 !   !END!
3945 ! X =     739.00800,   5852.53500,       406.0,          0.0 !   !END!
3946 ! X =     739.20800,   5852.53500,       406.0,          0.0 !   !END!
3947 ! X =     739.40800,   5852.53500,       406.0,          0.0 !   !END!
3948 ! X =     739.60800,   5852.53500,       406.0,          0.0 !   !END!
3949 ! X =     739.80800,   5852.53500,       413.0,          0.0 !   !END!
3950 ! X =     740.00800,   5852.53500,       414.0,          0.0 !   !END!
3951 ! X =     740.20800,   5852.53500,       419.0,          0.0 !   !END!
3952 ! X =     740.40800,   5852.53500,       413.0,          0.0 !   !END!
3953 ! X =     740.60800,   5852.53500,       412.0,          0.0 !   !END!
3954 ! X =     740.80800,   5852.53500,       409.0,          0.0 !   !END!
3955 ! X =     741.00800,   5852.53500,       409.0,          0.0 !   !END!
3956 ! X =     741.20800,   5852.53500,       406.0,          0.0 !   !END!
3957 ! X =     741.40800,   5852.53500,       404.0,          0.0 !   !END!
3958 ! X =     741.60800,   5852.53500,       405.0,          0.0 !   !END!
3959 ! X =     741.80800,   5852.53500,       403.0,          0.0 !   !END!
3960 ! X =     742.00800,   5852.53500,       403.0,          0.0 !   !END!
3961 ! X =     742.20800,   5852.53500,       404.0,          0.0 !   !END!
3962 ! X =     742.40800,   5852.53500,       404.0,          0.0 !   !END!
3963 ! X =     742.60800,   5852.53500,       402.0,          0.0 !   !END!
3964 ! X =     742.80800,   5852.53500,       410.0,          0.0 !   !END!
3965 ! X =     743.00800,   5852.53500,       408.0,          0.0 !   !END!
3966 ! X =     743.20800,   5852.53500,       407.0,          0.0 !   !END!
3967 ! X =     743.40800,   5852.53500,       409.0,          0.0 !   !END!
3968 ! X =     743.60800,   5852.53500,       409.0,          0.0 !   !END!
3969 ! X =     743.80800,   5852.53500,       408.0,          0.0 !   !END!
3970 ! X =     744.00800,   5852.53500,       412.0,          0.0 !   !END!
3971 ! X =     744.20800,   5852.53500,       414.0,          0.0 !   !END!
3972 ! X =     744.40800,   5852.53500,       416.0,          0.0 !   !END!
3973 ! X =     744.60800,   5852.53500,       421.0,          0.0 !   !END!
3974 ! X =     744.80800,   5852.53500,       421.0,          0.0 !   !END!
3975 ! X =     745.00800,   5852.53500,       420.0,          0.0 !   !END!
3976 ! X =     745.20800,   5852.53500,       418.0,          0.0 !   !END!
3977 ! X =     745.40800,   5852.53500,       417.0,          0.0 !   !END!
3978 ! X =     745.60800,   5852.53500,       415.0,          0.0 !   !END!
3979 ! X =     745.80800,   5852.53500,       421.0,          0.0 !   !END!
3980 ! X =     746.00800,   5852.53500,       420.0,          0.0 !   !END!
3981 ! X =     746.20800,   5852.53500,       425.0,          0.0 !   !END!
3982 ! X =     746.40800,   5852.53500,       423.0,          0.0 !   !END!
3983 ! X =     746.60800,   5852.53500,       428.0,          0.0 !   !END!
3984 ! X =     746.80800,   5852.53500,       430.0,          0.0 !   !END!
3985 ! X =     747.00800,   5852.53500,       427.0,          0.0 !   !END!
3986 ! X =     747.20800,   5852.53500,       429.0,          0.0 !   !END!
3987 ! X =     747.40800,   5852.53500,       425.0,          0.0 !   !END!
3988 ! X =     747.60800,   5852.53500,       426.0,          0.0 !   !END!
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3989 ! X =     747.80800,   5852.53500,       428.0,          0.0 !   !END!
3990 ! X =     748.00800,   5852.53500,       435.0,          0.0 !   !END!
3991 ! X =     748.20800,   5852.53500,       445.0,          0.0 !   !END!
3992 ! X =     748.40800,   5852.53500,       453.0,          0.0 !   !END!
3993 ! X =     748.60800,   5852.53500,       472.0,          0.0 !   !END!
3994 ! X =     748.80800,   5852.53500,       506.0,          0.0 !   !END!
3995 ! X =     749.00800,   5852.53500,       574.0,          0.0 !   !END!
3996 ! X =     749.20800,   5852.53500,       571.0,          0.0 !   !END!
3997 ! X =     749.40800,   5852.53500,       554.0,          0.0 !   !END!
3998 ! X =     749.60800,   5852.53500,       560.0,          0.0 !   !END!
3999 ! X =     749.80800,   5852.53500,       542.0,          0.0 !   !END!
4000 ! X =     750.00800,   5852.53500,       480.0,          0.0 !   !END!
4001 ! X =     750.20800,   5852.53500,       458.0,          0.0 !   !END!
4002 ! X =     750.40800,   5852.53500,       448.0,          0.0 !   !END!
4003 ! X =     750.60800,   5852.53500,       441.0,          0.0 !   !END!
4004 ! X =     750.80800,   5852.53500,       438.0,          0.0 !   !END!
4005 ! X =     751.00800,   5852.53500,       437.0,          0.0 !   !END!
4006 ! X =     751.20800,   5852.53500,       438.0,          0.0 !   !END!
4007 ! X =     751.40800,   5852.53500,       437.0,          0.0 !   !END!
4008 ! X =     751.60800,   5852.53500,       442.0,          0.0 !   !END!
4009 ! X =     751.80800,   5852.53500,       443.0,          0.0 !   !END!
4010 ! X =     752.00800,   5852.53500,       436.0,          0.0 !   !END!
4011 ! X =     752.20800,   5852.53500,       436.0,          0.0 !   !END!
4012 ! X =     752.40800,   5852.53500,       445.0,          0.0 !   !END!
4013 ! X =     739.00800,   5852.73500,       406.0,          0.0 !   !END!
4014 ! X =     739.20800,   5852.73500,       406.0,          0.0 !   !END!
4015 ! X =     739.40800,   5852.73500,       406.0,          0.0 !   !END!
4016 ! X =     739.60800,   5852.73500,       406.0,          0.0 !   !END!
4017 ! X =     739.80800,   5852.73500,       406.0,          0.0 !   !END!
4018 ! X =     740.00800,   5852.73500,       412.0,          0.0 !   !END!
4019 ! X =     740.20800,   5852.73500,       413.0,          0.0 !   !END!
4020 ! X =     740.40800,   5852.73500,       415.0,          0.0 !   !END!
4021 ! X =     740.60800,   5852.73500,       412.0,          0.0 !   !END!
4022 ! X =     740.80800,   5852.73500,       410.0,          0.0 !   !END!
4023 ! X =     741.00800,   5852.73500,       408.0,          0.0 !   !END!
4024 ! X =     741.20800,   5852.73500,       406.0,          0.0 !   !END!
4025 ! X =     741.40800,   5852.73500,       406.0,          0.0 !   !END!
4026 ! X =     741.60800,   5852.73500,       403.0,          0.0 !   !END!
4027 ! X =     741.80800,   5852.73500,       404.0,          0.0 !   !END!
4028 ! X =     742.00800,   5852.73500,       406.0,          0.0 !   !END!
4029 ! X =     742.20800,   5852.73500,       405.0,          0.0 !   !END!
4030 ! X =     742.40800,   5852.73500,       407.0,          0.0 !   !END!
4031 ! X =     742.60800,   5852.73500,       408.0,          0.0 !   !END!
4032 ! X =     742.80800,   5852.73500,       407.0,          0.0 !   !END!
4033 ! X =     743.00800,   5852.73500,       410.0,          0.0 !   !END!
4034 ! X =     743.20800,   5852.73500,       414.0,          0.0 !   !END!
4035 ! X =     743.40800,   5852.73500,       410.0,          0.0 !   !END!
4036 ! X =     743.60800,   5852.73500,       413.0,          0.0 !   !END!
4037 ! X =     743.80800,   5852.73500,       414.0,          0.0 !   !END!
4038 ! X =     744.00800,   5852.73500,       417.0,          0.0 !   !END!
4039 ! X =     744.20800,   5852.73500,       414.0,          0.0 !   !END!
4040 ! X =     744.40800,   5852.73500,       416.0,          0.0 !   !END!
4041 ! X =     744.60800,   5852.73500,       420.0,          0.0 !   !END!
4042 ! X =     744.80800,   5852.73500,       421.0,          0.0 !   !END!
4043 ! X =     745.00800,   5852.73500,       422.0,          0.0 !   !END!
4044 ! X =     745.20800,   5852.73500,       420.0,          0.0 !   !END!
4045 ! X =     745.40800,   5852.73500,       415.0,          0.0 !   !END!
4046 ! X =     745.60800,   5852.73500,       416.0,          0.0 !   !END!
4047 ! X =     745.80800,   5852.73500,       414.0,          0.0 !   !END!
4048 ! X =     746.00800,   5852.73500,       417.0,          0.0 !   !END!
4049 ! X =     746.20800,   5852.73500,       419.0,          0.0 !   !END!
4050 ! X =     746.40800,   5852.73500,       419.0,          0.0 !   !END!
4051 ! X =     746.60800,   5852.73500,       424.0,          0.0 !   !END!
4052 ! X =     746.80800,   5852.73500,       426.0,          0.0 !   !END!
4053 ! X =     747.00800,   5852.73500,       425.0,          0.0 !   !END!
4054 ! X =     747.20800,   5852.73500,       425.0,          0.0 !   !END!
4055 ! X =     747.40800,   5852.73500,       423.0,          0.0 !   !END!
4056 ! X =     747.60800,   5852.73500,       427.0,          0.0 !   !END!
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4057 ! X =     747.80800,   5852.73500,       431.0,          0.0 !   !END!
4058 ! X =     748.00800,   5852.73500,       439.0,          0.0 !   !END!
4059 ! X =     748.20800,   5852.73500,       453.0,          0.0 !   !END!
4060 ! X =     748.40800,   5852.73500,       457.0,          0.0 !   !END!
4061 ! X =     748.60800,   5852.73500,       469.0,          0.0 !   !END!
4062 ! X =     748.80800,   5852.73500,       509.0,          0.0 !   !END!
4063 ! X =     749.00800,   5852.73500,       533.0,          0.0 !   !END!
4064 ! X =     749.20800,   5852.73500,       553.0,          0.0 !   !END!
4065 ! X =     749.40800,   5852.73500,       523.0,          0.0 !   !END!
4066 ! X =     749.60800,   5852.73500,       523.0,          0.0 !   !END!
4067 ! X =     749.80800,   5852.73500,       503.0,          0.0 !   !END!
4068 ! X =     750.00800,   5852.73500,       468.0,          0.0 !   !END!
4069 ! X =     750.20800,   5852.73500,       457.0,          0.0 !   !END!
4070 ! X =     750.40800,   5852.73500,       450.0,          0.0 !   !END!
4071 ! X =     750.60800,   5852.73500,       444.0,          0.0 !   !END!
4072 ! X =     750.80800,   5852.73500,       441.0,          0.0 !   !END!
4073 ! X =     751.00800,   5852.73500,       436.0,          0.0 !   !END!
4074 ! X =     751.20800,   5852.73500,       441.0,          0.0 !   !END!
4075 ! X =     751.40800,   5852.73500,       441.0,          0.0 !   !END!
4076 ! X =     751.60800,   5852.73500,       441.0,          0.0 !   !END!
4077 ! X =     751.80800,   5852.73500,       440.0,          0.0 !   !END!
4078 ! X =     752.00800,   5852.73500,       433.0,          0.0 !   !END!
4079 ! X =     752.20800,   5852.73500,       432.0,          0.0 !   !END!
4080 ! X =     752.40800,   5852.73500,       438.0,          0.0 !   !END!
4081 ! X =     739.00800,   5852.93500,       406.0,          0.0 !   !END!
4082 ! X =     739.20800,   5852.93500,       406.0,          0.0 !   !END!
4083 ! X =     739.40800,   5852.93500,       406.0,          0.0 !   !END!
4084 ! X =     739.60800,   5852.93500,       406.0,          0.0 !   !END!
4085 ! X =     739.80800,   5852.93500,       406.0,          0.0 !   !END!
4086 ! X =     740.00800,   5852.93500,       407.0,          0.0 !   !END!
4087 ! X =     740.20800,   5852.93500,       416.0,          0.0 !   !END!
4088 ! X =     740.40800,   5852.93500,       413.0,          0.0 !   !END!
4089 ! X =     740.60800,   5852.93500,       414.0,          0.0 !   !END!
4090 ! X =     740.80800,   5852.93500,       410.0,          0.0 !   !END!
4091 ! X =     741.00800,   5852.93500,       410.0,          0.0 !   !END!
4092 ! X =     741.20800,   5852.93500,       406.0,          0.0 !   !END!
4093 ! X =     741.40800,   5852.93500,       407.0,          0.0 !   !END!
4094 ! X =     741.60800,   5852.93500,       404.0,          0.0 !   !END!
4095 ! X =     741.80800,   5852.93500,       405.0,          0.0 !   !END!
4096 ! X =     742.00800,   5852.93500,       411.0,          0.0 !   !END!
4097 ! X =     742.20800,   5852.93500,       407.0,          0.0 !   !END!
4098 ! X =     742.40800,   5852.93500,       407.0,          0.0 !   !END!
4099 ! X =     742.60800,   5852.93500,       410.0,          0.0 !   !END!
4100 ! X =     742.80800,   5852.93500,       410.0,          0.0 !   !END!
4101 ! X =     743.00800,   5852.93500,       409.0,          0.0 !   !END!
4102 ! X =     743.20800,   5852.93500,       412.0,          0.0 !   !END!
4103 ! X =     743.40800,   5852.93500,       416.0,          0.0 !   !END!
4104 ! X =     743.60800,   5852.93500,       416.0,          0.0 !   !END!
4105 ! X =     743.80800,   5852.93500,       417.0,          0.0 !   !END!
4106 ! X =     744.00800,   5852.93500,       421.0,          0.0 !   !END!
4107 ! X =     744.20800,   5852.93500,       415.0,          0.0 !   !END!
4108 ! X =     744.40800,   5852.93500,       418.0,          0.0 !   !END!
4109 ! X =     744.60800,   5852.93500,       413.0,          0.0 !   !END!
4110 ! X =     744.80800,   5852.93500,       423.0,          0.0 !   !END!
4111 ! X =     745.00800,   5852.93500,       422.0,          0.0 !   !END!
4112 ! X =     745.20800,   5852.93500,       422.0,          0.0 !   !END!
4113 ! X =     745.40800,   5852.93500,       419.0,          0.0 !   !END!
4114 ! X =     745.60800,   5852.93500,       417.0,          0.0 !   !END!
4115 ! X =     745.80800,   5852.93500,       416.0,          0.0 !   !END!
4116 ! X =     746.00800,   5852.93500,       417.0,          0.0 !   !END!
4117 ! X =     746.20800,   5852.93500,       416.0,          0.0 !   !END!
4118 ! X =     746.40800,   5852.93500,       417.0,          0.0 !   !END!
4119 ! X =     746.60800,   5852.93500,       419.0,          0.0 !   !END!
4120 ! X =     746.80800,   5852.93500,       420.0,          0.0 !   !END!
4121 ! X =     747.00800,   5852.93500,       421.0,          0.0 !   !END!
4122 ! X =     747.20800,   5852.93500,       421.0,          0.0 !   !END!
4123 ! X =     747.40800,   5852.93500,       424.0,          0.0 !   !END!
4124 ! X =     747.60800,   5852.93500,       427.0,          0.0 !   !END!
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4125 ! X =     747.80800,   5852.93500,       433.0,          0.0 !   !END!
4126 ! X =     748.00800,   5852.93500,       441.0,          0.0 !   !END!
4127 ! X =     748.20800,   5852.93500,       455.0,          0.0 !   !END!
4128 ! X =     748.40800,   5852.93500,       460.0,          0.0 !   !END!
4129 ! X =     748.60800,   5852.93500,       470.0,          0.0 !   !END!
4130 ! X =     748.80800,   5852.93500,       488.0,          0.0 !   !END!
4131 ! X =     749.00800,   5852.93500,       508.0,          0.0 !   !END!
4132 ! X =     749.20800,   5852.93500,       514.0,          0.0 !   !END!
4133 ! X =     749.40800,   5852.93500,       501.0,          0.0 !   !END!
4134 ! X =     749.60800,   5852.93500,       487.0,          0.0 !   !END!
4135 ! X =     749.80800,   5852.93500,       475.0,          0.0 !   !END!
4136 ! X =     750.00800,   5852.93500,       463.0,          0.0 !   !END!
4137 ! X =     750.20800,   5852.93500,       453.0,          0.0 !   !END!
4138 ! X =     750.40800,   5852.93500,       446.0,          0.0 !   !END!
4139 ! X =     750.60800,   5852.93500,       441.0,          0.0 !   !END!
4140 ! X =     750.80800,   5852.93500,       439.0,          0.0 !   !END!
4141 ! X =     751.00800,   5852.93500,       436.0,          0.0 !   !END!
4142 ! X =     751.20800,   5852.93500,       437.0,          0.0 !   !END!
4143 ! X =     751.40800,   5852.93500,       442.0,          0.0 !   !END!
4144 ! X =     751.60800,   5852.93500,       442.0,          0.0 !   !END!
4145 ! X =     751.80800,   5852.93500,       444.0,          0.0 !   !END!
4146 ! X =     752.00800,   5852.93500,       432.0,          0.0 !   !END!
4147 ! X =     752.20800,   5852.93500,       433.0,          0.0 !   !END!
4148 ! X =     752.40800,   5852.93500,       439.0,          0.0 !   !END!
4149 ! X =     739.00800,   5853.13500,       406.0,          0.0 !   !END!
4150 ! X =     739.20800,   5853.13500,       406.0,          0.0 !   !END!
4151 ! X =     739.40800,   5853.13500,       406.0,          0.0 !   !END!
4152 ! X =     739.60800,   5853.13500,       406.0,          0.0 !   !END!
4153 ! X =     739.80800,   5853.13500,       406.0,          0.0 !   !END!
4154 ! X =     740.00800,   5853.13500,       406.0,          0.0 !   !END!
4155 ! X =     740.20800,   5853.13500,       414.0,          0.0 !   !END!
4156 ! X =     740.40800,   5853.13500,       413.0,          0.0 !   !END!
4157 ! X =     740.60800,   5853.13500,       412.0,          0.0 !   !END!
4158 ! X =     740.80800,   5853.13500,       409.0,          0.0 !   !END!
4159 ! X =     741.00800,   5853.13500,       419.0,          0.0 !   !END!
4160 ! X =     741.20800,   5853.13500,       406.0,          0.0 !   !END!
4161 ! X =     741.40800,   5853.13500,       406.0,          0.0 !   !END!
4162 ! X =     741.60800,   5853.13500,       406.0,          0.0 !   !END!
4163 ! X =     741.80800,   5853.13500,       410.0,          0.0 !   !END!
4164 ! X =     742.00800,   5853.13500,       411.0,          0.0 !   !END!
4165 ! X =     742.20800,   5853.13500,       412.0,          0.0 !   !END!
4166 ! X =     742.40800,   5853.13500,       412.0,          0.0 !   !END!
4167 ! X =     742.60800,   5853.13500,       408.0,          0.0 !   !END!
4168 ! X =     742.80800,   5853.13500,       413.0,          0.0 !   !END!
4169 ! X =     743.00800,   5853.13500,       411.0,          0.0 !   !END!
4170 ! X =     743.20800,   5853.13500,       420.0,          0.0 !   !END!
4171 ! X =     743.40800,   5853.13500,       426.0,          0.0 !   !END!
4172 ! X =     743.60800,   5853.13500,       421.0,          0.0 !   !END!
4173 ! X =     743.80800,   5853.13500,       418.0,          0.0 !   !END!
4174 ! X =     744.00800,   5853.13500,       417.0,          0.0 !   !END!
4175 ! X =     744.20800,   5853.13500,       415.0,          0.0 !   !END!
4176 ! X =     744.40800,   5853.13500,       419.0,          0.0 !   !END!
4177 ! X =     744.60800,   5853.13500,       422.0,          0.0 !   !END!
4178 ! X =     744.80800,   5853.13500,       427.0,          0.0 !   !END!
4179 ! X =     745.00800,   5853.13500,       421.0,          0.0 !   !END!
4180 ! X =     745.20800,   5853.13500,       421.0,          0.0 !   !END!
4181 ! X =     745.40800,   5853.13500,       423.0,          0.0 !   !END!
4182 ! X =     745.60800,   5853.13500,       419.0,          0.0 !   !END!
4183 ! X =     745.80800,   5853.13500,       417.0,          0.0 !   !END!
4184 ! X =     746.00800,   5853.13500,       416.0,          0.0 !   !END!
4185 ! X =     746.20800,   5853.13500,       417.0,          0.0 !   !END!
4186 ! X =     746.40800,   5853.13500,       418.0,          0.0 !   !END!
4187 ! X =     746.60800,   5853.13500,       420.0,          0.0 !   !END!
4188 ! X =     746.80800,   5853.13500,       418.0,          0.0 !   !END!
4189 ! X =     747.00800,   5853.13500,       420.0,          0.0 !   !END!
4190 ! X =     747.20800,   5853.13500,       422.0,          0.0 !   !END!
4191 ! X =     747.40800,   5853.13500,       426.0,          0.0 !   !END!
4192 ! X =     747.60800,   5853.13500,       428.0,          0.0 !   !END!
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4193 ! X =     747.80800,   5853.13500,       437.0,          0.0 !   !END!
4194 ! X =     748.00800,   5853.13500,       453.0,          0.0 !   !END!
4195 ! X =     748.20800,   5853.13500,       458.0,          0.0 !   !END!
4196 ! X =     748.40800,   5853.13500,       465.0,          0.0 !   !END!
4197 ! X =     748.60800,   5853.13500,       470.0,          0.0 !   !END!
4198 ! X =     748.80800,   5853.13500,       482.0,          0.0 !   !END!
4199 ! X =     749.00800,   5853.13500,       491.0,          0.0 !   !END!
4200 ! X =     749.20800,   5853.13500,       494.0,          0.0 !   !END!
4201 ! X =     749.40800,   5853.13500,       486.0,          0.0 !   !END!
4202 ! X =     749.60800,   5853.13500,       479.0,          0.0 !   !END!
4203 ! X =     749.80800,   5853.13500,       470.0,          0.0 !   !END!
4204 ! X =     750.00800,   5853.13500,       457.0,          0.0 !   !END!
4205 ! X =     750.20800,   5853.13500,       449.0,          0.0 !   !END!
4206 ! X =     750.40800,   5853.13500,       446.0,          0.0 !   !END!
4207 ! X =     750.60800,   5853.13500,       441.0,          0.0 !   !END!
4208 ! X =     750.80800,   5853.13500,       439.0,          0.0 !   !END!
4209 ! X =     751.00800,   5853.13500,       435.0,          0.0 !   !END!
4210 ! X =     751.20800,   5853.13500,       439.0,          0.0 !   !END!
4211 ! X =     751.40800,   5853.13500,       443.0,          0.0 !   !END!
4212 ! X =     751.60800,   5853.13500,       441.0,          0.0 !   !END!
4213 ! X =     751.80800,   5853.13500,       440.0,          0.0 !   !END!
4214 ! X =     752.00800,   5853.13500,       429.0,          0.0 !   !END!
4215 ! X =     752.20800,   5853.13500,       433.0,          0.0 !   !END!
4216 ! X =     752.40800,   5853.13500,       442.0,          0.0 !   !END!
4217 ! X =     739.00800,   5853.33500,       406.0,          0.0 !   !END!
4218 ! X =     739.20800,   5853.33500,       406.0,          0.0 !   !END!
4219 ! X =     739.40800,   5853.33500,       406.0,          0.0 !   !END!
4220 ! X =     739.60800,   5853.33500,       406.0,          0.0 !   !END!
4221 ! X =     739.80800,   5853.33500,       406.0,          0.0 !   !END!
4222 ! X =     740.00800,   5853.33500,       406.0,          0.0 !   !END!
4223 ! X =     740.20800,   5853.33500,       406.0,          0.0 !   !END!
4224 ! X =     740.40800,   5853.33500,       406.0,          0.0 !   !END!
4225 ! X =     740.60800,   5853.33500,       406.0,          0.0 !   !END!
4226 ! X =     740.80800,   5853.33500,       406.0,          0.0 !   !END!
4227 ! X =     741.00800,   5853.33500,       409.0,          0.0 !   !END!
4228 ! X =     741.20800,   5853.33500,       408.0,          0.0 !   !END!
4229 ! X =     741.40800,   5853.33500,       405.0,          0.0 !   !END!
4230 ! X =     741.60800,   5853.33500,       413.0,          0.0 !   !END!
4231 ! X =     741.80800,   5853.33500,       412.0,          0.0 !   !END!
4232 ! X =     742.00800,   5853.33500,       415.0,          0.0 !   !END!
4233 ! X =     742.20800,   5853.33500,       411.0,          0.0 !   !END!
4234 ! X =     742.40800,   5853.33500,       413.0,          0.0 !   !END!
4235 ! X =     742.60800,   5853.33500,       413.0,          0.0 !   !END!
4236 ! X =     742.80800,   5853.33500,       411.0,          0.0 !   !END!
4237 ! X =     743.00800,   5853.33500,       417.0,          0.0 !   !END!
4238 ! X =     743.20800,   5853.33500,       449.0,          0.0 !   !END!
4239 ! X =     743.40800,   5853.33500,       463.0,          0.0 !   !END!
4240 ! X =     743.60800,   5853.33500,       430.0,          0.0 !   !END!
4241 ! X =     743.80800,   5853.33500,       419.0,          0.0 !   !END!
4242 ! X =     744.00800,   5853.33500,       417.0,          0.0 !   !END!
4243 ! X =     744.20800,   5853.33500,       417.0,          0.0 !   !END!
4244 ! X =     744.40800,   5853.33500,       419.0,          0.0 !   !END!
4245 ! X =     744.60800,   5853.33500,       428.0,          0.0 !   !END!
4246 ! X =     744.80800,   5853.33500,       425.0,          0.0 !   !END!
4247 ! X =     745.00800,   5853.33500,       421.0,          0.0 !   !END!
4248 ! X =     745.20800,   5853.33500,       420.0,          0.0 !   !END!
4249 ! X =     745.40800,   5853.33500,       420.0,          0.0 !   !END!
4250 ! X =     745.60800,   5853.33500,       421.0,          0.0 !   !END!
4251 ! X =     745.80800,   5853.33500,       415.0,          0.0 !   !END!
4252 ! X =     746.00800,   5853.33500,       416.0,          0.0 !   !END!
4253 ! X =     746.20800,   5853.33500,       418.0,          0.0 !   !END!
4254 ! X =     746.40800,   5853.33500,       420.0,          0.0 !   !END!
4255 ! X =     746.60800,   5853.33500,       422.0,          0.0 !   !END!
4256 ! X =     746.80800,   5853.33500,       422.0,          0.0 !   !END!
4257 ! X =     747.00800,   5853.33500,       420.0,          0.0 !   !END!
4258 ! X =     747.20800,   5853.33500,       423.0,          0.0 !   !END!
4259 ! X =     747.40800,   5853.33500,       427.0,          0.0 !   !END!
4260 ! X =     747.60800,   5853.33500,       430.0,          0.0 !   !END!
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4261 ! X =     747.80800,   5853.33500,       441.0,          0.0 !   !END!
4262 ! X =     748.00800,   5853.33500,       452.0,          0.0 !   !END!
4263 ! X =     748.20800,   5853.33500,       459.0,          0.0 !   !END!
4264 ! X =     748.40800,   5853.33500,       467.0,          0.0 !   !END!
4265 ! X =     748.60800,   5853.33500,       470.0,          0.0 !   !END!
4266 ! X =     748.80800,   5853.33500,       476.0,          0.0 !   !END!
4267 ! X =     749.00800,   5853.33500,       486.0,          0.0 !   !END!
4268 ! X =     749.20800,   5853.33500,       483.0,          0.0 !   !END!
4269 ! X =     749.40800,   5853.33500,       479.0,          0.0 !   !END!
4270 ! X =     749.60800,   5853.33500,       471.0,          0.0 !   !END!
4271 ! X =     749.80800,   5853.33500,       466.0,          0.0 !   !END!
4272 ! X =     750.00800,   5853.33500,       452.0,          0.0 !   !END!
4273 ! X =     750.20800,   5853.33500,       449.0,          0.0 !   !END!
4274 ! X =     750.40800,   5853.33500,       443.0,          0.0 !   !END!
4275 ! X =     750.60800,   5853.33500,       439.0,          0.0 !   !END!
4276 ! X =     750.80800,   5853.33500,       433.0,          0.0 !   !END!
4277 ! X =     751.00800,   5853.33500,       430.0,          0.0 !   !END!
4278 ! X =     751.20800,   5853.33500,       428.0,          0.0 !   !END!
4279 ! X =     751.40800,   5853.33500,       430.0,          0.0 !   !END!
4280 ! X =     751.60800,   5853.33500,       433.0,          0.0 !   !END!
4281 ! X =     751.80800,   5853.33500,       427.0,          0.0 !   !END!
4282 ! X =     752.00800,   5853.33500,       435.0,          0.0 !   !END!
4283 ! X =     752.20800,   5853.33500,       445.0,          0.0 !   !END!
4284 ! X =     752.40800,   5853.33500,       445.0,          0.0 !   !END!
4285 ! X =     739.00800,   5853.53500,       406.0,          0.0 !   !END!
4286 ! X =     739.20800,   5853.53500,       406.0,          0.0 !   !END!
4287 ! X =     739.40800,   5853.53500,       406.0,          0.0 !   !END!
4288 ! X =     739.60800,   5853.53500,       406.0,          0.0 !   !END!
4289 ! X =     739.80800,   5853.53500,       406.0,          0.0 !   !END!
4290 ! X =     740.00800,   5853.53500,       406.0,          0.0 !   !END!
4291 ! X =     740.20800,   5853.53500,       406.0,          0.0 !   !END!
4292 ! X =     740.40800,   5853.53500,       406.0,          0.0 !   !END!
4293 ! X =     740.60800,   5853.53500,       406.0,          0.0 !   !END!
4294 ! X =     740.80800,   5853.53500,       406.0,          0.0 !   !END!
4295 ! X =     741.00800,   5853.53500,       411.0,          0.0 !   !END!
4296 ! X =     741.20800,   5853.53500,       414.0,          0.0 !   !END!
4297 ! X =     741.40800,   5853.53500,       409.0,          0.0 !   !END!
4298 ! X =     741.60800,   5853.53500,       409.0,          0.0 !   !END!
4299 ! X =     741.80800,   5853.53500,       412.0,          0.0 !   !END!
4300 ! X =     742.00800,   5853.53500,       409.0,          0.0 !   !END!
4301 ! X =     742.20800,   5853.53500,       414.0,          0.0 !   !END!
4302 ! X =     742.40800,   5853.53500,       413.0,          0.0 !   !END!
4303 ! X =     742.60800,   5853.53500,       414.0,          0.0 !   !END!
4304 ! X =     742.80800,   5853.53500,       413.0,          0.0 !   !END!
4305 ! X =     743.00800,   5853.53500,       420.0,          0.0 !   !END!
4306 ! X =     743.20800,   5853.53500,       447.0,          0.0 !   !END!
4307 ! X =     743.40800,   5853.53500,       462.0,          0.0 !   !END!
4308 ! X =     743.60800,   5853.53500,       436.0,          0.0 !   !END!
4309 ! X =     743.80800,   5853.53500,       422.0,          0.0 !   !END!
4310 ! X =     744.00800,   5853.53500,       421.0,          0.0 !   !END!
4311 ! X =     744.20800,   5853.53500,       419.0,          0.0 !   !END!
4312 ! X =     744.40800,   5853.53500,       420.0,          0.0 !   !END!
4313 ! X =     744.60800,   5853.53500,       424.0,          0.0 !   !END!
4314 ! X =     744.80800,   5853.53500,       421.0,          0.0 !   !END!
4315 ! X =     745.00800,   5853.53500,       421.0,          0.0 !   !END!
4316 ! X =     745.20800,   5853.53500,       421.0,          0.0 !   !END!
4317 ! X =     745.40800,   5853.53500,       421.0,          0.0 !   !END!
4318 ! X =     745.60800,   5853.53500,       418.0,          0.0 !   !END!
4319 ! X =     745.80800,   5853.53500,       418.0,          0.0 !   !END!
4320 ! X =     746.00800,   5853.53500,       416.0,          0.0 !   !END!
4321 ! X =     746.20800,   5853.53500,       419.0,          0.0 !   !END!
4322 ! X =     746.40800,   5853.53500,       423.0,          0.0 !   !END!
4323 ! X =     746.60800,   5853.53500,       425.0,          0.0 !   !END!
4324 ! X =     746.80800,   5853.53500,       423.0,          0.0 !   !END!
4325 ! X =     747.00800,   5853.53500,       426.0,          0.0 !   !END!
4326 ! X =     747.20800,   5853.53500,       423.0,          0.0 !   !END!
4327 ! X =     747.40800,   5853.53500,       426.0,          0.0 !   !END!
4328 ! X =     747.60800,   5853.53500,       428.0,          0.0 !   !END!
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4329 ! X =     747.80800,   5853.53500,       436.0,          0.0 !   !END!
4330 ! X =     748.00800,   5853.53500,       446.0,          0.0 !   !END!
4331 ! X =     748.20800,   5853.53500,       457.0,          0.0 !   !END!
4332 ! X =     748.40800,   5853.53500,       464.0,          0.0 !   !END!
4333 ! X =     748.60800,   5853.53500,       467.0,          0.0 !   !END!
4334 ! X =     748.80800,   5853.53500,       468.0,          0.0 !   !END!
4335 ! X =     749.00800,   5853.53500,       476.0,          0.0 !   !END!
4336 ! X =     749.20800,   5853.53500,       475.0,          0.0 !   !END!
4337 ! X =     749.40800,   5853.53500,       470.0,          0.0 !   !END!
4338 ! X =     749.60800,   5853.53500,       468.0,          0.0 !   !END!
4339 ! X =     749.80800,   5853.53500,       458.0,          0.0 !   !END!
4340 ! X =     750.00800,   5853.53500,       453.0,          0.0 !   !END!
4341 ! X =     750.20800,   5853.53500,       446.0,          0.0 !   !END!
4342 ! X =     750.40800,   5853.53500,       441.0,          0.0 !   !END!
4343 ! X =     750.60800,   5853.53500,       437.0,          0.0 !   !END!
4344 ! X =     750.80800,   5853.53500,       434.0,          0.0 !   !END!
4345 ! X =     751.00800,   5853.53500,       432.0,          0.0 !   !END!
4346 ! X =     751.20800,   5853.53500,       424.0,          0.0 !   !END!
4347 ! X =     751.40800,   5853.53500,       424.0,          0.0 !   !END!
4348 ! X =     751.60800,   5853.53500,       425.0,          0.0 !   !END!
4349 ! X =     751.80800,   5853.53500,       433.0,          0.0 !   !END!
4350 ! X =     752.00800,   5853.53500,       439.0,          0.0 !   !END!
4351 ! X =     752.20800,   5853.53500,       446.0,          0.0 !   !END!
4352 ! X =     752.40800,   5853.53500,       446.0,          0.0 !   !END!
4353 ! X =     739.00800,   5853.73500,       406.0,          0.0 !   !END!
4354 ! X =     739.20800,   5853.73500,       406.0,          0.0 !   !END!
4355 ! X =     739.40800,   5853.73500,       406.0,          0.0 !   !END!
4356 ! X =     739.60800,   5853.73500,       406.0,          0.0 !   !END!
4357 ! X =     739.80800,   5853.73500,       406.0,          0.0 !   !END!
4358 ! X =     740.00800,   5853.73500,       406.0,          0.0 !   !END!
4359 ! X =     740.20800,   5853.73500,       406.0,          0.0 !   !END!
4360 ! X =     740.40800,   5853.73500,       406.0,          0.0 !   !END!
4361 ! X =     740.60800,   5853.73500,       406.0,          0.0 !   !END!
4362 ! X =     740.80800,   5853.73500,       406.0,          0.0 !   !END!
4363 ! X =     741.00800,   5853.73500,       413.0,          0.0 !   !END!
4364 ! X =     741.20800,   5853.73500,       411.0,          0.0 !   !END!
4365 ! X =     741.40800,   5853.73500,       410.0,          0.0 !   !END!
4366 ! X =     741.60800,   5853.73500,       409.0,          0.0 !   !END!
4367 ! X =     741.80800,   5853.73500,       414.0,          0.0 !   !END!
4368 ! X =     742.00800,   5853.73500,       418.0,          0.0 !   !END!
4369 ! X =     742.20800,   5853.73500,       413.0,          0.0 !   !END!
4370 ! X =     742.40800,   5853.73500,       414.0,          0.0 !   !END!
4371 ! X =     742.60800,   5853.73500,       413.0,          0.0 !   !END!
4372 ! X =     742.80800,   5853.73500,       415.0,          0.0 !   !END!
4373 ! X =     743.00800,   5853.73500,       421.0,          0.0 !   !END!
4374 ! X =     743.20800,   5853.73500,       427.0,          0.0 !   !END!
4375 ! X =     743.40800,   5853.73500,       436.0,          0.0 !   !END!
4376 ! X =     743.60800,   5853.73500,       432.0,          0.0 !   !END!
4377 ! X =     743.80800,   5853.73500,       423.0,          0.0 !   !END!
4378 ! X =     744.00800,   5853.73500,       426.0,          0.0 !   !END!
4379 ! X =     744.20800,   5853.73500,       420.0,          0.0 !   !END!
4380 ! X =     744.40800,   5853.73500,       420.0,          0.0 !   !END!
4381 ! X =     744.60800,   5853.73500,       422.0,          0.0 !   !END!
4382 ! X =     744.80800,   5853.73500,       420.0,          0.0 !   !END!
4383 ! X =     745.00800,   5853.73500,       422.0,          0.0 !   !END!
4384 ! X =     745.20800,   5853.73500,       423.0,          0.0 !   !END!
4385 ! X =     745.40800,   5853.73500,       422.0,          0.0 !   !END!
4386 ! X =     745.60800,   5853.73500,       420.0,          0.0 !   !END!
4387 ! X =     745.80800,   5853.73500,       418.0,          0.0 !   !END!
4388 ! X =     746.00800,   5853.73500,       420.0,          0.0 !   !END!
4389 ! X =     746.20800,   5853.73500,       423.0,          0.0 !   !END!
4390 ! X =     746.40800,   5853.73500,       423.0,          0.0 !   !END!
4391 ! X =     746.60800,   5853.73500,       427.0,          0.0 !   !END!
4392 ! X =     746.80800,   5853.73500,       427.0,          0.0 !   !END!
4393 ! X =     747.00800,   5853.73500,       427.0,          0.0 !   !END!
4394 ! X =     747.20800,   5853.73500,       426.0,          0.0 !   !END!
4395 ! X =     747.40800,   5853.73500,       425.0,          0.0 !   !END!
4396 ! X =     747.60800,   5853.73500,       432.0,          0.0 !   !END!
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4397 ! X =     747.80800,   5853.73500,       438.0,          0.0 !   !END!
4398 ! X =     748.00800,   5853.73500,       445.0,          0.0 !   !END!
4399 ! X =     748.20800,   5853.73500,       453.0,          0.0 !   !END!
4400 ! X =     748.40800,   5853.73500,       460.0,          0.0 !   !END!
4401 ! X =     748.60800,   5853.73500,       465.0,          0.0 !   !END!
4402 ! X =     748.80800,   5853.73500,       471.0,          0.0 !   !END!
4403 ! X =     749.00800,   5853.73500,       471.0,          0.0 !   !END!
4404 ! X =     749.20800,   5853.73500,       468.0,          0.0 !   !END!
4405 ! X =     749.40800,   5853.73500,       464.0,          0.0 !   !END!
4406 ! X =     749.60800,   5853.73500,       459.0,          0.0 !   !END!
4407 ! X =     749.80800,   5853.73500,       455.0,          0.0 !   !END!
4408 ! X =     750.00800,   5853.73500,       448.0,          0.0 !   !END!
4409 ! X =     750.20800,   5853.73500,       443.0,          0.0 !   !END!
4410 ! X =     750.40800,   5853.73500,       441.0,          0.0 !   !END!
4411 ! X =     750.60800,   5853.73500,       438.0,          0.0 !   !END!
4412 ! X =     750.80800,   5853.73500,       435.0,          0.0 !   !END!
4413 ! X =     751.00800,   5853.73500,       431.0,          0.0 !   !END!
4414 ! X =     751.20800,   5853.73500,       421.0,          0.0 !   !END!
4415 ! X =     751.40800,   5853.73500,       431.0,          0.0 !   !END!
4416 ! X =     751.60800,   5853.73500,       439.0,          0.0 !   !END!
4417 ! X =     751.80800,   5853.73500,       435.0,          0.0 !   !END!
4418 ! X =     752.00800,   5853.73500,       438.0,          0.0 !   !END!
4419 ! X =     752.20800,   5853.73500,       442.0,          0.0 !   !END!
4420 ! X =     752.40800,   5853.73500,       441.0,          0.0 !   !END!
4421 ! X =     739.00800,   5853.93500,       406.0,          0.0 !   !END!
4422 ! X =     739.20800,   5853.93500,       406.0,          0.0 !   !END!
4423 ! X =     739.40800,   5853.93500,       406.0,          0.0 !   !END!
4424 ! X =     739.60800,   5853.93500,       406.0,          0.0 !   !END!
4425 ! X =     739.80800,   5853.93500,       406.0,          0.0 !   !END!
4426 ! X =     740.00800,   5853.93500,       406.0,          0.0 !   !END!
4427 ! X =     740.20800,   5853.93500,       406.0,          0.0 !   !END!
4428 ! X =     740.40800,   5853.93500,       406.0,          0.0 !   !END!
4429 ! X =     740.60800,   5853.93500,       406.0,          0.0 !   !END!
4430 ! X =     740.80800,   5853.93500,       406.0,          0.0 !   !END!
4431 ! X =     741.00800,   5853.93500,       412.0,          0.0 !   !END!
4432 ! X =     741.20800,   5853.93500,       412.0,          0.0 !   !END!
4433 ! X =     741.40800,   5853.93500,       411.0,          0.0 !   !END!
4434 ! X =     741.60800,   5853.93500,       413.0,          0.0 !   !END!
4435 ! X =     741.80800,   5853.93500,       414.0,          0.0 !   !END!
4436 ! X =     742.00800,   5853.93500,       414.0,          0.0 !   !END!
4437 ! X =     742.20800,   5853.93500,       412.0,          0.0 !   !END!
4438 ! X =     742.40800,   5853.93500,       415.0,          0.0 !   !END!
4439 ! X =     742.60800,   5853.93500,       418.0,          0.0 !   !END!
4440 ! X =     742.80800,   5853.93500,       418.0,          0.0 !   !END!
4441 ! X =     743.00800,   5853.93500,       420.0,          0.0 !   !END!
4442 ! X =     743.20800,   5853.93500,       424.0,          0.0 !   !END!
4443 ! X =     743.40800,   5853.93500,       428.0,          0.0 !   !END!
4444 ! X =     743.60800,   5853.93500,       429.0,          0.0 !   !END!
4445 ! X =     743.80800,   5853.93500,       424.0,          0.0 !   !END!
4446 ! X =     744.00800,   5853.93500,       423.0,          0.0 !   !END!
4447 ! X =     744.20800,   5853.93500,       421.0,          0.0 !   !END!
4448 ! X =     744.40800,   5853.93500,       422.0,          0.0 !   !END!
4449 ! X =     744.60800,   5853.93500,       422.0,          0.0 !   !END!
4450 ! X =     744.80800,   5853.93500,       424.0,          0.0 !   !END!
4451 ! X =     745.00800,   5853.93500,       423.0,          0.0 !   !END!
4452 ! X =     745.20800,   5853.93500,       421.0,          0.0 !   !END!
4453 ! X =     745.40800,   5853.93500,       421.0,          0.0 !   !END!
4454 ! X =     745.60800,   5853.93500,       422.0,          0.0 !   !END!
4455 ! X =     745.80800,   5853.93500,       421.0,          0.0 !   !END!
4456 ! X =     746.00800,   5853.93500,       417.0,          0.0 !   !END!
4457 ! X =     746.20800,   5853.93500,       422.0,          0.0 !   !END!
4458 ! X =     746.40800,   5853.93500,       424.0,          0.0 !   !END!
4459 ! X =     746.60800,   5853.93500,       425.0,          0.0 !   !END!
4460 ! X =     746.80800,   5853.93500,       427.0,          0.0 !   !END!
4461 ! X =     747.00800,   5853.93500,       424.0,          0.0 !   !END!
4462 ! X =     747.20800,   5853.93500,       424.0,          0.0 !   !END!
4463 ! X =     747.40800,   5853.93500,       425.0,          0.0 !   !END!
4464 ! X =     747.60800,   5853.93500,       429.0,          0.0 !   !END!
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4465 ! X =     747.80800,   5853.93500,       438.0,          0.0 !   !END!
4466 ! X =     748.00800,   5853.93500,       443.0,          0.0 !   !END!
4467 ! X =     748.20800,   5853.93500,       456.0,          0.0 !   !END!
4468 ! X =     748.40800,   5853.93500,       459.0,          0.0 !   !END!
4469 ! X =     748.60800,   5853.93500,       465.0,          0.0 !   !END!
4470 ! X =     748.80800,   5853.93500,       466.0,          0.0 !   !END!
4471 ! X =     749.00800,   5853.93500,       466.0,          0.0 !   !END!
4472 ! X =     749.20800,   5853.93500,       457.0,          0.0 !   !END!
4473 ! X =     749.40800,   5853.93500,       456.0,          0.0 !   !END!
4474 ! X =     749.60800,   5853.93500,       448.0,          0.0 !   !END!
4475 ! X =     749.80800,   5853.93500,       442.0,          0.0 !   !END!
4476 ! X =     750.00800,   5853.93500,       442.0,          0.0 !   !END!
4477 ! X =     750.20800,   5853.93500,       442.0,          0.0 !   !END!
4478 ! X =     750.40800,   5853.93500,       438.0,          0.0 !   !END!
4479 ! X =     750.60800,   5853.93500,       437.0,          0.0 !   !END!
4480 ! X =     750.80800,   5853.93500,       436.0,          0.0 !   !END!
4481 ! X =     751.00800,   5853.93500,       431.0,          0.0 !   !END!
4482 ! X =     751.20800,   5853.93500,       422.0,          0.0 !   !END!
4483 ! X =     751.40800,   5853.93500,       424.0,          0.0 !   !END!
4484 ! X =     751.60800,   5853.93500,       445.0,          0.0 !   !END!
4485 ! X =     751.80800,   5853.93500,       428.0,          0.0 !   !END!
4486 ! X =     752.00800,   5853.93500,       435.0,          0.0 !   !END!
4487 ! X =     752.20800,   5853.93500,       430.0,          0.0 !   !END!
4488 ! X =     752.40800,   5853.93500,       437.0,          0.0 !   !END!
4489 ! X =     739.00800,   5854.13500,       406.0,          0.0 !   !END!
4490 ! X =     739.20800,   5854.13500,       406.0,          0.0 !   !END!
4491 ! X =     739.40800,   5854.13500,       406.0,          0.0 !   !END!
4492 ! X =     739.60800,   5854.13500,       406.0,          0.0 !   !END!
4493 ! X =     739.80800,   5854.13500,       406.0,          0.0 !   !END!
4494 ! X =     740.00800,   5854.13500,       406.0,          0.0 !   !END!
4495 ! X =     740.20800,   5854.13500,       406.0,          0.0 !   !END!
4496 ! X =     740.40800,   5854.13500,       406.0,          0.0 !   !END!
4497 ! X =     740.60800,   5854.13500,       406.0,          0.0 !   !END!
4498 ! X =     740.80800,   5854.13500,       418.0,          0.0 !   !END!
4499 ! X =     741.00800,   5854.13500,       415.0,          0.0 !   !END!
4500 ! X =     741.20800,   5854.13500,       412.0,          0.0 !   !END!
4501 ! X =     741.40800,   5854.13500,       411.0,          0.0 !   !END!
4502 ! X =     741.60800,   5854.13500,       415.0,          0.0 !   !END!
4503 ! X =     741.80800,   5854.13500,       414.0,          0.0 !   !END!
4504 ! X =     742.00800,   5854.13500,       417.0,          0.0 !   !END!
4505 ! X =     742.20800,   5854.13500,       415.0,          0.0 !   !END!
4506 ! X =     742.40800,   5854.13500,       417.0,          0.0 !   !END!
4507 ! X =     742.60800,   5854.13500,       418.0,          0.0 !   !END!
4508 ! X =     742.80800,   5854.13500,       421.0,          0.0 !   !END!
4509 ! X =     743.00800,   5854.13500,       423.0,          0.0 !   !END!
4510 ! X =     743.20800,   5854.13500,       424.0,          0.0 !   !END!
4511 ! X =     743.40800,   5854.13500,       425.0,          0.0 !   !END!
4512 ! X =     743.60800,   5854.13500,       426.0,          0.0 !   !END!
4513 ! X =     743.80800,   5854.13500,       429.0,          0.0 !   !END!
4514 ! X =     744.00800,   5854.13500,       424.0,          0.0 !   !END!
4515 ! X =     744.20800,   5854.13500,       424.0,          0.0 !   !END!
4516 ! X =     744.40800,   5854.13500,       423.0,          0.0 !   !END!
4517 ! X =     744.60800,   5854.13500,       425.0,          0.0 !   !END!
4518 ! X =     744.80800,   5854.13500,       426.0,          0.0 !   !END!
4519 ! X =     745.00800,   5854.13500,       421.0,          0.0 !   !END!
4520 ! X =     745.20800,   5854.13500,       423.0,          0.0 !   !END!
4521 ! X =     745.40800,   5854.13500,       421.0,          0.0 !   !END!
4522 ! X =     745.60800,   5854.13500,       421.0,          0.0 !   !END!
4523 ! X =     745.80800,   5854.13500,       418.0,          0.0 !   !END!
4524 ! X =     746.00800,   5854.13500,       419.0,          0.0 !   !END!
4525 ! X =     746.20800,   5854.13500,       417.0,          0.0 !   !END!
4526 ! X =     746.40800,   5854.13500,       426.0,          0.0 !   !END!
4527 ! X =     746.60800,   5854.13500,       426.0,          0.0 !   !END!
4528 ! X =     746.80800,   5854.13500,       427.0,          0.0 !   !END!
4529 ! X =     747.00800,   5854.13500,       424.0,          0.0 !   !END!
4530 ! X =     747.20800,   5854.13500,       424.0,          0.0 !   !END!
4531 ! X =     747.40800,   5854.13500,       425.0,          0.0 !   !END!
4532 ! X =     747.60800,   5854.13500,       429.0,          0.0 !   !END!
```



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4533 ! X =     747.80800,   5854.13500,       435.0,          0.0 !   !END!
4534 ! X =     748.00800,   5854.13500,       439.0,          0.0 !   !END!
4535 ! X =     748.20800,   5854.13500,       453.0,          0.0 !   !END!
4536 ! X =     748.40800,   5854.13500,       458.0,          0.0 !   !END!
4537 ! X =     748.60800,   5854.13500,       459.0,          0.0 !   !END!
4538 ! X =     748.80800,   5854.13500,       459.0,          0.0 !   !END!
4539 ! X =     749.00800,   5854.13500,       452.0,          0.0 !   !END!
4540 ! X =     749.20800,   5854.13500,       451.0,          0.0 !   !END!
4541 ! X =     749.40800,   5854.13500,       450.0,          0.0 !   !END!
4542 ! X =     749.60800,   5854.13500,       444.0,          0.0 !   !END!
4543 ! X =     749.80800,   5854.13500,       437.0,          0.0 !   !END!
4544 ! X =     750.00800,   5854.13500,       438.0,          0.0 !   !END!
4545 ! X =     750.20800,   5854.13500,       440.0,          0.0 !   !END!
4546 ! X =     750.40800,   5854.13500,       439.0,          0.0 !   !END!
4547 ! X =     750.60800,   5854.13500,       437.0,          0.0 !   !END!
4548 ! X =     750.80800,   5854.13500,       434.0,          0.0 !   !END!
4549 ! X =     751.00800,   5854.13500,       434.0,          0.0 !   !END!
4550 ! X =     751.20800,   5854.13500,       420.0,          0.0 !   !END!
4551 ! X =     751.40800,   5854.13500,       419.0,          0.0 !   !END!
4552 ! X =     751.60800,   5854.13500,       438.0,          0.0 !   !END!
4553 ! X =     751.80800,   5854.13500,       432.0,          0.0 !   !END!
4554 ! X =     752.00800,   5854.13500,       430.0,          0.0 !   !END!
4555 ! X =     752.20800,   5854.13500,       434.0,          0.0 !   !END!
4556 ! X =     752.40800,   5854.13500,       435.0,          0.0 !   !END!
4557 ! X =     739.00800,   5854.33500,       406.0,          0.0 !   !END!
4558 ! X =     739.20800,   5854.33500,       406.0,          0.0 !   !END!
4559 ! X =     739.40800,   5854.33500,       406.0,          0.0 !   !END!
4560 ! X =     739.60800,   5854.33500,       406.0,          0.0 !   !END!
4561 ! X =     739.80800,   5854.33500,       406.0,          0.0 !   !END!
4562 ! X =     740.00800,   5854.33500,       406.0,          0.0 !   !END!
4563 ! X =     740.20800,   5854.33500,       406.0,          0.0 !   !END!
4564 ! X =     740.40800,   5854.33500,       406.0,          0.0 !   !END!
4565 ! X =     740.60800,   5854.33500,       414.0,          0.0 !   !END!
4566 ! X =     740.80800,   5854.33500,       417.0,          0.0 !   !END!
4567 ! X =     741.00800,   5854.33500,       414.0,          0.0 !   !END!
4568 ! X =     741.20800,   5854.33500,       414.0,          0.0 !   !END!
4569 ! X =     741.40800,   5854.33500,       411.0,          0.0 !   !END!
4570 ! X =     741.60800,   5854.33500,       417.0,          0.0 !   !END!
4571 ! X =     741.80800,   5854.33500,       419.0,          0.0 !   !END!
4572 ! X =     742.00800,   5854.33500,       417.0,          0.0 !   !END!
4573 ! X =     742.20800,   5854.33500,       419.0,          0.0 !   !END!
4574 ! X =     742.40800,   5854.33500,       420.0,          0.0 !   !END!
4575 ! X =     742.60800,   5854.33500,       421.0,          0.0 !   !END!
4576 ! X =     742.80800,   5854.33500,       425.0,          0.0 !   !END!
4577 ! X =     743.00800,   5854.33500,       427.0,          0.0 !   !END!
4578 ! X =     743.20800,   5854.33500,       431.0,          0.0 !   !END!
4579 ! X =     743.40800,   5854.33500,       436.0,          0.0 !   !END!
4580 ! X =     743.60800,   5854.33500,       438.0,          0.0 !   !END!
4581 ! X =     743.80800,   5854.33500,       433.0,          0.0 !   !END!
4582 ! X =     744.00800,   5854.33500,       428.0,          0.0 !   !END!
4583 ! X =     744.20800,   5854.33500,       430.0,          0.0 !   !END!
4584 ! X =     744.40800,   5854.33500,       427.0,          0.0 !   !END!
4585 ! X =     744.60800,   5854.33500,       427.0,          0.0 !   !END!
4586 ! X =     744.80800,   5854.33500,       423.0,          0.0 !   !END!
4587 ! X =     745.00800,   5854.33500,       423.0,          0.0 !   !END!
4588 ! X =     745.20800,   5854.33500,       423.0,          0.0 !   !END!
4589 ! X =     745.40800,   5854.33500,       421.0,          0.0 !   !END!
4590 ! X =     745.60800,   5854.33500,       420.0,          0.0 !   !END!
4591 ! X =     745.80800,   5854.33500,       418.0,          0.0 !   !END!
4592 ! X =     746.00800,   5854.33500,       419.0,          0.0 !   !END!
4593 ! X =     746.20800,   5854.33500,       421.0,          0.0 !   !END!
4594 ! X =     746.40800,   5854.33500,       426.0,          0.0 !   !END!
4595 ! X =     746.60800,   5854.33500,       424.0,          0.0 !   !END!
4596 ! X =     746.80800,   5854.33500,       427.0,          0.0 !   !END!
4597 ! X =     747.00800,   5854.33500,       425.0,          0.0 !   !END!
4598 ! X =     747.20800,   5854.33500,       425.0,          0.0 !   !END!
4599 ! X =     747.40800,   5854.33500,       425.0,          0.0 !   !END!
4600 ! X =     747.60800,   5854.33500,       425.0,          0.0 !   !END!
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4601 ! X =     747.80800,   5854.33500,       434.0,           0.0 !   !END!
4602 ! X =     748.00800,   5854.33500,       443.0,           0.0 !   !END!
4603 ! X =     748.20800,   5854.33500,       451.0,           0.0 !   !END!
4604 ! X =     748.40800,   5854.33500,       452.0,           0.0 !   !END!
4605 ! X =     748.60800,   5854.33500,       453.0,           0.0 !   !END!
4606 ! X =     748.80800,   5854.33500,       451.0,           0.0 !   !END!
4607 ! X =     749.00800,   5854.33500,       444.0,           0.0 !   !END!
4608 ! X =     749.20800,   5854.33500,       444.0,           0.0 !   !END!
4609 ! X =     749.40800,   5854.33500,       444.0,           0.0 !   !END!
4610 ! X =     749.60800,   5854.33500,       438.0,           0.0 !   !END!
4611 ! X =     749.80800,   5854.33500,       434.0,           0.0 !   !END!
4612 ! X =     750.00800,   5854.33500,       431.0,           0.0 !   !END!
4613 ! X =     750.20800,   5854.33500,       438.0,           0.0 !   !END!
4614 ! X =     750.40800,   5854.33500,       443.0,           0.0 !   !END!
4615 ! X =     750.60800,   5854.33500,       435.0,           0.0 !   !END!
4616 ! X =     750.80800,   5854.33500,       434.0,           0.0 !   !END!
4617 ! X =     751.00800,   5854.33500,       430.0,           0.0 !   !END!
4618 ! X =     751.20800,   5854.33500,       416.0,           0.0 !   !END!
4619 ! X =     751.40800,   5854.33500,       421.0,           0.0 !   !END!
4620 ! X =     751.60800,   5854.33500,       430.0,           0.0 !   !END!
4621 ! X =     751.80800,   5854.33500,       433.0,           0.0 !   !END!
4622 ! X =     752.00800,   5854.33500,       429.0,           0.0 !   !END!
4623 ! X =     752.20800,   5854.33500,       431.0,           0.0 !   !END!
4624 ! X =     752.40800,   5854.33500,       427.0,           0.0 !   !END!
4625 ! X =     744.81642,   5847.40348,       422.7,           0.0 !   !END!
4626 ! X =     744.90028,   5847.61543,       421.6,           0.0 !   !END!
4627 ! X =     744.92937,   5848.23174,       415.0,           0.0 !   !END!
4628 ! X =     745.29679,   5848.60048,       411.5,           0.0 !   !END!
4629 ! X =     746.71945,   5848.37469,       417.1,           0.0 !   !END!
4630 ! X =     746.92453,   5848.29425,       418.7,           0.0 !   !END!
4631 ! X =     747.04654,   5848.06522,       419.2,           0.0 !   !END!
4632 ! X =     746.66510,   5847.23912,       430.0,           0.0 !   !END!
4633 ! X =     745.29701,   5848.81543,       412.1,           0.0 !   !END!
4634 ! X =     745.04965,   5848.84097,       415.6,           0.0 !   !END!
4635 ! X =     745.10875,   5849.18101,       412.5,           0.0 !   !END!
4636 ! X =     744.63007,   5849.02339,       424.0,           0.0 !   !END!
4637 ! X =     744.28840,   5847.32314,       433.3,           0.0 !   !END!
4638 ! X =     744.39256,   5846.97323,       448.2,           0.0 !   !END!
4639 ! X =     746.78986,   5846.73104,       432.0,           0.0 !   !END!
4640 ! X =     746.82532,   5846.66596,       432.9,           0.0 !   !END!
4641 ! X =     746.84384,   5846.59240,       434.6,           0.0 !   !END!
4642 ! X =     747.02693,   5846.52467,       436.9,           0.0 !   !END!
4643 ! X =     746.93856,   5846.45799,       435.9,           0.0 !   !END!
4644 ! X =     746.99095,   5846.32517,       436.0,           0.0 !   !END!
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a
Data for each receptor are treated as a separate input subgroup and therefore must end with an input group terminator.

b
Receptor height above ground is optional. If no value is entered, the receptor is placed on the ground.

c
Receptors can be assigned using group names provided in 17b. If no group names are used (NRGRP=0) then the default assignment name X must be used.

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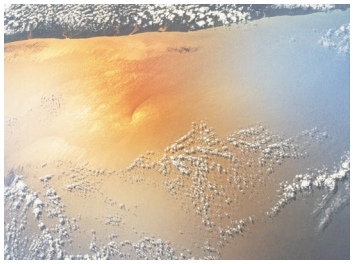

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