

Preliminaries

Questions

Lab_04T

36-290 – Statistical Research Methodology

Week 4 Tuesday – Fall 2021

Preliminaries

Goal

The goal of this lab is to work with principal components analysis, or PCA.

Data

We'll begin by importing the stellar data you've been working with for the past week:

```
rm(list=ls())
file.path = "https://raw.githubusercontent.com/pefreeman/36-290/master/EXAMPLE_DATASETS/DRACO/draco_photometry.Rdata"
load(url(file.path))
rm(file.path)
objects()
```

```
## [1] "dec"      "log.g"    "mag.g"    "mag.i"    "mag.r"
## [6] "mag.u"    "mag.z"    "metallicity" "ra"      "signal.noise"
## [11] "temperature" "velocity.los"
```

Today we are going to do things a little differently: we are simply going to concentrate on the five magnitude measurements.

```
df = data.frame(mag.u, mag.g, mag.r, mag.i, mag.z)
```

Questions

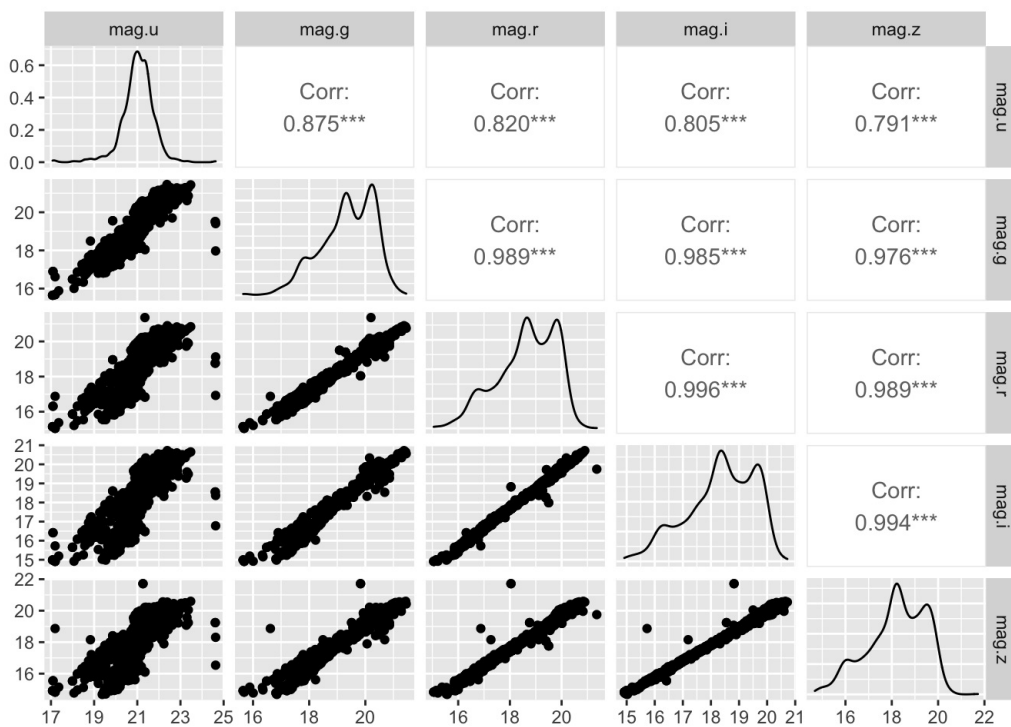
To answer the questions below, it will help you to refer to Sections 10.2 and 10.4 of ISLR; it might also help you to refer to your previous lab work (and, as always, to Google).

Question 1

Construct a pairs plot for the data frame `df`. Do the data appear to be correlated?

```
suppressMessages(library(GGally))

df %>% dplyr::select(., mag.u, mag.g, mag.r, mag.i, mag.z) %>% ggpairs(., progress=FALSE, lower=list(combo=wrap("facet", binwidth=0.8)))
```



Yes the data seems to be correlated.

Question 2

Perform PCA on these data. (Be sure to look at the documentation, as there is one particular argument to `prcomp()` that you'll want to set!) Show the matrix of loadings, and interpret the principal components. (For instance, is PC1 more strongly tied to any of the magnitudes in particular? How about PCs 2-5?)

```
pca.out = prcomp(df, scale=TRUE, retx = TRUE, center = TRUE, tol = NULL)
```

```
v = pca.out$sdev^2
```

```
round(cumsum(v/sum(v)), 3)
```

```
## [1] 0.940 0.996 0.999 1.000 1.000
```

```
s <- summary(pca.out)
```

```
round(pca.out$rotation[, 1:5], 3)
```

```
##          PC1    PC2    PC3    PC4    PC5
## mag.u -0.407 -0.889 -0.171  0.123 -0.016
## mag.g -0.460  0.008  0.548 -0.699  0.009
## mag.r -0.457  0.213  0.352  0.587  0.526
## mag.i -0.456  0.265 -0.018  0.278 -0.802
## mag.z -0.453  0.307 -0.739 -0.274  0.281
```

PC1 is explained by 94% of the variance in the data.
PC1 doesn't seem that strongly tied to any of the magnitudes in particular.

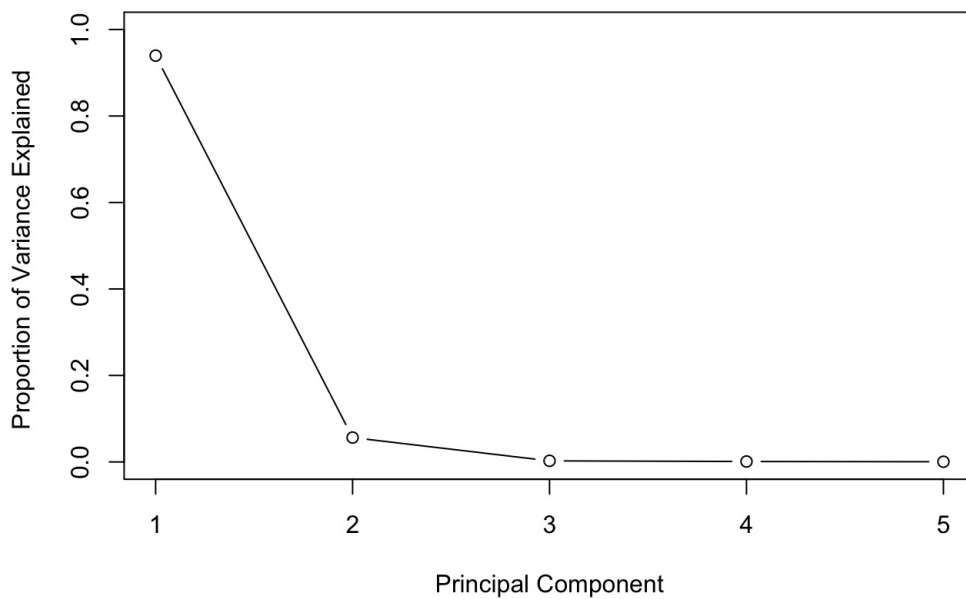
PC 2 seems more closely tied to the u magnitude
PC 3 seems more closely tied to the z magnitude
PC 4 seems more closely tied to the r magnitude
PC 5 seems more closely tied to the i magnitude

Question 3

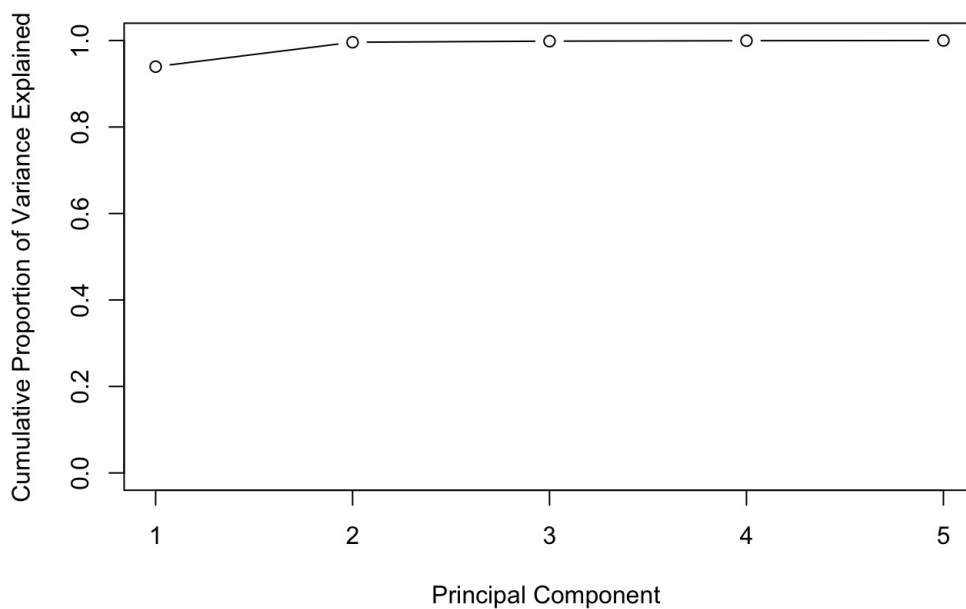
Construct a scree plot showing proportion of variance explained. (See page 403 of ISLR to see how to do this. Use `ggplot()` rather than `plot()`, though. Just show the second plot, the one that involves `cumsum()`.) How many PCs would you retain, if you were to make a choice?

```
pve = v/sum(v)
```

```
plot(pve, xlab="Principal Component", ylab="Proportion of Variance Explained ", ylim=c(0,1), type='b')
```

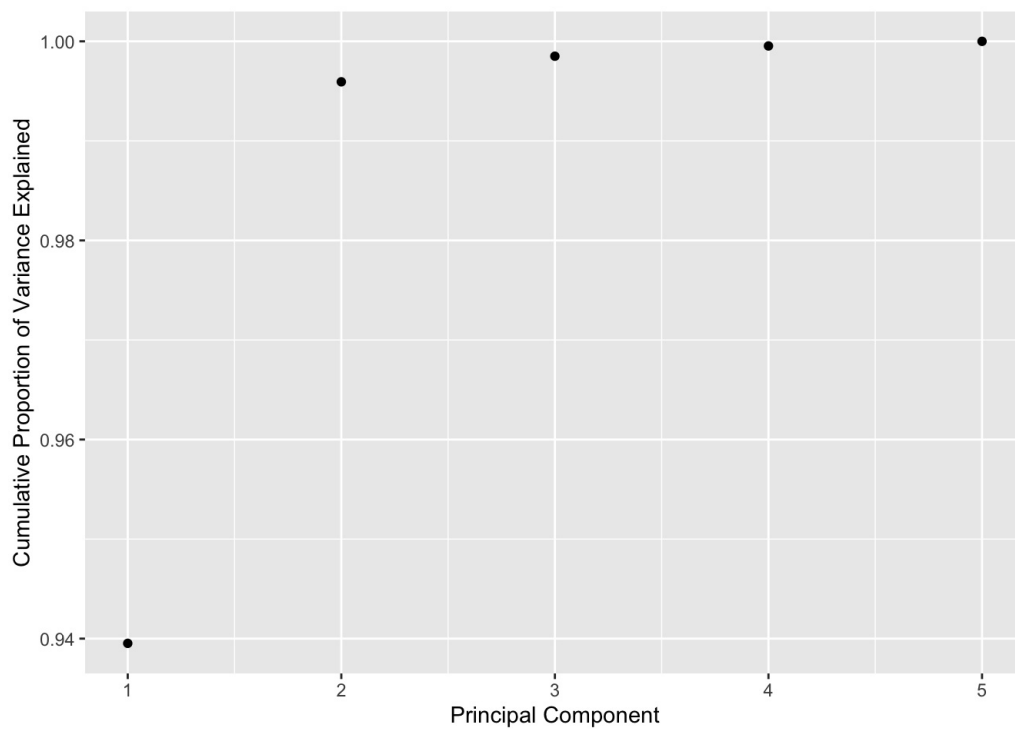


```
plot(cumsum(pve), xlab="Principal Component ", ylab=" Cumulative Proportion of Variance Explained ", ylim=c(0,1), type="b")
```



```
pr_var = data.frame(varExp = v)
```

```
ggplot(pr_var, aes(as.numeric(row.names(pr_var)), cumsum(pve))) +  
  geom_point() +  
  xlab("Principal Component") +  
  ylab("Cumulative Proportion of Variance Explained")
```

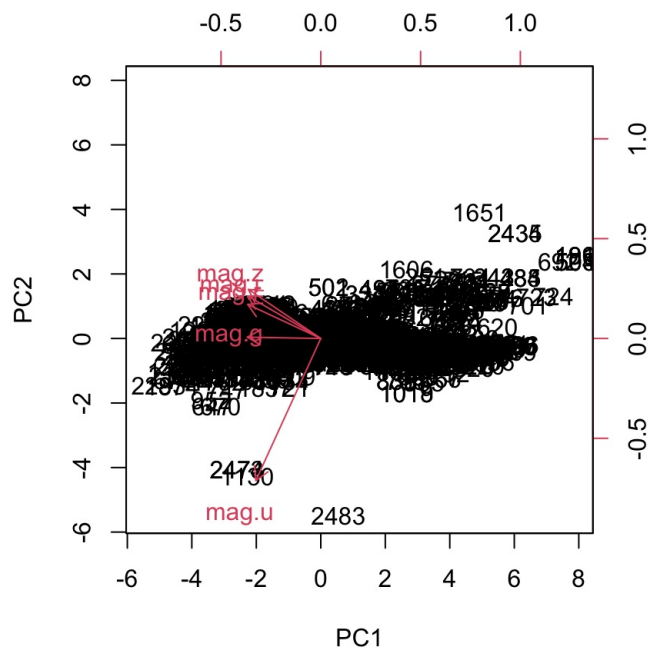


I would maintain 2 PCs

Question 4

Visualize the first two PCs. This information is kept in the first two columns of the `x` matrix output by `prcomp()`. For fun, color the data using the u-band magnitudes. (How? Remember that `mag.u` is in the first column of your original data frame. Set the argument `color` to this. Then add an additional function call on the end, e.g., `scale_color_gradientn(colors=rainbow(6))`. Feel free to play with the number. What you should see is that the colors change with PC2...which makes sense because PC2 is dominated by u-band magnitude. If you change the color to match other bands, then you should see PC1 dominate.)

```
biplot(pca.out, scale=0)
```



Question 5

Show how retaining the first two PCs leads to an almost perfect reconstruction of the data. This is a bit complicated, so here are some pointers:

- First, you are dealing with scaled data. Scaling involves the (column-wise) computation $Z = (X - \mu) / \sigma$, where X is the original data in a column, and μ and σ are the column mean and standard deviation. To get μ and σ for each column, do something like `s = scale(X)`, `mu = as.numeric(attr(s, "scaled:center"))`, and `sigma = as.numeric(attr(s, "scaled:scale"))`. Set these aside for later.

- To reconstruct data based on the first two PCs, one might do $\text{Xhat} = \text{pca.out}\$x[,1:2] \%*\% \text{t}(\text{pca.out}\$rotation[,1:2])$. This means: matrix multiply the first two columns of x with the transpose of the first two columns of $rotation$.
- To back out the effects of scaling, do something like $\text{Xhat} = \text{t}(\text{t}(\text{Xhat})*\text{sigma}+\text{mu})$. The transposing is necessary because of the rules of how matrices and vectors are multiplied on a row-by-row and column-by-column basis.

When you are done, display the first five rows of the difference between your original data frame and your reconstructed data frame. If you do things correctly, they should approximately match. For which wavelength band are the differences closest to zero?

```
s = scale(df)
mu = as.numeric(attr(s,"scaled:center"))
sigma = as.numeric(attr(s,"scaled:scale"))

Xhat = pca.out$x[,1:2] %*% t(pca.out$rotation[,1:2])

Xhat = t(t(Xhat)*sigma+mu)

diffe = Xhat - df

head(Xhat,5)
```

```
##          mag.u      mag.g      mag.r      mag.i      mag.z
## [1,] 21.20105 19.69791 19.07273 18.80942 18.68171
## [2,] 21.52679 20.05705 19.46296 19.21202 19.09093
## [3,] 21.72600 20.22481 19.62856 19.37804 19.25544
## [4,] 21.72600 20.22481 19.62856 19.37804 19.25544
## [5,] 21.41791 20.01229 19.43855 19.19385 19.07863
```

```
head(df,5)
```

```
##          mag.u      mag.g      mag.r      mag.i      mag.z
## 1 21.19948 19.70348 19.07734 18.81921 18.66146
## 2 21.51945 20.11101 19.43237 19.13829 19.14253
## 3 21.71561 20.26365 19.66915 19.40216 19.15022
## 4 21.71561 20.26365 19.66915 19.40216 19.15022
## 5 21.40875 20.05116 19.47914 19.16447 19.02752
```

```
head(diffe,5)
```

```
##          mag.u      mag.g      mag.r      mag.i      mag.z
## 1 0.001569731 -0.005571845 -0.004608319 -0.009787402 0.02025348
## 2 0.007338076 -0.053958273 0.030589821 0.073728998 -0.05159705
## 3 0.010381625 -0.038832251 -0.040580818 -0.024123419 0.10521626
## 4 0.010381625 -0.038832251 -0.040580818 -0.024123419 0.10521626
## 5 0.009164807 -0.038869327 -0.040589948 0.029376731 0.05111498
```

```
Wavelength band u
```

Question 6

Now, let's reintroduce the original dataset, but with colors instead of magnitudes:

```
df = data.frame("col.ug"= mag.u-mag.g,"col.gr"=mag.g-mag.r,"col.ri"=mag.r-mag.i,"col.iz"=mag.i-mag.z,ra,dec,log.g,metallicity,signal.noise,temperature,velocity,los)
```

```
df
```

```
##          col.ug      col.gr      col.ri      col.iz      ra      dec log.g
## 1 1.4960041 0.62614059 0.25812721 0.1577529907 260.0115 57.81589 3.7
## 2 1.4084473 0.67863464 0.29408264 -0.0042400360 259.8737 57.71628 3.1
## 3 1.4519672 0.59450150 0.26698685 0.2519397736 259.9352 57.79092 4.5
## 4 1.4519672 0.59450150 0.26698685 0.2519397736 259.9352 57.79092 2.1
## 5 1.3575878 0.57201767 0.31466866 0.1369590759 260.0805 57.85542 1.2
## 6 1.6174984 0.61961746 0.26855469 0.0747585297 260.0039 57.75311 3.7
## 7 1.6174984 0.61961746 0.26855469 0.0747585297 260.0039 57.75311 1.2
## 8 1.6174984 0.61961746 0.26855469 0.0747585297 260.0039 57.75311 3.2
## 9 1.7621536 0.80937195 0.37376595 0.2242412567 259.8828 57.55964 1.1
## 10 1.7621536 0.80937195 0.37376595 0.2242412567 259.8828 57.55964 1.1
## 11 1.7621536 0.80937195 0.37376595 0.2242412567 259.8828 57.55964 1.9
## 12 1.7621536 0.80937195 0.37376595 0.2242412567 259.8828 57.55964 1.3
## 13 1.7621536 0.80937195 0.37376595 0.2242412567 259.8828 57.55964 1.6
```

## 14	2.2839260	0.96387672	0.42143631	0.2248592377	260.0880	57.82422	2.6
## 15	2.2839260	0.96387672	0.42143631	0.2248592377	260.0880	57.82422	0.7
## 16	1.3797779	0.61110306	0.28328514	0.0318183899	260.1038	57.81189	2.0
## 17	1.3797779	0.61110306	0.28328514	0.0318183899	260.1038	57.81189	3.2
## 18	1.6377602	0.64290047	0.29775810	0.1413803101	260.0775	57.76697	2.0
## 19	1.6377602	0.64290047	0.29775810	0.1413803101	260.0775	57.76697	1.2
## 20	1.5919819	0.67703056	0.26595688	0.1466522217	260.0989	57.40069	5.0
## 21	1.2159214	0.46289444	0.18533134	0.0962696075	260.1214	57.41747	4.2
## 22	1.0992756	0.62359238	0.27491951	0.1982860565	259.9794	57.55006	3.0
## 23	1.0992756	0.62359238	0.27491951	0.1982860565	259.9794	57.55006	2.6
## 24	2.0910683	0.84983444	0.34782982	0.2061805725	260.2573	57.47744	1.7
## 25	1.8414249	0.78652000	0.36330795	0.1907253265	260.1319	57.84864	1.0
## 26	1.7263660	0.70061493	0.31844902	0.1617012024	260.2132	57.63728	1.4
## 27	1.1061382	0.48720551	0.21196365	0.0628261566	260.2839	57.46575	2.5
## 28	1.5593491	0.72564316	0.31992722	0.1438274384	260.1290	57.49975	5.0
## 29	1.5593491	0.72564316	0.31992722	0.1438274384	260.1290	57.49975	5.2
## 30	1.5593491	0.72564316	0.31992722	0.1438274384	260.1290	57.49975	5.4
## 31	1.5593491	0.72564316	0.31992722	0.1438274384	260.1290	57.49975	5.1
## 32	1.5168915	0.70239830	0.29327965	0.1912899017	260.2313	57.74289	1.6
## 33	1.5069771	0.64671707	0.30360222	0.1729717255	260.1729	57.79911	2.6
## 34	1.5069771	0.64671707	0.30360222	0.1729717255	260.1729	57.79911	1.2
## 35	1.4174137	0.57426262	0.27221870	0.1208267212	260.3970	57.59014	2.8
## 36	1.4174137	0.57426262	0.27221870	0.1208267212	260.3970	57.59014	2.2
## 37	1.3639851	0.60568810	0.31266022	-0.0169200897	260.2654	57.66506	3.3
## 38	1.3639851	0.60568810	0.31266022	-0.0169200897	260.2654	57.66506	2.0
## 39	1.3639851	0.60568810	0.31266022	-0.0169200897	260.2654	57.66506	3.0
## 40	1.3639851	0.60568810	0.31266022	-0.0169200897	260.2654	57.66506	2.1
## 41	1.3639851	0.60568810	0.31266022	-0.0169200897	260.2654	57.66506	2.1
## 42	1.3639851	0.60568810	0.31266022	-0.0169200897	260.2654	57.66506	2.8
## 43	1.3639851	0.60568810	0.31266022	-0.0169200897	260.2654	57.66506	1.8
## 44	1.7104168	0.72683525	0.31524849	0.1752681732	260.2507	57.77714	1.6
## 45	1.7104168	0.72683525	0.31524849	0.1752681732	260.2507	57.77714	1.4
## 46	1.6245384	0.65998459	0.26937866	0.1539134979	260.1754	57.82486	1.3
## 47	1.6245384	0.65998459	0.26937866	0.1539134979	260.1754	57.82486	1.1
## 48	1.6245384	0.65998459	0.26937866	0.1539134979	260.1754	57.82486	1.3
## 49	1.6245384	0.65998459	0.26937866	0.1539134979	260.1754	57.82486	1.5
## 50	1.2730331	0.60172272	0.26959038	0.1498985291	260.6283	57.59617	2.2
## 51	1.4586983	0.63233948	0.24799538	0.1754474640	260.5314	57.73108	4.8
## 52	2.0049076	0.84945488	0.39056396	0.1995429993	260.4140	57.77781	1.1
## 53	1.6978569	0.76242065	0.29623032	0.2232837677	260.5150	57.75200	1.4
## 54	1.6978569	0.76242065	0.29623032	0.2232837677	260.5150	57.75200	1.8
## 55	1.6978569	0.76242065	0.29623032	0.2232837677	260.5150	57.75200	1.3
## 56	1.6978569	0.76242065	0.29623032	0.2232837677	260.5150	57.75200	1.2
## 57	1.6978569	0.76242065	0.29623032	0.2232837677	260.5150	57.75200	1.2
## 58	1.6978569	0.76242065	0.29623032	0.2232837677	260.5150	57.75200	1.0
## 59	1.6205444	0.68673515	0.29483795	0.1342182159	260.1807	57.84522	3.4
## 60	1.6205444	0.68673515	0.29483795	0.1342182159	260.1807	57.84522	1.6
## 61	1.6205444	0.68673515	0.29483795	0.1342182159	260.1807	57.84522	1.1
## 62	1.6205444	0.68673515	0.29483795	0.1342182159	260.1807	57.84522	1.6
## 63	1.6205444	0.68673515	0.29483795	0.1342182159	260.1807	57.84522	1.9
## 64	1.6205444	0.68673515	0.29483795	0.1342182159	260.1807	57.84522	1.3
## 65	1.6205444	0.68673515	0.29483795	0.1342182159	260.1807	57.84522	1.9
## 66	1.6205444	0.68673515	0.29483795	0.1342182159	260.1807	57.84522	1.3
## 67	1.6205444	0.68673515	0.29483795	0.1342182159	260.1807	57.84522	1.2
## 68	1.6205444	0.68673515	0.29483795	0.1342182159	260.1807	57.84522	1.4
## 69	1.4374828	0.62323380	0.24116325	0.1484394073	260.8735	57.65533	2.7
## 70	1.4374828	0.62323380	0.24116325	0.1484394073	260.8735	57.65533	2.5
## 71	1.4317036	0.56002235	0.22481346	0.0886421204	260.7815	57.57419	4.4
## 72	1.4317036	0.56002235	0.22481346	0.0886421204	260.7815	57.57419	4.2
## 73	1.2684174	0.56448746	0.22020149	0.1645202637	260.7745	57.73142	2.9
## 74	2.2000847	0.93719101	0.43173409	0.2448768616	260.3762	57.83786	2.9
## 75	2.2000847	0.93719101	0.43173409	0.2448768616	260.3762	57.83786	1.3
## 76	2.4353409	1.00365067	0.42736816	0.2426853180	260.4182	57.79222	1.5
## 77	2.4353409	1.00365067	0.42736816	0.2426853180	260.4182	57.79222	0.8
## 78	2.4353409	1.00365067	0.42736816	0.2426853180	260.4182	57.79222	0.9
## 79	2.4353409	1.00365067	0.42736816	0.2426853180	260.4182	57.79222	0.8
## 80	1.4033241	0.56577492	0.21986008	0.0832233429	260.8644	57.86694	5.3
## 81	1.5542622	0.68200874	0.34345627	0.1311206818	260.2685	57.89661	1.1
## 82	1.8010292	0.69107246	0.24985695	0.1249465942	260.9295	57.93150	3.6
## 83	1.5998440	0.62369156	0.24320793	0.1508121490	260.8948	57.96297	2.7
## 84	1.8364887	0.74408150	0.28389740	0.1093292236	260.3975	57.91644	1.0
## 85	1.8364887	0.74408150	0.28389740	0.1093292236	260.3975	57.91644	1.6
## 86	1.8364887	0.74408150	0.28389740	0.1093292236	260.3975	57.91644	2.0
## 87	1.3927937	0.64132118	0.34874535	0.1485023499	260.5253	58.00328	1.3
## 88	1.3927937	0.64132118	0.34874535	0.1485023499	260.5253	58.00328	1.4
## 89	1.3927937	0.64132118	0.34874535	0.1485023499	260.5253	58.00328	2.0
## 90	1.3927937	0.64132118	0.34874535	0.1485023499	260.5253	58.00328	1.6
## 91	1.3927937	0.64132118	0.34874535	0.1485023499	260.5253	58.00328	1.4
## 92	1.6571140	0.65962029	0.33335876	0.0581645966	260.4242	57.93075	1.1

##	93	1.6571140	0.65962029	0.33335876	0.0581645966	260.4242	57.93075	1.2
##	94	1.5978336	0.70701408	0.33314896	0.1284999847	260.7778	58.17011	5.1
##	95	1.5978336	0.70701408	0.33314896	0.1284999847	260.7778	58.17011	4.5
##	96	1.5978336	0.70701408	0.33314896	0.1284999847	260.7778	58.17011	4.8
##	97	1.5978336	0.70701408	0.33314896	0.1284999847	260.7778	58.17011	5.2
##	98	1.5978336	0.70701408	0.33314896	0.1284999847	260.7778	58.17011	4.7
##	99	1.6034889	0.65087891	0.31983376	0.2063465118	260.4074	58.01450	1.4
##	100	1.6034889	0.65087891	0.31983376	0.2063465118	260.4074	58.01450	1.1
##	101	1.6034889	0.65087891	0.31983376	0.2063465118	260.4074	58.01450	3.2
##	102	1.6034889	0.65087891	0.31983376	0.2063465118	260.4074	58.01450	1.6
##	103	1.6034889	0.65087891	0.31983376	0.2063465118	260.4074	58.01450	1.6
##	104	1.6034889	0.65087891	0.31983376	0.2063465118	260.4074	58.01450	1.2
##	105	1.6034889	0.65087891	0.31983376	0.2063465118	260.4074	58.01450	1.2
##	106	1.6034889	0.65087891	0.31983376	0.2063465118	260.4074	58.01450	1.7
##	107	1.6034889	0.65087891	0.31983376	0.2063465118	260.4074	58.01450	1.3
##	108	1.6034889	0.65087891	0.31983376	0.2063465118	260.4074	58.01450	3.7
##	109	1.6034889	0.65087891	0.31983376	0.2063465118	260.4074	58.01450	1.5
##	110	1.7834549	0.67800140	0.34913635	0.1633701324	260.1864	57.91650	1.0
##	111	1.7834549	0.67800140	0.34913635	0.1633701324	260.1864	57.91650	1.5
##	112	1.1967335	0.59618187	0.26110268	0.0333309174	260.3528	58.09669	1.7
##	113	1.1967335	0.59618187	0.26110268	0.0333309174	260.3528	58.09669	1.8
##	114	1.4125214	0.69382286	0.25196648	0.1718540192	260.3033	58.07806	1.3
##	115	1.4125214	0.69382286	0.25196648	0.1718540192	260.3033	58.07806	1.3
##	116	1.8284378	0.75049400	0.33977890	0.1997604370	260.2553	57.96206	1.4
##	117	1.5848484	0.67816162	0.34037399	0.1298751831	260.2357	58.04308	1.4
##	118	1.5848484	0.67816162	0.34037399	0.1298751831	260.2357	58.04308	1.2
##	119	1.3605671	0.65240097	0.26616859	-0.0786952972	260.2124	58.08033	4.0
##	120	1.3605671	0.65240097	0.26616859	-0.0786952972	260.2124	58.08033	1.4
##	121	1.3605671	0.65240097	0.26616859	-0.0786952972	260.2124	58.08033	2.8
##	122	1.4822369	0.62690926	0.30303574	0.1458740234	260.1513	57.92750	1.6
##	123	1.8928566	0.83368683	0.30956268	0.1986465454	260.1520	58.21247	5.5
##	124	1.8928566	0.83368683	0.30956268	0.1986465454	260.1520	58.21247	5.2
##	125	1.2633724	0.59506798	0.23877335	0.1600723267	260.1339	58.09442	2.7
##	126	1.8096771	0.76747322	0.38023376	0.1943187714	260.1201	57.89253	1.9
##	127	1.4547729	0.64848328	0.33205986	0.1885185242	260.1606	58.00681	1.5
##	128	1.4547729	0.64848328	0.33205986	0.1885185242	260.1606	58.00681	1.8
##	129	1.4547729	0.64848328	0.33205986	0.1885185242	260.1606	58.00681	1.8
##	130	1.2598534	0.62620735	0.33057404	0.0683727264	260.0436	58.04428	3.0
##	131	1.2598534	0.62620735	0.33057404	0.0683727264	260.0436	58.04428	1.2
##	132	1.8846130	0.79477501	0.39331818	0.2248554230	260.0673	58.06800	1.1
##	133	1.8846130	0.79477501	0.39331818	0.2248554230	260.0673	58.06800	1.3
##	134	1.8846130	0.79477501	0.39331818	0.2248554230	260.0673	58.06800	1.0
##	135	1.8846130	0.79477501	0.39331818	0.2248554230	260.0673	58.06800	1.6
##	136	1.8846130	0.79477501	0.39331818	0.2248554230	260.0673	58.06800	0.8
##	137	1.8846130	0.79477501	0.39331818	0.2248554230	260.0673	58.06800	0.9
##	138	1.4892101	0.67266083	0.30711365	0.1453208923	260.0253	58.04725	2.5
##	139	1.4892101	0.67266083	0.30711365	0.1453208923	260.0253	58.04725	1.1
##	140	1.4892101	0.67266083	0.30711365	0.1453208923	260.0253	58.04725	1.2
##	141	1.8307877	0.77185440	0.35449791	0.2056751251	260.0605	58.21428	1.1
##	142	1.8307877	0.77185440	0.35449791	0.2056751251	260.0605	58.21428	2.1
##	143	1.8307877	0.77185440	0.35449791	0.2056751251	260.0605	58.21428	1.5
##	144	1.8307877	0.77185440	0.35449791	0.2056751251	260.0605	58.21428	0.9
##	145	1.8307877	0.77185440	0.35449791	0.2056751251	260.0605	58.21428	1.0
##	146	1.7441196	0.79516411	0.36142159	0.2006855011	259.9743	58.11225	1.4
##	147	1.7441196	0.79516411	0.36142159	0.2006855011	259.9743	58.11225	0.9
##	148	1.7441196	0.79516411	0.36142159	0.2006855011	259.9743	58.11225	1.3
##	149	1.7441196	0.79516411	0.36142159	0.2006855011	259.9743	58.11225	1.8
##	150	1.7441196	0.79516411	0.36142159	0.2006855011	259.9743	58.11225	1.9
##	151	1.9172192	0.85223389	0.37253761	0.2071628571	259.8226	58.17783	0.9
##	152	1.2679100	0.67015457	0.32089233	0.1580791473	259.9909	58.01431	1.1
##	153	1.2679100	0.67015457	0.32089233	0.1580791473	259.9909	58.01431	3.3
##	154	1.2679100	0.67015457	0.32089233	0.1580791473	259.9909	58.01431	2.4
##	155	1.2679100	0.67015457	0.32089233	0.1580791473	259.9909	58.01431	1.8
##	156	1.4237709	0.57964325	0.32260704	0.0721874237	260.1006	57.89789	2.4
##	157	1.7051620	0.78502083	0.35390091	0.1375026703	259.9850	57.98778	1.2
##	158	1.7051620	0.78502083	0.35390091	0.1375026703	259.9850	57.98778	1.1
##	159	1.6536942	0.71885872	0.31179810	0.2401752472	259.8942	58.16856	5.1
##	160	1.5925560	0.69365501	0.29061317	0.1879177094	259.6910	58.12581	2.4
##	161	1.5925560	0.69365501	0.29061317	0.1879177094	259.6910	58.12581	2.5
##	162	1.5925560	0.69365501	0.29061317	0.1879177094	259.6910	58.12581	1.4
##	163	1.5925560	0.69365501	0.29061317	0.1879177094	259.6910	58.12581	1.9
##	164	1.5922108	0.71711349	0.30902290	0.0989131927	259.8570	58.01669	1.8
##	165	1.5922108	0.71711349	0.30902290	0.0989131927	259.8570	58.01669	1.5
##	166	1.5922108	0.71711349	0.30902290	0.0989131927	259.8570	58.01669	2.7
##	167	1.8995838	0.81982231	0.34882164	0.2227497101	259.4933	58.09978	1.2
##	168	1.8995838	0.81982231	0.34882164	0.2227497101	259.4933	58.09978	1.2
##	169	1.8995838	0.81982231	0.34882164	0.2227497101	259.4933	58.09978	1.8
##	170	1.8995838	0.81982231	0.34882164	0.2227497101	259.4933	58.09978	1.1
##	171	1.8995838	0.81982231	0.34882164	0.2227497101	259.4933	58.09978	1.4

##	172	1.8995838	0.81982231	0.34882164	0.2227497101	259.4933	58.09978	1.1
##	173	1.8100567	0.78361702	0.36230850	0.2157573700	259.8270	57.99017	1.2
##	174	1.9911003	0.81878090	0.27869987	0.1261863708	259.4176	58.15392	4.8
##	175	1.9911003	0.81878090	0.27869987	0.1261863708	259.4176	58.15392	5.1
##	176	1.6217499	-0.41802216	1.51001358	0.2277202606	259.6487	58.01400	1.0
##	177	1.6217499	-0.41802216	1.51001358	0.2277202606	259.6487	58.01400	1.2
##	178	2.0856628	0.97565079	0.42773056	0.2140846252	259.4108	58.07753	0.9
##	179	1.6147079	0.67067528	0.33325386	0.1525764465	259.8121	57.94772	1.2
##	180	1.4681816	0.70814705	0.30191803	0.1470813751	259.7452	57.90594	1.7
##	181	1.2026367	0.65812111	0.28248024	0.1443462372	259.5743	57.93811	1.9
##	182	2.1977386	1.02595711	0.41595840	0.2462749481	259.9244	57.87200	0.7
##	183	2.1977386	1.02595711	0.41595840	0.2462749481	259.9244	57.87200	0.8
##	184	2.1753349	0.86960793	0.32014465	0.1832752228	259.2317	57.78800	2.4
##	185	1.5464573	0.73410606	0.32433128	0.1706447601	259.8867	57.83022	1.1
##	186	1.5464573	0.73410606	0.32433128	0.1706447601	259.8867	57.83022	1.3
##	187	1.5464573	0.73410606	0.32433128	0.1706447601	259.8867	57.83022	1.3
##	188	1.5464573	0.73410606	0.32433128	0.1706447601	259.8867	57.83022	1.9
##	189	1.4270935	0.50167274	0.16054535	0.0701961517	259.2693	57.68158	4.2
##	190	1.4270935	0.50167274	0.16054535	0.0701961517	259.2693	57.68158	4.4
##	191	1.4270935	0.50167274	0.16054535	0.0701961517	259.2693	57.68158	4.1
##	192	2.0868645	0.96249199	0.38521004	0.2288169861	259.7649	57.77844	0.8
##	193	2.0868645	0.96249199	0.38521004	0.2288169861	259.7649	57.77844	0.9
##	194	1.2295818	0.57760239	0.24916840	0.2209186554	259.4127	57.72144	2.0
##	195	1.4129181	0.63693237	0.29554176	0.1686916351	259.8945	57.80139	1.3
##	196	2.2090626	0.96922874	0.42019081	0.2235660553	259.7428	57.81600	0.8
##	197	2.2090626	0.96922874	0.42019081	0.2235660553	259.7428	57.81600	0.7
##	198	1.0994453	0.41514778	0.22108841	-0.0056438446	259.4698	57.59956	3.9
##	199	1.0994453	0.41514778	0.22108841	-0.0056438446	259.4698	57.59956	4.6
##	200	1.4033146	0.68342018	0.35063744	0.2041606903	259.7337	57.72925	3.4
##	201	1.4033146	0.68342018	0.35063744	0.2041606903	259.7337	57.72925	1.2
##	202	1.4475193	0.64774513	0.29898834	0.2013454437	259.7119	57.69372	2.9
##	203	1.4475193	0.64774513	0.29898834	0.2013454437	259.7119	57.69372	1.9
##	204	1.4475193	0.64774513	0.29898834	0.2013454437	259.7119	57.69372	2.7
##	205	1.4475193	0.64774513	0.29898834	0.2013454437	259.7119	57.69372	1.3
##	206	1.4475193	0.64774513	0.29898834	0.2013454437	259.7119	57.69372	2.4
##	207	1.4475193	0.64774513	0.29898834	0.2013454437	259.7119	57.69372	1.3
##	208	1.4475193	0.64774513	0.29898834	0.2013454437	259.7119	57.69372	1.7
##	209	1.4475193	0.64774513	0.29898834	0.2013454437	259.7119	57.69372	2.2
##	210	1.4894371	0.69008446	0.31264114	0.1540489197	259.8932	57.76989	1.7
##	211	1.9059792	0.79253197	0.33104897	0.1677532196	260.1893	57.81669	2.3
##	212	2.0434837	0.82755470	0.35683632	0.1917533875	260.0485	57.82678	3.4
##	213	2.0434837	0.82755470	0.35683632	0.1917533875	260.0485	57.82678	1.0
##	214	1.3255177	0.49008369	0.23445511	0.0782947540	260.4410	57.82431	5.1
##	215	1.3255177	0.49008369	0.23445511	0.0782947540	260.4410	57.82431	4.6
##	216	1.8469219	0.79199219	0.38150978	0.1766071320	260.2122	57.85269	3.0
##	217	1.4048328	0.63456154	0.27474976	0.1975593567	260.1830	57.86258	2.3
##	218	1.4048328	0.63456154	0.27474976	0.1975593567	260.1830	57.86258	2.4
##	219	1.2897854	0.59533882	0.28391075	0.2227535248	260.3890	57.77447	1.7
##	220	1.4629440	0.62971687	0.35889435	0.1645107269	260.6396	57.80106	1.4
##	221	1.4629440	0.62971687	0.35889435	0.1645107269	260.6396	57.80106	1.7
##	222	1.4629440	0.62971687	0.35889435	0.1645107269	260.6396	57.80106	2.6
##	223	1.4629440	0.62971687	0.35889435	0.1645107269	260.6396	57.80106	1.6
##	224	1.4629440	0.62971687	0.35889435	0.1645107269	260.6396	57.80106	1.5
##	225	1.4629440	0.62971687	0.35889435	0.1645107269	260.6396	57.80106	1.2
##	226	1.4629440	0.62971687	0.35889435	0.1645107269	260.6396	57.80106	1.5
##	227	1.4629440	0.62971687	0.35889435	0.1645107269	260.6396	57.80106	1.7
##	228	1.4629440	0.62971687	0.35889435	0.1645107269	260.6396	57.80106	1.5
##	229	1.5434513	0.66572571	0.27662849	0.1147823334	260.3218	57.79653	3.7
##	230	1.5434513	0.66572571	0.27662849	0.1147823334	260.3218	57.79653	1.6
##	231	1.7067127	0.60741806	0.27507973	0.0843868256	260.7551	57.78225	1.5
##	232	1.7067127	0.60741806	0.27507973	0.0843868256	260.7551	57.78225	1.4
##	233	1.7067127	0.60741806	0.27507973	0.0843868256	260.7551	57.78225	1.6
##	234	1.7067127	0.60741806	0.27507973	0.0843868256	260.7551	57.78225	1.5
##	235	1.7067127	0.60741806	0.27507973	0.0843868256	260.7551	57.78225	1.8
##	236	1.1946049	0.50110626	0.18741989	0.0596523285	260.5110	57.71728	3.9
##	237	1.3131676	0.61184883	0.22381020	0.0983734131	260.8740	57.74583	3.6
##	238	1.7316284	0.73789024	0.34158707	0.1659488678	260.7621	57.45814	2.3
##	239	1.7316284	0.73789024	0.34158707	0.1659488678	260.7621	57.45814	1.3
##	240	1.7316284	0.73789024	0.34158707	0.1659488678	260.7621	57.45814	1.3
##	241	1.7467098	0.64494896	0.26148033	0.1471309662	261.4852	57.54122	5.0
##	242	1.3673534	0.53021812	0.20828629	0.1022586823	261.3536	57.50975	2.6
##	243	1.3247585	0.50841904	0.23783112	0.0837631226	261.5749	57.73744	3.6
##	244	1.3138485	0.63127327	0.24982071	0.1554069519	261.3270	57.87781	4.6
##	245	1.4205856	0.62377167	0.28119659	0.1585426331	261.6633	57.87775	1.6
##	246	1.9066849	0.74715614	0.27551651	0.2097873688	261.4644	57.94272	4.8
##	247	1.6772404	0.73496628	0.25732803	0.1592006683	261.2342	57.95728	4.9
##	248	1.4577045	0.68560028	0.20579910	0.1666908264	260.9679	57.97544	1.9
##	249	1.8067455	0.77266884	0.34536552	0.1870784760	261.0149	58.01258	5.6
##	250	1.8067455	0.77266884	0.34536552	0.1870784760	261.0149	58.01258	5.6

##	251	1.0851536	0.38853836	0.14482880	0.0385265350	260.9305	58.24883	3.9
##	252	1.6270275	0.77193260	0.34259987	0.1589565277	260.6343	58.29636	3.6
##	253	1.6270275	0.77193260	0.34259987	0.1589565277	260.6343	58.29636	1.3
##	254	1.6270275	0.77193260	0.34259987	0.1589565277	260.6343	58.29636	1.1
##	255	1.6270275	0.77193260	0.34259987	0.1589565277	260.6343	58.29636	1.0
##	256	1.6270275	0.77193260	0.34259987	0.1589565277	260.6343	58.29636	2.1
##	257	1.6270275	0.77193260	0.34259987	0.1589565277	260.6343	58.29636	1.6
##	258	1.6270275	0.77193260	0.34259987	0.1589565277	260.6343	58.29636	1.2
##	259	1.6270275	0.77193260	0.34259987	0.1589565277	260.6343	58.29636	2.1
##	260	1.6270275	0.77193260	0.34259987	0.1589565277	260.6343	58.29636	1.2
##	261	1.6658745	0.77323914	0.33361053	0.1898689270	260.4273	58.24250	3.6
##	262	1.6658745	0.77323914	0.33361053	0.1898689270	260.4273	58.24250	1.2
##	263	1.6658745	0.77323914	0.33361053	0.1898689270	260.4273	58.24250	1.0
##	264	1.6658745	0.77323914	0.33361053	0.1898689270	260.4273	58.24250	1.3
##	265	1.6658745	0.77323914	0.33361053	0.1898689270	260.4273	58.24250	1.4
##	266	1.3806686	0.58542442	0.20565414	0.0288677216	260.6283	58.10236	3.1
##	267	1.5166550	0.64653778	0.27412415	0.2021007538	260.6216	58.08617	1.8
##	268	1.5166550	0.64653778	0.27412415	0.2021007538	260.6216	58.08617	1.5
##	269	1.5166550	0.64653778	0.27412415	0.2021007538	260.6216	58.08617	2.1
##	270	1.5166550	0.64653778	0.27412415	0.2021007538	260.6216	58.08617	3.0
##	271	1.3108559	0.62214661	0.27225494	0.1508121490	260.7431	58.02064	1.5
##	272	1.3993816	0.64719772	0.22807312	0.1680927277	260.5120	58.14322	1.3
##	273	1.3993816	0.64719772	0.22807312	0.1680927277	260.5120	58.14322	3.4
##	274	1.3993816	0.64719772	0.22807312	0.1680927277	260.5120	58.14322	2.2
##	275	1.6932926	0.66232109	0.31045914	0.0742282867	260.7860	58.01647	3.6
##	276	1.5859280	0.66675568	0.30817223	0.2115020752	260.5221	58.02969	1.3
##	277	1.5859280	0.66675568	0.30817223	0.2115020752	260.5221	58.02969	1.3
##	278	1.5859280	0.66675568	0.30817223	0.2115020752	260.5221	58.02969	2.2
##	279	1.5859280	0.66675568	0.30817223	0.2115020752	260.5221	58.02969	3.3
##	280	1.6449699	0.66039467	0.36691475	0.1417007446	260.6820	57.95853	1.7
##	281	1.6449699	0.66039467	0.36691475	0.1417007446	260.6820	57.95853	0.9
##	282	1.6449699	0.66039467	0.36691475	0.1417007446	260.6820	57.95853	1.5
##	283	1.6449699	0.66039467	0.36691475	0.1417007446	260.6820	57.95853	1.6
##	284	1.6449699	0.66039467	0.36691475	0.1417007446	260.6820	57.95853	1.1
##	285	1.5686722	0.57285881	0.31044960	0.1442012787	260.6520	58.05097	2.3
##	286	1.5686722	0.57285881	0.31044960	0.1442012787	260.6520	58.05097	1.3
##	287	1.5686722	0.57285881	0.31044960	0.1442012787	260.6520	58.05097	2.4
##	288	1.5686722	0.57285881	0.31044960	0.1442012787	260.6520	58.05097	1.1
##	289	1.5686722	0.57285881	0.31044960	0.1442012787	260.6520	58.05097	2.5
##	290	1.5686722	0.57285881	0.31044960	0.1442012787	260.6520	58.05097	2.3
##	291	1.6464405	0.65513992	0.28785133	0.1576004028	260.4033	57.97694	2.0
##	292	2.1179771	0.87588501	0.41214752	0.2022800446	260.4873	57.99272	2.9
##	293	2.1179771	0.87588501	0.41214752	0.2022800446	260.4873	57.99272	0.9
##	294	2.1179771	0.87588501	0.41214752	0.2022800446	260.4873	57.99272	1.0
##	295	1.7219810	0.77202034	0.37130356	0.1957607269	260.5467	57.94253	1.8
##	296	1.7219810	0.77202034	0.37130356	0.1957607269	260.5467	57.94253	1.7
##	297	1.6235733	0.76146507	0.28060913	0.1384181976	260.3428	58.03764	1.3
##	298	1.6235733	0.76146507	0.28060913	0.1384181976	260.3428	58.03764	1.3
##	299	1.6235733	0.76146507	0.28060913	0.1384181976	260.3428	58.03764	1.3
##	300	1.6235733	0.76146507	0.28060913	0.1384181976	260.3428	58.03764	1.4
##	301	1.6235733	0.76146507	0.28060913	0.1384181976	260.3428	58.03764	1.0
##	302	2.4423752	1.02651596	0.45251083	0.2384757996	260.2169	57.99661	1.0
##	303	2.1882057	0.80955887	0.37194824	0.2289237976	260.2634	57.93314	5.1
##	304	2.1882057	0.80955887	0.37194824	0.2289237976	260.2634	57.93314	1.0
##	305	2.1882057	0.80955887	0.37194824	0.2289237976	260.2634	57.93314	1.6
##	306	2.2348347	1.01665497	0.44452667	0.2480983734	260.2648	57.95228	1.5
##	307	2.2348347	1.01665497	0.44452667	0.2480983734	260.2648	57.95228	1.0
##	308	1.9396267	0.79371834	0.39380836	0.2074527740	260.1908	57.92811	4.4
##	309	1.7433167	0.77004433	0.36049271	0.1863098145	260.1421	57.97292	4.1
##	310	2.1233006	0.94838524	0.42973518	0.2393150330	260.5446	57.89928	1.5
##	311	2.1233006	0.94838524	0.42973518	0.2393150330	260.5446	57.89928	1.0
##	312	2.1233006	0.94838524	0.42973518	0.2393150330	260.5446	57.89928	1.0
##	313	2.1233006	0.94838524	0.42973518	0.2393150330	260.5446	57.89928	0.8
##	314	1.7514820	0.72179794	0.36255264	0.1758899689	260.0634	58.00972	3.2
##	315	2.2823372	0.95328522	0.42140388	0.2214698792	260.0563	57.86644	1.2
##	316	1.5276432	0.66842270	0.31089211	0.1704807281	259.8488	57.78967	3.1
##	317	1.5276432	0.66842270	0.31089211	0.1704807281	259.8488	57.78967	1.9
##	318	1.1507683	0.66142654	0.31783485	0.1355590820	259.8383	57.75828	2.9
##	319	1.1507683	0.66142654	0.31783485	0.1355590820	259.8383	57.75828	1.7
##	320	1.4528923	0.62735176	0.30803108	0.1264324188	259.7370	57.77458	1.7
##	321	1.4528923	0.62735176	0.30803108	0.1264324188	259.7370	57.77458	1.7
##	322	1.4528923	0.62735176	0.30803108	0.1264324188	259.7370	57.77458	1.9
##	323	1.9840469	0.78962517	0.33624268	0.1848869324	260.0222	57.83839	1.5
##	324	1.8569374	0.91941643	0.36170197	0.2170429230	259.6790	57.64714	0.8
##	325	1.8569374	0.91941643	0.36170197	0.2170429230	259.6790	57.64714	1.3
##	326	2.0773296	0.91461945	0.40106964	0.2054576874	260.0405	57.77483	1.1
##	327	2.0773296	0.91461945	0.40106964	0.2054576874	260.0405	57.77483	1.1
##	328	1.4988441	0.71872902	0.32018280	0.1907062531	260.0073	57.77961	2.3
##	329	1.4988441	0.71872902	0.32018280	0.1907062531	260.0073	57.77961	2.5

##	330	1.4988441	0.71872902	0.32018280	0.1907062531	260.0073	57.77961	1.6
##	331	1.2872181	0.50545692	0.17618942	0.0993251801	260.2743	57.41350	4.7
##	332	1.2872181	0.50545692	0.17618942	0.0993251801	260.2743	57.41350	4.8
##	333	1.1010818	0.43674088	0.08062172	0.1266765594	260.3496	57.42181	4.7
##	334	1.1010818	0.43674088	0.08062172	0.1266765594	260.3496	57.42181	4.0
##	335	1.7197762	0.76394081	0.32650757	0.1899433136	260.2525	57.82258	1.4
##	336	1.7197762	0.76394081	0.32650757	0.1899433136	260.2525	57.82258	1.7
##	337	1.3977661	0.62346268	0.24774361	0.1914596558	260.3372	57.87675	1.4
##	338	1.7227173	0.80035591	0.38510323	0.2367877960	260.4686	57.87689	1.5
##	339	1.7227173	0.80035591	0.38510323	0.2367877960	260.4686	57.87689	1.9
##	340	1.7227173	0.80035591	0.38510323	0.2367877960	260.4686	57.87689	1.2
##	341	1.7227173	0.80035591	0.38510323	0.2367877960	260.4686	57.87689	1.3
##	342	1.3590469	0.55347252	0.23369026	0.0906419754	260.8942	57.76906	4.9
##	343	1.3590469	0.55347252	0.23369026	0.0906419754	260.8942	57.76906	4.9
##	344	1.4698524	0.73062706	0.32913017	0.1474456787	260.3106	57.90322	1.0
##	345	1.2967052	0.65659332	0.33173370	0.1441612244	260.4721	57.93328	2.4
##	346	1.2967052	0.65659332	0.33173370	0.1441612244	260.4721	57.93328	1.6
##	347	1.2967052	0.65659332	0.33173370	0.1441612244	260.4721	57.93328	1.5
##	348	1.5119686	0.67741203	0.31748009	0.2052173615	260.2610	57.87908	1.1
##	349	1.5119686	0.67741203	0.31748009	0.2052173615	260.2610	57.87908	1.4
##	350	1.5119686	0.67741203	0.31748009	0.2052173615	260.2610	57.87908	1.7
##	351	1.5119686	0.67741203	0.31748009	0.2052173615	260.2610	57.87908	2.3
##	352	1.5119686	0.67741203	0.31748009	0.2052173615	260.2610	57.87908	2.0
##	353	1.5554161	0.63335800	0.34818077	0.1166076660	260.5412	57.96550	2.7
##	354	1.4534340	0.72203255	0.35994148	0.1613368988	260.5188	57.95417	0.9
##	355	1.4534340	0.72203255	0.35994148	0.1613368988	260.5188	57.95417	1.4
##	356	1.4534340	0.72203255	0.35994148	0.1613368988	260.5188	57.95417	1.1
##	357	1.4436054	0.52577400	0.26405525	0.1514644623	260.3612	57.92339	3.2
##	358	1.4927025	0.63055611	0.30821991	0.1545810699	260.2208	57.94103	1.2
##	359	1.4927025	0.63055611	0.30821991	0.1545810699	260.2208	57.94103	1.9
##	360	1.4927025	0.63055611	0.30821991	0.1545810699	260.2208	57.94103	1.5
##	361	1.4927025	0.63055611	0.30821991	0.1545810699	260.2208	57.94103	1.2
##	362	1.4927025	0.63055611	0.30821991	0.1545810699	260.2208	57.94103	1.3
##	363	1.4927025	0.63055611	0.30821991	0.1545810699	260.2208	57.94103	1.0
##	364	1.4927025	0.63055611	0.30821991	0.1545810699	260.2208	57.94103	1.0
##	365	1.4927025	0.63055611	0.30821991	0.1545810699	260.2208	57.94103	1.8
##	366	1.4927025	0.63055611	0.30821991	0.1545810699	260.2208	57.94103	1.6
##	367	1.4927025	0.63055611	0.30821991	0.1545810699	260.2208	57.94103	1.6
##	368	1.4608479	0.57400703	0.26868248	0.2181205750	260.3229	57.99703	1.6
##	369	1.4608479	0.57400703	0.26868248	0.2181205750	260.3229	57.99703	2.0
##	370	1.3530502	0.54646492	0.25322151	0.1361236572	260.1664	57.89328	2.2
##	371	1.4191380	0.68523979	0.23547173	0.0949554443	260.1482	57.93553	1.1
##	372	1.4658356	0.64023209	0.27405739	0.1698379517	260.2344	58.00739	1.7
##	373	1.4658356	0.64023209	0.27405739	0.1698379517	260.2344	58.00739	2.3
##	374	1.4658356	0.64023209	0.27405739	0.1698379517	260.2344	58.00739	1.3
##	375	1.2269783	0.63226128	0.27136612	0.1414928436	260.3399	58.10231	3.4
##	376	1.2269783	0.63226128	0.27136612	0.1414928436	260.3399	58.10231	2.0
##	377	1.2269783	0.63226128	0.27136612	0.1414928436	260.3399	58.10231	2.2
##	378	1.2269783	0.63226128	0.27136612	0.1414928436	260.3399	58.10231	1.4
##	379	1.2269783	0.63226128	0.27136612	0.1414928436	260.3399	58.10231	3.9
##	380	1.2269783	0.63226128	0.27136612	0.1414928436	260.3399	58.10231	2.3
##	381	1.2269783	0.63226128	0.27136612	0.1414928436	260.3399	58.10231	1.7
##	382	2.4295902	0.99771500	0.43732452	0.2382583618	260.1449	57.99911	0.9
##	383	1.2995529	0.64493752	0.29993439	0.1439590454	260.1440	57.97017	2.0
##	384	1.7028561	0.69632149	0.25707054	0.1496372223	260.1570	57.87128	1.6
##	385	1.7647877	0.75408936	0.37342072	0.2221813202	259.8205	58.26414	2.5
##	386	1.7647877	0.75408936	0.37342072	0.2221813202	259.8205	58.26414	2.4
##	387	1.7647877	0.75408936	0.37342072	0.2221813202	259.8205	58.26414	1.3
##	388	1.2403564	0.63504791	0.30876160	0.1872367859	260.0499	57.94144	1.6
##	389	1.6620178	0.70879936	0.32893562	0.1200752258	260.0064	57.96650	2.0
##	390	1.3573475	0.56356239	0.28113174	0.0671939850	260.0585	57.90694	3.1
##	391	1.4888401	0.72803116	0.35299492	0.1592864990	259.9774	57.95186	1.9
##	392	1.4888401	0.72803116	0.35299492	0.1592864990	259.9774	57.95186	1.5
##	393	1.4888401	0.72803116	0.35299492	0.1592864990	259.9774	57.95186	1.8
##	394	1.7591877	0.76180458	0.34614372	0.1421947479	259.5240	58.18958	1.9
##	395	1.7591877	0.76180458	0.34614372	0.1421947479	259.5240	58.18958	1.1
##	396	1.7591877	0.76180458	0.34614372	0.1421947479	259.5240	58.18958	1.6
##	397	1.7591877	0.76180458	0.34614372	0.1421947479	259.5240	58.18958	2.0
##	398	1.7591877	0.76180458	0.34614372	0.1421947479	259.5240	58.18958	1.2
##	399	1.7591877	0.76180458	0.34614372	0.1421947479	259.5240	58.18958	1.4
##	400	1.7591877	0.76180458	0.34614372	0.1421947479	259.5240	58.18958	1.0
##	401	1.7591877	0.76180458	0.34614372	0.1421947479	259.5240	58.18958	1.2
##	402	1.7591877	0.76180458	0.34614372	0.1421947479	259.5240	58.18958	1.3
##	403	1.4871902	0.63817024	0.32404137	0.1118621826	259.9575	58.00742	2.0
##	404	1.4871902	0.63817024	0.32404137	0.1118621826	259.9575	58.00742	1.3
##	405	1.4871902	0.63817024	0.32404137	0.1118621826	259.9575	58.00742	1.4
##	406	1.4871902	0.63817024	0.32404137	0.1118621826	259.9575	58.00742	2.2
##	407	1.4871902	0.63817024	0.32404137	0.1118621826	259.9575	58.00742	1.1
##	408	1.4871902	0.63817024	0.32404137	0.1118621826	259.9575	58.00742	1.6

##	409	1.4871902	0.63817024	0.32404137	0.1118621826	259.9575	58.00742	1.5
##	410	1.3059864	0.66644859	0.31198120	0.0652790070	259.9108	57.96700	2.4
##	411	1.3059864	0.66644859	0.31198120	0.0652790070	259.9108	57.96700	1.3
##	412	1.3059864	0.66644859	0.31198120	0.0652790070	259.9108	57.96700	2.4
##	413	1.3059864	0.66644859	0.31198120	0.0652790070	259.9108	57.96700	2.7
##	414	1.3059864	0.66644859	0.31198120	0.0652790070	259.9108	57.96700	3.2
##	415	1.3059864	0.66644859	0.31198120	0.0652790070	259.9108	57.96700	1.3
##	416	1.3059864	0.66644859	0.31198120	0.0652790070	259.9108	57.96700	3.4
##	417	1.3059864	0.66644859	0.31198120	0.0652790070	259.9108	57.96700	2.4
##	418	1.3059864	0.66644859	0.31198120	0.0652790070	259.9108	57.96700	1.2
##	419	1.3059864	0.66644859	0.31198120	0.0652790070	259.9108	57.96700	4.2
##	420	1.3059864	0.66644859	0.31198120	0.0652790070	259.9108	57.96700	3.6
##	421	1.6684208	0.71777153	0.34057426	0.1337051392	259.9989	57.91831	2.6
##	422	1.6684208	0.71777153	0.34057426	0.1337051392	259.9989	57.91831	1.7
##	423	1.6684208	0.71777153	0.34057426	0.1337051392	259.9989	57.91831	1.8
##	424	1.6684208	0.71777153	0.34057426	0.1337051392	259.9989	57.91831	1.6
##	425	2.5958118	1.10619354	0.48713112	0.2608804703	259.7951	57.98814	0.9
##	426	2.5958118	1.10619354	0.48713112	0.2608804703	259.7951	57.98814	0.7
##	427	1.6861534	0.61842537	0.23960114	0.1357889175	259.3330	58.15119	3.9
##	428	1.6861534	0.61842537	0.23960114	0.1357889175	259.3330	58.15119	3.8
##	429	1.6861534	0.61842537	0.23960114	0.1357889175	259.3330	58.15119	3.9
##	430	1.4076462	0.61191177	0.31828308	0.1162090302	260.0082	57.90619	1.7
##	431	1.4781914	0.68795204	0.32641792	0.1612873077	259.7228	57.97389	2.4
##	432	1.4781914	0.68795204	0.32641792	0.1612873077	259.7228	57.97389	0.9
##	433	1.4781914	0.68795204	0.32641792	0.1612873077	259.7228	57.97389	1.2
##	434	1.3905029	0.60417175	0.27368927	0.1678504944	259.5262	58.03206	2.9
##	435	1.3905029	0.60417175	0.27368927	0.1678504944	259.5262	58.03206	2.0
##	436	1.3905029	0.60417175	0.27368927	0.1678504944	259.5262	58.03206	3.0
##	437	1.3905029	0.60417175	0.27368927	0.1678504944	259.5262	58.03206	2.7
##	438	1.6720867	0.72007179	0.29329491	0.1645164490	259.8394	57.92711	2.6
##	439	1.6720867	0.72007179	0.29329491	0.1645164490	259.8394	57.92711	1.0
##	440	1.6720867	0.72007179	0.29329491	0.1645164490	259.8394	57.92711	1.6
##	441	1.6720867	0.72007179	0.29329491	0.1645164490	259.8394	57.92711	1.0
##	442	1.4139481	0.63170433	0.27126884	0.2506694794	259.7066	57.91686	1.6
##	443	1.4139481	0.63170433	0.27126884	0.2506694794	259.7066	57.91686	3.0
##	444	1.4963341	0.76116753	0.31388092	0.1646919250	259.9406	57.90772	1.2
##	445	1.4080467	0.77436256	0.29494858	0.1989517212	259.9092	57.89747	4.0
##	446	1.4826298	0.63308525	0.29092979	0.1316967010	259.7733	57.89950	2.5
##	447	1.4826298	0.63308525	0.29092979	0.1316967010	259.7733	57.89950	1.6
##	448	1.4777908	0.50688553	0.18145561	0.0848255157	259.4091	57.91161	4.7
##	449	1.4777908	0.50688553	0.18145561	0.0848255157	259.4091	57.91161	4.8
##	450	1.4777908	0.50688553	0.18145561	0.0848255157	259.4091	57.91161	4.6
##	451	1.4777908	0.50688553	0.18145561	0.0848255157	259.4091	57.91161	4.5
##	452	1.3454742	0.64298248	0.27224922	0.1630477905	259.2749	57.99264	2.6
##	453	1.3454742	0.64298248	0.27224922	0.1630477905	259.2749	57.99264	3.4
##	454	1.3454742	0.64298248	0.27224922	0.1630477905	259.2749	57.99264	1.2
##	455	1.3454742	0.64298248	0.27224922	0.1630477905	259.2749	57.99264	1.4
##	456	1.3420353	0.65405655	0.27203560	0.2298793793	259.5930	57.89639	1.9
##	457	1.3420353	0.65405655	0.27203560	0.2298793793	259.5930	57.89639	2.3
##	458	1.7146111	0.58484459	0.30554199	0.1043510437	259.2486	57.82600	1.8
##	459	1.7146111	0.58484459	0.30554199	0.1043510437	259.2486	57.82600	2.7
##	460	1.7146111	0.58484459	0.30554199	0.1043510437	259.2486	57.82600	4.1
##	461	1.7146111	0.58484459	0.30554199	0.1043510437	259.2486	57.82600	3.8
##	462	1.7146111	0.58484459	0.30554199	0.1043510437	259.2486	57.82600	4.6
##	463	1.5765495	0.68775940	0.34340096	0.1497383118	260.0503	57.88369	2.2
##	464	1.6396847	0.69783211	0.32522011	0.1963062286	259.9071	57.82181	3.0
##	465	1.6396847	0.69783211	0.32522011	0.1963062286	259.9071	57.82181	1.0
##	466	1.6396847	0.69783211	0.32522011	0.1963062286	259.9071	57.82181	1.8
##	467	1.7917824	0.83641624	0.37218094	0.2370319366	259.4423	57.70608	1.3
##	468	1.7917824	0.83641624	0.37218094	0.2370319366	259.4423	57.70608	1.1
##	469	1.7917824	0.83641624	0.37218094	0.2370319366	259.4423	57.70608	0.8
##	470	1.7917824	0.83641624	0.37218094	0.2370319366	259.4423	57.70608	0.9
##	471	1.7917824	0.83641624	0.37218094	0.2370319366	259.4423	57.70608	1.1
##	472	1.7917824	0.83641624	0.37218094	0.2370319366	259.4423	57.70608	0.9
##	473	1.7917824	0.83641624	0.37218094	0.2370319366	259.4423	57.70608	0.8
##	474	1.1260967	0.54248810	0.20382309	-0.0649127960	258.7309	57.62222	4.6
##	475	1.2749043	0.48426247	0.15589142	0.0665512085	258.7795	57.62736	4.1
##	476	1.2749043	0.48426247	0.15589142	0.0665512085	258.7795	57.62736	4.8
##	477	1.2749043	0.48426247	0.15589142	0.0665512085	258.7795	57.62736	4.0
##	478	1.4543285	0.58187103	0.21559334	0.0971584320	258.8857	57.62700	5.2
##	479	1.4543285	0.58187103	0.21559334	0.0971584320	258.8857	57.62700	5.1
##	480	1.4543285	0.58187103	0.21559334	0.0971584320	258.8857	57.62700	4.8
##	481	1.7364902	0.64806175	0.21721077	0.0945415497	258.9385	57.57000	4.7
##	482	1.7364902	0.64806175	0.21721077	0.0945415497	258.9385	57.57000	4.8
##	483	1.5118351	0.62322807	0.21191025	0.1223945618	258.9277	57.54614	4.7
##	484	1.5118351	0.62322807	0.21191025	0.1223945618	258.9277	57.54614	4.8
##	485	1.5118351	0.62322807	0.21191025	0.1223945618	258.9277	57.54614	5.0
##	486	1.8145218	0.74054718	0.26081276	0.1505756378	259.0148	57.60981	4.9
##	487	1.8145218	0.74054718	0.26081276	0.1505756378	259.0148	57.60981	5.0

##	488	1.2269154	0.47110748	0.15013313	0.0158195496	258.9146	57.52156	4.8
##	489	1.2269154	0.47110748	0.15013313	0.0158195496	258.9146	57.52156	4.5
##	490	1.4274845	0.57534027	0.21948814	0.1209106445	258.9423	57.58903	4.6
##	491	1.4274845	0.57534027	0.21948814	0.1209106445	258.9423	57.58903	4.7
##	492	1.9452019	0.83176804	0.30500603	0.2090549469	258.9747	57.61458	4.7
##	493	1.9452019	0.83176804	0.30500603	0.2090549469	258.9747	57.61458	5.3
##	494	1.0087261	0.45235634	0.15607452	0.0920886993	259.0404	57.51292	4.2
##	495	1.0087261	0.45235634	0.15607452	0.0920886993	259.0404	57.51292	3.9
##	496	1.1415672	0.53506660	0.21169662	0.1135330200	259.0635	57.48483	4.5
##	497	1.1415672	0.53506660	0.21169662	0.1135330200	259.0635	57.48483	5.0
##	498	1.5826721	0.57424927	0.16294479	0.0831527710	258.9591	57.53644	4.4
##	499	1.5826721	0.57424927	0.16294479	0.0831527710	258.9591	57.53644	4.5
##	500	1.5826721	0.57424927	0.16294479	0.0831527710	258.9591	57.53644	4.7
##	501	0.3047886	0.59676933	0.35510635	0.1987934113	259.1384	57.31642	4.6
##	502	0.3047886	0.59676933	0.35510635	0.1987934113	259.1384	57.31642	5.0
##	503	1.5086784	0.62890720	0.13830662	0.0851764679	259.1209	57.46453	4.7
##	504	1.5086784	0.62890720	0.13830662	0.0851764679	259.1209	57.46453	4.9
##	505	1.5086784	0.62890720	0.13830662	0.0851764679	259.1209	57.46453	4.9
##	506	1.4679775	0.63599205	0.23431015	0.1722812653	259.2624	57.35667	2.9
##	507	1.4679775	0.63599205	0.23431015	0.1722812653	259.2624	57.35667	1.7
##	508	1.4679775	0.63599205	0.23431015	0.1722812653	259.2624	57.35667	2.9
##	509	1.1973209	0.61370850	0.28304863	0.1323947906	260.2688	57.84661	1.6
##	510	1.1973209	0.61370850	0.28304863	0.1323947906	260.2688	57.84661	4.8
##	511	1.1973209	0.61370850	0.28304863	0.1323947906	260.2688	57.84661	3.3
##	512	1.7440834	0.75825310	0.32711983	0.1645927429	260.3107	57.87053	1.0
##	513	1.7440834	0.75825310	0.32711983	0.1645927429	260.3107	57.87053	1.1
##	514	1.7440834	0.75825310	0.32711983	0.1645927429	260.3107	57.87053	1.1
##	515	1.7440834	0.75825310	0.32711983	0.1645927429	260.3107	57.87053	1.7
##	516	1.3362026	0.63025284	0.32482338	0.1492023468	260.2574	57.83317	1.5
##	517	1.3362026	0.63025284	0.32482338	0.1492023468	260.2574	57.83317	1.3
##	518	1.3914719	0.58897018	0.25032234	0.0705814362	260.1551	57.85797	1.5
##	519	1.7786198	0.74739456	0.33288288	0.1549520493	260.2827	57.81175	1.6
##	520	1.7786198	0.74739456	0.33288288	0.1549520493	260.2827	57.81175	1.7
##	521	1.7936611	0.70726967	0.29137230	0.1580486298	260.1634	57.87633	1.5
##	522	1.7936611	0.70726967	0.29137230	0.1580486298	260.1634	57.87633	1.4
##	523	1.7936611	0.70726967	0.29137230	0.1580486298	260.1634	57.87633	1.9
##	524	1.4562798	0.66589928	0.29356194	0.1660556793	259.9300	57.87631	1.5
##	525	1.4562798	0.66589928	0.29356194	0.1660556793	259.9300	57.87631	1.8
##	526	1.4562798	0.66589928	0.29356194	0.1660556793	259.9300	57.87631	3.0
##	527	1.4562798	0.66589928	0.29356194	0.1660556793	259.9300	57.87631	2.1
##	528	1.4562798	0.66589928	0.29356194	0.1660556793	259.9300	57.87631	2.7
##	529	1.4562798	0.66589928	0.29356194	0.1660556793	259.9300	57.87631	2.5
##	530	1.4562798	0.66589928	0.29356194	0.1660556793	259.9300	57.87631	1.6
##	531	1.4562798	0.66589928	0.29356194	0.1660556793	259.9300	57.87631	2.8
##	532	1.4562798	0.66589928	0.29356194	0.1660556793	259.9300	57.87631	2.2
##	533	1.4822426	0.70577812	0.31727791	0.1683940887	260.1635	57.95742	1.6
##	534	1.4822426	0.70577812	0.31727791	0.1683940887	260.1635	57.95742	2.5
##	535	1.6728783	0.70849419	0.36137390	0.1617107391	260.2005	57.91569	1.3
##	536	1.6728783	0.70849419	0.36137390	0.1617107391	260.2005	57.91569	3.6
##	537	1.7370834	0.71508217	0.36018753	0.1602325439	260.0432	57.88681	1.2
##	538	1.7370834	0.71508217	0.36018753	0.1602325439	260.0432	57.88681	1.1
##	539	1.3838444	0.61033249	0.29049683	0.1205348969	259.9348	58.01619	1.6
##	540	1.3838444	0.61033249	0.29049683	0.1205348969	259.9348	58.01619	1.7
##	541	1.4225483	0.66015434	0.29979706	0.1054859161	259.7847	57.96406	1.4
##	542	1.4225483	0.66015434	0.29979706	0.1054859161	259.7847	57.96406	1.6
##	543	1.3263016	0.62765121	0.25020981	0.1510963440	259.7994	57.90778	1.5
##	544	1.3263016	0.62765121	0.25020981	0.1510963440	259.7994	57.90778	1.2
##	545	1.3317833	0.54703140	0.20206261	0.1406898499	259.3310	57.90378	4.7
##	546	1.3317833	0.54703140	0.20206261	0.1406898499	259.3310	57.90378	5.1
##	547	1.7653694	0.71736908	0.32418633	0.1192016602	258.7193	58.02222	4.9
##	548	1.7653694	0.71736908	0.32418633	0.1192016602	258.7193	58.02222	4.3
##	549	1.3269100	0.63056946	0.31432533	0.0517196655	259.3902	57.68389	1.6
##	550	1.3269100	0.63056946	0.31432533	0.0517196655	259.3902	57.68389	1.9
##	551	1.3269100	0.63056946	0.31432533	0.0517196655	259.3902	57.68389	1.8
##	552	1.3269100	0.63056946	0.31432533	0.0517196655	259.3902	57.68389	2.4
##	553	1.1850758	0.45641136	0.15228653	0.0765972137	260.1292	57.13494	4.0
##	554	1.2294102	0.48006630	0.23765182	0.0243663788	260.2920	57.09183	4.0
##	555	1.5831566	0.70058823	0.29607010	0.1572961807	260.2833	57.34361	2.2
##	556	1.8623600	0.70281029	0.26780701	0.1211442947	260.6451	57.07367	4.0
##	557	1.8644123	0.69964409	0.27272415	0.1303730011	260.5370	57.15519	4.9
##	558	1.1865196	0.56041145	0.25732613	0.1179122925	260.6650	57.13719	1.5
##	559	1.3743095	0.54475594	0.32139969	0.1222133636	260.2437	57.85067	1.4
##	560	1.4089794	0.62258530	0.30206108	0.1794567108	260.2466	57.79481	1.0
##	561	1.4089794	0.62258530	0.30206108	0.1794567108	260.2466	57.79481	1.0
##	562	1.2833748	0.42939568	0.16246796	0.0733299255	260.2819	57.87169	2.2
##	563	1.2833748	0.42939568	0.16246796	0.0733299255	260.2819	57.87169	1.4
##	564	1.2833748	0.42939568	0.16246796	0.0733299255	260.2819	57.87169	2.1
##	565	1.5943813	0.63245392	0.30830383	0.2090740204	260.0818	57.90061	2.3
##	566	1.5360661	0.62733459	0.33697128	0.1759586334	260.0539	57.90083	1.1

##	567	1.5360661	0.62733459	0.33697128	0.1759586334	260.0539	57.90083	1.4
##	568	1.5881958	0.62601089	0.31031418	0.0869827271	260.0452	57.88264	1.6
##	569	1.5881958	0.62601089	0.31031418	0.0869827271	260.0452	57.88264	3.0
##	570	1.7932701	0.67884254	0.32177162	0.2107067108	260.0236	57.88436	1.5
##	571	1.7932701	0.67884254	0.32177162	0.2107067108	260.0236	57.88436	1.5
##	572	1.7932701	0.67884254	0.32177162	0.2107067108	260.0236	57.88436	2.1
##	573	2.0713463	0.93774223	0.40473557	0.2203464508	259.7400	57.90394	1.3
##	574	2.0713463	0.93774223	0.40473557	0.2203464508	259.7400	57.90394	1.3
##	575	1.4895096	0.68304634	0.24545670	0.1155052185	259.9298	57.88367	1.8
##	576	1.4826603	0.56194687	0.24268913	0.1718292236	259.0373	58.23594	4.2
##	577	2.0619926	0.85257149	0.37278748	0.2051620483	259.3427	58.12372	1.4
##	578	2.0619926	0.85257149	0.37278748	0.2051620483	259.3427	58.12372	2.6
##	579	2.0619926	0.85257149	0.37278748	0.2051620483	259.3427	58.12372	1.4
##	580	2.0619926	0.85257149	0.37278748	0.2051620483	259.3427	58.12372	1.5
##	581	2.0619926	0.85257149	0.37278748	0.2051620483	259.3427	58.12372	1.3
##	582	2.0619926	0.85257149	0.37278748	0.2051620483	259.3427	58.12372	1.5
##	583	2.0619926	0.85257149	0.37278748	0.2051620483	259.3427	58.12372	1.6
##	584	2.0619926	0.85257149	0.37278748	0.2051620483	259.3427	58.12372	1.7
##	585	2.6660175	1.44934273	0.74876595	0.4184885025	259.4420	58.22303	5.2
##	586	1.4684429	0.62198830	0.30615044	0.0241260529	259.3088	58.18014	2.3
##	587	1.4684429	0.62198830	0.30615044	0.0241260529	259.3088	58.18014	2.2
##	588	1.4684429	0.62198830	0.30615044	0.0241260529	259.3088	58.18014	2.7
##	589	1.4684429	0.62198830	0.30615044	0.0241260529	259.3088	58.18014	1.2
##	590	1.4684429	0.62198830	0.30615044	0.0241260529	259.3088	58.18014	1.2
##	591	1.4684429	0.62198830	0.30615044	0.0241260529	259.3088	58.18014	1.8
##	592	1.5405369	0.59816170	0.27443886	0.2023944855	259.7771	58.41464	2.9
##	593	1.4520874	0.68716621	0.29767799	0.1905326843	259.7493	58.10814	1.1
##	594	1.4520874	0.68716621	0.29767799	0.1905326843	259.7493	58.10814	2.1
##	595	1.4520874	0.68716621	0.29767799	0.1905326843	259.7493	58.10814	1.8
##	596	1.4520874	0.68716621	0.29767799	0.1905326843	259.7493	58.10814	1.7
##	597	1.4520874	0.68716621	0.29767799	0.1905326843	259.7493	58.10814	1.1
##	598	2.4539490	1.07271004	0.45840263	0.2487239838	259.6760	57.98611	1.0
##	599	2.4539490	1.07271004	0.45840263	0.2487239838	259.6760	57.98611	0.8
##	600	2.4539490	1.07271004	0.45840263	0.2487239838	259.6760	57.98611	0.8
##	601	2.4539490	1.07271004	0.45840263	0.2487239838	259.6760	57.98611	0.8
##	602	2.4539490	1.07271004	0.45840263	0.2487239838	259.6760	57.98611	0.8
##	603	2.4539490	1.07271004	0.45840263	0.2487239838	259.6760	57.98611	0.9
##	604	2.4539490	1.07271004	0.45840263	0.2487239838	259.6760	57.98611	1.0
##	605	1.5962696	0.66993141	0.29729462	0.1915912628	259.7923	58.13517	1.9
##	606	1.5962696	0.66993141	0.29729462	0.1915912628	259.7923	58.13517	0.9
##	607	1.5962696	0.66993141	0.29729462	0.1915912628	259.7923	58.13517	1.0
##	608	1.5962696	0.66993141	0.29729462	0.1915912628	259.7923	58.13517	1.2
##	609	1.5962696	0.66993141	0.29729462	0.1915912628	259.7923	58.13517	1.7
##	610	1.5235863	0.73962975	0.33312607	0.1496982574	259.9045	58.08892	2.2
##	611	1.8235435	0.80222321	0.33128548	0.1945209503	259.8405	58.01125	1.0
##	612	2.2453785	0.97982979	0.43522835	0.1998939514	259.9545	58.07556	0.9
##	613	1.3774319	0.61819839	0.24216843	0.1551837921	260.2742	58.08192	1.4
##	614	1.8850365	1.02386665	0.43548012	0.1958923340	259.9327	58.37842	4.1
##	615	2.0185509	0.85757065	0.35140991	0.1955661774	260.2701	58.03364	1.0
##	616	2.0185509	0.85757065	0.35140991	0.1955661774	260.2701	58.03364	1.3
##	617	2.0185509	0.85757065	0.35140991	0.1955661774	260.2701	58.03364	1.1
##	618	2.0185509	0.85757065	0.35140991	0.1955661774	260.2701	58.03364	1.1
##	619	2.0185509	0.85757065	0.35140991	0.1955661774	260.2701	58.03364	1.2
##	620	2.3865623	0.95225716	0.31541157	0.1556568146	260.4848	58.72172	5.1
##	621	1.6855412	0.73808289	0.25218010	0.1073150635	260.3896	58.85006	5.2
##	622	1.6855412	0.73808289	0.25218010	0.1073150635	260.3896	58.85006	5.1
##	623	1.9315910	0.76785088	0.25975227	0.0981636047	260.3582	58.84372	4.9
##	624	1.4096375	0.53358459	0.19600868	0.0778560638	260.2246	58.87192	4.7
##	625	1.4573536	0.53523254	0.18326950	0.0485267639	260.2374	58.84886	4.7
##	626	1.5101089	0.59736633	0.18577766	0.1004009247	260.1633	58.85533	5.0
##	627	1.5382214	0.57892418	0.20663071	0.0798645020	260.3306	58.86911	5.0
##	628	1.9877071	0.81687164	0.31882668	0.1989040375	259.9981	58.88575	5.1
##	629	1.4607506	0.68892860	0.27147675	0.2031021118	260.0208	58.89417	5.1
##	630	1.2758408	0.56004715	0.24069023	0.1675891876	259.6241	58.74625	4.4
##	631	1.2758408	0.56004715	0.24069023	0.1675891876	259.6241	58.74625	3.6
##	632	1.2758408	0.56004715	0.24069023	0.1675891876	259.6241	58.74625	4.8
##	633	1.4341755	0.57822227	0.25481987	0.0895500183	259.6736	58.79658	3.5
##	634	1.8541260	0.69846916	0.25478268	0.1171369553	259.5341	58.57331	4.0
##	635	1.4259300	0.60571098	0.26650238	0.1830844879	258.9359	58.52483	2.1
##	636	1.4391556	0.66377258	0.29742241	0.1827411652	259.0963	58.51164	5.4
##	637	1.5594864	0.70405388	0.29853630	0.1373310089	259.1422	58.49883	2.2
##	638	2.2820339	0.85303688	0.35331535	0.1515483856	259.0255	58.47150	3.5
##	639	1.6695709	0.71872139	0.29886055	0.1206779480	260.4148	57.36514	4.3
##	640	1.6695709	0.71872139	0.29886055	0.1206779480	260.4148	57.36514	5.1
##	641	1.5440388	0.55403709	0.25882339	0.1860656738	260.8085	57.15375	3.2
##	642	1.5440388	0.55403709	0.25882339	0.1860656738	260.8085	57.15375	4.0
##	643	1.4858379	0.49155998	0.15328217	0.0699615479	260.3856	57.42344	4.3
##	644	1.7342091	0.72609329	0.32887840	0.2098369598	260.6130	57.76511	1.1
##	645	1.7342091	0.72609329	0.32887840	0.2098369598	260.6130	57.76511	1.3

##	646	1.2844048	0.56601906	0.26107216	0.1777553558	260.1618	57.95681	3.5
##	647	2.5015869	0.96619797	0.40504837	0.2520561218	262.5555	58.24208	5.0
##	648	1.1175060	0.46454430	0.21766472	0.0264816284	262.8343	57.93803	4.7
##	649	1.3913269	0.54786873	0.24131775	0.1261692047	262.9388	58.15181	1.7
##	650	1.2275715	0.48402214	0.23234177	0.1551895142	262.9508	57.94556	3.8
##	651	1.9711475	0.83984375	0.37106895	0.1894149780	263.0305	57.93842	4.8
##	652	1.9711475	0.83984375	0.37106895	0.1894149780	263.0305	57.93842	4.9
##	653	1.5866432	0.73106194	0.30397797	0.1916961670	262.9330	58.35397	4.6
##	654	1.8075142	0.80347633	0.27645874	0.1213188171	263.2908	58.07519	5.1
##	655	1.6616421	0.72789001	0.24520302	0.1329345703	263.1751	58.14847	2.3
##	656	1.8428288	0.77817726	0.33777237	0.1912765503	263.4161	58.05817	4.9
##	657	1.3779774	0.52812576	0.27068710	0.1122169495	263.3082	57.99483	2.8
##	658	2.0995045	0.86781693	0.34047890	0.1806068420	263.4846	58.14231	5.0
##	659	1.8872185	1.22913742	0.45949936	0.2605342865	263.4213	58.26492	4.2
##	660	2.0497417	0.84625435	0.33415985	0.1948337555	263.5701	58.35308	5.0
##	661	2.3027611	0.97651482	0.38806343	0.2168045044	263.3005	58.42447	5.2
##	662	1.3191795	0.51302147	0.17928505	0.0301055908	263.2950	58.52869	3.3
##	663	1.1598148	0.48027039	0.21458435	0.1004486084	263.2375	58.53536	3.1
##	664	1.9506226	0.80798721	0.27996635	0.1535758972	263.1263	58.59000	4.8
##	665	1.6830750	0.69111252	0.28586006	0.0927715302	263.0446	58.57925	5.1
##	666	1.5841618	0.66264915	0.22448158	0.1927547455	262.9374	58.50647	4.7
##	667	1.2528648	0.58065224	0.23355293	0.1805496216	262.8785	58.54278	2.9
##	668	1.9876919	0.84318924	0.29733276	0.1645660400	262.8646	58.41703	5.1
##	669	1.4810963	0.69565582	0.30891228	0.2032661438	262.8414	58.44206	5.1
##	670	2.4108257	1.13136482	0.45215034	0.1999607086	262.7600	58.53464	5.2
##	671	1.9292679	0.71483231	0.22759438	-0.1540031433	262.5190	58.74633	3.6
##	672	0.9192410	0.70119095	0.19633865	0.1284294128	262.6916	58.50639	4.9
##	673	1.2830219	0.57629776	0.24762154	0.1312046051	262.8125	58.42494	3.2
##	674	1.2251701	0.48250580	0.16348648	0.0700855255	258.8775	57.53392	4.0
##	675	1.3750973	0.74253464	0.33747101	0.1577186584	260.0210	57.93847	1.7
##	676	1.6770515	0.64394760	0.29740715	0.1838169098	260.1982	57.90236	2.2
##	677	1.6770515	0.64394760	0.29740715	0.1838169098	260.1982	57.90236	1.4
##	678	1.6770515	0.64394760	0.29740715	0.1838169098	260.1982	57.90236	1.4
##	679	1.6770515	0.64394760	0.29740715	0.1838169098	260.1982	57.90236	1.1
##	680	1.6770515	0.64394760	0.29740715	0.1838169098	260.1982	57.90236	1.3
##	681	1.6770515	0.64394760	0.29740715	0.1838169098	260.1982	57.90236	1.8
##	682	1.6770515	0.64394760	0.29740715	0.1838169098	260.1982	57.90236	1.4
##	683	1.6770515	0.64394760	0.29740715	0.1838169098	260.1982	57.90236	1.2
##	684	1.7257538	0.72976875	0.26504707	0.2133560181	259.1377	57.41294	4.9
##	685	1.7257538	0.72976875	0.26504707	0.2133560181	259.1377	57.41294	4.8
##	686	1.7257538	0.72976875	0.26504707	0.2133560181	259.1377	57.41294	5.4
##	687	1.7257538	0.72976875	0.26504707	0.2133560181	259.1377	57.41294	5.1
##	688	2.1406040	0.81692886	0.25819778	0.1783447266	259.0808	57.46031	5.3
##	689	1.7019558	0.70851898	0.23807716	0.1732826233	258.9713	57.51736	5.3
##	690	0.9640923	0.41324425	0.11030388	0.1414661407	258.9010	57.58369	4.8
##	691	0.9640923	0.41324425	0.11030388	0.1414661407	258.9010	57.58369	2.1
##	692	1.4749231	0.50987911	0.17975903	0.0517425537	258.9129	57.59597	4.3
##	693	1.1697140	0.49547577	0.21287537	0.0937385559	258.9850	57.59717	3.6
##	694	1.8083248	0.70636368	0.27417374	0.1797523499	258.9390	57.58000	4.9
##	695	1.7925491	0.70466232	0.26584625	0.1525726318	258.7850	57.56514	4.9
##	696	1.2461033	0.59817314	0.28927040	0.1357307434	262.0855	58.05028	4.5
##	697	1.2461033	0.59817314	0.28927040	0.1357307434	262.0855	58.05028	4.9
##	698	1.8274784	0.82099915	0.36653709	0.2219409943	261.9098	58.26308	0.9
##	699	1.8274784	0.82099915	0.36653709	0.2219409943	261.9098	58.26308	1.2
##	700	1.8274784	0.82099915	0.36653709	0.2219409943	261.9098	58.26308	1.0
##	701	2.1655350	0.79164219	0.28977871	0.1331434250	261.9182	58.28853	4.9
##	702	1.5282764	0.67072868	0.23872948	0.1497764587	261.8919	58.41278	5.2
##	703	1.5282764	0.67072868	0.23872948	0.1497764587	261.8919	58.41278	4.8
##	704	1.2529869	0.46168709	0.16302299	0.0079784393	261.9478	58.70875	2.0
##	705	1.2877674	0.45348358	0.17262077	0.0876369476	261.7180	58.55928	4.0
##	706	1.6937656	0.65830803	0.32013321	0.1363906860	261.7112	58.47267	1.7
##	707	2.0585766	0.85129166	0.30500412	0.2043285370	261.8240	58.74328	5.2
##	708	1.4927425	0.62090492	0.26711655	0.1807670593	261.5848	58.45422	2.3
##	709	2.6117611	0.66291618	0.27684402	0.1823215485	261.4968	58.74478	5.4
##	710	1.2563572	0.56384087	0.23368835	0.0761108398	260.9928	58.23353	2.7
##	711	1.3293324	0.54819489	0.18142509	0.0906848907	261.9041	57.61508	4.5
##	712	1.5532017	1.12379074	0.44053459	0.3657302856	262.0496	57.62369	3.0
##	713	1.4354267	1.57764435	0.57907486	0.3790435791	262.0826	57.63928	3.2
##	714	2.2971535	1.01207733	0.40559387	0.2225914001	262.8084	57.36583	5.1
##	715	1.6171188	0.62696266	0.22830963	0.0670509338	263.0761	57.35167	4.9
##	716	1.6031494	0.71024513	0.27625275	0.1073474884	262.8259	57.56481	1.2
##	717	1.5417461	0.50329971	0.25783730	0.1372451782	262.9558	57.95386	3.8
##	718	1.7080154	0.72559166	0.24357796	0.1808032990	262.8508	58.02692	4.9
##	719	2.2239113	1.01482964	0.38074684	0.2331447601	262.8363	58.05939	4.8
##	720	1.2718563	1.22524834	0.37837219	0.4253673553	262.3057	57.77258	4.4
##	721	2.1703930	1.24529076	0.49509048	0.4260730743	262.2612	57.73631	3.5
##	722	1.9229565	1.06324577	0.44132614	0.3396644592	257.6145	58.28606	5.4
##	723	1.8706436	0.86764336	0.33189583	0.1900577545	257.1401	58.27417	2.0
##	724	2.0617561	0.79126358	0.29155827	0.1528930664	257.5338	58.09119	3.1

##	725	1.5796185	0.83481407	0.29100800	0.1978588104	258.4548	58.17942	1.6
##	726	1.7815018	0.75850487	0.30234909	0.2092933655	258.2557	58.34958	4.7
##	727	1.8656349	0.84255600	0.32985497	0.2223339081	258.1907	58.35264	4.6
##	728	1.8629055	0.87388039	0.33897591	0.2451534271	258.1387	58.44742	5.1
##	729	1.0754204	0.51320457	0.20977211	0.1292419434	258.0864	58.66203	4.5
##	730	1.8134441	0.72588921	0.24427605	0.1565790176	257.9237	58.67772	3.7
##	731	1.3651581	0.53285599	0.19289207	0.1051254272	257.6646	58.71617	4.4
##	732	2.0499763	0.81049728	0.31400108	0.2227344513	257.7569	58.69842	5.1
##	733	1.7979183	0.68690872	0.19572830	0.0965957642	257.7047	58.63714	4.8
##	734	1.1709576	0.53981781	0.26626205	0.1440620422	257.7757	58.48139	2.2
##	735	1.1952705	0.42269325	0.16328812	0.0871028900	257.5534	58.66969	4.6
##	736	2.4855556	1.08310699	0.48179054	0.2460756302	259.9954	57.95581	1.1
##	737	1.7697773	0.74643326	0.34269524	0.1902885437	259.3372	58.03258	1.7
##	738	1.7697773	0.74643326	0.34269524	0.1902885437	259.3372	58.03258	1.9
##	739	1.7697773	0.74643326	0.34269524	0.1902885437	259.3372	58.03258	1.5
##	740	1.6760120	0.74535942	0.31901741	0.2310180664	259.4220	58.01219	1.6
##	741	1.5612431	0.60192680	0.25720024	0.1666126251	259.3585	58.04086	3.8
##	742	1.6378098	0.74553680	0.34949684	0.2251815796	259.4108	57.98183	2.3
##	743	1.6378098	0.74553680	0.34949684	0.2251815796	259.4108	57.98183	1.9
##	744	1.6378098	0.74553680	0.34949684	0.2251815796	259.4108	57.98183	1.0
##	745	1.2267876	0.52561378	0.23605347	0.1173934937	259.2333	57.97672	3.0
##	746	1.4983807	0.58193398	0.32453728	0.0786952972	260.0297	57.88264	1.2
##	747	2.2445164	0.89254570	0.38696671	0.1593208313	257.4518	57.00311	4.5
##	748	1.4631290	0.62726593	0.25207901	0.2222385406	259.3576	57.68792	5.3
##	749	1.4631290	0.62726593	0.25207901	0.2222385406	259.3576	57.68792	5.2
##	750	1.4631290	0.62726593	0.25207901	0.2222385406	259.3576	57.68792	3.7
##	751	1.4631290	0.62726593	0.25207901	0.2222385406	259.3576	57.68792	4.3
##	752	1.4631290	0.62726593	0.25207901	0.2222385406	259.3576	57.68792	4.9
##	753	1.4631290	0.62726593	0.25207901	0.2222385406	259.3576	57.68792	5.0
##	754	1.4631290	0.62726593	0.25207901	0.2222385406	259.3576	57.68792	4.2
##	755	1.8962078	0.71447945	0.25691605	0.1763610840	259.4770	57.74714	5.2
##	756	1.8962078	0.71447945	0.25691605	0.1763610840	259.4770	57.74714	4.9
##	757	2.5039997	1.18723679	0.41103935	0.2492294312	259.9091	57.89342	5.4
##	758	1.5860367	0.62250328	0.22922707	0.0210990906	259.2277	57.68647	4.7
##	759	1.5860367	0.62250328	0.22922707	0.0210990906	259.2277	57.68647	5.1
##	760	1.5860367	0.62250328	0.22922707	0.0210990906	259.2277	57.68647	5.1
##	761	2.2646580	0.99764061	0.33458519	0.2185249329	259.6461	57.75356	5.3
##	762	2.2646580	0.99764061	0.33458519	0.2185249329	259.6461	57.75356	5.3
##	763	1.7178211	0.77812576	0.32898903	0.2026977539	259.8333	57.81803	1.6
##	764	1.9069366	0.87479019	0.33381462	0.2056102753	259.7382	57.78017	5.1
##	765	1.9069366	0.87479019	0.33381462	0.2056102753	259.7382	57.78017	4.2
##	766	2.5454674	1.20812225	0.45935631	0.2637023926	259.3594	57.58633	4.8
##	767	2.5454674	1.20812225	0.45935631	0.2637023926	259.3594	57.58633	5.2
##	768	2.3254223	1.00232315	0.31938744	0.1999092102	259.7736	57.77347	4.8
##	769	2.3254223	1.00232315	0.31938744	0.1999092102	259.7736	57.77347	4.9
##	770	1.5079403	0.53648376	0.27637863	-0.1121978760	259.5077	57.60078	5.0
##	771	1.5079403	0.53648376	0.27637863	-0.1121978760	259.5077	57.60078	5.2
##	772	1.5079403	0.53648376	0.27637863	-0.1121978760	259.5077	57.60078	4.1
##	773	1.9708481	0.82757568	0.30472183	0.1362934113	259.3767	57.62069	5.4
##	774	1.9708481	0.82757568	0.30472183	0.1362934113	259.3767	57.62069	5.2
##	775	1.9708481	0.82757568	0.30472183	0.1362934113	259.3767	57.62069	5.2
##	776	1.9708481	0.82757568	0.30472183	0.1362934113	259.3767	57.62069	5.3
##	777	1.9708481	0.82757568	0.30472183	0.1362934113	259.3767	57.62069	5.4
##	778	1.9708481	0.82757568	0.30472183	0.1362934113	259.3767	57.62069	5.1
##	779	1.9708481	0.82757568	0.30472183	0.1362934113	259.3767	57.62069	5.1
##	780	1.6876183	0.74328423	0.33575439	0.1763954163	259.7138	57.70444	1.2
##	781	1.6876183	0.74328423	0.33575439	0.1763954163	259.7138	57.70444	1.6
##	782	2.4359150	1.04173660	0.33018875	0.2246608734	259.7794	57.65542	5.5
##	783	2.4359150	1.04173660	0.33018875	0.2246608734	259.7794	57.65542	5.4
##	784	2.9917183	1.17779922	0.34352684	0.3883609772	260.0029	57.89628	0.7
##	785	2.9917183	1.17779922	0.34352684	0.3883609772	260.0029	57.89628	0.7
##	786	1.9729137	0.79543304	0.28944397	0.2348423004	259.8624	57.77961	4.9
##	787	1.9729137	0.79543304	0.28944397	0.2348423004	259.8624	57.77961	5.3
##	788	1.3459244	0.63656425	0.28776169	-0.0069675446	259.7251	57.53158	4.7
##	789	1.3459244	0.63656425	0.28776169	-0.0069675446	259.7251	57.53158	4.8
##	790	2.5336246	1.09977531	0.46011353	0.2747097015	259.9488	57.81017	0.8
##	791	2.5336246	1.09977531	0.46011353	0.2747097015	259.9488	57.81017	0.8
##	792	1.8710766	0.66836166	0.42993736	0.0920753479	259.8745	57.80464	1.2
##	793	1.8710766	0.66836166	0.42993736	0.0920753479	259.8745	57.80464	1.3
##	794	1.8710766	0.66836166	0.42993736	0.0920753479	259.8745	57.80464	1.3
##	795	2.4971886	1.05151176	0.39369583	0.2072467804	259.8123	57.49233	5.3
##	796	2.4971886	1.05151176	0.39369583	0.2072467804	259.8123	57.49233	5.2
##	797	2.4971886	1.05151176	0.39369583	0.2072467804	259.8123	57.49233	5.1
##	798	2.4971886	1.05151176	0.39369583	0.2072467804	259.8123	57.49233	5.1
##	799	2.4971886	1.05151176	0.39369583	0.2072467804	259.8123	57.49233	5.2
##	800	2.4971886	1.05151176	0.39369583	0.2072467804	259.8123	57.49233	5.3
##	801	2.4971886	1.05151176	0.39369583	0.2072467804	259.8123	57.49233	5.2
##	802	2.4971886	1.05151176	0.39369583	0.2072467804	259.8123	57.49233	5.0
##	803	2.4971886	1.05151176	0.39369583	0.2072467804	259.8123	57.49233	5.2

##	804	2.4971886	1.05151176	0.39369583	0.2072467804	259.8123	57.49233	5.2
##	805	1.7222137	0.41563606	0.64360809	0.0922565460	259.8918	57.61903	5.2
##	806	1.7222137	0.41563606	0.64360809	0.0922565460	259.8918	57.61903	5.3
##	807	1.3313313	1.26946259	0.28682327	0.4145240784	259.9903	57.83486	0.9
##	808	1.3313313	1.26946259	0.28682327	0.4145240784	259.9903	57.83486	0.8
##	809	1.1298809	0.52985191	0.22843170	0.0805892944	259.9404	57.67847	3.6
##	810	1.1298809	0.52985191	0.22843170	0.0805892944	259.9404	57.67847	4.8
##	811	2.3511906	1.01512909	0.37150383	0.2004966736	260.0901	57.44303	5.4
##	812	2.3511906	1.01512909	0.37150383	0.2004966736	260.0901	57.44303	5.2
##	813	2.3511906	1.01512909	0.37150383	0.2004966736	260.0901	57.44303	5.2
##	814	2.3511906	1.01512909	0.37150383	0.2004966736	260.0901	57.44303	5.0
##	815	2.3511906	1.01512909	0.37150383	0.2004966736	260.0901	57.44303	5.1
##	816	2.3511906	1.01512909	0.37150383	0.2004966736	260.0901	57.44303	5.2
##	817	2.3511906	1.01512909	0.37150383	0.2004966736	260.0901	57.44303	5.3
##	818	2.3511906	1.01512909	0.37150383	0.2004966736	260.0901	57.44303	5.3
##	819	2.4484100	0.94398689	0.34568977	0.1785469055	260.0472	57.71658	5.3
##	820	2.4484100	0.94398689	0.34568977	0.1785469055	260.0472	57.71658	5.1
##	821	1.5187149	0.65589905	0.19984627	0.2385692596	260.0480	57.44325	5.2
##	822	1.5187149	0.65589905	0.19984627	0.2385692596	260.0480	57.44325	4.7
##	823	1.5187149	0.65589905	0.19984627	0.2385692596	260.0480	57.44325	4.9
##	824	1.5187149	0.65589905	0.19984627	0.2385692596	260.0480	57.44325	4.1
##	825	1.6750259	0.69892883	0.37666321	0.1877326965	260.0310	57.90908	1.4
##	826	2.2065086	1.00502968	0.44270706	0.1953353882	259.9838	57.44578	5.0
##	827	2.2065086	1.00502968	0.44270706	0.1953353882	259.9838	57.44578	5.2
##	828	2.0527248	0.91055298	0.33694649	0.1906356812	260.2206	57.52244	5.2
##	829	2.0527248	0.91055298	0.33694649	0.1906356812	260.2206	57.52244	5.3
##	830	1.9800282	0.43150902	0.23762894	0.2230415344	260.2209	57.57933	4.3
##	831	0.9388847	0.56062889	0.23902893	0.1988735199	260.1452	57.64656	4.8
##	832	2.4416676	0.85909843	0.28520775	0.2369441986	260.3113	57.45414	5.1
##	833	2.4416676	0.85909843	0.28520775	0.2369441986	260.3113	57.45414	4.8
##	834	1.8981915	0.70546913	0.24290085	0.0688304901	260.1113	57.60686	4.3
##	835	1.8981915	0.70546913	0.24290085	0.0688304901	260.1113	57.60686	4.6
##	836	2.2363224	0.94979858	0.33003807	0.2030029297	260.3891	57.62911	4.8
##	837	2.2363224	0.94979858	0.33003807	0.2030029297	260.3891	57.62911	5.2
##	838	2.9320030	1.20415115	0.34327316	0.2602958679	260.1397	57.83878	0.8
##	839	2.9320030	1.20415115	0.34327316	0.2602958679	260.1397	57.83878	0.8
##	840	2.3001842	0.99071312	0.35864639	0.2119083405	260.3036	57.72386	5.3
##	841	2.3001842	0.99071312	0.35864639	0.2119083405	260.3036	57.72386	5.3
##	842	2.0280647	0.88617516	0.40797615	0.1672344208	260.0672	57.88222	2.0
##	843	2.0280647	0.88617516	0.40797615	0.1672344208	260.0672	57.88222	1.4
##	844	2.5951385	1.14856148	0.41951942	0.2201900482	260.5339	57.58044	5.4
##	845	2.5951385	1.14856148	0.41951942	0.2201900482	260.5339	57.58044	5.2
##	846	2.5951385	1.14856148	0.41951942	0.2201900482	260.5339	57.58044	5.3
##	847	2.5951385	1.14856148	0.41951942	0.2201900482	260.5339	57.58044	5.1
##	848	2.5951385	1.14856148	0.41951942	0.2201900482	260.5339	57.58044	5.1
##	849	2.5951385	1.14856148	0.41951942	0.2201900482	260.5339	57.58044	5.4
##	850	2.5951385	1.14856148	0.41951942	0.2201900482	260.5339	57.58044	5.4
##	851	2.5951385	1.14856148	0.41951942	0.2201900482	260.5339	57.58044	5.4
##	852	2.5951385	1.14856148	0.41951942	0.2201900482	260.5339	57.58044	5.3
##	853	1.9470291	0.75348091	0.26436043	0.1520309448	260.3700	57.74914	4.5
##	854	1.9470291	0.75348091	0.26436043	0.1520309448	260.3700	57.74914	4.6
##	855	1.9470291	0.75348091	0.26436043	0.1520309448	260.3700	57.74914	4.6
##	856	1.9470291	0.75348091	0.26436043	0.1520309448	260.3700	57.74914	5.2
##	857	1.9470291	0.75348091	0.26436043	0.1520309448	260.3700	57.74914	4.7
##	858	1.9837799	0.81424904	0.36982155	0.1672306061	260.1660	57.85425	1.1
##	859	1.9837799	0.81424904	0.36982155	0.1672306061	260.1660	57.85425	1.0
##	860	2.2693253	0.90903664	0.41003227	0.2514991760	260.5157	57.69128	1.3
##	861	2.2693253	0.90903664	0.41003227	0.2514991760	260.5157	57.69128	0.8
##	862	2.2693253	0.90903664	0.41003227	0.2514991760	260.5157	57.69128	1.1
##	863	2.4816532	1.12113380	0.40272331	0.2246513367	260.6483	57.63353	5.2
##	864	2.4816532	1.12113380	0.40272331	0.2246513367	260.6483	57.63353	5.4
##	865	2.4816532	1.12113380	0.40272331	0.2246513367	260.6483	57.63353	5.3
##	866	2.9938068	1.28071213	0.54098606	0.2875900269	260.1368	57.86219	0.7
##	867	2.9938068	1.28071213	0.54098606	0.2875900269	260.1368	57.86219	0.7
##	868	1.6020756	0.75781822	0.31859970	0.1090316772	260.6075	57.53889	4.3
##	869	1.6020756	0.75781822	0.31859970	0.1090316772	260.6075	57.53889	4.7
##	870	2.7074566	1.42141056	0.51383400	0.3690080643	260.6375	57.76158	5.3
##	871	1.9623032	0.58113098	0.26688004	0.1498527527	260.6843	57.74056	3.5
##	872	2.5156384	1.05431366	0.44012451	0.2518596649	260.1425	57.89219	0.9
##	873	2.5156384	1.05431366	0.44012451	0.2518596649	260.1425	57.89219	0.7
##	874	1.4302864	0.63100433	0.28634644	0.2246055603	260.7373	57.71594	3.8
##	875	1.4302864	0.63100433	0.28634644	0.2246055603	260.7373	57.71594	4.2
##	876	2.5689011	1.31247616	0.62514496	0.3495817184	260.1869	57.89067	5.3
##	877	2.5689011	1.31247616	0.62514496	0.3495817184	260.1869	57.89067	5.3
##	878	1.5931740	0.55338097	0.34054565	0.1156330109	260.0655	57.90767	2.8
##	879	1.5509109	0.69007874	0.32097244	0.1957874298	260.1856	57.86100	2.1
##	880	1.5509109	0.69007874	0.32097244	0.1957874298	260.1856	57.86100	1.5
##	881	1.3699589	0.58229637	0.29008865	0.0980625153	260.3694	57.86731	2.1
##	882	1.6421013	0.69858360	0.27526474	0.0569343567	260.4256	57.77517	4.5

##	883	1.6421013	0.69858360	0.27526474	0.0569343567	260.4256	57.77517	5.0
##	884	1.5182152	0.62918854	0.34782791	0.0482196808	260.2462	57.89297	1.6
##	885	2.6189384	1.18690300	0.54845047	0.3301830292	260.3682	57.88589	5.3
##	886	2.6189384	1.18690300	0.54845047	0.3301830292	260.3682	57.88589	5.2
##	887	2.5895367	1.25472641	0.49618912	0.2803688049	260.7291	57.79619	5.3
##	888	2.5895367	1.25472641	0.49618912	0.2803688049	260.7291	57.79619	5.4
##	889	1.6260452	0.68630409	0.36199379	0.1207180023	260.1026	57.92078	1.5
##	890	1.6260452	0.68630409	0.36199379	0.1207180023	260.1026	57.92078	1.2
##	891	1.6260452	0.68630409	0.36199379	0.1207180023	260.1026	57.92078	1.6
##	892	2.3104935	0.92693520	0.34626579	0.2071704865	260.8727	57.75914	4.9
##	893	2.3104935	0.92693520	0.34626579	0.2071704865	260.8727	57.75914	4.8
##	894	1.8076363	0.79345512	0.36337090	0.1919384003	260.4549	57.89364	1.4
##	895	1.8076363	0.79345512	0.36337090	0.1919384003	260.4549	57.89364	1.0
##	896	2.5626373	1.15469170	0.44679832	0.2454738617	260.4573	57.93325	5.3
##	897	2.5626373	1.15469170	0.44679832	0.2454738617	260.4573	57.93325	5.4
##	898	2.8513260	1.20451164	0.53052521	0.2871627808	260.2208	57.93272	0.8
##	899	2.8513260	1.20451164	0.53052521	0.2871627808	260.2208	57.93272	0.7
##	900	1.4033165	0.63887215	0.33641624	0.1402988434	260.4110	57.92778	1.7
##	901	1.4033165	0.63887215	0.33641624	0.1402988434	260.4110	57.92778	1.3
##	902	1.1220360	0.50538635	0.27250671	-0.1688785553	260.4564	57.95586	3.2
##	903	1.1220360	0.50538635	0.27250671	-0.1688785553	260.4564	57.95586	4.5
##	904	1.4741230	0.58320999	0.32003593	0.0552024841	260.1854	57.91989	2.7
##	905	1.4741230	0.58320999	0.32003593	0.0552024841	260.1854	57.91989	1.4
##	906	1.9530487	0.80827332	0.37705231	0.2354373932	260.1135	57.93667	1.1
##	907	2.6745300	1.30918884	0.58165073	0.2941226959	260.4617	57.99331	5.2
##	908	2.6745300	1.30918884	0.58165073	0.2941226959	260.4617	57.99331	5.4
##	909	2.3766479	1.05102539	0.38100624	0.1681175232	260.8043	58.02236	5.1
##	910	2.3766479	1.05102539	0.38100624	0.1681175232	260.8043	58.02236	5.2
##	911	2.3766479	1.05102539	0.38100624	0.1681175232	260.8043	58.02236	5.1
##	912	2.3766479	1.05102539	0.38100624	0.1681175232	260.8043	58.02236	5.2
##	913	1.8654099	0.82211113	0.34743881	0.2197036743	260.5855	58.02061	5.1
##	914	1.8654099	0.82211113	0.34743881	0.2197036743	260.5855	58.02061	5.4
##	915	2.4271145	1.14662361	0.50413513	0.2562465668	260.3444	57.96014	5.6
##	916	2.4271145	1.14662361	0.50413513	0.2562465668	260.3444	57.96014	5.6
##	917	1.0912018	0.43679619	0.47245407	0.2242660522	260.8061	58.06900	1.6
##	918	1.9425640	0.97235680	0.48109055	0.2750663757	260.6153	57.98344	5.2
##	919	1.9425640	0.97235680	0.48109055	0.2750663757	260.6153	57.98344	5.2
##	920	2.9554768	1.23710251	0.54184914	0.2957115173	260.1677	57.95914	0.7
##	921	1.9976654	0.84007072	0.30058861	0.1116657257	260.7162	58.16428	4.5
##	922	1.9976654	0.84007072	0.30058861	0.1116657257	260.7162	58.16428	4.8
##	923	1.9976654	0.84007072	0.30058861	0.1116657257	260.7162	58.16428	4.9
##	924	1.9976654	0.84007072	0.30058861	0.1116657257	260.7162	58.16428	4.9
##	925	1.9976654	0.84007072	0.30058861	0.1116657257	260.7162	58.16428	4.7
##	926	1.8001900	0.74633217	0.26175690	0.1012077332	260.7257	58.15700	4.4
##	927	1.8001900	0.74633217	0.26175690	0.1012077332	260.7257	58.15700	4.6
##	928	1.8001900	0.74633217	0.26175690	0.1012077332	260.7257	58.15700	3.4
##	929	1.8001900	0.74633217	0.26175690	0.1012077332	260.7257	58.15700	4.7
##	930	1.8001900	0.74633217	0.26175690	0.1012077332	260.7257	58.15700	5.1
##	931	1.3305340	0.68194199	0.30609131	0.2177639008	260.0842	57.94875	1.2
##	932	1.3305340	0.68194199	0.30609131	0.2177639008	260.0842	57.94875	1.1
##	933	1.8645630	0.82075882	0.37384033	0.1775417328	260.0709	57.93675	0.8
##	934	1.8645630	0.82075882	0.37384033	0.1775417328	260.0709	57.93675	0.9
##	935	1.8645630	0.82075882	0.37384033	0.1775417328	260.0709	57.93675	0.8
##	936	2.5179157	1.05961609	0.47470284	0.2498931885	260.1991	57.99875	0.8
##	937	2.5179157	1.05961609	0.47470284	0.2498931885	260.1991	57.99875	0.7
##	938	1.8587151	0.73081207	0.27517700	0.2023639679	260.6957	58.27397	4.5
##	939	1.8587151	0.73081207	0.27517700	0.2023639679	260.6957	58.27397	4.9
##	940	1.8587151	0.73081207	0.27517700	0.2023639679	260.6957	58.27397	4.9
##	941	2.5903397	1.13911438	0.50286293	0.2595844269	260.1742	58.00689	0.8
##	942	2.5903397	1.13911438	0.50286293	0.2595844269	260.1742	58.00689	0.7
##	943	2.5903397	1.13911438	0.50286293	0.2595844269	260.1742	58.00689	0.9
##	944	2.5902748	1.12903595	0.50153542	0.2836828232	260.1559	57.98681	0.8
##	945	2.5902748	1.12903595	0.50153542	0.2836828232	260.1559	57.98681	0.7
##	946	1.8241978	0.69685364	0.23869896	0.1157608032	260.3958	58.08897	4.5
##	947	1.8241978	0.69685364	0.23869896	0.1157608032	260.3958	58.08897	4.8
##	948	1.8241978	0.69685364	0.23869896	0.1157608032	260.3958	58.08897	4.1
##	949	1.8241978	0.69685364	0.23869896	0.1157608032	260.3958	58.08897	4.6
##	950	1.8241978	0.69685364	0.23869896	0.1157608032	260.3958	58.08897	4.5
##	951	1.8241978	0.69685364	0.23869896	0.1157608032	260.3958	58.08897	4.5
##	952	2.6941833	0.65948296	0.34661674	0.0349788666	260.6654	58.19800	3.0
##	953	1.8440132	0.72909546	0.25786972	0.1496295929	260.3462	58.28553	4.8
##	954	1.8440132	0.72909546	0.25786972	0.1496295929	260.3462	58.28553	4.9
##	955	1.8440132	0.72909546	0.25786972	0.1496295929	260.3462	58.28553	3.8
##	956	1.8440132	0.72909546	0.25786972	0.1496295929	260.3462	58.28553	5.0
##	957	1.8440132	0.72909546	0.25786972	0.1496295929	260.3462	58.28553	4.8
##	958	1.8440132	0.72909546	0.25786972	0.1496295929	260.3462	58.28553	4.9
##	959	1.5390587	0.69435692	0.21556091	0.1067981720	260.3209	58.22647	3.9
##	960	2.5652084	1.19029045	0.44651318	0.2393503189	260.1628	58.09256	5.2
##	961	2.5652084	1.19029045	0.44651318	0.2393503189	260.1628	58.09256	5.3

##	962	1.9539986	1.27387428	0.31084824	0.2342624664	260.2971	58.16308	5.1
##	963	1.9539986	1.27387428	0.31084824	0.2342624664	260.2971	58.16308	5.0
##	964	1.9539986	1.27387428	0.31084824	0.2342624664	260.2971	58.16308	5.2
##	965	1.9539986	1.27387428	0.31084824	0.2342624664	260.2971	58.16308	5.0
##	966	1.9539986	1.27387428	0.31084824	0.2342624664	260.2971	58.16308	5.1
##	967	1.8787422	0.71974564	0.27238655	0.2150478363	260.0985	57.98558	1.4
##	968	1.8787422	0.71974564	0.27238655	0.2150478363	260.0985	57.98558	1.6
##	969	1.8787422	0.71974564	0.27238655	0.2150478363	260.0985	57.98558	1.8
##	970	1.6478119	0.67246246	0.35323524	0.1324825287	260.0750	58.01997	1.6
##	971	1.6478119	0.67246246	0.35323524	0.1324825287	260.0750	58.01997	1.4
##	972	1.6478119	0.67246246	0.35323524	0.1324825287	260.0750	58.01997	1.2
##	973	1.6478119	0.67246246	0.35323524	0.1324825287	260.0750	58.01997	1.2
##	974	2.3830566	0.95550919	0.41358757	0.2375850677	260.0709	57.98389	0.8
##	975	2.3830566	0.95550919	0.41358757	0.2375850677	260.0709	57.98389	0.8
##	976	2.2828751	0.92300606	0.33314323	0.1622810364	260.1054	58.11608	5.0
##	977	2.2828751	0.92300606	0.33314323	0.1622810364	260.1054	58.11608	5.0
##	978	2.4367561	1.09017181	0.46837807	0.2593879700	260.2593	58.26064	0.7
##	979	2.4367561	1.09017181	0.46837807	0.2593879700	260.2593	58.26064	0.7
##	980	2.4367561	1.09017181	0.46837807	0.2593879700	260.2593	58.26064	0.7
##	981	2.4367561	1.09017181	0.46837807	0.2593879700	260.2593	58.26064	0.8
##	982	1.4348335	0.63201332	0.25955772	0.2537021637	260.0393	57.95886	1.7
##	983	2.1622505	1.01442146	0.36851692	0.2894573212	260.3137	58.32208	5.1
##	984	2.1622505	1.01442146	0.36851692	0.2894573212	260.3137	58.32208	5.1
##	985	2.1622505	1.01442146	0.36851692	0.2894573212	260.3137	58.32208	5.3
##	986	2.1622505	1.01442146	0.36851692	0.2894573212	260.3137	58.32208	5.2
##	987	2.1622505	1.01442146	0.36851692	0.2894573212	260.3137	58.32208	5.0
##	988	2.5898018	1.25911903	0.59158039	0.3511610031	259.9926	58.31611	5.2
##	989	2.5898018	1.25911903	0.59158039	0.3511610031	259.9926	58.31611	5.4
##	990	2.3962727	1.02513123	0.37242699	0.1952381134	260.0018	58.10500	5.0
##	991	2.3962727	1.02513123	0.37242699	0.1952381134	260.0018	58.10500	4.9
##	992	1.2233734	0.59333992	0.29533386	0.1538658142	260.0301	58.01794	2.1
##	993	1.2233734	0.59333992	0.29533386	0.1538658142	260.0301	58.01794	1.3
##	994	1.5638142	0.70946884	0.32070160	0.1817779541	260.0735	58.41972	5.3
##	995	1.5638142	0.70946884	0.32070160	0.1817779541	260.0735	58.41972	4.9
##	996	1.5638142	0.70946884	0.32070160	0.1817779541	260.0735	58.41972	5.0
##	997	1.9818478	0.79181290	0.29288864	0.1418209076	259.8897	58.18581	4.8
##	998	1.9818478	0.79181290	0.29288864	0.1418209076	259.8897	58.18581	4.8
##	999	1.3854218	0.59700012	0.28761482	0.1623039246	259.9480	58.09764	2.9
##	1000	0.9337368	0.53486633	0.29297066	0.1344718933	259.9118	58.08044	1.6
##	1001	2.3352642	0.98886299	0.37707901	0.2325611115	259.9372	58.24072	5.3
##	1002	2.3352642	0.98886299	0.37707901	0.2325611115	259.9372	58.24072	5.2
##	1003	2.3352642	0.98886299	0.37707901	0.2325611115	259.9372	58.24072	5.1
##	1004	2.3352642	0.98886299	0.37707901	0.2325611115	259.9372	58.24072	5.1
##	1005	2.3352642	0.98886299	0.37707901	0.2325611115	259.9372	58.24072	5.5
##	1006	2.3352642	0.98886299	0.37707901	0.2325611115	259.9372	58.24072	5.3
##	1007	1.4110889	0.58029938	0.23647499	0.2350959778	259.7339	58.16869	2.9
##	1008	1.4110889	0.58029938	0.23647499	0.2350959778	259.7339	58.16869	2.2
##	1009	1.4110889	0.58029938	0.23647499	0.2350959778	259.7339	58.16869	1.9
##	1010	1.4110889	0.58029938	0.23647499	0.2350959778	259.7339	58.16869	2.6
##	1011	1.5512753	0.65270996	0.33425522	0.0367565155	259.9453	57.99892	1.4
##	1012	1.5512753	0.65270996	0.33425522	0.0367565155	259.9453	57.99892	1.3
##	1013	1.0819073	0.56457710	0.21496201	0.1601982117	259.5980	58.33522	4.7
##	1014	1.0819073	0.56457710	0.21496201	0.1601982117	259.5980	58.33522	3.0
##	1015	1.0819073	0.56457710	0.21496201	0.1601982117	259.5980	58.33522	3.4
##	1016	1.0819073	0.56457710	0.21496201	0.1601982117	259.5980	58.33522	4.9
##	1017	1.9383335	0.85631752	0.39903259	0.2040004730	260.0066	57.95128	0.9
##	1018	3.3111095	1.21147919	0.35274506	0.3750610352	259.9266	57.97714	0.8
##	1019	3.3111095	1.21147919	0.35274506	0.3750610352	259.9266	57.97714	0.8
##	1020	2.2322121	0.88846207	0.32160759	0.1920642853	259.6532	58.13439	4.9
##	1021	2.2322121	0.88846207	0.32160759	0.1920642853	259.6532	58.13439	5.0
##	1022	2.5637188	1.09725380	0.47684479	0.2592430115	259.7171	58.07025	0.7
##	1023	2.5637188	1.09725380	0.47684479	0.2592430115	259.7171	58.07025	0.7
##	1024	1.4226551	0.67972565	0.28349686	0.1381587982	259.3900	58.21272	4.7
##	1025	1.4226551	0.67972565	0.28349686	0.1381587982	259.3900	58.21272	4.4
##	1026	1.4226551	0.67972565	0.28349686	0.1381587982	259.3900	58.21272	4.9
##	1027	1.4226551	0.67972565	0.28349686	0.1381587982	259.3900	58.21272	4.1
##	1028	1.4226551	0.67972565	0.28349686	0.1381587982	259.3900	58.21272	5.1
##	1029	1.4226551	0.67972565	0.28349686	0.1381587982	259.3900	58.21272	4.4
##	1030	1.4226551	0.67972565	0.28349686	0.1381587982	259.3900	58.21272	4.8
##	1031	1.7512970	0.76323509	0.31617737	0.1621170044	259.5417	58.22481	5.3
##	1032	1.7512970	0.76323509	0.31617737	0.1621170044	259.5417	58.22481	4.9
##	1033	1.7512970	0.76323509	0.31617737	0.1621170044	259.5417	58.22481	5.4
##	1034	1.7512970	0.76323509	0.31617737	0.1621170044	259.5417	58.22481	5.1
##	1035	1.7512970	0.76323509	0.31617737	0.1621170044	259.5417	58.22481	5.2
##	1036	1.7512970	0.76323509	0.31617737	0.1621170044	259.5417	58.22481	5.4
##	1037	1.7512970	0.76323509	0.31617737	0.1621170044	259.5417	58.22481	5.2
##	1038	2.0783329	0.91283035	0.38221359	0.1702327728	259.6921	58.05425	5.5
##	1039	2.0783329	0.91283035	0.38221359	0.1702327728	259.6921	58.05425	5.5
##	1040	1.6084499	0.66361618	0.32110405	0.1762142181	259.8192	57.96911	1.4

##	1041	1.6084499	0.66361618	0.32110405	0.1762142181	259.8192	57.96911	1.9
##	1042	1.9343414	0.83659554	0.37846756	0.1948413849	259.9585	57.94464	1.4
##	1043	1.9970741	0.77621841	0.29093933	0.1417694092	259.2945	58.10319	5.1
##	1044	1.9970741	0.77621841	0.29093933	0.1417694092	259.2945	58.10319	5.1
##	1045	1.9970741	0.77621841	0.29093933	0.1417694092	259.2945	58.10319	5.2
##	1046	1.9970741	0.77621841	0.29093933	0.1417694092	259.2945	58.10319	5.4
##	1047	1.9970741	0.77621841	0.29093933	0.1417694092	259.2945	58.10319	5.3
##	1048	1.9970741	0.77621841	0.29093933	0.1417694092	259.2945	58.10319	5.2
##	1049	1.9970741	0.77621841	0.29093933	0.1417694092	259.2945	58.10319	5.0
##	1050	1.9970741	0.77621841	0.29093933	0.1417694092	259.2945	58.10319	5.0
##	1051	1.1752281	0.60571289	0.30308533	0.1574554443	259.9588	57.95289	2.1
##	1052	1.1752281	0.60571289	0.30308533	0.1574554443	259.9588	57.95289	3.6
##	1053	1.7516479	0.81134605	0.29231262	0.1503582001	259.5166	58.08433	5.3
##	1054	1.7516479	0.81134605	0.29231262	0.1503582001	259.5166	58.08433	4.8
##	1055	2.4522743	1.04967690	0.44288445	0.2387599945	259.5336	58.02969	0.9
##	1056	2.4522743	1.04967690	0.44288445	0.2387599945	259.5336	58.02969	0.7
##	1057	2.4522743	1.04967690	0.44288445	0.2387599945	259.5336	58.02969	0.7
##	1058	1.8543053	0.77765465	0.36267281	0.1788864136	259.8333	57.99531	1.7
##	1059	1.8543053	0.77765465	0.36267281	0.1788864136	259.8333	57.99531	1.2
##	1060	1.2149982	0.60016251	0.20530128	0.2361469269	259.5174	58.10214	2.5
##	1061	1.2149982	0.60016251	0.20530128	0.2361469269	259.5174	58.10214	1.6
##	1062	1.2149982	0.60016251	0.20530128	0.2361469269	259.5174	58.10214	1.8
##	1063	1.2149982	0.60016251	0.20530128	0.2361469269	259.5174	58.10214	1.3
##	1064	1.3851337	0.68356323	0.27622604	0.1653766632	259.6401	57.97689	1.1
##	1065	1.3851337	0.68356323	0.27622604	0.1653766632	259.6401	57.97689	1.4
##	1066	1.2810802	0.59211349	0.32613754	0.0824184418	259.8569	57.95156	1.8
##	1067	1.3143635	0.54042053	0.26074028	0.0579605103	259.2245	58.02128	4.9
##	1068	1.3143635	0.54042053	0.26074028	0.0579605103	259.2245	58.02128	4.3
##	1069	1.3143635	0.54042053	0.26074028	0.0579605103	259.2245	58.02128	4.6
##	1070	1.3143635	0.54042053	0.26074028	0.0579605103	259.2245	58.02128	4.7
##	1071	1.4433956	0.62965202	0.30999184	0.1085529327	259.7911	57.95297	1.8
##	1072	1.4433956	0.62965202	0.30999184	0.1085529327	259.7911	57.95297	2.5
##	1073	1.8487415	0.76823807	0.29469299	0.2023334503	259.4226	58.02700	5.4
##	1074	1.8487415	0.76823807	0.29469299	0.2023334503	259.4226	58.02700	5.3
##	1075	1.8487415	0.76823807	0.29469299	0.2023334503	259.4226	58.02700	3.0
##	1076	1.8487415	0.76823807	0.29469299	0.2023334503	259.4226	58.02700	4.9
##	1077	1.8487415	0.76823807	0.29469299	0.2023334503	259.4226	58.02700	5.2
##	1078	1.8487415	0.76823807	0.29469299	0.2023334503	259.4226	58.02700	4.6
##	1079	1.8487415	0.76823807	0.29469299	0.2023334503	259.4226	58.02700	4.0
##	1080	1.7074089	0.78385162	0.19905472	0.1818599701	259.5206	57.97639	5.1
##	1081	1.7074089	0.78385162	0.19905472	0.1818599701	259.5206	57.97639	4.6
##	1082	1.5630474	0.62713432	0.33653069	0.1515121460	259.4853	57.90019	2.2
##	1083	1.5630474	0.62713432	0.33653069	0.1515121460	259.4853	57.90019	2.3
##	1084	1.2898769	0.70989037	0.29889870	0.2166843414	259.9595	57.92228	2.6
##	1085	1.2898769	0.70989037	0.29889870	0.2166843414	259.9595	57.92228	1.4
##	1086	1.7477722	0.78536606	0.33626938	0.2102279663	259.1685	57.91889	1.2
##	1087	1.7477722	0.78536606	0.33626938	0.2102279663	259.1685	57.91889	1.6
##	1088	2.2711296	0.95080376	0.31586075	0.2443199158	259.4349	57.93056	5.0
##	1089	2.2711296	0.95080376	0.31586075	0.2443199158	259.4349	57.93056	4.9
##	1090	2.0732059	0.88127136	0.36108971	0.2275104523	259.8233	57.90892	1.3
##	1091	1.8763275	0.83716583	0.24281883	0.0952129364	259.4973	57.93625	4.9
##	1092	1.8919353	0.85700798	0.32538414	0.1728782654	259.3918	57.84142	4.9
##	1093	1.8919353	0.85700798	0.32538414	0.1728782654	259.3918	57.84142	4.6
##	1094	2.1551456	0.91516876	0.35010529	0.2008972168	259.3186	57.81336	5.0
##	1095	2.1551456	0.91516876	0.35010529	0.2008972168	259.3186	57.81336	5.0
##	1096	1.3081856	0.70073509	0.31628609	0.0952243805	259.9242	57.91261	1.5
##	1097	1.3081856	0.70073509	0.31628609	0.0952243805	259.9242	57.91261	2.1
##	1098	1.9442673	0.88242531	0.32355118	0.2139244080	259.6369	57.84897	1.1
##	1099	1.9442673	0.88242531	0.32355118	0.2139244080	259.6369	57.84897	1.1
##	1100	1.8401165	0.72084808	0.29804420	0.1849288940	259.2747	57.77606	4.9
##	1101	1.8401165	0.72084808	0.29804420	0.1849288940	259.2747	57.77606	5.1
##	1102	1.8401165	0.72084808	0.29804420	0.1849288940	259.2747	57.77606	5.3
##	1103	1.8401165	0.72084808	0.29804420	0.1849288940	259.2747	57.77606	5.1
##	1104	1.8401165	0.72084808	0.29804420	0.1849288940	259.2747	57.77606	4.9
##	1105	1.8401165	0.72084808	0.29804420	0.1849288940	259.2747	57.77606	4.9
##	1106	1.7569485	0.67370987	0.28306770	0.2094287872	265.0308	55.81606	4.9
##	1107	2.1670609	0.88879204	0.33847046	0.1776885986	264.8154	55.72333	5.4
##	1108	2.7212391	1.05796051	0.36661339	0.2012882233	264.9970	55.81292	5.0
##	1109	1.9908371	0.80841827	0.25015068	0.1213302612	264.8811	55.73592	5.4
##	1110	1.6914845	0.56621933	0.31776047	-0.0610046387	265.1515	55.87931	5.0
##	1111	2.2204990	0.93409538	0.32216263	0.1828975677	264.9543	55.76156	5.3
##	1112	2.2907028	0.96500587	0.38598442	0.2062263489	265.3136	55.94092	5.2
##	1113	2.5558147	1.20312691	0.43436241	0.2532272339	264.9922	55.71778	5.1
##	1114	1.7609406	0.67686462	0.28648567	0.1043319702	265.0680	55.74492	5.4
##	1115	1.9487572	0.89435005	0.34824944	0.1703586578	265.0048	55.66386	5.3
##	1116	2.0097599	0.90215492	0.39985847	0.2217941284	265.3057	55.90564	5.6
##	1117	1.1379662	0.55913353	0.23676491	-0.1167793274	265.4751	55.96131	5.2
##	1118	1.1407471	0.53719521	0.32218933	0.0488243103	265.3811	55.86297	5.1
##	1119	2.2932987	0.97604179	0.36436462	0.1845912933	265.3044	55.78081	5.0

##	1120	2.5148048	1.10404205	0.39208412	0.2203788757	265.2103	55.59772	5.3
##	1121	2.0413284	0.74653053	0.33347702	0.2841453552	265.2160	55.55631	4.9
##	1122	2.0610352	0.94964218	0.32046127	0.1870422363	265.3242	55.64703	5.2
##	1123	1.4318295	0.62413597	0.23930168	0.0548191071	265.3742	55.65278	5.2
##	1124	1.7413254	0.77504158	0.30467987	0.1630668640	265.3898	55.79908	5.0
##	1125	2.2965374	0.89127731	0.31792641	0.2113971710	265.3096	55.68561	5.4
##	1126	2.4343967	1.01767540	0.30361938	0.2779655457	265.5526	55.59044	5.1
##	1127	2.5007210	1.11050224	0.41603088	0.2370071411	265.5092	55.90761	5.2
##	1128	2.2352867	0.91182899	0.29077721	0.2261466980	265.4900	55.67600	5.0
##	1129	2.2790451	0.87389374	0.27382469	0.1259136200	265.4638	55.71092	5.2
##	1130	5.2241631	0.28472519	0.75199318	0.0600414276	265.6923	55.63158	1.2
##	1131	1.8369503	0.68433189	0.25617218	0.1642360687	265.6414	55.74006	4.2
##	1132	2.1926785	0.75209427	0.23761940	0.2205104828	265.5984	55.77853	5.0
##	1133	1.7898827	0.67493820	0.26145744	0.1023921967	265.7301	55.61292	4.8
##	1134	2.5074387	0.79539871	0.31836128	0.1722640991	265.6962	55.70283	4.1
##	1135	2.0443020	0.77813530	0.26928139	0.2146530151	265.6262	55.64436	3.6
##	1136	2.0371914	0.86360359	0.31620216	0.1893959045	265.8238	55.53928	4.3
##	1137	2.4114513	0.99681664	0.42430496	0.2399063110	265.8081	55.74636	5.2
##	1138	2.0255127	0.77351952	0.28308487	0.1879596710	265.9340	55.65533	4.1
##	1139	2.4801922	1.05295372	0.40499878	0.2416915894	265.6528	55.88683	4.8
##	1140	2.0036430	0.85259438	0.31636429	0.1750144958	265.8062	55.66400	5.1
##	1141	2.0564365	0.86189079	0.31223297	0.1697216034	266.0500	55.69706	4.9
##	1142	2.3593082	0.92206764	0.32411385	0.2184829712	265.7783	55.84303	4.2
##	1143	2.6600533	1.19492149	0.49945259	0.2959403992	265.9545	55.77453	4.9
##	1144	0.9436054	1.08051872	0.22883797	0.1252441406	265.7920	55.86022	4.5
##	1145	2.1663265	0.81418991	0.36077881	0.2101306915	265.6366	55.91781	4.6
##	1146	2.3555431	1.02448463	0.39900970	0.2286834717	265.7571	55.88331	5.0
##	1147	1.5993385	0.74028778	0.28515053	0.1631450653	265.7507	55.82936	3.9
##	1148	1.6833553	0.71598434	0.12552261	0.3283100128	265.8206	55.89553	3.9
##	1149	2.1926270	0.87801552	0.34499550	0.1688404083	265.8775	55.90061	4.7
##	1150	2.6250038	1.31370735	0.54932117	0.3177471161	266.0618	55.81981	4.9
##	1151	2.2384853	1.00864983	0.42485237	0.2367477417	265.6649	55.95983	5.0
##	1152	1.6762810	0.70677948	0.29392242	0.1761131287	265.9273	55.84972	4.4
##	1153	2.5429840	1.04742241	0.34598923	0.2096214294	266.2426	55.82883	4.8
##	1154	1.9389648	0.83131790	0.29013634	0.1717891693	266.0707	55.79806	4.7
##	1155	2.0825634	0.79716492	0.28427696	0.1606388092	266.1640	55.89856	3.6
##	1156	1.8347664	0.75257683	0.30287743	0.1215476990	266.3116	55.89783	4.4
##	1157	2.5383968	1.15963936	0.41039276	0.2264080048	265.8767	55.96025	4.8
##	1158	2.1458302	0.76738167	0.28425598	0.1447620392	266.2520	55.85703	4.1
##	1159	1.8265591	0.77288437	0.30872536	0.1822147369	265.9887	55.88939	3.8
##	1160	2.3826122	1.22907448	0.46834564	0.2769279480	266.3126	55.99631	4.9
##	1161	1.8349476	0.84052086	0.32184029	0.2094097137	265.9394	56.00436	4.1
##	1162	2.0813808	0.84396553	0.34024048	0.2253665924	265.6344	55.98864	4.6
##	1163	2.5854549	1.26775742	0.50364017	0.2788019180	266.0714	56.08681	5.3
##	1164	1.6782608	0.58004570	0.27384567	0.0807762146	265.8125	56.04722	3.0
##	1165	2.4850903	1.16592026	0.45717812	0.2597179413	266.0303	56.05650	5.0
##	1166	2.7395782	1.38651085	0.57740688	0.3011445999	266.2164	56.15244	4.9
##	1167	2.1823120	0.95530891	0.37121201	0.1941776276	265.8644	56.14339	4.7
##	1168	2.1447926	0.75506592	0.24484253	0.1311817169	266.1095	56.22611	4.5
##	1169	2.2608032	0.94659424	0.37136459	0.1800193787	265.8688	56.16306	5.1
##	1170	2.3973274	1.03388596	0.41082382	0.2487735748	265.7985	56.09378	5.0
##	1171	1.9737701	0.81322670	0.29355812	0.1884403229	265.7869	56.13969	4.3
##	1172	1.6212997	0.61561394	0.32400322	0.0769252777	265.9507	56.25353	3.5
##	1173	2.2939072	0.84654999	0.32797241	0.1395549774	265.9838	56.26594	4.5
##	1174	2.2519436	0.97095680	0.35647774	0.1893367767	265.7537	56.14744	5.0
##	1175	2.3516541	1.04166603	0.52119446	0.3406953812	265.8880	56.20253	5.4
##	1176	2.5819283	1.12792206	0.41690063	0.2234344482	265.9175	56.26103	5.4
##	1177	1.8192711	0.67466736	0.33154488	0.0207462311	265.9705	56.23397	3.3
##	1178	2.3249264	1.02749252	0.42864609	0.2694320679	265.8197	56.20675	4.7
##	1179	2.1306725	0.98674393	0.36328888	0.2118129730	266.1645	56.32661	5.0
##	1180	1.9162292	0.93665504	0.16701126	0.2342872620	265.7470	56.18092	4.0
##	1181	1.7237873	0.75929260	0.28193092	0.1633758545	265.5647	56.04708	4.4
##	1182	1.7540855	0.66173553	0.24645615	0.1185894012	265.6312	56.17469	3.9
##	1183	2.5822372	1.30130196	0.52884293	0.2932586670	265.8260	56.29986	4.8
##	1184	1.5757046	0.72096825	0.25883102	0.1350326538	265.7754	56.38075	5.1
##	1185	2.0858250	0.85709381	0.31910706	0.1970443726	265.8868	56.34594	4.8
##	1186	2.6945686	1.28668594	0.53890705	0.3042926788	265.8145	56.44900	5.0
##	1187	1.5746307	0.67714119	0.29392815	0.1292724609	265.6800	56.38978	5.0
##	1188	2.2524281	0.94481850	0.35859680	0.1857357025	265.5207	55.97622	5.0
##	1189	1.5175152	0.58837509	0.41377068	0.0022983551	265.6057	56.32911	3.8
##	1190	1.7048931	0.70508003	0.27125168	0.1829700470	265.7657	56.41578	4.8
##	1191	2.3702393	0.92751694	0.32752228	0.1386623383	265.7540	56.37808	5.0
##	1192	2.7512379	1.34811211	0.59383202	0.3314228058	265.4365	56.47844	5.5
##	1193	2.1199532	0.83012962	0.27747154	0.1568984985	265.4847	56.12972	5.4
##	1194	2.0013027	0.77228165	0.26183510	0.1189937592	265.4508	56.26497	4.4
##	1195	2.2293568	0.88799095	0.37016106	0.2171611786	265.3713	56.49094	4.8
##	1196	2.5650444	1.19067001	0.50387001	0.3182392120	265.3903	56.33758	5.1
##	1197	2.2770996	0.96064186	0.34976578	0.1973247528	265.5400	56.24772	5.2
##	1198	2.6561718	1.18247223	0.42527199	0.2462596893	265.3618	56.21842	5.1

##	1199	1.2659416	0.71010017	0.29212189	0.2721881866	265.3759	56.34411	4.4
##	1200	2.1650562	0.83663177	0.32806396	0.1600570679	265.2794	56.29281	5.1
##	1201	2.5711269	1.18368530	0.43330383	0.2311096191	265.1098	56.30650	5.0
##	1202	2.4572144	1.11151695	0.41968536	0.2349281311	265.2867	56.19333	4.8
##	1203	1.1529999	0.50328445	0.26922417	0.0700664520	265.4146	56.06656	4.2
##	1204	1.8274689	0.70160866	0.28677177	0.0961971283	265.3919	56.11750	5.3
##	1205	1.9920845	0.80681801	0.35486984	0.1687030792	265.3164	56.12658	4.6
##	1206	1.5628777	0.68631935	0.29678154	0.2149486542	265.1384	56.38714	3.9
##	1207	2.3756638	0.97941971	0.35164642	0.1780204773	265.3470	56.08731	5.3
##	1208	1.4982395	0.61412048	0.11164284	0.1141338348	265.2017	56.13225	5.1
##	1209	2.3139343	1.25230980	0.52457905	0.2783327103	265.2121	56.18606	4.1
##	1210	2.7098064	1.28834343	0.52053165	0.2645845413	265.1769	56.08719	5.2
##	1211	1.8599644	0.80084419	0.33160210	0.2248134613	264.9524	56.14947	5.3
##	1212	2.3387756	0.92617226	0.35915565	0.2089805603	265.2584	56.07278	5.1
##	1213	2.1607475	0.98061562	0.39713287	0.2669239044	264.9708	56.12600	5.6
##	1214	2.3232670	0.94075203	0.34184647	0.1990280151	264.9206	56.20692	5.1
##	1215	1.9531994	0.70864487	0.26112747	0.1279907227	264.6554	56.12347	4.7
##	1216	1.6053905	0.66518593	0.27414703	0.1470031738	265.2346	56.02244	5.2
##	1217	1.4741917	0.54254532	0.27272224	0.1031169891	265.1861	56.04864	5.2
##	1218	2.4465618	1.08143425	0.41461563	0.2268390656	265.1006	56.03206	5.4
##	1219	2.3167591	0.95302963	0.36297226	0.1744651794	265.0805	56.02478	5.1
##	1220	2.7517281	1.34279251	0.62702847	0.3839426041	264.9459	56.10656	5.4
##	1221	1.6946106	0.74047279	0.29693222	0.2771301270	265.3510	56.04317	5.3
##	1222	2.2399712	0.93134117	0.38866043	0.2574005127	264.7088	55.96419	5.5
##	1223	2.0345669	0.62588310	0.61768723	0.2490921021	265.0971	55.99358	5.4
##	1224	2.2043304	0.90955544	0.29462814	0.1937465668	264.7045	55.94597	5.1
##	1225	1.7703342	0.76598740	0.31172943	0.1090984344	265.0271	55.96536	5.1
##	1226	1.6141071	0.62798882	0.23535538	0.0601940155	264.6854	55.87000	5.2
##	1227	1.8424072	0.65996361	0.26891708	0.0386810303	265.1922	55.93808	5.2
##	1228	2.0620823	0.77852440	0.29684258	0.1366081238	265.0961	55.92700	5.2
##	1229	1.5868340	0.78678894	0.32164955	0.1863422394	265.0383	55.92794	5.4
##	1230	2.0691910	0.82197189	0.34377289	0.1817722321	264.7407	55.84617	5.4
##	1231	2.6201553	0.94364929	0.33264160	0.1692295074	265.0826	55.94306	4.9
##	1232	2.0967503	0.75629807	0.31979179	0.1667327881	265.2219	55.96753	4.8
##	1233	1.4335670	0.55973434	0.24748611	-0.0988197327	260.1444	58.01061	2.4
##	1234	0.8188324	0.43862915	0.16850853	0.2565937042	259.6790	58.22589	4.0
##	1235	2.1595936	0.88339996	0.30216217	0.1521663666	259.8731	58.05028	5.2
##	1236	1.3019772	0.53423691	0.39769745	0.1695289612	259.9927	57.90878	2.5
##	1237	1.2374630	0.61712456	0.26510811	0.1806983948	259.3584	57.73817	4.1
##	1238	1.2374630	0.61712456	0.26510811	0.1806983948	259.3584	57.73817	5.2
##	1239	1.2374630	0.61712456	0.26510811	0.1806983948	259.3584	57.73817	5.3
##	1240	1.2374630	0.61712456	0.26510811	0.1806983948	259.3584	57.73817	4.3
##	1241	1.2374630	0.61712456	0.26510811	0.1806983948	259.3584	57.73817	5.1
##	1242	1.5155830	0.68043900	0.29622269	0.1174449921	259.8277	57.85097	2.8
##	1243	1.5155830	0.68043900	0.29622269	0.1174449921	259.8277	57.85097	1.4
##	1244	1.5155830	0.68043900	0.29622269	0.1174449921	259.8277	57.85097	1.7
##	1245	1.5155830	0.68043900	0.29622269	0.1174449921	259.8277	57.85097	1.5
##	1246	1.5155830	0.68043900	0.29622269	0.1174449921	259.8277	57.85097	1.2
##	1247	1.5155830	0.68043900	0.29622269	0.1174449921	259.8277	57.85097	2.0
##	1248	1.5155830	0.68043900	0.29622269	0.1174449921	259.8277	57.85097	1.2
##	1249	1.5155830	0.68043900	0.29622269	0.1174449921	259.8277	57.85097	1.0
##	1250	1.5155830	0.68043900	0.29622269	0.1174449921	259.8277	57.85097	1.1
##	1251	1.5155830	0.68043900	0.29622269	0.1174449921	259.8277	57.85097	2.1
##	1252	1.5155830	0.68043900	0.29622269	0.1174449921	259.8277	57.85097	1.1
##	1253	1.5155830	0.68043900	0.29622269	0.1174449921	259.8277	57.85097	1.1
##	1254	1.1660290	0.47398376	0.17304420	0.0882663727	259.6988	57.74883	5.0
##	1255	1.5839081	0.72731400	0.34049797	0.1693344116	259.8439	57.83694	2.5
##	1256	1.5839081	0.72731400	0.34049797	0.1693344116	259.8439	57.83694	1.6
##	1257	1.5839081	0.72731400	0.34049797	0.1693344116	259.8439	57.83694	2.3
##	1258	1.5839081	0.72731400	0.34049797	0.1693344116	259.8439	57.83694	1.9
##	1259	1.5839081	0.72731400	0.34049797	0.1693344116	259.8439	57.83694	1.6
##	1260	1.5839081	0.72731400	0.34049797	0.1693344116	259.8439	57.83694	1.2
##	1261	1.5839081	0.72731400	0.34049797	0.1693344116	259.8439	57.83694	1.9
##	1262	1.5839081	0.72731400	0.34049797	0.1693344116	259.8439	57.83694	1.3
##	1263	1.5839081	0.72731400	0.34049797	0.1693344116	259.8439	57.83694	1.1
##	1264	1.5839081	0.72731400	0.34049797	0.1693344116	259.8439	57.83694	1.2
##	1265	1.8021622	0.75032425	0.37416267	0.1801376343	259.9858	57.87858	1.5
##	1266	0.8783550	0.34880257	0.12780190	0.0068187714	259.3973	57.67306	3.3
##	1267	0.8783550	0.34880257	0.12780190	0.0068187714	259.3973	57.67306	4.2
##	1268	0.8783550	0.34880257	0.12780190	0.0068187714	259.3973	57.67306	3.2
##	1269	0.8783550	0.34880257	0.12780190	0.0068187714	259.3973	57.67306	4.2
##	1270	1.1757793	0.33573151	0.23366547	0.1450023651	259.8614	57.72925	2.5
##	1271	1.3947811	0.66363525	0.26537704	0.2321605682	259.7432	57.62431	1.9
##	1272	1.3947811	0.66363525	0.26537704	0.2321605682	259.7432	57.62431	1.2
##	1273	1.3947811	0.66363525	0.26537704	0.2321605682	259.7432	57.62431	2.9
##	1274	1.6343098	0.69916534	0.35058784	0.1374721527	260.0081	57.85844	1.6
##	1275	1.6343098	0.69916534	0.35058784	0.1374721527	260.0081	57.85844	1.7
##	1276	1.6343098	0.69916534	0.35058784	0.1374721527	260.0081	57.85844	1.7
##	1277	1.6343098	0.69916534	0.35058784	0.1374721527	260.0081	57.85844	1.2

##	1278	1.6343098	0.69916534	0.35058784	0.1374721527	260.0081	57.85844	1.4
##	1279	1.6343098	0.69916534	0.35058784	0.1374721527	260.0081	57.85844	1.4
##	1280	2.5624142	1.26362228	0.47917843	0.2785596848	259.8294	57.77606	5.0
##	1281	1.1940613	0.67216682	0.28468513	0.1425228119	259.8347	57.48056	2.2
##	1282	1.1940613	0.67216682	0.28468513	0.1425228119	259.8347	57.48056	2.2
##	1283	1.1940613	0.67216682	0.28468513	0.1425228119	259.8347	57.48056	1.8
##	1284	1.1940613	0.67216682	0.28468513	0.1425228119	259.8347	57.48056	1.2
##	1285	2.3850060	1.09609985	0.43420601	0.2438383102	259.7606	57.56344	5.1
##	1286	2.3850060	1.09609985	0.43420601	0.2438383102	259.7606	57.56344	4.9
##	1287	2.3850060	1.09609985	0.43420601	0.2438383102	259.7606	57.56344	5.1
##	1288	2.3850060	1.09609985	0.43420601	0.2438383102	259.7606	57.56344	5.1
##	1289	2.3850060	1.09609985	0.43420601	0.2438383102	259.7606	57.56344	5.2
##	1290	2.3850060	1.09609985	0.43420601	0.2438383102	259.7606	57.56344	5.1
##	1291	1.7578526	0.71540070	0.28455353	0.2014732361	259.7201	57.54044	4.9
##	1292	1.7578526	0.71540070	0.28455353	0.2014732361	259.7201	57.54044	5.0
##	1293	1.7578526	0.71540070	0.28455353	0.2014732361	259.7201	57.54044	5.1
##	1294	1.7578526	0.71540070	0.28455353	0.2014732361	259.7201	57.54044	4.9
##	1295	1.7578526	0.71540070	0.28455353	0.2014732361	259.7201	57.54044	5.2
##	1296	1.7578526	0.71540070	0.28455353	0.2014732361	259.7201	57.54044	5.4
##	1297	1.7578526	0.71540070	0.28455353	0.2014732361	259.7201	57.54044	4.4
##	1298	1.7578526	0.71540070	0.28455353	0.2014732361	259.7201	57.54044	5.1
##	1299	1.2115726	0.56398773	0.24963570	0.2795143127	260.0403	57.58261	2.4
##	1300	1.1737556	0.54113197	0.25257111	0.1401176453	260.0285	57.58608	2.7
##	1301	2.2602463	0.88976097	0.39765930	0.2041034698	260.0707	57.88675	0.8
##	1302	0.9558048	0.35003471	0.13851357	0.0854835510	259.9724	57.46742	2.8
##	1303	0.9558048	0.35003471	0.13851357	0.0854835510	259.9724	57.46742	4.8
##	1304	0.9558048	0.35003471	0.13851357	0.0854835510	259.9724	57.46742	2.8
##	1305	0.8565922	0.51270103	0.10059357	0.1222591400	260.1876	57.58094	4.8
##	1306	1.7655201	0.69360924	0.24575806	0.1117057800	260.1485	57.71150	4.3
##	1307	1.7655201	0.69360924	0.24575806	0.1117057800	260.1485	57.71150	4.7
##	1308	1.7655201	0.69360924	0.24575806	0.1117057800	260.1485	57.71150	5.0
##	1309	1.7655201	0.69360924	0.24575806	0.1117057800	260.1485	57.71150	4.6
##	1310	1.7655201	0.69360924	0.24575806	0.1117057800	260.1485	57.71150	4.8
##	1311	1.7655201	0.69360924	0.24575806	0.1117057800	260.1485	57.71150	4.6
##	1312	1.7655201	0.69360924	0.24575806	0.1117057800	260.1485	57.71150	4.9
##	1313	1.7655201	0.69360924	0.24575806	0.1117057800	260.1485	57.71150	4.9
##	1314	1.7655201	0.69360924	0.24575806	0.1117057800	260.1485	57.71150	4.8
##	1315	1.7655201	0.69360924	0.24575806	0.1117057800	260.1485	57.71150	5.0
##	1316	1.7655201	0.69360924	0.24575806	0.1117057800	260.1485	57.71150	5.0
##	1317	1.7655201	0.69360924	0.24575806	0.1117057800	260.1485	57.71150	4.9
##	1318	1.7655201	0.69360924	0.24575806	0.1117057800	260.1485	57.71150	5.1
##	1319	2.8348217	1.21088409	0.51776028	0.2746591568	260.1820	57.81228	0.7
##	1320	1.5860863	0.62962532	0.33442307	0.1452159882	260.2419	57.77442	1.7
##	1321	2.2871609	0.94331741	0.32882309	0.1695423126	260.4330	57.61478	4.9
##	1322	2.0827198	0.89750481	0.38560677	0.2257099152	260.1675	57.78528	1.5
##	1323	2.1041965	0.88468552	0.29399490	0.1370658875	260.4950	57.65039	4.6
##	1324	2.1041965	0.88468552	0.29399490	0.1370658875	260.4950	57.65039	4.8
##	1325	2.1041965	0.88468552	0.29399490	0.1370658875	260.4950	57.65039	5.0
##	1326	2.1041965	0.88468552	0.29399490	0.1370658875	260.4950	57.65039	5.0
##	1327	2.1371460	0.95266151	0.34497261	0.1919746399	260.5967	57.56178	4.6
##	1328	2.1371460	0.95266151	0.34497261	0.1919746399	260.5967	57.56178	5.4
##	1329	2.1371460	0.95266151	0.34497261	0.1919746399	260.5967	57.56178	5.1
##	1330	2.1371460	0.95266151	0.34497261	0.1919746399	260.5967	57.56178	5.1
##	1331	2.3540440	0.80835152	0.31626701	0.1559734344	260.1132	57.90714	4.6
##	1332	1.6675358	0.67802620	0.30929184	0.1698169708	260.2619	57.83336	1.2
##	1333	1.6675358	0.67802620	0.30929184	0.1698169708	260.2619	57.83336	1.2
##	1334	1.6675358	0.67802620	0.30929184	0.1698169708	260.2619	57.83336	1.6
##	1335	1.6675358	0.67802620	0.30929184	0.1698169708	260.2619	57.83336	2.1
##	1336	1.6675358	0.67802620	0.30929184	0.1698169708	260.2619	57.83336	1.5
##	1337	1.6675358	0.67802620	0.30929184	0.1698169708	260.2619	57.83336	1.4
##	1338	1.6675358	0.67802620	0.30929184	0.1698169708	260.2619	57.83336	1.2
##	1339	1.6675358	0.67802620	0.30929184	0.1698169708	260.2619	57.83336	1.4
##	1340	1.6675358	0.67802620	0.30929184	0.1698169708	260.2619	57.83336	1.8
##	1341	0.8702984	0.24710846	0.15508842	0.1955757141	260.5672	57.83428	4.7
##	1342	2.4976521	1.18342113	0.50266171	0.2857007980	260.3424	57.86406	5.2
##	1343	1.6889534	0.69250679	0.31763649	0.1640071869	260.1472	57.90206	1.3
##	1344	1.6889534	0.69250679	0.31763649	0.1640071869	260.1472	57.90206	1.9
##	1345	1.6889534	0.69250679	0.31763649	0.1640071869	260.1472	57.90206	1.7
##	1346	1.6889534	0.69250679	0.31763649	0.1640071869	260.1472	57.90206	1.4
##	1347	1.6889534	0.69250679	0.31763649	0.1640071869	260.1472	57.90206	1.2
##	1348	1.6889534	0.69250679	0.31763649	0.1640071869	260.1472	57.90206	1.5
##	1349	1.6889534	0.69250679	0.31763649	0.1640071869	260.1472	57.90206	2.3
##	1350	1.6889534	0.69250679	0.31763649	0.1640071869	260.1472	57.90206	1.6
##	1351	1.6889534	0.69250679	0.31763649	0.1640071869	260.1472	57.90206	1.3
##	1352	1.6889534	0.69250679	0.31763649	0.1640071869	260.1472	57.90206	1.3
##	1353	1.7871475	0.73916435	0.36306381	0.1626873016	260.1680	57.93836	0.9
##	1354	1.7514286	0.76561928	0.36534119	0.1452999115	260.3245	57.93922	1.1
##	1355	2.1836452	0.81783485	0.28902245	0.1553516388	260.8601	58.13631	4.0
##	1356	2.1836452	0.81783485	0.28902245	0.1553516388	260.8601	58.13631	5.0

##	1357	2.1836452	0.81783485	0.28902245	0.1553516388	260.8601	58.13631	4.8
##	1358	2.1836452	0.81783485	0.28902245	0.1553516388	260.8601	58.13631	4.8
##	1359	2.0918159	0.91623688	0.41305351	0.2170944214	260.1141	57.94789	0.8
##	1360	2.0503712	0.85860252	0.34549522	0.1654682159	260.4374	58.18069	5.0
##	1361	2.0503712	0.85860252	0.34549522	0.1654682159	260.4374	58.18069	5.3
##	1362	2.0503712	0.85860252	0.34549522	0.1654682159	260.4374	58.18069	4.9
##	1363	1.4946003	0.68183899	0.25266075	0.1050682068	260.1995	58.13731	5.0
##	1364	1.4946003	0.68183899	0.25266075	0.1050682068	260.1995	58.13731	5.2
##	1365	1.4946003	0.68183899	0.25266075	0.1050682068	260.1995	58.13731	4.2
##	1366	1.4946003	0.68183899	0.25266075	0.1050682068	260.1995	58.13731	4.8
##	1367	1.7044373	0.73085594	0.28267860	0.1224250793	260.3267	58.38156	4.7
##	1368	1.7044373	0.73085594	0.28267860	0.1224250793	260.3267	58.38156	5.0
##	1369	2.4366550	0.99831200	0.35621834	0.1886310577	260.4463	58.36425	5.0
##	1370	1.8742046	0.78387833	0.29622650	0.1562442780	260.0779	58.14464	4.5
##	1371	1.8742046	0.78387833	0.29622650	0.1562442780	260.0779	58.14464	5.5
##	1372	1.8742046	0.78387833	0.29622650	0.1562442780	260.0779	58.14464	5.4
##	1373	1.8742046	0.78387833	0.29622650	0.1562442780	260.0779	58.14464	5.5
##	1374	1.6931248	0.64580917	0.30917168	0.1486988068	260.1008	58.18900	1.4
##	1375	1.6931248	0.64580917	0.30917168	0.1486988068	260.1008	58.18900	2.1
##	1376	1.6931248	0.64580917	0.30917168	0.1486988068	260.1008	58.18900	2.2
##	1377	1.8074207	0.75388336	0.30025101	0.1307907104	260.1502	58.39472	4.8
##	1378	1.8074207	0.75388336	0.30025101	0.1307907104	260.1502	58.39472	5.5
##	1379	1.8074207	0.75388336	0.30025101	0.1307907104	260.1502	58.39472	5.4
##	1380	1.8433418	0.74399948	0.28789330	0.1454162598	260.0365	58.33422	4.4
##	1381	1.8433418	0.74399948	0.28789330	0.1454162598	260.0365	58.33422	4.6
##	1382	1.1947594	0.43862152	0.17453766	0.1189861298	259.9820	58.19147	1.8
##	1383	1.1947594	0.43862152	0.17453766	0.1189861298	259.9820	58.19147	2.2
##	1384	1.7253838	0.68060493	0.31580353	0.1661434174	259.8455	58.39475	1.4
##	1385	1.7253838	0.68060493	0.31580353	0.1661434174	259.8455	58.39475	3.1
##	1386	1.7253838	0.68060493	0.31580353	0.1661434174	259.8455	58.39475	1.9
##	1387	1.7253838	0.68060493	0.31580353	0.1661434174	259.8455	58.39475	2.3
##	1388	1.7253838	0.68060493	0.31580353	0.1661434174	259.8455	58.39475	1.8
##	1389	1.5347576	0.59152794	0.26212883	0.1249408722	260.0337	58.20469	3.7
##	1390	1.4804916	0.61919594	0.26528931	0.1769638062	259.7628	58.22933	4.4
##	1391	1.4804916	0.61919594	0.26528931	0.1769638062	259.7628	58.22933	4.9
##	1392	2.2582912	0.56517029	0.21492004	0.2108650208	259.6154	58.33672	4.8
##	1393	2.2582912	0.56517029	0.21492004	0.2108650208	259.6154	58.33672	4.4
##	1394	2.2582912	0.56517029	0.21492004	0.2108650208	259.6154	58.33672	5.4
##	1395	2.2582912	0.56517029	0.21492004	0.2108650208	259.6154	58.33672	4.8
##	1396	1.5412598	0.73183060	0.32106590	0.1515159607	260.0459	57.94603	1.8
##	1397	1.5924664	0.68133163	0.31516266	0.0927238464	259.9912	58.02225	2.2
##	1398	1.6444283	0.70810127	0.32063484	0.0155582428	259.9438	58.10925	2.8
##	1399	1.1259003	0.34258080	0.17839622	-0.0029544830	259.7811	58.09694	1.7
##	1400	0.9370480	0.31679916	0.07729149	0.2315921783	259.6395	58.20239	1.8
##	1401	0.9370480	0.31679916	0.07729149	0.2315921783	259.6395	58.20239	5.1
##	1402	1.5913811	0.66328239	0.32960320	0.1330204010	259.8924	58.00867	2.8
##	1403	1.5913811	0.66328239	0.32960320	0.1330204010	259.8924	58.00867	2.1
##	1404	1.5913811	0.66328239	0.32960320	0.1330204010	259.8924	58.00867	1.8
##	1405	1.5913811	0.66328239	0.32960320	0.1330204010	259.8924	58.00867	2.0
##	1406	1.5913811	0.66328239	0.32960320	0.1330204010	259.8924	58.00867	1.3
##	1407	1.5913811	0.66328239	0.32960320	0.1330204010	259.8924	58.00867	2.0
##	1408	1.5913811	0.66328239	0.32960320	0.1330204010	259.8924	58.00867	1.6
##	1409	1.5913811	0.66328239	0.32960320	0.1330204010	259.8924	58.00867	1.9
##	1410	1.5913811	0.66328239	0.32960320	0.1330204010	259.8924	58.00867	1.0
##	1411	1.5913811	0.66328239	0.32960320	0.1330204010	259.8924	58.00867	1.0
##	1412	1.5913811	0.66328239	0.32960320	0.1330204010	259.8924	58.00867	1.3
##	1413	1.5913811	0.66328239	0.32960320	0.1330204010	259.8924	58.00867	2.0
##	1414	1.0050697	0.35403442	0.13943672	0.1029224396	259.6144	58.01275	3.1
##	1415	1.4148273	0.66447830	0.32501602	0.1517047882	259.9360	57.95600	3.8
##	1416	1.5018444	0.65384674	0.26908493	0.1298255920	259.7822	58.00547	3.1
##	1417	1.5018444	0.65384674	0.26908493	0.1298255920	259.7822	58.00547	2.1
##	1418	1.5018444	0.65384674	0.26908493	0.1298255920	259.7822	58.00547	2.3
##	1419	1.5018444	0.65384674	0.26908493	0.1298255920	259.7822	58.00547	1.0
##	1420	1.5018444	0.65384674	0.26908493	0.1298255920	259.7822	58.00547	1.2
##	1421	1.5018444	0.65384674	0.26908493	0.1298255920	259.7822	58.00547	1.1
##	1422	1.5018444	0.65384674	0.26908493	0.1298255920	259.7822	58.00547	1.8
##	1423	1.5018444	0.65384674	0.26908493	0.1298255920	259.7822	58.00547	1.4
##	1424	1.5018444	0.65384674	0.26908493	0.1298255920	259.7822	58.00547	1.6
##	1425	1.5018444	0.65384674	0.26908493	0.1298255920	259.7822	58.00547	1.6
##	1426	1.6495266	0.74969101	0.31601143	0.1996250153	259.8455	57.92517	1.2
##	1427	1.5956059	0.75534439	0.29498672	0.1780586243	259.1525	57.90386	5.1
##	1428	1.5956059	0.75534439	0.29498672	0.1780586243	259.1525	57.90386	5.2
##	1429	1.5956059	0.75534439	0.29498672	0.1780586243	259.1525	57.90386	5.1
##	1430	1.5956059	0.75534439	0.29498672	0.1780586243	259.1525	57.90386	4.5
##	1431	1.5956059	0.75534439	0.29498672	0.1780586243	259.1525	57.90386	4.4
##	1432	1.5247154	0.69118118	0.25874329	0.1712875366	259.8019	57.93969	2.5
##	1433	1.5247154	0.69118118	0.25874329	0.1712875366	259.8019	57.93969	3.3
##	1434	1.5247154	0.69118118	0.25874329	0.1712875366	259.8019	57.93969	3.0
##	1435	1.5247154	0.69118118	0.25874329	0.1712875366	259.8019	57.93969	2.2

##	1436	1.5247154	0.69118118	0.25874329	0.1712875366	259.8019	57.93969	2.3
##	1437	1.5247154	0.69118118	0.25874329	0.1712875366	259.8019	57.93969	2.0
##	1438	1.5247154	0.69118118	0.25874329	0.1712875366	259.8019	57.93969	1.4
##	1439	1.5247154	0.69118118	0.25874329	0.1712875366	259.8019	57.93969	1.1
##	1440	1.5247154	0.69118118	0.25874329	0.1712875366	259.8019	57.93969	2.1
##	1441	1.5247154	0.69118118	0.25874329	0.1712875366	259.8019	57.93969	2.1
##	1442	1.5294075	0.66795349	0.22020340	0.0628070831	259.6002	57.91128	4.8
##	1443	1.2440472	0.54086113	0.30587578	0.2032089233	259.2925	57.97347	1.5
##	1444	1.9550533	0.79484749	0.28234100	0.2475948334	259.4143	57.85039	4.8
##	1445	1.9550533	0.79484749	0.28234100	0.2475948334	259.4143	57.85039	4.7
##	1446	2.6014595	1.17379761	0.41998291	0.2493305206	259.1575	57.85161	5.0
##	1447	2.6014595	1.17379761	0.41998291	0.2493305206	259.1575	57.85161	5.1
##	1448	2.6014595	1.17379761	0.41998291	0.2493305206	259.1575	57.85161	5.1
##	1449	2.6014595	1.17379761	0.41998291	0.2493305206	259.1575	57.85161	5.1
##	1450	1.7656918	0.75760269	0.30782890	0.2165451050	259.6273	57.86297	1.7
##	1451	1.7656918	0.75760269	0.30782890	0.2165451050	259.6273	57.86297	0.9
##	1452	1.6950111	0.45999146	0.33425331	-0.2560024261	259.3702	57.82206	2.2
##	1453	1.4811707	0.68578529	0.26319695	0.0641975403	259.9609	57.78364	3.4
##	1454	1.7997246	0.64913559	0.19483757	0.0497150421	260.0016	57.82461	5.2
##	1455	0.9413071	0.50441360	0.12914658	0.0731048584	259.8565	57.50606	4.1
##	1456	1.6696053	0.76252365	0.24334908	0.1641693115	259.7760	57.62222	4.7
##	1457	1.5940933	0.65641403	0.20085144	0.0897693634	259.9692	57.53014	4.1
##	1458	1.5940933	0.65641403	0.20085144	0.0897693634	259.9692	57.53014	5.1
##	1459	1.3954487	0.68000984	0.25345993	0.1133937836	259.9555	57.63786	4.0
##	1460	1.3954487	0.68000984	0.25345993	0.1133937836	259.9555	57.63786	4.8
##	1461	1.0376110	0.30888939	0.10193253	-0.0764408112	259.9852	57.51992	3.9
##	1462	1.0376110	0.30888939	0.10193253	-0.0764408112	259.9852	57.51992	4.0
##	1463	0.8878841	0.31791306	0.10465240	0.1521949768	259.9190	57.57825	4.3
##	1464	1.5769901	0.64952850	0.30388069	0.0729598999	260.0642	57.89175	2.0
##	1465	1.3826084	0.59489441	0.23923492	0.0497188568	259.8598	57.44225	4.4
##	1466	1.3826084	0.59489441	0.23923492	0.0497188568	259.8598	57.44225	1.8
##	1467	1.3826084	0.59489441	0.23923492	0.0497188568	259.8598	57.44225	2.7
##	1468	1.3826084	0.59489441	0.23923492	0.0497188568	259.8598	57.44225	3.8
##	1469	1.3826084	0.59489441	0.23923492	0.0497188568	259.8598	57.44225	1.8
##	1470	1.3545570	0.63745880	0.28117180	0.1704158783	260.0687	57.81122	1.8
##	1471	1.4018478	0.63836288	0.26327133	0.0976562500	260.2459	57.80447	4.1
##	1472	1.5569782	0.75899506	0.23909950	0.1721401215	260.1655	57.84725	1.2
##	1473	1.7998943	0.49564743	0.24186897	0.0283279419	260.4981	57.68364	4.0
##	1474	1.7040253	0.69325066	0.24668884	0.1546649933	260.2258	57.86653	3.6
##	1475	2.0587807	0.88734055	0.35954475	0.2134513855	260.3112	57.86953	1.2
##	1476	1.1885185	0.59706497	0.24794960	0.0545158386	260.8801	57.74172	3.9
##	1477	1.5869999	0.71434593	0.30902100	0.1835117340	260.3076	57.87939	1.1
##	1478	1.5869999	0.71434593	0.30902100	0.1835117340	260.3076	57.87939	1.3
##	1479	0.9236164	0.29856873	0.19350243	-0.0225048065	260.7335	57.86953	4.3
##	1480	0.9236164	0.29856873	0.19350243	-0.0225048065	260.7335	57.86953	4.8
##	1481	0.9236164	0.29856873	0.19350243	-0.0225048065	260.7335	57.86953	3.1
##	1482	2.3716755	1.02998734	0.38421631	0.2049312592	260.5505	57.87789	5.3
##	1483	1.6470947	0.68084526	0.31323624	0.1677665710	260.1004	57.92094	1.4
##	1484	1.6470947	0.68084526	0.31323624	0.1677665710	260.1004	57.92094	1.4
##	1485	1.6470947	0.68084526	0.31323624	0.1677665710	260.1004	57.92094	1.3
##	1486	1.6470947	0.68084526	0.31323624	0.1677665710	260.1004	57.92094	1.2
##	1487	1.6470947	0.68084526	0.31323624	0.1677665710	260.1004	57.92094	1.4
##	1488	1.6470947	0.68084526	0.31323624	0.1677665710	260.1004	57.92094	1.5
##	1489	1.6470947	0.68084526	0.31323624	0.1677665710	260.1004	57.92094	1.0
##	1490	1.6470947	0.68084526	0.31323624	0.1677665710	260.1004	57.92094	1.6
##	1491	2.5987206	1.20635128	0.51295185	0.2783012390	260.8675	58.00397	5.4
##	1492	0.9947071	0.37700844	0.14198303	-0.0756244659	260.7913	58.01172	4.4
##	1493	1.2219296	0.46810341	0.21817970	0.0769882202	260.9479	57.96686	4.6
##	1494	1.2219296	0.46810341	0.21817970	0.0769882202	260.9479	57.96686	3.6
##	1495	2.6539688	1.21673584	0.46955967	0.2587013245	260.8594	58.08961	5.2
##	1496	2.6539688	1.21673584	0.46955967	0.2587013245	260.8594	58.08961	5.3
##	1497	2.6539688	1.21673584	0.46955967	0.2587013245	260.8594	58.08961	5.2
##	1498	1.4121265	0.67881966	0.27362442	0.1342105865	260.9041	58.09267	5.0
##	1499	1.4121265	0.67881966	0.27362442	0.1342105865	260.9041	58.09267	3.8
##	1500	1.4121265	0.67881966	0.27362442	0.1342105865	260.9041	58.09267	4.6
##	1501	1.6449242	0.69291687	0.35286331	0.1765270233	260.1008	57.94053	1.4
##	1502	1.9391670	0.72463036	0.28191757	0.1709346771	260.3168	58.00906	5.0
##	1503	1.9391670	0.72463036	0.28191757	0.1709346771	260.3168	58.00906	5.3
##	1504	1.9391670	0.72463036	0.28191757	0.1709346771	260.3168	58.00906	5.1
##	1505	1.4045811	0.65781403	0.32453346	0.1294555664	260.1267	57.96817	1.1
##	1506	1.5286884	0.65468979	0.23509979	0.2372016907	260.4446	58.21619	5.1
##	1507	1.5286884	0.65468979	0.23509979	0.2372016907	260.4446	58.21619	4.0
##	1508	1.0526600	0.26459503	0.05171585	0.2101764679	260.4432	58.12575	4.3
##	1509	2.5698071	1.11493492	0.41106033	0.2029876709	260.4015	58.35228	5.2
##	1510	2.5698071	1.11493492	0.41106033	0.2029876709	260.4015	58.35228	5.2
##	1511	2.5698071	1.11493492	0.41106033	0.2029876709	260.4015	58.35228	5.1
##	1512	1.4112186	0.70276833	0.13344383	0.3382778168	260.2583	58.21939	3.7
##	1513	0.7152290	0.28815079	0.18460846	0.1745777130	260.4334	58.37517	2.8
##	1514	1.3974819	0.62628174	0.26019287	0.1724948883	260.2817	58.28281	4.6

##	1515	1.3974819	0.62628174	0.26019287	0.1724948883	260.2817	58.28281	5.4
##	1516	1.1791935	0.19587135	0.08532524	0.1113166809	260.2467	58.08964	3.4
##	1517	2.5219746	1.19627285	0.43890953	0.2523078918	260.1914	58.37792	5.5
##	1518	2.5219746	1.19627285	0.43890953	0.2523078918	260.1914	58.37792	5.4
##	1519	1.6019287	0.69013023	0.31249237	0.1645202637	260.0988	58.09006	1.4
##	1520	1.6019287	0.69013023	0.31249237	0.1645202637	260.0988	58.09006	0.9
##	1521	1.2302723	0.24480057	0.05775642	0.0826282501	260.2166	58.25044	1.6
##	1522	1.7508202	0.77676010	0.36155319	0.2103767395	260.0437	57.97244	1.0
##	1523	1.4406242	0.62662315	0.24788094	0.2181262970	260.0053	58.31150	1.6
##	1524	1.4406242	0.62662315	0.24788094	0.2181262970	260.0053	58.31150	4.0
##	1525	1.4406242	0.62662315	0.24788094	0.2181262970	260.0053	58.31150	3.3
##	1526	1.4406242	0.62662315	0.24788094	0.2181262970	260.0053	58.31150	4.4
##	1527	1.2008915	0.45859528	0.22583199	0.1132678986	260.0389	58.13117	2.5
##	1528	0.9705429	0.30802536	0.16005135	0.2856559753	259.7163	58.36133	1.9
##	1529	0.9705429	0.30802536	0.16005135	0.2856559753	259.7163	58.36133	4.4
##	1530	0.9705429	0.30802536	0.16005135	0.2856559753	259.7163	58.36133	4.2
##	1531	0.9705429	0.30802536	0.16005135	0.2856559753	259.7163	58.36133	4.4
##	1532	0.9231434	0.39721298	0.22693443	0.1276760101	259.8314	58.31986	4.4
##	1533	0.9231434	0.39721298	0.22693443	0.1276760101	259.8314	58.31986	4.1
##	1534	0.9231434	0.39721298	0.22693443	0.1276760101	259.8314	58.31986	2.8
##	1535	0.9231434	0.39721298	0.22693443	0.1276760101	259.8314	58.31986	4.3
##	1536	0.9231434	0.39721298	0.22693443	0.1276760101	259.8314	58.31986	3.8
##	1537	1.7218113	0.73313904	0.30711555	0.1333560944	259.9725	57.99836	5.0
##	1538	1.4137440	0.38453102	0.15693092	0.2309799194	259.9302	58.16614	2.1
##	1539	1.1738853	0.65280533	0.30008888	0.1439342499	259.8380	58.13106	3.8
##	1540	2.0373192	0.88887405	0.32793236	0.1574020386	259.3947	58.24106	5.3
##	1541	2.0373192	0.88887405	0.32793236	0.1574020386	259.3947	58.24106	4.7
##	1542	2.0373192	0.88887405	0.32793236	0.1574020386	259.3947	58.24106	5.1
##	1543	2.0373192	0.88887405	0.32793236	0.1574020386	259.3947	58.24106	5.4
##	1544	2.0373192	0.88887405	0.32793236	0.1574020386	259.3947	58.24106	5.5
##	1545	2.0373192	0.88887405	0.32793236	0.1574020386	259.3947	58.24106	5.3
##	1546	2.0373192	0.88887405	0.32793236	0.1574020386	259.3947	58.24106	5.1
##	1547	2.0373192	0.88887405	0.32793236	0.1574020386	259.3947	58.24106	5.3
##	1548	1.6210785	0.65457344	0.28711319	0.1493244171	259.7522	57.99328	1.7
##	1549	1.5337849	0.58363914	0.30987740	0.0417652130	259.8417	57.98408	1.6
##	1550	1.3160381	0.56468582	0.31917572	0.0682430267	260.0280	57.93103	1.7
##	1551	1.2399445	0.63303757	0.29171371	0.1663589478	259.6530	58.04522	3.2
##	1552	1.3755188	0.65475845	0.25393677	0.2092838287	259.2945	57.99469	3.4
##	1553	1.4583797	0.63900948	0.28240204	0.2115154266	259.3325	57.96094	2.1
##	1554	1.4583797	0.63900948	0.28240204	0.2115154266	259.3325	57.96094	1.2
##	1555	1.4583797	0.63900948	0.28240204	0.2115154266	259.3325	57.96094	1.0
##	1556	1.4354057	0.71291733	0.26021767	0.1510753632	259.8736	57.90983	2.3
##	1557	1.0666275	0.40353203	0.18432426	0.1424503326	259.5033	57.85661	2.5
##	1558	1.5776997	0.67902565	0.30389023	0.1787338257	259.7212	57.92208	1.8
##	1559	1.8523521	0.80565262	0.28553772	0.1816959381	259.5598	57.81353	5.3
##	1560	1.8523521	0.80565262	0.28553772	0.1816959381	259.5598	57.81353	4.9
##	1561	1.1894932	0.46362877	0.31681824	0.2045669556	259.4859	57.80714	3.9
##	1562	1.1894932	0.46362877	0.31681824	0.2045669556	259.4859	57.80714	3.9
##	1563	1.6099262	0.67094612	0.32512474	0.1905097961	259.8078	57.86528	3.0
##	1564	1.6099262	0.67094612	0.32512474	0.1905097961	259.8078	57.86528	2.2
##	1565	1.6099262	0.67094612	0.32512474	0.1905097961	259.8078	57.86528	1.4
##	1566	1.6099262	0.67094612	0.32512474	0.1905097961	259.8078	57.86528	1.1
##	1567	1.6099262	0.67094612	0.32512474	0.1905097961	259.8078	57.86528	1.5
##	1568	1.6099262	0.67094612	0.32512474	0.1905097961	259.8078	57.86528	1.6
##	1569	1.6099262	0.67094612	0.32512474	0.1905097961	259.8078	57.86528	2.3
##	1570	1.5199051	0.70445061	0.23017311	0.1201744080	259.5448	57.84194	2.1
##	1571	1.5199051	0.70445061	0.23017311	0.1201744080	259.5448	57.84194	2.6
##	1572	1.5199051	0.70445061	0.23017311	0.1201744080	259.5448	57.84194	1.2
##	1573	0.8472004	0.39105034	0.18604469	0.0690078735	259.2740	57.70583	4.6
##	1574	0.8472004	0.39105034	0.18604469	0.0690078735	259.2740	57.70583	4.8
##	1575	0.8472004	0.39105034	0.18604469	0.0690078735	259.2740	57.70583	4.8
##	1576	0.8472004	0.39105034	0.18604469	0.0690078735	259.2740	57.70583	2.9
##	1577	1.7264843	0.77323532	0.35245705	0.1701297760	259.5542	57.71294	2.0
##	1578	1.7264843	0.77323532	0.35245705	0.1701297760	259.5542	57.71294	2.0
##	1579	1.7264843	0.77323532	0.35245705	0.1701297760	259.5542	57.71294	1.0
##	1580	1.7264843	0.77323532	0.35245705	0.1701297760	259.5542	57.71294	1.2
##	1581	1.5147514	0.64435768	0.30017662	0.1688156128	259.7680	57.78575	1.9
##	1582	1.0679607	0.32037735	0.14903831	-0.0678081512	259.7684	57.74744	3.6
##	1583	1.0679607	0.32037735	0.14903831	-0.0678081512	259.7684	57.74744	3.0
##	1584	1.7176609	0.70261383	0.36455154	0.1539344788	260.0023	57.88239	2.5
##	1585	1.7176609	0.70261383	0.36455154	0.1539344788	260.0023	57.88239	2.4
##	1586	1.7176609	0.70261383	0.36455154	0.1539344788	260.0023	57.88239	2.5
##	1587	1.7176609	0.70261383	0.36455154	0.1539344788	260.0023	57.88239	3.0
##	1588	1.7176609	0.70261383	0.36455154	0.1539344788	260.0023	57.88239	2.7
##	1589	1.7176609	0.70261383	0.36455154	0.1539344788	260.0023	57.88239	2.2
##	1590	1.7176609	0.70261383	0.36455154	0.1539344788	260.0023	57.88239	2.1
##	1591	2.1257839	0.83360863	0.31344795	0.1759738922	259.5300	57.60844	4.8
##	1592	2.1257839	0.83360863	0.31344795	0.1759738922	259.5300	57.60844	5.0
##	1593	2.1257839	0.83360863	0.31344795	0.1759738922	259.5300	57.60844	5.1

##	1594	2.1257839	0.83360863	0.31344795	0.1759738922	259.5300	57.60844	5.0
##	1595	2.1257839	0.83360863	0.31344795	0.1759738922	259.5300	57.60844	4.6
##	1596	2.1257839	0.83360863	0.31344795	0.1759738922	259.5300	57.60844	5.4
##	1597	1.6563988	0.64813042	0.31763077	0.1752529144	260.0309	57.88669	1.8
##	1598	1.3378944	0.73463249	0.21469498	0.2964973450	258.6588	57.83136	4.5
##	1599	2.1998749	0.93083000	0.32413483	0.2127323151	258.5875	57.77761	5.0
##	1600	2.1998749	0.93083000	0.32413483	0.2127323151	258.5875	57.77761	5.2
##	1601	2.1998749	0.93083000	0.32413483	0.2127323151	258.5875	57.77761	5.3
##	1602	2.0517025	0.78185463	0.23897171	0.1012172699	258.6671	57.81908	3.1
##	1603	2.0517025	0.78185463	0.23897171	0.1012172699	258.6671	57.81908	5.1
##	1604	1.6255951	0.65117645	0.24465752	0.0394573212	258.2805	57.65767	5.0
##	1605	2.4302044	1.01203346	0.36683655	0.1689548492	258.2769	57.67856	4.6
##	1606	0.3382759	1.22473907	0.07642937	-0.9654483795	258.5033	57.61511	4.8
##	1607	1.9472046	0.82199860	0.23352242	0.2004718781	258.7572	57.84539	4.9
##	1608	1.9472046	0.82199860	0.23352242	0.2004718781	258.7572	57.84539	4.9
##	1609	1.9674473	0.78541374	0.25197220	0.1957874298	258.7580	57.80786	3.7
##	1610	1.9674473	0.78541374	0.25197220	0.1957874298	258.7580	57.80786	4.9
##	1611	0.9596806	0.37060928	0.18296432	0.2113456726	258.7543	57.86497	3.7
##	1612	2.0515251	0.77092171	0.25201797	0.1398983002	258.5217	57.57514	4.6
##	1613	2.0515251	0.77092171	0.25201797	0.1398983002	258.5217	57.57514	4.6
##	1614	2.2416821	1.02376175	0.37205696	0.1830577850	258.7717	57.71122	5.1
##	1615	2.2416821	1.02376175	0.37205696	0.1830577850	258.7717	57.71122	5.0
##	1616	1.3284111	0.58491707	0.08936119	0.1774578094	258.7510	57.70108	4.8
##	1617	1.5364780	0.65715599	0.27784348	0.1311779022	258.7225	57.73500	4.1
##	1618	2.0565147	0.84703255	0.30119514	0.1960353851	258.7709	57.65958	4.8
##	1619	1.9408169	0.73338509	0.26288795	0.1484413147	258.5701	57.52536	3.6
##	1620	1.1518021	-1.15920448	1.61345482	-0.0042781830	258.7783	57.54997	4.2
##	1621	2.2687130	0.89969063	0.31815529	0.1977024078	258.7572	57.48008	5.2
##	1622	1.2455673	0.63846779	0.25072098	0.1231689453	258.7955	57.69019	5.1
##	1623	1.3901291	0.64855003	0.24356270	0.0885715485	258.9002	57.80956	2.7
##	1624	1.3901291	0.64855003	0.24356270	0.0885715485	258.9002	57.80956	1.6
##	1625	1.8138561	0.69720840	0.28334045	0.1437072754	259.0911	57.58353	5.0
##	1626	1.8138561	0.69720840	0.28334045	0.1437072754	259.0911	57.58353	4.5
##	1627	1.8812046	0.79794693	0.24704170	0.2026195526	258.9987	57.53139	4.7
##	1628	1.8812046	0.79794693	0.24704170	0.2026195526	258.9987	57.53139	4.9
##	1629	1.8675404	0.73317146	0.24433327	0.1656017303	258.8137	57.94028	5.0
##	1630	1.8675404	0.73317146	0.24433327	0.1656017303	258.8137	57.94028	5.0
##	1631	1.5790138	0.71836853	0.24143219	0.1411533356	258.9075	57.84469	3.0
##	1632	1.5790138	0.71836853	0.24143219	0.1411533356	258.9075	57.84469	5.0
##	1633	1.5790138	0.71836853	0.24143219	0.1411533356	258.9075	57.84469	5.3
##	1634	2.1687775	0.72328949	0.26914978	0.1909275055	259.3232	57.52461	3.0
##	1635	2.1687775	0.72328949	0.26914978	0.1909275055	259.3232	57.52461	3.5
##	1636	2.1687775	0.72328949	0.26914978	0.1909275055	259.3232	57.52461	3.5
##	1637	2.1687775	0.72328949	0.26914978	0.1909275055	259.3232	57.52461	3.4
##	1638	1.7127018	0.75871658	0.32153130	0.1524848938	259.1351	57.71281	5.4
##	1639	1.7127018	0.75871658	0.32153130	0.1524848938	259.1351	57.71281	5.3
##	1640	1.7127018	0.75871658	0.32153130	0.1524848938	259.1351	57.71281	5.4
##	1641	2.6777039	1.12220955	0.47173691	0.2718944550	259.1158	57.80239	1.1
##	1642	2.1823597	0.89400673	0.33233833	0.1781425476	259.3154	57.78692	4.5
##	1643	2.1823597	0.89400673	0.33233833	0.1781425476	259.3154	57.78692	5.0
##	1644	2.1823597	0.89400673	0.33233833	0.1781425476	259.3154	57.78692	5.0
##	1645	1.3019447	0.59583473	0.23233986	0.0508136749	259.2532	57.85619	4.5
##	1646	1.3019447	0.59583473	0.23233986	0.0508136749	259.2532	57.85619	4.8
##	1647	1.3041840	0.37009048	0.15006828	0.0830516815	259.5665	57.80322	3.0
##	1648	1.3041840	0.37009048	0.15006828	0.0830516815	259.5665	57.80322	4.7
##	1649	2.5077343	1.12893677	0.46115494	0.2584323883	259.5433	57.86917	1.3
##	1650	2.5077343	1.12893677	0.46115494	0.2584323883	259.5433	57.86917	0.7
##	1651	0.5746670	-0.25685120	1.14950562	-3.1411972046	259.4928	57.95181	2.8
##	1652	1.6004105	0.66475105	0.34161758	0.1517333984	259.6898	58.08231	4.2
##	1653	1.6004105	0.66475105	0.34161758	0.1517333984	259.6898	58.08231	1.5
##	1654	1.6004105	0.66475105	0.34161758	0.1517333984	259.6898	58.08231	1.2
##	1655	1.6004105	0.66475105	0.34161758	0.1517333984	259.6898	58.08231	1.5
##	1656	1.4977875	0.68592644	0.31751060	0.1684913635	259.0066	57.98864	1.1
##	1657	1.9357510	0.79471779	0.33427811	0.1678867340	258.9026	58.09486	4.6
##	1658	1.7221107	0.75367928	0.30123901	0.1740608215	258.9107	58.41686	4.4
##	1659	2.5574436	1.21694469	0.46210289	0.2492256165	258.8918	58.12594	5.4
##	1660	2.5386333	1.18495369	0.43219280	0.2502193451	258.5865	58.33750	5.0
##	1661	1.8691463	0.71930122	0.28779984	0.1630992889	258.6771	58.31758	4.6
##	1662	2.1300449	0.79247093	0.27350235	0.1726589203	258.7080	58.12417	5.1
##	1663	2.1300449	0.79247093	0.27350235	0.1726589203	258.7080	58.12417	5.0
##	1664	1.5521431	0.66689110	0.17736435	0.1797409058	258.5351	58.32286	4.0
##	1665	2.1610718	0.92065430	0.31832886	0.1734256744	258.7153	58.33067	4.8
##	1666	1.9235439	0.75996590	0.28497124	0.1560821533	258.7380	58.01575	4.3
##	1667	2.4695683	1.20686913	0.45931339	0.2602329254	258.5793	58.06153	5.0
##	1668	2.4695683	1.20686913	0.45931339	0.2602329254	258.5793	58.06153	5.4
##	1669	2.4695683	1.20686913	0.45931339	0.2602329254	258.5793	58.06153	5.4
##	1670	2.3163090	1.04866028	0.36038208	0.2066783905	258.4586	58.10967	5.1
##	1671	2.3163090	1.04866028	0.36038208	0.2066783905	258.4586	58.10967	5.1
##	1672	1.4542618	0.67267990	0.27219582	0.1609268188	258.3918	58.06614	5.2

##	1673	2.5548782	1.16529274	0.46118832	0.2632265091	258.3078	58.14328	5.4
##	1674	1.6791363	0.67884445	0.29276848	0.0737419128	258.1575	57.98939	4.6
##	1675	1.6791363	0.67884445	0.29276848	0.0737419128	258.1575	57.98939	4.8
##	1676	0.9538078	0.46386337	0.38745308	-0.5454406738	258.5245	57.99161	3.8
##	1677	1.4333153	1.78815079	-0.78062248	-2.8946743011	257.9853	57.97017	4.8
##	1678	1.4333153	1.78815079	-0.78062248	-2.8946743011	257.9853	57.97017	3.7
##	1679	1.5555115	1.01461983	0.21665573	0.1289615631	258.2269	57.85833	4.7
##	1680	1.5555115	1.01461983	0.21665573	0.1289615631	258.2269	57.85833	5.3
##	1681	0.8503017	0.40787506	0.18536949	-0.0092334747	258.3322	57.87475	3.3
##	1682	1.4518566	0.55631638	0.26530075	-0.0298957825	258.0678	57.67786	4.0
##	1683	2.0291157	0.76441383	0.28653336	0.2317199707	258.1021	57.76094	4.6
##	1684	2.5161953	1.12487793	0.43090439	0.2247314453	261.3605	57.54450	4.9
##	1685	2.3081188	0.95947647	0.33889961	0.1861858368	261.3410	57.56075	5.2
##	1686	1.7929115	0.69999313	0.25704956	0.0847320557	261.3579	57.44256	4.5
##	1687	1.8815441	0.73220444	0.27043915	0.1422500610	261.3317	57.71497	4.7
##	1688	1.2199879	0.55213928	0.22043991	0.0034294128	261.3470	57.70936	5.1
##	1689	1.5150089	0.69192123	0.26210976	0.1815528870	261.4569	57.48314	5.1
##	1690	1.6298866	0.64239502	0.29567719	0.1753368378	261.3035	57.42456	4.6
##	1691	1.5251007	0.59863281	0.19431686	-0.0066490173	261.3516	57.77067	4.0
##	1692	1.8211670	0.57200813	0.25313377	0.1873035431	261.5106	57.44872	3.4
##	1693	2.1534195	0.75480652	0.27867126	0.1588745117	261.5500	57.68300	4.8
##	1694	2.1142063	0.74669266	0.29320717	0.1671581268	261.7724	57.49225	4.5
##	1695	1.9005508	0.77359390	0.29621124	0.1370639801	261.4439	57.76064	5.2
##	1696	2.1758995	0.91892624	0.35146904	0.1822738647	261.7382	57.67367	5.3
##	1697	1.5837212	0.70169067	0.23957062	0.1429920197	261.7632	57.63444	4.4
##	1698	1.4023819	0.43663597	0.18159676	0.1650505066	261.8648	57.57108	3.6
##	1699	1.3765965	0.63774300	0.23839760	0.0749607086	261.6070	57.81056	4.3
##	1700	2.5988331	1.16448021	0.43685150	0.2333936691	261.3782	57.84789	5.1
##	1701	1.5749550	0.69024277	0.18619156	0.1320381165	262.0376	57.68611	4.4
##	1702	2.2717438	0.69500542	0.21712494	-0.0126075745	261.9267	57.75667	3.9
##	1703	2.0429802	0.77804565	0.32800293	0.1562137604	261.7121	57.76281	4.4
##	1704	1.5532951	0.69512939	0.26415253	0.1570148468	262.0138	57.74681	5.2
##	1705	1.5003910	0.65468979	0.29010010	0.0283908844	261.5368	57.79961	4.7
##	1706	1.5003910	0.65468979	0.29010010	0.0283908844	261.5368	57.79961	4.7
##	1707	1.0014057	0.64982224	0.26944733	0.0800857544	261.7186	57.74378	4.6
##	1708	2.3928070	0.94792366	0.30618095	0.1747970581	261.6692	57.86992	5.2
##	1709	1.5475655	0.58572578	0.28371239	0.2344627380	262.0647	57.93886	3.4
##	1710	2.5593510	1.23666382	0.43306923	0.2344570160	262.0006	57.89372	5.3
##	1711	1.8450909	0.80168343	0.29224205	0.1787319183	262.0479	58.02081	4.9
##	1712	1.7371235	0.62823105	0.25490379	0.0735225677	262.0409	58.00647	4.8
##	1713	2.4265900	1.14973259	0.42803574	0.2553043365	261.6882	57.95811	5.4
##	1714	1.5614395	0.64114189	0.28052330	0.1189861298	261.9750	57.97975	4.6
##	1715	2.6068478	1.18292999	0.49560833	0.2849369049	261.5599	57.94994	5.0
##	1716	1.5155201	0.57211685	0.24394417	0.0591030121	261.8898	57.96119	4.7
##	1717	1.8286247	0.75085831	0.29508400	0.1751842499	261.4475	57.93956	5.5
##	1718	1.8286247	0.75085831	0.29508400	0.1751842499	261.4475	57.93956	5.3
##	1719	1.5870647	0.68550110	0.21725845	0.1011009216	261.8835	58.09731	4.8
##	1720	2.1988068	0.96013260	0.34229469	0.2198638916	261.9739	58.20056	5.3
##	1721	2.4622440	1.08645058	0.41297340	0.2235298157	261.7088	58.10181	5.5
##	1722	1.4453468	0.61023903	0.24086571	0.0646591187	262.0185	58.11225	4.5
##	1723	1.7106457	0.62891197	0.25383568	-0.0437679291	261.5000	57.98714	4.7
##	1724	1.9108601	0.81019974	0.27545738	0.0975437164	261.6178	58.09706	4.7
##	1725	1.7199783	0.73702240	0.23810768	0.1096229553	261.5983	58.10092	5.4
##	1726	1.7199783	0.73702240	0.23810768	0.1096229553	261.5983	58.10092	5.0
##	1727	2.3188725	1.07903290	0.41508484	0.2195816040	261.9323	58.22078	5.0
##	1728	0.8660393	0.31047440	0.09817505	0.1361904144	261.7355	58.22667	3.1
##	1729	2.1980057	0.85967064	0.30302238	0.1608123779	261.4442	58.10264	4.9
##	1730	2.1980057	0.85967064	0.30302238	0.1608123779	261.4442	58.10264	4.9
##	1731	2.1980057	0.85967064	0.30302238	0.1608123779	261.4442	58.10264	5.1
##	1732	2.1156178	0.93451881	0.38057327	0.2280597687	261.5075	58.15772	5.0
##	1733	1.0376911	0.37801933	0.19719887	-0.0229091644	261.2838	57.92397	4.4
##	1734	1.0376911	0.37801933	0.19719887	-0.0229091644	261.2838	57.92397	3.0
##	1735	2.6288452	1.20643044	0.40261841	0.2468967438	261.4944	58.23758	5.0
##	1736	1.4175758	0.42830467	0.21959686	0.1820678711	261.5455	58.18492	3.1
##	1737	2.0685768	0.76579857	0.22985840	0.1894054413	261.5570	58.34794	5.0
##	1738	0.8472614	0.24505806	0.20922470	0.0148944855	261.3678	57.94356	2.1
##	1739	0.8472614	0.24505806	0.20922470	0.0148944855	261.3678	57.94356	4.4
##	1740	1.8819275	0.70154381	0.26660156	0.1140346527	261.4185	58.28828	4.4
##	1741	1.8819275	0.70154381	0.26660156	0.1140346527	261.4185	58.28828	4.3
##	1742	1.4373322	0.63416862	0.21440315	0.0567493439	261.4821	58.35433	5.1
##	1743	0.7745914	0.39737892	0.19390678	0.1048755646	261.3912	58.11586	2.9
##	1744	1.3875885	0.63430786	0.19918823	0.2436542511	261.5142	58.34883	4.2
##	1745	1.3875885	0.63430786	0.19918823	0.2436542511	261.5142	58.34883	4.5
##	1746	1.3875885	0.63430786	0.19918823	0.2436542511	261.5142	58.34883	4.0
##	1747	1.5741234	0.67101097	0.28913307	0.2138633728	261.2232	58.29106	1.3
##	1748	1.5741234	0.67101097	0.28913307	0.2138633728	261.2232	58.29106	2.0
##	1749	1.5741234	0.67101097	0.28913307	0.2138633728	261.2232	58.29106	3.3
##	1750	1.1005192	0.32207489	0.10123825	0.0634593964	261.1710	58.23497	4.5
##	1751	1.1005192	0.32207489	0.10123825	0.0634593964	261.1710	58.23497	4.6

##	1752	1.6695805	0.71998405	0.27022743	0.1242885590	261.1855	58.15556	4.7
##	1753	1.6695805	0.71998405	0.27022743	0.1242885590	261.1855	58.15556	5.0
##	1754	1.6695805	0.71998405	0.27022743	0.1242885590	261.1855	58.15556	5.3
##	1755	1.2968407	0.45449066	0.18280602	0.1353149414	261.2829	58.11222	4.3
##	1756	1.4014988	0.65819550	0.18331909	0.0513172150	261.0172	58.29111	4.4
##	1757	1.4014988	0.65819550	0.18331909	0.0513172150	261.0172	58.29111	4.0
##	1758	1.4014988	0.65819550	0.18331909	0.0513172150	261.0172	58.29111	4.9
##	1759	2.3710613	0.95509720	0.31354332	0.1994838715	261.1218	58.12697	5.1
##	1760	2.4452610	0.98687553	0.33525276	0.1483459473	261.0027	58.23639	5.2
##	1761	2.4452610	0.98687553	0.33525276	0.1483459473	261.0027	58.23639	4.9
##	1762	2.3788509	1.08056259	0.44191742	0.2532854080	261.0823	58.21669	5.2
##	1763	2.3788509	1.08056259	0.44191742	0.2532854080	261.0823	58.21669	5.4
##	1764	2.3788509	1.08056259	0.44191742	0.2532854080	261.0823	58.21669	5.1
##	1765	2.3788509	1.08056259	0.44191742	0.2532854080	261.0823	58.21669	5.4
##	1766	2.3213310	1.00836945	0.34524918	0.1600856781	260.9930	58.22372	5.0
##	1767	2.3213310	1.00836945	0.34524918	0.1600856781	260.9930	58.22372	5.1
##	1768	2.3213310	1.00836945	0.34524918	0.1600856781	260.9930	58.22372	5.0
##	1769	2.3213310	1.00836945	0.34524918	0.1600856781	260.9930	58.22372	5.0
##	1770	2.3213310	1.00836945	0.34524918	0.1600856781	260.9930	58.22372	5.2
##	1771	1.1860123	0.45175743	0.11723709	0.0344905853	261.0794	58.28886	1.9
##	1772	1.1860123	0.45175743	0.11723709	0.0344905853	261.0794	58.28886	5.0
##	1773	1.1860123	0.45175743	0.11723709	0.0344905853	261.0794	58.28886	4.0
##	1774	1.9236622	0.76086807	0.29102516	0.1030235291	260.9772	58.05264	5.0
##	1775	1.9236622	0.76086807	0.29102516	0.1030235291	260.9772	58.05264	5.0
##	1776	2.0092621	0.78673172	0.27509117	0.1799411774	261.2497	57.92000	4.7
##	1777	1.5268555	0.57054138	0.28345299	0.0660877228	260.6806	58.15156	4.8
##	1778	1.5268555	0.57054138	0.28345299	0.0660877228	260.6806	58.15156	4.5
##	1779	1.5268555	0.57054138	0.28345299	0.0660877228	260.6806	58.15156	4.2
##	1780	1.5268555	0.57054138	0.28345299	0.0660877228	260.6806	58.15156	3.2
##	1781	0.7920303	0.28682137	0.09980011	0.0190658569	261.1889	57.91392	4.2
##	1782	0.7920303	0.28682137	0.09980011	0.0190658569	261.1889	57.91392	4.3
##	1783	0.7903728	0.31887054	0.17645264	-0.1455574036	260.8148	58.05347	3.3
##	1784	0.9170189	0.39598274	0.19725609	0.0397605896	260.4501	57.95903	5.0
##	1785	1.3796597	0.64906311	0.30994797	0.1791629791	260.5272	57.93617	1.2
##	1786	1.3397083	0.46607399	0.16215897	-0.0254821777	260.6501	57.62258	4.4
##	1787	1.3397083	0.46607399	0.16215897	-0.0254821777	260.6501	57.62258	3.9
##	1788	1.9936695	0.83572578	0.30718040	0.1542778015	261.0115	57.76806	5.1
##	1789	1.9936695	0.83572578	0.30718040	0.1542778015	261.0115	57.76806	5.1
##	1790	0.6515007	0.35669136	0.25418663	-0.0586223602	260.9803	57.69239	4.3
##	1791	1.1580200	0.30264854	0.12710953	0.1057357788	260.7033	57.52231	4.4
##	1792	1.1580200	0.30264854	0.12710953	0.1057357788	260.7033	57.52231	2.1
##	1793	1.1102085	0.40157700	0.23290443	-0.0213317871	260.6995	57.49989	3.4
##	1794	1.1121578	0.43437004	0.19656372	-0.0179576874	260.8860	57.64889	5.0
##	1795	0.9286480	0.38800812	0.20333862	0.2157382965	260.7906	57.60217	2.5
##	1796	2.2608433	0.94910240	0.33842468	0.1695747375	261.0473	57.71581	4.8
##	1797	1.5900917	0.72760582	0.25123596	0.0808258057	260.9931	57.72306	4.8
##	1798	1.3868771	0.66035843	0.29383850	0.0394535065	261.1376	57.75797	5.3
##	1799	1.2649364	0.65255928	0.22254372	0.0678806305	261.0565	57.59506	4.5
##	1800	2.4942970	1.03262901	0.39684486	0.1793670654	261.0326	57.61903	4.8
##	1801	2.4942970	1.03262901	0.39684486	0.1793670654	261.0326	57.61903	5.0
##	1802	1.6453495	0.63334274	0.31414223	0.0417156219	260.8759	57.48278	5.2
##	1803	2.1219788	0.88900375	0.29197121	0.1304721832	261.1656	57.48856	5.2
##	1804	1.5596504	0.71701431	0.21643639	0.0994644165	261.1151	57.46961	5.2
##	1805	1.3722382	0.51620674	0.29040718	0.0458431244	261.2095	57.70514	4.4
##	1806	1.7353058	0.66266060	0.29461479	0.0532321930	261.1037	57.51997	4.3
##	1807	2.4467583	1.18121910	0.43211651	0.2288684845	261.2328	57.57867	5.4
##	1808	1.3381729	0.57993126	0.33145714	0.0399303436	260.0660	57.91744	1.9
##	1809	1.4935513	0.55691528	0.29848099	-0.0425815582	260.0519	57.91453	1.2
##	1810	1.4385662	0.68851662	0.33779144	0.1066341400	260.1271	57.91756	3.0
##	1811	1.1014633	0.65543365	0.28870773	0.1575546265	260.1150	58.33094	2.8
##	1812	1.0543842	0.55888176	0.27929115	0.1636505127	260.5075	58.06383	2.1
##	1813	1.0216236	0.42072868	0.19230843	0.0502357483	260.2218	58.30689	3.1
##	1814	0.9170094	0.26869011	0.11308861	0.1506786346	260.1187	58.40417	4.2
##	1815	0.9170094	0.26869011	0.11308861	0.1506786346	260.1187	58.40417	3.2
##	1816	2.2102070	1.04827118	0.43824959	0.2298793793	260.6045	58.27983	5.5
##	1817	2.2102070	1.04827118	0.43824959	0.2298793793	260.6045	58.27983	5.5
##	1818	2.2102070	1.04827118	0.43824959	0.2298793793	260.6045	58.27983	5.2
##	1819	1.4433517	0.64689827	0.26033211	0.1104736328	260.2964	58.37392	4.9
##	1820	1.4433517	0.64689827	0.26033211	0.1104736328	260.2964	58.37392	4.7
##	1821	1.4433517	0.64689827	0.26033211	0.1104736328	260.2964	58.37392	4.8
##	1822	1.7113876	0.68844604	0.22794724	0.0628757477	260.6524	58.33642	4.4
##	1823	1.7113876	0.68844604	0.22794724	0.0628757477	260.6524	58.33642	4.7
##	1824	1.7113876	0.68844604	0.22794724	0.0628757477	260.6524	58.33642	5.0
##	1825	2.3830624	1.04011345	0.41299820	0.2088050842	260.7693	58.40478	5.1
##	1826	2.3830624	1.04011345	0.41299820	0.2088050842	260.7693	58.40478	5.1
##	1827	1.5350342	0.59177017	0.23582649	0.1436500549	260.4696	58.41592	5.2
##	1828	1.5350342	0.59177017	0.23582649	0.1436500549	260.4696	58.41592	4.9
##	1829	0.6430569	0.34402084	0.10863304	0.1308460236	260.8550	58.43894	3.4
##	1830	0.6430569	0.34402084	0.10863304	0.1308460236	260.8550	58.43894	2.1

##	1831	2.2645721	0.96248436	0.36346245	0.1637763977	260.7462	58.36550	5.3
##	1832	2.2645721	0.96248436	0.36346245	0.1637763977	260.7462	58.36550	5.3
##	1833	2.5005684	1.03509521	0.38292503	0.2069034576	260.4044	58.44075	5.2
##	1834	2.5005684	1.03509521	0.38292503	0.2069034576	260.4044	58.44075	5.1
##	1835	1.2009869	0.46489525	0.14599800	0.1458148956	260.3887	58.43306	2.7
##	1836	1.2009869	0.46489525	0.14599800	0.1458148956	260.3887	58.43306	3.8
##	1837	2.9162521	0.62951851	0.25970840	-0.2636299133	260.6809	58.43722	3.8
##	1838	1.6971092	0.56711197	0.22460365	0.0751819611	260.4743	58.46903	4.9
##	1839	1.4609299	0.60227585	0.15699196	0.3665370941	260.7178	58.59144	4.7
##	1840	0.9123554	0.27344704	0.14746094	0.0080986023	260.5293	58.51625	2.5
##	1841	0.9123554	0.27344704	0.14746094	0.0080986023	260.5293	58.51625	2.1
##	1842	2.5781975	1.26633072	0.54876137	0.2900304794	260.5283	58.55386	5.0
##	1843	2.5781975	1.26633072	0.54876137	0.2900304794	260.5283	58.55386	5.2
##	1844	1.6776142	0.71222878	0.31960106	0.1034793854	260.7646	58.64544	5.1
##	1845	1.6776142	0.71222878	0.31960106	0.1034793854	260.7646	58.64544	5.0
##	1846	1.6776142	0.71222878	0.31960106	0.1034793854	260.7646	58.64544	4.7
##	1847	1.2929077	0.47060585	0.28755188	-0.1899299622	260.2617	58.43133	4.3
##	1848	1.2947464	0.65602875	0.18502808	0.1322841644	260.5555	58.62425	5.1
##	1849	1.2947464	0.65602875	0.18502808	0.1322841644	260.5555	58.62425	3.5
##	1850	1.7652073	0.72473526	0.26172256	0.1948356628	260.3019	58.49644	5.1
##	1851	1.7652073	0.72473526	0.26172256	0.1948356628	260.3019	58.49644	5.1
##	1852	1.2221203	0.62955093	0.20075035	0.0897712708	260.5638	58.59597	4.8
##	1853	2.3452473	0.98485756	0.34494972	0.1394195557	260.6511	58.70753	5.2
##	1854	0.9162941	0.44277763	0.13812637	0.0547790527	260.3367	58.62514	2.8
##	1855	0.9162941	0.44277763	0.13812637	0.0547790527	260.3367	58.62514	3.7
##	1856	2.3568192	0.97700882	0.36380577	0.2137832642	260.3376	58.57853	5.0
##	1857	2.3568192	0.97700882	0.36380577	0.2137832642	260.3376	58.57853	5.1
##	1858	2.3568192	0.97700882	0.36380577	0.2137832642	260.3376	58.57853	4.9
##	1859	1.7079067	0.59352112	0.23921776	0.1224575043	260.2693	58.60617	4.6
##	1860	1.7079067	0.59352112	0.23921776	0.1224575043	260.2693	58.60617	5.2
##	1861	1.7079067	0.59352112	0.23921776	0.1224575043	260.2693	58.60617	5.3
##	1862	1.6789284	0.68644333	0.24198341	0.1247959137	260.2879	58.52733	4.5
##	1863	1.6789284	0.68644333	0.24198341	0.1247959137	260.2879	58.52733	4.9
##	1864	1.6789284	0.68644333	0.24198341	0.1247959137	260.2879	58.52733	4.8
##	1865	2.3747025	1.13073921	0.41889381	0.2574205399	260.2794	58.73050	5.3
##	1866	1.8949814	0.72097206	0.26196861	0.1323165894	260.1669	58.56917	4.6
##	1867	1.8949814	0.72097206	0.26196861	0.1323165894	260.1669	58.56917	4.9
##	1868	1.8837318	0.70092010	0.22097397	0.1465187073	260.4609	58.82844	4.6
##	1869	1.5280743	0.67516899	0.23079681	0.2072238922	260.0841	58.60806	4.1
##	1870	1.5280743	0.67516899	0.23079681	0.2072238922	260.0841	58.60806	4.8
##	1871	1.9964581	0.78544044	0.28308678	0.1722393036	260.1165	58.75844	4.4
##	1872	1.9964581	0.78544044	0.28308678	0.1722393036	260.1165	58.75844	4.8
##	1873	1.9964581	0.78544044	0.28308678	0.1722393036	260.1165	58.75844	5.1
##	1874	2.0924149	0.53147888	0.15790367	0.5317707062	260.0618	58.64842	3.9
##	1875	2.0114784	0.92497444	0.32196617	0.2010974884	260.0490	58.86808	5.1
##	1876	2.0114784	0.92497444	0.32196617	0.2010974884	260.0490	58.86808	5.0
##	1877	0.8037930	0.50150681	0.20546150	0.1608428955	260.1395	58.62581	4.4
##	1878	2.0609207	0.84754372	0.29033661	0.1729965210	260.0478	58.59547	5.2
##	1879	2.0609207	0.84754372	0.29033661	0.1729965210	260.0478	58.59547	5.2
##	1880	0.9100780	0.41137886	0.19032288	-0.0260047913	259.9170	58.87492	3.4
##	1881	1.6845894	0.72116280	0.28192711	0.2209358215	260.0158	58.59808	4.7
##	1882	1.6845894	0.72116280	0.28192711	0.2209358215	260.0158	58.59808	4.7
##	1883	1.6845894	0.72116280	0.28192711	0.2209358215	260.0158	58.59808	5.2
##	1884	2.4120255	0.88612175	0.34458733	0.1629543304	259.9364	58.78794	5.0
##	1885	1.2349472	0.46348381	0.14536095	0.0624256134	259.9482	58.88353	4.5
##	1886	2.1411419	0.88238907	0.30920410	0.1750793457	259.9787	58.65867	5.2
##	1887	2.1411419	0.88238907	0.30920410	0.1750793457	259.9787	58.65867	5.2
##	1888	2.1411419	0.88238907	0.30920410	0.1750793457	259.9787	58.65867	5.2
##	1889	0.6916809	0.72953415	0.18256378	-0.0197162628	260.0305	58.62839	3.5
##	1890	0.6916809	0.72953415	0.18256378	-0.0197162628	260.0305	58.62839	4.7
##	1891	1.0676250	0.35101509	0.08898926	-0.2208843231	260.0055	58.56297	4.5
##	1892	1.9205837	0.82341003	0.28413200	0.1693458557	260.0110	58.85425	5.2
##	1893	1.9205837	0.82341003	0.28413200	0.1693458557	260.0110	58.85425	5.4
##	1894	1.9205837	0.82341003	0.28413200	0.1693458557	260.0110	58.85425	4.9
##	1895	1.1070919	0.43998909	0.13446426	0.1385612488	259.8565	58.63283	3.9
##	1896	1.9624710	0.81937981	0.34796715	0.1940078735	259.7012	58.80772	4.9
##	1897	1.7329330	0.75166893	0.23719978	0.1275978088	259.7301	58.71492	4.1
##	1898	1.7329330	0.75166893	0.23719978	0.1275978088	259.7301	58.71492	4.4
##	1899	2.5335464	1.13245201	0.39481735	0.2288837433	259.8643	58.65375	5.3
##	1900	2.5335464	1.13245201	0.39481735	0.2288837433	259.8643	58.65375	5.2
##	1901	1.9093609	0.81389427	0.26852417	0.1819305420	260.0550	58.45697	5.0
##	1902	1.9093609	0.81389427	0.26852417	0.1819305420	260.0550	58.45697	4.9
##	1903	1.9093609	0.81389427	0.26852417	0.1819305420	260.0550	58.45697	4.3
##	1904	1.5552406	0.68894196	0.24029541	0.1049251556	259.5463	58.73486	4.0
##	1905	2.5270576	1.17089653	0.45672226	0.2545146942	259.8503	58.54964	5.3
##	1906	2.5270576	1.17089653	0.45672226	0.2545146942	259.8503	58.54964	5.3
##	1907	2.5270576	1.17089653	0.45672226	0.2545146942	259.8503	58.54964	5.5
##	1908	2.0310173	0.84290886	0.32151413	0.1516323090	259.3034	58.67228	4.6
##	1909	2.7028599	1.28966045	0.56351566	0.2761659622	259.9505	58.44781	5.5

##	1910	1.3307552	0.67738342	0.25964546	0.0297050476	259.3440	58.61581	4.9
##	1911	1.6992188	0.73150253	0.30108643	0.1493072510	260.0774	58.42925	5.1
##	1912	1.0061359	0.57157135	0.23225594	0.0461540222	259.5267	58.51378	4.9
##	1913	1.9034386	0.78367805	0.28789902	0.1742763519	259.3808	58.49186	5.2
##	1914	1.9034386	0.78367805	0.28789902	0.1742763519	259.3808	58.49186	5.2
##	1915	2.3788834	1.11432266	0.45625305	0.2253684998	259.3599	58.58139	5.3
##	1916	2.3788834	1.11432266	0.45625305	0.2253684998	259.3599	58.58139	5.5
##	1917	1.4161396	0.58693695	0.29259300	0.0984020233	259.8599	58.41478	4.8
##	1918	2.0454540	0.86770439	0.27850533	0.1531581879	259.6056	58.42717	5.1
##	1919	2.0454540	0.86770439	0.27850533	0.1531581879	259.6056	58.42717	5.1
##	1920	2.0454540	0.86770439	0.27850533	0.1531581879	259.6056	58.42717	4.6
##	1921	1.5569611	0.60804558	0.25262833	0.0682182312	259.3843	58.32397	4.8
##	1922	1.5569611	0.60804558	0.25262833	0.0682182312	259.3843	58.32397	4.5
##	1923	1.5569611	0.60804558	0.25262833	0.0682182312	259.3843	58.32397	5.1
##	1924	2.6327515	1.13107681	0.45424938	0.2504110336	259.6006	58.34239	5.4
##	1925	1.7833366	0.68891144	0.28697395	0.2080116272	259.2118	58.28358	4.5
##	1926	1.7833366	0.68891144	0.28697395	0.2080116272	259.2118	58.28358	5.2
##	1927	0.9118290	0.27920341	0.10469627	-0.0868415833	259.6799	58.27842	2.8
##	1928	0.9118290	0.27920341	0.10469627	-0.0868415833	259.6799	58.27842	3.9
##	1929	0.9118290	0.27920341	0.10469627	-0.0868415833	259.6799	58.27842	2.3
##	1930	0.9118290	0.27920341	0.10469627	-0.0868415833	259.6799	58.27842	2.1
##	1931	1.3179531	0.65008354	0.17045784	-0.2200031281	259.5210	58.16606	4.0
##	1932	1.1976223	0.32727432	0.07814789	0.0970535278	259.4585	58.15000	2.6
##	1933	1.1976223	0.32727432	0.07814789	0.0970535278	259.4585	58.15000	3.6
##	1934	1.0830746	0.32727623	0.14416504	-0.0710315704	259.9035	58.23400	1.7
##	1935	1.0830746	0.32727623	0.14416504	-0.0710315704	259.9035	58.23400	2.3
##	1936	1.0779667	0.43884659	0.12522125	0.1531829834	259.8153	58.02825	2.2
##	1937	1.4415264	0.60573196	0.22727013	0.1765213013	259.7164	57.95692	4.8
##	1938	2.1687851	0.84405327	0.27204323	0.1642360687	260.2260	57.00983	4.7
##	1939	2.1687851	0.84405327	0.27204323	0.1642360687	260.2260	57.00983	5.0
##	1940	2.1687851	0.84405327	0.27204323	0.1642360687	260.2260	57.00983	5.1
##	1941	2.1706867	0.99027252	0.36648941	0.1957015991	260.1694	57.14047	5.0
##	1942	1.7098541	0.59990120	0.25642014	0.0813331604	260.1527	57.18911	5.1
##	1943	2.4121437	1.02706146	0.36460114	0.2125091553	260.1330	57.11200	4.8
##	1944	2.0697575	0.86132240	0.30215645	0.2035503387	260.2904	57.04503	5.1
##	1945	1.0885468	0.65766907	0.15899086	0.1462745667	260.2613	57.16267	5.1
##	1946	1.9598846	0.73623085	0.25566864	0.1089763641	260.3695	57.02833	4.3
##	1947	1.6204529	0.68658066	0.33238792	0.1860580444	260.3640	57.00350	5.0
##	1948	2.2876968	0.94889069	0.35592270	0.1920661926	260.1643	57.33939	5.3
##	1949	2.2876968	0.94889069	0.35592270	0.1920661926	260.1643	57.33939	5.1
##	1950	2.2876968	0.94889069	0.35592270	0.1920661926	260.1643	57.33939	5.1
##	1951	1.0967731	0.35417747	0.15482330	-0.1520099640	260.3955	57.19064	3.7
##	1952	2.4728756	1.17781639	0.45721054	0.2586889267	260.6425	57.10608	5.3
##	1953	2.6074963	1.17674255	0.43179893	0.2350540161	260.2778	57.25414	4.8
##	1954	2.6074963	1.17674255	0.43179893	0.2350540161	260.2778	57.25414	5.0
##	1955	1.6975555	0.71298790	0.26865196	0.1259765625	260.6150	57.03511	4.6
##	1956	0.7005177	0.43201637	0.20475197	-0.1457614899	260.2971	57.29936	2.1
##	1957	1.7060947	0.70082664	0.22346306	0.1381397247	260.4812	57.25622	4.9
##	1958	1.7060947	0.70082664	0.22346306	0.1381397247	260.4812	57.25622	4.9
##	1959	1.9590111	0.81167221	0.27166176	0.1427288055	260.5700	57.24083	5.5
##	1960	0.8550053	0.32938766	0.16976929	-0.1685752869	260.7610	57.17919	3.6
##	1961	2.0525150	0.56509590	0.18888855	0.0463809967	260.3682	57.27581	4.7
##	1962	1.5348663	0.65909195	0.27959824	0.1383056641	260.9052	57.27564	4.2
##	1963	1.5348663	0.65909195	0.27959824	0.1383056641	260.9052	57.27564	5.2
##	1964	1.7594414	0.78756905	0.30996323	0.1438560486	260.6149	57.31253	5.0
##	1965	1.7594414	0.78756905	0.30996323	0.1438560486	260.6149	57.31253	4.7
##	1966	1.7594414	0.78756905	0.30996323	0.1438560486	260.6149	57.31253	5.0
##	1967	1.5787621	0.68300438	0.24195862	0.1615276337	260.6682	57.32025	4.5
##	1968	1.5787621	0.68300438	0.24195862	0.1615276337	260.6682	57.32025	5.1
##	1969	1.5787621	0.68300438	0.24195862	0.1615276337	260.6682	57.32025	5.1
##	1970	2.4317932	1.01654625	0.37383461	0.2109928131	260.7093	57.32231	5.2
##	1971	1.1439247	0.55395317	0.27408028	0.0767765045	260.3691	57.33319	3.9
##	1972	1.1439247	0.55395317	0.27408028	0.0767765045	260.3691	57.33319	3.5
##	1973	1.7342606	0.72112274	0.24577522	0.1005210876	260.6790	57.26636	4.9
##	1974	1.7342606	0.72112274	0.24577522	0.1005210876	260.6790	57.26636	5.1
##	1975	2.5200367	1.06227112	0.36113739	0.1626968384	260.8517	57.38867	4.9
##	1976	1.7288952	0.60851860	0.25009346	0.2208271027	260.4975	57.38383	1.3
##	1977	1.7288952	0.60851860	0.25009346	0.2208271027	260.4975	57.38383	1.9
##	1978	1.7288952	0.60851860	0.25009346	0.2208271027	260.4975	57.38383	1.8
##	1979	2.5320110	1.06036758	0.38150597	0.1869754791	260.5785	57.41775	5.1
##	1980	2.5320110	1.06036758	0.38150597	0.1869754791	260.5785	57.41775	5.2
##	1981	1.7865200	0.64446449	0.24703026	0.1023616791	260.8610	57.34156	5.3
##	1982	1.4445820	0.67435646	0.22110367	0.1639137268	260.6877	57.34681	4.5
##	1983	1.4445820	0.67435646	0.22110367	0.1639137268	260.6877	57.34681	5.2
##	1984	1.0060978	0.23467827	0.17725182	0.2798748016	260.5654	57.48831	4.2
##	1985	2.4801025	1.15097427	0.41107368	0.2362565994	260.8417	57.50372	5.2
##	1986	1.5673542	0.76032257	0.24268723	0.0620899200	260.2298	57.51919	4.8
##	1987	1.5673542	0.76032257	0.24268723	0.0620899200	260.2298	57.51919	4.7
##	1988	1.5673542	0.76032257	0.24268723	0.0620899200	260.2298	57.51919	4.8

##	1989	2.0512466	0.79207420	0.28670311	0.1602306366	260.3426	57.64728	5.4
##	1990	2.0512466	0.79207420	0.28670311	0.1602306366	260.3426	57.64728	5.1
##	1991	1.2062454	0.52461243	0.13565063	0.2178134918	260.3465	57.61842	4.2
##	1992	1.2062454	0.52461243	0.13565063	0.2178134918	260.3465	57.61842	4.3
##	1993	1.2062454	0.52461243	0.13565063	0.2178134918	260.3465	57.61842	4.8
##	1994	1.2068691	0.59104919	0.24678040	0.1085338593	260.3208	57.85831	4.7
##	1995	1.2747498	0.60839844	0.29500771	0.1764087677	260.2582	57.88056	1.4
##	1996	0.9304295	0.42682457	0.12015915	-0.0081005096	260.2351	57.65772	2.9
##	1997	0.9304295	0.42682457	0.12015915	-0.0081005096	260.2351	57.65772	4.0
##	1998	0.9304295	0.42682457	0.12015915	-0.0081005096	260.2351	57.65772	4.7
##	1999	0.9304295	0.42682457	0.12015915	-0.0081005096	260.2351	57.65772	4.6
##	2000	0.9304295	0.42682457	0.12015915	-0.0081005096	260.2351	57.65772	3.3
##	2001	1.4037838	0.51238823	0.28207397	0.0662670135	260.1551	57.79089	1.7
##	2002	2.1863861	0.83531189	0.38803101	0.2115802765	260.0288	57.87697	1.0
##	2003	1.1699867	0.64473534	0.18689346	0.2219448090	259.8980	57.90311	3.4
##	2004	1.0081158	0.36959267	0.15101433	0.1264381409	259.4620	57.77578	2.5
##	2005	1.0081158	0.36959267	0.15101433	0.1264381409	259.4620	57.77578	4.6
##	2006	2.0131931	0.73155212	0.24760056	0.1547183990	259.5158	57.78289	5.2
##	2007	2.0131931	0.73155212	0.24760056	0.1547183990	259.5158	57.78289	5.3
##	2008	1.2693901	0.57158661	0.29011917	0.1654109955	259.3305	57.71600	1.7
##	2009	1.4691658	0.57219696	0.30733871	0.2679843903	259.5539	57.55647	3.5
##	2010	1.4691658	0.57219696	0.30733871	0.2679843903	259.5539	57.55647	4.6
##	2011	1.4691658	0.57219696	0.30733871	0.2679843903	259.5539	57.55647	4.7
##	2012	0.8621349	0.39716148	0.17839050	0.1325187683	259.6489	57.58833	2.2
##	2013	0.8621349	0.39716148	0.17839050	0.1325187683	259.6489	57.58833	3.2
##	2014	0.8621349	0.39716148	0.17839050	0.1325187683	259.6489	57.58833	3.3
##	2015	0.8621349	0.39716148	0.17839050	0.1325187683	259.6489	57.58833	3.4
##	2016	0.8621349	0.39716148	0.17839050	0.1325187683	259.6489	57.58833	5.3
##	2017	0.8621349	0.39716148	0.17839050	0.1325187683	259.6489	57.58833	4.6
##	2018	1.2487984	0.50144005	0.15545845	0.1300354004	259.4208	57.51675	4.3
##	2019	1.2487984	0.50144005	0.15545845	0.1300354004	259.4208	57.51675	4.6
##	2020	0.8495216	0.32331657	0.07570267	0.1579113007	259.3185	57.50997	3.6
##	2021	0.8495216	0.32331657	0.07570267	0.1579113007	259.3185	57.50997	2.8
##	2022	2.4675865	0.94034195	0.22973061	0.3173370361	259.4869	57.47750	4.9
##	2023	2.4675865	0.94034195	0.22973061	0.3173370361	259.4869	57.47750	5.0
##	2024	1.7343216	0.72736740	0.25340843	0.1295375824	259.8668	57.41219	4.9
##	2025	1.7343216	0.72736740	0.25340843	0.1295375824	259.8668	57.41219	4.8
##	2026	1.7343216	0.72736740	0.25340843	0.1295375824	259.8668	57.41219	4.8
##	2027	2.1483955	0.85889626	0.28816986	0.1814594269	259.2158	57.43042	5.4
##	2028	2.1483955	0.85889626	0.28816986	0.1814594269	259.2158	57.43042	5.2
##	2029	1.3974247	0.66620827	0.24187469	0.0582046509	259.2966	57.42242	4.6
##	2030	1.1724529	0.53791809	0.26216125	0.0464057922	259.5107	57.44872	4.2
##	2031	1.1724529	0.53791809	0.26216125	0.0464057922	259.5107	57.44872	4.6
##	2032	1.0255585	0.36022568	0.15639305	0.1436958313	259.3772	57.46981	3.1
##	2033	1.0255585	0.36022568	0.15639305	0.1436958313	259.3772	57.46981	3.3
##	2034	0.9768295	0.60700226	0.14530945	0.1143703461	259.1659	57.29861	3.9
##	2035	0.9768295	0.60700226	0.14530945	0.1143703461	259.1659	57.29861	2.8
##	2036	1.2365360	0.41134453	0.01573181	-0.0522651672	259.1983	57.32761	4.2
##	2037	2.2088547	1.01097488	0.40816689	0.2464694977	259.5518	57.36811	5.0
##	2038	1.7974014	0.73882294	0.28536224	0.2250347137	259.3835	57.23925	5.0
##	2039	1.7731991	0.70789909	0.27209663	0.1829280853	259.6525	57.30542	5.2
##	2040	1.7731991	0.70789909	0.27209663	0.1829280853	259.6525	57.30542	4.9
##	2041	1.7731991	0.70789909	0.27209663	0.1829280853	259.6525	57.30542	4.1
##	2042	1.9403820	0.77195930	0.25591278	0.2047309875	259.7248	57.33150	4.8
##	2043	1.9403820	0.77195930	0.25591278	0.2047309875	259.7248	57.33150	4.6
##	2044	1.6635170	0.63657951	0.26400566	0.2351531982	259.4828	57.23903	4.8
##	2045	1.6635170	0.63657951	0.26400566	0.2351531982	259.4828	57.23903	4.4
##	2046	1.6635170	0.63657951	0.26400566	0.2351531982	259.4828	57.23903	4.9
##	2047	1.3654499	0.59889412	0.27323914	0.2569828033	259.5035	57.10686	5.2
##	2048	1.3654499	0.59889412	0.27323914	0.2569828033	259.5035	57.10686	4.5
##	2049	1.9405518	0.87109184	0.28520775	0.2204322815	259.5314	57.17850	5.4
##	2050	0.9787636	0.39676666	0.20845032	0.0974006653	259.7024	57.21461	4.6
##	2051	0.9787636	0.39676666	0.20845032	0.0974006653	259.7024	57.21461	3.8
##	2052	2.1614189	0.95780563	0.37386322	0.1772270203	259.9199	57.36314	5.4
##	2053	2.1614189	0.95780563	0.37386322	0.1772270203	259.9199	57.36314	5.4
##	2054	1.3089085	0.65652466	0.25141335	0.1887607574	259.5411	57.00942	5.1
##	2055	1.3089085	0.65652466	0.25141335	0.1887607574	259.5411	57.00942	4.9
##	2056	1.8374043	0.75367165	0.27628326	0.1472434998	259.6050	57.03903	5.3
##	2057	1.7754841	0.74385834	0.30154610	0.1946716309	259.7152	57.19267	5.4
##	2058	1.7754841	0.74385834	0.30154610	0.1946716309	259.7152	57.19267	5.0
##	2059	2.2386093	0.94638824	0.33070946	0.2181682587	259.7519	57.14056	5.0
##	2060	2.2386093	0.94638824	0.33070946	0.2181682587	259.7519	57.14056	5.1
##	2061	1.1861095	0.29359627	0.07704926	-0.0107994080	259.7330	57.08486	4.6
##	2062	0.9093189	0.27631187	0.12251854	-0.0642452240	260.0152	57.33306	4.6
##	2063	0.9093189	0.27631187	0.12251854	-0.0642452240	260.0152	57.33306	2.2
##	2064	0.9093189	0.27631187	0.12251854	-0.0642452240	260.0152	57.33306	4.4
##	2065	1.8026867	0.74822998	0.25902367	0.1802730560	259.8004	57.06511	5.1
##	2066	1.8026867	0.74822998	0.25902367	0.1802730560	259.8004	57.06511	5.0
##	2067	1.5775604	0.68444443	0.18419456	0.2151985168	259.9905	57.19275	4.7

##	2068	1.5270519	0.60481262	0.19618797	0.0706653595	259.9370	57.01217	4.3
##	2069	2.4744473	1.18661690	0.46864033	0.2884874344	260.0677	57.00917	5.1
##	2070	2.4744473	1.18661690	0.46864033	0.2884874344	260.0677	57.00917	5.2
##	2071	2.3099251	1.08524895	0.41588402	0.2336368561	259.9792	57.20922	5.3
##	2072	2.3099251	1.08524895	0.41588402	0.2336368561	259.9792	57.20922	5.2
##	2073	2.3099251	1.08524895	0.41588402	0.2336368561	259.9792	57.20922	5.0
##	2074	1.2170048	0.41400146	0.17473412	0.2003574371	259.8066	57.89994	2.2
##	2075	1.1362724	0.54067993	0.25383568	-0.0035114288	259.2096	57.81058	3.3
##	2076	1.6027412	0.70243073	0.29490471	0.2249526978	259.7928	57.91042	1.5
##	2077	1.6027412	0.70243073	0.29490471	0.2249526978	259.7928	57.91042	1.4
##	2078	1.6027412	0.70243073	0.29490471	0.2249526978	259.7928	57.91042	1.3
##	2079	1.6027412	0.70243073	0.29490471	0.2249526978	259.7928	57.91042	1.1
##	2080	1.6027412	0.70243073	0.29490471	0.2249526978	259.7928	57.91042	0.9
##	2081	1.6027412	0.70243073	0.29490471	0.2249526978	259.7928	57.91042	3.8
##	2082	1.6027412	0.70243073	0.29490471	0.2249526978	259.7928	57.91042	1.1
##	2083	1.3611069	0.66754532	0.23920250	0.1300563812	259.6687	57.91092	2.4
##	2084	1.3611069	0.66754532	0.23920250	0.1300563812	259.6687	57.91092	1.2
##	2085	1.4872570	0.59272957	0.25916672	0.1909446716	259.7271	57.83486	2.0
##	2086	1.4872570	0.59272957	0.25916672	0.1909446716	259.7271	57.83486	1.8
##	2087	1.1460114	0.38560677	0.13603210	0.1728572845	259.7531	57.84806	4.8
##	2088	1.3261700	0.62891006	0.32492828	0.1890525818	259.9737	57.89419	2.2
##	2089	1.2391567	0.27634811	0.16134071	0.0688648224	259.7912	57.70417	1.6
##	2090	1.1832695	0.38419151	0.18757820	0.0622005463	259.9207	57.80094	3.6
##	2091	0.7713318	0.28702736	0.09173584	0.1048450470	259.9981	57.61608	4.9
##	2092	1.2603340	0.57129860	0.27518272	0.0073890686	260.0683	57.71772	3.7
##	2093	1.2603340	0.57129860	0.27518272	0.0073890686	260.0683	57.71772	5.0
##	2094	1.2603340	0.57129860	0.27518272	0.0073890686	260.0683	57.71772	5.0
##	2095	1.2603340	0.57129860	0.27518272	0.0073890686	260.0683	57.71772	5.0
##	2096	0.9025021	0.42783546	0.13730431	0.1462516785	260.2432	57.67222	1.7
##	2097	0.9025021	0.42783546	0.13730431	0.1462516785	260.2432	57.67222	4.4
##	2098	1.7731705	0.73490715	0.30588913	0.1485443115	260.3059	57.70011	4.7
##	2099	1.7731705	0.73490715	0.30588913	0.1485443115	260.3059	57.70011	5.1
##	2100	1.7731705	0.73490715	0.30588913	0.1485443115	260.3059	57.70011	4.6
##	2101	1.2926579	0.60174751	0.27832413	0.1037750244	260.2248	57.79981	2.2
##	2102	1.2926579	0.60174751	0.27832413	0.1037750244	260.2248	57.79981	1.7
##	2103	1.7406616	0.78612709	0.32612038	0.1754436493	260.2933	57.79814	1.2
##	2104	1.7406616	0.78612709	0.32612038	0.1754436493	260.2933	57.79814	1.3
##	2105	1.0045662	0.35596848	0.17537498	0.1944370270	260.2978	57.74103	1.6
##	2106	1.0045662	0.35596848	0.17537498	0.1944370270	260.2978	57.74103	2.6
##	2107	1.1711998	0.35443687	0.20000648	0.1044178009	260.1100	57.90286	1.2
##	2108	1.1711998	0.35443687	0.20000648	0.1044178009	260.1100	57.90286	1.5
##	2109	1.0084686	0.33215332	0.10786247	0.1303043365	260.4259	57.79275	2.5
##	2110	0.9310226	0.41489601	0.18414879	0.0942611694	260.3795	57.88081	2.1
##	2111	1.2008095	0.54207802	0.30227852	-0.2319259644	260.5975	57.97425	4.2
##	2112	1.5179195	0.54243851	0.26979446	0.0831604004	260.6562	57.99314	4.8
##	2113	1.5179195	0.54243851	0.26979446	0.0831604004	260.6562	57.99314	5.0
##	2114	1.5179195	0.54243851	0.26979446	0.0831604004	260.6562	57.99314	4.7
##	2115	1.4167099	0.56791496	0.31138039	0.0633716583	260.1845	57.92397	1.9
##	2116	1.5234089	0.61325836	0.28640556	0.1134471893	260.5095	58.02147	2.0
##	2117	1.0399933	0.51056290	0.16119957	0.0762195587	260.6120	58.09272	3.6
##	2118	1.0399933	0.51056290	0.16119957	0.0762195587	260.6120	58.09272	4.6
##	2119	1.5786800	0.69469070	0.33794022	0.1436328888	260.1711	57.97378	2.0
##	2120	1.5786800	0.69469070	0.33794022	0.1436328888	260.1711	57.97378	1.1
##	2121	1.3402252	0.56522942	0.31495667	0.0926036835	260.0844	57.93589	2.8
##	2122	0.9277802	0.46035767	0.13699913	0.0876312256	260.1545	58.09053	4.2
##	2123	0.7910328	0.37483025	0.17300987	0.2098064423	260.1335	58.01767	2.5
##	2124	1.1800861	0.54262352	0.25244141	-0.0255489349	260.2139	58.09458	1.9
##	2125	1.4762611	-0.10404587	1.12239647	0.1978530884	260.0830	57.98817	2.0
##	2126	1.4762611	-0.10404587	1.12239647	0.1978530884	260.0830	57.98817	1.2
##	2127	1.4762611	-0.10404587	1.12239647	0.1978530884	260.0830	57.98817	1.2
##	2128	1.4762611	-0.10404587	1.12239647	0.1978530884	260.0830	57.98817	1.7
##	2129	1.4762611	-0.10404587	1.12239647	0.1978530884	260.0830	57.98817	1.9
##	2130	1.4762611	-0.10404587	1.12239647	0.1978530884	260.0830	57.98817	1.2
##	2131	1.4762611	-0.10404587	1.12239647	0.1978530884	260.0830	57.98817	2.6
##	2132	1.4762611	-0.10404587	1.12239647	0.1978530884	260.0830	57.98817	1.2
##	2133	1.0730953	0.40073395	0.15350723	0.0918388367	260.0622	58.11253	4.1
##	2134	1.0730953	0.40073395	0.15350723	0.0918388367	260.0622	58.11253	4.0
##	2135	1.0730953	0.40073395	0.15350723	0.0918388367	260.0622	58.11253	2.4
##	2136	1.0730953	0.40073395	0.15350723	0.0918388367	260.0622	58.11253	4.3
##	2137	1.0730953	0.40073395	0.15350723	0.0918388367	260.0622	58.11253	3.9
##	2138	2.2586727	1.12598228	0.48104477	0.2686271667	259.9111	58.38608	5.1
##	2139	0.9833031	0.61482239	0.29531479	0.0032844543	260.0558	57.99569	4.3
##	2140	1.2517414	0.65643883	0.27931213	0.1374874115	260.0235	57.96625	3.6
##	2141	1.1482525	0.44140244	0.23306274	0.0627956390	260.0220	57.98997	2.1
##	2142	1.1030674	0.35366249	0.19194984	0.1276683807	260.0306	58.00967	2.6
##	2143	1.6236858	0.61164856	0.30754852	0.0958957672	259.9742	57.99992	2.7
##	2144	1.6236858	0.61164856	0.30754852	0.0958957672	259.9742	57.99992	1.1
##	2145	1.2404060	0.28576660	0.12979126	-0.0754451752	259.9017	58.02433	2.3
##	2146	1.3508911	0.52378845	0.34444237	0.1883468628	259.8447	58.02025	1.8

##	2147	0.9903145	0.34966469	0.22022820	0.2532157898	259.2834	58.04197	2.2
##	2148	0.9903145	0.34966469	0.22022820	0.2532157898	259.2834	58.04197	4.7
##	2149	1.3703156	0.81486130	0.14576530	0.1618728638	259.8885	57.94389	2.4
##	2150	1.2841702	0.62019920	0.27930832	0.1270446777	259.6360	57.94703	5.0
##	2151	1.8928661	0.73783493	0.14740944	0.1807956696	259.4997	57.94492	2.9
##	2152	1.8928661	0.73783493	0.14740944	0.1807956696	259.4997	57.94492	2.6
##	2153	1.4057388	0.57747841	0.27590942	0.0904350281	259.2642	57.99894	4.7
##	2154	1.3040142	0.63159561	0.31115341	0.0966587067	259.7172	57.95544	5.0
##	2155	1.3040142	0.63159561	0.31115341	0.0966587067	259.7172	57.95544	4.5
##	2156	1.4418335	0.56536102	0.35795212	0.1433773041	260.0683	57.91578	2.0
##	2157	1.4418335	0.56536102	0.35795212	0.1433773041	260.0683	57.91578	1.8
##	2158	1.4418335	0.56536102	0.35795212	0.1433773041	260.0683	57.91578	2.1
##	2159	1.4942741	0.59368706	0.34624100	0.0604648590	260.4801	57.94981	2.1
##	2160	1.4942741	0.59368706	0.34624100	0.0604648590	260.4801	57.94981	2.0
##	2161	1.4942741	0.59368706	0.34624100	0.0604648590	260.4801	57.94981	1.6
##	2162	1.0592842	0.59064674	0.25499344	0.1632843018	260.0631	57.94303	2.0
##	2163	1.0592842	0.59064674	0.25499344	0.1632843018	260.0631	57.94303	1.3
##	2164	1.0489216	0.35802078	0.25939560	0.0684165955	260.1134	57.95944	2.1
##	2165	1.0489216	0.35802078	0.25939560	0.0684165955	260.1134	57.95944	2.5
##	2166	1.0021801	0.31821251	0.09756088	0.2505989075	260.0590	58.23831	2.1
##	2167	1.0021801	0.31821251	0.09756088	0.2505989075	260.0590	58.23831	2.0
##	2168	1.0340881	0.28926659	0.23263359	0.0222949982	260.0153	57.96386	2.0
##	2169	1.0084152	0.38429832	0.15165138	0.2282276154	259.6468	57.86325	2.7
##	2170	1.1313515	0.22505760	0.13043213	-0.0442085266	259.7591	57.79844	1.9
##	2171	0.9762897	0.29605865	0.17872047	0.0114250183	260.0924	57.69775	2.0
##	2172	1.0529881	0.35998535	0.19758034	-0.0989875793	260.1285	57.48161	3.9
##	2173	1.0529881	0.35998535	0.19758034	-0.0989875793	260.1285	57.48161	4.1
##	2174	1.0529881	0.35998535	0.19758034	-0.0989875793	260.1285	57.48161	3.8
##	2175	1.0529881	0.35998535	0.19758034	-0.0989875793	260.1285	57.48161	4.7
##	2176	1.0529881	0.35998535	0.19758034	-0.0989875793	260.1285	57.48161	4.3
##	2177	1.5699406	0.64109230	0.29078484	0.0882835388	260.0075	57.73072	4.4
##	2178	1.4504337	0.60249329	0.24432755	0.0679073334	260.1287	57.77536	4.8
##	2179	1.4504337	0.60249329	0.24432755	0.0679073334	260.1287	57.77536	5.2
##	2180	1.4504337	0.60249329	0.24432755	0.0679073334	260.1287	57.77536	5.0
##	2181	1.3357124	0.45790672	0.15989876	0.1005058289	260.1153	57.85019	3.8
##	2182	1.0095367	0.24893761	0.13834381	0.0163516998	260.0893	57.79619	3.2
##	2183	1.0095367	0.24893761	0.13834381	0.0163516998	260.0893	57.79619	3.1
##	2184	1.4227448	0.62083054	0.29404068	0.0568027496	260.2239	57.82503	1.7
##	2185	1.4227448	0.62083054	0.29404068	0.0568027496	260.2239	57.82503	1.4
##	2186	1.2378025	0.36626816	0.23325729	0.0228042603	260.1253	57.89636	1.6
##	2187	0.9893513	0.42317963	0.13891220	0.0809726715	260.5997	57.76808	3.0
##	2188	0.9893513	0.42317963	0.13891220	0.0809726715	260.5997	57.76808	3.2
##	2189	1.4369259	0.55125427	0.28437042	0.1004123688	260.1651	57.88547	1.4
##	2190	1.5898132	0.68572044	0.24284363	0.3418674469	260.8785	57.93022	4.7
##	2191	1.5898132	0.68572044	0.24284363	0.3418674469	260.8785	57.93022	4.6
##	2192	1.6732903	0.62071228	0.32551193	0.1009941101	260.4622	57.91058	2.1
##	2193	1.6732903	0.62071228	0.32551193	0.1009941101	260.4622	57.91058	2.7
##	2194	1.6732903	0.62071228	0.32551193	0.1009941101	260.4622	57.91058	2.4
##	2195	1.1853352	0.55478287	0.25774574	0.1784400940	260.4581	57.97142	2.5
##	2196	1.1491184	0.59352875	0.27423096	0.1420459747	260.2032	57.95406	1.5
##	2197	0.9962635	0.23233604	0.10155296	0.1386966705	260.1952	57.96064	2.5
##	2198	1.0315437	0.27241707	0.13571930	0.0892753601	260.2008	57.98472	1.5
##	2199	1.0315437	0.27241707	0.13571930	0.0892753601	260.2008	57.98472	1.9
##	2200	1.0315437	0.27241707	0.13571930	0.0892753601	260.2008	57.98472	2.7
##	2201	1.6870193	0.55389977	0.17471123	0.0857448578	260.3534	58.11389	4.9
##	2202	1.1888008	0.40634537	0.21530151	-0.0831851959	260.1597	57.97419	1.3
##	2203	0.9552021	0.56649208	0.28084183	0.2713413239	260.1536	57.98214	2.2
##	2204	1.3669662	0.57629967	0.30526161	-0.0028133392	260.0833	58.01503	1.7
##	2205	1.3470058	0.34995842	0.16117096	0.1171493530	260.0770	58.07667	1.5
##	2206	1.3470058	0.34995842	0.16117096	0.1171493530	260.0770	58.07667	3.8
##	2207	1.3470058	0.34995842	0.16117096	0.1171493530	260.0770	58.07667	4.3
##	2208	1.4847126	0.57716751	0.27949715	0.3311653137	260.0275	58.07686	1.8
##	2209	1.4520531	0.60159683	0.21574020	0.2706317902	260.1074	58.21339	4.1
##	2210	1.5182247	0.31882286	0.17905617	0.0231819153	260.0245	57.99731	1.2
##	2211	1.1379299	0.57121658	0.28748131	0.1049728394	260.0360	57.99919	1.2
##	2212	1.3677654	0.59111023	0.30720711	0.0827178955	259.9609	57.98036	2.3
##	2213	1.0871181	0.44920349	0.18783569	0.0571651459	259.9497	57.93744	2.2
##	2214	1.1804962	0.67632484	0.25411224	-0.0084552765	259.9894	57.94114	2.0
##	2215	1.0343342	0.62956238	0.19920349	0.2616119385	259.6923	57.93522	3.2
##	2216	1.3674755	0.40685272	0.21672249	0.1093692780	259.6462	57.94847	3.6
##	2217	1.3674755	0.40685272	0.21672249	0.1093692780	259.6462	57.94847	2.1
##	2218	1.2844601	0.66430855	0.25372314	0.1338138580	259.8515	57.92164	2.4
##	2219	0.9572792	0.48513222	0.16385841	0.0121097565	259.9212	57.90936	2.4
##	2220	1.2936707	0.63691711	0.25628853	0.1399536133	260.0267	57.92619	2.2
##	2221	1.0137882	0.38228989	0.13451576	0.0663089752	259.7843	57.88011	2.8
##	2222	1.3843174	0.65562820	0.28994751	0.0851860046	259.9089	57.82425	4.7
##	2223	1.2758541	0.59696198	0.26942635	0.1543006897	259.9830	57.85681	3.0
##	2224	1.2758541	0.59696198	0.26942635	0.1543006897	259.9830	57.85681	1.3
##	2225	1.2758541	0.59696198	0.26942635	0.1543006897	259.9830	57.85681	2.0

##	2226	1.2758541	0.59696198	0.26942635	0.1543006897	259.9830	57.85681	1.6
##	2227	0.9911919	0.45102692	0.05237579	0.1417827606	259.9891	57.84919	1.6
##	2228	1.3540249	0.63111877	0.19229507	0.2872238159	260.1185	57.94686	1.6
##	2229	1.3540249	0.63111877	0.19229507	0.2872238159	260.1185	57.94686	2.2
##	2230	0.9624271	0.29879761	0.10931015	0.0281906128	260.2403	57.75231	4.0
##	2231	1.0701694	0.61648941	0.26922989	0.1470451355	260.1619	57.78356	2.6
##	2232	1.4404984	0.57334137	0.23367119	0.1475467682	260.1191	57.86044	2.1
##	2233	1.3207493	0.57575798	0.35272598	0.0608882904	260.2188	57.91961	1.9
##	2234	1.3207493	0.57575798	0.35272598	0.0608882904	260.2188	57.91961	2.2
##	2235	1.3207493	0.57575798	0.35272598	0.0608882904	260.2188	57.91961	3.3
##	2236	1.0974827	0.35070610	0.11173630	0.0863037109	260.3526	57.88153	2.3
##	2237	1.2452297	0.50252533	0.30117798	0.0221672058	260.1633	57.93264	1.8
##	2238	1.3814659	0.60785294	0.29214287	0.1059265137	260.1597	57.92564	1.5
##	2239	1.4669037	0.54673195	0.31341171	-0.0012245178	260.4126	57.96533	1.1
##	2240	1.0702953	0.25314522	0.08857918	0.0200939178	260.2243	57.96183	2.6
##	2241	1.0388012	0.38500214	0.15085793	-0.0205936432	260.7650	58.12217	4.8
##	2242	1.0388012	0.38500214	0.15085793	-0.0205936432	260.7650	58.12217	3.6
##	2243	1.0388012	0.38500214	0.15085793	-0.0205936432	260.7650	58.12217	3.2
##	2244	1.4203682	0.57438850	0.25391769	0.2661514282	260.2821	58.00583	2.4
##	2245	1.0834961	0.40599251	0.16079140	-0.0986576080	260.1103	57.99369	4.0
##	2246	1.0805912	0.43230438	0.21142197	0.0531730652	260.1153	58.01653	2.4
##	2247	1.2783413	0.58058357	0.28410721	0.2057609558	260.0748	57.99661	2.2
##	2248	2.0805874	0.63084030	0.25372314	0.2361869812	260.0217	57.95622	2.1
##	2249	1.0289478	0.37366867	0.15577126	0.1330947876	260.0239	57.93597	2.0
##	2250	1.4089375	0.67380714	0.29069328	0.0742111206	259.5131	57.94331	1.8
##	2251	1.4089375	0.67380714	0.29069328	0.0742111206	259.5131	57.94331	1.0
##	2252	1.9032288	0.62027168	0.21966934	0.2037220001	259.6423	57.92403	2.2
##	2253	1.7798080	0.81442451	0.35430908	0.2007217407	259.6855	57.91061	2.0
##	2254	1.5515671	0.45336342	0.22746086	0.6397724152	259.3911	57.90664	4.0
##	2255	1.3862686	0.62768936	0.29724693	0.1455554962	259.9807	57.91650	1.3
##	2256	1.2126293	0.56783676	0.25516129	0.1532211304	259.9764	57.85622	2.7
##	2257	1.3355255	0.53702164	0.36382675	-0.0071926117	260.0332	57.89794	1.4
##	2258	1.0263329	0.68092346	0.08615875	0.4112796783	259.9356	57.81419	4.1
##	2259	1.3896217	0.63592911	0.29500961	0.1536560059	260.2258	57.92219	1.7
##	2260	1.9836311	0.86620140	0.39246368	0.2017936707	260.2238	57.97017	1.3
##	2261	1.1648846	0.24750900	0.10113335	-0.1862545013	259.9674	57.98586	2.7
##	2262	1.8328056	0.84214973	0.34986115	0.2161216736	259.8409	58.03117	0.9
##	2263	1.8328056	0.84214973	0.34986115	0.2161216736	259.8409	58.03117	1.4
##	2264	1.6516438	0.55300713	0.27350426	0.0693168640	259.8191	57.98894	1.3
##	2265	1.1955776	0.23566437	0.13267136	0.1006832123	259.7285	57.92064	2.9
##	2266	2.3883553	1.02680397	0.35788536	0.1822376251	259.1080	57.87428	4.8
##	2267	2.3883553	1.02680397	0.35788536	0.1822376251	259.1080	57.87428	5.0
##	2268	2.3883553	1.02680397	0.35788536	0.1822376251	259.1080	57.87428	4.9
##	2269	1.5233231	0.66750908	0.30338097	0.1812801361	259.1486	57.83381	4.9
##	2270	1.2505512	0.30833054	0.10630798	0.0607223511	259.8522	57.89336	3.3
##	2271	0.7351170	0.30444527	0.11064529	-0.0548934937	259.9540	57.82961	3.6
##	2272	1.4677372	0.53311348	0.33549309	0.1917819977	260.0405	57.91383	2.6
##	2273	1.3027420	0.42195129	0.20590782	0.1727447510	260.1237	57.87275	2.1
##	2274	1.7790661	0.69148064	0.27349663	0.0837860107	260.1997	57.86058	2.3
##	2275	1.0509243	0.39308357	0.16311264	0.1540584564	260.3222	57.77581	3.8
##	2276	1.6214390	0.69179344	0.24299049	0.1477966309	260.9951	57.57631	4.4
##	2277	2.3366013	0.54279137	0.23355103	0.1338863373	260.9776	57.56542	5.0
##	2278	1.7507553	0.40586472	0.34173965	-0.2169113159	261.0561	57.83564	4.0
##	2279	1.4592190	0.55866051	0.17373466	0.2833347321	261.3758	57.68950	3.1
##	2280	1.2990685	0.64194679	0.21808434	0.1527309418	261.1719	57.84783	4.9
##	2281	1.6516552	0.66406059	0.28878784	0.1414260864	261.4422	58.07442	5.3
##	2282	1.6516552	0.66406059	0.28878784	0.1414260864	261.4422	58.07442	4.6
##	2283	1.6516552	0.66406059	0.28878784	0.1414260864	261.4422	58.07442	5.2
##	2284	1.2132797	0.61611748	0.15935135	0.1816654205	261.5993	58.09453	4.5
##	2285	0.6950665	0.43905449	0.31035233	0.0930137634	261.1595	58.07311	4.3
##	2286	2.2211113	0.86276817	0.27584076	0.1469135284	261.1212	58.13694	5.1
##	2287	1.4197388	0.58983994	0.16581535	-0.0015888214	261.1615	58.20194	4.6
##	2288	2.0996876	0.99950409	0.37110519	0.2194919586	261.4663	58.35061	5.2
##	2289	2.0681534	0.75638199	0.27945518	0.3321609497	261.3020	58.34708	4.9
##	2290	1.0989666	0.43242836	0.23691368	0.1609287262	261.2902	58.30489	4.6
##	2291	1.4963531	0.60468864	0.19378662	0.1843929291	261.1030	58.42886	4.7
##	2292	1.5198269	0.62016678	0.27701950	0.0314979553	260.8403	58.20083	5.0
##	2293	2.0367107	0.59819031	0.18838120	0.0545005798	260.9517	58.45100	4.0
##	2294	1.7052917	0.74427605	0.20213509	0.0406475067	260.8546	58.43142	3.9
##	2295	1.7052917	0.74427605	0.20213509	0.0406475067	260.8546	58.43142	4.3
##	2296	1.7052917	0.74427605	0.20213509	0.0406475067	260.8546	58.43142	4.8
##	2297	1.7052917	0.74427605	0.20213509	0.0406475067	260.8546	58.43142	3.7
##	2298	1.0637531	0.28084373	0.05775070	0.0013923645	260.9440	58.38806	3.4
##	2299	1.2200165	0.44846344	0.12555504	0.1115760803	260.6768	58.41808	4.7
##	2300	1.2350712	0.52088165	0.31396484	-0.0405311584	260.7145	58.33981	3.1
##	2301	1.0784092	0.56824875	0.13473129	0.0051860809	260.6123	58.43783	4.8
##	2302	0.9435005	0.43686676	0.13402176	0.0492057800	260.7468	58.36106	3.8
##	2303	1.0112019	0.48251915	0.17665672	0.1717128754	260.3083	58.42139	4.8
##	2304	1.2156525	0.32332611	0.22837639	-0.0564250946	259.9591	58.15167	4.9

##	2305	1.1011143	0.34871674	0.18565178	-0.0356178284	260.2298	58.05608	2.9
##	2306	1.1011143	0.34871674	0.18565178	-0.0356178284	260.2298	58.05608	3.8
##	2307	1.1011143	0.34871674	0.18565178	-0.0356178284	260.2298	58.05608	2.6
##	2308	1.2225800	0.64923096	0.28376770	0.0027618408	259.9152	57.93081	1.9
##	2309	0.9941330	0.60677910	0.34574318	0.0206756592	259.9970	57.95050	2.5
##	2310	1.6096096	0.72467613	0.29159927	0.1517276764	259.5144	57.54914	4.5
##	2311	1.8328667	0.69372749	0.27460098	0.1541976929	259.5652	57.41894	4.8
##	2312	1.8328667	0.69372749	0.27460098	0.1541976929	259.5652	57.41894	4.9
##	2313	1.8328667	0.69372749	0.27460098	0.1541976929	259.5652	57.41894	4.6
##	2314	1.0168781	0.45602036	0.12701416	0.1374816895	259.7048	57.75819	3.4
##	2315	1.4416142	0.64742279	0.30416489	0.1033039093	260.0998	57.92681	1.7
##	2316	1.2065125	0.63536835	0.25561523	0.1692066193	259.8809	57.91767	2.0
##	2317	1.6720085	0.56780434	0.34091568	0.1096153259	260.1594	57.91342	1.6
##	2318	1.6720085	0.56780434	0.34091568	0.1096153259	260.1594	57.91342	1.6
##	2319	1.0326920	0.40620995	0.09693146	0.1108341217	259.8107	57.92294	2.1
##	2320	1.5770473	0.22575569	0.17029572	0.0259552002	259.9639	57.88908	4.6
##	2321	1.4159431	0.47586632	0.38547897	0.0240039825	259.9699	57.98158	1.5
##	2322	1.2739773	0.38063049	0.22287941	-0.1940460205	259.9460	57.96411	2.1
##	2323	2.3945084	1.01479721	0.44245529	0.2558021545	259.8011	58.04939	0.9
##	2324	2.3945084	1.01479721	0.44245529	0.2558021545	259.8011	58.04939	0.9
##	2325	2.3945084	1.01479721	0.44245529	0.2558021545	259.8011	58.04939	1.0
##	2326	1.2274113	0.29578018	0.24941444	0.0004997253	259.4481	57.90778	1.7
##	2327	1.7179871	0.77624893	0.36446762	0.2275867462	259.4807	57.93308	1.1
##	2328	1.7179871	0.77624893	0.36446762	0.2275867462	259.4807	57.93308	1.0
##	2329	1.7179871	0.77624893	0.36446762	0.2275867462	259.4807	57.93308	1.2
##	2330	1.3988876	0.56394768	0.32387543	0.2140655518	259.4311	57.95431	2.4
##	2331	1.3972073	0.41235542	0.20008278	0.1090126038	259.2446	58.24353	2.5
##	2332	1.2179432	0.67142868	0.31188011	0.2407798767	258.9264	58.21847	1.7
##	2333	1.6791534	0.63054276	0.28129005	0.1278781891	258.9136	58.21039	4.9
##	2334	1.4045792	0.60687065	0.25517273	0.1022262573	258.8930	58.13369	3.4
##	2335	0.9986820	0.38714600	0.13536072	0.2069568634	258.8645	58.13358	4.0
##	2336	0.9986820	0.38714600	0.13536072	0.2069568634	258.8645	58.13358	3.8
##	2337	0.9185200	0.26820564	0.13244247	0.0088100433	259.0428	58.07292	3.4
##	2338	1.6841507	0.65020370	0.23495674	0.2482414246	258.9608	58.07489	5.1
##	2339	1.4927464	0.43120384	0.17740822	0.1009330750	258.9002	58.08733	4.4
##	2340	1.2708607	0.62678719	0.23589134	0.0687046051	258.7812	58.04306	4.7
##	2341	1.2270164	0.52776337	0.21652985	0.1403045654	258.7505	58.06897	5.0
##	2342	1.0234737	0.30375671	0.05880547	-0.1482715607	258.5569	57.98714	5.1
##	2343	2.0430260	0.74637222	0.28107643	0.1467342377	259.0265	57.95761	5.4
##	2344	2.0430260	0.74637222	0.28107643	0.1467342377	259.0265	57.95761	5.1
##	2345	0.9662094	0.39476585	0.08314705	0.0116615295	258.6842	57.82433	2.9
##	2346	0.9662094	0.39476585	0.08314705	0.0116615295	258.6842	57.82433	4.2
##	2347	1.4700108	0.59933472	0.23286438	0.0538749695	258.7171	57.88719	4.8
##	2348	1.5275345	0.62143326	0.19451332	0.2939701080	258.9881	57.81333	4.9
##	2349	1.1906490	0.57513237	0.16174126	0.1796894073	258.7808	57.74742	4.9
##	2350	1.1906490	0.57513237	0.16174126	0.1796894073	258.7808	57.74742	4.3
##	2351	2.1427097	0.87949944	0.29653549	0.1769733429	258.6019	57.78717	5.3
##	2352	2.1427097	0.87949944	0.29653549	0.1769733429	258.6019	57.78717	5.2
##	2353	1.6654720	0.68584442	0.24687386	0.1612663269	258.9249	57.69792	5.1
##	2354	1.6654720	0.68584442	0.24687386	0.1612663269	258.9249	57.69792	4.7
##	2355	1.2847271	0.65660095	0.19196892	0.0494251251	259.0991	57.72047	4.8
##	2356	1.2847271	0.65660095	0.19196892	0.0494251251	259.0991	57.72047	4.5
##	2357	1.1836205	0.60663223	0.26401520	0.1953182220	258.9248	57.61819	2.8
##	2358	1.1836205	0.60663223	0.26401520	0.1953182220	258.9248	57.61819	2.4
##	2359	0.9373608	0.32975769	0.16876030	0.0130767822	259.1599	57.71267	3.8
##	2360	0.9969444	0.37498665	0.06209373	0.1121482849	259.0332	57.44431	4.5
##	2361	0.9969444	0.37498665	0.06209373	0.1121482849	259.0332	57.44431	2.7
##	2362	0.8154678	0.46627235	0.11617661	0.0045204163	259.0511	57.49600	4.9
##	2363	1.0869637	0.41389275	0.10891151	0.0985527039	259.1618	57.48700	4.8
##	2364	2.3553066	1.00441933	0.34506989	0.2401771545	259.1711	57.66764	5.0
##	2365	2.3553066	1.00441933	0.34506989	0.2401771545	259.1711	57.66764	5.1
##	2366	2.3553066	1.00441933	0.34506989	0.2401771545	259.1711	57.66764	5.1
##	2367	2.0213280	0.78905296	0.31420517	0.1186294556	260.5556	56.92531	5.0
##	2368	2.4359589	1.06516647	0.42337608	0.2066802979	260.5608	56.96456	5.3
##	2369	0.8546944	0.32170868	0.13894844	0.1003265381	260.5290	56.87050	4.7
##	2370	2.5496902	1.16038132	0.44331932	0.2099103928	260.6945	56.99350	4.9
##	2371	2.5169563	1.10926247	0.44731903	0.2096977234	260.6575	57.00947	5.1
##	2372	1.2566319	0.48855400	0.23980141	0.0394687653	260.8125	56.96836	4.8
##	2373	1.1648655	0.52928734	0.24899101	0.3395957947	260.6305	56.97931	3.5
##	2374	1.2506809	0.55329132	0.27363205	0.1153640747	260.7257	57.02886	5.0
##	2375	1.3679714	0.56867027	0.29380798	0.1163520813	260.6449	56.94694	5.0
##	2376	1.0363426	0.47024918	0.16600800	0.2971553802	260.6033	57.16600	4.7
##	2377	1.0743446	0.27640915	0.15856552	0.0077228546	260.9399	57.07164	4.0
##	2378	1.5370502	0.67403412	0.28849030	0.1738090515	260.9185	57.05239	4.5
##	2379	1.0238113	0.55960274	0.19426918	0.0621910095	260.3778	57.24033	4.5
##	2380	1.4363995	0.56982040	0.27431107	-0.0356311798	260.7905	57.07075	5.2
##	2381	1.4185200	0.62637520	0.25293541	0.1538314819	260.7901	57.14606	5.3
##	2382	1.7712135	0.75873947	0.28132820	0.1858692169	260.9027	57.20306	4.9
##	2383	0.9887104	0.32211304	0.15736771	0.0188236237	260.9660	57.12292	3.7

##	2384	0.9751835	0.40688705	0.20491409	-0.0251140594	261.0488	57.29119	4.4
##	2385	1.9163246	0.52555275	0.16499710	0.1619300842	260.7188	57.29269	3.7
##	2386	0.9694996	0.36276817	0.18904305	-0.0213661194	260.6603	57.41731	2.9
##	2387	1.9244652	0.66499329	0.27789497	0.2125301361	260.8003	57.44283	5.1
##	2388	2.5977440	1.18331718	0.46022511	0.2492856979	260.2455	57.36242	5.4
##	2389	2.5977440	1.18331718	0.46022511	0.2492856979	260.2455	57.36242	5.3
##	2390	0.9285603	0.38207817	0.12392426	0.2398433685	260.2561	57.40272	2.9
##	2391	0.9285603	0.38207817	0.12392426	0.2398433685	260.2561	57.40272	4.4
##	2392	1.3653011	0.60980988	0.14880562	0.3352413177	260.2122	57.71925	4.9
##	2393	1.6714020	0.62485886	0.23536682	0.1140117645	259.7235	57.38508	4.6
##	2394	1.6714020	0.62485886	0.23536682	0.1140117645	259.7235	57.38508	4.7
##	2395	1.3625011	0.54482460	0.02110672	0.1077175140	259.5531	57.36767	4.6
##	2396	1.3625011	0.54482460	0.02110672	0.1077175140	259.5531	57.36767	5.0
##	2397	1.8433685	0.66863060	0.21765709	0.1676445007	259.3787	57.47706	4.7
##	2398	1.8433685	0.66863060	0.21765709	0.1676445007	259.3787	57.47706	4.6
##	2399	1.1943512	0.53204155	0.20109367	-0.0749645233	259.8557	57.24142	3.8
##	2400	1.1943512	0.53204155	0.20109367	-0.0749645233	259.8557	57.24142	4.9
##	2401	1.3976231	0.58415413	0.21805954	0.3187007904	259.6468	57.24508	1.6
##	2402	1.3976231	0.58415413	0.21805954	0.3187007904	259.6468	57.24508	3.3
##	2403	2.0099430	0.82209969	0.30816650	0.1747398376	259.5385	57.18081	5.1
##	2404	0.8577118	0.29841232	0.09635925	0.0688571930	259.7705	57.17306	2.2
##	2405	2.4451084	1.07760429	0.41724586	0.2038726807	259.6152	56.96994	5.4
##	2406	2.4451084	1.07760429	0.41724586	0.2038726807	259.6152	56.96994	5.1
##	2407	2.0147018	0.72447777	0.27706718	0.1325302124	259.6694	56.97325	5.0
##	2408	1.7248878	0.72858429	0.27793503	0.1290836334	260.0830	57.19650	5.4
##	2409	1.7248878	0.72858429	0.27793503	0.1290836334	260.0830	57.19650	4.8
##	2410	1.7210655	0.59721565	0.27913475	0.1375179291	259.9203	56.82558	5.0
##	2411	1.7481632	0.84318542	0.23261452	0.1912174225	260.0892	57.13831	5.0
##	2412	1.4548569	0.59798241	0.29902840	0.1326084137	259.8843	56.83700	5.3
##	2413	2.0984192	0.91928291	0.36805153	0.2514553070	260.0935	57.02147	5.0
##	2414	2.0984192	0.91928291	0.36805153	0.2514553070	260.0935	57.02147	5.1
##	2415	1.1632805	0.39595604	0.10971069	0.0679931641	260.0735	56.95850	3.8
##	2416	1.9589558	0.86392593	0.31535912	0.1503124237	260.1748	56.93022	5.3
##	2417	1.1616039	0.52111053	0.25564003	0.1171855927	260.1780	57.09836	5.2
##	2418	2.3740559	0.91470528	0.37845230	0.2024955750	260.1152	56.85789	5.0
##	2419	2.2570419	1.02958870	0.37986946	0.2352104187	260.4464	56.81606	5.5
##	2420	2.2335033	1.02050591	0.37265015	0.1980819702	260.3097	56.83331	5.1
##	2421	2.1480103	0.91364288	0.30394173	0.1839580536	260.4593	56.82653	4.8
##	2422	1.3542328	0.33727837	0.19704628	-0.0554828644	260.1042	57.74194	3.7
##	2423	1.3542328	0.33727837	0.19704628	-0.0554828644	260.1042	57.74194	2.8
##	2424	1.0752163	0.38417435	0.20376587	-0.0746555328	260.2686	57.78828	2.3
##	2425	1.2212372	0.13426971	0.02471924	-0.0806255341	260.3275	57.79547	3.7
##	2426	1.2212372	0.13426971	0.02471924	-0.0806255341	260.3275	57.79547	4.0
##	2427	1.2578526	0.44603539	0.14810753	0.1987743378	260.1872	57.84294	2.0
##	2428	1.2578526	0.44603539	0.14810753	0.1987743378	260.1872	57.84294	1.2
##	2429	1.2401981	-0.03148460	-0.15444946	0.1154117584	260.7812	57.89872	2.2
##	2430	1.0824413	0.71808624	-0.30500221	0.5243129730	260.3992	57.91831	1.7
##	2431	1.0824413	0.71808624	-0.30500221	0.5243129730	260.3992	57.91831	2.9
##	2432	1.2947598	0.08450699	0.05980492	0.1057624817	260.1970	57.92300	2.1
##	2433	1.2947598	0.08450699	0.05980492	0.1057624817	260.1970	57.92300	2.0
##	2434	0.1963234	0.58428574	-0.10397720	0.8666782379	260.4717	58.15069	3.4
##	2435	0.1963234	0.58428574	-0.10397720	0.8666782379	260.4717	58.15069	3.4
##	2436	1.1337185	0.21219635	-0.08361053	0.2551670074	260.3849	58.16272	2.3
##	2437	1.1337185	0.21219635	-0.08361053	0.2551670074	260.3849	58.16272	2.2
##	2438	1.0689507	0.35376549	0.25533867	-0.0131759644	260.1718	58.01047	2.0
##	2439	1.2422867	0.05682755	0.46294594	0.3555393219	260.0845	57.97750	2.2
##	2440	1.2422867	0.05682755	0.46294594	0.3555393219	260.0845	57.97750	1.9
##	2441	0.9801388	0.19952583	0.10103989	-0.1446208954	260.0900	57.90853	2.0
##	2442	0.8428459	0.26471519	0.05537605	0.1191768646	259.6420	58.22236	2.8
##	2443	1.2264233	0.14979172	0.11343002	0.1269245148	259.8727	57.97372	4.8
##	2444	1.1436214	0.18426895	0.12249756	0.0767421722	259.7707	58.05833	5.0
##	2445	0.9516239	0.20358849	0.13452339	-0.1181488037	259.5430	58.02989	4.6
##	2446	1.0641403	0.37978363	0.15625381	0.0130081177	259.9274	57.91375	2.4
##	2447	1.1141033	0.23659706	0.01949692	-0.0749816895	259.8454	57.90322	3.2
##	2448	0.8643303	0.35231209	0.11792946	0.1606979370	259.1813	57.85706	4.8
##	2449	0.8643303	0.35231209	0.11792946	0.1606979370	259.1813	57.85706	4.0
##	2450	0.8521614	0.35431480	0.07201958	0.2096652985	259.4548	57.76236	4.4
##	2451	0.8521614	0.35431480	0.07201958	0.2096652985	259.4548	57.76236	4.7
##	2452	1.3170853	0.47097969	0.12531281	0.0912094116	259.3082	57.76144	5.2
##	2453	1.3170853	0.47097969	0.12531281	0.0912094116	259.3082	57.76144	3.9
##	2454	1.7845383	0.84398651	0.26204491	0.1810779572	259.9487	58.44792	5.0
##	2455	1.7845383	0.84398651	0.26204491	0.1810779572	259.9487	58.44792	5.0
##	2456	2.1022854	0.55294991	0.23345757	-0.0461559296	260.0044	58.48697	4.9
##	2457	1.4899502	0.73624802	0.24445724	0.1076831818	260.4987	58.26258	4.8
##	2458	1.1924953	0.49376297	0.17031479	-0.0149364471	260.6078	58.43836	3.3
##	2459	1.1924953	0.49376297	0.17031479	-0.0149364471	260.6078	58.43836	4.4
##	2460	1.8787251	0.77515221	0.26339912	0.1169471741	260.8686	58.54467	4.8
##	2461	1.8787251	0.77515221	0.26339912	0.1169471741	260.8686	58.54467	5.1
##	2462	1.8787251	0.77515221	0.26339912	0.1169471741	260.8686	58.54467	4.8

##	2463	1.8787251	0.77515221	0.26339912	0.1169471741	260.8686	58.54467	4.1
##	2464	0.9245358	0.35536575	0.05666924	-0.0358352661	260.3567	58.66172	1.4
##	2465	2.0940380	0.82285118	0.28890038	0.1332683563	260.8717	58.82622	5.3
##	2466	1.0859356	0.26104355	0.16226578	0.1403408051	260.7032	58.80800	2.8
##	2467	0.8207092	0.31889915	0.11069870	0.2032184601	260.6431	58.80189	2.0
##	2468	2.1695881	0.82282448	0.32077217	0.1789379120	260.6247	58.75181	5.0
##	2469	1.1386890	0.26534653	0.15023804	0.0078468323	260.6126	58.72850	2.9
##	2470	1.9406528	0.79377937	0.26574135	0.1248931885	260.6224	58.86361	4.9
##	2471	0.8212070	0.37892532	0.11360168	0.0668354034	260.6358	58.85192	2.9
##	2472	0.9716301	0.53024101	0.14868164	-0.0295906067	260.2581	58.71456	4.2
##	2473	5.1015606	0.74769592	0.20946884	-0.6879692078	260.2632	58.73894	1.7
##	2474	5.1015606	0.74769592	0.20946884	-0.6879692078	260.2632	58.73894	4.9
##	2475	1.3423843	0.58243561	0.25873375	0.1334857941	260.7681	58.87508	5.2
##	2476	1.9361172	0.79191017	0.28060913	0.1366043091	260.1769	58.72156	5.1
##	2477	1.0326195	0.58489418	0.25191689	-0.0756626129	260.3961	58.90850	4.8
##	2478	2.3049431	0.92534065	0.32543755	0.1611938477	260.4448	58.90217	5.1
##	2479	2.3049431	0.92534065	0.32543755	0.1611938477	260.4448	58.90217	5.1
##	2480	0.8909969	0.23088646	0.15402794	-0.0677623749	260.4970	59.04719	4.3
##	2481	1.2504272	0.61677933	0.25036430	0.1102390289	260.2772	58.97464	5.3
##	2482	1.7505150	0.54442978	0.25841904	-0.0782089233	260.3322	58.99811	4.5
##	2483	6.6559620	1.04571533	0.14714432	0.2428722382	260.2599	59.03853	5.4
##	2484	1.3647423	0.66073227	0.30815506	0.1806545258	260.0837	59.08978	4.9
##	2485	2.0537529	0.74429321	0.25543594	0.0707836151	260.0847	59.05214	5.2
##	2486	1.6810341	0.70664406	0.25094414	0.1275272369	260.0397	58.86397	4.9
##	2487	1.6810341	0.70664406	0.25094414	0.1275272369	260.0397	58.86397	4.9
##	2488	0.8479824	0.37014389	0.14453888	0.0824584961	260.0360	58.76894	4.8
##	2489	0.9497108	0.29947472	0.05037308	-0.0253162384	260.0434	58.73417	3.2
##	2490	2.5690746	1.04291534	0.36306953	0.2020187378	259.9958	59.09319	4.9
##	2491	1.2923012	0.58390427	0.21405983	0.0711364746	259.9765	58.68158	5.3
##	2492	1.2923012	0.58390427	0.21405983	0.0711364746	259.9765	58.68158	4.4
##	2493	0.8911419	0.39268494	0.12450218	-0.1335163116	259.9541	59.09117	4.8
##	2494	0.6367836	0.36922646	0.14573669	0.2361202240	259.8745	58.91147	4.7
##	2495	0.8865700	0.58654976	0.22848129	0.1157550812	259.8598	58.91150	4.7
##	2496	2.5245686	1.27544785	0.55088902	0.3428010941	259.6376	59.00622	5.4
##	2497	1.0771027	0.44983292	0.33148003	-0.0714664459	259.8453	58.72089	4.6
##	2498	0.9178429	0.50637627	0.20856094	0.1392688751	259.5028	58.98844	3.2
##	2499	0.9879837	0.26750755	0.16476631	-0.0041179657	259.5552	59.00986	4.4
##	2500	2.3776398	1.00681877	0.34193611	0.1874465942	259.4369	58.85144	5.0
##	2501	2.5847321	1.20386314	0.44472790	0.2578630447	259.4273	58.87283	5.1
##	2502	1.2542667	0.53694344	0.14317131	0.2966785431	259.6201	58.80414	3.8
##	2503	2.5346622	1.22957611	0.46394444	0.2669324875	259.5013	58.86042	5.5
##	2504	0.8855495	0.28100395	0.11619949	0.0921840668	259.1410	58.78075	3.8
##	2505	2.4785728	1.18987465	0.46595383	0.2790527344	259.1824	58.83267	5.4
##	2506	1.6309013	0.69717979	0.28372383	0.0617427826	259.3717	58.73283	4.9
##	2507	1.1243992	0.37711716	0.07922935	-0.0940647125	259.3880	58.79025	2.7
##	2508	1.4076996	0.68393898	0.31630325	0.0690612793	259.1908	58.85728	4.8
##	2509	0.9891167	0.31690216	0.01022339	-0.0240898132	259.1339	58.67178	2.6
##	2510	1.4166565	0.60953522	0.20331573	0.1176223755	259.2118	58.63856	5.2
##	2511	1.0284748	0.39992714	0.21359634	0.0292034149	259.3137	58.67531	2.8
##	2512	1.3964024	0.66275597	0.25877762	0.0275974274	259.1689	58.70806	4.9
##	2513	1.5246048	0.65761375	0.30991554	0.1844692230	259.0728	58.57769	5.2
##	2514	1.2011299	0.26419067	0.10185242	0.2185459137	259.0692	58.53722	3.7
##	2515	0.8774033	0.42507935	0.10541344	0.1812229156	259.1500	58.59417	4.7
##	2516	0.9364510	0.37096024	0.19851685	-0.1756210327	259.1931	58.60147	4.3
##	2517	1.1281700	0.46578407	0.27298546	-0.1885147095	259.4759	58.49194	4.0
##	2518	2.2569141	0.87777519	0.30825806	0.1940841675	259.2098	58.47119	5.0
##	2519	2.2178249	1.01807213	0.37617302	0.2130699158	259.5512	58.41172	5.0
##	2520	2.4092846	1.05853653	0.36520386	0.2033710480	259.4889	58.47389	5.2
##	2521	1.6305504	0.70438957	0.15517616	0.2809085846	259.6347	58.41083	4.9
##	2522	1.6305504	0.70438957	0.15517616	0.2809085846	259.6347	58.41083	4.3
##	2523	1.0119762	0.45788765	0.09116936	0.2204360962	260.1585	57.96267	2.0
##	2524	1.3286915	0.59844589	0.26576042	0.1504306793	260.1289	57.96492	2.3
##	2525	1.3286915	0.59844589	0.26576042	0.1504306793	260.1289	57.96492	2.6
##	2526	1.3926678	0.70018578	0.33297539	0.1714763641	260.0617	57.94042	1.6
##	2527	1.3926678	0.70018578	0.33297539	0.1714763641	260.0617	57.94042	1.2
##	2528	1.3624344	0.62122917	0.23801422	0.1451835632	260.1198	58.06639	2.3
##	2529	1.3624344	0.62122917	0.23801422	0.1451835632	260.1198	58.06639	1.7
##	2530	1.2238560	0.55934715	0.23203278	0.1451568604	260.0260	57.93836	1.5
##	2531	1.3669510	0.59129333	0.29318619	0.0384311676	259.8539	58.04147	1.9
##	2532	1.3669510	0.59129333	0.29318619	0.0384311676	259.8539	58.04147	2.3
##	2533	1.2299919	0.52045250	0.31942177	0.2075862885	259.9758	57.96239	3.4
##	2534	1.0524273	0.56167984	0.17427254	-0.0305824280	259.9162	57.92372	3.2
##	2535	1.3556366	0.43910980	0.23629189	-0.0446414948	260.0029	57.90850	3.1
##	2536	1.1988239	0.51138306	0.34735680	0.1428642273	260.0442	57.89656	3.6
##	2537	1.2735958	0.55453491	0.32967949	0.3330650330	260.0715	57.91272	3.1
##	2538	1.4275112	0.59227943	0.28591347	0.1600723267	260.1480	57.88722	2.4
##	2539	1.4275112	0.59227943	0.28591347	0.1600723267	260.1480	57.88722	2.3
##	2540	1.6796112	0.62764931	0.29909515	0.1138896942	260.1991	57.89006	2.2
##	2541	1.6796112	0.62764931	0.29909515	0.1138896942	260.1991	57.89006	2.4

##	2542	1.4034500	0.55864525	0.29206085	-0.0138530731	260.0589	57.88039	2.8
##	2543	1.6057663	0.58540154	0.29883194	0.1131401062	260.1135	57.91564	1.6
##	2544	1.5016098	0.59562302	0.26181030	0.2133502960	260.3576	57.97186	1.4
##	2545	1.7928963	0.69054222	0.31860924	0.1935882568	260.0063	58.02594	1.3
##	2546	1.1943207	0.56952667	0.26376534	0.0667285919	259.2860	57.99742	4.6
##	2547	1.3610573	0.38060760	0.18442535	0.1308650970	259.9678	57.88625	2.3
##	2548	1.2079506	0.47308540	0.20349503	0.0547122955	260.0057	57.25339	5.0
##	2549	2.0755882	0.95613480	0.40297127	0.2133636475	260.3902	57.55667	5.0
##	2550	1.5450802	0.62364769	0.25158119	-0.0050926208	259.2328	57.44478	4.7
##	2551	1.8877087	0.61298370	0.21789360	0.4337482452	259.0614	57.46606	4.7
##	2552	0.9039745	0.36327553	0.17669487	0.1889114380	258.9733	57.40439	3.4
##	2553	0.9039745	0.36327553	0.17669487	0.1889114380	258.9733	57.40439	4.9
##	2554	2.5372505	1.20314026	0.43906593	0.2737445831	258.8811	57.34856	5.3
##	2555	2.5372505	1.20314026	0.43906593	0.2737445831	258.8811	57.34856	5.1
##	2556	1.9535389	0.82241821	0.28781128	0.2384109497	258.9890	57.38414	5.2
##	2557	1.9535389	0.82241821	0.28781128	0.2384109497	258.9890	57.38414	5.3
##	2558	2.6253567	1.12271881	0.39632607	0.2279195786	259.6153	57.35742	5.2
##	2559	2.1483688	0.89858818	0.27023697	0.1785774231	258.9488	57.23708	4.9
##	2560	2.3039799	0.83508301	0.31956673	0.2303943634	259.1717	57.17144	5.0
##	2561	1.7684574	0.67479324	0.27092552	0.1454238892	259.2696	57.20433	4.8
##	2562	2.0352936	0.99173546	0.45892715	0.2711162567	259.2429	57.16000	5.0
##	2563	2.3155403	0.95075226	0.34037399	0.1972751617	259.1322	57.10358	5.5
##	2564	2.3959064	1.08413506	0.39470291	0.1856555939	259.2892	57.03761	5.2
##	2565	1.1871223	0.59927750	0.17508507	0.2617588043	259.2909	57.12547	3.5
##	2566	1.4153709	0.72578049	0.25544357	0.0972728729	259.2777	57.12828	5.2
##	2567	1.5522804	0.64528465	0.27446175	0.1347160339	259.3540	56.94989	5.2
##	2568	1.6404419	0.66558647	0.25978851	0.0563678741	259.3865	56.95806	4.9
##	2569	2.2405834	0.95137215	0.36338043	0.2174377441	259.2945	56.97994	4.7
##	2570	2.2007275	0.92612648	0.36697578	0.1758232117	259.5798	56.98222	5.2
##	2571	2.0811672	0.76030540	0.27325821	0.1669158936	261.4294	58.41864	5.3
##	2572	1.6683578	0.68892288	0.21169662	0.2220859528	261.3686	58.50147	5.1
##	2573	1.3506222	0.66333389	0.23338509	0.0671825409	261.1815	58.49556	5.2
##	2574	1.3506222	0.66333389	0.23338509	0.0671825409	261.1815	58.49556	4.7
##	2575	1.3506222	0.66333389	0.23338509	0.0671825409	261.1815	58.49556	4.7
##	2576	2.0603256	0.81959724	0.31060219	0.1722640991	261.2558	58.44875	5.0
##	2577	1.8028259	0.65398407	0.22652435	0.1015586853	261.1796	58.69431	4.9
##	2578	2.3808365	1.07132530	0.42649651	0.2298669815	261.0320	58.66864	5.3
##	2579	1.0525074	0.42972946	0.17042732	-0.0038490295	261.0761	58.85167	3.7
##	2580	2.0775795	0.89809608	0.32798004	0.1676578522	261.0208	58.76344	5.0
##	2581	1.6750221	0.67027092	0.27177811	0.1602954865	261.1332	58.82300	4.8
##	2582	1.3421440	0.65226936	0.24259758	0.1649818420	260.9264	58.76744	4.4
##	2583	1.5347404	0.59705162	0.24353981	0.1453971863	260.9188	58.88644	4.4
##	2584	1.8187504	0.68096352	0.26714706	0.1598434448	260.8453	58.88017	4.8
##	2585	1.5348969	0.58450317	0.24229622	0.1384277344	260.9388	58.83903	3.8
##	2586	1.4657211	0.73685837	0.23432922	0.1939773560	260.6211	58.85236	5.1
##	2587	1.8969631	0.71439362	0.27982903	0.1186141968	260.6937	58.94547	4.7
##	2588	1.7793560	0.67967224	0.26132202	0.1272621155	260.6178	58.73067	5.0
##	2589	1.6478043	0.65728951	0.29904175	0.1338615417	260.5456	58.78364	5.3
##	2590	1.1741753	0.56403160	0.19711876	0.1618232727	260.4257	58.01736	3.8
##	2591	1.3034115	0.56866455	0.31271935	0.0983314514	260.4824	58.03522	2.6
##	2592	1.0925941	0.44890022	0.11002159	0.0714626312	261.6599	58.32167	3.2
##	2593	1.0925941	0.44890022	0.11002159	0.0714626312	261.6599	58.32167	4.7
##	2594	0.9894218	0.40634727	0.18881416	0.0957527161	261.6582	58.35489	4.6
##	2595	2.3932972	1.02510834	0.50924873	0.0474452972	261.8299	58.03639	4.9
##	2596	2.3932972	1.02510834	0.50924873	0.0474452972	261.8299	58.03639	5.4
##	2597	1.5445156	0.58952332	0.19574928	0.1067218781	261.7917	58.12636	4.4
##	2598	1.5445156	0.58952332	0.19574928	0.1067218781	261.7917	58.12636	4.4
##	2599	2.2018623	0.95441246	0.38597870	0.2018527985	262.0843	58.11306	5.6
##	2600	2.2018623	0.95441246	0.38597870	0.2018527985	262.0843	58.11306	5.6
##	2601	1.0347500	0.31381607	0.09363174	0.2983398438	261.9575	58.24189	4.0
##	2602	1.9956970	0.86451912	0.33379936	0.1696681976	261.9151	58.28150	5.3
##	2603	1.9956970	0.86451912	0.33379936	0.1696681976	261.9151	58.28150	4.9
##	2604	1.8719330	0.64727020	0.25936127	0.1504631042	261.7806	58.45236	5.3
##	2605	1.8719330	0.64727020	0.25936127	0.1504631042	261.7806	58.45236	5.0
##	2606	2.6070824	1.26527977	0.51223946	0.2626295090	262.1003	58.28706	5.5
##	2607	2.6070824	1.26527977	0.51223946	0.2626295090	262.1003	58.28706	5.1
##	2608	1.3444767	0.61952591	0.23589706	0.1795101166	262.0034	58.26083	5.2
##	2609	1.3444767	0.61952591	0.23589706	0.1795101166	262.0034	58.26083	5.0
##	2610	1.7763081	0.69690132	0.28946304	0.1949520111	261.9394	58.41567	5.3
##	2611	1.7763081	0.69690132	0.28946304	0.1949520111	261.9394	58.41567	4.6
##	2612	1.1398087	0.60265732	0.29080391	0.0247573853	262.0058	58.41808	5.2
##	2613	1.1398087	0.60265732	0.29080391	0.0247573853	262.0058	58.41808	4.2
##	2614	1.0270042	0.53980064	0.15103149	0.1695747375	262.3442	58.32833	4.2
##	2615	1.3749390	0.72805977	0.25577927	0.1254158020	262.3019	58.47683	5.2
##	2616	1.3749390	0.72805977	0.25577927	0.1254158020	262.3019	58.47683	5.2
##	2617	2.5657063	1.14909363	0.41931152	0.2618303299	262.4318	58.44028	5.2
##	2618	2.5657063	1.14909363	0.41931152	0.2618303299	262.4318	58.44028	5.0
##	2619	0.8518295	0.39592934	0.17236137	0.0958881378	262.0228	58.48556	3.9
##	2620	1.5179844	0.69636917	0.20091248	0.1201553345	262.2543	58.49175	3.2

##	2621	2.2104416	0.88681412	0.30476761	0.2423057556	262.3652	58.42081	5.0
##	2622	2.2104416	0.88681412	0.30476761	0.2423057556	262.3652	58.42081	4.5
##	2623	1.7509956	0.62384987	0.19943237	0.1883106232	262.2806	58.52153	4.8
##	2624	1.7509956	0.62384987	0.19943237	0.1883106232	262.2806	58.52153	4.7
##	2625	2.3156567	1.08248138	0.12753868	0.3578090668	262.2140	58.53842	5.3
##	2626	2.3156567	1.08248138	0.12753868	0.3578090668	262.2140	58.53842	5.1
##	2627	1.5838890	0.64532089	0.26670265	0.0419082642	262.2115	58.54578	3.3
##	2628	1.5838890	0.64532089	0.26670265	0.0419082642	262.2115	58.54578	4.8
##	2629	1.0382023	0.34220505	0.11764717	0.1144943237	262.0818	58.49261	2.3
##	2630	1.0382023	0.34220505	0.11764717	0.1144943237	262.0818	58.49261	3.1
##	2631	2.3228321	0.99869728	0.37192726	0.1992340088	262.1403	58.58978	5.3
##	2632	2.3228321	0.99869728	0.37192726	0.1992340088	262.1403	58.58978	5.1
##	2633	2.3838596	1.14963913	0.48966694	0.2832870483	262.2543	58.61028	5.1
##	2634	2.3838596	1.14963913	0.48966694	0.2832870483	262.2543	58.61028	4.9
##	2635	1.9918690	0.82156563	0.32067299	0.1594791412	261.7350	58.48258	5.3
##	2636	1.9918690	0.82156563	0.32067299	0.1594791412	261.7350	58.48258	5.2
##	2637	0.9358349	0.38584137	0.18359756	0.0810565948	261.9105	58.57186	3.9
##	2638	0.9358349	0.38584137	0.18359756	0.0810565948	261.9105	58.57186	1.8
##	2639	1.8706818	0.77480125	0.24937248	0.1461086273	262.1958	58.69536	5.4
##	2640	1.8706818	0.77480125	0.24937248	0.1461086273	262.1958	58.69536	5.1
##	2641	2.1976604	0.96046066	0.35694885	0.2234325409	261.9976	58.59731	5.3
##	2642	2.1976604	0.96046066	0.35694885	0.2234325409	261.9976	58.59731	5.1
##	2643	1.0765152	0.37052155	0.15015221	0.0658435822	262.1653	58.65050	4.7
##	2644	1.0765152	0.37052155	0.15015221	0.0658435822	262.1653	58.65050	2.8
##	2645	2.3944778	0.99541473	0.36129761	0.2157726288	262.3954	58.79519	5.3
##	2646	2.3944778	0.99541473	0.36129761	0.2157726288	262.3954	58.79519	5.2
##	2647	2.0474892	0.69379997	0.16202164	0.2343101501	262.3202	58.69492	4.8
##	2648	2.0474892	0.69379997	0.16202164	0.2343101501	262.3202	58.69492	4.4
##	2649	1.4155903	0.56920052	0.21069145	0.1396942139	262.3879	58.69281	5.1
##	2650	1.4155903	0.56920052	0.21069145	0.1396942139	262.3879	58.69281	3.9
##	2651	1.2465057	0.39987183	0.17729759	0.1006374359	261.8064	58.55531	4.5
##	2652	1.2465057	0.39987183	0.17729759	0.1006374359	261.8064	58.55531	4.3
##	2653	2.5974121	1.26353455	0.50610065	0.2509031296	262.0019	58.72372	5.4
##	2654	2.5974121	1.26353455	0.50610065	0.2509031296	262.0019	58.72372	5.5
##	2655	1.5832462	0.63734055	0.23559380	-0.0058517456	262.1940	58.77956	5.3
##	2656	1.5832462	0.63734055	0.23559380	-0.0058517456	262.1940	58.77956	4.2
##	2657	1.0119267	0.37911606	0.14225006	0.1513195038	262.0535	58.78742	2.0
##	2658	1.1457500	0.44244194	0.14430618	-0.0829620361	261.8461	58.65550	3.9
##	2659	0.9924126	0.40287590	0.13957214	0.0312080383	262.0333	58.88564	3.1
##	2660	0.9924126	0.40287590	0.13957214	0.0312080383	262.0333	58.88564	3.7
##	2661	1.1680756	0.70212173	0.19963264	0.2332744598	262.0381	58.85814	5.2
##	2662	2.0450821	0.87142754	0.29552841	0.1430110931	261.9977	58.80133	5.3
##	2663	2.0450821	0.87142754	0.29552841	0.1430110931	261.9977	58.80133	5.1
##	2664	1.5822697	0.67753220	0.24377823	0.1175498962	262.0158	58.94942	5.4
##	2665	1.5822697	0.67753220	0.24377823	0.1175498962	262.0158	58.94942	4.8
##	2666	1.3581429	0.64838409	0.17056274	0.1893253326	262.0166	58.80361	5.0
##	2667	1.3581429	0.64838409	0.17056274	0.1893253326	262.0166	58.80361	4.4
##	2668	1.6877728	0.71392250	0.26549339	0.2112789154	261.8420	58.69517	4.7
##	2669	1.6877728	0.71392250	0.26549339	0.2112789154	261.8420	58.69517	5.3
##	2670	1.7841492	0.66965294	0.25501442	0.2105350494	261.8356	58.91728	4.0
##	2671	1.7841492	0.66965294	0.25501442	0.2105350494	261.8356	58.91728	5.2
##	2672	1.2826157	0.49355125	0.26226997	0.1935806274	261.7869	58.60097	3.4
##	2673	1.5250072	0.58797264	0.28777122	0.1707572937	261.7276	58.79981	4.3
##	2674	1.5250072	0.58797264	0.28777122	0.1707572937	261.7276	58.79981	4.7
##	2675	1.2129536	0.58162689	0.26121712	0.1316890717	261.6565	58.74633	4.2
##	2676	1.2129536	0.58162689	0.26121712	0.1316890717	261.6565	58.74633	4.0
##	2677	2.4399319	1.01155853	0.37602997	0.1904220581	261.5797	58.91050	5.4
##	2678	2.4399319	1.01155853	0.37602997	0.1904220581	261.5797	58.91050	5.2
##	2679	1.9902859	0.91202736	0.33748436	0.1991329193	261.6865	58.94922	4.9
##	2680	1.9902859	0.91202736	0.33748436	0.1991329193	261.6865	58.94922	5.1
##	2681	1.7729931	0.74230385	0.27257729	0.1506557465	261.3213	58.90136	5.1
##	2682	1.7729931	0.74230385	0.27257729	0.1506557465	261.3213	58.90136	5.0
##	2683	1.5390396	0.69819069	0.29021454	0.1761779785	261.4269	58.84983	5.4
##	2684	1.5390396	0.69819069	0.29021454	0.1761779785	261.4269	58.84983	5.4
##	2685	2.4263592	1.09126282	0.37739754	0.2020473480	261.5937	58.60597	5.1
##	2686	2.4263592	1.09126282	0.37739754	0.2020473480	261.5937	58.60597	5.1
##	2687	2.2612038	0.95417023	0.32643127	0.1602954865	261.5888	58.65286	5.2
##	2688	2.2612038	0.95417023	0.32643127	0.1602954865	261.5888	58.65286	5.3
##	2689	2.5793819	1.16689491	0.41824532	0.2275943756	261.2785	58.87444	5.2
##	2690	2.5793819	1.16689491	0.41824532	0.2275943756	261.2785	58.87444	5.1
##	2691	2.3906498	1.08860397	0.38993645	0.2175045013	261.5088	58.79186	5.1
##	2692	2.3906498	1.08860397	0.38993645	0.2175045013	261.5088	58.79186	4.9
##	2693	1.0691509	0.35200691	0.02413177	0.0945816040	261.2489	58.79769	2.1
##	2694	2.5836029	1.14378548	0.39544487	0.2432966232	261.3012	58.74261	5.2
##	2695	2.5836029	1.14378548	0.39544487	0.2432966232	261.3012	58.74261	5.2
##	2696	1.4243412	0.61014557	0.07543373	0.2255725861	261.3068	58.81358	2.1
##	2697	1.8114510	0.72290802	0.29723549	0.1102886200	261.3505	58.80208	4.6
##	2698	1.8114510	0.72290802	0.29723549	0.1102886200	261.3505	58.80208	4.8
##	2699	2.5831852	1.25970936	0.52896690	0.2630882263	261.1001	58.73203	5.5

##	2700	2.5831852	1.25970936	0.52896690	0.2630882263	261.1001	58.73203	5.5
##	2701	1.5237999	0.68488121	0.23797417	0.2696876526	261.2362	58.62061	5.2
##	2702	1.5237999	0.68488121	0.23797417	0.2696876526	261.2362	58.62061	4.5
##	2703	1.7878952	0.76451492	0.26983070	0.1685695648	261.0025	58.65386	4.8
##	2704	1.7878952	0.76451492	0.26983070	0.1685695648	261.0025	58.65386	4.2
##	2705	2.1148624	0.90962601	0.35022926	0.2353591919	261.3611	58.58497	5.1
##	2706	2.1148624	0.90962601	0.35022926	0.2353591919	261.3611	58.58497	5.0
##	2707	1.6433449	0.69484901	0.19765282	0.1767807007	261.5805	58.52575	5.0
##	2708	1.6433449	0.69484901	0.19765282	0.1767807007	261.5805	58.52575	4.8
##	2709	1.9254322	0.72736740	0.25263023	0.1083621979	261.1622	58.57672	5.2
##	2710	1.9254322	0.72736740	0.25263023	0.1083621979	261.1622	58.57672	4.8
##	2711	1.9078388	0.72280502	0.22918320	0.1412849426	261.5370	58.50172	4.9
##	2712	2.3811302	0.91656113	0.32194901	0.2064094543	261.0924	58.53103	5.1
##	2713	2.3811302	0.91656113	0.32194901	0.2064094543	261.0924	58.53103	5.3
##	2714	1.7775974	0.64811707	0.23630142	0.2096996307	261.5601	58.45803	5.1
##	2715	1.4764633	0.62084579	0.18155670	0.0967388153	261.4405	58.41656	5.1
##	2716	1.4764633	0.62084579	0.18155670	0.0967388153	261.4405	58.41656	4.8
##	2717	2.0472946	0.72784042	0.31624413	0.1230850220	261.5314	58.44697	4.9
##	2718	2.0472946	0.72784042	0.31624413	0.1230850220	261.5314	58.44697	5.0
##	2719	1.1536884	0.56845856	0.24068069	0.1554470062	261.5108	58.37542	4.8
##	2720	1.7326050	0.66078568	0.23569298	0.1038131714	261.2421	58.08408	5.2
##	2721	1.7326050	0.66078568	0.23569298	0.1038131714	261.2421	58.08408	4.3
##	2722	1.3504677	0.65147591	0.24575806	0.1467742920	261.5755	58.37083	3.3
##	2723	1.3504677	0.65147591	0.24575806	0.1467742920	261.5755	58.37083	2.6
##	2724	2.5263119	1.14410782	0.42266464	0.2488021851	258.5902	57.36964	5.2
##	2725	1.4551563	0.59616661	0.22793579	0.0845222473	258.6155	57.19422	4.6
##	2726	1.6574287	0.66660118	0.21576500	0.2569503784	258.5842	57.34108	4.4
##	2727	2.1693420	0.95236397	0.33770752	0.1977691650	258.5734	57.38478	5.3
##	2728	1.7512932	0.67535973	0.24453735	0.1093502045	258.5668	57.29389	5.3
##	2729	1.3566475	0.65340996	0.25830650	0.1945343018	258.7928	57.27197	3.6
##	2730	1.7961712	0.70934486	0.25727272	0.1560134888	258.7572	57.30158	4.6
##	2731	1.9710159	0.70092773	0.20038223	0.1667938232	258.7625	57.34103	4.8
##	2732	1.5520325	0.70243073	0.24748993	0.1077423096	258.7010	57.45425	4.5
##	2733	1.0062943	0.40581131	0.17876244	0.0396404266	258.7258	57.52358	4.5
##	2734	1.7359886	0.66857338	0.24487305	0.1037464142	259.1410	57.33361	4.5
##	2735	1.5936317	0.63561440	0.28804970	0.1765346527	258.9408	57.68728	4.5
##	2736	1.1030178	0.47579956	0.16398430	0.1546344757	258.6635	57.66906	4.7
##	2737	1.5003986	0.60552788	0.27838516	0.1284713745	259.0558	57.75422	2.2
##	2738	1.2862759	0.46984863	0.18715668	0.0944557190	259.1663	57.76600	4.9
##	2739	1.3509235	0.56382751	0.25949669	0.3373851776	258.9083	57.75117	1.7
##	2740	1.0819893	0.43459702	0.17978668	0.2124805450	259.0976	57.83408	4.7
##	2741	2.0397911	0.79821587	0.28244209	0.1784496307	258.8435	57.83561	5.0
##	2742	0.9285622	0.38322258	0.12814331	0.1359882355	258.8890	57.84939	3.0
##	2743	1.0215225	0.41729164	0.15120506	0.2155933380	258.7113	57.89875	3.5
##	2744	1.9673615	0.72737885	0.32182693	0.1108322144	258.8149	58.10069	5.1
##	2745	1.6686764	0.67769051	0.23859787	0.0996761322	258.4725	58.11231	4.5
##	2746	2.1297913	0.81356430	0.30238533	0.1591033936	258.3182	58.15475	5.0
##	2747	1.6532059	0.59847832	0.22249413	0.1223926544	258.0782	58.03872	4.8
##	2748	2.3770580	0.97276306	0.34215927	0.2145423889	258.1045	58.08183	4.9
##	2749	1.5734615	0.56550980	0.22734070	-0.0614032745	257.9506	58.02567	2.4
##	2750	1.1165657	0.42546082	0.15242577	0.0224380493	257.8924	57.83317	4.1
##	2751	1.5142784	0.53612709	0.20234871	0.0956611633	257.8673	57.81861	1.7
##	2752	2.3946266	1.05547905	0.39979553	0.2364292145	258.1797	57.74750	5.3
##	2753	1.2183552	0.51648521	0.31920433	0.0953426361	257.7619	57.78469	3.5
##	2754	2.0246983	0.83739090	0.30543137	0.1299037933	257.6528	57.76175	5.3
##	2755	0.7835255	0.31269455	0.06527138	0.0812358856	258.1405	57.71411	3.0
##	2756	1.7429047	0.79066277	0.27029228	0.1333789825	257.9854	57.71258	5.3
##	2757	2.6027966	1.19882011	0.47623253	0.2238225937	258.0238	57.63558	5.2
##	2758	1.5909138	0.59279251	0.23281860	-0.2897071838	258.0464	57.66703	4.3
##	2759	1.9381027	0.80580711	0.25016403	0.1859664917	257.8386	57.67092	5.1
##	2760	1.1624203	0.61280251	0.18359375	0.2671852112	257.9085	57.61931	4.3
##	2761	2.5412292	1.23444176	0.47558498	0.2569780350	257.7925	57.52992	5.4
##	2762	2.1381321	0.95286942	0.38613319	0.2334194183	257.8193	57.40428	5.3
##	2763	1.6937351	0.73613358	0.25343323	0.1212005615	258.0961	57.52181	4.3
##	2764	1.8791142	0.55861664	0.22989464	0.0503005981	257.9301	57.39953	4.3
##	2765	2.0465069	0.87153053	0.37498283	0.1915302277	258.1730	57.42300	5.1
##	2766	2.4360943	1.08768272	0.38519096	0.2266864777	257.9228	57.38725	5.0
##	2767	1.6618195	0.68278313	0.20853424	0.1313781738	258.2053	57.25958	5.1
##	2768	1.5041828	0.66228485	0.28516006	-0.0300540924	258.2545	57.36775	5.1
##	2769	1.0305138	0.43831444	0.19605446	0.1387691498	258.1961	57.22989	5.1
##	2770	1.2487411	0.63130951	0.23886871	0.2724685669	258.2622	57.28728	4.9
##	2771	1.1864338	0.43073463	0.19822502	0.1860980988	258.1173	57.26142	4.0
##	2772	1.4805775	0.72850800	0.26813126	0.2204017639	258.5030	57.60417	5.2
##	2773	1.0750046	0.54616737	0.09524345	0.2237854004	258.1565	57.31981	4.7
##	2774	2.4698544	1.19306374	0.47892857	0.2732334137	258.4260	57.33472	4.8
##	2775	1.3087845	0.69657516	0.25149727	0.1732025146	258.3240	57.20350	5.0
##	2776	1.7809944	0.68768311	0.26273918	0.0603160858	258.4013	57.22133	5.0
##	2777	1.9361324	0.79148674	0.31381035	0.2061729431	258.4480	57.33406	5.3
##	2778	1.5603638	0.66910362	0.25905800	0.1386623383	261.4207	58.49400	3.9

##	metallicity	signal.noise	temperature	velocity.los
## 1	-1.30	3.0	5923	-294.1
## 2	-1.73	4.1	4935	-205.1
## 3	-1.13	3.5	6503	-282.1
## 4	-2.20	3.2	4873	-283.7
## 5	-1.89	2.9	4886	-277.5
## 6	-1.02	4.9	5994	-298.2
## 7	-1.96	3.1	4522	-297.3
## 8	0.04	0.8	4741	-299.1
## 9	-3.28	12.2	4748	-309.1
## 10	-3.16	14.7	4789	-310.5
## 11	-3.18	13.7	4648	-309.1
## 12	-3.29	10.2	4543	-310.4
## 13	-3.29	13.0	4554	-310.7
## 14	-1.99	11.9	5285	-293.6
## 15	-1.70	14.1	4609	-295.5
## 16	-1.69	1.4	4626	-312.2
## 17	-1.69	2.6	5120	-309.6
## 18	-1.71	4.4	4971	-303.2
## 19	-2.02	7.2	4759	-302.7
## 20	-1.25	4.8	5070	-63.0
## 21	-0.67	12.8	5694	-187.9
## 22	-2.40	5.0	6454	-277.8
## 23	-1.91	4.4	6600	-275.4
## 24	-1.04	25.2	4789	-156.6
## 25	-1.96	8.5	4554	-290.1
## 26	-2.29	6.4	4658	-301.4
## 27	-1.98	5.5	4905	-107.1
## 28	-1.11	6.5	5199	-166.3
## 29	-0.61	4.6	5127	-164.8
## 30	-0.51	8.2	5285	-164.9
## 31	-0.28	6.1	5258	-164.5
## 32	-2.28	4.3	4922	-302.1
## 33	-1.58	5.3	5443	-288.2
## 34	-2.55	9.1	4881	-288.0
## 35	-1.83	13.6	5252	-116.4
## 36	-1.55	14.4	5004	-117.7
## 37	-1.90	2.9	5536	-292.3
## 38	-1.30	1.4	5196	-292.8
## 39	-2.30	4.4	5140	-290.3
## 40	-2.38	3.8	4771	-288.1
## 41	-2.22	3.7	4918	-291.0
## 42	-1.64	2.7	5035	-289.6
## 43	-1.11	2.7	5699	-290.6
## 44	-2.37	5.4	4487	-304.9
## 45	-2.19	6.2	4679	-304.5
## 46	-1.82	3.8	4801	-305.5
## 47	-1.79	5.5	4851	-305.6
## 48	-1.75	2.8	4719	-305.4
## 49	-1.86	6.0	5072	-306.2
## 50	-2.50	2.8	4796	-304.4
## 51	-0.74	2.7	5066	-19.7
## 52	-2.04	10.1	4600	-307.1
## 53	-1.75	5.0	4870	-286.5
## 54	-2.09	4.3	4676	-286.4
## 55	-2.10	6.3	4668	-287.1
## 56	-2.13	8.2	4673	-286.5
## 57	-1.92	8.1	4887	-286.6
## 58	-1.78	7.2	4805	-286.9
## 59	-1.79	7.8	6865	-296.8
## 60	-0.10	0.8	4856	-299.9
## 61	-1.72	4.6	4817	-299.1
## 62	-1.75	8.8	4904	-298.0
## 63	-1.54	9.1	5082	-298.3
## 64	-1.63	7.3	5016	-298.4
## 65	-1.39	9.1	5149	-298.2
## 66	-1.49	5.8	5059	-298.6
## 67	-1.78	6.1	4725	-298.8
## 68	-1.63	6.4	4958	-298.7
## 69	-1.27	9.5	5302	-201.8
## 70	-1.22	17.6	5062	-193.8
## 71	-0.74	4.7	5463	-69.0
## 72	-0.07	6.6	5329	-60.3
## 73	-1.53	3.5	5775	-278.4
## 74	-2.27	11.7	5348	-300.5
## 75	-2.15	9.2	4736	-302.2
## 76	-2.97	12.3	4535	-288.3
## 77	-2.07	13.2	4456	-282.0
## 78	-2.09	22.0	4522	-279.1

## 79	-2.04	21.2	4556	-279.9
## 80	-0.80	13.2	5816	-44.3
## 81	-1.94	6.3	4776	-294.6
## 82	-0.52	6.1	5266	-235.3
## 83	-1.16	0.8	4589	-119.6
## 84	-1.19	2.9	5233	-308.8
## 85	-1.22	3.9	5547	-307.9
## 86	-1.99	7.1	5114	-303.2
## 87	-2.18	3.8	5063	-287.0
## 88	-2.35	4.3	4848	-284.4
## 89	-2.69	5.7	4999	-284.4
## 90	-2.71	5.7	4662	-287.2
## 91	-2.41	5.1	4975	-285.6
## 92	-2.20	3.5	4561	-294.4
## 93	-2.02	5.1	4751	-295.5
## 94	-2.49	2.2	4776	-314.6
## 95	-2.70	6.2	4668	-315.2
## 96	-1.75	5.8	4998	-315.3
## 97	-1.73	5.8	4990	-316.1
## 98	-2.18	4.6	4648	-314.6
## 99	-2.38	2.5	4745	-277.8
## 100	-2.31	4.2	4717	-277.2
## 101	-1.61	5.4	6485	-277.2
## 102	-2.46	6.1	4698	-278.1
## 103	-2.50	5.9	4661	-277.7
## 104	-2.20	5.8	4933	-276.2
## 105	-2.65	7.6	4588	-278.0
## 106	-2.50	4.6	4666	-278.1
## 107	-2.16	5.4	4839	-279.2
## 108	-1.81	4.2	5411	-278.3
## 109	-2.58	3.9	4511	-278.8
## 110	-1.29	2.3	4672	-285.3
## 111	-1.47	5.1	4948	-291.2
## 112	-2.33	2.5	5013	-295.6
## 113	-2.35	2.2	4687	-297.8
## 114	-0.89	1.0	4769	-290.4
## 115	-2.29	4.0	4664	-289.5
## 116	-1.63	5.0	4745	-295.0
## 117	-1.67	2.1	4651	-283.6
## 118	-1.75	4.2	5112	-282.2
## 119	0.34	0.5	5008	-294.4
## 120	-2.25	2.5	4667	-294.3
## 121	-2.13	4.1	5051	-291.5
## 122	-0.92	1.5	5520	-293.5
## 123	-0.43	11.2	5354	-27.7
## 124	-0.45	17.6	5318	-48.0
## 125	-1.71	2.3	4871	-287.6
## 126	-1.47	7.4	4989	-280.9
## 127	-1.44	1.9	4783	-299.7
## 128	-2.25	3.4	4709	-298.9
## 129	-2.19	5.3	4775	-298.3
## 130	-1.67	1.2	4629	-306.2
## 131	-1.46	2.2	4957	-307.3
## 132	-1.80	5.5	4691	-297.8
## 133	-1.73	6.6	4557	-297.6
## 134	-1.46	7.1	4877	-298.2
## 135	-1.63	5.0	4761	-298.9
## 136	-1.72	9.0	4621	-298.0
## 137	-1.83	6.6	4603	-298.8
## 138	-2.11	5.1	5165	-293.0
## 139	-2.09	5.7	4742	-292.5
## 140	-2.05	3.8	4733	-293.0
## 141	-1.98	7.3	4620	-301.0
## 142	-2.00	5.4	5105	-302.0
## 143	-1.84	12.3	4918	-301.1
## 144	-1.82	7.5	4764	-301.4
## 145	-1.97	7.6	4736	-301.8
## 146	-2.05	5.6	4786	-279.6
## 147	-2.16	10.4	4604	-280.2
## 148	-1.95	11.2	4800	-280.2
## 149	-2.00	9.5	4774	-280.5
## 150	-2.12	12.7	4881	-279.6
## 151	-2.32	21.6	4699	-307.3
## 152	-1.96	2.2	4920	-279.4
## 153	-2.28	2.5	5197	-278.4
## 154	-1.75	2.3	5109	-277.7
## 155	-1.67	2.4	5189	-277.3
## 156	-1.96	5.2	5128	-293.0
## 157	-1.91	6.6	4793	-288.4

## 158	-2.13	6.3	4525	-288.7
## 159	-1.71	2.8	4817	-170.0
## 160	-2.27	4.8	4868	-275.5
## 161	-1.54	4.4	5245	-276.4
## 162	-1.94	4.2	4673	-277.2
## 163	-1.40	5.4	5154	-276.2
## 164	-2.34	5.2	4839	-285.1
## 165	-2.09	4.1	4730	-286.6
## 166	-1.80	8.3	5344	-286.3
## 167	-2.12	9.1	4637	-298.1
## 168	-2.20	5.3	4695	-298.8
## 169	-1.93	8.5	4917	-297.1
## 170	-2.09	10.3	4716	-298.0
## 171	-1.91	8.4	4802	-297.8
## 172	-2.14	13.6	4688	-298.7
## 173	-1.97	10.3	4632	-290.4
## 174	-0.05	12.3	5052	-44.4
## 175	-0.44	5.4	5232	-46.5
## 176	-2.00	5.9	4855	-288.9
## 177	-1.77	7.4	4792	-290.4
## 178	-3.03	20.9	4370	-265.6
## 179	-2.67	5.0	4693	-282.5
## 180	-2.54	4.9	4692	-297.2
## 181	-2.13	3.9	4978	-297.2
## 182	-2.57	17.4	4382	-294.8
## 183	-2.40	22.4	4476	-294.7
## 184	-3.07	7.3	4862	-306.9
## 185	-2.20	5.9	4905	-285.7
## 186	-2.05	5.3	4679	-287.6
## 187	-1.89	5.4	4877	-288.0
## 188	-1.78	6.8	5256	-287.2
## 189	-0.06	46.7	5529	-3.5
## 190	0.06	56.5	5625	-3.6
## 191	-0.24	26.7	5560	-2.8
## 192	-1.37	8.7	4694	-289.2
## 193	-1.73	9.9	4593	-289.8
## 194	-2.67	4.5	5089	-278.3
## 195	-2.05	6.8	4846	-289.1
## 196	-2.28	14.8	4597	-300.9
## 197	-2.04	14.7	4516	-300.5
## 198	-1.24	2.6	5698	-259.7
## 199	-1.61	2.7	5423	-262.5
## 200	-2.33	6.9	5347	-283.2
## 201	-2.66	6.9	4725	-285.2
## 202	-1.61	3.7	5815	-276.7
## 203	-2.42	3.2	4962	-280.5
## 204	-2.49	7.8	5574	-280.9
## 205	-2.52	4.2	4965	-280.3
## 206	-2.17	6.3	5208	-282.6
## 207	-2.31	4.2	4801	-281.3
## 208	-1.95	3.0	5300	-282.0
## 209	-2.51	3.2	4766	-279.2
## 210	-2.45	7.7	4873	-289.7
## 211	-2.64	6.7	5052	-290.3
## 212	-2.10	9.0	6169	-290.4
## 213	-2.07	4.2	4525	-292.2
## 214	-1.50	8.1	6093	-42.4
## 215	-0.24	6.5	5478	-44.0
## 216	-2.39	9.9	5770	-282.1
## 217	-1.93	3.5	4929	-291.0
## 218	-1.62	6.7	5109	-291.7
## 219	-2.12	1.9	4705	-290.5
## 220	-1.14	2.7	5271	-277.4
## 221	-1.57	3.3	4995	-277.3
## 222	-2.27	4.2	4656	-276.3
## 223	-1.39	3.4	5234	-278.0
## 224	-2.51	6.8	4595	-277.6
## 225	-2.40	6.3	4622	-276.2
## 226	-2.18	6.7	4826	-277.4
## 227	-2.12	5.4	4896	-276.8
## 228	-2.23	4.3	4793	-276.8
## 229	-0.44	2.2	6257	-276.3
## 230	-2.64	3.4	4629	-279.1
## 231	-1.93	2.2	4673	-292.7
## 232	-1.71	2.4	5205	-296.7
## 233	-2.32	4.2	4852	-292.2
## 234	-1.90	4.5	5135	-292.0
## 235	-1.73	2.6	5602	-292.1
## 236	-1.90	4.4	5481	-152.7

## 237	-0.88	2.2	5344	-87.1
## 238	-2.38	4.6	5145	-289.9
## 239	-2.32	6.8	4598	-291.5
## 240	-2.12	7.0	4804	-291.2
## 241	0.05	12.5	5548	-53.8
## 242	0.14	0.8	5128	-6.4
## 243	-0.73	2.9	5290	-33.2
## 244	-1.79	4.8	5185	-176.1
## 245	-1.87	3.4	4830	-188.6
## 246	-1.05	3.1	4842	-184.5
## 247	-0.83	2.1	5362	-153.7
## 248	-1.32	2.5	6078	-271.3
## 249	-1.40	10.1	5292	9.2
## 250	-1.73	19.8	5059	-0.7
## 251	-1.15	7.9	5699	-66.8
## 252	-1.51	4.9	6375	-279.9
## 253	-2.26	7.7	4780	-281.5
## 254	-2.21	6.7	4803	-282.1
## 255	-2.01	6.3	4832	-283.3
## 256	-2.23	3.4	4687	-282.7
## 257	-2.40	9.3	4784	-282.7
## 258	-2.41	9.2	4639	-282.3
## 259	-1.70	5.2	5109	-283.1
## 260	-2.18	5.4	4803	-282.5
## 261	-1.74	5.1	6207	-287.2
## 262	-2.01	5.8	4520	-288.2
## 263	-1.99	5.6	4770	-288.2
## 264	-1.92	8.3	4726	-288.5
## 265	-1.90	10.0	4840	-287.9
## 266	-0.15	2.0	5141	-43.7
## 267	-2.04	2.2	4896	-306.4
## 268	-1.64	2.3	4895	-307.0
## 269	-1.42	2.7	5438	-307.0
## 270	-1.71	3.5	5407	-308.6
## 271	-1.60	1.4	4640	-290.7
## 272	-1.18	1.1	4937	-283.7
## 273	-1.13	2.1	5708	-284.0
## 274	-1.46	1.6	5834	-280.3
## 275	-1.40	2.0	5926	-289.2
## 276	-1.53	2.6	4940	-303.8
## 277	-1.36	2.2	4845	-301.2
## 278	-1.46	3.7	5535	-302.5
## 279	-1.54	3.8	5353	-303.8
## 280	-1.72	5.0	4962	-282.2
## 281	-1.83	4.5	4692	-281.9
## 282	-1.69	3.9	4795	-281.6
## 283	-1.67	8.0	5007	-282.2
## 284	-1.84	5.7	4694	-281.7
## 285	-2.11	2.3	4927	-302.3
## 286	-1.85	1.9	4746	-301.3
## 287	-2.45	2.7	4899	-301.7
## 288	-2.03	4.6	5167	-301.0
## 289	-2.30	2.8	5049	-301.5
## 290	-1.84	2.2	5076	-300.9
## 291	-1.79	2.5	5029	-292.9
## 292	-1.75	6.3	5465	-297.7
## 293	-1.58	5.8	4704	-299.2
## 294	-1.68	8.9	4639	-300.2
## 295	-2.36	4.3	5358	-305.0
## 296	-2.20	4.5	4698	-307.8
## 297	-1.59	3.3	4902	-303.2
## 298	-1.99	5.8	4810	-303.6
## 299	-2.01	5.9	4745	-302.9
## 300	-2.12	5.1	4705	-303.7
## 301	-2.12	4.5	4539	-302.7
## 302	-2.12	6.6	4587	-295.1
## 303	-0.98	6.5	7013	-289.4
## 304	-2.06	8.0	4545	-291.0
## 305	-1.71	8.2	4819	-291.0
## 306	-2.55	10.2	4633	-290.3
## 307	-2.09	15.1	4491	-289.6
## 308	-1.76	5.8	6021	-280.6
## 309	-1.42	5.6	6688	-293.1
## 310	-2.94	9.7	4572	-321.5
## 311	-2.57	13.5	4511	-321.4
## 312	-2.63	18.6	4520	-323.5
## 313	-2.68	18.9	4405	-323.1
## 314	-2.07	6.4	6452	-289.3
## 315	-1.91	10.8	4690	-292.9

## 316	-1.67	4.4	5802	-295.8
## 317	-2.11	3.2	4777	-293.9
## 318	-1.35	2.8	5303	-309.0
## 319	-0.91	1.4	5627	-308.1
## 320	-1.64	1.6	4641	-293.4
## 321	-2.30	4.0	5078	-295.5
## 322	-2.31	3.1	4856	-292.9
## 323	-2.02	6.9	4757	-290.9
## 324	-2.19	9.1	4520	-301.5
## 325	-2.01	8.0	4606	-301.0
## 326	-1.85	9.3	4627	-292.9
## 327	-1.80	14.4	4612	-287.7
## 328	-1.89	5.3	5334	-296.0
## 329	-2.06	6.1	5070	-296.3
## 330	-2.02	7.6	4876	-296.9
## 331	-0.51	7.3	5479	-113.5
## 332	-0.44	13.4	5571	-113.1
## 333	-0.55	4.4	5572	-137.1
## 334	-0.77	7.9	5432	-136.4
## 335	-1.84	3.7	4668	-293.9
## 336	-1.91	6.2	4825	-292.7
## 337	-1.59	1.5	4741	-309.0
## 338	-1.74	5.0	4920	-316.7
## 339	-2.00	6.5	4905	-316.3
## 340	-2.36	12.5	4765	-281.6
## 341	-2.28	8.9	4739	-285.9
## 342	-0.27	21.4	5567	-27.9
## 343	-0.29	24.7	5605	-27.7
## 344	-1.52	1.5	4548	-291.6
## 345	-1.99	3.7	5601	-298.6
## 346	-2.24	4.9	5241	-296.3
## 347	-2.02	3.0	4856	-299.8
## 348	-1.48	1.4	4636	-296.1
## 349	-1.66	2.8	5065	-296.3
## 350	-1.89	4.0	5084	-295.3
## 351	-1.28	1.9	4914	-296.2
## 352	-2.18	5.7	4810	-295.6
## 353	-2.03	2.7	5212	-289.5
## 354	-1.62	2.8	4574	-306.2
## 355	-2.17	5.7	4661	-305.8
## 356	-2.10	7.4	4689	-306.1
## 357	-1.97	2.9	5035	-289.2
## 358	-1.86	1.9	4545	-287.1
## 359	-1.41	3.7	5155	-283.9
## 360	-1.92	4.1	4904	-283.8
## 361	-2.27	3.9	4607	-285.5
## 362	-1.77	3.5	4912	-284.5
## 363	-2.12	5.7	4701	-284.8
## 364	-1.99	6.3	4789	-284.2
## 365	-1.75	6.5	5045	-283.3
## 366	-1.95	5.5	4868	-283.7
## 367	-1.83	5.9	4917	-283.9
## 368	-1.28	1.6	5013	-291.7
## 369	-1.10	2.4	5461	-290.8
## 370	-0.78	2.2	6448	-296.4
## 371	-2.61	4.0	4506	-287.1
## 372	-2.02	3.3	4836	-292.2
## 373	-1.35	3.1	6009	-292.4
## 374	-2.05	2.2	4822	-292.8
## 375	-1.39	2.0	5406	-306.1
## 376	-1.44	2.4	4997	-300.4
## 377	-1.68	2.9	5198	-302.5
## 378	-1.91	2.2	4580	-302.6
## 379	-1.25	5.3	6204	-302.5
## 380	-1.44	2.5	5199	-302.1
## 381	-1.38	2.2	5200	-305.9
## 382	-1.56	9.7	4505	-298.0
## 383	-2.02	4.3	5057	-288.0
## 384	-0.78	2.2	5974	-302.8
## 385	-2.53	6.3	4917	-298.1
## 386	-2.49	9.0	4957	-296.2
## 387	-2.75	3.6	4465	-297.1
## 388	-1.53	3.8	5288	-290.1
## 389	-2.54	4.3	5103	-289.3
## 390	-1.76	2.5	5372	-310.1
## 391	-2.52	4.9	4901	-299.2
## 392	-2.20	3.3	4907	-300.2
## 393	-2.18	7.1	4873	-300.6
## 394	-2.10	5.9	5008	-288.0

## 395	-2.35	6.3	4533	-288.9
## 396	-2.35	10.5	4805	-289.4
## 397	-2.02	9.7	4925	-290.1
## 398	-2.13	7.4	4724	-289.7
## 399	-2.09	9.2	4696	-289.2
## 400	-2.10	11.2	4718	-289.5
## 401	-2.19	7.7	4660	-289.2
## 402	-2.25	5.6	4689	-289.2
## 403	-2.56	3.3	4946	-280.0
## 404	-2.04	2.7	4609	-280.5
## 405	-2.47	5.2	4781	-280.6
## 406	-2.35	2.3	4557	-279.1
## 407	-2.27	3.8	4638	-282.4
## 408	-2.18	5.1	5218	-278.8
## 409	-2.28	6.2	4790	-281.3
## 410	-3.25	4.5	4830	-271.9
## 411	-2.65	4.6	5206	-267.8
## 412	-2.36	6.8	5472	-267.2
## 413	-2.38	5.6	5989	-279.5
## 414	-2.45	5.5	5571	-266.4
## 415	-2.85	6.2	4906	-266.6
## 416	-2.78	7.9	5025	-268.5
## 417	-2.82	7.7	4832	-267.4
## 418	-3.04	6.3	4603	-266.3
## 419	-1.71	6.5	6112	-268.7
## 420	-3.14	3.7	4927	-269.2
## 421	-1.79	4.3	5209	-294.1
## 422	-1.23	3.4	5176	-294.8
## 423	-1.79	6.1	4875	-292.6
## 424	-1.81	6.9	4897	-294.4
## 425	-2.04	12.6	4394	-299.3
## 426	-1.81	16.0	4451	-298.6
## 427	-0.40	21.8	5254	-34.7
## 428	-0.46	33.1	5173	-34.0
## 429	-0.64	13.5	5283	-34.5
## 430	-2.58	4.2	4919	-278.7
## 431	-1.67	5.9	5576	-291.2
## 432	-2.24	6.1	4719	-291.9
## 433	-2.23	7.5	4811	-290.8
## 434	-1.24	5.9	5963	-299.2
## 435	-1.61	5.6	5172	-299.0
## 436	-1.50	6.2	5250	-298.7
## 437	-1.74	9.0	5280	-298.8
## 438	-1.67	5.9	5545	-303.8
## 439	-1.89	5.3	4835	-304.2
## 440	-2.18	5.2	4713	-303.4
## 441	-1.73	6.5	4894	-304.8
## 442	-1.32	1.9	5100	-289.0
## 443	-1.87	2.6	5053	-292.9
## 444	-2.66	5.2	4632	-296.4
## 445	-1.51	5.0	5975	-292.9
## 446	-2.37	6.9	6151	-290.7
## 447	-2.13	4.6	4994	-287.4
## 448	-0.29	12.4	5569	-1.3
## 449	-0.41	12.9	5523	-1.4
## 450	-0.35	20.8	5531	-1.4
## 451	-1.19	11.4	5679	-1.0
## 452	-1.91	4.4	5711	-275.6
## 453	-3.14	8.0	5525	-276.5
## 454	-2.53	4.5	4811	-274.6
## 455	-2.54	4.7	5129	-273.8
## 456	-1.88	2.3	4729	-283.7
## 457	-1.96	3.2	4964	-285.7
## 458	-3.03	4.6	5118	-300.3
## 459	-2.90	4.9	5213	-298.1
## 460	-2.00	3.3	5154	-301.3
## 461	-2.27	2.3	5215	-303.2
## 462	-1.41	4.2	6401	-298.8
## 463	-2.43	5.5	4866	-292.9
## 464	-1.26	5.8	6823	-297.0
## 465	-1.57	2.7	4531	-295.3
## 466	-2.22	4.3	4736	-294.9
## 467	-2.69	9.3	4624	-300.0
## 468	-2.26	5.1	4517	-298.3
## 469	-2.50	12.0	4670	-298.8
## 470	-2.33	8.5	4591	-299.5
## 471	-1.57	1.6	4663	-298.2
## 472	-2.45	10.6	4604	-299.6
## 473	-2.62	15.6	4549	-299.2

## 474	-1.22	2.6	5285	-180.6
## 475	-0.85	7.0	5465	-83.6
## 476	-0.30	2.2	5974	-85.4
## 477	-0.59	5.6	5289	-83.9
## 478	-0.68	6.4	5526	-99.3
## 479	0.17	2.9	5650	-99.7
## 480	-0.14	7.2	5352	-100.0
## 481	0.14	15.0	5473	-64.7
## 482	0.15	12.2	5420	-64.5
## 483	-0.60	24.7	5265	-83.4
## 484	-0.49	18.5	5304	-83.6
## 485	-0.39	38.8	5393	-83.6
## 486	-0.05	23.2	5303	0.0
## 487	-0.01	18.9	5299	-0.3
## 488	-0.60	3.7	6038	-111.4
## 489	-0.07	1.7	5795	-112.5
## 490	-0.66	7.9	5310	-85.1
## 491	-0.35	5.0	5436	-85.2
## 492	-0.90	8.0	4966	-89.6
## 493	-0.16	5.5	5028	-89.0
## 494	-1.66	7.1	5409	-214.8
## 495	-1.49	6.4	5346	-215.6
## 496	-1.57	2.5	5136	-238.4
## 497	-0.46	3.6	5590	-241.2
## 498	0.05	14.5	5482	-61.9
## 499	0.23	9.3	5471	-62.2
## 500	0.22	20.1	5589	-62.8
## 501	-1.80	2.6	4466	-302.1
## 502	0.43	0.9	4530	-302.3
## 503	0.02	48.4	5513	3.4
## 504	0.09	40.2	5592	2.4
## 505	0.09	56.6	5587	2.6
## 506	-0.93	8.7	5070	-198.8
## 507	-0.61	3.8	4899	-199.1
## 508	-0.55	8.1	5221	-199.3
## 509	-0.02	0.8	5374	-299.0
## 510	-1.09	2.5	6151	-290.5
## 511	-1.17	2.9	5757	-301.0
## 512	-1.80	3.4	4565	-287.9
## 513	-1.67	3.6	4854	-286.0
## 514	-1.89	6.7	4770	-286.6
## 515	-1.81	8.2	4828	-286.7
## 516	-0.19	1.0	5091	-285.2
## 517	-2.22	3.2	4613	-288.5
## 518	-0.98	2.3	5565	-306.3
## 519	-1.55	18.0	4832	-200.7
## 520	-1.55	18.7	4853	-200.4
## 521	-2.07	2.9	4547	-292.3
## 522	-1.52	2.1	4949	-294.1
## 523	-1.90	7.5	4953	-293.1
## 524	-2.73	4.0	4823	-274.8
## 525	-2.33	3.6	5222	-284.2
## 526	-2.16	5.8	5507	-289.9
## 527	-2.31	6.2	5039	-290.2
## 528	-2.24	9.6	5541	-285.3
## 529	-2.00	7.2	5202	-285.1
## 530	-2.36	5.9	4771	-285.3
## 531	-1.89	4.9	5213	-284.5
## 532	-1.87	4.7	5346	-288.4
## 533	-2.72	5.0	5187	-276.7
## 534	-2.54	4.5	4952	-274.8
## 535	-2.50	5.5	4565	-289.7
## 536	-0.82	3.4	6414	-289.9
## 537	-2.12	4.1	4645	-299.4
## 538	-1.70	4.1	4995	-300.9
## 539	-1.22	1.2	4817	-287.0
## 540	-1.46	2.0	5305	-286.9
## 541	-2.32	6.5	5070	-294.0
## 542	-2.72	7.5	4807	-293.5
## 543	-2.08	5.1	4855	-296.9
## 544	-2.32	6.8	4893	-296.2
## 545	-1.13	5.2	5198	-71.7
## 546	-1.22	8.2	5461	-71.9
## 547	-1.58	2.9	5296	-172.7
## 548	-2.47	5.5	5078	-174.5
## 549	-2.45	5.3	5548	-295.6
## 550	-1.91	2.7	5131	-298.1
## 551	-2.17	6.5	5481	-296.1
## 552	-1.92	4.3	6297	-298.6

## 553	-0.50	10.8	5704	-133.6
## 554	-0.33	1.6	5191	-84.6
## 555	-1.22	23.9	4971	-240.3
## 556	0.00	27.9	5167	-78.7
## 557	0.15	23.4	5294	-23.7
## 558	-2.27	3.6	4649	-214.1
## 559	-1.22	1.2	4897	-281.9
## 560	-2.31	3.3	4653	-296.2
## 561	-2.59	3.2	4528	-296.0
## 562	-0.94	0.8	5189	-293.0
## 563	-2.12	3.2	5131	-293.3
## 564	-1.56	2.2	5415	-296.4
## 565	-1.77	2.2	4493	-297.3
## 566	-1.62	2.4	4656	-286.7
## 567	-1.73	3.9	4878	-290.2
## 568	-1.53	3.0	5045	-278.9
## 569	-1.33	2.5	5561	-281.5
## 570	-1.53	3.2	4755	-292.2
## 571	-1.74	3.6	4773	-292.8
## 572	-0.78	4.2	5471	-292.9
## 573	-2.22	12.4	4549	-278.3
## 574	-2.05	3.1	4449	-280.1
## 575	-1.89	1.9	4609	-289.3
## 576	-0.80	13.7	5275	-42.0
## 577	-2.47	13.5	4673	-285.0
## 578	-2.21	7.1	4895	-286.4
## 579	-2.34	13.3	4640	-285.8
## 580	-2.25	13.3	4681	-285.6
## 581	-2.33	15.0	4595	-286.2
## 582	-2.23	11.9	4666	-285.3
## 583	-2.41	11.7	4648	-285.7
## 584	-2.20	7.2	4646	-286.3
## 585	-1.35	17.3	4325	20.3
## 586	-2.53	5.0	5103	-282.5
## 587	-1.42	1.8	5417	-282.7
## 588	-1.41	2.7	5652	-282.4
## 589	-2.01	3.7	4756	-284.9
## 590	-1.60	2.4	4816	-283.2
## 591	-2.04	3.6	4773	-284.8
## 592	-1.32	10.4	5128	-203.9
## 593	-3.09	6.1	4510	-286.7
## 594	-1.71	2.8	5499	-289.5
## 595	-2.52	3.9	4810	-286.7
## 596	-2.54	4.2	4838	-287.4
## 597	-2.41	5.9	4742	-286.8
## 598	-2.11	19.4	4450	-289.2
## 599	-2.21	15.8	4397	-287.6
## 600	-2.04	12.4	4511	-288.1
## 601	-2.11	21.4	4442	-290.4
## 602	-2.02	20.7	4482	-290.5
## 603	-2.01	16.2	4504	-290.9
## 604	-2.09	12.8	4377	-290.8
## 605	-2.42	5.1	4777	-294.9
## 606	-1.83	2.3	4522	-297.5
## 607	-1.70	4.2	4809	-297.3
## 608	-1.83	5.6	4948	-295.9
## 609	-2.10	3.5	4725	-297.1
## 610	-1.83	4.6	5156	-283.8
## 611	-1.97	8.9	4766	-271.8
## 612	-1.54	9.6	4435	-296.8
## 613	-2.67	3.8	4766	-293.4
## 614	0.83	0.4	4690	-84.8
## 615	-1.75	7.8	4609	-294.7
## 616	-1.92	9.5	4669	-294.9
## 617	-1.77	11.5	4691	-295.2
## 618	-1.79	11.8	4687	-294.9
## 619	-1.92	12.3	4657	-295.5
## 620	0.47	21.2	4964	-25.9
## 621	-0.61	7.7	5097	-143.8
## 622	-0.56	4.4	5114	-144.1
## 623	0.08	11.8	5051	-61.8
## 624	-0.08	21.9	5645	2.0
## 625	0.08	9.9	5583	-17.2
## 626	-0.02	13.1	5604	22.2
## 627	-0.05	5.8	5464	-39.0
## 628	-0.25	19.4	4992	-100.8
## 629	-1.46	10.9	5127	-151.6
## 630	-1.66	1.5	4761	-284.8
## 631	-0.85	1.1	5139	-285.6

## 632	-1.82	3.3	5168	-287.9
## 633	-0.80	21.1	5224	-74.9
## 634	0.01	34.1	5221	-27.6
## 635	-1.79	21.1	5026	-392.4
## 636	-2.85	7.6	5038	-218.3
## 637	-2.49	5.8	5158	-292.3
## 638	-2.14	6.2	4972	7.9
## 639	-1.34	2.6	4851	-67.9
## 640	-1.90	4.0	4982	-68.6
## 641	0.89	0.5	4725	-174.4
## 642	-0.85	3.2	5083	-175.2
## 643	-0.06	7.8	5502	-39.3
## 644	-0.74	1.7	5097	-294.6
## 645	-1.57	4.8	4996	-294.3
## 646	-1.38	3.7	5914	-289.3
## 647	-1.65	2.0	4701	-105.0
## 648	-1.44	5.2	6013	-233.7
## 649	-1.25	15.6	5085	-287.1
## 650	-1.67	1.9	5320	-144.5
## 651	0.17	10.0	4994	-83.6
## 652	-0.03	9.0	5061	-84.6
## 653	0.01	1.6	5070	-175.6
## 654	0.24	5.9	5220	-127.8
## 655	1.25	1.0	4464	-55.6
## 656	0.05	10.4	5127	-52.7
## 657	-0.96	4.8	4981	-258.8
## 658	0.13	20.8	5106	-47.9
## 659	0.33	0.4	4426	14.5
## 660	0.48	8.9	5075	-99.0
## 661	0.69	8.7	4960	-4.8
## 662	-0.21	3.0	5020	-81.3
## 663	-1.52	11.9	5222	-133.4
## 664	0.26	8.4	5138	-78.7
## 665	-0.70	4.2	5050	-313.5
## 666	0.23	0.8	5048	-226.0
## 667	-1.38	2.4	5057	-64.3
## 668	-0.13	11.3	5012	-50.7
## 669	-0.45	2.6	5222	-56.6
## 670	-0.22	1.0	4575	-252.7
## 671	-0.87	1.2	5105	2.5
## 672	-1.03	2.3	6152	-264.3
## 673	-1.53	18.0	5244	-301.5
## 674	-0.52	5.4	5421	6.5
## 675	-2.04	3.3	4738	-301.2
## 676	-1.69	3.4	5004	-290.2
## 677	-1.68	4.2	4996	-288.2
## 678	-1.66	4.5	4992	-288.9
## 679	-2.12	6.6	4723	-288.3
## 680	-1.90	7.3	4916	-288.6
## 681	-2.03	7.4	4986	-289.3
## 682	-2.27	5.3	4660	-289.1
## 683	-1.59	5.6	5177	-290.2
## 684	0.77	0.8	4941	-54.7
## 685	-0.65	6.1	5114	-54.1
## 686	-0.55	6.1	5292	-54.5
## 687	-0.59	5.7	5247	-55.7
## 688	0.43	12.1	5211	-57.7
## 689	-0.16	9.5	5241	-53.5
## 690	-0.99	3.7	5946	-210.9
## 691	-1.98	3.0	5070	-214.9
## 692	0.12	55.7	5630	-44.8
## 693	-1.11	12.7	5403	-153.4
## 694	0.24	8.8	5241	-8.9
## 695	0.30	10.4	5256	-51.3
## 696	-1.79	6.3	5134	-62.7
## 697	-2.12	9.6	5207	-57.6
## 698	-1.72	7.8	4812	-288.7
## 699	-1.82	8.9	5016	-287.8
## 700	-2.09	6.0	4656	-287.7
## 701	0.51	37.7	5204	-84.5
## 702	0.06	2.6	5365	-180.1
## 703	-0.70	2.9	5155	-180.1
## 704	0.82	0.6	4605	-170.2
## 705	-0.46	5.4	5480	-93.6
## 706	-1.66	5.2	4745	-3.7
## 707	0.10	1.2	4979	-152.7
## 708	-1.38	18.1	5020	-128.1
## 709	-0.40	2.9	4965	-174.0
## 710	-1.88	12.2	5132	-230.5

## 711	-0.88	15.8	5371	-40.0
## 712	-1.37	3.7	5627	6.6
## 713	-1.96	3.2	4799	5.7
## 714	0.53	10.1	4907	-81.5
## 715	0.38	9.7	5556	-24.9
## 716	-0.86	2.7	4501	-400.4
## 717	0.90	0.6	4805	-100.4
## 718	0.75	1.6	5262	-79.8
## 719	-0.19	4.4	4681	-71.7
## 720	-0.62	3.6	7053	9.1
## 721	-1.45	4.0	6071	7.5
## 722	-3.56	7.0	4686	474.8
## 723	-1.88	13.7	4831	-234.4
## 724	-0.55	27.6	4974	-153.2
## 725	-1.23	9.6	4861	-27.8
## 726	0.39	6.6	5239	8.2
## 727	0.01	5.0	4830	-55.1
## 728	-0.10	0.8	4495	-180.1
## 729	-1.57	5.8	5265	-216.2
## 730	-0.12	10.9	5189	-173.4
## 731	-0.78	12.6	5560	-9.2
## 732	-0.86	2.6	5471	-38.4
## 733	-1.59	3.5	6226	-59.0
## 734	-3.41	10.9	5190	-417.3
## 735	-1.11	8.5	6322	-86.1
## 736	-2.28	9.1	4335	-271.2
## 737	-2.89	5.9	4862	-277.7
## 738	-1.83	9.0	4947	-275.3
## 739	-1.82	9.3	4775	-276.6
## 740	-2.90	5.2	4704	-297.6
## 741	-1.20	8.3	5772	-167.4
## 742	-2.51	5.7	5505	-288.7
## 743	-1.49	1.8	5408	-292.5
## 744	-2.82	11.0	4562	-290.8
## 745	-2.08	15.3	5483	-274.0
## 746	-2.25	3.5	4725	-282.4
## 747	-1.00	2.1	4849	-212.5
## 748	-0.69	3.5	5703	-251.4
## 749	-1.49	4.0	5053	-250.4
## 750	0.06	1.4	4757	-250.7
## 751	-0.75	2.1	4849	-250.8
## 752	-0.93	3.7	5135	-249.1
## 753	-0.83	3.6	5750	-247.3
## 754	-1.15	4.7	5354	-251.1
## 755	-0.29	5.2	5268	-52.2
## 756	-0.38	6.7	5213	-52.6
## 757	-0.18	20.0	4770	-4.2
## 758	-0.43	4.4	5328	-185.3
## 759	-0.40	3.8	5388	-185.2
## 760	-1.13	2.2	5098	-188.2
## 761	0.06	7.1	4963	-20.6
## 762	0.02	11.6	4903	-20.6
## 763	-1.72	6.3	4908	-294.9
## 764	-0.57	5.7	4932	2.0
## 765	-0.54	4.5	4421	2.8
## 766	-0.31	14.6	4632	-37.4
## 767	-0.31	16.5	4704	-37.9
## 768	0.30	16.0	4871	-32.7
## 769	0.30	19.3	4907	-32.3
## 770	-0.53	2.3	6008	-78.5
## 771	-1.41	3.2	5533	-76.8
## 772	-0.03	1.0	5149	-64.7
## 773	-0.49	6.1	5087	-4.8
## 774	-0.50	9.8	4949	-4.8
## 775	-0.30	6.9	4975	-5.6
## 776	-0.29	8.7	5028	-4.9
## 777	-0.30	5.5	4999	-5.5
## 778	-0.59	8.2	4954	-5.2
## 779	-0.20	6.0	5002	-5.0
## 780	-1.99	5.0	4627	-288.2
## 781	-2.00	7.1	4759	-288.1
## 782	-0.07	8.9	4942	1.1
## 783	-0.05	11.8	4873	1.4
## 784	-2.09	16.1	4574	-301.4
## 785	-2.03	22.2	4590	-301.4
## 786	-0.03	3.5	5083	-60.0
## 787	0.05	5.6	5104	-60.8
## 788	-0.85	1.5	4952	-216.4
## 789	-1.19	1.9	5072	-212.1

## 790	-1.90	17.5	4421	-281.6
## 791	-1.78	19.4	4499	-281.4
## 792	-2.13	6.4	4827	-281.2
## 793	-2.15	4.2	4631	-281.9
## 794	-2.07	7.2	4763	-281.4
## 795	0.05	16.3	4846	-18.6
## 796	0.06	17.7	4806	-18.3
## 797	-0.30	11.4	4848	-19.0
## 798	0.13	12.8	4760	-18.8
## 799	0.02	20.3	4865	-19.1
## 800	0.00	18.1	4848	-18.8
## 801	0.07	14.8	4809	-18.7
## 802	-0.07	16.6	4805	-19.1
## 803	0.10	15.5	4827	-19.0
## 804	-0.07	13.0	4875	-19.1
## 805	-0.51	4.7	5307	-178.2
## 806	-0.37	4.6	5124	-177.3
## 807	-2.44	20.6	4530	-294.2
## 808	-2.44	27.6	4501	-294.9
## 809	-1.62	1.9	4972	-318.8
## 810	-2.45	2.6	4783	-314.4
## 811	-0.08	13.7	4879	3.0
## 812	-0.09	13.3	4887	2.5
## 813	0.01	12.6	4871	2.2
## 814	-0.34	16.2	4875	2.8
## 815	-0.11	16.3	4864	2.2
## 816	-0.25	14.3	4891	2.2
## 817	0.01	15.0	4879	2.4
## 818	-0.24	13.2	4908	2.0
## 819	-0.06	8.7	4878	-10.0
## 820	0.01	11.0	4859	-9.4
## 821	-0.02	2.2	5220	-90.6
## 822	0.55	1.8	5211	-91.7
## 823	-0.71	3.3	5396	-91.3
## 824	-0.78	2.4	5096	-91.3
## 825	-1.91	5.7	4743	-304.9
## 826	-0.49	11.8	4702	-65.4
## 827	-0.42	11.8	4694	-65.6
## 828	-0.19	9.2	5013	-7.1
## 829	-0.21	9.4	5002	-7.1
## 830	-0.26	1.1	5183	-255.7
## 831	-0.58	1.3	6132	-296.7
## 832	-0.21	3.8	4844	-90.8
## 833	0.03	3.8	4816	-90.5
## 834	0.46	0.8	5050	-148.9
## 835	-0.48	1.2	4904	-148.1
## 836	-0.05	9.5	4844	-84.6
## 837	0.13	10.9	4892	-83.7
## 838	-2.11	14.7	4651	-276.5
## 839	-2.24	17.7	4613	-276.3
## 840	0.07	9.3	4875	-22.7
## 841	0.07	12.7	4889	-22.5
## 842	-2.77	11.9	4645	-296.9
## 843	-2.91	16.8	4398	-296.6
## 844	0.07	16.9	4768	-45.9
## 845	0.14	14.6	4741	-45.4
## 846	0.11	9.4	4730	-46.1
## 847	-0.05	14.9	4739	-45.6
## 848	0.08	13.8	4748	-46.3
## 849	0.01	18.5	4808	-46.3
## 850	0.09	20.4	4804	-46.1
## 851	0.08	12.0	4798	-46.2
## 852	0.13	14.3	4781	-46.2
## 853	-0.46	6.3	4961	-30.2
## 854	0.01	5.6	4907	-30.2
## 855	-0.27	4.7	4882	-29.9
## 856	-0.38	5.0	5000	-30.4
## 857	-0.26	5.0	4932	-29.8
## 858	-1.87	8.3	4663	-282.9
## 859	-1.91	11.0	4636	-283.1
## 860	-1.89	14.4	4659	-292.3
## 861	-2.00	14.6	4561	-291.9
## 862	-2.05	11.2	4600	-291.8
## 863	-0.02	19.2	4752	-16.1
## 864	-0.04	19.5	4756	-16.2
## 865	-0.03	15.9	4755	-17.0
## 866	-1.57	16.5	4322	-300.2
## 867	-1.60	21.6	4322	-301.3
## 868	-0.61	2.8	4828	-149.3

## 869	-0.44	2.0	4733	-148.6
## 870	-0.76	23.7	4401	-37.6
## 871	-0.67	1.4	4747	-273.5
## 872	-1.52	13.4	4536	-287.2
## 873	-1.53	16.2	4500	-286.7
## 874	-1.45	2.7	4721	-94.8
## 875	-0.66	1.9	4534	-96.2
## 876	-0.70	26.0	4378	-3.2
## 877	-0.72	28.7	4360	-3.2
## 878	-2.34	2.6	5070	-287.2
## 879	-2.42	4.1	4830	-288.4
## 880	-2.07	6.4	5097	-287.9
## 881	-0.04	1.4	6136	-300.7
## 882	0.12	0.9	4949	-248.4
## 883	-0.18	1.5	5048	-246.4
## 884	-1.99	3.7	5074	-292.9
## 885	0.06	18.2	4755	-36.7
## 886	0.11	18.8	4762	-37.2
## 887	-0.35	15.7	4612	-50.6
## 888	-0.29	15.3	4571	-50.6
## 889	-1.50	4.7	4870	-300.4
## 890	-1.42	4.9	4818	-299.8
## 891	-1.82	8.1	4803	-300.1
## 892	-0.18	8.9	4774	-86.4
## 893	-0.14	7.7	4730	-85.9
## 894	-1.72	6.8	4791	-293.6
## 895	-1.50	7.8	4703	-293.6
## 896	0.00	14.6	4776	-36.0
## 897	-0.06	17.3	4739	-35.9
## 898	-1.32	17.3	4415	-295.7
## 899	-1.32	19.7	4380	-296.2
## 900	-1.72	4.9	5259	-274.1
## 901	-2.46	4.2	4557	-276.2
## 902	-0.53	0.8	4808	-104.4
## 903	-0.45	1.1	5145	-107.7
## 904	-1.05	2.1	5902	-295.7
## 905	-1.68	2.5	5151	-294.4
## 906	-1.88	7.8	4629	-288.1
## 907	-0.21	24.4	4594	-59.7
## 908	-0.23	32.2	4573	-59.6
## 909	0.28	15.0	4869	-2.7
## 910	0.23	18.1	4860	-2.2
## 911	0.25	14.4	4834	-2.8
## 912	0.25	21.1	4877	-3.2
## 913	-0.23	4.5	5091	-57.9
## 914	-0.22	6.5	5124	-56.5
## 915	-0.90	14.2	4773	-17.4
## 916	-0.06	15.4	4866	13.1
## 917	-1.97	2.7	5786	-140.6
## 918	-0.73	9.9	4827	-49.2
## 919	-0.69	13.5	4842	-18.4
## 920	-1.69	24.9	4343	-298.6
## 921	0.15	5.4	4890	-12.9
## 922	-0.01	9.6	4975	-12.4
## 923	0.01	7.0	4967	-12.2
## 924	0.03	10.0	5011	-12.2
## 925	-0.20	7.9	4952	-12.3
## 926	0.00	4.5	5013	-132.8
## 927	-0.08	7.0	5064	-131.8
## 928	0.76	1.2	4601	-133.0
## 929	-0.11	6.2	5040	-131.9
## 930	-0.08	6.3	5167	-132.7
## 931	-1.41	3.6	4910	-297.4
## 932	-1.51	4.2	4676	-296.3
## 933	-1.59	7.1	4724	-294.1
## 934	-1.51	10.4	4736	-293.3
## 935	-1.65	9.5	4674	-295.2
## 936	-1.65	12.5	4527	-297.5
## 937	-1.67	20.5	4480	-296.9
## 938	0.33	1.0	4702	-58.8
## 939	-0.16	4.5	5086	-58.4
## 940	-0.04	3.5	5056	-60.2
## 941	-2.23	9.3	4353	-301.6
## 942	-2.06	24.9	4320	-301.4
## 943	-2.05	17.9	4337	-304.7
## 944	-2.21	15.7	4359	-278.8
## 945	-2.21	23.4	4358	-278.6
## 946	-0.06	4.5	5145	-67.9
## 947	0.07	5.3	5276	-68.7

## 948	-1.29	3.9	5584	-66.8
## 949	0.18	1.7	5167	-69.2
## 950	0.04	3.6	5104	-68.6
## 951	0.10	3.2	5097	-67.8
## 952	-0.36	1.4	4816	-78.0
## 953	0.37	2.6	4982	-47.8
## 954	0.08	4.5	5093	-48.0
## 955	1.12	0.5	4532	-46.5
## 956	-0.04	2.8	4998	-47.2
## 957	0.07	6.4	5075	-47.0
## 958	-0.11	5.2	5071	-47.1
## 959	-0.93	1.3	4702	-122.9
## 960	0.01	16.4	4713	9.3
## 961	0.01	22.3	4733	9.2
## 962	0.26	15.7	4841	-45.3
## 963	0.26	18.7	4824	-45.2
## 964	0.35	6.4	4809	-44.8
## 965	0.36	21.3	4822	-45.2
## 966	0.25	17.4	4823	-44.8
## 967	-1.71	2.9	4705	-298.1
## 968	-1.66	4.7	4765	-296.8
## 969	-1.36	4.0	4916	-297.4
## 970	-1.69	5.0	4949	-288.5
## 971	-1.83	9.0	4898	-288.3
## 972	-1.76	6.2	4839	-289.8
## 973	-1.77	5.5	4833	-288.6
## 974	-1.69	8.6	4604	-307.5
## 975	-1.70	14.4	4637	-307.5
## 976	0.23	10.9	4961	-15.2
## 977	0.27	14.0	4957	-15.1
## 978	-1.91	17.1	4551	-276.8
## 979	-1.93	20.7	4458	-276.5
## 980	-1.91	19.4	4488	-276.2
## 981	-1.98	25.8	4489	-276.6
## 982	-2.06	2.0	4928	-300.0
## 983	-0.60	13.1	4733	-33.9
## 984	-0.62	16.2	4726	-33.3
## 985	-0.59	18.6	4768	-33.6
## 986	-0.58	15.5	4718	-33.6
## 987	-0.65	16.6	4688	-33.6
## 988	-0.16	10.6	4528	-56.6
## 989	-0.21	19.0	4588	-59.1
## 990	0.08	10.7	4783	-11.6
## 991	0.07	12.1	4771	-11.7
## 992	-2.24	2.2	4582	-302.4
## 993	-1.94	2.3	5217	-305.7
## 994	-0.23	3.1	5317	-60.9
## 995	-0.32	4.0	5165	-55.2
## 996	-0.17	5.8	5288	-55.1
## 997	-0.14	4.0	4869	-107.8
## 998	-0.16	5.7	4923	-108.1
## 999	-1.02	0.9	4757	-291.8
## 1000	-2.01	1.4	4900	-267.2
## 1001	-0.12	10.0	4894	-25.0
## 1002	0.03	9.6	4829	-24.7
## 1003	-0.18	12.9	4824	-24.7
## 1004	-0.19	14.8	4839	-25.0
## 1005	-0.12	9.4	4876	-25.0
## 1006	-0.03	7.4	4821	-24.8
## 1007	-1.78	2.6	5553	-304.7
## 1008	-2.20	3.3	5379	-302.8
## 1009	-1.36	2.4	5949	-305.0
## 1010	-1.97	2.0	4997	-305.6
## 1011	-2.15	2.9	4456	-301.8
## 1012	-1.86	3.5	4834	-303.8
## 1013	-1.23	1.4	5243	-257.8
## 1014	-1.11	1.5	4812	-259.8
## 1015	0.83	1.1	5493	-259.4
## 1016	-1.31	4.5	5676	-263.7
## 1017	-1.79	8.6	4656	-296.4
## 1018	-2.44	18.3	4504	-296.3
## 1019	-2.42	20.3	4447	-296.1
## 1020	-0.28	6.1	4821	-98.6
## 1021	0.00	6.5	4829	-98.4
## 1022	-1.57	19.3	4529	-293.1
## 1023	-1.59	18.8	4485	-293.0
## 1024	-1.06	2.6	4943	-6.1
## 1025	-0.21	3.2	5166	-4.1
## 1026	-1.08	2.8	5230	-9.8

##	1027	0.03	2.0	4896	-10.5
##	1028	-0.93	4.0	5041	-11.5
##	1029	-0.05	3.0	5238	-9.1
##	1030	-0.58	2.1	5187	-9.4
##	1031	-0.78	7.8	4981	-104.1
##	1032	-0.88	8.9	4860	-103.3
##	1033	-0.57	6.3	5113	-103.5
##	1034	-0.64	5.5	4979	-104.1
##	1035	-0.65	6.9	4952	-103.5
##	1036	-0.81	9.8	5024	-103.6
##	1037	-0.54	6.0	4964	-104.9
##	1038	-0.67	9.4	5006	-73.1
##	1039	-0.61	9.9	4958	-74.1
##	1040	-2.35	4.9	4879	-288.4
##	1041	-2.61	5.8	4495	-289.2
##	1042	-1.88	9.8	4704	-274.4
##	1043	-0.03	5.8	5047	-13.6
##	1044	0.08	7.7	5057	-14.3
##	1045	-0.22	4.4	5083	-14.4
##	1046	0.02	7.9	5128	-14.2
##	1047	-0.11	7.1	5020	-15.3
##	1048	-0.12	8.3	5020	-14.5
##	1049	0.14	5.6	5033	-14.5
##	1050	0.07	4.1	4942	-14.5
##	1051	-2.75	4.2	4833	-285.2
##	1052	-1.35	3.0	5494	-283.9
##	1053	-0.49	4.8	5139	-95.8
##	1054	-0.13	3.7	4860	-96.2
##	1055	-2.21	17.8	4435	-309.4
##	1056	-2.15	20.2	4472	-308.9
##	1057	-2.12	21.5	4534	-309.3
##	1058	-2.02	10.4	4867	-307.1
##	1059	-2.08	10.7	4699	-307.7
##	1060	-1.38	1.7	5213	-290.7
##	1061	-1.32	1.6	5251	-292.9
##	1062	-1.32	1.4	5286	-292.0
##	1063	-2.09	2.2	4745	-293.1
##	1064	-2.34	4.8	4713	-292.9
##	1065	-2.33	5.2	4702	-293.4
##	1066	-3.04	4.6	4599	-308.5
##	1067	-1.40	2.7	5381	-63.9
##	1068	-0.71	1.7	5178	-65.1
##	1069	-0.94	1.6	5501	-62.4
##	1070	-0.25	1.7	5906	-59.5
##	1071	-2.22	4.8	5350	-288.5
##	1072	-1.83	5.3	5377	-289.3
##	1073	-0.67	7.9	5179	-14.2
##	1074	-0.06	7.3	5152	-15.3
##	1075	1.11	0.7	4555	-4.4
##	1076	-0.17	7.6	5057	-15.7
##	1077	-0.29	7.8	5066	-15.3
##	1078	-0.11	3.8	4860	-17.3
##	1079	-0.08	2.8	4819	-15.7
##	1080	-0.64	3.8	5244	12.9
##	1081	0.38	2.3	5117	10.8
##	1082	-2.21	5.2	5083	-287.7
##	1083	-2.54	5.3	4798	-287.5
##	1084	-1.76	6.0	5621	-296.0
##	1085	-2.15	5.4	4753	-296.8
##	1086	-2.66	10.0	4691	-276.3
##	1087	-2.71	11.7	4677	-275.6
##	1088	0.01	16.3	4819	-62.0
##	1089	-0.05	19.0	4815	-61.5
##	1090	-1.89	12.1	4672	-290.5
##	1091	-0.58	5.6	4949	-93.5
##	1092	-0.27	5.3	4912	-81.9
##	1093	-0.24	7.5	4827	-82.0
##	1094	-0.38	14.9	4853	-39.8
##	1095	-0.41	19.2	4820	-39.7
##	1096	-2.66	4.3	4591	-275.3
##	1097	-2.44	5.9	4845	-274.6
##	1098	-2.26	13.9	4648	-285.2
##	1099	-2.19	13.7	4680	-286.3
##	1100	-0.56	5.8	5027	-39.1
##	1101	-0.41	8.2	5123	-38.6
##	1102	-0.01	4.7	5163	-34.1
##	1103	-0.72	7.5	5137	-33.8
##	1104	-0.08	4.0	5078	-34.9
##	1105	-0.02	4.2	5026	-34.6

## 1106	-1.02	4.3	5055	-43.7
## 1107	-0.21	7.1	5024	-16.3
## 1108	0.26	9.5	4899	-45.3
## 1109	-0.45	6.0	5253	-21.6
## 1110	-1.04	3.3	5150	-81.2
## 1111	-0.20	8.4	4989	-8.2
## 1112	0.12	9.4	4964	-38.2
## 1113	-0.23	12.2	4742	-38.0
## 1114	-0.59	3.6	4971	-81.2
## 1115	-0.15	7.2	5118	-43.4
## 1116	-1.55	6.8	4762	-74.0
## 1117	-1.22	2.7	5115	-153.0
## 1118	-2.00	2.7	4742	-160.6
## 1119	0.10	8.9	4929	-48.1
## 1120	-0.15	10.3	4756	-54.9
## 1121	0.23	2.1	4867	-95.8
## 1122	-0.11	6.6	4918	-53.9
## 1123	-0.60	2.7	5213	-85.6
## 1124	-0.25	2.9	5075	-66.5
## 1125	-0.06	4.5	4981	-55.5
## 1126	0.16	6.3	4798	-61.1
## 1127	0.02	14.3	4754	-55.7
## 1128	-0.01	4.3	4862	-29.8
## 1129	0.83	3.9	5201	-75.6
## 1130	-0.57	1.9	4613	-0.4
## 1131	0.25	1.1	4620	-13.8
## 1132	0.67	0.8	5221	-48.0
## 1133	-0.04	2.2	5156	-13.8
## 1134	0.34	1.2	4599	-37.0
## 1135	-0.27	1.6	4672	-102.7
## 1136	-0.08	4.5	4752	-39.7
## 1137	-0.36	7.2	4781	-25.8
## 1138	0.62	2.2	4781	-63.2
## 1139	-0.02	10.3	4668	-50.5
## 1140	-0.22	4.3	4975	-195.8
## 1141	-0.03	6.9	5032	-64.3
## 1142	0.19	4.3	4625	-153.4
## 1143	0.07	10.1	4660	-11.2
## 1144	-0.08	3.0	5392	-5.3
## 1145	-0.29	5.4	4758	-71.1
## 1146	-0.11	6.6	4706	-151.9
## 1147	0.09	2.9	4939	-8.0
## 1148	-0.50	1.1	4802	-53.0
## 1149	0.13	3.3	4720	-46.4
## 1150	-0.65	12.9	4519	-3.8
## 1151	-0.58	11.1	4718	-30.4
## 1152	-0.78	3.7	4929	1.2
## 1153	0.19	10.6	4826	-51.1
## 1154	-0.20	3.1	4930	-71.4
## 1155	-0.58	1.8	4509	-60.3
## 1156	-0.60	3.5	4807	-76.6
## 1157	0.31	7.8	4652	-11.6
## 1158	0.53	1.8	4789	-9.9
## 1159	0.17	3.4	4698	-29.1
## 1160	-0.72	10.5	4483	-89.5
## 1161	-0.67	3.1	4551	-102.2
## 1162	-1.61	3.4	4616	-366.3
## 1163	-0.51	13.9	4624	-14.2
## 1164	-0.44	0.6	4643	-96.3
## 1165	-0.39	12.0	4624	-75.3
## 1166	-0.18	19.7	4639	-22.9
## 1167	0.11	4.5	4711	-5.8
## 1168	0.12	1.5	4905	-88.2
## 1169	-0.10	9.6	4850	-76.0
## 1170	0.06	7.5	4754	5.2
## 1171	0.18	3.0	4802	-4.5
## 1172	1.11	0.5	4770	-65.1
## 1173	0.20	5.3	4796	-69.9
## 1174	-0.24	7.1	4870	-24.4
## 1175	-0.10	11.1	4998	-78.4
## 1176	-0.11	17.3	4892	-32.9
## 1177	-0.75	1.4	4666	3.4
## 1178	0.01	6.6	4698	-145.1
## 1179	-0.21	9.0	4863	-48.6
## 1180	0.24	1.7	4696	5.1
## 1181	0.12	3.0	4936	-56.1
## 1182	0.89	0.9	4938	-122.8
## 1183	-0.03	10.5	4664	-4.8
## 1184	0.87	0.6	5495	-37.9

## 1185	-0.07	4.4	4836	-65.5
## 1186	-0.11	13.3	4605	-20.4
## 1187	0.59	1.6	5263	-69.3
## 1188	-0.07	6.0	4801	-90.0
## 1189	-0.08	1.6	5013	-118.4
## 1190	0.09	2.4	5015	-102.7
## 1191	0.38	7.9	4957	-56.1
## 1192	-0.32	11.3	4514	-45.2
## 1193	0.11	4.4	5136	-69.6
## 1194	0.81	0.8	4721	-31.3
## 1195	0.31	6.5	5003	-30.1
## 1196	-0.16	9.9	4739	31.9
## 1197	0.16	9.9	4915	-29.1
## 1198	0.21	8.6	4693	14.2
## 1199	-0.75	1.4	4693	-172.4
## 1200	0.09	6.9	5152	-19.7
## 1201	0.16	9.1	4692	8.8
## 1202	-0.38	7.5	4563	-53.2
## 1203	0.61	1.1	6126	-202.8
## 1204	-0.13	3.6	5258	-45.2
## 1205	0.04	5.0	5041	-4.6
## 1206	-0.43	0.8	4521	-117.2
## 1207	-0.01	10.2	4954	-20.9
## 1208	-1.18	2.5	5745	-218.7
## 1209	-0.93	1.2	4558	-69.8
## 1210	-0.17	18.5	4666	18.4
## 1211	-1.25	4.5	4896	-213.9
## 1212	-0.21	7.7	4945	-17.6
## 1213	-2.71	10.1	4535	-41.1
## 1214	-0.23	6.9	4872	-25.5
## 1215	-0.14	1.9	5063	2.9
## 1216	-0.55	4.4	5296	-55.5
## 1217	-0.75	1.6	5436	-132.6
## 1218	-0.15	13.0	4931	-6.5
## 1219	-0.21	11.0	4912	-88.2
## 1220	-0.76	19.4	4567	-37.6
## 1221	-1.99	2.7	4575	-258.2
## 1222	-0.11	10.5	5111	34.3
## 1223	-0.29	9.4	5172	0.0
## 1224	-0.34	5.7	4930	-68.4
## 1225	-0.04	4.1	5205	2.2
## 1226	-0.29	2.7	5459	-173.6
## 1227	-0.82	3.6	5310	-56.9
## 1228	-0.38	5.3	5184	-136.7
## 1229	-1.33	5.8	5016	-77.9
## 1230	-0.42	7.7	5216	-4.0
## 1231	0.44	10.2	5038	-4.5
## 1232	-0.25	6.0	5021	-95.5
## 1233	0.02	0.7	5868	-303.0
## 1234	0.04	0.6	5489	-170.5
## 1235	0.48	6.8	5055	-40.3
## 1236	-2.21	3.9	5206	-278.2
## 1237	-2.43	3.7	4818	-320.1
## 1238	-0.46	2.5	5537	-308.7
## 1239	-1.49	6.2	5595	-355.8
## 1240	-1.30	2.6	5256	-320.7
## 1241	-0.83	2.2	5322	-360.4
## 1242	-1.56	5.3	6182	-299.8
## 1243	-2.55	5.9	4588	-297.6
## 1244	-1.82	5.1	4927	-297.6
## 1245	-1.97	5.7	5013	-297.5
## 1246	-2.11	7.2	4698	-297.3
## 1247	-1.73	7.0	5052	-296.1
## 1248	-2.10	5.1	4729	-296.0
## 1249	-1.96	7.9	4846	-297.0
## 1250	-2.08	4.2	4617	-296.2
## 1251	-2.17	7.3	5069	-297.0
## 1252	-1.88	5.2	4851	-296.2
## 1253	-1.93	4.3	4847	-298.2
## 1254	-1.46	4.0	5451	-190.6
## 1255	-1.94	3.4	5222	-293.0
## 1256	-2.17	5.3	4774	-294.6
## 1257	-1.79	8.3	5038	-294.3
## 1258	-1.71	6.3	4859	-294.7
## 1259	-1.96	5.2	4796	-294.0
## 1260	-1.91	7.5	4788	-294.9
## 1261	-1.58	3.7	4931	-294.7
## 1262	-2.22	6.7	4667	-294.6
## 1263	-1.87	4.9	4579	-295.1

## 1264	-2.02	4.1	4622	-294.0
## 1265	-1.78	5.3	5010	-296.2
## 1266	-0.95	2.6	5740	-99.8
## 1267	-1.14	4.2	5818	-97.3
## 1268	-1.12	3.0	5814	-97.6
## 1269	-2.14	2.7	5095	-99.6
## 1270	-3.13	4.9	4755	-290.2
## 1271	-2.28	6.0	4877	-289.3
## 1272	-1.99	4.0	5005	-289.7
## 1273	-2.05	5.4	5082	-289.3
## 1274	-2.28	3.5	4687	-308.0
## 1275	-2.02	9.2	5054	-309.6
## 1276	-2.17	6.0	4809	-312.2
## 1277	-2.11	4.3	4533	-309.4
## 1278	-2.08	6.4	4922	-309.2
## 1279	-2.17	4.3	4871	-312.8
## 1280	-0.44	16.7	4715	-10.0
## 1281	-2.17	2.5	4912	-306.8
## 1282	-2.18	3.7	5177	-303.8
## 1283	-2.64	4.2	4894	-306.6
## 1284	-2.35	3.4	4696	-305.0
## 1285	-0.24	13.2	4881	-27.0
## 1286	-0.09	19.3	4828	-26.9
## 1287	-0.05	24.9	4823	-27.9
## 1288	0.03	21.7	4825	-27.6
## 1289	0.02	16.6	4833	-27.0
## 1290	-0.07	15.4	4859	-26.9
## 1291	-0.90	3.3	5031	-114.4
## 1292	-0.60	5.7	5062	-113.5
## 1293	-0.30	4.8	5199	-114.4
## 1294	-0.49	4.9	5077	-113.5
## 1295	-0.75	9.3	5286	-113.6
## 1296	-0.31	3.6	5167	-114.1
## 1297	-0.89	5.9	4938	-113.7
## 1298	-0.40	4.1	5314	-113.4
## 1299	-1.71	2.1	5108	-299.2
## 1300	-0.59	1.6	4959	-290.9
## 1301	-1.52	4.9	4690	-292.4
## 1302	-1.58	3.2	5779	-201.0
## 1303	-1.28	2.6	5854	-196.5
## 1304	-1.32	1.7	5280	-200.3
## 1305	-1.56	1.5	5394	-203.9
## 1306	0.08	3.1	5016	-5.7
## 1307	-0.37	5.4	5054	-5.9
## 1308	-0.09	6.5	5184	-6.5
## 1309	-0.05	4.1	5070	-6.1
## 1310	-0.53	8.5	5202	-6.6
## 1311	-0.39	7.1	5088	-6.2
## 1312	-0.38	8.4	5284	-5.1
## 1313	-0.27	7.3	5224	-6.7
## 1314	-0.19	7.9	5171	-6.1
## 1315	0.01	7.6	5256	-6.5
## 1316	-0.36	5.3	5231	-6.6
## 1317	0.04	5.4	5229	-6.2
## 1318	-0.25	5.8	5250	-5.9
## 1319	-1.89	15.1	4373	-284.1
## 1320	-1.66	1.8	4484	-298.4
## 1321	0.02	5.9	4830	-45.8
## 1322	-1.92	7.0	4727	-296.3
## 1323	0.35	4.6	4943	-80.8
## 1324	-0.05	11.1	4935	-81.3
## 1325	0.17	10.9	5034	-81.4
## 1326	0.05	7.8	4969	-81.2
## 1327	-0.02	6.6	4686	-54.7
## 1328	-0.22	10.1	4927	-54.5
## 1329	-0.34	14.5	4862	-54.7
## 1330	-0.29	14.8	4846	-54.5
## 1331	0.29	3.0	4968	-66.6
## 1332	-2.16	2.3	4676	-279.7
## 1333	-2.04	4.1	4852	-279.2
## 1334	-2.42	6.8	4745	-281.8
## 1335	-2.30	7.9	5078	-280.2
## 1336	-2.10	6.6	4920	-278.5
## 1337	-2.52	7.2	4699	-280.8
## 1338	-2.49	5.2	4520	-280.0
## 1339	-2.51	5.6	4443	-278.8
## 1340	-2.09	5.0	5033	-280.0
## 1341	-2.43	1.8	5093	-280.9
## 1342	-0.44	15.6	4603	-72.3

## 1343	-0.82	1.8	4887	-292.9
## 1344	-1.56	4.0	4998	-293.7
## 1345	-1.62	5.0	4855	-293.5
## 1346	-1.76	3.8	4755	-291.9
## 1347	-1.85	6.5	4768	-292.2
## 1348	-1.80	6.8	4896	-292.6
## 1349	-1.74	6.7	4857	-292.6
## 1350	-1.64	5.3	5000	-291.3
## 1351	-1.73	4.6	4815	-293.1
## 1352	-1.76	4.9	4835	-293.6
## 1353	-1.63	3.1	4806	-293.4
## 1354	-1.94	4.4	4613	-292.0
## 1355	1.01	1.6	4779	-37.3
## 1356	0.43	7.6	5089	-34.5
## 1357	0.11	11.5	5124	-34.4
## 1358	0.25	6.7	5008	-33.9
## 1359	-2.23	8.6	4620	-294.5
## 1360	-0.03	2.6	4918	-18.7
## 1361	-0.25	6.6	4885	-17.1
## 1362	-0.31	6.8	4842	-17.1
## 1363	0.08	5.4	5332	-50.6
## 1364	-0.25	6.2	5320	-50.0
## 1365	0.04	3.0	5009	-50.2
## 1366	0.19	3.2	5143	-50.8
## 1367	0.90	0.9	4939	-131.6
## 1368	-0.51	9.3	5101	-132.5
## 1369	0.17	4.1	4744	-7.8
## 1370	-0.03	2.8	4959	-6.6
## 1371	-0.25	10.5	5173	-7.2
## 1372	-0.30	7.3	5088	-6.8
## 1373	-0.23	7.3	5150	-7.2
## 1374	-0.94	0.9	4683	-293.9
## 1375	-1.63	4.0	4931	-295.6
## 1376	-2.16	6.3	4961	-294.0
## 1377	-0.03	1.2	4701	-297.8
## 1378	-0.71	8.4	5127	-294.2
## 1379	-0.51	3.4	4950	-293.7
## 1380	0.17	1.4	4827	-77.8
## 1381	-0.21	3.0	4855	-76.6
## 1382	-2.09	2.1	5036	-301.9
## 1383	-1.42	2.0	5815	-298.1
## 1384	-1.46	2.8	4710	-266.4
## 1385	-0.78	3.8	4996	-266.9
## 1386	-1.13	6.8	4814	-266.6
## 1387	-1.20	10.3	4931	-266.6
## 1388	-0.78	4.3	4929	-266.5
## 1389	0.40	1.1	5116	-132.7
## 1390	-0.31	2.0	5100	-56.8
## 1391	-0.63	3.3	5212	-58.5
## 1392	-0.32	1.0	5288	-204.1
## 1393	1.00	1.3	5151	-201.4
## 1394	-0.63	3.4	5438	-201.5
## 1395	0.29	1.3	4726	-195.5
## 1396	-0.83	1.0	4527	-294.7
## 1397	-1.16	2.0	6295	-306.9
## 1398	-1.06	2.7	5571	-290.6
## 1399	-1.82	2.8	5693	-280.2
## 1400	-2.02	2.1	5400	-191.3
## 1401	-2.55	3.7	5188	-187.7
## 1402	-2.61	4.8	5172	-269.9
## 1403	-2.40	4.2	4828	-269.0
## 1404	-1.87	5.1	5505	-270.7
## 1405	-1.93	4.1	5153	-271.0
## 1406	-2.04	4.1	4762	-271.2
## 1407	-1.95	4.6	4976	-273.1
## 1408	-2.37	5.6	4595	-270.9
## 1409	-2.29	6.5	4860	-272.2
## 1410	-1.91	6.1	4893	-271.5
## 1411	-2.21	4.9	4744	-271.8
## 1412	-2.36	4.2	4635	-270.3
## 1413	-1.72	3.6	5345	-274.8
## 1414	-1.53	2.5	5870	-284.6
## 1415	-1.39	4.2	5990	-297.2
## 1416	-2.54	4.3	4945	-287.9
## 1417	-1.91	4.6	4912	-291.3
## 1418	-1.72	4.9	5160	-291.1
## 1419	-1.98	6.2	4821	-289.8
## 1420	-1.60	5.2	4993	-290.5
## 1421	-1.70	5.6	5013	-290.5

## 1422	-2.05	7.4	4847	-290.1
## 1423	-1.77	4.2	4859	-290.3
## 1424	-1.71	5.3	4976	-290.6
## 1425	-1.67	3.4	4966	-291.2
## 1426	-2.15	5.3	4830	-277.3
## 1427	-0.79	4.4	5105	-24.1
## 1428	-0.46	7.4	5198	-24.9
## 1429	-0.21	6.4	5194	-25.3
## 1430	-0.11	5.4	5031	-25.6
## 1431	-0.42	5.3	4961	-24.8
## 1432	-2.18	3.6	5122	-263.1
## 1433	-1.09	4.2	5731	-262.0
## 1434	-1.56	4.4	5416	-262.9
## 1435	-2.15	6.9	5217	-286.8
## 1436	-1.68	5.5	5071	-286.6
## 1437	-1.60	4.7	5317	-288.4
## 1438	-1.96	6.8	4830	-286.4
## 1439	-1.98	4.2	4847	-290.4
## 1440	-2.14	6.4	4984	-289.2
## 1441	-1.41	3.1	5298	-291.5
## 1442	-0.60	2.6	5255	-55.2
## 1443	-2.33	2.1	4766	-288.1
## 1444	-0.91	4.0	4980	-87.2
## 1445	-0.54	8.2	4950	-87.0
## 1446	-0.17	12.6	4777	-64.5
## 1447	0.16	23.6	4725	-64.9
## 1448	0.18	21.7	4735	-64.5
## 1449	0.15	18.8	4740	-64.5
## 1450	-2.11	5.8	4991	-286.9
## 1451	-2.10	7.0	4768	-287.1
## 1452	-1.81	2.2	5190	-283.8
## 1453	-1.20	3.7	4920	-7.2
## 1454	-0.58	3.3	5505	-214.7
## 1455	-0.25	1.8	5268	-146.0
## 1456	-0.91	6.6	5034	-111.4
## 1457	-1.46	2.5	4946	-118.1
## 1458	-0.13	2.1	5326	-113.8
## 1459	-0.93	3.6	4931	-74.1
## 1460	-0.53	5.1	5171	-74.6
## 1461	-1.18	7.3	6767	-290.9
## 1462	-1.57	5.4	6247	-292.6
## 1463	-1.57	6.4	6426	-139.5
## 1464	-1.99	5.4	5010	-292.0
## 1465	-1.06	1.3	5191	-249.3
## 1466	-1.84	3.8	5279	-249.4
## 1467	-1.44	2.5	4941	-248.8
## 1468	-1.59	1.6	5004	-249.7
## 1469	-1.36	1.4	4795	-250.0
## 1470	-2.16	3.0	5009	-294.5
## 1471	-0.23	2.7	6620	-295.9
## 1472	-2.20	6.4	5034	-293.1
## 1473	0.73	0.6	5581	-211.3
## 1474	-1.60	2.6	5354	-280.3
## 1475	-2.39	7.8	4590	-286.9
## 1476	-1.75	2.0	5158	-306.7
## 1477	-2.04	3.9	4595	-287.4
## 1478	-2.03	7.3	4748	-288.4
## 1479	-1.09	2.9	5556	-114.1
## 1480	-0.29	4.2	6727	-112.9
## 1481	-1.86	2.9	5053	-114.6
## 1482	0.10	14.6	4843	-11.3
## 1483	-1.70	2.9	4610	-295.6
## 1484	-1.65	3.7	4929	-294.3
## 1485	-2.08	5.3	4640	-294.2
## 1486	-1.96	7.0	4799	-293.4
## 1487	-2.16	6.7	4792	-294.5
## 1488	-2.24	5.8	4804	-293.9
## 1489	-2.05	5.6	4656	-293.4
## 1490	-2.40	4.1	4716	-296.6
## 1491	-0.18	22.6	4708	-21.0
## 1492	-1.13	1.1	4928	-319.8
## 1493	-1.92	1.6	5022	-126.5
## 1494	-0.69	1.8	5284	-127.2
## 1495	0.14	21.5	4718	-15.2
## 1496	0.08	29.1	4716	-15.9
## 1497	0.08	23.0	4677	-14.9
## 1498	-0.52	2.9	5023	-80.6
## 1499	-0.28	2.0	4716	-80.3
## 1500	-0.91	5.2	4917	-82.1

## 1501	-1.37	5.4	5072	-298.5
## 1502	0.27	2.6	5051	-41.6
## 1503	-0.04	3.6	5204	-40.9
## 1504	-0.12	2.9	5122	-40.6
## 1505	-2.05	2.8	4463	-298.7
## 1506	0.26	1.0	5163	-113.4
## 1507	-0.48	1.7	4866	-115.7
## 1508	-2.98	2.5	4604	-315.4
## 1509	0.10	16.4	4768	-3.5
## 1510	0.14	21.9	4765	-2.7
## 1511	0.10	23.5	4764	-3.1
## 1512	1.18	0.5	4626	-101.4
## 1513	-2.11	2.1	5374	-354.4
## 1514	0.73	0.9	5383	-260.3
## 1515	-0.76	3.0	5231	-258.3
## 1516	-1.92	5.1	7268	-339.2
## 1517	-0.04	22.7	4743	-3.7
## 1518	-0.05	31.6	4716	-3.3
## 1519	-1.56	5.4	5186	-305.2
## 1520	-2.10	7.3	4660	-305.3
## 1521	-1.50	4.9	7461	-308.7
## 1522	-1.82	4.4	4548	-287.5
## 1523	1.07	0.6	4732	-160.9
## 1524	0.36	0.9	5279	-160.1
## 1525	0.47	1.0	5012	-159.7
## 1526	0.45	1.1	5247	-159.6
## 1527	-1.78	3.0	5686	-295.1
## 1528	-1.07	1.6	5067	-236.7
## 1529	0.06	3.4	7464	-237.4
## 1530	-0.46	1.4	6093	-236.3
## 1531	-0.49	1.5	6018	-237.4
## 1532	-0.75	1.2	5165	-388.2
## 1533	0.75	1.6	5820	-388.6
## 1534	-1.34	2.8	4974	-391.2
## 1535	-0.73	2.0	5444	-391.5
## 1536	-0.46	1.1	5195	-387.9
## 1537	-0.18	3.5	5038	-48.6
## 1538	-1.71	3.0	5732	-292.2
## 1539	-1.09	1.5	5099	-303.9
## 1540	-0.18	8.3	4917	-2.3
## 1541	0.22	2.2	4594	-2.6
## 1542	-0.37	9.7	4946	-1.7
## 1543	-0.60	9.0	4971	-2.6
## 1544	-0.18	8.7	4974	-2.4
## 1545	-0.03	6.8	4977	-2.8
## 1546	-0.28	9.3	4968	-2.3
## 1547	-0.09	6.5	4983	-2.1
## 1548	-1.77	2.1	4993	-305.4
## 1549	-1.83	2.2	5000	-295.5
## 1550	-1.86	3.3	5240	-295.0
## 1551	-1.97	2.2	4939	-291.0
## 1552	-1.63	2.7	5355	-298.4
## 1553	-2.40	4.7	5320	-279.7
## 1554	-2.75	5.8	4647	-282.0
## 1555	-2.90	6.0	4534	-281.4
## 1556	-1.84	3.2	5200	-295.7
## 1557	-1.98	3.9	5982	-292.7
## 1558	-2.71	6.0	4658	-276.6
## 1559	-0.50	6.2	5119	-94.1
## 1560	-0.36	9.5	4969	-95.3
## 1561	-0.78	1.4	5025	-210.6
## 1562	-0.95	3.0	5258	-207.6
## 1563	-1.15	5.7	6245	-298.4
## 1564	-2.45	4.4	4512	-299.1
## 1565	-2.33	5.5	4644	-300.1
## 1566	-2.56	5.3	4538	-297.8
## 1567	-1.83	3.2	4930	-300.4
## 1568	-2.25	6.7	4952	-298.9
## 1569	-1.78	3.5	5436	-299.7
## 1570	-2.54	4.2	4930	-298.2
## 1571	-1.76	5.0	5278	-299.0
## 1572	-2.28	2.6	4654	-296.4
## 1573	-2.71	5.6	5537	-313.2
## 1574	-1.95	2.2	5184	-314.6
## 1575	-2.18	5.7	5843	-312.2
## 1576	-1.10	1.1	5122	-310.5
## 1577	-2.59	9.1	4942	-283.3
## 1578	-2.20	13.0	4999	-283.2
## 1579	-2.52	7.6	4602	-282.9

## 1580	-2.58	6.2	4604	-284.8
## 1581	-1.74	5.1	5241	-303.0
## 1582	-1.48	5.5	6652	-283.5
## 1583	-1.42	4.2	6532	-282.8
## 1584	-2.01	6.1	4968	-294.8
## 1585	-1.35	4.7	5446	-290.4
## 1586	-1.89	9.2	5273	-292.3
## 1587	-1.78	8.7	5466	-291.6
## 1588	-1.58	6.6	5159	-290.9
## 1589	-1.90	4.0	4788	-290.8
## 1590	-1.52	4.5	5187	-294.5
## 1591	-0.61	8.7	4870	-1.9
## 1592	-0.30	8.4	4913	-1.9
## 1593	-0.20	9.4	4943	-1.8
## 1594	-0.23	7.4	4902	-1.9
## 1595	-0.21	7.6	4871	-2.6
## 1596	-0.41	7.2	5003	-2.2
## 1597	-1.87	3.4	4590	-296.2
## 1598	-0.81	1.5	5079	-101.7
## 1599	-0.50	3.5	4969	-127.3
## 1600	-0.39	13.7	4856	-125.5
## 1601	-0.33	12.8	4903	-125.7
## 1602	-0.95	1.6	4631	-81.1
## 1603	0.01	4.8	5084	-79.8
## 1604	-0.84	2.7	4996	-268.7
## 1605	0.18	4.2	4808	14.0
## 1606	-0.54	9.6	4635	-21.0
## 1607	-0.49	2.2	5193	-17.5
## 1608	0.18	8.1	5084	-18.5
## 1609	-1.07	1.4	4774	-32.1
## 1610	-0.05	5.2	5076	-33.4
## 1611	-2.11	2.3	5133	-247.2
## 1612	-0.07	1.1	4981	-36.6
## 1613	-0.49	6.4	4994	-36.9
## 1614	-0.22	4.5	4810	-24.6
## 1615	0.08	16.1	4864	-24.8
## 1616	0.82	1.4	5549	-272.1
## 1617	-0.68	2.6	4930	-62.3
## 1618	0.28	1.7	4773	-42.7
## 1619	-0.04	0.9	4502	-75.6
## 1620	-1.94	4.2	5719	-193.2
## 1621	0.03	2.3	4822	7.1
## 1622	0.08	1.5	5132	-233.2
## 1623	-1.96	3.4	5073	-287.1
## 1624	-1.49	2.2	4957	-289.2
## 1625	0.17	3.5	5238	28.6
## 1626	0.14	4.3	5126	29.1
## 1627	-0.13	1.1	4843	-194.8
## 1628	-0.33	5.8	5000	-195.0
## 1629	0.72	1.0	5054	-53.9
## 1630	0.18	8.0	5216	-53.6
## 1631	1.04	0.5	4487	-54.9
## 1632	-0.37	7.3	5237	-55.2
## 1633	-0.34	5.9	5213	-55.2
## 1634	-0.22	5.6	4900	-330.6
## 1635	-0.48	9.8	5099	-329.5
## 1636	0.02	5.0	5058	-331.2
## 1637	-0.11	5.3	5042	-330.7
## 1638	-0.89	9.7	5145	-225.8
## 1639	-0.77	5.2	5098	-225.7
## 1640	-0.61	5.1	5088	-226.1
## 1641	-2.20	4.6	4385	-283.6
## 1642	0.38	1.6	4517	-58.6
## 1643	-0.09	9.0	4881	-57.2
## 1644	0.00	6.6	4840	-57.4
## 1645	0.86	0.8	4864	-384.9
## 1646	-0.44	1.5	4996	-384.2
## 1647	-2.47	5.7	5650	-303.8
## 1648	-0.79	3.8	7174	-304.0
## 1649	-2.18	5.6	4486	-309.2
## 1650	-2.20	24.3	4457	-308.6
## 1651	-0.89	2.8	5569	7.0
## 1652	-2.33	4.2	5299	-301.1
## 1653	-2.78	6.2	4635	-299.3
## 1654	-2.51	5.4	4792	-301.6
## 1655	-2.55	5.2	4718	-299.7
## 1656	-2.53	6.3	4617	-282.9
## 1657	0.53	1.2	4766	-37.2
## 1658	0.51	1.3	4699	-82.0

## 1659	-0.22	7.7	4609	-15.8
## 1660	0.13	5.7	4669	-13.2
## 1661	0.85	0.6	4595	-130.3
## 1662	0.66	0.7	4842	-17.3
## 1663	0.14	6.9	5091	-19.6
## 1664	0.78	0.5	4920	-110.5
## 1665	0.06	2.4	4611	-93.5
## 1666	0.25	1.2	4535	-71.3
## 1667	-0.52	7.1	4593	38.1
## 1668	-0.46	27.9	4682	38.7
## 1669	-0.60	26.6	4633	38.5
## 1670	0.34	3.8	4842	-47.9
## 1671	0.22	16.0	4890	-48.1
## 1672	0.46	1.4	5645	-119.3
## 1673	-0.02	6.9	4853	-33.5
## 1674	-0.69	2.6	5960	-59.0
## 1675	-0.54	5.7	5084	-67.5
## 1676	-1.53	3.3	5094	-283.7
## 1677	-1.21	4.3	6516	-14.3
## 1678	-0.94	5.9	5654	-13.8
## 1679	-0.44	3.1	5179	-56.8
## 1680	-0.24	8.8	5284	-57.4
## 1681	-0.40	1.7	5542	-187.4
## 1682	-0.67	1.7	4934	-93.4
## 1683	-0.16	1.3	5035	-135.2
## 1684	-0.12	14.9	4757	-32.6
## 1685	0.00	9.8	4961	-74.1
## 1686	-0.75	5.8	5010	-18.8
## 1687	-0.08	6.4	5209	-31.2
## 1688	-1.70	2.3	5121	-203.2
## 1689	-0.96	3.2	5088	-129.7
## 1690	-0.78	4.3	5024	-77.6
## 1691	-0.72	2.4	5304	-32.2
## 1692	-1.07	2.9	4964	-109.8
## 1693	-0.11	3.9	5054	-37.3
## 1694	0.15	3.9	5065	-99.9
## 1695	-0.16	4.9	5095	-47.3
## 1696	-0.09	7.3	4967	11.7
## 1697	-0.17	3.4	4983	-118.7
## 1698	0.34	1.7	6129	-226.1
## 1699	-0.91	1.5	4919	-112.6
## 1700	0.08	15.5	4742	-53.4
## 1701	0.06	2.1	5167	-68.4
## 1702	0.60	1.2	5230	-28.6
## 1703	-0.24	6.5	4985	-60.4
## 1704	-0.07	2.6	5296	-73.1
## 1705	0.11	2.0	5046	-60.0
## 1706	-0.01	2.8	5051	-60.0
## 1707	-0.63	1.1	4757	-323.7
## 1708	0.51	7.7	5026	-2.2
## 1709	-0.89	1.3	4756	-136.3
## 1710	0.15	20.5	4753	-3.7
## 1711	-0.19	4.6	4935	-29.0
## 1712	0.27	2.5	5219	-11.7
## 1713	-0.17	14.5	4734	-47.1
## 1714	0.57	1.1	5200	-109.8
## 1715	0.32	19.3	4739	-33.0
## 1716	-0.14	1.4	5502	-178.6
## 1717	-0.41	5.8	5150	4.8
## 1718	-0.45	8.9	5136	5.0
## 1719	-0.13	4.7	5302	-76.4
## 1720	-0.11	7.5	4898	4.0
## 1721	-0.22	14.9	4813	1.1
## 1722	0.13	0.9	5006	-102.9
## 1723	-0.03	1.8	5137	-180.6
## 1724	0.17	4.3	4966	-95.9
## 1725	0.11	4.6	5293	-33.8
## 1726	0.09	7.1	5214	-34.7
## 1727	-0.31	14.9	4685	-49.3
## 1728	-1.71	3.2	5402	-262.6
## 1729	0.40	7.6	5053	-20.0
## 1730	0.13	8.2	5050	-19.5
## 1731	0.29	5.9	5077	-19.6
## 1732	0.00	9.4	5009	-24.0
## 1733	-1.12	1.1	5000	-296.2
## 1734	-1.68	2.2	4981	-296.8
## 1735	0.31	17.1	4745	-46.9
## 1736	0.89	1.4	7262	-255.5
## 1737	0.17	3.3	5083	-104.2

## 1738	-1.55	1.3	4708	-399.9
## 1739	-2.28	2.5	4951	-401.9
## 1740	0.40	1.8	4870	-192.7
## 1741	-0.09	3.3	4953	-192.0
## 1742	-0.25	2.7	6193	-44.1
## 1743	-2.21	2.7	5185	-254.7
## 1744	0.54	1.4	5202	-99.1
## 1745	-0.99	2.6	5197	-98.9
## 1746	0.18	0.7	4758	-103.0
## 1747	-2.17	2.8	4772	-298.7
## 1748	-2.63	4.3	4986	-299.9
## 1749	-2.49	3.3	4639	-296.6
## 1750	-0.80	3.1	6181	-60.5
## 1751	-1.24	3.5	6342	-61.5
## 1752	-0.04	3.1	4906	-6.3
## 1753	-0.50	4.0	5170	-7.1
## 1754	0.11	2.1	5156	-6.8
## 1755	-0.81	1.8	5169	-172.4
## 1756	0.15	2.1	5155	-147.9
## 1757	-0.40	2.2	5083	-148.1
## 1758	0.40	1.1	5488	-147.2
## 1759	0.29	8.8	4963	-31.7
## 1760	0.00	11.7	4948	-63.7
## 1761	-0.06	10.7	4835	-63.4
## 1762	-0.37	16.9	4738	21.8
## 1763	-0.42	21.9	4775	6.3
## 1764	-0.47	15.2	4725	11.9
## 1765	-0.20	7.3	4744	12.1
## 1766	0.32	10.5	4882	-56.9
## 1767	0.27	14.2	4893	-56.3
## 1768	-0.01	11.9	4888	-57.0
## 1769	0.06	10.3	4900	-56.2
## 1770	0.32	6.9	4871	-56.4
## 1771	-1.88	1.7	4614	-111.9
## 1772	-1.79	3.0	5583	-113.2
## 1773	-2.06	2.1	4876	-116.4
## 1774	0.10	3.6	5104	-56.4
## 1775	-0.19	7.3	5088	-57.5
## 1776	0.26	4.7	4978	-60.4
## 1777	0.69	1.2	5259	-164.4
## 1778	-0.93	2.8	5045	-165.4
## 1779	-0.42	1.7	4742	-167.4
## 1780	-0.76	1.8	4786	-166.4
## 1781	0.09	1.4	6149	-299.7
## 1782	-1.39	3.1	5817	-287.0
## 1783	-2.10	3.0	5183	-202.7
## 1784	-0.06	1.2	5847	-153.1
## 1785	-2.26	2.4	4534	-304.6
## 1786	-0.14	2.6	5772	-212.7
## 1787	-0.46	2.6	5333	-213.2
## 1788	-0.34	7.6	5068	-71.7
## 1789	-0.12	11.3	5054	-71.9
## 1790	-0.88	2.0	5537	-190.6
## 1791	-0.54	1.5	5888	-304.1
## 1792	-1.35	1.8	5235	-305.4
## 1793	0.23	1.1	5454	-331.0
## 1794	-0.58	2.3	5486	-144.1
## 1795	-2.04	2.0	4882	-75.1
## 1796	-0.22	8.0	4848	-50.0
## 1797	-1.12	4.6	4929	-10.4
## 1798	-1.41	3.6	5142	-91.3
## 1799	-1.19	3.1	5260	-47.4
## 1800	0.26	10.8	4840	-45.7
## 1801	0.39	13.8	4821	-71.7
## 1802	-1.03	2.7	5071	-229.3
## 1803	0.25	7.9	5125	-48.2
## 1804	-0.38	3.1	5329	-89.4
## 1805	-0.25	1.1	5367	-165.3
## 1806	-0.29	3.3	4962	-51.1
## 1807	-0.24	15.5	4696	15.5
## 1808	-2.46	3.0	4692	-291.7
## 1809	-1.40	1.4	4717	-296.4
## 1810	-1.16	5.5	5697	-309.5
## 1811	-2.55	4.1	4910	-301.4
## 1812	-1.57	1.3	5089	-285.4
## 1813	-2.10	2.7	5227	-133.9
## 1814	-1.70	3.1	5317	-208.9
## 1815	-1.51	3.8	5577	-209.1
## 1816	-0.51	14.7	4920	-29.1

## 1817	-0.41	19.9	4931	-21.2
## 1818	-0.75	14.9	4760	-13.1
## 1819	0.19	1.9	5238	-166.2
## 1820	-0.24	3.9	5119	-167.5
## 1821	-0.74	5.0	5188	-166.5
## 1822	-0.09	4.2	5049	-54.7
## 1823	0.03	6.1	5248	-54.7
## 1824	-0.23	5.1	5295	-55.9
## 1825	0.09	14.6	4839	5.0
## 1826	-0.05	14.4	4873	4.4
## 1827	0.37	1.9	5321	-196.2
## 1828	-0.18	3.2	5220	-197.3
## 1829	-1.68	2.4	5459	-268.2
## 1830	-0.88	2.0	6575	-267.4
## 1831	-0.10	10.5	4932	-47.0
## 1832	-0.25	12.0	4897	-46.5
## 1833	0.23	11.7	4816	-63.2
## 1834	0.14	19.4	4807	-62.9
## 1835	0.47	0.8	4730	-157.6
## 1836	-1.14	2.5	5219	-153.1
## 1837	-0.08	2.4	5529	-17.2
## 1838	-0.70	1.7	5235	-202.6
## 1839	1.09	0.8	5247	-109.5
## 1840	-0.72	1.8	6659	-167.0
## 1841	-0.70	1.5	6214	-166.0
## 1842	-0.19	21.4	4573	-76.8
## 1843	-0.16	24.4	4536	-76.5
## 1844	-0.83	4.2	5102	-237.1
## 1845	-0.66	6.7	5124	-237.7
## 1846	-0.53	3.9	5098	-237.3
## 1847	-0.54	1.9	5681	-112.6
## 1848	0.42	1.3	5263	-99.6
## 1849	0.05	1.7	5047	-100.8
## 1850	-0.02	5.6	5223	21.9
## 1851	-0.30	10.1	5207	18.2
## 1852	-0.04	2.5	5336	-153.8
## 1853	0.30	10.3	4963	-39.8
## 1854	-1.15	1.3	4652	-242.9
## 1855	-0.32	1.7	5439	-239.9
## 1856	0.29	8.6	4938	-40.6
## 1857	0.20	14.2	4923	-40.8
## 1858	0.28	11.2	4889	-40.6
## 1859	0.01	1.9	5190	-123.9
## 1860	-0.49	4.0	5512	-123.8
## 1861	0.03	2.7	5511	-124.5
## 1862	0.71	1.8	5188	-51.2
## 1863	-0.02	4.3	5175	-50.4
## 1864	-0.03	2.9	5091	-51.2
## 1865	-0.36	15.7	4679	-70.3
## 1866	-0.12	2.4	4909	-104.8
## 1867	-0.19	4.7	5123	-104.4
## 1868	0.25	2.5	5018	-201.2
## 1869	-0.38	2.0	4979	-55.4
## 1870	-0.26	4.8	5242	-55.7
## 1871	0.21	3.0	4750	-40.1
## 1872	-0.01	8.1	4964	-39.7
## 1873	-0.03	4.9	5028	-39.2
## 1874	0.20	1.3	4741	-107.8
## 1875	-0.21	6.2	4779	-78.5
## 1876	-0.20	6.2	4789	-78.5
## 1877	-0.43	1.7	5632	-155.6
## 1878	-0.05	5.2	5001	-16.7
## 1879	-0.34	13.2	4991	-16.1
## 1880	-1.20	2.1	5937	-201.8
## 1881	-0.27	3.7	5026	-69.7
## 1882	-0.74	7.8	5146	-69.9
## 1883	-0.10	4.1	5214	-69.4
## 1884	-0.23	5.5	4872	6.4
## 1885	-0.64	3.7	5625	-229.1
## 1886	-0.37	8.4	5029	-81.6
## 1887	-0.24	10.5	4957	-81.8
## 1888	-0.11	6.8	4933	-81.7
## 1889	-1.71	2.5	4984	-385.8
## 1890	-0.83	3.0	6038	-385.9
## 1891	-1.03	4.1	6630	-200.7
## 1892	-0.14	5.0	5053	-49.9
## 1893	-0.19	9.6	5072	-50.8
## 1894	0.03	5.8	4942	-50.3
## 1895	-1.09	1.5	4979	-35.1

## 1896	0.09	5.2	4949	-11.6
## 1897	0.00	2.5	4985	-61.8
## 1898	0.13	3.6	5031	-60.3
## 1899	0.31	8.9	4781	-47.1
## 1900	0.30	12.2	4806	-47.2
## 1901	-0.16	4.4	4999	-36.4
## 1902	-0.24	9.6	4993	-36.0
## 1903	0.20	2.9	4661	-35.5
## 1904	0.53	1.2	4834	-29.3
## 1905	-0.13	9.2	4646	-2.4
## 1906	-0.29	25.2	4685	-1.6
## 1907	-0.25	12.0	4676	-1.9
## 1908	-0.05	3.2	4710	-83.9
## 1909	-0.15	20.1	4600	-15.2
## 1910	-0.29	1.5	5014	-166.1
## 1911	-0.23	2.7	4999	-88.7
## 1912	-1.15	3.5	5704	-297.4
## 1913	-0.45	5.2	5103	-81.2
## 1914	-0.47	12.5	5074	-80.6
## 1915	-0.23	13.2	4776	-18.6
## 1916	-0.22	22.9	4812	-18.7
## 1917	0.04	2.0	5574	-240.5
## 1918	-0.02	6.5	4984	-96.7
## 1919	-0.10	11.8	5077	-95.8
## 1920	0.25	5.0	4895	-96.8
## 1921	-0.65	2.6	5285	-136.8
## 1922	-0.60	4.1	5057	-139.4
## 1923	-1.28	6.5	5222	-138.4
## 1924	-0.25	15.9	4747	-14.8
## 1925	-0.32	3.3	4951	-48.1
## 1926	-0.29	7.4	5196	-48.5
## 1927	-0.96	3.3	6748	-131.9
## 1928	-1.23	3.7	6335	-133.0
## 1929	-2.31	4.2	5544	-133.6
## 1930	-0.73	2.2	6540	-137.5
## 1931	-1.29	1.8	5220	-127.4
## 1932	-0.60	1.5	6358	-295.1
## 1933	-2.46	3.1	5501	-294.2
## 1934	-1.38	1.8	5867	-284.9
## 1935	-2.41	4.1	4986	-289.8
## 1936	-2.23	3.7	5610	-311.3
## 1937	-0.73	1.9	5377	-166.0
## 1938	0.18	8.3	5076	-58.4
## 1939	0.19	10.0	5047	-58.4
## 1940	-0.02	8.7	5034	-58.3
## 1941	-0.16	11.5	4841	-19.8
## 1942	-0.67	4.8	5383	-185.9
## 1943	0.34	13.9	4895	-51.9
## 1944	-0.45	7.7	4966	-116.7
## 1945	-0.82	2.4	5645	-131.3
## 1946	-0.28	5.3	5096	-48.1
## 1947	-0.73	4.2	5199	-66.2
## 1948	-0.02	11.4	4966	-61.8
## 1949	0.26	13.5	4922	-62.5
## 1950	0.11	11.7	4891	-62.4
## 1951	-1.39	2.7	5786	-151.2
## 1952	-0.35	18.3	4702	-18.0
## 1953	0.26	18.2	4680	-9.8
## 1954	0.34	17.7	4750	-10.6
## 1955	-0.92	5.1	5033	-105.9
## 1956	-1.77	2.7	5024	-116.8
## 1957	-0.91	5.0	5096	-50.8
## 1958	-0.62	5.1	5117	-48.0
## 1959	-0.26	7.4	5160	-7.4
## 1960	-0.91	3.0	6514	-33.1
## 1961	-0.04	1.6	5370	-108.1
## 1962	-0.65	2.5	4991	-69.8
## 1963	-0.06	3.2	5299	-69.8
## 1964	-0.39	7.1	5189	-84.8
## 1965	-0.26	8.6	5124	-91.8
## 1966	-0.27	6.8	5167	-91.4
## 1967	-0.70	5.6	4983	-74.7
## 1968	-0.43	6.2	5219	-74.2
## 1969	-0.33	5.1	5236	-75.1
## 1970	-0.03	14.7	4859	16.8
## 1971	-0.90	1.5	4905	-245.8
## 1972	-0.64	1.5	4756	-238.8
## 1973	-0.44	6.2	5113	-109.5
## 1974	-0.48	7.7	5131	-108.8

## 1975	0.39	13.3	4828	-75.2
## 1976	-1.73	3.1	4510	-172.5
## 1977	-1.04	3.3	4968	-173.4
## 1978	-1.10	2.8	4998	-173.0
## 1979	0.36	13.4	4817	32.3
## 1980	0.36	16.0	4854	32.1
## 1981	-0.21	2.7	5378	-26.3
## 1982	-0.20	1.8	5046	-292.7
## 1983	-0.17	2.1	5422	-293.3
## 1984	-0.20	1.4	6188	-325.4
## 1985	0.15	16.2	4805	-58.8
## 1986	-0.02	3.8	5174	-145.0
## 1987	-0.55	6.4	5220	-145.2
## 1988	0.19	3.2	5147	-144.3
## 1989	-0.23	8.3	5130	-41.0
## 1990	-0.34	10.5	5090	-40.1
## 1991	-0.21	2.1	5232	-68.2
## 1992	-1.41	3.3	5040	-69.8
## 1993	0.60	2.6	6114	-67.6
## 1994	-0.50	1.9	5443	-267.0
## 1995	-2.49	2.9	4665	-287.0
## 1996	-0.96	2.7	5814	-284.0
## 1997	-1.34	5.4	5641	-283.7
## 1998	-2.19	4.0	5478	-281.4
## 1999	-1.13	3.9	6222	-286.1
## 2000	-1.53	2.7	5598	-281.3
## 2001	-1.93	2.8	5125	-297.4
## 2002	-1.93	10.3	4600	-288.5
## 2003	-1.99	2.2	5310	-279.6
## 2004	-1.02	1.3	5066	-188.0
## 2005	-1.67	3.2	5496	-189.1
## 2006	-0.23	2.5	5004	-77.0
## 2007	-0.41	4.5	5240	-77.0
## 2008	-1.78	1.4	4504	-284.0
## 2009	-0.96	1.6	4929	-114.7
## 2010	-1.75	1.5	4720	-115.0
## 2011	-1.79	3.0	4997	-116.3
## 2012	-1.21	1.8	5851	-158.2
## 2013	-2.32	3.8	5052	-156.2
## 2014	-2.13	1.8	4938	-158.4
## 2015	-2.16	3.2	5055	-153.6
## 2016	-1.86	5.5	5609	-155.8
## 2017	-2.49	4.0	4970	-156.0
## 2018	0.11	2.3	5414	-139.4
## 2019	0.15	2.6	5609	-139.7
## 2020	-1.19	2.1	5885	-64.5
## 2021	-1.02	1.9	6211	-67.6
## 2022	-0.16	9.3	4759	-80.1
## 2023	-0.11	10.7	4800	-80.2
## 2024	0.00	6.1	5167	-19.9
## 2025	-0.05	5.8	5056	-20.0
## 2026	-0.14	5.8	5198	-20.5
## 2027	-0.14	8.6	5020	-49.5
## 2028	-0.24	11.6	5062	-49.1
## 2029	-0.23	2.6	5097	-61.9
## 2030	-0.15	0.8	4831	-348.8
## 2031	-0.99	1.0	4777	-350.5
## 2032	-2.08	2.6	4921	-105.8
## 2033	-2.06	2.9	5046	-105.1
## 2034	-0.52	1.0	4751	-228.6
## 2035	-0.61	1.0	4780	-230.2
## 2036	-0.21	1.2	5247	-315.1
## 2037	-0.59	12.5	4744	-53.7
## 2038	-0.29	5.4	5109	-101.7
## 2039	-0.30	3.6	5235	-19.1
## 2040	0.10	4.2	5233	-19.1
## 2041	-0.21	3.4	4855	-20.3
## 2042	-0.32	6.8	5046	-13.4
## 2043	-0.32	7.3	5033	-13.3
## 2044	-0.30	3.3	5166	-147.6
## 2045	-0.36	4.9	5034	-147.7
## 2046	-0.64	4.5	5316	-148.2
## 2047	-0.94	3.1	5530	-121.6
## 2048	-1.07	2.5	5089	-120.0
## 2049	-0.45	7.4	5076	-91.0
## 2050	-0.61	2.4	5587	-273.9
## 2051	-1.13	2.9	5588	-270.2
## 2052	-0.30	12.6	4934	-40.6
## 2053	-0.07	11.3	4960	-41.2

##	2054	-1.15	1.8	5337	-250.4
##	2055	-1.55	2.7	5031	-266.9
##	2056	-0.08	5.0	5292	-31.4
##	2057	-1.24	7.9	5311	22.7
##	2058	-0.45	7.0	5132	-17.8
##	2059	0.11	10.8	4937	-73.1
##	2060	0.20	12.6	4935	-73.4
##	2061	-1.11	3.1	6256	-289.6
##	2062	-1.05	2.8	6041	-79.7
##	2063	-1.25	1.8	5648	-81.0
##	2064	-1.03	2.1	5628	-83.9
##	2065	-0.36	4.3	5091	-34.9
##	2066	-0.37	5.4	5063	-35.0
##	2067	-0.77	2.2	5306	-169.0
##	2068	-0.73	2.0	5532	-68.0
##	2069	-0.11	22.5	4688	-31.1
##	2070	-0.18	27.7	4735	-42.6
##	2071	-0.55	17.5	4683	-27.9
##	2072	-0.51	22.4	4670	-27.8
##	2073	-0.63	15.6	4648	-28.0
##	2074	0.46	1.4	6962	-294.4
##	2075	-0.01	0.9	5098	-101.9
##	2076	-2.24	5.1	4870	-297.0
##	2077	-2.53	7.9	4633	-299.5
##	2078	-2.06	5.6	4704	-298.9
##	2079	-2.53	5.3	4492	-297.9
##	2080	-2.11	3.2	4550	-299.1
##	2081	-1.13	6.4	6084	-297.2
##	2082	-1.79	4.0	4885	-298.0
##	2083	-1.92	2.7	5168	-290.3
##	2084	-1.93	2.7	4987	-288.0
##	2085	-0.37	1.8	6086	-283.8
##	2086	-1.09	1.1	4920	-284.8
##	2087	-2.70	5.1	5456	-289.9
##	2088	-1.62	1.9	4806	-283.1
##	2089	-1.74	2.3	5539	-278.2
##	2090	-1.13	2.6	6673	-285.4
##	2091	-2.78	3.3	5251	-292.9
##	2092	-0.66	1.4	4714	-293.1
##	2093	-1.56	4.3	5460	-291.7
##	2094	-1.22	3.4	5088	-293.3
##	2095	0.19	1.7	5231	-290.4
##	2096	0.71	0.6	5442	-242.9
##	2097	-0.66	2.8	6689	-241.6
##	2098	0.14	2.9	4950	-51.6
##	2099	-0.43	6.3	5145	-52.9
##	2100	-0.29	5.4	5100	-52.0
##	2101	-0.98	1.3	5348	-298.8
##	2102	-1.72	2.8	5355	-301.4
##	2103	-1.52	6.5	4831	-305.9
##	2104	-1.73	8.5	4859	-306.1
##	2105	-2.44	5.7	5376	-280.7
##	2106	-1.86	3.9	5884	-279.3
##	2107	-1.75	3.4	5781	-304.9
##	2108	-2.16	2.6	5255	-302.7
##	2109	-1.48	1.8	5697	-172.8
##	2110	0.22	1.4	7183	-290.5
##	2111	-0.83	0.9	4739	-309.9
##	2112	-0.51	1.5	5214	-349.0
##	2113	-1.27	2.4	5323	-345.8
##	2114	-0.87	1.5	5110	-347.1
##	2115	-2.32	1.8	4694	-292.5
##	2116	-2.31	2.4	5096	-300.0
##	2117	-2.01	3.0	5160	-153.4
##	2118	-1.43	2.9	5934	-151.4
##	2119	-1.75	1.8	4838	-294.1
##	2120	-1.70	6.5	4887	-293.7
##	2121	-1.53	3.5	5350	-293.8
##	2122	-0.44	1.7	5495	51.8
##	2123	-1.01	2.2	6330	-298.0
##	2124	-0.57	1.4	6006	-293.9
##	2125	-1.93	2.2	4820	-308.1
##	2126	-2.25	7.2	4792	-307.3
##	2127	-2.59	7.1	4682	-308.2
##	2128	-2.15	5.6	4713	-306.5
##	2129	-2.19	7.3	4951	-307.2
##	2130	-1.78	4.5	5079	-308.4
##	2131	-2.17	7.9	5219	-308.2
##	2132	-2.26	4.1	4646	-308.1

##	2133	-0.18	1.2	5605	-201.8
##	2134	-0.33	2.3	5560	-202.0
##	2135	-0.88	2.5	5018	-203.3
##	2136	0.44	1.6	5895	-201.0
##	2137	-0.30	1.9	5849	-200.0
##	2138	-1.04	4.8	4373	-237.6
##	2139	-1.81	1.7	4855	-299.1
##	2140	-1.37	2.3	5268	-294.0
##	2141	-2.14	1.9	4959	-283.2
##	2142	-1.54	2.2	5096	-234.8
##	2143	-1.19	3.0	5655	-297.3
##	2144	-1.57	3.3	4730	-296.9
##	2145	-1.05	1.9	6789	-311.0
##	2146	-1.66	1.7	5446	-290.3
##	2147	-1.63	2.3	5578	-220.6
##	2148	-1.56	1.1	5020	-220.2
##	2149	-2.20	8.5	6083	-289.1
##	2150	-0.85	2.2	5569	-134.7
##	2151	-2.27	2.5	4974	-301.5
##	2152	-1.07	1.7	5422	-303.3
##	2153	-1.41	2.2	5107	-19.7
##	2154	-1.54	2.3	5046	-134.4
##	2155	-0.64	1.6	5188	-137.8
##	2156	-2.35	4.9	4829	-295.6
##	2157	-2.37	4.1	4658	-299.8
##	2158	-2.05	4.6	5322	-294.3
##	2159	-2.40	2.9	4895	-304.0
##	2160	-2.04	3.5	5347	-303.2
##	2161	-1.95	3.5	5102	-307.4
##	2162	-0.89	1.1	5128	-311.7
##	2163	-1.48	1.3	4689	-311.4
##	2164	-1.85	2.9	5314	-299.2
##	2165	-2.47	2.4	4988	-295.9
##	2166	-2.32	1.9	4973	-45.5
##	2167	-0.59	1.2	5566	-46.7
##	2168	-0.79	1.9	7031	-290.3
##	2169	-1.55	2.3	5421	-287.1
##	2170	-2.28	2.8	5205	-302.2
##	2171	-2.09	4.9	5512	-291.0
##	2172	-1.01	4.1	6362	-171.9
##	2173	-1.87	2.7	5106	-169.7
##	2174	-0.20	2.2	6127	-170.3
##	2175	-0.93	4.9	5951	-172.9
##	2176	-1.14	3.4	5759	-171.2
##	2177	-1.61	5.2	4969	-71.7
##	2178	-1.18	3.0	5201	-226.1
##	2179	-1.85	3.9	4996	-223.9
##	2180	-0.89	2.7	5178	-221.9
##	2181	-1.07	3.2	6097	-294.4
##	2182	-2.51	3.8	5056	-293.4
##	2183	-1.48	4.5	6631	-296.9
##	2184	-2.65	4.4	4986	-296.4
##	2185	-2.32	3.7	4881	-297.1
##	2186	-3.04	3.9	4813	-286.3
##	2187	-1.97	2.7	5666	-282.6
##	2188	-1.42	3.5	6474	-278.3
##	2189	-2.16	2.2	5005	-289.9
##	2190	-1.06	2.7	5763	-29.7
##	2191	-0.74	1.5	4953	-31.0
##	2192	-1.82	3.1	5157	-287.8
##	2193	-1.86	3.4	4947	-290.1
##	2194	-1.58	2.3	5097	-293.1
##	2195	-1.13	1.5	5376	-310.8
##	2196	-1.22	1.4	4897	-294.9
##	2197	-0.74	1.1	5457	-296.6
##	2198	-1.65	2.4	5454	-294.3
##	2199	-1.69	4.8	5623	-293.5
##	2200	-1.40	3.5	5987	-295.5
##	2201	-0.53	1.9	6264	-245.0
##	2202	-1.69	2.6	5182	-294.1
##	2203	-1.75	2.1	5430	-297.3
##	2204	-1.92	2.5	5026	-282.4
##	2205	-1.63	2.3	5644	-292.2
##	2206	-0.44	2.4	6831	-291.9
##	2207	-2.16	1.5	4906	-295.9
##	2208	-1.45	1.5	5316	-287.8
##	2209	0.36	1.4	5021	-298.7
##	2210	-2.50	2.5	4578	-283.8
##	2211	-1.61	2.2	5132	-315.4

##	2212	-1.94	1.7	5167	-289.7
##	2213	-1.57	1.8	5689	-289.5
##	2214	-1.28	1.8	5175	-289.6
##	2215	-1.69	2.1	6074	-310.2
##	2216	-2.82	3.0	4848	-279.4
##	2217	-1.28	2.6	6527	-274.3
##	2218	-2.13	4.4	5155	-298.2
##	2219	-1.43	2.8	5974	-297.8
##	2220	-2.47	3.1	4534	-316.7
##	2221	-1.16	1.7	5629	-295.5
##	2222	-1.23	5.5	5377	-176.3
##	2223	-1.87	5.0	5441	-289.8
##	2224	-1.84	3.5	4754	-290.0
##	2225	-1.53	1.8	5040	-290.0
##	2226	-2.06	2.8	4726	-289.7
##	2227	-1.83	3.6	5623	-287.2
##	2228	-1.43	2.1	5021	-311.9
##	2229	-2.48	2.5	4696	-310.8
##	2230	-2.19	4.4	5535	91.0
##	2231	-1.96	4.1	5451	-288.5
##	2232	-2.51	4.2	4927	-287.1
##	2233	-2.29	3.1	4889	-286.9
##	2234	-2.71	2.9	4731	-288.3
##	2235	-2.16	2.0	5103	-283.6
##	2236	-1.56	2.0	5694	-288.2
##	2237	-1.52	1.2	4773	-291.7
##	2238	-1.65	3.4	4919	-288.3
##	2239	-1.45	1.2	4581	-298.6
##	2240	-1.84	1.7	4821	-283.3
##	2241	0.45	0.7	5491	-343.0
##	2242	0.21	1.2	5643	-345.5
##	2243	-1.00	1.5	4726	-343.7
##	2244	0.37	0.9	5370	-287.7
##	2245	-1.08	2.9	5617	-317.4
##	2246	-1.66	2.4	5817	-296.2
##	2247	-2.00	4.2	5722	-281.9
##	2248	-1.06	2.2	5322	-292.7
##	2249	-0.10	0.8	5411	-296.0
##	2250	-1.97	3.0	4556	-289.5
##	2251	-1.94	3.8	4867	-290.0
##	2252	-1.02	2.0	5205	-289.0
##	2253	-2.06	8.8	4757	-285.1
##	2254	-0.22	1.2	5311	-68.3
##	2255	-2.34	2.9	4532	-285.5
##	2256	-1.75	2.7	5285	-297.9
##	2257	-2.16	3.6	4633	-308.9
##	2258	-0.57	3.5	7124	-293.3
##	2259	-2.29	3.5	4715	-292.7
##	2260	-1.70	12.3	4686	-284.6
##	2261	-0.93	1.9	6288	-315.6
##	2262	-1.97	10.4	4628	-297.1
##	2263	-1.93	11.4	4750	-296.3
##	2264	-0.96	1.4	5130	-292.8
##	2265	-1.90	2.3	5580	-301.6
##	2266	0.29	10.1	4743	-21.6
##	2267	0.26	14.4	4790	-22.2
##	2268	0.15	12.7	4844	-21.8
##	2269	-0.47	2.4	5177	-295.3
##	2270	-3.04	3.2	4852	-306.1
##	2271	-1.66	3.0	5426	-455.4
##	2272	-1.73	2.4	5197	-285.9
##	2273	-1.89	3.5	5808	-295.3
##	2274	-1.64	4.5	4952	-295.8
##	2275	-1.36	3.0	5516	-289.1
##	2276	-0.28	4.7	5008	-39.1
##	2277	-0.01	1.9	5114	-53.1
##	2278	0.73	0.7	4910	-177.7
##	2279	0.84	0.5	4737	-289.7
##	2280	-0.87	2.3	5107	-163.1
##	2281	0.05	3.9	5248	-25.0
##	2282	-0.61	3.4	5054	-24.0
##	2283	0.03	2.4	5431	-24.6
##	2284	0.02	2.1	5086	-116.9
##	2285	-0.09	1.5	5395	-140.9
##	2286	0.20	9.9	5042	-68.8
##	2287	-0.79	1.6	4967	-333.8
##	2288	-0.65	15.5	4752	-34.8
##	2289	-0.49	5.2	5009	-102.3
##	2290	-0.68	2.3	5608	-75.4

## 2291	0.23	1.5	5273	-248.0
## 2292	0.58	1.1	5249	-201.3
## 2293	0.21	0.4	4531	-238.9
## 2294	-0.17	2.0	4931	-37.6
## 2295	-1.47	2.4	4730	-37.7
## 2296	0.16	1.3	5152	-36.3
## 2297	0.91	0.5	4716	-39.4
## 2298	-1.19	1.6	5317	-265.8
## 2299	-1.78	2.4	5212	-245.5
## 2300	-1.23	2.8	6398	-295.1
## 2301	-1.29	1.4	4516	-249.7
## 2302	-1.36	2.5	5832	-374.9
## 2303	-1.24	1.2	4873	-323.2
## 2304	-2.37	3.3	5061	-276.4
## 2305	-2.50	3.5	5005	-125.2
## 2306	-1.17	4.0	5632	-123.1
## 2307	-2.18	3.2	4941	-123.4
## 2308	-2.10	3.4	4746	-294.0
## 2309	-2.68	4.0	4642	-303.4
## 2310	-0.60	7.8	5138	-91.2
## 2311	-0.50	7.2	5124	-171.6
## 2312	-0.24	5.6	5154	-172.2
## 2313	-0.28	3.9	4947	-171.9
## 2314	-1.39	3.0	5687	-292.6
## 2315	-2.01	4.0	4683	-295.0
## 2316	-1.42	2.3	5044	-285.4
## 2317	-1.90	4.6	4944	-294.1
## 2318	-1.75	3.0	4806	-291.4
## 2319	-1.90	2.7	5154	-294.7
## 2320	-0.91	2.3	6259	-275.4
## 2321	-2.25	2.4	4487	-295.1
## 2322	-1.68	2.2	5261	-294.1
## 2323	-1.90	20.4	4552	-281.7
## 2324	-1.98	15.2	4492	-281.7
## 2325	-1.94	13.7	4535	-282.2
## 2326	-1.93	2.3	5272	-283.7
## 2327	-2.28	14.3	4718	-289.7
## 2328	-2.40	8.2	4510	-289.9
## 2329	-2.30	6.6	4663	-289.6
## 2330	-2.03	2.6	5164	-290.8
## 2331	-1.94	2.5	4790	-251.1
## 2332	-1.84	2.4	5386	-184.1
## 2333	-0.22	4.6	5080	-57.7
## 2334	-0.36	2.8	5585	-109.5
## 2335	-1.11	2.1	5637	-218.2
## 2336	-1.92	2.0	4969	-216.1
## 2337	-2.12	2.5	5529	-236.3
## 2338	-0.45	4.5	5180	-150.2
## 2339	0.26	2.6	5592	-95.1
## 2340	-0.01	1.6	5182	-149.4
## 2341	-1.32	2.2	5729	-146.5
## 2342	-1.26	1.0	4775	-496.7
## 2343	-0.36	7.3	5069	-32.8
## 2344	-0.04	6.0	5029	-32.3
## 2345	-1.43	3.2	5449	-252.8
## 2346	-0.61	2.7	5652	-254.5
## 2347	-0.03	4.0	5336	-78.1
## 2348	-0.25	3.8	5260	-91.9
## 2349	-0.91	2.6	5510	-121.7
## 2350	-0.42	1.0	5174	-119.5
## 2351	-0.11	12.2	5063	-36.6
## 2352	-0.01	10.9	5044	-36.6
## 2353	-0.19	6.8	5331	-85.8
## 2354	-0.02	4.1	5139	-85.0
## 2355	-0.74	5.2	5257	-121.5
## 2356	-0.26	2.6	5217	-123.0
## 2357	-1.90	6.3	6388	-299.5
## 2358	-1.98	3.2	5205	-299.0
## 2359	-2.02	3.5	5437	-119.3
## 2360	-0.58	1.6	6085	-204.4
## 2361	-1.74	2.2	4884	-205.6
## 2362	-1.91	3.5	5495	-277.9
## 2363	-0.89	4.0	5873	-190.8
## 2364	-0.08	17.5	4896	0.0
## 2365	0.11	10.9	4846	-0.8
## 2366	0.04	11.8	4925	-1.1
## 2367	-0.05	9.8	5088	-38.2
## 2368	-0.15	18.8	4852	-18.8
## 2369	-1.36	4.3	6455	-88.1

## 2370	0.25	23.6	4726	-29.6
## 2371	-0.03	21.0	4687	-41.4
## 2372	-1.45	2.9	5389	-84.9
## 2373	-1.35	2.1	4959	-245.2
## 2374	-1.70	3.2	5421	-143.9
## 2375	-0.91	5.8	5103	-112.0
## 2376	-0.37	3.5	5742	-24.2
## 2377	-1.72	4.2	5662	-81.4
## 2378	-0.25	4.0	5106	-43.5
## 2379	-0.89	2.5	5818	-184.4
## 2380	-0.91	3.0	5243	-38.2
## 2381	-0.82	3.1	5393	-324.6
## 2382	-1.04	5.9	4983	-257.3
## 2383	-1.54	2.3	5561	-82.3
## 2384	-0.84	2.6	5891	-270.3
## 2385	0.23	0.8	5278	-389.5
## 2386	-0.80	2.3	6041	-316.9
## 2387	-0.27	2.4	5350	-16.6
## 2388	-0.11	23.6	4718	-60.4
## 2389	-0.08	19.2	4685	-61.0
## 2390	-2.73	2.9	4817	-393.5
## 2391	-1.55	2.1	5353	-392.3
## 2392	0.23	1.3	5402	-181.0
## 2393	-0.13	4.0	5345	-135.8
## 2394	-0.18	3.1	5279	-135.4
## 2395	-0.82	1.9	5273	-108.3
## 2396	-1.66	1.9	4868	-105.7
## 2397	0.11	3.4	5138	-103.5
## 2398	-0.10	2.4	5005	-105.2
## 2399	-0.44	1.2	4901	-213.8
## 2400	-0.32	2.5	5902	-218.4
## 2401	-1.34	1.8	4727	-105.1
## 2402	-0.91	3.3	5692	-106.4
## 2403	-0.11	7.8	5041	-110.6
## 2404	-1.75	2.3	5651	-154.0
## 2405	0.16	22.7	4869	-42.5
## 2406	-0.01	16.5	4869	-42.6
## 2407	-0.27	8.8	5159	-45.5
## 2408	-0.66	5.5	5223	-168.5
## 2409	-0.55	4.1	5076	-167.7
## 2410	-0.57	3.2	5442	-143.0
## 2411	-0.61	9.8	5043	-106.3
## 2412	-1.35	5.2	5375	-267.1
## 2413	-0.25	14.3	4928	-62.1
## 2414	-0.41	12.1	4920	-62.7
## 2415	-1.57	3.9	5784	-122.2
## 2416	-0.67	9.6	4985	-70.4
## 2417	-1.20	2.6	5629	-116.4
## 2418	0.02	15.5	4930	0.7
## 2419	-0.58	21.1	4873	-15.5
## 2420	-0.33	19.0	4753	-90.6
## 2421	-0.12	13.9	4864	-24.1
## 2422	-0.97	3.7	6449	-298.1
## 2423	-1.80	2.9	5297	-294.8
## 2424	-2.68	4.2	4997	-304.4
## 2425	-1.79	3.4	6442	-272.5
## 2426	-1.60	2.9	6166	-297.4
## 2427	-1.56	3.4	5064	-283.4
## 2428	-1.53	2.4	5114	-283.5
## 2429	-1.16	3.4	7328	-323.0
## 2430	-2.07	6.4	4845	-301.3
## 2431	-1.18	4.8	5682	-302.2
## 2432	-2.33	3.1	4975	-309.5
## 2433	-1.85	2.2	5278	-297.7
## 2434	0.04	2.1	6119	11.8
## 2435	-0.33	1.5	5401	11.7
## 2436	-2.70	4.3	5600	-302.2
## 2437	-2.54	2.8	5060	-305.0
## 2438	-1.97	4.8	5439	-289.6
## 2439	-2.32	7.3	5623	-286.4
## 2440	-2.83	5.8	4987	-288.3
## 2441	-2.02	4.4	6781	-300.6
## 2442	-1.87	4.2	7153	-208.2
## 2443	-1.74	3.2	6005	-268.1
## 2444	-1.18	3.4	6482	-318.5
## 2445	-1.73	3.3	6188	-290.1
## 2446	-0.82	3.7	6511	-299.5
## 2447	-1.87	2.3	5811	-278.9
## 2448	-1.21	4.1	6531	-193.1

##	2449	-2.51	2.7	4926	-190.2
##	2450	-1.91	5.8	5776	-173.0
##	2451	-0.97	4.0	6344	-169.9
##	2452	-0.16	7.0	6126	-79.7
##	2453	-1.01	4.4	5206	-77.8
##	2454	-0.69	10.8	5021	-16.8
##	2455	-0.28	4.7	4917	-17.0
##	2456	-1.62	3.1	5050	-208.1
##	2457	-0.29	6.1	5130	-85.1
##	2458	-0.87	3.0	4956	-200.8
##	2459	-0.58	2.3	5595	-199.9
##	2460	-0.02	8.2	5052	-19.6
##	2461	-0.11	6.5	5130	-19.4
##	2462	0.28	3.5	4944	-18.6
##	2463	0.13	2.8	4779	-19.1
##	2464	-2.30	2.2	4579	-93.8
##	2465	0.02	11.8	5104	-61.9
##	2466	-1.60	3.0	6185	-19.2
##	2467	-1.40	2.7	5134	-299.7
##	2468	0.06	10.6	4987	-45.9
##	2469	-1.20	2.9	6161	-33.5
##	2470	-0.40	9.6	4939	-196.8
##	2471	-1.93	3.9	5450	-126.7
##	2472	-0.97	1.3	5722	-114.4
##	2473	1.06	0.4	4828	-20.9
##	2474	1.19	1.2	6023	-21.9
##	2475	-0.74	3.9	5231	-210.8
##	2476	0.12	8.7	5199	-9.4
##	2477	0.35	2.5	5458	-174.4
##	2478	0.45	15.5	4990	-33.4
##	2479	0.49	9.6	5000	-33.2
##	2480	-1.12	3.2	5829	-376.9
##	2481	-0.60	3.1	5457	-217.0
##	2482	-0.15	1.7	5081	-156.4
##	2483	-0.57	17.3	4664	-4.1
##	2484	-0.95	7.4	5000	-127.8
##	2485	0.53	7.7	5273	-52.0
##	2486	-0.36	8.4	5037	-253.3
##	2487	-0.13	5.5	5082	-252.5
##	2488	-1.67	3.0	5650	-167.8
##	2489	-2.43	3.3	4872	-66.9
##	2490	0.51	14.9	4841	-50.5
##	2491	-0.29	3.7	5635	-161.3
##	2492	0.77	1.1	4950	-159.4
##	2493	-1.25	3.4	6424	-42.3
##	2494	-1.77	2.0	5045	-290.6
##	2495	-0.60	3.6	5229	-290.0
##	2496	-0.76	38.6	4393	-10.3
##	2497	-0.38	1.8	5787	-304.4
##	2498	-0.26	1.6	4978	-191.8
##	2499	-1.06	2.8	6110	-309.3
##	2500	0.23	14.3	4884	10.0
##	2501	0.11	25.6	4711	-59.1
##	2502	-0.41	1.1	4860	-193.7
##	2503	-0.19	20.3	4660	-13.5
##	2504	-1.83	3.3	5493	-227.3
##	2505	-0.46	25.7	4591	-54.6
##	2506	-0.15	5.9	5120	-84.6
##	2507	-1.27	3.3	6781	-137.7
##	2508	-0.61	3.5	5354	-144.1
##	2509	-1.58	2.6	5459	-354.5
##	2510	-0.74	2.9	5316	-124.7
##	2511	-1.80	2.4	4830	-121.8
##	2512	-0.17	3.7	5403	-322.1
##	2513	-1.64	4.9	5148	43.8
##	2514	-1.15	3.5	5761	-121.1
##	2515	-1.46	4.1	6006	-95.1
##	2516	-1.88	3.0	5097	-220.4
##	2517	-1.72	1.5	4762	-283.6
##	2518	0.09	15.6	5077	-43.7
##	2519	-0.33	19.0	4794	-76.2
##	2520	0.18	18.6	4919	-20.9
##	2521	-0.80	5.9	5320	-33.6
##	2522	0.03	1.5	4932	-34.9
##	2523	-0.47	1.1	5887	-302.8
##	2524	-1.54	2.6	5497	-292.5
##	2525	-1.06	2.0	5781	-290.7
##	2526	-2.59	4.2	4602	-280.3
##	2527	-2.56	4.1	4577	-283.2

## 2528	-1.07	1.7	5688	-303.6
## 2529	-1.95	1.8	5060	-305.9
## 2530	-1.41	1.2	4839	-281.7
## 2531	-2.26	2.7	4794	-285.1
## 2532	-1.73	2.4	5531	-287.8
## 2533	0.11	1.2	6523	-296.8
## 2534	-0.52	1.5	5549	-285.3
## 2535	0.71	0.8	5400	-293.9
## 2536	-0.78	1.7	5530	-276.9
## 2537	-1.06	2.3	5615	-278.3
## 2538	-1.38	1.8	5061	-302.9
## 2539	-0.93	2.1	5613	-302.9
## 2540	-1.72	2.3	4951	-291.1
## 2541	-1.14	2.3	5493	-291.6
## 2542	-1.33	2.5	5818	-303.0
## 2543	-1.54	1.6	4622	-296.2
## 2544	-2.19	2.8	4893	-288.7
## 2545	-1.88	3.9	4706	-280.1
## 2546	-2.60	3.4	5125	-289.0
## 2547	-1.71	2.9	5788	-309.9
## 2548	-1.54	3.6	5572	-92.5
## 2549	-1.22	5.2	4607	-87.8
## 2550	0.17	1.4	5173	-46.1
## 2551	-0.66	1.2	5303	-107.1
## 2552	-0.45	1.6	5232	-205.2
## 2553	-0.60	2.2	5589	-205.7
## 2554	-0.04	17.4	4683	-29.0
## 2555	-0.08	18.6	4717	-28.6
## 2556	-0.46	7.6	4998	-110.0
## 2557	-0.54	7.7	5012	-111.0
## 2558	0.18	17.7	4827	-23.6
## 2559	-0.01	6.3	4820	-72.7
## 2560	0.39	8.0	5083	-0.9
## 2561	-0.29	3.0	5103	-116.7
## 2562	-0.62	9.6	4820	-44.0
## 2563	-0.37	9.7	5086	-105.3
## 2564	0.01	14.2	4874	-23.1
## 2565	-1.42	2.7	5496	-246.4
## 2566	-1.19	4.7	5084	-310.9
## 2567	-0.41	3.7	5481	-76.1
## 2568	-0.82	2.9	5191	-68.4
## 2569	-0.52	9.6	4755	-12.6
## 2570	-0.33	9.3	4903	-26.7
## 2571	-0.60	4.5	5085	-240.6
## 2572	-1.07	2.1	4902	-104.0
## 2573	-0.27	3.1	5321	-134.7
## 2574	-0.10	2.2	4995	-135.2
## 2575	0.53	0.7	4623	-138.7
## 2576	-0.12	8.6	5043	-40.8
## 2577	-0.39	2.3	5148	-86.7
## 2578	-0.13	15.2	4873	-12.9
## 2579	0.54	0.8	5224	-246.4
## 2580	0.22	6.5	4944	-36.9
## 2581	-0.41	3.3	5021	-82.3
## 2582	-0.35	1.1	5034	-71.5
## 2583	-1.68	2.1	4734	-95.2
## 2584	0.05	3.3	5205	15.0
## 2585	-0.10	0.9	4936	-93.3
## 2586	-0.40	3.2	5108	-147.8
## 2587	-0.01	4.5	5073	-36.6
## 2588	-0.26	4.2	5222	0.4
## 2589	-0.40	5.6	5188	-35.2
## 2590	-0.14	0.9	5137	-386.1
## 2591	-1.99	2.1	4893	-303.0
## 2592	-1.26	3.0	5646	-326.9
## 2593	-0.25	2.1	6048	-326.8
## 2594	-1.44	2.7	5719	43.0
## 2595	-0.12	15.7	4876	-9.0
## 2596	0.03	11.1	4937	-8.9
## 2597	-1.16	2.2	5566	-150.3
## 2598	-1.04	2.4	5692	-150.4
## 2599	-0.84	11.6	4986	39.0
## 2600	-0.60	8.8	4957	37.3
## 2601	-1.47	2.3	5497	-221.9
## 2602	-0.51	7.7	4908	-57.0
## 2603	-0.80	5.1	4718	-56.5
## 2604	-0.12	3.8	5398	-118.1
## 2605	-0.58	3.7	5192	-119.8
## 2606	-0.22	29.1	4618	-21.8

## 2607	-0.33	19.7	4578	-22.0
## 2608	-0.27	1.8	5554	-126.7
## 2609	-1.03	1.6	5210	-130.9
## 2610	-0.18	2.8	5078	-34.8
## 2611	-1.08	2.6	5204	-34.4
## 2612	0.23	1.5	5392	-317.8
## 2613	-1.30	2.0	4952	-317.1
## 2614	-1.48	1.2	4863	-133.0
## 2615	-0.50	2.6	5186	-121.8
## 2616	-1.16	2.9	4971	-121.9
## 2617	-0.18	15.4	4741	-20.2
## 2618	-0.11	15.8	4658	-19.9
## 2619	0.55	0.8	6034	-131.3
## 2620	0.06	0.6	4655	-349.5
## 2621	-0.37	6.3	4839	-109.8
## 2622	-0.42	6.0	4734	-109.9
## 2623	0.78	1.2	5200	-18.8
## 2624	-0.11	1.8	5213	-21.5
## 2625	-0.22	9.7	4748	-35.7
## 2626	-0.30	8.1	4720	-36.0
## 2627	1.13	0.9	4814	-24.9
## 2628	-0.57	1.4	4819	-21.5
## 2629	0.03	0.8	5152	-237.1
## 2630	-0.19	1.6	6047	-241.8
## 2631	0.22	13.2	4928	-21.2
## 2632	0.19	10.2	4851	-20.3
## 2633	-0.42	16.7	4612	-58.4
## 2634	-0.39	13.5	4561	-58.2
## 2635	0.23	6.5	5066	-43.9
## 2636	0.18	5.0	5040	-43.6
## 2637	-0.87	2.0	5926	-55.3
## 2638	-0.69	1.0	5307	-55.1
## 2639	0.10	6.7	5208	-44.4
## 2640	0.11	4.9	5125	-44.7
## 2641	-0.25	12.2	4820	-86.8
## 2642	-0.24	9.6	4775	-87.1
## 2643	-0.77	1.5	5635	-123.0
## 2644	-0.99	1.5	5248	-116.7
## 2645	0.29	12.7	4941	-26.5
## 2646	0.29	9.5	4901	-26.7
## 2647	0.14	1.5	5198	-117.3
## 2648	-1.03	1.2	4857	-116.8
## 2649	0.07	1.3	5197	-96.4
## 2650	0.47	1.2	5229	-93.9
## 2651	-0.21	1.9	5535	-84.6
## 2652	-0.63	1.0	5194	-85.5
## 2653	-0.07	27.3	4683	-11.4
## 2654	-0.10	19.9	4647	-11.1
## 2655	-0.03	3.0	5334	-73.2
## 2656	0.13	1.9	5015	-73.8
## 2657	-1.72	1.8	5103	-9.9
## 2658	-0.74	1.8	5895	-101.3
## 2659	-1.38	2.0	5100	-292.7
## 2660	-1.80	1.2	4901	-291.9
## 2661	-0.03	1.6	5359	-219.5
## 2662	0.12	7.7	5030	-12.0
## 2663	0.25	5.2	4971	-12.0
## 2664	-0.13	4.9	5319	-207.8
## 2665	-0.14	2.8	5020	-208.3
## 2666	-0.51	1.6	5319	-171.6
## 2667	0.35	0.6	4664	-172.5
## 2668	0.35	3.2	5103	-91.0
## 2669	0.48	2.0	5220	-89.8
## 2670	-0.66	2.7	4717	-133.9
## 2671	-0.55	2.8	5138	-135.2
## 2672	1.03	0.5	4645	-238.0
## 2673	-0.14	1.7	5066	-173.3
## 2674	-0.25	1.4	5131	-172.8
## 2675	-2.12	2.6	5180	-41.3
## 2676	-1.70	2.1	5312	-41.3
## 2677	-0.23	15.9	4938	13.1
## 2678	0.05	9.1	4844	13.8
## 2679	-0.34	9.5	4793	-107.2
## 2680	-0.21	8.9	4868	-106.9
## 2681	-0.16	4.2	5021	-10.4
## 2682	-0.04	4.6	5105	-9.3
## 2683	-1.63	1.7	4644	12.9
## 2684	-1.52	2.4	5080	-12.7
## 2685	0.17	15.1	4807	-36.7

## 2686	0.19	15.1	4796	-36.6
## 2687	0.17	10.7	5039	-7.3
## 2688	0.19	10.1	5040	-7.1
## 2689	0.29	13.1	4763	-46.5
## 2690	0.26	13.9	4766	-46.4
## 2691	0.00	11.7	4774	-65.8
## 2692	0.06	12.2	4760	-66.0
## 2693	-1.61	1.9	5843	-342.7
## 2694	0.16	14.6	4776	4.5
## 2695	0.16	14.6	4776	4.2
## 2696	0.58	0.5	4677	-101.0
## 2697	0.02	4.3	4899	-42.0
## 2698	0.02	4.7	5061	-40.6
## 2699	-0.09	25.1	4695	-28.6
## 2700	-0.11	22.7	4707	-29.3
## 2701	-0.12	2.2	5298	-107.9
## 2702	-0.12	1.7	4846	-105.5
## 2703	0.07	2.8	4967	-172.0
## 2704	0.31	2.2	4964	-170.4
## 2705	-0.39	9.5	4827	-5.1
## 2706	-0.41	8.2	4845	-5.1
## 2707	0.09	2.3	5253	-147.8
## 2708	0.33	1.0	5028	-146.4
## 2709	-0.01	4.6	5262	-63.7
## 2710	0.54	2.0	5141	-63.9
## 2711	-0.47	1.9	4657	-17.3
## 2712	-0.14	10.1	4851	9.2
## 2713	0.09	5.0	4944	9.7
## 2714	-0.80	2.0	5131	-263.3
## 2715	-0.77	2.8	5390	-215.9
## 2716	0.24	1.4	5526	-215.8
## 2717	-0.43	5.3	5117	5.6
## 2718	0.18	2.3	5024	3.6
## 2719	-0.80	2.8	6264	-301.4
## 2720	-0.37	3.6	5283	-56.6
## 2721	0.10	2.7	5167	-57.8
## 2722	-1.33	5.5	5673	-262.3
## 2723	-1.39	1.9	4705	-264.0
## 2724	-0.31	17.8	4724	13.7
## 2725	-1.34	2.3	5113	-154.8
## 2726	-0.97	3.0	4913	-128.2
## 2727	-0.63	11.3	4836	-40.8
## 2728	-0.64	5.4	5334	-63.0
## 2729	-2.13	5.7	5845	-290.3
## 2730	-0.78	5.3	4992	-64.9
## 2731	0.13	2.3	5184	-186.1
## 2732	-0.52	4.8	5110	-66.9
## 2733	-1.78	3.2	5483	-193.1
## 2734	0.04	4.9	5186	-75.8
## 2735	-0.23	2.5	5230	-60.0
## 2736	-0.90	2.7	5334	-173.0
## 2737	-0.97	2.0	5689	-286.0
## 2738	0.30	1.5	5533	-118.7
## 2739	-2.32	2.3	4997	-285.1
## 2740	-1.94	1.9	5211	-259.4
## 2741	-0.12	9.1	5043	-14.3
## 2742	-1.57	2.6	4998	-143.3
## 2743	-1.69	2.6	5198	-152.3
## 2744	0.12	7.0	5136	-66.8
## 2745	-0.28	3.9	5146	-2.2
## 2746	-0.04	8.0	4972	-13.0
## 2747	-0.32	1.5	5055	-84.2
## 2748	-0.07	8.5	4777	-60.7
## 2749	-0.34	0.7	4592	-105.0
## 2750	-0.18	1.4	5857	-115.1
## 2751	-0.24	1.1	4752	-151.3
## 2752	0.10	15.3	4836	-51.8
## 2753	-0.37	0.9	4672	-333.6
## 2754	-0.12	7.6	5053	-60.1
## 2755	-1.21	1.6	5531	-192.4
## 2756	-0.54	6.1	5105	-48.0
## 2757	-0.04	23.5	4731	-1.3
## 2758	0.54	0.5	4885	-211.1
## 2759	0.38	8.1	5250	-48.1
## 2760	-1.18	1.8	4716	-119.3
## 2761	-0.02	31.8	4748	-14.8
## 2762	-0.52	14.7	4863	8.6
## 2763	-0.37	3.6	4983	-32.8
## 2764	-0.45	1.6	5706	-48.3

## 2765	-0.38	12.6	4964	-72.0
## 2766	-0.06	21.1	4757	-75.5
## 2767	-0.78	4.1	5094	-101.8
## 2768	-1.76	4.5	5259	-141.3
## 2769	-0.80	3.0	5773	-154.0
## 2770	-1.50	2.5	5125	-107.1
## 2771	-2.03	2.9	5006	-324.2
## 2772	-0.58	3.9	5071	-121.1
## 2773	-1.01	3.2	6134	-140.9
## 2774	-0.42	18.4	4628	-5.3
## 2775	-1.34	3.5	5119	-204.4
## 2776	-0.89	3.3	5179	3.4
## 2777	-0.82	8.9	5086	-75.5
## 2778	1.08	0.5	4598	-148.0

Perform a PCA analysis of these data, following the steps that you undertook above. Act as though you are making a presentation to a client, i.e., show a plot or two, and explain the reason(s) that you come to the conclusions that you come to. Also, be sure to interpret the PCs that you retain! (Not all of them...just the ones you choose to retain.) By interpret, I really mean, indicate which variables contribute the most to the PCs...you cannot really say *why* these variables contribute to the PCs, because to do that you'd need to be a domain scientist.