



B O N N E V I L L E P O W E R A D M I N I S T R A T I O N

WORKSHEET EXPLANATION AND DOCUMENTATION

The purpose of this spreadsheet is to provide clarification and understanding to the statistical separation of those variables contributing to some aggregate variation. Specifically, this method is being put forth as one possible means of taking those variable that contribute to the need for various reserve requirements and allocate the reserve requirement based on the those sources that are driving the need for specific types of reserves (e.g. imbalance, regulation, load following, etc.).

/Example 1

This worksheet walks through the calculation methods presented in the June 9, 2008 Customer Workshop. The example explores the interaction in a two variable environment.

/Example 2

This worksheet performs the same calculations as in Example 1 but with seven variables. Additionally, data are provided to help give the example a more "hands on" feel.

/Citations

For more information on the calculations put forth, Philippe Jorion's "Value at Risk," Third Edition is a good resource. Specifically, chapter 7, sections 7.1 through 7.2.3.

Questions/Comments?

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B O N N E V I L L E P O W E R A D M I N I S T R A T I O N

/NOTES

THE FOLLOWING EXAMPLE IS INTENDED TO EXPLAIN AND DEMONSTRATE THE CALCULATION OF AN AGGREGATE STANDARD DEVIATION WHILE CONSIDERING THE EFFECTS OF CORRELATION.

ADDITIONALLY, THE EXAMPLE ATTEMPTS TO EXPLAIN AND DEMONSTRATE THE CALCULATION FOR ASSIGNING CAUSE TO THOSE ELEMENTS THAT COMPRISING THE AGGREGATE STANDARD DEVIATION SUCH THAT THE SUM OF THE COMPONENTS EQUALS THE TOTAL STANDARD DEVIATION. THIS CALCULATION IS ALSO PERFORMED WHILE CONSIDERING THE EFFECTS OF CORRELATION.

ALTHOUGH ONLY TWO ELEMENTS ARE CONSIDERED IN THE FOLLOWING EXAMPLE, ANY NUMBER OF ELEMENTS MAY BE USED.

UNDERLINED VALUES ARE INPUT VALUES FOR PURPOSES OF THIS EXAMPLE.

/EXAMPLE

- 1) ASSUME THE FOLLOWING CORRELATION MATRIX BETWEEN TWO VARIABLES: ELEMENT 1 AND ELEMENT 2.

/CORRELATION MATRIX (R)

	Element1	Element2
Element1	1.000	0.900
Element2	<u>0.900</u>	1.000

- 2) ASSUME THE FOLLOWING STANDARD DEVIATION VALUES FOR ELEMENT 1 AND ELEMENT 2.

/STANDARD DEVIATION (s)

Element1	Element2
<u>10.00</u>	<u>8.00</u>

- 3) GIVEN THE CORRELATION MATRIX AND STANDARD DEVIATION VALUES, THE AGGREGATE OR TOTAL STANDARD DEVIATION CONSIDERING THE IMPACTS OF CORRELATION ARE CALCULATED.

/TOTAL STANDARD DEVIATION (sp)

Total  
17.550

- 4) GIVEN THE CORRELATION MATRIX, THE STANDARD DEVIATIONS OF THE INDIVIDUAL ELEMENTS, AND THE TOTAL STANDARD DEVIATION, CALCULATE THE INCREMENTAL STANDARD DEVIATION.

THE INCREMENTAL STANDARD DEVIATION IS THE AMOUNT OF CONTRIBUTION EACH ELEMENT MAKES TO THE TOTAL STANDARD DEVIATION PER UNIT OF EACH ELEMENT'S INDIVIDUAL STANDARD DEVIATION.

FOR EXAMPLE, FOR EACH UNIT OF ELEMENT 1'S STANDARD DEVIATION 0.980 UNITS ARE CONTRIBUTING TO THE TOTAL STANDARD DEVIATION OF 17.550.

/INCREMENTAL STANDARD DEVIATION (sinc)

Element1	Element2
0.980	0.969

- 5) GIVEN THE INDIVIDUAL ELEMENT'S STANDARD DEVIATIONS AND THE CALCULATED INCREMENTAL STANDARD DEVIATIONS OF EACH ELEMENT, THE MARGINAL STANDARD DEVIATION IS CALCULATED.

THE MARGINAL STANDARD DEVIATION IS THE TOTAL CONTRIBUTION EACH ELEMENT MAKES TO THE TOTAL STANDARD DEVIATION.

THE SUM OF THE MARGINAL STANDARD DEVIATIONS EQUALS THE TOTAL STANDARD DEVIATION.

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/MARGINAL STANDARD DEVIATION (smarg)
      Element1 Element2
      9.801    7.749
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- 6) EVEN THOUGH THE ACTUAL DATA ARE NOT NORMALLY DISTRIBUTED, THESE CALCULATIONS ARE STILL VALID. ONE ONLY NEEDS TO CALCULATE FROM THE EMPIRICAL DISTRIBUTION THE NUMBER OF STANDARD DEVIATIONS REQUIRED TO ACHIEVE A GIVEN EXCEEDANCE PROBABILITY.

FOR EXAMPLE, WITH A NORMAL DISTRIBUTION THE NUMBER OF STANDARD DEVIATIONS REQUIRED TO ACHIEVE A 95% EXCEEDANCE PROBABILITY IS 1.645. IF THE DATA BEHIND THIS EXAMPLE ARE NORMAL, AT A 95% EXCEEDANCE PROBABILITY ELEMENT 1 CONTRIBUTES  $1.645 * 9.801$  TO THE TOTAL P95 OF  $1.645 * 17.55$ .

FOR NON-NORMAL DISTRIBUTIONS, ONE NEED ONLY TAKE THE EMPIRICALLY CALCULATED P95 AND DIVIDE THAT VALUE BY THE ABOVE CALCULATED TOTAL STANDARD DEVIATION IN ORDER TO ARRIVE AT THE NUMBER OF STANDARD DEVIATIONS REQUIRED TO ACHIEVE THE GIVEN EXCEEDANCE PROBABILITY.

FOR EXAMPLE, IF THE EMPIRICALLY CALCULATED P95 IS 61.425, THEN THE NUMBER OF STANDARD DEVIATIONS REQUIRED TO ACHIEVE A P95 EXCEEDANCE PROBABILITY IS  $61.425 / 17.55$ . THUS 3.500 IS SUBSTITUTED IN FOR THE 1.645 AND THE MARGINAL STANDARD DEVIATIONS ARE USED



B O N N E V I L L E P O W E R A D M I N I S T R A T I O N

CORRELATION								
	Element1	Element2	Element3	Element4	Element5	Element6	Element7	
Element1	-0.018	1.000	0.006	0.222	-0.547	-0.784	-0.051	
Element2	0.229	0.006	1.000	-0.065	0.043	0.055	-0.571	
Element3	0.008	0.222	-0.065	1.000	-0.286	-0.327	-0.062	
Element4	0.251	-0.547	0.043	-0.286	1.000	0.598	-0.057	
Element5	0.006	-0.784	0.055	-0.327	0.598	1.000	0.009	
Element6	-0.277	-0.051	-0.571	-0.062	-0.057	0.009	1.000	
Element7	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
STANDARD DEVIATION								TOTAL
	96.613	74.493	7.335	48.056	34.302	75.529	8.181	123.512
INCREMENTAL STANDARD DEVIATION								CALC
	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
MARGINAL STANDARD DEVIATION								CHECK
	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
MARGINAL STANDARD P95								P95
	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	257.926
								CHECK
								#REF!
Obs	Element1	Element2	Element3	Element4	Element5	Element6	Element7	Total
1	32.74	6.66	-0.54	17.94	-18.91	3.86	0.54	42.29
2	33.58	6.90	-0.66	19.59	-14.58	4.99	0.66	50.49
3	33.46	6.49	-0.45	9.37	-12.21	0.22	0.45	37.33
4	32.21	6.76	-0.34	21.98	-7.95	-0.14	0.34	52.87
5	29.87	7.43	-0.54	10.68	-3.22	1.11	0.54	45.88
6	29.55	6.62	-0.37	15.81	0.24	0.54	0.37	52.77
7	29.90	7.75	-0.42	4.66	8.85	1.29	0.42	52.45
8	30.42	7.85	-0.01	1.96	10.62	1.82	-0.37	52.30
9	29.64	8.89	-0.18	8.47	12.78	1.10	-0.70	60.00
10	10.74	23.17	0.16	71.11	3.85	-94.04	0.72	15.71
11	9.84	23.67	-0.45	73.45	2.98	-85.30	0.45	24.64
12	9.46	22.96	-0.61	42.35	2.58	-76.34	0.61	1.02
13	10.32	18.71	-0.13	42.68	2.26	-65.71	0.13	8.26
14	9.74	17.14	-0.10	28.91	1.67	-54.43	0.10	3.04
15	8.85	17.02	-0.36	12.66	1.98	-44.64	0.24	-4.25
16	9.29	15.28	-1.34	10.25	1.84	-38.20	0.34	-2.54
17	9.88	12.83	-1.76	-8.41	1.66	-29.54	0.76	-14.57
18	9.77	11.97	-1.49	-19.56	1.44	-22.18	0.49	-19.56
19	9.66	10.83	-1.16	-33.97	1.21	-15.70	0.16	-28.97
20	9.93	8.56	-0.91	-41.23	-0.31	-9.10	-0.22	-33.27
21	8.09	6.08	-1.88	-43.02	-0.97	-7.70	-0.12	-39.52
22	7.55	6.89	-2.05	-10.64	-0.55	-5.60	0.05	-4.35
23	7.17	7.71	-2.25	6.35	0.03	-11.35	-0.50	7.16
24	7.13	7.03	-2.25	-34.72	0.03	-14.93	0.00	-37.70
25	7.61	6.99	-2.15	-29.05	0.77	-13.78	0.15	-29.47
26	7.55	7.11	-2.01	10.82	0.37	-15.77	0.01	8.07
27	7.82	8.45	-2.38	40.96	0.18	-18.95	-0.79	35.29
28	7.97	8.01	-2.87	52.32	0.91	-19.86	-0.71	45.75
29	7.77	7.22	-2.00	48.39	1.15	-19.57	0.00	42.95
30	7.58	7.58	-2.10	55.08	1.75	-19.52	0.10	50.48
31	8.02	7.41	-1.97	52.35	1.19	-20.81	-0.03	46.16
32	7.70	8.21	-1.54	46.58	1.01	-20.37	-0.46	41.12
33	7.66	7.41	-2.08	56.56	0.97	-18.66	-0.88	50.98
34	7.97	7.09	-1.74	40.73	0.33	-16.05	-0.46	37.86
35	8.01	7.42	-1.89	49.95	-0.13	-15.27	-0.11	47.97
36	8.16	7.08	-1.96	38.59	-0.16	-13.68	-0.04	37.99
37	8.22	7.97	-2.64	7.22	-0.38	-15.80	0.64	5.22
38	8.92	7.77	-2.59	-3.80	-0.97	-16.94	0.59	-7.01

39	8.95	7.30	-2.48	18.29	-1.24	-18.47	-0.48	11.88
40	8.90	8.01	-2.28	20.90	-1.90	-14.60	-0.43	18.61
41	8.86	8.70	-1.83	19.48	-1.90	-14.28	-0.17	18.86
42	8.94	7.71	-2.19	31.78	-2.94	-15.80	0.19	27.70
43	8.99	6.47	-2.05	33.68	-2.91	-14.57	0.05	29.66
44	8.97	7.79	-2.06	39.53	-2.97	-15.87	0.06	35.45
45	8.97	7.11	-1.92	31.35	-2.97	-18.00	-0.08	24.45
46	8.67	6.46	-1.80	25.48	-2.26	-18.09	-0.20	18.27
47	8.81	5.78	-2.18	22.47	-2.72	-16.70	-0.28	15.18
48	8.97	5.73	-2.57	25.83	-2.56	-13.84	-0.43	21.15
49	9.57	6.14	-1.93	62.15	-1.87	-12.62	-0.11	61.34
50	9.16	7.45	-2.11	95.69	-1.95	-8.00	-0.30	99.93
51	8.78	6.33	-2.24	81.03	-1.91	-5.77	-0.26	85.96
52	8.76	6.85	-1.99	61.28	-1.97	-4.77	-0.01	68.16
53	9.19	7.11	-2.53	61.67	-1.90	-3.61	0.53	70.46
54	8.31	7.07	-2.60	56.75	-0.77	-6.92	0.60	62.44
55	7.66	6.51	-2.66	54.35	0.01	-7.61	0.66	58.91
56	7.26	6.76	-2.27	64.20	-0.05	-7.32	0.27	68.85
57	7.02	6.95	-1.94	78.84	1.18	-7.80	-0.06	84.20
58	7.31	6.36	-2.07	72.48	1.69	-8.07	0.07	77.78
59	7.03	7.69	-1.97	79.61	2.51	-10.25	-0.03	84.59
60	7.82	7.23	-1.40	81.57	4.34	-11.63	-0.60	87.34
61	8.66	7.55	-1.54	77.50	5.34	-11.88	-0.96	84.66
62	9.11	5.73	-1.64	77.93	6.06	-12.48	-0.91	83.80
63	9.70	6.05	-1.69	63.53	6.09	-11.38	-0.36	71.95
64	8.80	5.52	-1.82	48.70	6.51	-12.57	-0.18	54.96
65	8.32	4.08	-1.69	40.35	5.54	-8.37	-0.31	47.92
66	8.35	3.31	-1.57	44.62	5.63	-8.37	-0.43	51.53
67	8.60	3.89	-1.51	35.62	4.59	-11.95	-0.49	38.75
68	9.58	3.20	-1.68	37.51	3.30	-11.61	-0.32	39.97
69	8.77	0.54	-2.91	35.46	3.23	-13.34	0.91	32.67
70	33.45	26.69	6.75	63.85	-0.80	-73.57	-8.75	47.62
71	34.93	23.30	6.07	49.03	-1.26	-67.26	-8.07	36.73
72	37.33	21.10	5.23	28.68	-1.01	-53.65	-7.23	30.45
73	38.02	19.83	4.92	28.12	-1.17	-36.87	-6.67	46.19
74	40.46	19.37	4.29	-10.15	-0.92	-26.08	-5.66	21.31
75	42.73	18.02	3.37	10.22	-1.52	-23.31	-4.37	45.14
76	45.30	17.77	2.52	33.89	-2.42	-23.02	-3.52	70.52
77	44.98	16.18	1.51	47.66	-2.65	-26.85	-2.47	78.36
78	48.36	13.55	1.17	43.83	-2.36	-24.17	-0.54	79.83
79	49.49	12.14	0.35	31.94	-2.37	-20.22	0.48	71.81
80	51.70	10.33	-0.01	30.19	-2.26	-10.70	1.01	80.25
81	49.25	11.33	-0.47	21.47	0.10	-9.92	0.68	72.45
82	48.65	11.46	-0.46	34.58	2.26	-6.25	0.84	91.08
83	48.47	10.53	-0.20	45.82	4.66	-5.62	1.20	104.86
84	48.77	15.25	-0.24	26.78	5.90	-31.96	1.24	65.74
85	49.16	11.69	-0.32	-2.83	6.55	-46.28	1.24	19.22
86	49.57	10.74	-0.18	-10.58	6.35	-42.83	1.06	14.12
87	49.67	10.81	-0.82	-18.44	6.33	-35.88	0.91	12.58
88	49.28	11.65	-1.20	-21.14	6.51	-31.09	0.74	14.75
89	49.80	11.79	-0.48	-4.04	7.08	-25.25	-0.52	38.37
90	49.40	10.64	-0.81	4.88	7.72	-27.66	-0.19	43.99
91	49.75	10.57	-1.05	-1.53	8.26	-29.68	0.05	36.36
92	49.48	12.18	-1.15	5.12	9.35	-32.14	0.15	42.99
93	49.66	11.03	-0.64	27.71	10.21	-48.45	-0.36	49.17
94	49.55	11.43	-0.93	8.16	11.16	-51.35	-0.07	27.95
95	49.65	11.52	-1.17	7.00	12.31	-51.23	0.17	28.25
96	49.41	12.19	-1.01	4.73	13.26	-53.94	0.01	24.65
97	49.43	11.69	-0.27	17.47	13.99	-52.94	-0.73	38.63
98	49.70	11.36	-0.68	30.05	14.59	-55.61	-0.32	49.09
99	50.03	10.52	-0.93	62.87	15.06	-57.89	-0.07	79.58
100	49.80	10.23	-0.87	70.24	15.41	-57.90	-0.13	86.78
101	49.49	11.26	-0.92	41.57	16.06	-58.63	-0.08	58.73
102	49.48	10.57	-0.99	33.63	16.48	-54.28	-0.01	54.88
103	49.44	10.06	-1.15	28.32	16.36	-53.98	0.15	49.19
104	49.61	10.49	-0.88	33.22	17.06	-51.99	0.22	57.72
105	49.78	10.47	-1.21	47.11	18.26	-53.72	0.21	70.90
106	49.80	10.22	-0.67	49.68	19.75	-55.80	1.04	74.02
107	49.89	10.76	0.27	29.42	21.07	-58.13	1.73	55.00
108	48.89	10.58	-0.12	38.89	21.28	-59.58	1.21	61.14

109	49.05	9.66	-0.97	38.65	21.46	-55.20	0.84	63.48
110	48.54	11.01	0.15	43.74	20.59	-53.68	1.23	71.57
111	48.56	10.09	-0.29	57.56	19.40	-55.18	1.25	81.39
112	49.05	10.73	0.25	44.78	16.29	-53.85	1.42	68.66
113	48.86	9.06	-1.11	47.03	14.72	-52.06	0.73	67.24
114	48.50	9.82	-0.31	53.71	13.50	-49.78	0.89	76.33
115	48.18	12.51	-0.13	42.29	12.11	-51.84	1.09	64.21
116	47.09	12.10	-0.85	52.26	11.04	-59.62	0.56	62.57
117	47.46	12.49	-0.77	53.21	10.08	-62.91	0.69	60.25
118	47.22	12.12	-0.63	54.86	9.66	-63.43	1.00	60.80
119	47.42	11.57	-0.92	53.49	9.06	-62.05	0.59	59.16
120	48.17	11.77	-0.66	54.44	7.26	-59.56	0.62	62.05
121	49.71	10.55	-0.56	55.30	4.80	-53.33	0.56	67.03
122	50.11	10.46	-0.43	42.39	2.54	-45.92	0.43	59.58
123	49.51	9.29	-0.80	36.02	0.03	-43.21	0.30	51.14
124	49.50	7.12	-0.16	35.43	-1.71	-36.57	0.16	53.76
125	49.51	6.69	-0.11	28.23	-2.97	-33.86	0.11	47.60
126	49.89	4.31	-0.28	29.33	-3.48	-32.23	0.12	47.67
127	50.19	2.76	-0.06	30.22	-3.39	-27.96	-0.10	51.64
128	50.40	1.55	0.04	39.00	-4.02	-25.32	-0.04	61.61
129	50.40	-0.36	-0.08	26.80	-4.36	-20.91	-0.21	51.28
130	-69.93	4.58	1.21	47.64	12.76	-65.50	-1.63	-70.86
131	-71.67	3.72	-0.21	51.17	15.30	-66.80	-1.50	-69.99
132	-73.00	4.65	0.03	44.12	17.83	-61.07	-0.65	-68.09
133	-73.45	6.19	0.08	38.62	22.37	-58.77	0.79	-64.17
134	-75.14	7.31	-0.56	14.25	24.22	-59.31	1.56	-87.66
135	-76.74	7.86	0.23	10.71	22.82	-55.69	0.77	-90.04
136	-78.59	8.41	1.00	3.32	22.76	-47.91	0.00	-91.01
137	-79.99	9.10	1.05	-9.09	26.33	-35.35	-0.05	-88.00
138	-81.21	10.00	0.73	-33.91	28.59	-24.35	0.27	-99.89
139	-81.68	10.47	1.03	-14.52	32.10	-21.08	-0.03	-73.72
140	-84.58	11.27	0.75	11.23	32.78	-16.19	0.00	-44.73
141	-86.82	11.15	-1.24	18.99	29.57	-16.65	0.24	-44.76
142	-87.18	10.40	-1.68	-16.59	23.68	-19.60	0.68	-90.28
143	-86.97	9.55	-1.65	-5.16	17.80	-17.06	0.65	-82.84
144	-86.08	10.36	-1.23	29.52	10.16	-17.52	0.23	-54.56
145	-86.45	10.36	-1.43	0.46	6.49	-16.82	0.43	-86.96
146	-85.99	11.84	-1.45	-15.15	5.03	-18.69	2.20	-102.20
147	-86.78	10.78	-1.96	-11.86	1.20	-23.53	1.92	-110.23
148	-85.94	9.61	-2.30	-7.33	-1.77	-23.64	1.34	-110.03
149	-85.88	11.21	-2.19	-12.97	-5.29	-21.77	1.36	-115.53
150	-85.69	10.67	-1.65	-2.97	-6.64	-16.99	0.65	-102.62
151	-85.13	9.51	-1.73	-17.82	-9.94	-19.68	0.73	-124.06
152	-85.19	5.70	-1.95	-12.06	-12.62	-20.07	0.95	-125.24
153	-84.98	3.80	-2.03	-9.66	-14.17	-18.35	1.03	-124.36
154	-85.96	0.06	-1.77	6.44	-14.81	-16.48	0.77	-111.74
155	-84.57	-2.37	-1.73	1.38	-16.14	-13.42	0.73	-116.12
156	-85.08	-4.25	-2.22	-12.56	-19.17	-16.55	1.22	-138.61
157	-84.75	-4.37	-2.32	0.54	-23.07	-21.84	1.36	-134.44
158	-84.95	-5.13	-1.80	0.80	-24.36	-23.89	1.80	-137.53
159	-84.89	-5.26	-1.74	1.63	-26.57	-24.22	1.74	-139.31
160	-84.81	-4.08	-1.73	0.59	-30.11	-22.59	1.61	-141.11
161	-84.98	-5.18	-2.27	9.44	-32.08	-18.24	1.44	-131.87
162	-84.80	-3.93	-2.02	10.33	-34.35	-16.86	1.10	-130.53
163	-83.44	-3.91	-1.88	13.40	-36.47	-19.15	0.88	-130.58
164	-84.01	-4.39	-1.98	13.77	-36.70	-17.09	0.98	-129.42
165	-82.82	-3.27	-1.94	24.24	-35.91	-16.31	0.94	-115.07
166	-83.74	-5.07	-2.31	18.30	-38.41	-17.14	1.31	-127.05
167	-83.74	-3.95	-1.71	23.87	-37.67	-16.80	0.71	-119.30
168	-84.19	-3.60	-1.38	85.09	-39.10	-16.65	0.38	-59.46
169	-84.58	-4.66	-0.97	99.09	-38.04	-13.04	-0.03	-42.25
170	-83.82	-4.44	-1.27	100.90	-39.52	-7.61	0.27	-35.47
171	-83.13	-4.85	-1.79	103.86	-41.52	-4.96	0.79	-31.60
172	-83.70	-3.18	-1.71	105.50	-42.48	-3.50	0.71	-28.37
173	-83.72	-4.21	-1.68	110.42	-42.53	0.10	0.68	-20.93
174	-83.25	-3.64	-1.66	100.96	-43.67	-0.84	0.66	-31.43
175	-82.50	-3.77	-1.60	110.44	-44.58	0.27	0.60	-21.15
176	-82.79	-3.58	-1.67	107.11	-42.71	-0.81	0.67	-23.78
177	-82.60	-3.92	-1.79	111.69	-44.62	-3.10	0.79	-23.57
178	-82.93	-4.29	-1.76	99.99	-46.13	-2.75	0.76	-37.11

179	-83.42	-3.70	-1.72	91.74	-47.33	-3.43	0.72	-47.13
180	-83.75	-3.80	-2.14	105.48	-47.08	-1.53	1.14	-31.69
181	-82.89	-3.92	-1.90	87.20	-43.27	-2.45	0.90	-46.34
182	-82.84	-3.90	-1.69	56.39	-40.11	-3.48	0.69	-74.94
183	-81.85	-4.94	-1.77	42.66	-37.50	-2.97	0.77	-85.60
184	-82.44	-4.38	-1.55	35.27	-35.92	-1.40	0.55	-89.87
185	-83.57	-5.07	-0.90	38.14	-31.43	3.59	-0.10	-79.34
186	-83.57	-6.54	-0.98	31.20	-25.84	3.92	-0.02	-81.84
187	-82.29	-5.48	-0.40	21.53	-21.29	2.90	-0.60	-85.64
188	-83.40	-6.90	-0.30	28.95	-19.10	1.27	-0.70	-80.17
189	-84.27	-7.42	-0.45	11.51	-16.73	1.60	-0.55	-96.31
190	-1.39	13.63	5.81	53.13	-0.48	-47.42	-0.94	22.34
191	-0.47	14.57	4.81	46.04	-0.53	-50.23	-0.81	13.38
192	-0.42	15.19	4.44	33.05	-0.58	-60.15	-0.44	-8.92
193	-0.37	16.35	4.77	22.27	-0.63	-70.85	-0.77	-29.23
194	-0.33	15.22	4.21	14.39	-0.67	-69.45	-0.21	-36.84
195	-0.28	14.90	4.50	1.70	-0.72	-62.25	0.42	-41.74
196	-0.23	14.69	3.37	-13.11	-0.77	-56.19	0.63	-51.61
197	-0.18	15.43	3.15	-18.19	-0.82	-47.31	0.85	-47.07
198	-0.13	16.68	2.90	-24.90	-0.87	-42.10	1.10	-47.32
199	-0.09	16.63	2.94	-26.45	-0.91	-32.13	1.14	-38.87
200	-0.04	16.49	2.97	-44.22	-0.96	-24.39	1.24	-48.91
201	-0.04	14.22	2.24	-41.07	-0.96	-22.78	0.76	-47.64
202	-0.04	14.45	2.21	23.42	-0.96	-21.87	0.79	18.00
203	-0.04	13.98	2.30	20.38	-0.96	-23.05	0.87	13.48
204	-0.04	14.16	2.11	24.93	-0.96	-22.30	0.89	18.78
205	-0.04	15.33	2.38	39.51	-0.96	-20.69	0.62	36.15
206	-0.04	15.56	2.43	38.88	-0.96	-17.95	0.57	38.48
207	-0.04	14.95	2.53	38.63	-0.96	-19.22	0.47	36.35
208	-0.04	14.51	2.38	48.60	-0.96	-20.43	0.54	44.60
209	-0.04	14.31	1.94	49.77	-0.96	-21.37	0.15	43.79
210	-0.04	14.06	2.64	53.99	-0.96	-25.29	0.28	44.68
211	-0.04	13.75	2.44	43.64	-0.96	-26.27	0.10	32.66
212	-0.04	14.94	2.39	47.89	-0.96	-24.80	0.36	39.79
213	-0.04	13.57	3.05	0.90	-0.96	-22.38	0.95	-4.91
214	-0.04	14.82	2.40	2.94	-0.96	-23.17	0.81	-3.20
215	-0.04	14.25	2.56	10.62	-0.96	-22.40	0.44	4.47
216	-0.04	14.53	2.40	19.40	-0.96	-20.74	0.60	15.19
217	-0.04	15.02	2.29	25.78	-0.96	-17.56	0.71	25.24
218	-0.04	14.69	2.30	39.48	-0.96	-16.19	0.70	39.98
219	-0.04	15.22	2.49	35.45	-0.96	-14.89	0.51	37.78
220	-0.04	15.04	2.80	27.63	-0.96	-14.58	0.20	30.09
221	-0.04	14.78	2.64	37.11	-0.96	-15.70	0.03	37.86
222	-0.04	15.15	2.57	29.83	-0.96	-15.40	0.43	31.58
223	-0.04	15.81	2.45	45.59	-0.96	-15.23	0.55	48.18
224	-0.04	15.17	2.28	39.59	-0.96	-14.21	0.72	42.55
225	-0.04	13.64	2.71	36.77	-0.96	-15.60	-0.04	36.48
226	-0.04	13.30	2.44	37.43	-0.96	-18.42	-0.24	33.51
227	-0.06	13.48	2.40	28.38	-0.94	-19.48	-0.10	23.67
228	-0.20	13.40	2.69	17.23	-0.80	-21.46	0.31	11.17
229	-0.85	14.30	2.72	90.55	-0.15	-24.60	0.28	82.25
230	-1.15	13.54	2.77	96.08	0.27	-24.80	0.23	86.94
231	-1.01	13.41	2.82	64.73	1.14	-25.07	0.18	56.19
232	-1.61	14.49	2.49	59.38	2.11	-26.29	-0.03	50.53
233	-1.29	13.51	2.67	52.63	2.54	-26.71	-0.67	42.67
234	-1.35	13.59	2.66	47.32	3.60	-27.38	-0.66	37.78
235	-1.55	14.35	2.16	61.78	4.63	-28.73	-0.16	52.48
236	-1.06	13.57	2.25	74.28	5.31	-30.94	-0.25	63.16
237	-0.81	13.33	2.58	63.21	5.31	-32.00	-0.58	51.04
238	-1.01	13.27	2.55	69.83	6.04	-31.52	-0.55	58.61
239	-0.77	13.93	2.09	67.27	6.65	-28.64	-0.09	60.45
240	-1.48	12.48	1.97	61.89	8.52	-28.67	0.03	54.75
241	-0.51	12.84	2.28	54.93	8.46	-25.07	-0.28	52.64
242	1.10	11.90	1.96	47.08	9.54	-17.77	0.04	53.85
243	2.37	10.39	1.63	50.05	9.96	-16.32	0.46	58.53
244	3.64	10.68	1.89	50.37	10.52	-15.37	0.74	62.47
245	4.61	8.28	2.55	46.81	11.22	-14.83	1.20	59.85
246	6.27	7.21	1.79	52.78	11.06	-12.71	1.21	67.62
247	7.28	7.05	1.86	45.94	11.47	-8.80	1.14	65.94
248	8.62	5.87	1.94	45.31	11.13	-11.16	1.06	62.77

249	10.00	5.70	1.65	25.25	10.46	-16.51	1.43	37.98
250	-170.37	27.10	3.68	75.67	-50.00	-71.08	1.19	-183.81
251	-172.26	29.21	2.77	56.23	-46.28	-66.65	1.23	-195.75
252	-174.61	30.97	3.23	43.61	-42.48	-53.68	0.77	-192.18
253	-173.95	32.89	3.20	25.88	-37.47	-49.56	0.80	-198.20
254	-176.75	35.07	2.91	20.68	-31.21	-56.19	1.09	-204.40
255	-179.23	35.81	3.30	74.53	-21.40	-66.94	0.70	-153.22
256	-180.85	35.94	2.75	67.10	-16.65	-65.12	1.25	-155.59
257	-179.70	36.16	2.89	45.12	-10.92	-54.44	1.11	-159.78
258	-182.03	37.95	2.74	41.86	-7.84	-40.62	1.26	-146.68
259	-183.37	39.15	2.75	27.86	-0.67	-33.44	1.34	-146.39
260	-186.39	40.17	2.94	17.07	7.06	-25.50	0.68	-143.97
261	-185.06	41.60	0.52	-27.29	6.10	-27.43	0.48	-191.08
262	-184.94	41.82	0.21	-40.20	6.32	-27.07	0.79	-203.07
263	-185.98	40.83	0.22	-37.08	9.89	-28.79	0.78	-200.12
264	-184.99	40.59	0.38	-31.76	10.95	-30.80	0.62	-195.01
265	-185.35	41.30	0.53	-31.12	7.72	-33.13	0.47	-199.58
266	-185.51	40.21	0.84	-27.94	12.30	-35.17	0.16	-195.10
267	-185.69	40.90	0.91	-19.53	13.56	-35.95	0.09	-185.70
268	-184.43	40.20	0.74	-12.55	13.22	-34.91	0.26	-177.46
269	-184.93	41.00	0.46	-5.58	12.90	-30.12	0.54	-165.73
270	-186.48	40.63	0.36	-12.01	15.64	-28.72	0.64	-169.94
271	-186.42	41.40	0.59	-14.49	19.44	-27.32	0.41	-166.38
272	-185.77	41.22	0.65	-20.68	19.08	-29.59	0.35	-174.74
273	-186.32	40.97	0.65	-17.29	18.91	-29.97	0.35	-172.70
274	-188.71	41.23	0.50	-10.64	17.55	-25.53	0.50	-165.10
275	-189.32	41.06	0.40	-6.75	24.15	-30.73	0.60	-160.59
276	-189.76	40.58	1.07	-2.06	29.43	-30.95	-0.07	-151.77
277	-189.06	40.42	1.18	-0.50	28.44	-30.79	-0.18	-150.50
278	-189.51	40.99	1.22	0.45	23.97	-30.51	-0.22	-153.61
279	-189.83	40.92	1.87	-1.03	18.46	-26.82	-0.87	-157.30
280	-190.64	41.65	1.38	6.87	15.39	-28.15	-0.38	-153.88
281	-189.35	41.17	1.23	14.65	11.23	-27.08	-0.23	-148.37
282	-189.90	41.73	1.18	22.20	5.35	-32.12	-0.18	-151.73
283	-188.94	41.28	1.56	77.97	0.85	-32.03	-0.56	-99.86
284	-189.68	40.68	1.97	84.98	-5.78	-32.85	-0.97	-101.65
285	-189.37	41.19	1.55	84.70	-9.96	-30.94	-0.55	-103.39
286	-190.13	40.83	1.42	93.29	-19.85	-36.81	-0.42	-111.67
287	-191.36	41.47	1.04	99.54	-22.00	-36.66	-0.66	-108.63
288	-189.55	40.68	1.48	98.69	-27.58	-38.80	-1.48	-116.56
289	-188.15	40.56	1.57	102.59	-33.89	-37.10	-1.57	-116.00
290	-188.46	42.09	1.39	105.84	-41.62	-32.55	-1.39	-114.70
291	-188.26	42.79	1.16	94.61	-48.11	-29.31	-1.16	-128.28
292	-186.82	41.87	1.29	95.72	-58.68	-29.27	-1.29	-137.18
293	-187.13	42.06	1.59	98.73	-62.02	-30.46	-1.59	-138.81
294	-187.86	41.40	1.36	99.08	-61.91	-32.13	-1.36	-141.42
295	-187.47	41.14	1.36	65.87	-59.83	-28.31	-1.36	-168.59
296	-187.08	42.07	1.07	61.84	-62.09	-26.55	-1.07	-171.81
297	-186.95	41.46	1.28	63.77	-64.67	-27.25	-1.28	-173.65
298	-187.17	41.19	1.31	61.49	-66.87	-28.79	-1.31	-180.16
299	-185.69	40.30	1.40	67.63	-68.94	-24.68	-1.40	-171.37
300	-185.61	40.65	1.41	73.82	-75.18	-19.28	-1.41	-165.60
301	-188.89	40.72	2.37	59.90	-70.65	-20.47	-3.21	-180.22
302	-190.08	38.93	2.27	53.92	-68.67	-20.68	-5.35	-189.66
303	-191.85	37.92	2.35	61.47	-67.90	-21.38	-7.68	-187.07
304	-193.76	35.96	1.62	51.47	-62.12	-26.17	-9.25	-202.23
305	-195.75	35.14	1.39	45.80	-55.63	-24.73	-11.23	-204.99
306	-196.10	34.07	-4.24	52.77	-50.48	-23.24	4.45	-182.78
307	-198.96	32.82	-2.06	36.52	-47.79	-23.02	25.14	-177.35
308	-201.19	30.35	-1.51	35.78	-45.02	-20.89	26.81	-175.68
309	-202.97	29.37	-1.40	20.39	-40.14	-21.74	25.57	-190.92
310	-25.07	62.18	-8.57	65.22	8.45	39.52	-31.59	110.13
311	-29.06	63.55	-15.21	64.00	8.98	63.45	6.55	162.25
312	-33.86	63.79	-12.62	40.23	8.52	78.54	27.91	172.52
313	-38.77	62.42	-12.40	35.14	10.73	93.49	30.27	180.89
314	-44.31	62.27	-13.74	19.63	11.22	105.77	28.94	169.79
315	-48.53	61.68	-13.94	2.21	11.40	124.57	27.64	165.05
316	-51.30	59.32	-14.87	0.71	12.21	145.47	24.08	175.63
317	-59.06	61.49	-15.91	-9.47	11.93	145.34	20.61	154.95
318	-62.22	60.45	-16.95	-26.59	13.97	139.34	17.20	125.20



319	-65.38	61.64	-18.21	-27.86	16.75	127.28	13.46	107.68
320	-69.85	60.52	-19.17	7.48	16.20	116.56	9.29	121.05
321	-75.04	65.22	-20.95	-8.29	14.60	79.40	5.62	60.56
322	-75.46	63.75	-21.43	34.19	14.42	44.31	4.02	63.79
323	-75.53	64.37	-21.54	23.46	10.53	18.70	3.17	23.15
324	-75.37	63.57	-21.63	34.41	9.29	2.64	1.63	14.53
325	-76.22	62.78	-21.18	38.53	7.80	-11.76	1.89	1.85
326	-75.49	64.15	-20.90	46.41	5.95	-30.69	1.90	-8.68
327	-75.64	64.71	-21.57	46.74	5.56	-75.19	2.66	-52.74
328	-75.10	62.95	-21.42	15.82	2.06	-96.75	2.59	-109.84
329	-74.74	63.03	-21.76	-8.23	-3.43	-97.28	2.46	-139.93
330	-75.69	64.59	-22.98	-12.72	-2.52	-96.75	8.94	-137.13
331	-75.15	65.83	-21.50	1.46	-3.52	-99.50	19.41	-112.96
332	-75.87	66.10	-21.77	51.45	-5.51	-109.98	22.10	-73.47
333	-75.39	65.89	-21.66	47.25	-2.65	-122.05	24.41	-84.21
334	-75.43	65.94	-21.42	41.39	-5.61	-129.42	25.29	-99.25
335	-75.02	66.39	-21.44	62.76	-5.44	-137.12	25.60	-84.26
336	-75.64	66.62	-21.36	65.76	-7.51	-145.23	25.36	-91.99
337	-75.80	66.17	-22.05	73.92	-8.81	-151.85	24.68	-93.75
338	-75.78	65.20	-21.29	44.12	-10.76	-153.40	25.08	-126.83
339	-75.34	65.73	-21.20	28.34	-15.95	-150.85	23.86	-145.41
340	-75.42	67.08	-21.03	38.02	-18.58	-147.70	22.95	-134.68
341	-74.84	66.41	-21.27	42.86	-18.66	-145.83	23.52	-127.81
342	-74.68	65.75	-21.21	33.07	-21.36	-140.70	23.30	-135.84
343	-75.74	66.60	-21.06	28.44	-24.91	-140.65	23.06	-144.25
344	-76.35	66.25	-21.06	22.06	-25.29	-136.54	22.97	-147.96
345	-75.55	65.89	-21.94	25.77	-28.24	-134.05	23.32	-144.82
346	-75.65	65.74	-21.98	17.77	-28.81	-133.99	22.98	-153.93
347	-75.01	66.30	-21.50	17.74	-34.33	-132.51	22.29	-157.01
348	-75.29	66.40	-21.53	38.27	-34.88	-135.65	21.53	-141.14
349	-75.45	66.19	-21.45	36.37	-33.80	-136.52	21.66	-143.00
350	-76.48	66.46	-21.40	24.57	-33.31	-142.13	22.15	-160.13
351	-75.38	66.84	-21.20	70.62	-34.58	-141.72	22.20	-113.21
352	-75.63	67.13	-21.69	90.64	-33.20	-137.00	22.19	-87.57
353	-74.67	65.94	-21.90	68.31	-34.66	-134.09	20.36	-110.71
354	-74.94	67.22	-22.32	60.37	-40.43	-133.86	13.98	-129.99
355	-76.20	66.84	-22.09	38.41	-36.38	-134.17	12.26	-151.34
356	-76.15	67.66	-21.49	46.64	-34.50	-136.66	11.49	-143.01
357	-75.74	66.54	-22.06	53.66	-37.24	-137.54	12.06	-140.32
358	-75.78	67.28	-22.32	58.11	-35.38	-137.45	12.32	-133.23
359	-75.64	66.24	-22.55	61.73	-36.36	-137.36	12.55	-131.39
360	-76.01	66.50	-21.98	61.32	-39.99	-138.79	11.98	-136.98
361	-70.10	63.53	-21.31	60.49	-37.40	-133.90	11.31	-127.38
362	-69.17	60.53	-20.83	51.29	-37.96	-130.05	10.83	-135.36
363	-67.21	57.78	-20.14	41.73	-34.21	-126.05	10.14	-137.96
364	-66.29	54.33	-19.23	44.65	-29.46	-120.21	9.23	-126.97
365	-65.25	50.27	-19.60	40.91	-28.67	-113.86	9.69	-126.51
366	-65.61	46.52	-18.75	35.74	-27.47	-104.65	8.75	-125.46
367	-62.58	42.76	-17.97	34.64	-20.26	-95.34	7.97	-110.78
368	-61.41	39.82	-17.65	30.25	-18.43	-89.70	7.65	-109.46
369	-60.06	35.97	-17.11	26.12	-21.19	-85.34	7.11	-114.50
370	30.17	211.10	0.54	108.45	-1.67	-250.97	1.00	98.62
371	31.40	226.04	0.73	122.81	-10.15	-250.54	0.19	120.48
372	32.26	242.60	1.10	115.01	-17.51	-260.72	0.19	112.92
373	30.42	255.96	0.02	96.05	-24.74	-273.00	0.56	85.28
374	31.79	272.01	0.04	81.89	-23.77	-279.03	0.96	83.89
375	32.99	287.23	0.25	80.80	-28.79	-277.00	1.21	96.70
376	32.76	304.18	0.43	75.78	-38.64	-283.05	1.82	93.29
377	31.16	317.76	0.43	60.87	-40.54	-290.89	1.90	80.69
378	33.19	333.87	0.85	60.58	-49.65	-296.33	1.19	83.70
379	32.54	348.68	0.07	56.07	-55.46	-308.39	0.18	73.69
380	31.74	362.64	0.17	52.16	-60.57	-322.18	0.00	63.95
381	28.93	366.98	0.74	52.27	-63.09	-345.14	-0.66	40.02
382	30.68	367.24	0.52	53.38	-69.51	-355.74	-0.44	26.13
383	30.62	367.97	0.28	59.41	-81.41	-365.80	-0.28	10.79
384	29.63	367.08	0.57	64.49	-84.21	-375.29	-0.53	1.74
385	30.27	366.81	0.73	64.30	-87.70	-371.93	-1.78	0.70
386	30.54	368.07	1.10	84.74	-94.56	-382.40	-1.60	5.88
387	30.77	368.18	1.02	140.70	-96.10	-406.31	-1.02	37.24
388	31.21	367.73	0.67	137.71	-104.63	-407.95	-0.67	24.07

389	31.76	367.97	0.16	151.94	-112.10	-404.67	-0.16	34.91
390	30.98	368.22	0.61	149.64	-116.07	-401.09	0.89	33.19
391	30.97	368.15	0.48	148.99	-111.76	-402.23	-0.48	34.12
392	32.21	368.03	1.06	161.74	-118.00	-398.12	-1.06	45.87
393	31.83	367.72	0.75	155.86	-127.25	-398.09	-0.75	30.07
394	31.57	367.39	0.78	143.84	-128.86	-395.31	-0.78	18.63
395	30.90	367.70	0.88	150.66	-126.99	-393.63	-1.47	28.06
396	31.76	368.00	0.91	158.60	-135.10	-396.85	-0.91	26.42
397	31.93	366.99	0.62	160.35	-139.43	-398.88	-0.62	20.96
398	32.86	365.89	0.73	124.88	-139.24	-403.53	-0.73	-19.14
399	32.53	364.60	0.63	109.18	-142.36	-405.58	-1.01	-42.01
400	32.74	363.48	0.78	105.41	-147.45	-403.29	-1.78	-50.11
401	34.86	364.33	1.71	117.50	-149.24	-403.42	-1.80	-36.04
402	35.55	364.13	1.13	137.18	-159.47	-400.83	-2.09	-24.41
403	34.48	364.06	1.93	122.84	-159.10	-401.73	-2.09	-39.61
404	35.32	364.68	1.79	126.28	-156.67	-401.10	-2.12	-31.82
405	35.20	364.48	1.80	137.61	-158.68	-403.02	-2.17	-24.79
406	33.49	365.39	0.48	148.89	-155.45	-404.39	-2.77	-14.36
407	33.95	364.56	-0.68	163.81	-157.99	-405.77	-2.99	-5.11
408	32.69	365.33	0.62	140.14	-159.81	-402.54	-1.70	-25.27
409	34.39	364.72	0.34	141.04	-167.97	-406.89	-2.34	-36.71
410	34.29	365.33	0.45	140.79	-173.06	-406.24	-2.16	-40.60
411	34.18	363.90	1.29	149.43	-172.95	-402.49	-2.29	-28.93
412	34.65	364.23	1.17	151.46	-180.57	-399.20	-2.17	-30.43
413	34.15	363.77	0.81	156.25	-178.28	-396.34	-1.81	-21.44
414	32.48	364.94	0.52	156.16	-176.48	-399.69	-1.64	-23.71
415	32.83	364.99	0.31	219.59	-181.83	-399.03	-2.27	34.59
416	32.17	364.49	1.03	218.58	-182.96	-397.83	-1.95	33.54
417	32.41	365.31	0.42	194.58	-182.66	-395.92	-1.22	12.93
418	31.15	365.31	0.58	179.29	-178.54	-398.53	-1.49	-2.24
419	30.59	365.39	0.05	183.29	-176.42	-400.52	-1.80	0.59
420	30.37	365.72	1.23	188.88	-173.30	-402.59	-1.73	8.58
421	32.42	347.57	1.36	166.57	-177.19	-383.95	-1.36	-14.56
422	31.10	329.59	1.02	163.70	-176.64	-361.09	-1.90	-14.21
423	30.28	311.55	0.86	152.79	-170.78	-341.13	-1.77	-18.21
424	27.25	291.44	0.08	151.75	-166.59	-325.23	-1.62	-22.91
425	26.29	272.49	0.29	132.70	-161.00	-303.19	-1.33	-33.76
426	24.52	254.26	0.46	123.97	-157.60	-279.74	-1.62	-35.76
427	22.83	235.47	0.40	110.81	-156.63	-261.15	-1.57	-49.84
428	20.92	217.73	-0.02	110.78	-154.29	-242.60	-1.07	-48.55
429	19.47	198.31	-0.07	86.79	-150.81	-224.69	-0.89	-71.87
430	-37.65	-37.58	1.95	85.23	-22.47	29.79	0.05	19.31
431	-32.88	-34.36	1.72	78.00	-17.17	37.70	0.28	33.29
432	-26.45	-29.48	1.62	55.57	-12.23	36.73	0.38	26.14
433	-21.50	-25.29	1.42	59.12	-11.52	26.00	0.71	28.93
434	-17.47	-20.89	1.71	32.95	-9.16	20.72	1.33	9.20
435	-11.51	-16.89	1.67	23.78	-11.97	9.76	1.25	-3.90
436	-6.83	-14.47	1.99	8.02	-9.23	2.10	1.18	-17.25
437	-2.84	-9.60	1.46	2.71	-13.91	0.39	1.04	-20.74
438	1.75	-5.49	1.17	-10.95	-13.80	-0.35	0.83	-26.83
439	8.81	-1.09	0.93	-30.86	-14.56	-1.66	1.07	-37.36
440	12.48	1.75	1.08	-41.94	-15.00	-2.29	0.92	-43.00
441	15.98	7.15	1.39	-41.24	-12.17	-23.23	0.61	-51.51
442	15.65	6.61	1.23	-39.57	-8.60	-34.36	0.31	-58.74
443	16.34	6.93	1.08	-42.14	-13.38	-40.14	-0.08	-71.39
444	15.87	6.30	1.38	-37.82	-7.75	-44.24	-0.38	-66.63
445	16.03	6.81	1.66	-34.91	-10.36	-51.62	-0.66	-73.05
446	15.74	8.15	1.87	-38.12	-7.74	-82.11	-0.87	-103.08
447	16.84	6.69	1.90	-31.07	-4.71	-106.40	-0.90	-117.65
448	16.61	6.67	2.29	-22.14	-6.19	-110.71	-1.29	-114.77
449	16.64	5.94	2.27	-20.59	-1.64	-110.11	-1.35	-108.84
450	17.28	5.90	2.20	-24.21	1.51	-108.78	-1.20	-107.29
451	17.49	5.69	2.12	5.68	1.64	-102.81	-1.25	-71.45
452	17.14	5.77	1.74	49.49	7.53	-102.24	-1.20	-21.77
453	16.97	6.40	1.49	42.10	2.40	-100.51	-0.49	-31.64
454	15.85	5.05	1.14	53.58	1.81	-100.81	-0.05	-23.43
455	15.51	6.31	1.01	59.49	8.86	-98.84	-0.01	-7.66
456	15.23	5.73	1.37	53.54	8.44	-98.77	-0.37	-14.83
457	14.69	5.41	2.02	56.23	12.65	-101.66	-1.02	-11.68
458	13.32	5.44	1.94	66.63	16.13	-103.94	-0.94	-1.41

459	12.34	3.76	1.95	70.41	19.57	-104.97	-0.95	2.12
460	12.93	5.10	2.11	64.28	18.96	-104.10	-1.11	-1.83
461	12.70	4.71	2.19	59.31	21.38	-103.34	-1.19	-4.23
462	13.48	5.52	1.98	61.02	21.37	-101.40	-0.98	1.00
463	13.32	6.41	2.07	81.41	20.14	-99.50	-1.07	22.78
464	13.49	6.46	1.78	73.46	19.86	-104.75	-0.78	9.52
465	14.81	5.61	1.61	81.98	18.75	-105.27	-0.61	16.87
466	14.63	5.79	1.62	78.37	19.37	-106.29	-0.62	12.87
467	15.52	5.70	1.68	55.58	24.48	-106.82	-0.68	-4.55
468	14.17	5.72	1.67	31.05	27.66	-108.76	-0.67	-29.16
469	14.22	6.19	1.34	32.99	31.82	-106.44	-0.17	-20.05
470	13.81	6.28	1.16	29.49	34.26	-106.14	0.00	-21.12
471	13.22	6.49	1.38	25.83	33.16	-107.55	-0.38	-27.84
472	11.69	6.51	1.32	34.81	35.98	-107.70	-0.32	-17.71
473	14.78	6.51	1.03	26.17	32.36	-110.37	-0.03	-29.54
474	14.70	6.30	1.17	26.03	33.61	-106.71	-0.17	-25.08
475	13.81	6.10	1.35	36.71	35.40	-105.02	-0.35	-12.00
476	14.37	6.78	1.53	40.44	28.88	-105.72	-0.53	-14.24
477	12.27	7.16	1.28	39.63	26.10	-105.65	-0.28	-19.49
478	12.80	6.94	1.44	34.19	29.86	-106.26	0.27	-20.75
479	11.24	6.34	1.94	32.23	31.76	-104.38	-0.23	-21.10
480	10.90	7.09	1.24	37.83	32.26	-108.88	-0.24	-19.79
481	20.37	4.55	1.34	32.69	29.71	-104.09	-0.34	-15.76
482	27.59	5.00	1.84	55.32	29.93	-97.69	-0.84	21.15
483	33.99	5.58	1.81	84.36	22.53	-92.26	-0.81	55.19
484	40.08	6.11	1.31	57.88	21.75	-86.40	-0.27	40.46
485	46.99	6.28	1.85	13.15	19.13	-83.66	-0.15	3.61
486	53.07	6.15	1.43	21.37	16.55	-74.11	-0.43	24.04
487	60.44	6.85	2.07	12.99	15.56	-66.03	0.13	32.01
488	66.41	6.51	1.83	15.86	12.01	-57.74	-0.20	44.67
489	75.02	7.61	1.41	25.37	5.44	-48.82	-0.41	65.62
490	15.03	12.76	-1.58	126.62	1.80	6.07	-36.34	124.37
491	16.96	11.15	-2.58	126.04	1.58	3.52	-39.51	117.17
492	17.08	9.96	-3.64	103.78	1.71	0.63	-43.03	86.49
493	19.08	10.57	-7.98	106.75	0.92	-1.88	-32.19	95.28
494	20.33	10.32	-11.30	79.35	0.59	-6.59	-1.82	90.86
495	20.38	9.97	-11.32	70.62	0.04	-10.26	23.45	102.87
496	21.16	8.32	-11.26	49.80	-0.28	-12.45	28.10	83.39
497	21.66	8.41	-12.00	42.20	-0.91	-10.66	26.71	75.41
498	22.35	8.00	-13.29	-14.12	-1.97	-7.00	23.96	17.92
499	22.46	8.25	-15.13	-41.71	-2.38	-5.17	22.05	-11.63
500	23.63	8.96	-16.44	-63.91	-3.17	-4.65	19.90	-35.68
501	22.67	6.56	-18.51	-62.69	-3.17	-4.13	20.43	-38.84
502	22.91	5.90	-18.05	-46.38	-3.74	-4.75	20.38	-23.74
503	22.28	5.49	-18.21	-36.64	-3.57	-3.01	20.21	-13.45
504	22.15	5.45	-18.41	-34.00	-3.65	1.38	20.53	-6.54
505	22.63	5.62	-18.15	-27.92	-4.17	3.76	20.36	2.12
506	22.65	5.57	-18.45	-21.12	-3.69	7.56	20.45	12.96
507	23.09	6.06	-18.12	-28.54	-3.17	9.79	20.58	9.69
508	22.72	5.41	-18.60	-27.11	-3.17	11.51	20.18	10.93
509	22.05	5.40	-18.42	-24.48	-3.17	9.29	20.13	10.79
510	21.81	4.95	-18.45	-22.23	-3.56	8.24	19.74	10.50
511	22.09	5.63	-18.37	25.63	-4.17	9.50	19.37	59.67
512	23.23	6.19	-17.84	67.87	-4.11	12.41	18.84	106.60
513	22.07	6.38	-18.69	35.67	-4.15	13.87	19.73	74.88
514	21.62	6.34	-19.07	18.63	-4.33	11.83	20.36	55.38
515	22.03	6.57	-19.03	15.98	-5.16	7.41	20.03	47.83
516	22.34	5.70	-18.87	21.32	-5.67	5.36	19.87	50.05
517	22.16	6.84	-19.22	20.61	-5.42	1.78	20.43	47.18
518	22.35	6.99	-18.54	18.44	-6.17	-1.29	20.42	42.20
519	21.67	6.59	-18.79	23.14	-5.67	-3.38	19.79	43.35
520	21.55	5.86	-18.91	13.98	-5.20	-4.69	19.91	32.50
521	21.88	5.54	-18.88	20.83	-4.93	-7.71	19.88	36.61
522	22.31	5.84	-18.60	32.38	-3.97	-8.34	19.60	49.22
523	22.13	5.60	-18.73	29.32	-2.97	-8.06	19.73	47.03
524	22.22	4.73	-18.20	29.12	-1.67	-11.09	19.20	44.31
525	21.55	5.46	-19.00	32.98	-1.22	-11.17	20.00	48.61
526	22.72	6.16	-19.12	31.47	0.53	-8.26	20.12	53.61
527	22.09	5.72	-19.07	31.58	1.72	-3.49	20.07	58.63
528	23.14	6.64	-18.24	45.52	3.72	-5.62	19.24	74.39

529	22.11	6.04	-18.01	47.77	5.64	-2.03	19.01	80.53
530	22.82	5.19	-18.29	49.00	8.64	0.51	19.29	87.16
531	22.35	6.17	-18.51	40.31	10.11	-0.14	19.51	79.80
532	22.27	5.72	-18.00	48.65	12.32	-0.54	19.00	89.41
533	23.05	5.24	-17.69	50.27	14.08	-1.18	18.23	92.00
534	22.17	5.98	-17.49	64.95	16.63	-3.92	18.12	106.43
535	21.84	5.46	-17.65	64.93	19.33	-5.96	18.65	106.60
536	22.84	5.28	-17.66	77.13	21.37	-7.57	18.66	120.05
537	22.69	5.68	-17.97	62.98	23.52	-7.43	18.97	108.44
538	22.94	5.87	-17.66	109.73	26.02	-5.91	18.66	159.64
539	22.76	6.31	-17.46	139.93	28.58	-8.19	18.46	190.38
540	22.82	6.39	-17.86	77.68	30.60	-11.52	18.86	126.98
541	23.86	5.87	-17.09	97.50	31.55	-12.37	18.09	147.41
542	24.60	4.99	-15.92	130.77	32.36	-12.57	16.92	181.15
543	25.61	4.73	-15.22	116.36	31.48	-10.56	16.22	168.61
544	26.31	4.88	-14.34	117.22	31.06	-3.33	15.34	177.14
545	27.15	5.88	-13.37	120.72	30.43	-2.93	14.37	182.26
546	28.59	5.19	-12.73	110.42	29.20	-3.94	13.73	170.46
547	29.48	4.91	-11.71	106.82	27.56	-4.16	12.84	165.73
548	31.09	5.87	-10.10	101.69	26.33	-4.50	12.14	162.52
549	31.96	5.72	-9.57	79.09	24.29	-4.06	10.91	138.34
550	-32.93	22.90	6.85	40.78	36.26	-10.27	1.15	64.74
551	-29.23	22.98	7.24	46.92	35.89	-6.02	0.76	78.55
552	-23.68	21.52	7.31	26.49	34.55	2.27	0.48	68.95
553	-19.85	21.19	6.68	22.94	33.52	5.43	-0.47	69.44
554	74.74	0.35	-1.91	115.58	26.60	-20.23	28.49	223.62
555	70.09	-5.50	1.14	120.09	29.02	-14.04	41.77	242.57
556	67.93	-8.05	1.35	103.81	30.86	-2.45	40.07	233.52
557	63.12	-9.14	0.00	101.10	32.73	0.51	36.46	224.79
558	61.69	-11.69	0.42	87.03	31.52	1.27	33.58	203.82
559	58.54	-13.09	-0.61	60.72	31.17	0.93	31.61	169.26
560	53.10	-16.40	-1.31	68.36	34.48	5.27	29.43	172.94
561	49.85	-17.32	-1.40	39.63	30.79	9.94	26.40	137.90
562	45.84	-20.78	-2.16	33.59	24.76	16.53	22.21	119.99
563	42.41	-22.46	-2.68	18.55	20.84	15.08	18.68	90.42
564	39.44	-25.74	-3.15	1.65	14.96	9.82	14.40	51.38
565	33.41	-33.49	-5.54	18.09	15.48	14.24	13.75	55.94
566	33.40	-32.36	-5.94	7.56	10.83	14.82	14.98	43.29
567	33.33	-31.78	-5.38	5.24	2.36	14.99	15.38	34.13
568	31.66	-33.16	-5.14	7.30	-1.37	15.96	15.09	30.35
569	32.45	-33.73	-5.20	16.97	-6.41	30.47	14.20	48.75
570	31.78	-32.59	-5.03	21.03	-10.91	38.18	14.23	56.70
571	31.42	-32.72	-5.26	28.65	-11.31	40.09	14.51	65.38
572	30.91	-32.87	-4.99	19.02	-16.26	41.24	14.49	51.54
573	31.12	-33.32	-5.78	40.07	-17.49	35.07	15.49	65.15
574	31.87	-33.04	-5.49	14.90	-24.49	31.91	16.28	31.94
575	30.68	-31.92	-5.49	26.80	-29.31	30.24	14.53	35.53
576	30.95	-31.67	-5.12	26.45	-31.78	30.57	14.12	33.52
577	31.44	-32.25	-4.95	25.84	-34.78	36.46	13.66	35.42
578	30.07	-32.57	-5.02	-19.13	-37.74	46.71	13.82	-3.86
579	30.55	-31.67	-5.46	-16.40	-39.42	39.19	14.46	-8.74
580	31.54	-32.76	-5.18	-10.13	-43.00	32.85	13.52	-13.17
581	30.85	-32.20	-5.22	-15.26	-43.93	23.45	14.14	-28.18
582	30.28	-33.41	-4.81	-17.93	-40.28	26.37	13.73	-26.05
583	31.32	-33.04	-5.07	11.46	-38.32	33.49	14.16	14.00
584	31.30	-32.30	-4.86	39.75	-41.01	36.14	13.86	42.89
585	30.33	-32.43	-5.29	34.80	-37.49	32.69	14.29	36.89
586	30.63	-33.98	-4.85	27.53	-33.75	30.92	13.68	30.18
587	31.31	-32.98	-4.93	46.28	-31.31	33.27	13.76	55.40
588	31.71	-32.92	-5.16	7.04	-33.34	37.19	13.87	18.39
589	31.31	-32.58	-5.60	6.47	-30.27	32.86	13.35	15.54
590	31.17	-32.84	-5.53	11.80	-30.23	28.59	13.74	16.70
591	31.70	-33.55	-4.98	2.20	-31.89	35.81	13.73	13.03
592	31.11	-32.40	-4.98	0.50	-29.23	38.85	13.06	16.91
593	31.45	-32.67	-5.60	7.14	-30.85	37.39	12.89	19.75
594	31.25	-32.13	-5.53	-9.20	-29.37	24.78	12.73	-7.45
595	31.31	-30.93	-6.02	13.76	-30.88	16.37	14.10	7.72
596	31.54	-32.81	-5.19	-12.37	-25.42	11.83	15.53	-16.89
597	31.52	-33.54	-5.12	-12.58	-23.43	16.29	14.29	-12.58
598	31.51	-33.11	-4.87	3.17	-23.93	24.32	13.87	10.96

599	31.45	-33.62	-5.39	54.49	-20.41	32.62	12.48	71.61
600	32.26	-32.84	-6.56	80.66	-20.51	29.71	12.10	94.83
601	31.07	-32.92	-6.27	44.70	-16.03	25.79	12.31	58.66
602	31.95	-32.95	-5.80	23.42	-14.99	21.74	13.75	37.13
603	31.16	-32.52	-5.72	38.84	-10.36	25.73	12.85	59.96
604	31.25	-32.07	-5.74	32.70	-6.63	25.99	12.86	58.36
605	33.30	-28.19	-4.86	41.84	-1.14	21.01	12.15	74.12
606	31.47	-26.03	-3.63	24.23	1.99	17.48	12.38	57.89
607	29.98	-24.59	-3.14	29.08	3.23	7.78	11.35	53.69
608	27.25	-23.21	-2.24	21.30	5.96	-3.67	11.12	36.51
609	26.03	-23.80	-1.48	17.31	3.06	-7.91	10.23	23.44
610	22.48	-22.56	-0.80	5.86	6.19	6.89	9.71	27.78
611	20.46	-22.26	0.31	7.05	5.81	21.47	8.61	41.45
612	17.38	-20.04	0.73	6.57	9.31	34.25	8.19	56.38
613	13.80	-16.79	1.40	8.73	8.41	34.12	7.60	57.27
614	59.24	1.69	5.91	47.45	-9.57	-16.14	0.42	89.00
615	64.93	3.63	5.46	72.47	-12.01	-15.32	0.58	119.74
616	70.33	6.08	6.13	44.66	-14.87	-24.76	1.50	89.06
617	73.57	8.49	5.53	29.39	-11.61	-38.33	1.01	68.06
618	80.32	8.91	5.45	24.95	-11.20	-43.79	0.47	65.12
619	84.59	10.26	5.57	9.36	-8.09	-40.79	0.60	61.50
620	90.78	10.83	6.32	-5.45	-5.40	-34.51	1.18	63.75
621	93.55	13.70	5.89	-22.27	-5.05	-27.64	0.66	58.83
622	97.96	15.24	6.02	-24.48	-2.34	-18.60	0.40	74.21
623	105.03	17.18	5.73	-53.61	-1.95	-8.64	0.02	63.77
624	109.55	18.24	5.60	-54.77	-0.53	2.16	-0.22	80.02
625	111.78	21.99	5.87	-69.44	-0.01	-6.05	0.13	64.27
626	111.96	22.85	6.06	-50.78	2.62	-19.97	0.48	73.22
627	112.94	23.12	6.14	-57.90	2.18	-45.24	0.73	41.98
628	112.99	21.78	6.40	-49.50	3.88	-69.59	0.85	26.81
629	112.78	20.58	6.15	-34.21	6.63	-76.31	0.06	35.68
630	112.55	21.87	5.51	1.32	9.87	-77.28	-0.51	73.32
631	112.64	19.93	5.86	-24.95	14.32	-72.22	0.35	55.92
632	112.54	21.19	5.95	23.08	19.38	-57.21	0.13	125.06
633	113.04	21.21	5.80	20.80	18.21	-45.79	0.70	133.97
634	112.99	21.55	5.75	23.86	18.64	-35.16	0.58	148.21
635	112.73	21.57	6.18	34.12	21.82	-32.23	-1.05	163.12
636	112.57	20.71	5.31	39.80	23.06	-28.08	-0.31	173.05
637	113.63	21.21	5.19	46.75	22.04	-24.37	0.23	184.66
638	112.09	21.88	6.15	47.45	25.67	-24.72	0.81	189.32
639	113.44	21.56	5.63	51.68	23.72	-27.10	0.66	189.60
640	114.24	20.52	6.26	52.06	21.67	-25.98	0.99	189.77
641	112.30	21.70	6.19	50.59	22.16	-28.32	0.39	185.00
642	112.78	21.27	5.69	58.80	22.64	-28.73	-0.56	191.88
643	112.54	20.47	5.99	54.21	20.92	-32.47	-0.24	181.42
644	113.84	21.65	6.01	55.40	21.87	-32.94	-0.55	185.27
645	113.82	21.57	5.86	63.81	20.41	-31.99	-0.86	192.63
646	113.42	22.47	5.67	60.10	18.51	-33.07	-0.67	186.43
647	114.08	21.79	6.06	79.60	17.67	-35.15	-1.06	202.99
648	113.17	21.62	6.11	82.71	17.42	-36.75	-1.11	203.17
649	114.58	21.12	6.10	76.55	14.22	-38.45	-1.10	193.00
650	113.92	20.62	6.30	78.44	11.75	-37.82	-1.30	191.90
651	113.67	20.76	6.17	71.01	7.67	-34.01	-1.25	184.01
652	113.39	21.69	5.88	75.43	7.36	-30.23	-0.88	192.64
653	113.95	21.98	6.28	53.55	6.17	-28.11	0.97	174.80
654	112.74	21.03	7.32	43.95	4.39	-27.74	1.22	162.90
655	113.94	21.11	6.22	29.27	1.27	-27.11	1.03	145.73
656	114.71	20.99	6.53	26.50	0.77	-24.87	1.13	145.77
657	114.01	21.76	5.68	30.00	-5.03	-23.42	0.32	143.31
658	113.47	21.47	6.11	47.49	-6.88	-25.72	-0.11	155.82
659	113.18	22.14	6.08	37.65	-6.93	-27.20	-0.37	144.55
660	113.89	21.77	5.70	38.09	-8.18	-29.08	-0.86	141.32
661	112.78	20.31	5.22	42.83	-9.67	-28.97	-0.22	142.27
662	113.24	21.55	5.86	57.32	-8.56	-32.53	-0.86	156.02
663	113.76	21.07	5.73	53.80	-7.55	-31.51	-0.73	154.57
664	113.49	21.38	5.78	56.35	-5.86	-32.88	-0.45	157.81
665	114.82	16.91	6.15	40.36	-7.24	-25.22	-1.15	144.64
666	110.74	18.41	6.64	43.98	-10.28	-20.61	-1.64	147.24
667	104.83	18.24	6.57	53.63	-10.42	-18.53	-1.19	153.13
668	99.59	19.03	6.54	55.59	-10.05	-13.19	-0.37	157.13

669	95.84	18.35	6.45	110.61	-12.80	-9.60	-1.16	207.69
670	89.22	17.89	6.26	103.17	-11.34	-8.05	-1.17	195.96
671	84.63	16.87	6.76	50.15	-13.13	-9.29	-0.96	135.02
672	78.40	16.94	6.90	38.13	-11.66	-11.11	-0.86	116.74
673	75.98	17.16	7.94	36.79	-11.55	-17.91	-0.19	108.23
674	66.32	30.59	2.62	48.63	10.64	-137.59	-1.99	19.21
675	62.70	29.29	2.25	35.67	11.55	-134.62	0.55	7.38
676	57.36	25.91	2.55	43.20	11.93	-122.91	0.36	18.40
677	52.96	24.43	2.75	36.78	12.66	-109.22	-0.09	20.28
678	49.82	21.33	2.58	36.13	12.30	-92.75	-2.37	27.05
679	44.43	19.40	2.62	27.68	9.86	-78.69	-1.91	23.39
680	38.93	17.34	2.32	0.95	10.28	-63.52	-0.36	5.93
681	34.69	16.61	2.33	20.94	13.19	-54.80	0.59	33.55
682	30.36	13.53	2.64	40.60	13.73	-44.98	1.02	56.89
683	25.93	12.23	2.43	26.37	10.69	-34.57	1.24	44.33
684	19.80	9.89	2.33	-25.91	10.65	-23.12	1.46	-4.89
685	7.65	11.49	2.38	-44.56	9.35	-24.85	0.79	-37.75
686	6.35	11.05	2.65	-36.80	2.03	-22.93	0.35	-37.31
687	7.86	12.29	2.39	-27.30	-0.40	-24.87	0.78	-29.24
688	6.40	11.19	2.53	-25.72	-0.36	-27.57	0.47	-33.05
689	6.92	11.12	2.76	-29.53	-0.13	-28.62	0.15	-37.32
690	6.63	10.45	2.90	-27.58	-3.84	-26.22	0.02	-37.65
691	6.83	11.77	2.77	-24.74	-8.12	-19.16	0.23	-30.42
692	6.53	11.38	2.41	-18.95	-7.07	-21.88	-1.41	-28.99
693	6.04	11.90	2.34	-12.05	-9.37	-21.11	-0.80	-23.05
694	5.87	11.38	2.43	-6.11	-8.96	-17.77	-0.51	-13.67
695	6.74	11.45	2.65	-11.51	-13.57	-15.68	-0.65	-20.57
696	6.64	11.88	2.29	3.69	-19.67	-16.13	-0.42	-11.71
697	5.83	11.26	2.22	8.32	-20.67	-15.30	-0.43	-8.78
698	6.07	11.69	2.45	10.27	-24.90	-16.82	-0.16	-11.40
699	6.13	10.71	3.11	9.39	-28.67	-17.83	0.06	-17.11
700	5.92	10.91	3.22	11.94	-26.80	-12.95	0.28	-7.48
701	6.13	11.62	2.95	9.00	-24.38	-17.16	0.59	-11.25
702	6.16	11.23	3.28	16.39	-22.91	-16.57	0.27	-2.15
703	6.38	11.18	3.05	23.94	-22.92	-14.66	0.07	7.04
704	6.08	12.09	2.41	23.38	-18.33	-12.65	-0.12	12.86
705	5.95	11.60	2.74	29.72	-18.49	-12.92	0.09	18.70
706	8.41	11.01	2.78	30.59	-12.33	-13.32	0.13	27.28
707	8.98	11.22	2.42	51.71	-8.65	-12.97	-0.75	51.96
708	9.87	11.60	2.31	100.10	-8.62	-13.27	-0.98	101.02
709	9.93	12.31	2.16	85.95	-9.51	-16.68	-0.08	84.07
710	9.88	12.36	2.32	90.04	-9.92	-17.69	0.35	87.33
711	9.53	12.26	3.50	101.08	-10.91	-19.92	0.37	95.91
712	9.84	12.00	2.80	103.85	-9.46	-19.08	0.08	100.02
713	9.03	11.57	2.81	105.05	-3.49	-21.24	1.69	105.42
714	9.43	10.81	3.27	104.44	-2.72	-20.14	0.94	106.02
715	9.76	11.66	3.41	104.50	-1.18	-18.32	0.51	110.34
716	10.32	11.73	3.44	105.40	-4.57	-17.08	1.06	110.30
717	10.16	11.04	3.48	106.60	-6.95	-16.19	0.52	108.66
718	9.76	11.75	3.28	104.08	-5.82	-18.35	-0.07	104.63
719	10.44	11.49	3.20	111.69	-8.37	-17.81	-0.20	110.43
720	10.12	12.02	2.96	120.67	-9.46	-13.68	0.04	122.67
721	10.00	12.52	3.15	120.40	-16.04	-15.65	-0.15	114.24
722	10.23	11.71	2.66	120.90	-17.02	-15.46	-0.21	112.81
723	11.26	11.78	2.35	120.30	-25.88	-16.48	-0.35	102.96
724	9.71	11.96	2.97	121.15	-39.26	-22.00	-1.10	83.45
725	9.84	12.51	3.17	118.17	-39.84	-26.68	-1.62	75.55
726	7.12	11.74	2.94	119.45	-44.19	-25.78	-3.07	68.22
727	4.34	11.51	2.40	115.67	-47.15	-17.89	-3.40	65.48
728	-0.22	11.84	2.49	110.19	-46.87	-15.30	-2.53	59.61
729	-4.56	11.45	3.19	53.57	-41.57	-14.96	-1.53	5.59
730	-7.40	11.13	2.31	40.77	-32.31	-13.53	-0.48	0.49
731	-9.85	11.47	3.27	38.52	-34.52	-12.95	0.02	-4.04
732	-15.11	11.79	2.67	41.80	-30.77	-10.19	-0.54	-0.34
733	-17.22	10.93	2.78	23.14	-24.57	-6.31	-0.28	-11.53
734	-103.13	-32.94	-0.28	127.90	-21.33	16.09	1.45	-12.24
735	-99.76	-29.26	0.03	92.96	-13.40	-0.72	0.76	-49.39
736	-95.79	-25.10	-0.02	78.85	-7.00	-20.49	1.36	-68.19
737	-91.28	-21.01	0.27	40.22	-6.22	-33.91	1.86	-110.07
738	-88.68	-17.84	-0.03	29.96	-2.11	-36.41	0.53	-114.58

739	-84.82	-14.20	-0.55	23.69	-3.54	-31.88	0.46	-110.83
740	-82.84	-10.39	0.20	0.19	-3.35	-29.86	0.59	-125.45
741	-79.52	-7.14	0.14	-20.50	4.47	-23.49	0.74	-125.30
742	-76.21	-2.11	0.71	-30.14	8.52	-16.64	0.88	-115.00
743	-71.30	2.02	0.33	-32.48	8.75	-18.60	0.50	-110.77
744	-70.57	7.11	0.84	-58.43	6.57	-14.69	1.07	-128.10
745	-71.71	6.52	0.41	-47.72	-1.00	-17.02	0.80	-129.72
746	-71.16	6.67	0.45	-35.86	-3.09	-17.65	0.88	-119.75
747	-70.65	5.70	0.83	-38.11	-4.62	-14.76	1.46	-120.15
748	-71.23	6.46	0.42	-37.36	-3.79	-13.92	1.83	-117.59
749	-71.39	5.27	0.65	-2.80	-6.44	-11.42	1.43	-84.70
750	-71.71	4.66	0.51	46.97	-9.88	-9.19	0.57	-38.05
751	-70.78	5.15	0.11	37.53	-10.86	-7.44	0.98	-45.33
752	-70.18	4.95	0.31	-1.89	-10.57	-5.91	1.98	-81.31
753	-71.38	5.00	0.33	-10.20	-11.69	-13.67	1.67	-99.93
754	-71.33	4.15	0.27	-7.51	-18.34	-15.94	1.90	-106.80
755	-71.31	4.99	0.00	-4.80	-21.39	-18.15	1.71	-108.97
756	-71.46	4.24	0.03	13.35	-21.54	-20.16	1.22	-94.32
757	-71.07	4.59	-0.45	26.05	-20.30	-21.17	-0.34	-82.70
758	-70.61	4.71	0.22	8.93	-18.76	-23.29	0.03	-98.77
759	-70.67	4.94	-0.31	29.16	-16.37	-22.19	-0.65	-76.09
760	-70.40	4.03	-0.49	20.21	-17.56	-23.69	-0.80	-88.71
761	-71.50	3.98	-0.65	22.32	-16.46	-24.60	-0.60	-87.52
762	-72.11	4.45	-0.94	27.42	-13.79	-23.04	-1.06	-79.06
763	-72.33	4.22	-0.59	26.39	-13.73	-21.47	-1.33	-78.84
764	-71.58	4.83	-0.33	31.08	-12.13	-20.79	-1.67	-70.59
765	-70.58	4.94	-0.90	35.18	-12.25	-18.34	-1.10	-63.06
766	-71.31	5.88	-0.85	33.25	-12.10	-18.13	-1.15	-64.41
767	-70.38	6.18	-0.92	43.13	-14.99	-17.54	-1.03	-55.56
768	-70.99	4.59	-0.26	39.95	-13.78	-14.39	-0.58	-55.45
769	-71.98	5.94	0.23	44.55	-11.66	-16.90	-0.90	-50.72
770	-72.00	5.32	-0.20	43.98	-13.96	-21.57	-0.84	-59.27
771	-70.95	4.84	0.31	49.97	-19.87	-21.92	-0.76	-58.39
772	-70.18	5.31	0.10	57.75	-21.54	-19.27	-0.22	-48.06
773	-70.32	6.34	0.52	50.33	-20.51	-19.46	-0.52	-53.62
774	-70.61	4.91	0.21	61.16	-19.85	-17.83	-0.21	-42.22
775	-70.31	5.88	0.39	114.63	-23.24	-18.07	-0.98	8.31
776	-71.08	5.21	-0.72	138.07	-25.13	-16.90	-1.07	28.38
777	-70.85	4.91	-0.49	101.38	-24.49	-13.19	-1.18	-3.90
778	-70.04	5.21	0.62	94.35	-23.67	-8.90	-0.66	-3.09
779	-71.71	5.11	-0.33	148.34	-27.08	-9.36	-1.17	43.80
780	-71.41	5.38	0.34	153.28	-27.86	-8.54	-0.34	50.85
781	-70.33	4.59	0.39	147.86	-29.66	-6.76	-0.39	45.70
782	-70.50	6.46	0.36	150.04	-31.53	-9.79	-0.61	44.43
783	-70.46	5.65	-0.68	162.58	-36.79	-8.86	-0.73	50.71
784	-70.76	4.44	-0.21	108.51	-39.97	-9.32	0.13	-7.18
785	-64.83	5.07	-0.13	90.47	-39.78	-7.30	0.13	-16.37
786	-60.59	6.06	-0.26	91.14	-38.89	-5.21	-0.74	-8.49
787	-57.22	5.57	-0.79	87.88	-43.12	-6.07	-1.55	-15.28
788	-52.90	5.46	-0.72	84.30	-43.26	-4.12	-0.61	-11.87
789	-48.34	6.19	-0.49	69.30	-40.32	-1.41	-0.38	-15.46
790	-45.52	5.48	-1.23	68.15	-41.60	1.16	-0.73	-14.29
791	-41.45	4.67	-1.34	50.36	-43.81	3.89	-0.66	-28.34
792	-37.94	4.16	-1.36	43.16	-43.56	5.44	-0.64	-30.74
793	-33.88	5.19	-1.10	28.64	-43.56	2.85	-0.98	-42.84
794	-57.91	19.51	-4.65	99.18	-7.17	0.39	0.90	50.24
795	-54.02	19.43	-4.99	83.74	-7.05	4.80	0.40	42.31
796	-50.62	19.20	-4.51	61.07	-6.33	8.36	0.43	27.60
797	-46.74	18.59	-4.27	51.93	-6.20	5.91	0.07	19.28
798	-43.21	18.12	-3.46	39.82	-6.75	1.51	-1.54	4.48
799	-40.33	18.28	-3.74	17.29	-6.22	-6.93	-1.21	-22.85
800	-37.43	18.32	-4.01	13.52	-5.21	-12.23	-0.49	-27.54
801	-32.43	17.58	-2.92	7.11	-4.32	-20.46	-2.08	-37.52
802	-29.82	16.29	-3.44	-17.48	-3.43	-21.89	-1.18	-60.96
803	-26.27	15.38	-3.45	-39.99	-2.73	-15.84	-1.05	-73.95
804	-24.75	13.38	-4.01	-66.92	-2.35	-13.51	-0.53	-98.69
805	-27.52	10.01	-2.98	-48.26	-2.15	-13.55	1.19	-83.26
806	-27.73	11.35	-2.79	-23.62	-2.18	-9.83	1.79	-53.01
807	-27.92	10.53	-2.51	-18.71	-1.79	-12.92	1.51	-51.81
808	-27.72	10.47	-2.49	-13.35	-1.32	-15.51	1.49	-48.43

809	-27.37	11.14	-2.84	-9.47	-0.67	-15.81	0.80	-44.22
810	-27.37	10.76	-4.15	2.37	-0.50	-10.22	0.15	-28.97
811	-27.07	9.52	-4.32	67.71	-0.09	-5.18	-0.27	40.29
812	-26.88	9.56	-3.61	85.64	-0.74	-3.93	0.49	60.52
813	-27.01	10.01	-2.52	87.23	-0.41	-6.84	1.31	61.77
814	-27.33	10.35	-2.65	82.51	-0.08	-7.93	1.27	56.13
815	-26.83	10.59	-2.55	93.14	0.46	-10.42	1.38	65.77
816	-27.29	11.32	-2.31	105.69	0.79	-9.74	1.22	79.69
817	-27.66	10.17	-3.15	97.76	-0.22	-10.04	0.15	67.01
818	-27.61	9.47	-3.99	110.52	0.72	-11.47	-0.22	77.41
819	-27.10	10.25	-4.16	98.74	1.70	-11.08	0.16	68.51
820	-26.90	9.78	-3.86	106.03	2.22	-10.53	-0.22	76.51
821	-26.78	10.27	-3.99	102.23	2.64	-11.31	-0.59	72.47
822	-27.31	11.94	-3.80	88.86	2.55	-11.19	-0.03	61.01
823	-27.84	12.27	-3.65	97.88	3.67	-14.82	-0.77	66.75
824	-26.81	12.64	-3.34	50.83	3.93	-13.45	-0.71	23.10
825	-26.99	13.26	-3.31	64.57	3.87	-12.92	-1.53	36.94
826	-27.55	10.67	-3.84	58.33	2.80	-11.27	-1.16	27.98
827	-26.37	11.29	-3.63	50.37	3.83	-6.62	-1.37	27.49
828	-27.18	11.28	-3.63	71.90	2.89	-6.12	-0.08	49.07
829	-27.51	10.67	-3.58	62.38	3.34	-9.17	-0.63	35.50
830	-27.51	11.15	-4.03	78.23	2.17	-7.44	-0.43	52.15
831	-27.05	11.85	-3.71	88.83	2.09	-6.81	-1.24	63.95
832	-27.03	11.03	-3.47	79.40	2.41	-8.53	-1.53	52.28
833	-26.52	11.19	-3.94	80.72	3.47	-9.98	-0.94	54.01
834	-27.44	10.11	-3.39	83.51	4.07	-10.27	0.76	57.34
835	-27.94	10.09	-2.86	82.63	4.25	-10.34	0.57	56.40
836	-27.48	10.36	-4.00	97.02	4.82	-13.30	0.42	67.83
837	-26.79	11.15	-4.00	101.15	5.87	-12.82	0.00	74.57
838	-26.61	10.13	-3.91	126.87	6.17	-10.36	0.03	102.33
839	-26.86	10.72	-3.44	166.39	6.94	-8.81	-0.47	144.48
840	-26.48	10.93	-3.60	142.36	6.15	-8.88	-0.56	119.90
841	-26.65	12.08	-4.12	115.08	7.15	-7.42	-0.88	95.25
842	-26.83	10.85	-3.58	113.53	6.14	-10.18	-1.42	88.51
843	-26.67	12.03	-3.61	125.83	6.47	-6.99	-0.85	106.20
844	-27.20	10.65	-3.34	122.49	6.80	-2.77	-0.66	105.97
845	-24.22	12.22	-3.60	126.08	5.72	0.03	-0.40	115.83
846	-21.80	12.95	-3.61	111.45	4.86	-0.74	-0.60	102.51
847	-19.63	11.79	-3.69	108.29	4.94	1.50	-0.77	102.44
848	-18.31	13.13	-3.65	99.86	5.10	5.08	-0.35	100.86
849	-15.63	12.53	-4.04	96.82	4.97	-1.86	-0.04	92.74
850	-13.88	12.54	-3.87	86.58	4.46	-5.84	-0.50	79.50
851	-11.33	12.81	-3.81	90.53	3.50	-8.35	0.35	83.69
852	-9.45	12.50	-3.36	66.46	4.20	-0.13	1.11	71.34
853	-8.83	14.07	-3.50	61.83	3.17	12.93	0.80	80.45
854	155.24	84.95	8.91	128.72	29.46	34.32	-1.46	440.16
855	143.78	88.89	9.00	101.30	29.39	33.27	-1.46	404.18
856	134.80	92.08	9.45	104.76	27.22	33.54	-1.20	400.65
857	125.72	97.13	9.10	85.54	21.43	6.91	-0.10	345.73
858	115.06	98.43	8.57	72.84	24.40	-3.55	0.43	316.17
859	105.82	103.28	7.96	50.34	21.09	-33.01	1.04	256.53
860	96.51	103.94	8.23	96.75	19.11	-79.96	0.77	245.35
861	88.35	106.09	8.86	56.27	17.77	-100.03	0.14	177.46
862	77.85	106.32	8.49	-3.56	19.02	-81.26	0.67	127.54
863	69.31	108.31	8.06	-37.79	15.27	-32.48	1.36	132.04
864	57.39	111.84	8.55	-67.33	14.61	0.41	1.57	127.04
865	49.91	118.10	8.73	-76.09	12.46	2.07	1.68	116.87
866	48.97	118.82	8.27	-80.15	9.65	-24.57	1.61	82.60
867	49.25	119.92	8.39	-68.90	6.87	-56.96	1.40	59.97
868	49.27	118.63	8.64	-72.09	0.65	-71.72	2.65	36.03
869	49.00	118.08	10.22	-68.73	-4.80	-69.03	3.49	38.23
870	49.89	116.76	9.81	-75.50	-8.51	-48.35	2.77	46.87
871	49.36	116.54	9.73	-76.94	-9.99	-31.12	1.93	59.52
872	49.49	118.15	9.01	-68.83	-10.03	-33.73	1.74	65.80
873	49.88	118.68	8.90	-66.62	-11.34	-45.60	1.80	55.72
874	48.54	118.70	9.72	-64.28	-13.58	-60.81	1.91	40.19
875	49.64	116.09	8.46	-61.23	-16.14	-62.72	1.12	35.21
876	49.22	117.32	8.26	-60.33	-21.77	-50.92	0.95	42.73
877	49.75	116.88	8.47	-44.63	-23.25	-38.32	0.53	69.43
878	49.50	116.80	9.03	-43.32	-24.41	-32.39	-0.03	75.18



879	49.73	116.56	9.55	-44.22	-22.73	-30.47	-0.55	77.87
880	48.00	117.94	9.50	-33.23	-24.21	-38.40	-0.50	79.10
881	48.74	117.05	9.45	-32.40	-25.07	-46.05	-0.53	71.18
882	48.05	117.34	9.54	-44.60	-24.53	-50.84	-0.75	54.21
883	48.79	117.11	9.49	-41.75	-23.06	-51.45	-0.62	58.52
884	48.19	119.30	9.30	-38.34	-21.06	-52.54	-0.30	64.55
885	49.32	117.87	9.97	-27.01	-17.86	-55.93	-1.09	75.27
886	49.78	117.32	9.29	-31.98	-15.45	-55.65	-0.33	72.97
887	49.12	117.76	9.77	-25.18	-9.66	-64.05	-1.19	76.57
888	49.35	116.50	10.11	40.67	-6.89	-71.42	-1.90	136.42
889	48.75	118.46	9.58	47.30	-7.38	-81.96	-0.87	133.88
890	49.29	117.23	9.91	49.60	-7.54	-83.79	-0.96	133.75
891	49.81	117.45	9.33	70.47	-8.73	-84.53	-1.12	152.67
892	49.62	117.51	9.65	71.62	-10.87	-84.99	-1.28	151.27
893	48.81	118.06	9.20	70.37	-11.19	-93.31	-0.32	141.62
894	49.95	117.51	9.61	63.88	-10.11	-104.01	-0.65	126.17
895	49.15	117.05	9.69	69.29	-11.27	-115.05	-0.74	118.12
896	48.94	117.23	9.40	67.47	-12.56	-124.90	-0.78	104.81
897	48.88	117.49	9.80	80.38	-15.75	-127.37	-1.59	111.84
898	49.13	117.46	9.33	74.27	-16.88	-127.04	-0.66	105.61
899	49.37	118.58	9.74	26.36	-18.25	-127.25	-0.74	57.82
900	48.76	117.86	8.98	35.37	-19.14	-131.94	0.02	59.91
901	49.06	117.13	8.84	43.12	-21.56	-134.38	0.16	62.37
902	48.36	116.62	9.08	36.78	-20.90	-136.29	-0.08	53.57
903	49.60	116.21	9.42	37.09	-25.85	-133.12	-0.42	52.92
904	49.86	117.05	9.09	62.35	-23.07	-128.09	-0.34	86.85
905	53.89	111.69	8.42	47.18	-21.93	-113.33	0.67	86.57
906	56.85	108.02	8.89	60.48	-19.89	-102.40	-0.14	111.81
907	58.91	103.42	8.73	36.76	-18.79	-97.52	0.27	91.79
908	62.87	99.95	8.19	23.25	-17.79	-102.20	0.89	75.16
909	65.40	92.35	8.38	27.14	-16.19	-113.76	0.79	64.10
910	68.45	88.15	8.56	13.84	-10.37	-111.86	0.53	57.29
911	71.49	83.05	8.68	18.76	-8.61	-111.22	0.32	62.47
912	73.25	76.66	9.56	13.82	-11.29	-98.49	-1.02	62.48
913	76.68	73.00	8.98	49.60	-9.26	-81.41	-0.35	117.23
914	-33.98	-1.95	11.55	152.78	-18.15	17.63	0.28	128.17
915	-39.43	4.91	12.01	129.05	-15.53	7.72	-0.01	98.71
916	-44.74	12.38	11.59	114.71	-17.61	-11.77	0.00	64.54
917	-51.99	17.26	11.52	73.16	-17.61	-20.05	-1.85	10.43
918	-56.97	22.09	11.29	72.93	-19.43	-19.07	-3.54	7.31
919	-64.06	28.80	11.59	58.92	-16.62	-11.84	-3.75	3.02
920	-70.32	34.78	11.97	46.13	-15.76	-16.74	-4.14	-14.08
921	-76.65	40.53	11.22	-13.91	-16.39	-31.62	-2.84	-89.66
922	-82.84	47.15	10.76	-26.66	-15.53	-33.53	0.44	-100.20
923	-89.11	53.43	11.42	-69.93	-15.93	-22.01	2.25	-129.89
924	-95.81	59.49	11.41	-84.55	-15.23	-21.91	2.51	-144.10
925	-100.97	61.92	11.25	-89.48	-14.87	-38.34	2.75	-167.73
926	-100.14	61.64	11.57	-86.55	-13.90	-46.35	2.43	-171.30
927	-100.61	60.95	10.76	-76.09	-16.47	-44.95	1.74	-164.67
928	-100.86	61.44	10.43	-70.11	-20.00	-41.06	1.99	-158.18
929	-100.46	61.28	10.96	-55.62	-15.32	-43.42	2.42	-140.16
930	-100.59	61.02	10.68	-57.60	-17.99	-47.41	1.45	-150.45
931	-100.39	61.25	10.24	-61.02	-21.67	-47.71	1.93	-157.38
932	-101.01	61.61	11.14	-63.86	-25.47	-43.19	0.86	-159.93
933	-99.83	61.95	10.87	-62.26	-25.00	-49.61	1.13	-162.76
934	-99.24	61.21	10.97	-57.86	-24.97	-57.13	1.03	-165.99
935	-99.72	61.89	11.07	-39.55	-29.03	-56.60	1.30	-150.63
936	-100.13	60.75	11.52	28.87	-17.62	-55.25	-0.60	-72.46
937	-99.47	60.11	11.69	28.09	-22.34	-45.66	-0.56	-68.14
938	-99.96	60.74	11.40	25.55	-24.81	-39.45	0.35	-66.18
939	-100.09	61.09	11.58	33.25	-25.16	-36.70	0.42	-55.61
940	-100.42	60.31	11.25	44.37	-25.04	-39.04	0.75	-47.82
941	-100.87	61.21	10.86	52.70	-22.30	-42.48	1.14	-39.74
942	-100.18	60.64	11.06	50.08	-24.62	-45.71	0.94	-47.78
943	-101.06	60.51	11.51	56.22	-22.71	-45.35	0.20	-40.68
944	-100.96	59.38	11.73	51.08	-18.68	-35.84	-0.81	-34.11
945	-100.34	59.87	11.25	71.30	-16.62	-24.01	-1.17	0.28
946	-100.28	59.87	11.83	79.94	-6.42	-22.93	-0.70	21.29
947	-99.83	59.18	11.72	80.85	-4.62	-23.43	-1.18	22.69
948	-100.83	60.48	11.55	38.08	-3.79	-26.15	-0.09	-20.75

949	-100.41	59.75	11.82	33.52	-2.01	-26.71	0.18	-23.85
950	-99.85	58.78	11.90	39.88	1.31	-28.28	-0.45	-16.70
951	-99.68	58.83	12.23	56.65	-0.65	-28.04	-0.89	-1.56
952	-100.22	58.67	11.96	55.25	-1.41	-26.71	-0.88	-3.34
953	-100.74	58.34	11.97	46.74	-2.63	-16.22	-0.97	-3.51
954	-101.16	58.87	11.74	53.26	-3.55	-10.20	-0.74	8.22
955	-100.18	58.53	11.20	68.41	3.13	-5.32	0.60	36.37
956	-100.49	58.49	10.65	47.74	1.58	-7.43	1.77	12.29
957	-100.60	59.14	10.78	53.35	-1.90	-10.74	1.22	11.25
958	-100.80	60.03	10.50	60.85	4.08	-13.28	1.50	22.87
959	-100.73	60.16	10.79	69.23	9.83	-15.87	1.21	34.62
960	-100.60	60.63	11.03	70.30	13.56	-18.30	0.80	37.43
961	-99.58	59.75	11.72	81.16	12.08	-13.96	0.28	51.45
962	-100.72	58.91	11.37	79.07	12.14	-14.87	0.63	46.53
963	-100.37	59.71	11.55	88.11	17.60	-12.21	0.28	64.67
964	-100.87	59.49	11.73	84.40	22.56	-13.12	-0.40	63.79
965	-88.35	59.97	11.68	80.09	22.39	-17.76	-0.52	67.50
966	-79.00	59.33	11.84	61.98	19.73	-18.04	0.16	56.00
967	-68.71	56.86	12.01	67.10	13.52	-16.67	-0.63	63.47
968	-59.57	56.26	11.80	66.46	13.44	-12.58	-0.59	75.23
969	-48.37	55.25	12.05	58.00	12.70	-9.75	-0.30	79.58
970	-37.94	54.99	11.54	60.46	5.77	-7.04	-0.04	87.76
971	-28.52	53.46	11.45	37.25	2.00	-4.34	-0.78	70.52
972	-19.76	53.81	11.30	63.72	0.28	-7.01	-1.09	101.24
973	-8.72	53.06	11.39	47.06	-4.24	-8.56	-0.80	89.18
974	28.19	42.95	4.80	116.75	57.37	131.82	-2.59	379.30
975	40.96	46.60	3.80	91.55	48.06	135.79	-0.51	366.25
976	53.40	49.77	5.07	53.25	37.43	140.42	1.23	340.56
977	65.91	50.11	5.44	38.73	30.68	139.98	1.65	332.48
978	77.70	53.06	5.56	36.06	22.72	142.07	1.39	338.56
979	89.30	56.01	4.66	27.47	15.00	135.94	2.59	330.97
980	101.46	60.17	4.42	-8.59	4.45	128.08	3.28	293.28
981	115.70	59.71	4.43	-21.83	-0.32	118.71	3.12	279.51
982	126.91	63.32	4.79	-46.74	-5.12	112.05	3.34	258.55
983	139.59	66.96	5.55	-53.60	-8.72	91.02	3.37	244.17
984	151.32	69.25	5.31	-66.90	-11.01	53.31	3.19	204.47
985	149.47	69.30	4.97	-76.36	-8.95	26.45	3.07	167.95
986	149.53	69.06	6.62	-85.23	-4.72	17.98	1.63	154.87
987	150.11	70.20	6.16	-68.89	1.58	5.61	1.84	166.61
988	149.54	70.57	6.18	-64.92	6.96	-12.13	2.07	158.27
989	149.86	70.40	6.58	-57.03	15.83	-40.53	1.42	146.54
990	148.29	69.09	6.45	-64.78	22.67	-63.71	1.17	119.17
991	149.75	72.32	4.72	-47.88	32.14	-92.74	-0.01	118.30
992	149.87	69.27	6.86	-48.23	37.38	-125.52	0.94	90.56
993	148.62	68.44	6.35	-44.08	39.79	-135.00	0.74	84.85
994	149.33	69.04	5.46	-51.90	44.08	-141.26	0.13	74.88
995	149.31	67.84	3.97	-48.43	45.61	-139.72	-0.18	78.40
996	149.02	67.91	4.27	-39.74	46.98	-137.50	-0.31	90.63
997	149.37	67.57	4.27	28.29	46.96	-138.15	-0.19	158.12
998	150.66	67.42	3.76	33.46	45.34	-133.42	-0.39	166.83
999	150.09	69.13	5.57	45.21	42.53	-129.92	0.51	183.12
1000	149.91	69.61	5.56	40.86	39.59	-133.07	0.57	173.02
1001	149.11	69.45	5.14	56.59	37.52	-133.87	-0.26	183.67
1002	148.52	68.77	4.72	64.84	35.81	-136.94	-1.35	184.38
1003	149.65	68.66	4.13	72.99	37.43	-131.50	-0.97	200.41
1004	149.53	68.25	4.22	74.26	35.80	-129.59	-0.97	201.51
1005	149.30	66.98	4.15	77.86	35.78	-125.45	-0.90	207.71
1006	150.43	68.18	5.01	73.17	29.36	-121.00	-0.55	204.61
1007	150.32	68.17	5.37	91.14	21.31	-120.96	-0.41	214.93
1008	149.28	67.60	4.56	91.33	21.00	-119.51	-0.90	213.36
1009	149.27	68.15	3.99	93.37	23.48	-118.86	-0.74	218.66
1010	149.09	68.97	4.25	99.69	23.05	-117.76	-1.25	226.04
1011	149.56	68.97	4.66	99.58	19.15	-122.14	-1.58	218.21
1012	149.02	68.52	4.43	111.71	12.19	-124.19	-1.38	220.29
1013	150.29	69.30	4.36	111.02	3.71	-123.26	-0.86	214.57
1014	149.42	69.09	4.39	99.78	-3.02	-127.00	-0.02	192.64
1015	149.62	68.84	5.02	63.12	-6.77	-130.63	0.44	149.64
1016	148.53	69.29	4.75	63.92	-12.53	-131.54	0.29	142.72
1017	150.63	69.25	4.88	68.85	-14.55	-128.00	0.32	151.39
1018	149.47	68.71	5.57	60.28	-18.68	-128.44	0.47	137.39

1019	149.47	68.48	5.35	76.00	-24.06	-130.08	1.19	146.35
1020	148.95	68.32	6.13	82.04	-21.75	-130.61	1.08	154.17
1021	149.27	68.95	5.76	70.21	-21.31	-133.45	0.91	140.33
1022	150.36	69.23	5.84	81.18	-17.65	-133.23	0.58	156.31
1023	150.46	68.06	5.13	89.90	-17.25	-131.65	0.12	164.77
1024	150.92	69.35	4.48	82.60	-16.57	-131.41	0.47	159.85
1025	148.61	65.72	4.42	76.14	-13.13	-123.40	0.08	158.44
1026	142.57	62.81	4.71	73.71	-11.32	-110.69	-0.37	161.42
1027	134.54	61.06	5.71	57.77	-4.58	-97.10	0.29	157.69
1028	127.57	58.39	5.13	40.14	-1.11	-83.07	-0.18	146.87
1029	120.54	56.65	5.16	34.72	-1.54	-71.51	-0.08	143.95
1030	114.53	52.76	5.52	33.86	-2.36	-60.78	-0.15	143.38
1031	107.51	49.42	4.88	88.47	-2.18	-53.40	-0.97	193.74
1032	100.98	47.85	5.11	107.22	1.81	-54.47	-2.02	206.47
1033	93.38	46.38	5.46	49.79	3.00	-64.54	0.79	134.25
1034	62.58	43.50	5.51	69.16	-47.10	-44.38	3.24	92.51
1035	56.25	38.98	5.44	58.35	-45.44	-57.86	4.94	60.66
1036	49.07	37.63	5.97	28.64	-46.32	-39.05	5.36	41.31
1037	40.52	37.55	5.85	1.70	-42.31	-3.67	4.19	43.82
1038	35.22	39.99	5.39	65.73	-43.66	-18.80	2.74	86.61
1039	27.86	38.28	5.80	75.24	-38.84	-59.51	2.28	51.11
1040	21.00	35.42	5.79	63.32	-38.17	-78.46	1.59	10.49
1041	12.96	32.28	6.20	45.51	-36.42	-63.78	0.76	-2.49
1042	5.72	32.02	5.96	45.10	-32.55	-36.32	-0.17	19.76
1043	-2.01	31.97	5.95	21.03	-31.19	-26.97	0.26	-0.97
1044	-9.75	30.63	6.30	-0.92	-27.37	-34.47	-0.76	-36.34
1045	-14.70	27.48	6.12	0.40	-24.26	-43.32	-2.08	-50.35
1046	-14.28	28.07	5.64	4.05	-16.93	-47.78	-4.01	-45.24
1047	-13.74	27.12	5.54	15.99	-11.81	-42.95	-4.29	-24.14
1048	-14.32	28.43	5.59	13.45	-8.89	-48.97	-4.29	-29.00
1049	-13.70	27.98	5.28	6.27	-2.88	-50.40	-4.65	-32.10
1050	-14.45	28.69	5.58	6.82	-0.22	-56.44	-5.17	-35.18
1051	-14.02	27.62	5.78	26.20	5.35	-46.75	-5.41	-1.22
1052	-13.80	27.31	6.23	26.30	8.59	-33.34	-3.60	17.69
1053	-14.18	28.53	5.69	17.42	9.68	-23.51	-2.07	21.57
1054	-14.74	28.66	5.29	13.25	10.07	-20.87	-0.99	20.67
1055	-14.19	28.68	5.62	16.06	7.53	-22.64	0.75	21.81
1056	-14.20	26.91	6.02	31.06	7.51	-26.45	0.48	31.33
1057	-14.55	27.61	6.25	33.78	12.86	-30.23	0.08	35.80
1058	-13.72	27.77	6.54	45.34	7.93	-24.93	0.09	49.00
1059	-13.90	28.39	5.67	38.15	12.86	-22.08	1.08	50.17
1060	-14.32	27.70	6.09	43.04	10.15	-24.80	1.29	49.14
1061	-14.92	28.23	6.00	44.17	9.27	-25.96	1.50	48.30
1062	-13.98	28.94	6.37	53.57	7.48	-23.88	0.84	59.34
1063	-14.34	29.60	5.99	50.55	6.11	-16.81	1.51	62.62
1064	-13.67	28.21	6.19	51.75	8.54	-14.58	0.89	67.34
1065	-14.14	28.56	6.92	44.40	11.39	-14.29	0.67	63.50
1066	-13.43	29.45	6.85	14.15	10.68	-14.91	0.57	33.35
1067	-14.49	28.71	6.24	12.39	8.62	-12.35	1.01	30.12
1068	-15.46	28.39	6.04	-1.73	9.42	-13.18	1.09	14.56
1069	-14.41	28.78	6.77	9.64	12.33	-7.07	0.52	36.55
1070	-15.04	30.21	6.57	3.72	13.79	-6.42	0.76	33.60
1071	-13.89	29.40	6.33	8.80	15.01	-10.55	0.92	36.03
1072	-14.79	27.42	7.02	23.29	10.96	-12.32	0.39	41.98
1073	-14.50	28.96	7.10	17.90	12.00	-13.85	0.23	37.84
1074	-13.64	28.44	6.56	23.17	7.60	-14.01	-0.35	37.78
1075	-13.30	28.95	6.18	30.95	3.01	-14.66	-0.60	40.54
1076	-14.34	28.67	6.15	29.40	1.42	-13.21	0.14	38.24
1077	-13.49	30.03	6.19	36.97	-3.26	-19.81	0.22	36.86
1078	-13.88	28.34	5.88	40.40	-6.53	-18.94	0.33	35.60
1079	-13.37	28.63	6.27	34.67	-9.09	-15.58	0.44	31.96
1080	-14.11	28.29	6.18	33.05	-7.32	-7.33	0.40	39.16
1081	-14.19	28.64	5.83	59.85	-6.63	1.11	-0.95	73.66
1082	-14.10	28.54	5.43	57.79	-7.44	4.67	-1.81	73.09
1083	-14.42	27.72	6.36	22.28	-9.12	3.85	-1.06	35.60
1084	-14.49	29.17	5.84	7.56	-8.59	4.00	-1.13	22.35
1085	-10.04	27.78	6.08	14.45	-6.96	2.36	-0.95	32.72
1086	-5.99	24.56	5.60	15.72	-5.51	-4.62	-0.77	28.99
1087	-4.23	22.79	5.96	16.96	-0.19	-9.37	-0.29	31.63
1088	-0.62	20.66	6.07	9.51	-4.17	-11.28	0.18	20.34

1089	1.45	16.98	5.76	10.98	-1.70	-9.09	-0.14	24.26
1090	3.85	14.99	6.30	4.05	0.65	4.53	-0.09	34.28
1091	6.93	13.15	5.75	-11.40	2.11	-13.65	-0.37	2.52
1092	10.85	10.87	5.39	2.97	7.48	-9.53	-1.39	26.63
1093	12.86	10.49	5.15	-9.65	6.14	-17.07	-0.61	7.31
1094	63.98	-1.76	1.75	55.57	-15.31	-11.68	-0.75	91.80
1095	63.76	-1.88	1.17	69.51	-13.68	-6.99	0.12	112.01
1096	65.29	-2.40	2.68	45.91	-13.33	-5.87	1.28	93.56
1097	65.47	-1.81	3.14	41.67	-8.20	-15.62	1.73	86.38
1098	66.62	-2.67	2.66	32.22	-4.52	-24.87	1.13	70.58
1099	65.87	-5.35	3.11	16.41	-3.08	-20.82	0.85	56.99
1100	67.00	-5.48	3.08	5.73	-1.00	-14.19	1.71	56.85
1101	67.98	-6.25	2.97	-13.17	4.15	-5.42	1.03	51.29
1102	67.59	-4.55	2.34	-15.02	7.58	-2.26	2.87	58.54
1103	68.74	-7.11	2.53	1.99	10.03	-1.25	3.56	78.49
1104	67.63	-8.29	2.21	15.27	11.26	6.54	2.92	97.55
1105	67.39	-9.69	2.25	-39.36	9.78	11.39	2.75	44.52
1106	66.77	-9.48	3.08	-45.36	9.02	16.63	0.88	41.54
1107	66.96	-8.90	1.97	-5.33	9.79	9.04	-1.10	72.45
1108	66.41	-8.47	1.94	-9.62	11.46	0.51	-1.61	60.63
1109	67.64	-9.25	2.25	8.63	9.79	-4.98	-1.00	73.08
1110	67.59	-9.09	3.02	17.03	8.30	5.28	-0.61	91.53
1111	67.17	-8.03	2.25	16.64	2.39	12.32	-1.29	91.45
1112	67.07	-8.29	1.49	14.27	-0.57	12.50	-3.08	83.39
1113	67.14	-8.00	1.48	55.00	-1.89	2.09	-3.48	112.33
1114	66.43	-9.67	1.00	55.97	-4.35	-5.25	-2.21	101.93
1115	67.10	-9.68	1.24	48.99	-3.35	-5.99	-1.70	96.62
1116	66.60	-9.41	1.37	44.07	-5.14	-0.09	-1.21	96.20
1117	66.00	-9.63	2.09	32.57	-0.70	4.99	-0.26	95.06
1118	66.86	-9.21	2.80	-8.88	-0.86	4.43	-0.22	54.93
1119	66.57	-9.67	1.94	-12.01	-2.57	1.75	-0.77	45.24
1120	67.07	-9.46	1.98	-2.44	-5.61	-0.75	-0.94	49.85
1121	67.72	-10.24	1.98	13.55	-5.09	3.53	-0.98	70.47
1122	66.71	-9.53	2.29	52.00	-1.96	7.93	-1.29	116.15
1123	67.20	-9.07	0.96	63.23	1.00	8.51	-1.96	129.88
1124	66.92	-8.90	2.92	78.22	-0.56	3.11	-0.38	141.32
1125	66.70	-9.63	2.82	63.57	0.32	-6.18	-0.40	117.19
1126	66.26	-8.67	2.85	31.82	0.61	-5.73	0.32	87.46
1127	66.64	-8.95	3.13	15.72	2.65	-2.30	1.54	78.42
1128	66.49	-9.31	3.44	17.62	7.55	7.23	0.35	93.37
1129	67.93	-9.69	2.24	33.81	6.46	18.94	-0.57	119.12
1130	66.68	-9.23	3.12	27.82	6.68	17.64	0.26	112.97
1131	67.66	-8.74	3.03	28.02	9.84	11.45	-0.32	110.94
1132	67.81	-8.69	2.75	33.06	8.85	1.81	-0.16	105.43
1133	68.34	-8.37	3.16	31.79	4.37	-0.21	0.30	99.37
1134	66.67	-9.35	3.32	26.05	-2.34	2.14	0.56	87.05
1135	67.11	-9.88	3.21	31.00	-2.49	11.61	0.75	101.31
1136	66.89	-10.05	3.59	36.91	-4.85	4.09	0.66	97.24
1137	67.50	-9.38	3.06	47.01	-6.63	-0.97	0.02	100.61
1138	66.93	-10.04	2.48	83.44	-9.68	1.48	-0.69	133.92
1139	67.63	-10.29	2.94	127.40	-9.71	4.56	0.31	182.84
1140	67.88	-9.93	3.54	109.22	-11.70	3.80	1.26	164.08
1141	67.48	-9.68	2.74	115.81	-12.75	-3.86	0.21	159.95
1142	67.44	-10.49	2.85	122.52	-11.65	-4.17	-0.06	166.44
1143	67.36	-10.13	3.10	113.33	-15.24	-5.08	0.07	153.42
1144	66.83	-9.38	3.38	78.46	-17.95	-2.87	0.54	119.00
1145	71.13	-9.36	3.62	69.84	-13.75	-3.64	0.46	118.30
1146	73.07	-8.00	3.34	54.95	-16.65	-3.00	1.54	105.24
1147	73.73	-7.24	3.01	38.68	-15.40	-2.09	1.99	92.68
1148	73.96	-6.05	3.47	27.86	-15.83	-3.08	0.95	81.27
1149	75.68	-5.17	3.06	36.59	-11.31	-11.79	-0.52	86.54
1150	75.28	-5.77	3.46	25.67	-16.53	-17.35	0.04	64.79
1151	76.46	-4.95	3.39	16.24	-18.54	-16.51	-0.10	55.99
1152	78.18	-4.02	2.83	20.77	-11.55	-12.19	-0.46	73.57
1153	79.54	-3.99	3.43	15.90	-11.29	-14.84	0.86	69.61
1154	109.67	-244.13	8.02	111.86	-13.09	-3.41	-1.07	-32.14
1155	105.38	-224.23	8.62	99.59	-8.00	-1.39	0.84	-19.20
1156	104.07	-203.42	9.28	84.03	-2.78	-1.74	0.85	-9.71
1157	101.07	-182.20	10.00	95.45	0.52	-0.02	0.41	25.23
1158	99.59	-160.92	9.40	79.83	2.79	-0.83	-3.98	25.88

1159	97.50	-139.57	10.30	49.82	4.87	-0.03	-2.47	20.42
1160	95.37	-119.80	11.23	40.40	8.84	-1.38	-0.31	34.34
1161	93.22	-99.20	12.06	12.65	9.44	1.66	-2.18	27.65
1162	91.03	-77.79	12.34	2.04	12.09	4.96	-4.30	40.37
1163	89.88	-55.26	12.70	4.08	15.33	6.51	-7.12	66.12
1164	85.80	-35.14	13.58	12.82	17.99	3.60	-9.37	89.28
1165	83.45	-28.80	13.16	14.61	21.80	2.02	-10.62	95.62
1166	84.09	-28.57	12.26	18.34	18.32	-1.90	-4.30	98.24
1167	83.00	-29.64	13.69	-28.78	12.29	-1.07	0.39	49.89
1168	83.17	-29.11	13.60	-35.53	16.67	3.78	1.53	54.10
1169	82.58	-28.50	13.57	-44.05	16.48	3.16	1.06	44.30
1170	83.66	-28.51	13.40	-38.58	13.24	-1.33	1.06	42.95
1171	83.92	-29.24	13.62	-19.79	11.16	-4.04	2.96	58.60
1172	83.49	-29.31	13.99	-31.26	12.17	-4.04	3.97	49.02
1173	83.19	-29.87	13.82	-33.82	14.56	-2.46	3.43	48.85
1174	83.14	-29.56	13.52	-30.41	16.11	-3.28	3.23	52.76
1175	82.75	-29.25	13.27	-30.78	16.67	-2.88	2.23	52.01
1176	82.93	-29.68	12.92	-25.38	19.65	-3.35	1.99	59.09
1177	83.42	-29.16	13.43	-29.29	15.41	-1.48	2.24	54.57
1178	83.85	-27.69	13.04	-27.33	12.31	3.27	1.46	58.92
1179	83.35	-28.72	12.94	-24.67	11.07	3.76	2.11	59.83
1180	84.19	-29.07	13.90	-30.00	11.81	1.32	3.60	55.75
1181	84.39	-29.00	13.81	-0.41	13.15	0.17	3.03	85.13
1182	83.85	-28.96	12.60	-9.09	9.30	-2.20	2.06	67.55
1183	84.71	-29.28	12.88	2.05	4.56	-2.30	1.87	74.49
1184	83.93	-29.59	13.08	2.72	2.41	-2.16	1.21	71.59
1185	84.36	-28.95	13.18	21.34	-0.25	-0.89	2.40	91.20
1186	84.14	-27.39	13.62	9.76	-5.60	-0.44	3.34	77.42
1187	83.79	-28.80	13.78	3.07	-11.18	3.96	3.22	67.85
1188	83.59	-28.34	13.33	1.69	-11.29	4.42	3.59	66.98
1189	83.53	-28.23	13.68	8.22	-12.66	3.61	2.61	70.77
1190	84.19	-29.37	14.05	32.40	-20.40	1.41	2.58	84.86
1191	83.48	-29.41	12.64	81.75	-24.84	3.04	2.11	128.77
1192	83.87	-29.02	13.86	72.15	-28.10	5.06	2.89	120.71
1193	83.35	-28.64	13.70	32.63	-29.31	6.43	2.80	80.97
1194	83.65	-29.38	13.35	56.12	-35.86	2.50	4.70	95.08
1195	83.84	-28.67	13.62	15.38	-38.09	-0.49	6.88	52.47
1196	83.56	-29.18	13.52	77.61	-36.89	-2.53	6.52	112.61
1197	83.96	-28.99	13.61	78.97	-37.00	-2.84	5.23	112.93
1198	83.39	-28.70	13.37	81.81	-34.10	-0.38	5.68	121.06
1199	83.37	-29.22	13.07	82.29	-31.20	-4.57	6.97	120.71
1200	83.88	-28.64	14.59	82.74	-31.58	-5.73	7.29	122.53
1201	84.39	-28.48	13.53	95.07	-35.73	-6.44	7.13	129.48
1202	83.43	-28.52	14.36	94.82	-37.84	-9.58	7.55	124.22
1203	84.98	-28.71	13.90	98.72	-40.64	-9.96	7.35	125.63
1204	83.56	-28.54	13.75	93.47	-46.78	-10.89	7.25	111.80
1205	86.61	-27.71	14.46	41.39	-40.22	-8.20	7.08	73.41
1206	87.82	-26.91	13.92	28.59	-39.73	-9.01	5.70	60.38
1207	86.28	-27.75	14.56	20.62	-48.99	-6.77	6.44	44.39
1208	87.41	-26.54	15.34	11.80	-51.33	-7.81	5.99	34.87
1209	85.16	-25.93	15.09	4.14	-51.41	-4.39	4.74	27.40
1210	85.02	-25.32	15.85	-1.25	-49.38	0.32	4.81	30.07
1211	85.73	-25.02	15.96	-9.57	-45.79	-0.80	3.79	24.31
1212	84.97	-23.90	15.87	-14.83	-42.72	0.67	2.79	22.85
1213	84.80	-22.52	16.41	-29.83	-44.86	1.21	2.00	7.21
1214	-53.72	-189.54	7.33	132.80	-24.50	0.66	-0.25	-127.23
1215	-53.21	-164.27	7.70	121.15	-23.93	-1.27	0.76	-113.08
1216	-53.68	-138.07	8.77	92.15	-21.23	-0.99	1.44	-111.62
1217	-53.47	-113.64	7.67	42.56	-21.59	-3.19	0.70	-140.95
1218	-52.81	-89.31	7.77	15.49	-18.34	-1.55	0.73	-138.01
1219	-52.32	-63.10	8.44	-13.30	-13.50	-1.90	1.61	-134.07
1220	-52.19	-39.06	8.02	-29.51	-11.44	-1.69	2.19	-123.68
1221	-51.45	-12.80	8.40	-44.48	-7.48	-3.07	1.77	-109.12
1222	-52.33	12.78	8.74	-36.96	-8.71	-5.19	1.42	-80.25
1223	-51.64	37.39	9.20	-10.56	-4.28	-5.10	0.80	-24.18
1224	-52.02	62.46	9.28	7.38	-3.19	-3.74	0.72	20.90
1225	-55.08	69.39	8.82	36.16	-2.81	-0.95	0.18	55.70
1226	-55.57	68.73	8.18	53.17	-0.82	2.33	-0.05	75.96
1227	-55.43	69.60	9.23	62.92	-0.86	2.51	0.89	88.85
1228	-55.26	69.34	9.59	48.67	-1.40	3.21	0.41	74.54

1229	-54.91	69.38	9.61	12.22	-0.80	-1.24	0.39	34.65
1230	-55.25	69.76	9.65	6.71	-4.86	-3.86	0.35	22.49
1231	-55.34	68.99	8.19	8.62	-5.57	-4.40	-0.73	19.75
1232	-55.04	69.87	8.55	37.41	-2.75	0.13	0.66	58.83
1233	-55.15	69.12	8.88	2.96	-2.73	-1.24	0.49	22.33
1234	-54.32	68.09	8.17	21.16	-1.99	2.78	-0.12	43.76
1235	-53.98	68.99	9.34	2.46	-4.37	3.43	0.66	26.52
1236	-53.74	69.81	9.10	20.72	-4.11	-2.27	0.11	39.61
1237	-54.96	69.26	8.10	74.26	-2.54	-6.18	-1.10	86.84
1238	-54.61	69.33	8.28	99.28	-1.76	-1.83	-1.28	117.41
1239	-54.06	69.76	8.32	95.72	-2.10	3.37	-1.94	119.05
1240	-53.51	69.34	8.47	101.29	-1.61	5.16	-2.47	126.67
1241	-53.32	69.70	8.00	56.82	-2.55	3.26	-1.12	80.78
1242	-54.10	68.64	9.33	11.48	-2.19	-0.59	0.46	33.03
1243	-54.83	69.48	9.51	-8.36	-0.50	0.73	0.70	16.73
1244	-54.40	68.99	8.16	-3.35	0.06	-1.16	-1.00	17.32
1245	-53.50	69.04	8.42	5.50	2.25	0.54	-1.50	30.75
1246	-53.37	69.32	8.29	0.63	2.37	1.31	-1.38	27.17
1247	-54.45	68.79	8.25	3.03	3.15	1.33	-1.34	28.78
1248	-54.40	69.06	7.75	57.48	3.35	4.94	1.63	89.81
1249	-53.84	68.85	7.51	18.56	3.52	5.27	3.20	53.07
1250	-54.32	68.61	8.72	34.87	2.31	8.39	3.82	72.40
1251	-54.50	69.24	8.65	24.94	2.55	5.76	3.18	59.82
1252	-54.20	69.71	8.79	14.98	1.50	3.33	3.04	47.14
1253	-54.53	69.85	9.26	8.19	-0.72	1.36	1.86	35.28
1254	-53.66	70.34	8.87	13.23	0.85	0.66	0.55	40.84
1255	-53.96	70.12	8.06	23.63	-0.11	0.01	-0.19	47.56
1256	-54.79	70.09	8.58	20.58	-0.67	-0.25	-0.29	43.24
1257	-54.18	69.59	7.48	27.07	0.10	-0.86	-0.48	48.71
1258	-53.95	68.88	7.92	34.84	-0.63	1.81	-0.38	58.49
1259	-54.34	69.42	8.33	22.18	-1.73	2.29	-0.38	45.78
1260	-55.11	70.16	8.09	34.99	-3.43	-1.95	-0.76	52.00
1261	-55.01	69.32	7.77	39.68	-3.68	-3.61	-0.73	53.74
1262	-53.92	70.08	8.93	44.14	-5.39	-4.59	0.24	59.49
1263	-53.15	69.16	8.56	51.86	-6.63	0.22	-0.73	69.30
1264	-53.38	69.44	8.45	52.19	-7.93	1.44	-0.08	70.13
1265	-51.00	69.44	8.85	49.13	-8.39	4.85	-0.10	72.78
1266	-49.64	66.45	8.77	37.81	-9.61	5.05	0.40	59.23
1267	-48.50	63.32	8.72	38.84	-9.96	2.81	0.28	55.50
1268	-48.27	60.05	8.61	66.98	-9.65	4.95	0.60	83.27
1269	-46.87	57.84	8.77	51.62	-11.25	7.28	1.48	68.87
1270	-47.39	56.13	8.82	87.24	-11.27	3.37	1.18	98.07
1271	-46.55	52.34	9.08	80.84	-7.61	-2.26	-0.04	85.80
1272	-43.88	49.85	8.12	97.12	-6.19	-5.31	-1.12	98.58
1273	-45.42	47.34	9.08	91.08	-5.51	-1.59	-0.29	94.70
1274	199.24	-4.91	1.99	67.28	17.22	-3.07	0.55	278.29
1275	205.68	-5.44	1.97	61.36	9.21	-6.03	5.24	271.98
1276	214.05	-5.64	2.30	50.01	3.11	-4.86	9.53	268.50
1277	221.35	-5.41	9.10	27.93	-4.47	-1.05	-13.14	234.31
1278	229.60	-4.90	7.41	20.24	-11.74	2.15	-59.95	182.80
1279	237.28	-5.84	6.59	-5.71	-20.09	-1.55	-71.84	138.84
1280	245.78	-6.71	3.49	15.17	-25.03	-2.98	-62.61	167.10
1281	252.58	-7.21	0.11	-6.94	-29.12	-3.67	-25.03	180.72
1282	260.70	-6.99	2.34	-19.34	-36.95	-2.38	-11.63	185.75
1283	269.26	-5.50	3.00	-45.55	-45.51	-2.71	-8.21	164.78
1284	278.26	-5.10	2.43	-33.55	-47.96	-3.40	-5.93	184.74
1285	271.30	-7.53	4.20	-41.12	-41.85	-2.34	-5.70	176.97
1286	271.82	-7.96	3.92	-1.54	-39.32	-1.62	-6.29	219.00
1287	271.27	-7.28	3.89	-35.88	-38.48	-0.30	-6.18	187.04
1288	271.54	-7.47	3.73	1.54	-36.75	-0.73	-6.19	225.67
1289	272.04	-6.99	3.65	23.06	-35.40	-2.14	-6.56	247.66
1290	270.78	-7.44	4.41	25.03	-26.97	-1.52	-6.78	257.51
1291	272.19	-7.51	4.63	26.92	-20.31	-2.82	-7.17	265.92
1292	271.84	-7.55	4.08	36.97	-16.96	-1.24	-7.75	279.38
1293	270.98	-7.62	4.22	38.37	-7.73	-0.92	-7.77	289.53
1294	271.81	-7.68	3.45	44.66	-1.19	0.13	-7.74	303.45
1295	271.16	-7.21	3.53	29.92	7.88	-0.83	-7.12	297.34
1296	272.03	-7.23	4.15	8.67	13.95	0.07	-6.94	284.69
1297	271.53	-7.56	3.91	0.59	20.45	-1.02	-6.45	281.44
1298	271.70	-7.67	4.05	-3.79	27.49	-0.25	-6.30	285.23

1299	271.51	-7.43	3.44	4.86	38.80	2.48	-6.56	307.09
1300	272.04	-7.90	3.97	21.36	47.09	1.19	-6.51	331.23
1301	272.13	-8.22	4.27	18.85	53.79	2.17	-6.52	336.47
1302	271.56	-7.48	3.85	37.84	57.81	2.98	-6.60	359.97
1303	272.26	-7.41	3.75	22.96	62.45	4.63	-6.29	352.35
1304	270.89	-7.99	3.92	2.27	69.53	3.31	-6.04	335.89
1305	272.12	-7.89	3.33	31.21	79.12	4.49	-7.33	375.05
1306	272.21	-7.76	2.78	35.98	87.47	6.34	-7.37	389.66
1307	271.38	-7.54	2.78	27.56	91.27	9.33	-7.53	387.24
1308	271.85	-7.45	2.88	33.96	92.25	9.09	-6.75	395.83
1309	271.74	-6.54	3.36	62.65	96.85	9.88	-6.53	431.41
1310	271.10	-7.93	3.32	94.42	97.45	8.56	-6.44	460.47
1311	271.42	-8.00	3.54	79.61	95.14	9.79	-5.87	445.62
1312	271.16	-7.52	5.54	46.38	96.25	8.62	-7.25	413.19
1313	271.35	-8.04	7.89	30.37	98.70	7.94	-41.73	366.49
1314	271.46	-7.85	9.17	72.41	96.08	5.27	-52.46	394.07
1315	271.80	-8.12	7.58	42.97	96.32	4.12	-48.58	366.10
1316	271.84	-8.55	6.18	43.17	96.54	2.32	-48.26	363.23
1317	272.15	-7.88	0.92	55.12	94.10	3.48	-27.42	390.47
1318	272.18	-7.94	2.86	58.21	95.53	4.89	-9.40	416.33
1319	271.43	-7.85	3.11	66.13	94.60	4.33	-6.49	425.26
1320	271.33	-7.41	3.18	69.71	94.28	3.55	-5.80	428.83
1321	272.47	-8.24	3.93	78.25	94.25	4.22	-4.85	440.03
1322	271.77	-8.26	4.05	81.42	93.68	4.99	-4.76	442.88
1323	272.75	-8.08	4.07	81.44	88.67	6.95	-4.57	441.23
1324	272.06	-8.14	3.79	88.32	86.60	9.39	-4.71	447.32
1325	276.87	-6.60	4.03	88.96	79.25	7.43	-3.95	446.00
1326	277.15	-5.72	3.83	72.81	70.72	7.42	-3.29	422.92
1327	276.88	-6.04	3.71	70.58	63.43	9.96	-3.38	415.15
1328	276.00	-5.15	3.26	65.05	60.06	8.86	-3.01	405.07
1329	276.50	-5.29	3.56	60.42	56.29	7.79	-2.72	396.55
1330	273.31	-5.15	3.24	60.04	52.81	7.11	-3.28	388.08
1331	272.68	-4.94	3.01	55.85	49.40	4.92	-3.30	377.62
1332	272.98	-5.64	2.62	48.55	45.52	6.71	-2.29	368.44
1333	272.37	-5.30	2.67	39.18	41.13	7.57	-1.92	355.70
1334	17.33	13.51	-0.07	116.53	-13.91	5.82	0.07	139.28
1335	17.38	14.55	-0.48	106.03	-16.47	4.37	-0.48	124.90
1336	18.17	13.98	-0.40	104.82	-19.13	5.10	-0.48	122.07
1337	20.32	14.52	-0.20	87.67	-23.09	5.55	0.83	105.58
1338	21.97	12.98	-0.38	61.68	-26.03	3.02	0.46	73.70
1339	22.69	12.05	0.21	12.10	-29.31	1.26	1.13	20.12
1340	22.43	13.16	0.06	-5.49	-30.68	-0.24	0.07	-0.70
1341	24.62	13.11	0.43	-19.17	-32.94	1.39	-0.43	-12.98
1342	26.76	12.20	0.30	-17.42	-32.07	0.34	-0.22	-10.11
1343	27.47	11.89	1.16	-41.19	-33.72	2.07	1.47	-30.85
1344	27.05	11.26	0.98	-71.69	-35.26	3.16	2.02	-62.49
1345	24.92	9.81	0.88	-71.16	-32.76	1.52	2.07	-64.70
1346	24.01	9.10	0.34	-41.39	-29.59	-0.05	1.50	-36.08
1347	23.89	9.02	0.20	-37.21	-26.62	0.80	1.80	-28.12
1348	23.99	9.38	0.29	-43.69	-24.72	-0.42	1.63	-33.55
1349	24.11	9.39	0.34	-33.04	-22.78	0.88	1.66	-19.43
1350	24.06	10.33	0.41	-38.38	-19.51	-0.10	1.21	-21.98
1351	25.12	10.13	0.69	-48.60	-16.96	-1.80	0.35	-31.06
1352	25.38	9.71	0.77	14.50	-17.59	-3.80	0.15	29.12
1353	23.92	8.64	1.02	49.74	-15.87	-1.36	-0.36	65.72
1354	24.32	9.72	0.70	44.19	-11.59	-2.04	-0.08	65.22
1355	25.11	10.31	0.49	47.51	-10.34	-4.86	-0.12	68.11
1356	24.95	9.56	1.13	55.36	-10.66	-3.48	0.24	77.11
1357	24.74	9.20	1.21	19.73	-8.78	-2.74	0.37	43.73
1358	25.26	9.89	1.15	11.06	-5.85	0.19	0.51	42.22
1359	25.90	9.81	0.16	8.89	-3.85	2.69	-0.12	43.49
1360	25.68	10.07	0.55	14.36	-0.74	4.26	-0.14	54.05
1361	24.99	9.74	0.44	25.03	1.76	0.78	-0.32	62.43
1362	25.18	10.29	0.58	15.86	1.69	0.44	-0.20	53.83
1363	24.85	8.89	0.59	10.76	1.44	0.21	-0.17	46.58
1364	24.83	9.25	0.47	19.91	2.21	-0.02	-0.22	56.43
1365	24.42	9.04	0.44	18.93	0.58	0.39	-0.44	53.37
1366	24.10	9.74	0.77	21.14	4.61	1.91	-0.77	61.49
1367	24.76	10.85	0.67	29.42	9.70	0.40	-0.67	75.13
1368	24.33	9.90	0.60	33.71	15.75	1.06	-0.68	84.66

1369	24.83	8.89	0.57	35.21	19.00	-1.32	-0.65	86.53
1370	24.61	9.41	0.81	48.98	23.84	-1.78	-0.76	105.11
1371	24.66	9.11	0.89	55.84	25.54	-1.01	0.11	115.14
1372	24.13	9.84	0.88	45.27	30.23	-2.92	0.91	108.33
1373	24.17	9.41	0.75	38.59	36.64	-2.11	0.71	108.15
1374	25.25	8.81	0.32	50.19	40.67	-4.18	0.31	121.36
1375	25.53	8.89	0.48	55.07	43.84	-3.18	0.23	130.86
1376	23.78	9.81	0.31	63.34	45.89	-3.15	-0.10	139.88
1377	24.00	9.66	0.55	70.32	49.50	-5.24	-0.47	148.32
1378	24.71	8.43	0.70	72.49	50.27	-5.26	-0.70	150.63
1379	24.72	9.65	0.62	76.01	52.84	-7.19	-0.20	156.44
1380	24.48	8.52	0.48	87.28	57.02	-4.23	-0.06	173.49
1381	24.33	9.03	1.12	73.88	62.59	-1.95	1.50	170.51
1382	25.29	9.09	-0.02	109.60	65.96	-1.05	0.68	209.56
1383	24.80	9.40	0.58	147.75	64.49	-1.57	0.88	246.33
1384	24.15	9.50	0.95	148.81	69.01	-3.16	0.64	249.89
1385	28.98	10.76	0.80	173.21	68.10	-4.27	0.70	278.28
1386	31.59	11.26	0.88	170.19	65.79	-4.21	0.57	276.07
1387	32.55	11.35	0.83	137.79	67.57	-1.44	0.29	248.95
1388	34.88	10.88	0.13	131.49	66.08	1.03	0.25	244.74
1389	36.18	11.09	-0.08	111.54	62.36	-0.84	0.53	220.79
1390	37.73	10.47	0.30	78.45	59.11	0.36	0.24	186.66
1391	40.23	10.07	1.15	24.50	50.36	2.22	0.72	129.25
1392	40.52	10.18	0.59	1.61	44.56	3.28	0.82	101.57
1393	42.71	9.35	0.81	-15.33	36.75	2.60	0.81	77.71
1394	-105.61	-24.60	1.87	80.76	-44.12	-2.10	0.01	-93.81
1395	-107.91	-33.29	2.41	76.79	-37.95	-5.83	-1.08	-106.87
1396	-113.90	-40.34	2.35	58.91	-34.26	-3.54	-2.31	-133.08
1397	-119.28	-47.04	2.69	53.47	-28.51	-6.32	-2.69	-147.68
1398	-123.49	-55.46	2.61	33.76	-22.51	-5.06	-2.61	-172.77
1399	-127.70	-62.66	1.79	23.48	-11.17	-3.84	-1.79	-181.90
1400	-130.76	-70.16	1.80	18.14	-1.37	-4.61	-1.80	-188.75
1401	-137.77	-76.64	2.09	2.58	4.14	-4.84	-1.50	-211.95
1402	-141.57	-84.39	2.72	-22.04	5.57	-5.82	-1.67	-247.20
1403	-145.31	-91.53	2.93	-36.23	9.52	-5.97	-1.72	-268.31
1404	-151.50	-98.91	3.06	-52.95	18.25	-4.01	-1.85	-287.91
1405	-152.40	-104.49	2.80	-50.75	16.52	1.06	-1.18	-288.44
1406	-152.64	-103.53	2.83	-40.67	14.81	3.55	-0.50	-276.15
1407	-152.62	-104.38	2.78	-36.98	10.04	4.50	-0.03	-276.69
1408	-151.89	-104.95	2.65	-32.83	4.97	5.61	0.10	-276.33
1409	-152.33	-104.05	3.20	0.41	2.04	4.96	0.55	-245.22
1410	-151.90	-103.60	2.94	-21.30	4.40	4.56	0.81	-264.09
1411	-152.58	-103.42	2.94	37.07	2.88	5.59	1.06	-206.48
1412	-152.47	-104.20	3.14	48.98	2.47	5.49	0.86	-195.73
1413	-152.80	-104.22	3.29	52.33	-0.74	6.57	0.16	-195.40
1414	-152.15	-103.20	2.62	64.77	-5.89	6.64	-0.17	-187.37
1415	-152.18	-103.45	2.82	74.57	-11.57	4.12	-0.48	-186.18
1416	-152.51	-102.51	2.89	70.57	-11.45	5.01	-0.64	-188.64
1417	-152.83	-103.44	2.75	75.90	-7.80	5.15	-0.71	-180.98
1418	-152.37	-103.20	3.05	70.15	-7.21	2.61	-0.43	-187.39
1419	-152.16	-103.34	3.12	65.73	-9.70	0.67	-1.00	-196.66
1420	-152.71	-103.60	2.84	68.92	-14.44	0.77	-1.38	-199.60
1421	-152.44	-103.87	2.80	34.75	-13.00	1.96	-0.67	-230.48
1422	-152.73	-104.14	2.87	36.17	-14.25	-1.44	0.50	-233.02
1423	-152.84	-104.70	2.75	33.99	-13.75	-2.55	1.16	-235.93
1424	-152.31	-104.48	2.59	38.98	-11.81	-3.98	1.33	-229.68
1425	-152.13	-104.26	3.48	55.85	-13.50	-1.58	0.52	-211.61
1426	-152.22	-103.96	2.98	47.93	-20.74	2.29	0.10	-223.61
1427	-152.20	-103.40	2.56	53.86	-26.34	0.24	-0.02	-225.31
1428	-153.25	-103.56	3.05	61.33	-23.80	2.40	0.37	-213.46
1429	-152.38	-104.09	3.44	70.25	-13.12	1.25	1.15	-193.50
1430	-152.74	-104.22	3.59	49.73	-14.80	-1.11	3.08	-216.48
1431	-153.00	-103.87	4.10	56.87	-23.44	-0.34	2.90	-216.77
1432	-152.26	-104.69	4.05	39.09	-25.72	-0.02	2.95	-236.60
1433	-152.75	-104.75	4.22	41.52	-23.87	4.63	2.78	-228.23
1434	-152.63	-104.15	4.71	48.41	-18.75	9.28	2.04	-211.09
1435	-151.92	-102.94	4.38	53.39	-20.58	6.35	2.00	-209.32
1436	-152.79	-103.46	3.54	97.60	-19.08	6.75	1.80	-165.65
1437	-152.66	-102.88	3.00	128.07	-21.72	5.17	0.58	-140.43
1438	-152.80	-103.57	3.15	107.71	-24.29	4.80	0.81	-164.19



1439	-152.74	-104.06	3.58	75.77	-20.85	8.08	0.71	-189.50
1440	-152.87	-103.42	3.51	79.00	-22.71	11.09	0.45	-184.96
1441	-153.10	-103.31	3.40	86.00	-18.48	10.77	-0.03	-174.75
1442	-152.49	-103.25	3.29	82.84	-18.60	7.02	0.00	-181.18
1443	-152.97	-104.22	3.33	97.51	-17.78	8.78	-0.33	-165.68
1444	-152.35	-104.23	3.25	89.10	-22.73	5.52	-0.25	-181.69
1445	-143.62	-101.85	3.66	89.06	-21.51	3.10	-0.25	-171.40
1446	-133.31	-98.56	3.37	79.61	-25.35	5.10	-0.08	-169.22
1447	-122.98	-96.39	3.89	71.79	-19.61	2.68	0.02	-160.58
1448	-114.00	-93.64	3.57	52.05	-18.87	3.31	-0.02	-167.61
1449	-104.06	-89.74	3.73	46.84	-16.27	2.11	0.06	-157.32
1450	-94.52	-86.49	3.39	42.75	-17.64	1.15	-0.06	-151.41
1451	-85.26	-83.90	3.75	43.55	-19.28	2.23	-0.17	-139.08
1452	-76.85	-80.31	3.28	40.60	-15.10	0.18	-0.07	-128.27
1453	-65.65	-78.65	3.84	35.83	-10.35	0.11	0.12	-114.75
1454	88.38	0.10	-2.48	138.27	12.52	6.61	0.53	243.91
1455	90.36	0.73	-2.72	137.46	10.68	8.98	0.76	246.25
1456	92.34	1.09	-2.24	111.80	9.16	9.62	2.12	223.88
1457	93.63	0.76	-2.74	73.35	7.62	8.12	2.49	183.23
1458	96.22	1.13	-2.45	56.70	6.03	5.58	2.16	165.37
1459	99.34	1.21	-2.88	51.52	3.75	6.16	1.51	160.61
1460	100.45	1.10	-2.64	44.58	0.80	4.23	1.85	150.37
1461	102.05	1.56	-2.45	17.78	-1.48	3.75	1.65	122.87
1462	105.26	1.68	-2.36	-11.91	-3.70	2.09	1.82	92.87
1463	107.74	2.12	-2.69	30.63	-5.95	1.07	1.40	134.31
1464	109.95	1.47	-2.30	22.83	-7.37	1.11	1.55	127.25
1465	107.67	-0.67	-2.68	15.58	-7.50	1.69	0.26	114.35
1466	107.71	-1.14	-2.39	23.91	-7.50	1.95	0.18	122.72
1467	107.75	-0.85	-2.60	15.74	-7.33	4.35	0.93	117.99
1468	107.36	-0.47	-2.21	14.32	-6.86	2.24	1.21	115.59
1469	107.07	-2.07	-2.35	30.47	-5.87	2.49	0.89	130.63
1470	107.74	-0.53	-2.61	47.50	-4.22	0.40	0.44	148.73
1471	108.22	-0.38	-2.98	44.98	-2.99	-0.96	0.68	146.59
1472	108.02	-1.11	-3.11	11.56	-1.36	-0.94	0.57	113.64
1473	108.04	-1.33	-3.49	5.73	0.25	-2.27	0.94	107.88
1474	107.73	-0.97	-3.61	3.71	1.48	-3.10	1.49	106.72
1475	106.90	-0.62	-3.24	-4.91	1.81	-0.67	0.70	99.97
1476	107.01	-1.31	-3.53	0.89	3.28	-2.21	1.28	105.41
1477	107.44	-1.25	-2.90	-1.41	4.35	-5.65	0.95	101.53
1478	107.07	-1.12	-3.31	5.50	5.35	-9.46	0.51	104.54
1479	107.69	-0.61	-2.97	5.20	5.73	-9.91	-1.11	104.01
1480	107.96	-1.65	-2.66	22.46	5.67	-8.16	-1.59	122.02
1481	107.80	-1.37	-2.09	21.93	6.18	-3.38	-0.79	128.29
1482	108.10	-0.35	-2.54	9.30	7.79	-2.53	-0.87	118.90
1483	107.56	-0.45	-2.49	25.58	8.23	0.41	-1.14	137.71
1484	107.22	-1.15	-2.42	26.47	8.53	-0.35	-0.75	137.55
1485	107.46	-0.55	-2.75	22.82	9.64	-0.95	-1.17	134.50
1486	108.16	-1.05	-2.20	40.82	9.61	-2.66	-1.42	151.26
1487	107.72	-0.82	-2.21	48.90	9.79	-3.26	-1.71	158.41
1488	106.97	-0.50	-2.42	39.70	10.98	-4.05	-1.58	149.10
1489	107.27	-0.49	-2.03	50.27	11.73	-4.15	-1.63	160.96
1490	106.87	-1.01	-2.22	43.62	12.38	-0.17	-1.53	157.93
1491	106.37	-0.72	-2.11	50.73	12.38	-0.59	-1.48	164.59
1492	106.87	-0.82	-2.76	51.92	12.59	-1.22	-0.99	165.58
1493	107.89	-1.05	-2.28	40.52	12.69	-0.54	-1.39	155.85
1494	107.44	-1.22	-2.48	49.32	13.56	1.57	-1.44	166.75
1495	108.33	-0.45	-2.39	46.94	13.83	-0.52	-0.86	164.88
1496	108.53	-0.44	-2.55	73.80	13.05	-1.35	-1.08	189.97
1497	107.28	-0.84	-2.15	108.50	12.72	-3.00	-1.23	221.29
1498	107.83	-0.59	-2.53	98.57	13.83	-2.54	-0.80	213.77
1499	108.80	0.17	-2.23	114.53	14.74	-2.36	-1.06	232.59
1500	108.37	-0.90	-3.01	71.18	14.29	-2.11	-0.57	187.25
1501	108.19	-0.75	-2.81	128.62	13.06	-2.91	-0.81	242.57
1502	107.54	-0.56	-2.49	140.02	12.83	-5.23	-1.18	250.93
1503	107.66	-0.37	-2.65	142.35	11.76	-4.13	-2.15	252.47
1504	107.98	-0.10	-1.96	159.38	11.39	-3.42	-1.96	271.32
1505	110.77	-0.91	-2.61	142.74	9.11	-2.82	-0.93	255.35
1506	111.60	-1.98	-2.49	145.10	7.90	-4.06	-1.10	254.98
1507	113.88	-3.70	-2.38	116.34	5.60	-2.74	-0.91	226.09
1508	113.56	-3.17	-2.44	74.19	4.55	-4.60	-0.81	181.27

1509	114.42	-4.50	-2.40	50.58	4.16	-2.69	-1.19	158.39
1510	116.38	-5.87	-2.16	39.41	2.37	-3.11	-1.38	145.64
1511	116.69	-7.98	-1.98	52.08	-0.61	-4.65	-1.44	152.12
1512	118.20	-8.88	-2.37	30.15	-1.87	1.25	-0.13	136.36
1513	119.90	-9.94	-2.32	36.58	-3.44	-0.90	-0.47	139.41
1514	172.63	6.37	-0.70	133.30	27.16	-2.85	-0.09	335.82
1515	163.37	6.56	-1.05	72.15	24.97	-1.66	0.76	265.09
1516	158.43	5.09	-1.10	58.43	32.82	-2.51	1.10	252.26
1517	151.91	6.16	-0.84	50.57	31.22	-2.41	0.84	237.44
1518	147.73	6.05	-0.36	42.15	27.35	-1.76	0.36	221.53
1519	140.99	6.80	-0.16	11.16	22.38	-0.89	-0.13	180.16
1520	133.98	6.00	-1.48	11.96	25.02	-3.00	-0.56	171.92
1521	127.11	7.83	-1.19	6.73	20.58	-2.21	-0.76	158.08
1522	121.22	7.56	-0.99	-17.28	21.99	-1.60	-0.10	130.80
1523	116.51	6.86	-1.34	-38.51	26.72	1.69	-0.29	111.63
1524	110.85	7.27	-1.22	-36.32	25.15	0.44	0.22	106.39
1525	101.03	3.53	-1.39	-32.94	21.60	-0.74	-0.16	90.93
1526	99.68	3.60	-1.65	-25.39	19.73	-0.48	-0.98	94.53
1527	100.81	3.78	-1.80	-24.69	18.17	-2.40	-1.20	92.66
1528	101.25	3.64	-1.94	-15.24	13.69	0.90	-2.19	100.11
1529	101.19	3.98	-1.77	0.54	10.14	2.40	-2.27	114.21
1530	100.49	3.44	-1.60	-4.93	10.47	0.81	-2.36	106.32
1531	100.39	2.94	-1.87	3.01	6.94	2.29	-0.42	113.28
1532	100.65	3.71	-2.01	-7.07	2.10	4.33	0.64	102.35
1533	99.25	4.42	-1.59	-16.72	-1.46	4.56	0.13	88.59
1534	100.09	3.70	-1.68	-0.11	-4.34	5.05	-1.66	101.06
1535	99.38	4.05	-1.47	1.06	-3.54	6.82	-2.73	103.56
1536	100.39	4.47	-1.09	15.22	-5.48	4.24	-2.95	114.81
1537	99.93	2.63	-1.98	53.85	-8.38	4.91	-2.02	148.93
1538	100.02	3.45	-1.85	71.84	-7.73	7.93	-2.03	171.63
1539	100.49	4.08	-1.56	81.52	-9.86	5.13	-1.53	178.27
1540	100.93	3.27	-1.54	77.01	-15.84	3.55	-1.50	165.86
1541	100.35	2.54	-1.78	66.92	-16.28	4.75	-1.77	154.74
1542	100.15	4.32	-1.76	16.91	-18.34	5.74	-1.24	105.77
1543	99.84	3.87	-1.91	33.06	-15.54	5.34	-1.00	123.65
1544	100.06	3.37	-1.57	88.61	-22.14	5.59	-1.43	172.48
1545	99.84	3.43	-1.63	89.81	-19.90	5.32	-1.37	175.49
1546	100.71	3.75	-1.78	97.06	-22.06	5.38	-1.13	181.92
1547	100.16	3.23	-2.09	96.52	-26.58	8.25	-0.91	178.58
1548	99.86	4.21	-2.16	106.74	-27.44	5.25	-0.46	185.99
1549	99.68	4.06	-1.52	114.51	-26.18	3.84	-0.23	194.15
1550	99.96	2.97	-1.01	112.57	-19.96	6.82	-0.20	201.16
1551	100.98	3.49	-1.01	69.66	-22.15	6.26	-0.03	157.21
1552	100.53	4.23	-0.91	55.67	-25.26	4.56	0.37	139.19
1553	100.75	3.38	-0.98	56.71	-22.68	4.75	0.68	142.60
1554	100.01	3.09	-0.65	55.79	-24.68	3.37	1.81	138.75
1555	100.42	3.78	-0.38	55.96	-30.09	2.43	2.04	134.17
1556	100.25	3.94	-0.36	60.81	-36.04	-1.48	2.16	129.26
1557	99.96	3.61	-0.55	58.94	-34.08	-4.56	2.05	125.36
1558	100.00	3.39	-0.47	61.21	-33.96	-4.05	2.26	128.39
1559	100.35	4.49	-0.60	61.02	-30.02	-7.17	2.60	130.67
1560	101.59	2.82	-0.72	78.07	-40.80	-4.70	2.64	138.91
1561	100.85	3.85	-0.87	72.74	-47.52	-5.72	2.53	125.86
1562	99.70	2.95	-0.46	77.62	-47.55	-2.22	2.46	132.50
1563	101.31	3.98	-0.24	74.10	-46.49	-0.54	2.24	134.35
1564	100.91	3.84	-0.33	74.92	-51.87	-4.00	2.25	125.71
1565	100.96	2.89	-0.27	76.48	-52.42	-4.84	2.11	124.90
1566	100.72	3.58	0.06	94.74	-48.40	-4.67	1.90	147.94
1567	98.64	3.40	-0.37	136.87	-44.71	0.33	1.12	195.28
1568	97.07	3.36	-0.44	118.75	-45.70	-1.23	0.82	172.62
1569	93.95	3.89	-0.05	61.26	-47.00	-2.37	1.18	110.86
1570	91.15	3.38	0.37	45.75	-48.25	-6.05	1.26	87.60
1571	89.10	3.98	0.16	38.53	-40.62	-7.02	0.67	84.80
1572	85.96	2.36	0.38	49.42	-42.58	-5.11	0.87	91.29
1573	83.46	2.82	0.79	26.73	-37.38	-6.03	1.17	71.56
1574	196.06	28.94	4.96	82.68	26.67	-2.38	-5.13	331.80
1575	195.64	30.16	8.31	87.20	22.90	-1.41	-7.01	335.78
1576	193.22	31.48	7.85	60.53	27.26	-0.79	-2.10	317.45
1577	190.21	32.32	8.04	54.36	24.21	3.68	2.25	315.06
1578	187.07	32.66	9.53	52.68	24.26	3.72	4.39	314.31

1579	185.67	34.87	11.02	35.89	20.72	3.46	-7.39	284.25
1580	182.34	35.50	11.78	14.47	23.31	2.79	-15.24	254.95
1581	179.23	36.13	12.20	0.54	16.77	-0.15	-20.53	224.19
1582	177.06	35.52	13.70	-11.96	12.35	-2.42	-23.32	200.94
1583	175.56	37.40	14.71	-22.48	9.90	-0.74	-20.84	193.52
1584	173.27	38.57	15.72	15.18	8.18	-0.41	-16.85	233.68
1585	166.39	35.93	16.53	11.96	11.22	-0.43	-16.49	225.12
1586	165.64	35.63	16.20	-11.95	16.04	0.33	-17.20	204.69
1587	167.41	36.10	16.09	-24.60	14.69	1.91	-17.38	194.22
1588	166.48	35.63	15.96	-18.75	15.67	1.50	-17.55	198.94
1589	167.17	36.37	15.97	-20.19	13.00	5.08	-17.72	199.69
1590	165.50	36.33	16.11	-22.39	12.21	4.65	-17.86	194.55
1591	166.12	36.27	16.18	-19.40	13.93	4.44	-18.18	199.35
1592	167.71	35.72	15.99	-21.15	10.38	0.98	-17.78	191.85
1593	166.56	35.92	16.09	-31.84	8.57	3.58	-17.80	181.07
1594	166.37	35.21	16.00	-25.78	7.05	-1.46	-17.92	179.47
1595	165.72	34.39	16.39	-14.00	8.70	-1.18	-18.39	191.62
1596	166.53	35.33	16.40	-11.34	12.92	0.04	-18.40	201.50
1597	166.38	35.59	16.29	-8.36	10.41	1.82	-18.29	203.85
1598	166.15	35.83	16.38	-16.67	11.52	2.63	-18.38	197.46
1599	166.42	35.88	16.75	-4.94	10.45	-0.57	-18.75	205.24
1600	166.09	35.81	16.48	-0.89	10.78	-0.99	-18.48	208.81
1601	166.44	35.62	16.39	0.88	12.98	2.21	-17.68	216.84
1602	166.92	35.57	15.87	-5.84	10.46	1.11	-17.57	206.50
1603	165.97	34.81	16.12	-10.42	11.12	2.23	-18.04	201.78
1604	165.84	35.61	16.89	5.74	9.52	2.48	-18.89	217.18
1605	166.24	35.31	16.61	9.10	4.44	1.98	-18.61	215.08
1606	166.29	36.20	16.25	9.32	2.59	2.97	-18.25	215.36
1607	166.12	35.28	16.15	11.74	0.78	1.59	-18.15	213.52
1608	165.65	36.32	16.34	18.63	-1.84	0.99	-18.34	217.75
1609	166.30	36.49	16.34	26.58	-5.17	0.14	-18.34	222.33
1610	165.50	35.88	16.58	62.45	-5.25	-0.65	-18.58	255.93
1611	166.28	34.80	16.17	72.25	-4.78	-0.47	-18.17	266.08
1612	165.74	35.72	16.42	37.91	-6.45	-2.68	-17.51	229.16
1613	165.73	36.15	15.96	76.03	-6.44	-2.27	-17.79	267.36
1614	165.47	36.01	15.84	103.48	-9.10	-3.92	-17.84	289.94
1615	166.66	36.00	16.23	75.18	-13.57	-5.62	-18.23	256.64
1616	166.23	35.55	16.12	80.16	-15.27	-5.72	-18.12	258.96
1617	166.33	35.16	16.43	116.05	-16.04	-3.16	-18.43	296.34
1618	166.20	35.51	16.42	123.61	-18.74	-3.03	-18.42	301.55
1619	165.54	35.73	16.15	134.58	-18.75	-3.54	-18.15	311.56
1620	166.39	35.91	16.05	120.06	-22.82	-2.02	-17.97	295.61
1621	166.43	36.18	16.56	124.77	-21.41	2.47	-18.56	306.44
1622	165.96	36.10	16.77	134.17	-22.41	1.15	-18.77	312.96
1623	166.84	35.76	16.81	135.95	-21.88	0.14	-18.81	314.80
1624	166.71	35.80	16.76	145.29	-28.50	-0.70	-18.76	316.60
1625	165.66	34.85	16.04	136.65	-28.85	-0.60	-18.04	305.71
1626	159.87	36.76	14.92	122.62	-25.64	-0.76	-16.92	290.85
1627	155.50	35.36	13.59	83.83	-21.17	-0.41	-15.55	251.16
1628	148.76	37.10	12.98	76.33	-22.01	1.11	-14.94	239.33
1629	143.22	37.19	12.49	73.77	-19.44	-1.10	-14.49	231.63
1630	138.17	37.36	11.66	56.05	-20.58	3.50	-13.66	212.50
1631	133.22	37.66	10.55	33.55	-19.17	4.69	-12.55	187.94
1632	128.71	37.39	9.60	37.12	-18.21	0.98	-11.60	184.00
1633	122.16	37.38	8.69	41.23	-20.95	0.37	-10.69	178.19
1634	-68.12	101.57	6.90	83.86	4.08	-14.51	-6.94	106.84
1635	-71.84	104.99	6.44	68.29	9.53	-6.62	-7.19	103.61
1636	-76.45	106.36	5.38	66.72	16.51	-2.23	-6.88	109.41
1637	-79.34	108.12	4.67	58.90	17.00	5.21	-6.05	108.53
1638	-82.57	110.36	3.97	45.56	16.15	10.81	-5.01	99.27
1639	-85.53	112.43	3.48	32.45	18.25	16.19	-3.69	93.58
1640	-88.52	113.77	2.93	21.80	20.30	23.11	-2.93	90.45
1641	-92.18	116.70	2.13	2.95	22.81	29.18	-2.13	79.45
1642	-94.97	117.46	1.24	-7.19	25.97	35.79	-1.24	77.06
1643	-98.64	119.19	0.40	-15.35	26.93	41.77	-0.40	73.90
1644	-102.76	120.40	-0.50	-40.77	26.97	49.14	0.50	52.98
1645	-108.88	121.90	-0.28	-24.82	22.83	46.18	0.28	57.22
1646	-107.99	120.95	-0.30	-26.02	18.23	45.80	0.30	50.97
1647	-107.82	120.88	-0.61	-27.45	12.88	45.62	0.61	44.10
1648	-109.31	120.35	-0.69	-28.21	10.29	45.94	0.85	39.24

1649	-109.56	121.05	-0.92	-30.83	10.74	44.84	0.92	36.24
1650	-109.03	121.38	-0.90	-11.13	7.81	44.02	0.90	53.05
1651	-109.20	120.11	-0.95	-7.01	2.76	48.64	0.95	55.29
1652	-108.74	121.81	-0.84	-7.07	0.04	47.54	0.84	53.59
1653	-108.69	121.35	-0.83	-4.58	-2.13	47.15	0.83	53.10
1654	-108.33	121.53	-0.81	-4.22	-1.11	45.62	0.81	53.48
1655	-108.07	120.47	-0.35	-3.76	1.40	47.86	0.35	57.91
1656	-108.16	121.19	-0.29	-51.52	0.74	47.81	0.20	9.98
1657	-108.47	121.72	0.00	4.13	-1.32	46.24	-0.25	62.05
1658	-108.20	122.53	-0.01	9.85	-1.95	37.18	-0.20	59.20
1659	-108.26	121.93	-0.17	-56.33	-3.67	27.48	-0.70	-19.73
1660	-106.94	123.28	0.37	-44.15	-9.10	14.61	-0.78	-22.72
1661	-107.03	122.52	0.21	15.77	-12.12	5.92	-0.54	24.74
1662	-107.91	124.01	-0.41	28.67	-14.87	-13.55	-0.84	15.10
1663	-108.48	123.43	0.37	24.28	-17.13	-23.93	-0.87	-2.33
1664	-108.50	122.58	0.09	26.83	-21.87	-40.16	-0.88	-21.90
1665	-107.54	122.79	0.14	51.48	-22.37	-47.58	-0.77	-3.84
1666	-108.43	122.61	-0.20	42.86	-26.15	-53.53	0.20	-22.64
1667	-109.06	122.18	-0.51	48.02	-29.07	-59.59	0.51	-27.53
1668	-109.14	121.31	-0.39	45.35	-30.52	-61.10	0.39	-34.11
1669	-107.75	122.35	-0.32	42.33	-30.29	-61.85	0.32	-35.21
1670	-108.43	123.27	-0.41	46.62	-34.67	-68.69	0.08	-42.23
1671	-107.50	121.82	-0.72	46.20	-36.16	-68.78	0.72	-44.42
1672	-107.22	122.28	-0.68	66.15	-39.95	-70.19	0.68	-28.93
1673	-108.34	122.28	-0.44	43.28	-42.38	-69.30	0.44	-54.46
1674	-107.55	121.12	0.14	54.52	-43.02	-68.02	-0.14	-42.94
1675	-107.68	121.79	-0.09	64.61	-46.28	-68.50	0.09	-36.06
1676	-108.39	122.04	-0.16	56.45	-45.86	-71.21	0.16	-46.97
1677	-107.45	122.77	0.10	70.47	-47.57	-69.48	-0.10	-31.26
1678	-108.88	122.38	0.25	74.17	-55.31	-70.17	-0.50	-38.05
1679	-108.55	122.34	0.05	64.32	-59.16	-69.88	-0.47	-51.35
1680	-108.93	122.64	-0.16	47.92	-58.72	-70.56	-0.46	-68.27
1681	-108.18	122.29	-0.20	71.29	-59.67	-73.25	-0.59	-48.31
1682	-108.43	122.01	0.20	22.97	-62.87	-70.13	-0.28	-96.53
1683	-107.59	122.28	0.14	34.20	-66.60	-71.32	-0.47	-89.36
1684	-107.84	122.17	0.10	93.22	-68.24	-71.29	-0.39	-32.28
1685	-104.66	116.62	-0.06	87.15	-65.53	-68.74	-0.53	-35.74
1686	-106.22	110.40	-0.56	99.93	-59.64	-63.69	-0.86	-20.63
1687	-106.76	103.48	-0.13	86.73	-52.09	-59.89	-0.57	-29.24
1688	-106.00	97.52	-0.07	79.32	-52.04	-55.64	-0.26	-37.18
1689	-107.31	91.55	-0.40	70.63	-50.57	-51.26	0.32	-47.04
1690	-108.66	85.24	-0.67	68.53	-46.30	-48.93	0.67	-50.12
1691	-108.44	78.55	-0.56	56.97	-42.39	-46.80	0.56	-62.11
1692	-108.48	71.92	-0.65	50.21	-41.77	-41.98	0.49	-70.27
1693	-109.74	65.13	-0.92	46.42	-36.28	-39.51	-0.12	-75.02