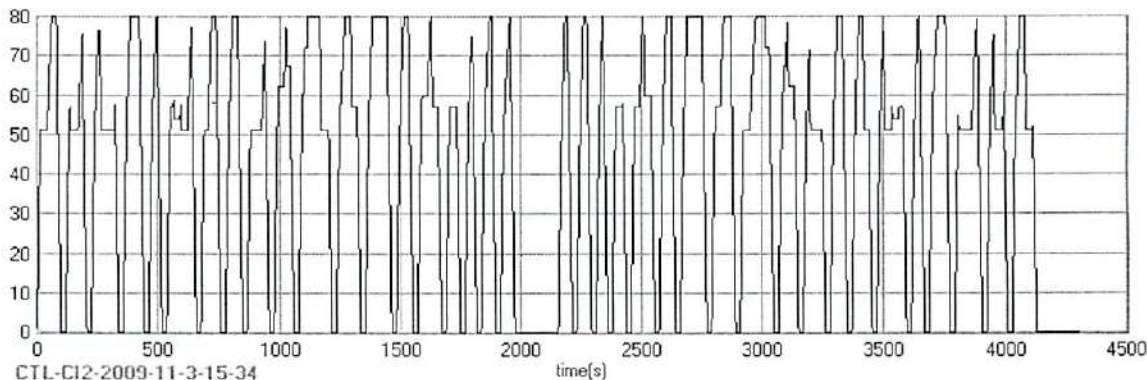


010413

Time [s]	4310
Distance [m]	47941
Commercial Speed [Km/h]	40.04
Total Stop Time [s]	972
Running Time [s]	3338
Average Speed [Km/h]	51.70
Stop Time [s]	17
Return time [s]	180
Isf(A)	88.77
IL1(A)	329.96
Isf(A) without stop time	100.87
ILf(A) without stop time	374.94
EIn(kwh)	550.54
EIn_T(kwh)	1317.94
EIn_B(kwh)	767.41

speed(km/h)

7C 5M AW2 6p/m²

Normal Mode

time(s)	distance(m)	speed(km/h)	F(kN)	F_elec(kN)	F_brakeP(kN)	gamma(m/s)	Resist(kN)	gradient(0/00)
0	0	0	5.8215	5.82148	0	0	5.82148	0
1	0.576285	2.39115	231.36	231.356	0	0.607654	5.94045	0
2	1.39795	5.15367	397.18	397.181	0	1.0542	6.08999	0
3	3.31793	8.9466	397.18	397.181	0	1.05338	6.31645	0
4	6.32108	12.737	397.18	397.181	0	1.05263	6.56718	0
5	10.3822	16.5247	397.18	397.181	0	1.05185	6.84215	0
6	15.4964	20.3096	397.18	397.181	0	1.05102	7.14126	0
7	21.6619	24.0915	397.18	397.181	0	1.05014	7.46447	0
8	28.8771	27.8701	397.19	397.187	0	1.04921	7.81167	0
9	37.143	31.6416	394.88	394.882	0	1.04363	8.18243	0

2	34 0787	34 0787
1	34 0787	34 0787
0	34 0787	34 0787
9	34 0787	34 0787
8	34 0787	34 0787
7	34 0787	34 0787
6	34 0787	34 0787
5	34 0787	34 0787
4	34 0787	34 0787
3	34 0787	34 0787
2	34 0787	34 0787
1	34 0787	34 0787
0	34 0787	34 0787

10	46.4516	35.367	385.53	385.529	0	1.02555	8.57239	0
11	56.7661	38.8293	341.88	341.878	0	0.907414	8.95597	0
12	67.9858	41.9082	312.02	312.016	0	0.821076	9.31419	0
13	80.0257	44.7422	289.59	289.586	0	0.758976	9.65817	0
14	92.8246	47.3818	273.62	273.617	0	0.71343	9.99082	0
15	106.335	49.8715	252.22	252.22	0	0.673	10.3154	0
16	120.402	50.9117	10.454	10.4542	0	0	10.4542	0
17	134.544	50.9117	10.454	10.4542	0	0	10.4542	0
18	148.686	50.9117	10.454	10.4542	0	0	10.4542	0
19	162.828	50.9117	10.454	10.4542	0	0	10.4542	0
20	176.97	50.9117	10.454	10.4542	0	0	10.4542	0
21	191.112	50.9117	25.096	25.0962	0	0	24.9988	0
22	205.255	50.9117	26.474	26.4735	0	0	26.3761	0
23	219.397	50.9117	37.442	37.4418	0	0	37.225	5
24	233.539	50.9117	40.508	40.508	0	0	40.2911	5
25	247.681	50.9117	43.574	43.5741	0	0	43.3573	5
26	261.823	50.9117	38.746	38.7462	0	0	38.6268	5
27	275.965	50.9117	40.435	40.4351	0	0	40.3156	5
28	290.107	50.9117	40.808	40.8075	0	0	40.8075	5
29	304.25	50.9117	40.808	40.8075	0	0	40.8075	5
30	318.392	50.9117	40.808	40.8075	0	0	40.8075	5
31	332.534	50.9117	40.808	40.8075	0	0	40.8075	5
32	346.676	50.9117	40.808	40.8075	0	0	40.8075	5
33	360.818	50.9117	40.808	40.8075	0	0	40.8075	5
34	374.96	50.9117	40.808	40.8075	0	0	40.8075	5
35	389.102	50.9117	40.808	40.8075	0	0	40.8075	5
36	403.245	50.9117	40.808	40.8075	0	0	40.8075	5
37	417.387	50.9117	40.808	40.8075	0	0	40.8075	5
38	431.529	50.9117	33.583	33.5825	0	0	33.6799	5
39	445.671	50.9117	32.205	32.2053	0	0	32.3026	5
40	459.813	50.9117	30.828	30.828	0	0	30.9254	5
41	473.955	50.9117	30.659	30.6585	0	0	30.7836	5
42	488.097	50.9117	29.038	29.038	0	0	29.1434	5
43	502.247	51.1108	158.2	158.204	0	0.296574	27.2	5
44	516.693	53.0428	243.1	243.104	0	0.582969	27.4632	5
45	531.713	55.0866	232.97	232.967	0	0.554527	27.7486	5
46	547.287	57.0196	224.9	224.902	0	0.517886	33.1932	5
47	563.38	58.8402	217.31	217.306	0	0.49507	34.0293	5
48	579.968	60.5814	210.72	210.719	0	0.474634	34.8766	5
49	597.031	62.2595	205.67	205.671	0	0.458666	35.7361	5
50	614.552	63.8859	200.78	200.779	0	0.450083	34.0163	5
51	632.52	65.4804	196.16	196.158	0	0.436831	34.2677	5
52	650.926	67.0307	192.06	192.063	0	0.425097	34.5163	5
53	669.756	68.5393	188.08	188.079	0	0.413669	34.7621	5
54	689	70.0136	184.18	184.184	0	0.407802	33.0379	5
55	708.651	71.4772	180.29	180.287	0	0.405482	29.9981	5
56	728.708	72.9329	176.41	176.411	0	0.403392	26.8929	5
57	749.169	74.384	172.55	172.548	0	0.40835	21.1878	-2
58	770.035	75.8543	168.64	168.635	0	0.408492	17.2182	-2
59	791.31	77.3255	164.72	164.72	0	0.408844	13.1695	-2
60	812.994	78.7983	160.8	160.801	0	0.409397	9.04203	-2
61	835.077	80	8.3915	8.39147	0	0	8.39147	-2
62	857.299	80	8.3915	8.39147	0	0	8.39147	-2
63	879.521	80	8.3915	8.39147	0	0	8.39147	-2

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

010420

64	901.744	80	8.3915	8.39147	0	0	8.39147	-2
65	923.966	80	8.3915	8.39147	0	0	8.39147	-2
66	946.188	80	8.3915	8.39147	0	0	8.39147	-2
67	968.41	80	8.3915	8.39147	0	0	8.39147	-2
68	990.632	80	8.3915	8.39147	0	0	8.39147	-2
69	1012.85	80	8.3915	8.39147	0	0	8.39147	-2
70	1035.08	80	8.3915	8.39147	0	0	8.39147	-2
71	1057.3	80	8.3915	8.39147	0	0	8.39147	-2
72	1079.52	80	8.3915	8.39147	0	0	8.39147	-2
73	1101.74	80	8.3915	8.39147	0	0	8.39147	-2
74	1123.97	80	14.259	14.2587	0	0	14.2198	-2
75	1146.19	80	15.124	15.1244	0	0	15.0854	-2
76	1168.41	80	15.99	15.9901	0	0	15.9511	-2
77	1190.63	80	13.845	13.8452	0	0	13.8452	-2
78	1212.85	80	13.845	13.8452	0	0	13.8452	-2
79	1235.08	80	13.845	13.8452	0	0	13.8452	-2
80	1257.29	79.5819	-202.8	-202.813	0	-0.547299	13.7685	-2
81	1278.98	76.2687	-393.9	-326.673	-67.1902	-1.09781	13.5967	-2
82	1299.62	72.3115	-394.6	-345.006	-49.5443	-1.10046	13.8938	-2
83	1319.15	68.345	-395.2	-360.395	-34.8193	-1.10298	14.1635	-2
84	1337.59	64.3698	-395.9	-369.85	-26.0048	-1.10536	14.4059	-2
85	1354.91	60.3862	-396.5	-369.848	-26.6214	-1.10759	14.6211	0
86	1371.13	56.4039	-397.1	-369.848	-27.203	-1.10185	11.9075	0
87	1386.25	52.4365	-397.6	-369.849	-27.7577	-1.1022	11.4843	0
88	1400.26	48.4679	-398.1	-369.848	-28.2887	-1.10254	11.0781	0
89	1413.18	44.4984	-398.6	-369.845	-28.7963	-1.10245	10.5409	0
90	1424.99	40.532	-399.1	-369.845	-29.2743	-1.10121	9.60489	0
91	1435.69	36.5699	-399.6	-369.846	-29.719	-1.10008	8.73905	0
92	1445.3	32.61	-400	-369.849	-30.1368	-1.09998	8.28153	0
93	1453.81	28.65	-400.4	-369.851	-30.5298	-1.09999	7.88636	0
94	1461.22	24.69	-400.8	-369.852	-30.9	-1.1	7.51785	0
95	1467.52	20.7301	-401.1	-369.852	-31.2429	-1.09999	7.17599	0
96	1472.73	16.7701	-401.4	-369.852	-31.5561	-1.09999	6.8608	0
97	1476.84	12.8102	-401.7	-369.852	-31.843	-1.09998	6.57227	0
98	1479.84	8.85021	-401.9	-285.084	-116.862	-1.09998	6.31039	0
99	1481.71	4.8906	-286	-1.20016	-284.805	-1.09986	6.07519	0
100	1482.47	2.21165	-239.2	-0.542739	-238.661	-0.895391	5.93118	0
101	1483	0	0	0	0	0	5.82148	0
102	1483	0	0	0	0	0	5.82148	0
103	1483	0	0	0	0	0	5.82148	0
104	1483	0	0	0	0	0	5.82148	0
105	1483	0	0	0	0	0	5.82148	0
106	1483	0	0	0	0	0	5.82148	0
107	1483	0	0	0	0	0	5.82148	0
108	1483	0	0	0	0	0	5.82148	0
109	1483	0	0	0	0	0	5.82148	0
110	1483	0	0	0	0	0	5.82148	0
111	1483	0	0	0	0	0	5.82148	0
112	1483	0	0	0	0	0	5.82148	0
113	1483	0	0	0	0	0	5.82148	0
114	1483	0	0	0	0	0	5.82148	0
115	1483	0	0	0	0	0	5.82148	0
116	1483	0	0	0	0	0	5.82148	0
117	1483	0	0	0	0	0	5.82148	0

118	1483.04	0.16556	397.18	397.182	0	4.24E-02	5.8294	0
119	1483.61	2.52365	397.18	397.182	0	0.645805	5.94732	0
120	1484.48	5.34527	397.18	397.181	0	1.05416	6.10084	0
121	1486.46	9.13808	397.18	397.181	0	1.05334	6.32853	0
122	1489.51	12.9283	397.18	397.181	0	1.05259	6.58049	0
123	1493.62	16.7159	397.18	397.181	0	1.05181	6.85667	0
124	1498.79	20.5007	397.18	397.181	0	1.05098	7.15701	0
125	1505.01	24.2824	397.18	397.181	0	1.05009	7.48143	0
126	1512.28	28.0608	397.19	397.188	0	1.04916	7.82984	0
127	1520.6	31.831	394.62	394.615	0	1.04284	8.20169	0
128	1529.96	35.5528	383.19	383.187	0	1.02185	8.59246	0
129	1540.32	38.9714	340.09	340.086	0	0.890453	13.374	0
130	1551.57	41.9716	311.51	311.514	0	0.794628	18.56	0
131	1563.61	44.6884	290.01	290.012	0	0.72107	24.0668	0
132	1576.37	47.1674	274.87	274.87	0	0.663051	29.8654	0
133	1589.8	49.4522	261.51	261.508	0	0.610344	35.9332	0
134	1603.83	51.5563	250.53	250.53	0	0.563132	42.2472	18
135	1618.42	53.4981	240.83	240.83	0	0.516028	48.7878	18
136	1633.53	55.2584	232.25	232.249	0	0.469288	58.5446	18
137	1649.11	56.8754	225.5	225.503	0	0.431494	65.7761	18
138	1664.79	54.6146	-390.4	-369.849	-20.5847	-1.26968	73.9371	18
139	1679.45	51.4359	-92.8	-92.7966	0	-0.510248	75.7614	18
140	1693.63	50.9117	73.37	73.3696	0	0	73.3696	18
141	1707.77	50.9117	73.37	73.3696	0	0	73.3696	18
142	1721.91	50.9117	75.613	75.6125	0	0	75.5491	18
143	1736.05	50.9117	76.539	76.5391	0	0	76.4717	18
144	1750.2	50.9117	77.521	77.5213	0	0	77.45	18
145	1764.34	50.9117	85.399	85.3989	0	0	85.321	18
146	1778.48	50.9117	86.501	86.5007	0	0	86.4228	18
147	1792.62	50.9117	87.668	87.6682	0	0	87.5708	18
148	1806.76	50.9117	89.046	89.0455	0	0	88.9481	18
149	1820.91	50.9117	90.423	90.4227	0	0	90.3254	18
150	1835.05	50.9117	84.277	84.277	0	0	84.277	18
151	1849.19	50.9117	84.277	84.277	0	0	84.277	18
152	1863.33	50.9117	84.277	84.277	0	0	84.277	18
153	1877.47	50.9117	84.277	84.277	0	0	84.277	18
154	1891.62	50.9117	84.277	84.277	0	0	84.277	18
155	1905.76	50.9117	84.277	84.277	0	0	84.277	18
156	1919.9	50.9117	84.277	84.277	0	0	84.277	18
157	1934.04	50.9117	84.277	84.277	0	0	84.277	18
158	1948.19	50.9117	84.277	84.277	0	0	84.277	18
159	1962.33	50.9117	84.277	84.277	0	0	84.277	18
160	1976.47	50.9117	84.277	84.277	0	0	84.277	18
161	1990.61	50.9117	84.277	84.277	0	0	84.277	18
162	2004.75	50.9117	84.277	84.277	0	0	84.277	18
163	2018.9	50.9117	84.277	84.277	0	0	84.277	18
164	2033.04	50.9117	84.277	84.277	0	0	84.277	18
165	2047.18	50.9117	84.277	84.277	0	0	84.277	18
166	2061.32	50.9117	84.277	84.277	0	0	84.277	18
167	2075.46	50.9117	77.29	77.2898	0	0	77.4272	18
168	2089.61	50.9117	76.191	76.1911	0	0	76.2792	18
169	2103.75	50.9117	76.995	76.9948	0	0	77.1562	18
170	2117.89	50.9117	74.846	74.8463	0	0.00E+00	74.9898	18
171	2132.03	50.9117	73.642	73.6423	0	0	73.0753	18

172	2146.28	52.0024	248.3	248.302	0	0.478057	71.4795	18
173	2160.96	53.7121	239.76	239.761	0	0.473672	64.5418	18
174	2176.12	55.4081	231.63	231.625	0	0.470226	57.5717	18
175	2191.74	57.0985	224.57	224.573	0	0.469024	50.9512	18
176	2207.84	58.7856	217.53	217.534	0	0.468405	44.1291	18
177	2224.4	60.4722	211.05	211.048	0	0.469505	37.1059	0
178	2241.44	62.1731	205.93	205.931	0	0.47516	29.8833	0
179	2258.94	63.8942	200.75	200.754	0	0.480767	22.6225	0
180	2276.93	65.6365	195.75	195.746	0	0.487266	15.1633	0
181	2295.41	67.3869	191.12	191.123	0	0.480888	12.897	0
182	2314.37	69.0935	186.62	186.615	0	0.467955	13.1764	0
183	2333.79	70.7542	182.21	182.212	0	0.45532	13.4531	0
184	2353.67	72.3699	177.91	177.911	0	0.442963	13.7268	0
185	2373.99	73.9417	173.73	173.726	0	0.43093	13.9973	0
186	2394.75	75.4709	169.66	169.655	0	0.419216	14.2644	0
187	2415.89	75.837	-393.9	-328.672	-65.2686	-1.09999	14.329	0
188	2436.4	71.877	-394.6	-347.019	-47.6054	-1.09999	13.6428	0
189	2455.82	67.9171	-395.3	-361.604	-33.6792	-1.09998	12.9833	0
190	2474.13	63.9571	-395.9	-369.849	-26.0686	-1.09999	12.3504	0
191	2491.35	59.9971	-396.5	-369.848	-26.6794	-1.1	11.7443	0
192	2507.46	56.0372	-397.1	-369.848	-2.73E+01	-1.09999	11.1647	0
193	2522.48	52.0772	-397.7	-369.849	-27.807	-1.09999	10.6118	0
194	2536.4	48.1173	-398.2	-369.848	-28.3342	-1.09999	10.0856	0
195	2549.21	44.1573	-398.7	-369.845	-28.8374	-1.09999	9.58605	0
196	2560.93	40.1973	-399.2	-369.845	-29.3132	-1.1	9.11315	0
197	2571.54	36.2374	-399.6	-369.846	-29.7562	-1.09999	8.6669	0
198	2581.06	32.2774	-400	-369.849	-30.1709	-1.09998	8.24731	0
199	2589.47	28.3174	-400.4	-369.851	-30.5615	-1.09999	7.85438	0
200	2596.79	24.3575	-400.8	-369.852	-30.9288	-1.09999	7.48811	0
201	2603.01	20.3975	-401.1	-369.852	-31.2706	-1.09999	7.1485	0
202	2608.12	16.4376	-401.4	-369.852	-31.5821	-1.09999	6.83554	0
203	2612.13	12.4776	-401.7	-369.852	-31.8667	-1.09998	6.54925	0
204	2615.05	8.51766	-402	-260.566	-141.396	-1.09997	6.28961	0
205	2616.84	4.55809	-265.3	-1.11856	-264.198	-1.09984	6.05665	0
206	2617.51	2.01189	-239.2	-0.493718	-238.71	-0.874197	5.92093	0
207	2618	0	0	0	0	0	5.82148	0
208	2618	0	0	0	0	0	5.82148	0
209	2618	0	0	0	0	0	5.82148	0
210	2618	0	0	0	0	0	5.82148	0
211	2618	0	0	0	0	0	5.82148	0
212	2618	0	0	0	0	0	5.82148	0
213	2618	0	0	0	0	0	5.82148	0
214	2618	0	0	0	0	0	5.82148	0
215	2618	0	0	0	0	0	5.82148	0
216	2618	0	0	0	0	0	5.82148	0
217	2618	0	0	0	0	0	5.82148	0
218	2618	0	0	0	0	0	5.82148	0
219	2618	0	0	0	0	0	5.82148	0
220	2618	0	0	0	0	0	5.82148	0
221	2618	0	0	0	0	0	5.82148	0
222	2618	0	0	0	0	0	5.82148	0
223	2618	0	0	0	0	0	5.82148	0
224	2618.09	0.363594	397.18	397.182	0	9.30E-02	5.83894	0
225	2618.66	2.72168	397.18	397.182	0	0.696482	5.95766	0

226	2619.61	5.66389	397.18	397.181	0	1.05409	6.11903	0
227	2621.67	9.45648	397.18	397.181	0	1.05328	6.34875	0
228	2624.81	13.2465	397.18	397.181	0	1.05253	6.60275	0
229	2629.01	17.0339	397.18	397.181	0	1.05174	6.88097	0
230	2634.27	20.8184	397.18	397.181	0	1.05091	7.18333	0
231	2640.58	24.5998	397.18	397.181	0	1.05002	7.50976	0
232	2647.94	28.378	397.19	397.188	0	1.04908	7.86019	0
233	2656.34	32.1459	394.17	394.172	0	1.04154	8.23384	0
234	2665.79	35.8582	379.34	379.336	0	1.0114	8.62558	0
235	2676.23	39.2628	336.41	336.413	0	0.892267	9.00543	0
236	2687.57	42.3022	308.9	308.897	0	0.812439	9.3612	0
237	2699.71	45.1066	286.95	286.95	0	0.750997	9.70338	0
238	2712.61	47.7292	271.59	271.585	0	0.711312	8.73305	0
239	2726.22	50.2232	257.19	257.19	0	0.67708	6.78471	0
240	2740.5	52.6088	245.27	245.273	0	0.650338	4.71884	0
241	2755.44	54.9013	233.82	233.82	0	0.625176	2.54092	0
242	2770.99	57.1137	224.51	224.509	0	0.605801	0.25585	0
243	2787.16	59.2603	215.55	215.554	0	0.588005	-2.13195	-7
244	2803.91	61.3493	208.41	208.409	0	0.574992	-4.61894	-7
245	2821.24	63.4006	202.24	202.239	0	0.565273	-7.20048	-7
246	2839.13	65.4181	196.32	196.323	0	0.556386	-9.8747	-7
247	2857.58	67.4005	191.09	191.086	0	0.543941	-10.5074	-7
248	2876.57	69.3309	185.99	185.988	0	0.529308	-10.1909	-7
249	2896.09	71.2093	181	181.001	0	5.15E-01	-9.87692	-7
250	2916.13	73.0367	176.14	176.135	0	0.501009	-9.56565	-7
251	2936.66	74.8146	171.4	171.402	0	0.487392	-9.25739	-7
252	2957.68	76.3569	14.101	14.1007	0	0.200528	-8.98559	-7
253	2978.89	76.3675	-2.3	-2.29977	0	0	-2.34305	-7
254	3000.11	76.3675	-1.382	-1.38159	0	0	-1.42487	-7
255	3021.32	76.3675	-0.463	-0.463409	0	0	-0.506692	-7
256	3042.53	76.3675	1.8198	1.81981	0	0	1.49737	-7
257	3063.75	76.3675	8.6598	8.65976	0	0	8.33732	-7
258	3084.96	76.3675	15.5	15.4997	0	0	15.1773	-7
259	3106.17	76.3675	22.34	22.3397	0	0	22.0172	6.5
260	3127.3	75.1293	-290.1	-290.121	0	-0.821212	28.6114	6.5
261	3147.65	71.2027	-394.7	-350.144	-44.5997	-1.15649	34.4961	6.5
262	3166.84	67.0075	-395.4	-364.176	-31.2586	-1.17316	39.9931	6.5
263	3184.87	62.7884	-396.1	-369.849	-26.2494	-1.16611	36.713	6.5
264	3201.73	58.5942	-396.7	-369.848	-26.8838	-1.16415	35.3504	6.5
265	3217.42	54.4068	-397.3	-369.849	-27.4868	-1.16233	34.0691	6.5
266	3232.05	51.3647	-123.2	-123.17	0	-0.476877	33.0173	6.5
267	3246.22	50.9117	33.043	33.0428	0	0	33.0092	6.5
268	3260.36	50.9117	32.189	32.1889	0	0	32.1889	6.5
269	3274.5	50.9117	32.189	32.1889	0	0	32.1889	6.5
270	3288.64	50.9117	32.189	32.1889	0	0	32.1889	6.5
271	3302.78	50.9117	32.189	32.1889	0	0	32.1889	6.5
272	3316.93	50.9117	46.585	46.5854	0	0	46.488	6.5
273	3331.07	50.9117	47.963	47.9627	0	0	47.8653	6.5
274	3345.21	50.9117	49.34	49.34	0	0	49.2426	6.5
275	3359.35	50.9117	50.717	50.7172	0	0	50.6199	6.5
276	3373.5	50.9117	52.095	52.0945	0	0	51.9971	6.5
277	3387.64	50.9117	45.823	45.8232	0	0	45.8232	6.5
278	3401.78	50.9117	45.823	45.8232	0	0	45.8232	6.5
279	3415.92	50.9117	45.823	45.8232	0	0	45.8232	6.5

280	3430.06	50.9117	45.823	45.8232	0	0	45.8232	6.5
281	3444.21	50.9117	45.823	45.8232	0	0	45.8232	6.5
282	3458.35	50.9117	45.823	45.8232	0	0	45.8232	6.5
283	3472.49	50.9117	45.823	45.8232	0	0	45.8232	6.5
284	3486.63	50.9117	45.823	45.8232	0	0	45.8232	6.5
285	3500.77	50.9117	45.823	45.8232	0	0	45.8232	6.5
286	3514.92	50.9117	45.823	45.8232	0	0	45.8232	6.5
287	3529.06	50.9117	45.823	45.8232	0	0	45.8232	6.5
288	3543.2	50.9117	45.823	45.8232	0	0	45.8232	6.5
289	3557.34	50.9117	45.823	45.8232	0	0	45.8232	6.5
290	3571.49	50.9117	45.823	45.8232	0	0	45.8232	6.5
291	3585.63	50.9117	45.823	45.8232	0	0	45.8232	6.5
292	3599.77	50.9117	45.045	45.0454	0	0	45.8232	6.5
293	3613.91	50.9117	44.075	44.0753	0	0	44.1193	6.5
294	3628.05	50.9117	50.645	50.6449	0	0	50.6449	6.5
295	3642.2	50.9117	50.645	50.6449	0	0	50.6449	6.5
296	3656.34	50.9117	50.645	50.6449	0	0	50.6449	6.5
297	3670.48	50.9117	50.712	50.7121	0	0	50.6449	6.5
298	3684.62	50.9117	52.089	52.0894	0	0	51.992	6.5
299	3698.76	50.9117	45.823	45.8232	0	0	45.8232	6.5
300	3712.91	50.9117	45.823	45.8232	0	0	45.8232	6.5
301	3727.05	50.9117	45.823	45.8232	0	0	45.8232	6.5
302	3741.19	50.9117	45.823	45.8232	0	0	45.8232	6.5
303	3755.33	50.9117	45.823	45.8232	0	0	45.8232	6.5
304	3769.48	50.9117	45.823	45.8232	0	0	45.8232	6.5
305	3783.62	50.9117	45.823	45.8232	0	0	45.8232	6.5
306	3797.76	50.9117	45.823	45.8232	0	0	45.8232	6.5
307	3811.9	50.9117	45.823	45.8232	0	0	45.8232	6.5
308	3826.04	50.9117	45.823	45.8232	0	0	45.8232	6.5
309	3840.19	50.9117	45.823	45.8232	0	0	45.8232	6.5
310	3854.33	50.9117	45.823	45.8232	0	0	45.8232	6.5
311	3868.47	50.9117	45.823	45.8232	0	0	45.8232	6.5
312	3882.61	50.9117	45.823	45.8232	0	0	45.8232	6.5
313	3896.75	50.9117	45.823	45.8232	0	0	45.8232	6.5
314	3910.9	50.9117	45.823	45.8232	0	0	45.8232	6.5
315	3925.04	50.9117	37.138	37.1379	0	0	37.3906	6.5
316	3939.18	50.9117	33.565	33.5651	0	0	33.8177	6.5
317	3953.32	50.9117	29.992	29.9923	0	0	30.2449	6.5
318	3967.47	50.9117	26.42	26.4195	0	0	26.6721	6.5
319	3981.61	50.9117	22.847	22.8467	0	0	23.0993	6.5
320	3995.79	51.5977	245.93	245.932	0	0.552185	20.4029	0
321	4010.43	53.7775	239.43	239.434	0	0.597441	18.4299	0
322	4025.66	55.8853	229.63	229.634	0	0.576168	16.3621	0
323	4041.46	57.31	-396.9	-369.848	-27.0703	-1.10744	14.1145	0
324	4056.83	53.3357	-397.5	-369.849	-27.6335	-1.10101	11.1653	0
325	4071.09	49.3755	-398	-369.849	-28.1711	-1.09999	10.2499	0
326	4084.26	45.4156	-398.5	-369.845	-28.6843	-1.09999	9.7419	0
327	4096.32	41.4556	-399	-369.845	-29.163	-1.09999	9.26053	0
328	4107.29	37.4957	-399.5	-369.846	-29.6154	-1.09999	8.80581	0
329	4117.15	33.5357	-399.9	-369.848	-30.0416	-1.09999	8.37775	0
330	4125.92	29.5757	-400.3	-369.851	-30.4416	-1.09999	7.97635	0
331	4133.58	25.6158	-400.7	-369.851	-30.8183	-1.09999	7.60161	0
332	4140.15	21.6558	-401	-369.852	-31.1636	-1.09999	7.25352	0
333	4145.61	17.6958	-401.3	-369.852	-31.4831	-1.09998	6.9321	0

334	4149.98	13.7359	-401.6	-369.852	-31.7773	-1.09999	6.63733	0
335	4153.23	9.77592	-401.9	-353.332	-48.5591	-1.09999	6.36922	0
336	4155.36	5.82E+00	-343.6	-6.14E+01	-282.194	-1.0999	6.12778	0
337	4156.33	2.76771	-239.2	-0.679197	-238.524	-0.954389	5.96007	0
338	4156.91	0.389058	-239.2	-9.55E-02	-239.108	-0.702015	5.84017	0
339	4157	0	0	0	0	0	5.82148	0
340	4157	0	0	0	0	0	5.82148	0
341	4157	0	0	0	0	0	5.82148	0
342	4157	0	0	0	0	0	5.82148	0
343	4157	0	0	0	0	0	5.82148	0
344	4157	0	0	0	0	0	5.82148	0
345	4157	0	0	0	0	0	5.82148	0
346	4157	0	0	0	0	0	5.82148	0
347	4157	0	0	0	0	0	5.82148	0
348	4157	0	0	0	0	0	5.82148	0
349	4157	0	0	0	0	0	5.82148	0
350	4157	0	0	0	0	0	5.82148	0
351	4157	0	0	0	0	0	5.82148	0
352	4157	0	0	0	0	0	5.82148	0
353	4157	0	0	0	0	0	5.82148	0
354	4157	0	0	0	0	0	5.82148	0
355	4157	0	0	0	0	0	5.82148	0
356	4157.48	1.97239	397.18	397.182	0	0.504738	5.91891	0
357	4158.13	4.45836	397.18	397.182	0	1.05436	6.05113	0
358	4159.88	8.25168	397.18	397.181	0	1.05352	6.27313	0
359	4162.7	12.0425	397.18	397.181	0	1.05277	6.51942	0
360	4166.57	15.8307	397.18	397.181	0	1.052	6.78994	0
361	4171.49	19.6162	397.18	397.181	0	1.05118	7.08464	0
362	4177.46	23.3986	397.18	397.181	0	1.05031	7.40343	0
363	4184.49	27.1778	397.19	397.185	0	1.04938	7.74625	0
364	4192.56	30.9526	395.85	395.852	0	1.04647	8.11289	0
365	4201.68	34.6891	390.59	390.594	0	1.03105	8.49968	0
366	4211.81	38.2268	349.47	349.474	0	0.928477	8.88776	0
367	4222.88	41.3642	316.32	316.322	0	0.833005	9.24972	0
368	4234.77	44.2392	293.57	293.567	0	0.769994	9.59612	0
369	4247.43	46.9095	276.38	276.378	0	0.721207	9.89078	0
370	4260.82	49.4313	261.63	261.631	0	0.682851	9.25864	0
371	4274.88	51.8248	249.19	249.189	0	0.650545	8.571	0
372	4289.6	54.1107	237.77	237.77	0	0.62158	7.83149	0
373	4304.94	56.2982	227.91	227.911	0	0.596681	7.04228	0
374	4320.87	58.4048	219.12	219.123	0	0.575142	6.20656	-3
375	4337.38	60.4362	211.16	211.156	0	0.555578	5.32589	-3
376	4354.44	62.3864	205.29	205.289	0	0.531657	8.31055	-3
377	4372.03	64.2737	199.61	199.612	0	0.517686	7.80012	-3
378	4390.14	66.1124	194.49	194.489	0	0.504553	7.49785	-3
379	4408.75	67.9005	189.77	189.766	0	0.489706	8.27028	-3
380	4427.86	69.6508	185.14	185.142	0	0.480984	6.87316	-3
381	4447.44	71.3577	180.61	180.605	0	0.467961	7.15918	-3
382	4467.5	73.0182	176.18	176.184	0	0.455255	7.44221	-3
383	4488.01	74.6337	171.88	171.883	0	0.442884	7.72205	-3
384	4508.96	76.2053	167.7	167.701	0	0.430843	7.99855	-3
385	4530.34	77.7342	163.63	163.633	0	0.419121	8.27155	-3
386	4552.14	79.2215	159.68	159.675	0	0.407709	8.54095	-3
387	4574.3	80	8.6835	8.68347	0	0	8.68347	-3

388	4596.52	80	8.6835	8.68347	0	0	8.68347	-3
389	4618.74	80	8.6835	8.68347	0	0	8.68347	-3
390	4640.97	80	8.6835	8.68347	0	0	8.68347	-3
391	4663.19	80	6.3711	6.37112	0	0	6.39709	-3
392	4685.41	80	6.6352	6.63519	0	0	6.11182	-3
393	4707.63	80	18.266	18.2656	0	0	17.7423	-3
394	4729.86	80	30.304	30.3039	0	0	29.7546	-3
395	4752.08	80	42.512	42.5115	0	0	41.9622	-3
396	4774.3	80	54.719	54.719	0	0	54.1697	20
397	4796.52	80	66.927	66.9266	0	0	66.3773	20
398	4818.74	80	79.134	79.1341	0	0	78.5848	20
399	4840.97	80	81.955	81.9552	0	0	81.9552	20
400	4863.19	80	81.955	81.9552	0	0	81.9552	20
401	4885.41	80	81.955	81.9552	0	0	81.9552	20
402	4907.63	80	81.955	81.9552	0	0	81.9552	20
403	4929.86	80	81.955	81.9552	0	0	81.9552	20
404	4952.08	80	81.955	81.9552	0	0	81.9552	20
405	4974.3	80	81.955	81.9552	0	0	81.9552	20
406	4996.52	80	81.955	81.9552	0	0	81.9552	20
407	5018.74	80	78.454	78.4542	0	0	79.4095	20
408	5040.97	80	59.764	59.7644	0	0	60.7036	20
409	5063.19	80	38.895	38.8946	0	0	39.8337	20
410	5085.41	80	18.025	18.0248	0	0	18.9639	20
411	5107.63	80	-4.196	-4.19555	0	0	-3.24018	-20
412	5129.86	80	-25.43	-25.4261	0	0	-24.4707	-20
413	5152.08	80	-46.66	-46.6566	0	0	-45.7012	-20
414	5174.3	80	-50.9	-50.904	0	0	-50.8878	-20
415	5196.52	80	-51.26	-51.2647	0	0	-51.2485	-20
416	5218.74	80	-51.63	-51.6254	0	0	-51.6092	-20
417	5240.97	80	-51.8	-51.7971	0	0	-51.7971	-20
418	5263.19	80	-51.8	-51.7971	0	0	-51.7971	-20
419	5285.41	80	-51.8	-51.7971	0	0	-51.7971	-20
420	5307.63	80	-51.8	-51.7971	0	0	-51.7971	-20
421	5329.86	80	-44.26	-44.2612	0	0	-44.7389	-20
422	5352.08	80	-33.65	-33.646	0	0	-34.1236	-20
423	5374.28	79.5048	-225.7	-225.665	0	-0.509416	-23.6095	-20
424	5395.97	76.3808	-393.9	-326.154	-67.697	-1.02394	-13.8089	0
425	5416.67	72.6439	-394.5	-343.466	-51.0351	-1.05058	-4.5725	0
426	5436.32	68.8135	-395.1	-359.07	-36.0744	-1.07587	4.1702	0
427	5454.9	64.8947	-395.8	-369.85	-25.9235	-1.09976	12.4098	0
428	5472.37	60.9347	-396.4	-369.848	-26.5364	-1.09999	11.8854	0
429	5488.75	56.9748	-397	-369.848	-27.1198	-1.09999	11.2995	0
430	5504.02	53.0148	-397.5	-369.849	-27.6782	-1.09999	10.7403	0
431	5518.2	49.0548	-398.1	-369.848	-28.2126	-1.09999	10.2078	0
432	5531.28	45.0949	-398.6	-369.845	-28.7244	-1.1	9.70192	0
433	5543.25	41.1349	-399	-369.845	-29.2017	-1.09999	9.22271	0
434	5554.13	37.1749	-399.5	-369.846	-29.6513	-1.09999	8.77015	0
435	5563.91	33.215	-399.9	-369.848	-30.0746	-1.09999	8.34425	0
436	5572.58	29.255	-400.3	-369.851	-30.4721	-1.09999	7.94501	0
437	5580.16	25.295	-400.7	-369.852	-30.8475	-1.1	7.57242	0
438	5586.63	21.3351	-401	-369.852	-31.1915	-1.09999	7.2265	0
439	5592.01	17.3751	-401.4	-369.852	-31.5084	-1.09998	6.90723	0
440	5596.28	13.4152	-401.7	-369.852	-31.8001	-1.09999	6.61462	0
441	5599.44	9.45521	-401.9	-3.30E+02	-72.2224	-1.09999	6.34867	0

442	5601.48	5.49552	-323.6	-37.7593	-285.883	-1.09989	6.1094	0
443	5602.38	2.57506	-239.2	-0.631922	-238.571	-0.93395	5.95	0
444	5602.95	0.196412	-239.2	-4.82E-02	-239.155	-0.681575	5.83089	0
445	5603	0	0	0	0	0	5.82148	0
446	5603	0	0	0	0	0	5.82148	0
447	5603	0	0	0	0	0	5.82148	0
448	5603	0	0	0	0	0	5.82148	0
449	5603	0	0	0	0	0	5.82148	0
450	5603	0	0	0	0	0	5.82148	0
451	5603	0	0	0	0	0	5.82148	0
452	5603	0	0	0	0	0	5.82148	0
453	5603	0	0	0	0	0	5.82148	0
454	5603	0	0	0	0	0	5.82148	0
455	5603	0	0	0	0	0	5.82148	0
456	5603	0	0	0	0	0	5.82148	0
457	5603	0	0	0	0	0	5.82148	0
458	5603	0	0	0	0	0	5.82148	0
459	5603	0	0	0	0	0	5.82148	0
460	5603	0	0	0	0	0	5.82148	0
461	5603	0	0	0	0	0	5.82148	0
462	5603.53	2.16337	397.18	397.182	0	0.55361	5.92869	0
463	5604.25	4.76563	397.18	397.182	0	1.05429	6.0682	0
464	5606.07	8.55881	397.18	397.181	0	1.05346	6.29217	0
465	5608.97	12.3494	397.18	397.181	0	1.05271	6.54043	0
466	5612.92	16.1374	397.18	397.181	0	1.05193	6.81291	0
467	5617.93	19.9227	397.18	397.181	0	1.05111	7.10956	0
468	5623.99	23.7048	397.18	397.181	0	1.05023	7.43031	0
469	5631.1	27.4838	397.19	397.186	0	1.04931	7.77506	0
470	5639.26	31.2573	395.42	395.423	0	1.04521	8.14355	0
471	5648.46	34.9893	389.17	389.166	0	1.02981	8.53178	0
472	5658.68	38.4944	346.1	346.101	0	0.918576	9.11827	0
473	5669.81	41.598	314.47	314.471	0	0.824448	10.5411	0
474	5681.76	44.4379	291.99	291.994	0	0.759118	12.0265	0
475	5694.48	47.067	275.46	275.457	0	0.708744	13.571	0
476	5707.9	49.534	261.03	261.03	0	0.665216	15.1734	0
477	5721.98	51.8545	249.04	249.041	0	0.627814	16.8297	0
478	5736.69	54.0483	238.08	238.081	0	0.593484	18.5374	4
479	5752	56.1238	228.64	228.639	0	0.562854	20.2929	4
480	5767.86	58.0979	220.4	220.403	0	0.53569	22.0946	4
481	5784.26	59.9762	212.59	212.585	0	0.509499	23.9397	4
482	5801.18	61.772	207.14	207.138	0	0.490562	25.3879	4
483	5818.58	63.5096	201.91	201.911	0	0.475707	25.6558	4
484	5836.45	65.1947	196.91	196.913	0	0.461393	25.9206	4
485	5854.79	66.8321	192.59	192.588	0	0.449	26.1825	4
486	5873.58	68.4255	188.38	188.379	0	0.43693	26.4417	4
487	5892.8	69.9761	184.28	184.283	0	0.425174	26.6981	4
488	5912.45	71.4849	180.27	180.267	0	0.413646	26.9515	4
489	5932.51	72.9527	176.36	176.359	0	4.02E-01	27.2018	4
490	5952.98	74.3807	172.56	172.557	0	0.391483	27.4488	4
491	5973.83	75.7699	168.86	168.859	0	0.380842	27.6924	4
492	5995.07	77.1213	165.26	165.263	0	0.370484	27.9325	4
493	6016.67	78.436	161.77	161.765	0	0.360401	28.1691	4
494	6038.64	79.7149	149.9	149.902	0	0.350586	28.402	4
495	6060.85	80	28.454	28.4543	0	0	28.4543	4

496	6083.07	80	28.454	28.4543	0	0	28.4543	4
497	6105.28	79.5865	-188.3	-188.282	0	-0.547512	28.3785	4
498	6126.98	76.2295	-393.9	-326.855	-67.0153	-1.13528	27.4971	4
499	6147.58	72.1526	-394.6	-345.742	-48.8347	-1.12997	24.8195	4
500	6167.06	68.0943	-395.3	-361.104	-34.1509	-1.12496	22.2811	4
501	6185.41	64.0534	-395.9	-369.849	-26.0534	-1.12024	19.881	4
502	6202.65	60.0291	-396.5	-369.848	-26.6745	-1.11581	17.6181	0
503	6218.77	56.0203	-397.1	-369.848	-27.2586	-1.11165	15.4915	0
504	6233.77	52.0258	-397.7	-369.849	-27.8139	-1.10779	13.5004	0
505	6247.67	48.0447	-398.2	-369.847	-28.3434	-1.10421	11.644	0
506	6260.46	44.0761	-398.7	-369.845	-28.847	-1.10092	9.92156	0
507	6272.16	40.1157	-399.2	-369.845	-29.3225	-1.1	9.10368	0
508	6282.75	36.1558	-399.6	-369.846	-29.7653	-1.09999	8.65799	0
509	6292.24	32.1958	-400	-369.849	-30.1793	-1.09999	8.23895	0
510	6300.64	28.2358	-400.4	-369.851	-30.5693	-1.09999	7.84657	0
511	6307.93	24.2759	-400.8	-369.852	-30.9359	-1.09999	7.48084	0
512	6314.12	20.3159	-401.1	-369.852	-31.277	-1.09999	7.14178	0
513	6319.21	16.356	-401.4	-369.852	-31.5884	-1.09999	6.82938	0
514	6323.2	12.396	-401.7	-369.852	-31.8725	-1.09998	6.54363	0
515	6326.09	8.43606	-402	-254.55	-147.415	-1.09997	6.28454	0
516	6327.87	4.4765	-260.2	-1.09854	-259.142	-1.09984	6.05213	0
517	6328.53	1.96287	-239.2	-0.481689	-238.722	-0.868996	5.91842	0
518	6329	0	0	0	0	0	5.82148	0
519	6329	0	0	0	0	0	5.82148	0
520	6329	0	0	0	0	0	5.82148	0
521	6329	0	0	0	0	0	5.82148	0
522	6329	0	0	0	0	0	5.82148	0
523	6329	0	0	0	0	0	5.82148	0
524	6329	0	0	0	0	0	5.82148	0
525	6329	0	0	0	0	0	5.82148	0
526	6329	0	0	0	0	0	5.82148	0
527	6329	0	0	0	0	0	5.82148	0
528	6329	0	0	0	0	0	5.82148	0
529	6329	0	0	0	0	0	5.82148	0
530	6329	0	0	0	0	0	5.82148	0
531	6329	0.00E+00	0	0	0	0.00E+00	5.82148	0
532	6329	0	0	0	0	0	5.82148	0
533	6329	0	0	0	0	0	5.82148	0
534	6329	0	0	0	0	0	5.82148	0
535	6329.1	0.412187	397.18	397.182	0	0.105479	5.84129	0
536	6329.67	2.77028	397.18	397.182	0	0.708917	5.9602	0
537	6330.64	5.74207	397.18	397.181	0	1.05407	6.12352	0
538	6332.72	9.53462	397.18	397.181	0	1.05326	6.35374	0
539	6335.89	13.3246	397.18	397.181	0	1.05251	6.60824	0
540	6340.11	17.1119	397.18	397.181	0	1.05173	6.88696	0
541	6345.39	20.8964	397.18	397.181	0	1.05089	7.18981	0
542	6351.72	24.6777	397.18	397.181	0	1.05	7.51674	0
543	6359.1	28.4558	397.19	397.188	0	1.04906	7.86767	0
544	6367.53	32.2231	394.06	394.064	0	1.04123	8.24174	0
545	6376.99	35.9331	378.39	378.392	0	1.00877	8.63372	0
546	6387.46	39.3285	335.59	335.585	0	0.889973	9.01295	0
547	6398.81	42.3623	308.42	308.422	0	0.811121	9.36839	0
548	6410.96	45.0692	287.15	287.152	0	0.720117	21.3907	0
549	6423.83	47.5742	272.49	272.491	0	0.675951	22.7103	0

550	6437.38	49.9278	258.74	258.737	0	0.634883	24.073	0
551	6451.56	52.146	247.59	247.585	0	0.600489	25.476	0
552	6466.34	54.2453	237.1	237.097	0	0.568163	26.9175	0
553	6481.69	56.2762	215.35	215.346	0	0.556234	22.1064	0
554	6497.46	56.921	22.199	22.1992	0	0	22.1992	0
555	6513.27	56.921	21.567	21.567	0	0	22.0447	0
556	6529.08	56.921	14.014	14.0141	0	0	14.4918	0
557	6544.9	56.921	6.4612	6.46119	0	0	6.93888	0
558	6560.71	56.921	-1.092	-1.0917	0	0	-0.614013	0
559	6576.52	56.921	-8.645	-8.64459	0	0	-8.1669	0
560	6592.33	56.921	-22.28	-22.2846	0	0	-21.729	-20
561	6608.14	56.921	-31.07	-31.0694	0	0	-30.5138	-20
562	6623.95	56.921	-39.85	-39.8542	0	0	-39.2986	-20
563	6639.76	56.921	-48.64	-48.6389	0	0	-48.0833	-20
564	6655.58	56.9367	-7.208	-7.2075	0	7.97E-02	-55.5821	-20
565	6671.56	58.5845	-75.89	-75.8939	0	0.617068	-55.3417	-20
566	6687.44	55.5239	-351.8	-351.761	0	-0.849484	-55.7846	-20
567	6702.59	54.0027	-60.11	-60.1058	0	-4.88E-02	-55.9988	-20
568	6717.59	54	-56	-55.9992	0	0	-55.9992	-20
569	6732.59	54	-51.13	-51.1292	0	0	-51.6786	-20
570	6747.59	54	-42.89	-42.8892	0	0	-43.4385	-20
571	6762.59	54	-34.65	-34.6491	0	0	-35.1984	-20
572	6777.59	54	-13.86	-13.8607	0	0	-14.4966	-20
573	6792.59	54	-4.322	-4.32205	0	0	-4.95796	-20
574	6807.59	54	5.2165	5.21654	0	0	4.58064	3
575	6822.59	54	14.755	14.7551	0	0	14.1192	3
576	6837.59	54	24.294	24.2937	0	0	23.6578	3
577	6852.59	54	26.911	26.9109	0	0	26.3615	3
578	6867.59	54	33.028	33.0277	0	0	33.0277	3
579	6882.59	54	33.028	33.0277	0	0	33.0277	3
580	6897.59	54	33.028	33.0277	0	0	33.0277	3
581	6912.59	54	33.028	33.0277	0	0	33.0277	3
582	6927.59	54	33.028	33.0277	0	0	33.0277	3
583	6942.59	54	33.028	33.0277	0	0	33.0277	3
584	6957.59	54	33.028	33.0277	0	0	33.0277	3
585	6972.59	54	33.028	33.0277	0	0	33.0277	3
586	6987.59	54	33.028	33.0277	0	0	33.0277	3
587	7002.59	54	33.028	33.0277	0	0	33.0277	3
588	7017.59	54	26.004	26.0041	0	0	26.0907	3
589	7032.59	54	24.706	24.7056	0	0	24.7922	3
590	7047.59	54	23.407	23.4071	0	0	23.4937	3
591	7062.59	54	22.109	22.1086	0	0	22.1952	3
592	7077.59	54.0176	72.082	72.0824	0	8.45E-02	20.9108	3
593	7092.76	55.5401	231.07	231.074	0	5.67E-01	21.1253	3
594	7108.47	57.5371	222.74	222.743	0	0.543866	21.4125	3
595	7124.62	57.4717	-396.9	-369.848	-27.0474	-1.12701	21.403	3
596	7140.02	53.425	-362	-361.991	0	-1.08558	20.8284	3
597	7154.47	51.061	-64.09	-64.0876	0	-0.284381	20.5057	3
598	7168.62	50.9117	20.486	20.4856	0	0	20.4856	3
599	7182.76	50.9117	20.799	20.7989	0	0	20.6437	3
600	7196.9	50.9117	22.995	22.9945	0	0	22.8392	3
601	7211.04	50.9117	25.19	25.19	0	0	25.0348	3
602	7225.18	50.9117	27.386	27.3856	0	0	27.2303	3
603	7239.33	50.9117	44.288	44.2883	0	0	44.0357	3

604	7253.47	50.9117	47.861	47.8611	0	0	47.6085	9.5
605	7267.61	50.9117	51.434	51.4339	0	0	51.1813	9.5
606	7281.75	50.9117	55.007	55.0067	0	0	54.7541	9.5
607	7295.9	50.9117	58.58	58.5795	0	0	58.3269	9.5
608	7310.04	50.9117	54.193	54.1931	0	0	54.0378	9.5
609	7324.18	50.9117	55.855	55.8546	0	0	55.8546	9.5
610	7338.32	50.9117	55.855	55.8546	0	0	55.8546	9.5
611	7352.46	50.9117	55.855	55.8546	0	0	55.8546	9.5
612	7366.61	50.9117	55.855	55.8546	0	0	55.8546	9.5
613	7380.75	50.9117	55.855	55.8546	0	0	55.8546	9.5
614	7394.89	50.9117	55.855	55.8546	0	0	55.8546	9.5
615	7409.03	50.9117	55.855	55.8546	0	0	55.8546	9.5
616	7423.17	50.9117	54.926	54.9256	0	0	55.1525	9.5
617	7437.32	50.9117	51.717	51.7167	0	0	51.9436	9.5
618	7451.46	50.9117	48.508	48.5078	0	0	48.7347	9.5
619	7465.6	50.9117	37.288	37.2877	0	0	37.612	9.5
620	7479.74	50.9117	32.702	32.7016	0	0	33.0259	9.5
621	7493.89	50.9117	28.116	28.1155	0	0	28.4398	0
622	7508.03	50.9117	23.529	23.5293	0	0	23.8536	0
623	7522.17	50.9117	22.504	22.504	0	0	19.2675	0
624	7536.42	52.1526	247.55	247.551	0	0.626045	15.9899	0
625	7551.22	54.3643	236.5	236.503	0	0.60434	12.9385	0
626	7566.62	56.5011	227.07	227.065	0	0.583073	11.2312	0
627	7582.6	58.554	218.5	218.5	0	0.559077	11.53	0
628	7599.14	60.5232	210.89	210.894	0	0.537333	11.8232	0
629	7616.22	62.4265	205.17	205.169	0	0.521068	12.113	0
630	7633.82	64.2722	199.62	199.617	0	0.505283	12.3998	0
631	7651.92	66.063	194.62	194.619	0	0.490912	12.6837	0
632	7670.51	67.8052	190.02	190.017	0	0.477719	12.9651	0
633	7689.59	69.5006	185.54	185.539	0	0.464868	13.2438	0
634	7709.12	71.1503	181.16	181.158	0	0.452292	13.5198	0
635	7729.11	72.7552	176.89	176.885	0	0.440014	13.7927	0
636	7749.54	74.3166	172.73	172.727	0	0.428059	14.0624	0
637	7770.39	75.8356	168.69	168.685	0	0.416422	14.3287	0
638	7791.66	77.3133	164.75	164.753	0	0.405095	14.5916	0
639	7812.88	74.5111	-394.2	-334.814	-59.3599	-1.09999	14.0963	0
640	7833.02	70.5512	-394.9	-353.163	-41.6888	-1.09999	13.419	0
641	7852.07	66.5912	-395.5	-365.352	-30.1475	-1.09999	12.7684	0
642	7870.02	62.6313	-396.1	-369.849	-26.2738	-1.09999	12.1445	0
643	7886.87	58.6713	-396.7	-369.848	-26.8726	-1.09999	11.5472	0
644	7902.61	54.7113	-397.3	-369.849	-27.4451	-1.1	10.9766	0
645	7917.26	50.7514	-397.8	-369.849	-27.9893	-1.09999	10.4327	0
646	7930.81	46.7914	-398.4	-369.846	-28.5061	-1.09999	9.91538	0
647	7943.26	42.8314	-398.8	-369.845	-28.9972	-1.09999	9.42475	0
648	7954.6	38.8715	-399.3	-369.846	-29.4616	-1.09999	8.96077	0
649	7964.85	34.9115	-399.7	-369.847	-29.9003	-1.1	8.52345	0
650	7974	30.9515	-400.2	-369.85	-30.3073	-1.09999	8.11279	0
651	7982.05	26.9916	-400.5	-369.851	-30.6879	-1.09999	7.72878	0
652	7989	23.0316	-400.9	-369.852	-31.044	-1.09999	7.37144	0
653	7994.84	19.0716	-401.2	-369.852	-31.3747	-1.09999	7.04075	0
654	7999.58	15.1117	-401.5	-369.852	-31.6802	-1.09999	6.73672	0
655	8003.23	11.1517	-401.8	-369.852	-31.9577	-1.09999	6.45935	0
656	8005.76	7.19184	-402	-162.82	-239.187	-1.09996	6.20864	0
657	8007.13	3.59412	-239.2	-0.882	-238.321	-1.04207	6.00397	0

658	8007.71	1.21547	-239.2	-0.298278	-238.905	-0.789698	5.88074	0
659	8008	0	0	0	0	0	5.82148	0
660	8008	0	0	0	0	0	5.82148	0
661	8008	0	0	0	0	0	5.82148	0
662	8008	0	0	0	0	0	5.82148	0
663	8008	0	0	0	0	0	5.82148	0
664	8008	0	0	0	0	0	5.82148	0
665	8008	0	0	0	0	0	5.82148	0
666	8008	0	0	0	0	0	5.82148	0
667	8008	0	0	0	0	0	5.82148	0
668	8008	0	0	0	0	0	5.82148	0
669	8008	0	0	0	0	0	5.82148	0
670	8008	0	0	0	0	0	5.82148	0
671	8008	0.00E+00	0	0	0	0.00E+00	5.82148	0
672	8008	0	0	0	0	0	5.82148	0
673	8008	0	0	0	0	0	5.82148	0
674	8008	0	0	0	0	0	5.82148	0
675	8008	0	0	0	0	0	5.82148	0
676	8008.28	1.15312	397.18	397.182	0	0.295085	5.87764	0
677	8008.85	3.51121	397.18	397.182	0	0.898523	5.99951	0
678	8010.15	6.93405	397.18	397.181	0	1.0538	6.19324	0
679	8012.61	10.7257	397.18	397.181	0	1.05303	6.4311	0
680	8016.1	14.5149	397.18	397.181	0	1.05227	6.69321	0
681	8020.66	18.3013	397.18	397.181	0	1.05147	6.97952	0
682	8026.27	22.0848	397.18	397.181	0	1.05062	7.28995	0
683	8032.92	25.8652	397.18	397.182	0	1.0497	7.62442	0
684	8040.64	29.6422	397.19	397.191	0	1.04875	7.98287	0
685	8049.39	33.3972	392.41	392.412	0	1.03638	8.36326	0
686	8059.18	37.0459	364.36	364.363	0	0.969794	8.75585	0
687	8069.93	40.3113	324.65	324.654	0	0.856292	9.12639	0
688	8081.55	43.2657	301.27	301.271	0	0.791322	9.47726	0
689	8093.95	46.0004	281.7	281.695	0	0.735864	9.81525	0
690	8107.08	48.4692	267.26	267.257	0	0.656306	24.7158	0
691	8120.86	50.6492	155.83	155.831	0	0.40553	26.3457	0
692	8134.99	50.9117	27.855	27.8548	0	0	27.7574	0
693	8149.14	50.9117	29.232	29.232	0	0	29.1347	0
694	8163.28	50.9117	30.609	30.6093	0	0	30.5119	0
695	8177.42	50.9117	24.089	24.0885	0	0	24.0885	0
696	8191.56	50.9117	24.089	24.0885	0	0	24.0885	0
697	8205.7	50.9117	24.089	24.0885	0	0	24.0885	0
698	8219.85	50.9117	24.089	24.0885	0	0	24.0885	0
699	8233.99	50.9117	24.089	24.0885	0	0	24.0885	0
700	8248.13	50.9117	24.089	24.0885	0	0	24.0885	0
701	8262.27	50.9117	24.089	24.0885	0	0	24.0885	0
702	8276.41	50.9117	16.324	16.3243	0	0	16.4217	0
703	8290.56	50.9117	12.924	12.9235	0	0	13.3314	0
704	8304.7	50.9117	7.1552	7.15519	0	0	7.56308	0
705	8318.84	50.9117	1.3868	1.38684	0	0	1.79472	0
706	8332.98	50.9117	-4.382	-4.38151	0	0	-3.97363	0
707	8347.19	51.8048	243	242.999	0	0.63024	-8.72283	0
708	8361.92	54.2631	237.01	237.008	0	0.675716	-12.9581	-13
709	8377.33	56.6603	226.4	226.401	0	0.658625	-17.4017	-13
710	8393.4	59.0044	216.62	216.622	0	0.644691	-22.0477	-13
711	8410.11	61.3042	208.55	208.545	0	0.635475	-26.8912	-13

712	8427.45	63.5765	201.71	201.709	0	0.623206	-29.1956	-13
713	8445.42	65.7629	195.41	195.412	0	0.593549	-24.5598	-13
714	8463.98	67.847	189.91	189.907	0	0.565802	-19.791	-13
715	8483.1	69.832	184.66	184.664	0	0.538427	-14.8962	-13
716	8502.76	71.7191	179.64	179.643	0	0.511341	-9.88292	-3
717	8522.94	73.5095	174.88	174.876	0	0.484639	-4.75834	-3
718	8543.59	75.2045	170.36	170.364	0	0.458344	0.470592	-3
719	8564.71	76.8077	166.1	166.098	0	0.436034	4.46983	-3
720	8586.26	78.355	161.98	161.981	0	0.424167	4.74773	-3
721	8608.23	79.8295	102	101.997	0	0.297382	5.01635	-3
722	8630.45	80	5.0477	5.04766	0	0	5.04766	-3
723	8652.67	80	5.0477	5.04766	0	0	5.04766	-3
724	8674.9	80	5.0477	5.04766	0	0	5.04766	-3
725	8697.12	80	5.0477	5.04766	0	0	5.04766	-3
726	8719.34	80	5.0477	5.04766	0	0	5.04766	-3
727	8741.56	80	5.0477	5.04766	0	0	5.04766	-3
728	8763.79	80	5.0477	5.04766	0	0	5.04766	-3
729	8786.01	80	5.0477	5.04766	0	0	5.04766	-3
730	8808.23	80	5.0477	5.04766	0	0	5.04766	-3
731	8830.45	80	5.0477	5.04766	0	0	5.04766	-3
732	8852.67	80	5.0477	5.04766	0	0	5.04766	-3
733	8874.9	80	5.3574	5.35736	0	0	5.3572	-3
734	8897.12	80	5.3549	5.35491	0	0	5.35527	-3
735	8919.34	80	5.0477	5.04766	0	0	5.04766	-3
736	8941.56	80	5.1016	5.10164	0	0	5.10326	-3
737	8963.79	80	5.0656	5.06557	0	0	5.06719	-3
738	8986.01	80	6.1688	6.16884	0	0	6.09719	-3
739	9008.11	78.5978	-301	-301.006	0	-0.794484	7.42494	-3
740	9029.44	74.8649	-394.1	-333.175	-60.9388	-1.08418	8.28836	-3
741	9049.69	70.9544	-394.8	-351.294	-43.4884	-1.08809	9.06825	0
742	9068.86	67.0302	-395.4	-364.111	-31.3171	-1.09178	9.79396	0
743	9086.93	63.0931	-396.1	-369.849	-26.2024	-1.09527	10.4656	0
744	9103.91	59.1438	-396.7	-369.848	-26.8039	-1.09855	11.0833	0
745	9119.79	55.1849	-397.2	-369.849	-27.3798	-1.1	11.0435	0
746	9134.57	51.2249	-397.8	-369.849	-27.9242	-1.09999	10.4963	0
747	9148.25	47.265	-398.3	-369.847	-28.4447	-1.09999	9.97584	0
748	9160.83	43.305	-398.8	-369.845	-28.9401	-1.09999	9.48202	0
749	9172.3	39.345	-399.3	-369.846	-29.4086	-1.09999	9.01485	0
750	9182.68	35.3851	-399.7	-369.847	-29.8507	-1.1	8.57434	0
751	9191.96	31.4251	-400.1	-369.85	-30.2586	-1.09999	8.16049	0
752	9200.14	27.4652	-400.5	-369.851	-30.6427	-1.09999	7.7733	0
753	9207.22	23.5052	-400.9	-369.852	-31.0028	-1.09999	7.41277	0
754	9213.2	19.5452	-401.2	-369.852	-31.3375	-1.09999	7.07889	0
755	9218.08	15.5853	-401.5	-369.852	-31.6469	-1.09999	6.77167	0
756	9221.85	11.6253	-401.8	-369.852	-31.9275	-1.09999	6.49112	0
757	9224.51	7.6654	-402	-197.734	-204.258	-1.09996	6.23722	0
758	9226.06	3.87859	-239.2	-0.951808	-238.251	-1.07225	6.01935	0
759	9226.64	1.49994	-239.2	-0.368086	-238.835	-0.819879	5.89497	0
760	9227	0	0	0	0	0	5.82148	0
761	9227	0	0	0	0	0	5.82148	0
762	9227	0	0	0	0	0	5.82148	0
763	9227	0	0	0	0	0	5.82148	0
764	9227	0	0	0	0	0	5.82148	0
765	9227	0	0	0	0	0	5.82148	0

766	9227	0	0	0	0	0	5.82148	0
767	9227	0	0	0	0	0	5.82148	0
768	9227	0	0	0	0	0	5.82148	0
769	9227	0	0	0	0	0	5.82148	0
770	9227	0	0	0	0	0	5.82148	0
771	9227	0	0	0	0	0	5.82148	0
772	9227	0	0	0	0	0	5.82148	0
773	9227	0	0	0	0	0	5.82148	0
774	9227	0	0	0	0	0	5.82148	0
775	9227	0	0	0	0	0	5.82148	0
776	9227	0	0	0	0	0	5.82148	0
777	9227.21	0.871115	397.18	397.182	0	0.22292	5.86369	0
778	9227.78	3.2292	397.18	397.182	0	0.826358	5.98444	0
779	9228.93	6.48043	397.18	397.181	0	1.0539	6.16642	0
780	9231.25	10.2724	397.18	397.181	0	1.05312	6.40137	0
781	9234.63	14.0619	397.18	397.181	0	1.05236	6.66059	0
782	9239.06	17.8487	397.18	397.181	0	1.05157	6.94401	0
783	9244.54	21.6325	397.18	397.181	0	1.05072	7.25156	0
784	9251.07	25.4133	397.18	397.181	0	1.04982	7.58316	0
785	9258.66	29.1907	397.19	397.19	0	1.04887	7.93874	0
786	9267.29	32.951	393.04	393.04	0	1.03822	8.3168	0
787	9276.96	36.6276	369.64	369.636	0	0.98444	8.70969	0
788	9287.6	39.9415	328.01	328.007	0	0.868564	9.08351	0
789	9299.12	42.9248	303.97	303.97	0	0.799252	9.26653	0
790	9311.43	45.6893	283.51	283.514	0	0.743763	8.72445	0
791	9324.48	48.2895	268.31	268.308	0	0.704066	8.12075	0
792	9338.24	50.7524	254.55	254.546	0	0.668081	7.45977	0
793	9352.67	53.0997	242.82	242.82	0	0.638209	6.74529	0
794	9367.73	55.3427	231.9	231.897	0	0.610348	5.97972	-3
795	9383.41	57.4973	222.91	222.909	0	0.588203	5.1661	-3
796	9399.67	59.5742	214.24	214.244	0	0.567068	4.30669	-3
797	9416.5	61.5835	207.71	207.705	0	0.551433	3.40366	-3
798	9433.88	63.543	201.81	201.81	0	0.53804	2.46028	-3
799	9451.79	65.4509	196.24	196.236	0	0.522614	2.55461	-3
800	9470.23	67.3055	191.34	191.337	0	0.508571	2.85241	-3
801	9489.18	69.1104	186.57	186.57	0	0.494893	3.14781	-3
802	9508.62	70.8666	181.91	181.913	0	0.481526	3.44058	-3
803	9528.55	72.5753	177.36	177.363	0	0.468455	3.73046	-3
804	9548.94	74.2377	172.94	172.938	0	0.455727	4.01723	-3
805	9569.79	75.8548	168.63	168.633	0	0.443337	4.30071	-3
806	9591.08	77.428	164.45	164.447	0	0.431278	4.58076	-3
807	9612.8	78.9584	160.38	160.375	0	0.419536	4.85723	-3
808	9634.92	80	5.0477	5.04766	0	0	5.04766	-3
809	9657.14	80	5.0477	5.04766	0	0	5.04766	-3
810	9679.36	80	5.0477	5.04766	0	0	5.04766	-3
811	9701.58	80	5.0477	5.04766	0	0	5.04766	-3
812	9723.81	80	5.0477	5.04766	0	0	5.04766	-3
813	9746.03	80	5.0477	5.04766	0	0	5.04766	-3
814	9768.25	80	5.0477	5.04766	0	0	5.04766	-3
815	9790.47	80	5.0477	5.04766	0	0	5.04766	-3
816	9812.69	80	5.0477	5.04766	0	0	5.04766	-3
817	9834.92	80	5.0477	5.04766	0	0	5.04766	-3
818	9857.14	80	5.0477	5.04766	0	0	5.04766	-3
819	9879.36	80	5.0477	5.04766	0	0	5.04766	-3

820	9901.58	80	5.0477	5.04766	0	0	5.04766	-3
821	9923.81	80	5.0477	5.04766	0	0	5.04766	-3
822	9946.03	80	5.0477	5.04766	0	0	5.04766	-3
823	9968.25	80	5.0477	5.04766	0	0	5.04766	-3
824	9990.47	80	5.0477	5.04766	0	0	5.04766	-3
825	10012.7	80	5.0477	5.04766	0	0	5.04766	-3
826	10034.9	80	5.0477	5.04766	0	0	5.04766	-3
827	10057.1	80	5.88	5.88004	0	0	5.87932	-3
828	10079.3	78.7799	-276.3	-276.256	0	-0.726196	6.79563	-3
829	10100.7	75.144	-394.1	-331.882	-62.1836	-1.08235	7.65689	-3
830	10121	71.2455	-394.7	-349.945	-44.7874	-1.08463	7.83742	-3
831	10140.2	67.3341	-395.4	-363.252	-32.1265	-1.08815	8.49417	0
832	10158.4	63.4104	-396	-369.849	-26.1533	-1.09146	9.1013	0
833	10175.5	59.4751	-396.6	-369.848	-26.7556	-1.0946	9.66503	0
834	10191.4	55.5286	-397.2	-369.849	-27.3306	-1.09769	10.2354	0
835	10206.3	51.5717	-397.7	-369.849	-27.8765	-1.09999	10.5432	0
836	10220.1	47.6117	-398.2	-369.847	-28.3998	-1.09999	10.0204	0
837	10232.8	43.6517	-398.7	-369.845	-28.8983	-1.09999	9.52419	0
838	10244.3	39.6918	-399.2	-369.846	-29.3699	-1.1	9.05469	0
839	10254.8	35.7318	-399.7	-369.846	-29.8128	-1.09999	8.61185	0
840	10264.2	31.7719	-400.1	-369.85	-30.2229	-1.09999	8.19567	0
841	10272.5	27.8119	-400.5	-369.851	-30.6097	-1.09999	7.80614	0
842	10279.6	23.8519	-400.8	-369.852	-30.9727	-1.09999	7.44327	0
843	10285.7	19.892	-401.2	-369.852	-31.3103	-1.09999	7.10706	0
844	10290.7	15.932	-401.5	-369.852	-31.6208	-1.09999	6.79751	0
845	10294.6	11.9721	-401.8	-369.852	-31.9028	-1.09999	6.51462	0
846	10297.3	8.01213	-402	-223.296	-178.684	-1.09997	6.25838	0
847	10299	4.08687	-239.2	-1.00292	-238.2	-1.09435	6.0307	0
848	10299.6	1.70822	-239.2	-0.419198	-238.784	-0.841978	5.90548	0
849	10300	0	0	0	0	0	5.82148	0
850	10300	0	0	0	0	0	5.82148	0
851	10300	0	0	0	0	0	5.82148	0
852	10300	0	0	0	0	0	5.82148	0
853	10300	0	0	0	0	0	5.82148	0
854	10300	0	0	0	0	0	5.82148	0
855	10300	0	0	0	0	0	5.82148	0
856	10300	0	0	0	0	0	5.82148	0
857	10300	0	0	0	0	0	5.82148	0
858	10300	0	0	0	0	0	5.82148	0
859	10300	0	0	0	0	0	5.82148	0
860	10300	0	0	0	0	0	5.82148	0
861	10300	0	0	0	0	0	5.82148	0
862	10300	0	0	0	0	0	5.82148	0
863	10300	0	0	0	0	0	5.82148	0
864	10300	0	0	0	0	0	5.82148	0
865	10300	0	0	0	0	0	5.82148	0
866	10300.2	0.664636	397.18	397.182	0	0.170081	5.85357	0
867	10300.7	3.02273	397.18	397.182	0	0.773519	5.97349	0
868	10301.8	6.14823	397.18	397.181	0	1.05398	6.147	0
869	10304	9.94051	397.18	397.181	0	1.05318	6.37983	0
870	10307.3	13.7302	397.18	397.181	0	1.05243	6.63692	0
871	10311.6	17.5172	397.18	397.181	0	1.05164	6.91823	0
872	10317	21.3013	397.18	397.181	0	1.0508	7.22367	0
873	10323.5	25.0824	397.18	397.181	0	1.0499	7.55317	0

874	10331	28.8601	397.19	397.189	0	1.04896	7.90665	0
875	10339.5	32.6237	393.5	393.5	0	1.03957	8.28294	0
876	10349.1	36.31	373.64	373.64	0	0.988832	11.144	0
877	10359.6	39.6137	331.99	331.989	0	0.859543	16.5574	0
878	10371	42.5256	307.13	307.129	0	0.77238	22.3522	0
879	10383.2	45.1624	286.6	286.596	0	0.698993	28.4953	0
880	10396.1	47.5209	272.8	272.803	0	0.605572	49.0297	0
881	10409.6	49.595	260.67	260.673	0	0.550916	57.0594	0
882	10423.6	50.9117	65.868	65.8676	0	0	65.2925	20
883	10437.8	50.9117	74	74.0004	0	0	73.4253	20
884	10451.9	50.9117	82.133	82.1332	0	0	81.5581	20
885	10466	50.9117	82.91	82.9095	0	0	82.4318	20
886	10480.2	50.9117	89.665	89.665	0	0	89.1874	20
887	10494.3	50.9117	90.965	90.9646	0	0	90.9646	20
888	10508.5	50.9117	90.965	90.9646	0	0	90.9646	20
889	10522.6	50.9117	90.965	90.9646	0	0	90.9646	20
890	10536.7	50.9117	90.965	90.9646	0	0	90.9646	20
891	10550.9	50.9117	90.965	90.9646	0	0	90.9646	20
892	10565	50.9117	90.965	90.9646	0	0	90.9646	20
893	10579.2	50.9117	90.965	90.9646	0	0	90.9646	20
894	10593.3	50.9117	90.965	90.9646	0	0	90.9646	20
895	10607.5	50.9117	90.965	90.9646	0	0	90.9646	20
896	10621.6	50.9117	90.965	90.9646	0	0	90.9646	20
897	10635.7	50.9117	90.965	90.9646	0	0	90.9646	20
898	10649.9	50.9117	90.965	90.9646	0	0	90.9646	20
899	10664	50.9117	90.965	90.9646	0	0	90.9646	20
900	10678.2	50.9117	90.965	90.9646	0	0	90.9646	20
901	10692.3	50.9117	86.385	86.385	0	0	86.4697	20
902	10706.5	50.9117	79.922	79.922	0	0	80.5363	20
903	10720.6	50.9117	71.381	71.3814	0	0	71.976	20
904	10734.7	50.9117	63.119	63.119	0	0	63.694	20
905	10748.9	50.9117	55.135	55.1349	0	0	55.6902	20
906	10763	50.9117	55.326	55.3257	0	0	55.7776	20
907	10777.2	50.9117	48.934	48.9341	0	0	49.3861	-3
908	10791.3	50.9117	42.543	42.5425	0	0	42.9945	-3
909	10805.4	50.9117	36.151	36.151	0	0	36.6029	-3
910	10819.6	50.9117	29.759	29.7594	0	0	30.2114	-3
911	10833.7	50.9117	15.632	15.632	0	0	16.1814	-3
912	10847.9	50.9117	14.057	14.057	0	0	14.057	-3
913	10862	50.9117	14.057	14.057	0	0	14.057	-3
914	10876.2	50.9117	14.057	14.057	0	0	14.057	-3
915	10890.3	50.9117	14.057	14.057	0	0	14.057	-3
916	10904.4	50.9117	14.057	14.057	0	0	14.057	-3
917	10918.6	50.9117	14.057	14.057	0	0	14.057	-3
918	10932.7	50.9117	14.057	14.057	0	0	14.057	-3
919	10946.9	50.9117	14.057	14.057	0	0	14.057	-3
920	10961	50.9117	14.057	14.057	0	0	14.057	-3
921	10975.2	50.9117	14.057	14.057	0	0	14.057	-3
922	10989.3	50.9117	7.1039	7.10391	0	0	7.2013	-3
923	11003.4	50.9117	5.7266	5.72664	0	0	5.82402	-3
924	11017.6	50.9117	4.3494	4.34937	0	0	4.44675	-3
925	11031.7	50.9117	2.9721	2.9721	0	0	3.06948	-3
926	11045.9	50.9117	1.5948	1.59483	0	0	1.69221	-3
927	11060	50.9769	84.565	84.565	0	0.170163	0.431522	-3

928	11074.4	52.8188	244.22	244.224	0	0.658407	0.681918	-3
929	11089.4	55.127	232.8	232.797	0	0.626204	1.05226	-3
930	11105	57.3258	223.62	223.624	0	0.597379	2.48662	-3
931	11121.2	59.4233	214.87	214.874	0	0.569717	3.9569	-3
932	11138	61.4285	208.17	208.171	0	0.547139	5.46139	-3
933	11155.3	63.3603	202.36	202.36	0	0.527272	7.00048	-3
934	11173.2	65.2215	196.84	196.842	0	0.508013	8.57246	0
935	11191.6	67.0178	192.1	192.097	0	0.490864	10.1762	0
936	11210.4	68.7527	187.52	187.515	0	0.472623	11.8105	0
937	11229.8	70.4158	183.11	183.113	0	0.454375	14.7053	0
938	11249.5	72.0282	178.82	178.82	0	0.442049	14.976	0
939	11269.8	73.5986	174.64	174.639	0	0.433557	13.9378	0
940	11290	71.1589	-394.7	-350.347	-44.4007	-1.10081	13.8269	0
941	11309.2	67.1966	-395.4	-363.641	-31.7601	-1.10047	13.0471	0
942	11327.4	63.2355	-396	-369.849	-26.1802	-1.10016	12.3013	0
943	11344.4	59.2754	-396.6	-369.848	-26.7846	-1.09999	11.6366	0
944	11360.3	55.3154	-397.2	-369.849	-27.3613	-1.1	11.062	0
945	11375.1	51.3555	-397.8	-369.849	-27.9063	-1.09999	10.5139	0
946	11388.8	47.3955	-398.3	-369.847	-28.4278	-1.09999	9.99258	0
947	11401.4	43.4355	-398.8	-369.845	-28.9244	-1.09999	9.49787	0
948	11412.9	39.4756	-399.2	-369.846	-29.394	-1.09999	9.02983	0
949	11423.4	35.5156	-399.7	-369.847	-29.8365	-1.09999	8.58844	0
950	11432.7	31.5556	-400.1	-369.85	-30.2452	-1.09999	8.17371	0
951	11440.9	27.5957	-400.5	-369.851	-30.6303	-1.09999	7.78564	0
952	11448	23.6357	-400.8	-3.70E+02	-30.9915	-1.09999	7.42423	0
953	11454	19.6758	-401.2	-369.852	-31.3273	-1.09999	7.08947	0
954	11458.9	15.7158	-401.5	-369.852	-31.6374	-1.09999	6.78138	0
955	11462.7	11.7558	-401.8	-369.852	-31.9182	-1.09999	6.49994	0
956	11465.4	7.79592	-402	-207.356	-194.631	-1.09996	6.24516	0
957	11467	3.95699	-239.2	-0.971049	-238.232	-1.08057	6.02362	0
958	11467.6	1.57834	-239.2	-0.387327	-238.816	-0.828198	5.89892	0
959	11468	0	0	0	0	0	5.82148	0
960	11468	0	0	0	0	0	5.82148	0
961	11468	0	0	0	0	0	5.82148	0
962	11468	0	0	0	0	0	5.82148	0
963	11468	0	0	0	0	0	5.82148	0
964	11468	0	0	0	0	0	5.82148	0
965	11468	0	0	0	0	0	5.82148	0
966	11468	0	0	0	0	0	5.82148	0
967	11468	0	0	0	0	0	5.82148	0
968	11468	0	0	0	0	0	5.82148	0
969	11468	0	0	0	0	0	5.82148	0
970	11468	0	0	0	0	0	5.82148	0
971	11468	0	0	0	0	0	5.82148	0
972	11468	0	0	0	0	0	5.82148	0
973	11468	0	0	0	0	0	5.82148	0
974	11468	0	0	0	0	0	5.82148	0
975	11468	0	0	0	0	0	5.82148	0
976	11468.2	0.793388	397.18	397.182	0	0.203029	5.85988	0
977	11468.8	3.15148	397.18	397.182	0	0.806467	5.98031	0
978	11469.9	6.35538	397.18	397.181	0	1.05393	6.15909	0
979	11472.2	10.1475	397.18	397.181	0	1.05314	6.39324	0
980	11475.5	13.937	397.18	397.181	0	1.05239	6.65166	0
981	11479.9	17.7239	397.18	397.181	0	1.0516	6.93428	0

982	11485.3	21.5079	397.18	397.181	0	1.05075	7.24104	0
983	11491.8	25.2887	397.18	397.181	0	1.04985	7.57185	0
984	11499.4	29.0662	397.19	397.19	0	1.0489	7.92664	0
985	11508	32.8279	393.21	393.213	0	1.03873	8.30405	0
986	11517.6	36.5107	371.11	371.109	0	0.988533	8.69685	0
987	11528.2	39.8388	329.21	329.21	0	0.87215	9.07165	0
988	11539.7	42.8299	304.72	304.721	0	0.800873	9.42456	0
989	11552	45.5954	284.06	284.064	0	0.742443	9.76439	0
990	11565	48.1862	268.91	268.912	0	0.700367	10.0945	0
991	11578.8	50.6309	255.15	255.153	0	0.661734	10.4165	0
992	11593.2	52.9507	243.57	243.565	0	0.629451	10.7315	0
993	11608.2	55.1358	232.76	232.761	0	0.586131	15.8266	0
994	11623.8	57.1711	224.27	224.27	0	0.547204	21.7074	0
995	11639.9	58.9802	216.72	216.722	0	0.483205	37.8366	0
996	11656.5	60.6474	210.52	210.521	0	0.446452	45.1183	0
997	11673.6	62.1605	146.53	146.533	0	0.298381	52.5694	15
998	11690.9	62.3538	60.35	60.3495	0	0	59.9263	15
999	11708.2	62.3538	52.438	52.4384	0	0	52.6773	15
1000	11725.5	62.3538	48.302	48.3015	0	0	48.5404	15
1001	11742.9	62.3538	40.917	40.9173	0	0	41.5144	15
1002	11760.2	62.3538	30.575	30.575	0	0	31.1722	15
1003	11777.5	62.3538	20.233	20.2328	0	0	20.8299	-10
1004	11794.8	62.3538	9.8906	9.89061	0	0	10.4877	-10
1005	11812.1	62.3538	-0.452	-0.451607	0	0	0.145501	-10
1006	11829.5	62.3538	-10.79	-10.7938	0	0	-10.1967	-10
1007	11846.8	62.3538	-12.25	-12.2468	0	0	-12.2468	-10
1008	11864.1	62.3538	-12.25	-12.2468	0	0	-12.2468	-10
1009	11881.4	62.3538	#####	-1.22E+01	0	0	-12.2468	-10
1010	11898.7	62.3538	-12.25	-12.2468	0	0	-12.2468	-10
1011	11916.1	62.3538	-10.15	-10.1453	0	0	-10.3125	-10
1012	11933.4	62.3538	-7.249	-7.24948	0	0	-7.41667	-10
1013	11950.7	62.3538	-4.354	-4.35366	0	0	-4.52085	-10
1014	11968	62.3538	-5.4	-5.40037	0	0	-5.48013	-10
1015	11985.4	62.3538	-3.872	-3.87186	0	0	-3.96778	-3
1016	12002.7	62.3538	-0.773	-0.772698	0	0	-0.89267	-3
1017	12020	62.3538	1.3053	1.30528	0	0	1.18531	-3
1018	12037.4	63.1899	202.87	202.872	0	0.532807	5.46341	-3
1019	12055.2	65.0677	197.25	197.248	0	0.513534	6.9493	-3
1020	12073.5	66.8958	192.42	192.42	0	0.504985	5.26508	-3
1021	12092.3	68.6879	187.69	187.686	0	0.491407	5.55714	-3
1022	12111.7	70.4441	183.04	183.038	0	0.482246	4.29974	-3
1023	12131.5	72.1572	178.48	178.477	0	4.70E-01	4.2384	-3
1024	12151.8	73.8271	174.03	174.031	0	0.458277	4.16627	-3
1025	12172.5	75.4548	169.7	169.698	0	0.446402	4.23018	-3
1026	12193.7	77.0389	165.48	165.483	0	0.434262	4.5111	-3
1027	12215.2	76.8353	-393.8	-324.049	-69.7122	-1.07296	4.47476	-3
1028	12236	72.9727	-394.4	-341.942	-52.4946	-1.07296	3.79857	-3
1029	12255.7	69.1766	-323.7	-323.728	0	-0.922454	3.15876	-3
1030	12274.6	67.3735	-26.52	-26.5191	0	-0.12192	2.86343	-3
1031	12293.4	67.3498	2.8596	2.85959	0	0	2.85959	-3
1032	12312.1	67.3498	2.8596	2.85959	0	0	2.85959	-3
1033	12330.8	67.3498	2.8596	2.85959	0	0	2.85959	-3
1034	12349.5	67.3498	10.844	10.8444	0	0	10.7887	-3
1035	12368.2	67.3498	11.886	11.8855	0	0	11.8299	-3

SIMULACIONES, CÁLCULOS Y GRÁFICAS

012438

ALSTOM

1036	12386.9	67.3498	12.927	12.9266	0	0	12.871	-3
1037	12405.6	67.3498	13.968	13.9677	0	0	13.9121	-3
1038	12424.3	67.3498	10.651	10.6506	0	0	10.6506	-3
1039	12443	67.3498	10.651	10.6506	0	0	10.6506	-3
1040	12461.7	67.3498	11.09	11.09	0	0	11.0183	-3
1041	12480.4	67.3498	7.2586	7.25863	0	0	12.3588	-3
1042	12499	65.5854	-328.8	-328.829	0	-0.878226	13.4033	-3
1043	12516.7	61.7054	-396.3	-369.849	-26.4172	-1.10555	14.0658	-3
1044	12533.3	57.7192	-396.9	-369.848	-27.0114	-1.10875	14.6595	0
1045	12548.7	53.7219	-397.4	-369.849	-27.5811	-1.11174	15.1992	0
1046	12563.1	49.7231	-398	-369.849	-28.126	-1.10365	11.6517	0
1047	12576.4	45.7488	-398.5	-369.846	-28.6414	-1.10422	11.3518	0
1048	12588.5	41.7726	-399	-369.845	-29.1248	-1.10474	11.0607	0
1049	12599.6	37.795	-399.4	-369.846	-29.5819	-1.10464	10.5665	0
1050	12609.5	33.8213	-399.9	-369.848	-30.0122	-1.10315	9.58149	0
1051	12618.4	29.8526	-400.3	-369.851	-30.4152	-1.10183	8.68519	0
1052	12626.1	25.8885	-400.6	-3.70E+02	-30.793	-1.10067	7.87732	0
1053	12632.7	21.9279	-401	-369.852	-31.1399	-1.09999	7.27659	0
1054	12638.3	17.9679	-401.3	-369.852	-31.4616	-1.09998	6.95333	0
1055	12642.7	14.008	-401.6	-369.852	-31.7581	-1.09999	6.65673	0
1056	12646.1	10.048	-401.9	-369.852	-32.0231	-1.1	6.38679	0
1057	12648.3	6.08824	-360.5	-81.4576	-279.064	-1.09992	6.14352	0
1058	12649.3	2.93115	-239.2	-0.719306	-238.484	-0.97173	5.96866	0
1059	12649.9	0.552499	-239.2	-0.135584	-239.068	-0.719356	5.8481	0
1060	12650	0	0	0	0	0	5.82148	0
1061	12650	0	0	0	0	0	5.82148	0
1062	12650	0	0	0	0	0	5.82148	0
1063	12650	0	0	0	0	0	5.82148	0
1064	12650	0	0	0	0	0	5.82148	0
1065	12650	0	0	0	0	0	5.82148	0
1066	12650	0	0	0	0	0	5.82148	0
1067	12650	0	0	0	0	0	5.82148	0
1068	12650	0	0	0	0	0	5.82148	0
1069	12650	0	0	0	0	0	5.82148	0
1070	12650	0	0	0	0	0	5.82148	0
1071	12650	0	0	0	0	0	5.82148	0
1072	12650	0	0	0	0	0	5.82148	0
1073	12650	0	0	0	0	0	5.82148	0
1074	12650	0	0	0	0	0	5.82148	0
1075	12650	0	0	0	0	0	5.82148	0
1076	12650	0	0	0	0	0	5.82148	0
1077	12650.4	1.81037	397.18	397.182	0	0.463275	5.91066	0
1078	12651	4.19767	397.18	397.182	0	1.05442	6.03677	0
1079	12652.7	7.99109	397.18	397.181	0	1.05358	6.25709	0
1080	12655.5	11.7821	397.18	397.181	0	1.05282	6.50172	0
1081	12659.3	15.5705	397.18	397.181	0	1.05205	6.77058	0
1082	12664.1	19.3562	397.18	397.181	0	1.05124	7.06362	0
1083	12670	23.1388	397.18	397.181	0	1.05037	7.38076	0
1084	12677	26.9183	397.19	397.185	0	1.04945	7.72192	0
1085	12685	30.6939	396.22	396.216	0	1.04751	8.08699	0
1086	12694	34.4327	390.96	390.955	0	1.03098	8.88912	0
1087	12704.1	37.9887	352.48	352.476	0	0.933701	9.99911	0
1088	12715.1	41.1359	318.13	318.128	0	0.832785	11.149	0
1089	12726.9	44.0059	295.41	295.413	0	0.767583	12.3414	0

1090	12739.5	46.6602	277.84	277.836	0	0.715198	13.5752	0
1091	12752.8	49.1503	263.27	263.274	0	0.667832	16.8097	0
1092	12766.8	51.4665	250.98	250.979	0	0.626689	19.1897	3
1093	12781.4	53.658	240.03	240.031	0	0.593258	20.5764	3
1094	12796.6	55.7306	230.28	230.279	0	0.561141	22.5716	3
1095	12812.4	57.6969	222.08	222.076	0	0.533183	24.6991	3
1096	12828.6	59.5752	214.24	214.24	0	0.511284	24.9597	3
1097	12845.4	61.3881	208.29	208.292	0	0.49856	23.5814	3
1098	12862.7	63.1457	203.01	203.005	0	0.479513	25.3421	3
1099	12880.5	64.854	197.87	197.867	0	0.470109	23.68	3
1100	12898.8	66.5314	193.38	193.382	0	0.462331	22.0375	3
1101	12917.5	68.181	189.03	189.025	0	0.454612	20.5349	-3
1102	12936.6	69.8287	184.67	184.672	0	0.457885	14.964	-3
1103	12956.3	71.4677	180.31	180.312	0	0.452958	12.4267	-3
1104	12976.2	72	10.449	10.4494	0	0	10.4494	-3
1105	12996.2	72	10.449	10.4494	0	0	10.4494	-3
1106	13016.2	72	10.449	10.4494	0	0	10.4494	-3
1107	13036.2	72	10.449	10.4494	0	0	10.4494	-3
1108	13056.2	72	7.0834	7.08335	0	0	7.1534	-3
1109	13076.2	72	6.2239	6.22389	0	0	6.26732	-3
1110	13096.2	72	5.3553	5.3553	0	0	5.39873	-3
1111	13116.2	72.0188	52.768	52.7683	0	8.98E-02	4.58908	-3
1112	13136.4	73.3731	175.24	175.24	0	0.463989	3.25904	-3
1113	13157	75.0633	170.74	170.74	0	0.474496	-5.14023	-3
1114	13178.1	76.79	166.15	166.145	0	0.484365	-13.3982	-3
1115	13199.7	78.5527	161.46	161.455	0	0.494476	-21.8413	-3
1116	13221.7	79.9984	-27.33	-27.3282	0	6.37E-02	-30.532	-20
1117	13244	80	-39.96	-39.9607	0	0	-39.5547	-20
1118	13266.2	80	-48.98	-48.9837	0	0	-48.5777	-20
1119	13288.4	80	-51.06	-51.0601	0	0	-51.0601	-20
1120	13310.6	80	-51.06	-51.0601	0	0	-51.0601	-20
1121	13332.9	80	-51.06	-51.0601	0	0	-51.0601	-20
1122	13355.1	80	-51.06	-51.0601	0	0	-51.0601	-20
1123	13377.3	80	-51.06	-51.0601	0	0	-51.0601	-20
1124	13399.5	80	-51.06	-51.0601	0	0	-51.0601	-20
1125	13421.7	80	-51.06	-51.0601	0	0	-51.0601	-20
1126	13444	80	-51.06	-51.0601	0	0	-51.0601	-20
1127	13466.2	80	-51.06	-51.0601	0	0	-51.0601	-20
1128	13488.4	80	-51.06	-51.0601	0	0	-51.0601	-20
1129	13510.6	80	-51.06	-51.0601	0	0	-51.0601	-20
1130	13532.9	80	-51.06	-51.0601	0	0	-51.0601	-20
1131	13555.1	80	-51.06	-51.0601	0	0	-51.0601	-20
1132	13577.3	80	-51.06	-51.0601	0	0	-51.0601	-20
1133	13599.5	80	-51.06	-51.0601	0	0	-51.0601	-20
1134	13621.7	80	-51.27	-51.2748	0	0	-51.2735	-20
1135	13644	80	-51.28	-51.2846	0	0	-51.285	-20
1136	13666.2	80	-51.26	-51.2574	0	0	-51.2594	-20
1137	13688.4	80	-50.58	-50.5761	0	0	-50.5839	-20
1138	13710.6	80	-49.91	-49.9114	0	0	-49.9121	-20
1139	13732.9	80	-49.93	-49.926	0	0	-49.9242	-20
1140	13755.1	80	-50.71	-50.7063	0	0	-50.7063	-20
1141	13777.3	80	-51.39	-51.3865	0	0	-51.3787	-20
1142	13799.5	80	-51.56	-51.5596	0	0	-51.5518	-20
1143	13821.7	80	-50.97	-50.9719	0	0	-51.0238	-20

1144	13844	80	-49.71	-49.7093	0	0	-49.769	-20
1145	13866.2	80	-48.38	-48.3824	0	0	-48.4421	-20
1146	13888.4	80	-47.06	-47.0555	0	0	-47.1152	-17.5
1147	13910.6	80	-45.73	-45.7286	0	0	-45.7883	-17.5
1148	13932.9	80	-44.4	-44.4017	0	0	-44.4614	-17.5
1149	13955.1	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1150	13977.3	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1151	13999.5	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1152	14021.7	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1153	14044	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1154	14066.2	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1155	14088.4	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1156	14110.6	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1157	14132.9	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1158	14155.1	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1159	14177.3	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1160	14199.5	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1161	14221.7	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1162	14244	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1163	14266.2	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1164	14288.4	80	-43.44	-43.4375	0	0	-43.4375	-17.5
1165	14310.6	79.7706	-216	-215.963	0	-0.428579	-43.4796	-17.5
1166	14332.4	76.9321	-393.7	-323.601	-70.1427	-0.942326	-43.9932	-17.5
1167	14353.3	73.5397	-394.3	-339.315	-55.0248	-0.942327	-44.589	-17.5
1168	14373.3	70.1473	-394.9	-355.034	-39.886	-0.942336	-45.1652	-17.5
1169	14392.3	66.7549	-395.5	-364.889	-30.5835	-0.942326	-45.7218	-17.5
1170	14410.4	63.3625	-396	-369.849	-26.1606	-0.942327	-46.2589	-17.5
1171	14427.5	59.9701	-396.5	-369.848	-26.6835	-0.942339	-46.7764	-17.5
1172	14443.7	56.5777	-397	-369.848	-27.1776	-0.942327	-47.2744	-17.5
1173	14458.9	53.1854	-397.5	-369.849	-27.6548	-0.942326	-47.7528	-17.5
1174	14473.3	51.0095	-114.3	-114.3	0	-0.235005	-48.0493	-17.5
1175	14487.5	50.9117	-48.06	-48.0624	0	0	-48.0624	-17.5
1176	14501.6	50.9117	-48.06	-48.0624	0	0	-48.0624	-17.5
1177	14515.8	50.9117	-48.06	-48.0624	0	0	-48.0624	-17.5
1178	14529.9	50.9117	-48.06	-48.0624	0	0	-48.0624	-17.5
1179	14544.1	50.9117	-48.06	-48.0624	0	0	-48.0624	-17.5
1180	14558.2	50.9117	-33.27	-33.2693	0	0	-33.3667	-17.5
1181	14572.3	50.9117	-31.89	-31.892	0	0	-31.9894	-17.5
1182	14586.5	50.9117	-30.51	-30.5148	0	0	-30.6122	-17.5
1183	14600.6	50.9117	-29.14	-29.1375	0	0	-29.2349	-17.5
1184	14614.8	50.9117	-27.76	-27.7602	0	0	-27.8576	-17.5
1185	14628.9	50.9117	-34.43	-34.4282	0	0	-34.4282	-17.5
1186	14643.1	50.9117	-34.43	-34.4282	0	0	-34.4282	-17.5
1187	14657.2	50.9117	-34.43	-34.4282	0	0	-34.4282	-17.5
1188	14671.3	50.9117	-34.43	-34.4282	0	0	-34.4282	-17.5
1189	14685.5	50.9117	-34.43	-34.4282	0	0	-34.4282	-17.5
1190	14699.6	50.9117	-34.43	-34.4282	0	0	-34.4282	-17.5
1191	14713.8	50.9117	-34.43	-34.4282	0	0	-34.4282	-17.5
1192	14727.9	50.9117	-34.43	-34.4282	0	0	-34.4282	-17.5
1193	14742	50.9117	-34.43	-34.4282	0	0	-34.4282	-17.5
1194	14756.2	50.9117	-34.43	-34.4282	0	0	-34.4282	-17.5
1195	14770.3	50.9117	-34.43	-34.4282	0	0	-34.4282	-17.5
1196	14784.5	50.9117	-33.19	-33.1853	0	0	-33.6033	-17.5
1197	14798.6	50.9117	-27.27	-27.2743	0	0	-27.6922	-17.5

1198	14812.8	50.9117	-21.36	-21.3632	0	0	-21.7812	-17.5
1199	14826.9	50.9117	-15.45	-15.4521	0	0	-15.8701	-17.5
1200	14841	50.9117	-9.541	-9.54103	0	0	-9.95901	-17.5
1201	14855.2	50.9117	-3.63	-3.62996	0	0	-4.04794	0
1202	14869.3	50.8319	-202.5	-202.468	0	-0.267776	1.8521	0
1203	14883.1	47.6302	-398.2	-369.847	-28.4012	-1.09231	7.16949	0
1204	14895.7	43.6697	-398.7	-369.845	-28.8997	-1.10659	11.9736	0
1205	14907.3	39.6601	-399.2	-369.846	-29.3766	-1.11963	16.3361	0
1206	14917.8	35.6059	-399.7	-369.847	-29.8298	-1.1314	20.253	0
1207	14927.1	31.549	-400.1	-369.85	-30.2457	-1.11749	14.6698	0
1208	14935.3	27.5304	-400.5	-369.851	-30.6364	-1.11534	13.4773	0
1209	14942.4	23.5191	-400.9	-369.852	-31.0015	-1.11348	12.4214	0
1210	14948.4	19.514	-401.2	-369.852	-31.3399	-1.11192	11.5019	0
1211	14953.2	15.5139	-401.5	-369.852	-31.6518	-1.11064	10.7182	0
1212	14957	11.518	-401.8	-369.852	-31.9352	-1.10965	10.0697	0
1213	14959.6	7.52512	-402	-187.392	-214.604	-1.10894	9.55965	0
1214	14961.1	3.77919	-236.5	-0.927416	-235.577	-1.06933	9.19975	0
1215	14961.7	1.39668	-236.5	-0.342746	-236.162	-0.812417	9.01956	0
1216	14962	0	0	0	0	0	8.91841	0
1217	14962	0	0	0	0	0	8.91841	0
1218	14962	0	0	0	0	0	8.91841	0
1219	14962	0	0	0	0	0	8.91841	0
1220	14962	0	0	0	0	0	8.91841	0
1221	14962	0	0	0	0	0	8.91841	0
1222	14962	0	0	0	0	0	8.91841	0
1223	14962	0	0	0	0	0	8.91841	0
1224	14962	0	0	0	0	0	8.91841	0
1225	14962	0	0	0	0	0	8.91841	0
1226	14962	0	0	0	0	0	8.91841	0
1227	14962	0	0	0	0	0	8.91841	0
1228	14962	0	0	0	0	0	8.91841	0
1229	14962	0	0	0	0	0	8.91841	0
1230	14962	0	0	0	0	0	8.91841	0
1231	14962	0	0	0	0	0	8.91841	0
1232	14962	0	0	0	0	0	8.91841	0
1233	14962.2	0.972301	397.18	397.182	0	0.247341	8.94259	0
1234	14962.8	3.3221	397.18	397.182	0	0.845101	9.00766	0
1235	14964	6.61115	397.18	397.181	0	1.04605	9.07722	0
1236	14966.4	10.3764	397.18	397.181	0	1.04589	9.08034	0
1237	14969.8	14.1419	397.18	397.181	0	1.04604	9.00761	0
1238	14974.2	17.9084	397.18	397.181	0	1.04641	8.85674	0
1239	14979.7	21.6767	397.18	397.181	0	1.04701	8.62797	0
1240	14986.2	25.4445	397.18	397.182	0	1.04658	8.78296	0
1241	14993.8	29.2153	397.19	397.19	0	1.04867	7.94113	0
1242	15002.5	32.9752	393.01	393.005	0	1.03812	8.31932	0
1243	15012.2	36.6504	369.35	369.349	0	0.983643	8.7122	0
1244	15022.8	39.9619	327.67	327.665	0	0.867853	9.08587	0
1245	15034.3	42.9431	303.83	303.825	0	0.798392	9.43822	0
1246	15046.6	45.7004	283.45	283.45	0	0.740737	9.77755	0
1247	15059.7	48.2523	268.53	268.526	0	0.682108	16.4393	0
1248	15073.4	50.5985	255.32	255.315	0	0.626058	23.7734	0
1249	15087.8	52.7559	244.54	244.538	0	0.576084	31.4475	0
1250	15102.7	54.7535	234.56	234.558	0	0.539926	34.8184	0
1251	15118.2	56.6115	226.6	226.604	0	0.495798	43.0759	0

1252	15134.2	58.3133	219.51	219.505	0	0.447262	53.93	20
1253	15150.6	59.8326	213.17	213.166	0	0.399995	65.0799	20
1254	15167.4	61.2095	208.83	208.83	0	0.367514	72.6605	20
1255	15184.6	62.47	205.04	205.038	0	0.334704	81.0299	20
1256	15202.1	63.6159	201.59	201.591	0	0.307413	87.9517	20
1257	15219.9	64.746	198.19	198.191	0	0.314115	81.8045	20
1258	15238	65.8634	195.15	195.147	0	0.307258	81.2751	20
1259	15256.5	66.9517	192.27	192.272	0	0.299222	81.3762	20
1260	15275.2	68.0514	189.37	189.367	0	0.313738	73.0887	20
1261	15294.3	69.2168	186.29	186.289	0	0.331958	63.2549	20
1262	15313.7	70.4386	183.05	183.052	0	0.341456	56.4965	20
1263	15333.4	71.6901	179.72	179.72	0	0.353438	48.7204	0
1264	15353.5	72.9923	176.25	176.253	0	0.369258	39.3865	0
1265	15374	74.3519	172.63	172.634	0	0.385364	29.7935	0
1266	15394.8	75.7797	168.83	168.833	0	0.408374	17.4608	0
1267	15416.1	77.2471	164.93	164.929	0	0.40243	15.7559	0
1268	15437.8	78.6771	161.12	161.124	0	0.392466	15.6409	0
1269	15459.8	79.9735	65.896	65.8961	0	0.175563	15.6099	0
1270	15482	80	16.415	16.4149	0	0	16.4057	0
1271	15504.3	80	16.621	16.6211	0	0	16.6118	0
1272	15526.5	80	17.492	17.4918	0	0	17.4914	0
1273	15548.7	80	15.982	15.982	0	0	17.4686	0
1274	15570.9	80	16.378	16.3776	0	0	16.3776	0
1275	15593.1	80	15.604	15.6037	0	0	15.613	0
1276	15615.4	80	15.398	15.3976	0	0	15.4068	0
1277	15637.6	80	15.192	15.1915	0	0	15.2007	0
1278	15659.8	80	9.8692	9.86919	0	0	10.3469	0
1279	15682	80	-0.746	-0.746066	0	0	-0.26838	0
1280	15704.3	80	-11.36	-11.3613	0	0	-10.8836	0
1281	15726.5	80	-19.63	-19.6348	0	0	-19.1734	-20
1282	15748.7	80	-28.82	-28.8219	0	0	-28.3476	-20
1283	15770.9	80	-39.42	-39.4202	0	0.00E+00	-38.9408	-20
1284	15793.1	80	-49.52	-49.5247	0	0	-48.1008	-20
1285	15815.4	80	-50.85	-50.8453	0	0	-50.8291	-20
1286	15837.6	80	-44.67	-44.6692	0	0	-45.1307	-20
1287	15859.8	80	-34.41	-34.4146	0	0	-34.8761	-20
1288	15882	80	-24.03	-24.0297	0	0	-24.5074	-20
1289	15904.3	80	-13.79	-13.7895	0	0	-14.2194	0
1290	15926.5	80	-4.236	-4.23578	0	0.00E+00	-4.6657	0
1291	15948.7	80	5.318	5.31795	0	0	4.88803	0
1292	15970.9	79.9192	-98.33	-98.3346	0	-0.259879	11.5525	-2
1293	15992.8	77.4769	-391.6	-321.078	-70.5191	-1.06046	10.0617	-2
1294	16013.8	73.5673	-394.3	-339.187	-55.148	-1.085	8.37111	-2
1295	16033.7	69.6662	-395	-356.66	-38.3382	-1.08245	6.75972	-2
1296	16052.5	65.771	-395.6	-367.671	-27.9626	-1.08197	5.9494	-2
1297	16070.3	61.8759	-396.2	-369.849	-26.3907	-1.08197	5.34091	-2
1298	16086.9	58.2145	-266.9	-266.877	0	-0.783559	5.48558	-2
1299	16102.8	56.921	6.1058	6.10576	0	-4.17E-03	6.05799	-2
1300	16118.6	56.921	6.8611	6.86105	0	0	6.81328	-2
1301	16134.5	56.921	7.6163	7.61634	0	0	7.56857	-2
1302	16150.3	56.921	8.3716	8.37163	0	0	8.32386	0
1303	16166.1	56.921	9.1269	9.12692	0	0	9.07915	0
1304	16181.9	56.921	21.568	21.5681	0	0	21.4425	0
1305	16197.7	56.921	23.555	23.5553	0	0	23.4296	0

1306	16213.5	56.921	25.441	25.4414	0	0	25.3635	0
1307	16229.3	56.921	26.673	26.6733	0	0	26.5954	0
1308	16245.1	56.921	22.199	22.1992	0	0	22.1992	0
1309	16260.9	56.921	22.199	22.1992	0	0	22.1992	0
1310	16276.8	56.921	22.199	22.1992	0	0	22.1992	0
1311	16292.6	56.921	22.199	22.1992	0	0	22.1992	0
1312	16308.4	56.921	22.199	22.1992	0	0	22.1992	0
1313	16324.2	56.921	22.199	22.1992	0	0	22.1992	0
1314	16340	56.921	20.797	20.7972	0	0	20.8343	0
1315	16355.8	56.921	25.978	25.9778	0	0	25.9778	0
1316	16371.6	56.921	25.978	25.9778	0	0	25.9778	0
1317	16387.4	56.921	25.978	25.9778	0	0	25.9778	0
1318	16403.3	56.921	32.485	32.485	0	0	32.484	0
1319	16419.1	56.921	22.199	22.1992	0	0	32.3713	0
1320	16434.7	55.3562	-318.7	-318.744	0	-0.86576	21.9752	0
1321	16449.6	51.4204	-397.7	-369.849	-27.8973	-1.12938	21.4301	0
1322	16463.3	47.3727	-398.3	-369.847	-28.4306	-1.11396	15.178	0
1323	16475.9	43.3676	-398.8	-369.845	-28.9324	-1.11132	13.6961	0
1324	16487.4	39.3716	-399.3	-369.846	-29.4055	-1.10891	12.3291	0
1325	16497.8	35.3839	-399.7	-369.847	-29.8509	-1.10674	11.0765	0
1326	16507.1	31.4036	-400.1	-369.85	-30.2607	-1.10478	9.93788	0
1327	16515.2	27.43	-400.5	-369.851	-30.646	-1.10306	8.91302	0
1328	16522.3	23.462	-400.9	-369.852	-31.0065	-1.10158	8.00142	0
1329	16528.3	19.499	-401.2	-369.852	-31.3411	-1.10034	7.2028	0
1330	16533.1	15.539	-401.5	-369.852	-31.6502	-1.09999	6.76824	0
1331	16536.9	11.579	-401.8	-369.852	-31.9308	-1.09999	6.48799	0
1332	16539.5	7.61911	-402	-194.321	-207.673	-1.09996	6.23441	0
1333	16541.1	3.85078	-239.2	-0.944984	-238.258	-1.0693	6.01784	0
1334	16541.6	1.47213	-239.2	-0.361262	-238.842	-0.816929	5.89357	0
1335	16542	0	0	0	0	0	5.82148	0
1336	16542	0	0	0	0	0	5.82148	0
1337	16542	0	0	0	0	0	5.82148	0
1338	16542	0	0	0	0	0	5.82148	0
1339	16542	0	0	0	0	0	5.82148	0
1340	16542	0	0	0	0	0	5.82148	0
1341	16542	0	0	0	0	0	5.82148	0
1342	16542	0	0	0	0	0	5.82148	0
1343	16542	0	0	0	0	0	5.82148	0
1344	16542	0	0	0	0	0	5.82148	0
1345	16542	0	0	0	0	0	5.82148	0
1346	16542	0	0	0	0	0	5.82148	0
1347	16542	0	0	0	0	0	5.82148	0
1348	16542	0	0	0	0	0	5.82148	0
1349	16542	0	0	0	0	0	5.82148	0
1350	16542	0	0	0	0	0	5.82148	0
1351	16542	0	0	0	0	0	5.82148	0
1352	16542.2	0.898683	397.18	397.182	0	0.229974	5.86505	0
1353	16542.8	3.25677	397.18	397.182	0	0.833412	5.98591	0
1354	16543.9	6.52479	397.18	397.181	0	1.05389	6.16903	0
1355	16546.3	10.3167	397.18	397.181	0	1.05311	6.40426	0
1356	16549.7	14.1062	397.18	397.181	0	1.05235	6.66376	0
1357	16554.1	17.8929	397.18	397.181	0	1.05156	6.94746	0
1358	16559.6	21.6768	397.18	397.181	0	1.05071	7.25529	0
1359	16566.2	25.4575	397.18	397.182	0	1.0498	7.58718	0

1360	16573.8	29.2348	397.19	397.19	0	1.04886	7.94304	0
1361	16582.4	32.9946	392.98	392.978	0	1.03804	8.32133	0
1362	16592.1	36.6687	369.12	369.117	0	0.982999	8.71422	0
1363	16602.7	39.9779	327.58	327.58	0	0.867293	9.08772	0
1364	16614.3	42.958	303.71	303.707	0	0.798065	9.44002	0
1365	16626.6	45.7142	283.37	283.369	0	0.740513	9.77928	0
1366	16639.6	48.3005	268.24	268.244	0	0.700655	9.31685	0
1367	16653.4	50.7548	254.53	254.534	0	0.666596	7.99732	0
1368	16667.8	53.1003	242.82	242.817	0	0.638611	6.59347	0
1369	16682.9	55.3484	231.87	231.874	0	0.612636	5.10896	0
1370	16698.6	57.5148	222.84	222.836	0	0.592377	3.54797	0
1371	16714.8	59.6104	214.09	214.094	0	0.573123	1.91374	-5
1372	16731.7	61.6454	207.52	207.518	0	0.559551	0.209274	-5
1373	16749.1	63.6379	201.53	201.525	0	0.548123	-1.56155	-5
1374	16767	65.5905	195.87	195.867	0	0.537677	-3.39741	-5
1375	16785.5	67.5046	190.81	190.812	0	0.525108	-3.8029	-5
1376	16804.5	69.3681	185.89	185.889	0	0.510982	-3.49717	-5
1377	16824	71.1814	181.08	181.075	0	0.497162	-3.194	-5
1378	16844.1	72.9456	176.38	176.378	0	0.483663	-2.89369	-5
1379	16864.6	74.6619	171.81	171.808	0	0.470519	-2.59645	-5
1380	16885.5	76.3316	167.37	167.365	0	0.457726	-2.30248	-5
1381	16907	77.9558	163.04	163.043	0	0.445271	-2.01196	-5
1382	16928.8	79.5357	158.84	158.839	0	0.432519	-1.49262	-5
1383	16951	80	0.2548	0.25481	0	0	0.183157	-5
1384	16973.3	80	1.8471	1.8471	0	0	1.77545	-5
1385	16995.5	80	3.4394	3.43939	0	0	3.36774	-5
1386	17017.7	80	5.0317	5.03168	0	0	4.96002	-2
1387	17039.9	80	6.624	6.62397	0	0	6.55231	-2
1388	17062.2	80	8.2163	8.21626	0	0	8.1446	-2
1389	17084.4	80	8.3915	8.39147	0	0	8.39147	-2
1390	17106.6	80	8.3915	8.39147	0	0	8.39147	-2
1391	17128.8	80	8.3915	8.39147	0	0	8.39147	-2
1392	17151	80	8.3915	8.39147	0	0	8.39147	-2
1393	17173.3	80	8.3915	8.39147	0	0	8.39147	-2
1394	17195.5	80	8.3915	8.39147	0	0	8.39147	-2
1395	17217.7	80	8.3915	8.39147	0	0	8.39147	-2
1396	17239.9	80	8.3915	8.39147	0	0	8.39147	-2
1397	17262.2	80	8.3915	8.39147	0	0	8.39147	-2
1398	17284.4	80	8.9678	8.9678	0	0	8.96761	-2
1399	17306.6	80	8.3915	8.39147	0	0	8.96102	-2
1400	17328.8	80	8.3915	8.39147	0	0	8.39147	-2
1401	17351	80	8.4718	8.47183	0	0	8.47508	-2
1402	17373.3	80	8.3997	8.39969	0	0	8.40294	-2
1403	17395.5	80	8.3915	8.39147	0	0	8.39147	-2
1404	17417.7	80	8.3915	8.39147	0	0	8.39147	-2
1405	17439.9	80	8.3915	8.39147	0	0	8.39147	-2
1406	17462.2	80	8.3915	8.39147	0	0	8.39147	-2
1407	17484.4	80	8.3915	8.39147	0	0	8.39147	-2
1408	17506.6	80	8.3915	8.39147	0	0	8.39147	-2
1409	17528.8	80	8.3915	8.39147	0	0	8.39147	-2
1410	17551	80	8.3915	8.39147	0	0	8.39147	-2
1411	17573.3	80	8.3915	8.39147	0	0	8.39147	-2
1412	17595.5	80	8.3915	8.39147	0	0	8.39147	-2
1413	17617.7	80	8.3915	8.39147	0	0	8.39147	-2

1414	17639.9	80	8.3915	8.39147	0	0	8.39147	-2
1415	17662.2	80	8.3915	8.39147	0	0	8.39147	-2
1416	17684.4	80	8.3915	8.39147	0	0	8.39147	-2
1417	17706.6	80	8.3915	8.39147	0	0	8.39147	-2
1418	17728.8	80	8.3915	8.39147	0	0	8.39147	-2
1419	17751	80	8.3915	8.39147	0	0	8.39147	-2
1420	17773.3	80	8.3915	8.39147	0	0	8.39147	-2
1421	17795.5	80	8.3915	8.39147	0	0	8.39147	-2
1422	17817.7	80	8.3915	8.39147	0	0	8.39147	-2
1423	17839.9	80	8.3915	8.39147	0	0	8.39147	-2
1424	17862.2	80	8.3915	8.39147	0	0	8.39147	-2
1425	17884.4	80	10.047	10.0472	0	0	9.7606	-2
1426	17906.6	80	16.416	16.4164	0	0	16.1298	-2
1427	17928.8	80	22.786	22.7855	0	0	22.4989	-2
1428	17951	80	29.155	29.1547	0	0	28.8681	10
1429	17973.3	80	35.524	35.5238	0	0	35.2372	10
1430	17995.5	80	41.893	41.893	0	0	41.6064	10
1431	18017.7	80	48.262	48.2622	0	0	47.9755	10
1432	18039.9	80	48.517	48.5172	0	0	48.5172	10
1433	18062.2	80	48.517	48.5172	0	0	48.5172	10
1434	18084.4	80	48.517	48.5172	0	0	48.5172	10
1435	18106.6	80	44.696	44.6959	0	0	44.9347	10
1436	18128.8	80	39.388	39.3882	0	0	39.6271	10
1437	18151	80	34.081	34.0806	0	0	34.3194	10
1438	18173.3	80	28.773	28.773	0	0	29.0118	0
1439	18195.5	80	23.465	23.4653	0	0	23.7042	0
1440	18217.7	80	18.158	18.1577	0	0	18.3965	0
1441	18239.9	80	15.079	15.0791	0	0	15.0791	0
1442	18262.2	80	15.079	15.0791	0	0	15.0791	0
1443	18284.2	77.8179	-376.5	-319.499	-57.0059	-1.01755	14.6822	0
1444	18305.2	73.8682	-394.3	-337.793	-56.491	-1.09999	13.9845	0
1445	18325.2	69.9083	-395	-355.976	-38.9832	-1.1	13.3116	0
1446	18344.1	65.9483	-395.6	-367.169	-28.4351	-1.09999	12.6653	0
1447	18361.8	61.9884	-396.2	-369.849	-26.3733	-1.09999	12.0457	0
1448	18378.5	58.0284	-396.8	-369.848	-26.9663	-1.09999	11.4528	0
1449	18394.1	54.0684	-397.4	-369.849	-27.5334	-1.09999	10.8865	0
1450	18408.5	50.1085	-397.9	-369.849	-28.0761	-1.1	10.3469	0
1451	18421.9	46.1485	-398.4	-369.846	-28.5895	-1.09999	9.83392	0
1452	18434.2	42.1885	-398.9	-369.845	-29.0747	-1.09999	9.34761	0
1453	18445.3	38.2286	-399.4	-369.846	-29.5335	-1.09999	8.88796	0
1454	18455.4	34.2686	-399.8	-369.847	-29.9663	-1.09999	8.45496	0
1455	18464.4	30.3086	-400.2	-369.851	-30.372	-1.1	8.04863	0
1456	18472.2	26.3487	-400.6	-369.851	-30.7493	-1.09999	7.66895	0
1457	18479	22.3887	-401	-369.852	-31.0999	-1.09998	7.31594	0
1458	18484.7	18.4288	-401.3	-369.852	-31.4253	-1.09999	6.98958	0
1459	18489.3	14.4688	-401.6	-369.852	-31.7256	-1.09999	6.68988	0
1460	18492.7	10.5088	-401.8	-369.852	-31.9958	-1.09999	6.41683	0
1461	18495.1	6.54899	-389.2	-115.427	-273.762	-1.09994	6.17045	0
1462	18496.2	3.20795	-239.2	-0.787234	-238.416	-1.0011	5.98331	0
1463	18496.8	0.829305	-239.2	-0.203512	-239	-0.748725	5.86164	0
1464	18497	0	0	0	0	0	5.82148	0
1465	18497	0	0	0	0	0	5.82148	0
1466	18497	0	0	0	0	0	5.82148	0
1467	18497	0	0	0	0	0	5.82148	0

1468	18497	0	0	0	0	0	5.82148	0
1469	18497	0	0	0	0	0	5.82148	0
1470	18497	0	0	0	0	0	5.82148	0
1471	18497	0	0	0	0	0	5.82148	0
1472	18497	0	0	0	0	0	5.82148	0
1473	18497	0	0	0	0	0	5.82148	0
1474	18497	0	0	0	0	0	5.82148	0
1475	18497	0	0	0	0	0	5.82148	0
1476	18497	0	0	0	0	0	5.82148	0
1477	18497	0	0	0	0	0	5.82148	0
1478	18497	0	0	0	0	0	5.82148	0
1479	18497	0	0	0	0	0	5.82148	0
1480	18497	0	0	0	0	0	5.82148	0
1481	18497.4	1.53595	397.18	397.182	0	0.393052	5.89678	0
1482	18497.9	3.89404	397.18	397.182	0	0.99649	6.02019	0
1483	18499.5	7.54975	397.18	397.181	0	1.05367	6.2302	0
1484	18502.1	11.3411	397.18	397.181	0	1.05291	6.472	0
1485	18505.8	15.1298	397.18	397.181	0	1.05214	6.73805	0
1486	18510.5	18.9158	397.18	397.181	0	1.05134	7.02828	0
1487	18516.3	22.6988	397.18	397.181	0	1.05047	7.34262	0
1488	18523.1	26.4786	397.18	397.184	0	1.04955	7.68099	0
1489	18531	30.2551	396.83	396.829	0	1.04859	8.04332	0
1490	18539.9	34.0018	391.56	391.561	0	1.03389	8.42674	0
1491	18549.9	37.6041	357.32	357.324	0	0.950256	8.81791	0
1492	18560.8	40.8068	320.73	320.733	0	0.845229	9.18419	0
1493	18572.5	43.7239	297.65	297.645	0	0.781283	9.533	0
1494	18585	46.4276	279.2	279.197	0	0.728927	9.86919	0
1495	18598.3	48.9712	264.32	264.321	0	0.687619	10.1968	0
1496	18612.2	51.3739	251.44	251.441	0	0.651394	10.5164	0
1497	18626.8	53.6575	240.03	240.034	0	0.619613	10.8293	0
1498	18642	55.8309	229.86	229.861	0	0.590904	11.1353	0
1499	18657.8	57.9114	221.18	221.181	0	0.56659	11.4357	0
1500	18674.2	59.9063	212.86	212.859	0	0.543265	11.7307	0
1501	18691.1	61.8108	207.02	207.021	0	0.518435	14.9441	0
1502	18708.5	63.6454	201.5	201.502	0	0.501833	15.5667	0
1503	18726.5	65.4101	196.34	196.344	0	0.482128	17.6663	0
1504	18744.9	67.1211	191.82	191.824	0	0.469223	17.9231	0
1505	18763.7	68.8026	187.38	187.383	0	0.462802	15.8553	0
1506	18783.1	70.4451	183.04	183.035	0	0.450616	16.1281	0
1507	18802.9	72.058	178.74	178.741	0	0.442688	14.6597	0
1508	18823.1	73.6303	174.56	174.555	0	0.430469	14.9982	0
1509	18843.8	75.1487	170.51	170.512	0	0.413932	17.0813	0
1510	18864.9	76.6076	166.63	166.63	0	0.397153	19.4151	0
1511	18886.3	78.0054	162.91	162.911	0	0.380208	21.9737	0
1512	18908.2	79.3428	159.35	159.352	0	0.363609	24.5654	4.5
1513	18930.4	80	27.177	27.1765	0	0	27.069	4.5
1514	18952.6	80	29.565	29.5649	0	0	29.4575	4.5
1515	18974.8	80	30.126	30.1262	0	0	30.1262	4.5
1516	18997	80	30.126	30.1262	0	0	30.1262	4.5
1517	19019.2	80	30.126	30.1262	0	0	30.1262	4.5
1518	19041.5	80	31.545	31.5445	0	0	31.5425	4.5
1519	19063.7	80	31.563	31.5634	0	0	31.5635	4.5
1520	19085.9	80	31.537	31.5365	0	0	31.5387	4.5
1521	19108.1	80	30.514	30.5136	0	0	30.5201	4.5

1522	19130.4	80	30.369	30.3693	0	0	30.3758	4.5
1523	19152.6	80	30.225	30.225	0	0	30.2315	4.5
1524	19174.8	80	30.126	30.1262	0	0	30.1262	4.5
1525	19197	80	30.126	30.1262	0	0	30.1262	4.5
1526	19219.2	80	30.126	30.1262	0	0	30.1262	4.5
1527	19241.5	80	30.126	30.1262	0	0	30.1262	4.5
1528	19263.7	80	30.126	30.1262	0	0	30.1262	4.5
1529	19285.9	80	30.126	30.1262	0	0	30.1262	4.5
1530	19308.1	80	30.126	30.1262	0	0	30.1262	4.5
1531	19330.1	77.8369	-362.9	-319.411	-43.4446	-1.01709	28.5143	4.5
1532	19351.2	73.7785	-394.3	-338.208	-56.0902	-1.13115	25.5341	4.5
1533	19371.1	69.7174	-395	-356.516	-38.4743	-1.12538	22.703	4.5
1534	19389.9	65.6765	-395.6	-367.938	-27.7106	-1.11993	20.024	0
1535	19407.6	61.6546	-396.3	-369.849	-26.4246	-1.11481	17.4961	0
1536	19424.2	57.6505	-396.9	-369.848	-27.021	-1.11001	15.1181	0
1537	19439.6	53.6631	-397.4	-369.849	-27.5888	-1.10553	12.8889	0
1538	19454	49.6913	-398	-369.849	-28.1298	-1.10139	10.8076	0
1539	19467.3	45.7306	-398.5	-369.846	-28.6437	-1.09999	9.78134	0
1540	19479.4	41.7706	-399	-369.845	-29.125	-1.09999	9.29784	0
1541	19490.5	37.8107	-399.4	-369.846	-29.5802	-1.09999	8.84101	0
1542	19500.4	33.8507	-399.9	-369.848	-30.0093	-1.09999	8.41083	0
1543	19509.3	29.8908	-400.3	-369.851	-30.4116	-1.1	8.00731	0
1544	19517	25.9308	-400.6	-369.851	-30.7891	-1.09999	7.63044	0
1545	19523.7	21.9708	-401	-369.852	-31.1362	-1.09999	7.28024	0
1546	19529.2	18.0109	-401.3	-369.852	-31.4582	-1.09998	6.95669	0
1547	19533.7	14.0509	-401.6	-369.852	-31.7551	-1.09999	6.6598	0
1548	19537	10.0909	-401.9	-369.852	-32.0206	-1.1	6.38957	0
1549	19539.2	6.13117	-363.2	-84.6223	-278.57	-1.09992	6.14601	0
1550	19540.3	2.95694	-239.2	-0.725634	-238.478	-0.974467	5.97002	0
1551	19540.9	0.578287	-239.2	-0.141912	-239.061	-0.722092	5.84936	0
1552	19541	0	0	0	0	0	5.82148	0
1553	19541	0	0	0	0	0	5.82148	0
1554	19541	0	0	0	0	0	5.82148	0
1555	19541	0	0	0	0	0	5.82148	0
1556	19541	0	0	0	0	0	5.82148	0
1557	19541	0	0	0	0	0	5.82148	0
1558	19541	0	0	0	0	0	5.82148	0
1559	19541	0	0	0	0	0	5.82148	0
1560	19541	0	0	0	0	0	5.82148	0
1561	19541	0	0	0	0	0	5.82148	0
1562	19541	0	0	0	0	0	5.82148	0
1563	19541	0	0	0	0	0	5.82148	0
1564	19541	0	0	0	0	0	5.82148	0
1565	19541	0	0	0	0	0	5.82148	0
1566	19541	0	0	0	0	0	5.82148	0
1567	19541	0	0	0	0	0	5.82148	0
1568	19541	0	0	0	0	0	5.82148	0
1569	19541.4	1.7848	397.18	397.182	0	0.456733	5.90936	0
1570	19542	4.15654	397.18	397.182	0	1.05442	6.03452	0
1571	19543.7	7.94998	397.18	397.181	0	1.05359	6.25457	0
1572	19546.4	11.741	397.18	397.181	0	1.05283	6.49894	0
1573	19550.2	15.5295	397.18	397.181	0	1.05206	6.76754	0
1574	19555.1	19.3152	397.18	397.181	0	1.05125	7.06031	0
1575	19560.9	23.0978	397.18	397.181	0	1.05038	7.37719	0

SIMULACIONES, CÁLCULOS Y GRÁFICAS

010448

1576	19567.9	26.8773	397.19	397.185	0	1.04946	7.7181	0
1577	19575.9	30.6542	396.27	396.271	0	1.0489	7.60522	0
1578	19584.9	34.407	390.99	390.991	0	1.03729	6.58888	0
1579	19595	37.998	352.36	352.358	0	0.945863	5.41872	0
1580	19606	41.1993	317.63	317.626	0	0.850597	4.07809	0
1581	19617.8	44.1443	294.32	294.318	0	0.791037	2.59125	0
1582	19630.5	46.8964	276.46	276.455	0	0.745553	0.971916	0
1583	19643.9	49.4687	261.41	261.412	0	0.681615	9.49541	-6.5
1584	19658	51.859	249.02	249.018	0	0.649929	8.62707	-6.5
1585	19672.7	54.1437	237.61	237.605	0	0.621491	7.69884	-6.5
1586	19688	56.3321	227.77	227.77	0	0.597187	6.71328	-6.5
1587	19704	58.4415	218.97	218.97	0	0.576167	5.67385	-6.5
1588	19720.4	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1589	19737	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1590	19753.6	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1591	19770.2	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1592	19786.8	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1593	19803.4	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1594	19819.9	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1595	19836.5	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1596	19853.1	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1597	19869.7	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1598	19886.3	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1599	19902.9	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1600	19919.4	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1601	19936	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1602	19952.6	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1603	19969.2	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1604	19985.8	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1605	20002.4	59.6992	-0.119	-0.119185	0	0	-0.119185	-6.5
1606	20018.9	59.6992	1.229	1.22895	0	0	1.02593	-6.5
1607	20035.5	59.6992	-1.433	-1.43349	0	0	-1.56568	-6.5
1608	20052.1	59.6992	0.7586	0.758625	0	0	0.626436	-6.5
1609	20068.7	59.6992	2.9507	2.95074	0	0	2.81855	-6.5
1610	20085.3	59.6992	5.1429	5.14285	0	0	5.01066	2
1611	20101.9	60.4344	211.16	211.161	0	0.546265	8.06346	2
1612	20119	62.3587	205.37	205.373	0	0.522413	11.8189	2
1613	20136.5	64.1912	199.86	199.86	0	0.49711	15.6722	2
1614	20154.6	65.9345	194.96	194.959	0	0.47384	19.3508	2
1615	20173.2	67.6161	190.52	190.517	0	0.461107	19.6219	2
1616	20192.2	69.2525	186.19	186.194	0	0.448705	19.8904	2
1617	20211.6	70.8449	181.97	181.971	0	0.436583	20.156	2
1618	20231.5	72.3941	177.85	177.846	0	0.424734	20.4185	2
1619	20251.8	73.9013	173.83	173.833	0	0.413197	20.6779	2
1620	20272.6	75.3675	169.93	169.93	0	0.401966	20.9339	2
1621	20293.7	76.7939	166.14	166.135	0	0.391036	21.1864	2
1622	20315.2	78.1815	162.44	162.442	0	0.380395	21.4354	2
1623	20337.1	79.5314	158.85	158.851	0	0.370036	21.6808	2
1624	20359.3	80	21.767	21.7667	0	0	21.7667	2
1625	20381.6	80	21.767	21.7667	0	0	21.7667	2
1626	20403.7	78.7558	-272.7	-272.667	0	-0.756044	21.5394	2
1627	20425.1	74.9969	-394.1	-332.563	-61.5292	-1.11802	20.8688	2
1628	20445.3	70.9475	-394.8	-351.326	-43.4599	-1.13156	25.2024	2
1629	20464.5	66.848	-395.5	-364.626	-30.8337	-1.14511	29.555	2

1630	20482.5	62.7012	-396.1	-369.849	-26.265	-1.15784	33.628	2
1631	20499.3	58.6883	-282.3	-282.336	0	-0.911524	37.4473	13
1632	20515.3	56.9387	19.307	19.3066	0	-0.110807	41.3935	13
1633	20531.1	56.921	45.808	45.8079	0	0	45.5451	13
1634	20546.9	56.921	49.962	49.962	0	0	49.6992	13
1635	20562.7	56.921	54.116	54.116	0	0	53.8533	13
1636	20578.6	56.921	54.761	54.7612	0	0	54.7612	13
1637	20594.4	56.921	66.313	66.3128	0	0	66.2348	13
1638	20610.2	56.921	67.545	67.5446	0	0	67.4667	13
1639	20626	56.921	68.777	68.7765	0	0	68.6986	13
1640	20641.8	56.921	70.008	70.0084	0	0	69.9304	13
1641	20657.6	56.921	65.669	65.6687	0	0	65.6687	13
1642	20673.4	56.921	65.669	65.6687	0	0	65.6687	13
1643	20689.2	56.921	65.669	65.6687	0	0	65.6687	13
1644	20705	56.921	65.669	65.6687	0	0	65.6687	13
1645	20720.9	56.921	65.669	65.6687	0	0	65.6687	13
1646	20736.7	56.921	65.669	65.6687	0	0	65.6687	13
1647	20752.5	56.921	65.669	65.6687	0	0	65.6687	13
1648	20768.3	56.921	65.669	65.6687	0	0	65.6687	13
1649	20784.1	56.921	65.669	65.6687	0	0	65.6687	13
1650	20799.9	56.921	65.669	65.6687	0	0	65.6687	13
1651	20815.7	56.921	65.669	65.6687	0	0	65.6687	13
1652	20831.5	56.921	62.179	62.1794	0	0	62.4899	13
1653	20847.3	56.921	57.27	57.27	0	0	57.5805	13
1654	20863.1	56.1576	-193.3	-193.317	0	-0.610237	52.5748	13
1655	20878.3	52.5525	-397.6	-369.849	-27.7394	-1.19883	47.3654	13
1656	20892.3	48.2596	-398.2	-369.848	-28.3136	-1.18712	42.4455	0
1657	20905.1	44.0071	-398.7	-369.845	-28.8535	-1.1764	37.9303	0
1658	20916.7	39.7913	-399.2	-369.846	-29.3569	-1.16667	33.8155	0
1659	20927.2	35.6089	-399.7	-369.847	-29.8248	-1.15791	30.0965	0
1660	20936.5	31.4563	-400.1	-369.85	-30.2541	-1.15011	26.77	0
1661	20944.7	27.3698	-400.5	-369.851	-30.65	-1.12741	17.9467	0
1662	20951.7	23.3266	-400.9	-369.852	-31.0168	-1.12005	14.8452	0
1663	20957.6	19.3078	-401.2	-369.852	-31.3549	-1.11386	12.2087	0
1664	20962.4	15.3082	-401.5	-369.852	-31.6663	-1.10979	10.3868	0
1665	20966.1	11.3148	-401.8	-369.852	-31.9476	-1.10901	9.81774	0
1666	20968.7	7.32391	-402	-172.558	-229.445	-1.10844	9.36379	0
1667	20970.1	3.65978	-236.6	-0.898111	-235.719	-1.05611	9.04473	0
1668	20970.7	1.27742	-236.6	-0.313479	-236.304	-0.799408	8.87623	0
1669	20971	0	0	0	0	0	8.78986	0
1670	20971	0	0	0	0	0	8.78986	0
1671	20971	0	0	0	0	0	8.78986	0
1672	20971	0	0	0	0	0	8.78986	0
1673	20971	0	0	0	0	0	8.78986	0
1674	20971	0	0	0	0	0	8.78986	0
1675	20971	0	0	0	0	0	8.78986	0
1676	20971	0	0	0	0	0	8.78986	0
1677	20971	0	0	0	0	0	8.78986	0
1678	20971	0	0	0	0	0	8.78986	0
1679	20971	0	0	0	0	0	8.78986	0
1680	20971	0	0	0	0	0	8.78986	0
1681	20971	0	0	0	0	0	8.78986	0
1682	20971	0	0	0	0	0	8.78986	0
1683	20971	0	0	0	0	0	8.78986	0

1684	20971	0	0	0	0	0	8.78986	0
1685	20971	0	0	0	0	0	8.78986	0
1686	20971.3	1.08998	397.18	397.182	0	0.277338	8.82224	0
1687	20971.8	3.44009	397.18	397.182	0	0.875305	8.89892	0
1688	20973.1	6.80081	397.18	397.181	0	1.04627	8.99076	0
1689	20975.5	10.5666	397.18	397.181	0	1.04601	9.03771	0
1690	20979	14.3321	397.18	397.181	0	1.04598	9.02873	0
1691	20983.5	18.0979	397.18	397.181	0	1.04613	8.96105	0
1692	20989	21.8646	397.18	397.181	0	1.04645	8.83671	0
1693	20995.6	25.6328	397.18	397.182	0	1.04693	8.65451	0
1694	21003.2	29.403	397.19	397.191	0	1.04759	8.41535	0
1695	21011.9	33.1597	392.75	392.746	0	1.03736	8.33849	0
1696	21021.7	36.8236	367.17	367.165	0	0.977576	8.73129	0
1697	21032.4	40.1149	326.21	326.209	0	0.862583	9.10358	0
1698	21043.9	43.0845	302.71	302.706	0	0.795294	9.4553	0
1699	21056.3	45.8316	282.68	282.682	0	0.738606	9.79402	0
1700	21069.4	48.4091	267.61	267.609	0	0.696747	10.1235	0
1701	21083.2	50.8417	254.1	254.1	0	0.6588	10.4448	0
1702	21097.6	53.1444	242.6	242.597	0	0.622262	12.4204	0
1703	21112.7	55.3152	232.01	232.012	0	0.586605	14.8833	0
1704	21128.3	56.921	17.497	17.4968	0	0	17.3535	0
1705	21144.1	56.921	19.763	19.7626	0	0	19.6193	0
1706	21159.9	56.921	22.029	22.0285	0	0	21.8852	6
1707	21175.7	56.921	24.294	24.2944	0	0	24.1511	6
1708	21191.5	56.921	38.406	38.4061	0	0	38.1848	6
1709	21207.4	56.921	41.904	41.9038	0	0	41.6826	6
1710	21223.2	56.921	45.402	45.4015	0	0	45.1803	6
1711	21239	56.921	46.896	46.896	0	0	46.8181	6
1712	21254.8	56.921	42.262	42.262	0	0	42.262	6
1713	21270.6	56.921	42.262	42.262	0	0	42.262	6
1714	21286.4	56.921	42.262	42.262	0	0	42.262	6
1715	21302.2	56.921	42.262	42.262	0	0	42.262	6
1716	21318	56.921	42.262	42.262	0	0	42.262	6
1717	21333.8	56.921	42.262	42.262	0	0	42.262	6
1718	21349.7	56.921	40.161	40.1614	0	0	40.3047	6
1719	21365.5	56.921	37.896	37.8955	0	0	38.0388	6
1720	21381.3	56.921	34.534	34.5343	0	0	34.7277	6
1721	21397.1	56.921	31.622	31.6223	0	0	31.7982	6
1722	21412.9	56.921	34.635	34.635	0.00E+00	0	34.7783	0
1723	21428.7	56.921	32.369	32.3692	0	0	32.5125	0
1724	21444.5	56.921	30.103	30.1033	0	0	30.2466	0
1725	21460.3	56.921	28.752	28.7519	0	0	28.8173	0
1726	21476.1	56.921	22.199	22.1992	0	0	22.1992	0
1727	21492	56.921	22.199	22.1992	0	0	22.1992	0
1728	21507.8	56.921	22.199	22.1992	0	0	22.1992	0
1729	21523.6	56.921	22.199	22.1992	0	0	22.1992	0
1730	21539.4	56.921	22.199	22.1992	0	0	22.1992	0
1731	21555.2	56.921	22.199	22.1992	0	0	22.1992	0
1732	21571	56.3236	-203.3	-203.306	0	-0.55608	22.1132	0
1733	21586.2	52.9338	-397.5	-369.849	-27.6893	-1.12937	21.6366	0
1734	21600.4	48.868	-397.8	-369.848	-27.9972	-1.12938	21.0908	0
1735	21613.4	44.8529	-398.6	-369.845	-28.7535	-1.11243	14.2866	0
1736	21625.3	40.8532	-399.1	-369.845	-29.2355	-1.10993	12.8769	0
1737	21636.1	36.862	-399.5	-369.846	-29.6862	-1.10765	11.5819	0

1738	21645.8	32.8785	-400	-369.849	-30.1091	-1.10562	10.4011	0
1739	21654.3	28.9019	-400.4	-369.851	-30.5057	-1.10382	9.33403	0
1740	21661.8	24.9314	-400.7	-369.852	-30.879	-1.10226	8.38035	0
1741	21668.2	20.9662	-401.1	-369.852	-31.2231	-1.10092	7.53984	0
1742	21673.5	17.0052	-401.4	-369.852	-31.5376	-1.09998	6.87877	0
1743	21677.6	13.0452	-401.7	-369.852	-31.8263	-1.09999	6.58865	0
1744	21680.7	9.08526	-401.9	-302.413	-99.5185	-1.09998	6.32519	0
1745	21682.6	5.12563	-300.6	-10.4888	-290.139	-1.09987	6.08841	0
1746	21683.4	2.35284	-239.2	-0.577388	-238.626	-0.910372	5.93846	0
1747	21684	0	0	0	0	0	5.82148	0
1748	21684	0	0	0	0	0	5.82148	0
1749	21684	0	0	0	0	0	5.82148	0
1750	21684	0	0	0	0	0	5.82148	0
1751	21684	0	0	0	0	0	5.82148	0
1752	21684	0	0	0	0	0	5.82148	0
1753	21684	0	0	0	0	0	5.82148	0
1754	21684	0	0	0	0	0	5.82148	0
1755	21684	0	0	0	0	0	5.82148	0
1756	21684	0	0	0	0	0	5.82148	0
1757	21684	0	0	0	0	0	5.82148	0
1758	21684	0	0	0	0	0	5.82148	0
1759	21684	0	0	0	0	0	5.82148	0
1760	21684	0	0	0	0	0	5.82148	0
1761	21684	0	0	0	0	0	5.82148	0
1762	21684	0	0	0	0	0	5.82148	0
1763	21684	0	0	0	0	0	5.82148	0
1764	21684	2.56E-02	397.18	397.182	0	6.55E-03	5.8227	0
1765	21684.6	2.38368	397.18	397.182	0	0.609986	5.94006	0
1766	21685.4	5.12007	397.18	397.181	0	1.05421	6.08809	0
1767	21687.3	8.91302	397.18	397.181	0	1.05339	6.31433	0
1768	21690.3	12.7034	397.18	397.181	0	1.05264	6.56486	0
1769	21694.4	16.4912	397.18	397.181	0	1.05186	6.8396	0
1770	21699.5	20.2761	397.18	397.181	0	1.05103	7.13851	0
1771	21705.6	24.058	397.18	397.181	0	1.05015	7.4615	0
1772	21712.8	27.8366	397.19	397.187	0	1.04922	7.80849	0
1773	21721.1	31.6002	394.94	394.94	0	1.03832	10.2089	0
1774	21730.4	35.2907	386.49	386.491	0	1.01298	13.7023	0
1775	21740.7	38.6976	343.54	343.538	0	0.888636	17.5187	0
1776	21751.8	41.6902	313.74	313.741	0	0.792454	21.6018	0
1777	21763.8	44.4053	292.25	292.252	0	0.722122	25.9305	0
1778	21776.5	46.9105	276.37	276.373	0	0.67674	26.3152	0
1779	21789.8	49.2722	262.56	262.561	0	0.638398	26.621	14
1780	21803.8	51.504	250.79	250.791	0	0.605284	26.9187	14
1781	21818.4	53.626	240.19	240.191	0	0.575759	27.2095	14
1782	21833.6	55.6452	230.64	230.636	0	0.548809	27.4935	14
1783	21849.3	57.5775	222.57	222.574	0	0.526232	27.7716	0
1784	21865.6	59.4424	214.79	214.794	0	0.514007	24.5019	0
1785	21882.4	61.2851	208.6	208.602	0	0.511299	19.172	0
1786	21899.6	63.1184	203.09	203.087	0	0.502525	16.8982	0
1787	21917.4	64.8683	197.82	197.824	0	0.468565	24.2091	0
1788	21935.7	66.4865	193.5	193.501	0	0.432577	33.1831	0
1789	21954.4	67.9767	189.56	189.564	0	0.397217	42.347	0
1790	21973.4	69.3406	185.96	185.962	0	0.362297	51.683	20
1791	21992.9	70.5796	182.68	182.677	0	0.327822	61.1739	20

1792	22012.6	71.6954	179.71	179.706	0	0.293822	70.8028	20
1793	22032.7	72.6899	177.06	177.058	0	0.260455	80.5529	20
1794	22053	73.6129	174.6	174.601	0	0.253022	80.8165	20
1795	22073.6	74.5108	172.21	172.21	0	0.246814	80.7457	20
1796	22094.4	75.0171	-394.1	-332.469	-61.6097	-1.25275	70.8885	20
1797	22114.6	70.5569	-394.8	-353.136	-41.7069	-1.22673	60.4667	20
1798	22133.6	66.1875	-395.6	-366.493	-29.0651	-1.20229	50.6789	20
1799	22151.4	61.9032	-396.2	-369.849	-26.3799	-1.17939	41.5108	0
1800	22168	57.6986	-396.9	-369.848	-27.0082	-1.15801	32.9483	0
1801	22183.5	53.5683	-397.4	-369.849	-27.5964	-1.13813	24.9796	0
1802	22197.8	49.5069	-398	-369.849	-28.1487	-1.11972	17.5921	0
1803	22211	45.5093	-398.5	-369.845	-28.6677	-1.10273	10.775	0
1804	22223.1	41.5488	-399	-369.845	-29.1518	-1.09999	9.27155	0
1805	22234	37.5889	-399.5	-369.846	-29.605	-1.09999	8.81621	0
1806	22243.9	33.6289	-399.9	-369.848	-30.032	-1.09999	8.38752	0
1807	22252.7	29.6689	-400.3	-369.851	-30.4327	-1.1	7.98549	0
1808	22260.4	25.709	-400.7	-369.851	-30.8097	-1.09999	7.61012	0
1809	22267	21.749	-401	-369.852	-31.1555	-1.09999	7.26141	0
1810	22272.5	17.7891	-401.3	-369.852	-31.4757	-1.09998	6.93936	0
1811	22276.9	13.8291	-401.6	-369.852	-31.7707	-1.09999	6.64396	0
1812	22280.2	9.86915	-401.9	-360.205	-41.6806	-1.09999	6.37523	0
1813	22282.3	5.9094	-349.4	-68.2725	-281.121	-1.09991	6.13316	0
1814	22283.3	2.82371	-239.2	-0.692939	-238.51	-0.960331	5.963	0
1815	22283.9	0.445057	-239.2	-0.109217	-239.094	-0.707957	5.84289	0
1816	22284	0	0	0	0	0	5.82148	0
1817	22284	0	0	0	0	0	5.82148	0
1818	22284	0	0	0	0	0	5.82148	0
1819	22284	0	0	0	0	0	5.82148	0
1820	22284	0	0	0	0	0	5.82148	0
1821	22284	0	0	0	0	0	5.82148	0
1822	22284	0	0	0	0	0	5.82148	0
1823	22284	0	0	0	0	0	5.82148	0
1824	22284	0	0	0	0	0	5.82148	0
1825	22284	0	0	0	0	0	5.82148	0
1826	22284	0	0	0	0	0	5.82148	0
1827	22284	0	0	0	0	0	5.82148	0
1828	22284	0	0	0	0	0	5.82148	0
1829	22284	0	0	0	0	0	5.82148	0
1830	22284	0	0	0	0	0	5.82148	0
1831	22284	0	0	0	0	0	5.82148	0
1832	22284	0	0	0	0	0	5.82148	0
1833	22284.5	1.91688	397.18	397.182	0	0.490532	5.91608	0
1834	22285.1	4.36904	397.18	397.182	0	1.05438	6.0462	0
1835	22286.8	8.1624	397.18	397.181	0	1.05354	6.26762	0
1836	22289.6	11.9533	397.18	397.181	0	1.05278	6.51334	0
1837	22293.5	15.7416	397.18	397.181	0	1.05202	6.7833	0
1838	22298.4	19.5271	397.18	397.181	0	1.0512	7.07743	0
1839	22304.3	23.3096	397.18	397.181	0	1.05033	7.39565	0
1840	22311.3	27.0889	397.19	397.185	0	1.0494	7.7379	0
1841	22319.4	30.864	395.98	395.976	0	1.04683	8.10401	0
1842	22328.5	34.6018	390.72	390.717	0	1.03141	8.49037	0
1843	22338.6	38.1482	350.47	350.465	0	0.931225	8.8789	0
1844	22349.6	41.2936	316.88	316.88	0	0.834552	9.2414	0
1845	22361.5	44.1673	294.14	294.136	0	0.765911	11.674	0

1846	22374.1	46.8043	276.99	276.994	0	0.707358	15.6263	0
1847	22387.5	49.2534	262.67	262.671	0	0.657239	19.7682	0
1848	22401.5	51.5309	250.66	250.657	0	0.612582	24.0849	0
1849	22416.1	53.6573	240.04	240.035	0	0.571671	28.5647	0
1850	22431.3	55.6403	230.66	230.656	0	0.53346	33.1953	12
1851	22447	57.4958	222.92	222.915	0	0.499613	37.9667	12
1852	22463.2	59.2315	215.67	215.674	0	0.466775	42.8691	12
1853	22479.9	60.8532	209.9	209.901	0	0.437289	47.893	12
1854	22497	62.3783	205.31	205.314	0	0.413179	52.2312	12
1855	22514.5	63.8418	200.91	200.911	0	0.400668	52.4581	12
1856	22532.5	65.2611	196.74	196.738	0	0.388709	52.6816	12
1857	22550.8	66.6406	193.09	193.094	0	0.378271	52.9021	12
1858	22569.5	67.983	189.55	189.548	0	0.368106	53.1198	12
1859	22588.5	69.2894	186.1	186.097	0	0.358206	53.3345	12
1860	22608	70.5606	182.73	182.728	0	0.348539	53.5463	12
1861	22627.7	71.7974	179.44	179.435	0	0.339084	53.755	12
1862	22647.9	73.0006	176.23	176.231	0	0.329879	53.9605	12
1863	22668.3	74.1712	173.12	173.115	0	0.320918	54.1628	12
1864	22689.1	75.31	170.08	170.083	0	0.312196	54.3618	12
1865	22710.1	76.4178	167.14	167.135	0	0.30371	54.5576	12
1866	22731.5	77.4928	164.28	164.275	0	0.292414	55.8823	12
1867	22753.2	78.5263	161.53	161.525	0	0.282595	56.7705	12
1868	22775.1	79.529	158.86	158.857	0	0.274873	56.9632	12
1869	22797.3	80	56.296	56.2955	0.00E+00	0	56.2955	12
1870	22819.5	80	55.672	55.6719	0	0	55.6797	12
1871	22841.8	80	55.836	55.836	0	0	55.8329	12
1872	22864	80	55.935	55.9345	0	0	55.9289	12
1873	22886.2	80	55.205	55.2048	0	0	55.2048	12
1874	22908.4	80	57.642	57.6415	0	0	57.6253	12
1875	22930.7	80	59.254	59.2541	0	0	59.2505	12
1876	22952.7	77.869	-340.9	-319.263	-21.652	-1.03797	58.382	12
1877	22973.7	73.5786	-394.3	-339.135	-55.1957	-1.1966	49.7953	12
1878	22993.6	69.3001	-395	-357.695	-37.3317	-1.18119	43.3843	12
1879	23012.2	65.0873	-395.7	-369.603	-26.1377	-1.16303	35.9258	12
1880	23029.7	60.9279	-396.4	-369.848	-26.5349	-1.14874	29.9818	0
1881	23046.1	56.8182	-397	-369.848	-27.1402	-1.1354	24.422	0
1882	23061.3	52.7549	-397.6	-369.849	-27.7117	-1.12298	19.2413	0
1883	23075.4	48.7338	-398.1	-369.848	-28.2524	-1.11197	14.6139	0
1884	23088.4	44.7504	-398.6	-369.845	-28.7644	-1.10195	10.3862	0
1885	23100.2	40.79	-399.1	-369.845	-29.2433	-1.09999	9.18223	0
1886	23111	36.83	-399.5	-369.846	-29.6899	-1.09999	8.73199	0
1887	23120.7	32.8701	-400	-369.849	-30.11	-1.09999	8.30841	0
1888	23129.3	28.9101	-400.4	-369.851	-30.505	-1.09999	7.91149	0
1889	23136.8	24.9501	-400.7	-369.852	-30.8774	-1.1	7.54123	0
1890	23143.1	20.9902	-401.1	-369.852	-31.2212	-1.09999	7.19763	0
1891	23148.4	17.0302	-401.4	-369.852	-31.5356	-1.09998	6.88069	0
1892	23152.6	13.0703	-401.7	-369.852	-31.8245	-1.09999	6.5904	0
1893	23155.7	9.1103	-401.9	-304.259	-97.6712	-1.09998	6.32677	0
1894	23157.6	5.15066	-302.2	-12.3343	-289.851	-1.09987	6.08982	0
1895	23158.4	2.36788	-239.2	-0.581079	-238.622	-0.911968	5.93924	0
1896	23159	0	0	0	0	0	5.82148	0
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1910	23159	0	0	0	0	0	5.82148	0
1911	23159	0	0	0	0	0	5.82148	0
1912	23159	0	0	0	0	0	5.82148	0
1913	23159	1.07E-02	397.18	397.182	0	2.73E-03	5.82199	0
1914	23159.6	2.36877	397.18	397.182	0	0.60617	5.93929	0
1915	23160.4	5.09608	397.18	397.181	0	1.05421	6.08674	0
1916	23162.3	8.88905	397.18	397.181	0	1.05339	6.31283	0
1917	23165.3	12.6795	397.18	397.181	0	1.05264	6.5632	0
1918	23169.3	16.4672	397.18	397.181	0	1.05186	6.83779	0
1919	23174.4	20.2522	397.18	397.181	0	1.05104	7.13654	0
1920	23180.6	24.0341	397.18	397.181	0	1.05015	7.45938	0
1921	23187.8	27.8128	397.19	397.187	0	1.04922	7.80622	0
1922	23196	31.5653	394.99	394.989	0	1.03373	11.956	0
1923	23205.3	35.2327	387.22	387.223	0	1.00553	16.7725	0
1924	23215.6	38.6108	344.63	344.633	0	0.879292	22.0501	0
1925	23226.7	41.5614	314.76	314.76	0	0.778653	27.7148	0
1926	23238.6	44.2203	293.72	293.716	0	0.704962	33.7297	0
1927	23251.2	46.6336	277.99	277.992	0	0.643939	40.0612	0
1928	23264.5	48.8444	265.06	265.063	0	0.587843	47.8151	20
1929	23278.4	50.8609	254	254.004	0	0.537063	55.3726	20
1930	23292.8	52.7088	244.77	244.773	0	0.492715	62.5208	20
1931	23307.6	54.4003	236.32	236.323	0	0.449971	69.8642	20
1932	23323	55.9432	229.39	229.392	0	0.410671	77.3799	20
1933	23338.7	57.3731	223.43	223.427	0	0.389277	79.3241	20
1934	23354.8	58.7483	217.69	217.69	0	0.374951	78.8817	20
1935	23371.3	60.0691	212.26	212.26	0	0.359909	78.9495	20
1936	23388.2	61.3444	208.42	208.424	0	0.349304	79.0106	20
1937	23405.4	62.5816	204.7	204.702	0	0.338615	79.2447	20
1938	23423	63.7824	201.09	201.09	0	0.328977	79.1993	20
1939	23440.8	64.9477	197.59	197.585	0	0.319013	79.3824	20
1940	23459	66.0794	194.58	194.576	0	0.310338	79.5625	20
1941	23477.6	67.1655	191.71	191.707	0	0.295473	82.2004	20
1942	23496.4	68.2116	188.94	188.944	0	0.283034	84.0451	20
1943	23515.4	69.2158	186.29	186.292	0	0.275309	84.2537	20
1944	23534.8	70.1929	183.71	183.706	0	0.268007	84.3738	20
1945	23554.4	71.1616	181.13	181.127	0	0.26564	82.6702	20
1946	23574.3	72.1097	178.6	178.603	0	0.26184	81.5529	20
1947	23594.5	73.0405	176.13	176.125	0	0.255603	81.3849	20
1948	23614.9	73.9492	173.71	173.706	0	0.249542	81.2104	20
1949	23635.6	74.8363	171.34	171.344	0	0.243644	81.0296	20
1950	23656.5	75.701	169.04	169.043	0	0.237034	81.1811	20
1951	23677.6	76.5666	166.74	166.739	0	0.249134	74.3915	20
1952	23699	77.5019	164.25	164.251	0	0.269538	64.3377	20
1953	23720.7	78.5103	161.57	161.567	0	0.289726	54.1697	20

1954	23742.7	79.5819	-37.43	-37.4338	0	0.248293	43.8763	0
1955	23764.4	76.6438	-393.8	-324.936	-68.8514	-1.14974	32.9479	0
1956	23785.1	72.5554	-394.5	-343.876	-50.6249	-1.12308	22.3366	0
1957	23804.7	68.5599	-395.2	-359.787	-35.3915	-1.09999	13.0886	0
1958	23823.2	64.6	-395.8	-369.85	-25.9691	-1.1	12.4514	0
1959	23840.6	60.64	-396.4	-369.848	-26.582	-1.09999	11.8408	0
1960	23856.9	56.68	-397	-369.848	-27.1627	-1.09999	11.257	0
1961	23872.1	52.7201	-397.6	-369.849	-27.7187	-1.09999	10.6998	0
1962	23886.2	48.7601	-398.1	-369.848	-28.2508	-1.09999	10.1692	0
1963	23899.2	44.8001	-398.6	-369.845	-28.76	-1.1	9.66534	0
1964	23911.1	40.8402	-399.1	-369.845	-29.2372	-1.09999	9.18811	0
1965	23921.9	36.8802	-399.5	-369.846	-29.6843	-1.09999	8.73753	0
1966	23931.6	32.9202	-400	-369.849	-30.1049	-1.09999	8.31362	0
1967	23940.2	28.9603	-400.4	-369.851	-30.5002	-1.09999	7.91636	0
1968	23947.7	25.0003	-400.7	-369.852	-30.8731	-1.1	7.54576	0
1969	23954.1	21.0404	-401.1	-369.852	-31.217	-1.09999	7.20182	0
1970	23959.4	17.0804	-401.4	-369.852	-31.5316	-1.09998	6.88454	0
1971	23963.6	13.1204	-401.7	-369.852	-31.821	-1.09999	6.59391	0
1972	23966.6	9.16049	-401.9	-307.959	-93.9681	-1.09998	6.32995	0
1973	23968.6	5.20084	-305.3	-16.0339	-289.274	-1.09987	6.09266	0
1974	23969.4	2.39803	-239.2	-0.588477	-238.615	-0.915166	5.9408	0
1975	23970	1.94E-02	-239.2	-4.76E-03	-239.199	-0.662792	5.8224	0
1976	23970	0	0	0	0	0	5.82148	0
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2137	23970	0	0	0	0	0	5.82148	0
2138	23970	0	0	0	0	0	5.82148	0
2139	23970	0	0	0	0	0	5.82148	0
2140	23970	0	0	0	0	0	5.82148	0
2141	23970	0	0	0	0	0	5.82148	0
2142	23970	0	0	0	0	0	5.82148	0
2143	23970	0	0	0	0	0	5.82148	0
2144	23970	0	0	0	0	0	5.82148	0
2145	23970	0	0	0	0	0	5.82148	0
2146	23970	0	0	0	0	0	5.82148	0
2147	23970	0	0	0	0	0	5.82148	0
2148	23970	0	0	0	0	0	5.82148	0
2149	23970	0	0	0	0	0	5.82148	0
2150	23970	0	0	0	0	0	5.82148	0
2151	23970	0	0	0	0	0	5.82148	0
2152	23970	0	0	0	0	0	5.82148	0
2153	23970	0	0	0	0	0	5.82148	0
2154	23970	0	0	0	0	0	5.82148	0
2155	23970	0	0	0	0	0	5.82148	0
2156	23970.6	2.33888	397.18	397.182	0	0.598522	5.93774	0
2157	23971.4	5.048	397.18	397.181	0	1.05422	6.08403	0
2158	23973.3	8.841	397.18	397.181	0	1.0534	6.30981	0
2159	23976.2	12.6314	397.18	397.181	0	1.05265	6.55987	0
2160	23980.3	16.4193	397.18	397.181	0	1.05187	6.83416	0
2161	23985.3	20.2042	397.18	397.181	0	1.05105	7.13261	0
2162	23991.5	23.9862	397.18	397.181	0	1.05016	7.45514	0
2163	23998.7	27.7649	397.19	397.187	0	1.04923	7.80168	0
2164	24006.9	31.537	395.03	395.029	0	1.04406	8.17182	0
2165	24016.2	35.2645	386.82	386.821	0	1.02757	8.56135	0
2166	24026.5	38.7385	343.02	343.023	0	0.910588	8.94565	0
2167	24037.7	41.8259	312.67	312.668	0	0.822882	9.3044	0
2168	24049.7	44.6661	290.19	290.188	0	0.760643	9.64875	0
2169	24062.5	47.3103	274.04	274.035	0	0.714591	9.98165	0

2170	24076	49.8042	259.45	259.45	0	0.674094	10.3065	0
2171	24090.1	52.1643	247.49	247.493	0	0.640395	10.6237	0
2172	24104.9	54.4094	236.28	236.277	0	0.609148	10.9342	0
2173	24120.3	56.5491	226.87	226.865	0	0.582512	11.2381	0
2174	24136.3	58.6001	218.31	218.308	0	0.558539	11.5367	0
2175	24152.9	60.6013	210.66	210.659	0	0.556253	4.57818	0
2176	24170	62.6129	204.61	204.608	0	0.561124	-3.2896	0
2177	24187.7	64.6431	198.5	198.501	0	0.566543	-11.4158	0
2178	24205.9	66.6961	192.95	192.947	0	0.574048	-19.8021	0
2179	24224.7	68.7786	187.45	187.446	0	0.582517	-28.4507	-20
2180	24244.1	70.8924	181.84	181.844	0	0.591436	-37.365	-20
2181	24264.1	73.0391	176.13	176.129	0	0.60077	-46.5488	-20
2182	24284.7	75.214	170.34	170.339	0	0.601605	-52.6569	-20
2183	24305.9	77.3488	164.66	164.658	0	0.585237	-52.2782	-20
2184	24327.7	79.4168	123.73	123.731	0	0.509494	-51.9039	-20
2185	24349.9	80	-51.8	-51.7971	0	0	-51.7971	-20
2186	24372.1	80	-51.8	-51.7971	0	0	-51.7971	-20
2187	24394.3	80	-49.2	-49.1983	0	0	-49.2145	-20
2188	24416.5	80	-47.62	-47.6228	0	0	-47.6246	-20
2189	24438.8	80	-47.64	-47.641	0	0	-47.6377	-20
2190	24461	80	-49.52	-49.5247	0	0	-49.5247	-20
2191	24483.2	80	-50.81	-50.8102	0	0	-50.794	-20
2192	24505.4	80	-51.17	-51.1709	0	0	-51.1547	-20
2193	24527.6	80	-135.9	-135.898	0	0	-51.5154	-20
2194	24549.6	77.5024	-393.6	-320.96	-72.6815	-0.919802	-52.2506	-20
2195	24570.6	74.1911	-394.2	-336.297	-57.9319	-0.919809	-52.8356	-20
2196	24590.8	70.8798	-394.8	-351.64	-43.1553	-0.919807	-53.4019	-20
2197	24610	67.5615	-395.4	-362.609	-32.7433	-0.922981	-52.771	-20
2198	24628.3	64.1996	-395.9	-369.85	-26.038	-0.944856	-45.1981	-20
2199	24645.7	60.7552	-396.4	-369.848	-26.5705	-0.96721	-37.4313	-20
2200	24662.1	57.2327	-396.9	-369.848	-27.0882	-0.988227	-30.1489	-20
2201	24677.5	53.6411	-397.4	-369.849	-27.5978	-1.00612	-24.0179	-20
2202	24691.9	49.9873	-397.9	-369.849	-28.0969	-1.02297	-18.2634	0
2203	24705.2	46.2715	-398.4	-369.846	-28.5783	-1.03989	-12.4621	0
2204	24717.6	42.4971	-398.9	-369.845	-29.0418	-1.05549	-7.13321	0
2205	24728.8	38.669	-399.3	-369.846	-29.4882	-1.06977	-2.28213	0
2206	24739	34.7919	-399.8	-369.847	-29.9161	-1.0827	2.08573	0
2207	24748.2	30.8707	-400.2	-369.85	-30.3187	-1.09424	5.9652	0
2208	24756.2	26.9152	-400.5	-369.851	-30.6952	-1.09999	7.72164	0
2209	24763.1	22.9552	-400.9	-369.852	-31.0506	-1.09999	7.3648	0
2210	24768.9	18.9953	-401.2	-369.852	-31.3807	-1.09999	7.03463	0
2211	24773.7	15.0353	-401.5	-369.852	-31.6856	-1.09999	6.73112	0
2212	24777.3	11.0754	-401.8	-369.852	-31.9622	-1.09999	6.45426	0
2213	24779.8	7.11546	-402	-157.189	-244.821	-1.09996	6.20406	0
2214	24781.1	3.54824	-239.2	-0.870741	-238.333	-1.0372	6.0015	0
2215	24781.7	1.16959	-239.2	-0.287018	-238.916	-0.78483	5.87846	0
2216	24782	0	0	0	0	0	5.82148	0
2217	24782	0.00E+00	0	0	0	0.00E+00	5.82148	0
2218	24782	0	0	0	0	0	5.82148	0
2219	24782	0	0	0	0	0	5.82148	0
2220	24782	0	0	0	0	0	5.82148	0
2221	24782	0	0	0	0	0	5.82148	0
2222	24782	0	0	0	0	0	5.82148	0
2223	24782	0	0	0	0	0	5.82148	0

2224	24782	0	0	0	0	0	5.82148	0
2225	24782	0	0	0	0	0	5.82148	0
2226	24782	0	0	0	0	0	5.82148	0
2227	24782	0	0	0	0	0	5.82148	0
2228	24782	0	0	0	0	0	5.82148	0
2229	24782	0	0	0	0	0	5.82148	0
2230	24782	0	0	0	0	0	5.82148	0
2231	24782	0	0	0	0	0	5.82148	0
2232	24782	0	0	0	0	0	5.82148	0
2233	24782.3	1.19861	397.18	397.182	0	0.306725	5.8799	0
2234	24782.9	3.5567	397.18	397.182	0	0.910163	6.00196	0
2235	24784.2	7.0072	397.18	397.181	0	1.05379	6.1976	0
2236	24786.7	10.7989	397.18	397.181	0	1.05301	6.43592	0
2237	24790.2	14.588	397.18	397.181	0	1.05226	6.69851	0
2238	24794.8	18.3744	397.18	397.181	0	1.05145	6.98528	0
2239	24800.4	22.1578	397.18	397.181	0	1.0506	7.29617	0
2240	24807.1	25.9381	397.18	397.183	0	1.04969	7.63111	0
2241	24814.8	29.715	397.19	397.191	0	1.04873	7.99002	0
2242	24823.6	33.4691	392.31	392.311	0	1.03608	8.37078	0
2243	24833.4	37.1126	363.52	363.521	0	0.967458	8.76324	0
2244	24844.2	40.3705	324.19	324.186	0	0.854802	9.13327	0
2245	24855.8	43.3252	300.8	300.801	0	0.79459	7.79936	0
2246	24868.2	46.0894	281.17	281.174	0	0.748616	4.58095	0
2247	24881.4	48.7209	265.79	265.785	0	0.716093	1.14365	0
2248	24895.3	51.2423	252.1	252.099	0	0.688375	-2.50166	0
2249	24909.8	53.6766	239.94	239.938	0	0.665784	-6.34544	0
2250	24925.1	56.0343	229.01	229.012	0	0.646732	-10.3808	-12
2251	24941	58.3343	219.42	219.417	0	0.632144	-14.6005	-12
2252	24957.5	60.5691	210.76	210.756	0	0.613548	-16.5512	-12
2253	24974.6	62.7631	204.16	204.156	0	0.603775	-19.5444	-12
2254	24992.3	64.9264	197.65	197.649	0	0.59698	-23.5472	-12
2255	25010.7	67.0445	192.03	192.027	0	0.580839	-23.2404	-12
2256	25029.6	69.1179	186.55	186.55	0	0.569902	-24.6728	-12
2257	25049.1	71.1452	181.17	181.171	0	0.557857	-25.5933	-12
2258	25069.1	73.1247	175.9	175.901	0	0.542589	-25.212	-12
2259	25089.7	75.052	170.77	170.77	0	0.528827	-25.2491	-12
2260	25110.8	76.93	165.77	165.772	0	0.515187	-25.1961	-12
2261	25132.4	78.7609	160.9	160.901	0	0.49925	-24.1657	-12
2262	25154.5	80	-23.22	-23.2153	0	5.08E-03	-23.2172	-12
2263	25176.7	80	-23.2	-23.2007	0	0	-23.2002	-12
2264	25199	80	-23.24	-23.2412	0	0	-23.2382	-12
2265	25221.2	80	-24.56	-24.5595	0	0	-24.5517	-12
2266	25243.4	80	-24.73	-24.7326	0	0	-24.7249	-12
2267	25265.6	80	-24.91	-24.9058	0	0	-24.898	-12
2268	25287.8	80	-25.05	-25.0466	0	0	-25.0466	-12
2269	25310.1	80	-25.05	-25.0466	0	0	-25.0466	-12
2270	25332.3	80	-25.05	-25.0466	0	0	-25.0466	-12
2271	25354.5	80	-25.05	-25.0466	0	0	-25.0466	-12
2272	25376.7	80	-25.05	-25.0466	0	0	-25.0466	-12
2273	25399	80	-25.05	-25.0466	0	0	-25.0466	-12
2274	25421.2	79.7224	-212.7	-212.651	0	-0.469159	-25.0975	-12
2275	25442.9	76.7244	-393.8	-324.563	-69.2183	-0.991877	-25.6393	-12
2276	25463.8	73.1325	-394.4	-341.202	-53.2107	-1.00514	-21.3491	-12
2277	25483.6	69.4848	-395	-357.173	-37.858	-1.02044	-16.2879	-12

2278	25502.4	65.7835	-395.6	-367.635	-27.9986	-1.03495	-11.505	-12
2279	25520.1	62.0314	-396.2	-369.849	-26.369	-1.04865	-7.0034	0
2280	25536.8	58.2314	-396.8	-369.848	-26.9389	-1.06155	-2.78558	0
2281	25552.5	54.3864	-397.3	-369.849	-27.4918	-1.07364	1.14609	0
2282	25567	50.4995	-397.9	-369.849	-28.0258	-1.08489	4.7897	0
2283	25580.5	46.5735	-398.4	-369.846	-28.5362	-1.09529	8.14265	0
2284	25592.9	42.617	-398.9	-369.845	-29.023	-1.09999	9.39894	0
2285	25604.2	38.657	-399.3	-369.846	-29.4856	-1.09999	8.9364	0
2286	25614.4	34.697	-399.8	-369.847	-29.9223	-1.1	8.50052	0
2287	25623.5	30.7371	-400.2	-369.851	-30.3294	-1.09999	8.09131	0
2288	25631.4	26.7771	-400.6	-369.851	-30.7084	-1.09999	7.70874	0
2289	25638.3	22.8171	-400.9	-369.852	-31.0626	-1.09999	7.35284	0
2290	25644.1	18.8572	-401.2	-369.852	-31.3916	-1.09999	7.0236	0
2291	25648.8	14.8972	-401.5	-369.852	-31.6953	-1.09999	6.72101	0
2292	25652.4	10.9373	-401.8	-369.852	-31.9704	-1.09999	6.44509	0
2293	25654.9	6.97737	-402	-147.009	-255.006	-1.09995	6.19582	0
2294	25656.2	3.4653	-239.2	-0.850386	-238.353	-1.0284	5.99705	0
2295	25656.7	1.08665	-239.2	-0.266663	-238.937	-0.776029	5.87434	0
2296	25657	0	0	0	0	0	5.82148	0
2297	25657	0	0	0	0	0	5.82148	0
2298	25657	0	0	0	0	0	5.82148	0
2299	25657	0	0	0	0	0	5.82148	0
2300	25657	0	0	0	0	0	5.82148	0
2301	25657	0	0	0	0	0	5.82148	0
2302	25657	0	0	0	0	0	5.82148	0
2303	25657	0	0	0	0	0	5.82148	0
2304	25657	0	0	0	0	0	5.82148	0
2305	25657	0	0	0	0	0	5.82148	0
2306	25657	0	0	0	0	0	5.82148	0
2307	25657	0	0	0	0	0	5.82148	0
2308	25657	0	0	0	0	0	5.82148	0
2309	25657	0	0	0	0	0	5.82148	0
2310	25657	0	0	0	0	0	5.82148	0
2311	25657	0	0	0	0	0	5.82148	0
2312	25657	0	0	0	0	0	5.82148	0
2313	25657.3	1.28084	397.18	397.182	0	0.327768	5.884	0
2314	25657.9	3.63893	397.18	397.182	0	0.931206	6.00639	0
2315	25659.3	7.13945	397.18	397.181	0	1.05376	6.2055	0
2316	25661.8	10.931	397.18	397.181	0	1.05299	6.44467	0
2317	25665.3	14.7201	397.18	397.181	0	1.05223	6.7081	0
2318	25669.9	18.5063	397.18	397.181	0	1.05143	6.99571	0
2319	25675.6	22.2897	397.18	397.181	0	1.05057	7.30745	0
2320	25682.3	26.0698	397.18	397.183	0	1.04965	7.64322	0
2321	25690.1	29.8467	397.16	397.161	0	1.0487	8.00297	0
2322	25698.9	33.5991	392.13	392.128	0	1.03555	8.38439	0
2323	25708.7	37.2333	362	362	0	9.63E-01	8.77662	0
2324	25719.5	40.4772	323.34	323.342	0	0.85246	9.14569	0
2325	25731.2	43.4223	300.03	300.032	0	0.792424	7.82469	0
2326	25743.6	46.1918	280.58	280.576	0	0.753375	2.22073	0
2327	25756.9	48.8528	265.01	265.014	0	0.727223	-3.74399	0
2328	25770.8	51.4272	251.18	251.175	0	0.706294	-10.0557	0
2329	25785.4	53.9385	238.63	238.63	0	0.690234	-16.7021	0
2330	25800.7	56.398	227.5	227.495	0	0.678536	-23.6748	-20
2331	25816.7	58.8256	217.37	217.367	0	0.670801	-30.966	-20

2332	25833.4	61.2307	208.77	208.766	0	0.667599	-38.5711	-20
2333	25850.8	63.6373	201.53	201.527	0	0.669376	-46.4852	-20
2334	25868.8	66.052	194.65	194.648	0	0.671447	-54.1942	-20
2335	25887.5	68.4349	188.35	188.354	0	0.653389	-53.8081	-20
2336	25906.8	70.7536	182.21	182.214	0	0.63576	-53.4231	-20
2337	25926.8	72.9669	176.32	176.321	0	0.594523	-44.0411	-20
2338	25947.3	75.0275	170.84	170.835	0	0.552243	-33.8631	-20
2339	25968.4	76.9367	165.76	165.755	0	0.510405	-23.4416	-20
2340	25990	78.6963	161.07	161.073	0	0.469047	-12.7977	0
2341	26012.1	80	-1.537	-1.53699	0	0	-2.01468	0
2342	26034.2	78.5087	-328.4	-316.3	-12.0983	-0.871617	8.27206	0
2343	26055.5	74.6837	-394.1	-334.014	-60.1259	-1.08313	7.87136	0
2344	26075.7	70.8191	-394.8	-351.921	-42.8807	-1.06492	0.452078	0
2345	26094.9	67.0104	-395.4	-364.167	-31.2641	-1.05584	-3.5486	0
2346	26112.9	63.2094	-396	-369.849	-26.1843	-1.05584	-4.15071	-14
2347	26130	59.4083	-396.6	-369.848	-26.7652	-1.05585	-4.72826	-14
2348	26145.9	55.6073	-397.2	-369.849	-27.319	-1.05585	-5.28125	-14
2349	26160.9	51.8062	-397.7	-369.849	-27.8443	-1.05584	-5.80968	0
2350	26174.7	48.0052	-398.2	-369.847	-28.3488	-1.05584	-6.31354	0
2351	26187.5	44.1879	-398.7	-369.845	-28.836	-1.06552	-3.20605	0
2352	26199.3	40.331	-399.1	-369.845	-29.3	-1.0761	0.258337	0
2353	26209.9	36.4379	-399.6	-369.846	-29.7356	-1.0857	3.38425	0
2354	26219.5	32.5119	-400	-369.849	-30.1485	-1.09432	6.16874	0
2355	26228	28.5581	-400.4	-369.851	-30.5385	-1.09999	7.87751	0
2356	26235.4	24.5982	-400.8	-369.852	-30.908	-1.1	7.50961	0
2357	26241.7	20.6382	-401.1	-369.852	-31.2505	-1.09999	7.16838	0
2358	26246.8	16.6783	-401.4	-369.852	-31.5634	-1.09999	6.85381	0
2359	26250.9	12.7183	-401.7	-369.852	-31.8495	-1.09998	6.56589	0
2360	26253.9	8.75835	-402	-278.312	-123.639	-1.09998	6.30463	0
2361	26255.7	4.79876	-280.3	-1.17762	-279.113	-1.09985	6.07005	0
2362	26256.5	2.15647	-239.2	-0.529199	-238.674	-0.889537	5.92834	0
2363	26257	0	0	0	0	0.00E+00	5.82148	0
2364	26257	0	0	0	0	0	5.82148	0
2365	26257	0	0	0	0	0	5.82148	0
2366	26257	0	0	0	0	0	5.82148	0
2367	26257	0	0	0	0	0	5.82148	0
2368	26257	0	0	0	0	0	5.82148	0
2369	26257	0	0	0	0	0	5.82148	0
2370	26257	0	0	0	0	0	5.82148	0
2371	26257	0	0	0	0	0	5.82148	0
2372	26257	0	0	0	0	0	5.82148	0
2373	26257	0	0	0	0	0	5.82148	0
2374	26257	0	0	0	0	0	5.82148	0
2375	26257	0	0	0	0	0	5.82148	0
2376	26257	0	0	0	0	0	5.82148	0
2377	26257	0	0	0	0	0	5.82148	0
2378	26257	0	0	0	0	0	5.82148	0
2379	26257	0	0	0	0	0	5.82148	0
2380	26257.1	0.22026	397.18	397.182	0	5.64E-02	5.83203	0
2381	26257.6	2.57835	397.18	397.182	0	0.659803	5.95017	0
2382	26258.5	5.43328	397.18	397.181	0	1.05414	6.10585	0
2383	26260.5	9.22603	397.18	397.181	0	1.05332	6.3341	0
2384	26263.6	13.0162	397.18	397.181	0	1.05257	6.58662	0
2385	26267.7	16.8038	397.18	397.181	0	1.05179	6.86337	0

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

012433

2386	26272.9	20.5885	397.18	397.181	0	1.05096	7.16426	0
2387	26279.2	24.3701	397.18	397.181	0	1.05007	7.48924	0
2388	26286.5	28.1484	397.19	397.188	0	1.04914	7.83821	0
2389	26294.8	31.9181	394.49	394.493	0	1.04248	8.21056	0
2390	26304.2	35.6373	382.12	382.122	0	1.01914	8.60161	0
2391	26314.6	39.0677	338.87	338.873	0	0.899085	8.98313	0
2392	26325.9	42.1246	310.3	310.303	0	0.816331	9.33998	0
2393	26338	44.9424	288	288.001	0	0.754592	9.68298	0
2394	26350.8	47.4652	273.13	273.129	0	0.679903	21.8899	0
2395	26364.3	49.8326	259.28	259.284	0	0.638617	23.2518	0
2396	26378.5	52.0631	248	247.998	0	0.603832	24.6543	0
2397	26393.2	54.1742	237.45	237.452	0	0.571348	26.0954	0
2398	26408.5	56.1754	218.27	218.27	0	0.55079	22.0919	0
2399	26424.3	56.921	22.199	22.1992	0	0	22.1992	0
2400	26440.1	56.921	22.199	22.1992	0	0	22.1992	0
2401	26455.9	56.921	22.199	22.1992	0	0	22.1992	0
2402	26471.7	56.921	21.075	21.0749	0	0	21.2182	0
2403	26487.6	56.921	18.809	18.809	0	0	18.9523	0
2404	26503.4	56.921	16.543	16.5431	0	0	16.6864	0
2405	26519.2	56.921	14.277	14.2773	0	0	14.4206	0
2406	26535	56.921	12.011	12.0114	0	0	12.1547	-6
2407	26550.8	56.921	8.1156	8.1156	0	0	8.2951	-6
2408	26566.6	56.921	11.017	11.0168	0	0	11.1601	-6
2409	26582.4	56.921	8.7509	8.75091	0	0	8.89422	-6
2410	26598.2	56.921	6.4851	6.48505	0	0	6.62835	-6
2411	26614	56.921	6.3316	6.33164	0	0	6.25373	-6
2412	26629.9	56.921	7.5635	7.56351	0	0	7.4856	-6
2413	26645.7	56.921	2.1363	2.13633	0	0	2.13633	-6
2414	26661.5	56.921	2.1363	2.13633	0	0	2.13633	-6
2415	26677.3	56.921	2.1363	2.13633	0	0	2.13633	-6
2416	26693.1	56.921	2.1363	2.13633	0	0	2.13633	-6
2417	26708.9	56.921	2.1363	2.13633	0	0	2.13633	-6
2418	26724.7	56.921	3.688	3.68801	0	0	3.54471	-6
2419	26740.5	56.921	5.9539	5.95388	0	0	5.81057	-6
2420	26756.4	56.921	8.2198	8.21975	0	0	8.07644	-6
2421	26772.2	56.921	4.0298	4.02983	0	0	3.96443	-6
2422	26788	56.921	5.0638	5.06383	0	0	4.99843	0
2423	26803.8	56.921	6.0978	6.09783	0	0	6.03243	0
2424	26819.6	56.921	7.1318	7.13183	0	0	7.06643	0
2425	26835.4	57.159	147.78	147.784	0	0.324376	8.53409	0
2426	26851.5	57.78	-396.9	-369.848	-27.003	-1.09868	10.93	0
2427	26867	53.8204	-397.4	-369.849	-27.5675	-1.09999	10.8519	0
2428	26881.4	49.8604	-398	-369.849	-28.1082	-1.1	10.314	0
2429	26894.7	45.9005	-398.5	-369.846	-28.6217	-1.09999	9.80268	0
2430	26906.9	41.9405	-399	-369.845	-29.1046	-1.09999	9.31804	0
2431	26918	37.9806	-399.4	-369.846	-29.5612	-1.09999	8.86006	0
2432	26928	34.0206	-399.8	-369.848	-29.9918	-1.09999	8.42873	0
2433	26936.9	30.0606	-400.2	-369.851	-30.3954	-1.1	8.02407	0
2434	26944.7	26.1007	-400.6	-369.851	-30.773	-1.09999	7.64606	0
2435	26951.4	22.1407	-401	-369.852	-31.1214	-1.09999	7.29471	0
2436	26957	18.1807	-401.3	-369.852	-31.4448	-1.09998	6.97002	0
2437	26961.5	14.2208	-401.6	-369.852	-31.7431	-1.09999	6.67199	0
2438	26964.9	10.2608	-401.9	-369.852	-32.0105	-1.1	6.40062	0
2439	26967.2	6.30102	-373.8	-97.1447	-276.615	-1.09993	6.15591	0

2440	26968.3	3.05898	-239.2	-0.750676	-238.453	-0.985293	5.97541	0
2441	26968.8	0.68033	-239.2	-0.166953	-239.036	-0.732919	5.85434	0
2442	26969	0	0	0	0	0	5.82148	0
2443	26969	0	0	0	0	0	5.82148	0
2444	26969	0	0	0	0	0	5.82148	0
2445	26969	0	0	0	0	0	5.82148	0
2446	26969	0	0	0	0	0	5.82148	0
2447	26969	0	0	0	0	0	5.82148	0
2448	26969	0	0	0	0	0	5.82148	0
2449	26969	0	0	0	0	0	5.82148	0
2450	26969	0	0	0	0	0	5.82148	0
2451	26969	0	0	0	0	0	5.82148	0
2452	26969	0	0	0	0	0	5.82148	0
2453	26969	0	0	0	0	0	5.82148	0
2454	26969	0	0	0	0	0	5.82148	0
2455	26969	0	0	0	0	0	5.82148	0
2456	26969	0	0	0	0	0	5.82148	0
2457	26969	0	0	0	0	0	5.82148	0
2458	26969	0	0	0	0	0	5.82148	0
2459	26969.4	1.68364	397.18	397.182	0	0.430846	5.90423	0
2460	26970	4.04173	397.18	397.182	0	1.03428	6.02824	0
2461	26971.6	7.78728	397.18	397.181	0	1.05362	6.24463	0
2462	26974.3	11.5785	397.18	397.181	0	1.05286	6.48796	0
2463	26978	15.367	397.18	397.181	0	1.05209	6.75552	0
2464	26982.8	19.1572	397.18	397.181	0	1.05407	6.01415	0
2465	26988.7	22.9601	397.18	397.181	0	1.05809	4.51553	0
2466	26995.6	26.7789	397.19	397.185	0	1.06294	2.71454	0
2467	27003.6	30.5857	396.37	396.368	0	1.03813	11.6593	0
2468	27012.6	34.304	391.14	391.136	0	1.02863	9.94553	0
2469	27022.6	37.8773	353.88	353.881	0	0.943008	8.0017	0
2470	27033.6	41.0714	318.64	318.639	0	0.848645	5.81634	0
2471	27045.4	44.0143	295.35	295.347	0	0.791594	3.41997	0
2472	27058	46.7718	277.18	277.184	0	0.747916	0.830956	-13
2473	27071.4	49.3987	261.82	261.821	0	0.719103	-1.93632	-13
2474	27085.4	51.9682	248.47	248.473	0	0.702575	-11.3922	-13
2475	27100.2	54.4543	236.05	236.053	0	0.680371	-15.6386	-13
2476	27115.7	56.6816	100.89	100.894	0	0.377735	-20.1211	-13
2477	27131.5	56.921	-21.27	-21.2703	0	0	-21.2703	-13
2478	27147.3	56.921	-21.27	-21.2703	0	0	-21.2703	-13
2479	27163.1	56.921	-21.27	-21.2703	0	0	-21.2703	-13
2480	27178.9	56.921	-21.27	-21.2703	0	0	-21.2703	-13
2481	27194.7	56.921	-21.27	-21.2703	0	0	-21.2703	-13
2482	27210.5	56.921	-21.27	-21.2703	0	0	-21.2703	-13
2483	27226.4	56.921	-21.27	-21.2703	0	0	-21.2703	-13
2484	27242.2	56.921	-21.27	-21.2703	0	0	-21.2703	-13
2485	27258	56.921	-21.27	-21.2703	0	0	-21.2703	-13
2486	27273.8	56.921	-21.27	-21.2703	0	0	-21.2703	-13
2487	27289.6	56.921	-21.27	-21.2703	0	0	-21.2703	-13
2488	27305.4	56.921	-21.27	-21.2703	0	0	-21.2703	-13
2489	27321.2	56.921	-21.27	-21.2703	0	0	-21.2703	-13
2490	27337	56.921	-21.27	-21.2703	0	0	-21.2703	-13
2491	27352.9	56.921	-25.93	-25.9322	0	0	-21.2703	-13
2492	27368.7	56.921	-27.97	-27.9677	0	0	-27.8898	-13
2493	27384.5	56.921	-26.37	-26.3689	0	0	-26.5538	-13

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

2494	27400.3	56.921	-23.45	-23.4467	0	0	-23.6315	-13
2495	27416.1	56.921	-20.52	-20.5245	0	0	-20.7093	-13
2496	27431.9	57.4871	188.05	188.051	0	0.501766	-17.0568	-13
2497	27448.2	59.7044	213.7	213.701	0	0.610872	-12.4545	-2
2498	27465.1	61.8414	206.93	206.929	0	0.579294	-7.69586	-2
2499	27482.6	63.8702	200.83	200.826	0	0.549561	-2.79437	-2
2500	27500.6	65.7935	195.33	195.331	0	0.521012	2.24144	-2
2501	27519.1	67.6197	190.51	190.508	0	0.497169	6.24723	-2
2502	27538.1	69.384	185.85	185.847	0	0.483795	6.5369	-2
2503	27557.6	71.1009	181.29	181.289	0	0.470713	6.82384	-2
2504	27577.6	72.7712	176.84	176.842	0	0.457934	7.10781	-2
2505	27598.1	74.3962	172.52	172.516	0	0.445491	7.38863	-2
2506	27619	75.9771	168.31	168.308	0	0.43338	7.66613	-2
2507	27640.3	77.5149	164.22	164.216	0	0.42159	7.94016	-2
2508	27662	79.011	160.24	160.235	0	0.410112	8.21059	-2
2509	27684.1	80	8.3915	8.39147	0	0	8.39147	-2
2510	27706.4	80	8.3915	8.39147	0	0	8.39147	-2
2511	27728.6	80	8.3915	8.39147	0	0	8.39147	-2
2512	27750.6	77.5834	-392.2	-320.585	-71.6559	-1.06477	7.95246	-2
2513	27771.6	73.6889	-394.3	-338.623	-55.6909	-1.08197	7.26585	-2
2514	27791.5	69.7929	-395	-356.302	-38.6771	-1.08411	7.39438	-2
2515	27810.3	65.8704	-395.6	-367.39	-28.2287	-1.09441	10.5803	-2
2516	27828.1	61.9372	-348.1	-348.103	0	-1.02164	13.5687	-2
2517	27844.9	59.7866	-47.21	-47.2107	0	-0.220838	16.6622	-2
2518	27861.5	59.6992	20.219	20.2193	0	0	20.0163	6.5
2519	27878.1	59.6992	23.586	23.5859	0	0	23.3829	6.5
2520	27894.7	59.6992	26.953	26.9526	0	0	26.7496	6.5
2521	27911.3	59.6992	30.319	30.3192	0	0	30.1162	6.5
2522	27927.8	59.6992	44.019	44.0188	0	0	43.948	6.5
2523	27944.4	59.6992	45.193	45.1933	0	0	45.1225	6.5
2524	27961	59.6992	46.368	46.3679	0	0	46.2971	6.5
2525	27977.6	59.6992	47.542	47.5424	0	0	47.4716	6.5
2526	27994.2	59.6992	43.35	43.3503	0	0	43.3503	6.5
2527	28010.8	59.6992	43.35	43.3503	0	0	43.3503	6.5
2528	28027.3	59.6992	43.35	43.3503	0	0	43.3503	6.5
2529	28043.9	59.6992	43.35	43.3503	0	0	43.3503	6.5
2530	28060.5	59.6992	43.35	43.3503	0	0	43.3503	6.5
2531	28077.1	59.6992	43.35	43.3503	0	0	43.3503	6.5
2532	28093.7	59.6992	43.35	43.3503	0	0	43.3503	6.5
2533	28110.3	59.6992	43.35	43.3503	0	0	43.3503	6.5
2534	28126.8	59.6992	43.35	43.3503	0	0	43.3503	6.5
2535	28143.4	59.6992	43.35	43.3503	0	0	43.3503	6.5
2536	28160	59.6992	43.35	43.3503	0	0	43.3503	6.5
2537	28176.6	59.6992	43.35	43.3503	0	0	43.3503	6.5
2538	28193.2	59.6992	43.35	43.3503	0	0	43.3503	6.5
2539	28209.8	59.6992	43.35	43.3503	0	0	43.3503	6.5
2540	28226.3	59.6992	43.35	43.3503	0	0	43.3503	6.5
2541	28242.9	59.6992	40.879	40.8791	0	0	41.0344	6.5
2542	28259.5	59.6992	38.305	38.3046	0	0	38.4599	6.5
2543	28276.1	59.1565	-215.2	-215.178	0	-0.626997	35.8077	6.5
2544	28292	55.5643	-397.2	-369.849	-27.3248	-1.15848	32.8052	6.5
2545	28306.9	51.4266	-397.7	-369.849	-27.8953	-1.13795	24.6127	0
2546	28320.6	47.3463	-398.3	-369.847	-28.4331	-1.12959	20.9743	0
2547	28333.2	43.2949	-398.8	-369.845	-28.9403	-1.12192	17.6229	0

2548	28344.7	39.2698	-399.3	-369.846	-29.4161	-1.11494	14.5561	0
2549	28355	35.2687	-399.7	-369.847	-29.8626	-1.10864	11.7711	0
2550	28364.3	31.289	-400.1	-369.85	-30.2719	-1.103	9.26657	0
2551	28372.4	27.3261	-400.5	-369.851	-30.656	-1.09999	7.76019	0
2552	28379.4	23.3661	-400.9	-369.852	-31.0149	-1.09999	7.40059	0
2553	28385.4	19.4061	-401.2	-369.852	-31.3484	-1.09999	7.06765	0
2554	28390.2	15.4462	-401.5	-369.852	-31.6567	-1.09999	6.76137	0
2555	28394	11.4862	-401.8	-369.852	-31.9375	-1.09999	6.48175	0
2556	28396.6	7.52632	-402	-187.48	-214.516	-1.09996	6.22878	0
2557	28398.1	3.79505	-239.2	-0.931307	-238.272	-1.06339	6.01482	0
2558	28398.7	1.4164	-239.2	-0.347585	-238.856	-0.811016	5.89078	0
2559	28399	0	0	0	0	0	5.82148	0
2560	28399	0	0	0	0	0	5.82148	0
2561	28399	0	0	0	0	0	5.82148	0
2562	28399	0	0	0	0	0	5.82148	0
2563	28399	0	0	0	0	0	5.82148	0
2564	28399	0	0	0	0	0	5.82148	0
2565	28399	0	0	0	0	0	5.82148	0
2566	28399	0	0	0	0	0	5.82148	0
2567	28399	0	0	0	0	0	5.82148	0
2568	28399	0	0	0	0	0	5.82148	0
2569	28399	0	0	0	0	0	5.82148	0
2570	28399	0	0	0	0	0	5.82148	0
2571	28399	0	0	0	0	0	5.82148	0
2572	28399	0	0	0	0	0	5.82148	0
2573	28399	0	0	0	0	0	5.82148	0
2574	28399	0	0	0	0	0	5.82148	0
2575	28399	0	0	0	0	0	5.82148	0
2576	28399.2	0.953935	397.18	397.182	0	0.244113	5.86778	0
2577	28399.8	3.31202	397.18	397.182	0	0.847551	5.98885	0
2578	28401	6.61368	397.18	397.181	0	1.05387	6.17426	0
2579	28403.4	10.4056	397.18	397.181	0	1.05309	6.41007	0
2580	28406.8	14.1949	397.18	397.181	0	1.05234	6.67013	0
2581	28411.2	17.9816	397.18	397.181	0	1.05154	6.9544	0
2582	28416.8	21.7654	397.18	397.181	0	1.05069	7.2628	0
2583	28423.3	25.546	397.18	397.182	0	1.04978	7.59524	0
2584	28430.9	29.3233	397.19	397.19	0	1.04884	7.95E+00	0
2585	28439.6	33.0821	392.86	392.855	0	1.03768	8.33042	0
2586	28449.3	36.7508	368.08	368.083	0	0.980126	8.72326	0
2587	28460	40.0509	326.73	326.725	0	0.864744	9.09617	0
2588	28471.5	43.025	303.18	303.176	0	0.796596	9.44812	0
2589	28483.9	45.7768	283	283.003	0	0.740042	9.58583	0
2590	28497	48.3664	267.86	267.859	0	0.70179	8.51096	0
2591	28510.7	50.8239	254.19	254.189	0	0.667397	7.35442	0
2592	28525.2	53.1714	242.46	242.462	0	0.638925	6.1213	0
2593	28540.3	55.4197	231.58	231.576	0	0.612625	4.81486	0
2594	28556	57.5852	222.54	222.542	0	0.591875	3.43913	-4.5
2595	28572.2	59.678	213.81	213.811	0	0.572135	1.99693	-4.5
2596	28589.1	61.7092	207.33	207.327	0	0.558271	0.491289	-4.5
2597	28606.5	63.6961	201.35	201.35	0	0.546335	-1.07424	-4.5
2598	28624.5	65.6411	195.73	195.734	0	0.534708	-2.43082	-4.5
2599	28643	67.5387	190.72	190.721	0	0.520338	-2.12545	-4.5
2600	28662	69.3853	185.84	185.844	0	0.506341	-1.82241	-4.5
2601	28681.5	71.1822	181.07	181.073	0	0.492645	-1.52197	-4.5

2602	28701.5	72.9303	176.42	176.418	0	0.47927	-1.22441	-4.5
2603	28722	74.631	171.89	171.89	0	0.466245	-0.929936	-4.5
2604	28743	76.2855	167.49	167.487	0	0.453568	-0.638747	-4.5
2605	28764.4	77.895	163.21	163.205	0	0.441227	-0.351011	-4.5
2606	28786.3	79.4607	159.04	159.039	0	0.429211	-6.69E-02	-4.5
2607	28808.5	80	#####	3.19E-02	0	0	3.19E-02	-4.5
2608	28830.7	80	#####	3.19E-02	0	0	3.19E-02	-4.5
2609	28852.9	80	1.4423	1.44226	0	0	1.43998	-4.5
2610	28875.1	80	1.4691	1.4691	0	0	1.46889	-4.5
2611	28897.4	80	1.4501	1.45014	0	0	1.45199	-4.5
2612	28919.6	80	0.4444	0.444351	0	0	0.450843	-4.5
2613	28941.8	80	0.3001	0.300073	0	0	0.306565	-4.5
2614	28964	80	0.1558	0.155794	0.00E+00	0	0.162287	-4.5
2615	28986.2	80	0.5959	0.595884	0	0	0.488404	-4.5
2616	29008.5	80	2.9843	2.98432	0	0	2.87684	-4.5
2617	29030.7	80	5.3728	5.37275	0	0	5.26527	-4.5
2618	29052.9	80	7.7612	7.76118	0	0	7.65371	0
2619	29075.1	80	10.15	10.1496	0	0	10.0421	0
2620	29097.4	80	12.538	12.5381	0	0	12.4306	0
2621	29119.6	80	14.927	14.9265	0	0	14.819	0
2622	29141.8	80	15.079	15.0791	0	0	15.0791	0
2623	29164	80	17.956	17.9564	0	0	17.9369	0
2624	29186.2	80	18.389	18.3892	0	0	18.3698	0
2625	29208.5	80	20.17	20.1703	0	0	20.1705	0
2626	29230.5	77.9831	-365.1	-318.734	-46.3972	-0.993738	17.4388	0
2627	29251.6	74.0181	-394.3	-337.098	-57.1597	-1.10734	16.7374	0
2628	29271.6	70.0409	-394.9	-355.527	-39.4101	-1.10306	14.4688	0
2629	29290.5	66.0718	-395.6	-366.82	-28.7639	-1.10206	13.452	0
2630	29308.3	62.1062	-396.2	-369.849	-26.355	-1.10112	12.484	0
2631	29325	58.1438	-396.8	-369.848	-26.9494	-1.10024	11.5646	0
2632	29340.6	54.1837	-397.4	-369.849	-27.5176	-1.09999	10.9026	0
2633	29355.1	50.2238	-397.9	-369.849	-28.0613	-1.1	10.3622	0
2634	29368.5	46.2638	-398.4	-369.846	-28.5746	-1.09999	9.84848	0
2635	29380.8	42.3039	-398.9	-369.845	-29.0608	-1.09999	9.36139	0
2636	29392	38.3439	-399.4	-369.846	-29.5206	-1.09999	8.90097	0
2637	29402.1	34.3839	-399.8	-369.847	-29.9545	-1.09999	8.4672	0
2638	29411.1	30.424	-400.2	-369.851	-30.361	-1.09999	8.06009	0
2639	29419	26.464	-400.6	-369.851	-30.7383	-1.09999	7.67963	0
2640	29425.8	22.504	-400.9	-369.852	-31.0898	-1.09998	7.32584	0
2641	29431.5	18.5441	-401.3	-369.852	-31.4162	-1.09999	6.9987	0
2642	29436.1	14.5841	-401.6	-369.852	-31.7174	-1.09999	6.69823	0
2643	29439.6	10.6242	-401.8	-369.852	-31.989	-1.09999	6.42441	0
2644	29442	6.66429	-396.4	-123.927	-272.436	-1.09995	6.17725	0
2645	29443.2	3.27722	-239.2	-0.804233	-238.399	-1.00845	5.987	0
2646	29443.8	0.898574	-239.2	-0.220511	-238.983	-0.756075	5.86505	0
2647	29444	0	0	0	0	0	5.82148	0
2648	29444	0	0	0	0	0	5.82148	0
2649	29444	0	0	0	0	0	5.82148	0
2650	29444	0	0	0	0	0	5.82148	0
2651	29444	0	0	0	0	0	5.82148	0
2652	29444	0	0	0	0	0	5.82148	0
2653	29444	0	0	0	0	0	5.82148	0
2654	29444	0	0	0	0	0	5.82148	0
2655	29444	0	0	0	0	0	5.82148	0

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

2656	29444	0	0	0	0	0	5.82148	0
2657	29444	0	0	0	0	0	5.82148	0
2658	29444	0	0	0	0	0	5.82148	0
2659	29444	0	0	0	0	0	5.82148	0
2660	29444	0	0	0	0	0	5.82148	0
2661	29444	0	0	0	0	0	5.82148	0
2662	29444	0	0	0	0	0	5.82148	0
2663	29444	0	0	0	0	0	5.82148	0
2664	29444.4	1.46728	397.18	397.182	0	0.37548	5.89333	0
2665	29444.9	3.82537	397.18	397.182	0	0.978918	6.01647	0
2666	29446.4	7.43931	397.18	397.181	0	1.0537	6.22353	0
2667	29449	11.2307	397.18	397.181	0	1.05293	6.46462	0
2668	29452.7	15.0195	397.18	397.181	0	1.05217	6.72996	0
2669	29457.3	18.8056	397.18	397.181	0	1.05136	7.01948	0
2670	29463.1	22.5887	397.18	397.181	0	1.0505	7.33312	0
2671	29469.9	26.3686	397.18	397.184	0	1.04958	7.6708	0
2672	29477.7	30.1452	396.92	396.918	0	1.04862	8.03243	0
2673	29486.6	33.8934	391.71	391.713	0	1.03433	8.41532	0
2674	29496.6	37.5046	358.58	358.579	0	0.953739	8.8068	0
2675	29507.4	40.7183	321.43	321.433	0	0.84717	9.17384	0
2676	29519.2	43.6423	298.29	298.292	0	0.783072	9.52304	0
2677	29531.7	46.3511	279.64	279.644	0	0.730168	9.85952	0
2678	29544.9	48.8993	264.74	264.742	0	0.688788	10.1874	0
2679	29558.8	51.3057	251.78	251.782	0	0.652343	10.5072	0
2680	29573.4	53.5926	240.36	240.358	0	0.620517	10.8203	0
2681	29588.6	55.7689	230.12	230.119	0	0.591628	11.1264	0
2682	29604.4	57.852	221.43	221.429	0	0.567284	11.427	0
2683	29620.7	59.8494	213.1	213.096	0	0.543931	11.7222	0
2684	29637.6	61.7732	207.13	207.134	0	0.526652	12.0128	0
2685	29655	63.6387	201.52	201.522	0	0.510703	12.3007	0
2686	29672.9	65.4478	196.24	196.244	0	0.495568	12.5856	0
2687	29691.4	67.2065	191.6	191.599	0	0.482254	12.8678	0
2688	29710.3	68.9181	187.08	187.078	0	0.469982	12.889	0
2689	29729.7	70.6093	182.6	182.598	0	0.469613	8.54173	0
2690	29749.5	72.2996	178.1	178.098	0	0.469476	4.08703	0
2691	29769.8	73.9899	173.6	173.597	0	0.469628	-0.47492	0
2692	29790.6	75.6813	169.1	169.095	0	0.470064	-5.14402	-10
2693	29811.9	77.3748	164.59	164.589	0	0.47078	-9.92014	-10
2694	29833.6	79.0714	160.08	160.075	0	0.471762	-14.8033	-10
2695	29855.7	80	-18.36	-18.359	0	0	-18.359	-10
2696	29878	80	-18.36	-18.359	0	0	-18.359	-10
2697	29900.2	80	-18.36	-18.359	0	0	-18.359	-10
2698	29922.4	80	-17.75	-17.7525	0	0	-18.0391	-10
2699	29944.6	80	-11.38	-11.3833	0	0	-11.6699	-10
2700	29966.9	80	-5.014	-5.01415	0	0	-5.30076	-10
2701	29989.1	80	1.355	1.35501	0	0	1.06839	-10
2702	30011.3	80	7.7242	7.72416	0	0	7.43755	2
2703	30033.5	80	14.093	14.0933	0	0	13.8067	2
2704	30055.7	80	20.463	20.4625	0	0	20.1759	2
2705	30078	80	21.767	21.7667	0	0	21.7667	2
2706	30100.2	80	21.767	21.7667	0	0	21.7667	2
2707	30122.4	80	21.767	21.7667	0	0	21.7667	2
2708	30144.6	80	21.767	21.7667	0	0	21.7667	2
2709	30166.9	80	21.767	21.7667	0	0	21.7667	2

2710	30189.1	80	21.767	21.7667	0	0	21.7667	2
2711	30211.3	80	21.767	21.7667	0	0	21.7667	2
2712	30233.5	80	21.767	21.7667	0	0	21.7667	2
2713	30255.7	80	21.767	21.7667	0	0	21.7667	2
2714	30278	80	21.767	21.7667	0	0	21.7667	2
2715	30300.2	80	21.767	21.7667	0	0	21.7667	2
2716	30322.4	80	21.767	21.7667	0	0	21.7667	2
2717	30344.6	80	21.767	21.7667	0	0	21.7667	2
2718	30366.9	80	21.767	21.7667	0	0	21.7667	2
2719	30389.1	80	21.767	21.7667	0	0	21.7667	2
2720	30411.3	80	21.767	21.7667	0	0	21.7667	2
2721	30433.5	80	21.767	21.7667	0	0	21.7667	2
2722	30455.7	80	21.767	21.7667	0	0	21.7667	2
2723	30478	80	21.767	21.7667	0	0	21.7667	2
2724	30500.2	80	21.767	21.7667	0	0	21.7667	2
2725	30522.4	80	21.767	21.7667	0	0	21.7667	2
2726	30544.6	80	21.767	21.7667	0	0	21.7667	2
2727	30566.9	80	21.767	21.7667	0	0	21.7667	2
2728	30589.1	80	21.767	21.7667	0	0	21.7667	2
2729	30611.3	80	21.767	21.7667	0	0	21.7667	2
2730	30633.5	80	22.067	22.0674	0	0	21.7667	2
2731	30655.7	80	22.343	22.3428	0	0	22.343	2
2732	30678	80	21.767	21.7667	0	0	21.7667	2
2733	30700.2	80	21.767	21.7667	0	0	21.7667	2
2734	30722.4	80	21.819	21.8186	0	0	21.8218	2
2735	30744.6	80	21.767	21.7667	0	0	21.7667	2
2736	30766.9	80	21.767	21.7667	0	0	21.7667	2
2737	30789.1	80	21.767	21.7667	0	0	21.7667	2
2738	30811.3	80	21.767	21.7667	0	0	21.7667	2
2739	30833.5	80	21.767	21.7667	0	0	21.7667	2
2740	30855.7	80	21.767	21.7667	0	0	21.7667	2
2741	30878	80	22.03	22.0298	0	0	21.9581	2
2742	30900.2	80	23.622	23.6221	0.00E+00	0	23.5504	2
2743	30922.4	80	25.214	25.2144	0	0	25.1427	2
2744	30944.6	80	26.807	26.8067	0	0	26.735	2
2745	30966.9	80	28.399	28.3989	0	0	28.3273	5
2746	30989.1	80	29.991	29.9912	0	0	29.9196	5
2747	31011.3	80	31.584	31.5835	0	0	31.5119	5
2748	31033.5	80	31.798	31.7981	0	0	31.7981	5
2749	31055.7	80	31.798	31.7981	0	0	31.7981	5
2750	31078	80	31.798	31.7981	0	0	31.7981	5
2751	31100.2	80	31.798	31.7981	0	0	31.7981	5
2752	31122.4	80	31.798	31.7981	0	0	31.7981	5
2753	31144.6	80	31.798	31.7981	0	0	31.7981	5
2754	31166.9	80	31.778	31.7776	0	0	31.7981	5
2755	31188.8	77.6979	-372.2	-320.055	-52.1399	-1.0431	28.8671	5
2756	31209.9	73.6271	-394.3	-338.91	-55.4145	-1.1315	25.6391	5
2757	31229.7	69.5659	-395	-356.944	-38.0708	-1.12511	22.5761	5
2758	31248.5	65.5271	-395.7	-368.36	-27.3127	-1.11907	19.6789	0
2759	31266.2	61.5094	-396.3	-369.849	-26.447	-1.11339	16.9463	0
2760	31282.7	57.5114	-396.9	-369.848	-27.0412	-1.10807	14.3771	0
2761	31298.1	53.532	-397.5	-369.849	-27.6068	-1.10311	11.9698	0
2762	31312.4	49.5687	-398	-369.849	-28.146	-1.1	10.2754	0
2763	31325.6	45.6087	-398.5	-369.845	-28.6596	-1.09999	9.76606	0

2764	31337.8	41.6488	-399	-369.845	-29.1397	-1.09999	9.28339	0
2765	31348.8	37.6888	-399.4	-369.846	-29.5938	-1.09999	8.82737	0
2766	31358.7	33.7288	-399.9	-369.848	-30.0218	-1.09999	8.39801	0
2767	31367.5	29.7689	-400.3	-369.851	-30.4232	-1.1	7.99531	0
2768	31375.2	25.8089	-400.7	-369.851	-30.8004	-1.09999	7.61927	0
2769	31381.9	21.849	-401	-369.852	-31.1468	-1.09999	7.26988	0
2770	31387.4	17.889	-401.3	-369.852	-31.4678	-1.09998	6.94716	0
2771	31391.8	13.929	-401.6	-369.852	-31.7637	-1.09999	6.65109	0
2772	31395.1	9.96907	-401.9	-367.572	-34.3081	-1.09999	6.38168	0
2773	31397.3	6.00931	-355.6	-75.6381	-279.972	-1.09991	6.13894	0
2774	31398.3	2.88373	-239.2	-0.707668	-238.496	-0.966699	5.96616	0
2775	31398.9	0.505077	-239.2	-0.123946	-239.079	-0.714325	5.8458	0
2776	31399	0	0	0	0	0	5.82148	0
2777	31399	0	0	0	0	0	5.82148	0
2778	31399	0	0	0	0	0	5.82148	0
2779	31399	0	0	0	0	0	5.82148	0
2780	31399	0	0	0	0	0	5.82148	0
2781	31399	0	0	0	0	0	5.82148	0
2782	31399	0	0	0	0	0	5.82148	0
2783	31399	0	0	0	0	0	5.82148	0
2784	31399	0	0	0	0	0	5.82148	0
2785	31399	0	0	0	0	0	5.82148	0
2786	31399	0	0	0	0	0	5.82148	0
2787	31399	0	0	0	0	0	5.82148	0
2788	31399	0	0	0	0	0	5.82148	0
2789	31399	0	0	0	0	0	5.82148	0
2790	31399	0	0	0	0	0.00E+00	5.82148	0
2791	31399	0	0	0	0	0	5.82148	0
2792	31399	0	0	0	0	0	5.82148	0
2793	31399.5	1.85738	397.18	397.182	0	0.475305	5.91305	0
2794	31400.1	4.27331	397.18	397.182	0	1.0544	6.04092	0
2795	31401.8	8.0667	397.18	397.181	0	1.05356	6.26173	0
2796	31404.5	11.8577	397.18	397.181	0	1.0528	6.50684	0
2797	31408.4	15.646	397.18	397.181	0	1.05204	6.77619	0
2798	31413.2	19.4316	397.18	397.181	0	1.05122	7.06971	0
2799	31419.1	23.2142	397.18	397.181	0	1.05035	7.38733	0
2800	31426.1	26.9936	397.19	397.185	0	1.04943	7.72897	0
2801	31434.1	30.769	396.11	396.11	0	1.04722	8.0945	0
2802	31443.2	34.5082	390.85	390.848	0	1.03179	8.4804	0
2803	31453.3	38.064	351.53	351.527	0	0.934171	8.86943	0
2804	31464.3	41.218	317.48	317.479	0	0.83621	9.23249	0
2805	31476.2	44.1042	294.64	294.635	0	0.772952	9.57954	0
2806	31488.8	46.7117	277.54	277.535	0	0.693129	21.4275	0
2807	31502.1	49.1253	263.42	263.42	0	0.651133	22.7766	0
2808	31516.1	51.3955	251.33	251.334	0	0.614195	24.1669	0
2809	31530.6	53.5018	240.81	240.811	0	0.564531	31.9849	0
2810	31545.8	55.481	231.32	231.321	0	0.537229	32.4664	0
2811	31561.4	56.921	22.199	22.1992	0	4.00E-02	22.1992	0
2812	31577.2	56.921	22.199	22.1992	0	0	22.1992	0
2813	31593.1	56.921	21.221	21.2206	0	0	21.2689	0
2814	31608.9	56.921	20.605	20.605	0	0	20.6356	0
2815	31624.7	56.921	25.978	25.9778	0	0	25.9778	0
2816	31640.5	56.921	25.978	25.9778	0	0	25.9778	0
2817	31656.3	56.921	25.978	25.9778	0	0	25.9778	0

2818	31672.1	56.921	26.906	26.9063	0	0	26.8284	0
2819	31687.9	56.921	22.199	22.1992	0	0	22.1992	0
2820	31703.7	56.921	22.199	22.1992	0	0	22.1992	0
2821	31719.6	56.921	22.199	22.1992	0	0	22.1992	0
2822	31735.4	56.921	22.58	22.5795	0	0	22.5318	0
2823	31751.2	56.921	23.335	23.3348	0	0.00E+00	23.2871	0
2824	31767	56.921	18.709	18.7086	0	0	24.0423	0
2825	31782.8	56.921	18.153	18.1532	0	0	18.1833	0
2826	31798.6	56.921	17.677	17.6766	0	0	17.7067	2
2827	31814.4	56.921	17.2	17.2	0	0	17.2302	2
2828	31830.2	56.921	16.723	16.7234	0	0	16.7536	2
2829	31846.1	57.5026	222.89	222.887	0	0.508557	16.9973	2
2830	31862.3	59.452	214.75	214.754	0	0.531298	18.0602	2
2831	31879.1	61.3253	208.48	208.481	0	0.512429	18.6322	2
2832	31896.4	63.1404	203.02	203.021	0	0.496915	18.9109	2
2833	31914.2	64.9021	197.72	197.722	0	0.483233	18.6722	2
2834	31932.4	66.6208	193.15	193.146	0	0.472388	18.0737	2
2835	31951.2	68.3018	188.71	188.706	0	0.46207	17.4515	2
2836	31970.4	69.9462	184.36	184.362	0	0.452077	16.8059	2
2837	31990	71.5307	180.15	180.145	0	0.424419	22.8367	0
2838	32010.1	72.9934	176.25	176.25	0	0.389942	31.7171	0
2839	32030.6	74.333	172.68	172.684	0	0.355949	40.747	0
2840	32051.4	75.5504	169.44	169.443	0	0.321446	50.2929	20
2841	32072.5	76.6405	166.54	166.543	0	0.285851	60.5845	20
2842	32094	77.6036	163.98	163.98	0	0.250858	70.9915	20
2843	32115.6	78.4419	161.75	161.75	0	0.216497	81.497	20
2844	32137.5	79.206	159.72	159.716	0	0.203959	84.1104	20
2845	32159.6	79.9283	135.31	135.307	0	0.182079	81.5779	20
2846	32181.9	80	70.528	70.5282	0	0	71.0072	20
2847	32204.1	80	59.714	59.7141	0	0	60.3081	20
2848	32226.3	80	46.487	46.4868	0	0	46.9807	0
2849	32248.5	80	35.511	35.5108	0	0	36.0047	0
2850	32270.7	80	24.535	24.5348	0	0	25.0288	0
2851	32293	80	15.079	15.0791	0	0	15.0791	0
2852	32315.2	80	15.079	15.0791	0	0	15.0791	0
2853	32337.4	80	15.079	15.0791	0	0	15.0791	0
2854	32359.6	80	15.906	15.906	0	0	15.0791	0
2855	32381.9	80	16.589	16.5886	0	0	16.5794	0
2856	32404.1	80	17.49	17.4899	0	0	17.489	0
2857	32426.3	80	17.474	17.4744	0	0	17.4765	0
2858	32448.5	80	16.378	16.3776	0	0	16.3776	0
2859	32470.7	80	15.636	15.6361	0	0	15.6454	0
2860	32493	80	15.831	15.8314	0	0	15.8306	0
2861	32515.2	80	15.884	15.8842	0	0	15.8804	0
2862	32537.4	80	15.079	15.0791	0	0	15.0791	0
2863	32559.6	80	9.7822	9.78221	0	0	10.2534	0
2864	32581.9	80	-0.748	-0.747981	0	0	-0.271647	0
2865	32604.1	80	-11.39	-11.3927	0	0	-10.9112	0
2866	32626.3	80	-23.49	-23.4905	0	0	-23.0128	-20
2867	32648.5	80	-35.58	-35.575	0	0	-35.0811	-20
2868	32670.7	80	-45.83	-45.8342	0	0	-45.3695	-20
2869	32693	80	-50.29	-50.2906	0	0	-50.3087	-20
2870	32715.2	80	-51.8	-51.7971	0	0	-51.7971	-20
2871	32737.4	80	-43.02	-43.0238	0	0	-45.9729	-20

2872	32759.4	77.8619	-393.6	-319.296	-74.2898	-0.966731	-34.7765	-20
2873	32780.6	74.3294	-394.2	-335.656	-58.5578	-0.994506	-25.096	-20
2874	32800.7	70.7054	-394.8	-352.448	-42.3843	-1.01033	-19.842	-20
2875	32819.8	67.0283	-395.4	-364.117	-31.317	-1.03192	-12.4283	0
2876	32837.9	63.2751	-396	-369.849	-26.1792	-1.05195	-5.58947	0
2877	32855	59.4161	-396.6	-369.848	-26.7691	-1.08484	6.02813	0
2878	32870.9	55.4751	-397.2	-369.849	-27.3431	-1.10328	12.2994	0
2879	32885.8	51.4721	-397.1	-369.849	-27.2139	-1.11619	16.544	0
2880	32899.5	47.5078	-398.3	-369.847	-28.4132	-1.09999	10.007	0
2881	32912.2	43.5478	-398.8	-369.845	-28.9446	-1.10001	9.51153	0
2882	32923.7	39.5764	-399.2	-369.846	-29.3828	-1.10299	10.1541	0
2883	32934.2	35.6075	-399.7	-369.847	-29.8265	-1.10208	9.37205	0
2884	32943.5	31.6417	-400.1	-369.85	-30.2363	-1.10125	8.65293	0
2885	32951.7	27.6763	-400.5	-369.851	-30.6226	-1.10203	8.55308	0
2886	32958.9	23.7099	-400.8	-369.852	-30.9851	-1.09999	7.43075	0
2887	32964.9	19.7499	-401.2	-369.852	-31.3214	-1.09999	7.0955	0
2888	32969.9	15.79	-401.5	-369.852	-31.6317	-1.09999	6.7869	0
2889	32973.7	11.83	-401.8	-369.852	-31.9129	-1.09999	6.50497	0
2890	32976.4	7.87011	-402	-212.826	-189.159	-1.09996	6.24969	0
2891	32978	4.00156	-239.2	-0.981985	-238.221	-1.0853	6.02605	0
2892	32978.6	1.62291	-239.2	-0.398263	-238.805	-0.832927	5.90116	0
2893	32979	0	0	0	0	0	5.82148	0
2894	32979	0	0	0	0	0	5.82148	0
2895	32979	0	0	0	0	0	5.82148	0
2896	32979	0	0	0	0	0	5.82148	0
2897	32979	0	0	0	0	0	5.82148	0
2898	32979	0	0	0	0	0	5.82148	0
2899	32979	0	0	0	0	0	5.82148	0
2900	32979	0	0	0	0	0	5.82148	0
2901	32979	0	0	0	0	0	5.82148	0
2902	32979	0	0	0	0	0	5.82148	0
2903	32979	0	0	0	0	0	5.82148	0
2904	32979	0	0	0	0	0	5.82148	0
2905	32979	0	0	0	0	0	5.82148	0
2906	32979	0	0	0	0	0	5.82148	0
2907	32979	0	0	0	0	0	5.82148	0
2908	32979	0	0	0	0	0	5.82148	0
2909	32979	0	0	0	0	0	5.82148	0
2910	32979.2	0.749208	397.18	397.182	0	0.191723	5.85771	0
2911	32979.8	3.1073	397.18	397.182	0	0.795161	5.97797	0
2912	32980.9	6.2843	397.18	397.181	0	1.05395	6.15494	0
2913	32983.1	10.0765	397.18	397.181	0	1.05315	6.38863	0
2914	32986.4	13.8661	397.18	397.181	0	1.0524	6.6466	0
2915	32990.8	17.653	397.18	397.181	0	1.05161	6.92876	0
2916	32996.2	21.437	397.18	397.181	0	1.05077	7.23507	0
2917	33002.7	25.2179	397.18	397.181	0	1.04986	7.56543	0
2918	33010.2	28.9955	397.19	397.19	0	1.04892	7.91977	0
2919	33018.8	32.7339	393.35	393.345	0	1.0012	22.3215	0
2920	33028.4	36.2652	374.21	374.205	0	0.945392	27.6383	0
2921	33038.9	39.4213	334.42	334.415	0	0.820263	33.4143	0
2922	33050.3	42.1891	309.79	309.792	0	0.732906	39.5836	0
2923	33062.3	44.6876	290.02	290.018	0	0.661323	46.1089	0
2924	33075.1	46.953	276.12	276.124	0	0.603968	52.9551	0
2925	33088.4	49.0452	263.89	263.889	0	0.570271	53.1441	17.5

2926	33102.3	50.8139	127	126.999	0	0.238299	59.1855	17.5
2927	33116.4	50.9117	65.527	65.5269	0	0	65.1089	17.5
2928	33130.6	50.9117	71.438	71.438	0	0	71.02	17.5
2929	33144.7	50.9117	77.349	77.349	0	0	76.9311	17.5
2930	33158.9	50.9117	82.605	82.6051	0	0	82.6051	17.5
2931	33173	50.9117	82.605	82.6051	0	0	82.6051	17.5
2932	33187.2	50.9117	82.605	82.6051	0	0	82.6051	17.5
2933	33201.3	50.9117	82.605	82.6051	0	0	82.6051	17.5
2934	33215.4	50.9117	82.605	82.6051	0	0	82.6051	17.5
2935	33229.6	50.9117	82.605	82.6051	0	0	82.6051	17.5
2936	33243.7	50.9117	82.605	82.6051	0	0	82.6051	17.5
2937	33257.9	50.9117	82.605	82.6051	0	0	82.6051	17.5
2938	33272	50.9117	82.605	82.6051	0	0	82.6051	17.5
2939	33286.1	50.9117	82.605	82.6051	0	0	82.6051	17.5
2940	33300.3	50.9117	82.605	82.6051	0	0	82.6051	17.5
2941	33314.4	50.9117	82.605	82.6051	0	0	82.6051	17.5
2942	33328.6	50.9117	82.605	82.6051	0	0	82.6051	17.5
2943	33342.7	50.9117	82.605	82.6051	0	0	82.6051	17.5
2944	33356.9	50.9117	82.605	82.6051	0	0	82.6051	17.5
2945	33371	50.9117	82.605	82.6051	0	0	82.6051	17.5
2946	33385.1	50.9117	82.605	82.6051	0	0	82.6051	17.5
2947	33399.3	50.9117	75.137	75.1371	0	0	75.2345	17.5
2948	33413.4	50.9117	73.76	73.7598	0	0	73.8572	17.5
2949	33427.6	50.9117	72.383	72.3825	0	0	72.4799	17.5
2950	33441.7	50.9117	71.005	71.0053	0	0	71.1026	17.5
2951	33455.9	50.9117	69.628	69.628	0	0	69.7254	17.5
2952	33470	51.3722	251.45	251.45	0	0.452367	69.0328	17.5
2953	33484.5	53.0978	242.83	242.829	0	0.469207	69.2684	17.5
2954	33499.5	54.7428	234.61	234.612	0	0.446327	69.4977	17.5
2955	33514.9	56.3117	227.86	227.855	0	0.427202	69.7206	17.5
2956	33530.8	57.8158	221.58	221.58	0	0.409634	69.9383	17.5
2957	33547	59.2581	215.56	215.563	0	0.392782	70.1507	17.5
2958	33563.7	60.6426	210.54	210.535	0	0.378365	70.3579	17.5
2959	33580.7	61.9828	206.5	206.503	0	0.366919	70.5615	17.5
2960	33598.1	63.2825	202.59	202.594	0	0.355813	70.7619	17.5
2961	33615.9	64.5428	198.8	198.802	0	0.345037	70.959	17.5
2962	33634	65.7658	195.4	195.404	0	0.335267	71.1528	17.5
2963	33652.4	66.9556	192.26	192.262	0	0.326263	71.3438	17.5
2964	33671.2	68.1135	189.2	189.203	0	0.317496	71.532	17.5
2965	33690.3	69.2402	186.23	186.227	0	0.308958	71.7173	17.5
2966	33709.6	70.3367	183.32	183.324	0	0.30063	71.8997	17.5
2967	33729.3	71.4035	180.48	180.484	0	0.292477	72.0792	17.5
2968	33749.3	72.4413	177.72	177.72	0	0.28454	72.2556	17.5
2969	33769.6	73.451	175.03	175.032	0	0.276814	72.429	17.5
2970	33790.1	74.4333	172.42	172.417	0	0.269294	72.5993	17.5
2971	33810.9	75.3889	169.87	169.873	0	0.261976	72.7666	17.5
2972	33832	76.3186	167.4	167.4	0	0.254856	72.9309	17.5
2973	33853.3	77.2229	164.99	164.993	0	0.247925	73.0921	17.5
2974	33874.9	78.1027	162.65	162.652	0	0.24118	73.2502	17.5
2975	33896.7	78.9585	160.38	160.375	0	0.234615	73.4053	17.5
2976	33918.8	79.7911	158.16	158.16	0	0.228226	73.5574	17.5
2977	33941	80	73.596	73.5957	0	0	73.5957	17.5
2978	33963.2	80	73.596	73.5957	0	0	73.5957	17.5
2979	33985.4	80	73.596	73.5957	0	0	73.5957	17.5

2980	34007.6	80	74.661	74.661	0	0	74.6013	17.5
2981	34029.9	80	75.988	75.9879	0	0	75.9282	17.5
2982	34052.1	80	77.315	77.3148	0	0	77.2551	17.5
2983	34074.3	80	78.642	78.6417	0	0	78.582	20
2984	34096.5	80	79.969	79.9686	0	0	79.9089	20
2985	34118.8	80	81.296	81.2955	0	0	81.2358	20
2986	34141	80	81.955	81.9552	0	0	81.9552	20
2987	34163.2	80	81.955	81.9552	0	0	81.9552	20
2988	34185.4	80	83.098	83.0975	0	0	83.0897	20
2989	34207.6	80	83.829	83.8293	0	0	83.8276	20
2990	34229.9	80	83.84	83.8397	0	0	83.8404	20
2991	34252.1	80	83.046	83.046	0	0	83.046	20
2992	34274.3	80	82.704	82.7041	0	0	82.7136	20
2993	34296.5	80	82.522	82.5217	0	0	82.5288	20
2994	34318.8	80	82.394	82.3943	0	0	82.3989	20
2995	34341	80	82.72	82.7195	0	0	82.7142	20
2996	34363.2	80	82.836	82.8364	0	0	82.8312	20
2997	34385.4	80	82.953	82.9534	0	0	82.9482	20
2998	34407.6	80	82.692	82.6922	0	0	82.6922	20
2999	34429.9	80	82.692	82.6922	0	0	82.6922	20
3000	34452.1	80	82.692	82.6922	0	0	82.6922	20
3001	34474.3	80	82.692	82.6922	0	0	82.6922	20
3002	34496.5	80	82.692	82.6922	0	0	82.6922	20
3003	34518.8	80	82.692	82.6922	0	0	82.6922	20
3004	34541	80	82.692	82.6922	0	0	82.6922	20
3005	34563.2	80	82.692	82.6922	0	0	82.6922	20
3006	34585.4	80	82.692	82.6922	0	0	82.6922	20
3007	34607.6	80	82.692	82.6922	0	0	82.6922	20
3008	34629.9	80	82.692	82.6922	0	0	82.6922	20
3009	34652.1	80	82.692	82.6922	0	0	82.6922	20
3010	34674.3	80	79.928	79.9281	0	0	80.3341	20
3011	34696.5	80	70.905	70.9051	0	0	71.3111	20
3012	34718.8	80	61.882	61.8821	0	0	62.2882	20
3013	34741	80	52.859	52.8592	0	0	53.2652	3
3014	34763.2	79.9237	-106.9	-106.904	0	-0.370034	44.2285	3
3015	34785.1	77.0886	-393.7	-322.877	-70.8336	-1.14992	34.8335	3
3016	34805.9	73.2954	-249.2	-249.163	0	-0.778824	25.6999	3
3017	34826	72	24.432	24.4321	0	0	24.4321	3
3018	34846	72	24.432	24.4321	0	0	24.4321	3
3019	34866	72	26.144	26.1435	0	0	26.1038	3
3020	34886	72	26.954	26.9539	0	0	26.9127	3
3021	34906	72	31.215	31.2152	0	0	31.1718	3
3022	34926	72	32.084	32.0838	0	0	32.0404	3
3023	34946	72	33.012	33.0121	0	0	32.9634	3
3024	34966	72	30.512	30.5123	0	0	30.5123	3
3025	34986	72	28.085	28.085	0	0	28.2283	3
3026	35006	72	25.219	25.2189	0	0	25.3622	3
3027	35026	72	22.353	22.3528	0	0	22.4961	3
3028	35046	72	19.487	19.4866	0	0	19.6299	-3
3029	35066	72	16.621	16.6205	0	0	16.7638	-3
3030	35086	72	11.625	11.6252	0	0	13.8977	-3
3031	35106	71.9985	-84.2	-84.2039	0	-8.50E-03	7.70653	-3
3032	35125.6	68.4307	-395.2	-360.152	-35.0474	-1.08951	9.17832	-3
3033	35144	64.5086	-395.8	-369.85	-25.9832	-1.08952	8.54988	-3

3034	35161.4	60.5853	-396.4	-369.848	-26.5906	-1.09065	8.36497	-3
3035	35177.7	56.6531	-397	-369.848	-27.1668	-1.09364	8.89848	-3
3036	35192.9	52.7178	-397.6	-369.849	-27.7191	-1.09093	7.3381	0
3037	35207	48.7861	-398.1	-369.848	-28.2475	-1.09313	7.6253	0
3038	35220	44.8469	-398.6	-369.845	-28.7544	-1.09516	7.87471	0
3039	35231.9	40.9007	-399.1	-369.845	-29.23	-1.097	8.08641	0
3040	35242.7	36.9481	-399.5	-369.846	-29.6767	-1.09868	8.26053	0
3041	35252.4	32.9898	-399.9	-369.849	-30.0977	-1.10016	8.39717	0
3042	35261	29.0296	-400.3	-369.851	-30.4936	-1.09999	7.92308	0
3043	35268.6	25.0696	-400.7	-369.852	-30.8671	-1.1	7.55202	0
3044	35275	21.1097	-401.1	-369.852	-31.2112	-1.09999	7.20761	0
3045	35280.3	17.1497	-401.4	-369.852	-31.5262	-1.09998	6.88986	0
3046	35284.5	13.1898	-401.7	-369.852	-31.8161	-1.09999	6.59877	0
3047	35287.6	9.22981	-401.9	-313.07	-88.8536	-1.09998	6.33434	0
3048	35289.6	5.27015	-309.6	-21.1437	-288.477	-1.09988	6.09658	0
3049	35290.4	2.43966	-239.2	-0.598695	-238.605	-0.919584	5.94296	0
3050	35291	6.10E-02	-239.2	-1.50E-02	-239.188	-0.66721	5.82439	0
3051	35291	0	0	0	0	0	5.82148	0
3052	35291	0	0	0	0	0	5.82148	0
3053	35291	0	0	0	0	0	5.82148	0
3054	35291	0	0	0	0	0	5.82148	0
3055	35291	0	0	0	0	0	5.82148	0
3056	35291	0	0	0	0	0	5.82148	0
3057	35291	0	0	0	0	0	5.82148	0
3058	35291	0	0	0	0	0	5.82148	0
3059	35291	0	0	0	0	0	5.82148	0
3060	35291	0	0	0	0	0	5.82148	0
3061	35291	0	0	0	0	0	5.82148	0
3062	35291	0	0	0	0	0	5.82148	0
3063	35291	0	0	0	0	0	5.82148	0
3064	35291	0	0	0	0	0	5.82148	0
3065	35291	0	0	0	0	0	5.82148	0
3066	35291	0	0	0	0	0	5.82148	0
3067	35291	0	0	0	0	0	5.82148	0
3068	35291.6	2.2976	397.18	397.182	0	0.587959	5.93561	0
3069	35292.3	4.98158	397.18	397.181	0	1.05424	6.08029	0
3070	35294.2	8.77463	397.18	397.181	0	1.05341	6.30565	0
3071	35297.2	12.5651	397.18	397.181	0	1.05266	6.55529	0
3072	35301.2	16.353	397.18	397.181	0	1.05189	6.82915	0
3073	35306.2	20.138	397.18	397.181	0	1.05106	7.12718	0
3074	35312.4	23.92	397.18	397.181	0	1.05018	7.44929	0
3075	35319.5	27.6988	397.19	397.187	0	1.04925	7.7954	0
3076	35327.8	31.4712	395.12	395.122	0	1.04433	8.16516	0
3077	35337	35.2001	387.63	387.633	0	1.02885	8.55442	0
3078	35347.3	38.681	343.75	343.747	0	0.911994	9.16029	0
3079	35358.5	41.7677	313.13	313.128	0	0.821384	10.3198	0
3080	35370.5	44.5985	290.72	290.724	0	0.757022	11.5226	0
3081	35383.2	47.2068	274.64	274.64	0	0.687165	20.7239	0
3082	35396.7	49.5962	260.67	260.666	0	0.643737	22.7466	0
3083	35410.8	51.8396	249.12	249.115	0	0.606356	24.8409	0
3084	35425.5	53.9558	238.54	238.543	0	0.571851	27.0031	3
3085	35440.7	55.9525	229.35	229.353	0	0.540649	29.2285	3
3086	35456.5	57.8619	221.39	221.388	0	0.524379	27.2687	3
3087	35472.9	59.7023	213.71	213.71	0	0.499704	28.7106	3

3088	35489.7	61.4628	208.07	208.068	0	4.81E-01	29.788	3
3089	35507	63.1673	202.94	202.94	0	0.466631	30.0499	3
3090	35524.8	64.8202	197.97	197.968	0	0.452494	30.3085	3
3091	35543	66.4251	193.66	193.663	0	0.440082	30.5642	3
3092	35561.6	67.3498	30.713	30.7134	0	0	30.7134	3
3093	35580.4	67.3498	30.713	30.7134	0	0	30.7134	3
3094	35599.1	67.3498	26.47	26.4696	0	0	26.5253	3
3095	35617.8	67.3498	25.429	25.4285	0	0	25.4841	3
3096	35636.5	67.3498	24.387	24.3874	0	0	24.443	3
3097	35655.2	67.3498	23.346	23.3463	0	0	23.4019	3
3098	35673.9	67.9241	189.7	189.703	0	0.449751	23.0159	3
3099	35693	69.5202	185.49	185.487	0	0.437653	23.2785	3
3100	35712.5	71.0733	181.36	181.363	0	0.425815	23.5382	3
3101	35732.5	72.5843	177.34	177.34	0	0.414257	23.7948	3
3102	35752.9	74.0543	173.43	173.426	0	0.403004	24.0482	3
3103	35773.6	75.4844	169.62	169.619	0	0.39205	24.2982	3
3104	35794.8	76.8756	165.92	165.917	0	0.381389	24.5448	3
3105	35816.3	78.229	162.32	162.316	0	0.37101	24.7878	3
3106	35837.9	76.0981	-393.9	-327.464	-66.4306	-1.12702	24.4066	3
3107	35858.5	72.0253	-394.6	-346.332	-48.2668	-1.13426	26.3894	3
3108	35878	67.9358	-395.3	-361.552	-33.729	-1.13895	27.4486	3
3109	35896.3	64.0121	-283.4	-283.438	0	-0.881557	26.8555	3
3110	35913.7	62.3623	16.714	16.7143	0	-8.10E-02	29.47	3
3111	35931.1	62.3538	30.592	30.5921	0	0	30.4249	3
3112	35948.4	62.3538	34.618	34.6184	0	0	34.4166	3
3113	35965.7	62.3538	38.153	38.1531	0	0	37.9469	3
3114	35983	62.3538	41.764	41.7636	0	0	41.5531	10
3115	36000.3	62.3538	50.017	50.0171	0	0	49.8027	10
3116	36017.7	62.3538	53.842	53.8418	0	0	53.6097	10
3117	36035	62.3538	57.862	57.8621	0	0	57.63	10
3118	36052.3	62.3538	59.039	59.0385	0	0	58.9736	10
3119	36069.6	62.3538	54.629	54.6294	0	0	54.6294	10
3120	36087	62.3538	54.629	54.6294	0	0	54.6294	10
3121	36104.3	62.3538	54.629	54.6294	0	0	54.6294	10
3122	36121.6	62.3538	45.856	45.8564	0	0	46.4535	10
3123	36138.9	62.3538	35.514	35.5141	0	0	36.1112	10
3124	36156.2	62.3538	25.172	25.1719	0	0	25.769	10
3125	36173.6	62.3538	14.83	14.8297	0	0	15.4268	10
3126	36190.9	62.3538	4.4875	4.48748	0	0	5.08459	-15
3127	36208.2	62.3538	-4.746	-4.74589	0	0	-4.50704	-15
3128	36225.5	62.3538	-8.883	-8.88277	0	0	-8.64393	-15
3129	36242.8	62.3538	-13.02	-13.0197	0	0	-12.7808	-15
3130	36260.2	62.3538	-9.241	-9.24095	0	0	-9.59922	-15
3131	36277.5	62.3538	-3.036	-3.03562	0	0	-3.39389	0
3132	36294.8	62.3538	3.1697	3.16971	0	0	2.81144	0
3133	36312.1	62.3538	9.375	9.37504	0	0	9.01677	0
3134	36329.4	62.3538	10.111	10.1112	0	0	9.81783	0
3135	36346.6	59.9755	-396.5	-369.848	-26.6825	-1.10689	14.3146	0
3136	36362.7	55.996	-397.1	-369.848	-27.2623	-1.10411	12.6867	0
3137	36377.7	52.0263	-397.7	-369.849	-27.8139	-1.10148	11.1587	0
3138	36391.6	48.0649	-398.2	-369.848	-28.341	-1.09999	10.0788	0
3139	36404.4	44.105	-398.7	-369.845	-28.8437	-1.09999	9.57963	0
3140	36416.1	40.145	-399.2	-369.845	-29.3192	-1.1	9.10708	0
3141	36426.7	36.1851	-399.6	-369.846	-29.7621	-1.09999	8.66119	0

3142	36436.2	32.2251	-400	-369.849	-30.1763	-1.09998	8.24195	0
3143	36444.6	28.2651	-400.4	-369.851	-30.5665	-1.09999	7.84937	0
3144	36451.9	24.3052	-400.8	-369.852	-30.9334	-1.09999	7.48345	0
3145	36458.1	20.3452	-401.1	-369.852	-31.2747	-1.09999	7.14419	0
3146	36463.2	16.3852	-401.4	-369.852	-31.5861	-1.09999	6.83159	0
3147	36467.2	12.4253	-401.7	-369.852	-31.8704	-1.09998	6.54564	0
3148	36470.1	8.46535	-402	-256.71	-145.255	-1.09997	6.28636	0
3149	36471.9	4.50579	-262.1	-1.10572	-260.957	-1.09984	6.05375	0
3150	36472.5	1.98046	-239.2	-0.486007	-238.717	-0.870863	5.91932	0
3151	36473	0	0	0	0	0	5.82148	0
3152	36473	0	0	0	0	0	5.82148	0
3153	36473	0	0	0	0	0	5.82148	0
3154	36473	0	0	0	0	0	5.82148	0
3155	36473	0	0	0	0	0	5.82148	0
3156	36473	0	0	0	0	0	5.82148	0
3157	36473	0	0	0	0	0	5.82148	0
3158	36473	0	0	0	0	0	5.82148	0
3159	36473	0	0	0	0	0	5.82148	0
3160	36473	0	0	0	0	0	5.82148	0
3161	36473	0	0	0	0	0	5.82148	0
3162	36473	0	0	0	0	0	5.82148	0
3163	36473	0	0	0	0	0	5.82148	0
3164	36473	0	0	0	0	0	5.82148	0
3165	36473	0	0	0	0	0	5.82148	0
3166	36473	0	0	0	0	0	5.82148	0
3167	36473	0	0	0	0	0	5.82148	0
3168	36473.1	0.394744	397.18	397.182	0	0.101015	5.84045	0
3169	36473.7	2.75283	397.18	397.182	0	0.704454	5.95929	0
3170	36474.6	5.714	397.18	397.181	0	1.05408	6.1219	0
3171	36476.7	9.50657	397.18	397.181	0	1.05327	6.35195	0
3172	36479.9	13.2966	397.18	397.181	0	1.05252	6.60627	0
3173	36484.1	17.0839	397.18	397.181	0	1.05173	6.88481	0
3174	36489.3	20.8684	397.18	397.181	0	1.0509	7.18749	0
3175	36495.7	24.6498	397.18	397.181	0	1.05	7.51424	0
3176	36503	28.4279	397.19	397.188	0	1.04907	7.86498	0
3177	36511.5	32.1954	394.1	394.103	0	1.04134	8.2389	0
3178	36520.9	35.9063	378.73	378.731	0	1.00971	8.6308	0
3179	36531.4	39.3049	335.88	335.882	0	0.890797	9.01025	0
3180	36542.7	42.3407	308.59	308.592	0	0.811594	9.36581	0
3181	36554.9	45.1422	286.73	286.726	0	0.750216	9.70781	0
3182	36567.8	47.7587	271.41	271.412	0	0.707309	10.0393	0
3183	36581.4	50.2271	257.17	257.17	0	0.667372	10.3627	0
3184	36595.7	52.5666	245.48	245.483	0	0.634797	10.6787	0
3185	36610.6	54.792	234.37	234.366	0	0.603822	10.988	0
3186	36626.1	56.9154	225.34	225.336	0	0.578231	11.2909	0
3187	36642.2	58.9513	216.84	216.843	0	0.554432	11.5886	0
3188	36658.9	60.9056	209.74	209.744	0	0.534066	11.881	0
3189	36676	62.7952	204.06	204.06	0	0.514457	13.4515	0
3190	36693.7	64.6173	198.58	198.578	0	0.498796	13.7638	0
3191	36711.9	66.3859	193.77	193.766	0	0.484938	14.0436	0
3192	36730.6	68.1008	189.24	189.237	0	0.470545	14.3393	0
3193	36749.8	69.7674	184.83	184.834	0	0.454681	16.3138	0
3194	36769.4	71.3745	180.56	180.561	0	0.438967	17.8608	0
3195	36789.3	70.4921	-394.9	-353.436	-41.4255	-1.11508	19.0086	3

3196	36808.3	66.4714	-395.5	-365.691	-29.8284	-1.11855	19.6406	3
3197	36826.2	62.4379	-396.2	-369.849	-26.3039	-1.12201	20.2891	3
3198	36843	58.3924	-396.8	-369.848	-26.9133	-1.12525	2.09E+01	3
3199	36858.6	54.3368	-397.3	-369.849	-27.4965	-1.12702	20.9555	3
3200	36873.2	51.3447	-131.7	-131.703	0	-0.466396	20.5439	3
3201	36887.4	50.9117	20.486	20.4856	0	0	20.4856	3
3202	36901.5	50.9117	20.486	20.4856	0	0	20.4856	3
3203	36915.7	50.9117	20.486	20.4856	0	0	20.4856	3
3204	36929.8	50.9117	20.486	20.4856	0	0	20.4856	3
3205	36944	50.9117	20.486	20.4856	0	0	20.4856	3
3206	36958.1	50.9117	34.822	34.8222	0	0	34.7248	3
3207	36972.3	50.9117	36.2	36.1995	0	0	36.1021	3
3208	36986.4	50.9117	37.577	37.5768	0	0	37.4794	3
3209	37000.5	50.9117	38.954	38.954	0	0	38.8566	3
3210	37014.7	50.9117	40.331	40.3313	0	0	40.2339	3
3211	37028.8	50.9117	34.12	34.1199	0	0	34.1199	3
3212	37043	50.9117	34.12	34.1199	0	0	34.1199	3
3213	37057.1	50.9117	34.12	34.1199	0	0	34.1199	3
3214	37071.2	50.9117	34.12	34.1199	0	0	34.1199	3
3215	37085.4	50.9117	34.12	34.1199	0	0	34.1199	3
3216	37099.5	50.9117	34.12	34.1199	0	0	34.1199	3
3217	37113.7	50.9117	27.816	27.8161	0	0	28.3654	3
3218	37127.8	50.9117	20.047	20.0472	0	0	20.5966	3
3219	37142	50.9117	12.278	12.2784	0	0	12.8277	3
3220	37156.1	50.9117	4.5096	4.50955	0	0	5.05889	3
3221	37170.2	50.9117	-3.259	-3.25929	0	0	-2.70995	3
3222	37184.4	50.9117	-13.68	-13.6781	0	0	-10.4788	-20
3223	37198.5	50.9117	-23.62	-23.6158	0	0	-22.986	-20
3224	37212.7	50.9117	-32.38	-32.3773	0	0	-31.7671	-20
3225	37226.8	50.9117	-40.86	-40.8606	0	0	-40.27	-20
3226	37241	50.9117	-49.07	-49.0657	0	0	-48.4946	-20
3227	37255.1	50.9117	-56.42	-56.422	0	0	-49.9057	-20
3228	37269.2	50.9117	-41.65	-41.6542	0	0	-41.7516	-20
3229	37283.4	50.9117	-40.28	-40.2769	0	0	-40.3743	-20
3230	37297.5	50.9117	-38.9	-38.8997	0	0	-38.997	-20
3231	37311.7	50.9117	-37.52	-37.5224	0	0	-37.6198	-20
3232	37325.8	50.9117	-36.15	-36.1451	0	0	-36.2425	-20
3233	37339.9	50.9117	-42.79	-42.7877	0	0	-42.7877	-20
3234	37354.1	50.9117	-42.79	-42.7877	0	0	-42.7877	-20
3235	37368.2	50.9117	-42.79	-42.7877	0	0	-42.7877	-20
3236	37382.4	50.9117	-42.79	-42.7877	0	0	-42.7877	-20
3237	37396.5	50.9117	-42.79	-42.7877	0	0	-42.7877	-20
3238	37410.7	50.9117	-42.79	-42.7877	0	0	-42.7877	-20
3239	37424.8	50.9117	-42.79	-42.7877	0	0	-42.7877	-20
3240	37438.9	50.9117	-42.79	-42.7877	0	0	-42.7877	-20
3241	37453.1	50.9117	-42.79	-42.7877	0	0	-42.7877	-20
3242	37467.2	50.9117	-37.38	-37.3761	0	0	-37.8538	-20
3243	37481.4	50.9117	-30.62	-30.6206	0	0	-31.0983	-20
3244	37495.5	50.9117	-23.87	-23.8651	0	0	-24.3427	-20
3245	37509.7	50.9117	-17.11	-17.1095	0	0	-17.5872	-20
3246	37523.8	50.9117	-10.35	-10.354	0	0	-10.8317	-20
3247	37537.9	50.9117	-3.599	-3.59852	0	0	-4.07621	0
3248	37552	49.9246	-313.4	-313.408	0	-0.775199	-4.56112	0
3249	37565.4	46.2359	-398.4	-369.846	-28.5813	-1.0736	4.69E-02	0

3250	37577.7	42.3461	-398.9	-369.845	-29.0585	-1.0862	4.24759	0
3251	37588.9	38.4129	-399.4	-369.846	-29.5154	-1.0977	8.05608	0
3252	37599	34.442	-399.8	-369.847	-29.9484	-1.10531	10.4463	0
3253	37608.1	30.4677	-400.2	-369.851	-30.3567	-1.10294	9.15946	0
3254	37616	26.5014	-400.6	-369.851	-30.7346	-1.10086	8.00757	0
3255	37622.8	22.5409	-400.9	-369.852	-31.0866	-1.09998	7.32901	0
3256	37628.5	18.5809	-401.3	-369.852	-31.4133	-1.09999	7.00163	0
3257	37633.1	14.621	-401.6	-369.852	-31.7148	-1.09999	6.7009	0
3258	37636.6	10.661	-401.8	-369.852	-31.9868	-1.09999	6.42683	0
3259	37639	6.70116	-398.7	-126.645	-272.011	-1.09995	6.17943	0
3260	37640.2	3.29937	-239.2	-0.809667	-238.394	-1.0108	5.98818	0
3261	37640.8	0.920719	-239.2	-0.225945	-238.977	-0.758424	5.86614	0
3262	37641	0	0	0	0	0	5.82148	0
3263	37641	0	0	0	0	0	5.82148	0
3264	37641	0	0	0	0	0	5.82148	0
3265	37641	0	0	0	0	0	5.82148	0
3266	37641	0	0	0	0	0	5.82148	0
3267	37641	0	0	0	0	0	5.82148	0
3268	37641	0	0	0	0	0	5.82148	0
3269	37641	0	0	0	0	0	5.82148	0
3270	37641	0	0	0	0	0	5.82148	0
3271	37641	0	0	0	0	0	5.82148	0
3272	37641	0	0	0	0	0	5.82148	0
3273	37641	0	0	0	0	0	5.82148	0
3274	37641	0	0	0	0	0	5.82148	0
3275	37641	0	0	0	0	0	5.82148	0
3276	37641	0	0	0	0	0	5.82148	0
3277	37641	0	0	0	0	0	5.82148	0
3278	37641	0	0	0	0	0	5.82148	0
3279	37641.4	1.44533	397.18	397.182	0	0.369862	5.89223	0
3280	37641.9	3.80342	397.18	397.182	0	0.9733	6.01528	0
3281	37643.4	7.404	397.18	397.181	0	1.0537	6.2214	0
3282	37646	11.1954	397.18	397.181	0	1.05293	6.46226	0
3283	37649.6	14.9843	397.18	397.181	0	1.05217	6.72738	0
3284	37654.3	18.7703	397.18	397.181	0	1.05137	7.01668	0
3285	37660	22.5535	397.18	397.181	0	1.05051	7.33009	0
3286	37666.8	26.3334	397.18	397.184	0	1.04959	7.66754	0
3287	37674.7	30.11	396.95	396.947	0	1.04863	8.02895	0
3288	37683.5	33.8587	391.76	391.762	0	1.03448	8.41167	0
3289	37693.5	37.4728	358.98	358.981	0	0.954853	8.80326	0
3290	37704.3	40.69	321.66	321.657	0	0.84779	9.17053	0
3291	37716	43.6161	298.5	298.498	0	0.783644	9.51986	0
3292	37728.5	46.3267	279.79	279.787	0	0.730565	9.85643	0
3293	37741.8	48.8756	264.88	264.881	0	0.688326	10.4971	0
3294	37755.7	51.2753	251.93	251.934	0	0.649226	11.8128	0
3295	37770.2	53.546	240.59	240.591	0	0.614804	13.1668	0
3296	37785.4	55.6967	230.42	230.421	0	0.583177	14.5565	0
3297	37801.2	57.7443	221.88	221.878	0	0.556199	15.9808	0
3298	37817.5	59.6968	213.73	213.733	0	0.530216	17.4377	3
3299	37834.3	61.5645	207.76	207.762	0	0.50969	18.9263	3
3300	37851.7	63.3566	202.37	202.371	0	0.488783	21.2724	3
3301	37869.5	65.0814	197.21	197.212	0	0.470568	22.8309	3
3302	37887.8	66.7469	192.81	192.813	0	0.456433	23.653	3
3303	37906.6	68.3683	188.53	188.53	0	0.445966	23.0885	3

SIMULACIONES, CÁLCULOS Y GRÁFICAS

3304	37925.8	69.9503	184.35	184.351	0	0.433888	23.5366	3
3305	37945.5	71.4904	180.25	180.252	0	0.422329	23.7187	3
3306	37965.5	72.9894	176.26	176.261	0	0.411071	23.8961	3
3307	37986	74.4484	172.38	172.377	0	0.399986	24.1168	3
3308	38006.9	75.8677	168.6	168.599	0	0.389113	24.3658	3
3309	38028.1	77.2485	164.93	164.925	0	0.37853	24.6114	3
3310	38049.8	78.5917	161.35	161.351	0	0.368227	24.8535	3
3311	38071.8	79.8753	107.52	107.515	0	0.258147	25.0876	3
3312	38094	80	25.111	25.1105	0	0	25.1105	3
3313	38116.2	80	25.111	25.1105	0	0	25.1105	3
3314	38138.5	80	25.111	25.1105	0	0	25.1105	3
3315	38160.7	80	25.111	25.1105	0	0	25.1105	3
3316	38182.9	80	25.111	25.1105	0	0	25.1105	3
3317	38205.1	80	25.111	25.1105	0	0	25.1105	3
3318	38227.4	80	25.111	25.1105	0	0	25.1105	3
3319	38249.6	80	25.111	25.1105	0	0	25.1105	3
3320	38271.8	80	25.111	25.1105	0	0	25.1105	3
3321	38294	80	25.111	25.1105	0	0	25.1105	3
3322	38316.2	80	25.111	25.1105	0	0	25.1105	3
3323	38338.5	80	25.111	25.1105	0	0	25.1105	3
3324	38360.7	80	25.111	25.1105	0	0	25.1105	3
3325	38382.9	80	25.111	25.1105	0	0	25.1105	3
3326	38405.1	80	25.111	25.1105	0	0	25.1105	3
3327	38427.4	8.00E+01	25.111	2.51E+01	0	0	25.1105	3
3328	38449.6	80	25.111	25.1105	0	0	25.1105	3
3329	38471.8	80	25.111	25.1105	0	0	25.1105	3
3330	38494	78.9632	-254.5	-254.474	0	-0.716238	24.9209	3
3331	38515.4	75.2559	-394	-331.363	-62.6819	-1.12484	23.4479	3
3332	38535.7	71.214	-394.7	-350.092	-44.6464	-1.1209	21.2942	3
3333	38555	67.1858	-395.4	-363.671	-31.7312	-1.11719	19.2508	3
3334	38573.1	63.1706	-396	-369.849	-26.1901	-1.1137	17.317	3
3335	38590.1	59.1676	-396.6	-369.848	-26.8001	-1.11042	15.4923	0
3336	38605.9	55.176	-397.2	-369.849	-27.381	-1.10736	13.7759	0
3337	38620.7	51.1951	-397.8	-369.849	-27.9282	-1.1045	12.1675	0
3338	38634.4	47.2241	-398.3	-369.847	-28.4499	-1.10186	10.6664	0
3339	38647	43.2618	-398.8	-369.845	-28.9453	-1.09999	9.47678	0
3340	38658.4	39.3018	-399.3	-369.846	-29.4135	-1.09999	9.0099	0
3341	38668.8	35.3419	-399.7	-369.847	-29.8554	-1.1	8.56968	0
3342	38678.1	31.3819	-400.1	-369.85	-30.263	-1.09999	8.15613	0
3343	38686.2	27.4219	-400.5	-369.851	-30.6469	-1.09999	7.76922	0
3344	38693.3	23.462	-400.9	-369.852	-31.0066	-1.09999	7.40898	0
3345	38699.3	19.502	-401.2	-369.852	-31.3409	-1.09999	7.0754	0
3346	38704.1	15.5421	-401.5	-369.852	-31.6499	-1.09999	6.76847	0
3347	38707.9	11.5821	-401.8	-369.852	-31.9306	-1.09999	6.4882	0
3348	38710.5	7.62219	-402	-194.548	-207.445	-1.09996	6.23459	0
3349	38712.1	3.85263	-239.2	-0.945439	-238.258	-1.0695	6.01794	0
3350	38712.6	1.47398	-239.2	-0.361716	-238.842	-0.817125	5.89367	0
3351	38713	0	0	0	0	0	5.82148	0
3352	38713	0	0	0	0	0	5.82148	0
3353	38713	0	0	0	0	0	5.82148	0
3354	38713	0	0	0	0	0	5.82148	0
3355	38713	0	0	0	0	0	5.82148	0
3356	38713	0	0	0	0	0	5.82148	0
3357	38713	0	0	0	0	0	5.82148	0

3358	38713	0	0	0	0	0	5.82148	0
3359	38713	0	0	0	0	0	5.82148	0
3360	38713	0	0	0	0	0	5.82148	0
3361	38713	0	0	0	0	0	5.82148	0
3362	38713	0	0	0	0	0	5.82148	0
3363	38713	0	0	0	0	0	5.82148	0
3364	38713	0	0	0	0	0	5.82148	0
3365	38713	0	0	0	0	0	5.82148	0
3366	38713	0	0	0	0	0	5.82148	0
3367	38713	0	0	0	0	0	5.82148	0
3368	38713.2	0.896847	397.18	397.182	0	0.229504	5.86496	0
3369	38713.8	3.25494	397.18	397.182	0	0.832942	5.98581	0
3370	38714.9	6.52183	397.18	397.181	0	1.05389	6.16886	0
3371	38717.3	10.3138	397.18	397.181	0	1.05311	6.40407	0
3372	38720.7	14.1032	397.18	397.181	0	1.05235	6.66355	0
3373	38725.1	17.89	397.18	397.181	0	1.05156	6.94723	0
3374	38730.6	21.6738	397.18	397.181	0	1.05071	7.25505	0
3375	38737.2	25.4545	397.18	397.182	0	1.04981	7.58691	0
3376	38744.7	29.2319	397.19	397.19	0	1.04886	7.94276	0
3377	38753.4	32.9917	392.98	392.982	0	1.03805	8.32103	0
3378	38763.1	36.666	369.15	369.152	0	0.983095	8.71392	0
3379	38773.7	39.9755	327.61	327.609	0	0.867378	9.08744	0
3380	38785.2	42.9558	303.72	303.724	0	0.798114	9.43975	0
3381	38797.6	45.7121	283.38	283.381	0	0.740547	9.77902	0
3382	38810.6	48.2964	268.27	268.268	0	0.698578	10.1088	0
3383	38824.4	50.7351	254.63	254.633	0	0.660284	10.4305	0
3384	38838.8	53.0475	243.08	243.081	0	0.626282	11.4184	0
3385	38853.8	55.2378	232.34	232.335	0	0.593108	12.8023	0
3386	38869.5	57.3203	223.65	223.647	0	0.565741	14.2213	0
3387	38885.7	59.3064	215.36	215.361	0	0.539388	15.6738	0
3388	38902.4	61.2035	208.85	208.848	0	0.517398	17.158	3
3389	38919.7	63.03	203.35	203.353	0	0.49845	18.6745	3
3390	38937.4	64.7892	198.06	198.061	0	0.479969	20.2217	3
3391	38955.7	66.4849	193.51	193.505	0	0.463307	21.7984	3
3392	38974.4	68.1229	189.18	189.178	0	0.448245	23.0484	3
3393	38993.5	69.7137	184.98	184.976	0	0.436186	23.3106	3
3394	39013.1	71.2616	180.86	180.861	0	0.424375	23.57	3
3395	39033.1	72.7675	176.85	176.852	0	0.412855	23.8262	3
3396	39053.5	74.2298	172.96	172.959	0	0.400824	24.3885	3
3397	39074.3	75.6522	169.17	169.173	0	0.389935	24.635	3
3398	39095.5	77.0378	165.49	165.486	0	3.80E-01	24.5737	3
3399	39117.1	78.3864	161.9	161.897	0	0.369649	24.873	3
3400	39139.1	79.6983	157.39	157.388	0	0.359677	25.0763	3
3401	39161.3	80	25.111	25.1105	0	0	25.1105	3
3402	39183.5	80	25.111	25.1105	0	0	25.1105	3
3403	39205.7	80	25.111	25.1105	0	0	25.1105	3
3404	39228	80	25.111	25.1105	0	0	25.1105	3
3405	39250.2	80	25.111	25.1105	0	0	25.1105	3
3406	39272.4	80	25.111	25.1105	0	0	25.1105	3
3407	39294.6	80	25.111	25.1105	0	0	25.1105	3
3408	39316.8	80	25.111	25.1105	0	0	25.1105	3
3409	39339.1	80	25.111	25.1105	0	0	25.1105	3
3410	39361.3	80	25.111	25.1105	0	0	25.1105	3
3411	39383.5	80	25.782	25.7816	0	0	25.5428	3

3412	39405.7	80	31.089	31.0893	0	0	30.8504	3
3413	39428	80	36.397	36.3969	0	0	36.1581	3
3414	39450.2	80	41.705	41.7045	0	0	41.4657	3
3415	39472.3	79.0206	-249.8	-249.816	0	-0.762712	46.5809	13
3416	39493.8	75.107	-394.1	-332.053	-62.0204	-1.19916	51.0027	13
3417	39514	70.7652	-394.8	-352.171	-42.6449	-1.21219	55.0964	13
3418	39533.1	66.412	-395.5	-365.859	-29.6672	-1.20263	50.8383	13
3419	39550.9	62.1112	-396.2	-369.849	-26.3515	-1.18769	44.6211	13
3420	39567.6	57.8624	-396.8	-369.848	-26.9878	-1.17376	38.8118	13
3421	39583.1	53.6686	-368.4	-368.366	0	-1.13518	33.4048	13
3422	39597.6	51.1241	-74.89	-74.886	0	-0.334279	28.5584	0
3423	39611.7	50.9117	23.826	23.8258	0	0	24.1363	0
3424	39625.9	50.9117	19.435	19.4348	0	0	19.7453	0
3425	39640	50.9117	15.044	15.0437	0	0	15.3542	0
3426	39654.2	50.9117	10.663	10.6626	0	0	10.9631	0
3427	39668.3	50.9117	10.454	10.4542	0	0	10.4542	0
3428	39682.4	50.9117	25.096	25.096	0	0	24.9986	0
3429	39696.6	50.9117	26.473	26.4732	0	0	26.3759	0
3430	39710.7	50.9117	27.851	27.8505	0	0	27.7531	0
3431	39724.9	50.9117	29.228	29.2278	0	0	29.1304	0
3432	39739	50.9117	30.605	30.6051	0	0	30.5077	0
3433	39753.2	50.9117	24.089	24.0885	0	0	24.0885	0
3434	39767.3	50.9117	24.089	24.0885	0	0	24.0885	0
3435	39781.4	50.9117	24.089	24.0885	0	0	24.0885	0
3436	39795.6	50.9117	24.089	24.0885	0	0	24.0885	0
3437	39809.7	50.9117	24.089	24.0885	0	0	24.0885	0
3438	39823.9	50.9117	24.089	24.0885	0	0	24.0885	0
3439	39838	50.9005	-125	-125.043	0	-4.38E-02	24.087	0
3440	39851.8	48.1218	-398.2	-369.848	-28.3334	-1.11112	16.0924	0
3441	39864.6	44.1102	-398.7	-369.845	-28.8429	-1.11281	14.339	0
3442	39876.3	40.1102	-399.2	-369.846	-29.3229	-1.10975	12.7227	0
3443	39886.9	36.1207	-399.6	-369.846	-29.7691	-1.10696	11.2426	0
3444	39896.4	32.1407	-400	-369.849	-30.1849	-1.10447	9.89861	0
3445	39904.8	28.1691	-400.4	-369.851	-30.5755	-1.10227	8.68974	0
3446	39912.1	24.2048	-400.8	-369.852	-30.9421	-1.10037	7.6156	0
3447	39918.2	20.2448	-401.1	-369.852	-31.2826	-1.09999	7.13594	0
3448	39923.3	16.2849	-401.4	-369.852	-31.5938	-1.09999	6.82401	0
3449	39927.3	12.3249	-401.7	-369.852	-31.8776	-1.09998	6.53874	0
3450	39930.1	8.36497	-402	-249.309	-152.659	-1.09997	6.28013	0
3451	39931.9	4.40542	-255.8	-1.08109	-254.737	-1.09983	6.0482	0
3452	39932.5	1.92017	-239.2	-0.47121	-238.732	-0.864465	5.91624	0
3453	39933	0	0	0	0	0	5.82148	0
3454	39933	0	0	0	0	0	5.82148	0
3455	39933	0	0	0	0	0	5.82148	0
3456	39933	0	0	0	0	0	5.82148	0
3457	39933	0	0	0	0	0	5.82148	0
3458	39933	0	0	0	0	0	5.82148	0
3459	39933	0	0	0	0	0	5.82148	0
3460	39933	0	0	0	0	0	5.82148	0
3461	39933	0	0	0	0	0	5.82148	0
3462	39933	0	0	0	0	0	5.82148	0
3463	39933	0	0	0	0	0	5.82148	0
3464	39933	0	0	0	0	0	5.82148	0
3465	39933	0	0	0	0	0	5.82148	0

3466	39933	0	0	0	0	0	5.82148	0
3467	39933	0	0	0	0	0	5.82148	0
3468	39933	0	0	0	0	0	5.82148	0
3469	39933	0	0	0	0	0	5.82148	0
3470	39933.1	0.454522	397.18	397.182	0	0.116313	5.84335	0
3471	39933.7	2.81261	397.18	397.182	0	0.719751	5.96242	0
3472	39934.7	5.81018	397.18	397.181	0	1.05405	6.12744	0
3473	39936.8	9.60268	397.18	397.181	0	1.05325	6.3581	0
3474	39940	13.3926	397.18	397.181	0	1.0525	6.61303	0
3475	39944.2	17.1799	397.18	397.181	0	1.05171	6.89218	0
3476	39949.5	20.9643	397.18	397.181	0	1.05088	7.19547	0
3477	39955.8	24.7456	397.18	397.181	0	1.04998	7.52283	0
3478	39963.2	28.5236	397.19	397.189	0	1.04904	7.87418	0
3479	39971.7	32.2903	393.97	393.969	0	1.04095	8.24864	0
3480	39981.2	35.9976	377.58	377.579	0	1.00651	8.64074	0
3481	39991.7	39.3857	334.86	334.863	0	8.88E-01	9.01951	0
3482	40003	42.4147	308.01	308.007	0	0.809974	9.37466	0
3483	40015.2	45.2104	286.32	286.315	0	0.748908	9.71631	0
3484	40028.1	47.8231	271.04	271.036	0	0.706264	10.0476	0
3485	40041.8	50.2879	256.87	256.867	0	0.666514	10.3708	0
3486	40056	52.6244	245.19	245.194	0	0.633992	10.6866	0
3487	40071	54.8471	234.09	234.091	0	0.603056	10.9958	0
3488	40086.5	56.968	225.12	225.117	0	0.577616	11.2985	0
3489	40102.6	59.0018	216.63	216.632	0	0.553842	11.5961	0
3490	40119.3	60.9542	209.6	209.598	0	0.53365	11.8883	0
3491	40136.5	62.8445	203.91	203.911	0	0.517495	12.1774	0
3492	40154.2	64.6776	198.4	198.397	0	0.501815	12.4636	0
3493	40172.4	66.4571	193.58	193.579	0	0.487929	12.7469	0
3494	40191.1	68.1887	189.01	189.005	0	0.474813	13.0277	0
3495	40210.3	69.8737	184.55	184.554	0	0.462038	13.3058	0
3496	40229.9	71.5133	180.19	180.191	0	0.449515	13.5811	0
3497	40250	73.1084	175.94	175.944	0	0.43731	13.8533	0
3498	40270.5	74.6602	171.81	171.813	0	0.425426	14.1223	0
3499	40291.5	76.1684	147.31	147.312	0	0.395963	14.3876	0
3500	40312.2	72.5979	-394.5	-343.679	-50.8224	-1.09998	13.7657	0
3501	40331.8	68.638	-395.2	-359.567	-35.5995	-1.09999	13.1014	0
3502	40350.3	64.678	-395.8	-369.85	-25.957	-1.1	12.4637	0
3503	40367.7	60.7181	-396.4	-369.848	-26.5699	-1.09999	11.8526	0
3504	40384.1	56.7591	-397	-369.848	-27.1498	-1.09793	10.5069	0
3505	40399.3	52.8785	-330.9	-330.945	0	-0.963268	6.50664	0
3506	40413.6	50.9538	-36.49	-36.4861	0	-0.16229	2.98784	0
3507	40427.8	50.9117	-0.454	-0.45375	0	0	-0.226849	0
3508	40441.9	50.9117	-3.663	-3.66262	0	0	-3.43572	0
3509	40456.1	50.9117	-6.871	-6.87149	0	0	-6.64459	-9.5
3510	40470.2	50.9117	-10.08	-10.0804	0	0	-9.85345	-9.5
3511	40484.3	50.9117	-13.29	-13.2892	0	0	-13.0623	-9.5
3512	40498.5	50.9117	-1.599	-1.59931	0	0	-1.4698	-9.5
3513	40512.6	50.9117	-3.431	-3.43091	0	0	-3.30139	-9.5
3514	40526.8	50.9117	-3.659	-3.65866	0	0	-3.75605	-9.5
3515	40540.9	50.9117	-2.281	-2.28139	0	0	-2.37877	-9.5
3516	40555.1	50.9117	-1.266	-1.26636	0	0	-1.0015	-9.5
3517	40569.2	50.9117	-7.678	-7.6777	0	0	-7.6777	-9.5
3518	40583.3	50.9117	-7.678	-7.6777	0	0	-7.6777	-9.5
3519	40597.5	50.9117	-7.678	-7.6777	0	0	-7.6777	-9.5

3520	40611.6	50.9117	-7.678	-7.6777	0	0	-7.6777	-9.5
3521	40625.8	50.9117	-6.488	-6.48796	0	0	-6.64321	-9.5
3522	40639.9	50.9117	-4.292	-4.29242	0	0	-4.44767	-9.5
3523	40654	50.9117	-2.097	-2.09688	0	0	-2.25213	-9.5
3524	40668.2	50.9117	#####	9.87E-02	0	0	-5.66E-02	-9.5
3525	40682.3	50.9117	2.2942	2.2942	0	0	2.13895	-9.5
3526	40696.5	50.9117	4.4897	4.48974	0	0	4.3345	-3
3527	40710.6	50.9117	2.454	2.45395	0	0	6.53004	-3
3528	40724.8	50.9117	0.6751	0.675091	0	0	0.617231	-3
3529	40738.9	50.9117	1.4934	1.49336	0	0	1.4355	-3
3530	40753	50.9117	2.3116	2.31163	0	0	2.25377	-3
3531	40767.2	50.9117	1.7195	1.7195	0	0	1.81689	-3
3532	40781.3	50.926	49.282	49.2816	0	7.51E-02	0.441513	-3
3533	40795.6	52.5368	245.63	245.632	0	0.662331	0.64321	-3
3534	40810.6	54.8588	234.03	234.033	0	0.630009	0.965981	-3
3535	40826.1	57.0748	224.67	224.672	0	0.603468	1.28257	-3
3536	40842.1	56.7032	-393.7	-369.848	-23.8933	-1.0725	1.2289	-3
3537	40857.5	54.1982	-99.01	-99.0074	0	-3.22E-01	0.873223	-3
3538	40872.5	54	0.8455	0.845538	0	0	0.845538	-3
3539	40887.5	54	0.8455	0.845538	0	0	0.845538	-3
3540	40902.5	54	0.8455	0.845538	0	0	0.845538	-3
3541	40917.5	54	0.8455	0.845538	0	0	0.845538	-3
3542	40932.5	54	6.4239	6.42391	0	0	0.845538	-3
3543	40947.5	54	14.269	14.2685	0	0	14.1819	-3
3544	40962.5	54	15.567	15.567	0	0	15.4804	-3
3545	40977.5	54	16.866	16.8655	0	0	16.7789	-3
3546	40992.5	54	18.164	18.164	0	0	18.0774	-3
3547	41007.5	54	12.965	12.9649	0	0	12.9649	-3
3548	41022.5	54	12.965	12.9649	0	0	12.9649	-3
3549	41037.5	54	12.965	12.9649	0	0	12.9649	-3
3550	41052.5	54	12.965	12.9649	0	0	12.9649	-3
3551	41067.5	54	12.965	12.9649	0	0	12.9649	-3
3552	41082.5	54	17.007	17.0071	0	0	16.4578	-3
3553	41097.5	54	25.247	25.2472	0	0	24.6979	-3
3554	41112.5	54	33.487	33.4873	0	0	32.938	-3
3555	41127.5	54	41.727	41.7274	0	0	41.1781	-3
3556	41142.5	54	49.968	49.9675	0	0	49.4182	-3
3557	41157.5	54	58.208	58.2076	0	0	57.6583	20
3558	41172.5	54	59.846	59.8463	0	0	59.3835	20
3559	41187.5	54	66.788	66.7878	0	0	66.3251	20
3560	41202.5	54	73.729	73.7294	0	0	73.2667	20
3561	41217.5	54	79.376	79.3755	0	0	79.4621	20
3562	41232.5	54	78.077	78.077	0	0	78.1636	20
3563	41247.5	54.7627	234.51	234.513	0	0.423454	77.86	20
3564	41262.9	56.2512	228.11	228.107	0	0.405325	78.0715	20
3565	41278.7	57.1468	-29.77	-29.7732	0	-0.341364	78.2006	20
3566	41294.6	56.921	74.506	74.5058	0	0	74.9835	20
3567	41310.4	56.921	66.953	66.9529	0	0	67.4306	20
3568	41326.2	56.921	59.4	59.4	0	0	59.8777	20
3569	41342	56.921	51.847	51.8471	0	0	52.3248	20
3570	41357.8	56.921	55.452	55.4519	0	0	55.8517	20
3571	41373.6	56.921	49.131	49.1309	0	0	49.5307	0
3572	41389.4	56.921	42.81	42.8099	0	0	43.2096	0
3573	41405.2	56.921	36.489	36.4888	0	0	36.8886	0

3574	41421.1	56.921	30.168	30.1678	0	0	30.5676	0
3575	41436.9	56.921	22.199	22.1992	0	0	22.1992	0
3576	41452.7	56.921	22.199	22.1992	0	0	22.1992	0
3577	41468.5	56.921	22.199	22.1992	0	0	22.1992	0
3578	41484.3	56.921	22.199	22.1992	0	0	22.1992	0
3579	41500.1	56.2329	-224.4	-224.39	0	-0.612754	22.1002	0
3580	41515.3	52.7113	-397.6	-369.849	-27.7199	-1.12937	21.606	0
3581	41529.3	48.6455	-398.1	-369.848	-28.2657	-1.12938	21.0617	0
3582	41542.3	44.5944	-398.6	-369.845	-28.7846	-1.11419	14.9081	0
3583	41554.1	40.5882	-399.1	-369.845	-29.2674	-1.1117	13.5051	0
3584	41564.8	36.5906	-399.6	-369.846	-29.7166	-1.10945	12.217	0
3585	41574.4	32.6007	-400	-369.849	-30.1376	-1.10743	11.0433	0
3586	41582.9	28.6175	-400.4	-369.851	-30.5328	-1.10565	9.98345	0
3587	41590.3	24.6405	-400.8	-369.852	-30.9042	-1.1041	9.03751	0
3588	41596.6	20.6685	-401.1	-369.852	-31.248	-1.10278	8.20482	0
3589	41601.8	16.701	-401.4	-369.852	-31.5616	-1.10168	7.48508	0
3590	41605.9	12.7369	-401.7	-369.852	-31.8482	-1.10082	6.87817	0
3591	41608.9	8.7755	-402	-279.576	-122.374	-1.10019	6.38426	0
3592	41610.7	4.81588	-281.4	-1.18182	-280.174	-1.09985	6.07101	0
3593	41611.5	2.16675	-239.2	-0.531723	-238.672	-0.890628	5.92887	0
3594	41612	0	0	0	0	0	5.82148	0
3595	41612	0	0	0	0	0	5.82148	0
3596	41612	0	0	0	0	0	5.82148	0
3597	41612	0	0	0	0	0	5.82148	0
3598	41612	0	0	0	0	0	5.82148	0
3599	41612	0	0	0	0	0	5.82148	0
3600	41612	0	0	0	0	0	5.82148	0
3601	41612	0	0	0	0	0	5.82148	0
3602	41612	0	0	0	0	0	5.82148	0
3603	41612	0	0	0	0	0	5.82148	0
3604	41612	0	0	0	0	0	5.82148	0
3605	41612	0	0	0	0	0	5.82148	0
3606	41612	0	0	0	0	0	5.82148	0
3607	41612	0	0	0	0	0	5.82E+00	0
3608	41612	0	0	0	0	0	5.82148	0
3609	41612	0	0	0	0	0	5.82148	0
3610	41612	0	0	0	0	0	5.82148	0
3611	41612.1	0.210064	397.18	397.182	0	5.38E-02	5.83154	0
3612	41612.6	2.56815	397.18	397.182	0	0.657194	5.94964	0
3613	41613.5	5.41687	397.18	397.181	0	1.05414	6.10491	0
3614	41615.5	9.20963	397.18	397.181	0	1.05333	6.33306	0
3615	41618.6	12.9998	397.18	397.181	0	1.05258	6.58548	0
3616	41622.7	16.7874	397.18	397.181	0	1.0518	6.86212	0
3617	41627.9	20.5721	397.18	397.181	0	1.05097	7.16291	0
3618	41634.1	24.3537	397.18	397.181	0	1.05008	7.48778	0
3619	41641.4	28.1321	397.19	397.188	0	1.04914	7.83665	0
3620	41649.8	31.9019	394.52	394.516	0	1.04255	8.20891	0
3621	41659.1	35.6216	382.32	382.32	0	1.01969	8.5999	0
3622	41669.5	39.0537	339.05	339.049	0	0.899572	8.98154	0
3623	41680.8	42.1128	310.4	310.397	0	0.817655	8.94642	0
3624	41692.9	44.9409	288.01	288.013	0	0.758821	8.13509	0
3625	41705.8	47.5897	272.4	272.401	0	0.717566	7.24169	0
3626	41719.3	50.1004	257.8	257.803	0	0.680334	6.27343	0
3627	41733.6	52.4915	245.86	245.858	0	0.650532	5.23451	0

010436

3628	41748.5	54.7793	234.43	234.43	0	0.622536	4.12868	-4
3629	41764	56.9759	225.08	225.084	0	0.600055	2.95914	-4
3630	41780.1	59.0964	216.24	216.238	0	0.579426	1.72919	-4
3631	41796.8	61.1479	209.02	209.015	0	0.562973	0.441104	-4
3632	41814.1	63.1504	202.99	202.991	0	0.550306	-0.90119	-4
3633	41831.9	65.1019	197.16	197.158	0	0.534286	-0.844567	-4
3634	41850.3	66.998	192.15	192.15	0	0.519923	-0.541189	-4
3635	41869.1	68.8431	187.28	187.276	0	0.505941	-0.24009	-4
3636	41888.5	70.6386	182.52	182.52	0	0.492291	5.85E-02	-4
3637	41908.4	72.3855	177.87	177.869	0	0.478929	0.354198	-4
3638	41928.7	74.085	173.34	173.344	0	0.465918	0.646884	-4
3639	41949.5	75.7383	168.94	168.944	0	0.453251	0.93633	-4
3640	41970.8	77.3467	164.66	164.664	0	0.440922	1.22237	-4
3641	41992.5	78.9113	160.5	160.5	0	0.428918	1.50485	-4
3642	42014.6	80	1.7039	1.70385	0	0	1.70385	-4
3643	42036.8	80	1.7039	1.70385	0	0	1.70385	-4
3644	42059	80	1.7039	1.70385	0	0	1.70385	-4
3645	42081.3	80	1.7039	1.70385	0	0	1.70385	-4
3646	42103.5	79.8297	-122.3	-122.299	0	-0.297912	1.6726	-4
3647	42125.4	77.258	-393.7	-322.092	-71.5934	-1.06395	1.20648	-4
3648	42146.3	73.4276	-394.4	-339.835	-54.5249	-1.06449	0.73272	-4
3649	42166.2	69.5857	-395	-356.888	-38.1241	-1.06961	1.98006	-4
3650	42184.9	65.7258	-395.6	-367.798	-27.8427	-1.07444	3.14744	-4
3651	42202.7	61.8491	-396.2	-369.849	-26.3951	-1.079	4.23486	-4
3652	42219.3	57.9564	-396.8	-369.848	-26.977	-1.08328	5.24243	0
3653	42234.9	54.0488	-397.4	-369.849	-27.5363	-1.08729	6.17019	0
3654	42249.3	50.1273	-397.9	-369.849	-28.0739	-1.09102	7.01813	0
3655	42262.7	46.1929	-398.4	-369.846	-28.584	-1.09446	7.78636	0
3656	42275	42.2467	-398.9	-369.845	-29.0678	-1.09762	8.47499	0
3657	42286.2	38.2897	-399.4	-369.846	-29.5266	-1.09999	8.89486	0
3658	42296.3	34.3298	-399.8	-369.847	-29.96	-1.09999	8.46145	0
3659	42305.2	30.3698	-400.2	-369.851	-30.3662	-1.1	8.05471	0
3660	42313.1	26.4099	-400.6	-369.851	-30.7434	-1.09999	7.67462	0
3661	42319.9	22.4499	-400.9	-369.852	-31.0945	-1.09998	7.32119	0
3662	42325.6	18.4899	-401.3	-369.852	-31.4205	-1.09999	6.99442	0
3663	42330.2	14.53	-401.6	-369.852	-31.7212	-1.09999	6.6943	0
3664	42333.7	10.57	-401.8	-369.852	-31.9922	-1.09999	6.42085	0
3665	42336.1	6.61016	-393	-119.936	-273.058	-1.09995	6.17406	0
3666	42337.2	3.2447	-239.2	-0.796252	-238.407	-1.005	5.98527	0
3667	42337.8	0.866052	-239.2	-0.21253	-238.991	-0.752624	5.86345	0
3668	42338	0	0	0	0	0	5.82148	0
3669	42338	0	0	0	0	0	5.82148	0
3670	42338	0	0	0	0	0	5.82148	0
3671	42338	0	0	0	0	0	5.82148	0
3672	42338	0	0	0	0	0	5.82148	0
3673	42338	0	0	0	0	0	5.82148	0
3674	42338	0	0	0	0	0	5.82148	0
3675	42338	0	0	0	0	0	5.82148	0
3676	42338	0	0	0	0	0	5.82148	0
3677	42338	0	0	0	0	0	5.82148	0
3678	42338	0	0	0	0	0	5.82148	0
3679	42338	0	0	0	0	0	5.82148	0
3680	42338	0	0	0	0	0	5.82148	0
3681	42338	0	0	0	0	0	5.82148	0

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

010437

3682	42338	0	0	0	0	0	5.82148	0
3683	42338	0	0	0	0	0	5.82148	0
3684	42338	0	0	0	0	0	5.82148	0
3685	42338.4	1.49952	397.18	397.182	0	0.38373	5.89495	0
3686	42338.9	3.85761	397.18	397.182	0	0.987168	6.01821	0
3687	42340.5	7.49117	397.18	397.181	0	1.05368	6.22666	0
3688	42343	11.2826	397.18	397.181	0	1.05292	6.46809	0
3689	42346.7	15.0713	397.18	397.181	0	1.05216	6.73376	0
3690	42351.4	18.8573	397.18	397.181	0	1.05135	7.02361	0
3691	42357.2	22.6404	397.18	397.181	0	1.05049	7.33758	0
3692	42364	26.4203	397.18	397.184	0	1.04957	7.67558	0
3693	42371.9	30.1968	396.88	396.876	0	1.05E+00	8.03754	0
3694	42380.8	33.9443	391.64	391.642	0	1.03412	8.42068	0
3695	42390.7	37.5513	357.99	357.99	0	0.952104	8.81202	0
3696	42401.6	40.7598	321.11	321.105	0	0.846259	9.1787	0
3697	42413.3	43.6806	297.99	297.988	0	0.782232	9.52771	0
3698	42425.8	46.387	279.43	279.434	0	0.729585	9.86406	0
3699	42439.1	48.9331	264.54	264.544	0	0.688238	10.1918	0
3700	42453	51.3378	251.62	251.622	0	0.651897	10.5116	0
3701	42467.6	53.6231	240.21	240.206	0	0.620093	10.8245	0
3702	42482.8	55.798	230	229.998	0	0.591288	11.1306	0
3703	42498.6	57.8542	221.42	221.42	0	0.550644	17.5777	0
3704	42514.9	59.7538	213.5	213.495	0	0.507355	25.6627	0
3705	42531.8	61.5066	207.94	207.936	0	0.469546	33.9736	0
3706	42549.1	63.1281	203.06	203.058	0	0.433366	42.493	0
3707	42566.8	64.6204	198.57	198.569	0	0.397725	51.2033	20
3708	42585	65.9868	194.82	194.821	0	0.36355	60.0867	20
3709	42603.5	67.2324	191.53	191.53	0	0.33027	69.127	20
3710	42622.3	68.3592	188.55	188.554	0	0.297461	78.3078	20
3711	42641.4	69.4003	185.8	185.804	0	0.28519	80.1034	20
3712	42660.9	70.4124	183.12	183.122	0	0.277496	80.2719	20
3713	42680.5	71.3971	180.5	180.5	0	0.269971	80.4376	20
3714	42700.5	72.3551	177.95	177.95	0	0.262646	80.6004	20
3715	42720.7	73.2871	175.47	175.468	0	0.255515	80.7602	20
3716	42741.2	74.1938	173.05	173.054	0	0.248575	80.9172	20
3717	42762	75.0759	170.71	170.706	0	0.24182	81.0712	20
3718	42782.9	75.931	168.43	168.431	0	0.229035	83.5337	20
3719	42804.1	76.8279	166.04	166.044	0	0.27136	65.457	20
3720	42825.6	77.8919	163.21	163.213	0	0.317636	45.4702	20
3721	42847.4	79.1198	159.95	159.946	0	0.359057	26.8466	20
3722	42869.6	80	2.1831	2.18314	0	0	3.13852	-20
3723	42891.8	80	-19.05	-19.0474	0	0	-18.092	-20
3724	42914	80	-40.3	-40.3023	0	0	-39.3225	-20
3725	42936.2	80	-51.02	-51.0154	0	0	-50.9992	-20
3726	42958.5	80	-51.38	-51.3761	0	0	-51.3599	-20
3727	42980.7	80	-51.74	-51.7368	0	0	-51.7206	-20
3728	43002.9	80	-51.8	-51.7971	0	0	-51.7971	-20
3729	43025.1	80	-51.8	-51.7971	0	0	-51.7971	-20
3730	43047.4	80	-51.8	-51.7971	0	0	-51.7971	-20
3731	43069.6	80	-51.8	-51.7971	0	0	-51.7971	-20
3732	43091.8	80	-51.8	-51.7971	0	0	-51.7971	-20
3733	43114	80	-51.8	-51.7959	0	0	-51.7971	-20
3734	43136.2	80	-40.07	-40.0722	0	0	-40.6216	-20
3735	43158.5	80	-27.86	-27.8647	0	0	-28.414	-20

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

010433

3736	43180.7	80	-15.66	-15.6571	0	0	-16.2065	-20
3737	43202.9	80	-3.45	-3.44957	0	0	-3.99891	3
3738	43225.1	80	8.758	8.75798	0	0	8.20864	3
3739	43247.4	80	20.966	20.9655	0	0	20.4162	3
3740	43269.6	80	25.111	25.1105	0	0	25.1105	3
3741	43291.8	80	25.111	25.1105	0	0	25.1105	3
3742	43314	80	29.248	29.2481	0	0	29.2221	3
3743	43336.2	80	29.825	29.8252	0	0	29.7992	3
3744	43358.5	80	30.402	30.4023	0	0	30.3763	3
3745	43380.7	80	28.746	28.7463	0	0	28.7463	3
3746	43402.9	80	28.746	28.7463	0	0	28.7463	3
3747	43425.1	80	28.746	28.7463	0	0	28.7463	3
3748	43447.4	80	28.746	28.7463	0	0	28.7463	3
3749	43469.6	80	28.746	28.7463	0	0	28.7463	3
3750	43491.8	80	28.746	28.7463	0	0	28.7463	3
3751	43514	80	28.746	28.7463	0	0	28.7463	3
3752	43536.2	80	28.746	28.7463	0	0	28.7463	3
3753	43558.4	79.5156	-176.8	-176.786	0	-0.51619	28.3318	3
3754	43580.1	76.2447	-393.9	-326.785	-67.0831	-1.13175	26.1886	3
3755	43600.7	72.1823	-394.6	-345.605	-48.9672	-1.1226	22.0873	3
3756	43620.2	68.1507	-395.2	-360.944	-34.3013	-1.11747	19.5113	3
3757	43638.6	64.1371	-395.9	-369.85	-26.0404	-1.11264	17.0748	0
3758	43655.9	60.1403	-396.5	-369.848	-26.6581	-1.10811	14.7769	0
3759	43672	56.1591	-397.1	-369.848	-27.2385	-1.10421	12.7496	0
3760	43687.1	52.1896	-397.6	-369.849	-27.7915	-1.1013	11.1163	0
3761	43701	48.2286	-398.2	-369.848	-28.3198	-1.09999	10.1	0
3762	43713.9	44.2687	-398.7	-369.845	-28.824	-1.09999	9.59974	0
3763	43725.6	40.3087	-399.1	-369.845	-29.3003	-1.1	9.12608	0
3764	43736.3	36.3487	-399.6	-369.846	-29.7437	-1.09999	8.67909	0
3765	43745.8	32.3888	-400	-369.849	-30.1595	-1.09998	8.25875	0
3766	43754.3	28.4288	-400.4	-369.851	-30.5509	-1.09999	7.86507	0
3767	43761.6	24.4688	-400.8	-369.852	-30.9192	-1.09999	7.49805	0
3768	43767.8	20.5089	-401.1	-369.852	-31.2613	-1.09999	7.15769	0
3769	43773	16.5489	-401.4	-369.852	-31.5736	-1.09999	6.84398	0
3770	43777	12.589	-401.7	-369.852	-31.8587	-1.09998	6.55694	0
3771	43780	8.62902	-402	-268.777	-133.182	-1.09997	6.29655	0
3772	43781.8	4.66945	-272.2	-1.14589	-271.099	-1.09985	6.06284	0
3773	43782.5	2.07878	-239.2	-0.510135	-238.693	-0.881295	5.92435	0
3774	43783	0	0	0	0	0	5.82148	0
3775	43783	0	0	0	0	0	5.82148	0
3776	43783	0	0	0	0	0	5.82148	0
3777	43783	0	0	0	0	0	5.82148	0
3778	43783	0	0	0	0	0	5.82148	0
3779	43783	0	0	0	0	0	5.82148	0
3780	43783	0	0	0	0	0	5.82148	0
3781	43783	0	0	0	0	0	5.82148	0
3782	43783	0	0	0	0	0	5.82148	0
3783	43783	0	0	0	0	0	5.82148	0
3784	43783	0	0	0	0	0	5.82148	0
3785	43783	0	0	0	0	0	5.82148	0
3786	43783	0	0	0	0	0	5.82148	0
3787	43783	0	0	0	0	0	5.82148	0
3788	43783	0	0	0	0	0	5.82148	0
3789	43783	0	0	0	0	0	5.82148	0

3790	43783	0	0	0	0	0	5.82148	0
3791	43783.1	0.297274	397.18	397.182	0	7.61E-02	5.83574	0
3792	43783.6	2.65536	397.18	397.182	0	0.679511	5.95419	0
3793	43784.6	5.55718	397.18	397.181	0	1.05411	6.11292	0
3794	43786.6	9.34985	397.18	397.181	0	1.0533	6.34196	0
3795	43789.7	13.14	397.18	397.181	0	1.05255	6.59528	0
3796	43793.9	16.9274	397.18	397.181	0	1.05177	6.87281	0
3797	43799.1	20.712	397.18	397.181	0	1.05093	7.1745	0
3798	43805.4	24.4935	397.18	397.181	0	1.05004	7.50025	0
3799	43812.7	28.2718	397.19	397.188	0	1.04911	7.85001	0
3800	43821.1	32.0405	394.32	394.321	0	1.04198	8.22306	0
3801	43830.5	35.756	380.63	380.625	0	1.01498	8.61447	0
3802	43840.9	39.1729	337.55	337.546	0	0.895407	8.99515	0
3803	43852.2	42.2202	309.55	309.547	0	0.814237	9.35139	0
3804	43864.4	45.0307	287.43	287.429	0	0.75266	9.69394	0
3805	43877.2	47.6535	272.03	272.027	0	0.709017	10.0257	0
3806	43890.8	50.1331	257.64	257.642	0	0.672668	8.903	0
3807	43905.1	52.502	245.81	245.806	0	0.645591	7.00935	0
3808	43920	54.777	234.44	234.441	0	0.62018	5.01187	0
3809	43935.2	53.1413	-357.6	-357.564	0	-1.02393	2.42686	0
3810	43949.6	50.9986	-61.99	-61.9891	0	-0.222843	-0.1002	0
3811	43963.7	50.9117	-2.463	-2.463	0	0	-2.30775	-6.5
3812	43977.8	50.9117	-4.659	-4.65854	0	0	-4.50329	-6.5
3813	43992	50.9117	-6.854	-6.85408	0	0	-6.69883	-6.5
3814	44006.1	50.9117	-9.05	-9.04962	0	0	-8.89437	-6.5
3815	44020.3	50.9117	-11.22	-11.224	0	0	-11.0899	-6.5
3816	44034.4	50.9117	3.5432	3.54323	0	0	3.44584	-6.5
3817	44048.6	50.9117	4.9205	4.9205	0	0	4.82311	-6.5
3818	44062.7	50.9117	6.2978	6.29777	0	0	6.20038	-6.5
3819	44076.8	50.9117	7.675	7.67504	0	0	7.57765	-6.5
3820	44091	50.9117	9.0523	9.05231	0	0	8.95492	-6.5
3821	44105.1	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3822	44119.3	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3823	44133.4	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3824	44147.6	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3825	44161.7	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3826	44175.8	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3827	44190	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3828	44204.1	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3829	44218.3	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3830	44232.4	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3831	44246.5	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3832	44260.7	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3833	44274.8	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3834	44289	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3835	44303.1	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3836	44317.3	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3837	44331.4	50.9117	0.6594	0.659356	0	0	0.704893	-6.5
3838	44345.5	50.9117	7.1744	7.17441	0	0	7.17441	-6.5
3839	44359.7	50.9117	7.1744	7.17441	0	0	7.17441	-6.5
3840	44373.8	50.9117	7.1744	7.17441	0	0	7.17441	-6.5
3841	44388	50.9117	7.1744	7.17441	0	0	7.17441	-6.5
3842	44402.1	50.9117	8.4998	8.49984	0	0	8.40245	-6.5
3843	44416.3	50.9117	2.3537	2.35372	0	0	2.35372	-6.5

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

010400

3844	44430.4	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3845	44444.5	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3846	44458.7	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3847	44472.8	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3848	44487	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3849	44501.1	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3850	44515.2	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3851	44529.4	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3852	44543.5	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3853	44557.7	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3854	44571.8	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3855	44586	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3856	44600.1	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3857	44614.2	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3858	44628.4	50.9117	2.3537	2.35372	0	0	2.35372	-6.5
3859	44642.5	50.9117	-5.713	-5.71253	0	0	-5.61514	-6.5
3860	44656.7	50.9117	-7.09	-7.0898	0	0	-6.99241	-6.5
3861	44670.8	50.9117	-8.467	-8.46707	0	0	-8.36968	-6.5
3862	44685	50.9117	-9.844	-9.84434	0	0	-9.74695	-6.5
3863	44699.1	50.9124	12.144	12.1443	0	5.36E-03	-10.7046	-6.5
3864	44713.4	52.3461	246.59	246.585	0	0.696626	-11.0862	-6.5
3865	44728.3	54.7884	234.38	234.384	0	0.662625	-10.7473	-6.5
3866	44743.8	57.1186	224.49	224.489	0	0.634571	-10.4144	-6.5
3867	44760	59.3529	215.17	215.167	0	0.608445	-10.0866	-6.5
3868	44776.8	61.4413	208.13	208.133	0	0.565815	-1.49625	-6.5
3869	44794.1	63.4135	202.2	202.2	0	0.531833	5.15014	-6.5
3870	44812	65.2645	196.73	196.728	0	0.498516	11.9781	-6.5
3871	44830.4	67.0011	192.14	192.142	0	0.475824	18.9755	-6.5
3872	44849.2	68.6594	187.76	187.761	0	0.446381	22.3203	7
3873	44868.5	70.2122	183.66	183.655	0	0.417817	28.7976	7
3874	44888.2	71.663	179.79	179.793	0	0.389582	35.3961	7
3875	44908.3	73.0129	176.2	176.199	0	0.361772	42.1063	7
3876	44928.7	74.286	172.81	172.809	0	0.348797	43.5234	7
3877	44949.6	75.5237	169.52	1.70E+02	0	0.339317	43.74	7
3878	44970.7	76.3675	43.889	43.8893	0	0	43.8893	7
3879	44991.9	76.3675	40.098	40.0977	0	0	40.141	7
3880	45013.1	76.3675	39.18	39.1796	0	0	39.2228	7
3881	45034.3	76.3675	38.261	38.2614	0	0	38.3047	7
3882	45055.6	76.7758	166.18	166.183	0	0.346071	37.9022	7
3883	45077.1	78.0038	162.92	162.915	0	0.336655	38.1224	7
3884	45098.9	79.1989	147.7	147.697	0	0.32879	37.8558	7
3885	45120.6	76.3962	-393.8	-326.083	-67.7565	-1.15197	33.7214	7
3886	45141.2	72.2668	-394.6	-345.213	-49.3436	-1.14266	29.5506	7
3887	45160.8	68.1699	-395.2	-360.89	-34.3519	-1.13388	25.6051	7
3888	45179.1	64.1038	-395.9	-369.849	-26.045	-1.12561	21.8825	0
3889	45196.4	60.0666	-396.5	-369.848	-26.6685	-1.11785	18.3805	0
3890	45212.5	56.0564	-397.1	-369.848	-27.2529	-1.11057	15.097	0
3891	45227.5	52.0715	-397.7	-369.849	-27.8072	-1.10381	12.0299	0
3892	45241.4	48.1079	-398.2	-369.848	-28.3354	-1.09999	10.0844	0
3893	45254.2	44.1479	-398.7	-369.845	-28.8385	-1.09999	9.5849	0
3894	45266	40.188	-399.2	-369.845	-29.3143	-1.1	9.11206	0
3895	45276.6	36.228	-399.6	-369.846	-29.7572	-1.09999	8.66588	0
3896	45286.1	32.268	-400	-369.849	-30.1719	-1.09998	8.24635	0
3897	45294.5	28.3081	-400.4	-369.851	-30.5624	-1.09999	7.85349	0

SIMULACIONES, CÁLCULOS Y GRÁFICAS

010431

3898	45301.8	24.3481	-400.8	-369.852	-30.9297	-1.09999	7.48728	0
3899	45308	20.3881	-401.1	-369.852	-31.2713	-1.09999	7.14773	0
3900	45313.1	16.4282	-401.4	-369.852	-31.5829	-1.09999	6.83484	0
3901	45317.1	12.4682	-401.7	-369.852	-31.8673	-1.09998	6.5486	0
3902	45320.1	8.50829	-402	-259.876	-142.088	-1.09997	6.28903	0
3903	45321.8	4.54873	-264.7	-1.11626	-263.618	-1.09984	6.05613	0
3904	45322.5	2.00626	-239.2	-0.492337	-238.711	-0.8736	5.92064	0
3905	45323	0	0	0	0	0	5.82148	0
3906	45323	0	0	0	0	0	5.82148	0
3907	45323	0	0	0	0	0	5.82148	0
3908	45323	0	0	0	0	0	5.82148	0
3909	45323	0	0	0	0	0	5.82148	0
3910	45323	0	0	0	0	0	5.82148	0
3911	45323	0	0	0	0	0	5.82148	0
3912	45323	0	0	0	0	0	5.82148	0
3913	45323	0	0	0	0	0	5.82148	0
3914	45323	0	0	0	0	0	5.82148	0
3915	45323	0	0	0	0	0	5.82148	0
3916	45323	0	0	0	0	0	5.82148	0
3917	45323	0	0	0	0	0	5.82148	0
3918	45323	0	0	0	0	0	5.82148	0
3919	45323	0	0	0	0	0	5.82148	0
3920	45323	0	0	0	0	0	5.82148	0
3921	45323	0	0	0	0	0	5.82148	0
3922	45323.1	0.369173	397.18	397.182	0	9.45E-02	5.83921	0
3923	45323.7	2.72726	397.18	397.182	0	0.69791	5.95795	0
3924	45324.6	5.67286	397.18	397.181	0	1.05408	6.11954	0
3925	45326.7	9.46546	397.18	397.181	0	1.05328	6.34933	0
3926	45329.8	13.2555	397.18	397.181	0	1.05253	6.60338	0
3927	45334	17.0429	397.18	397.181	0	1.05174	6.88166	0
3928	45339.3	20.8274	397.18	397.181	0	1.05091	7.18407	0
3929	45345.6	24.6088	397.18	397.181	0	1.05001	7.51056	0
3930	45353	28.3869	397.19	397.188	0	1.04908	7.86105	0
3931	45361.4	32.1547	394.16	394.16	0	1.04151	8.23474	0
3932	45370.8	35.8668	379.23	379.228	0	1.01109	8.62651	0
3933	45381.3	39.2703	336.32	336.318	0	0.892004	9.0063	0
3934	45392.6	42.3091	308.84	308.843	0	0.812288	9.36202	0
3935	45404.7	45.113	286.91	286.91	0	0.750857	9.70417	0
3936	45417.6	47.7311	271.57	271.574	0	0.707757	10.0357	0
3937	45431.2	50.2011	257.3	257.3	0	0.667738	10.3592	0
3938	45445.5	52.5418	245.61	245.607	0	0.635141	10.6753	0
3939	45460.4	54.7685	234.48	234.484	0	0.604149	10.9847	0
3940	45475.9	56.8929	225.43	225.43	0	0.578494	11.2877	0
3941	45492	58.9297	216.93	216.933	0	0.554685	11.5854	0
3942	45508.7	60.8847	209.81	209.807	0	0.534244	11.8778	0
3943	45525.8	62.7771	204.11	204.114	0	0.518071	12.167	0
3944	45543.5	64.6122	198.59	198.594	0	0.502374	12.4533	0
3945	45561.7	66.3935	193.75	193.746	0	0.488411	12.7367	0
3946	45580.4	68.1268	189.17	189.168	0	0.475282	13.0176	0
3947	45599.6	69.8135	184.71	184.713	0	0.462495	13.2958	0
3948	45619.2	71.4547	180.35	180.347	0	0.449963	13.5712	0
3949	45639.3	73.0514	176.1	176.096	0	0.437746	13.8435	0
3950	45659.8	74.6054	171.96	171.959	0	0.428027	13.3045	0
3951	45680.7	75.1084	-394.1	-332.047	-62.0183	-1.07358	4.40233	0

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

012492

3952	45701	71.2884	-394.7	-349.747	-44.9723	-1.05002	-4.99604	0
3953	45720.3	67.5509	-395.3	-362.639	-32.6981	-1.02769	-13.9048	0
3954	45738.6	63.8918	-395.9	-369.849	-26.0732	-1.00655	-22.336	-18
3955	45755.8	60.3066	-396.5	-369.848	-26.6283	-0.986577	-30.3008	-18
3956	45772.1	56.7888	-397	-369.848	-27.1422	-0.971296	-36.487	-18
3957	45787.4	53.3228	-397.5	-369.849	-27.6233	-0.955783	-42.7347	-18
3958	45801.8	51.0403	-125.4	-125.409	0	-0.266266	-47.547	-18
3959	45815.9	50.9117	-46.56	-46.5649	0	0	-46.6615	-18
3960	45830.1	50.9117	-45.21	-45.2128	0	0	-45.3075	-18
3961	45844.2	50.9117	-48.44	-48.4358	0	0	-48.4358	-18
3962	45858.4	50.9117	-43.95	-43.9548	0	0	-44.0376	-18
3963	45872.5	50.9117	-42.77	-42.7702	0	0	-42.8549	-18
3964	45886.6	50.9117	-34.72	-34.7172	0	0	-34.8053	-18
3965	45900.8	50.9117	-33.47	-33.4711	0	0	-33.5592	-18
3966	45914.9	50.9117	-32.23	-32.225	0	0	-32.3131	-18
3967	45929.1	50.9117	-30.9	-30.9022	0	0	-30.9995	-18
3968	45943.2	50.9117	-29.52	-29.5249	0	0	-29.6223	-18
3969	45957.4	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3970	45971.5	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3971	45985.6	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3972	45999.8	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3973	46013.9	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3974	46028.1	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3975	46042.2	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3976	46056.4	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3977	46070.5	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3978	46084.6	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3979	46098.8	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3980	46112.9	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3981	46127.1	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3982	46141.2	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3983	46155.3	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3984	46169.5	50.9117	-36.1	-36.1001	0	0	-36.1001	-18
3985	46183.6	50.9117	-40.82	-40.8249	0	0	-40.6746	-18
3986	46197.8	50.9117	-42.8	-42.8042	0	0	-42.6735	-18
3987	46211.9	50.9117	-44.51	-44.5053	0	0	-44.3942	-18
3988	46226.1	50.9117	-44.45	-44.4527	0	0	-44.3748	-18
3989	46240.2	50.9117	-45.55	-45.5545	0	0	-45.4766	-18
3990	46254.3	50.9938	46.474	46.4744	0	0.189147	-44.7038	-18
3991	46268.7	53.0172	243.23	243.232	0	0.777566	-44.3893	-18
3992	46283.8	55.719	230.33	230.327	0	0.725943	-38.3817	-18
3993	46299.7	58.2542	219.75	219.751	0	0.684154	-33.519	-18
3994	46316.2	60.6282	210.58	210.578	0	0.638748	-26.0657	-18
3995	46333	58.876	-396.7	-369.848	-26.8474	-1.01306	-20.6925	-18
3996	46348.8	55.1951	-397.2	-369.849	-27.3827	-1.03059	-14.7219	0
3997	46363.6	51.4532	-397.7	-369.849	-27.8968	-1.04696	-9.15965	0
3998	46377.4	47.6544	-398.2	-369.847	-28.3979	-1.06218	-4.01078	0
3999	46390.1	43.8029	-398.7	-369.845	-28.8836	-1.07623	0.720252	0
4000	46401.7	39.9021	-399.2	-369.846	-29.3498	-1.0896	5.21774	0
4001	46412.3	35.9561	-399.6	-369.846	-29.7877	-1.09999	8.63622	0
4002	46421.7	31.9961	-400	-369.849	-30.1999	-1.09999	8.21852	0
4003	46430	28.0361	-400.4	-369.851	-30.5883	-1.09999	7.82749	0
4004	46437.3	24.0762	-400.8	-369.852	-30.9533	-1.09999	7.46311	0
4005	46443.4	20.1162	-401.1	-369.852	-31.2927	-1.09999	7.12539	0

4006	46448.4	16.1563	-401.5	-369.852	-31.6037	-1.09999	6.81433	0
4007	46452.4	12.1963	-401.7	-369.852	-31.8868	-1.09998	6.52992	0
4008	46455.2	8.23637	-402	-239.828	-162.144	-1.09997	6.27218	0
4009	46456.9	4.27684	-247.8	-1.04954	-246.768	-1.09983	6.04112	0
4010	46457.6	1.84292	-239.2	-0.452253	-238.751	-0.856269	5.91231	0
4011	46458	0	0	0	0	0	5.82148	0
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4027	46458	0	0	0	0	0	5.82148	0
4028	46458.1	0.531102	397.18	397.182	0	0.13591	5.84706	0
4029	46458.7	2.88919	397.18	397.182	0	0.739348	5.96645	0
4030	46459.7	5.93339	397.18	397.181	0	1.05E+00	6.13455	0
4031	46461.9	9.72581	397.18	397.181	0	1.05322	6.366	0
4032	46465.1	13.5157	397.18	397.181	0	1.05247	6.62172	0
4033	46469.4	17.3028	397.18	397.181	0	1.05169	6.90165	0
4034	46474.7	21.0871	397.18	397.181	0	1.05085	7.20572	0
4035	46481.1	24.8683	397.18	397.181	0	1.04995	7.53387	0
4036	46488.5	28.6462	397.19	397.189	0	1.04901	7.886	0
4037	46497	32.412	393.8	393.798	0	1.04045	8.26113	0
4038	46506.5	36.1142	376.11	376.109	0	1.00243	8.65345	0
4039	46517	39.4891	333.56	333.559	0	0.884361	9.03138	0
4040	46528.4	42.5088	307.26	307.263	0	0.807911	9.38594	0
4041	46540.6	45.2957	285.82	285.816	0	0.746138	10.2001	0
4042	46553.6	47.8959	270.61	270.61	0	0.702127	11.1486	0
4043	46567.2	50.3431	256.59	256.591	0	0.661024	12.1216	0
4044	46581.5	52.6296	245.17	245.169	0	0.611845	18.8526	0
4045	46596.4	54.7681	234.49	234.486	0	0.578586	20.4437	0
4046	46611.9	56.7957	225.84	225.836	0	0.550446	22.0767	2
4047	46628	58.7268	217.78	217.78	0	0.524117	23.7501	2
4048	46644.5	60.5666	210.76	210.764	0	0.504183	22.7215	2
4049	46661.6	62.3603	205.37	205.368	0	0.490036	23.8101	2
4050	46679.2	64.0929	200.16	200.156	0	0.474049	24.513	2
4051	46697.2	65.7726	195.39	195.386	0	0.46035	24.7786	2
4052	46715.7	67.4063	191.07	191.071	0	0.447981	25.0415	2
4053	46734.7	68.9961	186.87	186.872	0	0.435934	25.3017	2
4054	46754	70.5432	182.77	182.774	0	0.424175	25.559	2
4055	46773.8	72.0484	178.77	178.766	0	0.412665	25.8133	2
4056	46794.1	73.5128	174.87	174.868	0	0.401458	26.0643	2
4057	46814.7	74.9373	171.08	171.075	0	0.390548	26.3121	2
4058	46835.7	76.336	167.35	167.353	0	0.388155	23.4737	2
4059	46857.1	77.7176	163.68	163.677	0	0.379812	22.887	2

4060	46878.9	79.0696	160.08	160.079	0	0.371727	22.2834	2
4061	46901	80	21.767	21.7667	0	0	21.7667	2
4062	46923.2	80	21.767	21.7667	0	0	21.7667	2
4063	46945.4	80	21.767	21.7667	0	0	21.7667	2
4064	46967.7	80	21.767	21.7667	0	0	21.7667	2
4065	46989.9	80	21.767	21.7667	0	0	21.7667	2
4066	47012.1	80	21.767	21.7667	0	0	21.7667	2
4067	47034.3	80	21.767	21.7667	0	0	21.7667	2
4068	47056.6	80	21.767	21.7667	0	0	21.7667	2
4069	47078.8	80	21.767	21.7667	0	0	21.7667	2
4070	47101	80	21.767	21.7667	0	0	21.7667	2
4071	47123.2	80	21.663	21.6631	0	0	21.7667	2
4072	47145.4	80	17.948	17.9477	0	0	18.1149	2
4073	47167.7	80	14.232	14.2324	0	0	14.3996	2
4074	47189.9	80	10.517	10.517	0	0	10.6842	2
4075	47212.1	80	12.465	12.4647	0	0	12.5964	-5
4076	47234.3	80	9.5363	9.53628	0	0	9.66806	-5
4077	47256.6	80	6.6079	6.60791	0	0	6.73969	-5
4078	47278.8	80	3.318	3.31796	0	0	3.31796	-5
4079	47300.9	78.7406	-290.2	-290.2	0	-0.753561	3.08793	-5
4080	47322.3	75.0927	-394.1	-332.119	-61.9551	-1.06831	2.43687	-5
4081	47342.6	71.2469	-394.7	-349.939	-44.7932	-1.0683	1.77496	-5
4082	47361.9	67.401	-395.4	-363.063	-32.3044	-1.0683	1.1382	-5
4083	47380.1	63.5551	-396	-369.849	-26.1308	-1.0683	0.526573	-5
4084	47397.2	59.7092	-396.5	-369.848	-26.6917	-1.06831	-5.99E-02	-5
4085	47413.2	55.887	-397.1	-369.848	-27.2782	-1.06031	-3.58292	-5
4086	47428.2	52.2564	-281.5	-281.521	0	-8.01E-01	-4.62112	-5
4087	47442.5	50.9117	-4.793	-4.79323	0	-1.44E-02	-5.30832	-5
4088	47456.6	50.9117	-4.206	-4.20611	0	0	-4.25101	-5
4089	47470.8	50.9117	-6.265	-6.26485	0	0	-6.26485	-5
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4091	47499.1	50.9117	-6.265	-6.26485	0	0	-6.26485	-5
4092	47513.2	50.9117	7.535	7.53504	0	0	7.43765	-5
4093	47527.3	50.9117	8.9123	8.91231	0	0	8.81492	-5
4094	47541.5	50.9117	10.29	10.2896	0	0	10.1922	-5
4095	47555.6	50.9117	11.667	11.6669	0	0	11.5695	-5
4096	47569.8	50.9117	13.044	13.0441	0	0	12.9467	-5
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4098	47598.1	50.9117	7.3694	7.36943	0	0	7.36943	-5
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4100	47626.3	50.9117	7.3694	7.36943	0	0	7.36943	-5
4101	47640.5	50.9117	7.3694	7.36943	0	0	7.36943	-5
4102	47654.6	50.9117	7.3694	7.36943	0	0	7.36943	-5
4103	47668.8	50.9117	8.4519	8.45187	0	0	8.33245	-5
4104	47682.9	50.9117	10.141	10.1408	0	0	10.0213	-5
4105	47697	50.9117	11.83	11.8296	0	0	11.7102	-5
4106	47711.2	50.9117	13.519	13.5185	0	0	13.3991	-5
4107	47725.3	50.9117	15.207	15.2074	0	0	15.088	-5
4108	47739.5	50.9117	16.896	16.8963	0	0	16.7768	0
4109	47753.6	50.9117	18.585	18.5851	0	0	18.4657	0
4110	47767.8	50.9117	12.507	12.5065	0	0	12.4844	0
4111	47781.9	50.9117	12.818	12.8181	0	0	12.796	0
4112	47796	50.9117	13.13	13.1297	0	0	13.1077	0
4113	47810.2	50.9117	12.189	12.1891	0	0	12.2865	0

4114	47824.3	50.9117	10.812	10.8118	0	0	10.9092	0
4115	47838.5	51.7033	245.2	245.201	0	0.593044	10.561	0
4116	47852.9	50.0185	-397.9	-369.849	-28.0877	-1.1	10.3349	0
4117	47866.2	46.0586	-398.4	-369.846	-28.6012	-1.09999	9.82258	0
4118	47878.4	42.0986	-398.9	-369.845	-29.0855	-1.09999	9.33687	0
4119	47889.6	38.1386	-399.4	-369.846	-29.5435	-1.09999	8.87783	0
4120	47899.6	34.1787	-399.8	-369.847	-29.9756	-1.09999	8.44544	0
4121	47908.6	30.2187	-400.2	-369.851	-30.3805	-1.1	8.03971	0
4122	47916.4	26.2588	-400.6	-369.851	-30.7579	-1.09999	7.66064	0
4123	47923.2	22.2988	-401	-369.852	-31.1077	-1.09998	7.30823	0
4124	47928.8	18.3388	-401.3	-369.852	-31.4324	-1.09999	6.98247	0
4125	47933.3	14.3789	-401.6	-369.852	-31.7319	-1.09999	6.68338	0
4126	47936.8	10.4189	-401.9	-369.852	-32.0011	-1.09999	6.41094	0
4127	47939.1	6.45908	-383.6	-108.798	-274.797	-1.09994	6.16517	0
4128	47940.2	3.15394	-239.2	-0.773978	-238.429	-0.995368	5.98044	0
4129	47940.8	0.775286	-239.2	-0.190256	-239.013	-0.742994	5.85899	0
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4245	47941	0	0	0	0	0	5.82148	0
4246	47941	0	0	0	0	0	5.82148	0
4247	47941	0	0	0	0	0	5.82148	0
4248	47941	0	0	0	0	0	5.82148	0
4249	47941	0	0	0	0	0	5.82148	0
4250	47941	0	0	0	0	0	5.82148	0
4251	47941	0	0	0	0	0	5.82148	0
4252	47941	0	0	0	0	0	5.82148	0
4253	47941	0	0	0	0	0	5.82148	0
4254	47941	0	0	0	0	0	5.82148	0
4255	47941	0	0	0	0	0	5.82148	0
4256	47941	0	0	0	0	0	5.82148	0
4257	47941	0	0	0	0	0	5.82148	0
4258	47941	0	0	0	0	0	5.82148	0
4259	47941	0	0	0	0	0	5.82148	0
4260	47941	0	0	0	0	0	5.82148	0
4261	47941	0	0	0	0	0	5.82148	0
4262	47941	0	0	0	0	0	5.82148	0
4263	47941	0	0	0	0	0	5.82148	0
4264	47941	0	0	0	0	0	5.82148	0
4265	47941	0	0	0	0	0	5.82148	0
4266	47941	0	0	0	0	0	5.82148	0
4267	47941	0	0	0	0	0	5.82148	0
4268	47941	0	0	0	0	0	5.82148	0
4269	47941	0	0	0	0	0	5.82148	0
4270	47941	0	0	0	0	0	5.82148	0
4271	47941	0	0	0	0	0	5.82148	0
4272	47941	0	0	0	0	0	5.82148	0
4273	47941	0	0	0	0	0	5.82148	0
4274	47941	0	0	0	0	0	5.82148	0
4275	47941	0	0	0	0	0	5.82148	0

4276	47941	0	0	0	0	0	5.82148	0
4277	47941	0	0	0	0	0	5.82148	0
4278	47941	0	0	0	0	0	5.82148	0
4279	47941	0	0	0	0	0	5.82148	0
4280	47941	0	0	0	0	0	5.82148	0
4281	47941	0	0	0	0	0	5.82148	0
4282	47941	0	0	0	0	0	5.82148	0
4283	47941	0	0	0	0	0	5.82148	0
4284	47941	0	0	0	0	0	5.82148	0
4285	47941	0	0	0	0	0	5.82148	0
4286	47941	0	0	0	0	0	5.82148	0
4287	47941	0	0	0	0	0	5.82148	0
4288	47941	0	0	0	0	0	5.82148	0
4289	47941	0	0	0	0	0	5.82148	0
4290	47941	0	0	0	0	0	5.82148	0
4291	47941	0	0	0	0	0	5.82148	0
4292	47941	0	0	0	0	0	5.82148	0
4293	47941	0	0	0	0	0	5.82148	0
4294	47941	0	0	0	0	0	5.82148	0
4295	47941	0	0	0	0	0	5.82148	0
4296	47941	0	0	0	0	0	5.82148	0
4297	47941	0	0	0	0	0	5.82148	0
4298	47941	0	0	0	0	0	5.82148	0
4299	47941	0	0	0	0	0	5.82148	0
4300	47941	0	0	0	0	0	5.82148	0
4301	47941	0	0	0	0	0	5.82148	0
4302	47941	0	0	0	0	0	5.82148	0
4303	47941	0	0	0	0	0	5.82148	0
4304	47941	0	0	0	0	0	5.82148	0
4305	47941	0	0	0	0	0	5.82148	0
4306	47941	0	0	0	0	0	5.82148	0
4307	47941	0	0	0	0	0	5.82148	0
4308	47941	0	0	0	0	0	5.82148	0
4309	47941	0	0	0	0	0	5.82148	0
4310	47941	0	0	0	0	0	5.82148	0

SIMULACIONES, CÁLCULOS Y GRÁFICAS

010499

time(s)	Isf(A)_rms_w4310.	Pm(kW)_average_w4310.	IL1(A)_rms_w4310.
4310	88.7744	14.5336	329.963

time(s)	Isf(A)	Pm(kW)	IsPeak_vsi(A)	IL1(A)
0	16.8998	-6.37E-04	97.3222	1.52233
1	97.3721	7.89896	595.696	36.2762
2	137.24	29.2701	869.92	109.023
3	137.277	50.8395	903.867	166.685
4	137.317	72.3942	923.757	225.523
5	137.36	93.9338	930.563	285.513
6	137.406	115.457	929.393	346.568
7	137.456	136.963	966.451	407.928
8	140.207	158.452	961.101	467.302
9	145.198	178.743	957.013	523.115
10	150.416	194.872	966.48	568.702
11	140.507	189.217	920.543	549.962
12	133.986	186.511	880.685	540.029
13	129.277	185.334	844.558	534.687
14	125.922	185.061	811.359	532.84
15	119.618	180.009	762.34	517.193
16	28.7565	7.60744	313.948	32.0844
17	28.7565	7.60744	313.948	32.0844
18	28.7565	7.60744	313.948	32.0844
19	28.7565	7.60744	313.948	32.0844
20	28.7565	7.60744	313.948	32.0844
21	36.3398	18.2631	385.703	63.2108
22	36.5599	19.2654	386.332	65.9176
23	38.4406	27.2476	391.604	87.5018
24	39.085	29.479	393.05	93.5479
25	39.7598	31.7104	394.489	99.5972
26	38.6973	28.1969	392.223	90.0721
27	39.069	29.4259	393.016	93.4041
28	39.1509	29.697	393.191	94.1389
29	39.1509	29.697	393.191	94.1389
30	39.1509	29.697	393.191	94.1389
31	39.1509	29.697	393.191	94.1389
32	39.1509	29.697	393.191	94.1389
33	39.1509	29.697	393.191	94.1389
34	39.1509	29.697	393.191	94.1389
35	39.1509	29.697	393.191	94.1389
36	39.1509	29.697	393.191	94.1389
37	39.1509	29.697	393.191	94.1389
38	37.7789	24.439	389.749	79.9073
39	37.5427	23.4367	389.087	77.197
40	37.3066	22.4344	388.425	74.4867
41	37.2775	22.311	388.343	74.1532
42	36.9996	21.1317	387.564	70.9643

43	78.7705	115.555	536.994	331.603
44	119.02	184.162	754.214	527.713
45	116.556	183.679	738.692	525.293
46	114.449	183.209	740.56	523.429
47	112.464	182.766	742.319	521.673
48	111.094	182.624	746.837	521.091
49	110.789	183.03	756.644	522.639
50	110.494	183.423	766.148	524.139
51	110.396	183.778	772.024	525.498
52	110.731	184.054	769.976	526.57
53	111.057	184.323	767.983	527.613
54	111.372	184.58	766.03	528.617
55	111.385	184.254	763.547	528.027
56	111.398	183.929	761.078	527.44
57	111.411	183.606	758.616	526.856
58	111.246	182.954	755.293	525.389
59	110.952	182.068	751.37	523.289
60	110.658	181.181	747.443	521.188
61	24.7569	9.607	376.908	44.6586
62	24.7569	9.607	376.908	44.6586
63	24.7569	9.607	376.908	44.6586
64	24.7569	9.607	376.908	44.6586
65	24.7569	9.607	376.908	44.6586
66	24.7569	9.607	376.908	44.6586
67	24.7569	9.607	376.908	44.6586
68	24.7569	9.607	376.908	44.6586
69	24.7569	9.607	376.908	44.6586
70	24.7569	9.607	376.908	44.6586
71	24.7569	9.607	376.908	44.6586
72	24.7569	9.607	376.908	44.6586
73	24.7569	9.607	376.908	44.6586
74	26.1567	16.3255	377.804	62.6823
75	26.3632	17.3167	377.936	65.3416
76	26.5897	18.308	378.09	68.003
77	26.058	15.8519	377.74	61.4119
78	26.058	15.8519	377.74	61.4119
79	26.058	15.8519	377.74	61.4119
80	106.671	-217.301	740.207	-491.401
81	170.877	-335.257	1107.49	-752.796
82	169.523	-335.618	1108.57	-755.149
83	166.051	-331.537	1098.16	-747.606
84	159.759	-320.655	1064.8	-724.776
85	151.862	-300.814	982.912	-681.542
86	146.219	-280.977	938.206	-635.813
87	140.718	-261.215	902.261	-589.544
88	135.321	-241.445	880.379	-543.745
89	130.101	-221.669	874.968	-498.112
90	125.429	-201.909	852.724	-451.502
91	122.323	-182.171	813.549	-405.824
92	121.533	-162.443	814.399	-358.871
93	121.928	-142.715	845.673	-311.259
94	121.983	-122.985	877.298	-264.465
95	122.033	-103.255	857.975	-220.81
96	122.079	-83.5249	846.164	-174.198
97	122.122	-63.7946	826.031	-128.769

010500

010501

98	109.58	-38.3619	723.211	-73.1816
99	67.4878	-8.12E-02	444.112	7.89543
100	67.4825	-3.67E-02	413.617	6.66309
101	0	0	0	0
102	0	0	0	0
103	0	0	0	0
104	0	0	0	0
105	0	0	0	0
106	0	0	0	0
107	0	0	0	0
108	0	0	0	0
109	0	0	0	0
110	0	0	0	0
111	0	0	0	0
112	0	0	0	0
113	0	0	0	0
114	0	0	0	0
115	0	0	0	0
116	0	0	0	0
117	0	0	0	0
118	137.173	0.904647	800.978	30.4872
119	137.205	14.3142	831.546	67.6109
120	137.242	30.3597	871.635	111.936
121	137.279	51.9283	905.58	169.596
122	137.319	73.4823	924.488	228.516
123	137.362	95.0212	930.42	288.373
124	137.408	116.544	931.266	349.668
125	137.459	138.049	968.322	411.026
126	140.389	159.537	960.153	470.268
127	145.551	179.687	957.822	525.799
128	149.884	194.569	964.015	567.696
129	140.1	188.984	918.657	549.193
130	133.881	186.485	879.877	539.909
131	129.367	185.356	845.244	534.788
132	126.186	185.076	814.052	532.963
133	123.378	184.917	785.356	531.657
134	120.82	184.512	766.067	529.487
135	118.469	184.054	750.583	527.169
136	116.369	183.637	738.858	525.127
137	114.606	183.244	740.42	523.568
138	143.715	-272.064	920.795	-614.791
139	50.1475	-64.1538	452.667	-138.316
140	47.5522	53.394	409.936	158.769
141	47.5522	53.394	409.936	158.769
142	48.2091	55.0264	411.158	163.261
143	48.4918	55.7006	411.73	165.116
144	48.8069	56.4154	412.428	167.081
145	51.3341	62.1483	418.026	182.843
146	51.6876	62.9502	418.809	185.047
147	52.0621	63.7998	419.639	187.383
148	52.5091	64.8021	420.645	190.142
149	52.9817	65.8044	421.79	192.914
150	50.9742	61.3319	417.229	180.598
151	50.9742	61.3319	417.229	180.598
152	50.9742	61.3319	417.229	180.598

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

153	50.9742	61.3319	417.229	180.598
154	50.9742	61.3319	417.229	180.598
155	50.9742	61.3319	417.229	180.598
156	50.9742	61.3319	417.229	180.598
157	50.9742	61.3319	417.229	180.598
158	50.9742	61.3319	417.229	180.598
159	50.9742	61.3319	417.229	180.598
160	50.9742	61.3319	417.229	180.598
161	50.9742	61.3319	417.229	180.598
162	50.9742	61.3319	417.229	180.598
163	50.9742	61.3319	417.229	180.598
164	50.9742	61.3319	417.229	180.598
165	50.9742	61.3319	417.229	180.598
166	50.9742	61.3319	417.229	180.598
167	48.7326	56.247	412.264	166.618
168	48.3802	55.4474	411.483	164.42
169	48.638	56.0323	412.054	166.028
170	47.9847	54.4687	410.741	161.727
171	47.6321	53.5925	410.085	159.315
172	120.28	184.407	762.51	528.955
173	118.21	184.004	748.877	526.914
174	116.206	183.601	739.002	524.983
175	114.363	183.19	740.636	523.353
176	112.523	182.779	742.266	521.726
177	111.113	182.598	746.199	520.99
178	110.805	183.009	756.138	522.559
179	110.493	183.425	766.196	524.146
180	110.43	183.805	771.818	525.606
181	110.808	184.117	769.506	526.816
182	111.176	184.421	767.251	527.996
183	111.379	184.415	764.774	528.318
184	111.393	184.055	762.033	527.667
185	111.407	183.705	759.366	527.034
186	111.322	183.185	756.315	525.936
187	170.803	-335.479	1107.98	-753.451
188	169.34	-335.571	1108.51	-755.218
189	165.406	-330.546	1095.55	-745.561
190	158.941	-318.6	1056.32	-720.298
191	151.093	-298.876	974.944	-677.317
192	145.595	-279.151	933.962	-631.03
193	140.224	-259.425	899.203	-585.379
194	134.853	-239.698	880.116	-539.727
195	129.699	-219.969	873.055	-494.103
196	125.035	-200.242	850.847	-447.569
197	122.082	-180.514	810.04	-402.002
198	121.581	-160.787	816.822	-354.849
199	121.933	-141.058	848.692	-307.307
200	121.987	-121.328	875.676	-260.799
201	122.037	-101.598	856.352	-217.144
202	122.083	-81.8679	845.314	-170.227
203	122.125	-62.1376	823.683	-125.058
204	105.945	-3.51E+01	699.212	-66.1745
205	67.4871	-7.57E-02	440.327	7.74247
206	67.4821	-3.34E-02	411.343	6.5712
207	0	0	0	0

010502

1193

010503

208	0	0	0	0
209	0	0	0	0
210	0	0	0	0
211	0	0	0	0
212	0	0	0	0
213	0	0	0	0
214	0	0	0	0
215	0	0	0	0
216	0	0	0	0
217	0	0	0	0
218	0	0	0	0
219	0	0	0	0
220	0	0	0	0
221	0	0	0	0
222	0	0	0	0
223	0	0	0	0
224	137.176	2.03079	803.745	33.6086
225	137.208	15.4403	834.505	70.7358
226	137.245	32.1716	874.487	116.779
227	137.282	53.739	908.43	174.437
228	137.323	75.2918	925.787	233.274
229	137.366	96.8294	929.947	293.722
230	137.413	118.35	934.379	354.823
231	137.463	139.854	971.432	416.176
232	140.692	161.341	958.578	475.2
233	146.139	181.255	959.166	530.259
234	149.01	194.07	959.962	566.043
235	139.266	188.508	914.791	547.616
236	133.331	186.348	875.663	539.286
237	128.718	185.219	839.934	534.14
238	125.495	185.037	806.995	532.642
239	122.434	184.826	776.697	531.078
240	119.546	184.264	757.675	528.231
241	116.77	183.724	739.395	525.495
242	114.346	183.186	740.65	523.338
243	112.005	182.663	742.725	521.268
244	110.954	182.81	751.324	521.799
245	110.582	183.305	763.312	523.691
246	110.383	183.767	772.106	525.455
247	110.811	184.12	769.488	526.825
248	111.227	184.464	766.937	528.16
249	111.383	184.313	764.002	528.135
250	111.399	183.906	760.902	527.399
251	111.415	183.51	757.886	526.682
252	26.9284	15.394	395.405	59.3674
253	3.90174	-2.36346	61.3478	-3.13917
254	2.34397	-1.41985	36.8548	-1.88586
255	0.786209	-0.476242	12.3617	-0.632549
256	5.58718	1.98684	85.8262	9.26154
257	25.7509	9.45465	394.633	43.4391
258	27.2281	16.9237	395.539	63.4728
259	29.1752	24.3928	396.94	83.5575
260	146.406	-293.527	973.128	-662.627
261	169.054	-335.498	1108.42	-755.326
262	164.035	-328.441	1090	-741.213

263	156.624	-312.779	1032.29	-707.613
264	149.19	-291.887	960.6	-661.112
265	143.429	-271.029	919.027	-612.383
266	57.7787	-85.0394	470.599	-187.519
267	37.6863	24.0462	389.489	78.8452
268	37.5399	23.4248	389.079	77.1649
269	37.5399	23.4248	389.079	77.1649
270	37.5399	23.4248	389.079	77.1649
271	37.5399	23.4248	389.079	77.1649
272	40.4226	33.9019	395.903	105.538
273	40.7257	34.9042	396.55	108.256
274	41.0288	35.9065	397.196	110.973
275	41.3319	36.9088	397.843	113.69
276	41.6892	37.9111	398.565	116.417
277	40.2548	33.3472	395.545	104.035
278	40.2548	33.3472	395.545	104.035
279	40.2548	33.3472	395.545	104.035
280	40.2548	33.3472	395.545	104.035
281	40.2548	33.3472	395.545	104.035
282	40.2548	33.3472	395.545	104.035
283	40.2548	33.3472	395.545	104.035
284	40.2548	33.3472	395.545	104.035
285	40.2548	33.3472	395.545	104.035
286	40.2548	33.3472	395.545	104.035
287	40.2548	33.3472	395.545	104.035
288	40.2548	33.3472	395.545	104.035
289	40.2548	33.3472	395.545	104.035
290	40.2548	33.3472	395.545	104.035
291	40.2548	33.3472	395.545	104.035
292	40.0836	32.7811	395.18	102.5
293	39.8701	32.0752	394.725	100.586
294	41.316	36.8562	397.809	113.547
295	41.316	36.8562	397.809	113.547
296	41.316	36.8562	397.809	113.547
297	41.3308	36.9051	397.84	113.68
298	41.6878	37.9074	398.562	116.407
299	40.2548	33.3472	395.545	104.035
300	40.2548	33.3472	395.545	104.035
301	40.2548	33.3472	395.545	104.035
302	40.2548	33.3472	395.545	104.035
303	40.2548	33.3472	395.545	104.035
304	40.2548	33.3472	395.545	104.035
305	40.2548	33.3472	395.545	104.035
306	40.2548	33.3472	395.545	104.035
307	40.2548	33.3472	395.545	104.035
308	40.2548	33.3472	395.545	104.035
309	40.2548	33.3472	395.545	104.035
310	40.2548	33.3472	395.545	104.035
311	40.2548	33.3472	395.545	104.035
312	40.2548	33.3472	395.545	104.035
313	40.2548	33.3472	395.545	104.035
314	40.2548	33.3472	395.545	104.035
315	38.3885	27.0264	391.458	86.9038
316	37.7759	24.4263	389.74	79.873
317	37.1633	21.8262	388.023	72.8422

010504

318	36.5506	19.2261	386.306	65.8114
319	36.0813	16.626	384.882	58.8117
320	118.652	181.266	754.028	520.025
321	118.131	183.988	748.355	526.836
322	115.686	183.485	739.463	524.523
323	147.448	-285.491	947.471	-646.28
324	141.955	-265.694	909.912	-599.967
325	136.533	-245.967	881.059	-554.145
326	131.247	-226.238	878.092	-508.768
327	126.517	-206.51	857.904	-462.355
328	122.992	-186.783	823.316	-416.465
329	121.399	-167.055	807.654	-370.068
330	121.915	-147.327	837.268	-322.261
331	121.97	-127.597	873.221	-275.2
332	122.021	-107.867	862.492	-231.015
333	122.068	-88.1372	848.397	-185.432
334	122.112	-68.407	832.569	-139.1
335	119.701	-4.76E+01	790.016	-92.6873
336	76.4109	-8.20E+00	504.258	-9.25205
337	67.4836	-4.60E-02	419.947	6.91888
338	67.4789	-6.46E-03	392.87	5.82469
339	0	0	0	0
340	0	0	0	0
341	0	0	0	0
342	0	0	0	0
343	0	0	0	0
344	0	0	0	0
345	0	0	0	0
346	0	0	0	0
347	0	0	0	0
348	0	0	0	0
349	0	0	0	0
350	0	0	0	0
351	0	0	0	0
352	0	0	0	0
353	0	0	0	0
354	0	0	0	0
355	0	0	0	0
356	137.197	11.1794	826.23	58.9661
357	137.231	25.3161	860.975	98.1493
358	137.27	46.8876	897.647	156.121
359	137.31	68.4449	921.102	214.657
360	137.352	89.9874	931.402	274.324
361	137.397	111.514	926.824	335.356
362	137.447	133.023	959.662	396.687
363	139.546	154.515	964.538	456.536
364	143.912	175.311	954.072	513.355
365	150.886	193.923	970.022	566.284
366	142.231	190.201	928.537	553.223
367	134.89	186.737	887.621	541.054
368	130.113	185.543	850.97	535.635
369	126.502	185.094	817.29	533.11
370	123.403	184.918	785.619	531.669
371	120.495	184.449	763.926	529.167
372	117.728	183.91	745.699	526.438

010505

373	115.235	183.384	739.862	524.125
374	112.938	182.872	741.898	522.093
375	111.12	182.589	745.989	520.957
376	110.766	183.06	757.385	522.756
377	110.424	183.516	768.414	524.496
378	110.533	183.89	771.189	525.935
379	110.919	184.209	768.827	527.171
380	111.297	184.521	766.515	528.381
381	111.384	184.28	763.75	528.075
382	111.399	183.91	760.933	527.406
383	111.413	183.551	758.192	526.755
384	111.176	182.743	754.357	524.888
385	110.871	181.822	750.281	522.706
386	110.574	180.926	746.315	520.584
387	24.8266	9.94136	376.953	45.5556
388	24.8266	9.94136	376.953	45.5556
389	24.8266	9.94136	376.953	45.5556
390	24.8266	9.94136	376.953	45.5556
391	19.9107	7.2939	304.557	34.831
392	20.736	7.59623	317.18	36.2747
393	27.333	20.9137	378.655	75.0146
394	31.721	34.6984	382.296	112.166
395	37.2489	48.6769	387.693	150.156
396	43.4531	62.6553	394.801	188.396
397	50.1854	76.6336	408.897	226.762
398	57.2626	90.6117	444.496	265.319
399	58.9609	93.842	454.14	274.27
400	58.9609	93.842	454.14	274.27
401	58.9609	93.842	454.14	274.27
402	58.9609	93.842	454.14	274.27
403	58.9609	93.842	454.14	274.27
404	58.9609	93.842	454.14	274.27
405	58.9609	93.842	454.14	274.27
406	58.9609	93.842	454.14	274.27
407	56.8591	89.8331	442.196	263.165
408	46.1949	68.4325	398.562	204.232
409	35.4999	44.5353	385.967	138.82
410	27.2543	20.6379	378.595	74.2725
411	7.15073	-4.52098	112.542	-5.79718
412	28.0961	-27.3971	416.64	-47.238
413	33.5836	-50.2719	422.515	-102.139
414	35.1152	-54.8483	424.37	-113.036
415	35.2453	-55.2369	424.528	-113.961
416	35.3753	-55.6256	424.685	-114.887
417	35.4372	-55.8105	424.76	-115.327
418	35.4372	-55.8105	424.76	-115.327
419	35.4372	-55.8105	424.76	-115.327
420	35.4372	-55.8105	424.76	-115.327
421	32.8781	-47.691	421.742	-95.9575
422	29.8338	-36.2536	418.459	-68.5462
423	119.078	-241.535	810.723	-546.124
424	170.896	-335.2	1107.36	-752.626
425	169.664	-335.654	1108.62	-755.096
426	166.757	-332.621	1101.02	-749.846
427	160.8	-323.27	1075.59	-730.473

010506

1197

010507

428	152.95	-303.546	994.188	-687.495
429	146.993	-283.821	944.043	-642.407
430	141.514	-264.096	907.181	-596.247
431	136.104	-244.369	880.819	-550.47
432	130.819	-224.64	877.852	-505.093
433	126.139	-204.913	856.105	-458.587
434	122.76	-185.185	819.932	-412.778
435	121.445	-165.457	809.991	-366.189
436	121.92	-145.729	840.18	-318.45
437	121.975	-125.999	876.132	-271.388
438	122.025	-106.269	860.927	-227.48
439	122.072	-86.5393	847.709	-181.422
440	122.115	-6.68E+01	830.304	-135.521
441	116.195	-4.44E+01	766.871	-85.9296
442	72.9053	-5.00951	481.117	-2.49533
443	67.4832	-4.28E-02	417.754	6.83026
444	67.4785	-3.26E-03	390.677	5.73607
445	0	0	0	0
446	0	0	0	0
447	0	0	0	0
448	0	0	0	0
449	0	0	0	0
450	0	0	0	0
451	0	0	0	0
452	0	0	0	0
453	0	0	0	0
454	0	0	0	0
455	0	0	0	0
456	0	0	0	0
457	0	0	0	0
458	0	0	0	0
459	0	0	0	0
460	0	0	0	0
461	0	0	0	0
462	137.2	12.2654	828.9	61.9763
463	137.235	27.0634	865.269	102.992
464	137.273	48.6342	900.396	160.79
465	137.313	70.1903	922.275	219.459
466	137.355	91.7315	931.031	279.269
467	137.401	113.257	926.47	340.294
468	137.451	134.764	962.662	401.655
469	139.838	156.255	963.019	461.294
470	144.48	176.829	955.373	517.672
471	151.059	194.915	969.143	569.034
472	141.466	189.764	924.987	551.775
473	134.501	186.64	884.639	540.613
474	129.783	185.46	848.438	535.26
475	126.309	185.083	815.312	533.02
476	123.277	184.911	784.329	531.611
477	120.459	184.442	763.689	529.131
478	117.803	183.925	746.197	526.513
479	115.425	183.427	739.694	524.293
480	113.273	182.946	741.602	522.389
481	111.225	182.489	743.417	520.577
482	110.878	182.912	753.795	522.189

SIMULACIONES, CÁLCULOS Y GRÁFICAS



483	110.563	183.332	763.949	523.792
484	110.334	183.727	772.401	525.301
485	110.688	184.018	770.238	526.433
486	111.032	184.302	768.133	527.534
487	111.367	184.578	766.085	528.606
488	111.385	184.252	763.534	528.024
489	111.398	183.925	761.044	527.433
490	111.411	183.607	758.622	526.857
491	111.263	183.005	755.518	525.509
492	110.993	182.191	751.915	523.581
493	110.731	181.399	748.409	521.705
494	104.076	170.98	709.049	492.057
495	30.9903	32.5805	381.656	106.451
496	30.9903	32.5805	381.656	106.451
497	98.9579	-201.744	696.41	-456.06
498	170.87	-335.277	1107.53	-752.856
499	169.456	-335.601	1108.55	-755.174
500	165.673	-330.956	1096.63	-746.408
501	159.132	-319.08	1058.3	-721.343
502	151.155	-299.035	975.571	-677.666
503	145.574	-279.067	933.816	-630.842
504	140.153	-259.169	898.766	-584.784
505	134.756	-239.337	880.062	-538.896
506	129.604	-219.565	872.599	-493.149
507	124.939	-199.835	850.39	-446.61
508	122.023	-180.108	809.179	-401.064
509	121.592	-160.38	817.417	-353.862
510	121.934	-140.651	849.433	-306.337
511	121.988	-120.921	875.023	-260.159
512	122.038	-101.191	855.954	-216.245
513	122.084	-8.15E+01	845.106	-169.253
514	122.126	-61.7311	823.107	-124.147
515	105.053	-34.2443	693.323	-64.4551
516	67.487	-7.43E-02	439.399	7.70494
517	67.482	-3.26E-02	410.785	6.54865
518	0	0	0	0
519	0	0	0	0
520	0	0	0	0
521	0	0	0	0
522	0	0	0	0
523	0	0	0	0
524	0	0	0	0
525	0	0	0	0
526	0	0	0	0
527	0	0	0	0
528	0	0	0	0
529	0	0	0	0
530	0	0	0	0
531	0	0.00E+00	0	0
532	0	0	0	0
533	0	0	0	0
534	0	0	0	0
535	137.176	2.30712	804.424	34.3745
536	137.208	15.7167	837.382	71.5421
537	137.246	32.6162	875.186	117.968

010508

SIMULACIONES, CÁLCULOS Y GRÁFICAS

538	137.283	54.1833	909.129	175.625
539	137.324	75.7358	926.003	234.716
540	137.367	97.273	929.853	294.98
541	137.414	118.794	935.167	356.035
542	137.464	140.297	972.261	417.154
543	140.693	161.784	957.855	475.927
544	146.283	181.639	959.495	531.352
545	148.795	193.948	958.968	565.638
546	139.078	188.401	913.92	547.26
547	133.232	186.323	874.897	539.173
548	128.764	185.222	840.404	534.161
549	125.686	185.048	808.942	532.73
550	122.793	184.884	779.383	531.386
551	120.106	184.373	761.365	528.783
552	117.565	183.878	744.625	526.277
553	108.889	173.21	703.649	494.737
554	34.0663	18.0527	360.033	63.0663
555	33.9861	17.5386	359.938	61.6874
556	33.0284	11.3962	358.803	45.2135
557	18.7351	5.2541	205.458	22.4895
558	1.78824	-0.835122	19.5791	-1.25956
559	14.1601	-6.61289	155.037	-9.97379
560	36.3526	-17.0472	397.92	-25.7789
561	37.3501	-23.7669	400.17	-41.9515
562	38.3476	-30.4867	402.419	-58.124
563	39.6471	-37.2064	405.191	-74.2418
564	11.808	-5.51503	129.31	-8.31773
565	44.8777	-59.7696	419.559	-128.201
566	137.858	-262.832	889.049	-594.737
567	42.6302	-43.6472	414.496	-89.5609
568	41.889	-40.663	412.733	-82.4546
569	41.009	-37.1268	410.617	-74.0337
570	39.8239	-31.1435	408.008	-59.7081
571	38.9009	-25.1602	406.236	-45.3158
572	22.0734	-10.065	236.661	-15.3007
573	6.88298	-3.13849	73.796	-4.7711
574	14.744	4.02583	158.852	17.1647
575	34.0375	11.3874	363.299	45.0959
576	35.22	18.7493	364.264	64.8584
577	35.6885	20.7693	364.682	70.3063
578	36.7837	25.4903	365.659	83.0393
579	36.7837	25.4903	365.659	83.0393
580	36.7837	25.4903	365.659	83.0393
581	36.7837	25.4903	365.659	83.0393
582	36.7837	25.4903	365.659	83.0393
583	36.7837	25.4903	365.659	83.0393
584	36.7837	25.4903	365.659	83.0393
585	36.7837	25.4903	365.659	83.0393
586	36.7837	25.4903	365.659	83.0393
587	36.7837	25.4903	365.659	83.0393
588	35.5262	20.0694	364.537	68.4188
589	35.2937	19.0672	364.33	65.7158
590	35.0861	18.065	364.149	63.0173
591	34.9287	17.0629	364.021	60.3276
592	47.0551	55.6523	375.362	165.028

010509

593	116.062	183.569	739.13	524.856
594	113.884	183.083	741.06	522.93
595	147.667	-286.296	949.123	-648.146
596	139.053	-260.318	893.293	-588.074
597	44.3464	-44.0007	440.075	-90.6201
598	35.8101	14.9077	384.022	54.1945
599	35.8461	15.1357	384.136	54.8072
600	36.0983	16.7335	384.936	59.1008
601	36.3506	18.3313	385.737	63.3944
602	36.7163	19.9292	386.77	67.7125
603	39.917	32.2301	394.825	101.006
604	40.7033	34.8303	396.502	108.055
605	41.5171	37.4304	398.217	115.109
606	42.4478	40.0305	400.095	122.183
607	43.3785	42.6306	401.973	129.257
608	42.2358	39.4384	399.668	120.572
609	42.6686	40.6476	400.541	123.862
610	42.6686	40.6476	400.541	123.862
611	42.6686	40.6476	400.541	123.862
612	42.6686	40.6476	400.541	123.862
613	42.6686	40.6476	400.541	123.862
614	42.6686	40.6476	400.541	123.862
615	42.6686	40.6476	400.541	123.862
616	42.4266	39.9714	400.053	122.022
617	41.5907	37.6362	398.366	115.669
618	40.8457	35.3009	396.806	109.331
619	38.4142	27.1355	391.53	87.1986
620	37.6278	23.7979	389.325	78.1738
621	36.8414	20.4603	387.121	69.1489
622	36.1598	17.1228	385.131	60.1467
623	36.042	16.3766	384.758	58.1416
624	120.098	184.371	761.312	528.775
625	117.42	183.85	743.676	526.135
626	115.014	183.335	740.058	523.929
627	112.776	182.835	742.042	521.949
628	111.104	182.61	746.497	521.037
629	110.759	183.07	757.62	522.793
630	110.424	183.516	768.406	524.495
631	110.522	183.881	771.254	525.901
632	110.898	184.192	768.953	527.105
633	111.264	184.494	766.713	528.277
634	111.382	184.327	764.102	528.159
635	111.396	183.969	761.379	527.512
636	111.41	183.621	758.73	526.883
637	111.25	182.966	755.343	525.415
638	110.955	182.076	751.403	523.307
639	170.453	-335.856	1108.87	-754.798
640	168.779	-335.427	1108.33	-755.43
641	163.407	-327.477	1087.46	-739.223
642	156.313	-311.996	1029.06	-705.908
643	149.294	-292.271	961.388	-662.003
644	143.848	-272.547	921.618	-615.913
645	138.4	-252.821	887.921	-570.011
646	133.083	-233.092	879.123	-524.534
647	128.138	-213.364	865.62	-478.523

010510

648	123.987	-193.637	837.833	-432.278
649	121.2	-173.909	797.629	-386.709
650	121.772	-154.181	826.483	-338.812
651	121.951	-134.452	860.41	-291.851
652	122.004	-114.722	869.206	-246.182
653	122.053	-9.50E+01	851.919	-201.878
654	122.098	-75.2619	841.928	-154.397
655	122.139	-55.5316	814.32	-110.262
656	91.4502	-21.8743	603.533	-38.2383
657	67.4852	-5.97E-02	429.354	7.29904
658	67.4805	-2.02E-02	402.277	6.20485
659	0	0	0	0
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661	0	0	0	0
662	0	0	0	0
663	0	0	0	0
664	0	0	0	0
665	0	0	0	0
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667	0	0	0	0
668	0	0	0	0
669	0	0	0	0
670	0	0	0	0
671	0	0.00E+00	0	0
672	0	0	0	0
673	0	0	0	0
674	0	0	0	0
675	0	0	0	0
676	137.186	6.52052	814.78	46.0529
677	137.218	19.9301	847.737	83.2206
678	137.258	39.3946	885.854	136.089
679	137.295	60.9569	916.087	194.005
680	137.336	82.5047	930.553	253.34
681	137.381	104.037	928.414	314.157
682	137.429	125.552	946.826	375.245
683	138.294	147.05	971.057	436.123
684	141.898	168.531	952.3	494.86
685	148.474	187.488	964.507	547.984
686	145.611	192.13	944.205	559.615
687	136.639	187.175	901.042	543.039
688	131.731	185.947	863.38	537.47
689	127.62	185.157	828.708	533.629
690	124.586	184.985	797.702	532.219
691	77.5539	112.859	531.705	324.086
692	36.7967	20.2706	386.996	68.6359
693	37.0329	21.2729	387.658	71.3462
694	37.2691	22.2752	388.32	74.0564
695	36.224	17.5297	385.335	61.2402
696	36.224	17.5297	385.335	61.2402
697	36.224	17.5297	385.335	61.2402
698	36.224	17.5297	385.335	61.2402
699	36.224	17.5297	385.335	61.2402
700	36.224	17.5297	385.335	61.2402
701	36.224	17.5297	385.335	61.2402
702	35.3319	11.8793	382.504	46.0566

010511

703	34.9412	9.40439	381.265	39.4062
704	19.6819	5.20679	214.877	21.9596
705	3.8148	1.00919	41.648	4.25628
706	6.80015	-3.00007	73.6844	-4.62244
707	117.479	179.799	747.258	515.659
708	117.543	183.874	744.484	526.256
709	114.84	183.296	740.212	523.775
710	112.285	182.726	742.478	521.515
711	110.962	182.799	751.061	521.757
712	110.55	183.348	764.34	523.853
713	110.457	183.828	771.651	525.694
714	110.907	184.199	768.898	527.134
715	111.336	184.553	766.275	528.506
716	111.387	184.2	763.137	527.93
717	111.403	183.801	760.1	527.208
718	111.376	183.346	757.026	526.316
719	111.056	182.38	752.751	524.028
720	110.747	181.448	748.625	521.821
721	71.2497	116.521	523.893	337.439
722	15.7747	5.77876	241.292	27.5956
723	15.7747	5.77876	241.292	27.5956
724	15.7747	5.77876	241.292	27.5956
725	15.7747	5.77876	241.292	27.5956
726	15.7747	5.77876	241.292	27.5956
727	15.7747	5.77876	241.292	27.5956
728	15.7747	5.77876	241.292	27.5956
729	15.7747	5.77876	241.292	27.5956
730	15.7747	5.77876	241.292	27.5956
731	15.7747	5.77876	241.292	27.5956
732	15.7747	5.77876	241.292	27.5956
733	16.7426	6.13332	256.097	29.2888
734	16.7349	6.13051	255.979	29.2754
735	15.7747	5.77876	241.292	27.5956
736	15.9434	5.84056	243.872	27.8908
737	15.8307	5.79926	242.148	27.6936
738	19.2785	7.06233	294.887	33.7252
739	161.56	-318.326	1051.27	-715.466
740	170.603	-335.894	1108.91	-754.741
741	168.95	-335.471	1108.39	-755.365
742	164.069	-328.494	1090.14	-741.321
743	157.228	-314.296	1038.56	-710.921
744	149.935	-294.625	966.219	-667.461
745	144.493	-274.906	925.931	-621.384
746	139.051	-255.18	891.95	-575.5
747	133.715	-235.452	879.478	-529.96
748	128.695	-215.723	868.275	-484.088
749	124.329	-195.996	842.83	-437.722
750	121.466	-176.268	801.047	-392.205
751	121.704	-156.541	823.032	-344.54
752	121.945	-136.812	856.1	-297.487
753	121.998	-1.17E+02	871.517	-251.403
754	122.047	-9.74E+01	853.251	-207.332
755	122.093	-77.6215	843.138	-160.051
756	122.134	-57.8912	817.664	-115.547
757	96.6274	-26.5825	637.708	-48.2166

010512

SIMULACIONES, CÁLCULOS Y GRÁFICAS

758	67.4858	-6.44E-02	432.592	7.42989
759	67.4811	-2.49E-02	405.515	6.3357
760	0	0	0	0
761	0	0	0	0
762	0	0	0	0
763	0	0	0	0
764	0	0	0	0
765	0	0	0	0
766	0	0	0	0
767	0	0	0	0
768	0	0	0	0
769	0	0	0	0
770	0	0	0	0
771	0	0	0	0
772	0	0	0	0
773	0	0	0	0
774	0	0	0	0
775	0	0	0	0
776	0	0	0	0
777	137.182	4.91686	810.839	41.608
778	137.215	18.3264	843.796	78.7756
779	137.253	36.815	881.795	129.193
780	137.291	58.379	914.343	186.944
781	137.332	79.9285	928.821	246.252
782	137.376	101.463	928.962	306.859
783	137.423	122.98	942.356	368.032
784	137.862	144.48	973.301	429.096
785	141.467	165.963	954.542	487.838
786	147.642	185.265	962.602	541.663
787	146.808	192.813	949.754	561.879
788	137.324	187.4	905.787	543.942
789	132.297	186.089	867.726	538.112
790	128.002	185.179	832.615	533.807
791	124.807	184.998	799.959	532.322
792	121.794	184.701	772.477	530.447
793	118.952	184.148	753.761	527.645
794	116.277	183.617	738.939	525.046
795	113.928	183.093	741.021	522.968
796	111.663	182.587	743.028	520.965
797	110.912	182.866	752.693	522.015
798	110.557	183.34	764.144	523.822
799	110.39	183.772	772.063	525.478
800	110.79	184.103	769.613	526.76
801	111.18	184.424	767.229	528.007
802	111.38	184.39	764.583	528.273
803	111.395	184.009	761.684	527.585
804	111.41	183.639	758.864	526.915
805	111.246	182.954	755.292	525.388
806	110.932	182.006	751.097	523.143
807	110.626	181.085	747.016	520.959
808	15.7747	5.77876	241.292	27.5956
809	15.7747	5.77876	241.292	27.5956
810	15.7747	5.77876	241.292	27.5956
811	15.7747	5.77876	241.292	27.5956
812	15.7747	5.77876	241.292	27.5956

010513

813	15.7747	5.77876	241.292	27.5956
814	15.7747	5.77876	241.292	27.5956
815	15.7747	5.77876	241.292	27.5956
816	15.7747	5.77876	241.292	27.5956
817	15.7747	5.77876	241.292	27.5956
818	15.7747	5.77876	241.292	27.5956
819	15.7747	5.77876	241.292	27.5956
820	15.7747	5.77876	241.292	27.5956
821	15.7747	5.77876	241.292	27.5956
822	15.7747	5.77876	241.292	27.5956
823	15.7747	5.77876	241.292	27.5956
824	15.7747	5.77876	241.292	27.5956
825	15.7747	5.77876	241.292	27.5956
826	15.7747	5.77876	241.292	27.5956
827	18.376	6.73169	281.082	32.1463
828	146.782	-292.855	968.416	-660.073
829	170.685	-335.835	1108.77	-754.502
830	169.073	-335.502	1108.43	-755.319
831	164.527	-329.197	1092	-742.774
832	157.857	-315.877	1045.08	-714.364
833	150.385	-296.276	969.607	-671.288
834	144.953	-276.618	929.381	-625.334
835	139.528	-256.907	894.901	-579.519
836	134.178	-237.179	879.738	-533.934
837	129.104	-217.451	870.22	-488.162
838	124.58	-197.723	846.489	-441.707
839	121.717	-177.996	804.706	-396.191
840	121.654	-158.268	820.506	-348.734
841	121.94	-1.39E+02	853.282	-301.299
842	121.993	-1.19E+02	873.209	-255.225
843	122.043	-99.0792	854.136	-211.472
844	122.089	-79.3491	844.023	-164.191
845	122.13	-59.6188	820.113	-119.416
846	100.418	-30.0297	662.73	-55.5226
847	67.4862	-6.79E-02	434.963	7.5257
848	67.4815	-2.84E-02	407.886	6.43151
849	0	0	0	0
850	0	0	0	0
851	0	0	0	0
852	0	0	0	0
853	0	0	0	0
854	0	0	0	0
855	0	0	0	0
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860	0	0	0	0
861	0	0	0	0
862	0	0	0	0
863	0	0	0	0
864	0	0	0	0
865	0	0	0	0
866	137.18	3.7427	807.953	38.3535
867	137.212	17.1522	840.91	75.5212

010514

868	137.25	34.9259	878.821	124.143
869	137.287	56.4916	912.762	181.796
870	137.328	78.0422	927.553	241.062
871	137.372	99.5777	929.363	301.514
872	137.419	121.097	939.14	362.581
873	137.545	142.598	975.004	423.64
874	141.152	164.083	956.184	482.697
875	147.031	183.635	961.205	537.027
876	147.717	193.332	953.968	563.598
877	138.262	187.935	910.136	545.717
878	132.96	186.255	872.815	538.865
879	128.649	185.216	839.233	534.108
880	125.751	185.051	809.612	532.761
881	123.202	184.907	783.563	531.576
882	45.3554	47.9345	405.85	143.743
883	47.737	53.8531	410.28	160.032
884	50.2864	59.7717	415.706	176.309
885	50.5355	60.3367	416.257	177.862
886	52.7217	65.253	421.16	191.389
887	53.1676	66.1988	422.24	194.005
888	53.1676	66.1988	422.24	194.005
889	53.1676	66.1988	422.24	194.005
890	53.1676	66.1988	422.24	194.005
891	53.1676	66.1988	422.24	194.005
892	53.1676	66.1988	422.24	194.005
893	53.1676	66.1988	422.24	194.005
894	53.1676	66.1988	422.24	194.005
895	53.1676	66.1988	422.24	194.005
896	53.1676	66.1988	422.24	194.005
897	53.1676	66.1988	422.24	194.005
898	53.1676	66.1988	422.24	194.005
899	53.1676	66.1988	422.24	194.005
900	53.1676	66.1988	422.24	194.005
901	51.6505	62.866	418.727	184.816
902	49.5771	58.1626	414.134	171.885
903	46.97	51.9472	408.853	154.787
904	44.561	45.9342	404.359	138.245
905	42.4811	40.1237	400.163	122.437
906	42.5309	40.2626	400.263	122.814
907	40.9395	35.6111	397.006	110.172
908	39.5328	30.9597	394.005	97.562
909	38.2193	26.3082	390.983	84.9616
910	37.1233	21.6567	387.911	72.3839
911	35.2524	11.3755	382.252	44.7029
912	35.0714	10.2293	381.678	41.6229
913	35.0714	10.2293	381.678	41.6229
914	35.0714	10.2293	381.678	41.6229
915	35.0714	10.2293	381.678	41.6229
916	35.0714	10.2293	381.678	41.6229
917	35.0714	10.2293	381.678	41.6229
918	35.0714	10.2293	381.678	41.6229
919	35.0714	10.2293	381.678	41.6229
920	35.0714	10.2293	381.678	41.6229
921	35.0714	10.2293	381.678	41.6229
922	19.5408	5.16947	213.337	21.8022

010515

923	15.7524	4.16724	171.976	17.5753
924	11.9639	3.16501	130.615	13.3484
925	8.17539	2.16277	89.2546	9.1215
926	4.38691	1.16054	47.894	4.89459
927	51.0683	61.6154	416.74	181.378
928	119.292	184.214	756	527.98
929	116.512	183.669	738.731	525.254
930	114.115	183.134	740.855	523.134
931	111.828	182.624	742.882	521.111
932	110.94	182.829	751.788	521.872
933	110.59	183.296	763.076	523.654
934	110.34	183.732	772.366	525.319
935	110.728	184.052	769.993	526.561
936	111.103	184.361	767.701	527.76
937	111.376	184.49	765.348	528.455
938	111.39	184.131	762.613	527.805
939	111.404	183.781	759.948	527.172
940	169.036	-335.493	1108.42	-755.333
941	164.32	-328.879	1091.16	-742.117
942	157.511	-315.005	1041.48	-712.466
943	150.114	-295.281	967.564	-668.98
944	144.668	-275.556	927.241	-622.884
945	139.231	-255.83	893.061	-577.013
946	133.89	-236.102	879.576	-531.456
947	128.849	-216.374	869.007	-485.622
948	124.423	-196.646	844.207	-439.222
949	121.56	-176.919	802.424	-393.706
950	121.685	-157.191	822.081	-346.119
951	121.943	-1.37E+02	855.245	-298.73
952	121.996	-1.18E+02	872.154	-252.842
953	122.046	-98.002	853.584	-208.891
954	122.091	-78.2718	843.471	-161.61
955	122.132	-58.5415	818.586	-117.004
956	98.0544	-27.8801	647.127	-50.9669
957	67.4859	-6.57E-02	433.485	7.46596
958	67.4812	-2.62E-02	406.408	6.37177
959	0	0	0	0
960	0	0	0	0
961	0	0	0	0
962	0	0	0	0
963	0	0	0	0
964	0	0	0	0
965	0	0	0	0
966	0	0	0	0
967	0	0	0	0
968	0	0	0	0
969	0	0	0	0
970	0	0	0	0
971	0	0	0	0
972	0	0	0	0
973	0	0	0	0
974	0	0	0	0
975	0	0	0	0
976	137.181	4.47486	809.752	40.3829
977	137.214	17.8844	842.71	77.5505

010516

127

978	137.252	36.1039	880.675	127.292
979	137.289	57.6685	913.862	184.997
980	137.33	79.2184	928.344	244.298
981	137.374	100.753	929.113	304.847
982	137.422	122.271	941.166	365.919
983	137.737	143.771	973.955	426.838
984	141.262	165.255	954.752	485.389
985	147.412	184.652	962.077	539.919
986	147.142	193.004	951.305	562.511
987	137.618	187.568	907.149	544.498
988	132.455	186.128	868.936	538.291
989	128.117	185.185	833.795	533.861
990	124.934	185.005	801.256	532.381
991	121.941	184.73	773.446	530.592
992	119.132	184.183	754.949	527.823
993	116.503	183.667	738.739	525.246
994	114.284	183.172	740.706	523.283
995	112.311	182.732	742.454	521.538
996	111.082	182.64	747.223	521.152
997	80.205	130.197	581.16	372.063
998	43.1829	53.7869	426.326	160.593
999	40.5033	46.7361	422.83	141.269
1000	39.2101	43.049	421.014	131.26
1001	36.9778	36.4676	417.791	113.456
1002	34.3091	27.2498	413.908	88.5937
1003	32.2054	18.032	410.654	63.8097
1004	29.6504	8.8143	392.867	38.5201
1005	0.766442	-0.378754	10.197	-0.551164
1006	18.3187	-9.05255	243.717	-13.1733
1007	20.7845	-10.2711	276.523	-14.9465
1008	20.7845	-10.2711	276.523	-14.9465
1009	2.08E+01	-1.03E+01	276.523	-1.49E+01
1010	20.7845	-10.2711	276.523	-14.9465
1011	17.218	-8.50865	229.074	-12.3818
1012	12.3034	-6.07999	163.688	-8.84762
1013	7.38878	-3.65132	98.3026	-5.31342
1014	9.16519	-4.52917	121.937	-6.59088
1015	6.5711	-3.24725	87.4239	-4.72541
1016	1.31138	-0.648046	17.447	-0.943039
1017	3.913	1.16324	51.8472	5.08356
1018	110.621	183.255	762.081	523.497
1019	110.307	183.704	772.569	525.213
1020	110.702	184.03	770.154	526.477
1021	111.089	184.349	767.787	527.715
1022	111.376	184.484	765.3	528.443
1023	111.391	184.102	762.394	527.753
1024	111.406	183.73	759.561	527.08
1025	111.326	183.195	756.358	525.959
1026	111.01	182.241	752.134	523.698
1027	170.974	-334.966	1106.84	-751.937
1028	169.803	-335.689	1108.66	-755.043
1029	149.644	-301.38	1003.87	-681.158
1030	32.6008	-24.031	495.713	-40.8
1031	8.62332	2.753	133.469	12.3599
1032	8.62332	2.753	133.469	12.3599

010517

1218

1033	8.62332	2.753	133.469	12.3599
1034	29.0536	10.4403	446.547	44.6453
1035	29.2242	11.4428	446.637	47.3333
1036	29.3949	12.4452	446.728	50.0212
1037	29.5656	13.4477	446.819	52.7091
1038	29.0218	10.2538	446.53	44.1451
1039	29.0218	10.2538	446.53	44.1451
1040	29.0938	10.6768	446.568	45.2794
1041	21.889	6.98808	338.79	31.3737
1042	143.524	-290.3	977.522	-657.187
1043	154.477	-307.384	1010.03	-695.859
1044	148.003	-287.529	951.654	-651.006
1045	142.487	-267.618	913.199	-604.444
1046	136.996	-247.698	881.319	-558.128
1047	131.692	-227.898	878.342	-512.587
1048	126.891	-208.09	859.682	-466.08
1049	123.208	-188.274	826.475	-419.905
1050	121.358	-168.478	805.573	-373.522
1051	121.912	-1.49E+02	834.754	-325.552
1052	121.967	-1.29E+02	870.744	-278.441
1053	122.018	-109.223	863.82	-234.015
1054	122.065	-89.4929	849.223	-188.5
1055	122.109	-69.7627	834.49	-142.137
1056	122.15	-50.0323	806.525	-97.9446
1057	79.3852	-10.9023	523.891	-14.9845
1058	67.4839	-4.87E-02	421.807	6.99407
1059	67.4792	-9.17E-03	394.73	5.89987
1060	0	0	0	0
1061	0	0	0	0
1062	0	0	0	0
1063	0	0	0	0
1064	0	0	0	0
1065	0	0	0	0
1066	0	0	0	0
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1072	0	0	0	0
1073	0	0	0	0
1074	0	0	0	0
1075	0	0	0	0
1076	0	0	0	0
1077	137.195	10.258	823.966	56.4122
1078	137.228	23.8337	857.331	94.0405
1079	137.268	45.4057	895.315	152.159
1080	137.307	66.9641	920.152	210.462
1081	137.349	88.5077	931.717	270.128
1082	137.394	110.035	927.138	331.164
1083	137.443	131.546	957.116	392.472
1084	139.299	153.039	965.827	452.5
1085	143.429	174.022	952.968	509.691
1086	150.407	192.646	968.928	562.653
1087	142.913	190.59	931.696	554.512

010518

1088	135.269	186.832	890.531	541.485
1089	130.501	185.64	853.945	536.075
1090	126.809	185.111	820.421	533.252
1091	123.749	184.938	789.148	531.83
1092	120.929	184.533	766.783	529.594
1093	118.276	184.017	749.309	526.979
1094	115.854	183.523	739.314	524.672
1095	113.71	183.044	741.214	522.776
1096	111.662	182.587	743.029	520.964
1097	110.947	182.819	751.551	521.835
1098	110.629	183.244	761.823	523.456
1099	110.319	183.657	771.805	525.032
1100	110.623	183.965	770.636	526.225
1101	110.979	184.259	768.456	527.365
1102	111.335	184.552	766.28	528.504
1103	111.385	184.256	763.563	528.031
1104	27.3792	10.7547	418.2	46.1051
1105	27.3792	10.7547	418.2	46.1051
1106	27.3792	10.7547	418.2	46.1051
1107	27.3792	10.7547	418.2	46.1051
1108	21.447	7.29012	330.911	33.2159
1109	18.8447	6.40557	290.76	29.1856
1110	16.2148	5.51163	250.182	25.1126
1111	40.9246	54.3292	429.075	163.942
1112	111.402	183.831	760.331	527.263
1113	111.404	183.431	757.402	526.517
1114	111.059	182.391	752.798	524.054
1115	110.707	181.329	748.098	521.538
1116	28.4282	-29.4459	416.987	-52.1769
1117	31.6448	-43.0575	420.412	-84.8526
1118	34.4227	-52.7793	423.532	-108.109
1119	35.1715	-55.0164	424.438	-113.436
1120	35.1715	-55.0164	424.438	-113.436
1121	35.1715	-55.0164	424.438	-113.436
1122	35.1715	-55.0164	424.438	-113.436
1123	35.1715	-55.0164	424.438	-113.436
1124	35.1715	-55.0164	424.438	-113.436
1125	35.1715	-55.0164	424.438	-113.436
1126	35.1715	-55.0164	424.438	-113.436
1127	35.1715	-55.0164	424.438	-113.436
1128	35.1715	-55.0164	424.438	-113.436
1129	35.1715	-55.0164	424.438	-113.436
1130	35.1715	-55.0164	424.438	-113.436
1131	35.1715	-55.0164	424.438	-113.436
1132	35.1715	-55.0164	424.438	-113.436
1133	35.1715	-55.0164	424.438	-113.436
1134	35.2489	-55.2478	424.532	-113.987
1135	35.2524	-55.2584	424.536	-114.012
1136	35.2426	-55.229	424.525	-113.942
1137	34.997	-54.495	424.227	-112.195
1138	34.7573	-53.7788	423.937	-110.489
1139	34.7625	-53.7945	423.943	-110.527
1140	35.0439	-54.6353	424.284	-112.529
1141	35.2892	-55.3681	424.581	-114.274
1142	35.3516	-55.5547	424.657	-114.718

010519

1210

1143	35.1397	-54.9214	424.4	-113.21
1144	34.6844	-53.5611	423.849	-109.971
1145	34.2059	-52.1314	423.269	-106.567
1146	33.7274	-50.7017	422.69	-103.162
1147	33.299	-49.2721	422.196	-99.7467
1148	32.9184	-47.8424	421.786	-96.3202
1149	32.6419	-46.8036	421.488	-93.8305
1150	32.6419	-46.8036	421.488	-93.8305
1151	32.6419	-46.8036	421.488	-93.8305
1152	32.6419	-46.8036	421.488	-93.8305
1153	32.6419	-46.8036	421.488	-93.8305
1154	32.6419	-46.8036	421.488	-93.8305
1155	32.6419	-46.8036	421.488	-93.8305
1156	32.6419	-46.8036	421.488	-93.8305
1157	32.6419	-46.8036	421.488	-93.8305
1158	32.6419	-46.8036	421.488	-93.8305
1159	32.6419	-46.8036	421.488	-93.8305
1160	32.6419	-46.8036	421.488	-93.8305
1161	32.6419	-46.8036	421.488	-93.8305
1162	32.6419	-46.8036	421.488	-93.8305
1163	32.6419	-46.8036	421.488	-93.8305
1164	32.6419	-46.8036	421.488	-93.8305
1165	114.13	-231.972	782.201	-524.593
1166	170.99	-334.917	1106.73	-751.79
1167	170.043	-335.751	1108.74	-754.953
1168	168.608	-335.384	1108.28	-755.494
1169	163.654	-327.856	1088.46	-740.005
1170	157.762	-315.638	1044.1	-713.844
1171	151.056	-298.741	974.667	-677.005
1172	146.454	-281.843	939.984	-637.821
1173	141.749	-264.945	908.633	-598.224
1174	55.5115	-78.4004	469.111	-171.891
1175	41.7601	-32.9082	432.529	-64.2075
1176	41.7601	-32.9082	432.529	-64.2075
1177	41.7601	-32.9082	432.529	-64.2075
1178	41.7601	-32.9082	432.529	-64.2075
1179	41.7601	-32.9082	432.529	-64.2075
1180	40.1418	-22.7797	427.973	-39.8249
1181	39.9911	-21.8367	427.549	-37.5548
1182	39.8404	-20.8937	427.125	-35.2847
1183	39.6897	-19.9507	426.701	-33.0146
1184	39.5391	-19.0077	426.277	-30.7446
1185	40.2685	-23.5731	428.33	-41.7349
1186	40.2685	-23.5731	428.33	-41.7349
1187	40.2685	-23.5731	428.33	-41.7349
1188	40.2685	-23.5731	428.33	-41.7349
1189	40.2685	-23.5731	428.33	-41.7349
1190	40.2685	-23.5731	428.33	-41.7349
1191	40.2685	-23.5731	428.33	-41.7349
1192	40.2685	-23.5731	428.33	-41.7349
1193	40.2685	-23.5731	428.33	-41.7349
1194	40.2685	-23.5731	428.33	-41.7349
1195	40.2685	-23.5731	428.33	-41.7349
1196	40.1326	-22.7221	427.948	-39.6864
1197	39.4859	-18.6749	426.127	-29.9435

010520

1211

1198	33.1559	-14.6276	359.267	-22.5379
1199	23.9818	-10.5802	259.86	-16.3018
1200	14.8078	-6.53286	160.453	-10.0657
1201	5.63374	-2.48548	61.0455	-3.82956
1202	81.2766	-138.424	568.797	-311.721
1203	134.203	-237.271	879.751	-534.145
1204	129.125	-217.54	870.321	-488.374
1205	124.557	-197.566	846.155	-441.344
1206	121.625	-1.77E+02	803.377	-394.743
1207	121.686	-1.57E+02	822.13	-346.038
1208	121.944	-137.137	855.837	-297.954
1209	121.998	-117.151	871.585	-251.556
1210	122.048	-97.1958	853.171	-206.959
1211	122.093	-77.266	842.812	-159.351
1212	122.135	-57.3563	816.906	-114.349
1213	95.0938	-25.1878	627.585	-45.2608
1214	67.4856	-6.28E-02	431.461	7.38417
1215	67.4809	-2.32E-02	404.34	6.2882
1216	0	0	0	0
1217	0	0	0	0
1218	0	0	0	0
1219	0	0	0	0
1220	0	0	0	0
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1230	0	0	0	0
1231	0	0	0	0
1232	0	0	0	0
1233	137.184	5.49227	812.253	43.2029
1234	137.216	18.8547	845.094	80.2399
1235	137.254	37.5584	882.965	131.18
1236	137.292	58.9704	914.743	188.564
1237	137.332	80.3835	929.232	247.222
1238	137.377	101.802	928.889	307.822
1239	137.424	123.231	942.789	368.749
1240	137.892	144.658	973.146	429.582
1241	141.491	166.103	954.42	488.22
1242	147.687	185.386	962.706	542.007
1243	146.743	192.776	949.452	561.755
1244	137.266	187.367	905.516	543.832
1245	132.267	186.081	867.493	538.078
1246	127.988	185.178	832.476	533.801
1247	124.852	185	800.426	532.343
1248	121.98	184.738	773.704	530.63
1249	119.368	184.229	756.502	528.055
1250	116.949	183.758	740.573	525.671
1251	114.894	183.308	740.165	523.823
1252	113.038	182.894	741.81	522.181

010521

1212

1253	111.381	182.524	743.278	520.716
1254	110.98	182.776	750.508	521.67
1255	110.751	183.08	757.874	522.833
1256	110.543	183.357	764.57	523.89
1257	110.338	183.631	771.175	524.932
1258	110.479	183.846	771.518	525.763
1259	110.714	184.04	770.08	526.515
1260	110.951	184.236	768.628	527.275
1261	111.203	184.443	767.088	528.081
1262	111.376	184.485	765.309	528.445
1263	111.387	184.206	763.186	527.941
1264	111.399	183.916	760.977	527.417
1265	111.411	183.613	758.67	526.869
1266	111.261	182.999	755.492	525.495
1267	110.968	182.115	751.579	523.401
1268	110.683	181.254	747.766	521.361
1269	49.5901	75.4265	406.855	223.434
1270	26.7285	18.7945	378.195	69.3122
1271	26.7958	19.0305	378.246	69.9473
1272	27.0802	20.0275	378.463	72.6301
1273	26.587	18.2988	378.088	67.9782
1274	26.7162	18.7517	378.186	69.197
1275	26.4775	17.8655	378.009	66.8139
1276	26.4283	17.6295	377.977	66.1807
1277	26.3792	17.3935	377.946	65.5476
1278	25.1095	11.2991	377.134	49.198
1279	1.27157	-0.803935	20.0125	-1.03087
1280	19.3638	-12.2426	304.757	-15.6985
1281	27.0866	-21.1574	415.609	-32.1971
1282	28.6881	-31.0559	417.244	-56.0576
1283	31.4898	-42.475	420.245	-83.4566
1284	34.6178	-53.3621	423.768	-109.497
1285	35.094	-54.785	424.345	-112.885
1286	32.9951	-48.1306	421.869	-97.011
1287	30.0542	-37.0818	418.697	-70.5311
1288	27.8527	-25.8926	416.391	-43.6115
1289	23.5023	-14.8591	369.891	-19.0536
1290	7.2193	-4.56433	113.621	-5.85277
1291	16.6194	6.0882	254.213	29.0734
1292	54.6825	-105.837	455.795	-233.791
1293	171.083	-334.637	1106.11	-750.964
1294	170.054	-335.754	1108.74	-754.948
1295	168.043	-334.595	1106.22	-753.922
1296	162.171	-325.579	1082.46	-735.302
1297	154.815	-308.233	1013.53	-697.709
1298	108.137	-208.793	728.46	-474.49
1299	17.7045	4.96507	194.156	21.2524
1300	19.8946	5.57926	218.174	23.8813
1301	22.0846	6.19344	242.191	26.5103
1302	24.2747	6.80763	266.208	29.1392
1303	26.4648	7.42181	290.226	31.7682
1304	33.9863	17.5395	359.938	61.6899
1305	34.2988	19.1556	360.284	66.0329
1306	34.6501	20.6895	360.656	70.163
1307	34.8796	21.6913	360.899	72.8604

010522

1308	34.0663	18.0527	360.033	63.0663
1309	34.0663	18.0527	360.033	63.0663
1310	34.0663	18.0527	360.033	63.0663
1311	34.0663	18.0527	360.033	63.0663
1312	34.0663	18.0527	360.033	63.0663
1313	34.0663	18.0527	360.033	63.0663
1314	33.8885	16.9125	359.822	60.0083
1315	34.75	21.1257	360.762	71.3376
1316	34.75	21.1257	360.762	71.3376
1317	34.75	21.1257	360.762	71.3376
1318	35.9621	26.4177	362.045	85.5866
1319	34.0663	18.0527	360.033	63.0663
1320	125.117	-237.506	814.929	-538.179
1321	139.32	-256.154	893.614	-577.766
1322	133.859	-235.988	879.558	-531.195
1323	128.769	-216.035	868.626	-484.823
1324	124.348	-1.96E+02	843.111	-438.027
1325	121.465	-1.76E+02	801.035	-392.192
1326	121.707	-156.434	823.189	-344.281
1327	121.945	-136.636	856.75	-296.76
1328	121.998	-116.867	871.306	-250.927
1329	122.048	-97.1214	853.133	-206.78
1330	122.093	-77.3908	843.02	-159.499
1331	122.134	-57.6605	817.337	-115.03
1332	96.1213	-26.1222	634.367	-47.2412
1333	67.4857	-6.39E-02	432.276	7.4171
1334	67.481	-2.44E-02	405.199	6.32291
1335	0	0	0	0
1336	0	0	0	0
1337	0	0	0	0
1338	0	0	0	0
1339	0	0	0	0
1340	0	0	0	0
1341	0	0	0	0
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1347	0	0	0	0
1348	0	0	0	0
1349	0	0	0	0
1350	0	0	0	0
1351	0	0	0	0
1352	137.183	5.07363	811.224	42.0425
1353	137.215	18.4832	844.181	79.2102
1354	137.254	37.0673	882.192	129.867
1355	137.291	58.631	914.513	187.634
1356	137.332	80.1804	928.991	246.945
1357	137.377	101.714	928.97	307.43
1358	137.424	123.231	942.823	368.648
1359	137.905	144.731	973.082	429.783
1360	141.509	166.214	954.323	488.525
1361	147.723	185.483	962.789	542.281
1362	146.69	192.746	949.209	561.656

017523

1214

1363	137.22	187.34	905.304	543.745
1364	132.242	186.075	867.303	538.05
1365	127.971	185.177	832.303	533.793
1366	124.793	184.997	799.821	532.315
1367	121.791	184.701	772.458	530.444
1368	118.951	184.148	753.755	527.644
1369	116.271	183.616	738.945	525.041
1370	113.909	183.088	741.038	522.951
1371	111.624	182.578	743.063	520.93
1372	110.901	182.881	753.055	522.072
1373	110.539	183.363	764.699	523.91
1374	110.42	183.797	771.879	525.574
1375	110.833	184.138	769.35	526.897
1376	111.235	184.47	766.888	528.185
1377	111.382	184.32	764.049	528.146
1378	111.398	183.927	761.056	527.435
1379	111.413	183.544	758.144	526.744
1380	111.151	182.667	754.02	524.708
1381	110.827	181.688	749.69	522.39
1382	110.511	180.737	745.477	520.136
1383	0.79632	0.291717	12.1806	1.39305
1384	5.77246	2.11463	88.2964	10.0981
1385	10.7486	3.93755	164.412	18.8032
1386	15.7247	5.76046	240.528	27.5083
1387	20.7009	7.58338	316.644	36.2134
1388	24.7151	9.40637	376.881	44.1203
1389	24.7569	9.607	376.908	44.6586
1390	24.7569	9.607	376.908	44.6586
1391	24.7569	9.607	376.908	44.6586
1392	24.7569	9.607	376.908	44.6586
1393	24.7569	9.607	376.908	44.6586
1394	24.7569	9.607	376.908	44.6586
1395	24.7569	9.607	376.908	44.6586
1396	24.7569	9.607	376.908	44.6586
1397	24.7569	9.607	376.908	44.6586
1398	24.8944	10.2669	376.996	46.429
1399	24.7569	9.607	376.908	44.6586
1400	24.7569	9.607	376.908	44.6586
1401	24.7761	9.69902	376.92	44.9054
1402	24.7589	9.61642	376.909	44.6838
1403	24.7569	9.607	376.908	44.6586
1404	24.7569	9.607	376.908	44.6586
1405	24.7569	9.607	376.908	44.6586
1406	24.7569	9.607	376.908	44.6586
1407	24.7569	9.607	376.908	44.6586
1408	24.7569	9.607	376.908	44.6586
1409	24.7569	9.607	376.908	44.6586
1410	24.7569	9.607	376.908	44.6586
1411	24.7569	9.607	376.908	44.6586
1412	24.7569	9.607	376.908	44.6586
1413	24.7569	9.607	376.908	44.6586
1414	24.7569	9.607	376.908	44.6586
1415	24.7569	9.607	376.908	44.6586
1416	24.7569	9.607	376.908	44.6586
1417	24.7569	9.607	376.908	44.6586

010524

1418	24.7569	9.607	376.908	44.6586
1419	24.7569	9.607	376.908	44.6586
1420	24.7569	9.607	376.908	44.6586
1421	24.7569	9.607	376.908	44.6586
1422	24.7569	9.607	376.908	44.6586
1423	24.7569	9.607	376.908	44.6586
1424	24.7569	9.607	376.908	44.6586
1425	25.1519	11.503	377.161	49.7449
1426	26.7289	18.7961	378.195	69.3165
1427	28.8094	26.0893	379.777	88.9417
1428	31.2669	33.3825	381.898	108.615
1429	33.9921	40.6756	384.482	128.355
1430	36.9462	47.9687	387.394	148.214
1431	40.0939	55.2618	390.63	168.196
1432	40.2266	55.5537	390.794	168.994
1433	40.2266	55.5537	390.794	168.994
1434	40.2266	55.5537	390.794	168.994
1435	38.3181	51.1781	388.747	157.012
1436	35.7207	45.1006	386.185	140.353
1437	33.3466	39.023	383.845	123.874
1438	31.1161	32.9454	381.766	107.435
1439	29.0315	26.8677	379.946	91.0363
1440	27.2977	20.7901	378.628	74.6821
1441	26.3524	17.2648	377.929	65.2024
1442	26.3524	17.2648	377.929	65.2024
1443	171.142	-334.462	1105.72	-750.447
1444	170.182	-335.786	1108.78	-754.9
1445	168.408	-335.155	1107.7	-755.079
1446	162.438	-325.989	1083.54	-736.15
1447	155.038	-308.794	1015.85	-698.93
1448	148.422	-289.069	954.815	-654.577
1449	142.964	-269.344	916.147	-608.461
1450	137.515	-249.618	882.45	-562.558
1451	132.225	-229.889	878.641	-517.167
1452	127.38	-2.10E+02	862.014	-470.968
1453	123.522	-1.90E+02	831.05	-424.889
1454	121.293	-170.706	802.313	-378.933
1455	121.865	-150.979	831.167	-331.036
1456	121.96	-131.249	866.566	-283.91
1457	122.012	-111.519	866.069	-239.095
1458	122.06	-91.7889	850.399	-194.002
1459	122.105	-72.0587	837.745	-147.279
1460	122.145	-52.3284	809.78	-103.087
1461	84.4223	-15.4831	557.142	-24.693
1462	67.4845	-5.33E-02	424.958	7.1214
1463	67.4798	-1.38E-02	397.881	6.02721
1464	0	0	0	0
1465	0	0	0	0
1466	0	0	0	0
1467	0	0	0	0
1468	0	0	0	0
1469	0	0	0	0
1470	0	0	0	0
1471	0	0	0	0
1472	0	0	0	0

010525

1216

1473	0	0	0	0
1474	0	0	0	0
1475	0	0	0	0
1476	0	0	0	0
1477	0	0	0	0
1478	0	0	0	0
1479	0	0	0	0
1480	0	0	0	0
1481	137.192	8.69754	820.13	52.087
1482	137.224	22.1071	853.088	89.2547
1483	137.264	42.896	891.365	145.45
1484	137.302	64.4562	918.421	203.683
1485	137.343	86.0015	932.25	263.023
1486	137.389	107.531	927.671	324.064
1487	137.438	129.043	952.805	385.332
1488	138.879	150.539	968.011	445.663
1489	142.609	171.834	951.088	503.471
1490	149.603	190.499	967.088	556.548
1491	144.013	191.218	936.798	556.593
1492	135.816	186.969	894.726	542.105
1493	130.969	185.757	857.539	536.606
1494	127.095	185.127	823.344	533.385
1495	123.969	184.95	791.397	531.932
1496	121.041	184.555	767.521	529.705
1497	118.276	184.017	749.313	526.979
1498	115.745	183.498	739.411	524.575
1499	113.476	182.992	741.421	522.569
1500	111.301	182.506	743.349	520.645
1501	110.871	182.921	754.021	522.225
1502	110.538	183.365	764.743	523.917
1503	110.381	183.765	772.117	525.45
1504	110.75	184.07	769.857	526.632
1505	111.113	184.369	767.635	527.795
1506	111.376	184.484	765.298	528.443
1507	111.39	184.124	762.562	527.793
1508	111.404	183.774	759.895	527.16
1509	111.387	183.379	757.175	526.396
1510	111.096	182.501	753.284	524.314
1511	110.817	181.659	749.558	522.319
1512	110.55	180.853	745.991	520.411
1513	30.4854	31.1173	381.214	102.502
1514	31.429	33.8522	382.04	109.883
1515	31.6508	34.4949	382.235	111.617
1516	31.6508	34.4949	382.235	111.617
1517	31.6508	34.4949	382.235	111.617
1518	32.2121	36.1189	382.728	116
1519	32.2206	36.1406	382.736	116.058
1520	32.2086	36.1098	382.724	115.975
1521	31.8038	34.9385	382.369	112.814
1522	31.7468	34.7733	382.319	112.368
1523	31.6898	34.6081	382.269	111.922
1524	31.6508	34.4949	382.235	111.617
1525	31.6508	34.4949	382.235	111.617
1526	31.6508	34.4949	382.235	111.617
1527	31.6508	34.4949	382.235	111.617

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1528	31.6508	34.4949	382.235	111.617
1529	31.6508	34.4949	382.235	111.617
1530	31.6508	34.4949	382.235	111.617
1531	171.145	-334.452	1105.7	-750.418
1532	170.144	-335.776	1108.77	-754.915
1533	168.12	-334.713	1106.54	-754.167
1534	162.028	-325.36	1081.88	-734.85
1535	154.377	-307.131	1008.99	-695.307
1536	147.91	-287.187	950.951	-650.212
1537	142.406	-267.325	912.698	-603.762
1538	136.954	-247.54	881.295	-557.763
1539	131.667	-2.28E+02	878.328	-512.378
1540	126.888	-2.08E+02	859.671	-466.057
1541	123.22	-188.352	826.64	-420.086
1542	121.353	-168.624	805.358	-373.878
1543	121.911	-148.897	834.408	-326.005
1544	121.966	-129.167	870.36	-278.944
1545	122.017	-109.437	864.029	-234.488
1546	122.065	-89.7068	849.332	-189.012
1547	122.109	-69.9766	834.794	-142.616
1548	122.149	-50.2462	806.829	-98.4237
1549	79.8544	-11.3291	526.989	-15.8889
1550	67.484	-4.91E-02	422.101	7.00593
1551	67.4793	-9.60E-03	395.024	5.91174
1552	0	0	0	0
1553	0	0	0	0
1554	0	0	0	0
1555	0	0	0	0
1556	0	0	0	0
1557	0	0	0	0
1558	0	0	0	0
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1563	0	0	0	0
1564	0	0	0	0
1565	0	0	0	0
1566	0	0	0	0
1567	0	0	0	0
1568	0	0	0	0
1569	137.195	10.1126	823.608	56.0093
1570	137.227	23.5998	856.757	93.3921
1571	137.268	45.1719	894.947	151.534
1572	137.306	66.7305	919.95	209.94
1573	137.348	88.2742	931.767	269.466
1574	137.394	109.802	927.188	330.503
1575	137.443	131.313	956.763	391.618
1576	139.26	152.806	966.031	451.863
1577	143.355	173.825	952.798	509.128
1578	150.359	192.518	968.818	562.288
1579	142.886	190.575	931.572	554.461
1580	135.164	186.806	889.722	541.365
1581	130.271	185.582	852.181	535.814
1582	126.519	185.095	817.455	533.117

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1218

1583	123.357	184.916	785.149	531.648
1584	120.454	184.441	763.653	529.126
1585	117.688	183.902	745.435	526.399
1586	115.198	183.376	739.895	524.092
1587	112.898	182.863	741.934	522.058
1588	0.201189	-9.58E-02	2.28464	-0.143734
1589	0.201189	-9.58E-02	2.28464	-0.143734
1590	0.201189	-9.58E-02	2.28464	-0.143734
1591	0.201189	-9.58E-02	2.28464	-0.143734
1592	0.201189	-9.58E-02	2.28464	-0.143734
1593	0.201189	-9.58E-02	2.28464	-0.143734
1594	0.201189	-9.58E-02	2.28464	-0.143734
1595	0.201189	-9.58E-02	2.28464	-0.143734
1596	0.201189	-9.58E-02	2.28464	-0.143734
1597	0.201189	-9.58E-02	2.28464	-0.143734
1598	0.201189	-9.58E-02	2.28464	-0.143734
1599	0.201189	-9.58E-02	2.28464	-0.143734
1600	0.201189	-9.58E-02	2.28464	-0.143734
1601	0.201189	-9.58E-02	2.28464	-0.143734
1602	0.201189	-9.58E-02	2.28464	-0.143734
1603	0.201189	-9.58E-02	2.28464	-0.143734
1604	0.201189	-9.58E-02	2.28464	-0.143734
1605	0.201189	-9.58E-02	2.28464	-0.143734
1606	3.65391	1.04965	41.4056	4.49556
1607	2.41977	-1.15209	27.4782	-1.72874
1608	2.25555	0.647948	25.5595	2.77509
1609	8.77314	2.52025	99.416	10.794
1610	15.2907	4.39255	173.272	18.8128
1611	111.12	182.588	745.978	520.955
1612	110.771	183.054	757.223	522.73
1613	110.439	183.497	767.932	524.42
1614	110.494	183.859	771.424	525.812
1615	110.857	184.158	769.203	526.974
1616	111.211	184.45	767.041	528.106
1617	111.379	184.395	764.62	528.282
1618	111.393	184.049	761.992	527.658
1619	111.407	183.714	759.435	527.05
1620	111.343	183.248	756.591	526.083
1621	111.058	182.388	752.788	524.048
1622	110.782	181.553	749.088	522.068
1623	110.512	180.739	745.489	520.142
1624	28.4766	24.9227	379.524	85.8024
1625	28.4766	24.9227	379.524	85.8024
1626	144.575	-288.959	956.072	-651.559
1627	170.659	-335.908	1108.93	-754.72
1628	168.947	-335.47	1108.39	-755.366
1629	163.794	-328.072	1089.03	-740.45
1630	156.451	-312.344	1030.5	-706.666
1631	114.424	-222.762	766.012	-506.4
1632	33.6945	15.7051	359.621	56.7697
1633	39.094	37.2526	365.454	114.848
1634	40.2569	40.6309	366.766	124.004
1635	41.4198	44.0092	368.078	133.159
1636	41.6004	44.5339	368.282	134.581
1637	45.1728	53.9282	372.194	160.25

010528

1638	45.5594	54.93	372.615	162.991
1639	45.9801	55.9318	373.477	165.737
1640	46.4023	56.9336	374.36	168.484
1641	44.9706	53.4044	371.973	158.817
1642	44.9706	53.4044	371.973	158.817
1643	44.9706	53.4044	371.973	158.817
1644	44.9706	53.4044	371.973	158.817
1645	44.9706	53.4044	371.973	158.817
1646	44.9706	53.4044	371.973	158.817
1647	44.9706	53.4044	371.973	158.817
1648	44.9706	53.4044	371.973	158.817
1649	44.9706	53.4044	371.973	158.817
1650	44.9706	53.4044	371.973	158.817
1651	44.9706	53.4044	371.973	158.817
1652	43.8754	50.5667	370.779	151.053
1653	42.3345	46.5741	369.099	140.13
1654	80.4964	-145.976	559.869	-329.976
1655	140.878	-261.793	903.248	-590.889
1656	135.043	-2.40E+02	880.223	-541.358
1657	129.522	-2.19E+02	872.212	-492.338
1658	124.652	-198.219	847.539	-442.852
1659	121.628	-177.383	803.409	-394.778
1660	121.699	-156.696	822.805	-344.917
1661	121.946	-136.336	857.296	-296.045
1662	122	-116.192	870.645	-249.434
1663	122.05	-96.1686	852.644	-204.497
1664	122.096	-76.2411	842.43	-156.744
1665	122.137	-56.3443	815.472	-112.082
1666	92.8941	-23.1874	613.065	-41.0212
1667	67.4853	-6.08E-02	430.101	7.32924
1668	67.4806	-2.12E-02	402.982	6.23334
1669	0	0	0	0
1670	0	0	0	0
1671	0	0	0	0
1672	0	0	0	0
1673	0	0	0	0
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1678	0	0	0	0
1679	0	0	0	0
1680	0	0	0	0
1681	0	0	0	0
1682	0	0	0	0
1683	0	0	0	0
1684	0	0	0	0
1685	0	0	0	0
1686	137.185	6.16148	813.897	45.0577
1687	137.217	19.5256	845.239	82.072
1688	137.256	38.6369	884.662	134.064
1689	137.294	60.052	915.475	191.527
1690	137.334	81.4652	929.854	250.48
1691	137.379	102.88	928.66	310.877
1692	137.427	124.3	944.631	371.798

010529

1200

1693	138.072	145.728	972.211	432.509
1694	141.67	167.171	953.488	491.14
1695	148.031	186.305	963.493	544.619
1696	146.247	192.493	947.154	560.818
1697	136.966	187.257	903.546	543.409
1698	132.032	186.023	865.691	537.811
1699	127.827	185.169	830.828	533.726
1700	124.66	184.989	798.457	532.253
1701	121.685	184.68	771.765	530.34
1702	118.898	184.138	753.404	527.592
1703	116.307	183.624	738.912	525.073
1704	33.47	14.2285	359.326	52.8097
1705	33.7573	16.0712	359.667	57.7519
1706	34.0446	17.9139	360.007	62.694
1707	34.4365	19.7566	360.43	67.6513
1708	37.3024	31.233	363.496	98.5839
1709	38.1343	34.0776	364.402	106.267
1710	38.9803	36.9221	365.326	113.953
1711	39.3987	38.1375	365.798	117.247
1712	38.2195	34.3689	364.494	107.054
1713	38.2195	34.3689	364.494	107.054
1714	38.2195	34.3689	364.494	107.054
1715	38.2195	34.3689	364.494	107.054
1716	38.2195	34.3689	364.494	107.054
1717	38.2195	34.3689	364.494	107.054
1718	37.7199	32.6605	363.951	102.44
1719	37.181	30.8178	363.364	97.4623
1720	36.3815	28.0843	362.494	90.079
1721	35.8014	25.7161	361.875	83.6974
1722	36.4055	28.1662	362.52	90.3002
1723	35.9405	26.3235	362.022	85.3329
1724	35.5184	24.4808	361.575	80.3712
1725	35.2667	23.3818	361.309	77.4122
1726	34.0663	18.0527	360.033	63.0663
1727	34.0663	18.0527	360.033	63.0663
1728	34.0663	18.0527	360.033	63.0663
1729	34.0663	18.0527	360.033	63.0663
1730	34.0663	18.0527	360.033	63.0663
1731	34.0663	18.0527	360.033	63.0663
1732	83.9773	-153.947	581.143	-348.444
1733	141.402	-263.692	906.492	-595.308
1734	135.855	-2.43E+02	880.679	-548.329
1735	130.519	-2.23E+02	876.956	-502.278
1736	125.808	-203.509	854.525	-455.276
1737	122.534	-183.626	816.63	-409.181
1738	121.494	-163.781	812.442	-362.119
1739	121.925	-143.97	843.026	-314.585
1740	121.98	-124.188	878.201	-267.394
1741	122.03	-104.431	859.127	-223.413
1742	122.076	-84.696	846.764	-177.005
1743	122.119	-64.9658	827.691	-131.393
1744	112.15	-40.6988	740.174	-78.1345
1745	68.8614	-1.332	454.424	5.29871
1746	67.4828	-3.91E-02	415.224	6.72804
1747	0	0	0	0

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1221

010531

1748	0	0	0	0
1749	0	0	0	0
1750	0	0	0	0
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1760	0	0	0	0
1761	0	0	0	0
1762	0	0	0	0
1763	0	0	0	0
1764	137.171	0.108669	799.021	28.281
1765	137.203	13.5182	831.978	65.4486
1766	137.24	29.079	869.62	108.512
1767	137.277	50.6485	903.566	166.175
1768	137.317	72.2033	923.697	224.814
1769	137.36	93.7431	930.604	284.972
1770	137.406	115.267	929.065	346.025
1771	137.456	136.773	966.123	407.385
1772	140.175	158.262	961.267	466.781
1773	145.12	178.537	956.836	522.529
1774	150.634	194.997	967.492	569.115
1775	140.884	189.432	922.29	550.675
1776	134.348	186.602	883.465	540.44
1777	129.837	185.474	848.854	535.322
1778	126.501	185.094	817.278	533.109
1779	123.599	184.929	787.617	531.76
1780	120.884	184.524	766.484	529.549
1781	118.314	184.024	749.564	527.017
1782	115.947	183.543	739.231	524.754
1783	113.84	183.073	741.099	522.891
1784	111.807	182.619	742.901	521.092
1785	110.966	182.794	750.949	521.74
1786	110.634	183.237	761.663	523.431
1787	110.316	183.66	771.889	525.045
1788	110.613	183.957	770.695	526.194
1789	110.935	184.222	768.726	527.224
1790	111.23	184.465	766.925	528.166
1791	111.377	184.454	765.07	528.389
1792	111.387	184.205	763.177	527.939
1793	111.396	183.984	761.49	527.538
1794	111.404	183.778	759.924	527.167
1795	111.412	183.578	758.401	526.805
1796	170.663	-335.9	1108.91	-754.694
1797	168.781	-335.428	1108.34	-755.429
1798	162.799	-326.543	1085	-737.293
1799	154.87	-308.37	1014.1	-698.006
1800	147.975	-287.426	951.443	-650.768
1801	142.275	-2.67E+02	911.892	-602.664
1802	136.708	-2.47E+02	881.157	-555.651

1222

010532

1803	131.372	-226.705	878.162	-509.842
1804	126.627	-206.975	858.427	-463.451
1805	123.059	-187.247	824.3	-417.536
1806	121.385	-167.52	806.974	-371.196
1807	121.914	-147.792	836.046	-323.713
1808	121.969	-128.062	872.374	-276.308
1809	122.02	-108.332	862.947	-232.043
1810	122.067	-88.6017	848.636	-186.547
1811	122.111	-68.8715	833.227	-140.141
1812	120.72	-48.4922	796.743	-94.6516
1813	77.43	-9.12429	510.985	-11.2161
1814	67.4837	-4.69E-02	420.584	6.94464
1815	67.479	-7.39E-03	393.507	5.85045
1816	0	0	0	0
1817	0	0	0	0
1818	0	0	0	0
1819	0	0	0	0
1820	0	0	0	0
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1827	0	0	0	0
1828	0	0	0	0
1829	0	0	0	0
1830	0	0	0	0
1831	0	0	0	0
1832	0	0	0	0
1833	137.197	10.8637	825.454	58.0911
1834	137.23	24.8082	859.727	96.7415
1835	137.27	46.3799	896.848	154.763
1836	137.309	67.9376	920.811	213.128
1837	137.351	89.4804	931.51	272.886
1838	137.396	111.007	926.931	333.92
1839	137.446	132.517	958.79	395.242
1840	139.461	154.01	964.98	455.153
1841	143.746	174.87	953.694	512.1
1842	150.723	193.488	969.649	565.047
1843	142.456	190.329	929.58	553.649
1844	135.007	186.767	888.52	541.187
1845	130.233	185.573	851.887	535.77
1846	126.632	185.101	818.612	533.17
1847	123.622	184.931	787.853	531.771
1848	120.851	184.518	766.27	529.517
1849	118.276	184.017	749.314	526.979
1850	115.953	183.545	739.227	524.759
1851	113.929	183.093	741.02	522.97
1852	112.037	182.67	742.697	521.296
1853	111.044	182.69	748.426	521.341
1854	110.768	183.058	757.338	522.748
1855	110.502	183.412	765.89	524.098
1856	110.349	183.739	772.314	525.347
1857	110.647	183.984	770.491	526.3

1223

010533

1858	110.936	184.223	768.718	527.228
1859	111.218	184.456	766.992	528.131
1860	111.377	184.458	765.102	528.396
1861	111.388	184.182	763.004	527.898
1862	111.399	183.914	760.963	527.413
1863	111.409	183.654	758.977	526.942
1864	111.355	183.282	756.744	526.165
1865	111.133	182.615	753.79	524.585
1866	110.919	181.967	750.924	523.051
1867	110.713	181.345	748.168	521.576
1868	110.513	180.741	745.495	520.145
1869	44.3021	64.4604	395.943	193.341
1870	43.9618	63.7464	395.472	191.383
1871	44.0514	63.9343	395.596	191.898
1872	44.1051	64.047	395.67	192.207
1873	43.7069	63.2115	395.119	189.916
1874	45.0365	66.0017	396.959	197.567
1875	45.9164	67.8481	398.177	202.629
1876	171.15	-334.436	1105.66	-750.37
1877	170.059	-335.755	1108.74	-754.947
1878	167.491	-333.748	1103.99	-752.172
1879	161.14	-323.996	1078.29	-732.034
1880	152.936	-303.512	994.048	-687.421
1881	146.781	-2.83E+02	942.442	-640.599
1882	141.156	-2.63E+02	904.97	-593.235
1883	135.676	-242.77	880.578	-546.792
1884	130.398	-222.924	876.381	-501.073
1885	125.733	-203.194	854.171	-454.533
1886	122.511	-183.467	816.293	-408.814
1887	121.495	-163.739	812.504	-362.017
1888	121.925	-144.011	843.312	-314.35
1889	121.979	-124.281	878.568	-267.332
1890	122.03	-104.551	859.244	-223.678
1891	122.076	-84.8208	846.828	-177.304
1892	122.119	-65.0905	827.868	-131.672
1893	112.424	-40.9477	741.981	-78.662
1894	69.1351	-1.58088	456.23	4.77123
1895	67.4828	-3.93E-02	415.395	6.73496
1896	0	0	0	0
1897	0	0	0	0
1898	0	0	0	0
1899	0	0	0	0
1900	0	0	0	0
1901	0	0	0	0
1902	0	0	0	0
1903	0	0	0	0
1904	0	0	0	0
1905	0	0	0	0
1906	0	0	0	0
1907	0	0	0	0
1908	0	0	0	0
1909	0	0	0	0
1910	0	0	0	0
1911	0	0	0	0
1912	0	0	0	0

1224

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

1913	137.171	2.39E-02	798.813	28.046
1914	137.203	13.4334	829.232	65.1669
1915	137.24	28.9426	869.405	108.147
1916	137.277	50.5122	903.351	165.81
1917	137.317	72.0671	923.537	224.623
1918	137.359	93.607	930.727	284.346
1919	137.405	115.131	928.831	345.636
1920	137.455	136.637	965.889	406.997
1921	140.152	158.126	961.385	466.41
1922	145.055	178.363	956.687	522.034
1923	150.8	195.092	968.262	569.429
1924	141.132	189.574	923.442	551.145
1925	134.562	186.656	885.106	540.682
1926	130.144	185.551	851.211	535.67
1927	126.841	185.113	820.756	533.268
1928	124.125	184.959	792.989	532.005
1929	121.662	184.676	771.612	530.317
1930	119.425	184.24	756.877	528.111
1931	117.377	183.842	743.39	526.093
1932	115.622	183.471	739.519	524.467
1933	114.063	183.123	740.901	523.088
1934	112.564	182.788	742.23	521.762
1935	111.186	182.5	743.844	520.618
1936	110.955	182.808	751.296	521.794
1937	110.731	183.107	758.526	522.936
1938	110.513	183.398	765.543	524.043
1939	110.302	183.679	772.353	525.118
1940	110.525	183.884	771.233	525.912
1941	110.76	184.078	769.798	526.663
1942	110.986	184.264	768.416	527.386
1943	111.203	184.443	767.09	528.08
1944	111.374	184.54	765.726	528.544
1945	111.382	184.324	764.083	528.154
1946	111.391	184.113	762.474	527.772
1947	111.399	183.905	760.895	527.397
1948	111.407	183.703	759.354	527.031
1949	111.415	183.505	757.849	526.674
1950	111.277	183.047	755.702	525.607
1951	111.104	182.525	753.394	524.372
1952	110.917	181.962	750.9	523.038
1953	110.716	181.355	748.211	521.599
1954	30.9968	-40.1098	421.859	-77.8659
1955	170.941	-335.065	1107.06	-752.227
1956	169.626	-335.644	1108.6	-755.11
1957	166.375	-332.034	1099.48	-748.634
1958	160.215	-321.802	1069.53	-727.275
1959	152.366	-3.02E+02	988.129	-684.296
1960	146.593	-2.82E+02	941.03	-639.003
1961	141.108	-262.627	904.673	-592.831
1962	135.711	-242.901	880.598	-547.093
1963	130.457	-223.172	876.66	-501.657
1964	125.792	-203.444	854.452	-455.123
1965	122.547	-183.717	816.823	-409.391
1966	121.488	-163.989	812.138	-362.624
1967	121.924	-144.261	842.856	-314.947

010534

1225

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

1968	121.979	-124.531	878.808	-267.886
1969	122.029	-104.801	859.489	-224.231
1970	122.075	-85.0708	846.956	-177.903
1971	122.118	-65.3406	828.223	-132.232
1972	112.972	-41.4467	745.602	-79.7195
1973	69.6837	-2.07978	459.851	3.71387
1974	67.4829	-3.98E-02	415.739	6.74883
1975	67.4782	-3.22E-04	388.662	5.65463
1976	0	0	0	0
1977	0	0	0	0
1978	0	0	0	0
1979	0	0	0	0
1980	0	0	0	0
1981	0	0	0	0
1982	0	0	0	0
1983	0	0	0	0
1984	0	0	0	0
1985	0	0	0	0
1986	0	0	0	0
1987	0	0	0	0
1988	0	0	0	0
1989	0	0	0	0
1990	0	0	0	0
1991	0	0	0	0
1992	0	0	0	0
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2014	0	0	0	0
2015	0	0	0	0
2016	0	0	0	0
2017	0	0	0	0
2018	0	0	0	0
2019	0	0	0	0
2020	0	0	0	0
2021	0	0	0	0
2022	0	0	0	0

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1206

2023	0	0	0	0
2024	0	0	0	0
2025	0	0	0	0
2026	0	0	0	0
2027	0	0	0	0
2028	0	0	0	0
2029	0	0	0	0
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2040	0	0	0	0
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2042	0	0	0	0
2043	0	0	0	0
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2046	0	0	0	0
2047	0	0	0	0
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2072	0	0	0	0
2073	0	0	0	0
2074	0	0	0	0
2075	0	0	0	0
2076	0	0	0	0
2077	0	0	0	0

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2078	0	0	0	0
2079	0	0	0	0
2080	0	0	0	0
2081	0	0	0	0
2082	0	0	0	0
2083	0	0	0	0
2084	0	0	0	0
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2109	0	0	0	0
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2111	0	0	0	0
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2114	0	0	0	0
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2117	0	0	0	0
2118	0	0	0	0
2119	0	0	0	0
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2126	0	0	0	0
2127	0	0	0	0
2128	0	0	0	0
2129	0	0	0	0
2130	0	0	0	0
2131	0	0	0	0
2132	0	0	0	0

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1228

SIMULACIONES, CÁLCULOS Y GRÁFICAS



2133	0	0	0	0
2134	0	0	0	0
2135	0	0	0	0
2136	0	0	0	0
2137	0	0	0	0
2138	0	0	0	0
2139	0	0	0	0
2140	0	0	0	0
2141	0	0	0	0
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2150	0	0	0	0
2151	0	0	0	0
2152	0	0	0	0
2153	0	0	0	0
2154	0	0	0	0
2155	0	0	0	0
2156	137.202	13.2635	831.352	64.7426
2157	137.239	28.6692	868.975	107.416
2158	137.276	50.2389	902.921	165.08
2159	137.316	71.794	923.353	223.871
2160	137.359	93.3341	930.691	283.812
2161	137.405	114.858	928.361	344.858
2162	137.455	136.364	965.419	406.22
2163	140.107	157.854	961.623	465.666
2164	145.002	178.222	956.567	521.634
2165	150.709	195.04	967.839	569.256
2166	140.767	189.365	921.748	550.453
2167	134.123	186.546	881.735	540.184
2168	129.404	185.366	845.528	534.83
2169	126.01	185.066	812.257	532.881
2170	122.945	184.892	780.936	531.456
2171	120.084	184.369	761.219	528.761
2172	117.366	183.84	743.317	526.082
2173	114.962	183.323	740.105	523.883
2174	112.725	182.824	742.087	521.905
2175	111.09	182.629	746.954	521.109
2176	110.725	183.115	758.709	522.964
2177	110.357	183.606	770.573	524.837
2178	110.659	183.994	770.418	526.339
2179	111.108	184.365	767.667	527.778
2180	111.38	184.384	764.54	528.263
2181	111.399	183.906	760.898	527.398
2182	111.374	183.34	757	526.302
2183	110.948	182.054	751.308	523.256
2184	85.1011	140.568	602.578	405.021
2185	35.4372	-55.8105	424.76	-115.327
2186	35.4372	-55.8105	424.76	-115.327
2187	34.5001	-53.0104	423.625	-108.66

010533

1229



SIMULACIONES, CÁLCULOS Y GRÁFICAS

2188	33.932	-51.3129	422.937	-104.618
2189	33.9386	-51.3326	422.945	-104.664
2190	34.6178	-53.3621	423.768	-109.497
2191	35.0814	-54.7472	424.329	-112.795
2192	35.2114	-55.1359	424.487	-113.721
2193	72.6426	-146.424	546.072	-328.676
2194	171.088	-334.624	1106.08	-750.925
2195	170.318	-335.821	1108.82	-754.849
2196	168.918	-335.463	1108.38	-755.377
2197	164.87	-329.723	1093.38	-743.861
2198	159.422	-319.808	1061.3	-722.93
2199	152.594	-3.03E+02	990.498	-685.547
2200	147.343	-285.106	946.68	-645.387
2201	142.376	-267.215	912.511	-603.507
2202	137.349	-249.015	881.517	-561.156
2203	132.389	-230.502	878.734	-518.576
2204	127.744	-211.699	863.745	-474.594
2205	123.84	-192.628	835.696	-429.951
2206	121.217	-173.313	798.501	-385.262
2207	121.784	-153.779	827.072	-337.834
2208	121.952	-134.072	861.105	-290.942
2209	122.005	-114.342	868.833	-245.34
2210	122.054	-94.6115	851.846	-200.766
2211	122.099	-74.8813	841.733	-153.485
2212	122.139	-55.151	813.78	-109.409
2213	90.6152	-21.1149	598.021	-36.6288
2214	67.4851	-5.89E-02	428.832	7.27793
2215	67.4804	-1.94E-02	401.755	6.18374
2216	0	0	0	0
2217	0	0.00E+00	0	0
2218	0	0	0	0
2219	0	0	0	0
2220	0	0	0	0
2221	0	0	0	0
2222	0	0	0	0
2223	0	0	0	0
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2225	0	0	0	0
2226	0	0	0	0
2227	0	0	0	0
2228	0	0	0	0
2229	0	0	0	0
2230	0	0	0	0
2231	0	0	0	0
2232	0	0	0	0
2233	137.187	6.77919	815.416	46.7699
2234	137.219	20.1887	848.373	83.9375
2235	137.258	39.8106	886.509	137.201
2236	137.296	61.3727	916.368	195.144
2237	137.337	82.9202	930.832	254.483
2238	137.382	104.452	928.377	315.225
2239	137.43	125.967	947.503	376.554
2240	138.363	147.465	970.695	437.257
2241	141.968	168.945	951.939	495.992
2242	148.609	187.846	964.814	549.002

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1237

010510

2243	145.42	192.021	943.319	559.254
2244	136.541	187.15	900.288	542.927
2245	131.632	185.923	862.623	537.358
2246	127.51	185.151	827.59	533.578
2247	124.276	184.968	794.541	532.075
2248	121.2	184.586	768.571	529.862
2249	118.253	184.012	749.16	526.956
2250	115.523	183.449	739.607	524.379
2251	113.015	182.889	741.83	522.161
2252	111.096	182.621	746.765	521.079
2253	110.698	183.151	759.587	523.103
2254	110.306	183.674	772.229	525.098
2255	110.734	184.056	769.958	526.579
2256	111.181	184.426	767.219	528.013
2257	111.382	184.328	764.111	528.161
2258	111.4	183.887	760.752	527.363
2259	111.406	183.438	757.432	526.533
2260	111.031	182.306	752.425	523.854
2261	110.666	181.204	747.543	521.241
2262	27.7108	-25.0151	416.246	-41.4962
2263	27.7082	-24.9994	416.244	-41.4584
2264	27.7153	-25.043	416.251	-41.5634
2265	27.9451	-26.4634	416.485	-44.9874
2266	27.9753	-26.65	416.516	-45.4371
2267	28.0055	-26.8365	416.547	-45.8867
2268	28.03	-26.9882	416.572	-46.2525
2269	28.03	-26.9882	416.572	-46.2525
2270	28.03	-26.9882	416.572	-46.2525
2271	28.03	-26.9882	416.572	-46.2525
2272	28.03	-26.9882	416.572	-46.2525
2273	28.03	-26.9882	416.572	-46.2525
2274	112.246	-228.269	771.594	-516.213
2275	170.955	-335.023	1106.97	-752.105
2276	169.871	-335.707	1108.68	-755.018
2277	167.769	-334.175	1105.12	-753.055
2278	162.19	-3.26E+02	1082.54	-735.362
2279	155.124	-3.09E+02	1016.73	-699.398
2280	148.698	-290.08	956.891	-656.922
2281	143.401	-270.928	918.854	-612.147
2282	138.053	-251.566	885.777	-567.091
2283	132.792	-232.007	878.96	-522.037
2284	127.885	-212.296	864.417	-476.002
2285	123.832	-192.568	835.57	-429.813
2286	121.231	-172.841	799.192	-384.115
2287	121.803	-153.113	828.046	-336.218
2288	121.954	-133.384	862.677	-289.001
2289	122.006	-113.654	868.159	-243.818
2290	122.055	-93.9235	851.37	-199.315
2291	122.1	-74.1933	840.77	-152.061
2292	122.141	-54.463	812.805	-107.868
2293	89.1056	-19.7421	588.056	-33.7193
2294	67.485	-5.75E-02	427.888	7.23978
2295	67.4803	-1.80E-02	400.811	6.14558
2296	0	0	0	0
2297	0	0	0	0

1231

2298	0	0	0	0
2299	0	0	0	0
2300	0	0	0	0
2301	0	0	0	0
2302	0	0	0	0
2303	0	0	0	0
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2309	0	0	0	0
2310	0	0	0	0
2311	0	0	0	0
2312	0	0	0	0
2313	137.188	7.24679	816.565	48.0659
2314	137.22	20.6563	849.522	85.2336
2315	137.26	40.5627	887.693	139.212
2316	137.298	62.1243	916.877	197.204
2317	137.339	83.6713	931.337	256.549
2318	137.384	105.203	928.166	317.462
2319	137.432	126.717	948.796	378.694
2320	138.489	148.214	970.041	439.306
2321	142.083	169.681	951.229	498.001
2322	148.851	188.494	965.369	550.843
2323	145.075	191.824	941.719	558.601
2324	136.364	187.106	898.928	542.726
2325	131.47	185.882	861.384	537.175
2326	127.384	185.144	826.304	533.52
2327	124.114	184.959	792.885	532
2328	120.977	184.542	767.097	529.641
2329	117.936	183.951	747.072	526.644
2330	115.126	183.36	739.959	524.028
2331	112.479	182.769	742.305	521.687
2332	110.976	182.781	750.632	521.69
2333	110.539	183.363	764.695	523.909
2334	110.52	183.879	771.269	525.893
2335	111.034	184.304	768.121	527.54
2336	111.379	184.415	764.775	528.319
2337	111.398	183.922	761.02	527.427
2338	111.411	183.452	757.498	526.568
2339	111.03	182.302	752.407	523.844
2340	110.679	181.242	747.715	521.333
2341	2.61959	-1.65621	41.2284	-2.12373
2342	171.26	-334.107	1104.93	-749.4
2343	170.526	-335.874	1108.89	-754.77
2344	168.892	-3.35E+02	1108.37	-755.387
2345	164.039	-3.28E+02	1090.02	-741.227
2346	157.459	-314.875	1040.95	-712.182
2347	150.294	-295.943	968.923	-670.516
2348	145.059	-277.009	930.17	-626.238
2349	139.851	-258.075	896.897	-582.238
2350	134.703	-239.14	880.032	-538.443
2351	129.735	-220.122	873.226	-494.462
2352	125.193	-200.908	851.597	-449.14

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1232



SIMULACIONES, CÁLCULOS Y GRÁFICAS

2353	122.227	-181.513	812.156	-404.307
2354	121.547	-161.955	815.113	-357.685
2355	121.93	-142.257	846.154	-310.494
2356	121.984	-122.527	876.85	-263.452
2357	122.034	-102.797	857.526	-219.798
2358	122.08	-83.0672	845.929	-173.101
2359	122.123	-63.3369	825.383	-127.744
2360	108.576	-37.4486	716.582	-71.2461
2361	67.4876	-7.97E-02	443.067	7.85318
2362	67.4824	-3.58E-02	412.989	6.63771
2363	0	0	0	0
2364	0	0	0	0
2365	0	0	0	0
2366	0	0	0	0
2367	0	0	0	0
2368	0	0	0	0
2369	0	0	0	0
2370	0	0	0	0
2371	0	0	0	0
2372	0	0	0	0
2373	0	0	0	0
2374	0	0	0	0
2375	0	0	0	0
2376	0	0	0	0
2377	0	0	0	0
2378	0	0	0	0
2379	0	0	0	0
2380	137.174	1.2157	797.132	31.2646
2381	137.206	14.6252	834.699	68.517
2382	137.243	30.8602	872.423	113.273
2383	137.28	52.4285	906.367	170.933
2384	137.32	73.9821	924.824	229.891
2385	137.363	95.5206	930.226	290.012
2386	137.41	117.043	932.126	351.092
2387	137.46	138.547	969.243	412.182
2388	140.473	160.035	959.718	471.63
2389	145.714	180.12	958.193	527.032
2390	149.642	194.431	962.894	567.239
2391	139.825	188.827	917.38	548.672
2392	133.626	186.422	877.926	539.621
2393	128.945	185.251	842.006	534.309
2394	125.82	185.055	810.312	532.793
2395	122.91	184.89	780.579	531.44
2396	120.207	184.392	762.026	528.882
2397	117.651	183.895	745.192	526.362
2398	110.254	175.261	710.622	500.677
2399	34.0663	18.0527	360.033	63.0663
2400	34.0663	18.0527	360.033	63.0663
2401	34.0663	18.0527	360.033	63.0663
2402	33.9237	17.1384	359.864	60.614
2403	33.6364	15.2956	359.523	55.6719
2404	33.3491	13.4529	359.183	50.7297
2405	33.0618	11.6102	358.843	45.7876
2406	32.7745	9.76746	358.502	40.8454
2407	23.5323	6.59943	258.067	28.2481

010542

1233

2408	31.9447	8.95861	350.321	38.3462
2409	25.3745	7.11605	278.269	30.4594
2410	18.8043	5.2735	206.217	22.5726
2411	18.3595	5.14875	201.339	22.0386
2412	21.9314	6.15048	240.511	26.3264
2413	6.19459	1.73722	67.9329	7.43595
2414	6.19459	1.73722	67.9329	7.43595
2415	6.19459	1.73722	67.9329	7.43595
2416	6.19459	1.73722	67.9329	7.43595
2417	6.19459	1.73722	67.9329	7.43595
2418	10.6939	2.99901	117.275	12.8369
2419	17.2641	4.84157	189.327	20.7237
2420	23.8343	6.68412	261.379	28.6106
2421	11.685	3.27697	128.144	14.0267
2422	14.6833	4.12E+00	161.024	17.6257
2423	17.6815	4.96E+00	193.904	21.2248
2424	20.6797	5.79945	226.784	24.8238
2425	77.5499	120.678	533.059	345.043
2426	148.085	-287.832	952.276	-651.708
2427	142.622	-268.109	914.037	-605.586
2428	137.18	-248.383	881.422	-559.702
2429	131.894	-228.654	878.456	-514.325
2430	127.088	-208.926	860.623	-468.054
2431	123.342	-189.198	828.433	-422.038
2432	121.329	-169.471	804.12	-375.933
2433	121.901	-149.743	832.974	-328.037
2434	121.964	-130.013	868.818	-280.963
2435	122.015	-110.283	864.858	-236.361
2436	122.063	-90.5532	849.766	-191.041
2437	122.107	-70.823	835.993	-144.512
2438	122.148	-51.0927	808.028	-100.32
2439	81.7114	-13.0178	539.247	-19.4679
2440	67.4842	-5.08E-02	423.262	7.05287
2441	67.4795	-1.13E-02	396.186	5.95868
2442	0	0	0	0
2443	0	0	0	0
2444	0	0	0	0
2445	0	0	0	0
2446	0	0	0	0
2447	0	0	0	0
2448	0	0	0	0
2449	0	0	0	0
2450	0	0	0	0
2451	0	0	0	0
2452	0	0	0	0
2453	0	0	0	0
2454	0	0	0	0
2455	0	0	0	0
2456	0	0	0	0
2457	0	0	0	0
2458	0	0	0	0
2459	137.194	9.53738	818.996	54.356
2460	137.226	22.9469	855.152	91.5825
2461	137.266	44.2467	893.491	149.061
2462	137.305	65.806	919.328	207.396

010543

1234

2463	137.346	87.3504	931.963	266.847
2464	137.392	108.904	927.379	327.957
2465	137.441	130.529	955.365	389.572
2466	139.166	152.247	966.519	450.333
2467	143.227	173.483	952.506	508.157
2468	150.167	192.005	968.378	560.829
2469	143.232	190.772	933.174	555.115
2470	135.376	186.859	891.353	541.606
2471	130.487	185.636	853.838	536.059
2472	126.672	185.103	819.02	533.189
2473	123.443	184.92	786.028	531.688
2474	120.322	184.415	762.783	528.995
2475	117.311	183.829	742.959	526.028
2476	57.6551	81.7148	414.252	236.611
2477	34.8415	-16.2712	381.473	-24.5409
2478	34.8415	-16.2712	381.473	-24.5409
2479	34.8415	-16.2712	381.473	-24.5409
2480	34.8415	-16.2712	381.473	-24.5409
2481	34.8415	-16.2712	381.473	-24.5409
2482	34.8415	-16.2712	381.473	-24.5409
2483	34.8415	-16.2712	381.473	-24.5409
2484	34.8415	-16.2712	381.473	-24.5409
2485	34.8415	-16.2712	381.473	-24.5409
2486	34.8415	-16.2712	381.473	-24.5409
2487	34.8415	-16.2712	381.473	-24.5409
2488	34.8415	-16.2712	381.473	-24.5409
2489	34.8415	-16.2712	381.473	-24.5409
2490	34.8415	-16.2712	381.473	-24.5409
2491	36.7668	-19.8373	398.854	-32.4939
2492	36.9979	-21.3943	399.375	-36.2413
2493	36.8164	-20.1714	398.966	-33.298
2494	36.4846	-17.9361	398.218	-27.9183
2495	33.6198	-15.7007	368.097	-23.6804
2496	96.521	154.435	642.66	440.639
2497	111.521	182.555	743.154	520.84
2498	110.865	182.929	754.2	522.253
2499	110.497	183.419	766.056	524.124
2500	110.464	183.833	771.61	525.715
2501	110.858	184.159	769.198	526.977
2502	111.239	184.473	766.867	528.196
2503	111.382	184.337	764.186	528.179
2504	111.397	183.965	761.352	527.506
2505	111.411	183.603	758.595	526.851
2506	111.221	182.88	754.966	525.213
2507	110.915	181.954	750.865	523.019
2508	110.616	181.053	746.876	520.884
2509	24.7569	9.607	376.908	44.6586
2510	24.7569	9.607	376.908	44.6586
2511	24.7569	9.607	376.908	44.6586
2512	171.102	-334.582	1105.99	-750.803
2513	170.106	-335.767	1108.76	-754.929
2514	168.234	-334.888	1107	-754.527
2515	162.321	-325.809	1083.07	-735.777
2516	145.207	-290.009	960.303	-656.96
2517	38.5688	-38.0034	409.43	-76.3147

010544

1235

2518	33.0455	17.2703	363.824	60.9288
2519	33.6258	20.146	365.225	68.6543
2520	34.2771	23.0218	366.688	76.3881
2521	34.9284	25.8976	368.152	84.1219
2522	38.2558	37.5996	374.861	115.69
2523	38.5945	38.6029	375.506	118.405
2524	38.9332	39.6062	376.15	121.121
2525	39.2718	40.6095	376.794	123.836
2526	38.0631	37.0286	374.495	114.145
2527	38.0631	37.0286	374.495	114.145
2528	38.0631	37.0286	374.495	114.145
2529	38.0631	37.0286	374.495	114.145
2530	38.0631	37.0286	374.495	114.145
2531	38.0631	37.0286	374.495	114.145
2532	38.0631	37.0286	374.495	114.145
2533	38.0631	37.0286	374.495	114.145
2534	38.0631	37.0286	374.495	114.145
2535	38.0631	37.0286	374.495	114.145
2536	38.0631	37.0286	374.495	114.145
2537	38.0631	37.0286	374.495	114.145
2538	38.0631	37.0286	374.495	114.145
2539	38.0631	3.70E+01	374.495	114.145
2540	38.0631	3.70E+01	374.495	114.145
2541	37.4306	34.9178	373.245	108.445
2542	36.7984	32.7186	371.979	102.512
2543	89.6437	-171.218	625.713	-388.959
2544	145.001	-276.795	929.739	-625.744
2545	139.329	-256.184	893.666	-577.837
2546	133.824	-235.857	879.539	-530.892
2547	128.684	-215.673	868.218	-483.969
2548	124.275	-195.621	842.036	-436.857
2549	121.382	-175.688	799.819	-390.867
2550	121.723	-155.863	824.024	-342.894
2551	121.947	-136.119	857.693	-295.525
2552	121.999	-116.389	870.838	-249.87
2553	122.049	-96.6587	852.896	-205.671
2554	122.094	-76.9285	842.783	-158.391
2555	122.135	-57.1982	816.682	-113.995
2556	95.107	-25.1998	627.672	-45.2862
2557	67.4856	-6.30E-02	431.641	7.39146
2558	67.4809	-2.35E-02	404.564	6.29727
2559	0	0	0	0
2560	0	0	0	0
2561	0	0	0	0
2562	0	0	0	0
2563	0	0	0	0
2564	0	0	0	0
2565	0	0	0	0
2566	0	0	0	0
2567	0	0	0	0
2568	0	0	0	0
2569	0	0	0	0
2570	0	0	0	0
2571	0	0	0	0
2572	0	0	0	0

010545

1236

2573	0	0	0	0
2574	0	0	0	0
2575	0	0	0	0
2576	137.184	5.38783	811.996	42.9134
2577	137.216	18.7974	844.953	80.081
2578	137.254	37.5728	882.987	131.219
2579	137.292	59.1361	914.855	189.018
2580	137.333	80.6851	929.33	248.334
2581	137.378	102.219	928.861	308.866
2582	137.425	123.735	943.692	370.081
2583	137.989	145.235	972.642	431.159
2584	141.594	166.717	953.884	489.901
2585	147.886	185.918	963.162	543.52
2586	146.455	192.612	948.12	561.212
2587	137.072	187.283	904.362	543.53
2588	132.13	186.047	866.448	537.924
2589	127.894	185.173	831.517	533.757
2590	124.712	184.992	798.994	532.278
2591	121.707	184.684	771.907	530.361
2592	118.865	184.131	753.189	527.559
2593	116.193	183.598	739.013	524.972
2594	113.832	183.071	741.106	522.883
2595	111.55	182.562	743.128	520.865
2596	110.889	182.897	753.428	522.131
2597	110.529	183.377	765.039	523.964
2598	110.431	183.806	771.812	525.609
2599	110.841	184.144	769.305	526.921
2600	111.239	184.473	766.866	528.197
2601	111.382	184.319	764.048	528.146
2602	111.398	183.93	761.082	527.442
2603	111.413	183.551	758.197	526.756
2604	111.16	182.695	754.143	524.773
2605	110.839	181.725	749.852	522.477
2606	110.526	180.782	745.677	520.243
2607	9.98E-02	3.66E-02	1.52719	0.174659
2608	9.98E-02	3.66E-02	1.52719	0.174659
2609	4.50727	1.65115	68.9439	7.88486
2610	4.59117	1.68189	70.2272	8.03162
2611	4.53191	1.66018	69.3208	7.92796
2612	1.38866	0.50871	21.2412	2.42927
2613	0.937771	0.343535	14.3443	1.6405
2614	0.486881	0.17836	7.4474	0.851731
2615	1.86223	0.682191	28.4849	3.25771
2616	9.32644	3.41656	142.659	16.3153
2617	16.7906	6.15094	256.832	29.3729
2618	24.2549	8.88531	371.006	42.4306
2619	25.1764	11.6202	377.176	50.0595
2620	25.7462	14.3552	377.541	57.3965
2621	26.316	17.0901	377.905	64.7336
2622	26.3524	17.2648	377.929	65.2024
2623	27.232	20.5596	378.578	74.0618
2624	27.3734	21.0552	378.685	75.3955
2625	27.9552	23.0947	379.128	80.8835
2626	171.17	-3.34E+02	1105.53	-750.197
2627	170.245	-3.36E+02	1108.8	-754.877

010516

1237

010517

2628	168.563	-335.372	1108.27	-755.511
2629	162.624	-326.275	1084.3	-736.74
2630	155.272	-309.38	1018.27	-700.209
2631	148.579	-289.644	955.995	-655.91
2632	143.122	-269.918	917.129	-609.797
2633	137.674	-250.193	883.431	-563.895
2634	132.379	-230.464	878.728	-518.488
2635	127.516	-210.736	862.661	-472.323
2636	123.605	-191.009	832.267	-426.214
2637	121.276	-171.281	801.473	-380.328
2638	121.848	-151.553	830.327	-332.431
2639	121.959	-131.824	865.519	-285.28
2640	122.01	-112.094	866.434	-240.607
2641	122.059	-92.3635	850.694	-195.379
2642	122.104	-72.6333	838.559	-148.566
2643	122.144	-52.903	810.594	-104.374
2644	85.6829	-16.6295	565.463	-27.1224
2645	67.4846	-5.44E-02	425.747	7.15326
2646	67.4799	-1.49E-02	398.67	6.05907
2647	0	0	0	0
2648	0	0	0	0
2649	0	0	0	0
2650	0	0	0	0
2651	0	0	0	0
2652	0	0	0	0
2653	0	0	0	0
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2658	0	0	0	0
2659	0	0	0	0
2660	0	0	0	0
2661	0	0	0	0
2662	0	0	0	0
2663	0	0	0	0
2664	137.191	8.30704	819.171	51.0047
2665	137.223	21.7166	852.128	88.1723
2666	137.263	42.2679	890.376	143.771
2667	137.301	63.8287	918.03	201.872
2668	137.342	85.3743	932.384	261.244
2669	137.387	106.904	927.804	322.287
2670	137.436	128.417	951.768	383.388
2671	138.774	149.913	968.557	443.952
2672	142.39	171.254	950.538	501.881
2673	149.401	189.96	966.625	555.012
2674	144.298	191.381	938.119	557.132
2675	135.963	187.006	895.854	542.272
2676	131.105	185.791	858.58	536.76
2677	127.189	185.133	824.303	533.429
2678	124.057	184.955	792.301	531.973
2679	121.124	184.571	768.065	529.786
2680	118.355	184.032	749.83	527.057
2681	115.812	183.513	739.351	524.635
2682	113.541	183.006	741.364	522.626

1238

010548

2683	111.363	182.52	743.294	520.7
2684	110.877	182.912	753.802	522.19
2685	110.539	183.363	764.703	523.911
2686	110.389	183.772	772.067	525.476
2687	110.769	184.085	769.744	526.691
2688	111.138	184.39	767.483	527.874
2689	111.377	184.447	765.02	528.377
2690	111.392	184.07	762.152	527.696
2691	111.407	183.694	759.285	527.015
2692	111.28	183.059	755.754	525.636
2693	110.943	182.038	751.239	523.219
2694	110.604	181.017	746.715	520.798
2695	26.8642	-19.7827	415.382	-28.8835
2696	26.8642	-19.7827	415.382	-28.8835
2697	26.8642	-19.7827	415.382	-28.8835
2698	26.7585	-19.1292	415.274	-27.3082
2699	19.4013	-12.2663	305.347	-15.7288
2700	8.54592	-5.40308	134.5	-6.92828
2701	4.23459	1.55126	64.773	7.40784
2702	24.1392	8.84292	369.236	42.2281
2703	26.1172	16.1361	377.778	62.1742
2704	28.0506	23.4292	379.2	81.7837
2705	28.4766	24.9227	379.524	85.8024
2706	28.4766	24.9227	379.524	85.8024
2707	28.4766	24.9227	379.524	85.8024
2708	28.4766	24.9227	379.524	85.8024
2709	28.4766	24.9227	379.524	85.8024
2710	28.4766	24.9227	379.524	85.8024
2711	28.4766	24.9227	379.524	85.8024
2712	28.4766	24.9227	379.524	85.8024
2713	28.4766	24.9227	379.524	85.8024
2714	28.4766	24.9227	379.524	85.8024
2715	28.4766	24.9227	379.524	85.8024
2716	28.4766	24.9227	379.524	85.8024
2717	28.4766	24.9227	379.524	85.8024
2718	28.4766	24.9227	379.524	85.8024
2719	28.4766	24.9227	379.524	85.8024
2720	28.4766	24.9227	379.524	85.8024
2721	28.4766	24.9227	379.524	85.8024
2722	28.4766	24.9227	379.524	85.8024
2723	28.4766	24.9227	379.524	85.8024
2724	28.4766	24.9227	379.524	85.8024
2725	28.4766	24.9227	379.524	85.8024
2726	28.4766	24.9227	379.524	85.8024
2727	28.4766	24.9227	379.524	85.8024
2728	28.4766	24.9227	379.524	85.8024
2729	28.4766	24.9227	379.524	85.8024
2730	28.5748	25.267	379.599	86.7288
2731	28.6648	25.5823	379.667	87.5774
2732	28.4766	24.9227	379.524	85.8024
2733	28.4766	24.9227	379.524	85.8024
2734	28.4936	24.9821	379.537	85.9623
2735	28.4766	24.9227	379.524	85.8024
2736	28.4766	24.9227	379.524	85.8024
2737	28.4766	24.9227	379.524	85.8024

2738	28.4766	24.9227	379.524	85.8024
2739	28.4766	24.9227	379.524	85.8024
2740	28.4766	24.9227	379.524	85.8024
2741	28.5626	25.2239	379.59	86.613
2742	29.0827	27.0472	379.985	91.5193
2743	29.7103	28.8705	380.534	96.4393
2744	30.3393	30.6938	381.086	101.359
2745	30.9684	32.5171	381.637	106.28
2746	31.5974	34.3404	382.188	111.2
2747	32.2296	36.1637	382.745	116.121
2748	32.3256	36.4094	382.839	116.787
2749	32.3256	36.4094	382.839	116.787
2750	32.3256	36.4094	382.839	116.787
2751	32.3256	36.4094	382.839	116.787
2752	32.3256	36.4094	382.839	116.787
2753	32.3256	36.4094	382.839	116.787
2754	32.3164	3.64E+01	382.83	116.723
2755	171.121	-3.35E+02	1105.86	-750.629
2756	170.08	-335.76	1108.75	-754.939
2757	167.892	-334.363	1105.61	-753.443
2758	161.803	-325.014	1080.97	-734.136
2759	154.089	-306.408	1006	-693.732
2760	147.721	-286.494	949.53	-648.606
2761	142.226	-266.672	911.583	-602.243
2762	136.79	-246.929	881.204	-556.359
2763	131.505	-227.2	878.237	-510.982
2764	126.745	-207.473	858.987	-464.625
2765	123.132	-187.745	825.354	-418.685
2766	121.371	-168.017	806.246	-372.404
2767	121.913	-148.29	835.515	-324.556
2768	121.968	-128.56	871.467	-277.495
2769	122.019	-108.83	863.435	-233.145
2770	122.066	-89.0996	849.021	-187.557
2771	122.11	-69.3693	833.933	-141.256
2772	121.812	-49.4856	803.954	-96.757
2773	78.5222	-10.1176	518.195	-13.3212
2774	67.4838	-4.79E-02	421.267	6.97225
2775	67.4791	-8.39E-03	394.191	5.87806
2776	0	0	0	0
2777	0	0	0	0
2778	0	0	0	0
2779	0	0	0	0
2780	0	0	0	0
2781	0	0	0	0
2782	0	0	0	0
2783	0	0	0	0
2784	0	0	0	0
2785	0	0	0	0
2786	0	0	0	0
2787	0	0	0	0
2788	0	0	0	0
2789	0	0	0	0
2790	0	0	0	0
2791	0	0	0	0
2792	0	0	0	0

010519

1249

2793	137.196	10.5254	824.623	57.1532
2794	137.229	24.2638	858.389	95.2326
2795	137.269	45.8357	895.992	153.309
2796	137.308	67.3938	920.395	211.765
2797	137.349	88.937	931.626	271.346
2798	137.395	110.464	927.047	332.381
2799	137.444	131.974	957.855	393.695
2800	139.371	153.467	965.453	453.671
2801	143.569	174.396	953.288	510.755
2802	150.548	193.022	969.25	563.721
2803	142.697	190.467	930.697	554.104
2804	135.133	186.798	889.484	541.33
2805	130.337	185.599	852.692	535.889
2806	126.746	185.108	819.775	533.223
2807	123.779	184.94	789.462	531.844
2808	121.015	184.55	767.349	529.679
2809	118.465	184.053	750.554	527.165
2810	116.126	183.583	739.073	524.913
2811	34.0663	18.0527	360.033	63.0663
2812	34.0663	18.0527	360.033	63.0663
2813	33.9422	17.2569	359.886	60.9318
2814	33.8641	16.7562	359.793	59.5891
2815	34.75	21.1257	360.762	71.3376
2816	34.75	21.1257	360.762	71.3376
2817	34.75	21.1257	360.762	71.3376
2818	34.923	21.8808	360.945	73.3706
2819	34.0663	18.0527	360.033	63.0663
2820	34.0663	18.0527	360.033	63.0663
2821	34.0663	18.0527	360.033	63.0663
2822	34.1171	18.362	360.092	63.8963
2823	34.2578	18.9763	360.241	65.5501
2824	33.6237	15.214	359.508	55.4528
2825	33.5532	14.7623	359.425	54.2414
2826	33.4928	14.3747	359.353	53.2019
2827	33.4324	13.9871	359.282	52.1625
2828	33.372	13.5995	359.21	51.123
2829	113.922	183.091	741.026	522.963
2830	111.796	182.617	742.91	521.083
2831	110.959	182.804	751.184	521.777
2832	110.63	183.243	761.791	523.451
2833	110.31	183.668	772.087	525.076
2834	110.642	183.981	770.518	526.287
2835	111.005	184.28	768.297	527.448
2836	111.36	184.573	766.125	528.585
2837	111.386	184.242	763.457	528.005
2838	111.399	183.916	760.975	527.416
2839	111.411	183.618	758.703	526.876
2840	111.307	183.137	756.103	525.822
2841	111.089	182.481	753.197	524.267
2842	110.897	181.901	750.629	522.893
2843	110.73	181.396	748.394	521.696
2844	110.577	180.935	746.356	520.606
2845	93.7623	154.78	650.599	445.547
2846	52.227	80.7575	416.184	238.11
2847	46.1674	68.3749	398.524	204.074

010550

2848	39.1947	53.2288	389.612	162.634
2849	33.9863	40.6607	384.476	128.314
2850	29.4418	28.0924	380.299	94.3396
2851	26.3524	17.2648	377.929	65.2024
2852	26.3524	17.2648	377.929	65.2024
2853	26.3524	17.2648	377.929	65.2024
2854	26.5622	18.2117	378.069	67.744
2855	26.7852	18.9934	378.238	69.8473
2856	27.0796	20.0254	378.462	72.6243
2857	27.0745	20.0077	378.458	72.5767
2858	26.7162	18.7517	378.186	69.197
2859	26.4852	17.9027	378.014	66.9135
2860	26.5378	18.1264	378.05	67.5142
2861	26.5551	18.1868	378.063	67.6769
2862	26.3524	17.2648	377.929	65.2024
2863	25.0887	11.1995	377.12	48.9308
2864	1.27483	-0.805999	20.0639	-1.03352
2865	19.4173	-12.2764	305.598	-15.7418
2866	27.7587	-25.3116	416.295	-42.211
2867	30.387	-38.3321	419.056	-73.5275
2868	33.3292	-49.3859	422.229	-100.019
2869	34.894	-54.1874	424.102	-111.462
2870	35.4372	-55.8105	424.76	-115.327
2871	32.5232	-4.64E+01	421.36	-92.7621
2872	171.149	-3.34E+02	1105.67	-750.38
2873	170.377	-335.836	1108.84	-754.827
2874	168.844	-335.444	1108.36	-755.405
2875	164.066	-328.489	1090.13	-741.312
2876	157.589	-315.203	1042.3	-712.896
2877	150.305	-295.982	969.003	-670.606
2878	144.882	-276.351	928.844	-624.719
2879	139.392	-256.411	894.054	-578.366
2880	134.039	-236.662	879.66	-532.743
2881	128.982	-216.933	869.637	-486.941
2882	124.496	-197.149	845.271	-440.381
2883	121.627	-177.376	803.394	-394.762
2884	121.672	-157.62	821.454	-347.159
2885	121.942	-137.863	854.513	-299.687
2886	121.995	-118.102	872.516	-253.66
2887	122.045	-98.3716	853.774	-209.776
2888	122.09	-78.6415	843.661	-162.496
2889	122.132	-58.9112	819.11	-117.832
2890	98.8654	-28.6177	652.481	-52.5301
2891	67.486	-6.64E-02	433.992	7.48646
2892	67.4813	-2.69E-02	406.915	6.39227
2893	0	0	0	0
2894	0	0	0	0
2895	0	0	0	0
2896	0	0	0	0
2897	0	0	0	0
2898	0	0	0	0
2899	0	0	0	0
2900	0	0	0	0
2901	0	0	0	0
2902	0	0	0	0

010551

SIMULACIONES, CÁLCULOS Y GRÁFICAS



2903	0	0	0	0
2904	0	0	0	0
2905	0	0	0	0
2906	0	0	0	0
2907	0	0	0	0
2908	0	0	0	0
2909	0	0	0	0
2910	137.181	4.22362	809.135	39.6865
2911	137.213	17.6332	842.092	76.8542
2912	137.251	35.6997	880.039	126.211
2913	137.288	57.2646	913.589	183.891
2914	137.329	78.8148	928.073	243.188
2915	137.374	100.35	929.198	303.703
2916	137.421	121.868	940.44	364.86
2917	137.671	143.369	974.315	425.74
2918	141.281	164.853	955.512	484.803
2919	147.236	184.184	961.676	538.589
2920	147.845	193.405	954.563	563.84
2921	138.813	188.25	912.689	546.758
2922	133.519	186.395	877.104	539.499
2923	129.368	185.357	845.255	534.79
2924	126.449	185.091	816.744	533.085
2925	123.878	184.945	790.468	531.89
2926	66.1684	92.257	468.915	266.302
2927	45.2556	47.6865	405.665	143.06
2928	46.9866	51.9883	408.884	154.9
2929	48.7516	56.2901	412.306	166.737
2930	50.4378	60.1152	416.041	177.253
2931	50.4378	60.1152	416.041	177.253
2932	50.4378	60.1152	416.041	177.253
2933	50.4378	60.1152	416.041	177.253
2934	50.4378	60.1152	416.041	177.253
2935	50.4378	60.1152	416.041	177.253
2936	50.4378	60.1152	416.041	177.253
2937	50.4378	60.1152	416.041	177.253
2938	50.4378	60.1152	416.041	177.253
2939	50.4378	60.1152	416.041	177.253
2940	50.4378	60.1152	416.041	177.253
2941	50.4378	60.1152	416.041	177.253
2942	50.4378	60.1152	416.041	177.253
2943	50.4378	60.1152	416.041	177.253
2944	50.4378	60.1152	416.041	177.253
2945	50.4378	60.1152	416.041	177.253
2946	50.4378	60.1152	416.041	177.253
2947	48.0698	54.6803	410.899	162.309
2948	47.6665	53.678	410.149	159.55
2949	47.2632	52.6757	409.399	156.792
2950	46.8599	51.6734	408.649	154.033
2951	46.4566	50.6711	407.898	151.275
2952	121.043	184.555	767.535	529.707
2953	118.954	184.149	753.775	527.647
2954	116.962	183.761	740.659	525.684
2955	115.221	183.381	739.875	524.112
2956	113.581	183.015	741.329	522.661
2957	112.008	182.664	742.723	521.27

010532

1243

2958	111.082	182.639	747.195	521.147
2959	110.839	182.963	755.027	522.383
2960	110.604	183.277	762.622	523.582
2961	110.375	183.582	769.987	524.745
2962	110.458	183.828	771.647	525.696
2963	110.715	184.04	770.075	526.518
2964	110.965	184.247	768.546	527.318
2965	111.208	184.447	767.057	528.097
2966	111.375	184.508	765.482	528.487
2967	111.384	184.27	763.673	528.057
2968	111.394	184.039	761.912	527.639
2969	111.403	183.814	760.199	527.232
2970	111.411	183.595	758.532	526.836
2971	111.339	183.235	756.534	526.053
2972	111.153	182.675	754.055	524.726
2973	110.973	182.13	751.644	523.436
2974	110.797	181.6	749.298	522.18
2975	110.626	181.085	747.016	520.959
2976	110.46	180.583	744.796	519.771
2977	54.0153	84.27	425.931	247.805
2978	54.0153	84.27	425.931	247.805
2979	54.0153	84.27	425.931	247.805
2980	54.6388	85.4898	429.498	251.173
2981	55.4155	87.0092	433.94	255.368
2982	56.1922	88.5285	438.382	259.563
2983	56.9689	90.0479	442.824	263.759
2984	57.765	91.5673	447.349	267.967
2985	58.5638	93.0866	451.885	272.177
2986	58.9609	93.842	454.14	274.27
2987	58.9609	93.842	454.14	274.27
2988	59.6486	95.1499	458.045	277.895
2989	60.0891	95.9879	460.546	280.217
2990	60.0954	95.9998	460.582	280.25
2991	59.6176	95.0909	457.868	277.731
2992	59.4118	94.6995	456.7	276.646
2993	59.302	94.4907	456.076	276.068
2994	59.2253	94.3448	455.641	275.663
2995	59.421	94.717	456.752	276.695
2996	59.4914	94.851	457.152	277.066
2997	59.5618	94.9849	457.552	277.437
2998	59.4046	94.6858	456.659	276.609
2999	59.4046	94.6858	456.659	276.609
3000	59.4046	94.6858	456.659	276.609
3001	59.4046	94.6858	456.659	276.609
3002	59.4046	94.6858	456.659	276.609
3003	59.4046	94.6858	456.659	276.609
3004	59.4046	94.6858	456.659	276.609
3005	59.4046	94.6858	456.659	276.609
3006	59.4046	94.6858	456.659	276.609
3007	59.4046	94.6858	456.659	276.609
3008	59.4046	94.6858	456.659	276.609
3009	59.4046	94.6858	456.659	276.609
3010	57.7406	91.5208	447.21	267.838
3011	52.4407	81.1892	416.947	239.298
3012	47.3504	70.8574	400.161	210.881

010553

010554

3013	42.4855	60.5256	393.599	182.577
3014	58.627	-115.067	467.645	-255.467
3015	171.017	-334.836	1106.55	-751.553
3016	121.119	-245.711	833.689	-556.744
3017	30.5481	25.1477	420.253	84.7603
3018	30.5481	25.1477	420.253	84.7603
3019	31.007	26.9093	420.576	89.4992
3020	31.2316	27.7435	420.738	91.7443
3021	32.641	32.1299	421.885	103.578
3022	32.9283	33.0239	422.119	105.991
3023	33.2354	33.9794	422.369	108.568
3024	32.4085	31.4063	421.696	101.626
3025	31.6057	28.9078	421.043	94.8853
3026	30.7591	25.9575	420.401	86.9388
3027	29.9906	2.30E+01	419.861	79.0024
3028	29.2221	2.01E+01	419.32	71.0659
3029	28.5528	17.1069	418.879	63.1403
3030	27.6028	11.965	418.33	49.3509
3031	46.837	-81.5648	481.696	-177.801
3032	166.18	-331.735	1098.69	-748.016
3033	160.034	-321.347	1067.66	-726.283
3034	152.257	-301.805	987.004	-683.702
3035	146.557	-282.219	940.754	-638.692
3036	141.105	-262.616	904.654	-592.805
3037	135.746	-243.03	880.617	-547.391
3038	130.512	-223.405	876.922	-502.207
3039	125.864	-203.746	854.792	-455.834
3040	122.596	-184.055	817.539	-410.171
3041	121.478	-164.336	811.631	-363.466
3042	121.923	-144.606	842.227	-315.771
3043	121.978	-124.876	878.179	-268.709
3044	122.028	-105.146	859.827	-224.995
3045	122.075	-85.4162	847.133	-178.73
3046	122.118	-65.6859	828.712	-133.006
3047	113.73	-42.1358	750.605	-81.1801
3048	70.4414	-2.76884	464.853	2.25349
3049	67.4829	-4.05E-02	416.213	6.76798
3050	67.4782	-1.01E-03	389.136	5.67379
3051	0	0	0	0
3052	0	0	0	0
3053	0	0	0	0
3054	0	0	0	0
3055	0	0	0	0
3056	0	0	0	0
3057	0	0	0	0
3058	0	0	0	0
3059	0	0	0	0
3060	0	0	0	0
3061	0	0	0	0
3062	0	0	0	0
3063	0	0	0	0
3064	0	0	0	0
3065	0	0	0	0
3066	0	0	0	0
3067	0	0	0	0

3068	137.202	13.0287	830.776	64.0919
3069	137.238	28.2915	868.288	106.396
3070	137.276	49.8615	902.327	164.071
3071	137.315	71.4169	923.165	222.659
3072	137.358	92.9572	930.771	282.744
3073	137.404	114.481	927.712	343.784
3074	137.454	135.988	964.771	405.146
3075	140.043	157.478	961.951	464.637
3076	144.88	177.894	956.286	520.702
3077	150.893	195.145	968.694	569.605
3078	140.931	189.459	922.51	550.765
3079	134.22	186.57	882.477	540.294
3080	129.516	185.394	846.391	534.958
3081	126.137	185.073	813.557	532.94
3082	123.201	184.907	783.548	531.575
3083	120.477	184.445	763.808	529.149
3084	117.915	183.946	746.934	526.623
3085	115.612	183.469	739.528	524.458
3086	113.53	183.004	741.373	522.617
3087	111.524	182.556	743.152	520.842
3088	110.934	182.837	751.988	521.904
3089	110.625	183.249	761.949	523.476
3090	110.325	183.649	771.608	525
3091	110.6	183.946	770.776	526.151
3092	33.2507	29.5713	449.219	96.0479
3093	33.2507	29.5713	449.219	96.0479
3094	32.1358	25.4851	448.415	85.0429
3095	31.8913	24.4827	448.252	82.3469
3096	31.6468	23.4802	448.09	79.6509
3097	31.4023	22.4778	447.927	76.9549
3098	110.924	184.213	768.796	527.187
3099	111.268	184.497	766.687	528.291
3100	111.381	184.344	764.233	528.19
3101	111.395	184.007	761.669	527.581
3102	111.408	183.68	759.175	526.989
3103	111.32	183.177	756.279	525.916
3104	111.042	182.339	752.57	523.931
3105	110.772	181.524	748.961	522
3106	170.848	-335.345	1107.68	-753.055
3107	169.402	-335.587	1108.53	-755.194
3108	165.434	-330.59	1095.67	-745.65
3109	121.163	-244.148	843.32	-554.408
3110	31.7059	14.898	409.916	55.4105
3111	34.3126	27.265	413.913	88.6346
3112	35.3446	30.8535	415.417	98.3126
3113	36.2611	34.0039	416.749	106.81
3114	37.2272	37.2219	418.152	115.495
3115	39.7304	44.578	421.765	135.397
3116	40.9786	47.9868	423.45	144.697
3117	42.3404	51.57	425.227	154.518
3118	42.7389	52.6185	425.746	157.391
3119	41.2454	48.6888	423.798	146.621
3120	41.2454	48.6888	423.798	146.621
3121	41.2454	48.6888	423.798	146.621
3122	38.4685	40.8697	419.944	125.364

010555

3123	35.5769	31.6519	415.755	100.466
3124	33.1997	22.4341	412.198	75.6446
3125	31.4426	13.2164	409.264	50.899
3126	13.4527	3.99915	178.248	17.477
3127	8.05445	-3.98E+00	107.159	-5.79212
3128	15.0753	-7.45E+00	200.567	-10.841
3129	22.0962	-10.9193	293.975	-15.8898
3130	15.6832	-7.75019	208.654	-11.2781
3131	5.15188	-2.54591	68.5423	-3.70482
3132	9.50225	2.82478	125.905	12.3448
3133	28.1048	8.35484	372.388	36.5122
3134	30.3116	9.01086	401.628	39.3791
3135	151.064	-298.768	974.722	-677.067
3136	145.544	-278.946	933.606	-630.573
3137	140.154	-259.172	898.77	-584.79
3138	134.783	-239.437	880.077	-539.127
3139	129.638	-219.709	872.762	-493.488
3140	124.973	-199.981	850.554	-446.954
3141	122.044	-180.254	809.488	-401.4
3142	121.588	-160.526	817.203	-354.216
3143	121.934	-140.797	849.167	-306.685
3144	121.988	-121.067	875.42	-260.222
3145	122.038	-101.337	856.097	-216.567
3146	122.083	-81.6073	845.181	-169.603
3147	122.126	-61.877	823.314	-124.474
3148	105.373	-34.5356	695.437	-65.0723
3149	67.487	-7.48E-02	439.732	7.71841
3150	67.482	-3.29E-02	410.985	6.55675
3151	0	0	0	0
3152	0	0	0	0
3153	0	0	0	0
3154	0	0	0	0
3155	0	0	0	0
3156	0	0	0	0
3157	0	0	0	0
3158	0	0	0	0
3159	0	0	0	0
3160	0	0	0	0
3161	0	0	0	0
3162	0	0	0	0
3163	0	0	0	0
3164	0	0	0	0
3165	0	0	0	0
3166	0	0	0	0
3167	0	0	0	0
3168	137.176	2.20792	804.181	34.0995
3169	137.208	15.6175	837.138	71.2672
3170	137.246	32.4566	874.935	117.541
3171	137.283	54.0238	908.878	175.198
3172	137.323	75.5764	925.98	234.054
3173	137.367	97.1137	929.887	294.529
3174	137.413	118.635	934.893	355.582
3175	137.463	140.138	971.922	416.986
3176	140.739	161.625	958.331	475.976
3177	146.231	181.501	959.377	530.959

010556



SIMULACIONES, CÁLCULOS Y GRÁFICAS

3178	148.872	193.992	959.325	565.783
3179	139.146	188.44	914.233	547.388
3180	133.267	186.332	875.172	539.213
3181	128.674	185.217	839.486	534.12
3182	125.459	185.035	806.626	532.625
3183	122.43	184.825	776.665	531.073
3184	119.597	184.274	758.011	528.281
3185	116.903	183.749	740.266	525.625
3186	114.562	183.234	740.459	523.529
3187	112.342	182.739	742.426	521.566
3188	111.035	182.702	748.732	521.39
3189	110.692	183.159	759.774	523.133
3190	110.362	183.6	770.422	524.813
3191	110.592	183.939	770.828	526.124
3192	110.962	184.244	768.562	527.309
3193	111.322	184.541	766.361	528.461
3194	111.384	184.277	763.722	528.068
3195	168.754	-335.421	1108.33	-755.439
3196	163.227	-327.2	1086.73	-738.65
3197	155.93	-311.033	1025.09	-703.809
3198	148.916	-290.882	958.537	-658.782
3199	143.333	-270.681	918.431	-611.571
3200	60.1438	-90.8972	476.717	-201.248
3201	35.8101	14.9077	384.022	54.1945
3202	35.8101	14.9077	384.022	54.1945
3203	35.8101	14.9077	384.022	54.1945
3204	35.8101	14.9077	384.022	54.1945
3205	35.8101	14.9077	384.022	54.1945
3206	37.9915	25.3412	390.345	82.3469
3207	38.2276	26.3435	391.007	85.0571
3208	38.4638	27.3458	391.669	87.7674
3209	38.743	28.3481	392.321	90.4822
3210	39.0461	29.3504	392.967	93.1994
3211	37.871	24.8301	390.007	80.9648
3212	37.871	24.8301	390.007	80.9648
3213	37.871	24.8301	390.007	80.9648
3214	37.871	24.8301	390.007	80.9648
3215	37.871	24.8301	390.007	80.9648
3216	37.871	24.8301	390.007	80.9648
3217	36.7901	20.2425	386.977	68.5597
3218	35.7597	14.5887	383.862	53.3372
3219	33.7744	8.9349	368.731	37.6829
3220	12.4045	3.28157	135.426	13.84
3221	5.05845	-2.23168	54.8118	-3.43851
3222	21.2286	-9.36557	230.026	-14.4302
3223	36.652	-16.1701	397.15	-24.9144
3224	40.0442	-22.1689	427.699	-38.3547
3225	40.9722	-27.9773	430.311	-52.3372
3226	41.8699	-33.5951	432.838	-65.8611
3227	43.0561	-38.6318	436.737	-77.8671
3228	41.0591	-28.5206	430.555	-53.6452
3229	40.9084	-27.5776	430.131	-51.3751
3230	40.7577	-26.6346	429.707	-49.105
3231	40.607	-25.6916	429.283	-46.835
3232	40.4564	-24.7487	428.859	-44.5649

010557

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

3233	41.1831	-29.2967	430.904	-55.5134
3234	41.1831	-29.2967	430.904	-55.5134
3235	41.1831	-29.2967	430.904	-55.5134
3236	41.1831	-29.2967	430.904	-55.5134
3237	41.1831	-2.93E+01	430.904	-55.5134
3238	41.1831	-2.93E+01	430.904	-55.5134
3239	41.1831	-29.2967	430.904	-55.5134
3240	41.1831	-29.2967	430.904	-55.5134
3241	41.1831	-29.2967	430.904	-55.5134
3242	40.591	-25.5915	429.238	-46.5938
3243	39.852	-20.9661	427.158	-35.4591
3244	37.0388	-16.3407	401.341	-25.1773
3245	26.5542	-11.7151	287.733	-18.0503
3246	16.0696	-7.08953	174.125	-10.9234
3247	5.58495	-2.46395	60.5168	-3.7964
3248	117.538	-210.747	771.757	-475.845
3249	132.342	-230.325	878.707	-518.168
3250	127.566	-210.946	862.898	-472.819
3251	123.655	-191.352	832.994	-427.007
3252	121.268	-171.57	801.05	-381.03
3253	121.842	-151.771	830.009	-332.96
3254	121.958	-132.01	865.18	-285.725
3255	122.01	-112.277	866.811	-240.773
3256	122.058	-92.5472	850.788	-195.819
3257	122.103	-72.817	838.819	-148.978
3258	122.144	-53.0866	810.854	-104.786
3259	86.0858	-16.9959	568.123	-27.8991
3260	67.4846	-5.48E-02	425.999	7.16345
3261	67.4799	-1.53E-02	398.922	6.06926
3262	0	0	0	0
3263	0	0	0	0
3264	0	0	0	0
3265	0	0	0	0
3266	0	0	0	0
3267	0	0	0	0
3268	0	0	0	0
3269	0	0	0	0
3270	0	0	0	0
3271	0	0	0	0
3272	0	0	0	0
3273	0	0	0	0
3274	0	0	0	0
3275	0	0	0	0
3276	0	0	0	0
3277	0	0	0	0
3278	0	0	0	0
3279	137.19	8.18219	815.436	50.5956
3280	137.222	21.5917	851.821	87.8263
3281	137.262	42.0671	890.06	143.234
3282	137.301	63.628	917.894	201.323
3283	137.342	85.1737	932.347	260.683
3284	137.387	106.704	927.847	321.719
3285	137.436	128.217	951.381	382.974
3286	138.741	149.713	968.732	443.405
3287	142.326	171.069	950.388	501.401

010538

1249

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

3288	149.336	189.787	966.477	554.522
3289	144.389	191.433	938.541	557.304
3290	136.01	187.018	896.215	542.325
3291	131.148	185.802	858.913	536.809
3292	127.219	185.134	824.61	533.443
3293	124.086	184.957	792.598	531.987
3294	121.16	184.578	768.308	529.822
3295	118.411	184.043	750.202	527.112
3296	115.891	183.531	739.281	524.705
3297	113.659	183.032	741.26	522.73
3298	111.53	182.557	743.147	520.847
3299	110.915	182.862	752.582	521.997
3300	110.59	183.295	763.055	523.65
3301	110.31	183.707	772.551	525.222
3302	110.67	184.003	770.351	526.374
3303	111.02	184.292	768.209	527.494
3304	111.361	184.574	766.119	528.588
3305	111.385	184.251	763.525	528.022
3306	111.399	183.917	760.982	527.418
3307	111.412	183.592	758.507	526.83
3308	111.243	182.946	755.257	525.369
3309	110.968	182.115	751.576	523.399
3310	110.7	181.305	747.994	521.483
3311	74.8528	122.9	544.129	355.348
3312	29.6693	28.7516	380.498	96.1184
3313	29.6693	28.7516	380.498	96.1184
3314	29.6693	28.7516	380.498	96.1184
3315	29.6693	28.7516	380.498	96.1184
3316	29.6693	28.7516	380.498	96.1184
3317	29.6693	28.7516	380.498	96.1184
3318	29.6693	28.7516	380.498	96.1184
3319	29.6693	28.7516	380.498	96.1184
3320	29.6693	28.7516	380.498	96.1184
3321	29.6693	28.7516	380.498	96.1184
3322	29.6693	28.7516	380.498	96.1184
3323	29.6693	28.7516	380.498	96.1184
3324	29.6693	28.7516	380.498	96.1184
3325	29.6693	28.7516	380.498	96.1184
3326	29.6693	2.88E+01	380.498	96.1184
3327	29.6693	2.88E+01	380.498	96.1184
3328	29.6693	28.7516	380.498	96.1184
3329	29.6693	28.7516	380.498	96.1184
3330	134.351	-270.419	898.111	-610.62
3331	170.704	-335.777	1108.64	-754.332
3332	169.059	-335.499	1108.42	-755.324
3333	164.304	-328.854	1091.09	-742.065
3334	157.382	-314.682	1040.15	-711.762
3335	149.968	-294.744	966.462	-667.735
3336	144.481	-274.861	925.842	-621.282
3337	139.01	-255.031	891.697	-575.154
3338	133.661	-235.248	879.447	-529.491
3339	128.645	-215.508	868.033	-483.58
3340	124.298	-195.781	842.374	-437.225
3341	121.435	-176.053	800.591	-391.709
3342	121.71	-156.325	823.347	-344.018

010539

1250

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

3343	121.945	-136.596	856.822	-296.665
3344	121.998	-116.866	871.306	-250.927
3345	122.048	-97.1363	853.14	-206.816
3346	122.093	-77.4062	843.027	-159.535
3347	122.134	-57.6759	817.359	-115.065
3348	96.155	-26.1529	634.59	-47.3062
3349	67.4857	-6.40E-02	432.297	7.41795
3350	67.481	-2.45E-02	405.22	6.32376
3351	0	0	0	0
3352	0	0	0	0
3353	0	0	0	0
3354	0	0	0	0
3355	0	0	0	0
3356	0	0	0	0
3357	0	0	0	0
3358	0	0	0	0
3359	0	0	0	0
3360	0	0	0	0
3361	0	0	0	0
3362	0	0	0	0
3363	0	0	0	0
3364	0	0	0	0
3365	0	0	0	0
3366	0	0	0	0
3367	0	0	0	0
3368	137.183	5.06319	811.198	42.0136
3369	137.215	18.4727	844.155	79.1812
3370	137.254	37.0505	882.165	129.822
3371	137.291	58.6142	914.502	187.588
3372	137.332	80.1636	928.979	246.899
3373	137.376	101.698	928.912	307.525
3374	137.424	123.215	942.761	368.702
3375	137.902	144.714	973.096	429.737
3376	141.507	166.197	954.338	488.479
3377	147.718	185.468	962.776	542.24
3378	146.698	192.75	949.245	561.671
3379	137.227	187.344	905.336	543.758
3380	132.246	186.076	867.331	538.054
3381	127.974	185.177	832.329	533.794
3382	124.798	184.997	799.873	532.318
3383	121.815	184.705	772.615	530.467
3384	119.015	184.16	754.176	527.707
3385	116.392	183.643	738.838	525.147
3386	114.121	183.136	740.85	523.139
3387	111.955	182.652	742.769	521.223
3388	110.981	182.774	750.473	521.665
3389	110.65	183.216	761.146	523.349
3390	110.331	183.641	771.427	524.972
3391	110.613	183.957	770.697	526.193
3392	110.967	184.248	768.533	527.325
3393	111.31	184.532	766.432	528.424
3394	111.383	184.302	763.913	528.114
3395	111.397	183.966	761.358	527.507
3396	111.41	183.641	758.877	526.918
3397	111.286	183.076	755.832	525.677

010530

125i

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

3398	111.01	182.241	752.137	523.7
3399	110.741	181.429	748.542	521.776
3400	109.708	179.478	740.712	516.556
3401	29.6693	28.7516	380.498	96.1184
3402	29.6693	28.7516	380.498	96.1184
3403	29.6693	28.7516	380.498	96.1184
3404	29.6693	28.7516	380.498	96.1184
3405	29.6693	28.7516	380.498	96.1184
3406	29.6693	28.7516	380.498	96.1184
3407	29.6693	28.7516	380.498	96.1184
3408	29.6693	28.7516	380.498	96.1184
3409	29.6693	28.7516	380.498	96.1184
3410	29.6693	28.7516	380.498	96.1184
3411	29.9344	29.5201	380.731	98.1922
3412	32.0312	35.5977	382.568	114.593
3413	34.3827	41.6753	384.866	131.065
3414	36.8539	47.7529	387.303	147.623
3415	131.775	-265.671	883.469	-600.083
3416	170.678	-335.854	1108.81	-754.558
3417	168.869	-335.45	1108.36	-755.395
3418	163.137	-327.062	1086.37	-738.366
3419	155.282	-309.406	1018.37	-700.263
3420	148.197	-288.242	953.118	-652.66
3421	141.842	-266.254	909.465	-601.386
3422	46.219	-51.4741	445.832	-108.385
3423	36.1938	17.3386	385.239	60.7266
3424	35.6893	14.1429	383.639	52.1394
3425	35.1848	10.9473	382.038	43.5523
3426	29.3298	7.75909	320.207	32.724
3427	28.7565	7.61E+00	313.948	32.0844
3428	36.3398	1.83E+01	385.703	63.2104
3429	36.5598	19.2652	386.331	65.9172
3430	36.796	20.2675	386.993	68.6275
3431	37.0322	21.2698	387.655	71.3378
3432	37.2683	22.2721	388.317	74.0481
3433	36.224	17.5297	385.335	61.2402
3434	36.224	17.5297	385.335	61.2402
3435	36.224	17.5297	385.335	61.2402
3436	36.224	17.5297	385.335	61.2402
3437	36.224	17.5297	385.335	61.2402
3438	36.224	17.5297	385.335	61.2402
3439	58.2904	-85.5976	476.692	-188.825
3440	134.859	-239.721	880.12	-539.779
3441	129.644	-219.735	872.791	-493.55
3442	124.932	-199.808	850.359	-446.545
3443	121.998	-179.933	808.809	-400.661
3444	121.6	-160.105	817.818	-353.195
3445	121.935	-140.319	850.039	-305.544
3446	121.989	-120.568	874.931	-259.116
3447	122.039	-100.837	855.483	-215.677
3448	122.085	-81.1071	844.924	-168.404
3449	122.127	-61.3768	822.605	-123.354
3450	104.275	-33.5376	688.193	-62.9571
3451	67.4868	-7.32E-02	438.589	7.67224
3452	67.4819	-3.19E-02	410.299	6.52901

010561

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

010562

3453	0	0	0	0
3454	0	0	0	0
3455	0	0	0	0
3456	0	0	0	0
3457	0	0	0	0
3458	0	0	0	0
3459	0	0	0	0
3460	0	0	0	0
3461	0	0	0	0
3462	0	0	0	0
3463	0	0	0	0
3464	0	0	0	0
3465	0	0	0	0
3466	0	0	0	0
3467	0	0	0	0
3468	0	0	0	0
3469	0	0	0	0
3470	137.177	2.54786	805.016	35.0418
3471	137.209	15.9574	837.973	72.2094
3472	137.247	33.0035	875.796	119.003
3473	137.284	54.5704	909.738	176.66
3474	137.324	76.1226	926.263	235.781
3475	137.368	97.6595	929.771	296.076
3476	137.415	119.18	935.808	357.19
3477	137.465	140.683	972.861	418.541
3478	140.831	162.169	957.855	477.464
3479	146.408	181.974	959.782	532.304
3480	148.611	193.842	958.113	565.289
3481	138.915	188.308	913.161	546.951
3482	133.145	186.301	874.229	539.074
3483	128.59	185.212	838.63	534.081
3484	125.38	185.03	805.817	532.588
3485	122.356	184.811	776.181	531.001
3486	119.527	184.26	757.55	528.212
3487	116.836	183.736	739.827	525.559
3488	114.505	183.221	740.51	523.479
3489	112.287	182.726	742.475	521.517
3490	111.026	182.714	749.016	521.435
3491	110.683	183.171	760.062	523.178
3492	110.351	183.614	770.774	524.869
3493	110.607	183.952	770.734	526.173
3494	110.981	184.26	768.446	527.37
3495	111.345	184.56	766.22	528.535
3496	111.385	184.246	763.486	528.012
3497	111.4	183.89	760.78	527.37
3498	111.413	183.545	758.147	526.745
3499	96.9171	160.452	674.167	460.753
3500	169.644	-335.649	1108.61	-755.103
3501	166.493	-332.215	1099.95	-749.007
3502	160.37	-322.19	1071.14	-728.122
3503	152.52	-302.467	989.734	-685.143
3504	146.7	-282.747	941.838	-639.917
3505	126.746	-235.11	822.371	-531.643
3506	40.4747	-25.0014	428.663	-45.17
3507	0.704224	-0.310688	7.63076	-0.4787

1253



SIMULACIONES, CÁLCULOS Y GRÁFICAS

3508	5.68442	-2.50784	61.5946	-3.86401
3509	10.6646	-4.70499	115.559	-7.24933
3510	15.6448	-6.90214	169.522	-10.6346
3511	20.625	-9.09929	223.486	-14.02
3512	2.48214	-1.09507	26.8958	-1.68725
3513	5.3248	-2.34918	57.6979	-3.61956
3514	5.67827	-2.50513	61.528	-3.85984
3515	3.54074	-1.56209	38.3663	-2.40683
3516	1.9654	-0.867091	21.2965	-1.33599
3517	11.9159	-5.25701	129.117	-8.09987
3518	11.9159	-5.25701	129.117	-8.09987
3519	11.9159	-5.25701	129.117	-8.09987
3520	11.9159	-5.25701	129.117	-8.09987
3521	10.0694	-4.44239	109.109	-6.84472
3522	6.66188	-2.93907	72.1861	-4.52845
3523	3.25438	-1.43576	35.2635	-2.21218
3524	0.271389	7.18E-02	2.96288	0.302795
3525	6.3107	1.66948	68.8969	7.04101
3526	12.35	3.26716	134.831	13.7792
3527	6.75013	1.78573	73.6944	7.5313
3528	1.85699	0.49126	20.2736	2.07189
3529	4.10782	1.08671	44.847	4.5832
3530	6.35865	1.68216	69.4204	7.09451
3531	4.72985	1.25127	51.6381	5.27722
3532	41.0129	35.8734	397.042	110.884
3533	119.633	184.281	758.249	528.317
3534	116.822	183.734	739.734	525.545
3535	114.389	183.195	740.613	523.376
3536	146.625	-282.468	941.267	-639.271
3537	51.2177	-72.175	428.475	-157.203
3538	2.38983	0.652538	25.7481	2.78218
3539	2.38983	0.652538	25.7481	2.78218
3540	2.38983	0.652538	25.7481	2.78218
3541	2.38983	0.652538	25.7481	2.78218
3542	18.1565	4.95761	195.619	21.1374
3543	33.9785	11.0117	363.251	44.0878
3544	34.1359	12.0139	363.379	46.7775
3545	34.2933	13.0161	363.506	49.4671
3546	34.4506	14.0183	363.634	52.1568
3547	33.8205	10.0056	363.123	41.3877
3548	33.8205	10.0056	363.123	41.3877
3549	33.8205	10.0056	363.123	41.3877
3550	33.8205	10.0056	363.123	41.3877
3551	33.8205	10.0056	363.123	41.3877
3552	34.3104	13.1255	363.52	49.7606
3553	35.3907	19.4852	364.416	66.8432
3554	36.8659	25.845	365.732	83.996
3555	38.6433	32.2048	367.317	101.186
3556	40.6303	38.5646	369.133	118.406
3557	42.8628	44.9243	371.287	135.67
3558	43.3155	46.1891	371.724	139.108
3559	45.4275	51.5466	373.751	153.781
3560	47.6025	56.9042	376.75	168.464
3561	49.4799	61.2618	380.865	180.426
3562	49.0482	60.2596	379.918	177.675

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1254

3563	116.938	183.756	740.5	525.66
3564	115.287	183.396	739.817	524.17
3565	37.1208	-22.8639	400.057	-39.7855
3566	47.9439	60.5912	377.581	178.512
3567	45.3737	5.44E+01	372.413	161.674
3568	43.0031	4.83E+01	369.828	144.87
3569	40.7847	42.164	367.362	128.159
3570	41.7938	45.0956	368.5	136.104
3571	40.0243	39.955	366.504	122.172
3572	38.3498	34.8144	364.636	108.257
3573	36.8464	29.6738	363	94.3724
3574	35.5305	24.5332	361.588	80.5125
3575	34.0663	18.0527	360.033	63.0663
3576	34.0663	18.0527	360.033	63.0663
3577	34.0663	18.0527	360.033	63.0663
3578	34.0663	18.0527	360.033	63.0663
3579	91.311	-169.653	623.662	-384.542
3580	141.096	-262.584	904.599	-592.729
3581	135.558	-242.33	880.512	-545.78
3582	130.214	-222.147	875.506	-499.239
3583	125.495	-202.189	853.039	-452.162
3584	122.337	-182.274	813.767	-406.062
3585	121.534	-162.397	814.467	-358.759
3586	121.929	-142.553	845.968	-310.874
3587	121.983	-122.738	877.057	-263.918
3588	122.034	-102.948	857.674	-220.132
3589	122.08	-83.1803	845.851	-173.54
3590	122.122	-63.4295	825.514	-127.952
3591	108.764	-37.6191	717.82	-71.6075
3592	67.4876	-8.00E-02	443.262	7.86105
3593	67.4824	-3.60E-02	413.106	6.64244
3594	0	0	0	0
3595	0	0	0	0
3596	0	0	0	0
3597	0	0	0	0
3598	0	0	0	0
3599	0	0	0	0
3600	0	0	0	0
3601	0	0	0	0
3602	0	0	0	0
3603	0	0	0	0
3604	0	0	0	0
3605	0	0	0	0
3606	0	0	0	0
3607	0	0	0	0
3608	0	0	0	0
3609	0	0	0	0
3610	0	0	0	0
3611	137.173	1.15772	801.6	31.1887
3612	137.206	14.5673	832.211	68.3132
3613	137.243	30.7669	872.276	113.024
3614	137.28	52.3352	906.221	170.684
3615	137.32	73.889	924.838	229.431
3616	137.363	95.4275	930.245	289.748
3617	137.409	116.95	931.965	350.827

010561

1255

3618	137.46	138.454	969.083	411.917
3619	140.457	159.943	959.799	471.376
3620	145.683	180.039	958.124	526.802
3621	149.687	194.457	963.102	567.324
3622	139.865	188.85	917.565	548.747
3623	133.646	186.426	878.078	539.643
3624	128.947	185.251	842.026	534.312
3625	125.667	185.046	808.748	532.721
3626	122.583	184.855	777.676	531.225
3627	119.688	184.292	758.61	528.371
3628	116.918	183.752	740.368	525.64
3629	114.496	183.219	740.517	523.471
3630	112.184	182.703	742.566	521.426
3631	110.991	182.761	750.148	521.613
3632	110.628	183.245	761.85	523.46
3633	110.314	183.71	772.524	525.237
3634	110.724	184.048	770.019	526.547
3635	111.122	184.377	767.582	527.823
3636	111.378	184.44	764.97	528.365
3637	111.393	184.051	762.006	527.661
3638	111.408	183.673	759.123	526.976
3639	111.269	183.024	755.602	525.554
3640	110.948	1.82E+02	751.314	523.259
3641	110.636	1.81E+02	747.142	521.027
3642	5.32479	1.95064	81.4487	9.31499
3643	5.32479	1.95064	81.4487	9.31499
3644	5.32479	1.95064	81.4487	9.31499
3645	5.32479	1.95064	81.4487	9.31499
3646	65.8789	-131.472	507.673	-293.838
3647	171.046	-334.749	1106.36	-751.296
3648	169.995	-335.738	1108.72	-754.971
3649	167.921	-334.409	1105.73	-753.537
3650	162.103	-325.474	1082.19	-735.086
3651	154.762	-308.1	1012.98	-697.419
3652	148.325	-288.711	954.079	-653.746
3653	142.937	-269.246	915.981	-608.234
3654	137.541	-249.712	882.61	-562.777
3655	132.284	-230.111	878.675	-517.676
3656	127.449	-210.451	862.34	-471.651
3657	123.566	-190.739	831.695	-425.592
3658	121.284	-171.011	801.867	-379.673
3659	121.856	-151.283	830.722	-331.776
3660	121.959	-131.554	866.011	-284.637
3661	122.011	-111.824	866.367	-239.77
3662	122.059	-92.0937	850.556	-194.732
3663	122.104	-72.3635	838.177	-147.962
3664	122.145	-52.6332	810.212	-103.77
3665	85.091	-16.0913	561.556	-25.9818
3666	67.4845	-5.39E-02	425.377	7.1383
3667	67.4798	-1.44E-02	398.3	6.04411
3668	0	0	0	0
3669	0	0	0	0
3670	0	0	0	0
3671	0	0	0	0
3672	0	0	0	0

010565



SIMULACIONES, CÁLCULOS Y GRÁFICAS

3673	0	0	0	0
3674	0	0	0	0
3675	0	0	0	0
3676	0	0	0	0
3677	0	0	0	0
3678	0	0	0	0
3679	0	0	0	0
3680	0	0	0	0
3681	0	0	0	0
3682	0	0	0	0
3683	0	0	0	0
3684	0	0	0	0
3685	137.191	8.49038	819.621	51.5128
3686	137.223	21.8999	852.579	88.6805
3687	137.263	42.5628	890.841	144.559
3688	137.301	64.1233	918.197	202.767
3689	137.343	85.6687	932.321	262.079
3690	137.388	107.198	927.742	323.121
3691	137.437	128.711	952.232	384.384
3692	138.823	150.207	968.301	444.755
3693	142.491	171.527	950.787	502.618
3694	149.495	190.213	966.842	555.733
3695	144.164	191.304	937.499	556.879
3696	135.894	186.989	895.324	542.193
3697	131.041	185.775	858.092	536.688
3698	127.145	185.13	823.852	533.408
3699	124.016	184.953	791.876	531.954
3700	121.085	184.563	767.809	529.748
3701	118.318	184.025	749.587	527.02
3702	115.781	183.506	739.379	524.607
3703	113.539	183.006	741.366	522.624
3704	111.467	182.543	743.202	520.792
3705	110.926	182.848	752.244	521.944
3706	110.632	183.24	761.72	523.44
3707	110.361	183.6	770.441	524.816
3708	110.505	183.868	771.355	525.848
3709	110.774	184.09	769.71	526.709
3710	111.018	184.29	768.221	527.488
3711	111.242	184.476	766.846	528.208
3712	111.376	184.491	765.354	528.456
3713	111.384	184.272	763.683	528.059
3714	111.393	184.058	762.058	527.673
3715	111.401	183.85	760.477	527.298
3716	111.409	183.649	758.939	526.932
3717	111.401	183.423	757.368	526.499
3718	111.231	182.908	755.088	525.279
3719	111.052	182.368	752.697	523.999
3720	110.839	181.727	749.86	522.481
3721	110.594	180.987	746.586	520.729
3722	6.82265	2.49935	104.36	11.9353
3723	26.9842	-20.5244	415.504	-30.6714
3724	31.7428	-43.4255	420.518	-85.7345
3725	35.1554	-54.9683	424.419	-113.322
3726	35.2854	-55.357	424.576	-114.247
3727	35.4155	-55.7456	424.734	-115.172

010566

1257



SIMULACIONES, CÁLCULOS Y GRÁFICAS

3728	35.4372	-55.8105	424.76	-115.327
3729	35.4372	-55.8105	424.76	-115.327
3730	35.4372	-55.8105	424.76	-115.327
3731	35.4372	-55.8105	424.76	-115.327
3732	35.4372	-55.8105	424.76	-115.327
3733	35.4368	-55.8093	424.76	-115.324
3734	31.6768	-43.1776	420.447	-85.1404
3735	28.5212	-30.0246	417.074	-53.5716
3736	26.3933	-16.8716	414.901	-21.8662
3737	5.87932	-3.71714	92.5316	-4.76643
3738	24.8444	10.0267	376.964	45.7845
3739	28.2149	24.0053	379.325	83.3338
3740	29.6693	28.7516	380.498	96.1184
3741	29.6693	28.7516	380.498	96.1184
3742	31.3038	33.4894	381.931	108.904
3743	31.5318	34.1502	382.13	110.687
3744	31.7598	34.8111	382.33	112.47
3745	31.1056	3.29E+01	381.757	107.353
3746	31.1056	3.29E+01	381.757	107.353
3747	31.1056	32.9148	381.757	107.353
3748	31.1056	32.9148	381.757	107.353
3749	31.1056	32.9148	381.757	107.353
3750	31.1056	32.9148	381.757	107.353
3751	31.1056	32.9148	381.757	107.353
3752	31.1056	32.9148	381.757	107.353
3753	92.8849	-189.248	662.049	-427.523
3754	170.873	-335.27	1107.51	-752.833
3755	169.469	-335.604	1108.55	-755.169
3756	165.758	-331.087	1096.98	-746.678
3757	159.298	-319.496	1060.02	-722.251
3758	151.375	-299.589	977.857	-678.873
3759	145.886	-279.758	935.704	-632.986
3760	140.379	-259.985	900.159	-586.682
3761	135.002	-240.253	880.2	-541.003
3762	129.831	-220.524	873.68	-495.412
3763	125.166	-200.797	851.472	-448.878
3764	122.163	-181.069	811.215	-403.282
3765	121.565	-161.341	816.011	-356.196
3766	121.931	-141.613	847.681	-308.631
3767	121.986	-121.883	876.219	-262.026
3768	122.036	-102.153	856.895	-218.372
3769	122.082	-82.4228	845.599	-171.557
3770	122.124	-62.6925	824.469	-126.301
3771	107.162	-36.1628	707.249	-68.5211
3772	67.4873	-7.75E-02	441.595	7.79369
3773	67.4822	-3.45E-02	412.105	6.60197
3774	0	0	0	0
3775	0	0	0	0
3776	0	0	0	0
3777	0	0	0	0
3778	0	0	0	0
3779	0	0	0	0
3780	0	0	0	0
3781	0	0	0	0
3782	0	0	0	0

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ANEXO 1E
SIMULACIONES, CÁLCULOS Y GRÁFICAS

RESULT EBRCL130R00.xls

ALSTOM

3783	0	0	0	0
3784	0	0	0	0
3785	0	0	0	0
3786	0	0	0	0
3787	0	0	0	0
3788	0	0	0	0
3789	0	0	0	0
3790	0	0	0	0
3791	137.175	1.65365	802.818	32.5632
3792	137.207	15.0632	835.776	69.7309
3793	137.244	31.5648	873.532	115.157
3794	137.281	53.1326	907.476	172.816
3795	137.322	74.6858	925.377	231.614
3796	137.365	96.2238	930.076	292.005
3797	137.411	117.745	933.336	353.097
3798	137.461	139.249	970.454	414.177
3799	140.521	160.737	958.791	473.075
3800	145.942	180.73	958.716	528.766
3801	149.302	194.237	961.319	566.596
3802	139.524	188.655	915.984	548.102
3803	133.468	186.382	876.709	539.441
3804	128.811	185.225	840.888	534.183
3805	125.588	185.042	807.947	532.685
3806	122.543	184.847	777.415	531.186
3807	119.675	184.289	758.526	528.358
3808	116.921	183.753	740.386	525.643
3809	136.958	-255.626	881.086	-577.501
3810	44.0003	-42.5112	439.34	-87.0834
3811	3.8226	-1.68644	41.4205	-2.59843
3812	7.2301	-3.18976	78.3432	-4.9147
3813	10.6376	-4.69307	115.266	-7.23096
3814	14.0451	-6.19639	152.188	-9.54723
3815	17.4198	-7.68524	188.756	-11.8412
3816	9.74642	2.57838	106.406	10.8743
3817	13.5349	3.58061	147.767	15.1012
3818	17.3234	4.58284	189.128	19.3281
3819	21.1119	5.58508	230.488	23.555
3820	24.9003	6.58731	271.849	27.782
3821	6.47442	1.71279	70.6843	7.22368
3822	6.47442	1.71279	70.6843	7.22368
3823	6.47442	1.71279	70.6843	7.22368
3824	6.47442	1.71279	70.6843	7.22368
3825	6.47442	1.71279	70.6843	7.22368
3826	6.47442	1.71279	70.6843	7.22368
3827	6.47442	1.71279	70.6843	7.22368
3828	6.47442	1.71279	70.6843	7.22368
3829	6.47442	1.71279	70.6843	7.22368
3830	6.47442	1.71279	70.6843	7.22368
3831	6.47442	1.71279	70.6843	7.22368
3832	6.47442	1.71279	70.6843	7.22368
3833	6.47442	1.71279	70.6843	7.22368
3834	6.47442	1.71279	70.6843	7.22368
3835	6.47442	1.71279	70.6843	7.22368
3836	6.47442	1.71279	70.6843	7.22368
3837	1.8137	0.479809	19.801	2.02359

010563



SIMULACIONES, CÁLCULOS Y GRÁFICAS

3838	19.7348	5.22077	215.454	22.0186
3839	19.7348	5.22077	215.454	22.0186
3840	19.7348	5.22077	215.454	22.0186
3841	19.7348	5.22077	215.454	22.0186
3842	23.3806	6.18527	255.258	26.0864
3843	6.47442	1.71279	70.6843	7.22368
3844	6.47442	1.71279	70.6843	7.22368
3845	6.47442	1.71279	70.6843	7.22368
3846	6.47442	1.71279	70.6843	7.22368
3847	6.47442	1.71279	70.6843	7.22368
3848	6.47442	1.71279	70.6843	7.22368
3849	6.47442	1.71279	70.6843	7.22368
3850	6.47442	1.71279	70.6843	7.22368
3851	6.47442	1.71279	70.6843	7.22368
3852	6.47442	1.71279	70.6843	7.22368
3853	6.47442	1.71279	70.6843	7.22368
3854	6.47442	1.71279	70.6843	7.22368
3855	6.47442	1.71279	70.6843	7.22368
3856	6.47442	1.71279	70.6843	7.22368
3857	6.47442	1.71279	70.6843	7.22368
3858	6.47442	1.71279	70.6843	7.22368
3859	8.8659	-3.91143	96.0682	-6.02664
3860	11.0034	-4.85447	119.23	-7.47964
3861	13.141	-5.7975	142.392	-8.93264
3862	15.2785	-6.74054	165.553	-10.3856
3863	33.4056	8.83741	364.704	37.2718
3864	119.864	184.326	759.769	528.544
3865	116.907	183.75	740.295	525.629
3866	114.341	183.185	740.655	523.333
3867	111.904	182.641	742.814	521.179
3868	110.938	182.832	751.862	521.884
3869	110.58	183.309	763.388	523.703
3870	110.35	183.739	772.309	525.349
3871	110.724	184.049	770.015	526.549
3872	111.082	184.344	767.825	527.696
3873	111.374	184.535	765.693	528.537
3874	111.387	184.212	763.232	527.952
3875	111.399	183.912	760.942	527.408
3876	111.41	1.84E+02	758.782	526.895
3877	111.312	1.83E+02	756.175	525.86
3878	37.4905	47.9244	404.353	147.241
3879	35.8257	43.7842	402.779	135.95
3880	35.4432	42.7816	402.415	133.232
3881	35.0607	41.779	402.051	130.513
3882	111.062	182.399	752.836	524.074
3883	110.817	181.66	749.562	522.322
3884	101.63	167.304	696.06	481.337
3885	170.899	-335.192	1107.34	-752.603
3886	169.504	-335.613	1108.56	-755.156
3887	165.787	-331.132	1097.1	-746.769
3888	159.232	-319.33	1059.33	-721.89
3889	151.229	-299.222	976.342	-678.073
3890	145.619	-279.247	934.129	-631.244
3891	140.216	-259.397	899.154	-585.313
3892	134.84	-239.651	880.109	-539.619

010569

SIMULACIONES, CÁLCULOS Y GRÁFICAS



3893	129.688	-219.923	873.002	-493.993
3894	125.024	-200.195	850.795	-447.459
3895	122.075	-180.468	809.941	-401.894
3896	121.582	-160.74	816.89	-354.736
3897	121.933	-141.011	848.777	-307.196
3898	121.987	-121.281	875.63	-260.695
3899	122.037	-101.551	856.178	-217.258
3900	122.083	-81.8212	845.152	-170.279
3901	122.125	-62.091	823.617	-124.954
3902	105.842	-34.9625	698.536	-65.977
3903	67.4871	-7.55E-02	440.221	7.73816
3904	67.4821	-3.33E-02	411.279	6.56861
3905	0	0	0	0
3906	0	0	0	0
3907	0	0	0	0
3908	0	0	0	0
3909	0	0	0	0
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3916	0	0	0	0
3917	0	0	0	0
3918	0	0	0	0
3919	0	0	0	0
3920	0	0	0	0
3921	0	0	0	0
3922	137.176	2.06251	803.823	33.6965
3923	137.208	15.4721	836.781	70.8642
3924	137.245	32.2226	874.567	116.916
3925	137.282	53.79	908.51	174.573
3926	137.323	75.3428	925.739	233.635
3927	137.366	96.8803	929.936	293.867
3928	137.413	118.401	934.491	354.919
3929	137.463	139.905	971.52	416.321
3930	140.7	161.392	958.534	475.339
3931	146.155	181.299	959.204	530.384
3932	148.985	194.056	959.848	565.996
3933	139.245	188.496	914.691	547.575
3934	133.32	186.345	875.575	539.273
3935	128.71	185.219	839.854	534.136
3936	125.493	185.037	806.972	532.641
3937	122.461	184.831	776.873	531.105
3938	119.627	184.28	758.209	528.311
3939	116.931	183.755	740.454	525.653
3940	114.587	183.24	740.437	523.551
3941	112.366	182.744	742.405	521.587
3942	111.039	182.697	748.61	521.37
3943	110.695	183.155	759.668	523.116
3944	110.363	183.598	770.392	524.809
3945	110.593	183.94	770.818	526.129
3946	110.967	184.249	768.528	527.327
3947	111.332	184.55	766.3	528.493

010570

SIMULACIONES, CÁLCULOS Y GRÁFICAS

ALSTOM

3948	111.385	184.259	763.586	528.036
3949	111.399	183.903	760.877	527.393
3950	111.413	183.557	758.24	526.767
3951	170.679	-335.853	1108.81	-754.556
3952	169.091	-335.507	1108.43	-755.312
3953	164.854	-329.699	1093.32	-743.81
3954	158.812	-318.274	1054.97	-719.588
3955	151.705	-300.417	981.275	-680.677
3956	146.741	-282.894	942.141	-640.259
3957	141.938	-265.63	909.803	-599.818
3958	58.3766	-86.0689	475.408	-189.937
3959	41.5963	-31.8829	432.067	-61.7392
3960	41.4484	-30.9571	431.651	-59.5106
3961	41.801	-33.1639	432.644	-64.823
3962	41.3107	-30.0958	431.264	-57.4372
3963	41.1811	-29.2847	430.899	-55.4846
3964	40.3002	-23.771	428.419	-42.2113
3965	40.1638	-22.9178	428.036	-40.1575
3966	40.0275	-22.0646	427.652	-38.1036
3967	39.8828	-21.1589	427.245	-35.9232
3968	39.7321	-20.2159	426.82	-33.6531
3969	40.4514	-24.7178	428.845	-44.4906
3970	40.4514	-24.7178	428.845	-44.4906
3971	40.4514	-24.7178	428.845	-44.4906
3972	40.4514	-24.7178	428.845	-44.4906
3973	40.4514	-24.7178	428.845	-44.4906
3974	40.4514	-24.7178	428.845	-44.4906
3975	40.4514	-24.7178	428.845	-44.4906
3976	40.4514	-24.7178	428.845	-44.4906
3977	40.4514	-24.7178	428.845	-44.4906
3978	40.4514	-24.7178	428.845	-44.4906
3979	40.4514	-24.7178	428.845	-44.4906
3980	40.4514	-24.7178	428.845	-44.4906
3981	40.4514	-2.47E+01	428.845	-44.4906
3982	40.4514	-2.47E+01	428.845	-44.4906
3983	40.4514	-24.7178	428.845	-44.4906
3984	40.4514	-24.7178	428.845	-44.4906
3985	40.9683	-27.9528	430.3	-52.2783
3986	41.1849	-29.308	430.909	-55.5407
3987	41.371	-30.4727	431.433	-58.3445
3988	41.3652	-30.4367	431.417	-58.2578
3989	41.4857	-31.1911	431.756	-60.0738
3990	40.3798	33.8723	395.138	105.464
3991	119.051	184.168	754.418	527.743
3992	115.867	183.525	739.303	524.683
3993	113.103	182.908	741.753	522.238
3994	111.085	182.635	747.111	521.134
3995	149.572	-293.291	963.481	-664.367
3996	144.579	-274.956	925.848	-621.851
3997	139.365	-256.317	893.893	-578.146
3998	134.235	-237.392	879.77	-534.423
3999	129.282	-218.204	871.068	-489.939
4000	124.732	-198.771	848.708	-444.125
4001	121.879	-179.113	807.072	-398.768
4002	121.621	-159.385	818.872	-351.447

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1262



SIMULACIONES, CÁLCULOS Y GRÁFICAS

4003	121.937	-139.656	851.246	-303.964
4004	121.99	-119.927	874.303	-257.698
4005	122.041	-100.197	854.979	-214.043
4006	122.086	-80.4664	844.596	-166.869
4007	122.128	-60.7361	821.696	-121.919
4008	102.87	-32.259	678.912	-60.2475
4009	67.4866	-7.10E-02	437.126	7.61309
4010	67.4818	-3.06E-02	409.42	6.49347
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4012	0	0	0	0
4013	0	0	0	0
4014	0	0	0	0
4015	0	0	0	0
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4023	0	0	0	0
4024	0	0	0	0
4025	0	0	0	0
4026	0	0	0	0
4027	0	0	0	0
4028	137.178	2.98334	806.086	36.2488
4029	137.21	16.3929	837.008	73.379
4030	137.248	33.7041	876.899	120.877
4031	137.285	55.2706	910.84	178.532
4032	137.326	76.8223	926.823	237.467
4033	137.369	98.3586	929.622	298.058
4034	137.416	119.878	937.012	359.183
4035	137.466	141.381	974.131	420.235
4036	140.948	162.867	957.246	479.372
4037	146.636	182.58	960.301	534.027
4038	148.277	193.652	956.566	564.658
4039	138.619	188.139	911.788	546.391
4040	132.988	186.262	873.03	538.897
4041	128.486	185.206	837.559	534.032
4042	125.29	185.025	804.903	532.547
4043	122.289	184.798	775.741	530.935
4044	119.521	184.259	757.509	528.206
4045	116.932	183.755	740.457	525.654
4046	114.693	183.263	740.343	523.645
4047	112.587	182.793	742.209	521.782
4048	111.096	182.62	746.751	521.077
4049	110.771	183.054	757.233	522.731
4050	110.457	183.473	767.358	524.33
4051	110.459	183.83	771.638	525.7
4052	110.812	184.121	769.48	526.829
4053	111.155	184.404	767.38	527.928
4054	111.377	184.462	765.132	528.403
4055	111.39	184.126	762.578	527.797
4056	111.403	183.8	760.094	527.207
4057	111.416	183.483	757.677	526.633

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1263



SIMULACIONES, CÁLCULOS Y GRÁFICAS

4058	111.15	182.664	754.009	524.701
4059	110.874	181.832	750.325	522.73
4060	110.604	181.018	746.72	520.801
4061	28.4766	24.9227	379.524	85.8024
4062	28.4766	24.9227	379.524	85.8024
4063	28.4766	24.9227	379.524	85.8024
4064	28.4766	24.9227	379.524	85.8024
4065	28.4766	24.9227	379.524	85.8024
4066	28.4766	24.9227	379.524	85.8024
4067	28.4766	24.9227	379.524	85.8024
4068	28.4766	24.9227	379.524	85.8024
4069	28.4766	24.9227	379.524	85.8024
4070	28.4766	24.9227	379.524	85.8024
4071	28.4428	24.804	379.499	85.483
4072	27.2291	20.5496	378.576	74.035
4073	26.1504	16.2953	377.8	62.6014
4074	25.264	12.0409	377.232	51.1881
4075	25.7287	14.2711	377.53	57.1711
4076	25.0301	10.9179	377.083	48.1754
4077	20.6507	7.565	315.876	36.1256
4078	10.3691	3.79853	158.608	18.1394
4079	155.198	-307.476	1015.56	-691.922
4080	170.676	-335.861	1108.83	-754.579
4081	169.073	-335.503	1108.43	-755.319
4082	164.628	-329.352	1092.4	-743.094
4083	158.144	-316.597	1048.05	-715.934
4084	150.702	-297.441	971.999	-673.991
4085	145.41	-278.403	932.664	-629.363
4086	108.527	-197.64	719.709	-447.108
4087	7.43914	-3.28198	80.6082	-5.05679
4088	6.52793	-2.87998	70.7347	-4.4374
4089	9.72311	-4.28962	105.357	-6.60933
4090	9.72311	-4.28962	105.357	-6.60933
4091	9.72311	-4.28962	105.357	-6.60933
4092	20.7268	5.4832	226.284	23.1254
4093	24.5152	6.48543	267.644	27.3523
4094	28.3037	7.48766	309.005	31.5792
4095	32.0922	8.48989	350.366	35.8061
4096	34.9551	9.49214	381.309	39.642
4097	20.2712	5.36269	221.311	22.6171
4098	20.2712	5.36E+00	221.311	22.6171
4099	20.2712	5.36E+00	221.311	22.6171
4100	20.2712	5.36269	221.311	22.6171
4101	20.2712	5.36269	221.311	22.6171
4102	20.2712	5.36269	221.311	22.6171
4103	23.2487	6.15037	253.817	25.9392
4104	27.8943	7.37936	304.536	31.1224
4105	32.54	8.60834	355.254	36.3057
4106	35.0096	9.83738	381.482	40.5697
4107	35.2036	11.0665	382.097	43.8724
4108	35.3977	12.2955	382.713	47.1752
4109	35.5917	13.5246	383.329	50.4779
4110	34.4018	9.10088	375.58	38.3829
4111	34.9291	9.32764	381.226	39.2
4112	34.9649	9.55441	381.34	39.8093

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4113	33.5288	8.86993	366.05	37.4089
4114	29.7403	7.8677	324.689	33.182
4115	118.423	181.084	752.622	519.444
4116	137.392	-249.17	881.684	-561.516
4117	132.105	-229.441	878.574	-516.136
4118	127.275	-209.714	861.51	-469.911
4119	123.457	-189.986	830.101	-423.855
4120	121.306	-170.258	802.969	-377.845
4121	121.878	-150.531	831.823	-329.949
4122	121.961	-130.801	867.383	-282.841
4123	122.013	-111.071	865.63	-238.104
4124	122.061	-91.3408	850.043	-193.118
4125	122.106	-71.6106	837.11	-146.276
4126	122.146	-51.8803	809.145	-102.084
4127	83.4393	-14.5892	550.653	-22.7983
4128	67.4844	-5.24E-02	424.343	7.09655
4129	67.4797	-1.29E-02	397.266	6.00236
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