

Tiempo [s]	X [cm]	Y [cm]	Z [cm]	Xi [cm]	Yi [cm]	Error Abs. Xp	Error Abs. Yp	Error X	Error Y	Velocidad [cm/s]	Aceleración [Gal]	Angulo [°]	Angulo_i [°]	Fuerza (N)	Torque (Nm)	Frecuencia (Hz)
0.000	14.000	17.000	0.000	14.350	17.685	0.350	0.685	2.500%	4.029%	0.000	0.000	0.000	0.000	109.872	0.000	0.000
0.000	13.520	17.080	-0.050	14.349	17.689	0.829	0.609	6.131%	3.565%	0.003	0.000	-0.168	-0.162	109.872	-0.055	19.947
0.150	13.510	17.070	-0.070	14.349	17.691	0.839	0.621	6.207%	3.635%	0.004	0.000	-0.235	-0.227	109.872	-0.077	9.974
0.150	13.510	17.030	-0.060	14.349	17.690	0.839	0.660	6.208%	3.874%	0.003	0.000	-0.202	-0.194	109.872	-0.066	6.649
0.300	13.530	17.050	-0.090	14.348	17.692	0.818	0.642	6.047%	3.765%	0.005	0.001	-0.302	-0.291	109.872	-0.099	4.987
0.251	13.430	16.980	-0.160	14.347	17.698	0.917	0.718	6.825%	4.226%	0.008	0.000	-0.540	-0.518	109.872	-0.176	3.989
0.301	13.550	17.060	-0.070	14.349	17.691	0.799	0.631	5.893%	3.696%	0.004	0.000	-0.235	-0.227	109.872	-0.077	3.325
0.351	13.420	16.950	-0.100	14.348	17.693	0.928	0.743	6.914%	4.383%	0.005	0.000	-0.338	-0.324	109.872	-0.110	2.850
0.401	13.480	17.000	-0.090	14.348	17.692	0.868	0.692	6.440%	4.071%	0.005	0.000	-0.303	-0.291	109.872	-0.099	2.493
0.451	13.500	17.000	-0.080	14.348	17.691	0.848	0.691	6.284%	4.066%	0.004	0.000	-0.270	-0.259	109.872	-0.088	2.216
0.501	13.530	17.000	-0.070	14.349	17.691	0.819	0.691	6.050%	4.062%	0.004	0.000	-0.236	-0.227	109.872	-0.077	1.915
0.551	13.550	16.990	-0.090	14.348	17.692	0.798	0.702	5.890%	4.132%	0.005	0.000	-0.304	-0.291	109.872	-0.099	1.893
0.602	13.550	16.970	-0.090	14.348	17.692	0.798	0.722	5.890%	4.255%	0.005	0.000	-0.304	-0.291	109.872	-0.099	1.662
0.652	13.580	16.980	-0.120	14.347	17.694	0.767	0.714	5.652%	4.208%	0.006	0.000	-0.405	-0.389	109.872	-0.132	1.534
0.702	13.580	16.960	-0.100	14.348	17.693	0.768	0.733	5.655%	4.321%	0.005	0.000	-0.338	-0.324	109.872	-0.110	1.425
0.752	13.590	16.950	-0.130	14.347	17.695	0.757	0.735	5.572%	4.335%	0.007	0.000	-0.439	-0.421	109.872	-0.143	1.330
0.802	13.590	16.950	-0.130	14.347	17.695	0.757	0.745	5.572%	4.397%	0.007	0.000	-0.439	-0.421	109.872	-0.143	1.247
0.852	13.530	16.900	-0.130	14.347	17.695	0.817	0.795	6.041%	4.706%	0.007	0.000	-0.441	-0.421	109.872	-0.143	1.173
0.902	13.600	16.970	-0.130	14.347	17.695	0.747	0.725	5.495%	4.274%	0.007	0.000	-0.439	-0.421	109.872	-0.143	1.108
0.953	13.590	16.960	-0.130	14.347	17.695	0.757	0.735	5.572%	4.335%	0.007	0.000	-0.439	-0.421	109.872	-0.143	1.050
1.003	13.570	16.940	-0.170	14.346	17.698	0.776	0.758	5.722%	4.477%	0.009	0.000	-0.575	-0.550	109.872	-0.187	0.997
1.053	13.520	16.890	-0.180	14.346	17.699	0.826	0.809	6.111%	4.791%	0.009	0.000	-0.611	-0.583	109.872	-0.198	0.950
1.103	13.500	16.850	-0.140	14.347	17.696	0.847	0.846	6.275%	5.021%	0.007	0.000	-0.476	-0.453	109.872	-0.154	0.907
1.153	13.530	16.880	-0.180	14.346	17.699	0.816	0.819	6.033%	4.853%	0.009	0.000	-0.611	-0.583	109.872	-0.198	0.867
1.203	13.670	16.880	-0.200	14.346	17.701	0.796	0.791	5.878%	4.823%	0.011	0.001	-0.679	-0.647	109.872	-0.210	0.831
1.253	13.550	16.870	-0.220	14.345	17.702	0.795	0.823	5.870%	4.934%	0.012	0.001	-0.747	-0.717	109.872	-0.242	0.798
1.303	13.570	16.850	-0.250	14.345	17.705	0.775	0.855	5.710%	5.073%	0.013	0.001	-0.850	-0.809	109.872	-0.275	0.767
1.354	13.610	16.890	-0.350	14.343	17.713	0.733	0.823	5.384%	4.872%	0.018	0.001	-1.187	-1.132	109.872	-0.385	0.739
1.404	13.620	16.830	-0.440	14.341	17.720	0.721	0.890	5.293%	5.289%	0.023	0.001	-1.498	-1.422	109.872	-0.483	0.712
1.454	13.630	16.820	-0.490	14.340	17.724	0.710	0.904	5.208%	5.376%	0.026	0.001	-1.669	-1.584	109.872	-0.538	0.688
1.504	13.630	16.790	-0.630	14.337	17.736	0.707	0.946	5.188%	5.633%	0.033	0.002	-2.149	-2.034	109.872	-0.692	0.665
1.554	13.620	16.780	-0.720	14.335	17.743	0.715	0.963	5.252%	5.741%	0.038	0.002	-2.457	-2.324	109.872	-0.791	0.643
1.604	13.620	16.750	-0.930	14.331	17.761	0.711	1.011	5.221%	6.035%	0.049	0.003	-3.178	-2.997	109.872	-1.022	0.623
1.654	13.600	16.710	-1.170	14.327	17.781	0.727	1.071	5.342%	6.412%	0.062	0.003	-4.005	-3.765	109.872	-1.286	0.604
1.704	13.600	16.680	-1.270	14.325	17.790	0.725	1.110	5.328%	6.655%	0.067	0.004	-4.354	-4.083	109.872	-1.395	0.587
1.755	13.590	16.660	-1.360	14.323	17.798	0.733	1.138	5.393%	6.831%	0.072	0.004	-4.667	-4.370	109.872	-1.494	0.570
1.805	13.600	16.640	-1.460	14.321	17.807	0.721	1.167	5.302%	7.012%	0.077	0.004	-5.014	-4.687	109.872	-1.604	0.554
1.855	13.620	16.610	-1.520	14.320	17.812	0.700	1.202	5.139%	7.237%	0.080	0.004	-5.229	-4.878	109.872	-1.670	0.539
1.905	13.620	16.570	-1.660	14.317	17.825	0.697	1.255	5.120%	7.571%	0.087	0.005	-5.721	-5.321	109.872	-1.824	0.525
1.955	13.620	16.530	-1.800	14.315	17.837	0.695	1.307	5.101%	7.908%	0.095	0.005	-6.215	-5.762	109.872	-1.978	0.511
2.005	13.630	16.420	-2.060	14.310	17.861	0.680	1.441	4.990%	8.775%	0.108	0.006	-7.151	-6.579	109.872	-2.263	0.499
2.055	13.600	16.360	-2.180	14.308	17.872	0.708	1.512	5.206%	9.242%	0.115	0.006	-7.590	-6.955	109.872	-2.395	0.487
2.106	13.560	16.260	-2.420	14.304	17.894	0.744	1.634	5.486%	10.052%	0.127	0.007	-8.465	-7.702	109.872	-2.659	0.475
2.156	13.590	16.240	-2.480	14.303	17.900	0.713	1.660	5.245%	10.222%	0.131	0.007	-8.683	-7.888	109.872	-2.725	0.464
2.206	13.620	16.220	-2.430	14.304	17.895	0.634	1.675	4.630%	10.209%	0.128	0.007	-8.520	-7.733	109.872	-2.670	0.453
2.256	13.600	16.200	-2.490	14.301	17.901	0.603	1.701	4.399%	10.500%	0.131	0.007	-8.738	-7.919	109.872	-2.736	0.443
2.306	13.710	16.160	-2.650	14.300	17.916	0.590	1.756	4.303%	10.868%	0.139	0.007	-9.313	-8.414	109.872	-2.912	0.434
2.356	13.700	16.140	-2.750	14.298	17.926	0.598	1.766	4.367%	11.065%	0.145	0.008	-9.669	-8.722	109.872	-3.022	0.424
2.406	13.620	16.030	-2.960	14.295	17.946	0.675	1.916	4.955%	11.955%	0.156	0.008	-10.462	-9.366	109.872	-3.252	0.416
2.456	13.630	16.080	-3.010	14.294	17.951	0.664	1.871	4.872%	11.637%	0.158	0.008	-10.602	-9.519	109.872	-3.307	0.407
2.507	13.520	16.200	-3.310	14.289	17.981	0.769	1.781	5.690%	10.993%	0.174	0.009	-11.548	-10.430	109.872	-3.637	0.399
2.557	13.410	16.320	-3.560	14.285	18.006	0.875	1.686	6.528%	10.331%	0.187	0.010	-12.306	-11.184	109.872	-3.911	0.391
2.607	13.210	16.910	-4.140	14.277	18.066	1.067	1.156	8.075%	6.836%	0.218	0.011	-13.757	-12.907	109.872	-4.549	0.384
2.657	13.190	17.520	-4.740	14.268	18.130	1.078	0.610	8.176%	3.481%	0.249	0.013	-15.139	-14.652	109.872	-5.208	0.376
2.707	13.210	16.030	-6.600	14.265	18.252	1.095	0.618	5.217%	3.564%	0.257	0.013	-15.659	-15.074	109.872	-5.751	0.367
2.757	13.590	20.180	-8.420	14.229	18.565	0.639	0.615	4.704%	8.002%	0.443	0.023	-22.648	-24.396	109.872	-9.251	0.363
2.807	13.770	22.630	-13.670	14.209	19.290	0.439	3.340	2.624%	14.758%	0.719	0.038	-31.135	-35.323	109.872	-15.020	0.356
2.858	13.750	23.780	-17.720	14.219	19.903	0.469	3.877	1.925%	16.304%	0.933	0.049	-36.692	-41.679	109.872	-19.470	0.350
2.908	13.360	26.220	-26.730	14.307	21.277	0.947	4.943	2.958%	18.853%	1.407	0.074	-45.552	-51.481	109.880	-29.371	0.344
2.958	13.590	26.460	-31.950	14.387	21.972	0.797	4.488	0.109%	16.963%	1.682	0.089	-50.369	-55.484	109.882	-35.107	0.338
3.008	14.220	24.460	-43.720	14.585	22.855	0.365	1.605	2.569%	6.563%	2.301	0.121	-60.774	-62.402	109.886	-48.042	0.332
3.058	14.490	23.040	-50.650	14.668	22.731	0.178	0.309	1.228%	1.341%	2.666	0.140	-65.540	-65.830	109.888	-55.658	0.327
3.108	14.510	21.200	-63.190	14.624	21.095	0.114	0.105	0.788%	0.495%	3.326	0.175	-71.454	-71.539	109.892	-69.441	0.322
3.158	14.130	20.980	-69.590	14.451	19.705	0.321	1.275	2.273%	6.076%	3.658	0.193	-73.202	-74.170	109.894	-76.376	0.317
3.208	13.208	21.270	-79.070	13.913	17.448	0.993	3.822	5.203%	13.967%	4.162	0.219	-81.944	-85.969	109.897	-86.895	0.312
3.259	12.330	21.510	-82.610	13.622	16.788	1.282	4.472	1.494%	14.348	4.248	0.229	-75.405	-77.510	109.898	-80.786	0.307
3.309	10.970	21.450	-88.500	12.972	16.273	2.002	5.177	9.172%	14.691%	4.658	0.245	-76.376	-78.318	109		

6.216	14.930	22.590	-41.660	14.553	22.790	0.377	0.200	2.525%	0.884%	2.193	0.115	-61.531	-61.320	109.885	-45.778	0.161
6.266	15.530	23.680	-30.500	14.363	21.792	1.167	1.888	7.513%	7.974%	1.605	0.084	-52.174	-54.455	109.881	-33.514	0.160
6.317	15.790	24.040	-24.730	14.281	20.983	1.509	3.057	9.560%	12.718%	1.302	0.069	-45.811	-49.686	109.880	-27.173	0.158
6.367	16.090	24.370	-15.350	14.210	19.541	1.880	4.829	11.683%	19.817%	0.808	0.043	-32.206	-38.151	109.877	-16.866	0.157
6.417	16.120	24.190	-11.000	14.214	18.909	1.906	5.281	11.823%	21.833%	0.579	0.030	-24.453	-30.188	109.875	-12.086	0.156
6.467	16.140	23.010	-4.880	14.267	18.145	1.873	4.865	10.877%	20.453%	0.257	0.014	-11.974	-14.929	109.874	-5.362	0.155
6.517	16.030	21.710	-2.910	14.309	17.920	1.721	3.790	9.589%	15.889%	0.165	0.013	-7.837	-8.361	109.873	-2.956	0.153
6.567	15.590	18.960	0.110	14.252	17.676	1.238	1.284	6.811%	3.460%	0.006	0.000	0.332	0.344	109.872	0.121	0.152
6.617	15.320	18.010	1.700	14.388	17.562	0.932	0.448	4.870%	1.633%	0.089	0.005	5.392	5.306	109.873	1.868	0.151
6.668	15.410	16.300	3.480	14.333	17.454	0.977	1.154	5.093%	7.081%	0.183	0.010	12.052	11.276	109.873	3.824	0.150
6.718	15.490	15.760	4.170	14.451	17.419	1.039	1.659	5.455%	10.525%	0.219	0.012	14.820	13.463	109.873	4.582	0.149
6.768	15.760	16.940	4.740	14.467	17.392	1.293	1.452	6.970%	9.110%	0.249	0.013	16.561	15.245	109.873	5.208	0.148
6.818	15.680	16.200	5.270	14.483	17.369	1.197	1.169	6.398%	7.219%	0.277	0.015	18.020	16.878	109.874	5.790	0.147
6.868	15.670	16.590	6.300	14.514	17.332	1.156	0.742	6.149%	4.470%	0.332	0.017	20.794	19.976	109.874	6.922	0.146
6.918	15.860	16.550	6.750	14.528	17.318	1.332	0.768	7.192%	4.638%	0.355	0.019	22.188	21.295	109.874	7.417	0.145
6.968	16.020	16.690	7.500	14.552	17.298	1.468	0.608	7.984%	3.640%	0.395	0.021	24.198	23.441	109.874	8.241	0.144
7.018	16.100	16.760	7.820	14.563	17.290	1.537	0.530	8.384%	3.154%	0.412	0.022	25.013	24.336	109.874	8.592	0.142
7.069	16.190	16.830	8.260	14.578	17.282	1.612	0.452	8.815%	2.684%	0.435	0.023	26.141	25.546	109.875	9.076	0.141
7.119	16.180	16.870	8.420	14.583	17.279	1.597	0.409	8.730%	2.424%	0.443	0.023	26.524	25.980	109.875	9.251	0.140
7.169	16.220	16.930	8.690	14.592	17.275	1.628	0.345	8.907%	2.036%	0.457	0.024	27.171	26.705	109.875	9.548	0.139
7.219	16.190	16.970	8.830	14.597	17.273	1.593	0.303	8.713%	1.783%	0.465	0.024	27.489	27.077	109.875	9.702	0.139
7.269	16.110	17.050	9.080	14.606	17.269	1.504	0.219	8.215%	1.287%	0.478	0.025	28.038	27.735	109.875	9.977	0.138
7.319	16.050	17.130	9.290	14.613	17.267	1.437	0.137	7.835%	0.801%	0.489	0.026	28.472	28.281	109.875	10.207	0.137
7.369	15.880	17.260	9.600	14.625	17.264	1.255	0.004	6.792%	0.025%	0.505	0.027	29.083	29.077	109.875	10.548	0.136
7.420	15.770	17.400	9.930	14.637	17.262	1.133	0.078	6.081%	0.449%	0.523	0.028	29.798	29.909	109.875	10.911	0.135
7.470	15.720	17.490	10.450	14.656	17.260	1.064	0.190	5.687%	1.086%	0.550	0.029	30.915	31.192	109.875	11.482	0.134
7.520	15.700	17.550	12.530	14.737	17.274	0.963	0.476	5.186%	2.651%	0.655	0.035	35.219	35.956	109.876	13.767	0.132
7.570	15.600	17.930	14.100	14.802	17.306	0.798	0.624	4.288%	2.091%	0.742	0.039	38.181	37.607	109.876	15.493	0.130
7.620	15.580	18.660	19.080	15.030	17.525	0.350	1.133	1.986%	1.902%	1.004	0.053	45.638	46.187	109.878	20.965	0.131
7.670	15.590	19.890	32.904	15.000	18.900	0.210	0.995	0.753%	4.975%	1.732	0.091	58.848	60.126	109.882	36.156	0.130
7.720	16.140	21.190	42.200	16.376	20.159	0.236	1.031	1.462%	4.864%	2.221	0.117	63.337	64.466	109.885	46.372	0.130
7.770	16.540	22.140	48.360	16.753	20.968	0.213	1.172	1.287%	5.292%	2.545	0.134	65.401	66.559	109.887	53.141	0.129
7.821	17.080	23.600	58.100	17.294	21.968	0.214	1.632	1.252%	6.914%	3.058	0.161	67.893	69.288	109.890	63.846	0.128
7.871	17.250	24.210	63.340	17.537	22.290	0.287	1.920	1.662%	7.930%	3.334	0.175	69.082	70.612	109.892	69.605	0.127
7.921	17.520	24.570	70.680	17.796	22.455	0.276	2.115	1.576%	8.607%	3.720	0.196	70.831	72.375	109.894	77.773	0.126
7.971	17.690	24.160	74.080	17.879	22.433	0.189	1.727	1.066%	7.148%	3.899	0.205	71.937	73.153	109.895	81.410	0.125
8.021	18.120	22.020	77.540	17.935	22.368	0.185	0.346	1.102%	1.553%	4.081	0.215	74.146	75.909	109.896	85.213	0.125
8.071	17.390	19.660	80.010	17.957	22.310	0.567	2.650	3.224%	6.873%	4.211	0.222	76.195	77.111	109.897	87.928	0.124
8.121	17.060	18.660	81.110	17.962	22.285	0.902	3.625	1.167%	1.882%	4.269	0.225	77.044	77.280	109.897	89.138	0.123
8.172	16.930	17.180	82.590	17.964	22.255	1.034	5.075	0.156%	6.571%	4.347	0.229	78.249	77.501	109.898	90.764	0.122
8.222	17.110	16.680	83.030	17.963	22.247	0.853	5.767	1.132%	9.766%	4.370	0.230	78.641	77.565	109.898	91.248	0.122
8.272	17.300	16.410	83.460	17.962	22.241	0.662	5.831	2.147%	11.572%	4.393	0.231	78.876	77.627	109.898	91.721	0.121
8.322	17.380	16.350	83.500	17.962	22.240	0.582	5.890	2.590%	11.982%	4.395	0.231	78.921	77.633	109.898	91.765	0.120
8.372	17.390	16.340	83.960	17.960	22.234	0.570	5.894	2.570%	12.050%	4.419	0.233	78.987	77.698	109.898	92.270	0.119
8.422	17.440	16.370	84.270	17.959	22.230	0.519	5.860	2.798%	11.845%	4.435	0.233	79.007	77.742	109.898	92.611	0.119
8.472	17.600	16.440	85.040	17.954	22.224	0.354	5.794	2.012%	11.369%	4.476	0.236	79.059	77.850	109.898	93.458	0.118
8.522	17.670	16.480	85.400	17.951	22.222	0.281	5.721	1.592%	11.597%	4.495	0.237	79.078	77.899	109.898	93.863	0.117
8.573	17.940	16.600	86.090	17.945	22.221	0.005	5.611	0.028%	10.296%	4.531	0.238	79.086	77.994	109.899	94.612	0.117
8.623	18.110	16.660	86.340	17.942	22.222	0.168	5.562	0.925%	9.899%	4.544	0.239	79.079	78.027	109.899	94.887	0.116
8.673	18.320	16.840	86.910	17.936	22.225	0.384	5.385	2.097%	8.725%	4.574	0.241	79.034	78.104	109.899	95.513	0.115
8.723	18.410	16.930	87.200	17.932	22.228	0.478	5.298	2.595%	8.147%	4.589	0.242	79.013	78.142	109.899	95.832	0.114
8.773	18.570	17.210	87.740	17.925	22.236	0.645	5.026	3.475%	6.387%	4.618	0.243	78.902	78.213	109.899	96.426	0.115
8.823	18.530	17.200	87.740	17.925	22.236	0.605	5.036	3.266%	6.449%	4.618	0.243	78.909	78.213	109.899	96.426	0.113
8.873	18.500	17.260	87.740	17.925	22.236	0.575	4.976	3.109%	6.079%	4.618	0.243	78.871	78.213	109.899	96.426	0.113
8.923	18.450	17.270	87.740	17.925	22.236	0.525	4.966	2.847%	6.018%	4.618	0.243	78.865	78.213	109.899	96.426	0.112
8.973	18.360	17.320	87.680	17.926	22.235	0.434	4.915	2.366%	5.712%	4.615	0.243	78.826	78.205	109.899	96.360	0.111
9.023	18.280	17.370	87.650	17.926	22.234	0.354	4.864	1.986%	5.407%	4.615	0.243	78.821	78.205	109.899	96.327	0.111
9.074	18.120	17.470	87.830	17.923	22.238	0.197	4.768	1.085%	4.804%	4.623	0.243	78.750	78.225	109.899	96.525	0.110
9.124	18.060	17.520	88.010	17.921	22.241	0.139	4.721	0.771%	4.505%	4.632	0.244	78.741	78.248	109.899	96.722	0.110
9.174	17.940	17.560	88.420	17.914	22.250	0.026	4.690	0.143%	4.267%	4.654	0.245	78.767	78.301	109.899	97.173	0.109
9.224	17.940	17.680	88.820	17.908	22.261	0.032	4.581	0.181%	3.560%	4.675	0.246	78.742	78.352	109.899	97.613	0.108
9.274	18.090	18.060	89.650	17.892	22.289	0.198	4.229	1.093%	1.381%	4.718	0.248	78.610	78.457	109.900	98.525	0.108
9.325	18.050	18.360	90.030	17.885	22.306	0.165	3.946	0.916%	0.276%	4.738	0.249	78.474	78.505	109.900	98.943	0.107
9.375	17.620	19.300	92.180	17.834	22.440	0.214	3.140	1.216%	5.132%	4.852	0.255	78.175	78.766	109.901	101.306	0.107
9.425	17.400	19.720	94.070	17.780	22.630	0.380	2.910	0.953%	7.152%	4.951	0.261	78.160	78.986	109.901	103.384	0.106
9.475	17.000	20.220	98.530	17.615	23.432	0.615	3.212	2.133%	9.447%	5.186	0.273	78.403	79.473	109.903	108.287	0.106
9.525	16.520	21.170	108.600	17.518	24.852	0.788	3.882	3.788%	12.818%	5.429	0.279	79.673	79.894	109.903		

12,533	14,990	18,190	-68,900	14,473	19,847	0,517	1,657	3,447%	0,604%	3,626	0,191	-75,211	-75,126	109,893	-75,717	0,880
12,583	14,750	17,000	-71,830	14,354	19,143	0,396	2,143	2,688%	7,645%	3,781	0,199	-76,685	-75,707	109,894	-78,937	0,079
12,633	15,370	17,580	-73,130	14,250	18,826	1,080	1,246	7,025%	4,093%	3,849	0,203	-76,483	-75,951	109,895	-80,366	0,079
12,683	15,960	17,430	-73,110	14,291	18,831	1,359	1,401	8,682%	4,989%	3,848	0,203	-76,591	-75,947	109,895	-80,344	0,079
12,734	15,650	17,310	-73,050	14,294	18,846	1,666	1,536	10,437%	5,717%	3,845	0,202	-76,669	-75,936	109,895	-80,278	0,079
12,784	16,120	17,260	-72,980	14,298	18,863	1,822	1,603	11,304%	6,023%	3,841	0,202	-76,694	-75,923	109,895	-80,201	0,078
12,834	16,730	17,260	-72,930	14,305	18,885	1,895	1,591	12,160%	6,356%	3,844	0,202	-76,723	-75,910	109,895	-80,126	0,078
12,884	16,180	17,160	-73,060	14,294	18,843	1,886	1,683	11,658%	6,641%	3,845	0,202	-76,782	-75,938	109,895	-80,289	0,078
12,934	16,210	17,100	-73,210	14,286	18,807	1,924	1,707	11,869%	7,015%	3,853	0,203	-76,853	-75,966	109,895	-80,454	0,077
12,984	16,200	17,040	-73,540	14,269	18,726	1,931	1,686	11,921%	7,392%	3,871	0,204	-76,954	-76,026	109,895	-80,817	0,077
13,034	16,200	17,040	-73,700	14,261	18,688	1,940	1,648	11,973%	7,392%	3,879	0,204	-76,982	-76,056	109,895	-80,993	0,077
13,084	16,160	17,050	-74,050	14,241	18,603	1,919	1,553	11,873%	7,329%	3,897	0,205	-77,034	-76,119	109,895	-81,377	0,076
13,135	16,070	17,080	-74,330	14,226	18,535	1,844	1,455	11,476%	7,140%	3,912	0,206	-77,059	-76,169	109,895	-81,685	0,076
13,185	15,680	17,140	-75,160	14,178	18,336	1,502	1,196	9,579%	6,765%	3,956	0,208	-77,154	-76,316	109,895	-82,597	0,076
13,235	15,580	17,400	-75,610	14,151	18,228	1,429	0,828	9,173%	4,761%	3,979	0,209	-77,040	-76,445	109,895	-83,092	0,076
13,285	15,140	18,240	-77,140	14,052	17,872	1,088	0,368	7,187%	3,268%	4,060	0,214	-76,697	-76,655	109,896	-84,774	0,075
13,335	15,080	19,080	-78,460	13,958	17,579	1,122	1,501	7,437%	4,029%	4,129	0,217	-76,332	-76,872	109,896	-86,225	0,075
13,385	15,030	21,100	-81,920	13,675	16,902	1,355	4,148	9,013%	13,274%	4,312	0,227	-75,556	-77,408	109,897	-90,928	0,075
13,435	14,730	22,370	-84,600	13,416	16,514	1,314	5,956	8,921%	18,199%	4,453	0,234	-75,189	-77,795	109,898	-92,074	0,074
13,485	13,780	24,670	-90,550	12,704	16,351	1,076	8,319	7,805%	25,827%	4,766	0,251	-74,760	-78,575	109,900	-99,515	0,074
13,536	13,350	25,310	-94,150	12,177	16,938	1,173	8,372	8,790%	27,703%	4,955	0,261	-74,953	-79,001	109,901	-103,472	0,074
13,586	13,370	24,100	-101,420	10,868	20,556	2,502	3,544	13,208%	14,705%	5,338	0,281	-76,633	-78,542	109,903	-111,464	0,074
13,636	13,580	22,840	-105,570	9,968	24,642	3,612	1,802	15,430%	7,889%	5,556	0,292	-77,792	-76,861	109,905	-116,026	0,073
13,686	14,030	20,760	-112,200	8,288	35,454	5,742	14,694	19,504%	11,863%	5,905	0,311	-79,517	-80,738	109,907	-123,315	0,073
13,736	14,310	19,860	-115,190	7,431	42,506	6,879	22,646	21,680%	7,870%	6,063	0,319	-80,218	-80,974	109,908	-126,603	0,073
13,786	14,190	18,880	-118,350	6,459	51,752	7,731	32,872	21,659%	3,088%	6,229	0,328	-80,936	-81,212	109,909	-130,077	0,073
13,836	14,580	18,490	-121,990	5,687	62,499	7,987	34,979	21,599%	1,067%	6,355	0,339	-81,559	-81,559	109,909	-133,646	0,072
13,887	13,810	18,750	-118,280	5,126	73,28	33,676	19,489%	25,04%	6,225	0,328	-81,207	-81,207	109,909	-130,000	0,072	
13,937	13,820	17,760	-118,080	6,545	50,884	7,275	33,214	19,506%	3,548%	6,215	0,327	-81,489	-81,192	109,909	-129,780	0,072
13,987	13,690	17,320	-118,050	6,555	50,788	7,135	33,468	18,735%	5,640%	6,213	0,327	-81,653	-81,190	109,909	-129,747	0,071
14,037	13,820	17,310	-117,870	6,611	50,219	7,209	32,909	19,462%	5,701%	6,204	0,327	-81,645	-81,176	109,909	-129,549	0,071
14,087	13,890	17,170	-117,620	6,690	49,439	7,200	32,269	19,816%	6,563%	6,191	0,326	-81,695	-81,158	109,909	-129,274	0,071
14,137	13,940	17,150	-117,560	6,709	49,254	7,231	32,104	20,091%	6,688%	6,187	0,326	-81,700	-81,154	109,908	-129,208	0,071
14,187	14,080	17,110	-117,400	6,759	48,763	7,321	31,653	20,853%	6,937%	6,179	0,325	-81,708	-81,142	109,908	-129,032	0,070
14,237	14,210	17,050	-117,290	6,793	48,429	7,417	31,379	21,555%	7,314%	6,173	0,325	-81,729	-81,133	109,908	-128,912	0,070
14,288	14,400	16,920	-117,110	6,849	47,888	7,551	30,868	22,554%	8,138%	6,164	0,324	-81,779	-81,120	109,908	-128,714	0,070
14,338	14,580	16,880	-117,100	6,887	47,858	7,598	30,978	22,820%	8,394%	6,163	0,324	-81,787	-81,119	109,908	-128,703	0,070
14,388	14,500	16,850	-117,050	6,868	47,709	7,632	30,859	23,076%	8,587%	6,161	0,324	-81,808	-81,116	109,908	-128,648	0,070
14,438	14,540	16,850	-117,030	6,874	47,649	7,666	30,799	23,284%	8,587%	6,159	0,324	-81,807	-81,114	109,908	-128,626	0,069
14,488	14,550	16,870	-117,000	6,883	47,560	7,667	30,690	23,331%	8,459%	6,158	0,324	-81,795	-81,112	109,908	-128,593	0,069
14,538	14,550	16,880	-116,950	6,898	47,412	7,652	30,532	23,321%	8,394%	6,155	0,324	-81,787	-81,108	109,908	-128,538	0,069
14,588	14,600	16,910	-116,700	6,975	46,678	7,625	29,768	23,534%	8,202%	6,142	0,323	-81,755	-81,089	109,908	-128,263	0,068
14,638	14,600	16,950	-116,450	7,052	45,957	7,548	29,007	23,485%	7,947%	6,129	0,323	-81,718	-81,071	109,908	-127,988	0,068
14,688	14,630	17,010	-115,870	7,228	44,331	7,402	27,321	23,527%	7,566%	6,098	0,321	-81,648	-81,027	109,908	-127,350	0,068
14,739	14,640	17,040	-115,490	7,342	43,300	7,298	26,260	23,505%	7,377%	6,078	0,320	-81,607	-80,997	109,908	-126,933	0,068
14,789	14,630	17,130	-114,780	7,552	41,446	7,078	24,316	23,313%	6,813%	6,041	0,318	-81,512	-80,943	109,908	-126,152	0,067
14,839	14,580	17,200	-114,320	7,687	40,294	6,893	23,094	22,959%	6,379%	6,017	0,317	-81,444	-80,907	109,907	-125,646	0,067
14,889	14,680	17,440	-112,850	8,187	36,858	6,573	23,418	23,195%	4,915%	5,939	0,313	-81,215	-80,790	109,907	-124,030	0,066
14,939	14,730	17,700	-111,490	8,482	33,997	6,248	16,297	23,190%	3,375%	5,868	0,309	-80,979	-80,680	109,907	-122,535	0,067
14,989	14,210	18,280	-108,240	9,327	28,284	4,883	10,004	19,721%	0,096%	5,697	0,300	-80,414	-80,405	109,906	-118,962	0,067
15,040	14,090	18,810	-106,000	9,868	25,170	4,222	6,360	18,579%	2,724%	5,579	0,294	-79,937	-80,206	109,905	-116,499	0,066
15,090	13,600	19,730	-97,730	11,574	18,244	2,026	1,486	13,894%	7,257%	5,144	0,271	-78,586	-79,395	109,902	-107,408	0,066
15,140	13,440	20,380	-91,990	12,502	16,510	0,938	3,870	6,976%	10,214%	4,842	0,255	-77,508	-78,750	109,901	-101,098	0,066
15,190	13,810	21,720	-80,770	13,776	17,108	0,034	4,612	0,248%	15,750%	4,251	0,224	-74,949	-77,235	109,897	-88,764	0,066
15,240	14,210	22,400	-74,660	14,207	18,455	0,003	3,945	0,020%	17,610%	3,929	0,207	-73,299	-76,115	109,895	-82,048	0,066
15,290	15,020	23,330	-64,050	14,698	20,923	0,412	2,407	2,744%	10,319%	3,371	0,177	-69,996	-71,910	109,892	-70,386	0,066
15,340	15,560	23,560	-58,960	14,677	21,862	0,883	1,718	3,677%	12,593%	3,103	0,163	-68,219	-70,619	109,890	-64,971	0,066
15,391	16,220	23,150	-50,920	14,670	22,715	1,550	0,435	9,555%	1,879%	2,680	0,141	-65,552	-65,559	109,888	-55,955	0,065
15,441	16,640	22,430	-47,430	14,636	22,857	2,004	0,427	12,045%	1,902%	2,496	0,131	-64,690	-64,270	109,887	-52,119	0,065
15,491	17,410	20,030	-43,420	14,581	22,848	2,829	2,818	16,251%	8,630%	2,285	0,120	-65,236	-67,145	109,885	-47,712	0,065
15,541	17,390	18,950	-41,920	14,557	22,800	2,833	3,850	16,290%	3,422%	2,206	0,116	-65,675	-66,415	109,885	-46,064	0,064
15,591	17,150	17,340	-39,890	14,524	22,700	2,626	5,360	15,314%	5,546%	2,099	0,110	-66,506	-65,354	109,884	-43,833	0,064
15,641	17,440	16,740	-39,020	14,509	22,645	2,931	5,905	16,807%	9,329%	2,054	0,108	-66,780	-64,872	109,884	-42,877	0,064
15,691	17,730	16,690	-38,030	14,492	22,575	3,238	5,885	18,264%	9,657%	2,002	0,105	-66,305	-64,301	109,884	-41,789	0,064
15,741	17,700	16,690	-37,780	14,487	22,555	3,213	5,865	18,150%	9,657%	1,988	0,105	-66,166	-64,153	109,884	-41,514	0,064
15,792	17,720	16,830	-37,130	14,476	22,503	3,244	5,673	18,306%	9,475%	1,954	0,103	-66,617	-63,761	109,884	-40,800	0,063
15,842	17,780	16,870														

18,850	14,670	16,920	-0,190	14,346	17,700	0,324	0,780	1,026%	4,610%	0,010	0,001	-0,643	-0,615	109,872	-0,209	0,053
18,900	14,680	16,920	-0,170	14,346	17,698	0,334	0,778	1,089%	4,601%	0,009	0,000	-0,576	-0,550	109,872	-0,187	0,053
18,950	14,690	16,920	-0,150	14,347	17,697	0,343	0,777	1,153%	4,591%	0,008	0,000	-0,508	-0,486	109,872	-0,165	0,053
19,000	15,000	17,000	-0,150	14,347	17,697	0,653	0,697	3,195%	4,099%	0,008	0,000	-0,506	-0,486	109,872	-0,165	0,053