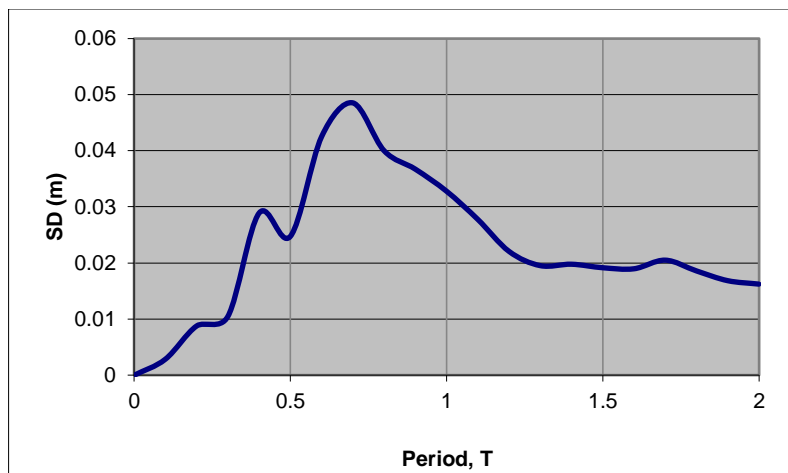


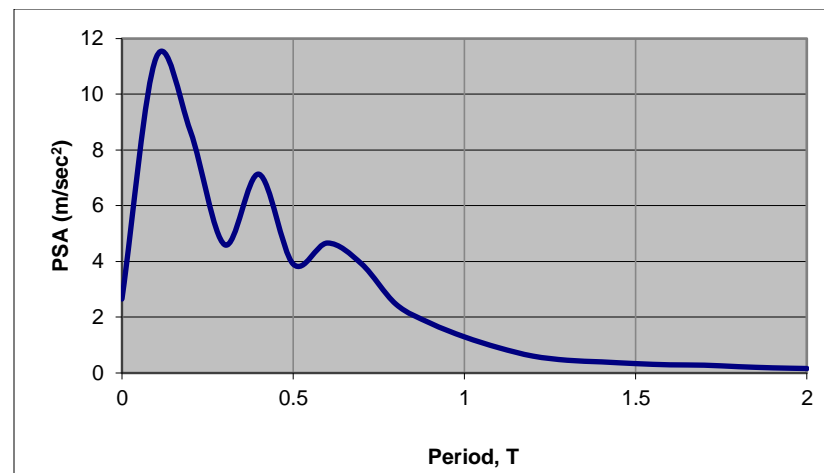
**ΛΥΣΗ ΑΣΚΗΣΗΣ 7**

Οι τιμές των ελαστικών φασμάτων απόκρισης και τα διαγράμματά τους δίνονται στον παρακάτω πίνακα και αντίστοιχα στα σχήματα 1 έως 4.

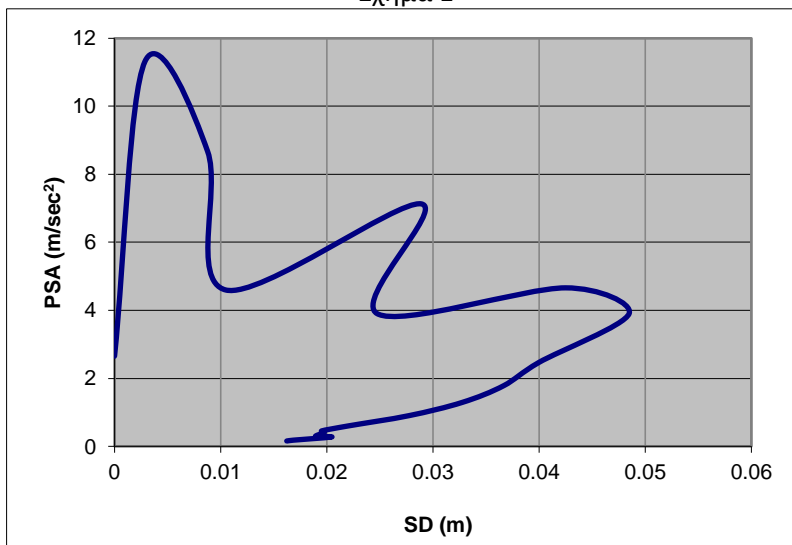
T (sec)	SD (m)	PSV (m/s)	PSA (m/s <sup>2</sup> )
0	0	0	2.652395515
0.1	0.002865108	0.180020049	11.31099329
0.2	0.008779129	0.275804459	8.664652634
0.3	0.010480915	0.219511776	4.597443881
0.4	0.028890106	0.453804716	7.128347817
0.5	0.024733359	0.310808557	3.905735519
0.6	0.042495483	0.445011661	4.660151219
0.7	0.048505078	0.435380559	3.90796676
0.8	0.039981786	0.314016211	2.466277557
0.9	0.036702809	0.256233948	1.788850417
1	0.032767458	0.205884012	1.293607398
1.1	0.027755675	0.158540045	0.905578622
1.2	0.02205425	0.115475782	0.60462978
1.3	0.019521414	0.09435128	0.456020441
1.4	0.019771355	0.088733634	0.398235616
1.5	0.019146095	0.080198974	0.335936677
1.6	0.018958072	0.074448174	0.292357295
1.7	0.020495367	0.0757507	0.279973932
1.8	0.018577924	0.064849188	0.226366369
1.9	0.016843192	0.055699419	0.184194616
2	0.01623113	0.050991598	0.160194831



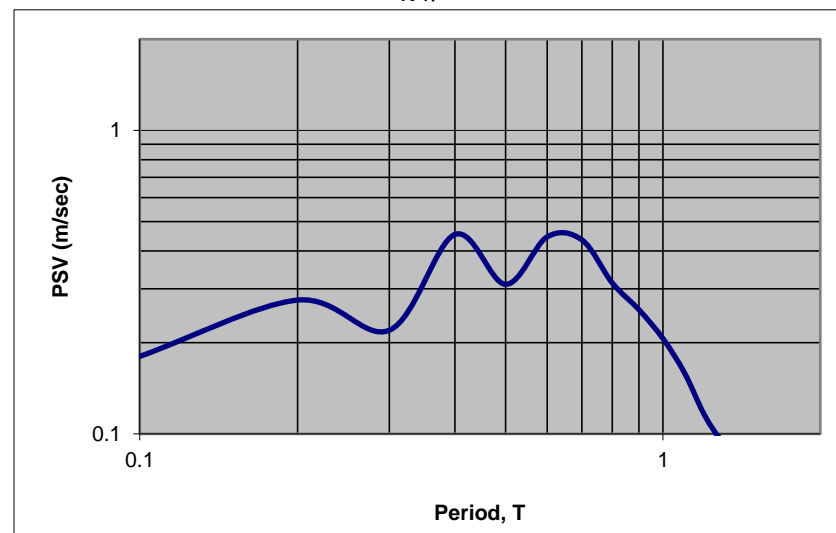
Σχήμα 1



Σχήμα 2



Σχήμα 3



Σχήμα 4

Ενδεικτικά δίνεται η επίλυση για  $T=0.1\text{sec}$ .

$$u_{i+1} = \frac{\hat{p}_i}{\hat{k}} \quad \hat{p}_i = -m\ddot{x}_{g,i} - \left[ \frac{m}{(\Delta t)^2} - \frac{C}{2\Delta t} \right] u_{i-1} - \left[ K - \frac{2m}{(\Delta t)^2} \right] u_i \quad \hat{k} = \frac{m}{(\Delta t)^2} + \frac{C}{2\Delta t}$$

$$u_{-1} = u_0 - (\Delta t)\dot{u}_0 + \frac{(\Delta t)^2}{2}\ddot{u}_0 \quad \ddot{u}_0 = \frac{-m\ddot{x}_{g,0} - C\dot{u}_0 - Ku_0}{m}$$

t(sec)	$a_g(\text{m/s}^2)$	$p'$	u
			0
0	0	0	0
0.005	0	0	0
0.01	0	0	0
0.015	-0.002038736	0.002039	0
0.02	-0.002038736	0.005855	5.02E-08
0.025	-0.002038736	0.011023	1.44E-07
0.03	-0.002038736	0.016999	2.71E-07
0.035	0	0.021138	4.18E-07
0.04	0	0.023095	5.2E-07
0.045	0	0.022748	5.68E-07
0.05	0	0.020201	5.6E-07
0.055	-0.002038736	0.017808	4.97E-07
0.06	-0.002038736	0.015798	4.38E-07
0.065	-0.002038736	0.014354	3.89E-07
0.07	-0.002038736	0.013598	3.53E-07
0.075	0	0.011544	3.35E-07
0.08	0	0.008432	2.84E-07
0.085	0	0.004597	2.08E-07
0.09	0	0.000434	1.13E-07
0.095	0	-0.00364	1.07E-08
0.1	-0.002038736	-0.0052	-9E-08
0.105	-0.002038736	-0.00417	-1.3E-07
0.11	-0.002038736	-0.00072	-1E-07
0.115	0	0.00269	-1.8E-08
0.12	0	0.005732	6.62E-08
0.125	0.002038736	0.006085	1.41E-07
0.13	0	0.005835	1.5E-07
0.135	0	0.005026	1.44E-07
0.14	-0.002038736	0.005793	1.24E-07
0.145	-0.002038736	0.008012	1.43E-07
0.15	-0.002038736	0.011422	1.97E-07
0.155	0	0.013617	2.81E-07
0.16	0	0.014421	3.35E-07

0.165	0.002038736	0.01176	3.55E-07
0.17	0.002038736	0.006	2.89E-07
0.175	0.002038736	-0.0022	1.48E-07
0.18	0	-0.00994	-5.4E-08
0.185	-0.002038736	-0.01443	-2.4E-07
0.19	-0.004077472	-0.0133	-3.6E-07
0.195	-0.002038736	-0.00888	-3.3E-07
0.2	0.002038736	-0.00577	-2.2E-07
0.205	0.004077472	-0.00627	-1.4E-07
0.21	0.006116208	-0.01227	-1.5E-07
0.215	0.004077472	-0.02096	-3E-07
0.22	0	-0.02735	-5.2E-07
0.225	-0.006116208	-0.02476	-6.7E-07
0.23	-0.01019368	-0.00966	-6.1E-07
0.235	-0.008154944	0.014069	-2.4E-07
0.24	0.004077472	0.03162	3.46E-07
0.245	0.022426096	0.02313	7.78E-07
0.25	0.046890928	-0.03424	5.69E-07
0.255	0.071355759	-0.15786	-8.4E-07
0.26	0.089704383	-0.35202	-3.9E-06
0.265	0.095820591	-0.60179	-8.7E-06
0.27	0.083588175	-0.86895	-1.5E-05
0.275	0.057084608	-1.1005	-2.1E-05
0.28	0.02038736	-1.23833	-2.7E-05
0.285	-0.02038736	-1.23119	-3E-05
0.29	-0.059123344	-1.04551	-3E-05
0.295	-0.085626911	-0.67835	-2.6E-05
0.3	-0.099898063	-0.15674	-1.7E-05
0.305	-0.101936799	0.465907	-3.9E-06
0.31	-0.091743119	1.115765	1.15E-05
0.315	-0.073394495	1.7105	2.75E-05
0.32	-0.053007136	2.173638	4.21E-05
0.325	-0.03058104	2.44182	5.35E-05
0.33	-0.01019368	2.47463	6.01E-05
0.335	0.008154944	2.257811	6.09E-05
0.34	0.024464832	1.803843	5.56E-05
0.345	0.038735984	1.149901	4.44E-05
0.35	0.048929664	0.35552	2.83E-05
0.355	0.053007136	-0.50184	8.75E-06
0.36	0.046890928	-1.33081	-1.2E-05
0.365	0.034658512	-2.03949	-3.3E-05

0.37	0.018348624	-2.54642	-5E-05
0.375	0	-2.79023	-6.3E-05
0.38	-0.01019368	-2.74519	-6.9E-05
0.385	-0.01019368	-2.42459	-6.8E-05
0.39	0.004077472	-1.88239	-6E-05
0.395	0.028542304	-1.20259	-4.6E-05
0.4	0.059123344	-0.48609	-3E-05
0.405	0.089704383	0.165783	-1.2E-05
0.41	0.112130479	0.669252	4.08E-06
0.415	0.118246687	0.973871	1.65E-05
0.42	0.108053007	1.066384	2.4E-05
0.425	0.085626911	0.966789	2.62E-05
0.43	0.057084608	0.719247	2.38E-05
0.435	0.03058104	0.378891	1.77E-05
0.44	0.012232416	1.38E-05	9.33E-06
0.445	0.008154944	-0.3753	3.39E-10
0.45	0.014271152	-0.71681	-9.2E-06
0.455	0.028542304	-1.00665	-1.8E-05
0.46	0.038735984	-1.22844	-2.5E-05
0.465	0.04077472	-1.36478	-3E-05
0.47	0.028542304	-1.39283	-3.4E-05
0.475	0	-1.28467	-3.4E-05
0.48	-0.034658512	-1.02037	-3.2E-05
0.485	-0.067278287	-0.59781	-2.5E-05
0.49	-0.089704383	-0.04053	-1.5E-05
0.495	-0.093781855	0.597229	-1E-06
0.5	-0.079510703	1.236744	1.47E-05
0.505	-0.055045872	1.791351	3.04E-05
0.51	-0.026503568	2.181242	4.41E-05
0.515	-0.01019368	2.357317	5.37E-05
0.52	-0.01019368	2.30908	5.8E-05
0.525	-0.024464832	2.062427	5.68E-05
0.53	-0.046890928	1.669889	5.08E-05
0.535	-0.06116208	1.188391	4.11E-05
0.54	-0.059123344	0.665433	2.93E-05
0.545	-0.034658512	0.12865	1.64E-05
0.55	0.012232416	-0.41626	3.17E-06
0.555	0.065239551	-0.96912	-1E-05
0.56	0.106014271	-1.51671	-2.4E-05
0.565	0.122324159	-2.02232	-3.7E-05
0.57	0.108053007	-2.42383	-5E-05

0.575	0.069317023	-2.64672	-6E-05
0.58	0.022426096	-2.62796	-6.5E-05
0.585	-0.014271152	-2.34015	-6.5E-05
0.59	-0.024464832	-1.80938	-5.8E-05
0.595	-0.01019368	-1.10902	-4.5E-05
0.6	0.02038736	-0.34295	-2.7E-05
0.605	0.048929664	0.383821	-8.4E-06
0.61	0.055045872	0.995772	9.45E-06
0.615	0.028542304	1.463495	2.45E-05
0.62	-0.024464832	1.799009	3.6E-05
0.625	-0.085626911	2.034963	4.43E-05
0.63	-0.134556575	2.200438	5.01E-05
0.635	-0.146788991	2.293769	5.42E-05
0.64	-0.118246687	2.279575	5.65E-05
0.645	-0.057084608	2.101398	5.61E-05
0.65	0.012232416	1.712308	5.17E-05
0.655	0.063200815	1.105668	4.21E-05
0.66	0.077471967	0.332881	2.72E-05
0.665	0.0509684	-0.49932	8.19E-06
0.67	-0.004077472	-1.25318	-1.2E-05
0.675	-0.063200815	-1.79875	-3.1E-05
0.68	-0.101936799	-2.05073	-4.4E-05
0.685	-0.110091743	-1.98555	-5E-05
0.69	-0.085626911	-1.64383	-4.9E-05
0.695	-0.046890928	-1.10606	-4E-05
0.7	-0.012232416	-0.46521	-2.7E-05
0.705	0.002038736	0.198987	-1.1E-05
0.71	-0.008154944	0.831456	4.9E-06
0.715	-0.032619776	1.39619	2.05E-05
0.72	-0.0509684	1.858758	3.44E-05
0.725	-0.046890928	2.173295	4.58E-05
0.73	-0.014271152	2.281196	5.35E-05
0.735	0.038735984	2.12536	5.61E-05
0.74	0.093781855	1.674042	5.23E-05
0.745	0.132517839	0.941499	4.12E-05
0.75	0.138634047	0.001495	2.32E-05
0.755	0.112130479	-1.02171	3.68E-08
0.76	0.063200815	-1.97719	-2.5E-05
0.765	0.016309888	-2.7273	-4.9E-05
0.77	-0.016309888	-3.17289	-6.7E-05
0.775	-0.024464832	-3.27193	-7.8E-05

0.78	-0.012232416	-3.03774	-8.1E-05
0.785	0.004077472	-2.51969	-7.5E-05
0.79	0.008154944	-1.78098	-6.2E-05
0.795	-0.008154944	-0.88391	-4.4E-05
0.8	-0.038735984	0.110041	-2.2E-05
0.805	-0.073394495	1.135949	2.71E-06
0.81	-0.091743119	2.11149	2.8E-05
0.815	-0.085626911	2.937311	5.2E-05
0.82	-0.055045872	3.507218	7.23E-05
0.825	-0.012232416	3.730935	8.63E-05
0.83	0.022426096	3.562772	9.18E-05
0.835	0.034658512	3.018958	8.77E-05
0.84	0.016309888	2.182303	7.43E-05
0.845	-0.02038736	1.17986	5.37E-05
0.85	-0.057084608	0.15086	2.9E-05
0.855	-0.075433231	-0.78554	3.71E-06
0.86	-0.06116208	-1.55548	-1.9E-05
0.865	-0.02038736	-2.13008	-3.8E-05
0.87	0.03058104	-2.5105	-5.2E-05
0.875	0.071355759	-2.70657	-6.2E-05
0.88	0.077471967	-2.71105	-6.7E-05
0.885	0.046890928	-2.49885	-6.7E-05
0.89	-0.01019368	-2.04021	-6.2E-05
0.895	-0.069317023	-1.32819	-5E-05
0.9	-0.106014271	-0.40312	-3.3E-05
0.905	-0.097859327	0.63037	-9.9E-06
0.91	-0.046890928	1.617532	1.55E-05
0.915	0.034658512	2.382327	3.98E-05
0.92	0.116207951	2.775768	5.86E-05
0.925	0.175331295	2.711989	6.83E-05
0.93	0.189602446	2.197057	6.68E-05
0.935	0.163098879	1.321465	5.41E-05
0.94	0.101936799	0.242613	3.25E-05
0.945	0.034658512	-0.8611	5.97E-06
0.95	-0.022426096	-1.82458	-2.1E-05
0.955	-0.055045872	-2.52592	-4.5E-05
0.96	-0.06116208	-2.89896	-6.2E-05
0.965	-0.046890928	-2.93188	-7.1E-05
0.97	-0.024464832	-2.65443	-7.2E-05
0.975	-0.008154944	-2.11947	-6.5E-05
0.98	-0.002038736	-1.39308	-5.2E-05

0.985	-0.004077472	-0.5497	-3.4E-05
0.99	-0.008154944	0.329152	-1.4E-05
0.995	-0.012232416	1.161074	8.1E-06
1	-0.01019368	1.864637	2.86E-05
1.005	-0.002038736	2.367292	4.59E-05
1.01	0.008154944	2.616215	5.83E-05
1.015	0.016309888	2.586913	6.44E-05
1.02	0.018348624	2.288798	6.37E-05
1.025	0.016309888	1.761193	5.63E-05
1.03	0.008154944	1.070617	4.33E-05
1.035	-0.004077472	0.301446	2.64E-05
1.04	-0.02038736	-0.45284	7.42E-06
1.045	-0.036697248	-1.10309	-1.1E-05
1.05	-0.0509684	-1.57508	-2.7E-05
1.055	-0.065239551	-1.81418	-3.9E-05
1.06	-0.069317023	-1.80028	-4.5E-05
1.065	-0.065239551	-1.54664	-4.4E-05
1.07	-0.044852192	-1.10571	-3.8E-05
1.075	-0.014271152	-0.5567	-2.7E-05
1.08	0.022426096	0.006995	-1.4E-05
1.085	0.055045872	0.497529	1.72E-07
1.09	0.073394495	0.851152	1.22E-05
1.095	0.071355759	1.039775	2.09E-05
1.1	0.044852192	1.076678	2.56E-05
1.105	0.002038736	1.00578	2.65E-05
1.11	-0.044852192	0.884195	2.48E-05
1.115	-0.083588175	0.764043	2.18E-05
1.12	-0.101936799	0.675301	1.88E-05
1.125	-0.089704383	0.61339	1.66E-05
1.13	-0.053007136	0.546798	1.51E-05
1.135	0.004077472	0.425057	1.35E-05
1.14	0.065239551	0.200538	1.05E-05
1.145	0.120285423	-0.15681	4.94E-06
1.15	0.156982671	-0.64485	-3.9E-06
1.155	0.173292559	-1.22842	-1.6E-05
1.16	0.171253823	-1.84584	-3E-05
1.165	0.154943935	-2.41974	-4.5E-05
1.17	0.134556575	-2.87532	-6E-05
1.175	0.114169215	-3.15159	-7.1E-05
1.18	0.095820591	-3.20889	-7.8E-05
1.185	0.079510703	-3.03213	-7.9E-05



1.19	0.06116208	-2.62736	-7.5E-05
1.195	0.038735984	-2.01855	-6.5E-05
1.2	0.004077472	-1.2365	-5E-05
1.205	-0.038735984	-0.31976	-3E-05
1.21	-0.087665647	0.687365	-7.9E-06
1.215	-0.134556575	1.731105	1.69E-05
1.22	-0.165137615	2.739489	4.26E-05
1.225	-0.173292559	3.62378	6.74E-05
1.23	-0.150866463	4.279465	8.92E-05
1.235	-0.097859327	4.596895	0.000105
1.24	-0.024464832	4.482292	0.000113
1.245	0.055045872	3.880646	0.00011
1.25	0.122324159	2.798202	9.55E-05
1.255	0.161060143	1.316279	6.89E-05
1.26	0.161060143	-0.40877	3.24E-05
1.265	0.120285423	-2.16103	-1E-05
1.27	0.048929664	-3.69804	-5.3E-05
1.275	-0.038735984	-4.78943	-9.1E-05
1.28	-0.120285423	-5.26139	-0.00012
1.285	-0.179408767	-5.0281	-0.00013
1.29	-0.203873598	-4.10957	-0.00012
1.295	-0.185524975	-2.6346	-0.0001
1.3	-0.132517839	-0.81673	-6.5E-05
1.305	-0.055045872	1.079318	-2E-05
1.31	0.032619776	2.779227	2.66E-05
1.315	0.110091743	4.046408	6.84E-05
1.32	0.163098879	4.718109	9.96E-05
1.325	0.179408767	4.731168	0.000116
1.33	0.152905199	4.131191	0.000116
1.335	0.089704383	3.058641	0.000102
1.34	-0.002038736	1.724096	7.53E-05
1.345	-0.106014271	0.369313	4.24E-05
1.35	-0.195718654	-0.78373	9.09E-06
1.355	-0.250764526	-1.5742	-1.9E-05
1.36	-0.252803262	-1.93444	-3.9E-05
1.365	-0.195718654	-1.89986	-4.8E-05
1.37	-0.089704383	-1.59203	-4.7E-05
1.375	0.046890928	-1.18592	-3.9E-05
1.38	0.181447503	-0.85858	-2.9E-05
1.385	0.27930683	-0.73724	-2.1E-05
1.39	0.313965341	-0.86199	-1.8E-05

1.395	0.273190622	-1.17231	-2.1E-05
1.4	0.165137615	-1.52425	-2.9E-05
1.405	0.016309888	-1.73351	-3.8E-05
1.41	-0.138634047	-1.62922	-4.3E-05
1.415	-0.260958206	-1.10888	-4E-05
1.42	-0.324159021	-0.17273	-2.7E-05
1.425	-0.322120285	1.073371	-4.3E-06
1.43	-0.267074414	2.443704	2.64E-05
1.435	-0.183486239	3.717684	6.01E-05
1.44	-0.110091743	4.701106	9.15E-05
1.445	-0.069317023	5.266623	0.000116
1.45	-0.073394495	5.376286	0.00013
1.455	-0.112130479	5.072276	0.000132
1.46	-0.163098879	4.447896	0.000125
1.465	-0.195718654	3.606346	0.000109
1.47	-0.18756371	2.627961	8.88E-05
1.475	-0.132517839	1.556998	6.47E-05
1.48	-0.046890928	0.414758	3.83E-05
1.485	0.042813456	-0.77527	1.02E-05
1.49	0.099898063	-1.95305	-1.9E-05
1.495	0.103975535	-3.00861	-4.8E-05
1.5	0.048929664	-3.78809	-7.4E-05
1.505	-0.044852192	-4.13053	-9.3E-05
1.51	-0.140672783	-3.92035	-0.0001
1.515	-0.19775739	-3.13796	-9.6E-05
1.52	-0.181447503	-1.89342	-7.7E-05
1.525	-0.085626911	-0.41775	-4.7E-05
1.53	0.071355759	0.981503	-1E-05
1.535	0.252803262	1.989305	2.42E-05
1.54	0.405708461	2.366928	4.9E-05
1.545	0.489296636	2.01358	5.83E-05
1.55	0.485219164	0.990283	4.96E-05
1.555	0.397553517	-0.49514	2.44E-05
1.56	0.256880734	-2.14339	-1.2E-05
1.565	0.095820591	-3.62821	-5.3E-05
1.57	-0.046890928	-4.66766	-8.9E-05
1.575	-0.150866463	-5.07053	-0.00011
1.58	-0.214067278	-4.75418	-0.00012
1.585	-0.244648318	-3.741	-0.00012
1.59	-0.254841998	-2.1408	-9.2E-05
1.595	-0.256880734	-0.1252	-5.3E-05

1.6	-0.246687054	2.086913	-3.1E-06
1.605	-0.216106014	4.243927	5.14E-05
1.61	-0.154943935	6.076787	0.000104
1.615	-0.053007136	7.315484	0.00015
1.62	0.073394495	7.73163	0.00018
1.625	0.203873598	7.179751	0.00019
1.63	0.305810398	5.641476	0.000177
1.635	0.342507645	3.260093	0.000139
1.64	0.301732926	0.333851	8.02E-05
1.645	0.185524975	-2.71985	8.22E-06
1.65	0.022426096	-5.43723	-6.7E-05
1.655	-0.148827727	-7.39341	-0.00013
1.66	-0.277268094	-8.2934	-0.00018
1.665	-0.332313965	-8.02737	-0.0002
1.67	-0.295616718	-6.69393	-0.0002
1.675	-0.177370031	-4.57392	-0.00016
1.68	-0.014271152	-2.06077	-0.00011
1.685	0.152905199	0.421996	-5.1E-05
1.69	0.281345566	2.505615	1.04E-05
1.695	0.336391437	3.944927	6.17E-05
1.7	0.30988787	4.646505	9.71E-05
1.705	0.214067278	4.660816	0.000114
1.71	0.083588175	4.138207	0.000115
1.715	-0.038735984	3.26839	0.000102
1.72	-0.112130479	2.220018	8.04E-05
1.725	-0.112130479	1.100484	5.46E-05
1.73	-0.03058104	-0.06078	2.71E-05
1.735	0.114169215	-1.29438	-1.5E-06
1.74	0.283384302	-2.64744	-3.2E-05
1.745	0.430173293	-4.13157	-6.5E-05
1.75	0.509683996	-5.67802	-0.0001
1.755	0.495412844	-7.12032	-0.00014
1.76	0.381243629	-8.20737	-0.00018
1.765	0.181447503	-8.64474	-0.0002
1.77	-0.06116208	-8.16741	-0.00021
1.775	-0.303771662	-6.60745	-0.0002
1.78	-0.495412844	-3.95828	-0.00016
1.785	-0.607543323	-0.39889	-9.7E-05
1.79	-0.621814475	3.710993	-9.8E-06
1.795	-0.54841998	7.881576	9.13E-05
1.8	-0.411824669	11.56914	0.000194

1.805	-0.246687054	14.26516	0.000285
1.81	-0.095820591	15.58747	0.000351
1.815	0.006116208	15.34814	0.000384
1.82	0.038735984	13.5861	0.000378
1.825	0	10.5584	0.000334
1.83	-0.091743119	6.690138	0.00026
1.835	-0.201834862	2.493276	0.000165
1.84	-0.28950051	-1.52655	6.14E-05
1.845	-0.322120285	-4.95158	-3.8E-05
1.85	-0.277268094	-7.51227	-0.00012
1.855	-0.167176351	-9.09661	-0.00018
1.86	-0.02038736	-9.72765	-0.00022
1.865	0.116207951	-9.51014	-0.00024
1.87	0.203873598	-8.57914	-0.00023
1.875	0.21814475	-7.06145	-0.00021
1.88	0.169215087	-5.07375	-0.00017
1.885	0.091743119	-2.74626	-0.00012
1.89	0.034658512	-0.25857	-6.8E-05
1.895	0.04077472	2.136531	-6.4E-06
1.9	0.124362895	4.125581	5.26E-05
1.905	0.267074414	5.385153	0.000102
1.91	0.413863405	5.668629	0.000133
1.915	0.505606524	4.886912	0.00014
1.92	0.493374108	3.16114	0.00012
1.925	0.366972477	0.814607	7.78E-05
1.93	0.159021407	-1.69753	2.01E-05
1.935	-0.063200815	-3.90381	-4.2E-05
1.94	-0.230377166	-5.43214	-9.6E-05
1.945	-0.28950051	-6.09586	-0.00013
1.95	-0.22833843	-5.91838	-0.00015
1.955	-0.083588175	-5.08772	-0.00015
1.96	0.085626911	-3.874	-0.00013
1.965	0.209989806	-2.53138	-9.5E-05
1.97	0.252803262	-1.23711	-6.2E-05
1.975	0.216106014	-0.07877	-3E-05
1.98	0.132517839	0.918873	-1.9E-06
1.985	0.057084608	1.739291	2.26E-05
1.99	0.028542304	2.336785	4.28E-05
1.995	0.055045872	2.633687	5.75E-05
2	0.114169215	2.551323	6.48E-05
2.005	0.154943935	2.068651	6.28E-05

2.01	0.132517839	1.26738	5.09E-05
2.015	0.028542304	0.339199	3.12E-05
2.02	-0.136595311	-0.45664	8.35E-06
2.025	-0.313965341	-0.86952	-1.1E-05
2.03	-0.438328236	-0.74682	-2.1E-05
2.035	-0.470948012	-0.08439	-1.8E-05
2.04	-0.403669725	0.969416	-2.1E-06
2.045	-0.271151886	2.167583	2.39E-05
2.05	-0.132517839	3.250585	5.34E-05
2.055	-0.044852192	4.029083	8E-05
2.06	-0.038735984	4.430734	9.92E-05
2.065	-0.099898063	4.489326	0.000109
2.07	-0.177370031	4.28725	0.00011
2.075	-0.209989806	3.884823	0.000106
2.08	-0.148827727	3.266183	9.56E-05
2.085	0.022426096	2.326879	8.04E-05
2.09	0.265035678	0.925489	5.73E-05
2.095	0.513761468	-1.03625	2.28E-05
2.1	0.693170234	-3.52978	-2.6E-05
2.105	0.74617737	-6.34939	-8.7E-05
2.11	0.660550459	-9.12536	-0.00016
2.115	0.462793068	-11.3916	-0.00022
2.12	0.220183486	-12.7009	-0.00028
2.125	-0.002038736	-12.7336	-0.00031
2.13	-0.142711519	-11.3853	-0.00031
2.135	-0.179408767	-8.7929	-0.00028
2.14	-0.124362895	-5.30195	-0.00022
2.145	-0.018348624	-1.38545	-0.00013
2.15	0.095820591	2.448729	-3.4E-05
2.155	0.175331295	5.751038	6.03E-05
2.16	0.201834862	8.190545	0.000142
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2.17	0.114169215	9.88396	0.000236
2.175	0.036697248	9.180087	0.000243
2.18	-0.044852192	7.650811	0.000226
2.185	-0.122324159	5.547733	0.000188
2.19	-0.193679918	3.164311	0.000137
2.195	-0.265035678	0.812169	7.79E-05
2.2	-0.332313965	-1.21383	2E-05
2.205	-0.387359837	-2.67185	-3E-05
2.21	-0.415902141	-3.40925	-6.6E-05

2.215	-0.401630989	-3.39094	-8.4E-05
2.22	-0.336391437	-2.7073	-8.3E-05
2.225	-0.226299694	-1.55545	-6.7E-05
2.23	-0.089704383	-0.19837	-3.8E-05
2.235	0.046890928	1.089118	-4.9E-06
2.24	0.152905199	2.078048	2.68E-05
2.245	0.20795107	2.626516	5.11E-05
2.25	0.199796126	2.703006	6.46E-05
2.255	0.140672783	2.373807	6.65E-05
2.26	0.046890928	1.777237	5.84E-05
2.265	-0.055045872	1.081471	4.37E-05
2.27	-0.144750255	0.44689	2.66E-05
2.275	-0.203873598	-0.00761	1.1E-05
2.28	-0.230377166	-0.21694	-1.9E-07
2.285	-0.222222222	-0.1765	-5.3E-06
2.29	-0.185524975	0.065375	-4.3E-06
2.295	-0.124362895	0.417776	1.61E-06
2.3	-0.048929664	0.767612	1.03E-05
2.305	0.032619776	0.999419	1.89E-05
2.31	0.101936799	1.025006	2.46E-05
2.315	0.134556575	0.815645	2.52E-05
2.32	0.110091743	0.423413	2.01E-05
2.325	0.018348624	-0.01618	1.04E-05
2.33	-0.130479103	-0.31012	-4E-07
2.335	-0.303771662	-0.26107	-7.6E-06
2.34	-0.448521916	0.260356	-6.4E-06
2.345	-0.513761468	1.254117	6.41E-06
2.35	-0.46687054	2.56215	3.09E-05
2.355	-0.30988787	3.890649	6.31E-05
2.36	-0.085626911	4.885632	9.58E-05
2.365	0.130479103	5.244625	0.00012
2.37	0.265035678	4.817861	0.000129
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2.39	-0.330275229	-0.85004	1.1E-05
2.395	-0.458715596	-1.56724	-2.1E-05
2.4	-0.426095821	-1.68387	-3.9E-05
2.405	-0.224260958	-1.40901	-4.1E-05
2.41	0.093781855	-1.09952	-3.5E-05
2.415	0.430173293	-1.12294	-2.7E-05

2.42	0.689092762	-1.72561	-2.8E-05
2.425	0.799184506	-2.94114	-4.2E-05
2.43	0.750254842	-4.58355	-7.2E-05
2.435	0.587155963	-6.31693	-0.00011
2.44	0.389398573	-7.77228	-0.00016
2.445	0.244648318	-8.67203	-0.00019
2.45	0.205912334	-8.90721	-0.00021
2.455	0.285423038	-8.55503	-0.00022
2.46	0.442405708	-7.82485	-0.00021
2.465	0.615698267	-6.97262	-0.00019
2.47	0.742099898	-6.21132	-0.00017
2.475	0.778797146	-5.64882	-0.00015
2.48	0.71559633	-5.27041	-0.00014
2.485	0.576962283	-4.96855	-0.00013
2.49	0.399592253	-4.59282	-0.00012
2.495	0.220183486	-4.00261	-0.00011
2.5	0.067278287	-3.10901	-9.9E-05
2.505	-0.0509684	-1.88997	-7.7E-05
2.51	-0.132517839	-0.39248	-4.7E-05
2.515	-0.181447503	1.278286	-9.7E-06
2.52	-0.203873598	2.977035	3.15E-05
2.525	-0.19775739	4.531722	7.33E-05
2.53	-0.167176351	5.765152	0.000112
2.535	-0.114169215	6.514403	0.000142
2.54	-0.044852192	6.652329	0.00016
2.545	0.032619776	6.106965	0.000164
2.55	0.110091743	4.874965	0.00015
2.555	0.191641182	3.015731	0.00012
2.56	0.275229358	0.645736	7.42E-05
2.565	0.364933741	-2.07863	1.59E-05
2.57	0.450560652	-4.96732	-5.1E-05
2.575	0.519877676	-7.80386	-0.00012
2.58	0.546381244	-10.3408	-0.00019
2.585	0.505606524	-12.3	-0.00025
2.59	0.387359837	-13.3908	-0.0003
2.595	0.201834862	-13.3485	-0.00033
2.6	-0.022426096	-11.988	-0.00033
2.605	-0.242609582	-9.26215	-0.0003
2.61	-0.422018349	-5.29857	-0.00023
2.615	-0.540265036	-0.40246	-0.00013
2.62	-0.601427115	4.982751	-9.9E-06

2.625	-0.627930683	10.34515	0.000123
2.63	-0.654434251	15.19089	0.000255
2.635	-0.703363914	19.11403	0.000374
2.64	-0.76656473	21.82507	0.00047
2.645	-0.817533129	23.14907	0.000537
2.65	-0.80733945	22.99006	0.00057
2.655	-0.693170234	21.29521	0.000566
2.66	-0.45667686	18.0402	0.000524
2.665	-0.116207951	13.24912	0.000444
2.67	0.275229358	7.043583	0.000326
2.675	0.646279307	-0.30072	0.000173
2.68	0.929663609	-8.3183	-7.4E-06
2.685	1.090723751	-16.3703	-0.0002
2.69	1.129459735	-23.7121	-0.0004
2.695	1.088685015	-29.6113	-0.00058
2.7	1.0254842	-33.4763	-0.00073
2.705	1.001019368	-34.9698	-0.00082
2.71	1.039755352	-34.0589	-0.00086
2.715	1.129459735	-30.9962	-0.00084
2.72	1.225280326	-26.2415	-0.00076
2.725	1.25382263	-20.3379	-0.00065
2.73	1.151885831	-13.7925	-0.0005
2.735	0.878695209	-6.98806	-0.00034
2.74	0.434250765	-0.1493	-0.00017
2.745	-0.142711519	6.635159	-3.7E-06
2.75	-0.782874618	13.34791	0.000163
2.755	-1.408766565	19.96479	0.000329
2.76	-1.957186544	26.39422	0.000491
2.765	-2.383282365	32.44335	0.00065
2.77	-2.674821611	37.8277	0.000799
2.775	-2.837920489	42.20772	0.000931
2.78	-2.890927625	45.24188	0.001039
2.785	-2.848114169	46.63417	0.001114
2.79	-2.721712538	46.17368	0.001148
2.795	-2.50764526	43.74839	0.001136
2.8	-2.209989806	39.35709	0.001077
2.805	-1.830784913	33.10808	0.000969
2.81	-1.392456677	25.22771	0.000815
2.815	-0.931702345	16.07141	0.000621
2.82	-0.493374108	6.130041	0.000396
2.825	-0.128440367	-3.97106	0.000151



2.83	0.114169215	-13.488	-9.8E-05
2.835	0.209989806	-21.61	-0.00033
2.84	0.144750255	-27.5257	-0.00053
2.845	-0.067278287	-30.5164	-0.00068
2.85	-0.391437309	-30.058	-0.00075
2.855	-0.77675841	-25.9162	-0.00074
2.86	-1.158002039	-18.2263	-0.00064
2.865	-1.465851172	-7.53733	-0.00045
2.87	-1.633027523	5.186463	-0.00019
2.875	-1.610601427	18.62334	0.000128
2.88	-1.378185525	31.21318	0.000458
2.885	-0.956167176	41.3368	0.000768
2.89	-0.405708461	47.53632	0.001017
2.895	0.183486239	48.74151	0.00117
2.9	0.711518858	44.46171	0.0012
2.905	1.094801223	34.89915	0.001094
2.91	1.28440367	20.95682	0.000859
2.915	1.27420999	4.13515	0.000516
2.92	1.107033639	-13.6751	0.000102
2.925	0.846075433	-30.4517	-0.00034
2.93	0.564729867	-44.3152	-0.00075
2.935	0.311926606	-53.7557	-0.00109
2.94	0.122324159	-57.8031	-0.00132
2.945	0	-56.1086	-0.00142
2.95	-0.06116208	-48.9533	-0.00138
2.955	-0.069317023	-37.1932	-0.0012
2.96	-0.028542304	-22.1543	-0.00092
2.965	0.057084608	-5.48488	-0.00055
2.97	0.179408767	11.0225	-0.00014
2.975	0.307849134	25.64041	0.000271
2.98	0.407747197	36.90697	0.000631
2.985	0.432212029	43.8066	0.000908
2.99	0.350662589	45.88549	0.001078
2.995	0.171253823	43.27015	0.001129
3	-0.06116208	36.59231	0.001065
3.005	-0.265035678	26.83039	0.000901
3.01	-0.352701325	15.116	0.00066
3.015	-0.256880734	2.552012	0.000372
3.02	0.034658512	-9.90601	6.28E-05
3.025	0.472986748	-21.4891	-0.00024
3.03	0.96432212	-31.5902	-0.00053

3.035	1.394495413	-39.7038	-0.00078
3.04	1.677879715	-45.3862	-0.00098
3.045	1.779816514	-48.2626	-0.00112
3.05	1.728848114	-48.0891	-0.00119
3.055	1.604485219	-44.8528	-0.00118
3.06	1.500509684	-38.8587	-0.0011
3.065	1.496432212	-30.7705	-0.00096
3.07	1.616717635	-21.5593	-0.00076
3.075	1.834862385	-12.3729	-0.00053
3.08	2.079510703	-4.34791	-0.0003
3.085	2.265035678	1.586329	-0.00011
3.09	2.318042813	4.864832	3.9E-05
3.095	2.20795107	5.361266	0.00012
3.1	1.944954128	3.376438	0.000132
3.105	1.590214067	-0.4653	8.31E-05
3.11	1.229357798	-5.37236	-1.1E-05
3.115	0.948012232	-10.5536	-0.00013
3.12	0.813455657	-15.3626	-0.00026
3.125	0.862385321	-19.3924	-0.00038
3.13	1.086646279	-22.4999	-0.00048
3.135	1.439347604	-24.7643	-0.00055
3.14	1.834862385	-26.3872	-0.00061
3.145	2.183486239	-27.5793	-0.00065
3.15	2.389398573	-28.4441	-0.00068
3.155	2.393476045	-28.9117	-0.0007
3.16	2.171253823	-28.7268	-0.00071
3.165	1.747196738	-27.5034	-0.00071
3.17	1.180428135	-24.8258	-0.00068
3.175	0.54841998	-20.3671	-0.00061
3.18	-0.073394495	-13.9938	-0.0005
3.185	-0.632008155	-5.8259	-0.00034
3.19	-1.096839959	3.752318	-0.00014
3.195	-1.469928644	14.1396	9.24E-05
3.2	-1.757390418	24.58904	0.000348
3.205	-1.965341488	34.29132	0.000605
3.21	-2.097859327	42.45929	0.000844
3.215	-2.148827727	48.39769	0.001045
3.22	-2.126401631	51.57603	0.001191
3.225	-2.057084608	51.70152	0.001269
3.23	-1.97961264	48.77892	0.001273
3.235	-1.944954128	43.15184	0.001201

3.24	-1.983690112	35.48944	0.001062
3.245	-2.087665647	26.70321	0.000874
3.25	-2.201834862	17.79582	0.000657
3.255	-2.236493374	9.671227	0.000438
3.26	-2.093781855	2.951955	0.000238
3.265	-1.706422018	-2.13991	7.27E-05
3.27	-1.074413863	-5.79193	-5.3E-05
3.275	-0.267074414	-8.50112	-0.00014
3.28	0.585117227	-10.8856	-0.00021
3.285	1.327217125	-13.4658	-0.00027
3.29	1.832823649	-16.4905	-0.00033
3.295	2.038735984	-19.858	-0.00041
3.3	1.953109072	-23.1449	-0.00049
3.305	1.641182467	-25.7223	-0.00057
3.31	1.211009174	-26.9316	-0.00063
3.315	0.760448522	-26.247	-0.00066
3.32	0.366972477	-23.4001	-0.00065
3.325	0.067278287	-18.4348	-0.00058
3.33	-0.126401631	-11.7053	-0.00045
3.335	-0.222222222	-3.8244	-0.00029
3.34	-0.232415902	4.416816	-9.4E-05
3.345	-0.179408767	12.15336	0.000109
3.35	-0.093781855	18.56345	0.000299
3.355	-0.02038736	22.99186	0.000457
3.36	-0.014271152	25.06346	0.000566
3.365	-0.114169215	24.74975	0.000617
3.37	-0.338430173	22.37924	0.000609
3.375	-0.650356779	18.55782	0.000551
3.38	-0.978593272	14.02994	0.000457
3.385	-1.229357798	9.508177	0.000345
3.39	-1.321100917	5.523466	0.000234
3.395	-1.231396534	2.356686	0.000136
3.4	-1.009174312	0.068031	5.8E-05
3.405	-0.762487258	-1.39396	1.67E-06
3.41	-0.617737003	-2.05754	-3.4E-05
3.415	-0.668705403	-1.83197	-5.1E-05
3.42	-0.929663609	-0.50569	-4.5E-05
3.425	-1.312945973	2.141648	-1.2E-05
3.43	-1.667686035	6.166686	5.27E-05
3.435	-1.816513761	11.28453	0.000152
3.44	-1.635066259	16.78263	0.000278

3.445	-1.098878695	21.57878	0.000413
3.45	-0.295616718	24.42541	0.000531
3.455	0.593272171	24.21731	0.000601
3.46	1.357798165	20.30465	0.000596
3.465	1.822629969	12.71739	0.0005
3.47	1.889908257	2.23915	0.000313
3.475	1.575942915	-9.70852	5.51E-05
3.48	0.972477064	-21.3157	-0.00024
3.485	0.226299694	-30.719	-0.00052
3.49	-0.523955148	-36.3225	-0.00076
3.495	-1.172273191	-37.051	-0.00089
3.5	-1.663608563	-32.4931	-0.00091
3.505	-1.985728848	-22.9331	-0.0008
3.51	-2.154943935	-9.28545	-0.00056
3.515	-2.199796126	7.042142	-0.00023
3.52	-2.152905199	24.33334	0.000173
3.525	-2.042813456	40.76808	0.000599
3.53	-1.906218145	54.63928	0.001003
3.535	-1.779816514	64.55198	0.001345
3.54	-1.692150866	69.57773	0.001589
3.545	-1.643221203	69.33041	0.001713
3.55	-1.608562691	63.96248	0.001706
3.555	-1.535168196	54.08054	0.001574
3.56	-1.351681957	40.60094	0.001331
3.565	-1.007135576	24.60022	0.000999
3.57	-0.493374108	7.19738	0.000605
3.575	0.136595311	-10.5032	0.000177
3.58	0.791029562	-27.4266	-0.00026
3.585	1.341488277	-42.5031	-0.00068
3.59	1.688073394	-54.6714	-0.00105
3.595	1.77166157	-62.9225	-0.00135
3.6	1.606523955	-66.4108	-0.00155
3.605	1.257900102	-64.596	-0.00163
3.61	0.825688073	-57.3862	-0.00159
3.615	0.401630989	-45.2249	-0.00141
3.62	0.038735984	-29.0839	-0.00111
3.625	-0.252803262	-10.3633	-0.00072
3.63	-0.501529052	9.286756	-0.00026
3.635	-0.742099898	28.16877	0.000229
3.64	-0.992864424	44.72247	0.000693
3.645	-1.235474006	57.65397	0.001101

3.65	-1.420998981	66.00428	0.001419
3.655	-1.478083588	69.16078	0.001625
3.66	-1.359836901	66.85915	0.001702
3.665	-1.04587156	59.1779	0.001646
3.67	-0.572884811	46.55682	0.001457
3.675	-0.016309888	29.8185	0.001146
3.68	0.532110092	10.16834	0.000734
3.685	0.988786952	-10.8509	0.00025
3.69	1.300713558	-31.4663	-0.00027
3.695	1.455657492	-49.8422	-0.00077
3.7	1.48216106	-64.2887	-0.00123
3.705	1.425076453	-73.4666	-0.00158
3.71	1.343527013	-76.5654	-0.00181
3.715	1.280326198	-73.4088	-0.00188
3.72	1.270132518	-64.4869	-0.00181
3.725	1.323139653	-50.8979	-0.00159
3.73	1.44138634	-34.2249	-0.00125
3.735	1.616717635	-16.3586	-0.00084
3.74	1.828746177	0.71582	-0.0004
3.745	2.0509684	15.14162	1.76E-05
3.75	2.254841998	25.39509	0.000373
3.755	2.405708461	30.45807	0.000625
3.76	2.483180428	29.92167	0.00075
3.765	2.47706422	24.01732	0.000736
3.77	2.407747197	13.55409	0.000591
3.775	2.30988787	-0.21245	0.000334
3.78	2.230377166	-15.7629	-5.2E-06
3.785	2.209989806	-31.5107	-0.00039
3.79	2.256880734	-45.9664	-0.00078
3.795	2.342507645	-57.851	-0.00113
3.8	2.403669725	-66.1503	-0.00142
3.805	2.348623853	-70.1137	-0.00163
3.81	2.095820591	-69.2374	-0.00173
3.815	1.600407747	-63.2608	-0.0017
3.82	0.876656473	-52.1987	-0.00156
3.825	0.004077472	-36.4108	-0.00128
3.83	-0.876656473	-16.6964	-0.0009
3.835	-1.610601427	5.641162	-0.00041
3.84	-2.059123344	28.7988	0.000139
3.845	-2.142711519	50.58451	0.000709
3.85	-1.869520897	68.65063	0.001245

3.855	-1.327217125	80.81441	0.00169
3.86	-0.674821611	85.42408	0.001989
3.865	-0.081549439	81.67209	0.002103
3.87	0.303771662	69.79632	0.00201
3.875	0.401630989	51.10415	0.001718
3.88	0.214067278	27.81029	0.001258
3.885	-0.177370031	2.711963	0.000685
3.89	-0.642201835	-21.2314	6.68E-05
3.895	-1.04587156	-41.3253	-0.00052
3.9	-1.288481142	-55.4936	-0.00102
3.905	-1.333333333	-62.498	-0.00137
3.91	-1.215086646	-61.9978	-0.00154
3.915	-1.019367992	-54.4694	-0.00153
3.92	-0.844036697	-41.0371	-0.00134
3.925	-0.77675841	-23.2559	-0.00101
3.93	-0.846075433	-2.91878	-0.00057
3.935	-1.029561672	18.10245	-7.2E-05
3.94	-1.251783894	37.96627	0.000446
3.945	-1.414882773	54.94141	0.000934
3.95	-1.435270133	67.48814	0.001352
3.955	-1.26401631	74.35301	0.001661
3.96	-0.905198777	74.68589	0.00183
3.965	-0.417940877	68.16921	0.001838
3.97	0.110091743	55.12001	0.001678
3.975	0.579001019	36.53943	0.001357
3.98	0.909276249	14.07375	0.000899
3.985	1.05606524	-10.1207	0.000346
3.99	1.021406728	-33.6047	-0.00025
3.995	0.848114169	-53.9452	-0.00083
4	0.609582059	-69.0243	-0.00133
4.005	0.389398573	-77.3193	-0.0017
4.01	0.262996942	-78.1076	-0.0019
4.015	0.27930683	-71.5612	-0.00192
4.02	0.44648318	-58.7101	-0.00176
4.025	0.72579001	-41.2775	-0.00145
4.03	1.037716616	-21.4109	-0.00102
4.035	1.282364934	-1.36061	-0.00053
4.04	1.353720693	16.848	-3.3E-05
4.045	1.178389399	31.67792	0.000415
4.05	0.73598369	42.23503	0.00078
4.055	0.073394495	48.28825	0.00104

4.06	-0.70540265	50.16749	0.001189
4.065	-1.463812436	48.57765	0.001235
4.07	-2.065239551	44.38195	0.001196
4.075	-2.407747197	38.4112	0.001092
4.08	-2.46687054	31.35958	0.000945
4.085	-2.285423038	23.76429	0.000772
4.09	-1.965341488	16.0601	0.000585
4.095	-1.635066259	8.668712	0.000395
4.1	-1.398572885	2.062174	0.000213
4.105	-1.312945973	-3.22746	5.08E-05
4.11	-1.363914373	-6.67595	-7.9E-05
4.115	-1.480122324	-7.88897	-0.00016
4.12	-1.569826707	-6.72806	-0.00019
4.125	-1.545361876	-3.40394	-0.00017
4.13	-1.361875637	1.509998	-8.4E-05
4.135	-1.033639144	7.158864	3.72E-05
4.14	-0.627930683	12.56532	0.000176
4.145	-0.226299694	16.80988	0.000309
4.15	0.087665647	19.20208	0.000414
4.155	0.273190622	19.38124	0.000473
4.16	0.336391437	17.33519	0.000477
4.165	0.330275229	13.3377	0.000427
4.17	0.326197757	7.841638	0.000328
4.175	0.383282365	1.370314	0.000193
4.18	0.5382263	-5.57223	3.37E-05
4.185	0.780835882	-12.5394	-0.00014
4.19	1.070336391	-19.143	-0.00031
4.195	1.343527013	-25.0257	-0.00047
4.2	1.551478084	-29.8463	-0.00062
4.205	1.663608563	-33.2811	-0.00073
4.21	1.681957187	-35.0578	-0.00082
4.215	1.641182467	-35.0142	-0.00086
4.22	1.588175331	-33.1577	-0.00086
4.225	1.565749235	-29.7025	-0.00082
4.23	1.604485219	-25.0725	-0.00073
4.235	1.708460754	-19.8578	-0.00062
4.24	1.861365953	-14.7363	-0.00049
4.245	2.03058104	-10.3718	-0.00036
4.25	2.171253823	-7.30569	-0.00026
4.255	2.242609582	-5.86716	-0.00018
4.26	2.203873598	-6.1069	-0.00014

4.265	2.022426096	-7.76824	-0.00015
4.27	1.681957187	-10.3053	-0.00019
4.275	1.178389399	-12.9409	-0.00025
4.28	0.534148828	-14.7717	-0.00032
4.285	-0.199796126	-14.9107	-0.00036
4.29	-0.950050968	-12.6465	-0.00037
4.295	-1.633027523	-7.59044	-0.00031
4.3	-2.169215087	0.216026	-0.00019
4.305	-2.50764526	10.26769	5.32E-06
4.31	-2.636085627	21.64683	0.000253
4.315	-2.597349643	33.16795	0.000533
4.32	-2.46687054	43.57667	0.000816
4.325	-2.332313965	51.76143	0.001073
4.33	-2.262996942	56.92639	0.001274
4.335	-2.293577982	58.69365	0.001401
4.34	-2.401630989	57.10464	0.001445
4.345	-2.521916412	52.53785	0.001406
4.35	-2.570846075	45.57807	0.001293
4.355	-2.479102956	36.88385	0.001122
4.36	-2.212028542	27.08659	0.000908
4.365	-1.783893986	16.74425	0.000667
4.37	-1.257900102	6.352662	0.000412
4.375	-0.711518858	-3.62328	0.000156
4.38	-0.226299694	-12.7123	-8.9E-05
4.385	0.152905199	-20.4378	-0.00031
4.39	0.409785933	-26.3483	-0.0005
4.395	0.568807339	-30.0844	-0.00065
4.4	0.666666667	-31.4484	-0.00074
4.405	0.733944954	-30.4484	-0.00077
4.41	0.795107034	-27.3156	-0.00075
4.415	0.850152905	-22.4757	-0.00067
4.42	0.890927625	-16.4925	-0.00055
4.425	0.907237513	-9.99898	-0.00041
4.43	0.895005097	-3.62971	-0.00025
4.435	0.856269113	2.038979	-8.9E-05
4.44	0.795107034	6.539102	5.02E-05
4.445	0.703363914	9.56127	0.000161
4.45	0.566768603	10.99413	0.000235
4.455	0.366972477	10.9474	0.000271
4.46	0.093781855	9.744576	0.000269
4.465	-0.234454638	7.866535	0.00024



4.47	-0.570846075	5.853039	0.000194
4.475	-0.839959225	4.173042	0.000144
4.48	-0.96432212	3.103836	0.000103
4.485	-0.882772681	2.648875	7.64E-05
4.49	-0.583078491	2.533673	6.52E-05
4.495	-0.112130479	2.287969	6.24E-05
4.5	0.440366972	1.387177	5.63E-05
4.505	0.966360856	-0.58691	3.41E-05
4.51	1.372069317	-3.81497	-1.4E-05
4.515	1.606523955	-8.17902	-9.4E-05
4.52	1.675840979	-13.2892	-0.0002
4.525	1.637104995	-18.5871	-0.00033
4.53	1.565749235	-23.4807	-0.00046
4.535	1.529051988	-27.4705	-0.00058
4.54	1.563710499	-30.2313	-0.00068
4.545	1.655453619	-31.6245	-0.00074
4.55	1.76146789	-31.6632	-0.00078
4.555	1.81243629	-30.4364	-0.00078
4.56	1.755351682	-28.0455	-0.00075
4.565	1.55351682	-24.5568	-0.00069
4.57	1.200815494	-19.9906	-0.0006
4.575	0.727828746	-14.3511	-0.00049
4.58	0.179408767	-7.67088	-0.00035
4.585	-0.385321101	-0.06659	-0.00019
4.59	-0.905198777	8.214162	-1.6E-06
4.595	-1.329255861	16.76988	0.000202
4.6	-1.606523955	25.03797	0.000413
4.605	-1.702344546	32.31974	0.000616
4.61	-1.606523955	37.84231	0.000795
4.615	-1.327217125	40.84415	0.000931
4.62	-0.903160041	40.6875	0.001005
4.625	-0.395514781	36.97761	0.001001
4.63	0.126401631	29.66296	0.00091
4.635	0.595310907	19.09691	0.00073
4.64	0.952089704	6.04993	0.00047
4.645	1.166156983	-8.34753	0.000149
4.65	1.22324159	-22.7118	-0.00021
4.655	1.131498471	-35.5564	-0.00056
4.66	0.909276249	-45.4579	-0.00088
4.665	0.587155963	-51.2233	-0.00112
4.67	0.20795107	-52.0409	-0.00126

4.675	-0.177370031	-47.599	-0.00128
4.68	-0.50764526	-38.1617	-0.00117
4.685	-0.729867482	-24.5783	-0.00094
4.69	-0.811416922	-8.21535	-0.0006
4.695	-0.75637105	9.196171	-0.0002
4.7	-0.605504587	25.78106	0.000226
4.705	-0.436289501	39.78414	0.000635
4.71	-0.338430173	49.82671	0.000979
4.715	-0.377166157	55.09418	0.001226
4.72	-0.568807339	55.41406	0.001356
4.725	-0.870540265	51.21001	0.001364
4.73	-1.188583078	43.34851	0.00126
4.735	-1.416921509	32.93494	0.001067
4.74	-1.474006116	21.11718	0.000811
4.745	-1.329255861	8.94225	0.00052
4.75	-1.029561672	-2.69546	0.00022
4.755	-0.666666667	-13.0446	-6.6E-05
4.76	-0.358817533	-21.4473	-0.00032
4.765	-0.18756371	-27.3186	-0.00053
4.77	-0.181447503	-30.1722	-0.00067
4.775	-0.307849134	-29.6979	-0.00074
4.78	-0.4872579	-25.8653	-0.00073
4.785	-0.632008155	-19.0059	-0.00064
4.79	-0.680937819	-9.83089	-0.00047
4.795	-0.627930683	0.643504	-0.00024
4.8	-0.515800204	11.24719	1.58E-05
4.805	-0.407747197	20.83777	0.000277
4.81	-0.362895005	28.4698	0.000513
4.815	-0.407747197	33.50712	0.000701
4.82	-0.519877676	35.65264	0.000825
4.825	-0.644240571	34.91168	0.000878
4.83	-0.717635066	31.51891	0.000859
4.835	-0.693170234	25.86157	0.000776
4.84	-0.564729867	18.43098	0.000637
4.845	-0.354740061	9.794027	0.000454
4.85	-0.112130479	0.584662	0.000241
4.855	0.122324159	-8.51899	1.44E-05
4.86	0.322120285	-16.8354	-0.00021
4.865	0.491335372	-23.75	-0.00041
4.87	0.648318043	-28.7913	-0.00058
4.875	0.811416922	-31.6905	-0.00071

4.88	0.978593272	-32.3992	-0.00078
4.885	1.133537207	-31.0713	-0.0008
4.89	1.237512742	-28.0028	-0.00076
4.895	1.251783894	-23.56	-0.00069
4.9	1.158002039	-18.1232	-0.00058
4.905	0.966360856	-12.06	-0.00045
4.91	0.71559633	-5.72804	-0.0003
4.915	0.464831804	0.499833	-0.00014
4.92	0.262996942	6.223515	1.23E-05
4.925	0.150866463	11.01456	0.000153
4.93	0.136595311	14.45054	0.000271
4.935	0.205912334	16.17018	0.000356
4.94	0.326197757	15.93918	0.000398
4.945	0.468909276	13.69761	0.000392
4.95	0.605504587	9.588873	0.000337
4.955	0.723751274	3.951723	0.000236
4.96	0.821610601	-2.71667	9.73E-05
4.965	0.899082569	-9.81391	-6.7E-05
4.97	0.958205912	-16.6962	-0.00024
4.975	0.996941896	-22.7402	-0.00041
4.98	1.017329256	-27.405	-0.00056
4.985	1.0254842	-30.288	-0.00067
4.99	1.027522936	-31.1663	-0.00075
4.995	1.037716616	-30.0267	-0.00077
5	1.060142712	-27.0648	-0.00074
5.005	1.094801223	-22.6595	-0.00067
5.01	1.125382263	-17.314	-0.00056
5.015	1.121304791	-11.5727	-0.00043
5.02	1.05606524	-5.94055	-0.00028
5.025	0.907237513	-0.8126	-0.00015
5.03	0.668705403	3.566989	-2E-05
5.035	0.369011213	7.095505	8.78E-05
5.04	0.044852192	9.780564	0.000175
5.045	-0.250764526	11.68296	0.000241
5.05	-0.475025484	12.86632	0.000288
5.055	-0.607543323	13.3704	0.000317
5.06	-0.654434251	13.21412	0.000329
5.065	-0.656472987	12.43514	0.000325
5.07	-0.670744139	11.14268	0.000306
5.075	-0.74617737	9.55364	0.000274
5.08	-0.915392457	8.000818	0.000235

5.085	-1.180428135	6.899016	0.000197
5.09	-1.500509684	6.661427	0.00017
5.095	-1.810397554	7.594296	0.000164
5.1	-2.03058104	9.790956	0.000187
5.105	-2.095820591	13.06411	0.000241
5.11	-1.96941896	16.93601	0.000322
5.115	-1.649337411	20.69182	0.000417
5.12	-1.174311927	23.49516	0.000509
5.125	-0.603465851	24.53223	0.000578
5.13	-0.008154944	23.1616	0.000604
5.135	0.5382263	19.04453	0.00057
5.14	0.980632008	12.22361	0.000469
5.145	1.270132518	3.155774	0.000301
5.15	1.374108053	-7.31235	7.77E-05
5.155	1.266055046	-18.0122	-0.00018
5.16	0.94393476	-27.5748	-0.00044
5.165	0.417940877	-34.5802	-0.00068
5.17	-0.260958206	-37.7477	-0.00085
5.175	-1.011213048	-36.1382	-0.00093
5.18	-1.724770642	-29.3421	-0.00089
5.185	-2.277268094	-17.6278	-0.00072
5.19	-2.568807339	-1.9941	-0.00043
5.195	-2.534148828	15.88394	-4.9E-05
5.2	-2.181447503	33.84702	0.000391
5.205	-1.577981651	49.54358	0.000833
5.21	-0.846075433	60.78658	0.001219
5.215	-0.124362895	65.89958	0.001496
5.22	0.464831804	63.98616	0.001622
5.225	0.848114169	55.0663	0.001575
5.23	1.009174312	40.06237	0.001355
5.235	0.992864424	20.63681	0.000986
5.24	0.870540265	-1.06374	0.000508
5.245	0.723751274	-22.7135	-2.6E-05
5.25	0.621814475	-42.1083	-0.00056
5.255	0.599388379	-57.411	-0.00104
5.26	0.666666667	-67.3285	-0.00141
5.265	0.815494393	-71.2124	-0.00166
5.27	1.023445464	-69.0799	-0.00175
5.275	1.270132518	-61.5711	-0.0017
5.28	1.531090724	-49.8427	-0.00152
5.285	1.78185525	-35.4158	-0.00123

5.29	1.985728848	-19.9794	-0.00087
5.295	2.101936799	-5.18111	-0.00049
5.3	2.101936799	7.561029	-0.00013
5.305	1.967380224	17.20697	0.000186
5.31	1.72069317	23.16187	0.000424
5.315	1.412844037	25.26911	0.00057
5.32	1.123343527	23.73243	0.000622
5.325	0.933741081	19.00347	0.000584
5.33	0.903160041	11.67106	0.000468
5.335	1.041794088	2.389571	0.000287
5.34	1.300713558	-8.13775	5.88E-05
5.345	1.577981651	-19.1267	-0.0002
5.35	1.749235474	-29.6665	-0.00047
5.355	1.70030581	-38.6978	-0.00073
5.36	1.359836901	-45.0495	-0.00095
5.365	0.731906218	-47.5591	-0.00111
5.37	-0.103975535	-45.2658	-0.00117
5.375	-1.007135576	-37.6379	-0.00111
5.38	-1.814475025	-24.7741	-0.00093
5.385	-2.371049949	-7.52992	-0.00061
5.39	-2.581039755	12.49365	-0.00019
5.395	-2.419979613	33.10386	0.000308
5.4	-1.942915392	51.80283	0.000815
5.405	-1.26401631	66.15378	0.001275
5.41	-0.521916412	74.15463	0.001628
5.415	0.152905199	74.54953	0.001825
5.42	0.670744139	67.01751	0.001835
5.425	0.996941896	52.20944	0.00165
5.43	1.143730887	31.64248	0.001285
5.435	1.158002039	7.478968	0.000779
5.44	1.086646279	-17.7505	0.000184
5.445	0.960244648	-41.4351	-0.00044
5.45	0.784913354	-61.1458	-0.00102
5.455	0.544342508	-74.8497	-0.00151
5.46	0.222222222	-81.0788	-0.00184
5.465	-0.18756371	-79.0493	-0.002
5.47	-0.658511723	-68.7428	-0.00195
5.475	-1.135575943	-50.9398	-0.00169
5.48	-1.555555556	-27.1821	-0.00125
5.485	-1.861365953	0.34338	-0.00067
5.49	-2.022426096	29.00658	8.45E-06

5.495	-2.0509684	56.01564	0.000714
5.5	-1.97961264	78.72589	0.001379
5.505	-1.857288481	94.94123	0.001938
5.51	-1.716615698	103.1462	0.002337
5.515	-1.565749235	102.6405	0.002539
5.52	-1.388379205	93.56527	0.002526
5.525	-1.149847095	76.82886	0.002303
5.53	-0.827726809	53.97239	0.001891
5.535	-0.424057085	27.00246	0.001328
5.54	0.022426096	-1.77954	0.000665
5.545	0.442405708	-29.9408	-4.4E-05
5.55	0.762487258	-55.0842	-0.00074
5.555	0.927624873	-75.025	-0.00136
5.56	0.907237513	-87.9661	-0.00185
5.565	0.71559633	-92.6749	-0.00217
5.57	0.383282365	-88.6161	-0.00228
5.575	-0.04077472	-76.0314	-0.00218
5.58	-0.519877676	-55.928	-0.00187
5.585	-1.023445464	-29.9885	-0.00138
5.59	-1.527013252	-0.41027	-0.00074
5.595	-2.002038736	30.29497	-1E-05
5.6	-2.403669725	59.51041	0.000746
5.605	-2.674821611	84.71443	0.001465
5.61	-2.76656473	103.6738	0.002085
5.615	-2.644240571	114.617	0.002552
5.62	-2.320081549	116.4045	0.002821
5.625	-1.851172273	108.6769	0.002865
5.63	-1.327217125	91.95549	0.002675
5.635	-0.846075433	67.66201	0.002263
5.64	-0.479102956	38.02435	0.001665
5.645	-0.252803262	5.861361	0.000936
5.65	-0.134556575	-25.7418	0.000144
5.655	-0.063200815	-53.803	-0.00063
5.66	0.034658512	-75.8028	-0.00132
5.665	0.199796126	-89.9563	-0.00187
5.67	0.432212029	-95.3632	-0.00221
5.675	0.687054027	-92.0235	-0.00235
5.68	0.897043833	-80.7422	-0.00227
5.685	1.001019368	-62.9652	-0.00199
5.69	0.976554536	-40.5963	-0.00155
5.695	0.839959225	-15.8145	-0.001

5.7	0.652395515	9.085147	-0.00039
5.705	0.47706422	31.85474	0.000224
5.71	0.373088685	50.45166	0.000784
5.715	0.352701325	63.2183	0.001242
5.72	0.395514781	69.05165	0.001556
5.725	0.450560652	67.54429	0.0017
5.73	0.46687054	59.05342	0.001662
5.735	0.413863405	44.6731	0.001454
5.74	0.293577982	26.10312	0.0011
5.745	0.144750255	5.426331	0.000642
5.75	0.016309888	-15.1545	0.000134
5.755	-0.042813456	-33.5834	-0.00037
5.76	-0.004077472	-48.1749	-0.00083
5.765	0.126401631	-57.7604	-0.00119
5.77	0.326197757	-61.763	-0.00142
5.775	0.562691131	-60.203	-0.00152
5.78	0.80733945	-53.6487	-0.00148
5.785	1.047910296	-43.132	-0.00132
5.79	1.280326198	-30.0298	-0.00106
5.795	1.506625892	-15.9215	-0.00074
5.8	1.714576962	-2.41702	-0.00039
5.805	1.877675841	9.026941	-5.9E-05
5.81	1.951070336	17.28872	0.000222
5.815	1.885830785	21.7292	0.000426
5.82	1.645259939	22.27565	0.000535
5.825	1.22324159	19.41743	0.000548
5.83	0.658511723	14.10233	0.000478
5.835	0.018348624	7.562954	0.000347
5.84	-0.597349643	1.088301	0.000186
5.845	-1.096839959	-4.195	2.68E-05
5.85	-1.410805301	-7.49646	-0.0001
5.855	-1.5127421	-8.45463	-0.00018
5.86	-1.418960245	-7.14267	-0.00021
5.865	-1.182466871	-3.99477	-0.00018
5.87	-0.870540265	0.314473	-9.8E-05
5.875	-0.54841998	5.008295	7.74E-06
5.88	-0.256880734	9.327162	0.000123
5.885	-0.018348624	12.62448	0.00023
5.89	0.169215087	14.42388	0.000311
5.895	0.311926606	14.45413	0.000355
5.9	0.413863405	12.66508	0.000356

5.905	0.468909276	9.231791	0.000312
5.91	0.46687054	4.540775	0.000227
5.915	0.403669725	-0.85004	0.000112
5.92	0.287461774	-6.27898	-2.1E-05
5.925	0.148827727	-11.0787	-0.00015
5.93	0.038735984	-14.6922	-0.00027
5.935	0.002038736	-16.7683	-0.00036
5.94	0.063200815	-17.2141	-0.00041
5.945	0.216106014	-16.1894	-0.00042
5.95	0.407747197	-14.0311	-0.0004
5.955	0.568807339	-11.145	-0.00035
5.96	0.623853211	-7.889	-0.00027
5.965	0.532110092	-4.49927	-0.00019
5.97	0.297655454	-1.07484	-0.00011
5.975	-0.012232416	2.360343	-2.6E-05
5.98	-0.295616718	5.755539	5.81E-05
5.985	-0.442405708	8.928862	0.000142
5.99	-0.369011213	11.50543	0.00022
5.995	-0.046890928	12.93122	0.000283
6	0.485219164	12.57116	0.000318
6.005	1.135575943	9.865133	0.000309
6.01	1.78185525	4.502353	0.000243
6.015	2.303771662	-3.43582	0.000111
6.02	2.609582059	-13.4042	-8.5E-05
6.025	2.652395515	-24.4141	-0.00033
6.03	2.436289501	-35.1475	-0.0006
6.035	2.004077472	-44.1378	-0.00087
6.04	1.414882773	-49.9759	-0.00109
6.045	0.750254842	-51.5276	-0.00123
6.05	0.077471967	-48.1019	-0.00127
6.055	-0.532110092	-39.576	-0.00118
6.06	-1.029561672	-26.4386	-0.00097
6.065	-1.378185525	-9.76033	-0.00065
6.07	-1.565749235	8.916222	-0.00024
6.075	-1.600407747	27.74913	0.000219
6.08	-1.510703364	44.81386	0.000683
6.085	-1.335372069	58.33159	0.001103
6.09	-1.119266055	66.88243	0.001436
6.095	-0.897043833	69.56689	0.001646
6.1	-0.689092762	66.09761	0.001712
6.105	-0.50764526	56.8206	0.001627



6.11	-0.358817533	42.6681	0.001399
6.115	-0.24872579	25.05603	0.00105
6.12	-0.189602446	5.743605	0.000617
6.125	-0.193679918	-13.3359	0.000141
6.13	-0.26911315	-30.2603	-0.00033
6.135	-0.413863405	-43.307	-0.00074
6.14	-0.601427115	-51.1406	-0.00107
6.145	-0.793068298	-52.9695	-0.00126
6.15	-0.941896024	-48.653	-0.0013
6.155	-1.01529052	-38.727	-0.0012
6.16	-1.001019368	-24.344	-0.00095
6.165	-0.913353721	-7.12693	-0.0006
6.17	-0.788990826	11.03909	-0.00018
6.175	-0.672782875	28.24335	0.000272
6.18	-0.595310907	42.7664	0.000695
6.185	-0.564729867	53.24938	0.001053
6.19	-0.566768603	58.80066	0.001311
6.195	-0.574923547	59.04152	0.001447
6.2	-0.55861366	54.0965	0.001453
6.205	-0.499490316	44.54737	0.001331
6.21	-0.403669725	31.36862	0.001096
6.215	-0.285423038	15.83483	0.000772
6.22	-0.159021407	-0.59814	0.00039
6.225	-0.04077472	-16.4239	-1.5E-05
6.23	0.073394495	-30.2377	-0.0004
6.235	0.191641182	-40.8777	-0.00074
6.24	0.320081549	-47.5366	-0.00101
6.245	0.448521916	-49.819	-0.00117
6.25	0.554536188	-47.7443	-0.00123
6.255	0.603465851	-41.6981	-0.00118
6.26	0.562691131	-32.3497	-0.00103
6.265	0.422018349	-20.5691	-0.0008
6.27	0.203873598	-7.35801	-0.00051
6.275	-0.044852192	6.20425	-0.00018
6.28	-0.260958206	19.00513	0.000153
6.285	-0.393476045	29.95682	0.000468
6.29	-0.415902141	38.07479	0.000737
6.295	-0.344546381	42.5865	0.000937
6.3	-0.224260958	43.0448	0.001048
6.305	-0.110091743	39.41637	0.001059
6.31	-0.048929664	32.11902	0.00097

6.315	-0.048929664	21.97531	0.000791
6.32	-0.089704383	10.09972	0.000541
6.325	-0.124362895	-2.26559	0.000249
6.33	-0.110091743	-13.9182	-5.6E-05
6.335	-0.024464832	-23.8335	-0.00034
6.34	0.116207951	-31.2424	-0.00059
6.345	0.26911315	-35.6555	-0.00077
6.35	0.369011213	-36.8364	-0.00088
6.355	0.371049949	-34.7725	-0.00091
6.36	0.254841998	-29.6485	-0.00086
6.365	0.048929664	-21.8509	-0.00073
6.37	-0.191641182	-11.9796	-0.00054
6.375	-0.391437309	-0.85813	-0.00029
6.38	-0.4872579	10.48999	-2.1E-05
6.385	-0.448521916	20.91632	0.000258
6.39	-0.283384302	29.27111	0.000515
6.395	-0.028542304	34.55177	0.00072
6.4	0.256880734	36.05483	0.00085
6.405	0.515800204	33.49216	0.000887
6.41	0.707441386	27.04689	0.000824
6.415	0.811416922	17.36142	0.000666
6.42	0.827726809	5.460789	0.000427
6.425	0.764525994	-7.3669	0.000134
6.43	0.634046891	-19.716	-0.00018
6.435	0.454638124	-30.2221	-0.00049
6.44	0.236493374	-37.7029	-0.00074
6.445	0	-41.2889	-0.00093
6.45	-0.230377166	-40.5215	-0.00102
6.455	-0.417940877	-35.4224	-0.001
6.46	-0.536187564	-26.5029	-0.00087
6.465	-0.562691131	-14.7213	-0.00065
6.47	-0.495412844	-1.3782	-0.00036
6.475	-0.354740061	12.04083	-3.4E-05
6.48	-0.177370031	24.05218	0.000296
6.485	-0.004077472	33.35894	0.000592
6.49	0.128440367	39.00794	0.000821
6.495	0.199796126	40.49202	0.00096
6.5	0.209989806	37.78561	0.000997
6.505	0.183486239	31.30781	0.00093
6.51	0.142711519	21.84548	0.000771
6.515	0.116207951	10.4369	0.000538

6.52	0.118246687	-1.75121	0.000257
6.525	0.146788991	-13.539	-4.3E-05
6.53	0.189602446	-23.8361	-0.00033
6.535	0.230377166	-31.7291	-0.00059
6.54	0.256880734	-36.5516	-0.00078
6.545	0.267074414	-37.9404	-0.0009
6.55	0.267074414	-35.8666	-0.00093
6.555	0.273190622	-30.645	-0.00088
6.56	0.297655454	-22.9048	-0.00075
6.565	0.344546381	-13.5229	-0.00056
6.57	0.407747197	-3.52494	-0.00033
6.575	0.472986748	6.033342	-8.7E-05
6.58	0.511722732	14.19801	0.000149
6.585	0.505606524	20.22492	0.000349
6.59	0.434250765	23.66591	0.000498
6.595	0.28950051	24.41137	0.000582
6.6	0.077471967	22.68425	0.000601
6.605	-0.183486239	18.98982	0.000558
6.61	-0.464831804	14.02925	0.000467
6.615	-0.723751274	8.582644	0.000345
6.62	-0.913353721	3.383884	0.000211
6.625	-0.99490316	-0.98799	8.33E-05
6.63	-0.937818552	-4.19081	-2.4E-05
6.635	-0.731906218	-6.15545	-0.0001
6.64	-0.397553517	-7.06364	-0.00015
6.645	0.018348624	-7.27572	-0.00017
6.65	0.448521916	-7.22278	-0.00018
6.655	0.825688073	-7.29534	-0.00018
6.66	1.092762487	-7.74952	-0.00018
6.665	1.219164118	-8.6558	-0.00019
6.67	1.208970438	-9.90194	-0.00021
6.675	1.100917431	-11.2483	-0.00024
6.68	0.939857288	-12.3999	-0.00028
6.685	0.77675841	-13.0877	-0.00031
6.69	0.640163099	-13.1227	-0.00032
6.695	0.5382263	-12.4197	-0.00032
6.7	0.45667686	-10.9883	-0.00031
6.705	0.375127421	-8.90854	-0.00027
6.71	0.27930683	-6.30682	-0.00022
6.715	0.173292559	-3.34602	-0.00016
6.72	0.079510703	-0.23119	-8.2E-05

6.725	0.034658512	2.775114	-5.7E-06
6.73	0.065239551	5.353533	6.83E-05
6.735	0.189602446	7.142398	0.000132
6.74	0.387359837	7.794548	0.000176
6.745	0.621814475	7.047319	0.000192
6.75	0.837920489	4.800495	0.000173
6.755	0.98470948	1.171993	0.000118
6.76	1.0254842	-3.48364	2.88E-05
6.765	0.952089704	-8.60887	-8.6E-05
6.77	0.782874618	-13.5219	-0.00021
6.775	0.546381244	-17.5155	-0.00033
6.78	0.285423038	-19.969	-0.00043
6.785	0.03058104	-20.4368	-0.00049
6.79	-0.199796126	-18.7045	-0.0005
6.795	-0.391437309	-14.8168	-0.00046
6.8	-0.552497452	-9.05713	-0.00036
6.805	-0.682976555	-1.91256	-0.00022
6.81	-0.791029562	5.987894	-4.7E-05
6.815	-0.880733945	13.94288	0.000147
6.82	-0.958205912	21.2552	0.000343
6.825	-1.027522936	27.30351	0.000523
6.83	-1.090723751	31.6024	0.000672
6.835	-1.153924567	33.85145	0.000778
6.84	-1.21304791	33.95465	0.000833
6.845	-1.266055046	32.02135	0.000836
6.85	-1.300713558	28.33705	0.000788
6.855	-1.314984709	23.32819	0.000697
6.86	-1.298674822	17.50614	0.000574
6.865	-1.257900102	11.421	0.000431
6.87	-1.194699286	5.608995	0.000281
6.875	-1.115188583	0.546921	0.000138
6.88	-1.017329256	-3.3944	1.35E-05
6.885	-0.903160041	-5.98082	-8.4E-05
6.89	-0.764525994	-7.14156	-0.00015
6.895	-0.599388379	-6.97307	-0.00018
6.9	-0.411824669	-5.72039	-0.00017
6.905	-0.209989806	-3.74062	-0.00014
6.91	-0.014271152	-1.44434	-9.2E-05
6.915	0.154943935	0.766317	-3.6E-05
6.92	0.281345566	2.552792	1.89E-05
6.925	0.360856269	3.675101	6.28E-05

6.93	0.399592253	4.005996	9.05E-05
6.935	0.413863405	3.523532	9.86E-05
6.94	0.426095821	2.287514	8.67E-05
6.945	0.448521916	0.418927	5.63E-05
6.95	0.493374108	-1.92595	1.03E-05
6.955	0.556574924	-4.56772	-4.7E-05
6.96	0.625891947	-7.30984	-0.00011
6.965	0.69520897	-9.95205	-0.00018
6.97	0.748216106	-12.2937	-0.00024
6.975	0.778797146	-14.1472	-0.0003
6.98	0.778797146	-15.3474	-0.00035
6.985	0.742099898	-15.7614	-0.00038
6.99	0.660550459	-15.2915	-0.00039
6.995	0.530071356	-13.8804	-0.00038
7	0.354740061	-11.5189	-0.00034
7.005	0.154943935	-8.2661	-0.00028
7.01	-0.042813456	-4.26789	-0.0002
7.015	-0.195718654	0.217082	-0.00011
7.02	-0.26911315	4.811354	5.34E-06
7.025	-0.240570846	9.036577	0.000118
7.03	-0.110091743	12.36312	0.000222
7.035	0.093781855	14.29168	0.000304
7.04	0.328236493	14.44363	0.000352
7.045	0.540265036	12.64713	0.000356
7.05	0.682976555	8.994301	0.000311
7.055	0.73598369	3.844499	0.000221
7.06	0.69520897	-2.2148	9.46E-05
7.065	0.581039755	-8.45251	-5.5E-05
7.07	0.426095821	-14.1021	-0.00021
7.075	0.260958206	-18.4675	-0.00035
7.08	0.112130479	-21.0156	-0.00045
7.085	-0.004077472	-21.4387	-0.00052
7.09	-0.079510703	-19.6861	-0.00053
7.095	-0.114169215	-15.9605	-0.00048
7.1	-0.114169215	-10.6852	-0.00039
7.105	-0.089704383	-4.44505	-0.00026
7.11	-0.063200815	2.097225	-0.00011
7.115	-0.057084608	8.290443	5.16E-05
7.12	-0.095820591	13.58234	0.000204
7.125	-0.193679918	17.58445	0.000334
7.13	-0.346585117	20.10069	0.000433

7.135	-0.532110092	21.11803	0.000495
7.14	-0.70540265	20.75727	0.00052
7.145	-0.813455657	19.20415	0.000511
7.15	-0.811416922	16.64442	0.000473
7.155	-0.685015291	13.23155	0.00041
7.16	-0.450560652	9.089089	0.000326
7.165	-0.156982671	4.348556	0.000224
7.17	0.126401631	-0.7943	0.000107
7.175	0.338430173	-6.03934	-2E-05
7.18	0.434250765	-10.9696	-0.00015
7.185	0.413863405	-15.0952	-0.00027
7.19	0.305810398	-17.9323	-0.00037
7.195	0.156982671	-19.0962	-0.00044
7.2	0.018348624	-18.3868	-0.00047
7.205	-0.077471967	-15.8352	-0.00045
7.21	-0.128440367	-11.6955	-0.00039
7.215	-0.146788991	-6.40049	-0.00029
7.22	-0.163098879	-0.48427	-0.00016
7.225	-0.199796126	5.495816	-1.2E-05
7.23	-0.260958206	11.01787	0.000135
7.235	-0.328236493	15.62676	0.000271
7.24	-0.375127421	18.94977	0.000385
7.245	-0.366972477	20.69563	0.000466
7.25	-0.287461774	20.66397	0.000509
7.255	-0.136595311	18.76197	0.000509
7.26	0.055045872	15.04066	0.000462
7.265	0.242609582	9.730337	0.00037
7.27	0.379204893	3.259569	0.000239
7.275	0.426095821	-3.75388	8.02E-05
7.28	0.369011213	-10.5547	-9.2E-05
7.285	0.216106014	-16.3356	-0.00026
7.29	-0.002038736	-20.3484	-0.0004
7.295	-0.236493374	-22.0233	-0.0005
7.3	-0.438328236	-21.0681	-0.00054
7.305	-0.568807339	-17.5264	-0.00052
7.31	-0.605504587	-11.7858	-0.00043
7.315	-0.542303772	-4.53515	-0.00029
7.32	-0.401630989	3.333515	-0.00011
7.325	-0.21814475	10.85303	8.2E-05
7.33	-0.038735984	17.12411	0.000267
7.335	0.099898063	21.43739	0.000421

7.34	0.163098879	23.37109	0.000528
7.345	0.146788991	22.82724	0.000575
7.35	0.059123344	20.02296	0.000562
7.355	-0.071355759	15.43115	0.000493
7.36	-0.205912334	9.687841	0.00038
7.365	-0.311926606	3.492732	0.000238
7.37	-0.364933741	-2.48522	8.6E-05
7.375	-0.356778797	-7.68	-6.1E-05
7.38	-0.29969419	-11.6681	-0.00019
7.385	-0.214067278	-14.1851	-0.00029
7.39	-0.126401631	-15.1194	-0.00035
7.395	-0.057084608	-14.4986	-0.00037
7.4	-0.016309888	-12.4719	-0.00036
7.405	-0.008154944	-9.28777	-0.00031
7.41	-0.02038736	-5.27929	-0.00023
7.415	-0.036697248	-0.8451	-0.00013
7.42	-0.042813456	3.576873	-2.1E-05
7.425	-0.022426096	7.536935	8.8E-05
7.43	0.024464832	10.61768	0.000186
7.435	0.091743119	12.47969	0.000261
7.44	0.165137615	12.90631	0.000307
7.445	0.22833843	11.8373	0.000318
7.45	0.25891947	9.392205	0.000291
7.455	0.246687054	5.863414	0.000231
7.46	0.189602446	1.68442	0.000144
7.465	0.101936799	-2.63093	4.15E-05
7.47	0.004077472	-6.56123	-6.5E-05
7.475	-0.077471967	-9.65495	-0.00016
7.48	-0.114169215	-11.6006	-0.00024
7.485	-0.095820591	-12.2631	-0.00029
7.49	-0.028542304	-11.6849	-0.0003
7.495	0.073394495	-10.0626	-0.00029
7.5	0.179408767	-7.69209	-0.00025
7.505	0.260958206	-4.90842	-0.00019
7.51	0.29969419	-2.03359	-0.00012
7.515	0.295616718	0.654306	-5E-05
7.52	0.260958206	2.934528	1.61E-05
7.525	0.216106014	4.642969	7.22E-05
7.53	0.177370031	5.670042	0.000114
7.535	0.159021407	5.95537	0.00014
7.54	0.152905199	5.500286	0.000147

7.545	0.142711519	4.382105	0.000135
7.55	0.110091743	2.76261	0.000108
7.555	0.04077472	0.883989	6.8E-05
7.56	-0.057084608	-0.96534	2.18E-05
7.565	-0.171253823	-2.49241	-2.4E-05
7.57	-0.267074414	-3.46299	-6.1E-05
7.575	-0.320081549	-3.74697	-8.5E-05
7.58	-0.307849134	-3.35022	-9.2E-05
7.585	-0.226299694	-2.41391	-8.2E-05
7.59	-0.091743119	-1.18025	-5.9E-05
7.595	0.071355759	0.058574	-2.9E-05
7.6	0.230377166	1.023015	1.44E-06
7.605	0.364933741	1.493287	2.52E-05
7.61	0.458715596	1.345195	3.68E-05
7.615	0.513761468	0.55721	3.31E-05
7.62	0.532110092	-0.79266	1.37E-05
7.625	0.52803262	-2.55178	-2E-05
7.63	0.503567788	-4.51211	-6.3E-05
7.635	0.462793068	-6.43616	-0.00011
7.64	0.407747197	-8.08304	-0.00016
7.645	0.344546381	-9.23811	-0.0002
7.65	0.277268094	-9.73705	-0.00023
7.655	0.21814475	-9.49256	-0.00024
7.66	0.179408767	-8.51265	-0.00023
7.665	0.171253823	-6.90713	-0.00021
7.67	0.193679918	-4.87379	-0.00017
7.675	0.236493374	-2.66625	-0.00012
7.68	0.287461774	-0.55537	-6.6E-05
7.685	0.322120285	1.22207	-1.4E-05
7.69	0.328236493	2.497544	3.01E-05
7.695	0.297655454	3.193226	6.15E-05
7.7	0.232415902	3.32469	7.86E-05
7.705	0.142711519	2.986317	8.18E-05
7.71	0.048929664	2.319301	7.35E-05
7.715	-0.032619776	1.48017	5.71E-05
7.72	-0.093781855	0.616947	3.64E-05
7.725	-0.128440367	-0.15108	1.52E-05
7.73	-0.138634047	-0.74205	-3.7E-06
7.735	-0.136595311	-1.10603	-1.8E-05
7.74	-0.130479103	-1.2208	-2.7E-05
7.745	-0.128440367	-1.08496	-3E-05



7.75	-0.136595311	-0.7113	-2.7E-05
7.755	-0.154943935	-0.12514	-1.8E-05
7.76	-0.179408767	0.634467	-3.1E-06
7.765	-0.20795107	1.516874	1.56E-05
7.77	-0.234454638	2.459049	3.73E-05
7.775	-0.25891947	3.392057	6.05E-05
7.78	-0.27930683	4.245909	8.35E-05
7.785	-0.297655454	4.958433	0.000105
7.79	-0.313965341	5.481074	0.000122
7.795	-0.330275229	5.78523	0.000135
7.8	-0.346585117	5.864415	0.000142
7.805	-0.356778797	5.728087	0.000144
7.81	-0.360856269	5.400234	0.000141
7.815	-0.356778797	4.914562	0.000133
7.82	-0.346585117	4.31295	0.000121
7.825	-0.330275229	3.641133	0.000106
7.83	-0.318042813	2.954331	8.96E-05
7.835	-0.307849134	2.309549	7.27E-05
7.84	-0.29969419	1.759986	5.68E-05
7.845	-0.28950051	1.345905	4.33E-05
7.85	-0.26911315	1.082963	3.31E-05
7.855	-0.22833843	0.951261	2.67E-05
7.86	-0.165137615	0.896336	2.34E-05
7.865	-0.083588175	0.839602	2.21E-05
7.87	0.006116208	0.696923	2.07E-05
7.875	0.089704383	0.401232	1.72E-05
7.88	0.152905199	-0.07721	9.88E-06
7.885	0.189602446	-0.72295	-1.9E-06
7.89	0.199796126	-1.47826	-1.8E-05
7.895	0.199796126	-2.26637	-3.6E-05
7.9	0.201834862	-3.01171	-5.6E-05
7.905	0.224260958	-3.66561	-7.4E-05
7.91	0.26911315	-4.21222	-9E-05
7.915	0.330275229	-4.66289	-0.0001
7.92	0.383282365	-5.02982	-0.00011
7.925	0.401630989	-5.29828	-0.00012
7.93	0.366972477	-5.41058	-0.00013
7.935	0.265035678	-5.25869	-0.00013
7.94	0.108053007	-4.70857	-0.00013
7.945	-0.079510703	-3.63843	-0.00012
7.95	-0.260958206	-1.98688	-9E-05

7.955	-0.401630989	0.208282	-4.9E-05
7.96	-0.472986748	2.788295	5.13E-06
7.965	-0.470948012	5.488518	6.86E-05
7.97	-0.401630989	7.973536	0.000135
7.975	-0.293577982	9.900485	0.000196
7.98	-0.177370031	10.98318	0.000244
7.985	-0.083588175	11.04873	0.00027
7.99	-0.034658512	10.07332	0.000272
7.995	-0.038735984	8.187993	0.000248
8	-0.093781855	5.659135	0.000202
8.005	-0.185524975	2.844123	0.000139
8.01	-0.293577982	0.133395	7E-05
8.015	-0.397553517	-2.1089	3.28E-06
8.02	-0.479102956	-3.59781	-5.2E-05
8.025	-0.521916412	-4.16916	-8.9E-05
8.03	-0.51783894	-3.79988	-0.0001
8.035	-0.464831804	-2.60796	-9.4E-05
8.04	-0.371049949	-0.82844	-6.4E-05
8.045	-0.252803262	1.229343	-2E-05
8.05	-0.130479103	3.234503	3.03E-05
8.055	-0.026503568	4.88985	7.96E-05
8.06	0.038735984	5.980117	0.00012
8.065	0.055045872	6.400529	0.000147
8.07	0.024464832	6.161535	0.000158
8.075	-0.042813456	5.374033	0.000152
8.08	-0.122324159	4.211019	0.000132
8.085	-0.193679918	2.868473	0.000104
8.09	-0.236493374	1.525217	7.06E-05
8.095	-0.240570846	0.315874	3.75E-05
8.1	-0.205912334	-0.68084	7.77E-06
8.105	-0.144750255	-1.43583	-1.7E-05
8.11	-0.067278287	-1.96066	-3.5E-05
8.115	0.008154944	-2.2869	-4.8E-05
8.12	0.071355759	-2.45219	-5.6E-05
8.125	0.116207951	-2.49029	-6E-05
8.13	0.146788991	-2.43202	-6.1E-05
8.135	0.165137615	-2.30438	-6E-05
8.14	0.177370031	-2.13413	-5.7E-05
8.145	0.189602446	-1.95139	-5.3E-05
8.15	0.195718654	-1.78039	-4.8E-05
8.155	0.195718654	-1.63741	-4.4E-05

8.16	0.183486239	-1.52322	-4E-05
8.165	0.152905199	-1.41747	-3.7E-05
8.17	0.108053007	-1.2853	-3.5E-05
8.175	0.0509684	-1.08329	-3.2E-05
8.18	-0.012232416	-0.77004	-2.7E-05
8.185	-0.065239551	-0.32641	-1.9E-05
8.19	-0.101936799	0.237146	-8E-06
8.195	-0.114169215	0.874401	5.84E-06
8.2	-0.097859327	1.50484	2.15E-05
8.205	-0.055045872	2.0246	3.7E-05
8.21	0.008154944	2.3234	4.98E-05
8.215	0.085626911	2.301566	5.72E-05
8.22	0.167176351	1.889589	5.66E-05
8.225	0.244648318	1.062096	4.65E-05
8.23	0.311926606	-0.15493	2.61E-05
8.235	0.362895005	-1.68216	-3.8E-06
8.24	0.391437309	-3.39013	-4.1E-05
8.245	0.395514781	-5.11137	-8.3E-05
8.25	0.375127421	-6.65783	-0.00013
8.255	0.334352701	-7.84387	-0.00016
8.26	0.275229358	-8.50627	-0.00019
8.265	0.209989806	-8.53162	-0.00021
8.27	0.144750255	-7.87192	-0.00021
8.275	0.087665647	-6.55538	-0.00019
8.28	0.048929664	-4.6915	-0.00016
8.285	0.03058104	-2.45998	-0.00012
8.29	0.03058104	-0.08903	-6.1E-05
8.295	0.048929664	2.168305	-2.2E-06
8.3	0.075433231	4.069697	5.34E-05
8.305	0.106014271	5.410814	0.0001
8.31	0.136595311	6.048087	0.000133
8.315	0.159021407	5.918937	0.000149
8.32	0.171253823	5.047387	0.000146
8.325	0.177370031	3.53497	0.000124
8.33	0.173292559	1.552548	8.7E-05
8.335	0.165137615	-0.68456	3.82E-05
8.34	0.154943935	-2.94089	-1.7E-05
8.345	0.148827727	-4.9905	-7.2E-05
8.35	0.144750255	-6.63654	-0.00012
8.355	0.146788991	-7.73359	-0.00016
8.36	0.152905199	-8.19813	-0.00019

8.365	0.156982671	-8.00869	-0.0002
8.37	0.156982671	-7.20388	-0.0002
8.375	0.150866463	-5.87483	-0.00018
8.38	0.136595311	-4.15263	-0.00014
8.385	0.116207951	-2.1964	-0.0001
8.39	0.095820591	-0.18307	-5.4E-05
8.395	0.077471967	1.708305	-4.5E-06
8.4	0.06116208	3.314022	4.2E-05
8.405	0.046890928	4.501161	8.16E-05
8.41	0.026503568	5.187701	0.000111
8.415	-0.006116208	5.355036	0.000128
8.42	-0.053007136	5.049854	0.000132
8.425	-0.106014271	4.369434	0.000124
8.43	-0.154943935	3.440426	0.000108
8.435	-0.177370031	2.383217	8.47E-05
8.44	-0.154943935	1.282075	5.87E-05
8.445	-0.071355759	0.161769	3.16E-05
8.45	0.071355759	-1.01096	3.98E-06
8.455	0.256880734	-2.30606	-2.5E-05
8.46	0.450560652	-3.78759	-5.7E-05
8.465	0.609582059	-5.46484	-9.3E-05
8.47	0.699286442	-7.25848	-0.00013
8.475	0.69520897	-8.98654	-0.00018
8.48	0.599388379	-10.3873	-0.00022
8.485	0.434250765	-11.1697	-0.00026
8.49	0.234454638	-11.077	-0.00027
8.495	0.046890928	-9.95767	-0.00027
8.5	-0.097859327	-7.80753	-0.00025
8.505	-0.183486239	-4.78176	-0.00019
8.51	-0.214067278	-1.17086	-0.00012
8.515	-0.212028542	2.654147	-2.9E-05
8.52	-0.203873598	6.306821	6.53E-05
8.525	-0.214067278	9.447752	0.000155
8.53	-0.254841998	11.82834	0.000233
8.535	-0.320081549	13.30602	0.000291
8.54	-0.397553517	13.84261	0.000328
8.545	-0.460754332	13.47828	0.000341
8.55	-0.499490316	12.31502	0.000332
8.555	-0.499490316	10.49058	0.000303
8.56	-0.468909276	8.172123	0.000258
8.565	-0.417940877	5.549229	0.000201

8.57	-0.356778797	2.825024	0.000137
8.575	-0.295616718	0.206188	6.95E-05
8.58	-0.236493374	-2.11519	5.07E-06
8.585	-0.175331295	-3.9839	-5.2E-05
8.59	-0.110091743	-5.29761	-9.8E-05
8.595	-0.038735984	-6.01718	-0.00013
8.6	0.032619776	-6.16243	-0.00015
8.605	0.093781855	-5.79816	-0.00015
8.61	0.140672783	-5.02243	-0.00014
8.615	0.167176351	-3.94984	-0.00012
8.62	0.181447503	-2.70807	-9.7E-05
8.625	0.193679918	-1.43524	-6.7E-05
8.63	0.222222222	-0.28455	-3.5E-05
8.635	0.273190622	0.585018	-7E-06
8.64	0.344546381	1.026294	1.44E-05
8.645	0.413863405	0.940334	2.53E-05
8.65	0.458715596	0.306945	2.31E-05
8.655	0.452599388	-0.78928	7.55E-06
8.66	0.381243629	-2.15615	-1.9E-05
8.665	0.24872579	-3.51995	-5.3E-05
8.67	0.083588175	-4.58313	-8.7E-05
8.675	-0.079510703	-5.08857	-0.00011
8.68	-0.19775739	-4.88616	-0.00013
8.685	-0.24872579	-3.96651	-0.00012
8.69	-0.224260958	-2.46561	-9.8E-05
8.695	-0.142711519	-0.62884	-6.1E-05
8.7	-0.04077472	1.252995	-1.5E-05
8.705	0.046890928	2.907981	3.08E-05
8.71	0.093781855	4.135429	7.16E-05
8.715	0.089704383	4.833369	0.000102
8.72	0.0509684	4.989096	0.000119
8.725	-0.004077472	4.659295	0.000123
8.73	-0.042813456	3.929766	0.000115
8.735	-0.0509684	2.891915	9.67E-05
8.74	-0.022426096	1.627585	7.12E-05
8.745	0.026503568	0.217705	4.01E-05
8.75	0.081549439	-1.25127	5.36E-06
8.755	0.118246687	-2.67147	-3.1E-05
8.76	0.128440367	-3.9166	-6.6E-05
8.765	0.110091743	-4.85273	-9.6E-05
8.77	0.073394495	-5.36177	-0.00012

8.775	0.032619776	-5.36668	-0.00013
8.78	-0.004077472	-4.84588	-0.00013
8.785	-0.032619776	-3.83769	-0.00012
8.79	-0.057084608	-2.4307	-9.4E-05
8.795	-0.083588175	-0.74745	-6E-05
8.8	-0.116207951	1.072578	-1.8E-05
8.805	-0.156982671	2.889072	2.64E-05
8.81	-0.199796126	4.568447	7.11E-05
8.815	-0.234454638	5.98642	0.000112
8.82	-0.250764526	7.0296	0.000147
8.825	-0.246687054	7.604138	0.000173
8.83	-0.224260958	7.646274	0.000187
8.835	-0.189602446	7.133723	0.000188
8.84	-0.152905199	6.096749	0.000176
8.845	-0.114169215	4.613598	0.00015
8.85	-0.071355759	2.799376	0.000114
8.855	-0.024464832	0.793717	6.89E-05
8.86	0.036697248	-1.26373	1.95E-05
8.865	0.103975535	-3.23872	-3.1E-05
8.87	0.175331295	-5.01324	-8E-05
8.875	0.22833843	-6.47409	-0.00012
8.88	0.24872579	-7.50939	-0.00016
8.885	0.224260958	-8.00724	-0.00018
8.89	0.156982671	-7.86862	-0.0002
8.895	0.057084608	-7.02678	-0.00019
8.9	-0.0509684	-5.47722	-0.00017
8.905	-0.140672783	-3.30269	-0.00013
8.91	-0.19775739	-0.67674	-8.1E-05
8.915	-0.209989806	2.143733	-1.7E-05
8.92	-0.185524975	4.85419	5.28E-05
8.925	-0.140672783	7.149804	0.000119
8.93	-0.089704383	8.769376	0.000176
8.935	-0.046890928	9.533627	0.000216
8.94	-0.014271152	9.362131	0.000235
8.945	0.014271152	8.271953	0.00023
8.95	0.038735984	6.372975	0.000204
8.955	0.067278287	3.846194	0.000157
8.96	0.093781855	0.930051	9.47E-05
8.965	0.112130479	-2.0984	2.29E-05
8.97	0.108053007	-4.93733	-5.2E-05
8.975	0.077471967	-7.28617	-0.00012

8.98	0.026503568	-8.88086	-0.00018
8.985	-0.036697248	-9.52659	-0.00022
8.99	-0.093781855	-9.13286	-0.00023
8.995	-0.132517839	-7.73136	-0.00022
9	-0.146788991	-5.47516	-0.00019
9.005	-0.140672783	-2.61605	-0.00013
9.01	-0.126401631	0.535222	-6.4E-05
9.015	-0.112130479	3.649151	1.32E-05
9.02	-0.103975535	6.416155	8.98E-05
9.025	-0.091743119	8.565863	0.000158
9.03	-0.059123344	9.875861	0.000211
9.035	0.01019368	10.17551	0.000243
9.04	0.120285423	9.356858	0.00025
9.045	0.25891947	7.395403	0.00023
9.05	0.397553517	4.378453	0.000182
9.055	0.495412844	0.533951	0.000108
9.06	0.51783894	-3.76136	1.31E-05
9.065	0.444444444	-8.00278	-9.3E-05
9.07	0.28950051	-11.6249	-0.0002
9.075	0.083588175	-14.0889	-0.00029
9.08	-0.118246687	-14.9895	-0.00035
9.085	-0.267074414	-14.1387	-0.00037
9.09	-0.330275229	-11.61	-0.00035
9.095	-0.29969419	-7.73169	-0.00029
9.1	-0.199796126	-3.02227	-0.00019
9.105	-0.067278287	1.902442	-7.4E-05
9.11	0.057084608	6.432888	4.68E-05
9.115	0.140672783	10.05745	0.000158
9.12	0.171253823	12.42138	0.000248
9.125	0.154943935	13.35026	0.000306
9.13	0.112130479	12.84104	0.000329
9.135	0.06116208	11.03865	0.000316
9.14	0.02038736	8.198992	0.000272
9.145	-0.008154944	4.658631	0.000202
9.15	-0.026503568	0.8016	0.000115
9.155	-0.048929664	-2.9651	1.97E-05
9.16	-0.079510703	-6.24766	-7.3E-05
9.165	-0.124362895	-8.69724	-0.00015
9.17	-0.181447503	-10.0445	-0.00021
9.175	-0.244648318	-10.1294	-0.00025
9.18	-0.307849134	-8.91961	-0.00025

9.185	-0.360856269	-6.51963	-0.00022
9.19	-0.403669725	-3.1567	-0.00016
9.195	-0.426095821	0.835042	-7.8E-05
9.2	-0.419979613	5.042158	2.06E-05
9.205	-0.383282365	9.012486	0.000124
9.21	-0.30988787	12.29416	0.000222
9.215	-0.201834862	14.48154	0.000303
9.22	-0.071355759	15.26546	0.000356
9.225	0.055045872	14.48675	0.000376
9.23	0.152905199	12.17154	0.000357
9.235	0.199796126	8.545439	0.0003
9.24	0.181447503	4.01969	0.00021
9.245	0.095820591	-0.85249	9.89E-05
9.25	-0.032619776	-5.45852	-2.1E-05
9.255	-0.177370031	-9.21431	-0.00013
9.26	-0.305810398	-11.6528	-0.00023
9.265	-0.391437309	-12.4921	-0.00029
9.27	-0.426095821	-11.6655	-0.00031
9.275	-0.415902141	-9.31501	-0.00029
9.28	-0.379204893	-5.7529	-0.00023
9.285	-0.340468909	-1.40149	-0.00014
9.29	-0.318042813	3.269553	-3.4E-05
9.295	-0.322120285	7.80054	8.05E-05
9.3	-0.346585117	11.77999	0.000192
9.305	-0.379204893	14.8709	0.00029
9.31	-0.397553517	16.81877	0.000366
9.315	-0.389398573	17.46151	0.000414
9.32	-0.344546381	16.73218	0.00043
9.325	-0.271151886	14.67071	0.000412
9.33	-0.183486239	11.43093	0.000361
9.335	-0.103975535	7.284599	0.000281
9.34	-0.053007136	2.611676	0.000179
9.345	-0.042813456	-2.12768	6.43E-05
9.35	-0.075433231	-6.43826	-5.2E-05
9.355	-0.136595311	-9.85332	-0.00016
9.36	-0.20795107	-11.9974	-0.00024
9.365	-0.26911315	-12.6402	-0.0003
9.37	-0.301732926	-11.7331	-0.00031
9.375	-0.295616718	-9.41845	-0.00029
9.38	-0.252803262	-6.00735	-0.00023
9.385	-0.183486239	-1.93454	-0.00015



9.39	-0.099898063	2.300172	-4.8E-05
9.395	-0.02038736	6.200788	5.66E-05
9.4	0.046890928	9.331337	0.000153
9.405	0.095820591	11.36251	0.00023
9.41	0.130479103	12.0963	0.00028
9.415	0.159021407	11.47297	0.000298
9.42	0.18756371	9.566529	0.000282
9.425	0.220183486	6.569297	0.000235
9.43	0.262996942	2.763436	0.000162
9.435	0.305810398	-1.49904	6.8E-05
9.44	0.344546381	-5.82857	-3.7E-05
9.445	0.364933741	-9.82275	-0.00014
9.45	0.360856269	-13.0998	-0.00024
9.455	0.326197757	-15.3287	-0.00032
9.46	0.262996942	-16.2623	-0.00038
9.465	0.175331295	-15.7621	-0.0004
9.47	0.079510703	-13.8252	-0.00039
9.475	-0.008154944	-10.5968	-0.00034
9.48	-0.071355759	-6.36711	-0.00026
9.485	-0.093781855	-1.55581	-0.00016
9.49	-0.069317023	3.327169	-3.8E-05
9.495	-0.004077472	7.739898	8.19E-05
9.5	0.089704383	11.17435	0.000191
9.505	0.18756371	13.22921	0.000275
9.51	0.267074414	13.66795	0.000326
9.515	0.307849134	12.45717	0.000336
9.52	0.29969419	9.773677	0.000307
9.525	0.250764526	5.972719	0.000241
9.53	0.177370031	1.531587	0.000147
9.535	0.101936799	-3.02294	3.77E-05
9.54	0.046890928	-7.18975	-7.4E-05
9.545	0.026503568	-10.5556	-0.00018
9.55	0.042813456	-12.8344	-0.00026
9.555	0.083588175	-13.8792	-0.00032
9.56	0.134556575	-13.6776	-0.00034
9.565	0.175331295	-12.3286	-0.00034
9.57	0.195718654	-10.019	-0.0003
9.575	0.191641182	-6.99895	-0.00025
9.58	0.171253823	-3.56348	-0.00017
9.585	0.146788991	-0.0348	-8.8E-05
9.59	0.132517839	3.255604	-8.6E-07

9.595	0.136595311	5.991295	8.01E-05
9.6	0.161060143	7.899138	0.000147
9.605	0.201834862	8.77858	0.000194
9.61	0.252803262	8.525005	0.000216
9.615	0.303771662	7.147129	0.00021
9.62	0.350662589	4.766725	0.000176
9.625	0.393476045	1.603289	0.000117
9.63	0.430173293	-2.04827	3.95E-05
9.635	0.460754332	-5.8486	-5E-05
9.64	0.481141692	-9.44423	-0.00014
9.645	0.485219164	-12.4962	-0.00023
9.65	0.470948012	-14.7104	-0.00031
9.655	0.432212029	-15.859	-0.00036
9.66	0.377166157	-15.8082	-0.00039
9.665	0.30988787	-14.5327	-0.00039
9.67	0.244648318	-12.1293	-0.00036
9.675	0.185524975	-8.80707	-0.0003
9.68	0.144750255	-4.87659	-0.00022
9.685	0.114169215	-0.708	-0.00012
9.69	0.091743119	3.308716	-1.7E-05
9.695	0.069317023	6.810366	8.14E-05
9.7	0.036697248	9.505252	0.000168
9.705	-0.004077472	11.19724	0.000234
9.71	-0.048929664	11.79779	0.000276
9.715	-0.085626911	11.31901	0.00029
9.72	-0.103975535	9.859142	0.000279
9.725	-0.091743119	7.578164	0.000243
9.73	-0.053007136	4.684376	0.000187
9.735	0.002038736	1.422875	0.000115
9.74	0.059123344	-1.93513	3.5E-05
9.745	0.095820591	-5.09706	-4.8E-05
9.75	0.099898063	-7.76581	-0.00013
9.755	0.063200815	-9.66061	-0.00019
9.76	-0.01019368	-10.5479	-0.00024
9.765	-0.103975535	-10.2788	-0.00026
9.77	-0.199796126	-8.81949	-0.00025
9.775	-0.277268094	-6.27103	-0.00022
9.78	-0.322120285	-2.86993	-0.00015
9.785	-0.330275229	1.035122	-7.1E-05
9.79	-0.305810398	5.024619	2.55E-05
9.795	-0.260958206	8.663437	0.000124

9.8	-0.20795107	11.55583	0.000213
9.805	-0.163098879	13.39899	0.000284
9.81	-0.132517839	14.01568	0.00033
9.815	-0.116207951	13.36761	0.000345
9.82	-0.112130479	11.55278	0.000329
9.825	-0.110091743	8.781596	0.000284
9.83	-0.099898063	5.342719	0.000216
9.835	-0.075433231	1.56649	0.000132
9.84	-0.038735984	-2.20642	3.86E-05
9.845	0.01019368	-5.65843	-5.4E-05
9.85	0.057084608	-8.51092	-0.00014
9.855	0.095820591	-10.544	-0.00021
9.86	0.114169215	-11.6038	-0.00026
9.865	0.108053007	-11.6114	-0.00029
9.87	0.079510703	-10.5699	-0.00029
9.875	0.036697248	-8.5703	-0.00026
9.88	-0.014271152	-5.78548	-0.00021
9.885	-0.06116208	-2.46347	-0.00014
9.89	-0.099898063	1.095067	-6.1E-05
9.895	-0.122324159	4.559455	2.7E-05
9.9	-0.132517839	7.606166	0.000112
9.905	-0.134556575	9.95411	0.000187
9.91	-0.130479103	11.39267	0.000245
9.915	-0.122324159	11.80204	0.00028
9.92	-0.110091743	11.16204	0.00029
9.925	-0.093781855	9.551004	0.000275
9.93	-0.069317023	7.131046	0.000235
9.935	-0.038735984	4.131751	0.000176
9.94	-0.006116208	0.82986	0.000102
9.945	0.024464832	-2.475	2.04E-05
9.95	0.044852192	-5.48201	-6.1E-05
9.955	0.046890928	-7.91021	-0.00013
9.96	0.028542304	-9.52321	-0.00019
9.965	-0.01019368	-10.1508	-0.00023
9.97	-0.06116208	-9.7114	-0.00025
9.975	-0.120285423	-8.22169	-0.00024
9.98	-0.175331295	-5.80382	-0.0002
9.985	-0.214067278	-2.68271	-0.00014
9.99	-0.230377166	0.832913	-6.6E-05
9.995	-0.216106014	4.374972	2.05E-05
10	-0.171253823	7.553615	0.000108

T (sec)	SD (m)	PSV (m/s)	PSA (m/s <sup>2</sup> )
0.1	0.00286511	0.180020049	11.31099329

