

kT 0.5961 ħ1000c1 2.857 ha 627.5 kT/h 6.25E+12

//6-31+G*

	V	V _{pcm}	V _{pcm+zp}	F	$^{-kT \ln \Sigma e^{-\beta F_i}}$	$\nu^\ddagger/\text{cm}^{-1}$	R [‡] /Å	
cis	1.42	1.92	1.10	0.85	0.85		0.162195	
trans	0.00	0.90	0.00	0.00	0.00		0.190133	
5ovLax	9.32	4.58	4.71	5.74			0.253016	
5ovLeq	9.96	5.69	5.95	7.09			0.248199	
5ovReq	8.38	5.04	5.26	6.38			0.337091	
5ovRax	9.33	4.65	4.77	5.90			0.212947	
lumped					5.27			
5offReq	10.16	6.25	6.69	8.17			0.286586	
5offRax	12.14	5.77	6.07	7.30			0.231481	
5offLeq	11.48	7.19	7.51	8.87			0.323433	
5offLax	9.34	4.65	4.97	6.34			0.231481	
lumped					6.20			
6ovBax	9.85	8.88	9.03	10.40			0.294325	
6ovBeq	9.93	9.15	9.08	10.17			0.187347	
6ovCax	2.93	1.13	1.52	3.20			0.323812	
6ovCeq	5.01	4.50	4.68	6.27			0.304916	
lumped					3.19			
6offBax	9.49	7.96	7.85	9.18			0.284392	
6offBeq	9.54	9.41	9.20	10.33			0.225724	
6offCax	0.06	0.00	0.18	1.81			0.32439	
6offCeq	2.23	3.25	3.26	4.83			0.300903	
lumped					1.80			
cis=5offLax	13.80	11.54	11.08	12.43	12.43	253i	2.072	0.282486
cis=5ovRax	13.58	9.34	9.01	10.58	10.58	261i	1.978	0.291822
cis=6offBax	15.22	14.19	13.71	15.26	15.26	242i	2.071	0.338379
cis=6ovCax	7.58	4.29	3.78	5.43	5.43	223i	2.110	0.361241
tr=5ovLax	10.45	8.02	7.44	8.13	8.13	250i	1.940	0.093266
tr=5offRax	9.98	7.32	6.83	8.33	8.33	217i	1.902	0.294104
tr=6offCax	4.46	3.24	2.63	4.30	4.30	225i	2.096	0.338362
tr=6ovBax	13.06	11.92	11.30	12.62	12.62	262i	2.016	0.239402
wrong5-6	30.34							

kescape-1

cis	0	-12.8	1E-04	12.07297	-1.13197
trans	2	-11.34	1E-05	10.7004	-1.045316
5ovLax	4	-9.882	1E-06	9.327828	-0.893044
5ovLeq	6	-8.425	1E-07	7.955257	-0.903126
5offReq	8	-6.967	1E-08	6.582686	-0.74585
5offRax	10	-5.51	1E-09	5.210115	-0.984337
5ovReq	12	-4.053	1E-10	3.837544	-0.828335
5ovRax			1E-11	2.464973	-0.93991
5offLeq					-0.766659
5offLax					-0.93991
6ovBax					-0.814645
6ovBeq					-1.053311
6ovCax					-0.766068

6ovCeq	-0.796572
6offBax	-0.832292
6offBeq	-0.953272
6offCax	-0.765168
6offCeq	-0.803334
#REF!	-0.835759
#REF!	-0.819027
#REF!	-0.74394
#REF!	-0.711385
tr=5ovLax	-1.441709
tr=5offRax	-0.81503
tr=6offCax	-0.743965
tr=6ovBax	-0.922123
wrong5-6	

0.292988 0.344577 0.483126 0.61967 0.858022 1.011994 1.080268 1.24024 1.510463
0.263167 0.45605 0.551716 0.698071 0.950435 1.04068 1.078666 1.134043 1.445338
0.354125 0.499141 0.828685 0.953358 1.078131 1.094325 1.32756 1.563035 1.839403
0.342374 0.530011 0.922024 0.967382 1.106685 1.165091 1.361009 1.508758 1.900113
0.444324 0.572054 0.867102 1.032717 1.21527 1.246073 1.309619 1.495903 1.656233
0.346321 0.56168 0.922004 1.139498 1.246984 1.357813 1.378652 1.681679 1.766424

0.332893 0.497658 0.884188 0.990121 1.061802 1.169279 1.307184 1.401228 1.7812
0.340611 0.50659 0.953637 1.074222 1.20826 1.273689 1.307355 1.481961 1.807174
0.393455 0.523498 0.845775 1.000653 1.174618 1.253157 1.399241 1.524235 1.76969
0.340611 0.50659 0.953637 1.074222 1.20826 1.273689 1.307355 1.481961 1.807174

0.321605 0.654357 0.965661 1.063963 1.167332 1.311492 1.387563 1.570474 1.965242
0.292005 0.629338 0.957667 1.041117 1.243142 1.343222 1.451345 1.71222 1.882346
0.470604 0.722283 0.95798 1.034472 1.141842 1.406481 1.491123 1.692616 2.012028
0.479768 0.739133 0.91879 0.989189 1.108988 1.374733 1.447517 1.733697 1.987087

0.325136 0.63023 0.961938 1.094071 1.174116 1.270155 1.460362 1.623534 1.841504
0.301867 0.606913 0.949509 1.075291 1.188568 1.281783 1.455501 1.629684 1.749047
0.460505 0.688833 1.001786 1.082542 1.141969 1.33212 1.417453 1.806668 1.900483
0.470752 0.703962 0.954615 1.097976 1.132295 1.310589 1.401399 1.839375 1.899958

0.418226 0.505508 0.9588 1.046972 1.160607 1.177528 1.293133 1.432644 2.01051
0.445753 0.549209 1.05934 1.100268 1.254343 1.312192 1.418414 1.484635 1.930189
0.354982 0.706699 0.962489 1.080098 1.185177 1.217108 1.336767 1.608493 2.056178
0.440955 0.711119 0.781378 1.067683 1.128817 1.396206 1.4894 1.638842 2.015251
0.418833 0.521356 0.88649 0.962479 1.114323 1.153629 1.281126 1.600056 1.924372
0.439285 0.526991 0.998641 1.131155 1.217718 1.23992 1.393977 1.604819 1.86382
0.452707 0.723797 0.993785 1.009308 1.166067 1.288379 1.437601 1.736968 1.926409
0.332898 0.688993 0.931337 1.039248 1.11783 1.301191 1.471176 1.679334 1.967581

-0.816981 -0.734862 -0.571859 -0.46046 -0.328837 -0.269295 -0.247241 -0.203583 -0.148725
-0.872491 -0.598799 -0.511412 -0.410264 -0.29131 -0.259745 -0.247733 -0.231412 -0.160202
-0.721249 -0.556804 -0.342046 -0.290215 -0.247897 -0.24298 -0.18363 -0.140136 -0.103161
-0.738066 -0.529447 -0.302236 -0.285031 -0.239306 -0.22283 -0.176597 -0.149014 -0.096563
-0.611092 -0.49533 -0.324884 -0.262353 -0.209751 -0.202174 -0.187536 -0.151208 -0.126242
-0.732343 -0.503437 -0.302243 -0.229876 -0.201955 -0.177256 -0.173014 -0.122719 -0.111749
-0.752139 -0.558172 -0.317611 -0.27687 -0.25298 -0.221702 -0.188074 -0.168549 -0.109949
-0.740649 -0.550008 -0.29011 -0.249103 -0.211522 -0.195654 -0.188036 -0.153629 -0.106861
-0.669464 -0.535046 -0.334269 -0.27319 -0.220273 -0.200477 -0.168937 -0.146419 -0.111348
-0.740649 -0.550008 -0.29011 -0.249103 -0.211522 -0.195654 -0.188036 -0.153629 -0.106861
-0.769522 -0.437241 -0.285661 -0.2523 -0.222225 -0.187124 -0.171235 -0.138967 -0.08999
-0.818705 -0.453815 -0.288609 -0.259603 -0.202881 -0.180297 -0.159103 -0.118635 -0.098445
-0.584077 -0.396309 -0.288493 -0.261776 -0.229219 -0.16753 -0.152033 -0.121239 -0.085567

-0.575096	-0.386978	-0.303512	-0.277199	-0.238629	-0.173802	-0.159803	-0.115852	-0.087895
-0.764008	-0.453209	-0.287029	-0.243056	-0.220407	-0.196474	-0.157468	-0.130934	-0.102924
-0.8017	-0.469444	-0.291658	-0.248772	-0.216593	-0.19379	-0.158347	-0.130037	-0.113907
-0.594231	-0.415768	-0.272797	-0.246546	-0.229184	-0.182653	-0.165422	-0.10692	-0.096524
-0.58393	-0.406807	-0.289745	-0.241887	-0.231907	-0.187322	-0.168516	-0.103164	-0.096579
-0.639955	-0.550987	-0.288189	-0.257707	-0.224045	-0.2195	-0.191211	-0.162555	-0.085706
-0.609573	-0.513447	-0.253757	-0.241205	-0.200195	-0.18697	-0.165239	-0.153162	-0.093466
-0.72005	-0.405215	-0.286826	-0.247294	-0.217481	-0.20929	-0.181663	-0.133157	-0.081606
-0.6147	-0.402661	-0.364857	-0.251135	-0.232895	-0.169531	-0.152332	-0.128713	-0.085271
-0.639258	-0.536908	-0.316647	-0.28683	-0.23707	-0.225953	-0.19394	-0.134422	-0.094056
-0.6165	-0.532032	-0.273888	-0.23223	-0.209137	-0.203661	-0.169969	-0.133706	-0.10045
-0.602263	-0.395458	-0.275583	-0.270211	-0.222566	-0.192286	-0.161632	-0.115435	-0.093849
-0.752132	-0.415672	-0.298598	-0.260212	-0.236051	-0.189404	-0.155533	-0.123039	-0.089763

1.917329	2.088611	2.2478	2.250187	2.435603	2.657241	2.77107	2.847905	2.945855
1.713055	2.095791	2.244028	2.308197	2.393276	2.462081	2.669383	2.769723	2.859167
2.062404	2.101874	2.283982	2.503799	2.700339	2.764641	2.928571	3.070548	3.314388
2.071703	2.107255	2.391876	2.56266	2.733711	2.824179	2.885515	3.078616	3.396197
2.052615	2.190163	2.322153	2.60778	2.762743	2.814776	3.038101	3.145137	3.460644
2.079559	2.190755	2.305955	2.507454	2.696878	2.786433	2.919545	3.120955	3.149214

2.035089	2.177721	2.347275	2.663333	2.701927	2.795191	2.982105	3.137045	3.408392
2.042579	2.150401	2.263226	2.498999	2.707063	2.798267	2.935077	3.035321	3.079291
2.06007	2.125342	2.324243	2.637728	2.726767	2.831982	2.948629	3.080617	3.498638
2.042579	2.150401	2.263226	2.498999	2.707063	2.798267	2.935077	3.035321	3.079291

2.022843	2.229285	2.334362	2.403206	2.533922	2.620802	2.76317	2.922434	3.1712
1.959902	2.200286	2.36346	2.401037	2.50108	2.515557	2.615344	2.849543	3.115769
2.147752	2.256565	2.332753	2.374964	2.435333	2.592778	2.757283	2.789001	3.136223
2.034281	2.218085	2.315405	2.408614	2.441445	2.526109	2.602359	2.806149	2.860535

2.087649	2.241214	2.292055	2.358805	2.466025	2.581567	2.705981	2.780243	3.100711
2.038715	2.181434	2.22078	2.354295	2.500344	2.533338	2.741711	2.748998	3.02547
2.072084	2.103657	2.221242	2.415163	2.498214	2.594005	2.639434	2.772879	3.123773
2.053309	2.099366	2.171775	2.310967	2.476565	2.556792	2.605848	2.689405	2.8448

2.103024	2.227635	2.335567	2.679872	2.720235	2.813213	3.033342	3.170065	3.25776
2.097926	2.234718	2.394543	2.651256	2.735906	2.808744	2.944488	3.087123	3.283107
2.137398	2.27469	2.322108	2.413684	2.651555	2.711208	2.788849	3.038463	3.37765
2.099826	2.245825	2.276017	2.387104	2.64781	2.723487	2.783885	2.88755	3.283317
2.097719	2.160931	2.331146	2.622521	2.712634	2.816306	2.937927	3.216988	3.311621
2.075971	2.181731	2.327766	2.680854	2.717851	2.805427	2.930813	2.984762	3.355278
2.111688	2.171977	2.281688	2.369247	2.636301	2.687057	2.716565	2.815618	3.149917
2.107181	2.271369	2.317856	2.351877	2.57742	2.694237	2.722778	2.869196	3.260642

-0.094777	-0.078821	-0.066547	-0.066379	-0.054613	-0.04335	-0.038532	-0.035595	-0.032183
-0.118525	-0.078219	-0.066813	-0.062435	-0.05709	-0.05312	-0.042808	-0.038585	-0.035185
-0.081063	-0.077712	-0.06405	-0.050854	-0.041456	-0.038789	-0.032759	-0.028319	-0.022076
-0.08026	-0.077267	-0.057174	-0.047827	-0.040049	-0.036477	-0.034243	-0.028086	-0.020312
-0.081918	-0.070739	-0.061523	-0.045634	-0.038865	-0.036832	-0.029276	-0.026238	-0.019024
-0.079588	-0.070694	-0.062583	-0.050661	-0.041605	-0.037925	-0.033065	-0.026895	-0.026129
-0.083473	-0.07168	-0.059918	-0.043077	-0.041388	-0.037584	-0.031007	-0.026456	-0.020061
-0.082804	-0.073793	-0.06547	-0.05111	-0.041169	-0.037465	-0.032541	-0.029359	-0.028066
-0.081266	-0.07579	-0.061388	-0.044237	-0.040338	-0.036184	-0.032091	-0.028028	-0.018303
-0.082804	-0.073793	-0.06547	-0.05111	-0.041169	-0.037465	-0.032541	-0.029359	-0.028066
-0.084578	-0.067864	-0.060737	-0.056499	-0.049281	-0.045021	-0.038848	-0.032967	-0.025548
-0.09051	-0.069983	-0.058906	-0.056627	-0.050999	-0.050234	-0.045277	-0.035535	-0.027038
-0.074002	-0.065933	-0.06084	-0.058199	-0.054628	-0.046352	-0.039085	-0.037825	-0.026478

-0.083545 -0.068674 -0.061962 -0.056179 -0.05428 -0.049684 -0.045892 -0.037161 -0.035135
-0.078902 -0.067012 -0.063507 -0.059195 -0.052901 -0.046895 -0.041215 -0.038168 -0.027458
-0.083148 -0.071398 -0.068478 -0.059477 -0.051038 -0.049311 -0.039719 -0.039421 -0.029657
-0.080227 -0.077564 -0.068445 -0.055795 -0.051152 -0.046293 -0.044158 -0.03846 -0.026817
-0.081857 -0.07792 -0.072134 -0.062253 -0.052322 -0.04812 -0.045726 -0.041929 -0.035709

-0.077617 -0.067983 -0.06066 -0.042345 -0.040611 -0.036891 -0.029419 -0.025578 -0.023387
-0.07804 -0.067475 -0.057015 -0.04362 -0.039958 -0.037062 -0.032228 -0.027842 -0.022791
-0.074822 -0.064682 -0.061526 -0.055881 -0.043607 -0.040992 -0.037831 -0.029265 -0.020699
-0.077882 -0.066686 -0.064591 -0.057462 -0.043776 -0.040475 -0.038025 -0.034171 -0.022786
-0.078058 -0.072971 -0.060943 -0.044941 -0.040932 -0.036774 -0.032446 -0.024381 -0.022138
-0.079894 -0.071375 -0.061161 -0.042302 -0.040712 -0.037189 -0.032684 -0.030922 -0.021175
-0.076902 -0.072119 -0.064206 -0.058549 -0.044302 -0.042031 -0.040766 -0.0368 -0.02611
-0.077273 -0.064909 -0.061803 -0.059628 -0.047098 -0.041719 -0.040504 -0.034823 -0.023319

3.140045	3.433466	3.632053	3.680924	3.719037	3.73316	3.969542	4.042894	4.182568
3.136013	3.429007	3.676952	3.712832	3.721816	3.839129	3.989715	4.054903	4.187056
3.390894	3.580125	3.664288	3.735508	3.763507	3.864896	4.034493	4.225645	4.303481
3.583654	3.66864	3.701904	3.782396	3.855569	4.019946	4.199575	4.313003	4.49102
3.619724	3.708502	3.729431	3.774849	3.867547	4.021893	4.197317	4.287518	4.425835
3.536143	3.660978	3.682871	3.735242	3.760083	3.964497	4.203032	4.281925	4.303213

3.610398	3.637555	3.71317	3.761211	3.873902	4.01501	4.197329	4.282073	4.492293
3.455271	3.574865	3.676242	3.714058	3.748065	3.922904	4.208897	4.280848	4.326475
3.595648	3.702137	3.706551	3.782535	3.821708	4.011567	4.197278	4.30285	4.429055
3.455271	3.574865	3.676242	3.714058	3.748065	3.922904	4.208897	4.280848	4.326475

3.431783	3.555686	3.673939	3.740198	3.753687	3.906185	3.976587	4.173027	4.21476
3.372105	3.565508	3.672865	3.701817	3.763494	3.991345	4.203601	4.294998	4.412971
3.33852	3.416893	3.687335	3.741531	3.779654	3.881518	4.045504	4.20004	4.297881
3.342443	3.551726	3.687874	3.747052	3.874755	3.932986	4.208293	4.252956	4.287505

3.374264	3.621996	3.689243	3.735418	3.771418	3.991736	4.102427	4.206047	4.333455
3.347324	3.51455	3.679926	3.752215	3.765356	4.061502	4.201437	4.283393	4.362368
3.240158	3.414988	3.681557	3.746767	3.770695	3.911138	4.088377	4.209728	4.29635
3.292755	3.494552	3.698777	3.755995	3.842334	4.132464	4.213095	4.261563	4.326051

3.573971	3.686973	3.68875	3.736409	3.790135	3.989053	4.250104	4.252901	4.323377
3.594185	3.699409	3.726572	3.736932	3.779145	4.231476	4.244244	4.270868	4.387465
3.541033	3.603581	3.706893	3.733159	3.858399	3.971511	4.194621	4.21957	4.281417
3.364719	3.501423	3.701642	3.748622	3.784353	4.044475	4.203094	4.260928	4.292459
3.508344	3.667607	3.701062	3.748873	3.794484	3.943568	4.246316	4.27874	4.365929
3.432221	3.648351	3.71137	3.722419	3.732328	4.231145	4.258932	4.296815	4.392021
3.334139	3.462208	3.699161	3.746996	3.774408	4.141708	4.206402	4.277102	4.298996
3.467626	3.676284	3.698367	3.726279	3.804645	4.165564	4.225498	4.300838	4.31364

-0.026375	-0.019556	-0.015986	-0.015214	-0.014638	-0.01443	-0.011363	-0.010552	-0.009166
-0.026484	-0.019645	-0.015275	-0.01473	-0.014597	-0.012963	-0.011134	-0.010425	-0.009125
-0.020422	-0.016851	-0.015473	-0.014396	-0.013994	-0.01263	-0.010642	-0.008777	-0.008115
-0.01679	-0.015405	-0.014894	-0.013729	-0.01275	-0.0108	-0.00901	-0.008038	-0.00672
-0.016187	-0.014795	-0.014485	-0.013834	-0.012596	-0.010778	-0.009031	-0.008247	-0.007175
-0.01762	-0.015525	-0.015184	-0.0144	-0.014042	-0.011421	-0.008979	-0.008293	-0.008117
-0.016341	-0.015897	-0.014725	-0.014026	-0.012516	-0.010854	-0.009031	-0.008292	-0.006711
-0.019128	-0.016941	-0.015286	-0.014712	-0.014214	-0.011911	-0.008926	-0.008302	-0.007929
-0.016587	-0.014891	-0.014824	-0.013727	-0.013194	-0.010891	-0.009031	-0.00812	-0.007152
-0.019128	-0.016941	-0.015286	-0.014712	-0.014214	-0.011911	-0.008926	-0.008302	-0.007929
-0.01959	-0.017274	-0.015322	-0.014328	-0.014134	-0.012114	-0.011283	-0.009255	-0.008874
-0.020816	-0.017102	-0.015339	-0.014896	-0.013994	-0.011116	-0.008974	-0.008185	-0.007268
-0.02154	-0.019889	-0.015116	-0.014309	-0.013767	-0.01242	-0.010525	-0.009006	-0.008161

-0.021454 -0.017343 -0.015107 -0.014229 -0.012505 -0.011791 -0.008932 -0.008539 -0.008247
-0.02077 -0.01615 -0.015086 -0.014397 -0.013882 -0.011111 -0.009937 -0.008952 -0.007874
-0.021348 -0.01801 -0.015229 -0.014155 -0.013968 -0.010356 -0.008994 -0.008281 -0.007648
-0.023811 -0.019927 -0.015204 -0.014233 -0.013892 -0.012054 -0.010079 -0.008919 -0.008174
-0.022568 -0.018379 -0.014941 -0.014101 -0.012922 -0.009641 -0.008889 -0.008465 -0.007933

-0.016956 -0.015121 -0.015094 -0.014383 -0.013622 -0.011142 -0.008563 -0.008539 -0.007954
-0.016612 -0.014932 -0.014527 -0.014375 -0.013774 -0.008725 -0.008614 -0.008386 -0.007457
-0.017532 -0.016454 -0.014819 -0.01443 -0.012713 -0.011341 -0.009056 -0.008831 -0.008297
-0.020973 -0.018252 -0.014898 -0.014206 -0.013702 -0.010536 -0.008979 -0.00847 -0.008206
-0.018124 -0.015421 -0.014907 -0.014203 -0.013562 -0.011665 -0.008596 -0.00832 -0.007621
-0.019581 -0.015724 -0.014752 -0.014588 -0.014442 -0.008728 -0.008487 -0.00817 -0.007423
-0.021636 -0.018993 -0.014936 -0.01423 -0.01384 -0.009552 -0.008949 -0.008334 -0.008152
-0.018889 -0.015286 -0.014948 -0.014531 -0.013423 -0.009325 -0.008778 -0.008137 -0.008033

4.28453	4.571684	4.592437	4.625042	4.810785	4.864054	4.9633	5.048729	5.097172
4.286145	4.583525	4.599223	4.616194	4.807584	4.965689	4.996616	5.051152	5.248514
4.461847	4.537901	4.61026	4.68241	4.844566	4.909666	5.056249	5.072731	5.184207
4.569364	4.688775	4.719726	4.766277	4.9316	4.94635	5.037109	5.058545	5.208112
4.597369	4.705273	4.776929	4.798991	4.865934	4.915502	4.926878	5.072733	5.119373
4.448343	4.601498	4.622871	4.702486	4.78684	4.916503	4.976636	5.070758	5.142963

4.608334	4.696602	4.733156	4.804755	4.900333	4.920786	5.025059	5.064449	5.137098
4.434265	4.543818	4.614954	4.692786	4.784015	4.911174	5.021647	5.062264	5.142616
4.563407	4.694449	4.73518	4.769803	4.810371	4.936758	4.992532	5.043676	5.235062
4.434265	4.543818	4.614954	4.692786	4.784015	4.911174	5.021647	5.062264	5.142616

4.332148	4.399482	4.708832	4.797398	4.901056	4.936706	4.948346	5.116128	5.221024
4.425367	4.711831	4.812281	4.891463	4.922202	4.965029	5.032074	5.204847	5.272727
4.308429	4.409202	4.781048	4.824401	4.942287	4.948376	4.960093	5.06858	5.208715
4.345262	4.681475	4.801567	4.864687	4.929138	4.961085	5.040805	5.090279	5.278458

4.352414	4.487937	4.804688	4.906788	4.924106	4.936815	4.956972	5.10601	5.199075
4.43254	4.696789	4.812287	4.903547	4.921821	4.964115	5.095592	5.150049	5.264753
4.366161	4.434436	4.781016	4.830745	4.901318	4.941324	4.953098	5.12436	5.307197
4.375014	4.677364	4.803096	4.881445	4.933261	4.959801	5.113438	5.181631	5.293255

4.382598	4.463731	4.654399	4.743377	4.868906	4.882303	5.014087	5.063496	5.228212
4.433028	4.556198	4.676315	4.829778	4.892372	4.899266	5.034055	5.061196	5.225593
4.30223	4.402185	4.723353	4.77126	4.875485	4.900255	4.999758	5.045746	5.239779
4.422838	4.493894	4.702577	4.764185	4.890802	4.928062	4.994925	5.018374	5.262917
4.435053	4.533799	4.674592	4.835333	4.894549	4.958898	5.058248	5.202708	5.341629
4.475271	4.541531	4.670276	4.823281	4.893896	4.939147	5.058996	5.146099	5.311769
4.441173	4.520223	4.704816	4.868135	4.889774	4.910716	5.020024	5.16656	5.283071
4.379562	4.57	4.730078	4.833139	4.903651	4.910019	4.990848	5.192906	5.333172

-0.008271	-0.006196	-0.006068	-0.005873	-0.004873	-0.004619	-0.004181	-0.003838	-0.003656
-0.008258	-0.006123	-0.006027	-0.005925	-0.004889	-0.004171	-0.004044	-0.003828	-0.003141
-0.00692	-0.00641	-0.00596	-0.005544	-0.00471	-0.004412	-0.003809	-0.003746	-0.00335
-0.006211	-0.005508	-0.00534	-0.005096	-0.004316	-0.004253	-0.003883	-0.0038	-0.003271
-0.006038	-0.005418	-0.005042	-0.004931	-0.004611	-0.004387	-0.004337	-0.003746	-0.003575
-0.007014	-0.006013	-0.005885	-0.005433	-0.004992	-0.004382	-0.004126	-0.003754	-0.003492
-0.005972	-0.005465	-0.005268	-0.004903	-0.004454	-0.004364	-0.00393	-0.003778	-0.003512
-0.007114	-0.006372	-0.005932	-0.005486	-0.005006	-0.004406	-0.003943	-0.003786	-0.003493
-0.006248	-0.005477	-0.005257	-0.005078	-0.004875	-0.004294	-0.00406	-0.003857	-0.003184
-0.007114	-0.006372	-0.005932	-0.005486	-0.005006	-0.004406	-0.003943	-0.003786	-0.003493
-0.007884	-0.007368	-0.005398	-0.004939	-0.004451	-0.004294	-0.004244	-0.003587	-0.003229
-0.007178	-0.005382	-0.004866	-0.004494	-0.004357	-0.004174	-0.003902	-0.003282	-0.003066
-0.008075	-0.007296	-0.005021	-0.004807	-0.00427	-0.004244	-0.004195	-0.003762	-0.003269

-0.007781 -0.005549 -0.004918 -0.004616 -0.004327 -0.004191 -0.003868 -0.003681 -0.003048
-0.007725 -0.00674 -0.004903 -0.004425 -0.004349 -0.004294 -0.004208 -0.003623 -0.003301
-0.007127 -0.005464 -0.004866 -0.00444 -0.004359 -0.004178 -0.003662 -0.003467 -0.00309
-0.007619 -0.007113 -0.005021 -0.004776 -0.00445 -0.004275 -0.004224 -0.003557 -0.002961
-0.007551 -0.005572 -0.004911 -0.004539 -0.004309 -0.004196 -0.003597 -0.003359 -0.003003

-0.007494 -0.006907 -0.005702 -0.005214 -0.004597 -0.004535 -0.003974 -0.003781 -0.003206
-0.007123 -0.006293 -0.005578 -0.004781 -0.00449 -0.004459 -0.003895 -0.00379 -0.003214
-0.008125 -0.007348 -0.00532 -0.00507 -0.004567 -0.004454 -0.004031 -0.003849 -0.003169
-0.007197 -0.0067 -0.005432 -0.005106 -0.004497 -0.004332 -0.004051 -0.003956 -0.003096
-0.007109 -0.006437 -0.005587 -0.004754 -0.00448 -0.0042 -0.003801 -0.003289 -0.002861
-0.006827 -0.006387 -0.005612 -0.004812 -0.004483 -0.004284 -0.003798 -0.003481 -0.002948
-0.007065 -0.006525 -0.00542 -0.0046 -0.004501 -0.004408 -0.00395 -0.00341 -0.003034
-0.007517 -0.006207 -0.005284 -0.004765 -0.004439 -0.004411 -0.004067 -0.003321 -0.002885

5.298768	5.343702	5.466105	5.618957	5.658679	5.733161	5.909908	6.119667	6.156662
5.29736	5.37654	5.46422	5.615957	5.675271	5.72916	5.895603	6.118051	6.135225
5.337376	5.439468	5.484021	5.670519	5.741193	5.796288	5.845134	5.947927	6.037716
5.333003	5.425072	5.51823	5.56133	5.670904	5.725009	5.752062	5.941105	5.977483
5.264734	5.365054	5.413203	5.571696	5.659063	5.705156	5.77175	5.949865	6.006927
5.185501	5.38922	5.490336	5.6063	5.706808	5.775687	5.833815	5.917922	5.989736

5.314033	5.414142	5.47616	5.572236	5.666872	5.724176	5.760928	5.95556	6.018726
5.268899	5.435351	5.495532	5.611677	5.733351	5.766512	5.845818	5.923463	5.995384
5.251118	5.372004	5.411455	5.547782	5.677421	5.731449	5.741798	5.901554	5.972546
5.268899	5.435351	5.495532	5.611677	5.733351	5.766512	5.845818	5.923463	5.995384

5.307301	5.484844	5.562695	5.598542	5.688637	5.793814	5.938975	6.015572	6.054244
5.436141	5.534071	5.616954	5.647579	5.747869	5.785978	5.940435	5.962503	6.028972
5.297185	5.392875	5.546223	5.647523	5.718915	5.793401	5.984914	6.014122	6.052808
5.325755	5.38078	5.582728	5.679864	5.770701	5.818109	5.884566	5.996093	5.999224

5.317224	5.43674	5.536983	5.618094	5.73836	5.816978	5.846042	5.983984	6.015594
5.392403	5.449569	5.60872	5.668918	5.773563	5.824684	5.941339	5.974108	6.00309
5.315297	5.500462	5.590628	5.677286	5.697667	5.786626	5.957858	6.019389	6.086921
5.302713	5.508111	5.585172	5.679117	5.755171	5.803174	5.928506	5.994708	6.075206

5.313958	5.472799	5.543877	5.682873	5.74877	5.875802	6.032368	6.150261	6.208058
5.383895	5.514113	5.562433	5.690224	5.756824	5.854049	5.994299	6.095257	6.161238
5.321555	5.437776	5.505716	5.650063	5.744989	5.824883	6.055152	6.105219	6.151656
5.293581	5.468272	5.556686	5.648913	5.738204	5.820307	6.057475	6.110561	6.153553
5.423999	5.517568	5.649176	5.688277	5.761043	5.851553	6.006175	6.064199	6.199026
5.442374	5.512263	5.660246	5.717773	5.763148	5.902029	5.952488	6.015039	6.184999
5.419933	5.459089	5.550278	5.656102	5.747158	5.815564	5.997476	6.079167	6.148785
5.364518	5.456347	5.642625	5.658348	5.762411	5.842189	5.987306	6.087428	6.139526

-0.002987	-0.002855	-0.002525	-0.002167	-0.002082	-0.001933	-0.001619	-0.001312	-0.001265
-0.002991	-0.002763	-0.00253	-0.002173	-0.002048	-0.00194	-0.001642	-0.001315	-0.001292
-0.002873	-0.002594	-0.002481	-0.002058	-0.001917	-0.001814	-0.001728	-0.001559	-0.001425
-0.002886	-0.002631	-0.002397	-0.002296	-0.002057	-0.001948	-0.001896	-0.001569	-0.001513
-0.00309	-0.002795	-0.002663	-0.002272	-0.002082	-0.001988	-0.001859	-0.001556	-0.001469
-0.003346	-0.002728	-0.002465	-0.002194	-0.001984	-0.001852	-0.001747	-0.001606	-0.001495
-0.002941	-0.00266	-0.0025	-0.002271	-0.002065	-0.00195	-0.00188	-0.001547	-0.001452
-0.003077	-0.002605	-0.002452	-0.002183	-0.001932	-0.001869	-0.001726	-0.001597	-0.001486
-0.003133	-0.002775	-0.002668	-0.002327	-0.002044	-0.001936	-0.001916	-0.001633	-0.001521
-0.003077	-0.002605	-0.002452	-0.002183	-0.001932	-0.001869	-0.001726	-0.001597	-0.001486
-0.002961	-0.002478	-0.002292	-0.002212	-0.002021	-0.001819	-0.001573	-0.001457	-0.001401
-0.002602	-0.002359	-0.002171	-0.002106	-0.001904	-0.001833	-0.00157	-0.001536	-0.001437
-0.002991	-0.002718	-0.002331	-0.002106	-0.00196	-0.001819	-0.001502	-0.001459	-0.001403

-0.002907 -0.002751 -0.002247 -0.002039 -0.001861 -0.001775 -0.001661 -0.001485 -0.001481
-0.002932 -0.002601 -0.002352 -0.002169 -0.001923 -0.001777 -0.001726 -0.001503 -0.001456
-0.002719 -0.002568 -0.002189 -0.002061 -0.001856 -0.001763 -0.001569 -0.001518 -0.001475
-0.002938 -0.00244 -0.002229 -0.002044 -0.002003 -0.001832 -0.001543 -0.001451 -0.001356
-0.002975 -0.002421 -0.002241 -0.00204 -0.00189 -0.001802 -0.001589 -0.001487 -0.001372

-0.002941 -0.002509 -0.002336 -0.002032 -0.001903 -0.001675 -0.001432 -0.001273 -0.001201
-0.002742 -0.002407 -0.002293 -0.002018 -0.001887 -0.001712 -0.001488 -0.001345 -0.001259
-0.002919 -0.002598 -0.002427 -0.0021 -0.00191 -0.001763 -0.0014 -0.001331 -0.001271
-0.003002 -0.00252 -0.002306 -0.002103 -0.001923 -0.001771 -0.001397 -0.001324 -0.001269
-0.002634 -0.002399 -0.002102 -0.002021 -0.001879 -0.001717 -0.00147 -0.001387 -0.001212
-0.002586 -0.002411 -0.002079 -0.001963 -0.001875 -0.001632 -0.001551 -0.001457 -0.001229
-0.002645 -0.002543 -0.002321 -0.002088 -0.001906 -0.00178 -0.001483 -0.001367 -0.001275
-0.002796 -0.00255 -0.002116 -0.002083 -0.001877 -0.001733 -0.001498 -0.001355 -0.001287

6.222595	6.463156	6.565281	6.653336	6.728408	6.749733	6.796002	6.830923	7.09293
6.21886	6.453008	6.588898	6.633649	6.724065	6.76016	6.794896	6.885738	7.008966
6.104984	6.263571	6.350637	6.433286	6.611952	6.623257	6.656752	6.775875	6.940346
6.069789	6.170541	6.298997	6.39964	6.481821	6.66418	6.705261	6.793198	6.936182
6.043684	6.117318	6.251378	6.348178	6.452431	6.634287	6.721182	6.752447	6.865256
6.042557	6.203904	6.285676	6.378745	6.516064	6.55876	6.750472	6.771012	6.887688

6.117195	6.160267	6.281415	6.376927	6.473146	6.656624	6.677744	6.758673	6.934762
6.196622	6.248432	6.402719	6.426326	6.534513	6.620874	6.67913	6.758553	6.929536
6.036367	6.107837	6.263934	6.330109	6.442288	6.603138	6.719723	6.762914	6.895464
6.196622	6.248432	6.402719	6.426326	6.534513	6.620874	6.67913	6.758553	6.929536

6.162377	6.31035	6.415682	6.497749	6.582065	6.700015	6.740384	6.890995	6.922845
6.16376	6.309299	6.472017	6.528493	6.660818	6.694821	6.817713	6.899063	6.933379
6.11079	6.280534	6.36707	6.499086	6.563601	6.707303	6.811439	6.897928	6.928926
6.119955	6.325854	6.351336	6.481246	6.62533	6.682164	6.805768	6.899	6.912913

6.14803	6.293334	6.430413	6.463605	6.612704	6.700647	6.823844	6.895415	6.920829
6.116229	6.343326	6.42958	6.492758	6.652056	6.660637	6.806597	6.891872	6.916475
6.148848	6.296044	6.419025	6.457812	6.551157	6.667857	6.710839	6.894278	6.919581
6.18762	6.318561	6.403774	6.44524	6.597933	6.676801	6.713532	6.891531	6.91768

6.25979	6.319191	6.451243	6.595138	6.626786	6.772333	6.865485	7.130798	7.172668
6.188254	6.352687	6.488091	6.560624	6.600851	6.766102	6.862325	7.027023	7.147484
6.264555	6.401497	6.463478	6.571199	6.790456	6.858661	6.89097	7.065932	7.166563
6.35463	6.424333	6.492253	6.566656	6.774574	6.859411	6.86927	7.074904	7.10154
6.316773	6.439762	6.510404	6.585127	6.647727	6.772023	6.78394	6.926042	7.155117
6.328605	6.436081	6.48708	6.580562	6.605954	6.76061	6.77005	6.920339	7.164277
6.375865	6.449324	6.546344	6.635354	6.776879	6.820905	6.872345	6.922031	7.083779
6.404581	6.468068	6.576572	6.660113	6.765909	6.795087	6.900633	6.948181	7.093111

-0.001184	-0.000931	-0.00084	-0.000769	-0.000714	-0.000699	-0.000667	-0.000644	-0.000496
-0.001188	-0.00094	-0.000821	-0.000785	-0.000717	-0.000691	-0.000668	-0.00061	-0.000539
-0.001332	-0.001136	-0.001041	-0.000959	-0.000802	-0.000793	-0.000767	-0.000681	-0.000577
-0.00138	-0.001247	-0.001097	-0.000992	-0.000913	-0.000761	-0.00073	-0.000669	-0.00058
-0.001416	-0.001315	-0.00115	-0.001044	-0.000941	-0.000784	-0.000719	-0.000697	-0.000622
-0.001418	-0.001206	-0.001111	-0.001013	-0.000883	-0.000846	-0.000698	-0.000684	-0.000608
-0.001316	-0.00126	-0.001116	-0.001014	-0.000921	-0.000767	-0.000751	-0.000692	-0.00058
-0.001215	-0.001154	-0.000989	-0.000966	-0.000866	-0.000795	-0.00075	-0.000692	-0.000584
-0.001427	-0.001328	-0.001136	-0.001063	-0.00095	-0.000809	-0.00072	-0.000689	-0.000604
-0.001215	-0.001154	-0.000989	-0.000966	-0.000866	-0.000795	-0.00075	-0.000692	-0.000584
-0.001257	-0.001084	-0.000976	-0.000899	-0.000826	-0.000734	-0.000705	-0.000606	-0.000587
-0.001256	-0.001085	-0.000922	-0.000872	-0.000764	-0.000738	-0.000653	-0.000602	-0.000581
-0.001324	-0.001117	-0.001024	-0.000898	-0.000842	-0.000729	-0.000657	-0.000602	-0.000584

-0.001312	-0.001068	-0.001041	-0.000914	-0.000791	-0.000747	-0.00066	-0.000602	-0.000593
-0.001276	-0.001103	-0.000962	-0.00093	-0.000801	-0.000734	-0.000649	-0.000604	-0.000589
-0.001317	-0.001049	-0.000962	-0.000903	-0.00077	-0.000764	-0.00066	-0.000606	-0.000591
-0.001275	-0.0011	-0.000973	-0.000936	-0.000852	-0.000758	-0.000726	-0.000604	-0.000589
-0.001226	-0.001075	-0.000988	-0.000947	-0.000813	-0.000751	-0.000724	-0.000606	-0.000591
-0.001141	-0.001075	-0.000942	-0.000815	-0.00079	-0.000683	-0.000622	-0.000477	-0.000458
-0.001225	-0.001039	-0.000908	-0.000844	-0.000811	-0.000687	-0.000624	-0.000529	-0.000469
-0.001135	-0.00099	-0.00093	-0.000835	-0.000671	-0.000626	-0.000606	-0.000509	-0.00046
-0.001037	-0.000967	-0.000904	-0.000839	-0.000681	-0.000626	-0.00062	-0.000505	-0.000491
-0.001077	-0.000953	-0.000888	-0.000824	-0.000774	-0.000683	-0.000675	-0.000586	-0.000466
-0.001065	-0.000956	-0.000909	-0.000827	-0.000807	-0.000691	-0.000684	-0.000589	-0.000461
-0.001016	-0.000944	-0.000856	-0.000783	-0.00068	-0.000651	-0.000618	-0.000588	-0.0005
-0.000987	-0.000926	-0.000831	-0.000764	-0.000687	-0.000668	-0.000601	-0.000573	-0.000495

7.107652	7.150901	7.218573	7.229336	7.248549	7.433115	7.527849	7.739636	7.898811
7.079368	7.109423	7.208378	7.221501	7.24756	7.295782	7.429864	7.738688	7.897335
7.151386	7.230062	7.236167	7.262201	7.282206	7.311611	7.333679	7.414274	7.715845
6.988447	7.138394	7.221338	7.263088	7.269614	7.310986	7.332633	7.462393	7.813537
7.017786	7.10297	7.234864	7.256493	7.303438	7.315602	7.325266	7.507692	7.817923
7.132667	7.202415	7.22557	7.237698	7.264784	7.289258	7.321823	7.364313	7.745932

7.008511	7.134372	7.232107	7.253228	7.287231	7.321312	7.340441	7.470118	7.814862
7.158572	7.204918	7.237576	7.254131	7.278777	7.317563	7.337222	7.357903	7.725032
6.996778	7.13368	7.207088	7.26185	7.285909	7.32207	7.333427	7.515871	7.812334
7.158572	7.204918	7.237576	7.254131	7.278777	7.317563	7.337222	7.357903	7.725032

7.066068	7.140352	7.243431	7.26576	7.297286	7.330935	7.397148	7.433469	7.753678
6.972279	7.076256	7.156694	7.164441	7.266807	7.320548	7.356896	7.395503	7.787473
7.077563	7.13204	7.218494	7.254619	7.290345	7.370072	7.378177	7.40462	7.730672
7.066937	7.122087	7.157904	7.185057	7.270512	7.275985	7.382708	7.419979	7.76787

7.013099	7.071088	7.151289	7.220756	7.276283	7.277781	7.361196	7.378372	7.768179
6.970426	7.068419	7.157494	7.184764	7.281974	7.306257	7.36324	7.392836	7.784331
7.064914	7.129929	7.227992	7.243992	7.284912	7.31153	7.374718	7.40417	7.722445
7.062672	7.113247	7.143984	7.19062	7.264485	7.330985	7.350118	7.384427	7.76616

7.223011	7.26812	7.288928	7.345044	7.391744	7.414887	7.474938	7.56086	7.973428
7.200304	7.247197	7.272734	7.283684	7.332451	7.363479	7.381099	7.580412	7.983944
7.202411	7.220169	7.262021	7.308213	7.376722	7.445333	7.53699	7.564382	7.843872
7.184111	7.218927	7.262902	7.360804	7.383158	7.43172	7.534353	7.565376	7.867543
7.206124	7.247762	7.26531	7.28126	7.363316	7.382749	7.505798	7.57274	7.9839
7.224152	7.233414	7.268276	7.285043	7.343092	7.347135	7.443437	7.604569	7.987864
7.205391	7.217755	7.242483	7.272676	7.337035	7.39775	7.530624	7.715117	7.86937
7.189871	7.2165	7.23539	7.253392	7.294683	7.34581	7.580169	7.586961	7.837969

-0.000488	-0.000468	-0.000437	-0.000432	-0.000424	-0.000353	-0.000321	-0.000259	-0.000221
-0.000502	-0.000487	-0.000441	-0.000436	-0.000425	-0.000405	-0.000354	-0.00026	-0.000222
-0.000467	-0.000432	-0.000429	-0.000418	-0.00041	-0.000398	-0.000389	-0.000359	-0.000266
-0.00055	-0.000474	-0.000436	-0.000418	-0.000415	-0.000398	-0.00039	-0.000342	-0.000241
-0.000534	-0.000491	-0.00043	-0.000421	-0.000401	-0.000397	-0.000393	-0.000327	-0.00024
-0.000476	-0.000444	-0.000434	-0.000429	-0.000417	-0.000407	-0.000394	-0.000378	-0.000258
-0.000539	-0.000475	-0.000431	-0.000422	-0.000408	-0.000394	-0.000387	-0.00034	-0.000241
-0.000464	-0.000443	-0.000429	-0.000422	-0.000411	-0.000396	-0.000388	-0.00038	-0.000263
-0.000546	-0.000476	-0.000442	-0.000418	-0.000409	-0.000394	-0.00039	-0.000325	-0.000241
-0.000464	-0.000443	-0.000429	-0.000422	-0.000411	-0.000396	-0.000388	-0.00038	-0.000263
-0.000509	-0.000473	-0.000426	-0.000417	-0.000404	-0.000391	-0.000366	-0.000352	-0.000256
-0.000559	-0.000504	-0.000465	-0.000461	-0.000416	-0.000395	-0.000381	-0.000366	-0.000247
-0.000503	-0.000477	-0.000437	-0.000422	-0.000407	-0.000376	-0.000373	-0.000363	-0.000262

-0.000509 -0.000481 -0.000464 -0.000452 -0.000415 -0.000413 -0.000371 -0.000357 -0.000252
-0.000537 -0.000506 -0.000467 -0.000436 -0.000412 -0.000412 -0.000379 -0.000372 -0.000252
-0.00056 -0.000508 -0.000465 -0.000452 -0.00041 -0.0004 -0.000378 -0.000367 -0.000248
-0.00051 -0.000478 -0.000433 -0.000426 -0.000409 -0.000398 -0.000374 -0.000363 -0.000264
-0.000511 -0.000486 -0.000471 -0.000449 -0.000417 -0.000391 -0.000383 -0.00037 -0.000253

-0.000435 -0.000416 -0.000407 -0.000385 -0.000368 -0.000359 -0.000338 -0.00031 -0.000205
-0.000445 -0.000425 -0.000414 -0.000409 -0.00039 -0.000378 -0.000371 -0.000304 -0.000203
-0.000444 -0.000436 -0.000418 -0.0004 -0.000373 -0.000348 -0.000318 -0.000309 -0.000234
-0.000452 -0.000437 -0.000418 -0.000379 -0.000371 -0.000353 -0.000319 -0.000309 -0.000228
-0.000442 -0.000424 -0.000417 -0.00041 -0.000378 -0.000371 -0.000328 -0.000307 -0.000203
-0.000435 -0.000431 -0.000416 -0.000409 -0.000386 -0.000384 -0.000349 -0.000297 -0.000202
-0.000443 -0.000437 -0.000427 -0.000414 -0.000388 -0.000365 -0.00032 -0.000266 -0.000228
-0.00045 -0.000438 -0.00043 -0.000422 -0.000405 -0.000385 -0.000304 -0.000302 -0.000235

8.133036	8.510873	14.75652	14.83046	14.90406	15.03374	15.08303	15.24079	15.33119
8.131765	8.580689	14.74634	14.81908	14.88967	15.05809	15.07567	15.20342	15.31181
7.998334	8.147075	14.76411	14.81143	14.87897	14.9233	15.1269	15.1945	15.21276
8.007635	8.165147	14.11987	14.55028	14.79572	14.95349	15.07225	15.1342	15.24182
8.009135	8.170006	14.64832	14.74634	14.77987	14.96771	15.04685	15.15552	15.20321
7.997542	8.151109	14.83074	14.83745	14.84886	14.87204	15.16701	15.23215	15.24889

8.013956	8.170009	14.24651	14.58273	14.77563	14.96023	15.08251	15.15255	15.18191
8.000397	8.147475	14.76389	14.83928	14.85065	14.87171	15.1434	15.16844	15.22067
7.99843	8.165369	14.64039	14.73644	14.88315	14.95911	15.01931	15.10005	15.16179
8.000397	8.147475	14.76389	14.83928	14.85065	14.87171	15.1434	15.16844	15.22067

7.804193	8.186994	14.78108	14.79354	14.85343	14.88011	14.92627	15.15146	15.20195
7.8015	8.215305	14.32632	14.36971	14.53039	14.68713	14.79993	14.95897	15.16517
7.807616	8.181531	14.80448	14.85629	14.95397	14.96669	15.00212	15.14328	15.23716
7.804029	8.205944	14.57454	14.79525	14.80155	14.87834	14.917	15.14846	15.16007

7.797632	8.194439	14.66552	14.72663	14.75141	14.84942	14.9271	14.93539	15.1168
7.800918	8.210623	14.3259	14.54554	14.68446	14.71705	14.78711	14.95993	15.07865
7.807754	8.178095	14.77616	14.8193	14.84064	14.88875	14.99909	15.16418	15.16704
7.803406	8.204853	14.32354	14.45531	14.78057	14.83449	14.91367	15.15543	15.15753

8.127048	14.7836	14.91232	15.02961	15.12455	15.17148	15.30242	15.33023	15.41145
8.13283	14.81182	14.87122	14.99385	15.14963	15.18172	15.2177	15.29756	15.3796
8.133858	14.7982	14.95489	15.04626	15.18062	15.20644	15.31563	15.34713	15.40467
8.131982	14.79663	14.87902	15.05246	15.16187	15.19993	15.32915	15.34534	15.42227
8.128883	14.8045	14.90813	14.95613	15.13134	15.14637	15.17773	15.27237	15.28346
8.130283	14.78357	14.86443	14.90524	15.08807	15.14753	15.15478	15.23775	15.28303
8.132322	14.77548	14.91144	14.96974	15.12372	15.1889	15.27309	15.31007	15.33629
8.138574	14.78877	14.83018	14.95981	15.11475	15.12364	15.24649	15.29824	15.33645

-0.000175	-0.00012	-2.33E-07	-2.16E-07	-2.01E-07	-1.76E-07	-1.68E-07	-1.43E-07	-1.31E-07
-0.000175	-0.000112	-2.35E-07	-2.19E-07	-2.04E-07	-1.72E-07	-1.69E-07	-1.49E-07	-1.34E-07
-0.0002	-0.000173	-2.31E-07	-2.2E-07	-2.06E-07	-1.97E-07	-1.61E-07	-1.5E-07	-1.47E-07
-0.000198	-0.00017	-4.4E-07	-2.86E-07	-2.24E-07	-1.91E-07	-1.7E-07	-1.59E-07	-1.43E-07
-0.000198	-0.000169	-2.59E-07	-2.35E-07	-2.27E-07	-1.88E-07	-1.74E-07	-1.56E-07	-1.49E-07
-0.0002	-0.000172	-2.16E-07	-2.15E-07	-2.12E-07	-2.07E-07	-1.54E-07	-1.45E-07	-1.42E-07
-0.000197	-0.000169	-3.87E-07	-2.77E-07	-2.28E-07	-1.9E-07	-1.68E-07	-1.57E-07	-1.52E-07
-0.0002	-0.000173	-2.31E-07	-2.14E-07	-2.12E-07	-2.07E-07	-1.58E-07	-1.54E-07	-1.46E-07
-0.0002	-0.00017	-2.61E-07	-2.37E-07	-2.05E-07	-1.9E-07	-1.79E-07	-1.65E-07	-1.55E-07
-0.0002	-0.000173	-2.31E-07	-2.14E-07	-2.12E-07	-2.07E-07	-1.58E-07	-1.54E-07	-1.46E-07
-0.000243	-0.000166	-2.27E-07	-2.24E-07	-2.11E-07	-2.06E-07	-1.96E-07	-1.57E-07	-1.49E-07
-0.000244	-0.000161	-3.58E-07	-3.42E-07	-2.92E-07	-2.49E-07	-2.23E-07	-1.9E-07	-1.55E-07
-0.000242	-0.000167	-2.22E-07	-2.11E-07	-1.91E-07	-1.89E-07	-1.82E-07	-1.58E-07	-1.44E-07

-0.000243	-0.000163	-2.79E-07	-2.24E-07	-2.22E-07	-2.06E-07	-1.98E-07	-1.57E-07	-1.55E-07
-0.000245	-0.000165	-2.55E-07	-2.4E-07	-2.34E-07	-2.12E-07	-1.96E-07	-1.95E-07	-1.62E-07
-0.000244	-0.000162	-3.58E-07	-2.87E-07	-2.5E-07	-2.42E-07	-2.26E-07	-1.9E-07	-1.69E-07
-0.000242	-0.000167	-2.28E-07	-2.18E-07	-2.14E-07	-2.04E-07	-1.83E-07	-1.55E-07	-1.54E-07
-0.000243	-0.000163	-3.59E-07	-3.14E-07	-2.27E-07	-2.15E-07	-1.99E-07	-1.56E-07	-1.56E-07
-0.000176	-2.26E-07	-1.99E-07	-1.77E-07	-1.61E-07	-1.54E-07	-1.35E-07	-1.31E-07	-1.21E-07
-0.000175	-2.2E-07	-2.07E-07	-1.83E-07	-1.57E-07	-1.52E-07	-1.47E-07	-1.35E-07	-1.25E-07
-0.000175	-2.23E-07	-1.91E-07	-1.74E-07	-1.52E-07	-1.48E-07	-1.33E-07	-1.29E-07	-1.22E-07
-0.000175	-2.23E-07	-2.06E-07	-1.73E-07	-1.55E-07	-1.49E-07	-1.31E-07	-1.29E-07	-1.2E-07
-0.000176	-2.22E-07	-2E-07	-1.91E-07	-1.6E-07	-1.58E-07	-1.53E-07	-1.39E-07	-1.37E-07
-0.000176	-2.26E-07	-2.09E-07	-2E-07	-1.67E-07	-1.57E-07	-1.56E-07	-1.44E-07	-1.37E-07
-0.000175	-2.28E-07	-1.99E-07	-1.88E-07	-1.61E-07	-1.51E-07	-1.39E-07	-1.34E-07	-1.3E-07
-0.000174	-2.25E-07	-2.16E-07	-1.9E-07	-1.63E-07	-1.61E-07	-1.43E-07	-1.35E-07	-1.3E-07

15.40314	15.4723	15.48009	15.5177	15.58248	15.78126	16.1694	17.72503
15.33085	15.42323	15.47906	15.51266	15.58126	15.78253	16.30295	17.72688
15.21847	15.50756	15.53497	15.57469	15.62708	15.71606	17.19685	17.35686
15.25977	15.52489	15.55264	15.6132	15.63893	15.71365	17.17213	17.2861
15.21507	15.52566	15.54753	15.59183	15.63183	15.78027	17.22058	17.29406
15.27638	15.51665	15.5383	15.57992	15.62811	15.71091	17.18569	17.34701

15.217	15.50712	15.53816	15.57731	15.62965	15.78035	17.19944	17.28929
15.24982	15.49541	15.53264	15.57226	15.62664	15.72879	17.10036	17.35196
15.23905	15.52507	15.55323	15.61571	15.64412	15.74604	17.2101	17.28584
15.24982	15.49541	15.53264	15.57226	15.62664	15.72879	17.10036	17.35196

15.26304	15.27927	15.52185	15.56088	15.59702	15.63944	17.1571	17.62707
15.16603	15.23532	15.52467	15.56865	15.60192	15.6458	17.19622	17.64455
15.25897	15.2753	15.51941	15.55702	15.59343	15.63663	17.30316	17.63821
15.18276	15.19109	15.52142	15.56669	15.5998	15.64317	17.35099	17.61539

15.19324	15.27475	15.52507	15.56428	15.60165	15.64128	17.16191	17.61869
15.15758	15.15997	15.52512	15.57016	15.60443	15.64559	17.21315	17.6271
15.23774	15.24974	15.52174	15.56069	15.59599	15.63816	17.23408	17.66622
15.18053	15.19922	15.52369	15.57187	15.6031	15.64544	17.31303	17.64297

15.41525	15.51569	15.55388	15.61286	15.78359	17.27463	17.53879	
15.4779	15.52226	15.56313	15.61652	15.73285	17.23406	17.49416	
15.49634	15.5199	15.57165	15.61431	15.67141	17.29061	17.67432	
15.494	15.51516	15.56586	15.61176	15.66322	17.33199	17.68925	
15.45582	15.52096	15.55917	15.61573	15.74148	17.20562	17.48317	
15.47859	15.52231	15.56378	15.61861	15.74146	17.18572	17.46066	
15.49395	15.51609	15.56662	15.61146	15.67576	17.29026	17.69702	
15.50378	15.52434	15.56919	15.57418	15.61766	17.14053	17.69751	

-1.22E-07	-1.14E-07	-1.13E-07	-1.09E-07	-1.02E-07	-8.35E-08	-5.66E-08	-1.2E-08
-1.31E-07	-1.19E-07	-1.13E-07	-1.09E-07	-1.02E-07	-8.34E-08	-4.95E-08	-1.19E-08
-1.47E-07	-1.1E-07	-1.07E-07	-1.03E-07	-9.74E-08	-8.91E-08	-2.03E-08	-1.73E-08
-1.41E-07	-1.08E-07	-1.05E-07	-9.88E-08	-9.63E-08	-8.93E-08	-2.08E-08	-1.85E-08
-1.47E-07	-1.08E-07	-1.05E-07	-1.01E-07	-9.69E-08	-8.36E-08	-1.98E-08	-1.84E-08
-1.38E-07	-1.09E-07	-1.06E-07	-1.02E-07	-9.73E-08	-8.96E-08	-2.05E-08	-1.74E-08
-1.47E-07	-1.1E-07	-1.06E-07	-1.02E-07	-9.72E-08	-8.36E-08	-2.02E-08	-1.85E-08
-1.42E-07	-1.11E-07	-1.07E-07	-1.03E-07	-9.74E-08	-8.8E-08	-2.23E-08	-1.74E-08
-1.44E-07	-1.08E-07	-1.05E-07	-9.85E-08	-9.58E-08	-8.65E-08	-2E-08	-1.85E-08
-1.42E-07	-1.11E-07	-1.07E-07	-1.03E-07	-9.74E-08	-8.8E-08	-2.23E-08	-1.74E-08
-1.4E-07	-1.38E-07	-1.08E-07	-1.04E-07	-1E-07	-9.62E-08	-2.11E-08	-1.32E-08
-1.54E-07	-1.44E-07	-1.08E-07	-1.03E-07	-9.99E-08	-9.56E-08	-2.03E-08	-1.3E-08
-1.41E-07	-1.38E-07	-1.08E-07	-1.04E-07	-1.01E-07	-9.65E-08	-1.82E-08	-1.3E-08

-1.52E-07 -1.51E-07 -1.08E-07 -1.03E-07 -1E-07 -9.58E-08 -1.74E-08 -1.33E-08
-1.5E-07 -1.39E-07 -1.08E-07 -1.04E-07 -9.99E-08 -9.6E-08 -2.1E-08 -1.33E-08
-1.56E-07 -1.55E-07 -1.08E-07 -1.03E-07 -9.96E-08 -9.56E-08 -1.99E-08 -1.32E-08
-1.44E-07 -1.42E-07 -1.08E-07 -1.04E-07 -1E-07 -9.63E-08 -1.95E-08 -1.27E-08
-1.52E-07 -1.49E-07 -1.08E-07 -1.03E-07 -9.98E-08 -9.56E-08 -1.8E-08 -1.3E-08

-1.2E-07 -1.09E-07 -1.05E-07 -9.88E-08 -8.33E-08 -1.88E-08 -1.44E-08
-1.13E-07 -1.08E-07 -1.04E-07 -9.84E-08 -8.76E-08 -1.95E-08 -1.51E-08
-1.11E-07 -1.08E-07 -1.03E-07 -9.87E-08 -9.32E-08 -1.85E-08 -1.26E-08
-1.11E-07 -1.09E-07 -1.04E-07 -9.89E-08 -9.39E-08 -1.77E-08 -1.24E-08
-1.16E-07 -1.08E-07 -1.04E-07 -9.85E-08 -8.69E-08 -2.01E-08 -1.52E-08
-1.13E-07 -1.08E-07 -1.04E-07 -9.82E-08 -8.69E-08 -2.05E-08 -1.56E-08
-1.11E-07 -1.09E-07 -1.03E-07 -9.89E-08 -9.28E-08 -1.85E-08 -1.23E-08
-1.1E-07 -1.08E-07 -1.03E-07 -1.03E-07 -9.83E-08 -2.14E-08 -1.23E-08

V(gas)	V(solv)	Vzp	dVzp	Fvib
-361114	-361157.7	-360998.8	158.8827	-4.537
-361115.4	-361158.7	-360999.9	158.7964	-5.392
-361106.1	-361155.1	-360995.2	159.8238	0.350
-361105.5	-361153.9	-360994	159.9548	1.702
-361105.3	-361153.4	-360993.2	160.1397	2.783
-361103.3	-361153.9	-360993.9	159.9965	1.907
-361107	-361154.6	-360994.7	159.9157	0.989
-361106.1	-361155	-360995.2	159.8199	0.509
-361103.9	-361152.4	-360992.4	160.0211	3.482
-361106.1	-361155	-360995	160.0211	3.482
-361105.6	-361150.7	-360990.9	159.8472	5.006
-361105.5	-361150.5	-360990.8	159.6334	4.778
-361112.5	-361158.5	-360998.4	160.0893	-2.195
-361110.4	-361155.1	-360995.3	159.8806	0.881
-361105.9	-361151.7	-360992.1	159.5887	3.792
-361105.9	-361150.2	-360990.7	159.4828	4.942
-361115.4	-361159.6	-360999.8	159.8753	-3.586
-361113.2	-361156.4	-360996.7	159.712	-0.558
-361101.6	-361148.1	-360988.9	159.2393	7.036
-361101.9	-361150.3	-360990.9	159.3643	5.187
-361100.2	-361145.4	-360986.2	159.215	9.869
-361107.9	-361155.3	-360996.2	159.1915	0.033
-361105	-361151.6	-360992.5	159.1144	2.735
-361105.4	-361152.3	-360993.1	159.2074	2.940
-361111	-361156.4	-360997.3	159.0919	-1.093
-361102.4	-361147.7	-360988.6	159.0757	7.227
-361085.1				
-361115.4	-361159.6	-360999.9		-5.392

original label	should be							
cis	cis	-575.4713	-575.541		33.8376	61.1242	71.8869	100.7915
trans	trans	-575.4736	-575.5426		39.6662	54.9029	95.1427	115.1009
5ovLax	5ovLax	-575.4587	-575.5367		52.7851	73.8789	104.1325	172.8832
5ovLeq	5ovLeq	-575.4577	-575.535		51.7802	71.4273	110.5728	192.3559
5offReq	5ovReq	-575.4574	-575.5341		70.3252	92.6965	119.3439	180.8979
5offRax	5ovRax	-575.4542	-575.5348		44.4258	72.2507	117.1797	192.3518
5ovReq	5offReq	-575.4602	-575.536		59.7885	69.4494	103.8231	184.4625
5offLax	5offRax	-575.4587	-575.5366		48.2924	71.0594	105.6866	198.9512
5offLeq	5offLeq	-575.4553	-575.5326		67.4758	82.084	109.214	176.4485
	5offLax	-575.4587	-575.5366	n06 optimiz	48.2924	71.0594	105.6866	198.9512
6ovBax	6ovBax	-575.4579	-575.5299		61.4032	67.0944	136.5143	201.4596
6ovBeq	6ovBeq	-575.4578	-575.5294		39.085	60.9192	131.2948	199.7919
6ovCax	6ovCax	-575.4689	-575.5422		67.5548	98.179	150.6853	199.8572
6ovCeq	6ovCeq	-575.4656	-575.5369		63.6127	100.0908	154.2006	191.6813
6offBax	6offBax	-575.4585	-575.5313		59.3309	67.8311	131.4808	200.6829
6offBeq	6offBeq	-575.4584	-575.529		47.0914	62.9766	126.6164	198.09
6offCax	6offCax	-575.4735	-575.544		67.6754	96.0721	143.7067	208.9962
6offCeq	6offCeq	-575.47	-575.5388		62.7754	98.2099	146.863	199.1552
cis=5offL	cis=5offL	-575.4516	-575.5256	-253.1545	58.9333	87.2517	105.4609	200.0283
cis=5ovR	cis=5ovR	-575.4519	-575.5291	-260.9435	60.881	92.9946	114.5779	221.0033
cis=6offB	cis=6offB	-575.4493	-575.5214	-241.6701	70.5938	74.0575	147.434	200.7978
cis=6ovC	cis=6ovC	-575.4615	-575.5372	-223.0392	75.3634	91.9935	148.3562	163.0139
tr=5offL	tr=5ovL	-575.4569	-575.5312	-250.19	19.4575	87.3784	108.7671	184.9427
tr=5ovR	tr=5offR	-575.4577	-575.5324	-216.8143	61.3571	91.6452	109.9428	208.34
tr=6offC	tr=6offC	-575.4665	-575.5389	-224.6579	70.5903	94.4453	151.001	207.3269
tr=6ovB	tr=6ovB	-575.4528	-575.525	-261.6293	49.9448	69.4503	143.7401	194.2988
	wrong5-6	-575.4252						

129.2777	179.0036	211.1257	225.3694	258.7432	315.1182	399.9999	435.7334	468.9439
145.634	198.2832	217.1103	225.035	236.588	301.5315	357.3835	437.2314	468.157
198.8929	224.9234	228.302	276.9603	326.0858	383.7428	430.266	438.5003	476.4923
201.8186	230.8806	243.0653	283.9385	314.7625	396.4083	432.2059	439.623	499.0017
215.4491	253.534	259.9602	273.2174	312.0805	345.5292	428.2238	456.9196	484.4557
237.7261	260.1503	283.2718	287.6192	350.8378	368.5177	433.8449	457.043	481.0764
206.5625	221.5169	243.9391	272.7094	292.3291	371.6003	424.5675	454.3239	489.6967
224.1079	252.0714	265.7215	272.7451	309.1719	377.019	426.13	448.6242	472.1621
208.7597	245.053	261.438	291.9145	317.9912	369.199	429.7791	443.3963	484.8917
224.1079	252.0714	265.7215	272.7451	309.1719	377.019	426.13	448.6242	472.1621
221.9678	243.533	273.608	289.4782	327.6379	409.9958	422.0126	465.0812	487.0028
217.2015	259.3486	280.2278	302.7848	357.2093	392.7016	408.8816	459.0315	493.0734
215.8152	238.2151	293.425	311.0834	353.1196	419.7563	448.0715	470.7726	486.6671
206.368	231.361	286.8017	301.9861	361.6899	414.553	424.3989	462.7447	483.0479
228.249	244.9482	264.9842	304.6659	338.7073	384.181	435.5326	467.5699	478.1765
224.3311	247.9632	267.41	303.6517	339.9904	364.8924	425.3239	455.0985	463.307
225.8437	238.2416	277.9115	295.7141	376.9135	396.4854	432.2854	438.8723	463.4034
229.0637	236.2234	273.4197	292.3647	383.7369	396.376	428.3686	437.9772	453.0834
218.423	242.1299	245.66	269.778	298.8833	419.4397	438.7402	464.737	487.2543
229.5418	261.6855	273.7542	295.9146	309.7297	402.6828	437.6768	466.2148	499.558
225.3338	247.2558	253.9173	278.881	335.5695	428.967	445.9116	474.5539	484.4464
222.7437	235.4977	291.2814	310.7238	341.9011	420.4287	438.0731	468.532	474.8307
200.7957	232.474	240.6742	267.2731	333.8094	401.4692	437.6336	450.821	486.332
235.9855	254.0446	258.6765	290.8164	334.8031	388.8368	433.0963	455.1604	485.6267
210.5653	243.269	268.7861	299.9173	362.3723	401.8942	440.5478	453.1255	476.0138
216.8116	233.2057	271.4591	306.9219	350.3486	410.4836	439.6076	473.861	483.5592

469.442	508.124	554.363	578.1104	594.1399	614.5746	655.0872	716.3017	757.7317
481.5443	499.2936	513.6481	556.8961	577.8294	596.4896	654.2461	715.3715	767.0986
522.3514	563.3543	576.7692	610.9688	640.5886	691.4593	707.4203	746.8983	764.4566
534.6312	570.3165	589.1902	601.9863	642.2717	708.5266	747.6345	765.3647	772.3042
544.0443	576.3732	587.2285	633.8193	656.1495	721.9718	755.1595	773.6808	778.0471
523.1138	562.6323	581.3154	609.0857	651.1047	657.0002	737.7226	763.7661	768.3335
555.634	563.6855	583.1427	622.1372	654.4614	711.0707	753.2139	758.8796	774.6546
521.35	564.757	583.7843	612.3262	633.2394	642.4125	720.8508	745.8009	766.9505
550.2921	568.8677	590.818	615.1534	642.6891	729.8982	750.1367	772.3528	773.2738
521.35	564.757	583.7843	612.3262	633.2394	642.4125	720.8508	745.8009	766.9505
501.3654	528.6358	546.761	576.4623	609.6885	661.587	715.9506	741.7997	766.4702
500.9128	521.7842	524.8043	545.6223	594.4817	650.0228	703.5005	743.8488	766.2461
495.4734	508.0678	540.9144	575.234	581.8512	654.29	696.4939	712.8443	769.2649
502.4935	509.3429	527.0057	542.9133	585.4287	596.7749	697.3122	740.9736	769.3772
492.1022	514.4709	538.5757	564.5312	580.0242	646.8812	703.9508	755.6336	769.6629
491.1613	521.6305	528.514	571.9854	573.5057	631.1842	698.3306	733.2179	767.7192
503.8598	521.1862	541.1705	550.6481	578.4878	651.6926	675.9732	712.4468	768.0593
482.122	516.6697	533.407	543.6411	561.0731	593.4923	686.9461	729.0457	771.652
559.0844	567.5051	586.9025	632.8264	661.3501	679.6454	745.6144	769.1894	769.5601
553.1144	570.7744	585.97	614.2895	644.0465	684.9333	749.8316	771.7837	777.4506
503.5512	553.1768	565.6218	581.8195	633.8948	704.6573	738.7427	751.7918	773.3451
498.006	552.3954	568.1835	580.784	602.4108	684.9772	701.9596	730.4793	772.2497
547.1195	565.9192	587.5477	612.9207	671.1393	690.8821	731.9231	765.1491	772.1287
559.2892	567.0076	585.278	611.4365	622.6916	699.9899	716.0421	761.1318	774.2791
494.2806	549.9944	560.5833	566.7393	587.4042	657.1467	695.5798	722.298	771.732
490.6568	537.7104	562.0813	568.0355	598.5818	680.2466	723.4284	766.9594	771.5663

767.9273	775.8787	778.825	828.1398	843.4429	872.5821	893.8537	953.7609	958.0904
774.5841	776.4584	800.9326	832.3484	845.9482	873.5184	894.1907	956.2312	959.5062
779.3149	785.1562	806.3082	841.6901	881.5689	897.8074	930.8463	946.7129	961.8087
789.0967	804.3625	838.6553	876.1302	899.7938	936.9325	953.2768	978.1887	984.6459
787.5224	806.8612	839.0615	875.6591	894.4771	923.3333	959.1194	981.6307	996.5797
779.2593	784.4417	827.0873	876.8513	893.3103	897.7514	928.0291	959.9808	964.4396
784.6771	808.1871	837.6256	875.6615	893.3411	937.1981	961.4068	979.8217	987.4476
774.8398	781.9345	818.41	878.0749	893.0855	902.6044	925.092	947.9474	962.7879
789.1257	797.2981	836.9072	875.651	897.6757	924.0051	952.034	979.3726	987.8699
774.8398	781.9345	818.41	878.0749	893.0855	902.6044	925.092	947.9474	962.7879
780.2932	783.1074	814.9221	829.6096	870.5917	879.2981	903.788	917.8355	982.3732
772.2861	785.1533	832.6884	876.9701	896.0377	920.6495	923.2356	982.9987	1003.955
780.5714	788.5247	809.776	843.9874	876.2272	896.639	898.8397	919.8633	997.4391
781.7232	808.3651	820.5135	877.949	887.2666	894.4744	906.5239	976.6658	1001.72
779.296	786.8065	832.7701	855.8627	877.4803	904.0607	908.016	936.2892	1002.371
782.8004	785.5419	847.3249	876.5187	893.6165	910.0926	924.7321	979.8606	1003.956
781.6638	786.6557	815.9555	852.9317	878.2483	896.3197	910.8838	925.1276	997.4325
783.589	801.6012	862.1293	878.9508	889.0624	902.516	912.7309	975.8082	1002.039
779.5029	790.7113	832.2102	886.6717	887.2553	901.9582	914.3131	931.2394	971.0172
779.6119	788.4185	882.7855	885.4492	891.0035	915.3284	924.834	950.53	975.5893
778.8247	804.9527	828.5507	875.0966	880.3016	893.2044	897.5464	918.3994	985.4026
782.0507	789.5051	843.7726	876.8642	888.9298	895.508	922.708	937.532	981.0681
782.1031	791.6186	822.721	885.8814	892.6458	910.8355	925.2563	945.8572	975.2299
776.5841	778.6515	882.7164	888.5135	896.4166	916.2789	933.6469	947.4703	974.3295
781.7115	787.4303	864.0577	877.5545	892.304	896.8717	926.5332	943.0249	981.5352
777.3895	793.7385	869.0347	881.5382	897.256	899.9268	913.6797	953.4096	986.8055

964.8926	1003.643	1014.756	1035.461	1053.284	1063.39	1105.448	1114.822	1140.358
963.0466	1002.975	1035.96	1042.412	1053.789	1094.964	1105.154	1121.673	1139.965
976.8608	1010.691	1024.272	1054.852	1058.291	1081.548	1113.502	1134.801	1144.096
994.3575	1028.848	1031.925	1050.86	1055.332	1086.535	1112.59	1131.798	1151.233
1001.182	1015.148	1025.489	1027.863	1058.292	1068.022	1098.347	1119.277	1129.322
981.0493	998.6474	1025.698	1038.243	1057.879	1072.943	1081.818	1124.318	1145.413
1002.385	1022.325	1026.592	1048.346	1056.563	1071.72	1108.632	1129.517	1142.456
979.0255	998.058	1024.587	1047.634	1056.107	1072.871	1099.216	1133.942	1146.497
995.0931	1003.557	1029.924	1041.56	1052.23	1092.157	1095.507	1120.726	1128.957
979.0255	998.058	1024.587	1047.634	1056.107	1072.871	1099.216	1133.942	1146.497
1000.85	1022.476	1029.913	1032.341	1067.345	1089.229	1107.228	1144.268	1160.509
1020.474	1026.887	1035.822	1049.809	1085.854	1100.015	1134.107	1154.537	1171.829
1006.484	1031.077	1032.348	1034.792	1057.425	1086.661	1105.117	1125.081	1157.073
1014.888	1028.334	1034.999	1051.631	1061.952	1101.211	1111.078	1122.557	1164.688
1023.671	1027.284	1029.936	1034.141	1065.234	1084.649	1109.298	1134.232	1155.145
1022.995	1026.808	1035.631	1063.06	1074.421	1098.351	1124.982	1136.908	1170.111
1007.807	1022.53	1030.877	1033.333	1069.062	1107.206	1108.896	1147.526	1166.337
1018.384	1029.194	1034.731	1066.784	1081.01	1104.298	1106.271	1149.122	1165.198
989.58	1015.768	1018.563	1046.057	1056.364	1090.728	1108.617	1141.755	1156.583
1007.605	1020.664	1022.102	1050.222	1055.885	1090.182	1123.207	1150.374	1160.454
995.3971	1017.141	1022.308	1043.067	1052.661	1093.141	1110.202	1134.448	1148.622
993.9211	1020.336	1028.11	1042.059	1046.951	1097.968	1104.366	1140.81	1159.255
1008.764	1021.118	1034.543	1055.27	1085.407	1114.389	1131.574	1151.095	1178.551
1006.25	1020.982	1030.422	1055.426	1073.597	1108.16	1135.407	1149.988	1180.861
1015.607	1020.122	1024.491	1047.295	1077.866	1102.173	1130.726	1138.894	1157.919
1008.307	1023.017	1024.346	1041.208	1083.362	1112.625	1119.165	1138.322	1177.184

1172.247	1180.534	1196.072	1232.946	1276.707	1284.425	1298.18	1348.366	1369.672
1171.621	1183.995	1195.238	1229.961	1276.369	1279.952	1297.401	1346.249	1374.599
1183.004	1197.748	1209.242	1219.432	1240.877	1259.61	1273.643	1306.728	1324.892
1160.224	1183.084	1194.372	1200.016	1239.454	1247.044	1266.301	1287.32	1314.119
1162.387	1180.614	1190.23	1204.123	1241.282	1253.186	1260.855	1276.216	1304.185
1169.606	1190.575	1204.944	1217.071	1234.618	1249.6	1260.62	1294.28	1311.34
1162.5	1182.243	1194.198	1201.865	1242.47	1255.648	1276.191	1285.177	1310.451
1170.728	1196.112	1203.03	1219.575	1235.774	1250.778	1292.761	1303.57	1335.758
1157.398	1184.444	1195.715	1197.874	1231.203	1246.014	1259.328	1274.239	1306.804
1170.728	1196.112	1203.03	1219.575	1235.774	1250.778	1292.761	1303.57	1335.758
1167.988	1186.784	1208.726	1239.01	1254.99	1263.058	1285.617	1316.488	1338.462
1178.218	1199.141	1207.091	1239.315	1243.918	1257.785	1285.905	1316.268	1350.215
1178.206	1193.1	1208.64	1248.594	1254.687	1262.758	1274.855	1310.267	1328.321
1184.953	1203.904	1213.794	1227.659	1250.926	1251.579	1276.767	1319.722	1325.038
1172.067	1197.157	1213.558	1219.622	1248.4	1254.994	1282.624	1312.938	1341.536
1182.67	1204.501	1215.166	1239.503	1246.339	1252.386	1275.989	1323.367	1341.362
1184.415	1188.667	1207.226	1242.949	1255.786	1269.875	1282.794	1313.503	1339.16
1184.798	1200.664	1210.679	1236.826	1250.637	1267.431	1290.883	1318.201	1335.978
1185.581	1199.329	1225.831	1258.494	1283.089	1295.147	1305.939	1318.332	1345.881
1187.115	1201.009	1221.292	1250.552	1271.614	1285.379	1291.015	1325.32	1353.569
1178.736	1198.54	1215.208	1263.247	1273.692	1283.38	1306.934	1335.503	1348.434
1178.496	1197.124	1214.253	1263.732	1274.807	1283.776	1325.725	1340.267	1354.437
1186.709	1201.889	1220.772	1253.029	1265.135	1293.263	1317.828	1343.486	1358.223
1192.862	1202.328	1231.302	1241.829	1254.879	1290.336	1320.296	1342.718	1353.357
1179.996	1198.992	1213.264	1251.215	1268.257	1282.781	1330.155	1345.481	1365.721
1180.465	1202.175	1218.818	1249.093	1269.981	1280.85	1336.146	1349.391	1372.028

1388.042	1403.704	1408.153	1417.806	1425.091	1479.752	1482.823	1491.846	1505.964
1383.935	1402.798	1410.328	1417.575	1436.527	1462.235	1476.923	1483.193	1503.837
1342.135	1379.409	1381.767	1388.755	1413.607	1447.919	1491.947	1508.361	1509.635
1335.116	1352.26	1390.305	1398.875	1417.221	1447.051	1457.955	1489.237	1506.541
1324.379	1346.129	1384.068	1402.197	1408.719	1432.254	1464.075	1481.847	1509.363
1330.756	1359.404	1368.312	1408.307	1412.593	1436.934	1488.042	1502.593	1507.424
1330.377	1350.451	1388.728	1393.135	1410.018	1446.755	1462.14	1488.398	1508.788
1340.683	1363.253	1381.27	1393.424	1409.993	1445.664	1493.447	1503.115	1509.929
1320.61	1344.013	1377.57	1401.892	1410.903	1438.556	1459.693	1488.254	1503.568
1340.683	1363.253	1381.27	1393.424	1409.993	1445.664	1493.447	1503.115	1509.929
1355.583	1373.174	1397.781	1406.203	1437.624	1444.268	1474.148	1489.646	1511.15
1361.997	1389.603	1396.697	1422.335	1439.307	1446.466	1454.581	1476.274	1493.055
1355.862	1369.322	1399.301	1421.026	1439.07	1445.537	1476.546	1487.911	1505.948
1352.14	1382.2	1394.057	1419.843	1439.294	1442.196	1474.329	1485.835	1493.307
1348.46	1379.566	1397.913	1423.614	1438.546	1443.848	1463.097	1475.195	1491.927
1354.542	1387.775	1389.566	1420.016	1437.807	1442.939	1454.195	1474.639	1493.222
1347.252	1366.726	1391.072	1400.039	1438.309	1443.587	1473.907	1487.471	1507.929
1344.629	1376.484	1392.938	1400.601	1437.736	1443.191	1473.44	1483.991	1490.403
1375.901	1382.503	1412.868	1432.302	1487.652	1496.387	1506.89	1516.301	1520.642
1368.701	1377.093	1411.568	1431.643	1466.002	1491.133	1502.153	1511.936	1517.264
1370.907	1416.649	1430.878	1437.618	1474.12	1495.114	1502.592	1506.297	1515.028
1369.959	1413.336	1431.035	1433.091	1475.992	1481.548	1498.775	1506.038	1515.212
1373.813	1386.872	1412.803	1415.289	1444.935	1492.726	1503.367	1512.054	1515.715
1372.86	1378.158	1410.422	1412.392	1443.746	1494.637	1507.128	1509.06	1516.333
1384.291	1413.816	1423.001	1433.733	1444.099	1477.843	1503.214	1505.794	1510.952
1389.456	1411.528	1417.615	1439.634	1449.554	1479.79	1499.976	1505.532	1509.473

1508.21	1512.218	1550.723	1570.487	1614.67	1647.878	1696.743	1775.568	3078.557
1506.575	1512.012	1522.072	1550.044	1614.472	1647.57	1696.477	1790.134	3076.433
1515.066	1519.24	1525.374	1529.978	1546.792	1609.707	1668.641	1699.672	3080.141
1515.251	1516.613	1525.244	1529.76	1556.831	1630.088	1670.581	1703.442	2945.738
1513.875	1523.669	1526.207	1528.223	1566.281	1631.003	1670.894	1704.456	3055.984
1509.954	1515.605	1520.711	1527.505	1536.369	1615.984	1668.476	1700.513	3094.041
1513.194	1520.288	1527.398	1531.389	1558.442	1630.364	1671.9	1704.456	2972.157
1513.382	1518.524	1526.616	1530.717	1535.032	1611.623	1669.071	1699.755	3080.096
1514.993	1520.012	1527.556	1529.926	1567.988	1629.837	1668.661	1703.488	3054.329
1513.382	1518.524	1526.616	1530.717	1535.032	1611.623	1669.071	1699.755	3080.096
1515.808	1522.386	1529.406	1543.219	1550.797	1617.6	1628.138	1708	3083.682
1494.671	1516.027	1527.239	1534.822	1542.876	1624.65	1627.576	1713.906	2988.808
1513.484	1520.937	1537.571	1539.261	1544.778	1612.8	1628.852	1706.86	3088.564
1498.972	1516.8	1517.942	1540.207	1547.982	1620.561	1628.104	1711.953	3040.591
1506.42	1518.004	1518.316	1535.719	1539.302	1620.625	1626.769	1709.553	3059.572
1498.911	1519.191	1524.257	1536.145	1542.32	1623.995	1627.455	1712.929	2988.719
1511.267	1519.804	1525.357	1538.54	1544.684	1611.084	1628.881	1706.143	3082.654
1500.133	1515.543	1529.416	1533.408	1540.565	1620.204	1627.974	1711.725	2988.227
1532.349	1542.092	1546.92	1559.448	1577.373	1663.445	1695.493	3084.208	3111.061
1519.548	1529.722	1536.195	1539.871	1581.452	1665.639	1696.7	3090.094	3102.486
1524.665	1538.958	1553.272	1572.394	1578.108	1636.416	1696.914	3087.254	3119.941
1535.637	1540.301	1550.432	1571.843	1578.316	1641.355	1696.523	3086.926	3104.113
1519.042	1536.161	1540.215	1565.886	1579.852	1665.629	1695.876	3088.567	3110.186
1519.831	1531.942	1532.785	1552.876	1586.492	1666.456	1696.168	3084.2	3101.07
1517.251	1530.678	1543.345	1571.065	1609.555	1641.736	1696.594	3082.513	3110.878
1513.228	1521.842	1532.509	1581.402	1582.819	1635.185	1697.898	3085.285	3093.925

3093.983	3109.338	3136.392	3146.674	3179.588	3198.446	3213.458	3227.885	3229.511
3091.608	3106.336	3141.471	3145.138	3171.791	3194.403	3198.375	3217.649	3229.296
3090.012	3104.104	3113.351	3155.827	3169.93	3173.739	3174.931	3235.242	3240.96
3035.531	3086.736	3119.649	3144.425	3157.35	3179.802	3183.548	3238.858	3244.646
3076.433	3083.429	3122.616	3139.127	3161.798	3171.746	3174.222	3239.018	3243.58
3095.441	3097.822	3102.658	3164.195	3177.785	3181.277	3187.012	3237.138	3241.655
3042.3	3082.544	3121.055	3146.567	3161.178	3167.303	3174.625	3235.15	3241.625
3095.824	3098.194	3102.589	3159.269	3164.494	3175.389	3181.472	3232.706	3240.474
3074.368	3104.974	3120.823	3133.382	3150.226	3163.106	3179.225	3238.895	3244.769
3095.824	3098.194	3102.589	3159.269	3164.494	3175.389	3181.472	3232.706	3240.474
3086.28	3098.776	3104.341	3113.97	3160.951	3171.484	3184.23	3187.615	3238.222
2997.86	3031.382	3064.081	3087.613	3120.793	3163.812	3163.99	3178.447	3238.812
3099.372	3119.749	3122.405	3129.796	3159.245	3178.83	3183.38	3186.787	3237.713
3086.637	3087.952	3103.972	3112.037	3160.326	3162.747	3167.482	3169.219	3238.134
3072.323	3077.491	3097.939	3114.145	3115.874	3153.72	3169.667	3186.672	3238.895
3034.542	3063.525	3070.323	3084.938	3120.992	3145.761	3162.228	3162.726	3238.906
3091.654	3096.106	3106.143	3129.164	3163.605	3164.2	3178.952	3181.454	3238.199
3015.717	3083.575	3094.823	3111.343	3161.78	3162.217	3167.017	3170.915	3238.607
3135.531	3155.338	3165.127	3192.445	3198.247	3215.191	3215.984	3236.938	3244.905
3128.069	3160.57	3167.264	3174.77	3191.43	3208.547	3229.053	3238.308	3246.835
3139.003	3167.035	3172.421	3195.201	3201.772	3213.777	3232.902	3237.817	3248.612
3140.297	3163.124	3171.062	3198.021	3201.399	3217.449	3232.414	3236.826	3247.404
3120.202	3156.755	3159.89	3166.432	3186.176	3188.488	3224.449	3238.037	3246.01
3109.583	3147.726	3160.131	3161.644	3178.953	3188.399	3229.198	3238.319	3246.971
3123.041	3155.163	3168.763	3186.326	3194.041	3199.51	3232.402	3237.021	3247.564
3120.968	3153.292	3155.147	3180.776	3191.572	3199.544	3234.453	3238.743	3248.099

3237.358	3250.872	3292.342	3373.317	3697.857
3236.306	3250.617	3292.607	3401.178	3698.243
3249.247	3260.176	3278.739	3587.667	3621.05
3257.28	3262.649	3278.238	3582.511	3606.287
3252.823	3261.168	3292.135	3592.618	3607.948
3250.337	3260.392	3277.666	3585.34	3618.995
3249.794	3260.712	3292.153	3588.207	3606.952
3248.74	3260.085	3281.395	3567.538	3620.026
3257.805	3263.731	3284.994	3590.433	3606.233
3248.74	3260.085	3281.395	3567.538	3620.026
3246.365	3253.906	3262.754	3579.376	3677.422
3247.987	3254.928	3264.082	3587.536	3681.067
3245.56	3253.157	3262.168	3609.846	3679.746
3247.577	3254.485	3263.533	3619.825	3674.984
3247.075	3254.872	3263.139	3580.378	3675.674
3248.303	3255.45	3264.039	3591.067	3677.427
3246.326	3253.69	3262.488	3595.436	3685.59
3248.659	3255.174	3264.007	3611.906	3680.738

3257.21	3292.829	3603.894	3659.004
3257.974	3282.243	3595.431	3649.693
3257.513	3269.424	3607.228	3687.278
3256.98	3267.717	3615.861	3690.393
3257.809	3284.042	3589.497	3647.4
3258.409	3284.039	3585.345	3642.704
3256.917	3270.332	3607.154	3692.014
3249.14	3258.211	3575.919	3692.117