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Inelastic surface deformation during the M_w 7.7 2013 Balochistan earthquake

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Supplementary Material

DETAILS ON IMAGERY PROCESSING

We used COSI-Corr software (Leprince et al., 2007) to co-register and orthorectify Landsat-8 and Spot-5 images. We orthorectified pre-earthquake Spot-5 images using 30 tie points on a 30 m ASTER Global DEM. We co-registered post-earthquake images with the pre-earthquake ones using 20 tie-points. We performed the main horizontal image correlation using the free open-source MicMac software, which computes multi-image sub-pixel correlation in the spatial domain. We measured profiles in 100 m wide and 15 km long stacks with the FDSC module of MicMac (Rosu et al., 2014). Based on a pyramidal iterative processing, MicMac allows for computing the ground displacement field with a resulting pixel size equal to the input pixel size and an accuracy of 0.1 pixels. Using the same Landsat-8 images as in (Avouac et al., 2014) we derived a 15 m-pixel displacement field for the entire area (Fig. DR1) as well as a 2.5 m-pixel displacement field using a mosaic of Spot-5 images (see tables below for image ID and acquisition parameters). We corrected the large scale Landsat-8 horizontal displacement field for CCD and ramp artifacts (we performed 4 iterations on the EW and NS components for the two scenes where we masked the earthquake displacement and imposed a zero displacement condition at the edges). Residual stripes of low amplitude are visible on Fig. DR1 due to image dynamics. Spot-5 displacement field is corrected for the stripes due to satellite wobbling (Fig. 1). Using a down-sampled (to 15 m ground resolution) resulting displacement field we calculated and removed the residual ramp between Spot-5 and Landsat-8 displacement fields so that Spot-5 correlation follows the same long-wavelength signal as the Landsat-8 one. Null displacements at the edges, far from the rupture, ensure us to measure the absolute value of displacement in the hanging and footwall.

Landsat8 images acquisition date from North to South (1-2)		
Landsat8-1	10 September 2013	26 September 2013
Landsat8-2	10 September 2013	26 September 2013

SPOT5 images description from North to South (1 to 5)					
	Acquisition date	Incidence angle	Sun elevation	Sun azimuth	Tie points number
SPOT5-1a	20 November 2009	-0.772179°	40.77491°	160,58756°	30
SPOT5-1b	06 January 2014	1.027174°	33.16474°	148,45223°	20
SPOT5-2a	20 November 2009	-0.770238°	41.21401°	160,33140°	30
SPOT5-2b	06 January 2014	1.025265°	33.54183	148,18812°	20
SPOT5-3a	20 November 2009	-0.768117°	41.65244°	160,06639°	30
SPOT5-3b	06 January 2014	1.023302°	33.91790	147,92076°	20
SPOT5-4a	29 August 2013	-3.085441°	60.31211°	119,24078°	30
SPOT5-4b	01 February 2014	-2.924998°	36.86613°	141,73997°	20
SPOT5-5a	31 March 2013	1.540645°	57.50784°	129,67495°	30
SPOT5-5b	25 April 2014	1.730406°	60.37886°	111,25088°	20

DETAILS ON TERRASAR-X PROCESSING

We used a set of two pairs of images acquired by the TerraSAR-X / TanDEM-X constellation of the German Aerospace Center (DLR) to measure the line-of-sight displacement field of the earthquake. The data were acquired in the 4-beam ScanSAR mode, which allows for covering a wider swath (approx. 100 km) compared to the standard Stripmap mode (approx. 30 km). The broadening of the swath is achieved by periodically steering the beam in elevation during the acquisition. This improvement comes at the expense of azimuth resolution, which is reduced by a factor ~ 4 (approx. 8m). Nevertheless, range resolution is not impacted and can be used to derive high-resolution displacement field in the line-of-sight component using standard sub-pixel correlation. The slant range resolution of the system is 0.9 m in the near-range (incidence angle of 22°) and 1.4 m in far-range (incidence angle of 40°).

Single-look complex (SLC) products provided by DLR consist in four independent images corresponding to the four ScanSAR sub-swaths. Each sub-swath image comes as a series of “burst images” that cover azimuthally juxtaposed and slightly overlapping parts of the full image. One burst typically covers 300-400 azimuth samples, which corresponds to a length of ~ 2.5 km along the azimuth. Bursts mutually overlap on approx. 12% of this length.

The burst images are first stitched by performing an appropriate translation by an integer number of azimuth samples, using the burst timing information provided in the metadata. Then, sub-pixel correlation of the images is performed in the radar geometry using normalized amplitude cross-correlation routine of ROI_PAC (Rosen et al., 2004). Range distortions induced by orbits and topography were subtracted in order to retrieve the line-of-sight component of ground displacement related to the earthquake. Finally, displacement fields are geocoded and mosaicked.

We projected the TerraSAR-X displacement field in range using the satellite orientation (incidence angle) and combine it with the Landsat-8 horizontal displacement field to reconstruct the 3D displacement field as in (Grandin et al., 2009). This last step allowed deriving the 115-m pixel vertical displacement field shown on Fig DR2. The residual stripes are of low amplitude and do not impact uplift estimations at the fault trace.

TeraSAR-X acquisitions		
Orbit 53 – Scan 008	21 November 2011	08 December 2013
Orbit 53 – Scan 004	26 March 2010	27 November 2013

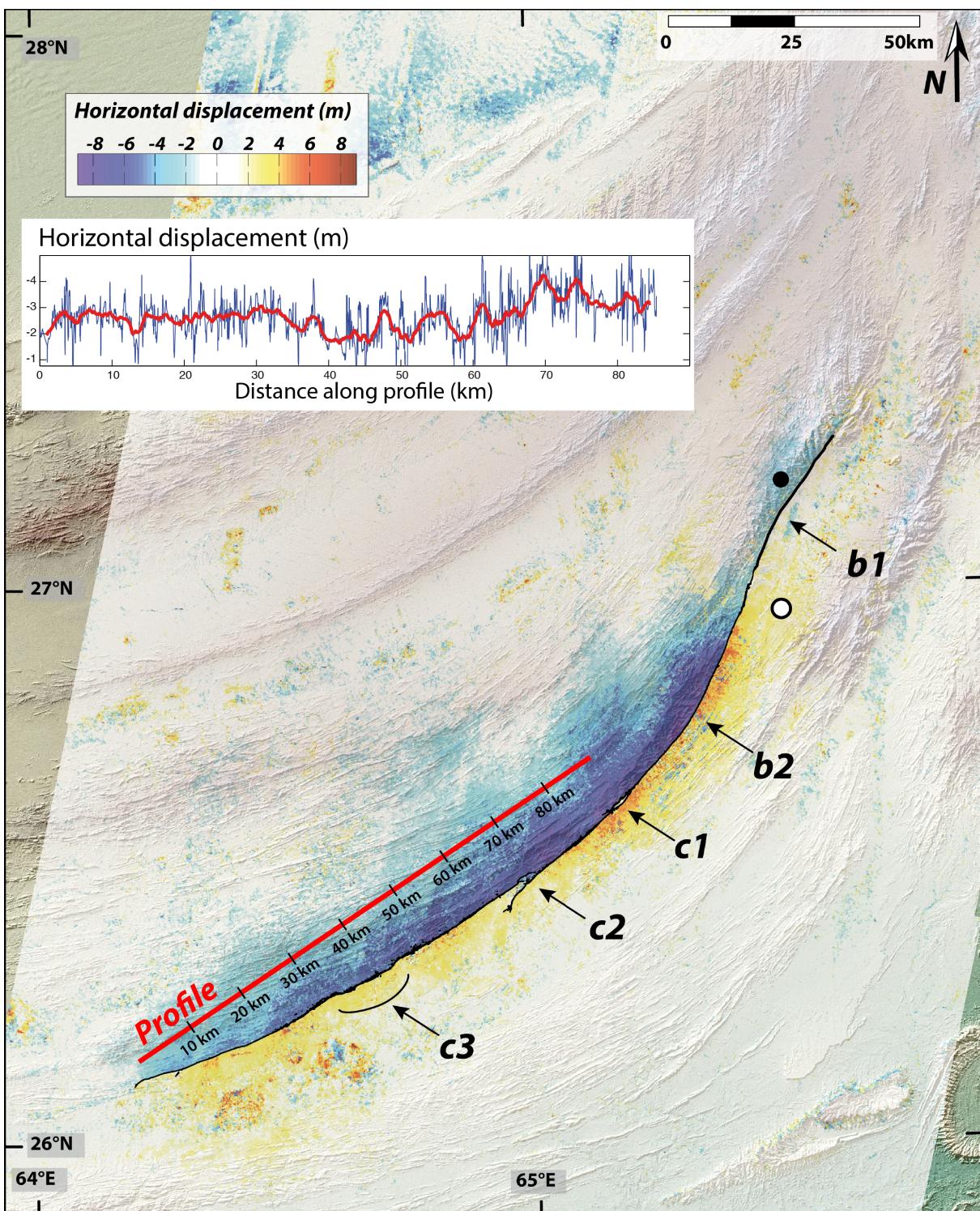


Figure DR1. Horizontal displacement field (15 m-pixel) of the Balochistan earthquake derived from 2 pairs of Landsat-8 images draped over a 30 m-pixel colored ASTER digital elevation model. The amplitude of the displacement is negative where the motion is westward and positive where the motion is eastward. The white circle represents the earthquake epicenter from USGS, and the black dot represent the main aftershock (Mw 6.8) that occurred on 2013 September 28. The displacement profile allows estimating the low values of the residual stripes.

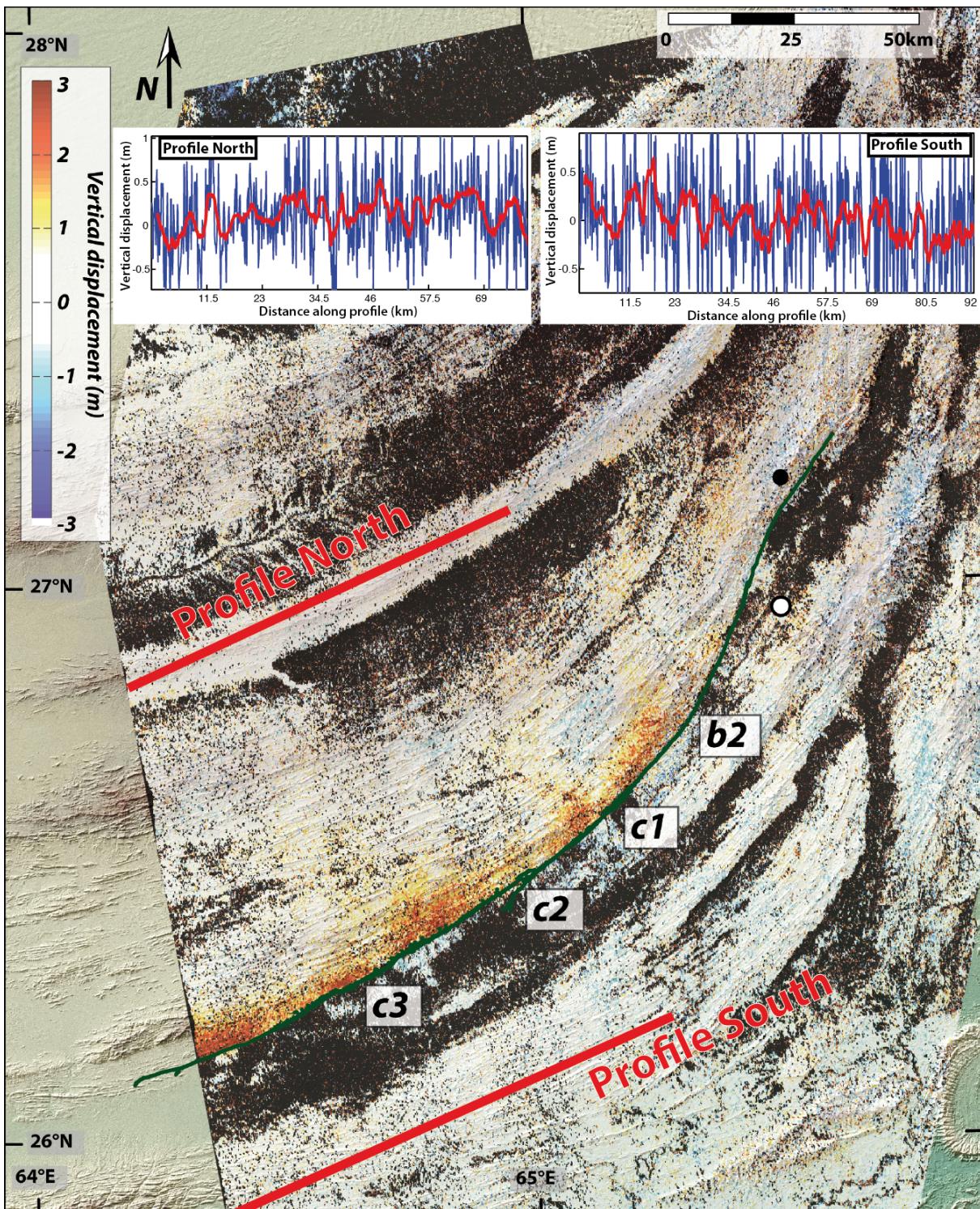


Figure DR2. Vertical displacement field (115 m-pixel) of the Balochistan earthquake derived from 2 pairs of Landsat-8 images associated with TerraSAR-X radar range correlation. The amplitude of the displacement is negative where there is subsidence and positive where there is uplift. c1-c2-c3 denote the three main kilometric geometrical complexities. The white circle represents the earthquake epicenter from USGS, and the black dot represent the main aftershock (Mw 6.8) that occurred on 2013 September 28. The displacement profiles allow estimating the low values of the residual stripes.

Table DR1: Offsets measurements

“Far-field” and “Near-field” correspond to the different measurements performed at the actual dislocation location, or ~ 1 km away, outside the damaged zone (see Fig. 2a for details).

Far-Field			Near-Field		
Distance (km)	Fault parallel (m)	Fault normal (m)	Distance (km)	Fault parallel (m)	Fault normal (m)
198.00885	0.88990998	0.37106836	198.05799	1.3678236	-0.66065419
197.92274	0.90157735	0.18232009	197.96486	1.1714942	-1.3666081
197.83309	0.98890305	0.12896875	197.88075	0.71694815	-0.22895344
197.74698	0.8683579	0.0012180358	197.79291	0.43931365	-0.15043989
197.66088	0.93048656	0.20210674	197.69987	0.79088485	-0.5911988
197.57124	0.86517453	0.44418883	197.60316	1.4919422	-0.82299942
197.48515	0.85727257	-0.10072912	197.50472	1.2202359	-0.32868525
197.39553	1.1471772	-0.01968725	197.40629	1.1854447	-0.5979225
197.30945	0.98417437	-0.045883808	197.3096	1.0455471	-0.65523183
197.22157	0.7135613	-0.15587114	197.21117	0.8404882	-0.6118654
197.13377	0.63309121	-0.14120452	197.1233	1.0530304	-0.88129318
197.0459	1.126195	0.036602125	197.03573	1.5846391	-0.78239214
196.95984	0.97607255	-0.074419819	196.94267	2.00032	-1.3641346
196.87025	0.94283128	0.0016105846	196.84608	0.41689575	-1.2651682
196.78421	1.0751474	0.44461054	196.7495	0.32602507	-1.3195825
196.69816	1.1743164	0.35067847	196.65647	0.84047741	-0.27681708
196.60859	1.1360369	0.47302586	196.5599	1.2396123	-0.034989953
196.52256	1.1436825	0.48383075	196.46334	1.4933994	0.12290221
196.43299	1.1328436	0.62206078	196.37032	1.2668051	-0.047952741
196.34697	1.1528487	0.42232373	196.27377	1.3267441	-0.21868205
196.26096	1.0016899	0.34739265	196.17904	1.4272896	-0.61750495
196.17141	1.2768655	0.38812554	196.08251	1.2454793	-0.95033193
196.08722	1.2574897	0.21383172	195.98771	1.2408173	-0.4697476
196.00122	1.1940188	0.4894703	195.893	1.383082	-0.032037556
195.9135	1.1646497	0.057069823	195.79467	1.8995086	-0.19938871
195.82751	1.2086345	0.32843569	195.70171	1.5297799	-0.10216802
195.74153	1.3249606	0.50191051	195.6034	1.2127044	-1.6128929
195.65382	1.3222091	0.72947371	195.5069	0.99930602	0.090581141
195.56785	1.295222	0.83488792	195.41214	0.9604966	-0.020350296
195.48016	1.3779356	0.51032805	195.31566	1.1473401	0.12948872
195.3942	1.2375463	0.56765163	195.21919	1.2295506	-0.073046178
195.30825	1.3723547	0.77319574	195.12272	1.2371973	-0.22523043
195.22057	1.492069	0.94686323	195.02799	1.4988891	-0.11072927
195.13463	1.5117346	0.88722366	194.93318	1.564038	-0.056180708
195.0487	1.3912938	0.90689522	194.8507	1.0258608	-0.7970556
194.96104	1.4991186	0.66400051	194.75046	1.5534149	-1.1521811
194.8733	1.366797	0.68566251	194.64995	1.5877194	-1.5927193
194.76019	1.4749383	0.12005562	194.55117	1.3883824	-1.1405423
194.64354	1.4496592	0.4226464	194.45628	1.3809304	-1.1688966
194.52862	1.555939	0.023299813	194.36322	1.2526377	-1.4230394
194.41197	1.6519823	0.1624524	194.24268	1.2702541	-1.4979275
194.29886	1.6577208	-0.027548134	194.12214	1.2489246	-1.2845013
194.18566	1.4627985	-0.13609535	194.00341	1.61253	-1.2871195
194.07056	1.6316891	0.0008670986	193.8846	1.5397376	-1.3069677
193.959	1.5290754	0.078933343	193.7675	1.4873037	-0.97858584
193.84572	1.622173	0.2206322	193.65395	1.8470618	-1.0385774
193.73062	1.6715634	0.091233551	193.53686	1.9122803	-1.6898743
193.61906	1.5956973	0.26645949	193.41978	1.4119468	-1.2457821
193.5075	1.7669661	-0.045764804	193.30623	1.5508448	-1.781997
193.39241	1.7554147	0.032381713	193.19622	1.4925654	-0.49025622
193.28085	1.8936193	-0.085040614	193.10579	1.7661287	-1.1808286
193.16929	1.8185492	-0.17761454	193.0102	2.2271712	-1.1487371
193.05419	1.9654623	-0.21719787	192.90925	2.2326725	-0.87759161
192.94264	1.9234848	-0.25257337	192.80305	2.5420868	-0.68207085
192.82754	1.8259836	-0.27453747	192.704	2.6297908	-0.47417384
192.71599	1.9185698	-0.24146347	192.61048	2.1304359	-1.1256729
192.60633	1.7832739	0.0048347116	192.51905	2.7058032	-1.3993413
192.49694	1.9447036	-0.14261526	192.42217	2.2410359	-1.278968
192.39109	1.8653586	0.0095299184	192.33383	2.651268	-0.79197013
192.28342	1.835475	-0.041491747	192.24903	2.9312353	-0.91440964
192.17585	1.7022364	-0.14243954	192.15008	2.8411691	-1.3506169
192.06818	1.747659	0.0094963014	192.04741	3.1036584	-1.142681
191.96234	1.6669171	-0.082614303	191.95208	2.8101425	-0.94580942

191.85477	1.8074172	-0.13336104	191.85857	3.3612585	-1.2403668
191.76343	1.8989614	0.33658975	191.76932	3.1347327	-0.79891956
191.67038	1.7578619	0.39971542	191.67972	3.1954174	-0.039405108
191.57905	1.9521956	0.54543608	191.58658	2.8413358	-0.4176302
191.48954	2.1133001	0.55577344	191.47748	3.2760386	-0.50804484
191.3965	2.2773369	0.48021889	191.37011	3.3016396	-0.68249762
191.30518	2.2594118	0.31505281	191.27651	3.4115295	-1.1195185
191.21387	1.9309828	0.28711015	191.18837	3.1569271	0.0067539215
191.12084	1.899686	0.34867093	191.09343	3.4584064	-0.051008344
191.02954	2.2122688	0.045695573	191.00719	3.5008001	-0.98096609
190.94006	2.0890112	0.067560762	190.91417	3.1340461	-0.89714581
190.84705	2.0953612	0.26722431	190.82822	3.2632337	-0.743379
190.75576	2.3274465	0.33411825	190.75145	4.067904	-2.0476258
190.66275	2.1783862	-0.075534835	190.66743	3.8840079	-1.4919823
190.55512	1.9576681	0.074882925	190.57099	3.9413481	-1.5010972
190.44567	2.3122437	-0.14819667	190.46183	3.7500863	-1.4365053
190.33269	2.2841237	-0.15178487	190.35955	3.9762225	-0.99090159
190.22324	2.1080263	-0.52700943	190.26062	3.1694539	-1.5597478
190.11198	1.9922811	-0.42671835	190.15088	2.9868584	-1.2809205
189.999	2.1143639	-0.20334014	190.04478	3.0648947	-2.4375153
189.88955	2.2583475	-0.30231112	189.94776	3.1347177	-3.1608913
189.7892	2.064075	0.0010532737	189.85428	3.4802499	-1.82838
189.68894	2.219738	-0.20433034	189.76061	3.7191467	-0.38635242
189.59223	2.206841	-0.22401722	189.65996	3.2460442	-0.061631069
189.49198	2.27384	0.052010387	189.56334	3.2372379	-0.074288242
189.39527	2.2824013	0.13141324	189.46692	3.2688117	-1.0604248
189.29856	2.1897225	0.34720561	189.36879	3.2210646	-0.017485738
189.1965	2.5509388	0.11099669	189.27057	3.8304272	-0.67861009
189.09616	2.6912084	0.34698617	189.18963	3.6872182	-0.34122816
188.99583	2.2811868	0.51033783	189.09839	3.7055764	-1.274948
188.89014	2.4020581	0.10892148	188.99977	3.3725004	-1.5179343
188.78981	2.2139559	0.42171222	188.89944	3.1878121	-0.94014293
188.68948	2.4063783	0.17646143	188.81295	2.8647394	-1.679469
188.58561	2.1584177	-0.013995769	188.70544	3.5658331	-1.5066937
188.48347	2.2705641	0.045737326	188.60137	3.5207934	-0.8859306
188.37961	2.3514395	-0.061182842	188.51337	3.2417855	0.71484101
188.27928	2.2524462	-0.02089468	188.42235	3.1862874	0.23335522
188.17714	2.2833622	0.070611894	188.32234	3.3330696	-1.5622467
188.07329	2.4485035	0.033805907	188.21688	3.1346366	-1.5053422
187.97298	2.5555301	0.13948745	188.13351	3.1785004	-1.4264348
187.87084	2.4169209	0.066620737	188.02945	3.3304346	-1.9750407
187.767	2.5238686	0.26681027	187.9256	2.9463942	-2.7882297
187.67033	2.5546398	0.52078372	187.83054	3.2467728	-1.8722999
187.5846	2.7906642	0.72225076	187.73538	2.944999	-1.4744204
187.49715	2.6461921	0.88840473	187.64032	3.0400443	0.0070923418
187.41325	2.53332	0.62197697	187.54902	3.1680408	0.07074225
187.32582	2.5604949	0.61482716	187.44722	3.5237808	-0.87169594
187.23282	2.7531834	0.39612764	187.34724	3.1592312	-0.39954767
187.13436	2.7779331	0.35848349	187.25434	3.2735038	-0.47704697
187.03236	2.8411715	0.18887314	187.17205	3.2707663	-1.3713549
186.93572	2.8146229	0.34794721	187.07198	3.2547231	-1.4617068
186.83726	2.8406968	0.21413697	186.97385	3.5507655	-0.68776691
186.73527	2.981462	0.40818685	186.87743	3.5470717	-0.24871576
186.63864	2.9618397	0.27263749	186.77759	3.1547499	0.17570597
186.5402	2.9436202	0.16348967	186.6813	3.6178579	0.34213623
186.43821	2.8068135	0.11225539	186.58832	3.0340548	-0.075256407
186.34159	2.8486035	0.021592446	186.49661	2.7484174	-0.4750405
186.23962	2.9002604	-0.085975841	186.39828	3.0929604	-1.1740761
186.143	2.8345976	-0.13282593	186.28729	3.055284	-1.7962124
186.04457	2.6322112	-0.34416118	186.19239	2.8125997	-1.5195429
185.9426	2.5613885	-0.54238474	186.09202	3.235708	-0.1682533
185.84599	2.5674911	-0.47144029	186.00602	3.0006471	-0.96828687
185.74939	2.7576847	-0.10519411	185.91101	2.8147304	-1.4262341
185.59715	2.7678032	-0.022640526	185.81953	2.956491	-0.9940933
185.50067	2.7948499	0.025632083	185.7178	2.9190798	-0.1068244
185.40603	2.9922576	0.094626248	185.62303	3.0191379	-0.97842485
185.30956	2.8223972	0.31362635	185.53374	3.074549	-1.2690978
185.21139	2.8238018	0.4691366	185.44445	3.1357172	-1.4372084
185.11493	2.9060638	0.322604	185.34993	2.9803996	-1.2600112
185.02031	2.9733727	0.25048378	185.26443	3.6032228	0.0031508207
184.92386	2.8762484	0.15231195	185.16078	3.5887609	-1.0091326

184.82924	2.8079438	0.092147469	185.05872	3.2545805	-0.47349948
184.7328	2.9949262	-0.27163863	184.96398	3.2813015	-0.2690531
184.63465	2.9898314	-0.098350108	184.87142	3.62466	-0.68427706
184.53822	2.7849603	-0.014992088	184.77315	3.8273177	-0.77215958
184.44362	2.5786576	-0.071380049	184.67635	3.436811	-1.8193367
184.34719	2.6650305	-0.11904575	184.58357	3.9316459	0.28588164
184.2526	2.7844415	-0.1104164	184.49067	3.8561349	-1.0062298
184.15618	2.7616258	0.011288136	184.39571	3.6031635	-1.6894146
184.05807	3.0296755	0.15840943	184.29928	3.4788985	-0.65018284
183.96166	3.1384158	0.16486178	184.20481	3.703898	-0.056883335
183.86708	3.0930111	0.17738323	184.119	3.2093849	-1.3784552
183.77068	3.1232207	0.10108636	184.02808	3.0379958	-1.5974846
183.67612	2.771513	0.18828695	183.93849	2.8405061	-1.3345289
183.57973	2.6027725	-0.024114639	183.84587	3.0372071	0.23025686
183.48164	2.6231861	-0.029184043	183.75313	3.0654645	-1.0387695
183.38525	2.7018843	-0.017224818	183.66602	3.1288784	-0.83973211
183.29071	2.6847043	-0.25831869	183.57317	3.1562977	-1.3461812
183.18701	2.8258686	-1.0885059	183.47495	2.9482102	-1.0099359
183.08147	2.602263	-1.1459343	183.38236	3.4254818	0.86040783
182.97594	2.6979597	-0.91979092	183.28428	3.6006413	-0.88339329
182.86688	2.7589059	-0.87312275	183.17901	3.5782819	-0.97490591
182.76135	2.9002562	-1.0760716	183.07885	3.4197011	-1.0503861
182.65766	2.666759	-1.1279349	182.98039	3.3019173	-0.92963898
182.55214	2.8032207	-0.89415371	182.87604	3.6244428	-0.78567624
182.44662	2.8444147	-0.94642574	182.77392	3.094501	-0.68901384
182.33194	2.6777793	-1.0894475	182.69026	2.9202883	-0.059261203
182.21372	2.6282477	-0.98981392	182.5003	3.4417939	-1.2143214
182.09904	2.5402861	-1.0486268	182.39439	2.9915414	-1.241143
181.98436	2.7081311	-1.0509677	182.38155	3.091404	-1.8409162
181.86968	2.8682494	-1.2369556	182.28951	3.3336525	-1.2973037
181.75316	2.8668337	-0.93344975	182.20834	2.9155493	-1.1157432
181.63848	2.8541803	-0.49962693	182.11251	3.0610547	-1.4973708
181.52027	2.9763379	-0.71508372	182.02074	3.1434484	-1.6094496
181.40559	2.8987992	-0.66576064	181.92006	3.3380375	-1.0675621
181.29092	3.1985455	-0.54000747	181.81925	3.0623658	-1.2786084
181.18541	2.8956332	-0.16494071	181.72054	3.4986348	-1.0249984
181.08175	2.9940195	-0.22677431	181.63283	3.74195	-0.6413492
180.97808	2.8550727	-0.45906121	181.52025	4.1142883	-0.037832618
180.87272	2.7624903	-0.50257039	181.42731	3.9029007	-0.36911631
180.76906	2.9828594	-0.29762727	181.33057	3.8901541	0.29184979
180.6654	2.8483729	-0.4066737	181.2307	3.5349865	0.39732617
180.56358	2.9277334	-0.33605319	181.13436	3.7895727	0.56304604
180.45993	2.9176753	-0.60974747	181.04667	4.2641716	0.26206076
180.35628	2.9351461	-0.69168735	180.93343	4.2520413	-1.0874662
180.25264	2.9594574	-0.81438529	180.83786	3.7549281	-1.0289642
180.14729	2.796977	-0.70825458	180.75031	3.6230302	-0.66935766
180.04365	2.8248768	-0.63390285	180.65949	4.1287041	-0.73985469
179.94001	3.0833869	-0.63070983	180.56019	4.5464106	-1.354154
179.84005	3.0981369	0.70026791	180.47421	4.8106203	-0.63647389
179.74193	3.1457353	0.74770492	180.38511	4.5995283	1.4939158
179.64197	3.1472154	0.8131004	180.29629	4.6636705	-1.0359074
179.54032	2.9302361	0.6843195	180.20339	3.7270532	-1.910728
179.44221	2.9283137	0.49493808	180.11701	3.8929076	0.10564607
179.34411	2.9433708	0.46984831	180.03007	3.4153342	-1.3703883
179.24417	2.953809	0.0059274584	179.94525	3.7181556	-0.64083815
179.14607	2.7800364	0.28950518	179.85603	4.219811	0.32151461
179.04797	2.6328335	0.068297185	179.76483	4.2794847	-0.86212564
178.94634	2.7002053	0.21904156	179.66488	3.8676286	-1.1425157
178.84826	2.8520312	-0.032575302	179.56648	3.3887439	-2.0563555
178.75017	2.7617025	-0.041855201	179.4736	3.0050445	-0.20894825
178.65025	2.6437075	-0.14429189	179.37704	3.2179823	-0.17446047
178.55218	2.7671862	-0.22530183	179.28544	3.488276	-0.72778076
178.4541	2.8807058	-0.89474559	179.19087	3.1909032	-0.31064212
178.3525	2.6598215	-0.60901761	179.09771	3.174593	-0.49626428
178.25444	2.8672962	-0.65414941	179.00301	3.1814055	-1.4608676
178.15638	2.8049963	-0.40982655	178.91325	3.1099305	-1.3345211
178.05832	2.8622999	-0.28960323	178.82179	3.1669335	-0.92394996
177.96027	2.8368497	0.0764772	178.73063	3.463798	-0.29972744
177.86038	2.8090916	-0.32524806	178.6338	2.941174	-1.3881009
177.76064	2.8862367	-0.49340212	178.52977	2.9980204	-0.5809679
177.66076	2.7843695	-0.095836416	178.442	3.2709556	-0.047177613

177.56272	2.8869438	-0.093625374	178.33729	3.1110177	-0.48616374
177.46469	2.6982358	-0.18243662	178.23074	3.2693005	-0.36915481
177.36666	2.7868996	-0.17122041	178.12605	2.8169031	-0.46923381
177.26863	2.7015333	-0.47366071	178.02136	3.1214385	-0.038866639
177.16708	2.8040452	-0.65948755	177.93111	2.7356906	0.9161275
177.06906	2.8287117	-0.54952347	177.84425	3.1118321	0.58638382
176.97289	2.8213747	-0.20236039	177.75725	2.690362	-0.13253671
176.87488	2.7230382	-0.2311767	177.65921	2.7136767	-0.14875555
176.77872	2.5975823	-0.47162262	177.55795	2.9665456	-0.50147563
176.68256	2.6288133	-0.30334228	177.45653	2.7950652	-0.52851152
176.58288	2.8316209	-0.17986736	177.36757	2.7491655	0.069772243
176.48673	2.8459718	-0.35595918	177.27108	2.604394	-1.3902527
176.39059	2.8810873	-0.6631301	177.17076	2.8480699	-0.58036369
176.29445	2.8610764	-0.072733536	177.06783	3.0432477	-0.17419654
176.19647	2.6991296	-0.092622466	176.97397	2.7281361	-0.80979061
176.10034	2.8987436	0.094584808	176.88487	2.9617186	-0.71227765
176.00068	2.8766699	0.1168649	176.78872	3.3038931	0.062404692
175.90456	2.8680224	0.0098178815	176.68903	3.0441144	-0.64777243
175.80845	2.7546725	-0.22873068	176.59304	3.0575626	-0.23277563
175.71234	2.6282589	-0.46025544	176.49858	2.9805479	-0.40230954
175.61808	2.8580806	-0.17953973	176.40229	3.1052275	-0.090297043
175.52382	2.8263402	0.074857615	176.31538	2.929049	-0.62397766
175.43142	2.7753019	-0.083238997	176.20665	2.6986294	-0.38699633
175.33734	2.7341733	-0.079516329	176.09101	2.9441915	-0.62021106
175.24495	2.958256	-0.070946544	175.97538	3.0040658	-0.70762044
175.15257	2.8237023	-0.11080319	175.85975	3.0226164	-0.4108839
175.06019	2.6910596	-0.063077308	175.74413	2.539098	0.03797704
174.96597	2.8090649	-0.1495547	175.62851	2.9082069	-0.60415024
174.8736	2.7926435	0.16246437	175.52382	2.7030239	-0.1562773
174.77956	2.8372343	0.10489297	175.4156	2.5638046	-1.1152964
174.6872	2.7856884	0.051304817	175.30739	3.2229276	-0.94355237
174.59485	2.6162152	0.047826864	175.19919	3.1895092	-1.1091793
174.50066	2.7417779	0.22438863	175.09099	2.6719062	-0.90616763
174.40832	2.7115111	0.16389984	174.98634	2.8062184	-0.96336567
174.31599	2.6470127	0.044697732	174.87815	3.0968261	-0.86271435
174.22198	2.7519546	0.1252228	174.76997	3.1657891	-1.2237532
174.12966	2.64449	0.088501647	174.6618	3.2461791	-0.62653053
174.0355	2.5392184	0.1417059	174.55364	3.5013106	-1.0922937
173.94319	2.5556004	0.12748563	174.44549	3.2553358	-1.2621984
173.85088	2.5958405	-0.019318892	174.33902	2.8732612	-0.81653339
173.75859	2.6169357	-0.11386983	174.23087	3.4724751	-0.31449276
173.66462	2.5569863	-0.058913201	174.12274	3.4579563	0.13913929
173.5575	2.4937072	-0.69236577	174.01646	2.954442	-0.71726274
173.45039	2.6024213	-0.69296527	173.91575	2.8550816	-1.189415
173.34329	2.7027807	-0.50579226	173.81504	2.8844469	-1.3931515
173.23618	2.7004948	-0.55932575	173.71788	3.48733	-0.49294326
173.12908	2.7486968	-0.355331	173.6172	2.9564531	-0.26159292
173.01844	2.824378	-0.40316626	173.52845	3.2787023	-0.27401543
172.91134	2.783967	-0.54804993	173.43078	3.1688113	-0.78215343
172.80424	2.7219448	-0.56240708	173.33375	2.7286458	-1.5458596
172.69715	2.7623758	-0.59584618	173.23856	3.0596926	-0.84605455
172.59006	2.7054679	-0.53705454	173.14038	3.10218	-0.96529597
172.48297	2.7353475	-0.58438385	173.02974	2.7667146	-1.5752594
172.37235	2.9267368	-0.40478691	172.92344	3.0732956	-1.320225
172.26526	2.6918173	-0.36823726	172.83047	3.0490842	-1.0227742
172.15817	2.6853924	-0.23960534	172.70571	3.4127474	-0.3067829
172.05109	2.7628126	-0.41359755	172.58449	2.9616506	-1.240357
171.94401	2.8407941	-0.54962343	172.45974	2.6470342	-1.2173063
171.83694	2.8965445	-0.31623539	172.33685	2.4586105	-1.8165545
171.73747	2.9484551	-0.043341659	172.21211	2.8186212	-1.0575256
171.64525	3.0515862	0.0018493067	172.08736	3.2859626	-1.0838715
171.55304	3.0548079	0.038369302	171.96448	3.293251	-0.10307515
171.46269	3.1633785	-0.26674506	171.87338	3.4003344	-0.69410276
171.37049	3.1769099	-0.20473474	171.77912	3.3857222	-0.026726186
171.27829	3.0808706	-0.23717538	171.6739	3.2308226	-0.067521393
171.18611	3.0382466	0.014942424	171.57593	3.8326867	-0.078728586
171.09225	2.8829281	0.23644248	171.47517	3.2506185	-0.038005024
171.00008	2.9822502	0.17110029	171.38296	3.0114651	-0.1733464
170.90791	2.9299245	0.29827827	171.29058	3.0860724	-0.64074838
170.8176	2.9118671	-0.026640032	171.19467	3.3234582	-1.2102158
170.72545	2.8424764	-0.26167232	171.10266	3.1096683	0.0076321512

170.6333	2.9459054	-0.34617278	171.01847	3.1476045	-0.54459971
170.53948	2.8854465	-0.29514134	170.93169	3.098588	-0.014874885
170.44734	2.9366672	0.015304852	170.84677	2.7470078	-0.57185829
170.35707	2.8695288	0.0004696799	170.75108	3.2933378	-0.11046002
170.26867	2.8844669	-0.056760136	170.65745	2.9138958	0.0033337399
170.18028	2.9166903	0.25559375	170.56177	3.066354	-0.013769224
170.09003	2.8813152	0.24004081	170.46128	3.0914242	-0.028140865
169.99812	2.9042642	0.047111511	170.35707	3.0832996	0.0069435611
169.90974	2.9053664	0.007477589	170.25641	3.0613384	-0.98789406
169.82138	3.0813303	0.022484899	170.15409	2.9350045	-0.80866766
169.73116	3.0620675	0.030932568	170.05177	3.083113	0.18471839
169.6428	2.9264193	0.19698098	169.958	2.9197617	0.2840859
169.55446	3.026011	0.19600014	169.87149	3.0377827	0.38380724
169.4626	3.0360243	0.0068694595	169.77774	3.3646891	0.14934506
169.3724	2.9630249	0.086646602	169.68585	3.0395231	-0.25355977
169.28408	3.0927417	0.29059505	169.59485	2.8140175	-0.072119579
169.19577	3.0477791	0.18795127	169.51749	2.6715946	0.65491474
169.1056	2.9923162	0.039328173	169.43808	2.7540193	-0.022316739
169.0173	2.8028769	0.14197007	169.34643	2.9477949	0.12661564
168.92548	2.867239	0.015245542	169.25438	2.6851711	0.11182301
168.8372	2.8920612	0.099907458	169.16314	2.7917004	-0.59957725
168.74892	2.8793643	-0.2882452	169.07297	2.7253969	0.016762406
168.66065	2.6802206	-0.023439638	168.98674	2.692066	0.74952412
168.57239	2.7839742	-0.27422038	168.89473	2.5508568	-0.12276746
168.48601	2.8091652	-0.29876345	168.80458	2.7000709	-0.053851698
168.3961	2.9287069	-0.50881714	168.71465	2.9122484	0.16156399
168.30974	2.9278786	-0.35852307	168.62597	2.7823684	0.017297164
168.22151	2.8858933	-0.42362255	168.53751	2.7702851	0.06633842
168.13516	2.8693473	-0.2488737	168.4476	2.8577886	-0.64325273
168.04694	2.8707395	0.0032531437	168.36475	2.9240136	0.083772183
167.95168	2.9126053	0.31765166	168.2678	2.8826764	-0.64569008
167.85332	2.8944063	0.46346194	168.17625	2.658375	0.067133777
167.75663	2.8361688	0.3325122	168.08638	2.4385846	-0.01663553
167.66182	2.8455286	0.32312712	167.98613	3.1315525	0.0076687336
167.56515	2.8160553	0.31000102	167.8859	2.8268414	0.043170806
167.46871	2.7949948	0.47299743	167.78567	2.9129455	0.0009715185
167.37768	2.7574072	0.25725362	167.68711	2.5247443	-0.015351608
167.28479	2.8770127	0.30216759	167.60477	2.6958516	0.32378468
167.19026	2.9292655	0.24733892	167.51869	2.6306114	0.21490255
167.0974	2.833889	0.18328097	167.42744	2.7256732	0.25794113
167.00454	2.7208347	0.26404145	167.33995	2.5458732	0.063554823
166.91005	2.8775826	0.36604467	167.25038	2.7812762	-0.26814559
166.81723	3.0304985	0.36884075	167.16247	2.7243094	-0.20614539
166.72629	3.0602593	0.24732091	167.07314	2.753541	-0.25692648
166.62996	3.0660405	0.30414754	166.98194	2.826786	0.0091309547
166.54092	3.0126586	0.46803164	166.8912	2.6804862	-0.011321962
166.4519	3.0670056	0.44287336	166.79838	2.6144695	0.030094296
166.35937	3.2182107	0.53842378	166.71615	2.7279599	0.21343935
166.27038	3.1453903	0.46383026	166.63349	2.5110745	0.4063957
166.1814	3.1715121	0.30384129	166.54047	2.7501397	0.53131658
166.08891	3.2352586	0.35464412	166.45475	2.7648232	0.32669419
165.99996	3.0637741	0.40426856	166.36597	2.5431337	0.47450307
165.90914	3.1365163	0.55395055	166.28403	2.8747971	0.61094064
165.81858	2.9285645	0.3731606	166.20421	2.9289021	0.50778168
165.72779	3.0777164	0.44665179	166.1136	2.9368358	0.48685861
165.6389	3.1059237	0.56173658	166.02112	3.1011915	0.25713873
165.55002	3.1812253	0.51852661	165.92866	3.1673446	0.027219564
165.45763	3.1549048	0.50941151	165.83786	2.5273614	0.16090913
165.36878	3.1372008	0.39089677	165.74848	2.9613843	-0.066682607
165.27995	3.0913022	0.31936592	165.66759	3.0348358	0.49072024
165.1876	3.1801696	0.012710542	165.58082	3.1754661	0.11096698
165.0988	3.0176897	0.29098761	165.49736	3.3884964	0.22435792
165.00624	3.0841427	0.23233065	165.40451	3.2660694	-0.092844755
164.91205	3.283637	0.022659533	165.30837	3.1772332	-0.12461044
164.81952	3.1631093	0.099301226	165.21883	3.7589381	0.39064723
164.727	3.2773242	0.23246421	165.13682	3.772243	0.3312791
164.63097	3.3163533	0.40083212	165.04778	3.6370323	0.19220042
164.53847	3.3217545	0.44461685	164.93668	3.6398463	0.0027813613
164.44599	3.4827507	0.62249291	164.84085	3.7313838	0.091037035
164.35	3.3479123	0.46733814	164.75398	3.6855998	0.093400717
164.25754	3.2841964	0.46841097	164.65959	4.089282	0.41852936

164.1651	3.3774519	0.41321808	164.57036	4.1818995	0.32667604
164.06914	3.4451308	0.67567521	164.47574	4.120635	0.69676375
163.97673	3.3401191	0.61485255	164.38679	4.1647596	0.97463751
163.88433	3.3823502	0.69443142	164.2981	4.0847549	1.1188085
163.7903	3.4811678	0.64512306	164.20779	4.0134425	0.67913926
163.69603	3.4672811	0.44134375	164.11863	4.095459	0.56302595
163.60367	3.382515	0.49774086	164.0281	4.2219529	0.86246932
163.51132	3.2618926	0.49970168	163.93947	4.1251583	0.75972521
163.41735	3.3046613	-0.024064809	163.84845	4.4922147	0.57284462
163.32313	3.3297882	0.31050396	163.75632	4.1220617	0.78593624
163.22893	3.5318732	0.48023587	163.6637	4.3222299	0.02841571
163.13311	3.5241103	0.51216733	163.56945	4.4558601	0.37132844
163.03893	3.4851828	0.22990353	163.48252	4.5611281	0.79985875
162.94476	3.4354057	0.30107349	163.39019	4.7033887	-0.2909655
162.84898	3.4014406	0.18950823	163.29571	4.9399395	-0.12593536
162.75484	3.468924	0.29732409	163.20073	4.8236151	0.024103522
162.66071	3.287652	0.40607244	163.11169	4.8257113	0.33179367
162.56496	3.3944354	0.38132542	163.02783	4.7005253	0.43428245
162.47086	3.4549384	0.2889089	162.93908	4.804657	0.43502551
162.37867	3.6461592	0.23946179	162.85034	5.124073	0.31571695
162.28107	3.5500593	0.28182727	162.75457	4.882081	0.39104533
162.1927	3.6242678	0.87314397	162.66044	4.8921118	-0.063860565
162.11004	3.5619066	0.93100548	162.57148	5.2785974	0.409262
162.02577	3.5162611	0.97781491	162.48226	5.6562014	-0.83888745
161.94315	3.5874548	0.80805594	162.38816	5.1189518	-0.049133152
161.86055	3.6247058	0.978522	162.2976	5.3639278	0.0374102
161.77634	3.5797081	0.97027326	162.21058	5.3584967	-0.076965317
161.69378	3.6292195	1.1194525	162.11463	5.2943158	0.061813563
161.61123	3.6897726	1.0184702	162.02763	4.8238916	0.35296625
161.5287	3.6029243	1.0280137	161.94092	5.0908213	0.068277858
161.44267	3.6034975	0.86782318	161.85613	5.0885143	0.1374393
161.36018	3.6815994	1.0012488	161.7681	5.2809253	0.75463068
161.26819	3.7698483	-0.56758636	161.6896	5.1446962	1.1915296
161.15936	3.940165	-0.5973534	161.61464	4.8301659	1.1356877
161.05215	3.7901149	-0.65926468	161.53808	4.9207897	1.5124915
160.94686	3.7648296	-0.58193558	161.46183	4.7081628	1.1353676
160.83805	3.7991195	-0.73108923	161.38286	4.5688787	1.0327756
160.73087	3.8346756	-0.74983293	161.29847	4.4095774	0.47582859
160.6256	3.7991152	-0.89466256	161.2143	4.9321485	0.67931426
160.51682	3.842684	-0.66919154	161.12365	4.7929907	-0.026989043
160.40966	3.8553987	-0.19123188	161.02673	5.11549	-0.43918222
160.33302	3.8583846	1.3094373	160.92497	4.9120216	-0.1730746
160.25289	3.8657684	1.4755166	160.83643	5.4150534	-0.55164492
160.1763	3.9054236	1.5404944	160.74334	5.5629392	-0.41739875
160.09973	3.9113643	1.4540406	160.64985	5.0074034	-2.0634751
160.03112	3.8176293	1.638893	160.53667	5.6263504	-0.99197978
159.96415	3.8526931	1.7162379	160.43903	5.6825681	0.72197509
159.89721	3.8705711	1.7073743	160.36077	5.6100473	0.95332146
159.8303	3.8250353	1.5869167	160.28107	5.6489296	0.63258606
159.76181	4.1050119	1.1868973	160.20475	5.4509053	0.95801765
159.68157	4.1594009	0.83209407	160.1358	5.2831669	0.50607562
159.59944	4.2678757	0.85029531	160.06336	5.5265789	0.584355
159.51571	4.204596	0.96879607	159.99124	5.3357692	0.87395251
159.43361	4.1760492	0.9495492	159.92459	4.9381719	0.92355585
159.35154	4.2946882	0.8378371	159.85827	4.9313045	1.3270841
159.26787	4.371273	0.84855598	159.79168	4.7908392	1.2800549
159.18584	4.2842546	0.56066495	159.71847	5.1389675	0.027555197
159.09998	4.4850383	0.46299314	159.63855	5.0144968	0.81399959
159.01255	4.4681778	0.55179709	159.56377	4.6565943	0.80212986
158.92481	4.4228916	0.32058084	159.48136	4.5347137	0.44034094
158.83901	4.4492788	0.38207644	159.40088	4.5052195	0.76198673
158.74971	4.3848705	0.39003953	159.31819	4.4913521	0.77933764
158.66394	4.4468355	0.40375826	159.23392	4.2471595	0.0061086416
158.57627	4.613184	-0.27776739	159.15157	4.3212914	-0.030701995
158.4851	4.4297986	-0.25733191	159.06349	4.4923959	0.7696479
158.39555	4.5044179	-0.22907875	158.97159	4.5244422	0.27117315
158.30793	4.4461594	-0.38897887	158.88993	4.6936712	0.95172793
158.21681	4.3522778	-0.016141295	158.80637	4.4300709	0.44075331
158.1273	4.3187556	-0.36881655	158.7209	4.3510942	-0.13468555
158.03781	4.5425076	-0.49560472	158.6441	4.238905	0.18173102
157.95026	4.4547286	-0.58978826	158.56636	4.0179715	0.053824931

157.8592	4.501792	-0.4867864	158.49089	4.6125302	-0.65645599
157.76976	4.5205903	-0.44618928	158.39399	4.5853424	-1.2462995
157.68225	4.5705209	-0.72914237	158.29358	4.4851608	-1.1252811
157.58932	4.5117183	-0.52092713	158.1967	4.5190825	-0.52046371
157.50185	4.6435337	-0.47054228	158.09632	4.8033109	-0.15577623
157.41247	4.688952	-0.69420767	157.99788	4.621026	0.0083910227
157.32152	4.4597301	-0.062699668	157.90104	4.9920197	-0.32840899
157.23217	4.5745611	-0.046640731	157.8007	4.8614998	-0.091086507
157.14477	4.4023342	-0.037810035	157.7039	4.4954267	-0.2474851
157.05386	4.6087155	-0.1325638	157.60551	4.6011739	-0.43539464
156.96456	4.6471481	-0.51919103	157.50522	4.564877	-0.59667695
156.87721	4.6731653	-0.6460557	157.40846	4.7686882	0.9019717
156.78443	4.7526288	-0.71767056	157.31012	4.3177748	1.5423988
156.69711	4.797924	-0.30032712	157.21338	4.5887365	-0.26820445
156.60788	4.7170296	-0.79834557	157.11315	4.8919544	-0.46014023
156.51707	4.714469	-0.2771287	157.01644	4.4012246	-0.83887684
156.42787	4.6476102	-0.11361744	156.91624	4.6412606	-0.051052481
156.34062	4.8081837	0.0094324201	156.81797	4.5739174	1.0151231
156.24987	4.8098307	-0.26334575	156.73186	4.5393515	-0.56963962
156.16072	4.9312162	-0.3379032	156.63646	4.4466028	-1.0569346
156.07352	4.9171848	-0.41359732	156.54583	4.7125835	-0.84197843
155.9844	4.8778906	-0.52573353	156.45976	4.7805362	-0.70486456
155.89759	4.8406143	0.21796486	156.36721	4.7769513	-0.85223353
155.81625	4.9740467	0.20025381	156.28468	4.9316139	-0.042664438
155.73686	4.9821014	0.024301868	156.21128	4.6785517	0.65130204
155.65399	4.9416924	0.016915321	156.14142	4.848525	1.0290238
155.57271	5.0431733	0.079067148	156.06456	5.0123973	-0.20038491
155.49339	5.0321569	0.37970257	155.98966	4.9116287	0.23604578
155.41058	5.025342	0.23010278	155.91338	4.9691753	-0.76999873
155.3313	5.0571241	0.10279633	155.82692	5.0456572	-0.43647772
155.25011	5.0786018	0.097482309	155.74787	5.28931	-0.069459081
155.16736	5.110476	-0.1826527	155.66533	4.9953647	0.85448897
155.08815	5.0699043	-0.072939068	155.59215	4.9780507	0.81460106
155.00702	4.9513807	-0.10505281	155.51353	5.019022	1.4937565
154.92629	4.9566226	-0.029677846	155.43774	5.1171489	0.7936843
154.8452	4.974493	0.21473125	155.36197	5.0479002	1.1058159
154.76608	5.0492868	0.39239311	155.2827	5.0360341	-0.84692943
154.68346	5.0008059	0.51967305	155.20431	5.5138755	-1.0290601
154.60244	4.9477682	0.37366745	155.11417	5.5643158	0.23082441
154.52339	5.113698	0.50509441	155.02878	5.5702229	0.65365338
154.44084	5.1958594	0.42145982	154.95505	5.4973531	0.95476067
154.36183	5.2722864	0.060061734	154.88208	5.6033268	0.58905143
154.28284	5.1255465	0.039510325	154.79943	5.2488642	0.020408452
154.20387	5.1481543	0.075061634	154.71718	6.3484912	0.71333039
154.12336	5.3469381	0.58868217	154.63846	5.5010209	1.1518041
154.04444	5.3384929	0.98370314	154.56216	5.2793951	0.51348096
153.96554	5.3941717	0.71700859	154.47765	5.3394279	0.81435037
153.88511	5.343071	0.72767711	154.40138	5.4464178	0.47009724
153.8082	5.3449383	0.65921414	154.32238	5.463099	0.68711442
153.72937	5.4117074	0.79840636	154.24767	5.4216652	1.7700869
153.67397	6.4129505	0.70192337	154.17845	5.5107541	1.2288628
153.5944	6.8876567	-0.24446069	154.10418	5.6363959	1.9289452
153.49767	7.1041269	-0.63201159	154.03345	6.0709472	1.1519296
153.40095	7.1017189	-0.70839834	153.95262	6.3955078	0.78154451
153.30424	6.9831858	-0.69165385	153.86791	6.3503342	-1.1104627
153.2091	7.0209417	-0.5682683	153.78673	6.3203459	-0.61730069
153.11241	6.9157047	-0.65489662	153.6966	6.3595653	-0.42267853
153.01573	7.0427876	-0.70788914	153.60844	6.3176794	-0.17671239
152.92258	7.1922894	-0.73466104	153.51678	6.7169838	0.6505248
152.82202	7.2210169	-0.65500855	153.43371	6.6151886	0.34396437
152.71951	7.2957163	-0.77047884	153.34404	6.6767507	0.245924
152.61701	7.265749	-0.90535408	153.254	6.3757925	0.74361944
152.51803	7.3282938	-1.1097419	153.16785	6.253315	-1.0215417
152.41555	7.4438677	-0.96894318	153.06883	6.1554093	-0.93355477
152.31308	7.1514125	-0.77014893	152.94911	6.2614102	-1.8835464
152.21062	7.2805743	-0.62333536	152.85201	6.4454184	-1.4876204
152.11364	7.3073945	-0.47344717	152.75999	6.3593807	-1.6734995
152.02099	7.3066688	-0.50453323	152.65548	6.9334478	-1.2108533
151.92835	7.4973688	-0.60262758	152.55609	6.8735366	-0.035904527
151.83572	7.4746637	-0.06067434	152.46182	6.9090962	0.0044516921
151.74466	7.4282012	0.0054083467	152.36831	7.218482	-0.54569691

151.65206	7.3500056	-0.26348495	152.27637	6.9907303	-0.24152231
151.55752	7.3788724	-0.21770707	152.18174	7.0792255	0.1601547
151.46845	7.279624	0.32257086	152.09805	7.1387377	0.5554238
151.37589	7.346673	0.66940033	152.01086	6.9242454	0.60245919
151.28727	7.2451935	0.28263575	151.92443	7.172842	-0.55236489
151.1967	7.244863	0.28518924	151.82748	7.2705517	-1.1902394
151.10966	7.1406121	0.45553809	151.736	7.3061447	-0.12680769
151.01912	7.341794	0.51585329	151.64577	7.2613311	0.8935172
150.92859	7.3434858	0.38672346	151.55865	7.9070339	-0.01317209
150.84005	7.4901824	0.63344192	151.47382	7.3147345	-0.18207866
150.75306	7.8149176	0.37147465	151.38126	7.3643379	1.0424562
150.66258	7.6518164	-0.27197972	151.29459	7.4764957	-0.85952383
150.57212	7.4592371	-0.47878772	151.21847	7.5369797	0.15321475
150.48363	7.6606617	-0.33171687	151.12987	7.4464917	-0.058028817
150.3967	7.8342347	-0.36049634	151.04284	7.2339811	-1.1666224
150.30628	7.8659258	-0.31526262	150.94375	7.2959528	-1.1865468
150.21588	8.1242743	-0.34017771	150.85169	7.5279427	-0.79548192
150.12899	8.0092201	-0.12829816	150.76625	7.6552258	0.43911624
150.04059	7.7844906	0.10628879	150.67815	7.8636947	-0.54356778
149.95023	8.05089	-0.12866162	150.60172	7.7024145	-0.29902923
149.86185	7.9732189	-0.15342647	150.50537	7.7638216	-1.1301718
149.77503	7.9272232	-0.33791536	150.41562	7.9234972	-0.54027456
149.68668	7.9148617	-0.059521764	150.32168	7.747508	-1.0843312
149.60033	7.8039627	0.3380338	150.23521	8.0213118	0.26857853
149.51398	8.0204926	0.4559955	150.15225	7.8314199	-0.71646446
149.43117	7.8756189	0.41734636	150.06187	7.4955912	0.0072413683
149.34486	8.1996469	0.45505774	149.97545	7.5524387	-0.8305524
149.25857	8.0889606	0.51230669	149.88553	7.9361944	0.95790958
149.1723	8.1624088	0.27139169	149.79453	8.1789131	0.055815816
149.08757	8.3961935	-0.42999244	149.70508	7.8737268	0.38070536
149.00133	8.7254705	-0.4865402	149.61412	7.8592968	0.59892964
148.91511	9.0038795	-0.89012706	149.52471	8.1187983	0.01068294
148.83241	9.0640411	-0.71003127	149.43379	7.9175801	-0.7547909
148.74623	8.794529	-0.43539754	149.34443	7.8745222	0.72592461
148.66006	9.0249386	-0.72187328	149.25355	7.8933153	1.0792994
148.5739	8.9540787	-0.2376574	149.1627	7.8527746	1.0355784
148.4893	8.9514017	-0.17794889	149.07339	7.6647992	1.1783922
148.40318	8.348772	0.094836086	148.98258	8.1986923	1.036773
148.31906	8.8679733	-0.13247746	148.89529	8.0371456	0.73294318
148.23297	8.4535055	-0.38683045	148.80777	7.970067	-0.82951659
148.14843	8.7927742	-0.52996314	148.71783	8.3240776	-1.0715648
148.06436	8.576993	0.3043842	148.62834	8.4608307	-2.392612
147.97833	8.4883432	0.087139808	148.53932	8.4140301	-0.76514298
147.89232	8.7883339	0.44501904	148.4468	8.2978392	-2.2985106
147.81577	8.8817549	0.87156391	148.35978	8.5595922	-1.2387815
147.73574	8.7890997	1.2036417	148.27368	8.6502638	-0.72372073
147.65772	8.5638618	1.0614719	148.19155	8.5281296	-0.010125637
147.57925	8.543129	1.4935259	148.10701	8.0653591	0.65546286
147.50126	8.6455259	1.3611877	148.0304	8.6597795	0.73341227
147.42132	8.6852217	1.5434134	147.9523	8.4439335	0.78286564
147.34338	8.7776089	1.5023503	147.87527	8.6745186	0.69811708
147.26697	8.6759758	1.4148405	147.79964	8.7910709	0.81018275
147.18709	8.7613611	1.2285259	147.71856	8.6876993	0.62303066
147.10922	8.8913193	1.343822	147.64054	8.6214809	-0.036661506
147.02938	8.7434883	1.3557882	147.56056	8.5622196	0.48251075
146.95306	9.0048523	1.3730723	147.48305	9.1269245	-0.13423121
146.87326	8.8508787	1.1956143	147.3981	8.8940125	-0.67447859
146.79548	8.9347744	1.3408974	147.31573	8.8012276	-1.849169
146.71572	8.9746847	1.4174567	147.23583	9.0406733	-0.10686147
146.6375	8.9913683	0.84393495	147.15842	8.7815962	-0.42468402
146.55381	9.0620804	0.96266186	147.07658	8.8746557	-0.9343695
146.47013	9.1623507	0.8113445	146.9993	8.7901468	-1.0096918
146.38799	9.0647449	0.92943656	146.914	9.2786598	-0.057458967
146.30435	9.2663355	0.72091579	146.90381	9.3522282	-0.26833558
146.22074	9.0732517	0.57917368	146.81751	9.602911	-0.20935953
146.13714	8.917037	0.92970496	146.73123	8.9937811	0.030577838
146.05507	9.2012749	0.82209295	146.64498	9.2360573	-0.071979403
145.97151	9.1879063	0.82893842	146.56328	9.2534208	-0.66129291
145.88797	9.1023693	0.67964131	146.47961	9.1359291	-0.36414325
145.80446	9.2453613	0.94555962	146.39746	9.2800636	-1.0442896
145.72246	9.2876186	1.2045754	146.30936	9.4279308	-0.44306207

145.63898	9.2530651	0.90452588	146.22574	9.4347582	-0.005305469
145.55552	9.1774998	0.8813926	146.14064	9.4324541	-0.50626361
145.47208	9.3589325	0.99101919	146.05755	9.8060951	-0.44421694
145.39015	9.2808962	1.1094388	145.97749	9.6755209	-0.016565919
145.30675	9.2919025	0.94437748	145.89295	9.5886745	-0.59964371
145.22337	9.4368544	1.0934694	145.80194	9.6581564	-1.376786
145.1375	9.2770767	0.45348588	145.71795	9.5127544	0.02144371
145.04616	9.2149076	0.42330199	145.63797	9.4456129	0.37146503
144.95683	9.2806625	0.57442367	145.55601	9.6085224	-0.89702362
144.86552	9.3366013	0.45216697	145.47557	9.5782413	-1.0377532
144.77572	9.1634636	0.18375814	145.38716	9.5344868	-0.37161118
144.68444	9.3562965	0.34050578	145.30076	9.3762941	-0.89731109
144.59518	9.3903008	0.21939659	145.20688	9.4264727	-0.33174038
144.50393	9.2797775	0.082166642	145.11303	9.5218134	-0.3633118
144.41419	9.3057556	0.5053829	145.02919	9.7763643	-0.50995231
144.32297	9.4291077	0.14445975	144.93936	9.7738428	-0.15408766
144.23377	9.5310707	0.16202724	144.85405	9.4642353	-1.0380445
144.14259	9.6806536	0.24693327	144.76774	9.8244467	0.002910316
144.05291	9.4509306	0.15725681	144.68546	10.062134	0.036459953
143.96176	9.4128513	-0.63540924	144.59521	9.9996967	-0.045447916
143.87263	9.3100166	-0.26428813	144.50998	9.7625065	-1.3617368
143.783	9.3302126	-0.20402664	144.42523	9.6506319	-2.5072889
143.69189	9.5635977	-0.065328181	144.324	9.8163061	-1.4562153
143.6008	9.409296	-0.20052385	144.23778	10.103965	0.32471982
143.50772	9.3131456	-0.11987185	144.14614	10.148882	-0.92966473
143.41815	9.4330435	-0.39145362	144.06442	9.8036861	-1.720367
143.32309	9.5486259	-0.41192931	143.97476	9.6910572	-1.4232404
143.23006	9.6339931	-0.40459245	143.88415	9.9115782	0.18224365
143.13704	9.6387119	0.13781548	143.79905	9.8873072	-0.70110548
143.04552	9.6199474	0.089106917	143.70193	9.9845943	-2.0431843
142.95052	8.9638691	-0.048494011	143.60779	9.962904	-1.5315814
142.85755	9.2687902	0.064821511	143.52623	9.8555956	0.45571738
142.7666	9.2286797	-0.25439996	143.43675	10.068942	-0.94689268
142.67715	9.6981649	0.36548355	143.34572	9.5461521	-2.1441236
142.58624	9.5591068	-0.43307483	143.24021	9.3996258	-3.0640082
142.49333	9.4530878	-0.35231239	143.13471	9.2307529	-3.1584854
142.40594	9.4657335	-0.44721937	143.04108	9.0972347	-4.078691
142.31306	9.4317436	-0.56705558	142.95253	9.9747705	-2.3280263
142.22221	9.5306015	-0.8021453	142.86601	9.6158113	-1.2426057
142.13138	9.3751354	-0.13364473	142.79104	9.934886	-0.60493493
142.04204	9.4603596	-0.14137137	142.70816	9.7725	-2.1701934
141.95124	9.2644892	-0.086226463	142.62422	9.5930099	-2.7386434
141.86046	9.4929962	-0.20041475	142.5348	9.9860287	-1.9681245
141.76768	9.6321363	0.012030333	142.44594	9.5130091	-2.83992
141.68042	9.5883236	0.0037896931	142.36313	9.4464331	-2.1914272
141.58767	9.7365923	-0.25907749	142.28423	9.7121744	-2.2341115
141.49897	9.732729	-0.10611671	142.19743	9.7235985	-1.3955662
141.40827	9.7307062	0.007846415	142.11267	9.6988544	-2.4334209
141.31906	9.7409058	-0.06219703	142.02133	9.3870392	-4.1730103
141.23042	9.7593994	-0.23152989	141.93148	9.8532009	-3.5801964
141.15408	9.7050285	-0.12455589	141.83358	9.6474915	-3.8266664
141.0684	9.7255306	-0.37502354	141.7377	9.0882664	-3.6027911
140.98475	10.044814	-0.24763916	141.64129	9.2060022	-3.8922777
140.90259	9.7771921	-0.24760301	141.55443	9.975831	-1.8236517
140.81696	9.706171	-0.46137667	141.47125	9.901247	0.24406567
140.73134	9.5706539	-0.50407326	141.39377	10.003103	0.11433697
140.64922	9.4536743	-0.65055621	141.3132	9.3055353	-1.6083953
140.56566	9.7521353	-0.42413425	141.22971	9.4021034	-3.0720124
140.48009	9.9155321	-0.35537609	141.14257	10.714376	-3.2725549
140.39453	9.9404583	-0.31376779	140.05029	9.4258175	-2.8217189
140.31248	9.862134	-0.18488562	140.95419	9.7877645	-2.4459376
140.22898	9.9190121	-0.17070076	140.85112	9.5249596	-2.2683363
140.14752	10.017671	-0.040779978	140.74808	9.41292	-1.9706099
140.06754	9.9294443	-0.14253643	140.6599	9.5922022	-2.2833922
139.98409	9.9733515	-0.22872318	140.56824	9.4910469	-1.8748993
139.90268	9.7380581	-0.36869985	140.47368	9.9275665	-1.5175469
139.82275	9.6993389	-0.49480927	140.39217	10.161871	-1.1676502
139.74138	9.8580389	-0.37460077	140.30225	9.8351641	-1.9708828
139.658	9.8514633	-0.56608194	140.21787	9.9768047	-1.5001721
139.57666	9.6802759	-0.53783143	140.12507	9.9595871	-3.3261337
139.4968	9.7639198	-0.28289807	140.03319	9.9628744	-1.5343139

139.4155	9.9403505	-0.087206125	139.94538	10.253655	-0.046629131
139.33218	9.7637167	0.24587014	139.86107	10.038548	-2.0971022
139.25237	9.7664061	0.24023211	139.77622	10.218552	-0.26513773
139.17112	9.946312	0.084462881	139.69107	10.506989	-1.0187755
139.08786	9.8805418	-0.10128659	139.60625	10.038881	-1.7840192
139.00665	9.8491716	-0.12961224	139.51188	10.613408	-2.1923432
138.9269	9.9290667	0.1033074	139.43116	10.633278	-1.6450827
138.84572	9.7620964	-0.20160402	139.34292	10.534018	-1.9987589
138.76456	9.9040499	-0.40793899	139.25556	10.242981	-2.1166048
138.68487	9.8883858	-0.38859293	139.1749	10.358389	-1.2835476
138.60374	10.225827	-0.27542371	139.08178	10.101995	-1.9147243
138.52264	10.072906	-0.32347497	138.9852	10.478759	-2.3201332
138.43952	10.070561	0.44757438	138.90111	10.472795	-1.6368134
138.36193	10.167381	0.62409598	138.81764	10.506486	-0.50995076
138.27884	10.100337	0.55484068	138.73622	10.378326	-0.88921541
138.1978	10.007166	0.49302614	138.65076	10.285463	-0.77949482
138.11823	10.030115	0.70929152	138.5755	10.27339	-0.8559739
138.03723	10.024021	0.72194231	138.48831	10.541315	-2.7748146
137.95218	10.039519	0.46291703	138.39621	10.335603	-2.441339
137.86713	10.281062	-0.58115727	138.29862	10.356562	-2.2766047
137.78151	10.248823	-0.25578949	138.21207	10.49252	-1.7629459
137.69446	10.229075	-0.1633231	138.11883	10.361411	-1.6905116
137.60947	10.075624	-0.35440397	138.0268	10.941163	-0.94944477
137.52388	9.9855127	-0.33321339	137.93274	10.608377	-2.2228105
137.43892	10.033892	-0.76196527	137.83871	10.761703	-1.9630736
137.35194	9.7767143	-0.59212881	137.7484	10.972725	-1.6268618
137.26496	9.793992	-0.91819859	137.6556	10.961687	-0.5011338
137.18149	9.9989719	-0.64951956	137.56834	10.685682	-1.6432436
137.09455	9.5870247	-1.32315	137.47701	10.932043	-0.68552566
137.00762	10.143354	-1.2314304	137.3941	10.923683	-1.208986
136.92419	9.9859991	-1.1355118	137.30364	10.974258	-0.56581163
136.8373	9.9922066	-0.27428979	137.21607	10.782724	-1.7671857
136.75042	9.6699314	-0.22212851	137.11869	10.949884	-1.4115216
136.66356	9.6286449	-0.42416593	137.03667	11.132289	-1.3920606
136.58019	9.8932238	-0.56954348	136.94832	11.098241	-0.65063834
136.49336	9.8448286	-1.0047755	136.85303	10.988756	-1.5135746
136.4045	9.8599625	-0.88893956	136.76553	11.043834	-0.5724448
136.31913	9.7608528	-1.016588	136.6799	10.822657	0.080963031
136.2303	9.7638922	-0.7826165	136.59919	10.852804	0.083611719
136.14148	9.8521862	-0.64664042	136.50621	10.963564	-2.2511492
136.05268	9.7178345	-0.93486738	136.41672	10.918527	-1.5896599
135.96737	9.7784433	-1.0055139	136.32992	11.048103	-0.39117649
135.8786	9.8174629	-0.98762167	136.24785	10.888105	-0.50259846
135.78985	9.6078358	-0.98369074	136.15903	11.072191	-1.7452891
135.70253	9.744503	-0.87634617	136.07245	11.173166	-0.82991821
135.6138	9.8733759	-0.75722104	135.99123	10.883693	-0.68439811
135.52715	9.660758	-0.20400223	135.89471	10.854233	-0.94293141
135.43845	9.7694063	-0.052783921	135.80106	10.898094	0.040439129
135.3512	9.8294077	-0.03904976	135.71926	11.028176	-1.5315462
135.26253	9.9246368	0.041329876	135.63338	11.484339	-1.1519321
135.17594	10.057789	-0.48057824	135.55366	11.592794	-0.086899713
135.08872	9.9964132	-0.14559841	135.46844	11.602867	-1.0597517
135.00011	10.046198	-0.16112494	135.3845	10.863558	1.5373099
134.91151	10.020817	0.017393202	135.29852	10.951523	1.3493441
134.82292	9.9712658	0.028440297	135.20782	11.114423	-1.1576189
134.73576	9.7624741	0.12827134	135.12202	11.140968	-1.7235062
134.64721	9.8683901	0.38614506	135.03007	11.053505	-1.0623536
134.55661	9.7532282	0.12997662	134.93735	11.037556	-0.50398064
134.4695	10.034365	0.11747809	134.8557	10.987534	0.79888856
134.38099	10.306305	0.059447289	134.77266	10.694194	-1.4702802
134.2925	9.9377308	0.10802457	134.68345	11.053022	0.54153246
134.20402	9.9053965	0.51933599	134.60326	10.902263	0.78400874
134.11697	10.0791	0.18270732	134.51114	10.848234	-1.037533
134.02646	9.9895716	0.16274135	134.41504	10.891318	0.33773696
133.93803	9.8140011	0.37208271	134.31743	11.007286	0.89620233
133.85103	10.302227	0.44380784	134.22126	10.885582	-0.9942705
133.76263	10.095721	0.40920752	134.1315	11.012834	-0.95764917
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133.58588	10.153204	0.66606665	133.9609	10.815164	0.91506523
133.49893	10.103962	0.3123489	133.87952	10.966223	-0.46968341
133.40853	10.045229	0.77772903	133.7974	10.976577	-0.60611022

133.32021	10.183489	0.0038096756	133.70629	11.091824	-0.50928426
133.22918	10.310483	-0.021314025	133.60892	11.301116	-1.1567225
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132.76036	10.313663	-0.077243924	133.15276	11.214771	-1.695774
132.66801	10.39446	-0.044971332	133.06456	11.306105	-1.1872828
132.57708	10.432864	-0.077113733	132.97356	11.159458	-1.0387983
132.48269	10.390898	0.061852276	132.88958	12.005768	-1.7485516
132.38831	10.374661	0.30003443	132.79661	12.155229	-3.5449255
132.29742	10.434603	0.56171978	132.72018	11.893759	-1.2948143
132.20307	10.489202	0.51227188	132.62923	11.499493	-0.050908387
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132.01649	10.417303	0.7401467	132.44933	11.111979	-0.013775945
131.92564	10.497324	0.81969208	132.35419	11.219779	1.8291677
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131.73707	10.486668	0.90193015	132.17585	11.272728	-1.8464584
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131.55202	10.607462	0.55098933	131.99415	11.273331	-1.3536007
131.45986	10.664404	0.5990566	131.89986	11.734585	-0.015073776
131.36564	10.763117	0.74750924	131.81665	11.548965	-1.3208542
131.27489	10.794315	0.77818274	131.72585	11.666741	-1.6041143
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130.36811	10.91822	0.25824678	130.88577	10.948881	-2.2214224
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130.09145	10.644836	0.47548574	130.61998	10.969594	0.043879509
129.99742	10.782755	0.5308255	130.53002	11.018191	0.063571453
129.90685	10.821059	0.56555516	130.44283	10.861983	0.79182732
129.79409	10.805531	0.80801982	130.34805	10.851491	-0.28964019
129.69452	10.937658	0.64930713	130.25535	10.814837	-0.51574731
129.6005	10.325938	0.50759637	130.17166	10.847076	-0.39911771
129.50304	10.547603	0.61759055	130.08798	10.944803	-0.62970424
129.4035	10.959427	0.56260359	130.00152	10.91567	-2.3900571
129.30951	10.588524	0.63398772	129.92547	10.853498	0.70951962
129.21207	10.549677	0.95723474	129.84668	10.703853	2.3406963
129.11602	10.448793	0.61768472	129.84325	10.622618	-1.8699602
129.0186	10.536067	0.90058577	129.75408	10.791698	-1.7863837
128.92119	10.528135	0.65393811	129.66628	10.994185	-2.8074255
128.82516	10.315545	0.79629743	129.57365	10.842285	-2.2275443
128.72777	10.201212	1.1040344	129.48238	11.03677	-1.9008404
128.63177	10.536722	1.0460155	129.38701	11.394985	-0.95260918
128.53439	10.449331	0.68518513	129.28957	11.084788	-1.006814
128.43703	10.336928	1.0556245	129.19285	11.238667	-0.55860901
128.34105	10.43063	1.0096326	129.09748	11.579103	-0.43287039
128.24371	10.69935	1.315648	129.00977	11.447121	0.93552649
128.14638	10.671868	1.4546115	128.92132	11.034045	-0.010070562
128.05043	10.725275	1.4698324	128.82322	11.070997	-0.87606454
127.94894	10.73988	-0.082146943	128.73758	11.316698	0.69367516
127.8384	10.499395	-0.2280748	128.65326	11.528109	-1.6250999
127.72441	10.817135	0.034006089	128.55579	11.716537	-1.7894548
127.61043	10.647337	-0.071738929	128.45974	11.495428	-1.0319239
127.49991	10.538343	0.050890788	128.37281	11.321692	2.0398324
127.38802	10.527656	0.058042318	128.28517	11.436634	2.3289094
127.27405	10.571966	-0.34627768	128.19129	11.692685	1.0016292
127.16354	10.786627	-0.40668353	128.1001	11.896594	0.59506953
127.04958	10.706053	-0.43400758	128.00415	11.671125	0.49380994
126.93908	10.692013	-0.37496826	127.90886	11.60973	-0.16475368
126.82514	10.62175	-0.74553788	127.8107	11.510401	-1.9070287
126.71256	10.26144	-0.24426362	127.71326	11.641783	0.92571902
126.60343	10.657961	-0.052857142	127.62007	11.453878	-1.7896495
126.49086	10.597923	0.48723713	127.49775	11.625803	-1.4989225
126.38875	10.416014	1.2768819	127.40032	11.797608	-1.3423473

126.29363	10.568981	1.5678314	127.30642	11.401243	-2.1476912
126.19644	10.589456	1.5519731	127.21454	11.448415	0.88308358
126.10271	10.436705	1.7626685	127.11921	11.808676	-1.5829661
126.00763	10.489116	1.980846	127.03079	11.611179	0.75511515
125.91046	10.398788	2.1333184	126.93137	11.770776	-0.15331721
125.81676	10.57182	1.9874308	126.83678	11.691826	-1.673245
125.72171	10.583164	1.8340006	126.74636	11.677094	-0.079930067
125.62803	10.554535	2.0511875	126.64759	11.541313	-2.4876399
125.53301	10.524369	1.9934784	126.55574	11.893034	-1.3820553
125.4359	10.55535	1.7280132	126.46951	11.627689	0.78276378
125.34225	10.473404	1.7786808	126.3793	11.443949	1.5103854
125.24725	10.452063	1.9006475	126.28774	11.578159	1.2145233
125.15018	10.52781	1.968684	126.19673	11.403141	-0.032394171
125.05656	10.35121	1.8674395	126.10374	11.279227	0.61416829
124.9595	10.634326	1.4186482	126.01839	11.417469	-0.063331962
124.85333	10.755055	0.98283243	125.9226	11.667107	-0.66241038
124.74581	10.758618	1.0517428	125.8267	11.335258	0.73001099
124.63621	10.909574	0.88718688	125.73919	11.584674	0.56446838
124.53006	10.896324	0.84486723	125.6476	11.403219	-1.1260406
124.42046	10.76	0.75050282	125.54743	11.428682	-1.0552652
124.31433	10.644814	0.69405305	125.45722	11.371565	-0.68315756
124.20475	10.620176	0.61918664	125.36775	10.924971	1.2796909
124.09517	10.710684	0.71948099	125.2783	11.031132	1.4561205
123.99115	10.698081	0.87267148	125.18479	10.982353	0.46485281
123.88159	10.603153	1.0024877	125.0924	11.078798	-0.03378129
123.77204	10.579567	1.0444685	125.00224	11.435966	-0.72052538
123.66594	10.631726	1.113291	124.91196	11.071527	-0.95198536
123.5564	10.580476	1.0037565	124.80789	11.260702	-0.39164305
123.45032	10.437951	1.0186338	124.70024	11.489904	-1.0283519
123.34289	10.454687	1.2170947	124.60037	11.637207	0.0056157112
123.23337	10.52561	1.1934863	124.50592	11.430879	-0.51173407
123.12731	10.488338	1.2906837	124.41417	11.558257	-0.17720234
123.0178	10.549067	1.1762238	124.31777	11.427507	0.79154861
122.91175	10.69192	1.408062	124.23172	11.465392	0.0032128096
122.80436	10.71328	1.2087889	124.13534	11.613357	0.51943761
122.69698	10.624769	1.2591876	124.04091	11.161195	-0.62639976
122.59305	10.728687	1.2390523	123.95533	11.437805	-0.28834403
122.48358	10.559012	1.3639638	123.86586	11.648478	-0.48839664
122.37622	10.644991	1.293155	123.77354	11.669754	-0.85993361
122.27231	10.537476	1.28469	123.67763	11.598218	-0.55458939
122.16286	10.39902	1.1249254	123.58968	11.697657	1.2632053
122.05897	10.662521	1.1731274	123.49528	11.658325	-0.89332217
121.95164	10.570854	1.1939476	123.40567	11.884167	-0.60030007
121.84221	10.563522	1.1209576	123.31263	11.42086	-2.2656505
121.73834	10.566307	1.2331316	123.21523	11.438883	-0.94658756
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121.52373	9.8983727	1.2140095	123.02184	11.162512	-0.37208408
121.41778	10.188825	1.0739256	122.93587	11.268414	1.1014946
121.31049	10.154729	1.0035563	122.84663	11.174242	3.437458
121.20455	10.317467	0.81473565	122.76447	11.124004	1.6289738
121.09096	10.295327	0.73918909	122.66609	11.535791	-0.41172767
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120.64489	10.606329	0.76768428	122.28029	11.20426	-0.28520453
120.53133	10.473972	0.52382189	122.18177	11.370658	1.7426661
120.41778	10.251812	0.71412575	122.09203	11.076687	0.74671125
120.30767	10.227011	0.70405805	121.99505	10.795851	1.2308222
120.19413	10.171062	0.54248506	121.90074	10.966824	0.61431122
120.08193	9.8105927	0.47895303	121.79268	10.703617	-1.3232681
119.97184	10.063547	0.61555779	121.65821	10.826393	-0.17344511
119.85832	10.067692	0.81823468	121.56469	10.699154	1.6951847
119.74824	10.272563	0.96464455	121.47118	10.944037	-2.2595966
119.64528	10.034375	1.3314559	121.37937	10.790023	-1.6573414
119.54022	10.143006	1.4676896	121.27092	10.459267	-1.5933807
119.44072	10.34529	1.5694406	121.17244	10.599127	1.4144238
119.33567	10.20515	1.3971974	121.07915	10.828524	0.19723201
119.23275	10.17038	1.3092885	120.97723	10.883751	-1.4062408
119.13116	10.125088	1.3962451	120.87855	10.413208	-1.886112
119.02825	9.9857006	1.4413054	120.78753	10.552534	-1.5896727
118.92668	10.072342	1.4072596	120.70206	10.629103	0.012144327

118.8238	10.349782	1.3801891	120.61202	10.651766	0.68919539
118.72092	10.363835	1.1823542	120.50956	10.541729	0.54675508
118.62149	10.036691	1.3954852	120.41499	10.909197	1.2662678
118.52074	10.161835	1.3740423	120.31698	10.761604	-1.0036224
118.42345	10.067665	1.2555676	120.22276	10.675295	-2.1588955
118.32061	9.8284416	1.2921321	120.12621	10.340625	-3.7798729
118.2199	10.096632	1.2936212	120.02545	10.768291	-3.0269046
118.12051	9.9175463	1.2952011	119.93078	10.781965	-1.4846561
118.01982	10.146994	1.3093963	119.83158	10.638847	-1.7318556
117.91914	9.9616108	1.44631	119.73682	10.831003	2.0378056
117.8219	10.188248	1.5552289	119.64441	10.748428	1.6435238
117.72547	10.202927	1.6981131	119.55202	10.699036	2.0058811
117.63249	10.269502	1.8111835	119.45542	10.885353	2.3819699
117.53609	10.470866	1.8122106	119.35991	10.926167	1.6588755
117.43758	10.2068	1.9621465	119.25832	10.841949	-1.2750146
117.34463	10.014261	1.8680832	119.15728	11.034262	-3.0220394
117.24826	9.8649864	1.6612475	119.06101	11.085289	-0.01211679
117.15191	10.132776	1.5216879	118.95945	10.836848	-1.778221
117.059	10.169574	1.3146775	118.8624	10.701839	-2.2759967
116.96267	10.02242	1.3280522	118.77116	11.0446	0.0042846203
116.86766	10.101213	1.3619661	118.6569	10.597097	0.81589139
115.97686	10.093003	1.7351747	118.56276	10.879189	0.87315357
115.9009	10.084057	-1.5104923	118.46203	11.07454	-2.8426583
115.8189	10.188506	-1.5332124	118.36924	10.750896	-2.1950502
115.73021	10.176924	-1.5319448	118.27646	10.756382	-2.2362545
115.64006	10.400779	-1.3008429	118.18421	10.903413	-0.94956476
115.55562	10.475519	-1.5901301	118.08986	10.839544	0.28119206
115.47037	10.588448	-1.5216353	117.99631	10.611716	-0.71010149
115.38855	10.516695	-1.6725657	117.90515	10.751747	-1.6769125
115.20352	10.564296	-2.1113324	117.80871	10.674966	0.14132535
115.10847	10.680771	-1.635756	117.72208	10.620876	-0.018067896
114.94108	10.485999	-1.5773585	117.62012	10.699118	-0.95818079
114.84672	10.597317	0.75654793	117.52767	10.662502	-1.3322845
114.76856	10.653222	0.56941873	117.43655	10.586791	-1.9806464
114.68486	10.708994	0.24778646	117.34309	10.580153	0.62082243
114.5858	10.534016	-0.94146293	117.25389	10.539566	0.39403713
114.47222	10.764289	-0.62862992	117.16157	10.919962	0.0053369999
114.36207	10.657516	-0.77841979	117.06686	10.672962	-1.6984124
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114.02826	10.43299	-0.57932091	116.77965	10.716734	-2.8643742
113.91686	10.403956	-0.68373269	116.69535	9.788763	-4.2944508
113.80677	10.488587	-0.22442079	116.60025	9.9374685	-3.5362518
113.69668	10.674777	-1.3976271	116.5099	10.196135	-3.6093454
113.58318	10.442925	-1.1775687	116.42248	10.968103	-3.7037723
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113.36306	10.449799	-1.3148942	116.25009	11.477995	-1.9484805
113.24959	10.522799	-0.9507584	116.16692	11.168836	-1.6834483
113.13955	10.748799	-1.0044101	116.08945	10.240179	1.9304047
113.02953	10.835469	-1.2160182	116.0213	10.300741	2.3984046
112.91822	10.6103	-0.79990113	115.95366	10.6389	-0.42060542
112.80822	10.746818	-0.96048105	115.8563	10.981432	-1.2507396
112.69822	10.763865	-1.6155534	115.7405	11.201255	-2.1576188
112.58482	10.57968	-0.77680862	115.61915	10.782653	-2.7176142
112.47485	10.904491	-0.5877763	115.49781	10.739047	-1.8090388
112.36146	10.897596	-0.27140781	115.3799	11.247487	-1.5361543
112.25151	10.917309	-0.20153812	115.26071	11.884438	-1.5319508
112.14157	10.928097	-0.20930156	115.14707	11.408051	-1.7564846
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111.58731	10.801164	0.044853985	114.56452	11.724302	-3.4262388
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111.36415	10.757482	0.087086916	114.33184	11.408108	-2.7845259
111.25429	10.679543	0.16101062	114.21828	10.89344	-2.3563261
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110.81027	10.553173	0.43472373	113.74965	10.821217	-2.7405405
110.70047	10.634369	0.63846892	113.63615	11.102234	-1.8440857

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102.97577	10.874652	0.32549831	105.8391	11.820215	1.2500737
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95.986642	9.8158731	0.052403331	100.14549	10.375181	-4.5810862
95.875315	9.815279	-0.065537572	100.0343	10.596859	-4.7510424
95.767382	9.5661993	-0.032058358	99.92651	10.583954	-6.0885096
95.656065	9.7527599	0.079473555	99.815327	10.308363	-7.1059957
95.548142	9.8786831	0.33258086	99.707541	10.7279213	

95.435625	9.7584524	0.059115887	99.596364	11.311382	-7.4741807
95.326503	9.7453346	0.16580456	99.487359	11.359919	-6.0805125
95.213999	10.018246	-0.02876842	99.376187	11.051134	-6.1988959
95.101502	10.111428	-0.099917531	99.268411	10.982137	-7.2737865
94.991189	10.235674	0.0064712763	99.255388	10.904693	-4.6080647
94.878705	9.9255133	-0.050029039	99.135261	11.099907	-4.9794693
94.77082	9.8726053	-0.47881269	99.012967	11.222065	-6.1877384
94.660759	10.026533	-0.56854218	98.892847	11.044815	-4.0369978
94.555295	9.8848648	-0.44721296	98.770559	11.043776	-5.3692498
94.445243	9.7747173	-0.51484621	98.650444	10.842939	-5.0482388
94.339785	9.8758154	-0.3780272	98.528161	11.452381	-7.0252318
94.229741	10.079668	0.0092818737	98.408053	9.9520397	-5.9844856
94.124518	9.9902773	-1.1735713	98.285776	11.643036	-4.7713909
94.022681	9.8497229	-0.95327824	98.165673	11.824357	-6.6409769
93.91746	9.7501621	-0.87746799	98.042182	11.070881	-5.0832262
93.815626	9.4263668	-0.9027003	97.923305	11.476901	-3.9773333
93.7068	9.7060986	0.0085334182	97.803212	11.547356	-4.7828722
93.598956	9.939909	-0.05745846	97.680949	11.341831	-4.522418
93.487734	9.8078976	0.12568888	97.560862	11.567066	-7.9711943
93.376517	9.7258358	0.16112471	97.444432	10.567769	-4.3843393
93.268689	9.8693581	0.0099716187	97.345486	10.871691	-4.452929
93.157483	10.031569	0.081571281	97.25237	10.829483	-4.8299689
93.049666	10.110199	0.1747795	97.156025	11.026887	-2.9290774
92.938471	10.03636	0.13869983	97.056554	10.607648	-4.5652595
92.830664	9.8365479	0.27631587	96.963078	11.111389	3.0058341
92.71948	9.8586388	0.56671536	96.891522	11.689602	-1.0027409
92.611684	9.7329845	0.8443172	96.79128	11.028117	-2.4555752
92.500511	9.6205654	0.85578603	96.697568	10.807539	-3.7851925
92.389345	9.9571285	0.93678832	96.601238	10.472653	-2.8766079
92.281564	9.9643059	1.1512623	96.509965	10.632888	0.19343525
92.169213	9.9454784	0.86086929	96.420618	10.606807	-0.69730377
92.060249	9.8751345	1.0382054	96.325715	10.236578	-1.917568
91.947912	9.7632847	1.0783625	96.231571	9.9423151	-3.3882115
91.837767	10.021354	0.94966942	96.149023	10.38015	-1.4854143
91.725444	9.830369	1.1386515	96.0602	10.280473	-2.6705108
91.616507	9.878067	1.2126235	95.962922	10.680278	-2.3945231
91.505389	9.8739347	0.89698666	95.857881	11.140996	-2.3327534
91.397852	10.012293	0.78605795	95.761326	10.535303	-2.9228258
91.293697	9.6988277	0.56809008	95.667918	9.8691959	-1.041173
91.187358	9.5741272	0.61556494	95.567015	10.221836	-3.4412298
91.083208	9.7405014	0.63493228	95.464903	10.51018	-0.81369257
90.976873	9.8640833	0.33013439	95.3657	10.353817	-1.2787831
90.872729	9.8587694	0.77719986	95.273038	10.360153	-1.591045
90.76521	9.7183037	1.0073119	95.175773	10.105874	-3.0817821
90.658883	9.5419846	1.172895	95.087955	10.492837	-1.8119936
90.554747	9.6214256	0.83045822	94.994576	10.051499	-0.3814258
90.448425	9.7813902	0.0005009174	94.902174	10.414126	-1.4503245
90.350236	9.6775894	-1.072354	94.80106	10.04932	-1.8583046
90.252235	9.4974461	-0.94402516	94.701622	10.280243	-1.8238361
90.157611	9.3706608	-0.39219588	94.615772	9.5850506	1.2564908
90.059611	9.3573341	-0.19649994	94.52362	9.9778728	-1.7728584
89.963799	9.3663044	-0.046987772	94.411907	10.403526	-1.7180361
89.866988	9.3485069	-0.21843386	94.305706	9.7294207	-1.7941177
89.768988	9.5059004	-0.088458777	94.215293	10.157597	-0.63862723
89.673177	9.4409847	-0.73298103	94.120226	10.296607	-3.1819682
89.576366	9.3903418	-0.61003339	94.020273	9.8854437	-2.8043756
89.480556	9.4394875	-0.50096643	93.927388	9.8662748	-3.0827429
89.382557	9.2605801	-0.68856835	93.825554	9.7512903	-1.8921061
89.287936	9.2887135	-0.80379021	93.733874	9.6442051	-1.6045234
89.189937	9.3918943	-1.041803	93.633999	9.6028748	-1.5688368
89.095317	9.3497	-0.90909809	93.542994	9.727931	-2.9731946
88.997319	9.4096775	-0.94433606	93.447932	9.772893	-1.8873639
88.899321	9.3081083	-1.4010482	93.348284	10.197357	-1.1670203
88.804701	9.2639294	-1.1575308	93.261062	10.253992	2.2914143
88.706704	9.3020382	-0.99813777	93.17942	10.795115	-0.52922297
88.612085	9.2099199	-1.3180449	93.088295	11.048847	-3.5751913
88.514088	9.24666278	-1.2815771	92.999792	10.264235	-5.1639743
88.419469	9.17066	-1.1251746	92.907359	10.420153	-3.9916244
88.321473	9.0210447	-1.3254396	92.816891	9.6660976	-4.6282458
88.226855	9.0350552	-1.2496052	92.712894	10.031528	-1.7499688
88.128859	9.0135593	-1.1392475	92.61643	10.038277	-1.5757251

88.030863	8.9627066	-1.0489845	92.528489	11.627922	-0.44866955
87.936246	8.8334484	-0.9853453	92.446684	10.492805	0.27314568
87.838251	8.9539604	-1.1126771	92.361307	10.170322	-1.1839242
87.742445	9.0970755	-1.3877507	92.273399	10.190207	-2.6914387
87.64564	8.9655704	-1.3821673	92.174368	10.059342	-1.7522658
87.549833	9.0316505	-1.423443	92.071381	10.118845	-2.1708794
87.45184	9.0111475	-1.3862805	91.972361	10.510694	-1.0386219
87.355035	8.9046984	-1.4428668	91.880109	10.142335	-1.4236337
87.25923	8.9527721	-1.4603095	91.791242	10.145912	-0.55093288
87.161237	8.9831371	-1.2376058	91.682305	9.8250618	-0.24235916
87.066622	8.9422569	-1.4242811	91.589077	9.6326809	1.2665336
86.968629	8.9830399	-1.3885441	91.49148	9.763011	-1.5076272
86.874014	9.0964079	-1.193655	91.399843	9.3861008	-2.5779891
86.776022	9.0081339	-1.1303447	91.311587	9.691987	-1.48852
86.681408	9.0921993	-1.472836	91.219563	9.2623978	0.14951557
86.583416	9.0877104	-1.5127286	91.125549	8.9892511	0.10298693
86.485425	9.1376572	-1.6302446	91.040096	8.8037052	0.76959485
86.390811	9.0515699	-1.7262359	90.946087	8.7443743	-2.0151699
86.29282	9.1027126	-1.5320959	90.847703	8.8347225	0.94901925
86.198207	9.0783825	-1.7853668	90.751508	9.0555172	1.5613774
86.100217	9.1082077	-2.0957427	90.656937	9.2730942	-1.4505628
86.004415	9.0902548	-1.8468916	90.551993	9.0161715	-1.6649117
85.907615	9.1857643	-1.0272003	90.452615	9.0399895	-2.113143
85.804672	9.1540813	0.67626023	90.353238	8.8505344	-3.5885065
85.698355	9.0776825	0.024702951	90.243104	9.1531696	-3.9418139
85.590851	9.1272287	0.32905731	90.135159	9.171917	-4.5053864
85.487915	9.3389053	0.20391256	90.023837	8.8635235	-2.3780644
85.380417	9.0766497	0.21844503	89.915894	9.0711994	-2.1952856
85.277487	8.929718	0.32805601	89.805761	9.0950279	-2.2735658
85.169995	9.0707989	0.30803502	89.69663	8.9696617	-1.9221325
85.06707	9.1855726	0.11298161	89.588687	8.9145336	-2.1308002
84.960771	9.3304577	-0.33221111	89.478556	8.7443123	-2.0689002
84.857851	9.0634499	-0.44827086	89.370614	8.9083109	-2.3778601
84.751557	9.0587978	-0.45685491	89.259296	8.6539917	-2.8954978
84.646451	8.9821701	-0.24645799	89.151355	8.9436798	-3.5256124
84.544723	8.8860931	-0.24543732	89.041226	8.5126438	-3.6260619
84.439621	8.9164124	-0.25511369	88.933286	9.115016	-4.2541485
84.336712	8.8686419	-0.35469809	88.821969	8.8266649	-3.8672683
84.231614	9.1713562	-1.5907943	88.71403	9.6878357	-4.2422042
84.129893	9.0835323	-1.2744117	88.602713	8.8501453	-4.6811924
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83.925626	9.0539293	-1.7333347	88.384649	9.6612873	-4.4017086
83.827461	9.0586777	-1.7554586	88.276712	9.2623386	-4.6151199
83.727105	9.0339184	-2.3475418	88.165397	9.0183105	-5.1284585
83.62894	9.0196972	-2.4123445	88.05746	9.2265835	-5.5972338
83.528584	8.8444777	-2.42788	87.947337	9.2315845	-6.3434067
83.427529	8.9998131	-1.7832947	87.838211	9.0019684	-6.3117437
83.32481	9.0617199	-2.1711326	87.730276	9.0697613	-4.6300526
83.220909	8.8739271	-2.0364087	87.620153	9.1188679	-4.4534273
83.118192	9.0424919	-1.9257292	87.512219	9.109231	-4.5296502
83.008557	9.1868534	-1.1434375	87.400907	8.7556658	-3.5624123
82.901117	9.0816336	-1.5703456	87.292974	9.384367	-2.7070179
82.79368	9.1775398	-1.1904989	87.182853	9.6050367	-2.740694
82.686247	9.0308828	-0.98555142	87.074921	9.3149538	-2.7462683
82.579998	9.0002718	-1.1087791	86.963611	9.422369	-3.1410608
82.472572	8.8116932	-1.1602457	86.855679	9.6997852	-3.3552256
82.36515	8.9054432	-1.0553932	86.74437	9.3711147	-3.1060071
82.260088	8.7623768	-1.93804	86.636439	9.7887154	-2.8822649
82.158565	8.9610462	-2.0992534	86.526321	9.8109808	-3.2373614
82.05822	8.9393139	-2.034796	86.418392	9.8858604	-4.1555133
81.956698	8.6350021	-2.1348214	86.307084	9.528079	-4.0293322
81.855176	8.679121	-1.7262075	86.199155	9.3528719	-3.4118347
81.754833	8.5873613	-2.0078468	86.090035	9.685915	-2.0251601
81.653313	8.4917164	-1.8716398	86.009951	10.236252	-1.8277355
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81.349932	8.8574409	-2.2322211	85.734318	9.6223202	-0.06776315
81.248414	8.8320112	-2.0810218	85.644507	9.0319214	-0.48279899
81.146896	8.960927	-2.0870259	85.544948	9.4288425	-2.1217747
81.046556	8.7745705	-2.1046054	85.460899	9.4395218	-0.55228972
80.94504	8.7915936	-1.9653025	85.373664	9.4846754	-1.3940856

80.843524	8.8095465	-1.80316	85.267732	9.621911	-1.141294
80.743186	8.7425003	-1.1254743	85.168994	9.4893417	-0.3174513
80.6383	8.751626	-1.3224275	85.079203	9.7917576	-0.85288668
80.537963	8.9316139	-1.8807355	84.988598	9.6236267	-1.1488218
80.436449	8.8096275	-1.32686	84.896993	9.7097139	-0.1060679
80.334936	8.5733099	-1.7107157	84.807212	9.7358027	-0.074386001
80.233424	8.8977852	-0.80439305	84.716613	9.7872438	-1.7642151
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80.0257	8.6943283	-0.76014638	84.526841	10.106338	-0.29822153
79.92184	8.8590622	-0.83490598	84.431866	9.9391451	-0.93367499
79.817982	8.890667	-0.93202746	84.339082	10.147125	-0.60034728
79.714126	8.8858376	-1.2609597	84.234989	10.138645	-0.37295902
79.610271	8.7032585	-1.0825173	84.142387	10.081385	-0.5800159
79.506417	8.7229671	-0.98010278	84.047239	9.8074093	0.38369074
79.402565	8.8436317	-0.61815053	83.950079	10.035488	-2.1084251
79.298715	8.797225	-0.9429369	83.864052	9.6601858	-1.3013846
79.193693	8.9706001	-0.64804775	83.767247	9.3569651	-3.3587112
79.089846	9.0006914	-0.84836793	83.672457	9.5941982	-3.1848061
78.986001	8.6778288	-1.2509061	83.580865	9.9674797	-0.10087037
78.882158	8.9220886	-0.8857699	83.487083	9.8211098	-2.1315041
78.777144	8.8298969	-1.1116204	83.397685	9.5146713	-2.4563804
78.672133	9.0129128	-0.68107182	83.30053	9.9981995	-1.700882
78.567124	8.9862232	-0.66953778	83.20303	10.245321	1.0617599
78.460946	8.9499149	-0.48984849	83.104353	10.050764	-1.099272
78.352574	8.9544859	-0.43957674	83.011588	8.4786158	-0.61145741
78.245233	8.9642906	-0.15080336	82.917813	10.210217	-1.4296136
78.136726	9.015686	-0.073955685	82.830447	10.247238	-0.70841962
78.028225	8.9301357	-0.023735881	82.740723	9.6306038	-1.0705659
77.920896	9.0279903	0.011953086	82.652184	8.6643658	-0.30815494
77.812404	9.048893	0.010803342	82.565842	9.9446049	-1.4601455
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77.595436	9.0234413	-0.016383529	82.383711	9.5171299	-2.4580355
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77.379654	8.9738846	-0.25826979	82.199031	9.3519363	-2.9583032
77.271188	9.0456085	-0.67671937	82.110996	9.2175817	-2.5811839
77.162726	9.1241131	-0.63777423	82.017726	8.250843	-5.322103
77.055434	9.0574894	-0.2659758	81.92007	8.8076849	-3.9815238
76.946983	9.0997953	-0.07277751	81.824277	8.6042719	-3.7508166
76.838537	8.937088	-0.50492978	81.725444	8.2201643	-3.3170404
76.730096	8.8343258	-0.52148891	81.624253	8.6834755	-3.14485
76.622823	8.8000441	-0.30413121	81.536219	9.3340693	-2.7969716
76.514392	9.0646629	-0.26643014	81.440259	8.9861965	0.18183401
76.405967	9.1199684	-0.0350507008	81.346328	8.5508232	-2.2148964
76.297547	8.9900513	-0.25781053	81.254592	8.4992504	-1.6712182
76.190292	8.8678942	-0.36094609	81.164037	8.7527084	-0.024594545
76.079565	8.7827587	0.80602795	81.074011	9.1449223	-0.1857987
75.968846	8.7748327	0.54994661	80.983302	9.2584229	-1.5143007
75.853617	8.9412336	-0.34019816	80.902551	9.5576172	-1.8396618
75.741759	8.8348513	-0.34698218	80.814202	9.4237356	-1.3203911
75.631067	9.0605364	-0.21045876	80.730245	8.8322973	-3.1353009
75.519227	8.9333487	-0.42063737	80.634298	8.6781521	-4.4168458
75.413169	8.6870165	-0.81289124	80.539527	8.8380575	-2.5190361
75.310576	8.5381126	-1.0121918	80.444757	9.3099499	-3.5819175
75.207984	8.6184759	-1.1745899	80.354376	8.8922806	-2.445997
75.10424	8.779398	-1.1978691	80.266192	9.092618	-3.2750502
75.001652	8.8187037	-1.2842128	80.166013	9.1858101	-2.4805133
74.899064	8.8049183	-1.4713308	80.074459	9.6772261	-2.6755936
74.796478	8.7218513	-1.5391058	79.979536	8.9442997	-2.9661572
74.692741	8.5587425	-1.5943702	79.890179	8.952549	-4.1889505
74.590158	8.8334436	-1.5328903	79.874812	9.255477	-2.0892718
74.487576	8.7359753	-1.7360018	79.770648	9.0770359	-2.2932658
74.384996	8.8410873	-1.6146607	79.673534	9.9359436	-1.6130283
74.281266	8.8894157	-1.9979287	79.571877	10.048433	-3.019711
74.178688	8.9619999	-1.9112929	79.4692	9.7778568	-3.1907187
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73.973538	8.9534464	-1.6730242	79.269414	9.0480318	-3.6851373
73.869814	8.9083872	-1.5393566	79.173329	9.6415234	-0.072276533
73.767243	8.7782021	-0.9947139	79.073729	9.3476973	-1.446237
73.664673	8.9947739	-0.87323117	78.97223	8.5798454	-0.66920757
73.558747	8.9542542	-0.70432371	78.872783	8.8607502	-3.4916892
73.45618	8.9099245	-0.91024351	78.776998	9.0479498	-1.2965922

73.352465	9.0565233	-0.84892911	78.680921	9.7060204	-1.1349963
73.249901	9.074501	-0.90366715	78.579136	9.1389227	-2.6849782
73.147338	8.9697151	-0.4126468	78.474418	8.6332169	-2.4640665
73.040187	9.0105038	-0.11044827	78.364875	9.6216831	-1.4842745
72.933041	9.0763912	-0.18269467	78.27189	9.0450191	-0.093147621
72.824753	8.9214544	-0.14296842	78.152534	8.9260883	-0.036534052
72.717617	8.98979	-0.020814806	78.060311	9.4161358	-0.71385241
72.610485	8.8402462	-0.18064514	77.959581	9.4688368	-1.2844436
72.503359	8.9622469	-0.1566273	77.853562	9.2593212	-3.1258025
72.395093	9.1816034	-0.000017643	77.751944	9.1649704	-1.318163
72.287977	9.2102089	0.0071524978	77.651225	8.6060877	0.07296674
72.180866	9.062746	-0.083282471	77.553747	8.6018381	-0.65937454
72.072618	8.7344608	-0.090116858	77.455503	8.9864588	-3.1934977
71.965517	9.0008993	0.065644033	77.359592	9.0944271	-2.0863445
71.858421	8.9780807	-0.5445081	77.251126	8.792922	-2.298008
71.751331	8.8770504	-0.28219128	77.150431	8.8493519	-1.6541767
71.643106	9.1115236	-0.60509133	77.043925	9.1910868	-1.8345962
71.541722	8.7537956	-0.76741457	76.941292	8.5370197	-4.1630535
71.439201	8.8615093	-0.51766479	76.83646	8.9888639	-2.060514
71.336681	8.7812223	-0.20351768	76.731381	9.4417486	-1.610594
71.234162	8.7686329	-0.33672386	76.630711	8.8912678	-1.9807253
71.129432	8.5783176	-0.45755911	76.529007	9.2143745	-2.9719448
71.026917	8.8444738	-0.77141976	76.420699	9.4698334	-2.5788646
70.924403	8.779458	-0.79101527	76.321087	9.9000463	-0.075010389
70.821891	8.5947762	-0.62182212	76.219049	8.6932287	-2.1882553
70.71938	9.0672951	-0.10624897	76.115162	8.8357286	-2.2361994
70.616871	8.883975	-0.1656943	76.016846	8.8926973	-3.3431258
70.514364	8.8811741	-0.28118539	75.924098	8.940937	-1.4816651
70.412994	8.768899	-0.27615368	75.831245	8.9284096	-0.49027163
70.310489	8.9210873	-0.91910875	75.732725	9.3438148	-2.8745251
70.207987	8.7110996	-1.0662954	75.636421	9.8837748	-2.7099249
70.105485	8.6793804	-0.96095175	75.536871	10.004128	-3.2332525
70.002986	8.80056	-0.28977036	75.448258	10.224735	-1.1875201
69.900488	8.6700535	0.023013502	75.368588	9.1779089	-3.0768046
69.797991	8.9309502	-0.15064102	75.262644	8.2478304	-3.8580174
69.696631	9.0838871	-0.013566419	75.171386	7.8417764	-4.9757504
69.593003	9.0335341	-0.13665791	75.063628	8.4104586	-5.2093554
69.489379	9.3915749	-0.79148126	74.956927	8.6554174	-2.820117
69.385756	9.4808159	-1.1128504	74.861059	9.171279	-3.1921163
69.281004	9.0548801	-0.23449865	74.763584	7.5712152	-6.3327293
69.177387	9.0873775	-0.18622214	74.668326	9.7301588	-1.0651807
69.073772	8.9886818	0.073617816	74.576359	10.172676	1.1824733
68.97016	9.2635965	0.055772155	74.479042	10.092091	-2.6491261
68.863202	9.0781832	-0.070816606	74.387396	10.270548	-0.14284314
68.759595	9.1635809	-0.51121402	74.288944	9.8658848	-2.4606748
68.65599	8.9734526	-0.37050015	74.181765	9.2873592	-3.766396
68.551259	9.038764	-0.04677166	74.082549	9.4763527	-2.9965982
68.447659	9.1306	-0.040115923	73.982184	9.7098808	-2.8531556
68.34632	9.1759644	-0.82314783	73.877313	9.5363884	-1.9367064
68.244982	8.9036999	-0.71329856	73.774834	9.5493336	-3.7748744
68.144773	9.2167034	-0.75096428	73.66767	9.9487743	-2.7626598
68.043437	9.1179228	-0.98047751	73.560687	9.5540085	-3.2714715
67.943229	9.2145567	-1.0330002	73.461745	9.6248474	-2.5960722
67.843023	9.4908762	-1.2436502	73.362625	9.7681408	-3.23597
67.74169	9.2438736	-1.0466294	73.249901	9.7870398	-2.9497702
67.641485	9.1895695	-1.5145254	73.146018	10.343683	-0.58145982
67.540154	9.2076836	-1.4061106	73.047707	9.8858376	-2.4538972
67.439951	9.1112823	-1.6350167	72.943921	9.8630695	-2.8448308
67.339748	8.943964	-1.277033	72.848078	9.7845478	-2.5028181
67.23842	8.8736105	-0.92933261	72.745363	9.5906773	-1.2805616
67.138219	8.7661629	-0.29179287	72.643719	9.5116177	-1.6490831
67.038019	8.9388208	-0.39691013	72.54666	9.7261581	-1.8209412
66.936694	8.8960285	-0.78326297	72.452882	9.9009266	-2.9637747
66.836496	8.9684944	-0.58141148	72.348054	9.8859854	-2.0855525
66.735173	9.1462307	-0.64246207	72.242086	9.6322412	-2.2591832
66.634976	8.8249121	-0.90904021	72.129414	9.510582	-1.0512394
66.531436	8.8196211	-0.68089443	72.03009	10.686335	-3.5443358
66.475941	8.2615147	-0.58220345	71.92856	10.156233	-2.5758495
66.371305	8.4989071	0.42361036	71.826031	9.6948509	-1.6946716
66.261042	8.9225197	0.83569062	71.727794	9.8599281	-2.475738
66.149659	8.6101933	0.80772179	71.62413	9.6872196	-1.868392

66.03606	8.6608591	0.68742907	71.525026	9.4202852	-3.5221646
65.924685	8.5500088	0.7898246	71.429341	9.6039228	-2.9628038
65.814439	8.4376793	0.7684747	71.323402	10.245832	-2.1235757
65.703073	8.291049	0.55185568	71.22847	9.6407366	-1.8864441
65.592834	8.4671707	0.65679157	71.134688	9.5124264	-3.5383248
65.480377	8.5112286	-0.28663051	71.025534	8.1517792	-5.6091599
65.376872	7.8790464	-0.27224323	70.918838	8.7443171	-4.2237263
65.272245	7.9637852	-0.41392446	70.816386	9.1843481	-4.5485897
65.16874	8.2974405	-0.49030066	70.716522	8.6769657	-5.2347012
65.065235	8.3680725	-0.42324361	70.613058	9.6437492	-0.58115578
64.958388	8.2512598	-0.35756266	70.522501	9.8348312	-0.73568493
64.853763	8.2742519	-0.34846056	70.419812	9.2420235	-1.3316548
64.750259	8.2224121	-0.28389257	70.323949	9.0029869	-3.1915412
64.646755	8.7048979	-0.63719833	70.228262	8.417614	-4.5277534
64.542131	8.4853334	-0.56471318	70.130129	8.878273	-0.93339133
64.436407	8.3245716	-0.39835	70.038592	8.7713995	-2.9416053
64.331783	8.4925795	-0.51619118	69.940472	8.4677849	-3.8223515
64.228281	8.2842388	-0.50998557	69.826846	7.9449096	-3.5746305
64.124779	8.262269	-0.79424423	69.725486	8.7894802	-1.103022
64.020157	8.3129368	-0.6363951	69.635007	8.978651	-1.4519891
63.913313	8.1760864	-0.46150395	69.533605	8.3579865	-3.7638254
63.809812	7.6406641	-0.41119608	69.44089	9.3479166	-4.8837171
63.706311	7.7620516	-0.57014877	69.339586	9.0027905	-2.9309568
63.602811	7.5094619	-0.70986056	69.250243	8.5900717	-4.8127837
63.498191	8.0698624	-0.64703894	69.146807	9.0952663	-4.7321162
63.391349	8.1854782	-0.34218889	69.047681	9.457428	-4.9502783
63.284491	8.1971798	-0.1941649	68.949852	7.6443052	-6.7378473
63.177635	8.5783787	-0.14487058	68.83629	9.8694305	-2.6584446
63.069661	8.7729073	-0.051936686	68.743777	9.1655245	-4.5530682
62.962808	8.306798	-0.039544463	68.642476	9.9854469	-3.5091035
62.852615	7.7853127	-0.29162884	68.544365	9.5335979	-3.8659427
62.745764	7.9970613	-0.59250778	68.442015	9.0673218	-5.2285061
62.638915	8.171422	-0.63645411	68.340715	9.300024	-4.2372088
62.532068	8.181673	-0.77790922	68.242763	9.0098715	-4.2358437
62.425222	8.0178022	-0.2521472	68.142632	9.0121708	-4.1577883
62.315037	8.1944227	-0.1386697	68.034719	10.355961	-3.5687675
62.208193	8.0675611	-0.10154989	67.927936	8.6824961	-5.0260091
62.100236	8.0118103	0.002664566	67.82559	9.8347855	-2.0040739
61.993396	7.949223	-0.35114759	67.736235	9.8308611	0.25308597
61.887673	7.6852245	-0.70886308	67.628066	9.9699249	-1.659438
61.779725	7.9877977	-0.37967855	67.519944	9.4044704	-3.1738038
61.675118	7.7546477	-0.51026088	67.410802	9.7718859	-2.651063
61.569397	7.9276285	-0.83364886	67.308321	9.4445801	-4.3377275
61.463677	8.0374422	-0.86755121	67.205874	9.7076492	-3.0565143
61.359072	7.8978529	-0.6335817	67.102362	9.2672119	-4.2562852
61.253353	8.0153923	-0.68194717	66.993375	8.195591	-5.8835816
61.145411	7.8926926	-0.97285318	66.896584	9.2477703	-3.9659142
61.039694	7.8286185	-0.75091678	66.798668	10.192477	-2.3016152
60.933978	7.8500767	-0.64096266	66.693969	10.024495	-3.3872316
60.829376	7.6325645	-0.63295436	66.591583	10.465301	-4.0224323
60.723662	7.9681001	-0.77500582	66.494824	9.0042744	-6.5179629
60.615723	7.9475803	-0.41655254	66.402538	10.289618	0.1314252
60.51001	7.994678	-0.81291336	66.301121	10.868931	0.21711856
60.404299	7.7306561	-0.78280962	66.206373	9.922863	-0.36911815
60.2997	7.8079867	-0.83524936	66.112762	9.020647	-2.235302
60.195102	7.8015227	-0.61893779	65.998048	9.2151451	-2.6493337
60.08939	7.9545641	-1.2526221	65.896738	8.5562649	-3.7723551
59.987016	7.7623153	-1.0464642	65.794329	8.7029524	-3.0080376
59.885755	7.7969942	-0.95838022	65.689655	9.3698997	-2.4153788
59.783381	7.6890192	-0.61002612	65.582742	9.2090302	-2.8590901
59.681008	7.8319807	-0.68836588	65.476994	9.2847519	-2.5868895
59.57641	7.9766283	-1.2269572	65.374533	9.996501	-2.3263454
59.474037	7.8077564	-1.0732468	65.273251	9.1364727	-5.347259
59.371665	7.6497273	-1.4521964	65.170922	8.6381102	-6.6604533
59.272629	7.653738	-1.6930227	65.069741	8.8091393	-6.2355504
59.172482	7.8585892	-1.5159202	64.961883	9.0568581	-6.1552944
59.07011	7.8692198	-1.5337675	64.853959	9.917881	-4.9725661
58.969964	7.8370552	-1.7811027	64.744843	9.8202562	-3.8068726
58.560482	7.9738803	0.60236657	64.650201	9.6308002	-1.7437019
58.445874	7.6776481	0.56191576	64.520994	9.7652941	-0.10497153
58.330164	7.9944859	0.42230123	64.417419	9.5548916	-1.9055479

58.214467	7.7472544	0.2756834	64.318451	7.8970613	-5.4168491
58.099892	7.8071842	0.20140409	64.223837	9.9677124	-1.7506069
57.980883	7.9972644	0.031923771	64.119233	9.9643564	-2.6311226
57.865223	7.8417373	-0.30924487	64.0179	9.9895725	-0.57774508
57.750682	7.8763475	-0.050396204	63.916588	9.686985	-2.6315415
57.635047	7.7725983	-0.24520051	63.816445	9.3909626	-3.1321669
57.519425	8.121727	-0.15273863	63.714032	10.029737	-1.5572406
57.419505	7.6029711	2.0321345	63.614978	8.9028168	-2.8875215
57.325227	7.5444956	1.7154837	63.512612	8.133461	-3.3729148
57.233238	7.4063492	1.7594151	63.406922	9.0818605	-2.2878265
57.139075	7.5430536	1.9693742	63.309004	8.2928305	-4.2217584
57.044969	7.4189863	2.4420753	63.20106	9.948184	-3.6115198
56.949831	7.5105267	2.1650333	63.096441	9.4654293	-2.2296524
56.846895	7.4985418	1.3616977	62.999626	8.84268	-0.47345448
56.735058	7.4149899	1.0612774	62.903867	8.2628679	-0.73459375
56.623263	7.3497	1.3065761	62.796986	8.6598454	-1.0074248
56.511511	7.3236618	1.3211886	62.695687	9.5206299	-0.085525632
56.399802	7.3055334	1.4026902	62.592157	9.3163109	-1.1939974
56.284816	7.322917	0.61255187	62.477496	8.6579151	-1.7370491
56.168445	7.1457996	0.55527222	62.369531	8.7692804	-1.7837021
56.052091	7.1101122	0.36371791	62.266025	8.8947182	-2.9613135
55.935754	7.0056467	0.43695408	62.152508	8.7175255	-3.2412915
55.818361	7.0081301	0.50048822	62.051244	7.8793211	-4.8944387
55.698743	7.0481339	0.74944937	61.948872	9.2138214	-2.5871835
55.58996	6.9071422	-0.96718764	61.848709	9.3650331	-2.9453213
55.486537	7.1285	-1.0687844	61.753006	8.2693825	-2.7035832
55.384186	7.0061693	-0.97428942	61.647276	8.091383	-1.9189466
55.280764	7.1302295	-1.1239355	61.538222	7.6870232	-1.5490788
55.175097	7.0626116	-0.97152305	61.430293	7.4288802	-2.4781847
55.072747	6.9447193	-1.1784916	61.330162	8.4835176	-3.2777886
54.970397	7.1431932	-1.1046174	61.23004	8.9037209	-3.6103454
54.868047	7.1289692	-1.1068696	61.132165	8.7065821	-3.6770704
54.765698	7.1870613	-0.76239669	61.026432	6.1357713	-4.9468808
54.660033	7.107686	-0.76293951	60.92961	8.2199011	-2.1165359
54.558755	7.3861365	-0.57142985	60.826135	7.3536897	-2.9707665
54.457477	7.3633299	-1.137663	60.729295	7.4029436	-4.2095046
54.355129	7.3009224	-0.74740696	60.62689	7.0474949	-5.1009998
54.253852	7.3558555	-0.71500605	60.530057	7.890728	-4.2536922
54.142836	7.2055788	0.5264681	60.427672	8.0024691	-3.6349373
54.031931	7.2591696	0.50326109	60.321971	8.1737318	1.0380658
53.925309	7.2054524	-0.2818664	60.224049	7.8128672	-2.9723082
53.822963	7.3120179	-0.34936231	60.122773	7.7067132	-3.8834558
53.719549	7.0962973	-0.37709537	60.020401	8.1629114	-0.040768206
53.612821	7.2693901	-0.42304197	59.926935	7.1586471	-5.5978642
53.510476	7.2129068	-0.49916536	59.837903	7.7470737	-3.2216461
53.407063	7.2139282	-0.46374446	59.738867	8.7301121	-0.50107759
53.303651	7.1406336	-0.43611431	59.645398	8.2682419	-3.4304025
53.20024	7.1204205	-0.62892544	59.546367	8.2848587	3.0359626
53.094582	6.9718485	-0.53003061	59.459588	6.9401531	-5.911984
52.991172	7.197052	-0.69259375	59.359422	8.2564526	-3.4505858
52.888829	7.3838468	-0.80289125	59.255937	8.0498857	-3.0285735
52.78542	7.4033356	-0.77877796	59.154678	8.1728706	-4.1483312
52.682011	7.1762381	-0.35475978	59.044518	8.0447769	-4.3914876
52.576355	7.2666559	-0.32370335	58.939921	9.5783091	-4.0291233
52.472948	7.3908453	-0.51157278	58.828648	8.4854841	-4.0749235
52.36954	7.1699409	-0.54389358	58.732963	8.0046034	-3.9297471
52.266133	6.9846106	-0.64742571	58.629476	9.229001	-2.0030932
52.163793	7.1430001	-0.49476159	58.532664	8.3976851	-0.533355
52.060387	7.1892171	-0.7405237	58.449215	7.7570701	-0.35876024
51.953668	7.2708178	-0.63950551	58.349077	7.9867702	0.20611364
51.85133	7.0270553	-1.0074925	58.252301	8.2751522	-2.681751
51.747925	7.149003	-0.82267749	58.159964	8.1837234	-1.9239022
51.644521	7.14431	-0.46928826	58.067682	8.3905535	-2.5484109
51.541118	7.089325	-0.67114109	57.977585	7.8293772	-2.9131603
51.435468	7.0802736	-0.55726945	57.880792	7.9096427	-3.9428046
51.332066	6.9729543	-0.98187619	57.780711	8.1267805	-1.1983759
51.228664	7.1632652	-0.97881204	57.696303	7.9518847	-2.6133237
51.126327	6.8682785	-0.76419389	57.604045	7.3051286	-2.9338214
51.022927	7.0401731	-0.8570931	57.509541	5.1622434	-6.8257022
50.917279	7.0118952	-0.79597116	57.419453	7.123353	-1.7579805
50.813879	7.0598788	-0.62027717	57.330758	6.9472294	-0.30327624

50.71048	6.7962995	-0.57319939	57.248755	6.4452896	-2.157774
50.607082	6.9959764	-0.56234467	57.162336	6.7952089	-0.48831969
50.503684	6.9728699	-0.36189467	57.069358	6.8461442	-0.72871703
50.396975	7.1137905	-0.43107182	56.978574	6.9848347	-0.9576574
50.291452	7.3082275	-0.34161106	56.892307	6.6451139	-0.22830564
50.186993	7.1445274	-0.41446632	56.808265	6.192687	-2.0253935
50.082536	7.0386505	-0.47003448	56.713005	5.3349991	-2.3690844
49.97808	7.1417665	-0.53139913	56.614377	5.3520775	0.0033891499
49.870314	7.0886135	-0.46237817	56.519238	5.9320431	-0.64890116
49.767983	7.1623592	-1.3342749	56.427612	6.3454485	-0.11075079
49.668838	7.1656904	-1.3520458	56.330141	6.4429359	-0.01466077
49.569693	7.1943517	-1.3454142	56.237256	7.0149841	-0.18527558
49.47055	7.0988846	-1.4325264	56.153462	6.6436081	-0.57881242
49.369158	7.0401278	-1.2513452	56.062788	6.6004343	-1.1329063
49.271078	6.9946194	-1.4905415	55.969408	6.0732555	-2.7907443
49.171937	7.021327	-1.3640307	55.870563	6.4021158	-2.4209471
49.071733	7.1989098	-0.44216266	55.769575	6.8839264	-0.17479497
48.966214	7.2677031	-0.33248204	55.670167	7.3794327	2.4712982
48.858447	7.2576256	-0.36620468	55.57272	7.293819	0.39640224
48.752932	7.039279	0.034764886	55.472097	7.0507798	-3.4311833
48.639988	7.0015774	1.0065613	55.370056	7.6349721	-1.1935649
48.524939	7.0627165	0.95212293	55.274338	6.893868	-3.5002339
48.409907	7.1817741	0.68265671	55.171678	7.6176739	0.25944284
48.291585	7.1540036	0.670816	55.075199	7.10884	-1.8446038
48.176591	7.2401295	0.75870657	54.979274	7.1315551	-2.7155662
48.061614	7.5499525	0.48542273	54.881519	6.8108954	3.392333
47.946656	7.5939355	0.71966004	54.790607	6.9709873	-3.3028617
47.830666	7.479497	0.81246239	54.686013	7.1274929	-3.0334225
47.713492	7.2645426	0.94851983	54.58442	7.4724383	-2.6123478
47.597543	7.4893398	0.90732241	54.47651	7.5967579	-2.2507262
47.482663	7.3815222	1.0408334	54.376724	7.4354906	-0.024192452
47.367801	7.2793503	0.70541924	54.275235	6.7208366	-3.8763309
47.252959	7.3769674	0.64623451	54.18166	7.4485512	0.24289218
47.138136	7.3113785	0.68374741	54.093211	7.5390697	-0.015321985
47.020034	7.5495644	0.475061	53.994615	7.4445553	-1.8931808
46.905251	7.2976956	0.55866462	53.885312	7.261106	-2.6639261
46.791526	7.5941215	0.019462943	53.787242	6.9016714	-1.5483018
46.690267	7.4001579	-1.6923577	53.689173	6.2619548	-2.3956027
46.64599	6.7520895	-2.2360327	53.591755	5.7065368	-3.4456239
46.557372	6.4530144	-2.020282	53.495835	6.9841099	-0.02586782
46.471023	6.1482358	-2.2206609	53.39957	8.0426817	-0.23105723
46.382424	5.902184	-2.3010497	53.299471	7.8959227	-3.4370575
46.296093	6.0249786	-2.3680186	53.203651	7.2745953	-0.27520025
46.207513	6.3942194	-2.3287175	53.110825	7.5778337	-0.28651887
46.1212	6.3773117	-2.3761451	53.006787	6.9955101	0.022081613
46.03264	6.2854562	-2.2145801	52.918729	7.079124	-1.0269938
45.946345	6.3619456	-2.2709405	52.80858	6.2447486	-3.2761319
45.857804	6.2898798	-2.3312628	52.709906	7.1684237	-0.012382835
45.771528	6.140367	-2.3800607	52.612665	7.2722497	-2.0084577
45.683007	6.4187708	-2.392494	52.518382	7.7625723	-2.6449525
45.5978	6.4034719	-2.2644351	52.42898	7.2689118	-0.94207758
45.508248	6.339746	-2.2335687	52.345686	6.6406317	-1.011779
45.423062	6.5316195	-2.2712529	52.268928	8.1067362	-1.0489119
45.334582	6.4436302	-2.3328888	52.176162	7.7310686	-2.8658357
45.248364	6.4829512	-2.3456323	52.076999	8.3366375	-3.1630633
45.159904	6.2341204	-2.3679438	51.761639	4.5165691	-3.2140589
45.073706	6.3611546	-2.3824744	51.673241	7.9184408	-1.3858033
44.985266	6.3671122	-2.325403	51.57211	4.1771498	-3.5917754
44.899088	6.5506163	-2.5125637	51.477806	4.0248241	-4.4047379
44.810669	6.51229	-2.5100546	51.376257	7.485076	-2.8456192
44.724511	6.2630897	-2.4474506	51.282155	7.3046064	-3.2569408
44.636113	6.4811392	-2.5021231	51.182078	7.2120132	-3.8173208
44.549975	6.5333662	-2.4809208	51.087422	6.9107833	-4.0084667
44.461599	6.6103764	-2.8725178	50.982702	7.0073299	-2.6449864
44.375481	6.5907593	-2.7811692	50.891355	6.1420259	-4.0941091
44.287127	6.5685329	-2.8767712	50.789945	5.9941015	-2.6067948
44.201029	6.8237286	-2.8685131	50.689319	6.1941624	-4.0818787
44.112697	6.5705605	-3.1345093	50.587509	6.3385196	-4.6805649
44.02662	7.1230736	-2.2914832	50.489019	6.3622565	-4.6379557
43.926542	7.0908442	-1.3827207	50.392662	5.6153393	-4.7210655
43.827641	6.9950609	-1.175802	50.295134	6.4165859	-5.2692547

43.726495	6.8574724	-1.1879724	50.190428	7.3843551	-2.182863
43.628664	6.944768	-1.2045759	50.090595	7.9915013	-1.7351146
43.52752	6.8559875	-1.1055419	49.99102	8.1619091	-0.45886275
43.428623	7.0156841	-1.170279	49.904034	7.761816	-3.6298826
43.32748	7.1498742	-1.2068583	49.799989	6.8470373	-5.0528412
43.229652	6.7828588	-1.4426292	49.700711	7.3745518	-3.3402667
43.131712	6.898448	-2.0479274	49.614523	7.9314928	-1.708661
43.036019	6.5989447	-2.0557034	49.515112	7.2932029	-4.768785
42.939148	6.8227973	-2.0500386	49.412525	7.8249192	-3.0598836
42.843455	6.6813545	-2.2148323	49.315499	6.5274391	-5.1751175
42.746585	6.6534052	-2.0497773	49.213725	6.7565246	-5.2712545
42.650893	6.8615813	-2.1712191	49.115768	7.856391	-1.3177938
42.554023	7.0697508	-2.1598439	49.018317	7.7849221	-1.9762344
42.457264	7.3325024	-1.0636302	48.916796	6.9855642	-5.0117712
42.346517	7.1982412	-0.35169011	48.816465	8.3408117	-2.7334499
42.239099	7.2487144	-0.43054587	48.717955	8.3381491	-1.9004252
42.128383	7.3635941	-0.47322142	48.610325	8.5610924	-0.75404596
42.020994	7.327714	-0.4817853	48.518451	7.529542	-2.9723725
41.910309	7.3555527	-0.42328995	48.411625	8.9793758	-1.7886233
41.802949	6.9461603	-0.28376895	48.305738	8.5671978	0.47633162
41.692296	7.395915	-0.38289452	48.216703	7.9581261	-0.15012792
41.584966	7.1716061	-0.30657637	48.134763	6.0707641	1.4574361
41.474344	7.1105728	-0.25431359	48.051535	7.3460798	-3.2985883
41.367046	7.2560596	-0.49865788	47.953268	5.4863439	-6.4848337
41.261723	6.9724674	-0.77175868	47.857107	6.2024193	-2.705812
41.159711	7.1694803	-0.79849064	47.777206	6.2047119	1.597527
41.054399	7.3206739	-0.81938303	47.694775	6.1662364	-0.75000954
40.952398	7.644433	-0.90483308	47.593277	6.5737514	-1.0409214
40.847096	7.7025261	-0.79028392	47.493887	5.8702292	-1.4375216
40.745105	7.6765923	-0.73008907	47.394513	6.0795746	-1.652668
40.639814	7.603508	-0.70174193	47.293764	5.9296989	-1.0326718
40.533641	7.3876505	-0.24472737	47.194414	5.6704397	-1.0919589
40.424178	7.5183372	-0.28816289	47.093505	6.9361267	-2.8700061
40.319077	6.9990644	-1.0270164	46.999734	7.8633833	-0.98701054
40.216952	6.9002872	-1.3363143	46.910314	7.4528446	-2.1225448
40.118129	7.2028084	-1.4010707	46.80753	7.6913061	-1.4962893
40.017051	6.9294968	-1.4727232	46.710791	7.2489772	-2.1317177
39.918231	7.0155582	-1.4533083	46.617834	6.1362209	-4.7111073
39.816113	7.0954065	-1.397205	46.51395	7.3193388	-3.4330761
39.717296	7.5916395	-1.3423245	46.420145	6.5229149	-4.0861425
39.616223	7.2174678	-1.3099215	46.32441	6.2377739	-4.0451918
39.516368	7.4326496	-1.1413333	46.22766	5.9866009	-4.556468
39.415298	7.5597782	-1.1206949	46.134067	5.9674778	-5.2838769
39.316488	7.4858465	-1.1216843	46.041555	5.6576567	-5.1978636
39.21438	7.7740312	-1.0143142	45.9494	7.02352	-4.2314205
39.115573	7.5549169	-1.1240873	45.851126	6.6955519	-3.6500044
39.013469	8.0814552	-0.55698216	45.757523	7.4710188	-1.4962852
38.907394	7.9102755	-0.082743287	45.656578	7.3796353	-2.1316962
38.799074	7.8400927	-0.044934571	45.549919	7.1104803	-1.9039903
38.694063	7.9483747	-0.21465909	45.450598	6.6975327	-3.6235533
38.584734	7.6417985	-0.3386426	45.356682	7.3939943	-2.0414548
38.479749	7.7591333	-0.35094953	45.257366	7.0847535	-3.4607468
38.37045	7.7086134	-0.23424578	45.163459	7.4891663	-2.5600481
38.26549	7.7516346	-0.03414309	45.063099	7.5607119	-2.3092363
38.156222	7.7902222	-0.085662067	44.962439	6.5270233	-3.9522986
38.051289	7.5219955	-0.042580962	44.867962	6.0485096	-4.605092
37.942051	7.4538598	-0.13783795	44.776685	6.1311388	-4.6103463
37.837145	7.7712331	-0.15461785	44.682279	6.3519335	-4.985002
37.727939	7.5093155	-0.17314196	44.590156	7.0895634	-3.4430561
37.62306	7.6379919	-0.13001096	44.493817	6.9564543	-3.9961061
37.513886	7.7451258	-0.035290241	44.393123	6.6576571	-4.2529178
37.409035	7.7824545	-0.095629633	44.295517	7.0150852	-4.9370422
37.299893	7.8768387	-0.70237154	44.201255	6.5334692	-5.3490539
37.19507	7.4012079	-0.56058311	44.108096	6.8770008	-4.9017644
37.085962	7.4279613	-0.47274411	44.008765	8.4693432	-1.4504519
36.981168	7.5433922	-0.2608006	43.911147	8.2378807	-0.20102292
36.873104	7.6570988	-0.33175719	43.792363	8.262886	0.64370376
36.767328	7.4914484	-0.36698419	43.691668	8.4505119	-0.87235832
36.659296	7.8578558	-0.57051402	43.585921	8.1284809	-1.7773454
36.553552	7.9921141	-0.34059596	43.47804	8.1151381	-1.8122956
36.445552	7.7259207	-0.096075475	43.371227	7.9449396	-2.5419652

36.338838	7.6953039	-0.07754153	43.273062	8.2603798	-2.5981283
36.228867	7.6191592	-0.07705456	43.163161	8.4330711	-1.6579714
36.121194	7.8191032	-0.057367206	43.068761	8.1710787	-2.7499309
36.01127	7.9237976	0.01760453	42.963015	8.2715111	-3.1999397
35.904642	8.0427294	-0.044569373	42.862716	7.9722166	-3.9320455
35.795758	8.0244865	-0.72779262	42.766688	7.7398558	-4.873487
35.698117	7.7978907	-1.2494533	42.671628	7.3468513	-4.3012648
35.597205	7.7584667	-1.375463	42.5769	7.8268728	-2.7479334
35.499567	7.7122917	-1.3572816	42.452772	8.5150366	-1.4778719
35.398659	7.6856031	-1.3206812	42.339891	8.5245056	-0.99629492
35.301024	7.7820234	-1.4861084	42.236852	8.1657133	-1.5849156
35.201112	7.5619893	-1.6531676	42.139622	8.3818293	1.9454024
35.102489	7.6816769	-1.5607232	42.040043	8.4924078	-1.9154291
35.00258	7.6754084	-1.5409325	41.938104	8.1402044	-0.81771666
34.904952	7.6550932	-1.564852	41.843854	8.5811901	-0.76099646
34.804056	7.4176493	-1.6651608	41.75887	8.5997715	-0.76650125
34.706431	7.5098639	-1.8310876	41.668077	8.3803902	-1.2477202
34.605539	7.4874468	-1.6502454	41.575042	8.2038517	-0.34492102
34.507918	7.5368052	-1.7419291	41.487853	9.0209732	0.59854329
34.40703	7.7220507	-1.8794508	41.400684	8.8755693	-1.3359035
34.309413	7.6187162	-1.7537533	41.299578	8.4346714	-1.7382836
34.209517	7.663588	-1.6352673	41.19862	8.550869	-0.72728783
34.111903	7.8057528	-1.6575634	41.089854	8.1528778	-1.2205585
34.011023	7.7875271	-1.5882349	40.991006	8.3606853	-0.7405315
33.913413	7.7461948	-1.6310657	40.900424	8.6184692	-1.0448906
33.812537	7.8184714	-1.6502905	40.803835	8.482543	-2.0178161
33.712963	7.8794403	-1.2841413	40.70274	8.5958538	-0.946015
33.609143	7.7831354	-1.2235887	40.608565	8.6674576	-0.089996874
33.508597	7.7967796	-1.2883514	40.50674	8.0746841	-0.34924006
33.405773	7.8246365	-1.246495	40.414994	8.4273643	1.3201369
33.305238	7.9575624	-1.2727523	40.3215	8.0454636	2.0069952
33.201447	7.7231941	-1.2345065	40.232554	8.2249804	1.8930086
33.100926	7.5569153	-1.1478217	40.134791	8.1950493	1.1470091
32.998127	7.574614	-1.1453834	40.035983	7.9900837	-2.0847209
32.897619	7.7710238	-1.2777799	39.940116	8.0905828	-1.7708549
32.793856	7.7511139	-1.266139	39.844251	8.0390406	-1.9565377
32.693362	7.8486152	-1.2388623	39.746661	8.2250595	-0.21699941
32.590588	7.6620545	-1.1123294	39.65658	8.5203629	1.624158
32.490108	7.6110239	-1.1175244	39.559189	8.1866837	-1.2331929
32.386375	7.7290154	-1.1382962	39.462841	8.0693893	-2.5704494
32.285909	7.6690083	-1.1186769	39.354817	8.1784515	-3.0790651
32.183161	7.802268	-1.14817	39.247644	7.8714228	-3.0698786
32.082709	7.9152169	-1.2627078	39.146883	7.6150522	-3.1651363
31.979007	7.919651	-1.221203	39.044054	8.0060959	-2.9931941
31.87857	7.7992368	-1.2685397	38.945253	8.5091963	-2.4616423
31.77585	7.7106023	-1.4171062	38.839193	8.6052246	0.49766827
31.67639	7.8287802	-1.453265	38.731077	8.6302967	-0.013766885
31.573682	7.8446369	-1.3635201	38.628732	8.6462193	0.55685198
31.474234	7.5319343	-1.4799653	38.520462	8.1927805	-2.280514
31.371538	7.3281097	-1.4643627	38.422517	8.0325108	-3.358129
31.272102	7.6363678	-1.6903383	38.322509	8.5555582	-2.0309925
31.16942	7.6051435	-1.7313557	38.219811	8.5168314	-1.3265694
31.069995	7.5862484	-1.5947963	38.109928	8.0729656	-2.7913899
30.967326	7.4799242	-1.5880586	38.009924	8.1022682	-2.8388891
30.866958	7.454021	-1.8728929	37.907041	7.9827738	-1.0390239
30.765257	7.4387779	-1.9399195	37.808298	8.1438961	-0.094972722
30.664904	7.5608034	-1.826072	37.722536	8.3281441	-1.6679723
30.563215	7.4290714	-1.9125972	37.613111	8.1694002	-0.54185641
30.466681	7.114151	-1.9578053	37.522276	8.2624998	-0.87168169
30.369756	6.9010639	-1.9830492	37.428073	8.23629	-1.9514518
30.275127	6.930686	-2.0023623	37.322201	8.2306261	-1.0311494
30.178201	7.1037178	-2.0285814	37.226437	8.5662518	-1.7403229
30.083573	7.1680069	-2.0430613	37.124663	8.1618395	-1.8007908
29.985697	7.2061768	-2.0334449	37.024149	8.2084522	-2.1576183
29.891069	7.2872829	-1.9523993	36.91785	8.1804085	-1.8716516
29.794145	7.2937183	-1.8914149	36.815816	8.2839785	0.55883551
29.699517	7.1154032	-1.7005751	36.720379	8.3123159	-0.13593811
29.598793	7.6588755	-1.6270328	36.622697	8.3793163	1.0997293
29.499421	7.6581421	-1.3696258	36.527836	8.5375748	0.62304926
29.39681	7.6388636	-1.0936892	36.423929	8.5949974	0.96884
29.297451	7.4934206	-1.0862212	36.316241	8.3040256	-1.7917445

29.265293	7.3857498	-0.82091445	36.212576	8.2974653	-1.4782124
29.153517	7.4711037	-0.59279805	36.118029	8.417592	-1.0804367
29.044986	7.2714968	-0.29770821	36.010687	8.6326351	-1.2376881
28.93646	7.0714083	-0.3575609	35.908352	8.4059343	-1.5348008
28.824696	7.1669664	-0.14885265	35.806154	7.7990198	-2.8352962
28.715238	7.1619558	-0.23902357	35.700395	7.887023	-3.0742226
28.604423	7.3161077	-0.3187435	35.597205	8.2219715	-1.9002092
28.495913	7.0160093	-0.55680805	35.491036	7.6883125	-2.9256396
28.387407	7.057445	-0.83669865	35.382006	8.3253689	-1.9674636
28.276602	7.0651407	-1.1486553	35.276438	8.48909	-0.25169495
28.169039	6.8504009	-1.3980947	35.181687	8.2059526	-1.9532806
28.058241	7.0037966	-1.2624539	35.077523	8.1676607	-2.6425023
27.949749	6.9060349	-1.1250737	34.978995	7.7116709	-3.8309841
27.841261	6.9724083	-1.1857141	34.88335	7.8871222	-2.5154796
27.729541	6.9994617	-0.43214911	34.788309	8.5978537	0.46150434
27.621063	6.9588814	-0.33560818	34.700051	8.5892553	1.988137
27.510284	6.858532	-1.2429892	34.591247	8.5666933	1.045938
27.401813	6.7971945	-1.5087762	34.485769	8.5002975	1.3767226
27.290113	6.9425321	-1.2230254	34.377405	8.146553	-1.8624253
27.181651	7.0016408	-0.3749091	34.270678	7.6337118	-3.2720187
27.073194	6.9228959	-0.46059501	34.173738	7.0942354	-3.9371142
26.962436	6.6730137	-0.20835014	34.073867	7.2999001	-4.3971062
26.853987	6.850955	-0.28824148	33.975323	6.3750415	-5.4044328
26.744161	6.721323	-0.52450979	33.877118	7.6617217	-3.9843802
26.636644	6.6319733	-0.55525959	33.770738	8.2117214	-3.4013162
26.52913	6.8175201	-0.48617408	33.664318	8.7661104	-1.3456118
26.41839	7.0896969	-0.98813856	33.557536	8.4993029	-1.5240041
26.310882	7.0108523	-0.99220967	33.454718	8.6360846	-0.33008239
26.20199	6.925962	-1.035485	33.354218	8.3504848	1.5382522
26.094488	6.6322761	-0.88782424	33.258033	8.2219658	0.91354609
25.986988	6.9005289	-0.52635258	33.163164	8.0627451	-0.58339727
25.876265	6.8033528	-0.82515204	33.07784	8.0861483	1.9211702
25.76969	6.8989315	-0.93304527	32.995225	8.2241468	0.97728705
25.658974	7.0381985	-0.8465575	32.891685	8.4172812	1.3498999
25.551488	6.8772411	-0.91967028	32.802319	8.403944	0.80549681
25.441695	6.9955263	-0.79193568	32.715503	8.3332415	-0.47620732
25.334216	6.9092131	-0.63105607	32.6115	6.1970949	-4.4432259
25.226739	6.8512154	-0.50447744	32.516289	6.3767581	-4.6817732
25.116955	6.894629	-0.33405682	32.420718	5.5849433	-5.7632437
25.009486	7.0737209	-0.15539747	32.325764	5.718843	-5.6960244
24.899708	7.0407753	-0.33177754	32.230852	6.2550793	-5.391593
24.792245	7.1924629	-0.03967075	32.134049	6.3639851	-4.9730692
24.683876	7.103929	0.096516207	32.03386	8.0426426	-2.934041
24.572293	7.3220439	0.67274725	31.92029	8.3421087	-1.9897227
24.463936	7.0823164	0.5604459	31.824798	7.4793959	-0.95751762
24.352366	7.0082273	0.028874189	31.73583	7.9789743	-1.1939063
24.244022	7.0040874	-0.039968133	31.659237	8.5750008	3.2845862
24.134781	7.1439362	0.4392755	31.566295	8.0997686	-1.9118853
24.024135	7.0726299	0.62793994	31.470133	7.6169348	-1.7693797
23.91671	7.046648	0.67717564	31.373204	7.5464287	-2.3397603
23.806074	7.0790405	0.82526404	31.274552	7.2017117	-4.0744934
23.697759	6.8953562	0.72313887	31.175903	7.6661158	-2.9662638
23.594841	6.8649893	-0.65157139	31.073246	7.0891943	-3.6246188
23.491405	6.9921579	-0.51358241	30.974604	7.7484436	-2.4092042
23.389388	6.8730946	-0.72445691	30.966389	7.8531265	0.5602715
23.285957	6.8449912	-0.0110665556	30.866386	7.8173008	-1.0386466
23.184844	7.2172451	-0.47343603	30.77022	7.9186325	-1.5740813
23.085029	7.2861252	-0.85180157	30.681327	8.3289785	0.73878163
22.986637	7.1667519	-0.86984372	30.582313	8.2992954	-0.078938723
22.889159	7.0785494	-1.0926461	30.48292	7.9267635	-2.0490289
22.788472	7.0807724	-1.2573191	30.38045	8.0561399	-0.99358445
22.691017	7.0545554	-1.283408	30.277981	7.9419394	-1.8007557
22.591263	6.7561417	-1.4381077	30.181056	7.9007545	-2.5376639
22.496573	6.8650632	-1.5893815	30.086597	7.8767476	-2.4602904
22.400992	6.831337	-1.6754018	29.990235	8.0487986	-1.8767699
22.303123	6.6802216	-1.6439663	29.896948	8.0925312	-1.0632621
22.208505	6.7978926	-1.9316113	29.798901	8.0303946	0.72684616
22.110683	6.7694998	-1.5486681	29.700863	8.0665274	-1.0257132
22.01519	6.6905365	-1.3897877	29.613921	8.0399714	0.55834413
21.920647	6.8831282	-0.89557087	29.519549	8.0117188	0.68548697
21.814532	6.9878149	0.17557707	29.420596	8.0929031	0.4284738

21.710722	7.0139756	0.17160559	29.319893	8.071579	-0.17979454
21.604609	7.1202345	0.12040155	29.225558	7.9876451	-0.47548115
21.5008	7.110774	0.26820129	29.135949	7.9739237	-1.0726836
21.393758	6.8196831	-0.027296573	29.039973	7.7132797	-2.133225
21.289949	6.8212981	-0.81909859	28.937927	8.1102772	-0.8919028
21.186141	6.8173065	-0.87502837	28.840901	8.0787563	0.69101381
21.080029	6.8918324	-1.0121654	28.744822	7.7803354	-0.67641824
20.975292	6.7073526	-0.040251359	28.650627	8.0367641	-0.97297192
20.87011	6.7108831	-0.33837557	28.554983	8.0325861	0.35821462
20.768162	6.6660705	-0.21323252	28.453381	7.8277836	-0.50480127
20.665286	6.6585875	-0.14829083	28.356895	7.8773737	-0.84384269
20.560106	6.6362076	-0.025217176	28.256671	7.9532723	-0.37037623
20.458163	6.7671509	0.022733524	28.156088	7.925992	-0.97671884
20.352987	6.7776022	-0.47995561	28.057306	8.0172262	-0.46601221
20.251047	6.6852665	-0.58261204	27.965373	8.1715698	1.1405735
20.148175	6.6262555	-0.59394449	27.863311	8.1256676	-0.89642775
20.043936	6.644609	-0.57490957	27.762285	7.8303032	-2.328615
19.941067	6.5444708	-1.3924482	27.663564	8.0153942	-0.82979321
19.836832	6.6536198	-1.3260683	27.575378	8.0614805	0.90851307
19.733965	6.7297401	-1.2823551	27.477051	7.9648757	-0.57721049
19.628798	6.7651272	-1.3423427	27.369028	8.0008583	-0.16153497
19.52687	6.8175244	-1.4980373	27.276252	7.9963531	-0.35801765
19.424944	6.8412848	-1.3572799	27.174258	7.9035435	-0.51660657
19.319781	6.7322488	-1.1809058	27.0755	7.8539481	-0.84723341
19.21692	6.7624435	-0.70365697	26.97028	7.8103108	-0.07152722
19.112699	6.7080779	-0.62045181	26.872451	7.9088016	-0.33658761
19.009841	6.7919874	-0.58376366	26.779236	8.0127058	-0.85500544
18.907924	6.7845168	-0.64467174	26.674947	8.0557632	0.010402978
18.802768	6.8608174	-0.62642062	26.565123	7.949482	-0.51067024
18.700855	6.6257939	-0.52566212	26.468222	7.7718391	-0.27201676
18.593819	6.8242235	0.46602061	26.370401	7.5571766	-0.84582913
18.486259	6.7737637	0.21412161	26.267509	7.6462479	-0.57667643
18.378701	6.9329686	0.50973332	26.164154	7.4807243	-0.66468072
18.267908	6.9846349	0.49782971	26.062189	7.3736944	0.82489473
18.160359	6.9998808	0.61693764	25.962535	7.6383381	-0.41532856
18.049575	7.0503864	0.31743717	25.86703	7.9133205	0.57846272
17.942033	7.0193691	0.31350595	25.765546	7.817543	0.31878629
17.832194	6.8834782	-0.43262458	25.670046	7.7768059	-0.88746399
17.724659	7.080883	-0.82208031	25.575463	7.6162062	-1.1135644
17.617129	7.1120119	-0.098971963	25.478133	7.6344581	-0.98366249
17.506367	7.0506668	0.14518023	25.378979	7.6903729	0.39824617
17.399776	7.1606178	-0.29057211	25.287624	7.4224424	-1.7576103
17.291812	7.0143032	-0.18967581	25.187028	7.8879004	-1.5857834
17.186153	6.9631906	-0.4900814	25.085036	7.701468	-0.36900663
17.080496	6.9462118	-0.4763633	24.978043	7.5981503	1.0039567
16.971606	7.2231741	-0.39269078	24.88815	7.8111954	0.30172127
16.86595	6.9007702	-0.55909729	24.784399	7.8663816	0.2341446
16.757991	7.0070581	-0.51767039	24.678759	7.8547697	0.82313722
16.652337	6.9381862	-0.43754077	24.577826	7.8193598	0.33140275
16.546685	7.078198	-0.37561184	24.478223	7.7307405	0.8992576
16.437802	6.9950376	-0.36625296	24.372185	7.7376084	0.78866351
16.332152	6.9796181	-0.4018088	24.271686	7.8404655	0.86894155
16.224197	7.1520519	-0.34279174	24.168372	7.90347	0.40341312
16.118549	6.9652548	-0.47831428	24.06749	7.9715633	0.59002596
16.01845	7.0840926	-0.86392909	23.968185	7.8963728	0.87608576
15.914199	6.8005433	-0.96153277	23.867824	7.9974346	1.077217
15.813184	6.6874633	-0.75969774	23.773784	7.9352455	1.844268
15.711244	6.7558217	-0.80081499	23.674735	7.9941363	-0.047618031
15.609306	6.8621683	-0.91410762	23.575413	7.8889456	-0.22409517
15.508301	6.6984005	-0.85479891	23.478411	7.9076185	-0.62387466
15.404066	6.6814795	-0.82391393	23.37781	7.8313513	-0.22317973
15.302136	6.9689884	-0.84351116	23.276695	7.7698221	-1.33419
15.201143	6.77447073	-0.79287261	23.177781	7.7067919	-1.7519386
15.099219	6.74449427	-0.84231073	23.07476	7.7614255	-0.9894738
14.999171	6.5592098	-1.0884076	22.97547	7.887557	-0.59242994
14.896829	6.4755297	-0.99971783	22.877094	7.8006678	-0.2357133
14.796796	6.4270687	-1.0806398	22.778232	7.6663394	-1.5239723
14.696772	6.2580805	-1.1630746	22.680788	7.8500628	0.17887336
14.596756	6.2342062	-1.0727855	22.581106	7.66623058	-1.4965
14.496748	6.539937	-1.2083395	22.488728	7.8574171	-0.91146481
14.396749	6.355648	-1.2988905	22.392276	7.9102135	-0.1413219

14.294462	6.2652645	-1.1455809	22.290249	7.7451811	-1.1824918
14.194482	6.1698389	-0.94197017	22.197001	7.765954	-1.4356419
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13.987877	5.8983192	-0.8765111	22.01149	7.4741859	-2.2652736
13.885052	6.3189445	-0.80882829	21.915109	7.8082256	-1.134636
13.778982	6.2563629	-0.77224255	21.82241	7.8601427	0.0081518292
13.67616	6.018712	-0.79744828	21.720422	7.747261	1.333902
13.572385	6.0780573	-0.62274188	21.617509	7.5704269	2.2586658
13.469566	5.8913717	-0.64892632	21.522445	8.025259	0.41259533
13.363884	5.9159861	-0.033046842	21.430637	8.0193157	-0.25841805
13.254001	5.7014151	0.022750139	21.337903	7.975894	0.69985563
13.147368	5.8982625	0.10982955	21.241009	8.1857891	0.46398628
13.039785	6.0217986	0.13952684	21.140911	7.9059792	-0.88899916
12.932207	5.9342861	0.091464519	21.044497	8.1676531	0.88159364
12.825582	5.7997389	-0.018283486	20.939761	7.9993391	-0.80516267
12.718011	5.7563553	0.21247733	20.836882	8.1351442	-0.41135678
12.608148	6.01266	0.044678569	20.741402	8.001358	-0.45989972
12.501531	5.816679	0.015238762	20.640387	7.8124242	0.012344509
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12.288304	5.8631105	0.0089302063	20.44939	8.1193762	-1.2065179
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11.966184	5.9545774	-0.16035032	20.148175	7.7286253	-0.095430464
11.860521	5.6388607	-0.26673806	20.048977	7.7832775	-0.048759997
11.753921	5.5830784	-0.45206654	19.957184	7.8436975	0.34171385
11.647323	5.7902627	-0.35271692	19.864894	7.8276968	-0.17345478
11.539364	5.7695265	-0.168365	19.768497	7.8128614	-0.84302533
11.433707	5.8102984	-0.083904147	19.668433	7.9144979	-0.80471498
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11.224268	5.7846665	-0.33616507	19.475224	7.8836432	-0.45207983
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11.014831	5.6859102	-0.3573637	19.277341	8.0117035	0.40746996
10.907811	5.7191339	-0.024403214	19.182745	7.9066486	-0.74079734
10.803093	5.4618297	-0.02852118	19.084062	7.8057318	-0.96983397
10.701185	5.5479774	0.2347002	18.990921	7.9381208	-0.87658942
10.598342	5.6115041	-0.24929798	18.886704	7.957859	-0.42274547
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9.9818546	5.5246992	-0.090022325	18.282436	7.9990573	0.15553641
9.87673	5.5524373	-0.38394654	18.174874	8.1731672	0.32967034
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9.6748794	5.3935423	-0.65463901	17.969384	8.1474237	0.50622976
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9.4778449	5.2782979	-0.51323688	17.769974	8.1578598	0.081821144
9.3798444	5.3419094	-0.5437237	17.677614	8.1680336	1.2045231
9.2786181	5.4267831	-0.33472812	17.574688	8.0526724	-0.77035093
9.1797045	5.4080849	0.010610819	17.474563	8.00666833	-0.53696996
9.0817867	5.3251481	0.00073874	17.373067	8.1119795	-0.83059722
8.9829232	5.3050985	0.0020242929	17.272453	8.1545401	0.48815608
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8.7839748	5.398807	-0.38700247	17.070317	8.1010275	-0.032157391
8.6861828	5.3910494	-0.21403563	16.970651	8.0310478	-0.062398374
8.5884267	5.3376641	-0.11332047	16.871462	8.1815996	-0.40683445
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8.2951378	5.1950788	-0.28375053	16.585423	7.9777937	-0.60883176
8.1985677	5.0082912	-0.014350534	16.496383	8.1052656	-0.61308622
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7.9091907	4.9813409	-0.10671496	16.203447	8.3651972	-0.12672693
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7.6181083	4.9352136	-0.32776797	15.904505	8.1488342	-1.9432011
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7.4269625	5.0030351	-0.43108511	15.7043	8.4673414	-0.51343286
7.3320474	4.9136124	-0.27697587	15.606967	8.3622856	-0.81582105
7.233903	4.7821207	-0.26645827	15.505956	8.4146614	-1.3253311
7.1391702	4.7555351	-0.20951962	15.407253	8.257576	-0.85477591

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