

## **Vostok ice records: comments on data :**

update: April, 1999

Supplementary information of the paper PO1256: "Climate and Atmospheric History of the Past 420 000 years from the Vostok Ice Core, Antarctica, by Petit et al., submitted to *Nature*. Files content: "GT4" ice core chronology (gas and ice chronology), Deuterium and reconstructed temperature , Dust content, Sodium concentrations, CO<sub>2</sub>, CH<sub>4</sub>, atmospheric oxygen composition. .

### **Vostok time scales : file "GT4"**

Column 1: depth (m)

Column 2: Age of the ice (GT4 chronology)

Column 3: Gas Age as deduced from the Barnola et al. (1991) model.

### **Deuterium - data : file « deutnat.txt »**

Column 1 -Depth (m)

Column 2 -Ice Age (GT4)

Column 3 -Deuterium content in ‰ SMOW (Standard Mean Ocean Sea Water). Deuterium measurements have been performed on three adjacent cores 3G, 4G and 5G (see Figure 1 of Jouzel et al., 1996). It combines results successively published in Jouzel et al. (1987, 1993 and 1996).

Column 4 -Temperature difference wrt the mean recent time value (i.e. corresponding departure from -438 ‰ mean deuterium value)

Deuterium data is from core 3G between 138 and 2083 meters below surface (mbs) (with one long missing section between 312 and 320 mbs), from core 4G between 8 and 138 mbs and between 1920 and 2546 mbs and from core 5G between 2504 and 2757 mbs. Ash layers help to make link between cores. No correction was applied for 3G and 4G core taken as reference depth. For 5G samples, a value of 3.41 m have been added to the depth measured in the field below depth of 2500 m.

Deuterium values (**column 3**) have been measured on ice samples of length comprised between 0.5 and 2 m (down to 2080 m) then every 1 m. Data was re-interpolated on 1m intervals afterwards. The ice recovery is 85% or higher. Measurement accuracy is of  $\pm 0.5\text{‰}$  SMOW (1  $\sigma$ ). From the surface down to 7 m a constant value (derived from surface and pits samples) of - 438.0 ‰ is reported .

The temperature change indicated in **column 4** (temperature above the inversion). This temperature is calculated using a deuterium / temperature gradient of 9‰/°C after accounting for the isotopic change of sea-water. No correction for the influence of the geographical position of the ice was applied.

### **Dust content: file "dustnat.txt"**

Column 1 -Depth (m): 3.41 m have been added to the depth for 5G samples (below 2500 m).

Column 2 -Ice Age (GT4)

Column 3 – dust concentration in ppm

The dust concentration was calculated from the total volume concentration (from Coulter counter measurements), and assuming a dust density of 2.500 Kg. m<sup>-3</sup>. Data from Petit et al (1990), Jouzel et al. (1993) down to 2545 m depth have been included.

**Sodium content** file “nanat.txt”

Column 1: depth (m) 3.41 m have been added to the depth for 5G samples (below 2500 m).

Column 2: Age of the ice (GT4 chronology)

Column 3: Sodium concentration (ppb)

Data from Legrand et al.(1988) ,down to 2080 m have been included.

**CH4 data:** file”ch4nat.txt”

Column 1: depth (m) 3.41 m have been added to the depth for 5G samples (below 2500 m).

Column 2: Age of the ice (GT4 chronology)

Column 3: Gas Age as deduced from the Barnola et al. (1991) model

Column 4: CH4 concentration (ppbv). See note below

**CO2 data:** file”co2nat.txt”

Column 1: depth (m) 3.41 m have been added to the depth for 5G samples (below 2500 m).

Column 2: Age of the ice (GT4 chronology)

Column 3: Gas Age as deduced from the Barnola et al. (1991) model

Column 4: CO2 concentration (ppmv).

CO<sub>2</sub> and CH<sub>4</sub> measurements have been performed using the methods and analytical procedures previously described (Barnola et al., 1987, Chappellaz et al, 1990). However, the CO<sub>2</sub> measuring system has been slightly modified in order to increase the sensitivity of the CO<sub>2</sub> detection. The thermal conductivity chromatographic detector has been replaced by a flame ionisation detector which measures CO<sub>2</sub> after its transformation into CH<sub>4</sub>. The overall accuracy for CH<sub>4</sub> and CO<sub>2</sub> measurements are ± 20 ppbv and 2-3 ppmv respectively. No gravitational correction has been applied.

**Atmospheric Oxygen :** file “o18nat.txt”

Column 1: depth (m) 3.41 m have been added to the depth for 5G samples (below 2500 m).

Column 2: Age of the ice (GT4 chronology)

Column 3: Gas Age as deduced from the Barnola et al. (1991) model

Column 4:  $\delta^{18}\text{O}_{\text{atm}}$  ‰

$\delta^{18}\text{O}_{\text{atm}}$  data published in Sowers et al.(1993) and Jouzel et al.(1993) have been included.

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Depth	corrected	Ice age	(GT4)	<sup>o</sup> 18nat	gas age	(GT4)	Atm	018
114.8	4095	724	-0.06					
116.3	4168	813	0.03					
120.3	4352	987	-0.06					
125.2	4561	1184	-0.02					
130.1	4791	1418	0.08					
135.3	5039	1675	0.04					
139.7	5245	1932	-0.05					
139.8	5250	1935	0.14					
143.7	5429	2108	-0.09					
149.6	5702	2370	-0.05					
152.8	5854	2541	-0.09					
156.9	6048	2745	-0.08					
161.8	6279	3041	-0.11					
165.1	6441	3214	-0.13					
166.8	6526	3306	-0.05					
169.7	6665	3453	-0.15					
174.2	6884	3679	0.06					
174.6	6905	3695	-0.14					
177.1	7028	3814	0.04					
184.3	7379	4262	0.15					
184.9	7408	4299	-0.19					
205.6	8403	5207	-0.18					
213.1	8768	5529	-0.13					
213.8	8801	5559	-0.2					
224	9298	6009	-0.24					
230	9589	6278	-0.05					
230.4	9608	6293	-0.11					
250	10564	7313	0.1					
252.9	10711	7475	-0.21					
270.8	11579	8285	0.04					
271.3	11606	8318	0.06					
280.2	12099	8808	0.04					
280.9	12139	8856	-0.11					
281.3	12161	8879	-0.38					
290.4	12719	9443	0.24					
291.3	12773	9503	0.33					
294.5	12964	9655	0.25					
298.5	13208	9898	0.29					
299.5	13267	9952	0.24					
311.1	13944	10544	0.58					
311.6	13971	10570	0.32					
322.6	14627	11066	0.88					
322.8	14639	11073	0.93					
330.5	15133	11288	0.9					
336.7	15549	11499	0.72					
345.8	16185	11909	0.87					
355.9	16962	12609	1.11					
363.9	17618	13299	1.02					
372	18283	13850	1.21					
372.1	18291	13853	0.97					
383	19199	14302	1.06					
396.1	20286	14927	1.23					
400.2	20628	15123	0.91					
410.2	21459	15615	0.92					

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422.3	22483	16185	1.16
422.4	22491	16189	1.33
431.4	23270	16719	0.97
446.5	24579	17937	0.98
456.5	25402	18797	0.89
467.6	26310	19661	0.74
476.7	27079	20435	0.98
486.7	27969	21288	0.82
495.8	28752	21999	0.67
496.8	28832	22076	0.76
502.4	29282	22590	0.9
511.9	30114	23561	0.49
515.5	30411	23928	1.02
528	31473	25057	0.44
537.1	32227	25812	0.44
547.1	33047	26477	0.41
562	34281	27904	0.37
571.9	35024	28784	0.33
576.4	35366	29056	0.47
576.5	35374	29062	0.52
597.8	37049	30942	0.35
615.8	38518	32740	0.64
627.8	39483	34133	0.58
631.5	39774	34495	0.58
636.8	40205	34893	0.57
637.8	40291	34947	0.29
645.7	40930	35449	0.49
659.7	41977	36237	0.46
671.7	42892	37241	0.49
677.7	43359	37752	0.57
686.6	44086	38599	0.52
696.6	44939	39582	0.43
709.6	46070	41011	0.57
721.5	47092	41928	0.65
734.5	48176	42711	0.46
747.5	49233	43509	0.5
759.4	50169	44336	0.43
771.4	51117	45279	0.43
784.4	52146	46655	0.29
796.3	53133	47826	0.18
809.3	54224	49156	0.31
821.3	55243	50188	0.56
834.2	56254	51152	0.37
846.2	57154	51881	0.33
859.2	58148	52763	0.22
871.1	59101	53867	0.3
884.1	60185	55442	0.26
892.2	60887	56257	0.6
897.1	61326	56713	0.31
909	62401	57529	0.77
921	63512	58373	0.71
934	64698	59346	0.8
945.9	65847	60229	0.72
959.9	67169	61370	0.77
970.9	68222	62301	0.67

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983.8	69393	63515	0.83
1020.5	72532	66581	0.77
1032.6	73589	67850	0.78
1045.6	74703	69299	0.71
1056.7	75602	70607	0.65
1069.8	76605	71543	0.56
1082.8	77674	72407	0.58
1095.9	78766	73689	0.42
1108	79714	74974	0.35
1121	80719	75937	0.31
1133.1	81599	76634	0.37
1146.2	82515	77505	0.14
1158.3	83352	78596	0.07
1171.3	84259	79753	0.02
1183.4	85062	80841	-0.05
1196.5	85915	81826	-0.03
1209.5	86812	82827	-0.25
1221.6	87666	83681	-0.21
1233.7	88548	84668	0.21
1234.7	88623	84733	0.13
1245.6	89419	85433	0.37
1246.8	89512	85498	0.05
1258.8	90423	86174	0.31
1284	92259	87755	0.26
1297	93180	88597	0.37
1309.1	94033	89355	0.23
1322.2	94946	90430	0.33
1334.2	95775	91475	0.43
1347.3	96673	92352	0.47
1358.4	97469	93181	0.56
1384.5	99310	95132	0.48
1408.7	100949	96632	0.41
1432.8	102476	98365	0.02
1444.9	103266	99254	-0.11
1459	104266	100462	-0.07
1473	105271	101636	-0.11
1485.1	106121	102314	-0.01
1496.2	106917	102869	-0.14
1507.2	107784	103548	-0.14
1512.3	108224	104017	0.06
1520.3	108897	104686	0.14
1529.3	109650	105444	0.33
1539.4	110459	106102	0.46
1551.5	111439	106686	0.44
1566.2	112644	107470	0.59
1592	114639	109824	0.73
1636.3	117593	113370	0.73
1656.1	118802	115226	0.39
1683.3	120457	117267	0.28
1693.1	121024	117891	-0.07
1716.7	122384	119319	-0.21
1732.7	123308	120424	-0.19
1757	124654	121904	-0.25
1784.3	126177	123521	-0.34
1823.5	128186	125622	-0.22

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1831.9	128592	126162	-0.21
1845.2	129284	127030	0.17
1858	129971	127752	0.27
1868.5	130554	128325	0.65
1882.3	131393	128995	1
1883.4	131465	129069	0.9
1907.6	133188	130379	1.13
1934.5	135557	131959	1.23
1954.6	137611	133340	1.21
1955.8	137733	133418	1.12
1965.5	138812	133941	1.16
1982.3	140689	135202	1.03
1990.8	141637	135994	0.86
2016.4	144496	138408	0.91
2058.8	149220	143362	0.59
2092.1	152863	147205	0.6
2104	154207	148765	0.74
2112.1	155163	149816	0.82
2132.2	157583	151981	0.98
2142	158702	153069	0.89
2161.1	160751	154894	0.88
2170	161776	156102	0.8
2191	164136	159270	0.87
2201.1	165412	160281	0.79
2222.4	168089	162810	0.66
2236.1	169649	163928	0.38
2254.1	171772	166309	0.09
2281.1	175045	169989	0.11
2293	176501	171357	-0.13
2301	177517	172412	-0.1
2312.2	178992	174181	0.04
2332	181382	176144	-0.01
2341.1	182570	177430	0.24
2353.1	184243	179606	0.47
2372.1	186941	181627	0.88
2391.1	189582	184076	0.87
2404.5	191213	185778	0.72
2415.4	192560	187408	0.53
2425.6	193893	189454	0.47
2435.6	195126	190962	0.38
2444.1	196215	191858	0.12
2455.2	197612	193211	-0.11
2465.2	198790	194611	-0.03
2472.2	199590	195320	-0.11
2492.2	201763	198189	-0.14
2502.4	202870	199497	-0.06
2509	203592	200370	-0.15
2512.4	203979	200759	0.04
2514.8	204256	201104	-0.02
2520.4	204903	201707	0.2
2520.8	204948	201751	0.03
2530.7	206189	202917	0.39
2531.7	206327	203049	0.15
2536.8	206995	203585	0.39
2546.4	208243	204656	0.66

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2549.7	208659	204934	0.52
2554.8	209293	205426	0.51
2572.7	211450	207759	0.47
2586.7	213077	209691	0.35
2595.7	214103	210894	0.26
2607.7	215464	212419	0.06
2616.7	216523	213539	-0.06
2625.7	217550	214611	-0.12
2634.7	218639	215622	-0.14
2644.7	219976	217045	0
2649.7	220719	217606	0.13
2658.7	222130	218640	0.05
2667.2	223642	219735	0.08
2677.2	225433	221031	0.14
2686.2	226975	222104	0.44
2692.2	228100	223181	0.51
2699.2	229392	224894	0.77
2706.2	230654	225994	0.84
2712.2	231682	226779	0.68
2718.2	232649	227928	0.65
2734.2	235013	231061	0.37
2736.2	235299	231478	0.27
2739.2	235722	232087	0.24
2743.2	236277	232849	0.09
2745.2	236545	233199	-0.01
2763.9	238752	235990	0.03
2772.9	239913	237741	0.48
2778.9	240859	238490	0.76
2787.9	242559	239486	0.75
2796.9	244313	240495	0.62
2802.9	245599	241301	0.63
2811.9	247548	243128	0.84
2820.9	249542	244726	0.75
2828.9	251206	246382	0.63
2835.9	252757	247944	0.51
2844.9	254756	250337	0.45
2853.9	256735	252048	0.37
2859.9	258202	253691	0.47
2869.9	260776	255933	0.59
2877.9	262907	257646	0.69
2885.9	265028	259567	0.66
2891.9	266614	261142	0.66
2900.9	268897	263563	0.73
2909.9	271097	266106	0.56
2918.9	273148	268568	0.4
2924.9	274459	270247	0.2
2933.9	276388	272620	0
2942.9	278337	274784	-0.15
2948.9	279752	276308	-0.09
2957.9	282123	278250	0
2965.9	284181	279851	-0.03
2971.9	285948	281656	0.09
2980.9	288387	283752	0.53
2989.9	290913	286629	0.6
2995.9	292475	288134	0.59

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3004.9	294900	291089	0.45
3013.9	297367	293273	0.25
3019.9	298989	295052	-0.02
3028.9	301282	297568	0.02
3037.9	303533	300215	0.19
3043.9	305141	301918	0.26
3052.9	307880	304243	0.57
3061.9	310471	306589	0.59
3067.9	312072	308551	0.56
3076.9	314415	311344	0.38
3085.9	316647	313862	0.18
3091.9	318123	315533	-0.03
3100.9	320329	317837	-0.21
3109.9	322409	319956	-0.16
3115.9	323676	321706	0.03
3124.9	325754	323802	0.77
3130.9	327565	325218	1.02
3142.9	332112	328540	1.12
3147.9	334555	330355	1.19
3154.9	337989	332841	1.21
3160.9	340942	336045	1.05
3163.9	342356	337494	0.92
3172.9	346772	342238	0.7
3178.9	349884	345278	0.67
3184.9	353220	348373	0.68
3190.9	356559	351525	0.67
3196.9	359819	355044	0.63
3199.9	361384	356764	0.41
3208.9	366230	361967	0.07
3211.9	367764	363534	0.11
3220.9	372699	368878	0.23
3226.9	376115	371710	0.33
3232.9	379228	375539	0.15
3238.9	382590	378831	0.39
3244.9	385814	382627	0.35
3250.9	389631	385590	0.65
3259.9	395516	391478	0.52
3268.9	400502	397554	0.55
3274.9	403775	401044	0.38
3277.9	405354	402666	0.24
3284.9	408947	406607	0.02
3290.9	411959	409860	-0.08
3296.9	415188	412938	0.02
3299.9	416824	414603	-0.06

depth	corrected	Ice age (GT4)	dustnat	Dust Conc (ppm)
124	4509	0.025		
125	4552	0.018		
128	4690	0.015		
140	5259	0.033		
149	5674	0.028		
166	6486	0.013		
174	6874	0.020		
175	6924	0.018		
182	7267	0.038		
191	7697	0.023		
192	7745	0.065		
199	8091	0.038		
220	9107	0.040		
224	9298	0.050		
244	10265	0.018		
249	10515	0.030		
256	10861	0.033		
260	11053	0.045		
274	11749	0.050		
278	11973	0.025		
288	12569	0.075		
296	13055	0.075		
299	13237	0.040		
309	13828	0.033		
319	14404	0.085		
324	14713	0.163		
325	14775	0.180		
329	15032	0.170		
349	16426	0.638		
350	16502	0.773		
352	16653	0.320		
363	17544	1.098		
374	18446	0.220		
379	18870	1.210		
399	20528	0.973		
402	20777	0.710		
403	20859	1.735		
417	22023	0.733		
424	22629	1.213		
433	23412	1.745		
447	24619	1.573		
449	24781	0.668		
451	24941	0.450		
460	25697	0.968		
474	26849	1.480		
475	26933	1.353		
492	28420	0.510		
499	29006	0.415		
500	29085	0.365		
502	29249	0.783		
524	31130	0.708		
549	33209	0.495		
574	35185	0.090		
575	35261	0.113		



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598	37066	0.490
599	37148	0.603
601	37313	0.293
624	39185	0.203
625	39263	0.220
649	41191	0.188
650	41268	0.210
674	43073	0.238
675	43150	0.185
698	45055	0.190
699	45139	0.468
700	45225	0.375
724	47295	0.280
749	49350	0.128
750	49430	0.208
774	51306	0.073
775	51384	0.150
777	51549	0.295
799	53355	0.190
800	53436	0.165
802	53606	0.155
823	55377	0.278
824	55457	0.205
848	57289	0.210
849	57362	0.145
873	59262	0.833
874	59345	0.468
898	61406	0.475
899	61496	0.378
923	63688	0.980
924	63776	0.708
948	66045	1.100
949	66144	0.748
955	66708	0.425
973	68424	1.285
974	68520	0.860
984	69413	0.328
993	70243	0.305
998	70683	0.160
999	70766	0.063
1005	71264	0.085
1015	72070	0.098
1023	72753	0.155
1024	72840	0.053
1034	73706	0.190
1041	74322	0.205
1048	74903	0.063
1049	74985	0.103
1073	76854	0.073
1074	76933	0.075
1098	78937	0.178
1099	79020	0.233
1123	80869	0.280
1124	80943	0.193
1144	82352	0.078



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1148	82647	0.188
1149	82721	0.223
1173	84378	0.068
1174	84448	0.058
1198	86016	0.065
1199	86083	0.078
1223	87766	0.090
1224	87837	0.090
1248	89597	0.190
1249	89672	0.208
1273	91480	0.113
1274	91547	0.120
1298	93254	0.270
1299	93325	0.238
1323	95000	0.070
1324	95070	0.103
1348	96722	0.048
1349	96791	0.043
1350	96861	0.053
1373	98505	0.075
1374	98572	0.068
1375	98640	0.005
1398	100232	0.170
1399	100301	0.140
1423	101868	0.133
1424	101930	0.110
1448	103481	0.248
1449	103553	0.180
1450	103625	0.315
1451	103697	0.258
1473	105271	0.058
1474	105342	0.058
1475	105413	0.058
1498	107048	0.128
1499	107121	0.098
1500	107194	0.085
1523	109121	0.093
1524	109206	0.050
1525	109292	0.065
1548	111159	0.070
1549	111239	0.043
1550	111319	0.010
1573	113195	0.050
1574	113272	0.078
1575	113348	0.043
1582	113891	0.068
1591	114562	0.058
1598	115077	0.035
1599	115150	0.080
1606	115617	0.028
1616	116296	0.048
1623	116762	0.033
1624	116827	0.028
1625	116891	0.073
1632	117326	0.068



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1635	117514	0.015
1643	118012	0.035
1648	118314	0.038
1649	118376	0.058
1655	118735	0.110
1665	119345	0.045
1673	119831	0.040
1674	119894	0.038
1675	119955	0.073
1682	120379	0.053
1692	120959	0.085
1698	121314	0.020
1699	121373	0.013
1709	121951	0.018
1716	122345	0.213
1723	122742	0.055
1724	122801	0.053
1732	123268	0.060
1739	123658	0.040
1749	124209	0.120
1756	124599	0.048
1761	124877	0.043
1768	125271	0.028
1783	126103	0.078
1798	126904	0.048
1799	126955	0.060
1800	127006	0.260
1816	127810	0.043
1823	128161	0.028
1824	128210	0.038
1825	128259	0.045
1830	128501	0.018
1848	129428	0.135
1849	129486	0.115
1850	129545	0.020
1866	130410	0.035
1872	130759	0.015
1873	130819	0.113
1874	130880	0.038
1875	130942	0.140
1879	131190	0.045
1883	131439	0.033
1886	131641	0.023
1890	131908	0.020
1895	132264	0.030
1898	132477	0.048
1899	132548	0.045
1900	132619	0.078
1901	132691	0.055
1902	132763	0.038
1903	132836	0.055
1906	133065	0.025
1907	133142	0.060
1912	133528	0.060
1919	134091	0.105



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1921	134266	0.095
1923	134447	0.500
1924	134538	0.120
1932	135308	0.298
1933	135408	0.095
1934	135507	0.105
1940	136103	0.160
1943	136411	0.123
1945	136614	0.245
1948	136923	0.883
1949	137026	0.860
1953	137446	0.158
1954	137549	0.183
1963	138532	0.288
1964	138644	0.235
1966	138868	0.553
1970	139308	0.338
1973	139643	0.848
1974	139756	0.498
1979	140319	0.405
1981	140542	0.553
1984	140876	0.688
1989	141434	0.245
1990	141547	0.438
1991	141661	0.303
1996	142218	0.565
1998	142440	1.010
1999	142551	0.753
2004	143117	0.625
2009	143675	0.740
2014	144237	0.460
2023	145226	0.973
2024	145337	0.673
2025	145449	0.738
2032	146242	0.528
2043	147459	0.423
2049	148141	0.770
2052	148471	0.158
2063	149679	0.265
2069	150333	0.550
2074	150868	0.418
2080	151502	0.325
2081	151611	0.318
2089	152513	0.313
2098	153523	0.871
2103	154094	0.305
2111	155029	1.177
2119	155983	1.228
2128	157080	0.671
2135	157909	0.715
2143	158815	0.426
2151	159651	0.130
2160	160626	0.237
2168	161545	0.728
2176	162440	0.238



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2184	163318	0.220
2191	164136	0.360
2199	165148	0.618
2202	165522	0.092
2208	166284	0.271
2217	167414	0.115
2225	168391	0.154
2232	169201	0.073
2241	170221	0.151
2248	171040	0.284
2256	172004	0.307
2264	173027	0.025
2272	173988	0.105
2280	174920	0.142
2287	175746	0.232
2294	176630	0.391
2308	178417	0.341
2325	180546	0.202
2325	180546	0.067
2333	181502	0.138
2342	182694	0.236
2348	183525	0.561
2356	184641	0.715
2364	185788	0.761
2373	187067	0.274
2387	189030	0.147
2398	190469	0.050
2400	190705	0.055
2404	191156	0.016
2410	191895	0.114
2414	192382	0.067
2420	193152	0.142
2425	193816	0.141
2430	194444	0.052
2434	194926	0.104
2440	195676	0.113
2444	196202	0.221
2451	197086	0.067
2454	197462	0.111
2459	198075	0.114
2462	198426	0.074
2471	199452	0.047
2473	199682	0.052
2475	199904	0.063
2477	200124	0.048
2479	200345	0.021
2491	201635	0.030
2502	202826	0.029
2505	203155	0.024
2505.41	203200	0.024
2508.41	203527	0.023
2509	203592	0.021
2512.41	203980	0.020
2515	204278	0.029
2515.41	204325	0.028



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2521	204973	0.022
2524.41	205386	0.032
2525	205458	0.024
2527.41	205760	0.032
2531	206232	0.025
2531.41	206287	0.028
2534.41	206681	0.031
2537.41	207072	0.042
2540.41	207463	0.041
2543.41	207857	0.023
2545	208061	0.029
2546.41	208244	0.023
2549.41	208623	0.031
2555.41	209364	0.028
2559.41	209864	0.021
2564.41	210466	0.023
2568.41	210941	0.032
2569.41	211057	0.015
2574.41	211651	0.022
2576.41	211892	0.040
2579.41	212237	0.029
2583.41	212700	0.030
2585.41	212928	0.022
2597.41	214297	0.031
2600.41	214639	0.018
2603.41	214978	0.060
2607.41	215432	0.022
2612.41	216003	0.036
2612.41	216003	0.054
2615.41	216369	0.029
2619.41	216839	0.032
2629.41	217989	0.022
2634.41	218602	0.035
2637.41	219000	0.082
2640.41	219393	0.041
2642.41	219660	0.053
2646.41	220226	0.093
2651.41	220967	0.077
2653.41	221272	0.069
2660.41	222426	0.119
2664.41	223135	0.138
2667.41	223681	0.194
2670.41	224240	0.158
2674.41	224959	0.029
2677.41	225469	0.085
2680.41	225971	0.069
2684.41	226653	0.036
2691.41	227958	0.076
2694.41	228488	0.070
2697.41	229052	0.045
2701.41	229802	0.073
2703.41	230161	0.031
2706.41	230691	0.076
2715.41	232206	0.036
2715.41	232206	0.043



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2718.41	232682	0.039
2719.41	232838	0.007
2721.41	233146	0.033
2721.41	233146	0.055
2723.41	233453	0.056
2733.41	234896	0.096
2736.41	235329	0.038
2748.41	236970	0.058
2751.41	237338	0.033
2754.41	237690	0.083
2756.41	237912	0.079
2762.41	238578	0.012
2765.41	238932	0.015
2768.41	239298	0.014
2771.41	239698	0.011
2774.41	240141	0.029
2777.41	240614	0.014
2780.41	241118	0.060
2780.41	241118	0.067
2783.41	241674	0.029
2786.41	242267	0.083
2789.41	242850	0.039
2792.41	243406	0.023
2795.41	243999	0.060
2797.41	244424	0.131
2797.41	244424	0.052
2798.41	244639	0.156
2801.41	245283	0.104
2807.41	246574	0.378
2816.41	248545	0.191
2819.41	249219	0.116
2825.41	250501	0.078
2828.41	251104	0.169
2834.41	252422	0.208
2837.41	253075	0.120
2840.41	253763	0.115
2846.41	255056	0.219
2849.41	255711	0.053
2852.41	256387	0.223
2858.41	257827	0.439
2864.41	259340	1.012
2868.41	260380	0.640
2871.41	261179	0.942
2874.41	261973	0.167
2878.41	263043	0.554
2883.41	264383	0.791
2888.41	265707	0.558
2897.41	268050	0.093
2903.41	269532	0.168
2907.41	270507	0.077
2913.41	271920	0.017
2918.41	273037	0.085
2922.41	273918	0.123
2928.41	275216	0.086
2937.41	277120	0.045



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2943.41	278456	0.080
2948.41	279632	0.146
2954.41	281175	0.184
2958.41	282253	0.140
2968.41	284925	0.204
2974.41	286639	0.041
2978.41	287726	0.059
2981.41	288530	0.059
2987.41	290214	0.066
2993.41	291830	0.054
2998.41	293076	0.042
3001.41	293893	0.063
3005.41	295035	0.045
3008.41	295862	0.090
3017.41	298327	0.257
3021.41	299383	0.097
3025.41	300397	0.078
3028.41	301156	0.053
3031.41	301917	0.032
3034.41	302691	0.013
3035.41	302937	0.029
3038.41	303657	0.022
3044.41	305288	0.021
3047.41	306200	0.111
3050.41	307131	0.102
3053.41	308031	0.026
3056.41	308907	0.020
3058.41	309483	0.009
3061.41	310330	0.036
3065.41	311411	0.022
3068.41	312208	0.019
3077.41	314543	0.021
3080.41	315297	0.045
3085.41	316524	0.020
3086.41	316765	0.027
3088.41	317255	0.044
3091.41	317999	0.037
3098.41	319708	0.019
3107.41	321875	0.032
3110.41	322513	0.014
3118.41	324218	0.008
3124.41	325629	0.012
3128.41	326761	0.010
3131.41	327730	0.046
3137.41	329848	0.117
3140.41	331050	0.142
3147.41	334306	0.586
3148.41	334805	1.035
3152.41	336766	0.395
3155.41	338233	0.366
3158.41	339706	0.439
3161.41	341187	0.164
3164.41	342594	0.034
3172.41	346523	0.277
3178.41	349620	0.401



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3188.41	355187	0.380
3194.41	358466	0.240
3197.41	360071	0.155
3205.41	364333	0.076
3208.41	365962	0.268
3211.41	367507	0.058
3214.41	369034	0.091
3218.41	371188	0.224
3221.41	372991	0.208
3224.41	374711	0.071
3227.41	376381	0.085
3233.41	379524	0.019
3236.41	381227	0.125
3238.41	382318	0.033
3248.41	388065	0.122
3254.41	391928	0.114
3257.41	393908	0.157
3260.41	395792	0.023
3263.41	397482	0.023
3266.41	399134	0.019
3268.41	400228	0.021
3274.41	403501	0.033
3278.41	405617	0.016
3287.41	410200	0.018
3288.41	410683	0.012
3300.41	417095	0.013
3306.41	420527	0.015
3308.41	421761	0.012



depth	corrected	Ice age (GT4)	nanat Na (ppb)
4	72	12.48	
7	129	65.37	
9	170	30.31	
11	211	24.26	
13	258	21.47	
19	397	37.25	
21	444	22.55	
22	469	33.63	
24	523	25.58	
26	581	38.08	
29	665	39.3	
31	726	22.84	
33	788	19.43	
35	848	25.52	
37	912	43.26	
39	976	19.35	
42	1074	26.59	
43	1107	29.77	
46	1211	23.17	
48	1285	16.53	
50	1356	18.69	
52	1426	53.09	
55	1535	21.08	
57	1612	33.45	
59	1692	37.9	
61	1772	21.91	
63	1853	34.71	
65	1931	35.05	
68	2049	33.96	
70	2129	36.11	
73	2253	30.34	
75	2331	28.41	
77	2418	26.88	
79	2501	27.66	
81	2585	23.31	
83	2670	24.74	
83.1	2674.3	23.83	
85	2760	39.99	
85.1	2764.5	39.4	
87	2847	38.47	
89	2934	20.78	
91	3026	28.09	
93	3114	26.59	
95	3201	29.98	
97	3289	13.99	
99	3379	39.39	
101	3466	29.48	
103	3558	nan	
105	3646	27.17	
108	3778	26.13	
109	3824	19.52	
111	3915	27.1	
113	4009	17.29	
117	4202	34.44	

## nanat

118	4250	34.38
121	4381	30.51
123	4466	36.42
125	4552	40.31
127	4642	33.79
129	4739	31.86
131	4831	18.21
133	4929	29.47
135	5025	32.21
137	5118	28.48
139	5212	17.05
140	5259	20.58
141	5305	18.33
143	5397	32.04
145	5488	26.23
147	5581	17.65
149	5674	29.53
151	5769	33.9
153	5863	45.13
155	5955	33.09
157	6052	29.09
159	6145	37.35
160	6193	30.4
161	6241	25.18
162	6287	21.04
163	6334	14.01
165	6436	33.44
167	6534	31.54
169	6631	26.69
170	6677	32.73
171	6724	24.22
173	6823	34.02
175	6924	26.4
177	7023	15.19
179	7124	30.18
180	7172	27.51
181	7220	23.01
183	7315	24.44
184	7364	32.18
187	7509	30.31
189	7602	30.32
191	7697	27.39
193	7794	18.9
195	7894	22.32
197	7994	23.01
199	8091	23.33
199.1	8095.4	37.95
201	8178	31.09
201.1	8182.8	34.28
203	8276	18.15
204	8325	19.34
205	8374	24.93
205.1	8378.8	22.52
206	8422	12.78
207	8471	27.54

## nanat

207.1	8475.9	19.66
209	8569	37.07
210	8619	18.11
211	8668	13.54
213	8763	22.66
215	8861	17.65
217	8960	20.83
220	9107	27.64
224	9298	37.51
224.1	9302.8	25.87
225	9346	13.25
230	9589	20.71
243	10218	24.32
247	10415	34.8
255	10812	18.33
262	11146	14.53
270	11537	12.47
273	11695	42.75
280	12087	26.97
282	12202	37.27
285	12385	27.74
285.1	12391.1	38.35
286	12446	30.17
287	12507	44.9
287.1	12513.2	33.32
288	12569	48.24
289	12632	44.41
290	12694	44.89
290.1	12700.1	52.1
291	12755	45.36
292	12815	53.88
293	12874	52.7
295	12994	61.92
295.1	13000.1	48.93
299	13237	64.09
302	13414	37.34
303	13476	49.56
303.1	13482.3	55.62
304	13539	61.78
305	13600	59
305.1	13605.9	53.55
306	13659	39.76
307	13718	60.57
307.1	13723.6	45.71
308	13774	55.7
310	13883	47.23
311	13938	53.23
312	13992	33.37
312.1	13997.6	24.23
313	14048	51.53
314	14105	43.09
314.1	14110.8	47.38
317	14281	56.46
318	14342	24.93
320	14466	58.41

## nanat

320.1	14472	44.5
322	14589	53.25
322.1	14595.2	30.43
323	14651	44.99
326	14839	55.12
326.1	14845.5	49.77
327	14904	54.54
328	14968	60.62
329	15032	58.51
330	15099	43.98
330.1	15105.8	56.4
331	15167	44
333	15300	44.21
333.1	15306.6	65.3
334	15366	44.42
336	15501	59.04
336.1	15507.9	70.17
337	15570	37.72
339	15708	50.57
339.1	15714.9	69.57
340	15777	65.36
341	15845	75.94
341.1	15852	76.7
342	15915	52.21
343	15987	61.37
344	16057	71.23
345	16128	61.45
345.1	16135.3	71.55
347	16275	79.02
347.1	16282.5	71.87
350	16502	84.24
350.1	16509.5	61.36
352	16653	100.18
352.1	16660.6	65.25
357	17058	120.49
357.1	17066.1	130.68
358	17139	134.4
360	17298	68.97
362	17462	72.63
363	17544	98.42
363.1	17552.1	126.79
371	18201	114.22
372	18283	138.89
372.1	18291.2	77.14
373	18365	86.78
374	18446	116.4
374.1	18454.4	96.42
375	18530	124.74
376	18615	78.66
377	18701	107.4
377.1	18709.6	136.65
378	18787	84.29
378.1	18795.3	135.79
379	18870	61.19
380	18950	62.06

		nanat
381	19032	83.37
381.1	19040.4	103.81
383	19199	111.81
383.1	19207.3	114.63
386	19443	119.81
386.1	19451.2	140.38
387	19525	140.92
390	19782	136.91
391	19868	131.83
392	19953	113.64
395	20197	133.06
400	20611	112.42
400.1	20619.3	153.84
403	20859	91.78
404	20943	94.67
409	21358	88.7
424	22629	124.33
428	22972	114.25
431	23234	125.51
441	24102	106.69
450	24860	145.12
461	25776	71.4
464	26017	70.6
476	27019	95.5
478	27202	101.82
483	27641	88.38
483.1	27649.9	87.35
489	28163	110.26
501	29166	115.8
503	29332	140.61
510	29949	72.12
510.1	29957.7	77.29
513	30201	103.8
531	31733	99.72
541	32546	102.12
544	32787	73.15
544.1	32795.4	77.9
554	33628	102.78
559	34041	55.34
567	34669	73.02
581	35705	107.78
586	36086	74.1
592	36585	90.5
592.1	36593.1	68.28
598	37066	74.52
600	37230	99.35
606	37718	118
609	37959	118.8
617	38619	115.38
619	38783	68.76
635	40054	113.61
647	41031	94.48
647.1	41039.1	95.26
655	41638	96.08
655.1	41645.2	100.45

## nanat

665	42374	141.54
670	42758	78.37
680	43540	83.26
691	44463	66.97
697	44972	112.63
700	45225	99.35
707	45846	104.12
718	46797	92.17
720	46966	93.26
726	47462	121.51
745	49034	57.22
750	49430	85.47
760	50217	99.48
762	50374	74.15
769	50928	49.46
780	51794	56.77
810	54286	78.61
815	54713	82.87
826	55615	107.51
828	55775	72.17
840	56698	60.08
842	56850	44.19
844	56993	67.57
846	57139	58.32
867	58759	63.37
877	59593	74.53
878	59674	85.6
888	60519	73.17
891	60779	66.08
895	61141	49.97
898	61406	124.98
898.1	61415	57.8
907	62213	101.47
925	63865	73.51
930	64322	56.01
930.1	64331.4	51.99
930.2	64340.8	101.7
931	64416	49.26
934	64698	63.67
940	65278	87.2
940.2	65296.6	65.28
948	66045	78.33
948.1	66054.9	131.69
953	66520	90.43
961	67272	90.91
961.1	67281.5	95.78
963	67462	99.97
965	67653	98.64
967	67848	161.81
971	68233	146.9
971.1	68242.7	78.42
973	68424	84.96
976	68715	82.35
980	69071	140.21
980.1	69079.4	70.84

		nanat
983	69324	79.54
990	69959	71.31
990.1	69968.5	122.34
995	70425	31.11
997	70600	82.72
997.1	70608.3	99.46
1011	71743	101.71
1011.1	71750.9	87.72
1012	71822	59.86
1020	72489	55.84
1020.1	72497.9	73.24
1021	72578	94.93
1024	72840	80.22
1031	73440	52.27
1035	73795	50.76
1037	73973	64.71
1040	74238	48.35
1040.1	74246.4	53.32
1049	74985	72.29
1050	75066	55.24
1050.1	75074.1	54.9
1051	75147	75.32
1051.1	75155.2	47.34
1061	75928	68.4
1061.1	75935.9	74.58
1068	76465	64.23
1069	76543	52.1
1070	76622	62.4
1072	76777	45.47
1072.1	76784.7	47.94
1080	77433	35.81
1081	77521	54.31
1081.1	77529.5	92.43
1083	77687	57.7
1092	78437	57.38
1092.1	78445.5	57.2
1095	78690	50.32
1096	78772	58.74
1097	78854	49.98
1098	78937	46.68
1098.1	78945.3	58.07
1115	80257	64.24
1131	81453	60.13
1145	82427	49.85
1158	83331	18.58
1160	83470	42.5
1172	84308	47.5
1172.1	84315	37.45
1181	84905	43.38
1182	84971	34.26
1193	85680	31.86
1194	85746	36.86
1205	86492	90.42
1220	87554	39.08
1221	87624	16.54

		nanat
1243	89221	27.95
1250	89748	29.08
1257	90286	34.89
1270	91258	55.97
1281	92040	72.26
1301	93468	59.83
1308	93961	46.19
1309	94026	59.97
1317	94585	51.44
1330	95487	110.06
1333	95693	37.7
1334	95761	21.68
1345	96511	37.88
1350	96861	42.46
1368	98157	49.79
1370	98300	49.35
1372	98439	51.73
1377	98783	45.07
1381	99063	48.17
1382	99134	45.43
1389	99622	36
1399	100301	54.07
1399.1	100307.6	48.59
1402	100498	51.16
1413	101234	49.13
1428	102177	39.89
1449	103553	39.23
1449.1	103560.2	35.93
1459	104266	37.06
1460	104337	42.65
1474	105342	31.16
1480	105772	34.5
1480.1	105779	44.5
1485	106114	27.74
1499	107121	44.73
1507	107767	67.88
1508	107852	65.42
1518	108706	66.17
1531	109790	49.75
1532	109872	64.05
1533	109952	66.34
1549	111239	52.51
1549.1	111247	39.32
1550	111319	28.85
1567	112708	76.98
1568	112790	53.19
1576	113425	51.84
1578	113578	54.88
1579	113656	34.05
1579.1	113664	78.38
1591	114562	57.83
1592	114639	37.28
1593	114715	70.02
1599	115150	44.54
1599.1	115157.2	42.59

nanat

1607	115683	33.38
1616	116296	50.82
1619	116497	23.29
1619.1	116503.6	25.46
1624	116827	23.86
1631	117264	56.56
1636	117575	23.17
1637	117635	18.3
1638	117697	24.25
1645	118135	13.19
1648	118314	19.84
1649	118376	14.28
1650	118438	18.19
1650.1	118444.1	27.03
1651	118499	20.2
1652	118559	27.42
1671	119710	29.7
1679	120199	21.23
1679.1	120205	25.33
1683	120439	19.93
1684	120498	19.52
1687	120669	15.86
1698	121314	24.96
1699	121373	10.08
1699.1	121378.9	14.62
1700	121432	10.22
1701	121492	9.37
1710	122006	18.79
1711	122064	9.64
1712	122122	10.13
1715	122290	9.78
1719	122515	17.18
1719.1	122520.6	13.86
1726	122919	24.59
1730	123154	10.88
1738	123602	7.96
1739	123658	15.62
1740	123715	17.56
1740.1	123720.5	13.7
1741	123770	9.47
1744	123936	18.25
1759	124765	18.49
1759.1	124770.6	12.92
1760	124821	10.36
1762	124935	13.58
1763	124993	14.69
1768	125271	11.31
1775	125653	12
1779	125877	71.15
1780	125933	18.02
1783	126103	16.51
1785	126217	13.27
1787	126327	10.03
1792	126598	16.98
1798	126904	10.21

			nanat
1798.1	126909.1		12.4
1800	127006	5.3	
1801	127057	17.55	
1802	127108	7.9	
1802.1	127113.1		11.43
1805	127260	9.4	
1807	127360	23.39	
1807.1	127365	12.81	
1810	127510	4.93	
1812	127610	14.54	
1815	127760	38.46	
1816	127810	7.88	
1817	127860	10.41	
1821	128062	18.31	
1821.1	128067	12.51	
1822	128112	7.58	
1823	128161	43.53	
1825	128259	12.29	
1825.5	128284	7.13	
1826	128309	16.99	
1828	128405	9.06	
1830	128501	7.18	
1831	128549	7.51	
1831.1	128554	10.48	
1832	128599	8.48	
1837	128854	13.7	
1837.1	128859.2		7.48
1840	129011	6.56	
1840.1	129016.4		6.48
1845	129274	8.05	
1845.1	129279	8.23	
1848	129428	13.2	
1850	129545	14.37	
1852	129653	9.65	
1853	129705	19.33	
1856	129863	13.82	
1857	129916	46.67	
1860	130079	9.65	
1862	130185	8.78	
1867	130467	24.3	
1868	130525	23.66	
1872	130759	17.74	
1876	131004	22.55	
1877	131066	8.79	
1882	131374	23.95	
1882.1	131380.5		39.24
1883	131439	27.46	
1887	131707	27.22	
1888	131773	16.77	
1892	132048	19.56	
1898	132477	30.96	
1898.1	132484.1		44.13
1900	132619	24.3	
1901	132691	44.56	
1903	132836	59.62	

nanat

1905	132987	40
1907	133142	53.42
1910	133374	114.71
1914	133679	35.48
1918	134005	92.94
1918.1	134013.6	76.93
1925	134628	58.82
1932	135308	73.02
1935	135604	90.31
1938	135903	91
1941	136206	85.39
1941.1	136216.3	86.67
1947	136819	45.5
1947.1	136829.4	83.2
1952	137341	73.67
1956	137754	94.57
1957	137858	89.55
1958	137966	72.08
1963	138532	133.02
1963.1	138543.2	105.98
1964	138644	118.94
1971	139418	128.74
1971.1	139429.2	89.33
1972	139530	96.64
1977	140093	111.28
1981	140542	120.81
1982	140655	124.93
1985	140986	101.95
1988	141323	95.72
1988.1	141334.1	115.76
1994	141997	90.62
1995	142108	67.48
1995.1	142119	114.97
1998	142440	58.58
2008	143562	49.93
2010	143790	91.26
2020	144894	71.85
2029	145905	59.46
2038	146903	71.9
2042	147347	69.29
2048	148025	61.61
2054	148691	53.09
2070	150440	55.93
2080	151502	103.89
2089	152513	69.11
2101	153868	80.61
2108	154664	66.64
2109	154783	37.41
2124	156593	67.74
2129	157202	60.69
2139	158359	71.28
2149	159444	83.36
2155	160076	78.25
2158	160403	77.29
2167	161427	93.62

## nanat

2173	162117	78.68
2177	162543	104.38
2188	163777	98.77
2198	165021	90.35
2202	165522	98.31
2210	166537	126.27
2219	167664	81.46
2225	168391	53.41
2233	169314	81.57
2242	170340	52.79
2255	171880	65.29
2259	172393	65.69
2269	173642	59.95
2278	174688	59.06
2279	174804	52.24
2290	176117	39.72
2298	177142	58.09
2302	177644	41.86
2309	178554	91.38
2319	179820	52.96
2324	180426	70.21
2329	181011	90.16
2338	182146	70.73
2350	183807	113.05
2354	184367	50.49
2359	185069	95.38
2369	186499	107.09
2373	187067	93.49
2377	187630	89.19
2388	189165	57.84
2400	190705	49.83
2401	190822	54.17
2412	192138	79.28
2422	193421	42.49
2431	194565	28.36
2441	195808	50.52
2449	196846	41.02
2452	197211	18.92
2462	198426	40.27
2469	199220	56.9
2480	200451	35.62
2489	201423	31.96
2499	202496	56.86
2501	202717	41.35
2502	202826	18.98
2504	203046	37.4
2509	203592	20.35
2510	203704	52.28
2516	204394	41.63
2517	204512	26.85
2519	204743	49.52
2522	205092	18.47
2525	205458	51.83
2526	205582	46.53
2527	205708	49.61

			nanat
2529	205965	75.03	
2533	206496	nan	
2536	206890	38.87	
2537	207019	59.8	
2538	207149	71.69	
2541	207540	33.81	
2543	207803	51.11	
2550.41	208747	69.53	
2553.41	209122	49.73	
2556.41	209487	60.12	
2560.41	209989	65.41	
2563.41	210348	60.67	
2570.41	211176	67.99	
2575.41	211771	26.45	
2578.41	212122	43.49	
2581.41	212470	32.43	
2584.41	212813	56.56	
2587.41	213156	19.34	
2590.41	213500	nan	
2593.41	213845	19.14	
2599.41	214525	25.16	
2602.41	214865	28.8	
2605.41	215207	25.99	
2612.41	216004	32.29	
2614.41	216247	40.27	
2617.41	216608	11.73	
2620.41	216951	28.13	
2627.41	217747	13.13	
2630.41	218110	17.83	
2632.41	218353	21.9	
2635.41	218736	27.88	
2639.41	219261	51.7	
2641.41	219527	51.84	
2642.41	219660	49.4	
2645.41	220082	78.06	
2648.41	220523	59.71	
2649.41	220674	60.54	
2652.41	221120	61.13	
2653.41	221273	58.67	
2656.41	221752	72.5	
2657.41	221918	69.48	
2659.41	222253	84.76	
2662.41	222782	95.22	
2669.41	224055	108.38	
2672.41	224610	96.28	
2675.41	225128	85.88	
2678.41	225629	79.65	
2679.41	225797	68.98	
2681.41	226140	51.41	
2686.41	227016	83.93	
2690.41	227774	97.45	
2693.41	228313	97.61	
2697.41	229052	84	
2700.41	229617	81.33	
2704.41	230336	68.56	

nanat

2707.41	230867	84.27
2710.41	231383	89.03
2716.41	232364	50.14
2720.41	232993	51.59
2723.41	233452	55.91
2729.41	234327	42.02
2731.41	234610	38.69
2734.41	235043	48.32
2737.41	235469	31.74
2741.41	236033	33.01
2743.41	236305	31.69
2746.41	236707	32.84
2750.41	237216	22.82
2752.41	237459	21.55
2755.41	237801	15.41
2757.41	238020	17.53
2761.41	238465	6.05
2764.41	238813	6.96
2767.41	239175	8.07
2770.41	239562	12.78
2773.41	239992	26.09
2776.41	240453	33.28
2779.41	240947	36.3
2782.41	241484	47.91
2785.41	242071	78.17
2788.41	242656	69.91
2791.41	243220	74.54
2794.41	243797	85.04
2797.41	244425	79.57
2800.41	245070	98.61
2803.41	245707	92.62
2806.41	246358	116.58
2810.41	247224	121.2
2812.41	247656	104.81
2815.41	248321	102.13
2818.41	248998	121.44
2821.41	249647	90.69
2824.41	250287	124.37
2827.41	250901	69.62
2829.41	251320	90.61
2833.41	252195	95.03
2836.41	252858	90.32
2839.41	253535	106.94
2845.41	254851	71.49
2848.41	255490	87.84
2851.41	256161	74.37
2854.41	256855	95.55
2857.41	257580	104.24
2860.41	258325	94.87
2863.41	259083	102.24
2866.41	259856	152.41
2870.41	260911	120.4
2872.41	261445	105.18
2875.41	262241	126.3
2878.41	263043	129.02

nanat

2880.41	263575	119.87
2881.41	263844	123.72
2883.41	264380	122.58
2884.41	264639	99.62
2886.41	265164	107.27
2887.41	265433	120.12
2888.41	265706	116.87
2889.41	265971	121.51
2890.41	266228	98.71
2892.41	266750	103.33
2893.41	267012	143.65
2895.41	267538	101.75
2896.41	267796	107.78
2897.41	268048	118.83
2899.41	268534	71.4
2901.41	269029	80.69
2902.41	269281	88.42
2904.41	269780	90.81
2905.41	270026	nan
2907.41	270507	75.76
2908.41	270744	85.8
2910.41	271210	69.34
2911.41	271444	73.1
2913.41	271917	69.78
2914.41	272144	88.86
2916.41	272592	64.61
2917.41	272815	59.54
2919.41	273256	65.43
2920.41	273475	71.84
2922.41	273918	53.95
2923.41	274136	62.12
2925.41	274565	55.54
2926.41	274781	63.28
2928.41	275216	49.32
2929.41	275432	53.09
2931.41	275859	53.64
2932.41	276070	38.61
2934.41	276496	51.02
2935.41	276707	56.48
2937.41	277122	28.88
2938.41	277334	64.71
2940.41	277771	nan
2941.41	277996	46.55
2943.41	278456	61.5
2944.41	278688	48.24
2946.41	279153	57.12
2947.41	279391	64.55
2949.41	279886	69.77
2950.41	280147	69.41
2952.41	280668	90.39
2953.41	280921	58.66
2955.41	281443	84.92
2956.41	281714	79.55
2958.41	282250	70.82
2959.41	282510	77.79

## nanat

2961.41	283013	69.26
2962.41	283265	51
2964.41	283785	74.48
2966.41	284337	76.29
2967.41	284629	104.6
2969.41	285223	92.4
2970.41	285516	97.76
2972.41	286083	73.43
2973.41	286362	84.72
2975.41	286916	70.9
2976.41	287191	78.39
2978.41	287724	84.38
2979.41	287988	64.82
2981.41	288533	75.35
2982.41	288816	65.14
2984.41	289385	93.47
2985.41	289661	80.19
2987.41	290216	69.83
2988.41	290496	73.23
2990.41	291037	90.97
2991.41	291300	65.61
2993.41	291830	75.93
2994.41	292091	74.12
2996.41	292589	64.82
2997.41	292832	55.87
2999.41	293343	55.48
3000.41	293616	68.27
3002.41	294178	64.23
3003.41	294466	73.7
3005.41	295033	68.2
3006.41	295311	68.31
3008.41	295860	67.77
3009.41	296130	58.63
3011.41	296676	62.09
3012.41	296953	62.97
3014.41	297506	62.69
3015.41	297781	49.44
3017.41	298326	53.35
3018.41	298593	38.52
3020.41	299120	28.21
3021.41	299381	38.36
3023.41	299891	40.24
3024.41	300143	30.97
3026.41	300650	47.9
3027.41	300903	40.73
3029.41	301410	40.04
3030.41	301664	45.19
3032.41	302167	36.66
3033.41	302428	44.06
3035.41	302934	47.28
3036.41	303175	30.82
3038.41	303661	23.9
3039.41	303916	41.87
3041.41	304445	38.98
3042.41	304721	38.69

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3044.41	305291	42.16
3045.41	305586	47.17
3047.41	306201	51.02
3048.41	306514	67.72
3050.41	307130	73.51
3051.41	307432	62.96
3053.41	308030	71.44
3054.41	308327	44.96
3056.41	308907	38.55
3057.41	309195	39.65
3059.41	309767	37.12
3060.41	310049	43.61
3062.41	310605	31.7
3063.41	310876	32.56
3065.41	311411	31.85
3066.41	311676	34.77
3068.41	312209	29.93
3069.41	312476	29.19
3071.41	313006	38.6
3072.41	313265	30.89
3074.41	313778	28.01
3075.41	314033	24.26
3077.41	314542	22.58
3078.41	314795	22.1
3080.41	315296	28.73
3081.41	315544	24.91
3083.41	316034	26.09
3084.41	316279	13.6
3086.41	316766	26.07
3087.41	317010	33.98
3089.41	317503	21.41
3090.41	317751	16.87
3092.41	318241	17.47
3093.41	318485	19.44
3095.41	318973	18.58
3096.41	319219	23.1
3098.41	319708	17.32
3099.41	319955	18.23
3101.41	320458	14.45
3102.41	320709	20.94
3104.41	321191	15
3105.41	321423	9.17
3107.41	321872	12.19
3108.41	322088	8.11
3110.41	322513	5.78
3111.41	322724	3.1
3113.41	323144	6.48
3114.41	323356	6.54
3116.41	323784	7.25
3117.41	324000	10.96
3119.41	324441	7.09
3120.41	324668	7.29
3122.41	325137	8.01
3123.41	325380	3.51
3125.41	325901	8.08

nanat

3126.41	326176	14.17
3128.41	326767	20.91
3128.51	326799	23.16
3131.41	327731	31.46
3132.41	328061	28.24
3134.41	328747	36.26
3135.41	329104	nan
3137.41	329853	41.72
3138.41	330243	48.31
3140.41	331054	62.99
3141.41	331474	61.53
3143.41	332353	74.36
3146.41	333807	113.44
3148.41	334805	97.23
3150.41	335794	96.69
3152.41	336767	83.12
3153.41	337255	92.62
3155.41	338233	93.92
3156.41	338724	84.24
3158.41	339705	82.6
3159.41	340197	85.15
3161.41	341180	86.87
3162.41	341654	67.34
3164.41	342597	68.9
3165.41	343078	72.37
3167.41	344056	70.02
3168.41	344549	74.55
3170.41	345530	109.49
3171.41	346025	77.95
3173.41	347031	86.12
3174.41	347540	76.63
3176.41	348570	86.57
3177.41	349093	78.71
3179.41	350170	90.73
3180.41	350719	98.93
3182.41	351823	90.39
3183.41	352380	106.55
3185.41	353505	100.68
3186.41	354068	109.37
3188.41	355185	110.17
3189.41	355737	93.71
3191.41	356840	82.89
3192.41	357390	101.89
3194.41	358468	149.64
3195.41	359008	83.1
3197.41	360069	70.08
3198.41	360592	64.83
3200.41	361659	74.51
3201.41	362190	78.73
3203.41	363263	91.53
3204.41	363799	73.63
3206.41	364884	70.34
3207.41	365427	62.14
3209.41	366479	64.19
3210.41	366994	48.81

nanat

3212.41	368026	52.89
3213.41	368534	51.18
3215.41	369547	46.94
3216.41	370081	56.68
3218.41	371200	71.29
3219.41	371793	76.02
3221.41	372986	65.6
3222.41	373568	63.69
3224.41	374709	56.66
3225.41	375272	48.85
3227.41	376374	54.06
3228.41	376901	43.41
3230.41	377910	41.26
3231.41	378429	41.02
3233.41	379529	57.55
3234.41	380098	56.98
3236.41	381224	52.06
3237.41	381774	51.24
3239.41	382832	43.43
3240.41	383342	42.94
3242.41	384385	45.09
3245.41	386154	53.8
3246.41	386790	68.94
3248.41	388063	58.75
3249.41	388692	69.96
3251.41	389966	58.76
3252.41	390616	65.76
3254.41	391928	61.27
3255.41	392586	63.6
3257.41	393907	64.1
3258.41	394559	53.91
3260.41	395782	46.24
3261.41	396359	42.3
3263.41	397481	36.28
3264.41	398035	27.19
3266.41	399133	28.63
3267.41	399680	29.19
3269.41	400776	28.8
3270.41	401318	26.18
3272.41	402404	23.05
3273.41	402953	19.64
3275.41	404033	19.78
3276.41	404562	16.92
3278.41	405615	16.13
3279.41	406135	14.84
3280.41	406653	16.83
3282.41	407677	14.94
3283.41	408185	11.54
3285.41	409199	13.78
3286.41	409701	13.42
3288.41	410686	10.98
3289.41	411189	13.75
3291.41	412224	13.2
3292.41	412750	12.29
3294.41	413825	13.9

nanat

3295.41	414370	13.85
3297.41	415459	14.72
3298.41	416005	13.41
3300.41	417096	13.78
3301.41	417645	13.32
3303.41	418759	12.02
3304.41	419336	13.66

Depth	corrected	Ice age	(GT4)	deutnat	deut	deltaTS
0	0	-438	0.00			
1	17	-438	0.00			
2	35	-438	0.00			
3	53	-438	0.00			
4	72	-438	0.00			
5	91	-438	0.00			
6	110	-438	0.00			
7	129	-438	0.00			
8	149	-442.9	-0.81			
9	170	-437.9	0.02			
10	190	-435.8	0.36			
11	211	-443.7	-0.95			
12	234	-449.1	-1.84			
13	258	-444.6	-1.09			
14	281	-442.5	-0.75			
15	304	-439.3	-0.22			
16	327	-440.9	-0.48			
17	351	-442.5	-0.75			
18	375	-436.6	0.23			
19	397	-430	1.33			
20	420	-435.9	0.35			
21	444	-436.9	0.18			
22	469	-438.5	-0.08			
23	495	-444.5	-1.08			
24	523	-446.4	-1.39			
25	552	-447.7	-1.61			
26	581	-443.4	-0.90			
27	609	-441.6	-0.60			
28	637	-438.1	-0.02			
29	665	-439.1	-0.18			
30	695	-445.4	-1.23			
31	726	-447.3	-1.54			
32	757	-443.1	-0.85			
33	788	-438.6	-0.10			
34	817	-439	-0.17			
35	848	-442.7	-0.78			
36	881	-442.7	-0.78			
37	912	-439	-0.17			
38	944	-439.5	-0.25			
39	976	-439.7	-0.28			
40	1009	-442.9	-0.81			
41	1042	-438.3	-0.05			
42	1074	-436.4	0.27			
43	1107	-443	-0.83			
44	1142	-441.9	-0.65			
45	1176	-439.6	-0.27			
46	1211	-441.9	-0.65			
47	1247	-446.9	-1.48			
48	1285	-447.9	-1.64			
49	1321	-440.4	-0.40			
50	1356	-436	0.33			
51	1390	-438.3	-0.05			
52	1426	-438.8	-0.13			
53	1461	-438.2	-0.03			

		deutnat	
54	1497	-440.8	-0.46
55	1535	-444	-1.00
56	1573	-443.8	-0.96
57	1612	-446	-1.33
58	1652	-447.1	-1.51
59	1692	-443.3	-0.88
60	1732	-444.4	-1.06
61	1772	-445.3	-1.21
62	1812	-445.5	-1.24
63	1853	-443.8	-0.96
64	1893	-441.2	-0.53
65	1931	-437.1	0.15
66	1970	-439.7	-0.28
67	2009	-440.7	-0.45
68	2049	-440.3	-0.38
69	2089	-441.2	-0.53
70	2129	-441.7	-0.61
71	2171	-443.7	-0.95
72	2212	-442.4	-0.73
73	2253	-437.3	0.12
74	2291	-431	1.16
75	2331	-443.9	-0.98
76	2374	-446.7	-1.44
77	2418	-442.4	-0.73
78	2460	-441.8	-0.63
79	2501	-436.2	0.30
80	2542	-439.6	-0.27
81	2585	-446.2	-1.36
82	2628	-439	-0.17
83	2670	-438.1	-0.02
84	2713	-445.2	-1.19
85	2760	-449.9	-1.97
86	2805	-441.7	-0.61
87	2847	-434.5	0.58
88	2889	-440.3	-0.38
89	2934	-446.1	-1.34
90	2980	-446.5	-1.41
91	3026	-442.4	-0.73
92	3070	-439.5	-0.25
93	3114	-441.2	-0.53
94	3158	-438.5	-0.08
95	3201	-437.1	0.15
96	3245	-440.6	-0.43
97	3289	-441.7	-0.61
98	3334	-439.8	-0.30
99	3379	-438.8	-0.13
100	3422	-436.7	0.22
101	3466	-437	0.17
102	3511	-443.5	-0.91
103	3558	-443.4	-0.90
104	3603	-436.2	0.30
105	3646	-434.1	0.65
106	3689	-434.5	0.58
107	3732	-437.8	0.03
108	3778	-441.8	-0.63

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109	3824	-440.8	-0.46
110	3870	-438	0.00
111	3915	-439.4	-0.23
112	3962	-442	-0.66
113	4009	-442.4	-0.73
114	4057	-442.5	-0.75
115	4104	-443.5	-0.91
116	4153	-444.6	-1.09
117	4202	-444	-1.00
118	4250	-441.2	-0.53
119	4295	-434.7	0.55
120	4339	-431.2	1.13
121	4381	-431.2	1.13
122	4423	-431.2	1.13
123	4466	-431.2	1.13
124	4509	-431.2	1.13
125	4552	-432.7	0.88
126	4596	-436.8	0.20
127	4642	-440	-0.33
128	4690	-443.3	-0.88
129	4739	-441.5	-0.58
130	4786	-436.5	0.25
131	4831	-438	0.00
132	4880	-444.9	-1.14
133	4929	-442	-0.66
134	4977	-440.2	-0.36
135	5025	-442	-0.66
136	5072	-437.2	0.13
137	5118	-436.9	0.18
138	5165	-440.3	-0.38
139	5212	-439.3	-0.22
140	5259	-436.3	0.28
141	5305	-437.4	0.10
142	5351	-437.5	0.08
143	5397	-435	0.50
144	5442	-435	0.50
145	5488	-436.8	0.20
146	5534	-437.9	0.02
147	5581	-437.5	0.08
148	5627	-437.8	0.03
149	5674	-438.37	-0.06
150	5721	-438.93	-0.15
151	5769	-439.5	-0.25
152	5816	-439.3	-0.22
153	5863	-437.1	0.15
154	5909	-435.3	0.45
155	5955	-438.8	-0.13
156	6004	-442.4	-0.73
157	6052	-439.25	-0.21
158	6099	-436.1	0.32
159	6145	-439	-0.17
160	6193	-440.2	-0.33
161	6241	-437.6	0.09
162	6287	-436.4	0.28
163	6334	-441.3	-0.55

		deutnat
164	6385	-447.5 -1.59
165	6436	-444.4 -1.09
166	6486	-439.6 -0.31
167	6534	-441.4 -0.62
168	6583	-441.5 -0.65
169	6631	-435.3 0.37
170	6677	-435.2 0.37
171	6724	-439.5 -0.36
172	6773	-442.3 -0.84
173	6823	-444.9 -1.28
174	6874	-444 -1.14
175	6924	-440.5 -0.58
176	6973	-440.5 -0.59
177	7023	-443.2 -1.05
178	7074	-444 -1.20
179	7124	-440.5 -0.63
180	7172	-436.5 0.02
181	7220	-436.8 -0.04
182	7267	-437.1 -0.11
183	7315	-438.1 -0.29
184	7364	-441.2 -0.81
185	7413	-439.7 -0.58
186	7462	-436 0.02
187	7509	-436.2 -0.03
188	7555	-433.1 0.48
189	7602	-436 -0.02
190	7649	-435.7 0.02
191	7697	-436 -0.04
192	7745	-440 -0.72
193	7794	-439 -0.57
194	7844	-440.9 -0.90
195	7894	-441 -0.93
196	7944	-439.5 -0.69
197	7994	-438.5 -0.54
198	8043	-439 -0.64
199	8091	-433.3 0.30
200	8135	-422.6 2.06
201	8178	-431.35 0.59
202	8226	-440.1 -0.87
203	8276	-439.5 -0.78
204	8325	-438 -0.55
205	8374	-435.9 -0.21
206	8422	-436.1 -0.26
207	8471	-437.6 -0.52
208	8520	-438.3 -0.65
209	8569	-438.4 -0.68
210	8619	-438.6 -0.73
211	8668	-437.5 -0.56
212	8716	-432 0.34
213	8763	-433.2 0.13
214	8811	-438.8 -0.81
215	8861	-437 -0.53
216	8910	-437 -0.54
217	8960	-439 -0.88
218	9009	-436.5 -0.48

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219	9058	-436	-0.41
220	9107	-437.1	-0.60
221	9156	-436.5	-0.51
222	9204	-434.1	-0.13
223	9252	-431.7	0.26
224	9298	-433	0.03
225	9346	-435.5	-0.39
226	9396	-438	-0.82
227	9445	-437.2	-0.70
228	9494	-433.9	-0.16
229	9542	-433.8	-0.16
230	9589	-430.2	0.43
231	9635	-429.6	0.51
232	9682	-435.4	-0.46
233	9732	-437.4	-0.80
234	9782	-437.6	-0.85
235	9831	-436.9	-0.74
236	9881	-434.5	-0.36
237	9929	-434.5	-0.37
238	9978	-436.1	-0.65
239	10027	-433.8	-0.28
240	10075	-434.9	-0.47
241	10124	-435.5	-0.58
242	10172	-430	0.31
243	10218	-428.7	0.52
244	10265	-432.8	-0.18
245	10315	-439.5	-1.30
246	10366	-437.4	-0.97
247	10415	-434.1	-0.43
248	10465	-436	-0.76
249	10515	-436	-0.77
250	10564	-436	-0.79
251	10614	-436.6	-0.90
252	10665	-436.9	-0.96
253	10715	-435.2	-0.70
254	10764	-432.5	-0.26
255	10812	-433.5	-0.44
256	10861	-434.5	-0.62
257	10910	-431.6	-0.15
258	10957	-431.3	-0.12
259	11005	-431.9	-0.23
260	11053	-430.3	0.02
261	11100	-429.8	0.09
262	11146	-425.8	0.74
263	11191	-425.3	0.81
264	11237	-431.2	-0.18
265	11286	-433	-0.48
266	11334	-431.7	-0.27
267	11383	-434.5	-0.73
268	11434	-437.4	-1.22
269	11485	-437.8	-1.29
270	11537	-439.5	-1.57
271	11590	-439.6	-1.59
272	11642	-439.7	-1.61
273	11695	-441	-1.83

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274	11749	-443.2	-2.20
275	11805	-444.2	-2.37
276	11861	-447.1	-2.85
277	11918	-445.3	-2.55
278	11973	-443.1	-2.19
279	12029	-447	-2.84
280	12087	-448.5	-3.09
281	12144	-446.5	-2.77
282	12202	-447.3	-2.90
283	12261	-453.2	-3.88
284	12323	-455	-4.18
285	12385	-453.6	-3.96
286	12446	-451.5	-3.61
287	12507	-452.4	-3.76
288	12569	-455.3	-4.25
289	12632	-455.3	-4.25
290	12694	-453.27	-3.91
291	12755	-451.23	-3.57
292	12815	-449.2	-3.24
293	12874	-450.2	-3.40
294	12934	-450.8	-3.50
295	12994	-451.8	-3.67
296	13055	-452.9	-3.85
297	13116	-452.3	-3.75
298	13177	-452.1	-3.72
299	13237	-450.5	-3.45
300	13296	-448.8	-3.17
301	13355	-448.8	-3.17
302	13414	-451.8	-3.67
303	13476	-455.5	-4.28
304	13539	-453.9	-4.02
305	13600	-451.2	-3.57
306	13659	-449.4	-3.27
307	13718	-447.2	-2.91
308	13774	-442.9	-2.19
309	13828	-442	-2.04
310	13883	-443.2	-2.24
311	13938	-442.1	-2.06
312	13992	-443.65	-2.32
313	14048	-445.2	-2.57
314	14105	-446.75	-2.83
315	14163	-448.3	-3.08
316	14221	-449.85	-3.34
317	14281	-451.4	-3.60
318	14342	-452.95	-3.85
319	14404	-454.5	-4.11
320	14466	-451.7	-3.64
321	14526	-452.8	-3.82
322	14589	-456	-4.34
323	14651	-453.8	-3.98
324	14713	-453.5	-3.92
325	14775	-454.8	-4.14
326	14839	-457.1	-4.52
327	14904	-458.1	-4.68
328	14968	-456.7	-4.44

			deutnat
329	15032	-458	-4.66
330	15099	-462	-5.32
331	15167	-462.5	-5.40
332	15234	-460.1	-5.00
333	15300	-459	-4.81
334	15366	-458.6	-4.74
335	15432	-461.1	-5.15
336	15501	-464.5	-5.71
337	15570	-463.8	-5.60
338	15639	-462.9	-5.44
339	15708	-463.7	-5.57
340	15777	-462	-5.29
341	15845	-462.4	-5.35
342	15915	-467.5	-6.19
343	15987	-466.3	-5.99
344	16057	-464.9	-5.75
345	16128	-466.9	-6.08
346	16201	-468.5	-6.34
347	16275	-470.9	-6.74
348	16350	-471.8	-6.88
349	16426	-471.8	-6.88
350	16502	-471	-6.74
351	16577	-471.2	-6.77
352	16653	-472.4	-6.97
353	16729	-473.6	-7.16
354	16808	-475.6	-7.49
355	16889	-480.7	-8.33
356	16974	-481.8	-8.51
357	17058	-479	-8.04
358	17139	-476.4	-7.60
359	17219	-476	-7.53
360	17298	-475.5	-7.45
361	17379	-479.4	-8.09
362	17462	-480.5	-8.27
363	17544	-477	-7.68
364	17625	-477.6	-7.78
365	17706	-478	-7.84
366	17787	-477.9	-7.82
367	17868	-477.3	-7.72
368	17949	-477.5	-7.75
369	18031	-480.15	-8.19
370	18116	-482.8	-8.63
371	18201	-480	-8.16
372	18283	-478.4	-7.89
373	18365	-477.5	-7.74
374	18446	-478.9	-7.97
375	18530	-482.1	-8.50
376	18615	-481.7	-8.43
377	18701	-483.5	-8.73
378	18787	-481.9	-8.46
379	18870	-476.6	-7.58
380	18950	-476.9	-7.63
381	19032	-479.8	-8.11
382	19116	-480.7	-8.26
383	19199	-479.35	-8.03

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384	19282	-478 -7.81
385	19362	-476.4 -7.54
386	19443	-477.4 -7.70
387	19525	-480.1 -8.15
388	19610	-481.9 -8.45
389	19696	-483.5 -8.71
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393	20035	-477 -7.62
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397	20361	-480 -8.11
398	20444	-479.8 -8.08
399	20528	-479.5 -8.03
400	20611	-479.6 -8.04
401	20694	-479.1 -7.96
402	20777	-478.6 -7.87
403	20859	-479 -7.94
404	20943	-480.1 -8.12
405	21026	-480 -8.10
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407	21192	-478.9 -7.91
408	21275	-478.9 -7.91
409	21358	-479.45 -8.00
410	21442	-480 -8.09
411	21525	-477.8 -7.73
412	21605	-475.6 -7.36
413	21686	-477.4 -7.66
414	21769	-480.9 -8.24
415	21854	-481.5 -8.33
416	21939	-480.2 -8.12
417	22023	-480.4 -8.15
418	22108	-482 -8.41
419	22196	-484.5 -8.82
420	22284	-484.5 -8.82
421	22371	-482.3 -8.45
422	22457	-481.4 -8.30
423	22543	-481.85 -8.37
424	22629	-482.3 -8.45
425	22716	-482.75 -8.52
426	22803	-483.2 -8.59
427	22888	-479.5 -7.97
428	22972	-479.2 -7.92
429	23057	-482.7 -8.50
430	23145	-484.5 -8.80
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432	23324	-485.8 -9.01
433	23412	-483 -8.54
434	23497	-478.3 -7.76
435	23581	-480.95 -8.20
436	23668	-483.6 -8.63
437	23755	-483.6 -8.63
438	23843	-483.6 -8.63

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439	23931	-482.5 -8.44
440	24017	-481.4 -8.26
441	24102	-480 -8.03
442	24186	-479.1 -7.87
443	24272	-484 -8.68
444	24363	-488.3 -9.39
445	24453	-482.7 -8.46
446	24537	-477.1 -7.53
447	24619	-477 -7.51
448	24700	-477 -7.50
449	24781	-475.5 -7.25
450	24860	-474 -7.00
451	24941	-477.45 -7.57
452	25024	-480.9 -8.14
453	25109	-480 -7.98
454	25193	-479.1 -7.83
455	25277	-478.2 -7.68
456	25360	-479.5 -7.89
457	25445	-481.8 -8.27
458	25531	-481 -8.13
459	25615	-478.4 -7.70
460	25697	-474.5 -7.05
461	25776	-474.1 -6.98
462	25855	-475.8 -7.26
463	25936	-476 -7.29
464	26017	-477.1 -7.47
465	26099	-477.2 -7.48
466	26180	-475.3 -7.16
467	26261	-475.8 -7.24
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469	26425	-479.3 -7.82
470	26510	-480.7 -8.05
471	26595	-481 -8.09
472	26681	-481 -8.09
473	26766	-478.9 -7.74
474	26849	-477.8 -7.56
475	26933	-479.9 -7.90
476	27019	-484.4 -8.64
477	27110	-486.7 -9.02
478	27202	-486.7 -9.02
479	27293	-485.5 -8.82
480	27382	-484.3 -8.62
481	27470	-481.4 -8.14
482	27555	-479.6 -7.84
483	27641	-482.3 -8.28
484	27730	-484.6 -8.66
485	27819	-483.8 -8.52
486	27907	-482.3 -8.27
487	27993	-481.2 -8.09
488	28079	-480.1 -7.90
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492	28420	-485.7 -8.82
493	28510	-483.58 -8.47

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496	28766	-477.23	-7.42	
497	28848	-475.12	-7.07	
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500	29085	-474.62	-6.98	
501	29166	-476.24	-7.25	
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507	29682	-482.8	-8.33	
508	29771	-484.3	-8.58	
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518	30622	-477.95	-7.52	
519	30705	-477.27	-7.41	
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523	31043	-480.8	-8.00	
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526	31302	-478.7	-7.65	
527	31387	-479.4	-7.77	
528	31473	-481	-8.03	
529	31560	-482	-8.20	
530	31648	-480.4	-7.93	
531	31733	-477.2	-7.40	
532	31815	-475.6	-7.14	
533	31896	-473.4	-6.77	
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536	32137	-475.3	-7.09	
537	32219	-476.4	-7.27	
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540	32463	-477.7	-7.49	
541	32546	-474.7	-6.99	
542	32626	-472.5	-6.62	
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544	32787	-477.6	-7.47	
545	32871	-477.6	-7.47	
546	32955	-476.5	-7.29	
547	33039	-478.3	-7.59	
548	33124	-478.4	-7.60	

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549	33209	-478.4	-7.60
550	33293	-476.8	-7.34
551	33376	-475.2	-7.07
552	33459	-477.4	-7.44
553	33544	-478	-7.54
554	33628	-476.6	-7.31
555	33711	-475.5	-7.12
556	33793	-475.8	-7.17
557	33877	-476.9	-7.36
558	33960	-475.8	-7.17
559	34041	-471.9	-6.53
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561	34202	-473.3	-6.76
562	34281	-470.2	-6.25
563	34360	-472.3	-6.59
564	34438	-469.2	-6.08
565	34515	-468.8	-6.01
566	34592	-469.6	-6.15
567	34669	-467.9	-5.87
568	34744	-466.9	-5.70
569	34818	-463.5	-5.14
570	34889	-461.6	-4.82
571	34960	-463	-5.05
572	35033	-465.8	-5.52
573	35108	-468.6	-5.98
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575	35261	-467.6	-5.82
576	35336	-465	-5.39
577	35409	-464.1	-5.24
578	35482	-464.9	-5.37
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587	36166	-472.9	-6.70
588	36248	-474.9	-7.03
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593	36666	-474.5	-6.97
594	36748	-472.6	-6.65
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598	37066	-473.25	-6.76
599	37148	-474.1	-6.90
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617	38619	-474.4 -6.94
618	38702	-473.1 -6.73
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622	39027	-472.1 -6.56
623	39107	-470 -6.21
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626	39341	-469.7 -6.16
627	39420	-470.2 -6.24
628	39499	-470.2 -6.24
629	39579	-469.5 -6.13
630	39657	-469.5 -6.13
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641	40551	-473 -6.71
642	40632	-472.1 -6.56
643	40714	-472.8 -6.67
644	40796	-471.5 -6.46
645	40875	-467.2 -5.74
646	40952	-467.2 -5.74
647	41031	-471 -6.37
648	41112	-472.3 -6.59
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650	41268	-463.9 -5.19
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654	41564	-465.7 -5.48
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657	41782	-463.3 -5.08
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659	41927	-460.9 -4.68
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661	42077	-467 -5.69
662	42152	-462.8 -4.99
663	42225	-460.8 -4.65
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665	42374	-467.1 -5.70
666	42451	-465.3 -5.40
667	42527	-465.9 -5.49
668	42603	-465.5 -5.43
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672	42916	-468.3 -5.88
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679	43464	-465.6 -5.42
680	43540	-465.9 -5.47
681	43619	-473.2 -6.68
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697	44972	-473.3 -6.68
698	45055	-473.6 -6.72
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700	45225	-477.7 -7.40
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702	45407	-480.8 -7.91
703	45497	-479.2 -7.64
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705	45677	-477.6 -7.38
706	45762	-472.6 -6.55
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714	46457	-476.3	-7.15
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716	46628	-474.8	-6.90
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718	46797	-472.3	-6.48
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720	46966	-475	-6.92
721	47050	-473.5	-6.67
722	47133	-471.2	-6.29
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731	47881	-474	-6.74
732	47966	-474.7	-6.85
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740	48622	-471.2	-6.26
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743	48870	-472	-6.39
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745	49034	-468.2	-5.76
746	49113	-468.3	-5.77
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748	49272	-466.7	-5.51
749	49350	-466.7	-5.51
750	49430	-469	-5.89
751	49510	-469.5	-5.97
752	49591	-470.1	-6.07
753	49672	-468.3	-5.78
754	49750	-465.4	-5.30
755	49828	-467.1	-5.58
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767	50766	-467.9	-5.72
768	50847	-470	-6.07

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769	50928	-468.9 -5.89
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771	51086	-463 -4.91
772	51159	-456.1 -3.77
773	51230	-459.5 -4.34
774	51306	-465.8 -5.38
775	51384	-467.1 -5.60
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777	51549	-473.1 -6.60
778	51633	-472.1 -6.43
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783	52034	-466.8 -5.56
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786	52275	-466.7 -5.55
787	52352	-463.6 -5.03
788	52430	-467 -5.60
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798	53275	-467.2 -5.65
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800	53436	-469.6 -6.05
801	53520	-473.2 -6.65
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803	53692	-472.6 -6.55
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812	54457	-472.4 -6.53
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817	54881	-471.3 -6.36
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820	55136	-470.1 -6.16
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824	55457	-465.6	-5.42
825	55536	-464.3	-5.21
826	55615	-465.6	-5.43
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828	55775	-467.9	-5.81
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831	56009	-463.5	-5.09
832	56087	-462.7	-4.95
833	56163	-461.2	-4.71
834	56239	-462.5	-4.92
835	56317	-463.6	-5.11
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837	56471	-463.5	-5.09
838	56548	-463.5	-5.10
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841	56774	-462.2	-4.88
842	56850	-459.7	-4.47
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846	57139	-460.1	-4.54
847	57215	-461.2	-4.73
848	57289	-456.9	-4.01
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850	57436	-461.9	-4.85
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852	57590	-462	-4.86
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857	57981	-460.7	-4.65
858	58057	-460.5	-4.62
859	58133	-462.2	-4.90
860	58211	-462.6	-4.96
861	58286	-458.4	-4.27
862	58360	-458.1	-4.22
863	58436	-462.4	-4.93
864	58514	-464.1	-5.21
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866	58676	-468	-5.86
867	58759	-469.2	-6.06
868	58842	-468.4	-5.93
869	58925	-467.9	-5.85
870	59008	-469.1	-6.04
871	59093	-471.3	-6.41
872	59178	-470.7	-6.31
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874	59345	-467.9	-5.85
875	59428	-469	-6.03
876	59511	-468	-5.86
877	59593	-466	-5.53
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879	59755	-466	-5.53
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881	59921	-471.8	-6.49
882	60007	-472	-6.53
883	60093	-469.7	-6.15
884	60177	-469.5	-6.11
885	60262	-470	-6.20
886	60348	-471.5	-6.45
887	60433	-470.6	-6.30
888	60519	-470.5	-6.28
889	60605	-472	-6.53
890	60692	-472.3	-6.58
891	60779	-472.5	-6.61
892	60869	-476.7	-7.31
893	60961	-477.7	-7.48
894	61052	-474.7	-6.98
895	61141	-473.7	-6.81
896	61229	-472	-6.53
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903	61852	-472.4	-6.60
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905	62031	-475.4	-7.10
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907	62213	-477.5	-7.44
908	62307	-479.2	-7.72
909	62401	-478.7	-7.64
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911	62594	-481	-8.02
912	62689	-478.9	-7.67
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914	62877	-477.9	-7.51
915	62970	-477.9	-7.51
916	63064	-477.9	-7.51
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918	63249	-475.5	-7.11
919	63338	-471.4	-6.43
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923	63688	-471.3	-6.41
924	63776	-473.8	-6.83
925	63865	-473.8	-6.82
926	63954	-473.6	-6.79
927	64043	-474.5	-6.94
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930	64322	-478.2	-7.55
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933	64605	-477.5	-7.43

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936	64890	-480.5 -7.92
937	64987	-482 -8.17
938	65085	-480.9 -7.98
939	65182	-480.7 -7.95
940	65278	-479.6 -7.76
941	65371	-476.5 -7.25
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946	65855	-479.6 -7.75
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948	66045	-482.4 -8.21
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955	66708	-479.8 -7.76
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959	67085	-476.7 -7.22
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994	70334	-476.8 -7.08
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1007	71427	-465.5 -5.15
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1069	76543	-466.5 -5.16
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1072	76777	-463.6 -4.67
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1225	87907	-459.3	-4.21
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1263	90740	-460.4	-4.16

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1272	91411	-464.2 -4.73
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1317	94585	-461.4 -4.15
1318	94655	-462.6 -4.35

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1321	94864	-459.7	-3.87
1322	94932	-459.3	-3.80
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1342	96304	-459.4	-3.80
1343	96372	-459.8	-3.87
1344	96441	-462	-4.23
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1356	97294	-462.7	-4.35
1357	97365	-464	-4.57
1358	97439	-469.4	-5.46
1359	97514	-466.5	-4.98
1360	97588	-465.9	-4.88
1361	97659	-461.3	-4.12
1362	97727	-456.7	-3.36
1363	97794	-461.2	-4.10
1364	97864	-462	-4.24
1365	97936	-465.5	-4.82
1366	98010	-468.9	-5.38
1367	98085	-465.8	-4.87
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1373	98505	-457.5	-3.51

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1375	98640	-461.2	-4.12
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1377	98783	-462.8	-4.39
1378	98855	-463.8	-4.56
1379	98925	-460.4	-4.00
1380	98994	-459.2	-3.80
1381	99063	-461.4	-4.17
1382	99134	-463.9	-4.58
1383	99205	-462.5	-4.35
1384	99275	-461.1	-4.12
1385	99345	-460.8	-4.07
1386	99414	-460.5	-4.03
1387	99484	-460.4	-4.01
1388	99553	-460	-3.95
1389	99622	-459.8	-3.92
1390	99691	-460.8	-4.08
1391	99760	-459.6	-3.89
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1393	99894	-457.2	-3.49
1394	99961	-457.2	-3.49
1395	100028	-456.9	-3.45
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1407	100835	-456.6	-3.42
1408	100902	-457.9	-3.64
1409	100969	-457.2	-3.52
1410	101036	-456.5	-3.41
1411	101102	-455.8	-3.29
1412	101168	-455.1	-3.18
1413	101234	-455.1	-3.18
1414	101299	-453.9	-2.99
1415	101363	-452.6	-2.77
1416	101427	-452	-2.67
1417	101490	-451.4	-2.58
1418	101554	-453.7	-2.96
1419	101618	-452.8	-2.81
1420	101681	-449.5	-2.27
1421	101743	-450.1	-2.37
1422	101806	-450.8	-2.49
1423	101868	-450	-2.36
1424	101930	-449.2	-2.23
1425	101991	-448.4	-2.10
1426	102052	-447.6	-1.97
1427	102114	-450.3	-2.42
1428	102177	-452.9	-2.86

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1430	102304	-450.2 -2.42
1431	102366	-449.2 -2.26
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1443	103137	-454.6 -3.19
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1446	103341	-456.7 -3.55
1447	103410	-459.6 -4.04
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1449	103553	-462.1 -4.46
1450	103625	-461.8 -4.41
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1456	104054	-460.2 -4.16
1457	104125	-459.9 -4.11
1458	104195	-459.5 -4.05
1459	104266	-460.5 -4.22
1460	104337	-461.6 -4.40
1461	104409	-461.4 -4.37
1462	104480	-461.1 -4.32
1463	104552	-461.1 -4.33
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1471	105128	-461.9 -4.48
1472	105200	-460.7 -4.28
1473	105271	-459.6 -4.10
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1476	105485	-462 -4.51
1477	105559	-463.2 -4.71
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1479	105702	-458.5 -3.93
1480	105772	-458.5 -3.93
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1484	106048	-454.2	-3.21
1485	106114	-451.2	-2.71
1486	106179	-455.2	-3.37
1487	106248	-459.1	-4.02
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1499	107121	-461.5	-4.40
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1506	107683	-474.1	-6.48
1507	107767	-475.3	-6.67
1508	107852	-476.4	-6.85
1509	107938	-476.7	-6.90
1510	108025	-477	-6.95
1511	108111	-477	-6.95
1512	108198	-476.3	-6.83
1513	108283	-475.6	-6.71
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1515	108454	-475.2	-6.64
1516	108538	-474.8	-6.57
1517	108622	-474	-6.43
1518	108706	-473.1	-6.28
1519	108789	-473.1	-6.28
1520	108872	-473.1	-6.28
1521	108954	-473.1	-6.27
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1524	109206	-476.4	-6.81
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1530	109707	-472.8	-6.20
1531	109790	-473.4	-6.30
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1533	109952	-468.4	-5.47
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1538	110348	-469.1	-5.58

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1539	110427	-469.1	-5.57
1540	110507	-469.1	-5.57
1541	110586	-469.1	-5.57
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1554	111640	-469.8	-5.68
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1558	111973	-472.7	-6.16
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1561	112219	-471.4	-5.94
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1564	112465	-471.4	-5.93
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1568	112790	-471	-5.86
1569	112872	-472.2	-6.06
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1571	113036	-470.6	-5.80
1572	113116	-468.2	-5.40
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1575	113348	-465	-4.86
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1579	113656	-467.5	-5.27
1580	113736	-469.6	-5.62
1581	113815	-466.5	-5.10
1582	113891	-463.3	-4.57
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1585	114115	-461.9	-4.33
1586	114189	-462.1	-4.36
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1589	114411	-461.4	-4.24
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1591	114562	-465.7	-4.95
1592	114639	-464.7	-4.78
1593	114715	-463.6	-4.60

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1594	114790	-462	-4.33
1595	114863	-460.4	-4.06
1596	114935	-458.5	-3.75
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1600	115222	-456.5	-3.41
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1603	115420	-450.9	-2.47
1604	115486	-450.9	-2.47
1605	115551	-450.9	-2.47
1606	115617	-450.9	-2.47
1607	115683	-451.5	-2.56
1608	115749	-452	-2.64
1609	115816	-454.8	-3.11
1610	115886	-457.6	-3.57
1611	115956	-456.2	-3.34
1612	116025	-454.7	-3.08
1613	116093	-454	-2.97
1614	116161	-453.4	-2.86
1615	116228	-453.5	-2.88
1616	116296	-453.2	-2.83
1617	116363	-452.8	-2.76
1618	116430	-452.5	-2.71
1619	116497	-452.3	-2.67
1620	116563	-452.3	-2.67
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1622	116697	-451.5	-2.53
1623	116762	-450.8	-2.41
1624	116827	-449	-2.11
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1631	117264	-446	-1.59
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1634	117451	-448.5	-2.00
1635	117514	-445.5	-1.50
1636	117575	-442.4	-0.98
1637	117635	-444.1	-1.26
1638	117697	-445.8	-1.54
1639	117759	-446.6	-1.67
1640	117822	-447.7	-1.85
1641	117886	-447.9	-1.88
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1643	118012	-446.6	-1.66
1644	118074	-444.5	-1.31
1645	118135	-442.3	-0.94
1646	118194	-442.3	-0.93
1647	118254	-442.3	-0.93
1648	118314	-443.9	-1.19

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1650	118438	-445.5 -1.45
1651	118499	-443.5 -1.12
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1653	118618	-440.2 -0.57
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1656	118796	-447.5 -1.77
1657	118859	-445.7 -1.47
1658	118921	-443.9 -1.16
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1661	119101	-440 -0.51
1662	119160	-442.7 -0.95
1663	119221	-445.4 -1.40
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1666	119406	-444.7 -1.27
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1673	119831	-446 -1.47
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1704	121669	-439.6	-0.32
1705	121727	-437.9	-0.03
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1707	121840	-436.1	0.28
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1710	122006	-437.2	0.11
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1712	122122	-438	-0.01
1713	122178	-436	0.32
1714	122234	-435.5	0.41
1715	122290	-435	0.50
1716	122345	-436.1	0.32
1717	122402	-437.3	0.13
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1719	122515	-436.5	0.27
1720	122571	-435.8	0.39
1721	122627	-437.1	0.18
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1738	123602	-437.2	0.25
1739	123658	-437.8	0.16
1740	123715	-436.1	0.44
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1742	123825	-434.5	0.72
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1745	123991	-436.5	0.40
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1747	124100	-431.5	1.24
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1753	124432	-436	0.50
1754	124488	-435.5	0.58
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1757	124654	-435.3	0.62
1758	124710	-435.4	0.60

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1759	124765	-435.4	0.60
1760	124821	-435.1	0.65
1761	124877	-437.4	0.27
1762	124935	-439.9	-0.14
1763	124993	-438.8	0.04
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1769	125325	-433.5	0.92
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1771	125435	-434.1	0.82
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1775	125653	-434.5	0.76
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1779	125877	-435.4	0.61
1780	125933	-435.8	0.55
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1782	126046	-436.8	0.38
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1791	126545	-431.5	1.26
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1793	126650	-427.3	1.93
1794	126700	-423.8	2.50
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1800	127006	-426.1	2.06
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1804	127210	-424.9	2.22
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1815	127760	-422.7	2.43
1816	127810	-421.7	2.58
1817	127860	-422.1	2.49
1818	127910	-424	2.16
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1820	128012	-423.2	2.26
1821	128062	-421.7	2.49
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1825	128259	-421.2	2.50
1826	128309	-419.4	2.78
1827	128357	-416.6	3.23
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1836	128804	-419.9	2.45
1837	128854	-421.2	2.20
1838	128906	-422.5	1.96
1839	128958	-423.9	1.70
1840	129011	-425.3	1.44
1841	129065	-425.3	1.42
1842	129119	-425.3	1.39
1843	129172	-422.5	1.83
1844	129224	-419.8	2.25
1845	129274	-418	2.52
1846	129324	-416.3	2.78
1847	129374	-419.6	2.20
1848	129428	-428.7	0.67
1849	129486	-434.5	-0.31
1850	129545	-429.1	0.56
1851	129600	-423.8	1.42
1852	129653	-421.5	1.78
1853	129705	-419.1	2.16
1854	129757	-420.2	1.95
1855	129809	-421.4	1.73
1856	129863	-422.1	1.60
1857	129916	-423.7	1.31
1858	129971	-424.6	1.14
1859	130026	-422.5	1.47
1860	130079	-420.3	1.81
1861	130131	-420.3	1.79
1862	130185	-423.5	1.24
1863	130241	-426.7	0.68
1864	130297	-425.4	0.88
1865	130353	-425.5	0.84
1866	130410	-426.9	0.59
1867	130467	-427	0.57
1868	130525	-427.2	0.53

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1869	130582	-428	0.40
1870	130641	-428.9	0.24
1871	130699	-429.5	0.14
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1874	130880	-432.9	-0.43
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1876	131004	-433.6	-0.56
1877	131066	-433.7	-0.58
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1888	131773	-438.8	-1.45
1889	131840	-441.3	-1.87
1890	131908	-443.8	-2.28
1891	131978	-443.5	-2.23
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1893	132120	-446.8	-2.78
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1895	132264	-445.7	-2.60
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1897	132406	-444.7	-2.44
1898	132477	-445.2	-2.52
1899	132548	-445.5	-2.57
1900	132619	-445.5	-2.58
1901	132691	-445.5	-2.58
1902	132763	-446.6	-2.76
1903	132836	-449	-3.16
1904	132911	-450.2	-3.36
1905	132987	-451.7	-3.61
1906	133065	-453.1	-3.84
1907	133142	-452.2	-3.69
1908	133219	-451.3	-3.54
1909	133296	-452.5	-3.73
1910	133374	-453.7	-3.93
1911	133452	-451.6	-3.58
1912	133528	-449.5	-3.23
1913	133603	-449.5	-3.23
1914	133679	-453	-3.81
1915	133759	-456.6	-4.41
1916	133841	-456.9	-4.46
1917	133923	-457	-4.47
1918	134005	-459.5	-4.89
1919	134091	-461.9	-5.28
1920	134178	-462.6	-5.40
1921	134266	-464.7	-5.74
1922	134356	-465.8	-5.93
1923	134447	-466.8	-6.09

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1925	134628	-464.7 -5.74
1926	134719	-468.6 -6.39
1927	134815	-472.1 -6.97
1928	134912	-471.7 -6.90
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1932	135308	-475.2 -7.48
1933	135408	-474.1 -7.30
1934	135507	-471.3 -6.83
1935	135604	-471.8 -6.91
1936	135702	-473.1 -7.13
1937	135802	-474.3 -7.33
1938	135903	-474.2 -7.31
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1943	136411	-474.7 -7.39
1944	136512	-475.6 -7.54
1945	136614	-474.1 -7.29
1946	136715	-475.4 -7.51
1947	136819	-478 -7.94
1948	136923	-476.1 -7.62
1949	137026	-475.4 -7.50
1950	137130	-477.3 -7.82
1951	137235	-478 -7.93
1952	137341	-478.3 -7.98
1953	137446	-476.7 -7.72
1954	137549	-475.1 -7.45
1955	137651	-475.2 -7.47
1956	137754	-475.7 -7.55
1957	137858	-477.7 -7.88
1958	137966	-481.5 -8.51
1959	138078	-483.8 -8.89
1960	138193	-485.9 -9.24
1961	138308	-484.1 -8.94
1962	138420	-482 -8.59
1963	138532	-482.8 -8.72
1964	138644	-482.5 -8.67
1965	138756	-482.5 -8.67
1966	138868	-482 -8.59
1967	138978	-480.3 -8.30
1968	139087	-480.3 -8.30
1969	139197	-481.7 -8.53
1970	139308	-480.9 -8.40
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1975	139868	-481.1 -8.43
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1979	140319	-480.6	-8.34
1980	140430	-481.2	-8.44
1981	140542	-482.6	-8.67
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1983	140766	-480.9	-8.38
1984	140876	-479.3	-8.11
1985	140986	-482.2	-8.59
1986	141100	-483.2	-8.75
1987	141212	-481	-8.38
1988	141323	-480.6	-8.31
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1990	141547	-483	-8.70
1991	141661	-482.3	-8.58
1992	141773	-481.9	-8.51
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1999	142551	-481.9	-8.49
2000	142665	-483.4	-8.73
2001	142779	-483.1	-8.68
2002	142893	-482.5	-8.58
2003	143006	-481.5	-8.41
2004	143117	-479.6	-8.09
2005	143227	-480.1	-8.17
2006	143338	-481	-8.31
2007	143450	-481.2	-8.34
2008	143562	-481.2	-8.34
2009	143675	-483.1	-8.65
2010	143790	-484.5	-8.87
2011	143905	-481.4	-8.36
2012	144016	-479	-7.95
2013	144126	-480.4	-8.18
2014	144237	-480.1	-8.13
2015	144346	-477.6	-7.71
2016	144453	-478.1	-7.79
2017	144562	-478.5	-7.85
2018	144671	-479	-7.93
2019	144782	-480.7	-8.21
2020	144894	-481.4	-8.32
2021	145006	-480.6	-8.19
2022	145116	-478.9	-7.90
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2024	145337	-480.3	-8.13
2025	145449	-481.4	-8.31
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2027	145678	-482.5	-8.49
2028	145792	-481.6	-8.34
2029	145905	-482.3	-8.45
2030	146019	-481.5	-8.31
2031	146131	-479.6	-8.00
2032	146242	-479.6	-7.99
2033	146352	-478.8	-7.86

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2035	146570	-478.6 -7.82
2036	146681	-479.6 -7.98
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2040	147124	-479.4 -7.95
2041	147236	-479.8 -8.02
2042	147347	-479.8 -8.02
2043	147459	-480.6 -8.15
2044	147572	-480 -8.05
2045	147684	-479.5 -7.97
2046	147796	-481.2 -8.25
2047	147910	-481.6 -8.32
2048	148025	-482.5 -8.47
2049	148141	-482.4 -8.45
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2051	148362	-476.8 -7.52
2052	148471	-477.9 -7.70
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2054	148691	-478.7 -7.84
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2056	148913	-478 -7.72
2057	149022	-477.4 -7.62
2058	149132	-476.9 -7.54
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2062	149569	-477.6 -7.66
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2065	149899	-477.1 -7.57
2066	150008	-475.7 -7.34
2067	150116	-475.6 -7.33
2068	150224	-476.9 -7.54
2069	150333	-475.7 -7.34
2070	150440	-473.2 -6.93
2071	150545	-473.4 -6.96
2072	150653	-476.2 -7.43
2073	150762	-476.1 -7.41
2074	150868	-472.1 -6.75
2075	150972	-471.3 -6.61
2076	151076	-472.8 -6.86
2077	151181	-473.1 -6.91
2078	151287	-473.1 -6.91
2079	151393	-475 -7.22
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2088	152398	-480.7 -8.15

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2090	152628	-479 -7.86
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2099	153637	-480.2 -8.06
2100	153753	-480.4 -8.10
2101	153868	-478.2 -7.74
2102	153981	-477.5 -7.62
2103	154094	-478.1 -7.72
2104	154207	-477.6 -7.64
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2106	154438	-478.9 -7.86
2107	154551	-475.9 -7.37
2108	154664	-478.8 -7.85
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2111	155029	-482.9 -8.53
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2113	155271	-480 -8.06
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2136	158026	-479 -7.93
2137	158140	-473.2 -6.97
2138	158250	-473 -6.93
2139	158359	-471.2 -6.63
2140	158469	-474.2 -7.13
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2142	158702	-477.2 -7.62
2143	158815	-473.9 -7.07

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2145	159033	-471.8 -6.72
2146	159139	-466.8 -5.89
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2150	159548	-463.7 -5.36
2151	159651	-469.2 -6.27
2152	159757	-469.8 -6.37
2153	159865	-470.9 -6.54
2154	159971	-467.3 -5.94
2155	160076	-469.2 -6.25
2156	160184	-472.3 -6.76
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2158	160403	-472.5 -6.78
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2160	160626	-476.3 -7.40
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2165	161192	-476.1 -7.34
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2167	161427	-480 -7.97
2168	161545	-476.6 -7.41
2169	161661	-476.5 -7.38
2170	161776	-474.4 -7.03
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2175	162336	-469.5 -6.22
2176	162440	-464.9 -5.46
2177	162543	-465.7 -5.59
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2185	163432	-474.2 -7.00
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2195	164642	-484.9 -8.77
2196	164769	-480.9 -8.11
2197	164894	-482 -8.29
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2199	165148	-482	-8.30
2200	165274	-482.1	-8.31
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2208	166284	-482.5	-8.39
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2211	166662	-478	-7.65
2212	166785	-479.5	-7.90
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2214	167035	-482.8	-8.45
2215	167164	-481.6	-8.25
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2217	167414	-478.6	-7.76
2218	167539	-479.8	-7.96
2219	167664	-479.8	-7.96
2220	167790	-480.3	-8.05
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2224	168276	-471.8	-6.65
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2227	168623	-472.1	-6.71
2228	168739	-473.5	-6.94
2229	168857	-474.1	-7.05
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2231	169088	-469.7	-6.33
2232	169201	-469.7	-6.33
2233	169314	-469.4	-6.29
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2238	169866	-472.8	-6.87
2239	169983	-471.2	-6.61
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2245	170683	-472.5	-6.85
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2247	170922	-471.1	-6.61
2248	171040	-473.5	-7.01
2249	171165	-479.3	-7.97
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2254	171760	-472.8	-6.88
2255	171880	-474	-7.08
2256	172004	-477.5	-7.65
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2258	172262	-480.5	-8.15
2259	172393	-480.5	-8.14
2260	172522	-476.8	-7.53
2261	172647	-477	-7.56
2262	172774	-477.5	-7.64
2263	172900	-476.7	-7.51
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2268	173519	-473.4	-6.96
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2270	173761	-469.4	-6.30
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2274	174226	-472	-6.74
2275	174344	-468.6	-6.18
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2283	175266	-468.4	-6.16
2284	175386	-472.5	-6.84
2285	175509	-475	-7.25
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2292	176373	-475.5	-7.33
2293	176501	-476.5	-7.50
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2295	176759	-476.8	-7.54
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2305	178026	-474	-7.07
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2309	178554	-480.6	-8.15
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2320	179939	-470.1	-6.39
2321	180060	-469.8	-6.34
2322	180182	-469.9	-6.35
2323	180304	-469.5	-6.28
2324	180426	-470.5	-6.44
2325	180546	-466.1	-5.71
2326	180663	-465.7	-5.64
2327	180780	-465.7	-5.64
2328	180895	-463.8	-5.32
2329	181011	-466.3	-5.73
2330	181132	-471.8	-6.64
2331	181259	-473.5	-6.92
2332	181382	-466.8	-5.80
2333	181502	-469.2	-6.20
2334	181626	-472.7	-6.77
2335	181753	-472.3	-6.71
2336	181881	-473.8	-6.95
2337	182011	-475.9	-7.30
2338	182146	-479.4	-7.87
2339	182284	-480.2	-8.00
2340	182421	-477.3	-7.52
2341	182556	-478.2	-7.66
2342	182694	-480.7	-8.08
2343	182830	-476	-7.29
2344	182965	-478.5	-7.70
2345	183102	-478.9	-7.77
2346	183243	-483.8	-8.58
2347	183386	-481	-8.11
2348	183525	-478.2	-7.64
2349	183664	-481.4	-8.17
2350	183807	-481.6	-8.20
2351	183948	-480.9	-8.08
2352	184088	-479.2	-7.79
2353	184229	-481.1	-8.10
2354	184367	-476.7	-7.37
2355	184501	-475.1	-7.10
2356	184641	-484.9	-8.72
2357	184787	-481.8	-8.21
2358	184928	-479.1	-7.75
2359	185069	-481.2	-8.10
2360	185212	-482	-8.23
2361	185354	-479.1	-7.75
2362	185494	-480.3	-7.94
2363	185640	-485	-8.72

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2364	185788	-483.6	-8.49
2365	185931	-478.5	-7.64
2366	186071	-480.1	-7.90
2367	186213	-480.6	-7.98
2368	186356	-480.4	-7.95
2369	186499	-481.6	-8.14
2370	186642	-478.8	-7.68
2371	186784	-481.3	-8.09
2372	186927	-480.4	-7.94
2373	187067	-476.9	-7.36
2374	187204	-476.4	-7.27
2375	187343	-479.3	-7.75
2376	187486	-481.7	-8.14
2377	187630	-479.5	-7.78
2378	187770	-477.4	-7.42
2379	187907	-475	-7.01
2380	188042	-475.2	-7.03
2381	188181	-480.3	-7.87
2382	188324	-480.2	-7.84
2383	188467	-479	-7.63
2384	188609	-480.8	-7.92
2385	188752	-478.4	-7.51
2386	188892	-478.2	-7.46
2387	189030	-476.1	-7.10
2388	189165	-473.4	-6.64
2389	189297	-472.5	-6.48
2390	189431	-476.2	-7.08
2391	189568	-475.9	-7.02
2392	189702	-473.6	-6.63
2393	189832	-470	-6.02
2394	189961	-471.6	-6.27
2395	190092	-473	-6.49
2396	190222	-470.1	-6.00
2397	190348	-467.8	-5.61
2398	190469	-463.2	-4.84
2399	190587	-463	-4.79
2400	190705	-462.6	-4.72
2401	190822	-461.4	-4.51
2402	190934	-456	-3.60
2403	191043	-456.5	-3.68
2404	191156	-462.3	-4.63
2405	191276	-465.7	-5.18
2406	191398	-466.8	-5.35
2407	191522	-467.8	-5.51
2408	191647	-468.1	-5.55
2409	191771	-467	-5.36
2410	191895	-467.7	-5.46
2411	192018	-464.8	-4.97
2412	192138	-464	-4.83
2413	192258	-465.2	-5.02
2414	192382	-468.2	-5.51
2415	192509	-470.3	-5.85
2416	192638	-471.3	-6.01
2417	192768	-471.1	-5.97
2418	192895	-467.4	-5.35

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2419	193022	-470.4	-5.84
2420	193152	-472.7	-6.21
2421	193285	-473.1	-6.28
2422	193421	-476.2	-6.78
2423	193556	-473	-6.25
2424	193687	-469.6	-5.68
2425	193816	-470.9	-5.89
2426	193946	-470.9	-5.88
2427	194075	-469.4	-5.63
2428	194201	-466.8	-5.19
2429	194324	-464.5	-4.80
2430	194444	-462.9	-4.53
2431	194565	-465.5	-4.96
2432	194687	-464.5	-4.79
2433	194806	-461.2	-4.23
2434	194926	-466.3	-5.07
2435	195051	-467.2	-5.22
2436	195175	-465.3	-4.90
2437	195298	-464.8	-4.81
2438	195420	-465.5	-4.92
2439	195546	-468.9	-5.48
2440	195676	-471.3	-5.88
2441	195808	-471.8	-5.95
2442	195940	-470.8	-5.78
2443	196071	-470.5	-5.73
2444	196202	-469.7	-5.59
2445	196332	-470.5	-5.72
2446	196463	-470.5	-5.72
2447	196593	-468.9	-5.45
2448	196722	-468.5	-5.37
2449	196846	-463.2	-4.49
2450	196965	-460.5	-4.04
2451	197086	-465.5	-4.86
2452	197211	-467.4	-5.17
2453	197338	-466.2	-4.97
2454	197462	-465.1	-4.79
2455	197587	-465.6	-4.87
2456	197711	-465.4	-4.83
2457	197833	-462.2	-4.30
2458	197954	-463.3	-4.48
2459	198075	-460.8	-4.07
2460	198192	-459.5	-3.85
2461	198309	-459.2	-3.80
2462	198426	-459.3	-3.81
2463	198542	-458.5	-3.68
2464	198656	-455.6	-3.20
2465	198768	-456.2	-3.29
2466	198881	-454.9	-3.08
2467	198992	-454.2	-2.96
2468	199104	-456.7	-3.37
2469	199220	-459.5	-3.84
2470	199337	-458.2	-3.62
2471	199452	-456.9	-3.40
2472	199567	-458.3	-3.63
2473	199682	-455.5	-3.17

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2474	199793	-453.2
2475	199904	-454.1
2476	200015	-452.4
2477	200124	-453
2478	200236	-454.7
2479	200345	-449.6
2480	200451	-448.3
2481	200558	-450.7
2482	200666	-451
2483	200776	-453
2484	200887	-453.1
2485	200998	-452.7
2486	201109	-451.5
2487	201216	-447.3
2488	201319	-444.8
2489	201423	-447.6
2490	201529	-448.5
2491	201635	-447.7
2492	201742	-449.3
2493	201849	-448.2
2494	201957	-449.7
2495	202065	-447.7
2496	202169	-444.7
2497	202275	-449.9
2498	202386	-451
2499	202496	-450.5
2500	202607	-450.6
2501	202717	-449.4
2502	202826	-449
2503	202936	-450.2
2504	203046	-449.5
2505	203155	-447
2506	203262	-446.5
2507	203370	-449.1
2508	203481	-450.4
2509	203592	-449.6
2510	203704	-451.4
2511	203818	-452.5
2512	203933	-453.1
2513	204049	-453.5
2514	204164	-451.1
2515	204278	-451.9
2516	204394	-454.3
2517	204512	-453.8
2518	204629	-452.4
2519	204743	-450.1
2520	204857	-451.4
2521	204973	-453.7
2522	205092	-456
2523	205214	-456.8
2524	205336	-456.7
2525	205458	-456.4
2526	205582	-458.3
2527	205708	-460.1
2528	205836	-460.7

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2529	205965	-461.3 -4.45
2530	206097	-464.3 -4.95
2531	206232	-464.9 -5.05
2532	206366	-462.6 -4.67
2533	206496	-460.9 -4.39
2534	206627	-462.3 -4.62
2535	206759	-462.5 -4.65
2536	206890	-460.2 -4.27
2537	207019	-460.8 -4.37
2538	207149	-460.3 -4.29
2539	207278	-460.4 -4.31
2540	207409	-461.5 -4.49
2541	207540	-460.8 -4.37
2542	207671	-461.4 -4.47
2543	207803	-461.7 -4.51
2544	207933	-459.3 -4.11
2545	208061	-458.8 -4.02
2546	208191	-460.8 -4.35
2547	208319	-456.9 -3.70
2548	208445	-457.6 -3.81
2549	208571	-456.8 -3.68
2550	208696	-456.3 -3.59
2551	208821	-456.4 -3.60
2552	208946	-456.1 -3.55
2553	209072	-457 -3.70
2554	209195	-453.2 -3.06
2555	209315	-452.1 -2.88
2556	209436	-453.9 -3.17
2557	209560	-456.2 -3.55
2558	209686	-457.3 -3.73
2559	209812	-455.8 -3.48
2560	209938	-456.4 -3.58
2561	210062	-453.4 -3.07
2562	210182	-450 -2.51
2563	210300	-450.8 -2.64
2564	210418	-451 -2.67
2565	210538	-452.5 -2.91
2566	210659	-451.8 -2.79
2567	210777	-449 -2.33
2568	210893	-447.9 -2.14
2569	211009	-448.3 -2.21
2570	211127	-450.9 -2.64
2571	211246	-451.1 -2.67
2572	211366	-450.5 -2.56
2573	211485	-450.3 -2.53
2574	211603	-448.8 -2.28
2575	211721	-450.8 -2.61
2576	211842	-452 -2.80
2577	211960	-447.2 -2.00
2578	212075	-447.4 -2.03
2579	212190	-446.1 -1.81
2580	212305	-448.3 -2.17
2581	212422	-447.7 -2.07
2582	212538	-447.5 -2.03
2583	212653	-445.2 -1.65

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2584	212766	-445.1	-1.63
2585	212881	-447.8	-2.07
2586	212996	-445.3	-1.65
2587	213109	-444.4	-1.50
2588	213223	-447.2	-1.96
2589	213338	-446	-1.76
2590	213453	-445.5	-1.67
2591	213567	-446.4	-1.82
2592	213684	-447.8	-2.06
2593	213799	-444.1	-1.45
2594	213911	-443.5	-1.35
2595	214024	-444.9	-1.58
2596	214138	-444.4	-1.50
2597	214251	-443.8	-1.40
2598	214364	-443.8	-1.41
2599	214478	-445	-1.61
2600	214592	-444.8	-1.58
2601	214706	-443.5	-1.36
2602	214819	-443	-1.29
2603	214932	-443.6	-1.39
2604	215047	-445.2	-1.67
2605	215161	-443.5	-1.40
2606	215274	-442.5	-1.24
2607	215386	-441.1	-1.02
2608	215497	-440.4	-0.91
2609	215608	-442.2	-1.22
2610	215723	-445.3	-1.74
2611	215839	-443.5	-1.45
2612	215955	-445.5	-1.79
2613	216075	-448.4	-2.28
2614	216197	-449	-2.39
2615	216319	-447.3	-2.11
2616	216439	-447.4	-2.14
2617	216560	-447.1	-2.10
2618	216678	-442.8	-1.39
2619	216792	-440.7	-1.05
2620	216904	-440.2	-0.97
2621	217018	-441.7	-1.23
2622	217131	-440.7	-1.07
2623	217244	-439.4	-0.86
2624	217356	-440.3	-1.02
2625	217470	-440.9	-1.13
2626	217584	-441.3	-1.20
2627	217699	-441.1	-1.18
2628	217817	-447.1	-2.18
2629	217939	-446.2	-2.04
2630	218060	-445	-1.85
2631	218181	-445.7	-1.97
2632	218303	-446.3	-2.08
2633	218426	-447	-2.20
2634	218551	-449.5	-2.62
2635	218681	-453.1	-3.23
2636	218814	-452.9	-3.20
2637	218946	-451.3	-2.94
2638	219076	-451	-2.90

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2639	219207	-451.4	-2.98
2640	219339	-452.5	-3.17
2641	219472	-453.5	-3.35
2642	219605	-450.4	-2.84
2643	219738	-453.8	-3.42
2644	219878	-459.5	-4.37
2645	220023	-459.1	-4.31
2646	220167	-458.5	-4.23
2647	220312	-459.7	-4.43
2648	220461	-463	-4.99
2649	220613	-462	-4.84
2650	220761	-459	-4.35
2651	220907	-459.8	-4.49
2652	221058	-463	-5.03
2653	221210	-462.1	-4.89
2654	221363	-462.4	-4.95
2655	221520	-467.4	-5.78
2656	221684	-469.8	-6.19
2657	221850	-468.7	-6.02
2658	222015	-468.9	-6.06
2659	222182	-469.8	-6.21
2660	222355	-474.9	-7.07
2661	222535	-476.2	-7.29
2662	222711	-471.3	-6.49
2663	222885	-473	-6.78
2664	223062	-474.5	-7.02
2665	223240	-473.7	-6.89
2666	223420	-476.2	-7.30
2667	223605	-478.2	-7.63
2668	223792	-478	-7.60
2669	223979	-477.7	-7.55
2670	224164	-476.6	-7.36
2671	224351	-478.3	-7.64
2672	224536	-475.6	-7.19
2673	224716	-472.4	-6.66
2674	224888	-467.8	-5.89
2675	225058	-469.8	-6.22
2676	225229	-469.7	-6.20
2677	225399	-467.8	-5.88
2678	225562	-462.5	-4.99
2679	225726	-468.4	-5.96
2680	225900	-472.2	-6.59
2681	226072	-467	-5.72
2682	226238	-466.2	-5.58
2683	226408	-469.8	-6.17
2684	226582	-470.8	-6.33
2685	226758	-472.1	-6.53
2686	226939	-475.2	-7.04
2687	227128	-479.2	-7.70
2688	227321	-478.8	-7.62
2689	227512	-476.3	-7.19
2690	227699	-475.9	-7.12
2691	227883	-474.1	-6.81
2692	228064	-472.3	-6.50
2693	228241	-469.4	-6.01

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2694	228416	-470.6 -6.19
2695	228596	-474.4 -6.81
2696	228783	-477.6 -7.33
2697	228974	-477.7 -7.34
2698	229165	-476.9 -7.19
2699	229354	-475.9 -7.01
2700	229541	-475.2 -6.89
2701	229726	-474.2 -6.71
2702	229909	-472.1 -6.34
2703	230088	-471 -6.15
2704	230264	-469.3 -5.85
2705	230440	-471.3 -6.17
2706	230618	-470 -5.94
2707	230794	-470.2 -5.96
2708	230972	-471.1 -6.09
2709	231146	-466.8 -5.37
2710	231315	-465.6 -5.15
2711	231482	-465.2 -5.07
2712	231649	-464.7 -4.98
2713	231815	-464.5 -4.93
2714	231979	-462.2 -4.54
2715	232140	-461.3 -4.38
2716	232299	-460.4 -4.21
2717	232458	-460.9 -4.29
2718	232617	-460.2 -4.16
2719	232774	-458.8 -3.91
2720	232930	-458.2 -3.80
2721	233083	-456.1 -3.44
2722	233236	-457.5 -3.66
2723	233390	-457.9 -3.71
2724	233542	-455.2 -3.26
2725	233691	-452.9 -2.87
2726	233836	-451.2 -2.59
2727	233979	-449.6 -2.33
2728	234122	-452.3 -2.78
2729	234268	-451.6 -2.66
2730	234411	-448.9 -2.22
2731	234552	-448.9 -2.22
2732	234694	-449.1 -2.25
2733	234837	-451.5 -2.65
2734	234984	-452.2 -2.77
2735	235129	-450.2 -2.44
2736	235271	-447.1 -1.93
2737	235411	-447 -1.92
2738	235552	-448.9 -2.24
2739	235694	-448.2 -2.13
2740	235836	-448 -2.11
2741	235977	-446.6 -1.89
2742	236114	-443.9 -1.45
2743	236250	-443.6 -1.40
2744	236385	-441.8 -1.11
2745	236518	-442.1 -1.17
2746	236652	-441.9 -1.15
2747	236785	-440.6 -0.94
2748	236916	-438.5 -0.60

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2749	237043	-434.2	0.10
2750	237166	-433.8	0.16
2751	237288	-431.8	0.48
2752	237410	-432.5	0.36
2753	237529	-428.4	1.03
2754	237643	-424.1	1.73
2755	237755	-424	1.74
2756	237866	-422.4	1.99
2757	237975	-421.1	2.20
2758	238084	-421.7	2.09
2759	238194	-422.8	1.90
2760	238306	-423.6	1.75
2761	238419	-424.1	1.66
2762	238532	-424.7	1.55
2763	238647	-426.1	1.30
2764	238764	-427.1	1.12
2765	238883	-427.8	0.99
2766	239003	-429.5	0.69
2767	239125	-430.2	0.56
2768	239248	-430.7	0.46
2769	239375	-434.4	-0.18
2770	239506	-436.5	-0.54
2771	239642	-440.9	-1.29
2772	239784	-443.6	-1.76
2773	239931	-446.2	-2.22
2774	240080	-445.5	-2.12
2775	240231	-448.2	-2.59
2776	240387	-451.1	-3.09
2777	240548	-453	-3.43
2778	240711	-453.6	-3.55
2779	240877	-455.3	-3.85
2780	241048	-457.1	-4.17
2781	241224	-460.9	-4.82
2782	241406	-463.3	-5.23
2783	241596	-466.6	-5.80
2784	241792	-469	-6.21
2785	241991	-468.3	-6.10
2786	242187	-466.8	-5.86
2787	242382	-466.4	-5.80
2788	242576	-466	-5.74
2789	242770	-465.4	-5.65
2790	242959	-461.6	-5.02
2791	243144	-461	-4.93
2792	243330	-462.5	-5.18
2793	243519	-464.2	-5.46
2794	243714	-467	-5.93
2795	243916	-469.7	-6.38
2796	244124	-472.4	-6.82
2797	244337	-473.1	-6.94
2798	244551	-473.6	-7.02
2799	244767	-473.9	-7.07
2800	244983	-473.3	-6.97
2801	245196	-471.8	-6.72
2802	245407	-471	-6.58
2803	245618	-471.8	-6.71

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2804	245834	-474.7 -7.19
2805	246053	-474 -7.07
2806	246269	-472.8 -6.86
2807	246485	-472.6 -6.83
2808	246700	-472.3 -6.78
2809	246917	-474.1 -7.07
2810	247135	-473.2 -6.92
2811	247351	-471.3 -6.60
2812	247566	-472.4 -6.78
2813	247785	-474.5 -7.13
2814	248007	-474.5 -7.13
2815	248229	-474.3 -7.10
2816	248453	-475.9 -7.36
2817	248680	-476.2 -7.41
2818	248907	-475.2 -7.24
2819	249128	-472.3 -6.76
2820	249345	-470.8 -6.51
2821	249560	-470.6 -6.48
2822	249772	-468.4 -6.11
2823	249984	-470.1 -6.39
2824	250199	-470.9 -6.52
2825	250413	-468.8 -6.17
2826	250618	-463.6 -5.31
2827	250818	-463.5 -5.29
2828	251021	-466.1 -5.72
2829	251231	-469.8 -6.34
2830	251448	-470.7 -6.48
2831	251666	-470.8 -6.50
2832	251883	-469.3 -6.25
2833	252102	-472.6 -6.79
2834	252329	-474.8 -7.16
2835	252553	-470.8 -6.49
2836	252769	-467.9 -6.01
2837	252986	-471.2 -6.55
2838	253213	-474.7 -7.13
2839	253442	-473.5 -6.93
2840	253670	-473.2 -6.88
2841	253896	-471.7 -6.63
2842	254121	-472.4 -6.75
2843	254345	-470.6 -6.45
2844	254560	-465.5 -5.60
2845	254767	-462.7 -5.14
2846	254972	-464.3 -5.41
2847	255183	-466.4 -5.77
2848	255399	-468.7 -6.16
2849	255620	-470.1 -6.39
2850	255844	-470.3 -6.43
2851	256068	-469.8 -6.36
2852	256294	-471.8 -6.69
2853	256525	-473.3 -6.95
2854	256759	-473.2 -6.93
2855	256994	-474.4 -7.13
2856	257234	-476.1 -7.42
2857	257479	-477.1 -7.58
2858	257726	-477.8 -7.70

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2859	257975	-478.7 -7.85
2860	258224	-476.6 -7.50
2861	258471	-477.6 -7.67
2862	258723	-479.7 -8.01
2863	258978	-479.5 -7.98
2864	259235	-480.2 -8.09
2865	259492	-480 -8.05
2866	259750	-479.6 -7.99
2867	260009	-481.5 -8.30
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2869	260536	-481.3 -8.26
2870	260801	-482.9 -8.52
2871	261069	-482.4 -8.43
2872	261336	-482.4 -8.43
2873	261602	-481 -8.19
2874	261865	-480.8 -8.16
2875	262131	-482.4 -8.42
2876	262399	-481.7 -8.30
2877	262665	-481.2 -8.21
2878	262933	-482.5 -8.42
2879	263201	-480.8 -8.13
2880	263466	-480.5 -8.08
2881	263732	-481.9 -8.30
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2884	264533	-477.3 -7.52
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2886	265055	-479.4 -7.85
2887	265321	-481.1 -8.13
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2891	266380	-478.1 -7.61
2892	266643	-479 -7.75
2893	266905	-477.8 -7.54
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2895	267431	-478.5 -7.65
2896	267692	-476.3 -7.28
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2898	268194	-472.2 -6.59
2899	268435	-468.4 -5.96
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2902	269178	-473.8 -6.84
2903	269429	-472.7 -6.65
2904	269678	-472.4 -6.59
2905	269926	-471.7 -6.47
2906	270169	-468.6 -5.95
2907	270409	-469 -6.00
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2909	270883	-465.7 -5.44
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2911	271347	-467.1 -5.65
2912	271584	-467.7 -5.74
2913	271822	-467.3 -5.65

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2915	272276	-461.2 -4.60
2916	272500	-463.2 -4.90
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2918	272946	-460.6 -4.43
2919	273166	-460.3 -4.35
2920	273385	-460.3 -4.33
2921	273605	-460.4 -4.33
2922	273827	-461.8 -4.55
2923	274048	-459.2 -4.10
2924	274263	-457.7 -3.84
2925	274477	-457.6 -3.80
2926	274692	-458.6 -3.95
2927	274909	-458.7 -3.95
2928	275127	-459.8 -4.13
2929	275344	-457.5 -3.73
2930	275559	-457.4 -3.71
2931	275772	-456.4 -3.53
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2933	276195	-456.2 -3.48
2934	276409	-457.1 -3.62
2935	276622	-455.5 -3.35
2936	276830	-452.7 -2.88
2937	277036	-453.5 -3.01
2938	277246	-455.5 -3.33
2939	277460	-457.2 -3.61
2940	277680	-459.3 -3.95
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2944	278593	-462.2 -4.44
2945	278825	-462.1 -4.43
2946	279057	-462.1 -4.44
2947	279292	-463.4 -4.67
2948	279533	-465.9 -5.10
2949	279781	-468.2 -5.49
2950	280038	-472.2 -6.17
2951	280303	-472.2 -6.18
2952	280564	-469.1 -5.69
2953	280817	-466.6 -5.30
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2955	281332	-471.2 -6.11
2956	281602	-473.4 -6.50
2957	281875	-472.6 -6.39
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2962	283160	-465.2 -5.22
2963	283417	-467.1 -5.55
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2965	283941	-469.4 -5.95
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2975	286802	-470.6	-6.15
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2977	287351	-467.5	-5.62
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2979	287879	-464.4	-5.09
2980	288145	-468	-5.68
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2982	288698	-472.1	-6.34
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2991	291193	-462.5	-4.65
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3000	293502	-466.5	-5.22
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3010	296289	-462.7	-4.53
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3016	297943	-463.2	-4.57
3017	298215	-462.7	-4.48
3018	298485	-461	-4.20
3019	298749	-458.7	-3.81
3020	299012	-460.1	-4.04
3021	299275	-458	-3.69
3022	299533	-456.6	-3.45
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3024	300039	-454.4	-3.08
3025	300293	-455.5	-3.26
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3030	301560	-455.8	-3.32
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3034	302583	-455	-3.19
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3044	305171	-461.6	-4.32
3045	305463	-464.6	-4.82
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3047	306073	-468.2	-5.42
3048	306386	-468.9	-5.54
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3050	307005	-466.2	-5.09
3051	307309	-464	-4.72
3052	307608	-463.2	-4.58
3053	307908	-463.9	-4.69
3054	308206	-462.2	-4.41
3055	308500	-460.3	-4.09
3056	308789	-459.5	-3.95
3057	309077	-459	-3.86
3058	309365	-458.8	-3.83
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3060	309934	-456.2	-3.39
3061	310215	-455.8	-3.32
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3077	314438	-444.8	-1.32
3078	314692	-443.6	-1.10

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3079	314943	-443	-0.99
3080	315194	-443	-0.97
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3086	316666	-438.9	-0.18
3087	316910	-439.9	-0.33
3088	317155	-439.2	-0.20
3089	317401	-440.4	-0.39
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3091	317897	-439	-0.14
3092	318141	-438.4	-0.03
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3101	320354	-438.4	-0.18
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3104	321095	-430	1.14
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3107	321783	-423.2	2.18
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3110	322426	-418.7	2.82
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3124	325527	-426.3	0.68
3125	325789	-430	0.05
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3128	326639	-440.5	-1.73
3129	326952	-444.4	-2.39
3130	327273	-444.5	-2.41
3131	327597	-445.4	-2.55
3132	327924	-445.9	-2.64
3133	328258	-448.3	-3.03

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3134	328602	-450.6 -3.41
3135	328955	-452.3 -3.68
3136	329318	-455.6 -4.21
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3139	330476	-461.4 -5.11
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3141	331300	-465.8 -5.76
3142	331725	-467.8 -6.06
3143	332164	-471.5 -6.63
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3146	333602	-480.7 -8.04
3147	334101	-480.3 -7.94
3148	334600	-480.4 -7.93
3149	335100	-480.1 -7.87
3150	335595	-478.4 -7.58
3151	336081	-476.6 -7.28
3152	336567	-477.5 -7.43
3153	337055	-476.7 -7.30
3154	337544	-477.4 -7.42
3155	338033	-475.8 -7.16
3156	338521	-476.6 -7.30
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3159	339993	-475.5 -7.13
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3166	343364	-472 -6.64
3167	343853	-472.6 -6.76
3168	344348	-473 -6.84
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3181	351044	-477.9 -7.64
3182	351596	-477.5 -7.57
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3187	354400	-477.3 -7.46
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3190	356060	-474.5 -6.94
3191	356612	-476.4 -7.24
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3195	358786	-473.2 -6.64
3196	359327	-471.9 -6.41
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3198	360376	-468.9 -5.89
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3200	361440	-471.1 -6.24
3201	361973	-468.4 -5.79
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3203	363042	-470.9 -6.20
3204	363580	-468 -5.72
3205	364114	-468.7 -5.84
3206	364659	-470.9 -6.21
3207	365208	-468.9 -5.88
3208	365743	-466 -5.40
3209	366267	-464.3 -5.13
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3226	375604	-464.8 -5.08
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3228	376690	-458.9 -4.07
3229	377204	-454.2 -3.27
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3235	380435	-463.1 -4.68
3236	380997	-461 -4.32
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3238	382095	-457.4 -3.72
3239	382622	-452.6 -2.92
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3241	383641	-450.1 -2.50
3242	384159	-454.5 -3.24
3243	384710	-459.6 -4.10

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3245	385894	-467.1 -5.36
3246	386528	-468.8 -5.65
3247	387167	-467.6 -5.46
3248	387804	-467.2 -5.40
3249	388435	-464.8 -5.02
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3253	390999	-466.8 -5.36
3254	391658	-468.3 -5.60
3255	392317	-465.7 -5.17
3256	392972	-466.6 -5.31
3257	393636	-467.2 -5.40
3258	394297	-465 -5.02
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3260	395543	-455.6 -3.43
3261	396126	-451.9 -2.80
3262	396694	-450.5 -2.54
3263	397253	-448.6 -2.20
3264	397808	-448.3 -2.13
3265	398361	-447.2 -1.92
3266	398909	-445.9 -1.68
3267	399455	-445.9 -1.65
3268	400003	-446 -1.64
3269	400553	-445.8 -1.58
3270	401097	-443.5 -1.17
3271	401636	-443.2 -1.09
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3273	402728	-444.4 -1.23
3274	403276	-443.3 -1.01
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3277	404874	-439.5 -0.28
3278	405401	-438.6 -0.10
3279	405923	-437.1 0.18
3280	406441	-436.5 0.31
3281	406957	-435.6 0.49
3282	407469	-434.4 0.71
3283	407977	-433.7 0.85
3284	408485	-433.3 0.94
3285	408992	-432.3 1.12
3286	409496	-431.4 1.28
3287	409995	-429.3 1.64
3288	410483	-426.4 2.13
3289	410979	-431.6 1.27
3290	411492	-431.2 1.34
3291	412009	-431.9 1.23
3292	412533	-432.4 1.15
3293	413062	-432.8 1.08
3294	413601	-434.5 0.80
3295	414147	-434.2 0.85
3296	414692	-432.8 1.07
3297	415235	-432.2 1.16
3298	415781	-432.3 1.13

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3299	416327	-431.1	1.32
3300	416872	-430.8	1.36
3301	417419	-430.3	1.43
3302	417969	-430.4	1.40
3303	418526	-431.1	1.27
3304	419095	-433	0.94
3305	419682	-435.5	0.51
3306	420281	-435.2	0.54
3307	420888	-436.4	0.32
3308	421507	-437.3	0.15
3309	422135	-437.6	0.08
3310	422766	-436.6	0.23