Table S1. Sliding windows analysis of the 2kb region flanking *FBti0019386* insertion (1kb on each side).

		Tajima's D		Nucleotide diversity	
Chr.start	**Chr.end**	***FBti0019386+***	***FBti0019386-***	***FBti0019386+***	***FBti0019386-***
12014186	12014385	-0.44	0.09	0.56	1.90
12014386	12014585	-1.25	-0.68	0.46	0.71
12014586	12014785	-1.57	-0.38	0.05	0.84
12014786	12014985	-0.87	-0.02	0.15	1.21
12014986	12015186	-0.82	0.21	0.05	1.12
12015532	12015731	-1.55	1.26	0.22	1.60
12015732	12015931	-0.67	1.19	0.62	1.85
12015932	12016131	1.72	-0.77	0.47	0.98
12016132	12016331	-1.39	-1.10	0.20	1.06
12016332	12016532	-1.44	-0.23	0.27	1.10

Table S2. Results of simulations under a neutral model using MS program, with theta parameter=5 for flies with the element (*FBti0019386* +) and flies without the element (*FBti0019386* -) datasets in a region of 1 kb around the TE insertion.

				Neutral simulations					
		Observed	**P-value**	**Valid N**	**Mean**	**Minimum**	**Maximum**	**Percentile 5**	**Percentile 95**
FBti0019386 +	Tajima'sD	-1.7743102	0.0160	1000	-0.094790	-2.28808	2.783320	-1.43645	1.594586
	nucl.div	0.4332737	<0.001	1000	5.038808	0.773882	22.29469	1.708646	10.17030
	CL (log)	-5.95	<0.001	1000	-24.3104	-56.5700	-6.78000	-38.1700	-12.3400
FBti0019386 -	Tajima'sD	0.6775646	>0.05	1000	-0.096610	-2.14222	2.585194	-1.41546	1.590358
	nucl.div	4.5140351	>0.05	1000	4.953185	0.437544	16.16000	1.751053	10.19860
	CL (log)	-18.15	>0.05	1000	-19.6168	-43.7300	-3.51000	-32.7450	-8.95000

Table S3. Statistics estimated in the 1000 datasets obtained by randomization of strains keeping the same proportion of the strains with and without the element.

dataset	CL	log(CL)	Tajima D	π
1	5.90E-12	-11.229313	0.8235081	3.797123
2	3.55E-15	-14.44944	-0.1670349	3.216816
3	1.94E-10	-9.7126312	0.21460617	2.785239
4	1.56E-13	-12.808249	0.27298718	3.352201
5	2.42E-08	-7.6157158	0.82448776	2.997203
6	1.07E-13	-12.972461	0.70823342	4.061495
7	8.45E-13	-12.073024	1.26670688	4.001695
8	1.56E-13	-12.808249	0.11532612	3.119774
9	5.76E-15	-14.239613	0.58744939	3.480829
10	8.45E-13	-12.073024	0.41540641	3.185876
11	1.43E-12	-11.84578	0.29438122	3.012121
12	5.41E-11	-10.266844	0.61799472	3.302458
13	3.55E-15	-14.44944	0.13584718	3.561608
14	2.66E-14	-13.574521	0.21921987	3.310996
15	2.66E-14	-13.574521	0.05058662	3.206061
16	4.13E-11	-10.384354	0.59262359	3.278314
17	5.71E-12	-11.24372	0.65259945	3.269474
18	3.85E-11	-10.414416	0.40631308	3.137401
19	1.83E-12	-11.738279	-0.4277619	2.732946
20	3.34E-17	-16.475968	0.06155533	3.601242
21	2.30E-14	-13.637553	0.64237548	3.634585
22	1.01E-12	-11.995585	0.71481474	3.988701
23	3.55E-15	-14.44944	0.22382834	3.686441
24	2.53E-15	-14.597012	0.6030543	4.023266
25	1.01E-14	-13.994952	0.26938517	3.604851
26	8.45E-13	-12.073024	0.47907708	3.246893
27	1.05E-12	-11.978945	0.60661451	3.576885
28	3.85E-11	-10.414416	0.85970978	3.5147
29	6.06E-09	-8.2177758	1.21843182	3.324942
30	3.55E-15	-14.44944	-0.0259769	3.332401
31	1.43E-12	-11.84578	0.82062707	3.553146
32	6.22E-13	-12.206189	0.67898357	3.629837
33	1.50E-15	-14.824256	0.24455025	3.685352
34	3.65E-10	-9.4375399	0.47367056	3.263158
35	4.09E-08	-7.388472	0.5119349	2.824026
36	2.14E-15	-14.669788	0.15736122	3.73705
37	3.79E-10	-9.4218958	0.36990539	2.604039
38	4.85E-11	-10.314691	1.00641645	3.402546
39	7.18E-12	-11.143995	0.83076601	3.299313
40	3.89E-14	-13.410309	0.39565522	3.342657
41	1.94E-10	-9.7126312	0.83120533	3.263403

42	4.57E-13	-12.340339	-0.0688167	3.039337
43	3.75E-16	-15.426316	0.2547472	3.629061
44	9.22E-14	-13.035493	0.92413619	3.878322
45	4.20E-12	-11.376885	0.36138798	3.327877
46	1.84E-09	-8.7357549	1.3499977	3.74504
47	1.58E-14	-13.801765	-0.195301	2.962302
48	1.15E-10	-9.9398751	0.44993913	2.875587
49	1.58E-14	-13.801765	0.084436	3.203313
50	4.85E-11	-10.314691	1.10396651	3.563842
51	7.18E-12	-11.143995	0.56291425	2.991304
52	1.94E-10	-9.7126312	0.85323799	3.266023
53	1.79E-12	-11.746055	1.18963955	3.565847
54	5.71E-12	-11.24372	0.43088248	3.180328
55	7.18E-12	-11.143995	0.79730766	3.288701
56	5.64E-17	-16.248724	-0.0795204	3.454785
57	1.54E-10	-9.8123561	0.44153628	3.232305
58	1.68E-11	-10.774825	0.13860677	3.143503
59	6.00E-15	-14.222196	0.47601221	4.000605
60	3.69E-13	-12.433433	0.69462182	3.645688
61	3.75E-16	-15.426316	0.35458249	3.835593
62	2.62E-13	-12.581005	-0.1273064	2.812587
63	2.26E-16	-15.646664	-0.1657208	3.310642
64	8.88E-16	-15.0515	-0.325746	3.08409
65	4.59E-10	-9.337815	0.57113254	3.048611
66	6.22E-13	-12.206189	0.20734012	3.213559
67	3.69E-13	-12.433433	0.77827037	3.79548
68	1.50E-15	-14.824256	0.15079809	3.511414
69	1.47E-12	-11.831373	0.24170571	3.206349
70	2.53E-15	-14.597012	0.17422824	3.581845
71	4.20E-12	-11.376885	0.56804048	3.558964
72	2.28E-11	-10.64166	1.02347141	3.688323
73	4.32E-08	-7.3645163	0.15564298	2.264972
74	6.00E-15	-14.222196	-0.0707918	3.281585
75	7.18E-12	-11.143995	0.35753312	2.840559
76	2.28E-11	-10.64166	0.01952139	2.750117
77	2.24E-10	-9.6491396	0.62208249	2.861449
78	4.20E-12	-11.376885	0.55893698	3.508159
79	3.38E-12	-11.470964	0.80273633	3.557062
80	3.55E-15	-14.44944	0.51307238	4.016384
81	3.74E-14	-13.426949	0.11223464	3.293155
82	1.94E-10	-9.7126312	0.99565894	3.376398
83	5.90E-12	-11.229313	0.21413921	3.121739
84	4.59E-10	-9.337815	1.00660914	3.437996
85	1.94E-10	-9.7126312	0.42160423	2.93284
86	2.28E-11	-10.64166	0.48063711	3.227922

87	3.75E-16	-15.426316	0.20782261	3.55528
88	5.64E-17	-16.248724	0.24214847	3.861072
89	2.87E-11	-10.541935	0.84739479	3.277855
90	2.28E-11	-10.64166	0.26138021	2.999008
91	2.14E-15	-14.669788	0.05936358	3.577856
92	2.11E-13	-12.675084	0.5223665	3.146316
93	8.45E-13	-12.073024	0.71791969	3.415851
94	3.85E-11	-10.414416	0.72111352	3.437996
95	1.94E-10	-9.7126312	0.51370991	3.015336
96	1.07E-13	-12.972461	0.19553048	3.303599
97	8.45E-13	-12.073024	0.29758708	2.964397
98	1.07E-13	-12.972461	0.06094805	3.125263
99	2.26E-16	-15.646664	-0.0440309	3.61948
100	1.07E-13	-12.972461	-0.2294247	2.992136
101	2.53E-15	-14.597012	0.40171985	3.774327
102	3.69E-13	-12.433433	0.67668383	3.627506
103	4.20E-12	-11.376885	0.07727958	2.934035
104	1.07E-13	-12.972461	-0.3358119	2.791142
105	2.53E-13	-12.597645	0.24278094	3.354069
106	2.62E-13	-12.581005	0.29808452	3.224759
107	1.94E-10	-9.7126312	0.81372005	3.214493
108	2.53E-15	-14.597012	0.00432936	3.305947
109	2.53E-15	-14.597012	-0.2492292	3.079254
110	3.95E-15	-14.403825	-0.1083576	3.015803
111	7.19E-13	-12.143158	0.45287336	3.682179
112	3.95E-15	-14.403825	-0.0549024	3.134849
113	1.50E-15	-14.824256	-0.0432031	3.334821
114	6.00E-15	-14.222196	0.27251523	3.670862
115	3.27E-10	-9.4853874	0.62870669	3.034429
116	4.26E-13	-12.370401	0.62678747	3.803775
117	2.40E-14	-13.620136	0.03958285	3.365217
118	9.22E-14	-13.035493	0.56403689	3.493854
119	6.06E-09	-8.2177758	0.86418173	3.119481
120	1.80E-11	-10.744762	0.66078628	3.591747
121	3.89E-14	-13.410309	0.32390323	3.26993
122	3.38E-12	-11.470964	0.31592484	3.051091
123	9.44E-11	-10.025193	-0.0054748	2.955357
124	5.41E-11	-10.266844	1.01929082	3.722718
125	6.31E-14	-13.199705	0.63496009	3.833566
126	3.75E-16	-15.426316	0.36218596	3.690115
127	1.65E-10	-9.7822937	1.06907513	3.750583
128	2.28E-11	-10.64166	0.82698329	3.519814
129	6.31E-14	-13.199705	-0.175894	2.88967
130	1.07E-13	-12.972461	-0.3870417	2.776838
131	2.24E-10	-9.6491396	1.00899944	3.167163

132	1.21E-11	-10.916751	0.45610353	2.881064
133	9.22E-14	-13.035493	0.35210534	3.226583
134	3.95E-15	-14.403825	0.02323482	3.17669
135	2.53E-13	-12.597645	0.24795225	3.397717
136	2.16E-10	-9.6647837	0.53256047	3.239161
137	1.05E-12	-11.978945	0.12558127	2.998519
138	6.09E-15	-14.2153	-0.3136064	3.220238
139	9.35E-15	-14.029009	0.43351162	3.576812
140	1.50E-13	-12.824889	0.03018131	3.184149
141	9.63E-12	-11.016476	0.47566164	3.223162
142	1.94E-10	-9.7126312	0.51016919	3.031073
143	4.20E-12	-11.376885	0.43612834	3.40377
144	2.49E-12	-11.604129	0.60286877	3.594395
145	8.97E-10	-9.0470796	0.99403892	3.171867
146	5.71E-12	-11.24372	0.2997674	3.096189
147	9.22E-14	-13.035493	0.83822475	3.698947
148	9.35E-15	-14.029009	0.64019759	3.77856
149	9.95E-12	-11.002069	-0.0628818	2.859526
150	1.94E-10	-9.7126312	0.53407516	2.981563
151	1.15E-10	-9.9398751	0.22279505	2.72028
152	1.35E-11	-10.868904	0.69735035	3.477919
153	3.95E-15	-14.403825	0.03363356	3.130673
154	3.75E-16	-15.426316	0.33270904	3.717296
155	1.50E-13	-12.824889	-0.107236	3.057044
156	4.20E-12	-11.376885	0.53193171	3.46137
157	1.05E-12	-11.978945	0.54496036	3.455901
158	2.66E-14	-13.574521	-0.3288654	2.798601
159	1.94E-10	-9.7126312	0.39139443	2.887897
160	3.79E-10	-9.4218958	0.71828691	2.959322
161	1.50E-15	-14.824256	0.3034645	3.728671
162	3.69E-13	-12.433433	-0.0162291	2.872066
163	1.56E-13	-12.808249	0.35422994	3.363277
164	3.69E-13	-12.433433	0.51585466	3.426501
165	5.71E-12	-11.24372	0.39426753	3.089552
166	3.81E-16	-15.41942	-0.0900951	3.511898
167	5.85E-16	-15.233129	0.63791859	3.90565
168	1.54E-10	-9.8123561	0.56111594	3.285218
169	1.01E-14	-13.994952	-0.0983386	3.25035
170	5.28E-14	-13.277144	0.74138113	3.385368
171	1.65E-10	-9.7822937	0.75152342	3.487044
172	8.45E-13	-12.073024	0.66803409	3.368298
173	2.53E-15	-14.597012	0.35050933	3.64036
174	9.02E-16	-15.044604	0.14416273	3.767857
175	6.31E-14	-13.199705	0.42196527	3.648863
176	1.01E-14	-13.994952	0.57954211	3.954617

177	2.11E-13	-12.675084	0.36824295	3.140678
178	1.43E-12	-11.84578	0.63699786	3.303106
179	1.50E-13	-12.824889	0.34395913	3.564781
180	5.71E-12	-11.24372	0.4686498	3.196925
181	5.68E-14	-13.24532	0.52347328	4.028249
182	3.34E-17	-16.475968	0.38194272	4.027972
183	2.87E-11	-10.541935	0.44146655	2.88323
184	1.43E-12	-11.84578	0.50373117	3.144021
185	2.49E-12	-11.604129	0.81046584	3.743196
186	1.21E-11	-10.916751	0.60141947	3.058275
187	2.14E-15	-14.669788	0.35191744	3.946584
188	1.15E-10	-9.9398751	1.05925894	3.503966
189	9.63E-12	-11.016476	0.41925924	3.079812
190	5.71E-12	-11.24372	0.68014557	3.344099
191	2.30E-14	-13.637553	0.40083671	3.292645
192	1.43E-12	-11.84578	0.24943234	2.987599
193	2.42E-08	-7.6157158	0.24179852	2.561017
194	9.02E-16	-15.044604	-0.4934054	2.941201
195	2.56E-09	-8.5925919	0.91266395	3.02543
196	5.99E-13	-12.222829	0.44743461	3.65377
197	5.71E-12	-11.24372	0.6239228	3.290683
198	2.53E-13	-12.597645	-0.1587673	3.045198
199	1.08E-08	-7.9665762	0.85341251	2.77381
200	1.58E-14	-13.801765	0.66849692	3.790078
201	4.04E-12	-11.393525	-0.1995824	3.074773
202	7.18E-12	-11.143995	1.11112948	3.447612
203	8.45E-13	-12.073024	1.27578088	3.875231
204	1.65E-10	-9.7822937	0.86799065	3.522567
205	1.70E-12	-11.768341	-0.2348516	2.843897
206	9.37E-17	-16.028376	-0.0654469	3.287646
207	2.62E-13	-12.581005	0.46694725	3.414918
208	9.63E-12	-11.016476	0.31077347	3.010097
209	1.58E-14	-13.801765	-0.3638617	2.870779
210	2.53E-15	-14.597012	-0.1004337	3.207039
211	3.55E-15	-14.44944	0.26172886	3.636962
212	4.20E-12	-11.376885	0.00722615	2.968254
213	5.71E-12	-11.24372	0.9235927	3.672881
214	7.19E-13	-12.143158	0.56097574	3.84755
215	3.75E-16	-15.426316	0.15742577	3.636419
216	6.50E-11	-10.187172	0.44823883	3.140913
217	1.65E-10	-9.7822937	0.72383798	3.336842
218	1.31E-09	-8.8833275	1.17889958	3.631073
219	4.20E-12	-11.376885	0.39243558	3.339394
220	4.85E-11	-10.314691	0.87350682	3.301166
221	2.49E-12	-11.604129	0.53366713	3.463126

222	8.88E-16	-15.0515	0.0810311	3.499207
223	5.68E-14	-13.24532	0.30109216	3.774576
224	9.63E-12	-11.016476	0.86098361	3.59175
225	5.55E-17	-16.25562	0.41480603	3.749352
226	3.81E-16	-15.41942	0.14416791	3.904962
227	2.87E-11	-10.541935	0.64006001	3.128503
228	5.71E-12	-11.24372	0.57119735	3.275991
229	1.56E-13	-12.808249	0.51024373	3.402973
230	3.38E-12	-11.470964	0.75117675	3.447552
231	2.14E-15	-14.669788	0.28314957	3.910023
232	4.20E-12	-11.376885	0.75525931	3.668323
233	2.66E-14	-13.574521	0.6922643	3.917163
234	1.05E-12	-11.978945	0.11180044	3.001174
235	5.07E-15	-14.294972	-0.1922504	3.299379
236	8.36E-18	-17.078028	-0.0853665	3.426501
237	1.80E-11	-10.744762	0.7395828	3.733474
238	1.52E-15	-14.81736	-0.1855476	3.569796
239	7.09E-12	-11.149641	0.77836066	3.710711
240	5.28E-14	-13.277144	0.73991401	3.475939
241	4.20E-12	-11.376885	0.8257689	3.739545
242	6.22E-13	-12.206189	0.67655093	3.58882
243	6.00E-15	-14.222196	0.26830095	3.623602
244	4.26E-13	-12.370401	0.4999244	3.83508
245	6.31E-14	-13.199705	-0.2220694	2.875362
246	1.43E-12	-11.84578	0.5894918	3.257971
247	2.87E-11	-10.541935	0.456822	2.896894
248	1.52E-15	-14.81736	0.31208951	3.921422
249	2.28E-11	-10.64166	1.13201639	3.830357
250	1.71E-14	-13.767708	0.27202865	3.692956
251	6.06E-09	-8.2177758	0.70933863	2.871222
252	1.01E-12	-11.995585	0.67315482	3.919619
253	1.84E-09	-8.7357549	0.04566916	2.633394
254	1.01E-14	-13.994952	-0.939998	2.315972
255	2.53E-15	-14.597012	0.00712918	3.46461
256	6.06E-09	-8.2177758	1.54595384	3.63247
257	4.20E-12	-11.376885	0.39179694	3.319579
258	6.22E-13	-12.206189	0.02605948	2.91471
259	8.45E-13	-12.073024	0.08623795	2.748612
260	3.27E-10	-9.4853874	0.73570822	3.214172
261	3.65E-10	-9.4375399	0.01433939	2.822142
262	5.64E-17	-16.248724	0.11821411	3.787571
263	6.22E-13	-12.206189	0.31977721	3.246708
264	1.50E-15	-14.824256	0.29449203	3.793103
265	9.44E-11	-10.025193	0.74935571	3.701166
266	2.24E-10	-9.6491396	0.40118583	2.660714

267	2.30E-14	-13.637553	0.28020811	3.225641
268	2.28E-11	-10.64166	0.45577579	3.165967
269	3.10E-09	-8.5085113	0.75339195	3.313068
270	4.26E-13	-12.370401	-0.1081257	3.123412
271	1.65E-10	-9.7822937	0.58102721	3.388961
272	6.22E-13	-12.206189	1.00474126	3.981151
273	3.95E-15	-14.403825	-0.0256262	3.144841
274	1.58E-14	-13.801765	0.61859644	3.794996
275	1.01E-14	-13.994952	0.0147266	3.378555
276	6.31E-14	-13.199705	0.0623769	3.17971
277	1.31E-09	-8.8833275	0.28403852	2.936327
278	4.09E-08	-7.388472	0.88251536	3.078794
279	7.18E-12	-11.143995	0.9941444	3.408858
280	3.38E-12	-11.470964	-0.0035508	2.746032
281	2.49E-12	-11.604129	0.4163529	3.363636
282	6.22E-13	-12.206189	1.05985539	4.082486
283	3.75E-16	-15.426316	0.01320781	3.421999
284	2.28E-11	-10.64166	0.60157759	3.385965
285	1.47E-12	-11.831373	0.23750576	3.145342
286	2.53E-15	-14.597012	-0.5007693	2.81498
287	5.71E-12	-11.24372	0.26330425	3.040113
288	1.31E-09	-8.8833275	0.82690308	3.315254
289	5.74E-08	-7.2408996	0.81671365	3.006944
290	1.94E-10	-9.7126312	0.41913134	2.863354
291	4.85E-11	-10.314691	0.71976685	3.199894
292	6.00E-15	-14.222196	0.16232613	3.59175
293	1.07E-13	-12.972461	0.22989823	3.464972
294	3.95E-15	-14.403825	0.13409691	3.27568
295	6.31E-14	-13.199705	-0.054479	3.09324
296	3.55E-15	-14.44944	0.64609748	3.990526
297	6.31E-14	-13.199705	-0.1230964	3.061343
298	3.65E-10	-9.4375399	-0.0851405	2.65035
299	4.20E-12	-11.376885	0.37541748	3.322145
300	1.50E-15	-14.824256	0.05074093	3.339504
301	1.42E-14	-13.84738	-0.0563244	3.276997
302	2.28E-11	-10.64166	0.99818061	3.79026
303	1.07E-13	-12.972461	0.27157184	3.443357
304	6.22E-13	-12.206189	0.75661262	3.633839
305	5.71E-12	-11.24372	0.49202607	3.219246
306	6.83E-14	-13.165648	0.2330452	3.626107
307	6.72E-11	-10.172765	0.87194728	3.89096
308	9.13E-11	-10.0396	0.31740975	3.113128
309	2.49E-12	-11.604129	0.74203563	3.782214
310	2.83E-11	-10.547581	0.15389276	3.205195
311	4.85E-11	-10.314691	0.56661436	3.101633

312	1.58E-14	-13.801765	0.40409948	3.545342
313	5.71E-12	-11.24372	0.88807224	3.617663
314	1.94E-10	-9.7126312	0.74764505	3.155694
315	9.95E-12	-11.002069	-0.0139003	3.058001
316	9.63E-12	-11.016476	0.8811111	3.590774
317	1.54E-10	-9.8123561	0.6209212	3.476621
318	2.66E-14	-13.574521	0.04186581	3.157764
319	4.46E-09	-8.3509298	0.09438273	2.787578
320	3.74E-14	-13.426949	-0.1625648	2.99752
321	9.02E-16	-15.044604	0.43164516	4.041408
322	1.27E-15	-14.897032	0.19309095	3.826389
323	1.15E-10	-9.9398751	1.05008342	3.630204
324	4.20E-12	-11.376885	0.42674565	3.484416
325	6.82E-12	-11.166281	0.23042133	3.465537
326	1.58E-14	-13.801765	0.4011069	3.674531
327	4.57E-13	-12.340339	0.542654	3.778953
328	1.94E-10	-9.7126312	0.37320034	2.854545
329	1.50E-13	-12.824889	0.756067	4.00899
330	1.94E-10	-9.7126312	0.78890385	3.225641
331	3.95E-15	-14.403825	0.28270574	3.396714
332	2.53E-13	-12.597645	0.4330483	3.735065
333	2.28E-11	-10.64166	1.02032977	3.72371
334	7.75E-10	-9.1105712	1.26928463	3.733212
335	2.16E-10	-9.6647837	0.39701371	3.2355
336	1.35E-11	-10.868904	1.03206866	3.776836
337	2.53E-13	-12.597645	-0.2535973	2.920677
338	1.43E-12	-11.84578	0.33546347	3.051282
339	2.87E-11	-10.541935	0.7588966	3.254237
340	1.05E-12	-11.978945	0.82949831	3.690175
341	3.38E-12	-11.470964	0.27156355	2.972783
342	2.87E-11	-10.541935	0.77821853	3.252247
343	9.22E-14	-13.035493	0.37964903	3.307287
344	2.24E-10	-9.6491396	1.15287136	3.322599
345	1.94E-10	-9.7126312	1.1676532	3.641863
346	1.01E-12	-11.995585	0.14727617	3.330853
347	9.59E-14	-13.018076	-0.119882	3.319419
348	6.00E-15	-14.222196	0.17247928	3.458246
349	1.51E-09	-8.8198357	0.86791048	3.049603
350	8.45E-13	-12.073024	0.95496457	3.68165
351	2.26E-16	-15.646664	0.22309971	3.793375
352	2.11E-13	-12.675084	0.25804909	2.854562
353	1.50E-13	-12.824889	-0.0585651	3.255656
354	1.58E-14	-13.801765	-0.2259705	2.909091
355	3.75E-16	-15.426316	0.39127738	3.783582
356	8.36E-18	-17.078028	0.25155603	3.896329

357	2.87E-11	-10.541935	0.50698572	2.957419
358	3.75E-16	-15.426316	0.12121345	3.499301
359	4.50E-12	-11.346823	0.57339658	3.543155
360	9.13E-11	-10.0396	0.34033027	2.989263
361	2.87E-11	-10.541935	0.75809165	3.198135
362	1.51E-09	-8.8198357	1.06425902	3.308176
363	9.22E-14	-13.035493	0.42003249	3.367366
364	3.69E-13	-12.433433	0.65448742	3.625496
365	6.22E-13	-12.206189	0.38139451	3.290683
366	8.18E-11	-10.087447	0.49592688	2.964103
367	6.31E-14	-13.199705	0.35760828	3.653247
368	6.22E-13	-12.206189	-0.0767652	2.845478
369	3.74E-14	-13.426949	0.12832371	3.37931
370	1.07E-13	-12.972461	-0.1082909	2.997101
371	1.77E-12	-11.751701	0.03439814	3.037288
372	3.89E-14	-13.410309	-0.0195263	2.885714
373	7.75E-10	-9.1105712	0.88511949	3.329365
374	2.66E-14	-13.574521	0.04399585	3.219742
375	8.45E-13	-12.073024	0.99881649	3.581419
376	3.59E-09	-8.4450195	0.55010797	2.753731
377	5.85E-16	-15.233129	0.61987586	3.839286
378	2.87E-11	-10.541935	0.68901512	3.10352
379	2.26E-16	-15.646664	0.15646518	3.860859
380	3.38E-12	-11.470964	0.53618125	3.261409
381	8.45E-13	-12.073024	0.34450336	3.139141
382	2.34E-15	-14.631069	0.72423059	3.99887
383	1.68E-11	-10.774825	0.61898335	3.610788
384	6.22E-13	-12.206189	-0.2668218	2.68998
385	4.13E-11	-10.384354	0.1569513	2.881119
386	9.59E-14	-13.018076	0.30090371	3.681299
387	1.58E-14	-13.801765	0.14523255	3.307692
388	1.58E-14	-13.801765	0.40837367	3.682396
389	1.58E-14	-13.801765	0.40870697	3.531299
390	8.45E-13	-12.073024	0.46995895	3.179487
391	9.22E-14	-13.035493	0.04514776	2.968832
392	2.92E-11	-10.534159	0.40670705	3.655932
393	7.18E-12	-11.143995	0.40854959	2.838811
394	2.66E-14	-13.574521	0.05095794	3.186567
395	4.20E-12	-11.376885	0.1909018	3.154762
396	3.69E-13	-12.433433	0.08927396	3.09322
397	1.05E-12	-11.978945	0.11532612	3.119774
398	2.40E-14	-13.620136	0.27428101	3.719196
399	9.35E-15	-14.029009	0.51370833	3.747753
400	2.14E-15	-14.669788	-0.0753922	3.639413
401	4.09E-08	-7.388472	0.31297351	2.657143

402	3.95E-15	-14.403825	0.46737602	3.653613
403	6.22E-13	-12.206189	0.27064842	3.324675
404	3.38E-12	-11.470964	0.82013624	3.513287
405	2.24E-10	-9.6491396	0.85698954	3.024242
406	9.63E-12	-11.016476	0.52099364	3.266526
407	3.27E-10	-9.4853874	0.36079087	2.878371
408	3.55E-15	-14.44944	-0.049001	3.306294
409	4.20E-12	-11.376885	0.44585222	3.479734
410	6.22E-13	-12.206189	-0.0185634	3.005445
411	5.71E-12	-11.24372	0.27021125	3.00744
412	3.38E-12	-11.470964	0.76786606	3.482639
413	1.34E-16	-15.873908	0.26980045	3.918155
414	1.58E-14	-13.801765	0.08973564	3.389238
415	1.94E-10	-9.7126312	0.91505963	3.39435
416	3.34E-17	-16.475968	0.22067169	3.835431
417	6.22E-13	-12.206189	0.68030971	3.611501
418	2.28E-11	-10.64166	0.66919826	3.351185
419	1.56E-13	-12.808249	0.29287827	3.219491
420	1.05E-12	-11.978945	0.10636888	2.995696
421	6.06E-09	-8.2177758	0.60299662	2.828869
422	1.50E-15	-14.824256	0.28076084	3.702877
423	1.58E-14	-13.801765	-0.0579013	3.110119
424	3.55E-15	-14.44944	0.11071239	3.668175
425	1.94E-10	-9.7126312	0.62864192	3.065847
426	9.22E-14	-13.035493	0.47520504	3.334035
427	1.47E-12	-11.831373	0.02217693	2.964103
428	5.71E-12	-11.24372	0.46673964	3.256503
429	6.32E-16	-15.199072	0.01209269	3.334161
430	3.65E-10	-9.4375399	0.78632096	3.610762
431	5.71E-12	-11.24372	0.53891844	3.245221
432	3.79E-10	-9.4218958	0.57709287	2.823903
433	4.59E-10	-9.337815	-0.221534	2.393224
434	6.22E-13	-12.206189	0.55603245	3.592257
435	7.71E-13	-12.113095	-0.018249	3.152778
436	6.22E-13	-12.206189	0.80178877	3.734416
437	1.21E-10	-9.9154588	0.69346155	3.732607
438	1.35E-11	-10.868904	0.83529755	3.527739
439	5.99E-13	-12.222829	0.52240599	3.805808
440	2.14E-15	-14.669788	0.02028866	3.696915
441	9.35E-15	-14.029009	0.27822087	3.471726
442	7.18E-12	-11.143995	0.45761992	2.965098
443	8.45E-13	-12.073024	0.62878283	3.27856
444	5.61E-09	-8.2512049	1.05996427	3.54507
445	1.58E-14	-13.801765	0.36642812	3.612429
446	1.56E-13	-12.808249	-0.3146827	2.587578

447	2.30E-14	-13.637553	0.77289816	3.66784
448	1.51E-09	-8.8198357	1.06376815	3.19627
449	1.47E-12	-11.831373	0.51345883	3.503437
450	1.50E-15	-14.824256	0.29449203	3.793103
451	3.10E-09	-8.5085113	0.38423127	2.918079
452	2.87E-11	-10.541935	0.98572997	3.384109
453	2.24E-10	-9.6491396	0.91077295	3.085317
454	9.63E-12	-11.016476	-0.1003864	2.672131
455	1.52E-15	-14.81736	0.0289425	3.735714
456	7.18E-12	-11.143995	0.25708151	2.704225
457	1.05E-12	-11.978945	0.78272829	3.777366
458	1.34E-16	-15.873908	0.37559204	3.974741
459	5.71E-12	-11.24372	0.71373253	3.493648
460	2.53E-15	-14.597012	0.32139867	3.79774
461	4.85E-11	-10.314691	0.14942014	2.689053
462	3.95E-15	-14.403825	0.34051091	3.496927
463	1.07E-13	-12.972461	0.54532425	3.830611
464	2.87E-11	-10.541935	0.95657233	3.341615
465	6.22E-13	-12.206189	0.2480017	3.277677
466	5.23E-09	-8.2812674	0.94435701	3.347234
467	2.87E-11	-10.541935	0.42527264	2.974592
468	1.54E-10	-9.8123561	0.59815911	3.283582
469	8.97E-10	-9.0470796	1.06314313	3.286364
470	9.59E-14	-13.018076	-0.0750554	3.321523
471	6.22E-13	-12.206189	0.67070449	3.621445
472	5.71E-12	-11.24372	1.22014569	3.857143
473	1.31E-09	-8.8833275	0.99314114	3.464407
474	1.01E-14	-13.994952	0.15907339	3.500207
475	1.56E-13	-12.808249	0.71926544	3.563104
476	3.79E-10	-9.4218958	0.62247668	2.799172
477	6.22E-13	-12.206189	0.5479843	3.477612
478	1.50E-15	-14.824256	-0.3768014	2.894824
479	1.71E-14	-13.767708	0.36451436	3.753292
480	1.58E-14	-13.801765	0.59279469	3.76734
481	6.00E-15	-14.222196	0.27673127	3.633126
482	1.01E-14	-13.994952	0.249957	3.582942
483	9.02E-16	-15.044604	-0.0693611	3.536753
484	1.62E-13	-12.790832	0.00875342	3.393849
485	8.45E-13	-12.073024	1.11309183	3.792541
486	2.53E-15	-14.597012	0.47155898	3.919643
487	2.34E-15	-14.631069	0.85163129	4.044776
488	6.83E-14	-13.165648	-0.0235556	3.357143
489	1.43E-12	-11.84578	1.02462105	3.748281
490	3.74E-14	-13.426949	0.32043285	3.437011
491	6.00E-15	-14.222196	0.45278479	3.898313

492	4.27E-15	-14.369768	0.10077637	3.41471
493	2.34E-15	-14.631069	0.74825097	3.893975
494	4.34E-14	-13.36283	0.04025519	3.386304
495	1.71E-14	-13.767708	0.44902233	3.969752
496	1.43E-12	-11.84578	0.51691009	3.224242
497	5.85E-16	-15.233129	0.74306484	3.94965
498	4.05E-14	-13.392892	-0.0924646	3.196792
499	6.22E-13	-12.206189	0.57980522	3.491097
500	2.66E-14	-13.574521	-0.3168989	2.75626
501	1.35E-11	-10.868904	0.5489591	3.219462
502	4.20E-12	-11.376885	0.71411136	3.707562
503	1.58E-14	-13.801765	0.54564313	3.759425
504	7.18E-12	-11.143995	0.20506162	2.688323
505	1.43E-12	-11.84578	0.77617762	3.490575
506	1.15E-10	-9.9398751	0.85904637	3.306052
507	9.35E-15	-14.029009	0.08637825	3.187011
508	1.51E-09	-8.8198357	0.84234265	2.996488
509	1.54E-10	-9.8123561	0.50419416	3.212121
510	4.95E-18	-17.305272	0.20967679	3.84623
511	2.87E-11	-10.541935	0.74132095	3.27987
512	1.07E-13	-12.972461	0.56416107	3.825989
513	6.31E-14	-13.199705	0.17282095	3.279343
514	1.15E-10	-9.9398751	0.38686845	3.005279
515	1.58E-14	-13.801765	0.52948807	3.679503
516	3.27E-10	-9.4853874	0.69414911	3.124232
517	1.58E-14	-13.801765	0.52561805	3.675362
518	5.76E-15	-14.239613	0.05795228	2.963975
519	3.89E-14	-13.410309	0.46104179	3.429067
520	5.71E-12	-11.24372	0.78221508	3.458736
521	4.27E-15	-14.369768	0.1030901	3.457419
522	1.52E-15	-14.81736	-0.0366247	3.484472
523	1.01E-12	-11.995585	-0.0313534	3.160233
524	2.87E-11	-10.541935	1.15849198	3.678546
525	3.85E-11	-10.414416	0.5173974	3.283616
526	3.85E-11	-10.414416	0.94335516	3.670545
527	9.35E-15	-14.029009	0.7238512	3.907814
528	3.61E-15	-14.442544	0.06838187	3.653613
529	9.59E-14	-13.018076	-0.4931441	2.845584
530	6.22E-13	-12.206189	-0.1928763	2.677897
531	6.31E-14	-13.199705	0.41068136	3.6367
532	1.01E-12	-11.995585	0.46788146	3.63345
533	1.07E-13	-12.972461	0.35320701	3.510536
534	6.60E-10	-9.1802336	0.84145577	3.44807
535	4.26E-13	-12.370401	0.33485653	3.628571
536	4.49E-14	-13.347278	-0.2136931	2.985876

537	1.58E-14	-13.801765	0.35426183	3.575886
538	6.22E-13	-12.206189	-0.510077	2.462189
539	1.15E-10	-9.9398751	0.66377533	3.131448
540	3.27E-10	-9.4853874	0.56594131	3.101028
541	2.87E-11	-10.541935	0.38676939	2.901639
542	3.74E-14	-13.426949	-0.0026933	3.129061
543	5.41E-11	-10.266844	0.55488227	3.279266
544	1.44E-08	-7.8429596	0.8874068	3.138961
545	6.22E-13	-12.206189	0.67250034	3.6036
546	3.38E-12	-11.470964	0.58512183	3.327869
547	1.14E-13	-12.942399	-0.1542274	2.966637
548	3.17E-16	-15.499092	0.48855345	4.131694
549	2.83E-11	-10.547581	0.30935546	3.364286
550	3.95E-15	-14.403825	0.40199913	3.650847
551	1.01E-14	-13.994952	0.07337155	3.467262
552	8.45E-13	-12.073024	0.80989267	3.485075
553	2.34E-15	-14.631069	0.2558778	3.386749
554	5.71E-12	-11.24372	0.20975079	2.9688
555	1.58E-14	-13.801765	0.19389144	3.339772
556	3.85E-11	-10.414416	0.36823146	3.082517
557	1.21E-10	-9.9154588	0.47547056	3.509982
558	5.71E-12	-11.24372	0.74488947	3.480698
559	2.53E-13	-12.597645	-0.2767667	2.854545
560	1.58E-14	-13.801765	0.69349599	4.017532
561	1.54E-10	-9.8123561	1.08943633	3.751097
562	1.58E-14	-13.801765	0.29218382	3.445127
563	9.02E-16	-15.044604	0.10747824	3.634977
564	1.50E-15	-14.824256	0.30992953	3.713287
565	9.22E-14	-13.035493	0.31760794	3.244513
566	4.20E-12	-11.376885	0.58150422	3.61827
567	1.50E-15	-14.824256	0.29610911	3.851153
568	1.01E-14	-13.994952	0.18044331	3.612374
569	1.71E-14	-13.767708	0.1777667	3.521325
570	1.56E-13	-12.808249	-0.1222874	2.85669
571	3.74E-14	-13.426949	0.03268839	3.251977
572	8.97E-10	-9.0470796	0.34463118	2.613591
573	4.04E-12	-11.393525	0.02291804	3.29026
574	1.51E-09	-8.8198357	0.70388817	2.852504
575	2.28E-11	-10.64166	0.71010972	3.32386
576	5.90E-12	-11.229313	0.50282325	3.451282
577	1.31E-09	-8.8833275	1.0264192	3.372455
578	8.45E-13	-12.073024	0.16618961	2.967937
579	1.58E-14	-13.801765	0.33539271	3.511888
580	1.34E-16	-15.873908	-0.0850184	3.426915
581	1.71E-14	-13.767708	0.11123537	3.466637

582	8.45E-13	-12.073024	0.69510314	3.498701
583	1.43E-12	-11.84578	0.74599513	3.481756
584	1.94E-10	-9.7126312	0.82811869	3.243635
585	9.22E-14	-13.035493	0.82740865	3.741201
586	2.49E-12	-11.604129	-0.3664313	2.672727
587	1.58E-14	-13.801765	-0.0200933	3.150794
588	3.81E-16	-15.41942	-0.0857924	3.626834
589	9.22E-14	-13.035493	0.25636298	3.164389
590	1.01E-14	-13.994952	-0.1274686	3.239087
591	1.31E-09	-8.8833275	0.98121674	3.474289
592	5.55E-17	-16.25562	0.18924395	3.514476
593	2.88E-14	-13.540465	0.19604205	3.584149
594	8.45E-13	-12.073024	-0.0331608	2.717758
595	1.56E-13	-12.808249	0.22167725	3.186012
596	3.74E-14	-13.426949	0.35140778	3.673655
597	1.02E-08	-7.9905321	0.27259842	2.553571
598	2.79E-10	-9.5550498	0.27726362	2.995804
599	2.53E-15	-14.597012	0.297184	3.698834
600	6.22E-13	-12.206189	0.33671826	3.323638
601	1.15E-10	-9.9398751	0.71703107	3.179067
602	1.58E-14	-13.801765	0.66510481	3.805164
603	4.20E-12	-11.376885	0.23881274	3.183683
604	7.18E-12	-11.143995	0.55180662	3.013986
605	9.22E-14	-13.035493	0.12682211	3.03354
606	2.28E-11	-10.64166	0.60323334	3.288411
607	3.79E-10	-9.4218958	1.03662171	3.225424
608	1.56E-13	-12.808249	0.41129347	3.358508
609	5.71E-12	-11.24372	1.26178478	3.975145
610	1.07E-13	-12.972461	0.33138022	3.574576
611	9.59E-14	-13.018076	-0.3090979	3.032738
612	7.18E-12	-11.143995	0.65751657	3.163277
613	2.30E-14	-13.637553	0.18357432	3.147321
614	5.85E-16	-15.233129	0.36508401	3.523266
615	1.02E-08	-7.9905321	0.97130617	3.119347
616	2.53E-15	-14.597012	-0.2413383	3.067603
617	1.01E-14	-13.994952	0.57634514	4.03869
618	1.50E-15	-14.824256	0.27489859	3.631056
619	1.21E-11	-10.916751	0.38421624	2.937689
620	3.27E-10	-9.4853874	0.7343821	3.128326
621	9.22E-14	-13.035493	0.23674673	3.266183
622	1.05E-12	-11.978945	0.71385542	3.626501
623	6.83E-14	-13.165648	0.03835276	3.500302
624	5.71E-12	-11.24372	0.91094879	3.683001
625	2.28E-11	-10.64166	0.79651517	3.472344
626	3.38E-12	-11.470964	0.80901766	3.542041

627	5.71E-12	-11.24372	0.28655603	3.004662
628	1.58E-14	-13.801765	0.608331	3.744523
629	2.14E-15	-14.669788	0.07574615	3.686012
630	1.73E-07	-6.7624563	1.67130767	3.405258
631	9.95E-12	-11.002069	0.59987241	3.54965
632	6.83E-14	-13.165648	0.38599156	3.799534
633	5.71E-12	-11.24372	0.88007215	3.589782
634	1.50E-15	-14.824256	0.69575519	4.128183
635	1.42E-14	-13.84738	0.42591118	3.801656
636	2.87E-11	-10.541935	0.65729922	3.108159
637	3.89E-14	-13.410309	-0.0875481	2.912994
638	1.31E-09	-8.8833275	0.92617079	3.366071
639	3.38E-12	-11.470964	0.17423069	2.880158
640	3.79E-10	-9.4218958	0.50254717	2.714223
641	2.53E-15	-14.597012	0.12314498	3.52381
642	3.75E-16	-15.426316	-0.0475284	3.161096
643	1.05E-12	-11.978945	0.000836	2.857193
644	3.38E-12	-11.470964	0.92566462	3.653622
645	5.71E-12	-11.24372	0.38203413	3.06087
646	1.56E-13	-12.808249	0.451309	3.399068
647	2.11E-13	-12.675084	0.20029075	2.888199
648	2.40E-14	-13.620136	-0.0066771	3.333187
649	1.51E-09	-8.8198357	0.95561565	3.106294
650	1.05E-12	-11.978945	0.77445598	3.70676
651	3.69E-13	-12.433433	0.93159302	3.975802
652	6.22E-13	-12.206189	-0.1362031	2.785338
653	1.31E-09	-8.8833275	0.39446954	2.841408
654	8.45E-13	-12.073024	0.48903285	3.197669
655	1.56E-13	-12.808249	-0.4681013	2.449517
656	8.45E-13	-12.073024	0.90367984	3.699351
657	1.07E-13	-12.972461	0.07314539	3.272871
658	9.22E-14	-13.035493	0.26620152	3.174327
659	2.87E-11	-10.541935	0.3478016	2.866737
660	2.53E-15	-14.597012	0.52464891	3.854035
661	2.34E-15	-14.631069	0.13940141	3.367232
662	2.53E-13	-12.597645	0.09626789	3.197574
663	1.71E-14	-13.767708	-0.0599676	3.362712
664	1.05E-12	-11.978945	0.79050857	3.723003
665	2.53E-13	-12.597645	0.48525326	3.717081
666	1.50E-13	-12.824889	-0.0519073	3.116567
667	9.22E-14	-13.035493	0.84821112	3.781387
668	9.95E-12	-11.002069	0.73923684	3.690909
669	5.41E-11	-10.266844	0.84899164	3.540793
670	1.01E-14	-13.994952	0.42178555	3.863095
671	3.75E-16	-15.426316	0.5098478	3.89648

672	1.58E-14	-13.801765	0.4300286	3.573085
673	1.94E-10	-9.7126312	0.73475865	3.319759
674	1.42E-14	-13.84738	0.17281441	3.628249
675	9.13E-11	-10.0396	0.28942483	3.108442
676	3.04E-11	-10.517519	0.21659885	3.124224
677	6.22E-13	-12.206189	0.63528845	3.585548
678	1.43E-12	-11.84578	0.64797877	3.330992
679	1.21E-10	-9.9154588	0.13971537	3.144633
680	5.71E-12	-11.24372	0.56817506	3.255048
681	6.06E-09	-8.2177758	1.26505023	3.435572
682	1.35E-11	-10.868904	1.09261905	3.813326
683	4.05E-14	-13.392892	-0.0222766	3.336597
684	3.74E-14	-13.426949	0.52921395	3.660016
685	9.95E-12	-11.002069	-0.335342	2.583845
686	9.37E-17	-16.028376	0.02930844	3.334116
687	1.07E-13	-12.972461	-0.258468	2.894345
688	4.85E-11	-10.314691	0.81372005	3.214493
689	2.53E-15	-14.597012	-0.0792087	3.251097
690	6.32E-16	-15.199072	-0.1283523	3.216317
691	1.07E-13	-12.972461	0.37898259	3.625989
692	1.51E-09	-8.8198357	0.88695096	3.082496
693	1.05E-12	-11.978945	-0.0858852	2.914689
694	1.47E-12	-11.831373	0.73411277	3.706349
695	2.27E-13	-12.64326	0.24583211	3.663194
696	8.45E-13	-12.073024	1.21840126	4.027254
697	6.22E-13	-12.206189	0.29407741	3.202484
698	2.92E-07	-6.5352125	0.9688049	2.948288
699	2.28E-11	-10.64166	0.9133184	3.621528
700	2.53E-13	-12.597645	0.13872021	3.300699
701	5.71E-12	-11.24372	0.82241068	3.534722
702	5.71E-12	-11.24372	0.52631127	3.251984
703	6.31E-14	-13.199705	0.45481178	3.661706
704	1.68E-11	-10.774825	0.4672875	3.395961
705	4.26E-13	-12.370401	0.47866695	3.606025
706	6.22E-13	-12.206189	0.28785469	3.273929
707	1.56E-13	-12.808249	0.53323327	3.462687
708	3.75E-16	-15.426316	0.22828587	3.691525
709	1.56E-13	-12.808249	0.5494697	3.460455
710	1.43E-12	-11.84578	-0.339209	2.462712
711	9.95E-12	-11.002069	0.54047515	3.553107
712	1.58E-14	-13.801765	0.48800902	3.697421
713	1.54E-10	-9.8123561	0.64127288	3.424077
714	6.00E-15	-14.222196	-0.0974386	3.230465
715	1.35E-11	-10.868904	0.51767666	3.263353
716	2.34E-15	-14.631069	0.15776543	3.245465

717	8.45E-13	-12.073024	0.65422548	3.393971
718	1.05E-12	-11.978945	0.1890879	3.173453
719	3.95E-15	-14.403825	-0.3379827	2.788811
720	4.50E-12	-11.346823	0.54128118	3.434272
721	1.58E-14	-13.801765	0.31359472	3.555367
722	1.94E-10	-9.7126312	0.63892279	3.187662
723	2.28E-11	-10.64166	1.05000123	3.732401
724	1.94E-10	-9.7126312	1.04730912	3.42236
725	9.22E-14	-13.035493	0.46188782	3.40979
726	1.07E-13	-12.972461	-0.1791683	3.023164
727	2.87E-11	-10.541935	0.59387718	3.068948
728	2.87E-11	-10.541935	0.86847707	3.314484
729	6.32E-16	-15.199072	-0.0602031	3.272608
730	8.97E-10	-9.0470796	0.09122181	2.490566
731	2.66E-14	-13.574521	0.24317933	3.434028
732	2.36E-11	-10.627253	-0.3161602	2.639881
733	2.87E-11	-10.541935	0.55424747	3.070621
734	1.47E-12	-11.831373	0.55058742	3.480246
735	1.51E-09	-8.8198357	1.03821694	3.331429
736	1.56E-13	-12.808249	-0.1269658	2.85193
737	1.35E-11	-10.868904	0.71184228	3.491833
738	6.22E-13	-12.206189	0.20143109	3.108903
739	1.50E-15	-14.824256	0.14670451	3.528205
740	4.05E-14	-13.392892	-0.4650692	2.776604
741	2.26E-16	-15.646664	0.18121456	3.682807
742	2.53E-15	-14.597012	0.11666555	3.472783
743	2.49E-12	-11.604129	0.32441702	3.355717
744	6.00E-15	-14.222196	-0.0341495	3.417423
745	6.06E-09	-8.2177758	0.73383192	2.972316
746	4.26E-13	-12.370401	-0.3949957	2.837013
747	3.95E-15	-14.403825	0.06989554	3.169405
748	1.94E-10	-9.7126312	0.75506999	3.271022
749	4.85E-11	-10.314691	0.50261292	3.024294
750	2.87E-11	-10.541935	0.71787913	3.162238
751	5.71E-12	-11.24372	0.25162453	3.072078
752	3.74E-14	-13.426949	0.3303221	3.527778
753	2.11E-13	-12.675084	1.20245316	3.858648
754	2.53E-15	-14.597012	-0.4081501	2.965537
755	2.30E-14	-13.637553	0.76794817	3.700176
756	9.37E-17	-16.028376	-0.0191896	3.362103
757	1.01E-14	-13.994952	0.35187103	3.718012
758	9.95E-12	-11.002069	0.80684929	3.759441
759	2.28E-11	-10.64166	-0.0284079	2.704429
760	5.71E-12	-11.24372	0.22004191	2.941259
761	2.40E-14	-13.620136	-0.0647883	3.436758

762	4.85E-11	-10.314691	0.6809725	3.146825
763	2.87E-11	-10.541935	1.04851541	3.556494
764	1.01E-14	-13.994952	0.204712	3.572432
765	6.22E-13	-12.206189	0.47487819	3.509377
766	1.50E-15	-14.824256	0.55276825	4.011905
767	2.53E-15	-14.597012	0.29542457	3.654244
768	6.22E-13	-12.206189	0.79850406	3.693662
769	8.88E-16	-15.0515	0.00264089	3.386905
770	3.04E-11	-10.517519	0.36946725	3.356954
771	3.34E-17	-16.475968	0.41903896	4.072261
772	6.22E-13	-12.206189	0.26789428	3.141799
773	2.49E-12	-11.604129	0.6699919	3.582195
774	6.60E-10	-9.1802336	0.66342846	3.311424
775	5.71E-12	-11.24372	0.61748634	3.251759
776	2.40E-14	-13.620136	-0.4346117	2.912216
777	1.51E-09	-8.8198357	0.68892427	2.813333
778	1.58E-14	-13.801765	0.62909732	3.849206
779	8.45E-13	-12.073024	0.88462217	3.55619
780	1.58E-14	-13.801765	0.22337916	3.371378
781	2.53E-13	-12.597645	0.19471055	3.34065
782	6.83E-14	-13.165648	0.12015638	3.476734
783	1.51E-09	-8.8198357	0.74211254	2.928671
784	3.95E-15	-14.403825	0.18273446	3.308489
785	6.31E-14	-13.199705	0.60201716	3.84294
786	1.94E-10	-9.7126312	-0.0952495	2.436364
787	5.71E-12	-11.24372	0.82427839	3.447612
788	9.59E-14	-13.018076	0.00457117	3.345917
789	1.50E-15	-14.824256	-0.4983838	2.796737
790	1.46E-09	-8.83548	0.71228248	3.429563
791	4.85E-11	-10.314691	0.67265129	3.139385
792	1.21E-11	-10.916751	0.43162783	2.890255
793	2.79E-10	-9.5550498	0.66584615	3.447671
794	1.70E-12	-11.768341	0.15375539	3.296752
795	2.42E-08	-7.6157158	0.62219215	2.828904
796	3.75E-16	-15.426316	0.28992962	3.713294
797	6.40E-09	-8.19382	1.65742506	3.335681
798	3.81E-16	-15.41942	0.20488491	3.793679
799	8.97E-10	-9.0470796	0.46686325	2.749153
800	1.58E-14	-13.801765	0.28974769	3.484127
801	7.75E-10	-9.1105712	0.88672359	3.368927
802	1.51E-09	-8.8198357	0.50485602	2.763617
803	3.38E-12	-11.470964	0.17192423	2.877963
804	3.27E-10	-9.4853874	0.99938148	3.37971
805	6.22E-13	-12.206189	0.40828338	3.33626
806	1.47E-12	-11.831373	0.48321986	3.542208

807	4.85E-11	-10.314691	0.64015685	3.060041
808	3.95E-15	-14.403825	0.72908375	3.979905
809	2.40E-14	-13.620136	0.08799924	3.507139
810	5.71E-12	-11.24372	0.60830756	3.29324
811	6.00E-15	-14.222196	0.19577323	3.629825
812	2.66E-14	-13.574521	0.18037624	3.325285
813	1.62E-11	-10.791465	0.49064991	3.722898
814	1.21E-11	-10.916751	0.45892543	3.00484
815	1.62E-13	-12.790832	0.32836168	3.831821
816	1.43E-12	-11.84578	0.8612185	3.552448
817	1.58E-14	-13.801765	0.65797266	3.816977
818	1.01E-12	-11.995585	0.14783748	3.31049
819	1.62E-13	-12.790832	-0.0029562	3.297731
820	5.71E-12	-11.24372	0.47093709	3.18042
821	5.55E-17	-16.25562	0.22531149	3.639881
822	2.49E-12	-11.604129	-0.1803575	2.777778
823	5.71E-12	-11.24372	0.63943285	3.400565
824	1.58E-14	-13.801765	0.61802802	3.815385
825	2.53E-13	-12.597645	-0.0558836	3.133792
826	1.58E-14	-13.801765	0.19081889	3.356643
827	9.35E-15	-14.029009	-0.0594022	3.031299
828	1.50E-15	-14.824256	-0.070792	3.459276
829	1.05E-12	-11.978945	0.38385894	3.350694
830	5.71E-12	-11.24372	0.69721777	3.415179
831	3.75E-16	-15.426316	0.53976022	3.973893
832	1.43E-12	-11.84578	0.01509211	2.681229
833	1.05E-12	-11.978945	0.52550902	3.537853
834	3.38E-12	-11.470964	0.71501241	3.377226
835	2.14E-15	-14.669788	0.05295092	3.736237
836	1.07E-13	-12.972461	0.13958853	3.301632
837	6.32E-16	-15.199072	0.2921771	3.764407
838	2.53E-13	-12.597645	0.51336803	3.724702
839	3.55E-15	-14.44944	-0.0366539	3.342262
840	3.75E-16	-15.426316	-0.1856166	3.195664
841	4.26E-13	-12.370401	-0.056518	3.111607
842	1.21E-10	-9.9154588	0.7006682	3.716384
843	1.50E-15	-14.824256	0.32514856	3.629825
844	7.75E-10	-9.1105712	0.22377796	2.705004
845	3.75E-16	-15.426316	-0.0848108	3.310418
846	1.51E-09	-8.8198357	0.20071902	2.562987
847	2.88E-12	-11.541098	0.4322192	3.637401
848	3.81E-16	-15.41942	0.03689419	3.593503
849	9.22E-14	-13.035493	0.51917691	3.509254
850	3.95E-15	-14.403825	-0.1942341	2.984664
851	2.11E-13	-12.675084	0.25799207	2.926839

852	1.80E-11	-10.744762	0.38359682	3.44026
853	1.56E-13	-12.808249	0.06164173	2.967702
854	5.71E-12	-11.24372	0.9501258	3.618525
855	1.07E-13	-12.972461	-0.0712724	3.095734
856	2.53E-15	-14.597012	0.11004671	3.508929
857	6.32E-16	-15.199072	-0.2227205	3.088674
858	4.61E-13	-12.336345	-0.1525851	3.257062
859	9.02E-16	-15.044604	0.36866617	4.012121
860	6.22E-13	-12.206189	0.4246262	3.435028
861	2.28E-11	-10.64166	0.61172432	3.374011
862	9.35E-15	-14.029009	0.18277878	3.369048
863	1.47E-12	-11.831373	0.24268271	3.207341
864	6.83E-14	-13.165648	0.03528391	3.401865
865	4.27E-15	-14.369768	0.14991001	3.489855
866	4.26E-13	-12.370401	0.46292376	3.608282
867	3.95E-15	-14.403825	0.30887488	3.574713
868	1.24E-08	-7.9064512	0.80039314	3.235897
869	7.18E-12	-11.143995	0.40158318	2.863477
870	2.66E-14	-13.574521	0.02599873	3.140787
871	2.28E-11	-10.64166	0.25740882	3.034463
872	1.79E-12	-11.746055	0.6583437	3.109091
873	8.88E-16	-15.0515	-0.0555446	3.343733
874	5.55E-17	-16.25562	0.2882173	3.735061
875	4.20E-12	-11.376885	-0.1814524	2.722153
876	1.94E-10	-9.7126312	0.3585776	2.841492
877	6.22E-13	-12.206189	0.2863861	3.17723
878	6.82E-12	-11.166281	0.67935426	3.903274
879	2.53E-15	-14.597012	0.13164428	3.430581
880	2.40E-14	-13.620136	0.33583173	3.742657
881	2.28E-11	-10.64166	0.55806783	3.195483
882	6.22E-13	-12.206189	0.40025173	3.309731
883	4.85E-11	-10.314691	0.19183226	2.785065
884	6.31E-14	-13.199705	-0.0235375	3.087785
885	1.58E-14	-13.801765	0.3961745	3.577156
886	2.53E-13	-12.597645	0.46259492	3.741077
887	3.69E-13	-12.433433	0.2785611	3.205004
888	2.56E-09	-8.5925919	0.70003248	2.909722
889	6.31E-14	-13.199705	-0.3353777	2.791608
890	6.82E-12	-11.166281	0.07242551	3.318814
891	6.31E-14	-13.199705	0.21436902	3.361721
892	6.31E-14	-13.199705	-0.208211	2.948413
893	6.60E-10	-9.1802336	0.86024035	3.551515
894	8.45E-13	-12.073024	0.62768968	3.368588
895	2.28E-11	-10.64166	1.15564158	3.873612
896	8.45E-13	-12.073024	0.45977116	3.151888

897	7.18E-12	-11.143995	1.14087857	3.522388
898	1.07E-13	-12.972461	-0.1834408	2.996298
899	9.22E-14	-13.035493	0.76775365	3.719814
900	8.97E-10	-9.0470796	0.87186523	2.977786
901	1.01E-14	-13.994952	0.16538519	3.619774
902	1.31E-09	-8.8833275	0.58545992	3.118572
903	1.70E-12	-11.768341	-0.0651319	3.146328
904	4.85E-11	-10.314691	1.09276863	3.431322
905	9.13E-11	-10.0396	0.57554507	3.24472
906	2.26E-16	-15.646664	0.04215982	3.645833
907	3.38E-12	-11.470964	0.88763056	3.638418
908	4.85E-11	-10.314691	0.62352822	3.113696
909	2.34E-15	-14.631069	0.39487203	3.575758
910	4.82E-12	-11.31681	-0.2881429	3.180294
911	2.14E-15	-14.669788	0.16025119	3.894156
912	4.85E-11	-10.314691	0.94977489	3.352063
913	2.87E-11	-10.541935	1.02103257	3.450893
914	8.45E-13	-12.073024	0.88532549	3.521909
915	2.66E-14	-13.574521	-0.5798073	2.529138
916	1.56E-13	-12.808249	0.62306603	3.637288
917	3.95E-15	-14.403825	0.0546439	3.190518
918	6.06E-09	-8.2177758	0.34935944	2.687662
919	5.20E-12	-11.283791	-0.0943588	3.012008
920	3.38E-12	-11.470964	0.86464202	3.555711
921	3.89E-14	-13.410309	0.10818733	3.051282
922	1.43E-12	-11.84578	0.05774693	2.804563
923	2.53E-15	-14.597012	0.12679625	3.444053
924	1.44E-14	-13.840484	0.19559119	3.967156
925	3.55E-15	-14.44944	0.09389218	3.490575
926	9.22E-14	-13.035493	0.47568628	3.423776
927	1.15E-10	-9.9398751	0.35755485	2.857639
928	2.11E-13	-12.675084	0.72838613	3.44494
929	1.01E-14	-13.994952	0.32677404	3.830006
930	6.31E-14	-13.199705	0.08869302	3.207867
931	7.18E-12	-11.143995	0.4925367	3.055844
932	1.04E-09	-8.9830523	1.08325829	3.764103
933	1.05E-12	-11.978945	0.42961491	3.440113
934	3.59E-09	-8.4450195	1.04853339	3.217345
935	9.35E-15	-14.029009	0.03820664	3.101053
936	7.18E-12	-11.143995	0.13720475	2.715668
937	1.62E-13	-12.790832	0.10786366	3.506448
938	1.80E-11	-10.744762	0.4914689	3.550649
939	1.07E-13	-12.972461	0.5301333	3.700176
940	9.95E-12	-11.002069	0.3799972	3.488688
941	2.49E-12	-11.604129	0.59365688	3.487089

942	2.11E-13	-12.675084	0.44784528	3.123395
943	2.28E-11	-10.64166	0.20903532	3.009074
944	3.89E-14	-13.410309	0.01089096	3.109351
945	3.85E-11	-10.414416	0.53928161	3.193662
946	3.89E-14	-13.410309	0.53158197	3.424491
947	1.05E-12	-11.978945	0.19725229	3.16121
948	7.75E-10	-9.1105712	1.15019245	3.648052
949	2.34E-15	-14.631069	0.15695475	3.32028
950	5.71E-12	-11.24372	0.74082613	3.519661
951	6.60E-10	-9.1802336	0.30373176	3.058699
952	6.06E-09	-8.2177758	1.20964444	3.370056
953	2.53E-13	-12.597645	-0.1009857	3.023705
954	3.95E-15	-14.403825	0.17632376	3.362103
955	1.14E-13	-12.942399	0.26531083	3.457837
956	3.74E-14	-13.426949	0.48524258	3.694444
957	5.23E-09	-8.2812674	0.94386447	3.346795
958	6.00E-15	-14.222196	-0.2174101	3.136905
959	1.35E-11	-10.868904	0.17546231	2.955932
960	1.43E-12	-11.84578	0.30339278	3.003073
961	1.05E-12	-11.978945	0.74009155	3.653002
962	1.07E-13	-12.972461	-0.1439515	2.923732
963	6.66E-15	-14.176581	0.04537907	3.22123
964	5.99E-13	-12.222829	0.08099507	3.281333
965	8.88E-16	-15.0515	0.09126434	3.423602
966	4.27E-15	-14.369768	0.06120844	3.389648
967	5.23E-09	-8.2812674	1.07663885	3.581818
968	1.07E-13	-12.972461	0.31121905	3.445963
969	9.22E-14	-13.035493	0.50209639	3.394757
970	1.56E-13	-12.808249	0.78896619	3.783712
971	1.05E-12	-11.978945	-0.1814643	2.83908
972	3.69E-13	-12.433433	0.65017286	3.642517
973	1.43E-12	-11.84578	0.22507768	3.094268
974	6.22E-13	-12.206189	0.80439189	3.73705
975	3.74E-14	-13.426949	0.19352705	3.283599
976	3.79E-10	-9.4218958	0.60359193	2.829365
977	3.89E-14	-13.410309	-0.0136991	2.927739
978	3.38E-12	-11.470964	0.9613555	3.731397
979	5.71E-12	-11.24372	0.87770277	3.549605
980	1.56E-13	-12.808249	0.08593002	3.010097
981	1.52E-15	-14.81736	0.16873696	3.773427
982	1.58E-14	-13.801765	-0.0009174	3.290706
983	1.01E-12	-11.995585	-0.3008867	2.84871
984	1.50E-13	-12.824889	-0.0137512	3.117208
985	4.85E-11	-10.314691	0.55807351	3.01958
986	7.18E-12	-11.143995	0.9483856	3.303221

987	1.44E-08	-7.8429596	0.4995482	2.813636
988	3.38E-12	-11.470964	0.74082613	3.519661
989	2.28E-11	-10.64166	0.26894935	2.987879
990	6.31E-14	-13.199705	0.03766266	3.134977
991	1.94E-10	-9.7126312	1.00149109	3.398156
992	3.38E-12	-11.470964	0.35881026	3.131638
993	5.71E-12	-11.24372	0.80059283	3.513889
994	8.88E-16	-15.0515	0.21714221	3.654151
995	2.40E-14	-13.620136	-0.1665888	3.17296
996	2.30E-14	-13.637553	0.59573287	3.545455
997	3.75E-16	-15.426316	0.04998475	3.488136
998	5.28E-14	-13.277144	0.55618143	3.243635
999	1.58E-14	-13.801765	0.08001386	3.280275
1000	6.00E-15	-14.222196	0.34170519	3.820904

Table S4. Composite Likelihood (CL) and Ratio (CLR) estimated in 1000 regions of 1kb taken randomly from the 3R chromosome in the datasets with (*FBti0019386* +) and without (*FBti0019386* -) the element**.**

				CL		
chr.start	**chr.end**	**dataset**	**sample_id**	***FBti0019386*** **+**	**FBti0019386 -**	**CLR**
20078025	20079025	568	586	4.45E-05	5.43E-18	8.56
12015987	12016987	941	971	1.58E-07	5.77E-19	4.63
20154668	20155668	539	554	1.36E-03	1.94E-10	3.98
16592452	16593452	636	657	4.13E-08	2.53E-18	2.83
12030464	12031464	133	136	1.59E-20	1.38E-42	2.26
264845	265845	408	422	1.00E+00	1.48E-01	0.83
353411	354411	176	179	8.19E-02	2.31E-03	0.46
2951623	2952623	134	137	1.56E-02	1.31E-04	0.27
185647	186647	404	418	1.00E+00	1.00E+00	0.00
2723396	2724396	415	429	1.56E-02	3.20E-04	-0.12
21690092	21691092	710	732	2.50E-01	2.50E-01	-0.60
3749567	3750567	945	975	3.91E-03	1.31E-04	-0.93
134551	135551	679	701	3.70E-02	1.56E-02	-1.06
7837217	7838217	521	536	3.70E-02	1.56E-02	-1.06
516917	517917	580	598	3.20E-04	1.25E-06	-1.09
25563991	25564991	293	300	2.50E-01	1.00E+00	-1.20
10581903	10582903	380	393	2.14E-05	1.03E-08	-1.35
578232	579232	992	1022	1.56E-02	8.64E-03	-1.55
81752	82752	834	860	1.28E-03	6.10E-05	-1.57
142216	143216	124	127	5.49E-03	1.28E-03	-1.63
1984213	1985213	785	810	1.48E-01	1.00E+00	-1.66
13994239	13995239	553	570	1.68E-03	1.31E-04	-1.67
14576729	14577729	28	28	1.61E-06	1.54E-10	-1.77
17300978	17301978	10	10	2.46E-09	5.43E-16	-1.95
12128397	12129397	411	425	1.10E-08	1.90E-14	-2.20
27843708	27844708	394	408	3.70E-02	2.50E-01	-2.26
751957	752957	622	643	1.28E-03	3.43E-04	-2.32
27551611	27552611	127	130	1.24E-03	3.43E-04	-2.35
1294422	1295422	932	962	1.28E-03	4.12E-04	-2.40
313386	314386	306	314	5.49E-03	1.52E-02	-2.70
27482632	27483632	878	906	1.94E-05	2.38E-07	-2.80
27555017	27556017	895	924	8.07E-06	4.13E-08	-2.80
337231	338231	501	516	3.20E-04	8.57E-05	-2.92
5589861	5590861	382	395	3.20E-04	8.57E-05	-2.92
3741902	3742902	583	601	4.32E-08	1.70E-12	-2.96
4103830	4104830	361	372	1.12E-06	1.31E-09	-3.02
267400	268400	93	96	1.31E-04	1.94E-05	-3.05
472634	473634	688	710	1.28E-03	2.31E-03	-3.15
12124139	12125139	788	813	6.40E-09	6.31E-14	-3.19

20135081	20136081	357	368	3.17E-16	2.62E-28	-3.42
5161509	5162509	765	790	5.08E-11	7.81E-18	-3.48
1736399	1737399	11	11	3.11E-04	3.43E-04	-3.55
11313422	11314422	894	922	3.81E-06	5.54E-08	-3.58
1393207	1394207	358	369	5.79E-04	1.28E-03	-3.58
3719761	3720761	825	850	5.79E-04	1.28E-03	-3.58
6174906	6175906	82	84	5.79E-04	1.28E-03	-3.58
10768402	10769402	258	263	6.55E-06	1.65E-07	-3.59
3724019	3725019	933	963	3.11E-04	5.79E-04	-3.78
5967117	5968117	461	476	1.61E-06	2.42E-08	-3.97
9843571	9844571	609	630	1.61E-06	2.56E-08	-3.99
14514563	14515563	123	126	1.76E-19	3.19E-34	-4.01
19947731	19948731	63	64	6.18E-23	4.62E-41	-4.08
3735941	3736941	265	270	3.20E-04	1.28E-03	-4.10
19792741	19793741	759	784	1.94E-05	4.86E-06	-4.11
10707087	10708087	296	304	1.34E-06	2.94E-08	-4.21
11670240	11671240	224	228	1.56E-11	4.95E-18	-4.31
5876848	5877848	999	1029	1.28E-03	3.70E-02	-4.35
10759035	10760035	913	942	7.49E-12	1.82E-18	-4.51
12288497	12289497	959	989	8.57E-05	3.11E-04	-4.63
1009138	1010138	317	325	9.54E-07	4.13E-08	-4.66
8027973	8028973	920	949	6.06E-09	2.19E-12	-4.78
20139339	20140339	43	43	2.38E-07	3.59E-09	-4.80
8902560	8903560	733	758	9.54E-07	6.97E-08	-4.88
11736664	11737664	370	382	4.38E-08	2.33E-10	-5.08
17446600	17447600	110	113	6.82E-12	6.53E-18	-5.15
383217	384217	947	977	1.28E-03	2.50E-01	-5.18
4817465	4818465	188	191	6.61E-07	6.97E-08	-5.20
6685010	6686010	526	541	1.21E-06	2.38E-07	-5.21
27736407	27737407	255	259	1.21E-06	2.38E-07	-5.21
16906690	16907690	640	661	8.46E-14	1.21E-21	-5.23
16180	17180	151	154	7.77E-05	1.28E-03	-5.33
14412372	14413372	118	121	1.24E-12	6.82E-19	-5.64
8100359	8101359	665	687	2.24E-10	2.66E-14	-5.72
7322854	7323854	369	381	1.28E-06	1.18E-06	-5.86
3191773	3192773	773	798	5.79E-04	2.50E-01	-5.87
10477157	10478157	558	576	2.57E-15	5.84E-24	-5.94
402803	403803	163	166	3.28E-05	1.28E-03	-6.08
6410797	6411797	520	535	8.07E-06	7.77E-05	-6.08
4407849	4408849	245	249	3.69E-07	1.65E-07	-6.08
2709771	2710771	754	779	2.56E-08	1.51E-09	-6.36
709377	710377	633	654	1.80E-11	9.16E-16	-6.45
19636899	19637899	336	346	1.94E-05	1.28E-03	-6.53
2213292	2214292	218	222	4.86E-06	8.57E-05	-6.56
7758018	7759018	778	803	4.86E-06	8.57E-05	-6.56

5811275	5812275	996	1026	8.37E-08	2.56E-08	-6.56
892470	893470	899	928	2.38E-07	2.38E-07	-6.62
20062696	20063696	366	378	1.21E-11	6.78E-16	-6.66
3496643	3497643	222	226	2.38E-07	2.92E-07	-6.71
57908	58908	161	164	4.32E-08	1.08E-08	-6.76
9264488	9265488	956	986	2.72E-09	4.85E-11	-6.82
22194235	22195235	625	646	2.45E-12	3.99E-17	-6.82
19106356	19107356	205	209	2.24E-10	3.57E-13	-6.85
636992	637992	298	306	6.97E-08	4.13E-08	-6.93
1287609	1288609	231	235	1.65E-07	2.79E-07	-7.01
805607	806607	184	187	2.38E-07	6.61E-07	-7.07
12309787	12310787	676	698	1.15E-10	1.62E-13	-7.09
27773025	27774025	696	718	1.02E-08	1.31E-09	-7.10
5506404	5507404	74	76	4.86E-06	3.20E-04	-7.13
3830468	3831468	505	520	1.21E-06	2.14E-05	-7.16
4628411	4629411	56	57	2.38E-07	9.54E-07	-7.22
203530	204530	603	623	8.57E-05	1.48E-01	-7.30
3070846	3071846	413	427	6.97E-08	1.02E-07	-7.32
4897515	4898515	437	451	4.67E-06	5.79E-04	-7.42
1994432	1995432	412	426	2.70E-09	1.94E-10	-7.42
10717306	10718306	809	834	2.70E-09	1.94E-10	-7.42
5355672	5356672	101	104	2.38E-07	1.61E-06	-7.45
27410247	27411247	362	373	2.38E-07	1.61E-06	-7.45
677017	678017	842	868	1.21E-06	4.35E-05	-7.47
19812327	19813327	776	801	4.50E-12	7.20E-16	-7.55
17289907	17290907	349	360	1.52E-15	1.12E-22	-7.68
2972913	2973913	326	335	6.97E-08	2.38E-07	-7.69
13112840	13113840	794	819	1.10E-08	6.04E-09	-7.70
25773483	25774483	576	594	1.21E-06	8.57E-05	-7.76
8263013	8264013	419	433	2.62E-06	5.79E-04	-7.93
1472405	1473405	122	125	1.60E-09	2.24E-10	-7.94
4090204	4091204	216	220	1.08E-08	1.08E-08	-7.97
9482496	9483496	795	820	1.40E-09	1.94E-10	-7.99
16046580	16047580	931	961	2.38E-07	6.44E-06	-8.05
3010383	3011383	974	1004	7.75E-10	9.13E-11	-8.18
12978288	12979288	966	996	7.52E-12	8.78E-15	-8.19
27566940	27567940	574	592	7.18E-12	9.72E-15	-8.28
9857197	9858197	644	665	1.51E-09	4.59E-10	-8.30
20135933	20136933	130	133	3.02E-17	2.28E-25	-8.40
12469035	12470035	375	388	7.83E-10	1.54E-10	-8.40
591857	592857	140	143	6.06E-09	1.08E-08	-8.47
17098298	17099298	76	78	6.50E-11	1.25E-12	-8.47
20259414	20260414	810	835	6.97E-08	1.61E-06	-8.52
21565759	21566759	150	153	1.51E-09	8.66E-10	-8.58
8276639	8277639	954	984	4.13E-08	6.91E-07	-8.61

7919821	7920821	268	273	4.26E-13	9.37E-17	-8.71
18238582	18239582	88	91	6.31E-14	2.09E-18	-8.72
15933318	15934318	482	497	1.10E-08	6.97E-08	-8.76
3048705	3049705	263	268	1.21E-11	8.91E-14	-8.78
7464218	7465218	930	960	2.53E-15	4.22E-21	-8.82
6228556	6229556	917	946	3.95E-15	1.10E-20	-8.85
1305493	1306493	416	430	1.03E-08	1.02E-07	-8.98
8664966	8665966	643	664	6.91E-07	5.79E-04	-9.08
20023523	20024523	550	567	1.44E-08	2.94E-07	-9.15
8273232	8274232	305	313	2.38E-07	8.57E-05	-9.18
5576235	5577235	581	599	4.10E-07	3.43E-04	-9.31
21093976	21094976	911	940	9.24E-13	2.05E-15	-9.38
2423635	2424635	697	719	1.03E-08	2.79E-07	-9.42
16611187	16612187	165	168	8.18E-11	1.93E-11	-9.46
9491012	9492012	417	431	1.79E-12	9.72E-15	-9.48
3757231	3758231	614	635	3.59E-09	4.38E-08	-9.53
23406053	23407053	286	293	1.39E-07	7.77E-05	-9.60
5948382	5949382	995	1025	5.61E-11	1.35E-11	-9.63
1745767	1746767	656	677	3.57E-13	5.49E-16	-9.64
1802823	1803823	695	717	1.21E-11	7.14E-13	-9.69
27631661	27632661	209	213	1.10E-08	6.61E-07	-9.74
27499664	27500664	820	845	9.54E-07	5.12E-03	-9.75
20342870	20343870	832	857	3.52E-31	9.44E-52	-9.88
4570503	4571503	902	931	2.70E-09	5.96E-08	-9.91
16945011	16946011	922	951	4.50E-12	1.76E-13	-9.94
11713671	11714671	549	566	2.72E-09	8.37E-08	-10.05
1765353	1766353	442	456	1.21E-11	1.70E-12	-10.07
11723039	11724039	672	694	4.62E-14	3.18E-17	-10.17
4060398	4061398	838	864	1.03E-08	1.61E-06	-10.18
706822	707822	217	221	5.61E-11	4.85E-11	-10.19
1231404	1232404	20	20	5.65E-07	5.49E-03	-10.24
949526	950526	646	667	3.95E-15	2.70E-19	-10.24
3346763	3347763	612	633	3.79E-10	2.58E-09	-10.26
17489180	17490180	504	519	5.73E-18	6.74E-25	-10.31
12806266	12807266	322	331	1.71E-15	6.75E-20	-10.37
19089324	19090324	257	262	6.31E-14	9.66E-17	-10.38
1850513	1851513	935	965	7.18E-12	1.79E-12	-10.54
3781076	3782076	570	588	7.75E-10	2.09E-08	-10.54
3781076	3782076	624	645	7.75E-10	2.09E-08	-10.54
4241788	4242788	605	625	2.40E-14	2.03E-17	-10.55
27250147	27251147	800	825	3.79E-10	6.06E-09	-10.63
5927092	5928092	229	233	3.79E-10	6.40E-09	-10.65
5731225	5732225	314	322	1.50E-15	1.01E-19	-10.65
21174877	21175877	637	658	2.41E-12	2.62E-13	-10.66
11052834	11053834	535	550	1.03E-08	4.86E-06	-10.66

8290264	8291264	190	193	1.51E-09	1.39E-07	-10.78
19952840	19953840	516	531	1.02E-16	6.46E-22	-10.79
1148799	1149799	648	669	4.85E-11	1.54E-10	-10.82
14741938	14742938	837	863	1.51E-20	1.53E-29	-10.83
18875574	18876574	167	170	2.26E-16	3.45E-21	-10.83
2181783	2182783	427	441	5.28E-14	2.22E-16	-10.90
2047231	2048231	398	412	1.21E-11	1.21E-11	-10.92
15762999	15763999	494	509	1.56E-22	2.32E-33	-10.98
12448596	12449596	660	682	1.01E-14	1.02E-17	-11.00
13212476	13213476	112	115	1.79E-12	3.69E-13	-11.06
2617799	2618799	197	200	1.58E-14	3.43E-17	-11.14
10006226	10007226	493	508	2.62E-13	1.01E-14	-11.17
27853927	27854927	873	901	1.51E-09	3.59E-07	-11.19
13106878	13107878	943	973	3.48E-19	2.63E-26	-11.34
27765361	27766361	828	853	1.62E-13	5.76E-15	-11.34
6889393	6890393	573	591	2.42E-16	1.40E-20	-11.38
487111	488111	113	116	1.79E-12	7.71E-13	-11.38
18771680	18772680	106	109	4.00E-10	4.13E-08	-11.41
2812814	2813814	971	1001	1.21E-11	5.61E-11	-11.58
18672043	18673043	46	46	1.54E-10	1.08E-08	-11.66
755363	756363	454	468	4.13E-08	1.28E-03	-11.88
7574926	7575926	790	815	8.88E-16	6.37E-19	-11.91
1651240	1652240	691	713	6.06E-09	3.23E-05	-11.94
1387246	1388246	905	934	4.85E-11	2.56E-09	-12.04
5568571	5569571	908	937	5.61E-11	3.59E-09	-12.06
1875209	1876209	944	974	2.41E-12	7.09E-12	-12.09
8416300	8417300	745	770	1.18E-10	2.56E-08	-12.26
21073538	21074538	736	761	2.81E-18	1.66E-23	-12.32
17122143	17123143	812	837	6.97E-13	1.02E-12	-12.32
889915	890915	55	56	1.39E-17	5.18E-22	-12.43
2289083	2290083	206	210	9.87E-16	2.81E-18	-12.46
19013532	19014532	67	68	2.81E-18	3.19E-23	-12.61
11379846	11380846	340	350	1.38E-25	8.46E-38	-12.64
7895976	7896976	111	114	3.57E-13	6.22E-13	-12.69
23095221	23096221	774	799	1.40E-17	1.01E-21	-12.71
12836923	12837923	214	218	2.04E-20	2.15E-27	-12.72
6186828	6187828	758	783	3.79E-10	9.54E-07	-12.82
20344573	20345573	593	611	1.01E-14	9.02E-16	-12.95
16653766	16654766	331	341	1.44E-14	2.34E-15	-13.05
4526220	4527220	350	361	4.93E-11	3.20E-08	-13.12
20818911	20819911	793	818	1.75E-25	4.51E-37	-13.17
3356982	3357982	579	597	2.88E-10	1.28E-06	-13.19
10206350	10207350	242	246	6.31E-14	6.31E-14	-13.20
22040948	22041948	189	192	2.62E-13	1.09E-12	-13.20
837116	838116	243	247	2.72E-09	1.20E-04	-13.21

24863130	24864130	973	1003	7.20E-11	1.02E-07	-13.30
1819004	1820004	135	138	1.50E-13	5.48E-13	-13.39
964855	965855	682	704	3.89E-14	3.89E-14	-13.41
480298	481298	775	800	5.76E-15	8.88E-16	-13.43
12114772	12115772	181	184	2.81E-18	2.53E-22	-13.51
19483612	19484612	237	241	5.22E-19	9.98E-24	-13.56
7478696	7479696	22	22	2.11E-13	1.79E-12	-13.60
12477551	12478551	770	795	3.23E-13	4.68E-12	-13.65
16106192	16107192	613	634	4.64E-11	1.02E-07	-13.68
18760609	18761609	100	103	4.89E-22	1.37E-29	-13.76
12417088	12418088	396	410	2.85E-14	5.28E-14	-13.81
18404643	18405643	407	421	4.49E-13	1.35E-11	-13.83
4647146	4648146	597	616	1.21E-11	1.02E-08	-13.84
5238152	5239152	868	896	2.31E-14	3.74E-14	-13.85
13290823	13291823	783	808	4.95E-18	1.78E-21	-13.86
20188732	20189732	215	219	3.38E-12	8.97E-10	-13.89
18634573	18635573	424	438	4.05E-27	1.41E-39	-13.94
27633364	27634364	632	653	1.00E-10	9.54E-07	-13.98
811568	812568	928	957	1.56E-13	2.39E-12	-14.00
23408608	23409608	148	151	9.02E-16	8.30E-17	-14.01
3276081	3277081	228	232	1.01E-14	1.38E-14	-14.13
8125055	8126055	866	894	6.09E-15	6.00E-15	-14.21
5016738	5017738	727	751	1.59E-14	5.28E-14	-14.32
8219582	8220582	686	708	1.68E-11	6.97E-08	-14.39
24348767	24349767	247	251	1.62E-18	7.04E-22	-14.43
11173761	11174761	410	424	5.71E-12	1.08E-08	-14.52
8224692	8225692	397	411	1.42E-11	7.13E-08	-14.55
5459567	5460567	817	842	4.81E-10	8.57E-05	-14.57
1022764	1023764	620	641	8.97E-10	3.20E-04	-14.60
12606141	12607141	771	796	4.97E-20	9.96E-25	-14.61
19866829	19867829	365	377	1.02E-17	5.59E-20	-14.73
8797814	8798814	503	518	3.75E-16	7.59E-17	-14.73
8806330	8807330	668	690	1.58E-16	1.39E-17	-14.74
2016573	2017573	972	1002	4.34E-14	1.47E-12	-14.89
9484199	9485199	982	1012	3.50E-12	1.08E-08	-14.94
7821036	7822036	844	870	5.08E-18	2.36E-20	-14.96
1640169	1641169	569	587	1.43E-12	2.56E-09	-15.10
1855622	1856622	571	589	8.90E-17	1.12E-17	-15.15
22874658	22875658	934	964	1.84E-12	5.61E-09	-15.22
27268882	27269882	211	215	6.56E-14	7.18E-12	-15.22
12773054	12774054	846	872	6.32E-16	7.19E-16	-15.26
18785305	18786305	821	846	2.00E-18	8.14E-21	-15.31
21137407	21138407	262	267	8.28E-21	1.50E-25	-15.34
16789170	16790170	146	149	1.44E-15	5.76E-15	-15.44
2122171	2123171	48	48	1.77E-12	9.46E-09	-15.48

3060627	3061627	15	15	2.88E-14	2.88E-12	-15.54
20834240	20835240	288	295	3.25E-16	4.26E-16	-15.61
12155648	12156648	383	396	4.50E-12	1.02E-07	-15.70
6214930	6215930	129	132	6.78E-16	2.53E-15	-15.74
11845668	11846668	718	741	1.06E-23	6.93E-31	-15.79
7953033	7954033	307	315	1.07E-16	7.59E-17	-15.82
7871280	7872280	420	434	2.59E-17	4.95E-18	-15.87
25753897	25754897	647	668	3.34E-17	8.36E-18	-15.87
14270155	14271155	327	336	5.15E-20	2.00E-23	-15.88
12865026	12866026	769	794	1.58E-14	2.49E-12	-16.00
8674333	8675333	712	734	3.65E-17	1.39E-17	-16.02
19741645	19742645	156	159	8.91E-14	9.13E-11	-16.06
19807218	19808218	843	869	2.36E-16	6.52E-16	-16.07
15367860	15368860	533	548	1.51E-17	2.73E-18	-16.08
11513547	11514547	811	836	5.85E-18	5.22E-19	-16.18
16352302	16353302	302	310	1.01E-14	1.79E-12	-16.24
14558846	14559846	792	817	1.44E-15	3.74E-14	-16.26
19240056	19241056	120	123	1.99E-15	7.32E-14	-16.27
7254726	7255726	455	469	1.12E-12	2.56E-08	-16.31
3035080	3036080	373	385	5.76E-15	8.45E-13	-16.41
12685340	12686340	339	349	1.75E-24	7.83E-32	-16.41
4894109	4895109	489	504	7.52E-12	1.61E-06	-16.45
18415714	18416714	86	89	5.55E-17	9.52E-17	-16.49
6906425	6907425	402	416	1.52E-15	7.32E-14	-16.50
20457835	20458835	955	985	5.76E-15	1.05E-12	-16.50
17889429	17890429	557	575	1.31E-29	9.26E-42	-16.73
2218401	2219401	492	507	5.76E-15	1.79E-12	-16.73
27688718	27689718	354	365	3.65E-17	9.37E-17	-16.85
12274020	12275020	453	467	1.72E-17	2.09E-17	-16.85
9259378	9260378	980	1010	1.73E-17	2.56E-17	-16.93
2826439	2827439	431	445	2.22E-21	4.44E-25	-16.95
6080379	6081379	423	437	6.31E-14	3.79E-10	-16.98
8079921	8080921	483	498	3.52E-18	1.19E-18	-16.98
6581116	6582116	545	561	2.71E-15	7.05E-13	-16.98
15605454	15606454	714	736	9.02E-16	8.11E-14	-17.00
20042258	20043258	114	117	2.36E-16	6.66E-15	-17.08
20961127	20962127	169	172	1.76E-18	4.16E-19	-17.13
2434706	2435706	143	146	4.93E-11	3.43E-04	-17.15
2722545	2723545	807	832	9.35E-15	1.35E-11	-17.19
27746626	27747626	906	935	2.42E-16	9.72E-15	-17.22
13157122	13158122	699	721	4.02E-22	2.70E-26	-17.22
9106091	9107091	300	308	3.57E-13	2.56E-08	-17.30
7017132	7018132	631	652	5.85E-18	8.00E-18	-17.37
1696374	1697374	508	523	3.81E-16	3.74E-14	-17.41
4567097	4568097	602	622	1.46E-16	5.76E-15	-17.43

12891425	12892425	958	988	2.47E-16	2.40E-14	-17.60
12921231	12922231	171	174	2.19E-24	1.94E-30	-17.61
12492028	12493028	761	786	1.90E-17	1.46E-16	-17.61
4250304	4251304	462	477	3.14E-17	4.08E-16	-17.62
8968133	8969133	16	16	9.22E-14	3.59E-09	-17.63
5288396	5289396	337	347	3.19E-13	4.38E-08	-17.63
18870465	18871465	984	1014	1.81E-25	1.45E-32	-17.65
7704368	7705368	324	333	5.85E-16	1.56E-13	-17.66
1171792	1172792	204	208	1.01E-14	5.61E-11	-17.74
3843242	3844242	191	194	7.18E-12	3.28E-05	-17.80
10567426	10568426	50	50	1.87E-21	2.61E-24	-17.87
15958014	15959014	737	762	3.05E-20	7.18E-22	-17.89
23250211	23251211	983	1013	1.36E-16	1.42E-14	-17.89
2998461	2999461	829	854	1.02E-17	8.13E-17	-17.89
7505947	7506947	405	419	7.92E-17	6.00E-15	-17.98
19702472	19703472	144	147	9.65E-25	9.03E-31	-17.99
20837646	20838646	681	703	3.49E-21	1.23E-23	-18.00
5548133	5549133	269	274	1.07E-13	1.44E-08	-18.10
1587370	1588370	560	578	5.55E-17	4.57E-15	-18.17
12893128	12894128	225	229	3.60E-16	2.11E-13	-18.21
17444045	17445045	942	972	5.20E-15	4.60E-11	-18.23
558645	559645	748	773	3.28E-14	2.00E-09	-18.27
3836429	3837429	693	715	3.57E-13	2.38E-07	-18.27
11828636	11829636	487	502	1.71E-19	5.59E-20	-18.28
1333595	1334595	862	890	9.72E-15	2.24E-10	-18.38
4952017	4953017	986	1016	5.76E-15	9.46E-11	-18.46
17108517	17109517	236	240	1.67E-18	8.36E-18	-18.48
13367466	13368466	220	224	3.25E-16	3.57E-13	-18.53
2700403	2701403	421	435	3.61E-15	4.85E-11	-18.57
16248408	16249408	939	969	9.87E-16	4.50E-12	-18.66
4372933	4373933	723	746	6.47E-18	2.48E-16	-18.77
2371688	2372688	376	389	3.95E-17	9.72E-15	-18.79
11674498	11675498	904	933	1.72E-19	1.92E-19	-18.81
25414962	25415962	406	420	6.25E-22	2.95E-24	-18.88
19871087	19872087	192	195	1.20E-20	1.56E-21	-19.03
12641908	12642908	187	190	1.92E-19	4.04E-19	-19.04
5420394	5421394	967	997	1.21E-15	1.62E-11	-19.04
2272052	2273052	551	568	6.47E-13	4.67E-06	-19.05
16105340	16106340	351	362	5.35E-16	3.38E-12	-19.07
16364224	16365224	145	148	5.36E-15	3.79E-10	-19.12
14678920	14679920	356	367	5.85E-16	5.71E-12	-19.22
6528317	6529317	52	53	9.37E-17	1.56E-13	-19.25
12375359	12376359	629	650	3.58E-18	3.04E-16	-19.38
5559203	5560203	246	250	1.51E-18	7.92E-17	-19.54
6094856	6095856	364	375	6.91E-17	1.73E-13	-19.56

2822181	2823181	886	914	3.81E-16	7.18E-12	-19.69
27882029	27883029	888	916	1.79E-13	2.64E-06	-19.92
27755994	27756994	756	781	2.26E-16	4.50E-12	-19.95
1269726	1270726	730	754	4.59E-20	2.24E-19	-20.02
13498612	13499612	393	407	3.24E-25	1.16E-29	-20.04
10446500	10447500	541	557	4.56E-19	2.34E-17	-20.05
7034164	7035164	595	614	1.76E-18	3.86E-16	-20.10
13989130	13990130	715	737	2.96E-19	1.43E-17	-20.21
769840	770840	675	697	7.39E-16	9.13E-11	-20.22
27724485	27725485	530	545	3.18E-19	1.98E-17	-20.29
19876197	19877197	285	292	9.61E-30	1.82E-38	-20.29
11617441	11618441	915	944	8.18E-21	1.38E-20	-20.31
3775114	3776114	334	344	3.96E-21	4.17E-21	-20.42
3805772	3806772	60	61	2.34E-15	1.51E-09	-20.44
4831942	4832942	893	921	1.58E-16	7.18E-12	-20.46
13180115	13181115	379	392	2.50E-21	1.91E-21	-20.48
8205957	8206957	989	1019	9.52E-17	3.38E-12	-20.57
809865	810865	969	999	4.73E-24	8.61E-27	-20.58
7621763	7622763	663	685	1.83E-14	1.65E-07	-20.69
20053328	20054328	968	998	3.45E-21	5.90E-21	-20.69
26514370	26515370	865	893	7.72E-29	3.15E-36	-20.72
13015758	13016758	936	966	3.19E-23	6.13E-25	-20.78
4309915	4310915	180	183	9.82E-17	7.31E-12	-20.88
23845475	23846475	630	651	5.11E-22	2.16E-22	-20.92
4877077	4878077	994	1024	2.94E-18	9.72E-15	-21.05
5485966	5486966	44	44	8.73E-22	8.73E-22	-21.06
12693855	12694855	292	299	1.33E-19	2.03E-17	-21.06
18225808	18226808	25	25	8.76E-21	9.31E-20	-21.08
27803683	27804683	352	363	1.24E-18	2.34E-15	-21.18
7295603	7296603	395	409	3.98E-22	2.47E-22	-21.19
3369756	3370756	709	731	9.67E-16	1.51E-09	-21.21
2672301	2673301	924	953	1.15E-20	2.24E-19	-21.23
11484592	11485592	554	571	4.20E-21	3.93E-20	-21.35
7659233	7660233	610	631	1.36E-18	6.00E-15	-21.51
21609190	21610190	304	312	1.23E-27	4.89E-33	-21.51
22316865	22317865	54	55	3.17E-16	3.50E-10	-21.54
20229608	20230608	722	745	1.51E-26	8.32E-31	-21.56
4607122	4608122	497	512	1.51E-17	8.45E-13	-21.57
8703287	8704287	752	777	1.58E-16	1.15E-10	-21.66
9153780	9154780	753	778	2.94E-29	4.61E-36	-21.73
10361340	10362340	926	955	1.67E-18	1.55E-14	-21.75
3963317	3964317	261	266	5.85E-18	2.11E-13	-21.79
22396063	22397063	617	638	2.34E-21	3.95E-20	-21.86
2574367	2575367	108	111	5.22E-19	2.34E-15	-21.93
3052963	3053963	484	499	1.67E-18	2.66E-14	-21.98

8886380	8887380	703	725	2.07E-21	4.39E-20	-22.01
19323513	19324513	13	13	3.22E-24	1.09E-25	-22.02
27706601	27707601	542	558	1.79E-22	4.47E-22	-22.14
27706601	27707601	707	729	1.79E-22	4.47E-22	-22.14
23391576	23392576	607	627	5.33E-16	4.16E-09	-22.17
11082640	11083640	430	444	1.23E-17	2.31E-12	-22.18
11082640	11083640	517	532	1.23E-17	2.31E-12	-22.18
19234947	19235947	95	98	3.00E-21	2.21E-19	-22.39
15174548	15175548	634	655	3.90E-22	4.22E-21	-22.44
14638896	14639896	877	905	3.12E-27	3.05E-31	-22.50
20341167	20342167	653	674	1.91E-33	1.46E-43	-22.60
4033999	4034999	414	428	3.43E-17	4.85E-11	-22.61
19650525	19651525	577	595	3.35E-27	4.75E-31	-22.63
21792283	21793283	725	749	2.52E-25	3.06E-27	-22.68
13557372	13558372	279	286	3.42E-26	5.67E-29	-22.69
19446994	19447994	173	176	6.59E-23	2.36E-22	-22.74
2238839	2239839	198	201	3.39E-17	6.72E-11	-22.77
20852975	20853975	62	63	1.78E-21	1.92E-19	-22.78
18446371	18447371	853	879	5.18E-22	1.85E-20	-22.84
6509582	6510582	555	573	1.56E-27	1.81E-31	-22.87
11876326	11877326	626	647	6.00E-15	2.80E-06	-22.89
3333989	3334989	159	162	4.56E-19	1.83E-14	-22.95
10325573	10326573	174	177	1.05E-21	9.98E-20	-22.95
4179621	4180621	883	911	4.74E-18	2.41E-12	-23.03
13651898	13652898	75	77	1.09E-21	1.28E-19	-23.03
6523207	6524207	152	155	5.22E-19	3.89E-14	-23.15
18560485	18561485	856	883	1.03E-24	1.75E-25	-23.22
3362092	3363092	53	54	1.33E-19	3.71E-15	-23.32
15732342	15733342	102	105	7.76E-30	1.35E-35	-23.35
6045463	6046463	136	139	3.78E-16	3.22E-08	-23.35
6045463	6046463	977	1007	3.78E-16	3.22E-08	-23.35
8126758	8127758	89	92	4.81E-20	5.35E-16	-23.36
21925131	21926131	847	873	3.73E-19	3.89E-14	-23.45
16747442	16748442	443	457	1.62E-22	7.66E-21	-23.47
12215260	12216260	290	297	4.37E-25	6.23E-26	-23.51
5142774	5143774	871	899	4.41E-28	6.41E-32	-23.52
15818353	15819353	141	144	3.36E-29	4.18E-34	-23.57
25728349	25729349	319	327	6.13E-25	1.50E-25	-23.60
16707417	16708417	374	387	1.92E-25	1.51E-26	-23.61
20367566	20368566	253	257	8.94E-27	3.32E-29	-23.62
8844652	8845652	422	436	5.22E-19	1.14E-13	-23.62
20742268	20743268	949	979	2.52E-21	2.95E-18	-23.67
6962630	6963630	70	72	5.55E-17	1.60E-09	-23.72
20363309	20364309	79	81	2.43E-28	3.22E-32	-23.74
24173339	24174339	671	693	1.71E-19	1.59E-14	-23.74

27032139	27033139	172	175	8.36E-18	4.93E-11	-23.85
9941505	9942505	618	639	1.36E-25	1.35E-26	-23.86
15707646	15708646	294	302	1.60E-26	1.89E-28	-23.87
10095643	10096643	221	225	1.19E-22	1.29E-20	-23.96
1485179	1486179	652	673	1.41E-17	2.79E-10	-24.15
8489537	8490537	879	907	1.03E-19	1.58E-14	-24.17
11220598	11221598	99	102	4.16E-19	2.62E-13	-24.18
18100624	18101624	154	157	6.43E-24	6.63E-23	-24.21
2698700	2699700	284	291	1.66E-23	4.48E-22	-24.21
13470509	13471509	272	277	4.77E-22	3.77E-19	-24.22
13470509	13471509	360	371	4.77E-22	3.77E-19	-24.22
6957520	6958520	611	632	8.28E-21	1.34E-16	-24.29
4496414	4497414	979	1009	1.53E-15	4.86E-06	-24.32
19114021	19115021	731	755	1.10E-24	2.84E-24	-24.37
11637879	11638879	434	448	6.98E-28	1.32E-30	-24.43
24243170	24244170	85	87	2.51E-27	1.84E-29	-24.47
6506176	6507176	137	140	1.95E-28	1.14E-31	-24.48
27084086	27085086	251	255	2.31E-22	1.71E-19	-24.50
8090991	8091991	58	59	2.96E-25	3.24E-25	-24.57
18933483	18934483	155	158	2.77E-30	2.98E-35	-24.59
23218702	23219702	301	309	2.12E-18	1.80E-11	-24.60
15091943	15092943	985	1015	1.72E-34	1.26E-43	-24.63
23107995	23108995	529	544	4.49E-23	9.21E-21	-24.66
18150868	18151868	903	932	1.10E-24	6.98E-24	-24.76
23016875	23017875	687	709	3.66E-23	8.28E-21	-24.79
4515149	4516149	244	248	3.10E-19	7.19E-13	-24.87
3420851	3421851	182	185	2.56E-25	7.38E-25	-25.05
21616003	21617003	128	131	3.80E-20	2.10E-14	-25.16
11195902	11196902	698	720	1.12E-23	1.84E-21	-25.17
11406246	11407246	23	23	9.37E-21	1.30E-15	-25.17
15799618	15800618	21	21	8.94E-27	1.33E-27	-25.22
11393472	11394472	287	294	6.33E-29	6.72E-32	-25.23
10296619	10297619	104	107	3.21E-24	2.06E-22	-25.30
23079041	23080041	36	36	4.20E-25	4.15E-24	-25.37
9089059	9090059	14	14	1.56E-20	6.53E-15	-25.43
10618522	10619522	496	511	8.96E-27	2.24E-27	-25.45
11452232	11453232	199	202	1.03E-24	3.91E-23	-25.56
18285420	18286420	923	952	7.57E-23	2.24E-19	-25.59
19714394	19715394	515	530	1.12E-23	5.90E-21	-25.67
8729687	8730687	323	332	1.60E-19	1.79E-12	-25.85
11800534	11801534	818	843	2.12E-26	4.39E-26	-25.99
19670963	19671963	645	666	1.56E-22	2.55E-18	-26.02
25697692	25698692	29	29	5.90E-23	3.73E-19	-26.03
2799188	2800188	885	913	2.52E-24	7.76E-22	-26.09
11405394	11406394	289	296	6.13E-25	4.86E-23	-26.11

26365341	26366341	694	716	1.89E-23	5.15E-20	-26.16
16661431	16662431	24	24	1.07E-22	1.67E-18	-26.16
10156106	10157106	739	764	8.14E-30	1.12E-32	-26.23
10145887	10146887	321	330	1.85E-31	6.93E-36	-26.31
4080837	4081837	657	678	1.23E-19	3.38E-12	-26.35
3495792	3496792	705	727	1.05E-21	3.04E-16	-26.44
17455116	17456116	960	990	4.31E-28	6.12E-29	-26.52
16049986	16050986	273	278	8.23E-22	2.47E-16	-26.56
18656715	18657715	27	27	2.95E-30	8.04E-33	-26.97
12897386	12898386	869	897	6.47E-26	3.86E-24	-26.97
13482431	13483431	230	234	1.08E-35	1.11E-43	-26.98
24195480	24196480	998	1028	3.24E-25	1.11E-22	-27.03
17291610	17292610	311	319	2.27E-41	6.03E-55	-27.07
14300813	14301813	562	580	2.01E-25	4.86E-23	-27.08
815826	816826	264	269	8.09E-24	9.43E-20	-27.16
8620683	8621683	523	538	1.52E-20	3.57E-13	-27.19
20917696	20918696	757	782	2.78E-25	1.28E-22	-27.22
23779903	23780903	57	58	3.66E-26	2.29E-24	-27.23
3988013	3989013	852	878	2.31E-22	9.37E-17	-27.24
7326260	7327260	835	861	5.31E-21	6.56E-14	-27.37
9661330	9662330	532	547	2.96E-25	2.18E-22	-27.40
8362650	8363650	18	18	2.50E-20	1.70E-12	-27.44
19590061	19591061	378	391	5.30E-27	1.05E-25	-27.57
4803840	4804840	341	351	5.11E-22	9.93E-16	-27.58
4810652	4811652	465	480	5.60E-22	1.21E-15	-27.59
18765719	18766719	519	534	3.58E-26	6.52E-24	-27.71
20530221	20531221	436	450	2.15E-33	2.55E-38	-27.74
3097246	3098246	392	406	1.65E-23	1.51E-18	-27.74
3812585	3813585	31	31	2.02E-26	2.34E-24	-27.76
23648757	23649757	170	173	3.54E-28	8.80E-28	-27.85
16274807	16275807	728	752	2.71E-25	5.25E-22	-27.85
4691429	4692429	320	329	2.31E-26	3.86E-24	-27.86
21288991	21289991	963	993	4.75E-31	1.72E-33	-27.88
6969443	6970443	38	38	1.29E-22	1.34E-16	-27.90
7118471	7119471	559	577	2.26E-21	4.34E-14	-27.93
15110678	15111678	919	948	2.17E-23	4.05E-18	-27.93
5398252	5399252	186	189	1.20E-22	1.28E-16	-27.95
24150346	24151346	861	889	2.57E-31	6.33E-34	-27.98
17530056	17531056	929	958	2.78E-23	7.81E-18	-28.00
7137206	7138206	426	440	2.37E-25	6.28E-22	-28.05
8937476	8938476	975	1005	7.03E-19	5.61E-09	-28.06
7382465	7383465	962	992	1.36E-24	2.85E-20	-28.19
23252766	23253766	855	882	1.92E-25	6.17E-22	-28.22
8442700	8443700	248	252	3.36E-29	1.99E-29	-28.25
2239691	2240691	115	118	2.26E-21	9.22E-14	-28.26

9426290	9427290	565	583	3.40E-25	2.19E-21	-28.28
8739906	8740906	677	699	9.88E-27	2.19E-24	-28.35
19222173	19223173	851	877	2.09E-27	9.79E-26	-28.35
21527437	21528437	751	776	1.76E-21	7.32E-14	-28.37
8663262	8664262	784	809	2.40E-21	1.62E-13	-28.45
13268681	13269681	762	787	6.62E-23	1.29E-16	-28.47
6660314	6661314	720	743	1.65E-23	8.36E-18	-28.49
17867287	17868287	403	417	3.56E-27	4.04E-25	-28.51
17867287	17868287	606	626	3.56E-27	4.04E-25	-28.51
5124039	5125039	651	672	1.22E-28	5.01E-28	-28.53
20267078	20268078	863	891	7.03E-29	1.76E-28	-28.55
8699029	8700029	540	555	1.54E-22	8.88E-16	-28.57
14392785	14393785	548	565	4.43E-29	7.92E-29	-28.61
7634537	7635537	91	94	2.31E-22	2.34E-15	-28.64
14420036	14421036	7	7	5.63E-40	1.62E-50	-28.71
10237859	10238859	744	769	1.95E-31	3.07E-33	-28.91
16544762	16545762	45	45	3.84E-26	1.57E-22	-29.03
18643089	18644089	260	265	1.65E-23	3.34E-17	-29.09
6558974	6559974	543	559	6.03E-26	4.60E-22	-29.10
18349289	18350289	4	4	2.36E-25	7.63E-21	-29.14
11166948	11167948	511	526	5.52E-20	4.72E-10	-29.19
1757689	1758689	98	101	9.88E-25	1.76E-19	-29.25
8532117	8533117	880	908	3.09E-23	1.80E-16	-29.28
18115101	18116101	916	945	5.51E-28	6.04E-26	-29.30
5318202	5319202	444	458	1.20E-26	3.19E-23	-29.35
10777770	10778770	210	214	1.25E-29	3.60E-29	-29.36
2870722	2871722	282	289	3.02E-27	2.70E-24	-29.47
20613677	20614677	281	288	1.11E-26	4.54E-23	-29.57
14881600	14882600	742	767	1.90E-30	1.41E-30	-29.59
26522034	26523034	997	1027	1.34E-28	8.94E-27	-29.69
7036718	7037718	582	600	3.19E-23	5.85E-16	-29.76
2394681	2395681	599	618	7.54E-22	3.57E-13	-29.80
8554258	8555258	486	501	1.21E-31	9.73E-33	-29.82
14047889	14048889	346	356	8.28E-29	5.30E-27	-29.89
22706894	22707894	160	163	3.95E-32	1.24E-33	-29.90
23668344	23669344	119	122	1.69E-32	2.38E-34	-29.92
23454594	23455594	371	383	1.31E-31	2.97E-32	-30.24
5204940	5205940	952	982	3.62E-25	2.67E-19	-30.31
17819598	17820598	249	253	3.14E-27	2.07E-23	-30.32
19210251	19211251	803	828	1.34E-28	4.39E-26	-30.38
15305693	15306693	80	82	1.76E-32	8.00E-34	-30.41
25030894	25031894	766	791	1.56E-24	6.47E-18	-30.43
23463961	23464961	849	875	1.85E-25	1.01E-19	-30.47
25925067	25926067	621	642	2.61E-23	2.34E-15	-30.54
23303862	23304862	827	852	2.25E-30	1.84E-29	-30.56

21434613	21435613	740	765	2.37E-27	2.07E-23	-30.57
24310445	24311445	457	472	1.11E-26	5.60E-22	-30.66
6283058	6284058	467	482	1.02E-25	4.81E-20	-30.66
6822968	6823968	741	766	1.55E-31	1.21E-31	-30.71
12333631	12334631	274	279	1.76E-32	1.61E-33	-30.72
5651175	5652175	202	205	1.66E-23	2.05E-15	-30.87
5651175	5652175	267	272	1.66E-23	2.05E-15	-30.87
8109726	8110726	951	981	2.73E-32	6.38E-33	-30.93
1888834	1889834	252	256	8.75E-24	9.02E-16	-31.07
5489373	5490373	254	258	3.95E-24	2.47E-16	-31.20
25829689	25830689	450	464	2.73E-26	1.20E-20	-31.21
16845375	16846375	329	338	1.05E-24	1.98E-17	-31.25
23828443	23829443	433	447	1.87E-44	6.73E-57	-31.28
20888742	20889742	303	311	1.58E-30	5.09E-29	-31.31
25913145	25914145	92	95	9.79E-38	2.29E-43	-31.38
20710759	20711759	787	812	1.31E-29	5.30E-27	-31.49
17403169	17404169	673	695	3.43E-24	4.51E-16	-31.58
16702307	16703307	777	802	1.02E-30	4.28E-29	-31.61
15582461	15583461	669	691	1.31E-24	9.37E-17	-31.74
6072714	6073714	178	181	2.55E-20	3.79E-08	-31.76
21728413	21729413	600	619	4.91E-29	1.43E-25	-31.77
11420723	11421723	466	481	4.07E-31	1.02E-29	-31.79
9881893	9882893	12	12	1.92E-31	3.51E-30	-31.98
12747506	12748506	513	528	4.31E-38	1.85E-43	-32.00
7691594	7692594	764	789	1.04E-22	1.87E-12	-32.23
21808463	21809463	814	839	2.27E-28	1.12E-23	-32.34
22931715	22932715	524	539	2.25E-30	1.32E-27	-32.42
25638080	25639080	68	69	1.05E-34	3.16E-36	-32.46
3461728	3462728	32	32	1.34E-28	7.21E-24	-32.60
9047331	9048331	250	254	1.34E-28	9.15E-24	-32.70
13494354	13495354	623	644	7.22E-33	3.30E-32	-32.80
8874458	8875458	717	739	8.86E-31	5.76E-28	-32.87
18391869	18392869	226	230	3.25E-44	8.47E-55	-32.91
24976392	24977392	896	925	3.50E-35	1.25E-36	-33.01
16809608	16810608	49	49	8.85E-36	8.37E-38	-33.03
8544039	8545039	961	991	1.58E-23	2.93E-13	-33.07
22723075	22724075	78	80	6.57E-27	5.15E-20	-33.08
24110321	24111321	527	542	4.49E-33	2.69E-32	-33.13
6921753	6922753	77	79	2.33E-31	8.42E-29	-33.19
21282178	21283178	561	579	2.74E-31	1.24E-28	-33.22
21375853	21376853	615	636	5.18E-38	4.86E-42	-33.26
27061093	27062093	338	348	3.80E-26	2.94E-18	-33.31
2463660	2464660	510	525	8.84E-29	1.70E-23	-33.34
20885335	20886335	2	2	7.44E-35	2.12E-35	-33.58
10965972	10966972	854	880	5.76E-28	1.59E-21	-33.68

7949627	7950627	125	128	9.09E-34	4.07E-33	-33.69
7949627	7950627	276	282	9.09E-34	4.07E-33	-33.69
18171306	18172306	17	17	4.31E-31	9.73E-28	-33.72
18622651	18623651	399	413	1.26E-35	8.57E-37	-33.73
22442049	22443049	377	390	8.96E-27	4.37E-19	-33.74
2615244	2616244	946	976	2.73E-30	4.38E-26	-33.77
9407555	9408555	463	478	1.46E-25	1.34E-16	-33.80
4965642	4966642	937	967	7.32E-27	3.77E-19	-33.85
16844523	16845523	546	562	6.14E-26	2.86E-17	-33.88
19613054	19614054	59	60	1.88E-37	2.89E-40	-33.91
18098921	18099921	8	8	6.73E-33	4.31E-31	-33.98
25443917	25444917	683	705	6.93E-31	6.04E-27	-34.10
20571949	20572949	459	474	6.42E-38	5.80E-41	-34.15
12944224	12945224	528	543	5.65E-38	4.74E-41	-34.17
15864339	15865339	468	483	1.96E-28	6.64E-22	-34.24
26304026	26305026	239	243	9.09E-34	1.91E-32	-34.36
23857398	23858398	400	414	8.77E-27	2.09E-18	-34.43
24475655	24476655	456	471	1.08E-31	3.19E-28	-34.43
18393572	18394572	743	768	3.21E-30	3.24E-25	-34.50
9263636	9264636	586	604	6.10E-31	1.45E-26	-34.59
11780947	11781947	109	112	1.58E-25	1.27E-15	-34.71
11780947	11781947	892	920	1.58E-25	1.27E-15	-34.71
11419020	11420020	446	460	6.08E-29	1.95E-22	-34.72
17231998	17232998	721	744	4.21E-26	9.54E-17	-34.73
9793327	9794327	841	867	2.47E-32	3.53E-29	-34.76
19889822	19890822	772	797	2.08E-30	2.68E-25	-34.79
14273562	14274562	836	862	9.02E-32	5.21E-28	-34.81
3160264	3161264	438	452	3.10E-29	6.62E-23	-34.84
11258920	11259920	451	465	1.42E-28	1.59E-21	-34.90
23187193	23188193	1000	1030	3.31E-36	9.28E-37	-34.93
13906525	13907525	73	75	7.77E-37	5.74E-38	-34.98
24306187	24307187	666	688	6.38E-39	4.09E-42	-35.00
24244021	24245021	823	848	1.12E-34	1.28E-33	-35.01
24875052	24876052	333	343	3.43E-40	1.35E-44	-35.06
7961549	7962549	870	898	5.25E-33	4.20E-30	-35.18
15147297	15148297	41	41	1.82E-31	5.30E-27	-35.20
15147297	15148297	848	874	1.82E-31	5.30E-27	-35.20
9554029	9555029	19	19	2.62E-34	1.17E-32	-35.23
22780131	22781131	716	738	1.09E-29	2.09E-23	-35.24
18727397	18728397	445	459	1.32E-33	3.50E-31	-35.30
12731326	12732326	312	320	3.81E-29	3.03E-22	-35.32
9363272	9364272	564	582	1.62E-26	5.55E-17	-35.33
18936037	18937037	381	394	9.65E-36	2.69E-35	-35.46
14554588	14555588	594	612	1.12E-33	4.85E-31	-35.59
4968197	4969197	87	90	4.01E-27	8.36E-18	-35.72

24293414	24294414	670	692	1.69E-32	1.52E-28	-35.72
23940854	23941854	833	858	1.43E-34	2.31E-32	-36.05
24116282	24117282	898	927	2.78E-32	8.95E-28	-36.06
16895619	16896619	401	415	3.58E-32	1.95E-27	-36.18
14194364	14195364	449	463	4.51E-34	3.29E-31	-36.21
16331012	16332012	655	676	3.99E-33	3.36E-29	-36.32
5468934	5469934	5	5	1.89E-28	9.31E-20	-36.42
16187945	16188945	485	500	5.24E-29	9.02E-21	-36.52
18861097	18862097	105	108	2.07E-29	2.07E-21	-36.68
14431107	14432107	948	978	7.97E-29	3.27E-20	-36.71
10512924	10513924	389	403	7.99E-40	3.78E-42	-36.77
17684195	17685195	208	212	9.43E-48	5.59E-58	-36.80
22944489	22945489	39	39	4.80E-38	1.51E-38	-36.82
23538050	23539050	965	995	2.69E-29	5.72E-21	-36.90
26516925	26517925	343	353	3.03E-33	8.17E-29	-36.95
22395211	22396211	590	608	5.48E-28	3.08E-18	-37.01
17037835	17038835	240	244	1.36E-37	2.24E-37	-37.08
19142975	19143975	235	239	2.70E-40	8.77E-43	-37.08
20533627	20534627	858	885	2.16E-33	6.13E-29	-37.12
10227640	10228640	840	866	5.31E-36	3.83E-34	-37.13
17575191	17576191	506	521	7.76E-30	1.05E-21	-37.24
4099572	4100572	876	904	4.73E-35	4.52E-32	-37.31
18161087	18162087	193	196	1.07E-41	2.67E-45	-37.37
18161087	18162087	719	742	1.07E-41	2.67E-45	-37.37
18061451	18062451	755	780	1.93E-29	1.00E-20	-37.43
19269011	19270011	760	785	1.74E-35	8.40E-33	-37.44
10164622	10165622	750	775	4.10E-36	4.82E-34	-37.46
17110221	17111221	608	629	1.76E-30	1.80E-22	-37.76
9669846	9670846	556	574	4.22E-30	1.05E-21	-37.77
26944425	26945425	342	352	2.01E-33	3.14E-28	-37.89
26451352	26452352	801	826	6.04E-37	3.52E-35	-37.98
22707746	22708746	153	156	1.09E-36	1.39E-34	-38.07
5922834	5923834	907	936	1.82E-31	4.15E-24	-38.10
8603651	8604651	536	551	3.31E-30	1.39E-21	-38.10
23207632	23208632	798	823	1.95E-32	4.84E-26	-38.11
18809150	18810150	81	83	1.79E-43	4.46E-48	-38.14
21017332	21018332	94	97	1.96E-36	5.63E-34	-38.16
13736206	13737206	658	679	1.37E-38	3.12E-38	-38.22
13926963	13927963	912	941	3.90E-36	2.75E-33	-38.26
24842691	24843691	970	1000	2.27E-34	9.33E-30	-38.26
14049593	14050593	604	624	3.63E-39	3.35E-39	-38.41
4011006	4012006	316	324	1.50E-32	6.47E-26	-38.46
16854742	16855742	232	236	3.52E-35	5.14E-31	-38.62
9767779	9768779	391	405	1.66E-41	1.18E-43	-38.63
16207531	16208531	498	513	3.97E-28	6.91E-17	-38.64

25922512	25923512	887	915	6.27E-36	2.63E-32	-38.83
8482725	8483725	6	6	4.01E-34	1.24E-28	-38.89
13586326	13587326	147	150	1.16E-32	1.05E-25	-38.89
13567591	13568591	708	730	8.34E-37	5.63E-34	-38.91
16778951	16779951	227	231	2.05E-37	6.86E-35	-39.21
15973343	15974343	639	660	1.00E-34	1.73E-29	-39.24
17914125	17915125	724	747	6.73E-40	8.13E-40	-39.25
22616626	22617626	628	649	2.13E-33	8.61E-27	-39.28
15992930	15993930	51	51	1.04E-32	2.09E-25	-39.28
9219353	9220353	589	607	3.04E-32	2.80E-24	-39.48
9278113	9279113	701	723	1.20E-32	4.41E-25	-39.49
4713571	4714571	318	326	6.27E-36	1.66E-31	-39.63
18789563	18790563	734	759	6.24E-33	1.91E-25	-39.69
14584394	14585394	918	947	3.20E-38	5.29E-36	-39.71
10980449	10981449	310	318	6.80E-47	2.57E-53	-39.74
6247291	6248291	90	93	7.28E-39	3.01E-37	-39.75
15172845	15173845	34	34	1.02E-36	6.18E-33	-39.77
26448797	26449797	525	540	3.01E-38	5.78E-36	-39.81
18998204	18999204	667	689	1.45E-47	1.52E-54	-39.86
22172094	22173094	802	827	2.58E-34	5.76E-28	-39.94
18564743	18565743	432	446	1.43E-34	1.85E-28	-39.95
21817831	21818831	387	401	4.78E-32	2.07E-23	-39.96
23428194	23429194	418	432	1.83E-38	3.57E-36	-40.03
21369041	21370041	61	62	4.46E-47	2.81E-53	-40.15
26156701	26157701	166	169	2.98E-33	1.27E-25	-40.15
21246411	21247411	690	712	3.69E-36	2.43E-31	-40.25
18562188	18563188	359	370	2.26E-38	1.62E-35	-40.50
18565594	18566594	509	524	7.21E-37	2.69E-32	-40.71
13943995	13944995	241	245	6.97E-39	2.76E-36	-40.75
16061909	16062909	661	683	6.71E-24	2.89E-06	-40.81
18884942	18885942	439	453	2.20E-36	4.43E-31	-40.96
10575090	10576090	270	275	2.49E-37	6.73E-33	-41.03
6971997	6972997	805	830	9.81E-36	1.18E-29	-41.09
15997188	15998188	478	493	9.47E-45	1.25E-47	-41.14
19917925	19918925	116	119	2.08E-49	6.43E-57	-41.17
14288891	14289891	185	188	6.90E-37	8.44E-32	-41.25
14288891	14289891	275	281	6.90E-37	8.44E-32	-41.25
21584494	21585494	537	552	2.52E-44	1.31E-46	-41.32
22299833	22300833	940	970	6.29E-38	9.09E-34	-41.36
9830797	9831797	910	939	1.32E-38	5.94E-35	-41.53
16115559	16116559	704	726	7.75E-41	2.07E-39	-41.54
10512072	10513072	131	134	1.57E-42	9.46E-43	-41.58
26996372	26997372	779	804	1.44E-38	1.05E-34	-41.70
18572407	18573407	291	298	4.03E-34	9.21E-26	-41.75
14615903	14616903	330	339	7.59E-44	5.51E-45	-41.98

22139733	22140733	372	384	7.67E-35	5.77E-27	-41.99
21185948	21186948	441	455	1.68E-53	4.11E-64	-42.16
11486296	11487296	522	537	3.37E-41	1.74E-39	-42.18
14865419	14866419	107	110	6.62E-35	8.59E-27	-42.29
8418003	8419003	9	9	2.10E-35	9.73E-28	-42.34
22160171	22161171	822	847	3.16E-30	2.37E-17	-42.38
9078840	9079840	678	700	4.22E-32	4.25E-21	-42.38
16032103	16033103	726	750	1.84E-40	9.53E-38	-42.45
23386466	23387466	781	806	1.75E-42	9.29E-42	-42.48
24162268	24163268	702	724	3.33E-52	4.42E-61	-42.60
18086999	18087999	384	397	9.21E-32	4.59E-20	-42.73
15879668	15880668	490	505	1.79E-37	1.82E-31	-42.75
27018513	27019513	309	317	3.52E-35	8.73E-27	-42.85
16595006	16596006	566	584	3.25E-33	7.57E-23	-42.86
23282572	23283572	348	358	8.44E-42	6.39E-40	-42.95
26859265	26860265	388	402	1.13E-42	1.27E-41	-43.00
13789005	13790005	889	917	5.77E-40	3.34E-36	-43.00
24602542	24603542	746	771	5.92E-42	5.23E-40	-43.17
26492229	26493229	650	671	8.88E-44	1.22E-43	-43.19
7700962	7701962	42	42	2.75E-30	1.28E-16	-43.23
16867516	16868516	662	684	1.19E-45	2.58E-47	-43.26
14007865	14008865	475	490	8.04E-39	1.22E-33	-43.28
11285319	11286319	35	35	4.75E-38	5.09E-32	-43.35
6888541	6889541	797	822	2.22E-33	1.56E-22	-43.50
21264295	21265295	458	473	3.59E-47	6.12E-50	-43.68
12575484	12576484	481	496	3.60E-34	6.65E-24	-43.71
16639289	16640289	179	182	2.04E-42	5.23E-40	-44.10
26347458	26348458	914	943	8.76E-45	1.13E-44	-44.17
23372841	23373841	164	167	5.74E-42	6.23E-39	-44.28
11869513	11870513	909	938	1.96E-36	7.56E-28	-44.29
13261017	13262017	448	462	7.71E-43	1.22E-40	-44.31
19178742	19179742	534	549	1.62E-42	6.28E-40	-44.38
17646725	17647725	782	807	2.26E-62	1.25E-79	-44.39
25644893	25645893	830	855	3.76E-42	3.85E-39	-44.43
5709084	5710084	65	66	7.27E-40	1.83E-34	-44.54
8646231	8647231	390	404	5.47E-37	2.40E-28	-44.90
20709056	20710056	881	909	4.48E-38	1.77E-30	-44.95
23394131	23395131	313	321	5.35E-38	2.89E-30	-45.00
26154146	26155146	277	283	2.53E-43	8.19E-41	-45.11
25766671	25767671	689	711	3.86E-50	2.11E-54	-45.15
25429440	25430440	901	930	3.66E-49	1.91E-52	-45.15
15969085	15970085	233	237	3.33E-53	1.70E-60	-45.18
7654124	7655124	685	707	4.06E-40	2.53E-34	-45.19
10845897	10846897	584	602	1.56E-43	5.61E-41	-45.36
21122930	21123930	40	40	7.26E-51	1.58E-55	-45.48

23843772	23844772	900	929	1.02E-45	3.38E-45	-45.52
23326855	23327855	627	648	2.95E-36	4.21E-26	-45.68
22953857	22954857	749	774	3.50E-41	7.43E-36	-45.78
17018248	17019248	596	615	1.48E-42	1.41E-38	-45.81
18160236	18161236	882	910	5.23E-47	2.04E-47	-45.87
26390889	26391889	328	337	5.26E-37	2.15E-27	-45.89
5205792	5206792	616	637	5.24E-36	2.41E-25	-45.94
15831127	15832127	460	475	1.71E-39	2.69E-32	-45.96
15200096	15201096	488	503	4.55E-50	2.14E-53	-46.01
7129542	7130542	37	37	1.73E-31	3.25E-16	-46.04
25552069	25553069	711	733	7.62E-38	6.64E-29	-46.06
14033412	14034412	72	74	1.80E-43	4.00E-40	-46.09
17802566	17803566	259	264	8.38E-44	1.08E-40	-46.19
13375130	13376130	664	686	3.28E-42	2.30E-37	-46.33
26241860	26242860	207	211	2.81E-40	1.74E-33	-46.34
23719439	23720439	925	954	8.20E-36	1.74E-24	-46.41
16495370	16496370	649	670	8.73E-40	2.16E-32	-46.45
24723468	24724468	619	640	3.18E-40	3.63E-33	-46.55
13980614	13981614	332	342	1.03E-47	4.27E-48	-46.60
9782257	9783257	447	461	6.86E-49	2.21E-50	-46.67
26459868	26460868	732	756	6.45E-41	3.60E-34	-46.94
23424788	23425788	499	514	6.71E-42	5.78E-36	-47.11
21420988	21421988	544	560	1.13E-42	1.79E-37	-47.15
21316242	21317242	26	26	2.43E-46	1.68E-44	-47.45
7133800	7134800	177	180	6.89E-37	1.43E-25	-47.48
27188832	27189832	531	546	5.08E-41	8.05E-34	-47.49
14007013	14008013	355	366	1.98E-43	1.41E-38	-47.55
14380011	14381011	299	307	1.76E-46	1.89E-44	-47.78
14380011	14381011	680	702	1.76E-46	1.89E-44	-47.78
6573451	6574451	491	506	6.10E-42	5.02E-35	-48.13
22166984	22167984	981	1011	1.07E-36	1.55E-24	-48.13
12319154	12320154	452	466	3.20E-49	1.67E-49	-48.21
23246805	23247805	988	1018	2.50E-42	1.32E-35	-48.33
15215424	15216424	592	610	3.25E-44	2.38E-39	-48.35
16894767	16895767	864	892	1.21E-43	4.31E-38	-48.47
9619602	9620602	97	100	2.37E-41	1.72E-33	-48.49
23475884	23476884	212	216	1.38E-47	8.32E-46	-48.64
22729036	22730036	747	772	9.61E-41	4.17E-32	-48.65
2352101	2353101	162	165	7.83E-32	2.85E-14	-48.67
24613613	24614613	203	206	1.53E-44	1.92E-39	-48.91
27208419	27209419	874	902	2.48E-39	6.54E-29	-49.03
5041434	5042434	547	564	1.23E-38	3.00E-27	-49.30
10552949	10553949	700	722	1.47E-49	5.90E-49	-49.43
25549514	25550514	213	217	6.07E-43	1.10E-35	-49.48
25549514	25550514	839	865	6.07E-43	1.10E-35	-49.48

26382373	26383373	588	606	1.68E-42	8.94E-35	-49.50
8090140	8091140	767	792	2.09E-39	1.44E-28	-49.52
17794902	17795902	256	261	1.50E-53	8.05E-57	-49.56
20400779	20401779	659	680	6.34E-47	2.18E-43	-49.73
25833947	25834947	308	316	7.63E-55	3.91E-59	-49.83
16300355	16301355	789	814	6.70E-38	3.91E-25	-49.94
25813508	25814508	3	3	7.90E-45	7.28E-39	-50.07
26423249	26424249	976	1006	4.06E-40	1.99E-29	-50.08
18899419	18900419	867	895	1.21E-38	2.22E-26	-50.18
27097712	27098712	297	305	8.26E-44	1.16E-36	-50.23
14278671	14279671	738	763	8.83E-40	1.60E-28	-50.31
11515250	11516250	132	135	2.40E-43	1.58E-35	-50.44
9600015	9601015	654	675	8.35E-51	1.98E-50	-50.45
22430126	22431126	474	489	1.45E-32	7.32E-14	-50.54
23180381	23181381	367	379	9.98E-41	7.60E-30	-50.88
19767193	19768193	875	903	8.58E-52	7.90E-52	-51.03
16488557	16489557	138	141	4.06E-45	2.07E-38	-51.10
16980778	16981778	280	287	1.01E-51	2.17E-51	-51.33
8890638	8891638	538	553	1.21E-43	3.14E-35	-51.33
8102062	8103062	819	844	1.97E-45	1.20E-38	-51.49
21183393	21184393	587	605	1.51E-48	8.58E-45	-51.58
14718945	14719945	435	449	6.29E-46	3.93E-39	-52.00
22088637	22089637	713	735	2.46E-48	6.58E-44	-52.04
19076550	19077550	729	753	6.01E-46	4.19E-39	-52.06
24251685	24252685	353	364	3.96E-43	2.25E-33	-52.16
5693755	5694755	502	517	4.52E-43	3.74E-33	-52.26
22031581	22032581	857	884	3.76E-50	3.88E-47	-52.44
9392227	9393227	139	142	2.51E-45	3.05E-37	-52.68
17742955	17743955	978	1008	1.43E-51	1.33E-49	-52.81
26691501	26692501	845	871	9.76E-45	7.64E-36	-52.90
20520002	20521002	476	491	2.24E-50	6.19E-47	-53.09
15445355	15446355	469	484	1.44E-52	5.26E-51	-53.40
23800341	23801341	791	816	2.51E-39	2.80E-24	-53.65
22009439	22010439	763	788	4.83E-47	1.07E-39	-53.66
24443294	24444294	385	399	7.28E-49	5.05E-43	-53.98
20864897	20865897	121	124	1.36E-48	3.64E-42	-54.30
21256630	21257630	831	856	4.74E-44	5.04E-33	-54.35
11442013	11443013	796	821	1.62E-45	8.41E-36	-54.51
26628484	26629484	363	374	7.95E-43	2.28E-30	-54.56
23222109	23223109	479	494	1.17E-48	5.31E-42	-54.59
13874164	13875164	315	323	1.94E-50	1.69E-45	-54.65
13564184	13565184	335	345	5.07E-46	1.51E-36	-54.77
21402253	21403253	567	585	3.41E-45	7.27E-35	-54.80
13116246	13117246	223	227	3.75E-48	5.40E-40	-55.59
25297443	25298443	200	203	1.57E-46	1.23E-36	-55.70

27130924	27131924	735	760	1.41E-43	1.31E-30	-55.82
13430484	13431484	706	728	1.11E-45	1.32E-34	-56.03
10579348	10580348	464	479	1.34E-56	3.18E-56	-56.25
12681933	12682933	674	696	5.55E-49	1.31E-40	-56.63
23514205	23515205	884	912	3.69E-45	8.10E-33	-56.77
22448010	22449010	472	487	3.86E-46	9.30E-35	-56.79
13975504	13976504	96	99	4.55E-50	1.54E-42	-56.87
8357540	8358540	83	85	1.28E-48	2.89E-39	-57.25
10935314	10936314	103	106	6.92E-49	1.22E-39	-57.41
13307003	13308003	768	793	2.18E-56	1.60E-54	-57.53
21388627	21389627	815	840	1.58E-53	1.32E-48	-57.72
25137343	25138343	859	886	5.07E-48	1.48E-37	-57.76
9778850	9779850	512	527	3.16E-51	5.96E-44	-57.78
21724155	21725155	692	714	2.79E-46	1.19E-33	-58.19
9605125	9606125	518	533	2.65E-49	2.86E-39	-58.61
11417316	11418316	69	71	3.29E-49	5.90E-39	-58.74
26134559	26135559	806	831	7.12E-56	4.03E-52	-58.90
10833975	10834975	808	833	9.08E-51	6.91E-42	-58.92
13869906	13870906	194	197	1.57E-54	4.67E-49	-59.28
15641221	15642221	196	199	2.67E-44	1.36E-28	-59.28
23179529	23180529	168	171	1.24E-49	1.07E-38	-59.84
13867352	13868352	684	706	1.24E-55	1.11E-50	-59.86
25456691	25457691	440	454	3.60E-53	1.13E-45	-59.94
23377950	23378950	641	662	1.16E-53	1.95E-46	-60.16
14730016	14731016	344	354	5.08E-59	4.91E-57	-60.28
14730016	14731016	598	617	5.08E-59	4.91E-57	-60.28
19085066	19086066	278	285	1.91E-52	1.26E-43	-60.54
25725794	25726794	514	529	7.45E-56	3.64E-50	-60.82
22690714	22691714	938	968	2.37E-53	9.36E-45	-61.22
19211102	19212102	368	380	1.76E-61	7.56E-61	-61.39
24204848	24205848	816	841	4.54E-56	5.85E-50	-61.45
25718130	25719130	927	956	3.39E-51	6.39E-40	-61.75
23971511	23972511	149	152	7.04E-61	7.86E-59	-62.20
25477980	25478980	33	33	1.13E-52	2.17E-42	-62.23
26468384	26469384	575	593	9.37E-58	1.75E-52	-62.30
17563268	17564268	591	609	4.99E-66	5.24E-69	-62.32
9496973	9497973	826	851	5.58E-57	9.27E-51	-62.47
23627467	23628467	953	983	1.51E-55	1.41E-47	-62.79
21628777	21629777	950	980	2.20E-62	3.76E-61	-62.89
10418397	10419397	991	1021	6.30E-54	3.74E-44	-62.98
15454722	15455722	993	1023	5.04E-56	6.90E-48	-63.43
13691923	13692923	158	161	1.64E-60	8.81E-57	-63.52
22452268	22453268	66	67	3.85E-49	7.92E-34	-63.73
13306151	13307151	325	334	1.29E-50	1.27E-36	-63.88
10080314	10081314	850	876	6.25E-57	1.80E-48	-64.66

24083070	24084070	824	849	1.80E-54	2.56E-43	-64.90
10545285	10546285	480	495	3.60E-58	1.06E-50	-64.91
23436710	23437710	295	303	1.70E-58	2.50E-51	-64.94
19231540	19232540	1	1	3.89E-64	1.58E-62	-65.02
8396714	8397714	428	442	6.38E-56	5.01E-46	-65.09
13343621	13344621	921	950	6.13E-49	7.76E-32	-65.32
26658289	26659289	572	590	1.16E-50	2.93E-35	-65.34
14915663	14916663	813	838	1.74E-50	7.98E-35	-65.42
9964498	9965498	347	357	2.26E-53	1.67E-40	-65.52
25789664	25790664	477	492	1.58E-59	2.34E-52	-65.97
16704010	16705010	157	160	1.96E-58	6.87E-50	-66.25
8154009	8155009	890	918	3.95E-56	4.23E-45	-66.43
26815834	26816834	47	47	9.28E-58	1.57E-47	-67.26
13889493	13890493	175	178	2.93E-63	1.77E-58	-67.31
13889493	13890493	283	290	2.93E-63	1.77E-58	-67.31
10395404	10396404	585	603	1.25E-56	1.69E-44	-68.04
16018477	16019477	429	443	1.68E-66	2.10E-63	-68.87
24760938	24761938	495	510	2.74E-61	9.59E-53	-69.11
9902331	9903331	30	30	9.35E-59	3.13E-47	-69.55
10973636	10974636	201	204	2.19E-63	2.46E-56	-69.71
15447910	15448910	126	129	1.70E-69	3.92E-68	-70.13
12251027	12252027	238	242	7.01E-57	5.29E-42	-71.03
22769061	22770061	117	120	1.19E-57	1.68E-43	-71.07
16868368	16869368	500	515	5.06E-70	7.75E-68	-71.48
15611416	15612416	563	581	5.78E-60	2.14E-47	-71.81
23952776	23953776	552	569	4.99E-64	6.98E-55	-72.45
14286336	14287336	897	926	3.83E-72	6.95E-71	-72.68
9753302	9754302	891	919	2.60E-60	1.57E-46	-73.37
24800963	24801963	470	485	7.26E-62	2.02E-49	-73.58
25841611	25842611	780	805	8.03E-71	4.55E-67	-73.85
22901909	22902909	345	355	7.35E-62	2.28E-48	-74.62
26731526	26732526	872	900	2.18E-65	4.02E-55	-74.93
25992343	25993343	386	400	1.06E-67	1.16E-59	-75.01
25948912	25949912	84	86	5.92E-72	2.14E-67	-75.79
26387482	26388482	642	663	3.72E-68	1.98E-58	-77.15
11424129	11425129	638	659	5.45E-83	4.93E-83	-82.22
9970459	9971459	271	276	5.25E-70	1.77E-54	-84.81
14037670	14038670	507	522	3.86E-75	1.07E-63	-85.86
14119423	14120423	471	486	2.84E-70	9.41E-54	-86.07
23477587	23478587	987	1017	5.83E-73	2.52E-55	-89.87
26332129	26333129	990	1020	5.48E-75	1.13E-58	-90.58
14718094	14719094	195	198	2.25E-78	7.03E-64	-92.14
26394295	26395295	71	73	5.00E-79	2.11E-62	-94.93
26676173	26677173	601	621	1.04E-77	3.14E-59	-95.46
14197770	14198770	957	987	8.21E-97	7.50E-97	-96.05

22742661	22743661	409	423	1.50E-84	2.70E-72	-96.08
23656421	23657421	425	439	2.61E-82	4.71E-66	-97.84
25158633	25159633	473	488	2.85E-90	6.59E-81	-98.91
22445455	22446455	183	186	2.67E-69	1.12E-38	-99.19
14988049	14989049	142	145	4.00E-95	1.96E-89	-100.09
14618457	14619457	964	994	2.07E-97	1.11E-93	-100.41
25512044	25513044	578	596	1.80E-96	5.92E-88	-104.26
2646753	2647753	234	238	1.10E-100	2.72E-96	-104.35
26338942	26339942	219	223	6.98E-84	4.21E-61	-105.94
13442406	13443406	635	656	6.97E-103	7.63E-94	-111.20
9898925	9899925	266	271	6.15E-98	3.68E-77	-117.99
16130888	16131888	799	824	3.66E-175	9.74E-130	-219.86
1578003	1579003	804	829	NA	1.00E+00	NA
11642989	11643989	786	811	NA	NA	NA
192460	193460	860	887	NA	NA	NA
364482	365482	64	65	NA	NA	NA

Table S5. Populations used to estimate the frequency of *FBti0019386*.

	Population	Köppen-Geiger climate classification / Latitude	Pool/ individual strain	Accession number	Reference
North America	Bowdoinham, ME	Cold climate, no dry season and warm summer / 45.5	50-100 pooled individuals	SRX661844-5	Bergland et al., 2014
	Linvilla, PA	Cold climate, no dry season and hot summer / 40	50-100 pooled individuals	SRX661837-43	Bergland et al., 2014
	Winters, CA	Temperate climate, dry winter and hot summer / 38.6	35 individual strains	SRP009033	Campo et al., 2013
	Raleigh, NC	Temperate climate, no dry season and hot summer / 35.5	141 individuals	SRX[a]	Huang et al., 2014
	Eutawville, SC	Temperate climate, no dry season and hot summer / 33	50-100 pooled individuals	SRX661835	Bergland et al., 2014
	Hahira, GA	Temperate climate, no dry season and hot summer / 30.9	50-100 pooled individuals	SRX661834	Bergland et al., 2014
	Homestead, FL	Tropical climate, monsoon / 25.5	50-100 pooled individuals	SRX661832-3	Bergland et al., 2014
Australia	Cairns	Tropical climate, monsoon / -16.88	Pool	SRR1177951	Reinhardt et al., 2014
	Innisfail	Tropical climate, monsoon / -17.52	-	-	González et al., 2010
	Cardwell	Tropical climate, savannah / - 18.25	Pool	SRR1177952	Reinhardt et al., 2014
	Redland Bay	Temperate climate, no dry season and hot summer / -27.48	-	-	González et al., 2010
	Coffs Harbour	Temperate climate, no dry season and hot summer / -30.32	-	-	González et al., 2010
	Melbourne	Temperate climate, no dry season and warm summer / -37.82	-	-	González et al., 2010
	Miller's Orchard, north Tasmania	Temperate climate, no dry season and warm summer / -41.53	Pool	SRR1177953	Reinhardt et al., 2014
	Sorell, south Tasmania	Temperate climate, no dry season and warm summer / -42.83	Pool	SRR1177955	Reinhardt et al., 2014
Europe	Stockholm, Sweden	Cold climate, no dry season and warm summer / 59.33	27 individual strains	-	This work
	Vienna, Austria	Cold climate, no dry season and warm summer / 48.25	Pool	ERR173232, ERR173238	Kofler et al., 2012
	Lyon, France	Temperate climate, no dry season and warm summer / 45.7	8 individual strains?	SRX058182-SRX058190	Pool et al., 2012
	Bolzano, Italy	Cold climate, no dry season and warm summer / 45.62	Pool	ERR173233, ERR173239	Kofler et al., 2012
	Povoa de Varzim, Portugal	Temperate climate, dry and warm summer / 41.23	Pool	SRR188217, SRR189066	Bastide et al., 2013
	Bari, Italy	Temperate climate, no dry season and hot summer / 41.13	16 individual strains	-	This work
Africa	Rwanda	Temperate climate, dry winter and warm summer / 2	22 individual strains	SRX058338-39, 41-57, 59, 62, 67, 69, 71	Pool et al., 2012

[a]Accession numbers for DGRP strains can be found in Supplemental Data File S1 in Huang et al 2014.

Table S6. (A) Pearson product-moment correlations between the frequency of the TE and geographical and climatic variables for each one of the three continents analyzed. Significant correlations are in bold and highlighted in gray. Data for each one of the geographic and climatic variables is detailed in **(B)**.

(A)

	USA		AUST		EUR	
%TE vs	r	p	r	p	r	p
Latitude	**0.87**	**p=0.011**	**0.91**	**p=0.002**	-0.50	p=0.313
Longitude	0.65	p=0.117	0.12	p=0.776	-0.68	p=0.139
Elevation	-0.27	p=0.556	**0.74**	**p=0.036**	0.18	p=0.735
AvMonTemp	**-0.75**	**p=0.050**	**-0.93**	**p=0.001**	0.37	p=0.470
ThermalAmp	0.2	p=0.664	0.55	p=0.160	-0.48	p=0.337
HotMonth	**-0.88**	**p=0.009**	**-0.95**	**p=0.000**	0.01	p=0.984
ColdMonth	-0.59	p=0.163	**-0.91**	**p=0.002**	0.38	p=0.458
SummerSEASON	**-0.87**	**p=0.012**	**-0.95**	**p=0.000**	0.29	p=0.573
WinterSEASON	-0.62	p=0.134	**-0.92**	**p=0.001**	0.40	p=0.434
Monthabove10	-0.56	p=0.185	**-0.94**	**p=0.000**	0.25	p=0.637
MAP	0.31	p=0.491	**0.84**	**p=0.009**	-0.66	p=0.156
Cv	0.16	p=0.734	-0.7	p=0.056	0.40	p=0.438
DryMonth	-0.48	p=0.278	-0.31	p=0.453	-0.12	p=0.817
Summer_P	-0.54	p=0.209	**-0.88**	**p=0.004**	0.15	p=0.773
Summer_DryM	-0.64	p=0.119	-0.58	p=0.135	-0.26	p=0.620
Summer_wetM	-0.63	p=0.127	**-0.85**	**p=0.007**	0.48	p=0.334
Winter_P	-0.54	p=0.209	-0.57	p=0.139	0.15	p=0.773
Winter_DryM	-0.64	p=0.119	-0.11	p=0.793	-0.26	p=0.620
Winter_wetM	-0.63	p=0.127	**-0.74**	**p=0.034**	0.48	p=0.334

(B) Climate data (from Peel et al., 2007)

LEGENDS:

Latitude Latitude (decimal degrees)
Longitude Longitude (decimal degrees)
Elevation Elevation (m)

Temperature

Ave. Mon. Temp. The average annual temperature (Deg. C) (the average of the monthly averages)
Thermal Amplitude HotMonth - ColdMonth
HotMonth The hottest monthly average (Deg. C)
ColdMonth The coldest monthly average (Deg. C)
SeasonA Average of the monthly average temperatures (Deg. C) for Oct, Nov, Dec, Jan, Feb & Mar
SeasonB Average of the monthly average temperatures (Deg. C) for Apr, May, Jun, Jul, Aug & Sep
MonthsAbove10 The number of monthly average temperatures greater than or equal to 10 Deg. C

Precipitation

MAP Mean annual precipitation for complete calendar years (mm)
Cv Coefficient of variation of annual precipitation for complete calendar years
DryMonth Monthly average precipitation (mm) for the driest month
ONDJFM_P* Summation of the monthly average precipitation (mm) for Oct, Nov, Dec, Jan, Feb & Mar
ONDJFM_DryM* Driest monthly average precipitation (mm) for the period Oct, Nov, Dec, Jan, Feb & Mar
ONDJFM_WetM* Wettest monthly average precipitation (mm) for the period Oct, Nov, Dec, Jan, Feb & Mar
AMJJAS_P* Summation of the monthly average precipitation (mm) for Apr, May, Jun, Jul, Aug & Sep
AMJJAS_DryM* Driest monthly average precipitation (mm) for Apr, May, Jun, Jul, Aug & Sep
AMJJAS_WetM* Wettest monthly average precipitation (mm) for Apr, May, Jun, Jul, Aug & Sep

*Oct, Nov, Dec, Jan, Feb & Mar were considered summer for AUST and winter for USA and EUR
*Apr, May, Jun, Jul, Aug & Sep were considered summer for USA and EUR and winter for AUST

Cont	pop	*FBti0019386* frequency	Latitude	Longitude	Elevation	AvMon Temp	Thermal Amplitude	Hot Month	Cold Month	SeasonA	SeasonB	Months Above10	MAP	Cv	Dry Month	ONDJFM _P	ONDJFM _DryM	ONDJFM _WetM	AMJJAS _P	AMJJAS _DryM	AMJJAS _WetM
USA	FL	46.88	25.5	-80.28	4	24.29	8.37	28.16	19.79	21.86	26.71	12	1475.09	0.244	50.06	499.15	50.06	206.81	987.58	81.84	225.32
USA	GA	43.06	30.9	-83.65	110	18.11	18.88	27.39	8.51	12.05	24.18	9	1140.95	0.166	57.46	572.03	57.46	127.13	575.78	78.10	125.10
USA	SC	61.67	33	-89.83	47	19.18	18.39	27.87	9.48	13.41	24.96	11	1133.07	0.182	70.56	544.61	70.56	110.60	587.73	83.22	118.23
USA	NC	59.40	35.5	-78.78	134	15.52	20.74	25.82	5.08	9.01	22.03	9	1149.69	0.157	68.48	503.57	68.48	99.16	646.30	83.32	132.44
USA	CA	66.30	38.6	-121.5	6	15.87	15.84	23.59	7.75	11.30	20.43	10	445.64	0.344	0.56	382.14	20.67	89.97	61.26	0.56	34.90
USA	PA	64.34	40	-75.2	9	12.49	24.77	24.88	0.11	5.06	19.93	7	1066.56	0.153	74.67	491.57	74.67	92.01	573.87	85.50	107.42
USA	ME	81.25	45.5	-122.6	12	11.85	15.69	19.79	4.10	7.30	16.41	7	1042.93	0.207	13.98	799.70	83.64	172.05	242.62	13.98	70.23
AUST	Cairns	15.38	-16.88	145.75	7	25.00	6.58	27.83	21.25	27.02	22.98	12	1990.58	0.288	25.78	1578.78	38.35	449.41	426.85	25.78	199.91
AUST	Innisfail	13	-17.52	146.02	4	22.97	7.78	26.46	18.68	25.29	20.64	12	3565.8	0.223	80.04	2262.50	80.04	673.34	1288.27	86.45	469.50
AUST	Cardwell	22.22	-18.25	146.02	7	23.74	8.03	27.16	19.13	26.19	21.30	12	2131.84	0.284	29.47	1674.83	52.02	464.08	452.90	29.47	212.15
AUST	Redland Bay	20	-27.48	153.03	38	20.24	9.78	24.62	14.84	23.24	17.25	12	1283.24	0.289	46.35	816.39	81.27	174.28	472.33	46.35	115.64
AUST	Coffs Harbour	30	-30.32	153.12	5	18.49	10.02	23.02	13.01	21.45	15.54	12	1697.47	0.282	60.71	1004.30	89.43	241.34	667.50	60.71	180.75
AUST	Melbourne	46	-37.82	144.97	113	15.49	10.37	20.52	10.15	18.54	12.44	12	656.86	0.192	47.11	333.97	47.11	67.80	324.01	48.71	59.21
AUST	Millers Orchard	100	-41.53	147.2	178	10.98	10.05	16.05	6.00	13.97	8.00	7	684.16	0.198	38.37	285.56	38.37	61.95	400.30	54.09	78.58
AUST	Sorell	76.92	-42.83	147.48	27	12.64	9.35	17.17	7.83	15.36	9.91	9	504.63	0.212	31.44	261.48	35.30	54.28	246.40	31.44	47.09
EUR	IT_bari	56.25	41.13	16.78	49	15.90	15.51	24.01	8.50	11.43	20.37	10	579.56	0.252	24.20	356.21	50.06	68.73	214.98	24.20	57.09
EUR	PORT	75.17	41.23	-8.68	77	14.23	11.18	19.93	8.75	10.93	17.53	9	1280.28	0.276	20.88	901.97	128.92	167.61	365.02	20.88	112.27
EUR	IT_bolzano	55.95	45.62	8.73	211	10.97	21.17	21.44	0.27	4.61	17.32	7	721.02	0.206	25.07	251.88	25.07	65.50	464.85	50.65	96.64
EUR	FR	52.5	45.7	4.7	201	11.08	17.75	20.28	2.53	5.74	16.42	7	735.43	0.198	37.35	314.96	37.35	83.25	424.73	56.47	77.54
EUR	AUST	71.89	48.25	16.37	209	9.47	21.06	19.61	-1.45	2.95	15.98	5	643.03	0.17	37.41	263.93	37.41	48.90	379.35	48.84	75.01
EUR	SW	48.15	59.33	18.05	52	6.04	21.14	17.49	-3.66	-0.18	12.27	4	555.76	0.171	28.57	244.64	28.57	51.01	308.92	33.21	72.95

Table S7. Pearson's product-moment correlation coefficients among the different geographical and climatic variables in the three continents. Significant correlations are in **bold**.

USA

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
latitude (1)																		
longitude (2)	0.56																	
elevation(3)	-0.14	-0.31																
AvMonTemp(4)	**-0.94**	-0.32	-0.09															
thermalAmp(5)	0.39	-0.31	0.48	-0.69														
HotMonth(6)	**-0.95**	-0.71	0.29	**0.79**	-0.11													
ColdMonth(7)	**-0.79**	-0.09	-0.26	**0.95**	**-0.88**	0.57												
summerSEASON (8)	**-1.00**	-0.56	0.17	**0.93**	-0.37	**0.96**	**0.77**											
winterSEASON(9)	**-0.83**	-0.14	-0.24	**0.97**	**-0.84**	0.63	**1.00**	**0.81**										
monthabove10(10)	**-0.86**	-0.11	-0.11	**0.93**	-0.66	0.71	**0.89**	**0.85**	**0.91**									
MAP(11)	0.31	0.65	-0.33	-0.25	-0.01	-0.37	-0.17	-0.34	-0.17	0.02								
Cv(12)	0.02	0.67	-0.63	0.19	-0.58	-0.23	0.36	-0.07	0.34	0.39	**0.82**							
DryMonth(13)	-0.47	**-0.91**	0.50	0.20	0.46	0.67	-0.06	0.50	0.00	0.06	-0.72	**-0.82**						
summer_P(14)	-0.55	**-0.84**	0.33	0.43	0.03	0.62	0.28	0.57	0.30	0.17	**-0.94**	**-0.76**	**0.85**					
summer_DryM(15)	-0.64	**-0.95**	0.43	0.41	0.26	**0.78**	0.17	0.66	0.22	0.22	**-0.76**	-0.74	**0.97**	**0.92**				
summer_wetM(16)	-0.66	**-0.80**	0.23	0.59	-0.18	0.68	0.47	0.67	0.49	0.34	**-0.89**	-0.61	0.75	**0.97**	**0.87**			
winter_P(17)	-0.55	**-0.84**	0.33	0.43	0.03	0.62	0.28	0.57	0.30	0.17	**-0.94**	**-0.76**	**0.85**	**1.00**	**0.92**	**0.97**		
winter_DryM(18)	-0.64	**-0.95**	0.43	0.41	0.26	**0.78**	0.17	0.66	0.22	0.22	**-0.76**	-0.74	**0.97**	**0.92**	**1.00**	**0.87**	**0.92**	
winter_wetM(19)	-0.66	**-0.80**	0.23	0.59	-0.18	0.68	0.47	0.67	0.49	0.34	**-0.89**	-0.61	0.75	**0.97**	**0.87**	**1.00**	**0.97**	**0.87**

AUST

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
latitude (1)																		
longitude (2)	-0.03																	
elevation(3)	**0.77**	0.10																
AvMonTemp(4)	**-0.99**	0.06	**-0.78**															
thermalAmp(5)	**0.75**	-0.44	0.67	**-0.78**														
HotMonth(6)	**-0.98**	0.02	**-0.76**	**1.00**	**-0.73**													
ColdMonth(7)	**-0.98**	0.12	**-0.78**	**1.00**	**-0.83**	**0.99**												
summerSEASON (8)	**-0.99**	0.03	**-0.77**	**1.00**	**-0.74**	**1.00**	**0.99**											
winterSEASON(9)	**-0.98**	0.09	**-0.78**	**1.00**	**-0.81**	**0.99**	**1.00**	**1.00**										
monthabove10(10)	**-0.75**	-0.11	-0.61	**0.80**	-0.34	**0.84**	**0.76**	**0.82**	**0.78**									
MAP(11)	**0.95**	0.14	**0.77**	**-0.89**	0.60	**-0.90**	**-0.88**	**-0.90**	**-0.88**	-0.68								
Cv(12)	**-0.71**	-0.50	-0.62	**0.73**	-0.42	**0.74**	0.70	**0.74**	**0.72**	0.58	-0.70							
DryMonth(13)	-0.21	-0.23	-0.30	0.11	0.16	0.15	0.08	0.13	0.10	0.30	-0.37	-0.16						
summer_P(14)	**-0.98**	-0.01	**-0.86**	**0.95**	**-0.73**	**0.94**	**0.94**	**0.95**	**0.95**	0.70	**-0.97**	0.67	0.32					
summer_DryM(15)	-0.43	-0.69	-0.46	0.36	0.16	0.41	0.30	0.39	0.33	0.55	-0.60	0.42	**0.77**	0.51				
summer_wetM(16)	**-0.97**	0.04	**-0.86**	**0.94**	**-0.76**	**0.93**	**0.94**	**0.94**	**0.94**	0.67	**-0.96**	0.65	0.31	1.00	0.46			
winter_P(17)	-0.65	-0.15	-0.62	0.54	-0.32	0.55	0.52	0.54	0.53	0.42	**-0.79**	0.22	**0.83**	**0.75**	**0.74**	**0.75**		
winter_DryM(18)	-0.09	-0.15	-0.14	-0.03	0.20	0.00	-0.05	-0.02	-0.04	0.07	-0.29	-0.31	0.96	0.21	0.65	0.21	**0.80**	
winter_wetM(19)	**-0.89**	0.01	**-0.81**	**0.82**	-0.66	**0.81**	**0.82**	**0.81**	**0.82**	0.55	**-0.95**	0.49	0.51	**0.95**	0.56	**0.96**	**0.89**	0.45

EUR

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
latitude (1)																		
longitude (2)	0.16																	
elevation(3)	-0.19	0.51																
AvMonTemp(4)	**-0.92**	-0.29	-0.19															
thermalAmp(5)	0.65	0.61	0.41	-0.77														
HotMonth(6)	-0.77	0.11	-0.06	**0.84**	-0.32													
ColdMonth(7)	**-0.83**	-0.43	-0.35	**0.96**	**-0.92**	0.67												
summerSEASON(8)	**-0.93**	-0.10	-0.02	**0.95**	-0.54	**0.95**	**0.82**											
winterSEASON(9)	**-0.88**	-0.39	-0.28	**0.98**	**-0.87**	0.74	**0.99**	**0.88**										
monthabove10(10)	**-0.87**	-0.28	-0.27	**0.98**	-0.79	**0.82**	**0.97**	**0.91**	**0.98**									
MAP(11)	0.56	0.51	-0.21	-0.42	0.69	0.04	-0.53	-0.25	-0.50	-0.42								
Cv(12)	**-0.75**	-0.59	-0.41	**0.89**	**-0.92**	0.56	**0.96**	0.72	**0.94**	**0.92**	-0.62							
DryMonth(13)	0.28	0.67	0.60	-0.49	0.54	-0.32	-0.56	-0.36	-0.54	-0.58	0.34	-0.75						
summer_P(14)	0.02	0.26	**0.84**	-0.36	0.29	-0.40	-0.40	-0.31	-0.38	-0.37	-0.46	-0.33	0.33					
summer_DryM(15)	0.14	**0.82**	**0.89**	-0.45	0.68	-0.16	-0.60	-0.25	-0.54	-0.49	0.17	-0.69	0.77	0.71				
summer_wetM(16)	-0.18	-0.42	0.34	0.00	-0.28	-0.34	0.08	-0.12	0.07	0.03	**-0.85**	0.27	-0.32	0.72	0.02			
winter_P(17)	0.02	0.26	**0.84**	-0.36	0.29	-0.40	-0.40	-0.31	-0.38	-0.37	-0.46	-0.33	0.33	**1.00**	0.71	0.72		
winter_DryM(18)	0.14	**0.82**	**0.89**	-0.45	0.68	-0.16	-0.60	-0.25	-0.54	-0.49	0.17	-0.69	0.77	0.71	**1.00**	0.02	0.71	
winter_wetM(19)	-0.18	-0.42	0.34	0.00	-0.28	-0.34	0.08	-0.12	0.07	0.03	**-0.85**	0.27	-0.32	0.72	0.02	**1.00**	0.72	0.02

Table S8. Climatic variables importance (given by its modeling power[a]) and contribution (given as correlation coefficients) to the principal components obtained in the three continents.

	Variable importance			Component 1			Component 2			Component 3
	USA	**AUST**	**EUR**	**USA**	**AUST**	**EUR**	**USA**	**AUST**	**EUR**	**AUST**
AvMonTemp	0.99	0.99	0.87	0.70	0.97	0.93	-0.71	-0.23	0.05	0.02
thermalAmp	0.78	0.96	0.84	-0.16	-0.71	-0.87	0.87	0.44	-0.29	0.52
HotMonth	0.77	0.98	0.55	0.84	0.97	0.69	-0.23	-0.19	-0.28	0.08
ColdMonth	0.97	0.99	0.95	0.54	0.96	0.97	-0.83	-0.26	0.12	-0.06
summerSEASON	0.89	0.99	0.66	0.83	0.97	0.81	-0.46	-0.21	-0.05	0.06
winterSEASON	0.99	0.99	0.94	0.57	0.97	0.96	-0.82	-0.24	0.11	-0.02
monthabove10	0.90	0.80	0.91	0.50	0.78	0.95	-0.81	-0.02	0.07	0.44
MAP	0.78	0.94	0.95	-0.79	-0.96	-0.41	-0.39	-0.11	-0.89	-0.01
Cv	0.95	0.83	0.99	-0.54	0.70	0.96	-0.81	-0.36	0.26	0.46
DryMonth	0.91	0.96	0.51	0.80	0.32	-0.70	0.53	0.93	-0.17	-0.01
summer_P	0.96	0.99	0.92	0.93	0.99	-0.54	0.30	0.02	0.79	-0.09
summer_DryM	0.95	0.97	0.56	0.91	0.53	-0.73	0.35	0.66	0.17	0.49
summer_wetM	0.94	0.99	0.95	0.96	0.98	0.01	0.09	0.01	0.97	-0.15
winter_P	0.96	0.99	0.92	0.93	0.72	-0.54	0.30	0.66	0.79	-0.19
winter_DryM	0.95	0.99	0.56	0.91	0.18	-0.73	0.35	0.96	0.17	-0.18
winter_wetM	0.94	0.98	0.95	0.96	0.92	0.01	0.09	0.26	0.97	-0.24

[a]A variable with a modeling power equal to one is completely relevant for building the PCA model. Variables with modeling power close to "number of components" divided by "number of variables" are regarded to be less significant.

Table S9. Principal Component Analysis for climatic variables in the three continents. USA: North America; AUST: Australia; EUR: Europe.

	R^2X	R^2X (Cumul.)	Eigenvalues	Q^2
USA				
1	0.467734	0.467734	10.75788	0.076350
2	0.270011	0.737745	6.21025	0.293118
AUST				
1	0.684061	0.684061	10.94498	0.542123
2	0.207512	0.891573	3.32019	0.451575
3	0.067786	0.959359	1.08457	0.308800
EUR				
1	0.546608	0.546608	8.745728	0.217079
2	0.268152	0.814760	4.290434	0.277424