

Supporting information

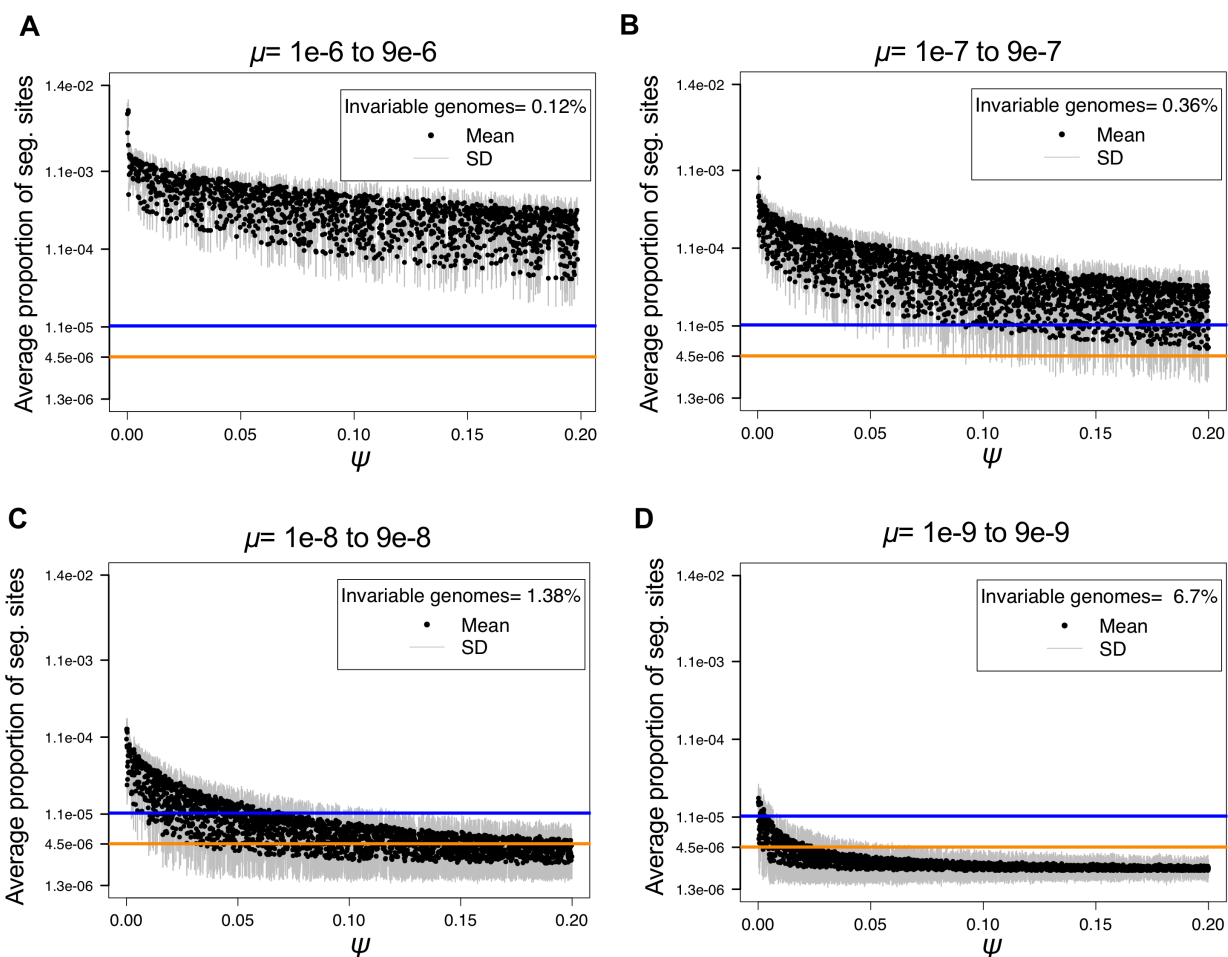
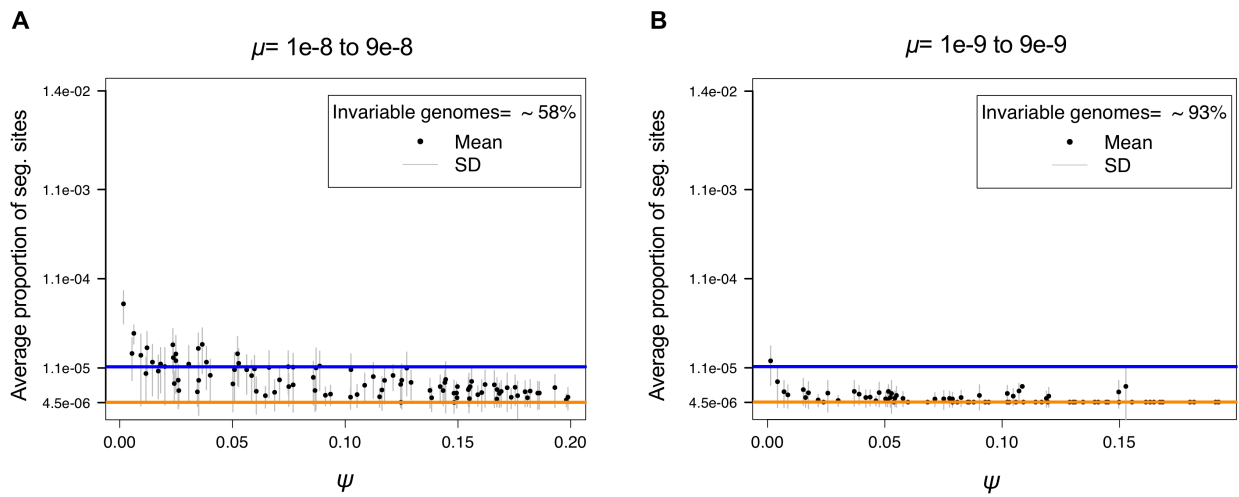


Figure S1. Log scale distribution of segregating sites in unfiltered simulated populations as a function of mutation rate (μ) and progeny skew (Ψ). For each parameter combination of μ and Ψ drawn from the prior (10,000 in total), 1,000 replicates were simulated, with the mean given by the black dot and the standard deviation given by the gray bars. Ψ proportions are given on the X-axis, while the proportion of segregating sites observed in the genome are given on the Y-axis. Each panel corresponds to a different order of magnitude of mutation rate: (A) $1e-6$ to $9e-6$, (B) $1e-7$ to $9e-7$, (C) $1e-8$ to $9e-8$, and (D) $1e-9$ to $9e-9$. The colored lines correspond to two examples of the proportion of segregating sites observed genome-wide in empirical patient data: 20 segregating sites as a mean (orange) and 50 segregating sites as the maximum observed from patient_10 (blue) (Trauner *et al.* 2017).



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15 **Figure S2. Log scale distribution of segregating sites in filtered simulated populations of N**

16 **= 25,000 as a function of mutation rate (μ) and progeny skew (Ψ).** For each parameter

17 combination of μ and Ψ drawn from the prior (100 in total), 100 replicates were simulated, with

18 the mean given by the black dot and the standard deviation given by the gray bars. Ψ proportions

19 are given on the X-axis, while the proportion of segregating sites observed in the genome are

20 given on the Y-axis. Each panel corresponds to a different order of magnitude of mutation rate:

21 (A) $1e-8$ to $9e-8$, and (B) $1e-9$ to $9e-9$. The colored lines correspond to two examples of the

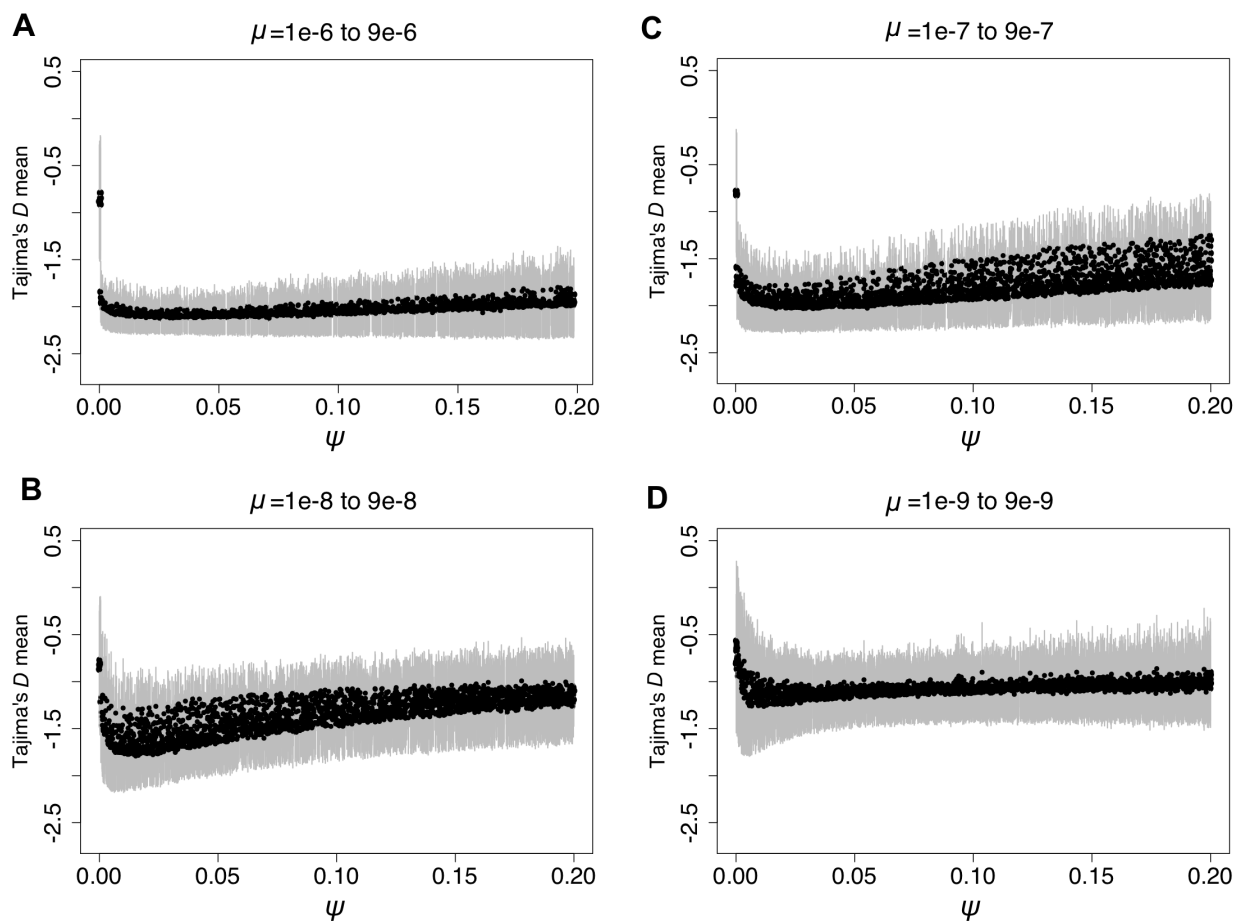
22 proportion of segregating sites observed genome-wide in empirical patient data: 20 segregating

23 sites (orange) and 50 segregating sites (blue) (Trauner *et al.* 2017). As shown, inference remains

24 consistent with the results of Figure 2, even under this 25x larger population size.

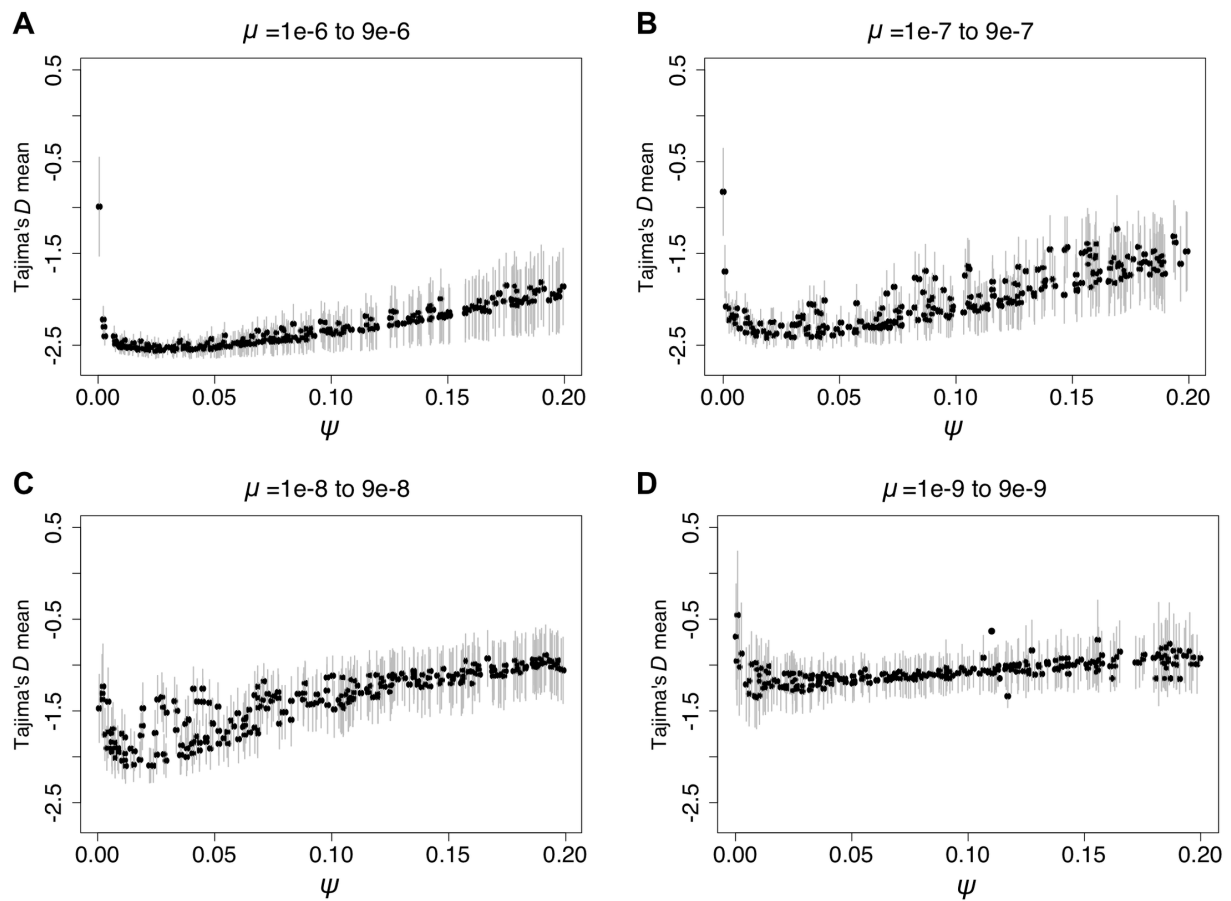
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28 **Figure S3. The shape of the site frequency spectrum in unfiltered simulated populations, as**
 29 **summarized by Tajima's D , as a function of mutation rate (μ) and progeny skew (Ψ).** For
 30 each parameter combination of μ and Ψ drawn from the prior distributions (10,000 in total),
 31 1,000 replicates were simulated, with the mean given by the black dot and the standard deviation
 32 given by the gray bars. Ψ proportions are given on the X-axis, while the mean Tajima's D is
 33 given on the Y-axis. Each panel corresponds to a different order of magnitude of mutation rate:
 34 (A) $1e-6$ to $9e-6$, (B) $1e-7$ to $9e-7$, (C) $1e-8$ to $9e-8$, and (D) $1e-9$ to $9e-9$. As shown, the
 35 distribution of variation expected to be observed in the genome differs as a function of these two
 36 parameters - with a strong excess of rare mutations (negative D) observed as the WF model is
 37 initially violated at small values of Ψ , with a slight recovery towards 0 (and larger standard
 38 deviations) observed as Ψ gets larger, owing to the rapidly decreasing number of segregating
 39 sites associated with increased progeny skew.



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41 **Figure S4. The shape of the site frequency spectrum (SFS), as summarized by Tajima's D ,**

42 **in simulated populations after filtering out segregating sites under 2% frequency, as a**

43 **function of mutation rate (μ) and progeny skew (Ψ).** 1,000 parameters combinations were

44 used. For each parameter combination of μ and Ψ drawn from the prior distributions, 1,000

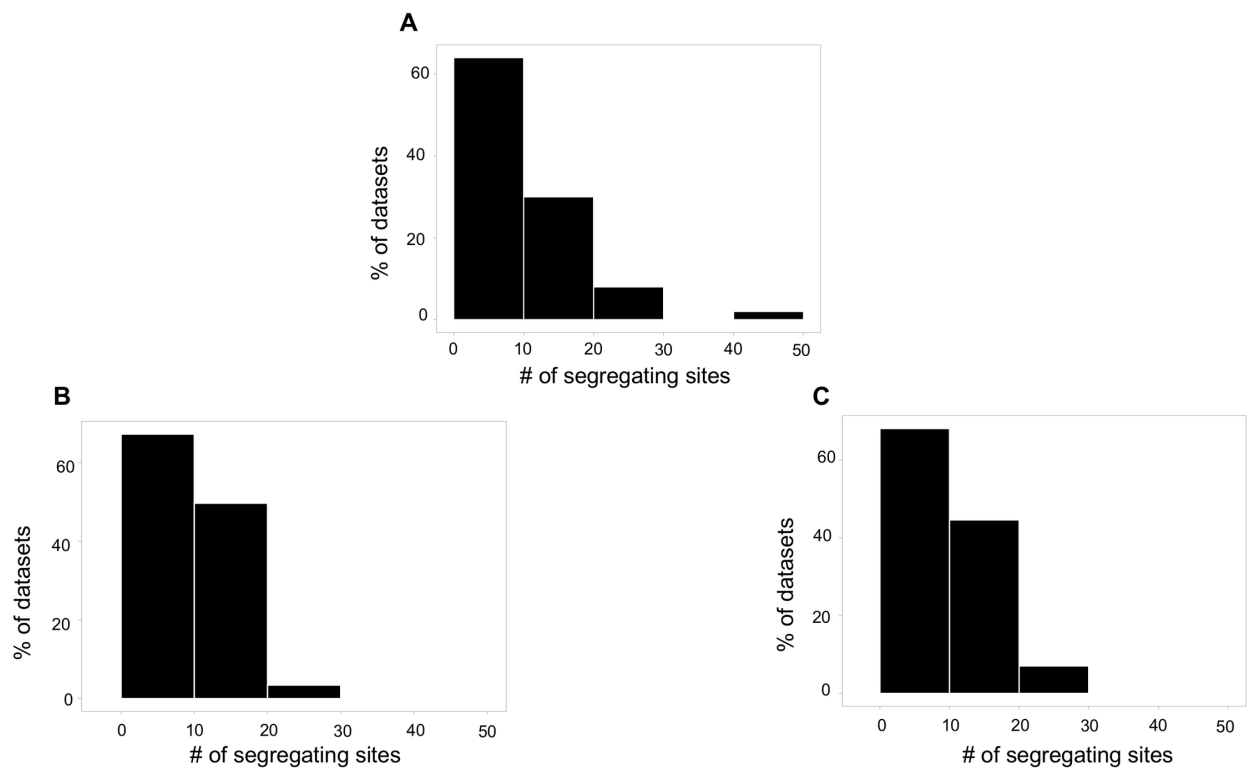
45 replicates were simulated, with the mean given by the black dot and the standard deviation given

46 by the gray bars. Ψ proportions are given on the X-axis, while the mean Tajima's D is given on

47 the Y-axis. Each panel corresponds to a different order of magnitude of mutation rate: (A) $1e-6$

48 to $9e-6$, (B) $1e-7$ to $9e-7$, (C) $1e-8$ to $9e-8$, and (D) $1e-9$ to $9e-9$. As shown, results remain largely

49 consistent pre- (Figure S3) and post-filtering.



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51 **Figure S5. The distribution of segregating sites in real versus simulated datasets.**

52 Comparison of the number of segregating sites observed from (A) patient samples (Trauner *et al.*
 53 2017) , (B) simulated datasets with $\mu = 3.1e-8$ and $\Psi = 0.02$, resulting in the same mean number
 54 of segregating sites as observed in patients, and (C) simulated datasets with $\mu = 3.7e-7$ and $\Psi =$
 55 0.18, also resulting in the same mean number of segregating sites as observed in patients. Thus,
 56 these two point estimates essentially demarcate the boundaries on the joint posterior ridge
 57 (Figure 3).

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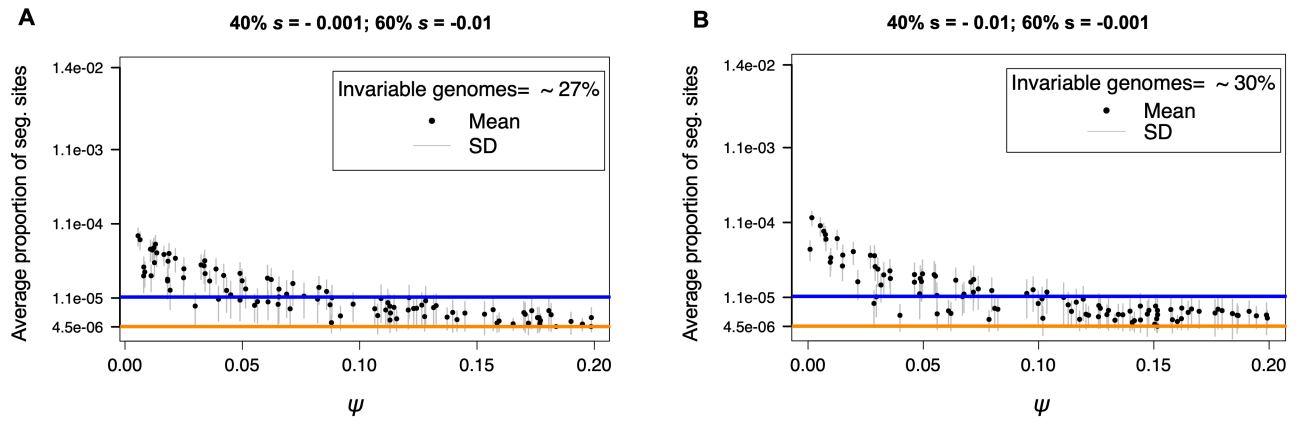
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73 **Figure S6. Log scale distribution of segregating sites in filtered simulated populations of**
74 **mutation rates ranging from 1e-8 to 9e-8, for two differing proportions of DFE density. For**
75 **comparison with Figure 2c, (A) presents a DFE comprised of 40% effectively neutral and 60%**
76 **deleterious mutations, and (B) presents a DFE comprised of 40% deleterious and 60% effectively**
77 **neutral mutations. As shown, owing to the strong impact of progeny skew combined with the**
78 **large-scale background selection effects inherent to this non-recombining genome, the same**
79 **parameter range remains supported under these alternative DFEs.**

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89 **Table S1. Simulation results.** Parameters simulated, ordered by descending mutation rate (μ)
90 and corresponding values of progeny skew (Ψ) and bottleneck severity ($N2$). Given are the mean
91 and standard deviation of the summary statistics from 1000 replicates.

Parameters			Summary statistics				
Mutation rate (μ)	Progeny skew (ψ)	Bneck ($N2$)	Tajima's D mean	Tajima's D sd	Segregating sites mean	Segregating sites sd	% invariable genomes
1.00E-06	0.08	30	-2.27	0.21	73.25	27.92	0
1.05E-06	0.05	51	-2.39	0.14	114.03	38.30	0
1.07E-06	0.07	79	-2.34	0.15	62.12	22.01	0
1.15E-06	0.17	27	-1.85	0.35	34.15	14.59	0
1.16E-06	0.08	55	-2.31	0.19	87.86	32.73	0
1.16E-06	0.15	47	-1.99	0.32	43.57	18.33	0
1.18E-06	0.10	50	-2.24	0.22	74.73	27.22	0
1.22E-06	0.00	94	-2.22	0.14	530.18	111.42	0
1.27E-06	0.04	98	-2.45	0.11	184.69	55.99	0
1.34E-06	0.07	2	-2.36	0.17	108.13	36.60	0
1.37E-06	0.19	88	-1.81	0.41	36.05	15.12	0
1.37E-06	0.18	8	-1.86	0.38	39.00	16.43	0
1.41E-06	0.02	36	-2.46	0.11	299.34	81.76	0
1.42E-06	0.05	78	-2.43	0.13	159.52	54.08	0
1.45E-06	0.13	76	-2.13	0.28	65.43	24.44	0
1.50E-06	0.03	87	-2.47	0.11	206.16	63.09	0
1.52E-06	0.14	57	-2.07	0.30	58.53	21.69	0
1.52E-06	0.13	5	-2.14	0.27	67.74	25.94	0
1.54E-06	0.10	10	-2.25	0.21	91.62	33.44	0
1.56E-06	0.13	73	-2.13	0.28	69.92	27.12	0
1.60E-06	0.00	89	-2.30	0.12	581.91	125.90	0
1.61E-06	0.11	13	-2.18	0.25	77.14	29.58	0
1.62E-06	0.19	44	-1.87	0.39	43.92	18.62	0
1.70E-06	0.08	56	-2.34	0.18	120.63	42.28	0
1.77E-06	0.18	27	-1.91	0.37	48.59	21.04	0
1.80E-06	0.01	87	-2.40	0.11	504.71	117.25	0
1.81E-06	0.07	45	-2.40	0.15	150.83	51.46	0
1.81E-06	0.17	37	-1.93	0.37	53.25	20.52	0
1.81E-06	0.09	31	-2.32	0.18	115.12	41.23	0
1.82E-06	0.01	70	-2.45	0.10	436.73	103.75	0
1.82E-06	0.17	48	-1.94	0.36	54.58	21.79	0
1.87E-06	0.10	72	-2.26	0.23	99.90	36.87	0
1.89E-06	0.07	30	-2.41	0.16	156.59	51.49	0
1.91E-06	0.08	53	-2.37	0.18	140.44	50.62	0
1.92E-06	0.09	14	-2.32	0.21	119.20	41.99	0
1.98E-06	0.07	25	-2.39	0.16	153.30	52.89	0
2.05E-06	0.06	89	-2.43	0.14	173.69	56.74	0
2.10E-06	0.04	42	-2.49	0.11	247.24	74.12	0
2.11E-06	0.17	57	-1.98	0.33	48.27	17.98	30.6
2.13E-06	0.12	77	-2.22	0.25	100.63	38.00	0
2.15E-06	0.14	51	-2.11	0.27	58.14	22.20	0
2.18E-06	0.16	18	-2.02	0.34	69.00	27.61	0
2.20E-06	0.02	8	-2.48	0.09	427.76	106.33	0
2.20E-06	0.02	82	-2.49	0.10	365.72	102.03	0
2.21E-06	0.19	28	-1.90	0.40	57.49	23.35	0

2.22E-06	0.09	42	-2.34	0.19	139.26	49.72	0
2.24E-06	0.19	45	-1.91	0.36	44.85	17.11	0
2.28E-06	0.13	5	-2.20	0.24	98.00	36.41	0
2.28E-06	0.14	32	-2.15	0.28	87.13	33.44	0
2.35E-06	0.05	44	-2.48	0.12	236.37	73.31	0
2.52E-06	0.19	83	-1.89	0.41	63.42	26.09	0
2.61E-06	0.02	67	-2.50	0.09	385.13	108.51	0
2.66E-06	0.14	59	-2.11	0.31	96.28	36.99	0
2.71E-06	0.20	66	-1.86	0.42	64.02	25.96	0
2.73E-06	0.03	80	-2.51	0.09	376.28	107.57	0
2.87E-06	0.03	3	-2.52	0.08	166.65	52.69	0
2.87E-06	0.14	34	-2.13	0.30	104.75	38.78	0
2.93E-06	0.05	47	-2.47	0.13	251.39	82.08	0
2.94E-06	0.10	12	-2.34	0.18	157.71	54.81	0
3.01E-06	0.08	52	-2.39	0.17	187.60	66.33	0
3.02E-06	0.13	3	-2.18	0.28	114.74	40.91	0
3.02E-06	0.04	31	-2.51	0.10	325.83	102.62	0
3.03E-06	0.10	97	-2.32	0.21	160.46	57.38	0
3.05E-06	0.18	20	-2.00	0.35	82.89	33.44	0
3.09E-06	0.17	47	-2.04	0.32	64.38	25.71	52.6
3.11E-06	0.07	68	-2.42	0.16	208.45	73.55	0
3.15E-06	0.11	97	-2.30	0.22	150.87	55.35	0
3.16E-06	0.06	50	-2.47	0.13	246.51	82.19	0
3.19E-06	0.19	95	-1.93	0.40	80.04	32.79	0
3.20E-06	0.16	67	-2.08	0.32	98.94	36.62	0
3.21E-06	0.20	97	-1.90	0.41	73.48	30.10	0
3.24E-06	0.10	82	-2.33	0.20	171.88	60.99	0
3.24E-06	0.03	5	-2.51	0.10	371.41	114.00	0
3.24E-06	0.11	45	-2.30	0.23	155.65	57.23	0
3.25E-06	0.01	81	-2.47	0.09	615.46	144.49	0
3.34E-06	0.09	69	-2.36	0.18	188.15	66.35	0
3.38E-06	0.08	10	-2.42	0.16	223.29	76.95	0
3.38E-06	0.18	17	-1.99	0.32	62.81	24.34	56.8
3.44E-06	0.05	29	-2.50	0.11	143.29	48.38	60.2
3.51E-06	0.09	30	-2.36	0.19	191.03	66.20	0
3.63E-06	0.17	62	-2.02	0.38	98.79	38.19	0
3.64E-06	0.02	17	-2.52	0.09	491.72	134.79	0
3.72E-06	0.01	35	-2.46	0.09	751.52	171.61	0
3.73E-06	0.07	16	-2.44	0.14	246.58	84.59	0
3.76E-06	0.13	45	-2.21	0.26	139.56	51.31	0
3.77E-06	0.02	52	-2.53	0.08	479.20	133.02	0
3.78E-06	0.06	18	-2.48	0.13	283.14	92.52	0
3.81E-06	0.06	31	-2.46	0.13	271.95	91.58	0
3.81E-06	0.04	47	-2.50	0.11	345.88	108.22	0
3.85E-06	0.05	89	-2.51	0.10	162.16	51.37	0
3.89E-06	0.16	50	-2.10	0.32	117.26	45.18	0
3.92E-06	0.11	66	-2.33	0.22	183.75	65.43	0
3.93E-06	0.10	22	-2.35	0.20	197.81	70.32	0
4.06E-06	0.08	27	-2.40	0.17	231.15	77.99	0
4.07E-06	0.05	99	-2.50	0.11	320.98	100.88	0
4.09E-06	0.16	39	-2.08	0.34	119.81	46.43	0
4.11E-06	0.15	97	-2.16	0.29	136.81	51.00	0

4.13E-06	0.07	91	-2.45	0.14	261.73	88.21	0
4.13E-06	0.18	72	-2.01	0.38	104.37	41.08	0
4.14E-06	0.18	25	-1.98	0.39	105.10	42.01	0
4.19E-06	0.12	91	-2.28	0.23	177.23	61.32	0
4.22E-06	0.06	74	-2.47	0.13	283.84	93.60	0
4.23E-06	0.04	24	-2.51	0.11	365.05	116.15	0
4.27E-06	0.06	61	-2.47	0.14	292.16	96.34	0
4.27E-06	0.06	56	-2.48	0.13	310.77	98.59	0
4.27E-06	0.05	70	-2.50	0.12	341.95	109.99	0
4.28E-06	0.08	85	-2.41	0.17	245.99	82.80	0
4.33E-06	0.18	16	-2.00	0.35	73.08	28.78	0
4.34E-06	0.09	85	-2.39	0.16	126.78	44.33	0
4.35E-06	0.03	16	-2.53	0.09	441.81	130.87	0
4.39E-06	0.17	1	-2.04	0.36	121.47	47.98	0
4.40E-06	0.18	97	-2.02	0.34	112.82	44.80	0
4.44E-06	0.01	39	-2.49	0.09	763.84	181.69	0
4.46E-06	0.06	45	-2.48	0.11	152.56	51.75	68.1
4.66E-06	0.16	2	-2.10	0.32	88.53	32.16	0
4.68E-06	0.15	36	-2.17	0.30	148.64	55.85	0
4.69E-06	0.16	5	-2.12	0.32	135.54	51.72	0
4.69E-06	0.18	68	-2.01	0.38	119.29	47.69	0
4.77E-06	0.14	66	-2.20	0.28	163.71	60.01	0
4.83E-06	0.10	54	-2.36	0.20	226.20	78.89	0
4.90E-06	0.07	36	-2.46	0.14	309.92	98.60	0
4.93E-06	0.04	45	-2.53	0.09	437.73	134.20	0
4.96E-06	0.19	66	-1.94	0.41	111.01	45.52	0
5.00E-06	0.08	81	-2.42	0.16	271.63	90.25	0
5.04E-06	0.01	41	-2.50	0.08	765.12	187.52	0
5.08E-06	0.09	67	-2.40	0.17	137.78	50.38	0
5.19E-06	0.08	51	-2.42	0.16	279.02	94.16	0
5.19E-06	0.18	13	-2.01	0.37	131.71	50.46	0
5.29E-06	0.16	5	-2.11	0.31	151.00	57.19	0
5.34E-06	0.04	70	-2.54	0.09	466.30	140.97	0
5.35E-06	0.03	79	-2.54	0.09	502.51	146.17	0
5.35E-06	0.07	73	-2.45	0.14	307.53	98.73	0
5.37E-06	0.07	98	-2.46	0.14	318.07	106.42	0
5.39E-06	0.15	61	-2.17	0.29	164.10	58.77	0
5.43E-06	0.03	76	-2.54	0.09	490.96	145.83	0
5.46E-06	0.15	94	-2.14	0.30	163.69	61.69	0
5.50E-06	0.01	73	-2.51	0.08	745.90	194.38	0
5.51E-06	0.15	41	-2.18	0.28	171.60	64.52	0
5.52E-06	0.02	8	-2.53	0.09	680.68	183.99	0
5.60E-06	0.08	68	-2.42	0.16	302.27	106.08	0
5.61E-06	0.04	66	-2.53	0.10	457.64	145.37	0
5.63E-06	0.13	5	-2.23	0.25	187.17	68.44	0
5.64E-06	0.17	49	-2.09	0.34	154.34	57.48	0
5.64E-06	0.20	52	-1.95	0.41	120.54	47.31	0
5.67E-06	0.01	37	-2.53	0.08	731.89	186.88	0
5.77E-06	0.04	20	-2.53	0.10	475.95	151.07	11.6
5.80E-06	0.10	31	-2.35	0.22	252.06	87.42	0
5.82E-06	0.02	41	-2.54	0.08	670.96	187.64	0
5.87E-06	0.12	42	-2.29	0.25	224.90	80.55	0

5.88E-06	0.01	12	-2.53	0.07	354.52	90.49	0
5.92E-06	0.11	8	-2.33	0.22	245.33	89.74	0
5.95E-06	0.16	88	-2.09	0.34	159.67	63.38	0
5.96E-06	0.09	18	-2.42	0.16	153.28	55.05	0
6.00E-06	0.18	30	-2.04	0.36	144.43	55.87	0
6.02E-06	0.18	55	-2.06	0.33	147.44	57.72	0
6.05E-06	0.00	32	-2.40	0.10	1198.87	255.71	0
6.08E-06	0.02	1	-2.54	0.08	681.49	179.41	0
6.14E-06	0.06	55	-2.49	0.13	383.21	129.85	0
6.22E-06	0.04	2	-2.53	0.10	474.70	147.92	0
6.22E-06	0.05	68	-2.52	0.11	422.11	136.96	0
6.28E-06	0.05	58	-2.53	0.10	449.10	145.23	0
6.29E-06	0.08	44	-2.43	0.16	321.52	106.13	0
6.33E-06	0.19	51	-2.01	0.38	138.23	54.61	0
6.34E-06	0.03	71	-2.55	0.08	581.88	172.53	0
6.35E-06	0.09	32	-2.40	0.18	295.07	100.32	0
6.37E-06	0.14	50	-2.20	0.27	120.96	46.29	0
6.39E-06	0.00	97	-0.99	0.54	4711.72	1154.14	0
6.43E-06	0.05	75	-2.52	0.11	442.70	142.79	0
6.43E-06	0.06	7	-2.49	0.13	390.06	130.05	0
6.46E-06	0.04	19	-2.54	0.09	511.88	159.56	0
6.51E-06	0.06	79	-2.49	0.12	389.01	123.46	0
6.52E-06	0.18	95	-2.05	0.35	158.22	61.29	0
6.62E-06	0.01	49	-2.53	0.08	840.51	207.17	0
6.68E-06	0.03	41	-2.55	0.08	643.11	184.41	0
6.71E-06	0.18	81	-2.03	0.36	157.08	59.45	0
6.74E-06	0.01	72	-2.53	0.08	870.14	224.09	0
6.78E-06	0.04	80	-2.54	0.09	497.06	147.93	0
6.78E-06	0.18	47	-2.04	0.35	163.30	62.91	0
6.81E-06	0.15	21	-2.19	0.28	122.69	45.58	0
6.83E-06	0.06	59	-2.51	0.11	422.41	134.05	0
6.84E-06	0.08	49	-2.44	0.16	350.26	118.35	0
6.84E-06	0.03	15	-2.56	0.08	644.69	193.02	0
6.87E-06	0.09	47	-2.42	0.18	320.62	104.46	0
6.91E-06	0.01	75	-2.49	0.08	1048.33	239.36	0
6.95E-06	0.19	78	-2.02	0.35	157.65	60.19	0
6.98E-06	0.15	8	-2.17	0.30	201.86	76.86	0
7.01E-06	0.12	99	-2.32	0.22	260.33	92.97	0
7.02E-06	0.06	68	-2.50	0.13	408.59	129.63	0
7.04E-06	0.08	49	-2.46	0.14	369.08	124.33	0
7.04E-06	0.02	27	-2.55	0.07	739.16	201.87	0
7.08E-06	0.10	11	-2.37	0.20	298.49	106.80	0
7.17E-06	0.16	34	-2.11	0.32	189.62	73.83	0
7.17E-06	0.18	30	-2.06	0.33	112.16	39.13	80.6
7.18E-06	0.14	21	-2.23	0.27	230.21	79.97	0
7.19E-06	0.05	58	-2.53	0.11	474.91	150.53	0
7.21E-06	0.13	41	-2.26	0.24	238.43	84.13	0
7.22E-06	0.15	89	-2.18	0.30	210.57	80.26	0
7.22E-06	0.07	27	-2.49	0.14	395.22	131.00	0
7.29E-06	0.05	28	-2.51	0.12	447.44	148.29	0
7.35E-06	0.05	34	-2.53	0.11	494.59	158.04	0
7.37E-06	0.05	95	-2.52	0.11	472.23	147.74	0

7.39E-06	0.05	44	-2.54	0.09	222.21	75.67	0
7.39E-06	0.14	65	-2.22	0.27	228.38	82.60	0
7.41E-06	0.08	26	-2.45	0.16	350.58	127.48	0
7.42E-06	0.14	4	-2.23	0.28	232.20	84.06	0
7.50E-06	0.07	53	-2.47	0.14	380.47	126.84	0.5
7.52E-06	0.14	72	-2.25	0.26	236.18	86.08	0
7.60E-06	0.04	92	-2.55	0.09	549.20	174.91	0
7.60E-06	0.20	56	-1.97	0.39	160.59	61.63	0
7.64E-06	0.08	79	-2.46	0.16	386.46	132.39	0
7.69E-06	0.09	71	-2.45	0.14	179.42	63.82	0
7.73E-06	0.08	79	-2.45	0.15	376.58	127.84	0
7.77E-06	0.20	63	-1.98	0.39	164.70	63.21	0
7.80E-06	0.01	63	-2.52	0.08	966.52	235.75	0
7.87E-06	0.18	71	-2.07	0.34	181.52	69.42	0
7.88E-06	0.08	35	-2.45	0.15	383.83	133.02	0
7.89E-06	0.17	59	-2.12	0.32	201.40	75.09	0
7.92E-06	0.07	93	-2.49	0.13	418.80	138.74	0
7.98E-06	0.06	13	-2.51	0.12	451.14	146.23	1.1
7.99E-06	0.09	53	-2.44	0.15	179.84	65.68	0
7.99E-06	0.05	97	-2.53	0.11	495.40	155.93	0
8.00E-06	0.05	89	-2.53	0.10	497.63	154.43	0
8.00E-06	0.13	83	-2.28	0.25	268.95	96.31	0
8.00E-06	0.12	55	-2.32	0.23	288.98	97.70	0
8.01E-06	0.15	87	-2.20	0.28	136.62	48.86	0
8.12E-06	0.17	87	-2.13	0.32	124.24	46.65	0
8.13E-06	0.02	75	-2.55	0.08	773.33	207.64	0
8.17E-06	0.13	80	-2.28	0.24	276.99	96.62	10.1
8.27E-06	0.07	45	-2.46	0.15	413.27	143.77	0
8.30E-06	0.02	88	-2.57	0.08	719.67	211.75	0
8.31E-06	0.10	65	-2.36	0.20	321.74	112.56	0
8.44E-06	0.19	80	-2.02	0.38	188.77	72.47	0
8.46E-06	0.10	5	-2.38	0.20	335.76	113.24	0
8.47E-06	0.17	75	-2.13	0.32	216.68	83.37	0
8.47E-06	0.03	37	-2.56	0.08	653.55	201.75	0
8.49E-06	0.05	70	-2.53	0.11	511.33	168.06	0
8.50E-06	0.01	93	-2.52	0.08	996.00	253.67	0
8.50E-06	0.16	58	-2.15	0.31	224.71	82.46	0
8.59E-06	0.12	2	-2.31	0.23	301.44	110.81	0
8.64E-06	0.11	34	-2.33	0.23	313.45	111.52	0
8.64E-06	0.13	19	-2.26	0.26	281.85	100.78	0
8.73E-06	0.13	41	-2.25	0.28	270.21	100.76	0
8.73E-06	0.02	22	-2.55	0.08	785.93	223.02	0
8.74E-06	0.02	80	-2.55	0.08	864.54	242.73	0
8.78E-06	0.12	1	-2.32	0.24	310.70	109.17	0
8.79E-06	0.10	78	-2.38	0.19	335.42	119.68	0
8.81E-06	0.01	97	-2.52	0.08	1085.27	272.37	0
8.81E-06	0.04	79	-2.56	0.09	612.42	203.42	0
8.84E-06	0.11	88	-2.34	0.21	319.74	108.26	0
8.89E-06	0.05	8	-2.54	0.10	560.69	173.71	3.9
1.01E-07	0.04	42	-2.05	0.20	21.65	8.30	0
1.07E-07	0.04	60	-2.01	0.21	19.40	7.61	0.1
1.11E-07	0.04	4	-2.06	0.20	22.62	8.50	0

1.16E-07	0.09	96	-1.69	0.29	9.42	4.34	1.6
1.31E-07	0.08	26	-1.77	0.28	11.30	5.27	0.5
1.32E-07	0.17	32	-1.24	0.37	4.79	2.41	11.7
1.32E-07	0.07	70	-1.87	0.25	13.38	5.78	0.4
1.32E-07	0.01	77	-2.13	0.19	76.43	19.25	0
1.35E-07	0.00	77	-1.70	0.28	136.12	30.23	0
1.39E-07	0.08	44	-1.78	0.27	11.88	5.49	0.5
1.43E-07	0.11	85	-1.64	0.30	9.36	4.62	1
1.46E-07	0.04	17	-2.14	0.18	28.42	10.39	0
1.48E-07	0.01	78	-2.10	0.18	98.16	24.08	0
1.51E-07	0.11	79	-1.67	0.31	9.77	4.55	1.6
1.54E-07	0.03	71	-2.18	0.17	34.49	11.81	0
1.55E-07	0.03	97	-2.19	0.17	37.51	12.53	0
1.57E-07	0.06	13	-2.04	0.20	20.97	8.10	0
1.59E-07	0.09	65	-1.77	0.28	12.21	5.73	0.6
1.59E-07	0.14	9	-1.46	0.37	7.03	3.52	3.2
1.61E-07	0.07	69	-1.94	0.25	17.01	7.29	0.2
1.62E-07	0.15	83	-1.43	0.33	6.72	3.29	3.8
1.65E-07	0.03	59	-2.20	0.16	37.41	12.51	0
1.65E-07	0.04	29	-2.15	0.19	30.24	10.84	0
1.67E-07	0.04	83	-2.16	0.17	30.33	11.01	0
1.72E-07	0.16	69	-1.40	0.35	6.41	3.22	7.8
1.75E-07	0.10	12	-1.74	0.29	11.68	5.48	0.9
1.82E-07	0.15	88	-1.46	0.36	7.62	3.76	3.5
1.83E-07	0.02	23	-2.25	0.15	60.75	17.80	0
1.89E-07	0.16	48	-1.39	0.38	7.01	3.69	4.2
1.90E-07	0.02	89	-2.25	0.16	59.16	17.48	0
1.92E-07	0.01	30	-2.20	0.17	97.79	24.93	0
1.94E-07	0.02	51	-2.25	0.16	63.04	18.30	0
2.03E-07	0.16	34	-1.46	0.38	7.92	4.09	4.1
2.19E-07	0.09	74	-1.92	0.26	17.61	7.36	0.1
2.19E-07	0.03	27	-2.26	0.15	49.27	15.76	0
2.20E-07	0.15	77	-1.50	0.37	8.62	4.15	2.4
2.22E-07	0.13	43	-1.65	0.32	10.79	5.21	1.2
2.25E-07	0.16	48	-1.48	0.37	8.40	4.35	2.2
2.30E-07	0.03	71	-2.27	0.14	55.34	18.13	0
2.31E-07	0.02	84	-2.26	0.15	84.82	22.91	0
2.43E-07	0.09	40	-1.90	0.27	17.18	7.41	0.2
2.45E-07	0.02	43	-2.29	0.15	68.26	21.02	0
2.45E-07	0.03	11	-2.28	0.15	58.57	18.40	0
2.49E-07	0.16	73	-1.53	0.35	9.23	4.56	1.5
2.52E-07	0.19	21	-1.31	0.39	7.11	3.59	4.9
2.54E-07	0.03	69	-2.28	0.15	56.09	18.23	0
2.55E-07	0.12	62	-1.81	0.28	14.55	6.53	0.6
2.56E-07	0.07	46	-2.10	0.22	27.86	11.28	0
2.57E-07	0.13	61	-1.69	0.34	12.39	5.89	0.5
2.61E-07	0.13	90	-1.68	0.33	11.81	5.58	0.9
2.65E-07	0.16	68	-1.52	0.36	9.35	4.47	1.6
2.67E-07	0.14	27	-1.66	0.34	11.62	5.64	0.6
2.67E-07	0.18	26	-1.43	0.39	8.27	4.15	2.7
2.68E-07	0.01	22	-2.26	0.15	115.42	29.13	0
2.77E-07	0.09	84	-1.98	0.26	21.28	8.64	0

2.85E-07	0.16	67	-1.55	0.36	10.25	4.91	1.2
2.87E-07	0.08	35	-2.08	0.22	27.15	10.97	0
2.96E-07	0.01	61	-2.26	0.15	135.23	32.52	0
2.99E-07	0.12	44	-1.80	0.32	15.65	6.95	0.3
3.00E-07	0.19	2	-1.38	0.40	8.14	4.11	3.3
3.03E-07	0.09	68	-2.00	0.24	23.60	9.76	0
3.21E-07	0.09	72	-2.02	0.26	24.71	10.18	0
3.23E-07	0.10	25	-1.99	0.24	22.58	9.42	0
3.26E-07	0.04	14	-2.30	0.15	62.74	21.18	0
3.28E-07	0.01	41	-2.18	0.17	186.83	40.77	0
3.29E-07	0.05	60	-2.25	0.18	46.38	16.37	0
3.30E-07	0.07	28	-2.16	0.19	34.59	12.94	0
3.30E-07	0.16	89	-1.62	0.36	11.95	5.82	0.6
3.36E-07	0.17	54	-1.55	0.38	10.81	5.15	1
3.41E-07	0.17	52	-1.53	0.38	10.72	5.29	1.1
3.43E-07	0.08	83	-2.09	0.22	28.74	11.31	0
3.43E-07	0.07	8	-2.12	0.23	32.72	12.81	0
3.45E-07	0.04	49	-2.29	0.16	56.22	19.10	0
3.59E-07	0.08	28	-2.13	0.21	33.10	13.05	0
3.60E-07	0.13	99	-1.83	0.31	17.94	7.85	0.3
3.61E-07	0.17	96	-1.60	0.37	12.29	5.89	0.8
3.62E-07	0.12	19	-1.89	0.30	19.73	8.83	0.1
3.68E-07	0.09	67	-2.07	0.23	28.56	10.96	0
3.71E-07	0.18	47	-1.51	0.41	11.19	5.70	1.1
3.72E-07	0.19	53	-1.47	0.40	10.56	5.38	1.2
3.76E-07	0.06	60	-2.24	0.18	45.73	16.16	0
3.79E-07	0.13	27	-1.84	0.30	18.51	7.94	0
3.82E-07	0.01	55	-2.31	0.15	143.20	36.64	0
3.82E-07	0.18	87	-1.48	0.43	10.89	5.42	1
3.85E-07	0.04	80	-2.33	0.15	72.52	22.82	0
3.85E-07	0.18	53	-1.56	0.38	11.71	5.72	0.9
3.87E-07	0.11	46	-1.97	0.26	23.65	9.97	0
3.89E-07	0.08	58	-2.15	0.21	33.83	13.19	0
3.89E-07	0.04	64	-2.31	0.15	61.69	20.86	0
3.91E-07	0.06	96	-2.24	0.17	47.06	17.70	0
3.91E-07	0.14	90	-1.79	0.33	17.18	7.31	0.2
3.93E-07	0.00	82	-2.17	0.16	224.21	47.82	0
3.93E-07	0.04	66	-2.31	0.16	66.36	21.62	0
4.03E-07	0.17	3	-1.60	0.38	13.05	6.59	0.7
4.12E-07	0.07	87	-2.22	0.19	43.55	16.05	0
4.15E-07	0.11	25	-1.96	0.27	23.90	10.10	0
4.18E-07	0.17	9	-1.63	0.36	13.54	6.41	0.7
4.21E-07	0.09	33	-2.10	0.22	31.44	12.46	0
4.25E-07	0.14	64	-1.81	0.32	18.34	8.11	0.2
4.26E-07	0.17	10	-1.66	0.37	14.63	6.94	0.2
4.28E-07	0.16	54	-1.70	0.35	15.61	7.12	0.2
4.30E-07	0.14	3	-1.78	0.33	17.60	7.78	0.4
4.34E-07	0.19	70	-1.52	0.41	11.96	5.74	0.8
4.42E-07	0.02	89	-2.35	0.13	136.15	36.57	0
4.45E-07	0.17	8	-1.64	0.35	14.18	6.56	0.4
4.48E-07	0.00	91	-2.21	0.16	231.58	51.25	0
4.53E-07	0.19	46	-1.55	0.39	12.63	6.18	0.2

4.56E-07	0.18	36	-1.59	0.40	13.18	6.00	0.4
4.56E-07	0.20	72	-1.48	0.42	11.67	5.78	0.7
4.57E-07	0.15	43	-1.73	0.38	17.01	7.85	0.1
4.57E-07	0.19	27	-1.53	0.42	12.70	6.33	0.5
4.59E-07	0.12	48	-1.96	0.28	25.57	10.35	0.1
4.60E-07	0.05	73	-2.30	0.15	59.54	20.64	0
4.65E-07	0.12	28	-1.96	0.29	25.40	10.54	0.2
4.67E-07	0.16	85	-1.70	0.38	16.03	7.39	0.2
4.72E-07	0.11	61	-2.04	0.26	29.02	11.77	0
4.74E-07	0.01	99	-2.34	0.13	167.56	42.68	0
4.74E-07	0.08	41	-2.20	0.18	41.64	15.27	0
4.77E-07	0.00	80	-0.83	0.47	627.40	139.04	0
4.79E-07	0.18	19	-1.61	0.41	14.59	6.72	0.4
4.81E-07	0.16	58	-1.72	0.35	16.68	7.84	0.1
4.85E-07	0.14	4	-1.86	0.32	20.86	9.24	0.1
4.85E-07	0.18	55	-1.61	0.37	14.39	6.84	0.6
4.86E-07	0.13	12	-1.88	0.31	22.10	9.20	0
4.86E-07	0.02	3	-2.37	0.13	123.78	35.02	0
4.87E-07	0.02	26	-2.37	0.12	134.03	38.08	0
4.90E-07	0.10	81	-2.08	0.22	31.12	12.53	0
4.93E-07	0.20	51	-1.48	0.43	12.19	5.88	0.7
4.94E-07	0.05	3	-2.33	0.15	69.62	24.17	0
4.99E-07	0.16	85	-1.72	0.37	17.81	7.74	0.4
5.07E-07	0.13	74	-1.93	0.28	23.85	9.99	0
5.09E-07	0.17	94	-1.68	0.38	16.55	7.63	0.3
5.10E-07	0.00	36	-2.10	0.16	305.53	62.92	0
5.11E-07	0.19	84	-1.58	0.40	14.20	6.91	0.2
5.12E-07	0.01	75	-2.35	0.13	167.38	43.15	0
5.23E-07	0.03	39	-2.38	0.13	113.43	32.95	0
5.27E-07	0.02	53	-2.37	0.13	147.88	39.69	0
5.30E-07	0.09	47	-2.17	0.21	41.69	15.81	0
5.31E-07	0.09	63	-2.12	0.24	37.31	14.98	0
5.41E-07	0.14	61	-1.85	0.32	22.44	9.40	0
5.41E-07	0.10	61	-2.12	0.22	36.47	13.98	0
5.45E-07	0.07	56	-2.24	0.19	50.27	18.60	0
5.46E-07	0.09	94	-2.16	0.21	40.23	14.84	0
5.47E-07	0.19	83	-1.59	0.40	15.04	6.95	0.4
5.51E-07	0.09	87	-2.13	0.23	38.96	15.11	0
5.56E-07	0.04	79	-2.36	0.14	87.06	28.92	0
5.63E-07	0.13	1	-1.94	0.30	26.14	10.81	0.1
5.64E-07	0.06	41	-2.29	0.18	61.10	21.67	0
5.68E-07	0.07	64	-2.24	0.18	50.63	18.87	0
5.74E-07	0.04	51	-2.38	0.13	100.51	31.60	0
5.76E-07	0.09	69	-2.14	0.23	40.19	15.82	0
5.78E-07	0.14	1	-1.89	0.32	25.21	10.54	0.1
5.83E-07	0.12	71	-2.01	0.28	30.95	12.68	0
5.86E-07	0.04	28	-2.37	0.14	91.26	29.74	0
5.88E-07	0.07	30	-2.27	0.17	56.32	20.37	0
5.89E-07	0.15	81	-1.84	0.32	22.29	9.45	0.1
5.90E-07	0.12	5	-1.99	0.29	29.80	11.78	0
5.92E-07	0.01	89	-2.37	0.13	195.29	48.74	0
5.98E-07	0.06	26	-2.30	0.16	64.28	22.73	0

6.08E-07	0.06	3	-2.29	0.17	63.58	23.30	0
6.10E-07	0.19	45	-1.63	0.42	16.91	7.97	0.1
6.11E-07	0.13	28	-1.93	0.30	27.21	11.16	0
6.23E-07	0.16	63	-1.79	0.36	21.64	9.41	0.1
6.26E-07	0.11	85	-2.09	0.26	37.70	15.07	0
6.27E-07	0.02	56	-2.39	0.12	150.37	41.96	0
6.29E-07	0.07	90	-2.27	0.18	59.78	21.29	0
6.32E-07	0.11	39	-2.07	0.27	37.18	14.75	0.1
6.33E-07	0.13	23	-1.97	0.29	29.78	12.50	0
6.34E-07	0.18	73	-1.67	0.39	18.63	8.13	0.2
6.35E-07	0.15	35	-1.82	0.37	23.32	10.26	0
6.41E-07	0.00	72	-2.20	0.16	332.26	69.47	0
6.46E-07	0.19	30	-1.67	0.39	18.02	8.14	0
6.49E-07	0.07	98	-2.26	0.19	57.55	21.17	0
6.49E-07	0.01	31	-2.26	0.13	298.54	65.21	0
6.50E-07	0.11	43	-2.06	0.25	35.37	14.24	0
6.52E-07	0.06	14	-2.31	0.17	68.58	24.41	0
6.54E-07	0.17	5	-1.74	0.36	19.97	9.10	0.2
6.56E-07	0.07	43	-2.31	0.16	66.06	22.60	0
6.56E-07	0.12	71	-2.01	0.26	32.09	13.00	0.1
6.57E-07	0.06	57	-2.33	0.16	74.95	26.48	0
6.64E-07	0.03	8	-2.40	0.13	137.28	40.18	0
6.74E-07	0.07	19	-2.28	0.18	64.36	22.75	0
6.75E-07	0.20	43	-1.61	0.41	17.39	8.31	0.3
6.79E-07	0.17	2	-1.74	0.39	20.58	8.97	0.1
6.90E-07	0.07	72	-2.30	0.19	68.62	24.49	0
6.93E-07	0.17	87	-1.73	0.41	21.27	9.37	0
7.00E-07	0.11	13	-2.07	0.26	38.49	15.41	0
7.09E-07	0.16	6	-1.82	0.37	24.06	10.77	0
7.16E-07	0.17	83	-1.80	0.35	23.48	10.47	0.2
7.18E-07	0.17	12	-1.75	0.37	22.84	10.03	0
7.23E-07	0.04	20	-2.40	0.13	109.44	35.41	0
7.24E-07	0.03	10	-2.41	0.12	139.25	40.94	0
7.27E-07	0.07	65	-2.31	0.17	68.65	24.56	0
7.29E-07	0.17	21	-1.78	0.35	22.90	10.19	0
7.33E-07	0.03	27	-2.41	0.12	140.51	41.50	0
7.35E-07	0.11	57	-2.13	0.26	42.37	16.46	0
7.38E-07	0.06	81	-2.31	0.17	74.78	26.44	0
7.38E-07	0.09	88	-2.22	0.21	53.99	20.50	0
7.40E-07	0.01	86	-2.32	0.13	287.85	66.02	0
7.44E-07	0.11	35	-2.09	0.26	40.74	16.46	0
7.45E-07	0.17	98	-1.77	0.39	23.36	9.91	0.1
7.46E-07	0.13	95	-1.96	0.31	32.63	13.66	0
7.46E-07	0.11	49	-2.09	0.27	40.62	16.06	0
7.49E-07	0.19	11	-1.69	0.40	20.67	9.04	0
7.55E-07	0.05	12	-2.37	0.14	94.98	31.32	0
7.57E-07	0.08	5	-2.23	0.21	58.18	21.59	0
7.58E-07	0.12	99	-2.05	0.27	37.43	14.96	0
7.66E-07	0.10	9	-2.14	0.24	46.15	17.97	0
7.67E-07	0.12	44	-2.04	0.30	38.22	15.98	0
7.70E-07	0.12	50	-2.02	0.29	36.47	14.27	0
7.73E-07	0.11	56	-2.12	0.27	43.72	16.66	0

7.74E-07	0.12	5	-2.04	0.28	37.34	14.82	0
7.79E-07	0.16	88	-1.87	0.32	27.21	11.85	0
7.81E-07	0.11	88	-2.10	0.24	42.25	17.24	0
7.84E-07	0.07	8	-2.30	0.17	70.64	25.09	0
7.87E-07	0.19	60	-1.69	0.42	21.37	9.60	0.1
7.89E-07	0.12	87	-2.07	0.27	40.55	16.41	0
7.92E-07	0.17	3	-1.81	0.37	26.10	11.60	0
7.92E-07	0.01	64	-2.36	0.12	263.73	62.04	0
7.95E-07	0.06	65	-2.36	0.15	88.33	30.44	0
8.02E-07	0.12	93	-2.07	0.28	40.49	16.40	0
8.04E-07	0.04	27	-2.41	0.13	124.75	38.87	0
8.04E-07	0.13	96	-2.04	0.29	37.67	15.00	0
8.12E-07	0.06	47	-2.36	0.16	90.97	30.83	0
8.24E-07	0.05	17	-2.39	0.14	110.28	34.90	0
8.24E-07	0.13	38	-2.05	0.28	38.65	15.02	0
8.26E-07	0.12	1	-2.07	0.27	41.91	16.18	0
8.32E-07	0.15	42	-1.95	0.31	32.59	14.11	0
8.34E-07	0.10	78	-2.20	0.21	54.37	20.77	0
8.38E-07	0.00	68	-2.23	0.14	390.48	83.65	0
8.43E-07	0.13	62	-2.04	0.29	38.44	15.94	0
8.43E-07	0.00	32	-2.08	0.16	458.90	98.30	0
8.43E-07	0.10	61	-2.17	0.23	53.82	20.21	0
8.44E-07	0.07	6	-2.32	0.18	78.95	28.20	0
8.46E-07	0.10	25	-2.18	0.23	54.74	21.13	0
8.46E-07	0.18	6	-1.73	0.38	24.15	10.74	0.1
8.47E-07	0.09	4	-2.22	0.22	59.83	22.29	0
8.48E-07	0.11	53	-2.12	0.25	48.35	18.70	0
8.51E-07	0.15	37	-1.89	0.34	31.51	13.81	0
8.58E-07	0.04	27	-2.41	0.14	122.95	37.93	0
8.60E-07	0.08	11	-2.29	0.18	70.69	24.50	0
8.63E-07	0.02	82	-2.42	0.12	209.87	57.67	0
8.68E-07	0.01	43	-2.40	0.12	242.48	59.70	0
8.73E-07	0.15	57	-1.91	0.33	32.32	13.70	0
8.79E-07	0.19	20	-1.73	0.39	23.62	10.47	0.1
8.91E-07	0.08	30	-2.28	0.20	72.92	26.50	0
8.93E-07	0.19	94	-1.72	0.43	23.83	10.85	0
8.95E-07	0.09	77	-2.23	0.21	61.75	23.18	0
8.95E-07	0.17	30	-1.82	0.35	28.80	12.22	0.1
8.95E-07	0.07	69	-2.31	0.17	79.72	27.37	0
1.03E-08	0.17	95	-0.93	0.30	2.10	0.30	95.8
1.07E-08	0.04	48	-1.26	0.24	3.20	1.43	40.5
1.09E-08	0.04	80	-1.26	0.21	3.11	1.24	46
1.10E-08	0.03	44	-1.35	0.26	4.16	2.01	16.8
1.11E-08	0.19	62	-0.99	0.33	2.14	0.41	95.6
1.13E-08	0.07	54	-1.18	0.19	2.51	0.79	62.6
1.14E-08	0.10	67	-1.12	0.21	2.38	0.68	79.8
1.18E-08	0.19	97	-0.94	0.28	2.06	0.23	94.6
1.20E-08	0.03	80	-1.37	0.26	4.50	2.09	12.7
1.32E-08	0.02	75	-1.47	0.28	6.06	2.83	3
1.38E-08	0.19	45	-0.89	0.33	2.23	0.59	93.9
1.38E-08	0.00	93	-1.23	0.46	19.67	6.08	0
1.38E-08	0.00	55	-1.40	0.37	15.67	5.11	0

1.39E-08	0.10	45	-1.14	0.22	2.53	0.73	73.8
1.42E-08	0.16	94	-0.96	0.29	2.20	0.45	89.5
1.49E-08	0.03	3	-1.39	0.26	4.39	2.13	13.4
1.50E-08	0.17	35	-1.00	0.24	2.30	0.52	89.5
1.52E-08	0.18	65	-0.95	0.32	2.20	0.45	90.5
1.53E-08	0.16	96	-0.99	0.34	2.17	0.38	90.6
1.59E-08	0.03	54	-1.46	0.27	5.26	2.49	8.7
1.64E-08	0.10	51	-1.14	0.23	2.53	0.81	69.9
1.70E-08	0.13	99	-1.06	0.26	2.38	0.75	81.1
1.72E-08	0.16	91	-1.01	0.30	2.28	0.54	88.8
1.78E-08	0.07	25	-1.24	0.23	2.98	1.19	44.1
1.83E-08	0.00	99	-1.31	0.42	24.85	7.28	0
1.83E-08	0.19	81	-0.97	0.34	2.22	0.47	91.4
1.86E-08	0.17	34	-1.02	0.27	2.35	0.61	86.4
1.88E-08	0.04	20	-1.40	0.25	4.24	1.92	16.3
1.94E-08	0.03	67	-1.52	0.27	6.06	2.76	5
2.00E-08	0.15	2	-1.04	0.25	2.40	0.72	80.2
2.01E-08	0.12	90	-1.11	0.26	2.53	0.80	68
2.06E-08	0.03	66	-1.50	0.28	5.63	2.61	6.3
2.08E-08	0.09	37	-1.20	0.23	2.82	1.04	52.9
2.08E-08	0.04	79	-1.40	0.26	4.41	2.14	13.7
2.10E-08	0.19	92	-0.93	0.31	2.30	0.53	86.8
2.14E-08	0.19	98	-1.02	0.29	2.35	0.64	86.8
2.17E-08	0.13	68	-1.10	0.27	2.61	0.96	68.1
2.18E-08	0.02	96	-1.66	0.26	9.52	4.00	0.6
2.19E-08	0.09	59	-1.20	0.24	2.88	1.11	50.7
2.27E-08	0.05	6	-1.41	0.25	4.43	2.10	17
2.28E-08	0.19	13	-0.96	0.30	2.20	0.46	88.1
2.34E-08	0.19	66	-0.98	0.31	2.32	0.64	84.8
2.37E-08	0.00	88	-1.37	0.41	30.97	8.49	0
2.42E-08	0.11	4	-1.16	0.25	2.78	1.09	56
2.43E-08	0.14	61	-1.07	0.23	2.44	0.73	71.6
2.44E-08	0.16	81	-1.07	0.28	2.52	0.77	79.5
2.44E-08	0.01	63	-1.69	0.29	20.76	6.63	0
2.50E-08	0.01	45	-1.75	0.27	17.15	6.03	0
2.51E-08	0.19	52	-0.98	0.32	2.36	0.68	83.5
2.52E-08	0.13	66	-1.12	0.26	2.65	0.93	64.5
2.59E-08	0.12	74	-1.11	0.27	2.72	1.03	60.2
2.61E-08	0.16	46	-1.05	0.25	2.41	0.73	77.7
2.63E-08	0.08	13	-1.29	0.25	3.54	1.54	31.3
2.64E-08	0.07	27	-1.33	0.26	3.79	1.77	23.5
2.70E-08	0.20	30	-0.95	0.32	2.35	0.66	83
2.71E-08	0.19	16	-0.95	0.34	2.39	0.65	82
2.72E-08	0.18	60	-1.00	0.31	2.39	0.69	78.8
2.73E-08	0.05	32	-1.45	0.26	4.90	2.24	12.7
2.74E-08	0.13	93	-1.12	0.27	2.72	1.04	63.6
2.75E-08	0.19	43	-0.94	0.34	2.43	0.77	81.6
2.77E-08	0.14	48	-1.10	0.27	2.63	0.93	64.1
2.77E-08	0.01	50	-1.79	0.25	16.84	5.91	0.1
2.78E-08	0.16	29	-1.08	0.28	2.63	0.91	73.6
2.80E-08	0.12	23	-1.14	0.23	2.77	1.07	55.7
2.81E-08	0.12	73	-1.12	0.28	2.76	1.07	60.4

2.83E-08	0.18	30	-0.98	0.32	2.42	0.73	79.7
2.87E-08	0.02	96	-1.77	0.24	12.41	4.85	0.1
2.93E-08	0.13	74	-1.09	0.29	2.74	1.01	57.5
3.02E-08	0.19	90	-0.98	0.29	2.37	0.66	78.8
3.03E-08	0.04	15	-1.59	0.25	6.71	3.20	3.5
3.03E-08	0.07	78	-1.31	0.26	3.77	1.80	21.6
3.04E-08	0.07	19	-1.36	0.26	4.05	1.93	19.9
3.11E-08	0.02	14	-1.74	0.25	10.40	4.45	0.7
3.11E-08	0.11	53	-1.17	0.27	3.00	1.26	49.7
3.15E-08	0.01	66	-1.74	0.28	27.55	7.94	0
3.16E-08	0.04	24	-1.60	0.26	6.85	3.17	3.6
3.19E-08	0.13	32	-1.15	0.26	2.90	1.14	52.6
3.29E-08	0.19	55	-1.01	0.29	2.45	0.79	79.8
3.29E-08	0.07	45	-1.38	0.26	4.32	2.01	17.5
3.30E-08	0.13	22	-1.15	0.28	2.97	1.23	54
3.33E-08	0.16	62	-1.06	0.29	2.61	0.96	65.5
3.34E-08	0.13	33	-1.14	0.30	2.89	1.18	54.7
3.40E-08	0.08	81	-1.34	0.27	4.01	1.95	20.4
3.47E-08	0.04	47	-1.64	0.26	7.69	3.58	2
3.54E-08	0.14	18	-1.11	0.27	2.76	1.07	57.6
3.59E-08	0.03	77	-1.71	0.26	9.07	3.99	1.7
3.61E-08	0.08	63	-1.36	0.25	4.16	1.96	17.6
3.64E-08	0.14	40	-1.13	0.28	2.92	1.18	50.4
3.67E-08	0.09	24	-1.31	0.28	3.78	1.79	24.7
3.74E-08	0.09	24	-1.31	0.29	3.90	1.79	22.9
3.80E-08	0.10	31	-1.28	0.28	3.63	1.63	31.5
3.83E-08	0.19	84	-0.95	0.35	2.52	0.83	70.1
3.88E-08	0.16	45	-1.07	0.32	2.71	0.97	63.5
3.89E-08	0.07	71	-1.39	0.28	4.54	2.12	15.3
3.97E-08	0.12	59	-1.18	0.26	3.09	1.29	42.4
3.98E-08	0.11	14	-1.22	0.27	3.37	1.52	32.7
4.00E-08	0.01	65	-1.85	0.25	31.47	8.79	0
4.01E-08	0.18	81	-1.03	0.32	2.62	0.90	67.2
4.07E-08	0.00	33	-1.73	0.28	40.54	10.68	0
4.10E-08	0.18	67	-1.04	0.33	2.58	0.84	66.2
4.17E-08	0.06	43	-1.49	0.28	5.52	2.77	9.5
4.18E-08	0.01	58	-1.91	0.22	22.10	7.37	0
4.22E-08	0.07	87	-1.45	0.27	5.07	2.60	10.6
4.23E-08	0.06	3	-1.53	0.27	5.83	2.75	6
4.23E-08	0.07	83	-1.46	0.27	5.12	2.46	10.4
4.31E-08	0.09	49	-1.32	0.27	4.04	2.05	20.6
4.31E-08	0.12	19	-1.20	0.27	3.32	1.40	36.3
4.41E-08	0.15	4	-1.12	0.29	3.00	1.25	51.3
4.42E-08	0.17	47	-1.07	0.31	2.80	1.09	58.8
4.43E-08	0.05	28	-1.63	0.27	7.39	3.56	2.5
4.45E-08	0.01	67	-1.84	0.26	37.08	10.22	0
4.51E-08	0.12	30	-1.23	0.28	3.52	1.58	34
4.52E-08	0.01	67	-1.90	0.24	31.81	9.51	0
4.53E-08	0.07	27	-1.47	0.28	5.34	2.59	7.8
4.53E-08	0.05	7	-1.64	0.28	7.63	3.51	2.8
4.58E-08	0.08	11	-1.39	0.26	4.57	2.19	13.1
4.60E-08	0.02	76	-1.94	0.21	22.12	7.43	0

4.65E-08	0.09	88	-1.38	0.27	4.43	2.15	15.6
4.70E-08	0.17	77	-1.06	0.32	2.92	1.25	56
4.74E-08	0.15	44	-1.10	0.31	3.01	1.36	49
4.77E-08	0.14	52	-1.14	0.33	3.19	1.46	42.1
4.78E-08	0.15	82	-1.12	0.31	3.08	1.28	45.5
4.79E-08	0.18	48	-1.05	0.30	2.71	0.99	60.5
4.81E-08	0.15	61	-1.12	0.31	3.07	1.32	44.4
4.94E-08	0.06	49	-1.61	0.27	7.05	3.42	2.4
4.95E-08	0.13	84	-1.21	0.26	3.46	1.48	34.5
4.96E-08	0.12	73	-1.23	0.29	3.63	1.66	29.9
4.97E-08	0.11	29	-1.28	0.31	3.91	1.90	26.2
5.01E-08	0.01	31	-1.97	0.21	28.86	8.91	0
5.11E-08	0.17	63	-1.07	0.33	2.92	1.15	49.4
5.14E-08	0.16	86	-1.10	0.30	3.01	1.23	49.4
5.16E-08	0.09	20	-1.38	0.29	4.65	2.23	12.2
5.18E-08	0.16	41	-1.09	0.30	3.02	1.19	50.1
5.19E-08	0.06	41	-1.60	0.28	6.86	3.36	4.8
5.28E-08	0.04	71	-1.78	0.25	10.46	4.49	0.6
5.28E-08	0.06	46	-1.57	0.28	6.61	3.21	4.1
5.32E-08	0.01	60	-1.95	0.23	36.12	10.16	0
5.34E-08	0.20	42	-0.99	0.34	2.66	0.95	60.1
5.37E-08	0.11	82	-1.32	0.28	4.16	1.95	22.4
5.38E-08	0.12	96	-1.26	0.29	3.82	1.73	22.7
5.38E-08	0.14	26	-1.17	0.31	3.34	1.45	36.5
5.42E-08	0.01	87	-1.90	0.24	40.92	10.81	0
5.45E-08	0.12	11	-1.24	0.28	3.68	1.62	26.4
5.48E-08	0.11	20	-1.30	0.30	4.13	1.95	18.7
5.56E-08	0.10	53	-1.33	0.29	4.37	2.12	18
5.57E-08	0.13	51	-1.23	0.30	3.67	1.83	27.5
5.57E-08	0.18	80	-1.08	0.31	3.08	1.26	50.6
5.58E-08	0.19	78	-1.02	0.35	2.83	1.08	58.5
5.61E-08	0.06	29	-1.67	0.26	8.05	3.73	2.3
5.61E-08	0.11	61	-1.31	0.29	4.12	1.92	23.2
5.64E-08	0.20	54	-1.00	0.32	2.84	1.11	58.6
5.64E-08	0.19	14	-1.03	0.35	2.92	1.15	55.1
5.67E-08	0.18	63	-1.04	0.32	2.88	1.18	56
5.69E-08	0.10	95	-1.39	0.30	4.83	2.40	14.4
5.77E-08	0.04	73	-1.87	0.22	13.03	5.21	0.1
5.81E-08	0.15	22	-1.16	0.31	3.38	1.53	37.4
5.83E-08	0.13	78	-1.21	0.29	3.55	1.65	29.4
5.83E-08	0.05	9	-1.72	0.26	9.01	4.18	1.4
5.89E-08	0.03	55	-1.98	0.21	19.13	6.97	0
5.97E-08	0.15	64	-1.14	0.32	3.37	1.49	36.8
5.98E-08	0.04	11	-1.83	0.25	11.91	4.96	0.4
6.04E-08	0.15	32	-1.16	0.29	3.32	1.42	35.1
6.04E-08	0.05	38	-1.79	0.26	10.77	4.82	0.9
6.05E-08	0.17	29	-1.11	0.30	3.13	1.26	42.4
6.08E-08	0.08	58	-1.51	0.29	6.10	3.02	6.6
6.09E-08	0.08	40	-1.51	0.29	6.07	2.96	6.1
6.10E-08	0.04	95	-1.86	0.24	12.67	5.25	0.1
6.17E-08	0.09	70	-1.41	0.31	5.19	2.54	11.3
6.18E-08	0.00	23	-1.76	0.28	61.18	15.79	0

6.20E-08	0.00	10	-1.47	0.37	78.73	18.20	0
6.25E-08	0.04	61	-1.85	0.24	11.91	5.03	0.6
6.26E-08	0.01	3	-1.91	0.24	49.66	12.79	0
6.28E-08	0.09	42	-1.43	0.29	5.27	2.55	7.9
6.29E-08	0.06	28	-1.66	0.27	8.06	3.73	2.9
6.29E-08	0.12	38	-1.30	0.30	4.26	2.04	17.7
6.30E-08	0.03	39	-1.97	0.21	18.09	6.83	0.1
6.33E-08	0.12	8	-1.30	0.30	4.22	2.04	18.2
6.35E-08	0.18	63	-1.07	0.33	3.12	1.31	45.9
6.38E-08	0.09	37	-1.43	0.30	5.28	2.70	7.9
6.39E-08	0.14	87	-1.21	0.30	3.74	1.72	25.8
6.44E-08	0.06	87	-1.68	0.26	8.29	3.84	1.4
6.51E-08	0.18	9	-1.02	0.37	3.01	1.20	45.9
6.52E-08	0.06	46	-1.73	0.28	9.52	4.55	1.5
6.55E-08	0.02	90	-2.03	0.19	27.29	8.98	0
6.60E-08	0.11	38	-1.37	0.31	4.79	2.43	14
6.63E-08	0.10	94	-1.38	0.31	4.86	2.45	11.8
6.63E-08	0.17	48	-1.12	0.31	3.19	1.34	38.4
6.66E-08	0.16	91	-1.14	0.32	3.48	1.57	33.5
6.70E-08	0.11	22	-1.35	0.31	4.71	2.35	13.9
6.78E-08	0.14	17	-1.21	0.32	3.75	1.68	26.2
6.78E-08	0.17	39	-1.10	0.37	3.27	1.42	40.7
6.84E-08	0.01	27	-1.95	0.24	54.12	13.78	0
6.84E-08	0.13	92	-1.29	0.31	4.21	2.01	20.4
6.88E-08	0.16	37	-1.12	0.33	3.39	1.53	33.1
6.89E-08	0.05	52	-1.84	0.24	12.02	5.18	0.2
6.90E-08	0.11	83	-1.36	0.31	4.79	2.36	13.4
6.90E-08	0.04	30	-1.91	0.24	14.60	5.86	0.2
7.10E-08	0.01	9	-2.04	0.20	38.60	11.53	0
7.16E-08	0.12	33	-1.32	0.31	4.46	2.13	16.5
7.19E-08	0.11	12	-1.38	0.29	4.99	2.47	11.6
7.21E-08	0.10	75	-1.44	0.31	5.47	2.79	9.5
7.25E-08	0.10	67	-1.43	0.30	5.43	2.55	9.8
7.27E-08	0.12	22	-1.35	0.29	4.75	2.19	13
7.32E-08	0.15	77	-1.20	0.32	3.73	1.82	26.4
7.39E-08	0.07	6	-1.68	0.28	8.59	4.08	2.1
7.41E-08	0.05	80	-1.80	0.25	10.93	4.87	0.3
7.48E-08	0.01	62	-2.04	0.20	42.51	12.24	0
7.53E-08	0.04	85	-1.98	0.21	17.44	6.94	0
7.58E-08	0.11	18	-1.41	0.31	5.28	2.70	10.7
7.64E-08	0.14	65	-1.24	0.33	4.09	2.01	21.7
7.64E-08	0.20	81	-1.04	0.35	3.11	1.29	43.4
7.65E-08	0.10	41	-1.44	0.29	5.50	2.62	8.3
7.67E-08	0.04	34	-1.98	0.21	17.65	6.70	0.1
7.70E-08	0.10	4	-1.43	0.31	5.47	2.66	8.6
7.70E-08	0.12	48	-1.35	0.29	4.81	2.35	15.4
7.72E-08	0.11	87	-1.41	0.31	5.42	2.70	8.8
7.75E-08	0.10	9	-1.43	0.32	5.55	2.73	9.1
7.75E-08	0.20	69	-1.05	0.33	3.12	1.29	44.8
7.78E-08	0.16	62	-1.18	0.35	3.75	1.69	27.6
7.82E-08	0.07	67	-1.71	0.27	9.20	4.19	1.8
7.94E-08	0.14	54	-1.23	0.33	4.05	1.96	22.7

7.97E-08	0.05	8	-1.86	0.23	12.50	5.35	0.4
7.98E-08	0.17	61	-1.11	0.35	3.48	1.60	31.1
7.99E-08	0.02	60	-2.09	0.18	38.34	11.27	0
8.02E-08	0.03	35	-2.04	0.18	21.93	8.00	0.1
8.03E-08	0.08	31	-1.64	0.28	7.85	3.88	2.3
8.13E-08	0.06	34	-1.76	0.26	10.16	4.64	1
8.14E-08	0.08	58	-1.60	0.28	7.36	3.52	3
8.27E-08	0.04	10	-1.93	0.23	15.22	6.20	0
8.32E-08	0.07	32	-1.73	0.25	9.66	4.41	1
8.32E-08	0.20	7	-1.06	0.36	3.34	1.51	40.8
8.34E-08	0.04	20	-1.96	0.21	16.27	6.31	0
8.36E-08	0.11	73	-1.46	0.30	5.86	2.88	7.4
8.38E-08	0.02	68	-2.09	0.19	29.35	9.70	0
8.44E-08	0.17	94	-1.12	0.37	3.55	1.74	31.5
8.49E-08	0.01	82	-2.01	0.22	59.35	15.85	0
8.51E-08	0.04	81	-2.00	0.20	18.04	6.68	0
8.52E-08	0.10	39	-1.48	0.30	6.03	3.05	6.3
8.54E-08	0.07	95	-1.74	0.27	9.98	4.71	1.2
8.60E-08	0.15	16	-1.20	0.34	4.10	2.01	20.2
8.70E-08	0.16	29	-1.20	0.33	3.85	1.84	25.4
8.70E-08	0.06	80	-1.81	0.26	11.14	4.82	0.9
8.78E-08	0.02	70	-2.10	0.18	29.64	9.70	0
8.78E-08	0.05	26	-1.91	0.23	14.48	5.88	0.1
8.83E-08	0.01	60	-2.10	0.19	47.20	13.15	0
8.85E-08	0.00	87	-1.91	0.24	76.38	18.27	0
8.87E-08	0.10	9	-1.47	0.31	6.02	2.96	5.5
8.90E-08	0.06	5	-1.86	0.25	12.60	5.35	0.4
8.97E-08	0.16	63	-1.20	0.35	4.08	1.96	21.6
8.99E-08	0.02	77	-2.10	0.18	29.65	9.61	0
1.01E-09	0.16	90	-1.15	NA	2.00	NA	99.9
1.01E-09	0.03	96	-1.09	0.16	2.05	0.21	95.7
1.04E-09	0.11	50	-0.63	NA	2.00	NA	99.9
1.04E-09	0.11	89	-1.15	NA	2.00	NA	99.9
1.07E-09	0.06	82	-1.05	0.17	2.00	0.00	98.8
1.17E-09	0.01	7	-0.98	0.30	2.45	0.77	74.6
1.21E-09	0.13	61	-1.07	NA	2.00	NA	99.9
1.25E-09	0.09	49	-1.03	0.30	2.17	0.39	98.8
1.31E-09	0.04	61	-1.12	0.14	2.13	0.34	96.8
1.41E-09	0.01	87	-1.01	0.28	2.39	0.61	79.6
1.52E-09	0.12	65	-1.00	0.07	2.00	0.00	99.7
1.52E-09	0.19	79	-1.15	0.00	2.00	0.00	99.8
1.62E-09	0.01	11	-1.06	0.30	2.47	0.76	72
1.63E-09	0.09	87	-1.15	0.08	2.00	0.00	99.7
1.68E-09	0.13	44	-0.84	0.33	2.00	0.00	99.3
1.76E-09	0.04	9	-1.11	0.21	2.22	0.50	94.5
1.81E-09	0.08	91	-1.09	0.14	2.00	0.00	98.7
1.86E-09	0.03	24	-1.09	0.21	2.29	0.60	85.6
1.89E-09	0.03	37	-1.11	0.20	2.27	0.54	91.4
1.89E-09	0.02	56	-1.09	0.22	2.35	0.63	78.8
1.89E-09	0.05	78	-1.12	0.21	2.13	0.40	96
1.90E-09	0.11	82	-0.92	0.24	2.00	0.00	98.7
1.93E-09	0.02	89	-1.09	0.21	2.33	0.57	78.9

1.95E-09	0.11	1	-1.01	0.22	2.09	0.30	98.9
1.97E-09	0.12	62	-1.34	0.12	3.00	0.00	99.8
1.97E-09	0.04	94	-1.12	0.17	2.21	0.44	90.9
2.00E-09	0.02	57	-1.09	0.24	2.25	0.54	81.9
2.05E-09	0.02	26	-1.11	0.20	2.29	0.64	79.8
2.11E-09	0.02	94	-1.09	0.23	2.32	0.56	81.3
2.16E-09	0.01	73	-0.99	0.36	3.05	1.33	42.7
2.19E-09	0.01	44	-1.03	0.32	2.70	0.94	57.7
2.21E-09	0.04	23	-1.10	0.23	2.21	0.55	92.4
2.21E-09	0.01	29	-1.09	0.28	2.61	0.82	59.9
2.24E-09	0.09	76	-1.05	0.17	2.00	0.00	98
2.27E-09	0.04	77	-1.13	0.18	2.19	0.43	88.3
2.28E-09	0.00	86	-0.46	0.70	4.60	2.07	9.5
2.29E-09	0.02	54	-1.09	0.19	2.29	0.51	81.3
2.32E-09	0.04	70	-1.11	0.19	2.24	0.51	91.7
2.33E-09	0.12	38	-1.07	0.12	2.00	0.00	99.4
2.41E-09	0.13	52	-1.10	0.21	2.22	0.67	99.1
2.47E-09	0.16	68	-1.05	0.16	2.00	0.00	99.6
2.50E-09	0.18	59	-0.82	0.05	2.00	0.00	99.8
2.50E-09	0.01	23	-1.05	0.33	2.98	1.19	42.3
2.52E-09	0.12	39	-1.07	0.21	2.00	0.00	98.9
2.56E-09	0.13	15	-1.00	0.10	2.00	0.00	99.8
2.62E-09	0.10	78	-1.03	0.25	2.07	0.27	98.6
2.65E-09	0.07	8	-1.09	0.22	2.24	0.50	96.7
2.69E-09	0.11	79	-1.05	0.14	2.00	0.00	98.4
2.78E-09	0.19	46	-0.93	0.41	2.00	0.00	99.8
2.79E-09	0.05	50	-1.15	0.17	2.30	0.55	89.5
2.80E-09	0.14	73	-1.10	0.15	2.13	0.35	99.2
2.81E-09	0.16	20	-0.73	0.43	2.00	0.00	99.7
2.87E-09	0.18	36	-1.15	0.11	2.00	0.00	99.6
2.93E-09	0.18	32	-0.89	0.21	2.00	0.00	99.4
2.93E-09	0.14	67	-1.05	0.19	2.00	0.00	98.7
2.95E-09	0.05	97	-1.08	0.22	2.13	0.37	91.5
2.95E-09	0.03	83	-1.12	0.20	2.33	0.67	79.2
3.06E-09	0.06	66	-1.10	0.18	2.19	0.49	94.8
3.09E-09	0.14	81	-0.99	0.14	2.25	0.46	99.2
3.11E-09	0.20	99	-0.93	0.07	2.00	0.00	99.7
3.12E-09	0.16	66	-0.89	0.26	2.00	0.00	99.6
3.24E-09	0.12	96	-1.01	0.18	2.13	0.34	98.4
3.29E-09	0.15	12	-0.96	0.28	2.00	0.00	99.6
3.32E-09	0.06	4	-1.12	0.17	2.20	0.50	90.5
3.34E-09	0.13	16	-0.97	0.23	2.00	0.00	98.9
3.36E-09	0.09	85	-1.11	0.17	2.21	0.41	96.6
3.41E-09	0.14	29	-0.93	0.24	2.08	0.28	98.7
3.45E-09	0.12	51	-1.04	0.19	2.00	0.00	97.4
3.46E-09	0.07	37	-1.07	0.19	2.13	0.33	94.4
3.47E-09	0.04	87	-1.15	0.17	2.29	0.58	77.6
3.48E-09	0.18	35	-1.15	0.11	2.00	0.00	99.8
3.54E-09	0.20	50	-0.85	0.42	2.00	0.00	99.3
3.55E-09	0.19	20	-1.15	0.16	2.22	0.44	99.1
3.56E-09	0.15	57	-0.96	0.27	2.18	0.60	98.9
3.60E-09	0.01	50	-1.11	0.32	3.45	1.46	27.2

3.64E-09	0.09	90	-1.11	0.16	2.06	0.24	96.7
3.68E-09	0.19	26	-0.96	0.22	2.13	0.35	99.2
3.72E-09	0.12	96	-0.96	0.39	2.00	0.00	98.9
3.74E-09	0.04	29	-1.13	0.18	2.32	0.58	81.4
3.84E-09	0.16	28	-0.94	0.35	2.11	0.33	99.1
3.86E-09	0.11	65	-1.06	0.22	2.04	0.20	97.6
3.86E-09	0.14	45	-1.02	0.23	2.09	0.30	98.9
3.87E-09	0.15	1	-1.00	0.30	2.00	0.00	98.2
3.89E-09	0.03	76	-1.15	0.19	2.44	0.74	72.1
3.89E-09	0.05	20	-1.15	0.20	2.37	0.59	86.3
3.91E-09	0.05	6	-1.16	0.17	2.39	0.64	83.7
3.98E-09	0.12	68	-1.02	0.26	2.11	0.32	98.2
4.03E-09	0.11	10	-1.09	0.20	2.16	0.37	96.9
4.05E-09	0.08	59	-1.07	0.19	2.08	0.27	93.8
4.13E-09	0.05	85	-1.13	0.20	2.28	0.57	86.7
4.15E-09	0.07	56	-1.13	0.16	2.23	0.49	90
4.18E-09	0.02	75	-1.16	0.26	3.11	1.25	37.9
4.21E-09	0.09	90	-1.06	0.20	2.14	0.39	93.6
4.21E-09	0.06	21	-1.09	0.18	2.18	0.44	90
4.21E-09	0.14	11	-0.95	0.27	2.06	0.24	98.2
4.22E-09	0.08	55	-1.10	0.22	2.17	0.42	93
4.22E-09	0.00	2	-0.69	0.57	7.52	2.97	1.1
4.23E-09	0.13	99	-1.08	0.11	2.19	0.40	97.9
4.24E-09	0.16	25	-1.02	0.25	2.00	0.00	98.6
4.24E-09	0.10	69	-1.08	0.17	2.17	0.45	96.5
4.30E-09	0.02	87	-1.18	0.24	2.78	1.01	55.2
4.31E-09	0.10	67	-1.06	0.15	2.05	0.23	96.3
4.35E-09	0.18	33	-0.92	0.36	2.40	0.55	99.5
4.40E-09	0.19	72	-0.82	0.33	2.08	0.29	98.8
4.44E-09	0.08	70	-1.10	0.19	2.20	0.45	94.6
4.45E-09	0.02	9	-1.18	0.26	3.01	1.18	39.8
4.46E-09	0.18	23	-0.94	0.23	2.08	0.29	98.8
4.46E-09	0.01	35	-1.17	0.32	3.90	1.70	19.1
4.62E-09	0.16	15	-0.97	0.25	2.07	0.26	98.5
4.62E-09	0.15	97	-0.96	0.30	2.07	0.26	98.5
4.65E-09	0.03	33	-1.16	0.22	2.73	1.00	52.9
4.66E-09	0.13	82	-1.07	0.21	2.13	0.34	96.9
4.71E-09	0.08	82	-1.12	0.20	2.26	0.54	91.4
4.76E-09	0.18	26	-0.91	0.37	2.00	0.00	98.6
4.79E-09	0.19	1	-0.91	0.35	2.13	0.35	99.2
4.81E-09	0.05	9	-1.16	0.17	2.38	0.67	74.5
4.82E-09	0.00	61	-0.87	0.55	7.52	3.23	1.1
4.91E-09	0.01	56	-1.20	0.31	3.65	1.65	24.4
4.93E-09	0.01	98	-1.17	0.39	5.51	2.45	5.8
4.94E-09	0.20	97	-0.99	0.31	2.13	0.35	99.2
5.00E-09	0.04	2	-1.15	0.21	2.41	0.76	72.2
5.07E-09	0.07	9	-1.10	0.25	2.24	0.43	89.9
5.11E-09	0.13	68	-1.09	0.19	2.12	0.41	96.6
5.12E-09	0.15	76	-0.94	0.23	2.08	0.28	98.7
5.18E-09	0.01	45	-1.20	0.30	3.78	1.75	18.7
5.23E-09	0.09	18	-1.07	0.19	2.16	0.37	92.5
5.29E-09	0.10	95	-1.04	0.20	2.10	0.37	95.1

5.32E-09	0.08	25	-1.11	0.21	2.23	0.54	92.7
5.34E-09	0.09	34	-1.09	0.19	2.17	0.41	92.4
5.38E-09	0.16	38	-0.98	0.20	2.00	0.00	99.1
5.41E-09	0.19	14	-0.80	0.30	2.00	0.00	99.1
5.48E-09	0.01	90	-1.25	0.29	4.15	1.93	16.3
5.49E-09	0.02	51	-1.23	0.27	3.56	1.55	24.3
5.50E-09	0.06	64	-1.17	0.17	2.37	0.69	83.9
5.62E-09	0.04	63	-1.18	0.21	2.61	0.90	63.8
5.69E-09	0.12	88	-1.01	0.30	2.26	0.54	95.8
5.71E-09	0.08	65	-1.10	0.20	2.16	0.39	90.5
5.75E-09	0.02	38	-1.24	0.25	3.42	1.47	30.5
5.77E-09	0.15	39	-0.98	0.28	2.05	0.22	97.9
5.90E-09	0.16	82	-1.01	0.27	2.17	0.51	98.2
5.94E-09	0.13	32	-1.00	0.26	2.17	0.45	96.5
5.95E-09	0.18	78	-0.88	0.56	2.07	0.26	98.5
6.00E-09	0.09	85	-1.10	0.20	2.17	0.43	90.2
6.01E-09	0.02	64	-1.22	0.25	3.25	1.33	34
6.07E-09	0.15	98	-0.98	0.22	2.09	0.29	96.6
6.09E-09	0.05	75	-1.16	0.19	2.42	0.74	76.8
6.10E-09	0.08	73	-1.12	0.24	2.34	0.60	88.1
6.11E-09	0.12	41	-1.00	0.26	2.17	0.38	94.8
6.14E-09	0.13	4	-0.99	0.27	2.09	0.29	96.6
6.17E-09	0.04	86	-1.19	0.23	2.62	0.92	62.7
6.18E-09	0.16	10	-1.01	0.27	2.09	0.29	97.8
6.19E-09	0.01	44	-1.25	0.29	4.22	1.89	13.3
6.20E-09	0.13	16	-1.10	0.16	2.15	0.36	95.9
6.20E-09	0.07	19	-1.11	0.21	2.21	0.50	86.2
6.33E-09	0.06	36	-1.16	0.19	2.41	0.77	82.5
6.35E-09	0.10	91	-1.09	0.18	2.14	0.38	90.6
6.35E-09	0.17	93	-0.85	0.34	2.10	0.30	96.9
6.39E-09	0.11	97	-1.09	0.20	2.15	0.40	94
6.40E-09	0.05	14	-1.17	0.20	2.54	0.80	68.9
6.42E-09	0.19	89	-0.84	0.30	2.00	0.00	99
6.47E-09	0.06	82	-1.16	0.18	2.45	0.76	79.6
6.52E-09	0.00	71	-1.21	0.40	7.28	3.06	2.5
6.60E-09	0.03	24	-1.24	0.24	3.25	1.36	37
6.61E-09	0.16	80	-1.08	0.20	2.19	0.49	97.4
6.65E-09	0.09	70	-1.12	0.21	2.29	0.68	88.7
6.75E-09	0.03	30	-1.23	0.23	3.05	1.22	40.6
6.76E-09	0.18	95	-0.90	0.28	2.04	0.20	97.6
6.80E-09	0.04	53	-1.22	0.22	2.82	1.03	52.1
6.81E-09	0.14	10	-0.93	0.32	2.05	0.22	96.1
6.82E-09	0.03	33	-1.23	0.25	3.22	1.42	35.9
6.84E-09	0.02	46	-1.26	0.26	3.51	1.56	29.3
6.88E-09	0.14	58	-1.01	0.25	2.07	0.26	94.6
6.99E-09	0.11	9	-1.05	0.24	2.23	0.45	92.6
7.01E-09	0.07	31	-1.16	0.18	2.42	0.64	78.7
7.06E-09	0.19	25	-1.03	0.24	2.08	0.28	98.7
7.08E-09	0.04	42	-1.21	0.21	2.77	1.07	59.5
7.10E-09	0.11	82	-1.09	0.23	2.22	0.45	92.8
7.11E-09	0.05	57	-1.19	0.20	2.62	0.91	67.6
7.12E-09	0.10	32	-1.09	0.21	2.20	0.42	89.3

7.13E-09	0.15	87	-0.96	0.23	2.14	0.35	95.6
7.18E-09	0.15	87	-0.99	0.16	2.15	0.36	96.7
7.19E-09	0.19	90	-0.77	0.45	2.08	0.28	97.6
7.21E-09	0.14	79	-1.05	0.23	2.16	0.42	94.9
7.27E-09	0.00	77	-1.02	0.53	10.99	3.96	0.2
7.30E-09	0.11	12	-1.04	0.22	2.17	0.38	92.4
7.37E-09	0.07	70	-1.15	0.20	2.44	0.68	80
7.38E-09	0.18	10	-0.92	0.37	2.24	0.56	98.3
7.38E-09	0.08	69	-1.11	0.21	2.31	0.61	83.4
7.38E-09	0.07	67	-1.15	0.21	2.46	0.69	83.3
7.42E-09	0.18	15	-0.99	0.23	2.14	0.35	97.8
7.51E-09	0.14	66	-1.03	0.21	2.13	0.40	95.3
7.51E-09	0.03	99	-1.25	0.25	3.35	1.46	32.4
7.54E-09	0.08	13	-1.16	0.20	2.47	0.79	81.9
7.65E-09	0.08	47	-1.11	0.20	2.30	0.51	83.9
7.65E-09	0.03	18	-1.22	0.25	2.99	1.19	43.7
7.66E-09	0.03	8	-1.27	0.25	3.42	1.57	32.4
7.68E-09	0.01	72	-1.33	0.31	5.85	2.56	5.1
7.69E-09	0.08	30	-1.14	0.21	2.39	0.64	82.1
7.69E-09	0.19	90	-0.99	0.21	2.00	0.00	97.7
7.72E-09	0.16	75	-0.94	0.29	2.08	0.28	96.3
7.75E-09	0.01	47	-1.31	0.35	7.82	3.34	0.9
7.81E-09	0.09	44	-1.12	0.19	2.27	0.55	86.8
7.87E-09	0.11	7	-1.06	0.21	2.23	0.51	89.3
7.93E-09	0.20	50	-0.99	0.32	2.17	0.38	97.6
8.00E-09	0.01	81	-1.34	0.34	6.96	2.99	2.8
8.01E-09	0.19	25	-0.90	0.39	2.21	0.42	98.1
8.07E-09	0.11	65	-1.08	0.20	2.17	0.44	89.1
8.14E-09	0.13	76	-1.02	0.25	2.14	0.35	94.3
8.17E-09	0.08	23	-1.14	0.22	2.43	0.73	78.5
8.18E-09	0.05	67	-1.20	0.21	2.64	0.89	61.3
8.24E-09	0.02	74	-1.28	0.25	3.58	1.64	25.3
8.27E-09	0.09	54	-1.14	0.16	2.33	0.61	85.1
8.31E-09	0.08	64	-1.12	0.25	2.42	0.80	82.8
8.31E-09	0.19	49	-0.90	0.30	2.04	0.20	97.4
8.35E-09	0.19	37	-0.84	0.40	2.07	0.26	97.2
8.41E-09	0.18	52	-0.98	0.26	2.07	0.26	97.2
8.42E-09	0.17	75	-0.97	0.28	2.14	0.35	97.1
8.43E-09	0.17	50	-0.97	0.27	2.14	0.36	96.5
8.43E-09	0.20	54	-0.92	0.25	2.10	0.30	96.9
8.45E-09	0.07	25	-1.14	0.20	2.49	0.82	74.4
8.45E-09	0.19	93	-1.00	0.26	2.06	0.25	96.9
8.46E-09	0.13	44	-1.06	0.23	2.16	0.42	94.4
8.48E-09	0.07	80	-1.14	0.21	2.40	0.72	78.3
8.51E-09	0.05	17	-1.19	0.19	2.61	0.83	64.3
8.55E-09	0.18	45	-0.89	0.38	2.13	0.34	97.7
8.60E-09	0.15	82	-1.04	0.23	2.16	0.37	95
8.61E-09	0.11	73	-1.09	0.23	2.29	0.56	89
8.63E-09	0.16	48	-0.91	0.33	2.02	0.15	95.5
8.64E-09	0.06	10	-1.20	0.21	2.64	0.89	66.2
8.74E-09	0.01	46	-1.36	0.34	6.85	2.96	2.1
8.79E-09	0.00	3	-0.96	0.48	13.71	4.39	0.1

8.88E-09	0.03	34	-1.29	0.24	3.49	1.51	30.1
8.88E-09	0.04	24	-1.26	0.22	3.07	1.25	41.8
8.91E-09	0.12	80	-1.05	0.26	2.28	0.66	91.4
8.92E-09	0.14	43	-1.01	0.28	2.30	0.60	94.3
8.93E-09	0.11	5	-1.08	0.20	2.24	0.48	87.4
8.98E-09	0.03	35	-1.27	0.24	3.35	1.37	32.7
8.98E-09	0.12	71	-0.99	0.28	2.16	0.39	90.5
8.99E-09	0.06	15	-1.17	0.20	2.50	0.78	70.2
2.87E-09	0.17	51	NA	NA	NA	NA	100
4.71E-09	0.11	51	NA	NA	NA	NA	100
8.13E-09	0.09	55	NA	NA	NA	NA	100
2.26E-09	0.05	87	NA	NA	NA	NA	100
2.35E-09	0.16	46	NA	NA	NA	NA	100
1.28E-09	0.17	95	NA	NA	NA	NA	100
3.20E-09	0.16	31	NA	NA	NA	NA	100
3.32E-09	0.07	43	NA	NA	NA	NA	100
7.12E-09	0.05	13	NA	NA	NA	NA	100
8.34E-09	0.11	88	NA	NA	NA	NA	100
2.45E-09	0.19	51	NA	NA	NA	NA	100

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93 *NA = Could NOT be estimated. Total of simulations were invariable genomes.