

## LSNReviews

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**From:** Brittain Hill [bhill@cnwra.swri.edu]  
**Sent:** Wednesday, March 30, 2005 6:36 PM  
**To:** Donald Hooper; Razvan Nes; Roland Benke; Brandi Winfrey  
**Subject:** TEPHRA.LUT  
**Attachments:** 033005\_REVISIED\_TEPHRA\_LUT.csv

Razvan discovered that I made a stupid mistake when I was creating the TEPHRA.LUT for TPA code. Instead of pasting the TEPHRA output values into the `m_ash_f` column (mass of ash, fluvial), I pasted the formula for unit conversion. Thus, the value for `m_ash_f` was incorrect and gave a multiple of the mass of HLW.

I've corrected this and revised the TEPHRA.LUT, which is in `s:\bhill\` and attached. The value for `m_ash_f` now accurately reflects the mass of ash in the fluvial basin, and gives a tephra/HLW ratio of about  $10^6:1$  (very reasonable).

Please accept my sincere apologies for such a stupid mistake, and let me know if there is anything I can do to help you overcome any impacts on your work that my error has created.

Britt

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30 Mar 2005 16:33:18 -0600 (CST)

Date: Wed, 30 Mar 2005 16:35:44 -0600

From: Brittain Hill <bhill@cnwra.swri.edu>

Subject: TEPHRA.LUT

To: Donald Hooper <dhooper@cnwra.swri.edu>, Razvan Nes <rnes@cnwra.swri.edu>,

Roland Benke <rbenke@cnwra.swri.edu>, Brandi Winfrey <bwinfrey@cnwra.swri.edu>

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c_HLW_I	C_ash_I	m_HLW_f	m_ash_f	area_f	m_HLW_e	m_ash_e	area_e
g/m2	g/m2	g	g	m2	g	g	m2
1.87E-04	7.06E+00	3.19E+07	1.20E+12	5.80E+07	9.88E+05	3.73E+10	4.60E+07
1.66E-32	6.54E-26	1.32E+07	5.16E+13	1.56E+08	0.00E+00	0.00E+00	0.00E+00
2.17E-11	1.29E-04	1.56E+07	9.18E+13	1.95E+08	5.95E+04	3.51E+11	7.00E+07
8.08E-16	8.03E-10	2.81E+07	2.78E+13	2.34E+08	1.19E+05	1.18E+11	6.60E+07
6.93E-05	3.73E+02	7.61E+06	4.10E+13	9.10E+07	2.09E+06	1.13E+13	8.38E+08
4.43E-09	7.59E-03	2.24E+07	3.82E+13	1.09E+08	4.14E+04	7.05E+10	3.90E+07
4.20E-37	2.60E-31	4.59E+07	2.82E+13	1.57E+08	0.00E+00	0.00E+00	0.00E+00
5.07E-06	1.23E+01	1.41E+07	3.43E+13	2.01E+08	1.88E+06	4.56E+12	3.44E+08
6.46E-07	1.98E-02	5.56E+07	1.70E+12	7.50E+07	0.00E+00	0.00E+00	0.00E+00
4.54E-12	1.30E-05	6.44E+06	1.83E+13	2.43E+08	9.87E+05	2.80E+12	9.00E+07
4.12E-18	3.45E-12	3.31E+07	2.76E+13	2.03E+08	2.33E+05	1.94E+11	7.10E+07
2.27E-05	1.57E+00	4.14E+07	2.86E+12	5.90E+07	4.09E+06	2.83E+11	5.00E+07
9.34E-08	6.07E-02	1.39E+07	8.99E+12	6.30E+07	1.93E+06	1.25E+12	1.35E+08
1.84E-06	8.22E-01	5.16E+07	2.30E+13	3.08E+08	4.64E+05	2.07E+11	1.80E+08
8.28E-07	9.51E-01	5.74E+07	6.57E+13	2.15E+08	1.66E+07	1.90E+13	4.29E+08
1.49E-09	4.75E-04	4.66E+07	1.48E+13	2.04E+08	9.97E+05	3.16E+11	1.39E+08
5.08E-10	3.61E-04	1.19E+07	8.44E+12	2.59E+08	1.57E+06	1.11E+12	1.01E+08
5.20E-06	2.69E+01	9.02E+06	4.67E+13	3.08E+08	4.55E+05	2.36E+12	3.29E+08
1.10E-24	4.18E-19	8.52E+06	3.22E+12	7.80E+07	0.00E+00	0.00E+00	0.00E+00
3.03E-07	3.44E-01	2.52E+06	2.87E+12	1.40E+07	1.83E+07	2.07E+13	2.80E+08
2.89E-06	3.70E+00	7.54E+06	9.64E+12	7.10E+07	5.26E+06	6.72E+12	3.15E+08
8.51E-06	2.34E+00	2.23E+07	6.12E+12	2.50E+07	3.94E+07	1.08E+13	2.76E+08
2.04E-11	3.01E-05	6.24E+07	9.17E+13	2.49E+08	2.98E+04	4.37E+10	3.60E+07
1.18E-24	2.09E-18	9.27E+06	1.63E+13	1.66E+08	2.69E+02	4.73E+08	2.00E+06
1.05E-11	8.58E-06	1.65E+07	1.34E+13	1.51E+08	8.27E+03	6.74E+09	2.20E+07
5.36E-11	7.60E-06	4.78E+07	6.76E+12	1.47E+08	2.06E+07	2.92E+12	1.99E+08
3.42E-06	2.77E-01	1.69E+07	1.37E+12	1.11E+08	2.72E+06	2.19E+11	6.40E+07
1.23E-10	5.45E-04	1.50E+07	6.60E+13	1.28E+08	1.55E+06	6.80E+12	1.86E+08
2.55E-02	3.32E+04	5.44E+07	7.08E+13	8.10E+07	2.32E+07	3.01E+13	1.13E+09
3.74E-08	1.51E-02	3.03E+07	1.22E+13	7.40E+07	9.02E+05	3.63E+11	1.41E+08
5.83E-20	2.33E-14	2.98E+06	1.19E+12	3.00E+07	2.83E+06	1.13E+12	8.90E+07
4.76E-12	2.16E-05	8.44E+06	3.83E+13	5.60E+07	7.93E+05	3.60E+12	2.69E+08
4.07E-08	4.57E-03	2.29E+07	2.57E+12	9.30E+07	1.57E+06	1.76E+11	1.77E+08
7.20E-09	9.55E-03	1.06E+07	1.40E+13	2.41E+08	2.41E+04	3.19E+10	5.20E+07
1.40E-10	3.10E-05	3.55E+07	7.81E+12	2.03E+08	5.39E+05	1.19E+11	1.28E+08
1.83E-14	1.17E-07	2.10E+06	1.34E+13	1.10E+07	1.00E+07	6.39E+13	2.29E+08
9.48E-04	5.03E+01	6.43E+07	3.41E+12	1.25E+08	8.51E+06	4.52E+11	1.64E+08
1.52E-09	1.46E-04	1.75E+07	1.67E+12	7.90E+07	7.48E+06	7.13E+11	1.23E+08
1.04E-05	2.37E+00	1.76E+07	4.03E+12	8.20E+07	3.77E+06	8.64E+11	1.56E+08
5.43E-07	9.18E-02	1.81E+07	3.05E+12	5.90E+07	4.60E+06	7.75E+11	1.44E+08
1.92E-08	3.73E-03	3.04E+07	5.89E+12	1.64E+08	8.65E+04	1.68E+10	9.00E+06
1.10E-15	1.26E-09	1.85E+07	2.11E+13	2.20E+08	3.25E+06	3.71E+12	2.16E+08
1.73E-16	2.09E-10	1.34E+07	1.61E+13	2.36E+08	4.00E+05	4.82E+11	1.11E+08
8.38E-05	2.36E+01	7.41E+06	2.09E+12	5.40E+07	4.70E+06	1.32E+12	2.57E+08
2.29E-03	1.20E+03	6.43E+06	3.35E+12	1.36E+08	1.55E+06	8.11E+11	2.26E+08
1.42E-05	7.51E+00	8.19E+06	4.33E+12	9.40E+07	4.31E+06	2.28E+12	1.98E+08
2.50E-03	7.30E+03	2.34E+07	6.82E+13	2.40E+08	1.45E+06	4.22E+12	4.27E+08
8.23E-10	2.09E-05	6.09E+07	1.54E+12	1.42E+08	1.23E+06	3.11E+10	6.70E+07
6.52E-09	4.01E-03	1.65E+07	1.01E+13	3.06E+08	1.02E+06	6.26E+11	2.48E+08
1.44E-07	1.36E-02	1.70E+07	1.59E+12	8.70E+07	1.47E+05	1.39E+10	3.90E+07

3.05E-19	1.18E-13	3.03E+07	1.16E+13	2.17E+08	1.28E+06	4.90E+11	4.10E+07
3.76E-06	1.82E+00	1.46E+07	7.09E+12	9.70E+07	7.34E+06	3.56E+12	2.40E+08
3.78E-19	6.95E-13	1.09E+07	2.00E+13	8.00E+06	1.29E+07	2.35E+13	1.20E+08
6.81E-23	4.58E-17	6.50E+07	4.35E+13	1.46E+08	0.00E+00	0.00E+00	0.00E+00
2.43E-08	6.83E-02	1.56E+07	4.37E+13	3.09E+08	1.48E+06	4.16E+12	2.69E+08
3.72E-09	4.51E-03	1.20E+07	1.46E+13	2.32E+08	9.31E+05	1.13E+12	2.29E+08
1.28E-20	2.91E-16	5.87E+07	1.32E+12	6.20E+07	0.00E+00	0.00E+00	0.00E+00
7.82E-07	7.10E-01	5.92E+07	5.37E+13	9.40E+07	1.07E+07	9.69E+12	3.89E+08
1.11E-19	1.35E-14	3.92E+07	4.75E+12	1.66E+08	6.29E+06	7.63E+11	1.01E+08
1.13E-03	2.40E+03	2.66E+07	5.65E+13	8.40E+07	5.14E+06	1.09E+13	5.46E+08
6.70E-11	1.77E-05	5.20E+07	1.37E+13	5.40E+07	2.48E+06	6.53E+11	8.70E+07
7.09E-63	2.85E-58	6.60E+07	2.64E+12	1.19E+08	5.00E+03	2.00E+08	1.00E+06
2.32E-27	1.69E-22	1.81E+07	1.31E+12	1.86E+08	6.13E+05	4.44E+10	1.80E+07
3.99E-06	5.27E+00	5.99E+07	7.88E+13	2.44E+08	2.57E+05	3.39E+11	1.27E+08
4.58E-05	3.89E+02	7.22E+06	6.12E+13	1.03E+08	3.87E+06	3.28E+13	6.26E+08
4.26E-54	2.05E-48	4.10E+07	1.97E+13	1.70E+08	7.43E+02	3.56E+08	1.00E+06
2.36E-05	2.79E+01	2.10E+07	2.48E+13	2.39E+08	1.60E+07	1.90E+13	5.15E+08
6.18E-07	1.52E+00	7.75E+06	1.90E+13	7.80E+07	3.22E+06	7.91E+12	4.45E+08
1.95E-26	8.66E-21	9.16E+06	4.04E+12	8.20E+07	0.00E+00	0.00E+00	0.00E+00
4.37E-10	6.93E-05	9.24E+06	1.46E+12	1.02E+08	4.56E+04	7.22E+09	2.50E+07
9.14E-09	5.34E-03	6.07E+07	3.53E+13	2.17E+08	4.40E+05	2.57E+11	1.32E+08
1.43E-05	9.38E+00	2.87E+07	1.88E+13	1.51E+08	2.58E+06	1.69E+12	2.32E+08
6.08E-35	7.65E-30	2.99E+07	3.74E+12	1.79E+08	0.00E+00	0.00E+00	0.00E+00
2.69E-06	2.08E+01	6.79E+06	5.24E+13	2.50E+08	5.85E+06	4.51E+13	5.48E+08
1.21E-03	7.88E+02	4.52E+07	2.93E+13	6.90E+07	6.18E+06	4.01E+12	3.21E+08
3.84E-06	1.50E+01	6.43E+06	2.51E+13	2.26E+08	3.11E+06	1.22E+13	4.85E+08
1.11E-09	2.10E-03	3.14E+07	5.93E+13	2.75E+08	6.81E+06	1.29E+13	1.46E+08
1.56E-05	1.92E+00	1.26E+07	1.55E+12	8.80E+07	2.51E+06	3.08E+11	1.31E+08
2.82E-10	4.94E-05	1.19E+07	2.08E+12	5.20E+07	3.11E+06	5.45E+11	1.93E+08
1.50E-04	4.09E+00	3.83E+07	1.04E+12	1.10E+08	9.82E+06	2.67E+11	2.71E+08
9.22E-09	3.56E-03	2.14E+07	8.22E+12	1.61E+08	9.27E+05	3.56E+11	1.44E+08
2.33E-05	1.87E+01	5.24E+07	4.19E+13	3.08E+08	3.87E+06	3.09E+12	4.50E+08
5.79E-10	3.91E-04	4.18E+07	2.81E+13	1.21E+08	7.78E+03	5.23E+09	2.10E+07
1.32E-03	9.48E+01	1.25E+07	9.01E+11	7.10E+07	5.22E+06	3.76E+11	2.18E+08
1.28E-21	1.43E-16	2.03E+07	2.26E+12	2.17E+08	3.43E+05	3.82E+10	5.80E+07
8.06E-04	3.02E+03	6.09E+06	2.28E+13	8.20E+07	3.73E+06	1.40E+13	1.01E+09
3.06E-27	2.40E-21	3.14E+07	2.45E+13	1.82E+08	0.00E+00	0.00E+00	0.00E+00
4.28E-22	2.08E-15	6.65E+06	3.20E+13	1.10E+08	2.27E+06	1.09E+13	1.03E+08
9.62E-39	5.53E-32	1.60E+07	9.15E+13	1.26E+08	0.00E+00	0.00E+00	0.00E+00
9.83E-08	1.34E-02	1.24E+07	1.67E+12	5.50E+07	3.14E+05	4.24E+10	1.50E+07
7.04E-06	1.81E+00	1.96E+07	5.03E+12	2.64E+08	4.37E+05	1.12E+11	1.53E+08
9.82E-07	6.37E-02	1.75E+07	1.13E+12	8.90E+07	9.91E+05	6.40E+10	4.20E+07
4.21E-08	1.62E-01	2.36E+07	9.03E+13	1.57E+08	1.67E+06	6.38E+12	3.86E+08
9.81E-11	1.89E-04	2.65E+06	5.07E+12	1.60E+07	6.71E+06	1.28E+13	1.66E+08
1.74E-04	3.65E+02	3.42E+07	7.18E+13	7.70E+07	1.06E+06	2.22E+12	2.53E+08
2.05E-03	3.47E+02	2.59E+07	4.37E+12	7.70E+07	1.43E+07	2.42E+12	5.39E+08
5.15E-09	6.81E-02	5.90E+06	7.77E+13	1.90E+07	1.83E+06	2.41E+13	1.85E+08
1.62E-14	5.80E-09	9.81E+06	3.49E+12	1.02E+08	8.78E+03	3.13E+09	1.60E+07
1.01E-04	1.33E+02	6.47E+07	8.48E+13	1.12E+08	9.90E+06	1.30E+13	6.25E+08
5.42E-19	1.04E-13	2.20E+07	4.20E+12	7.60E+07	7.79E+02	1.48E+08	1.00E+06
3.24E-08	1.23E-03	2.90E+07	1.09E+12	5.30E+07	3.15E+06	1.19E+11	5.30E+07
1.30E-35	5.10E-29	1.10E+07	4.29E+13	1.13E+08	2.58E+06	1.01E+13	7.80E+07

6.05E-09	3.58E-02	1.51E+07	8.90E+13	2.12E+08	6.72E+03	3.96E+10	3.60E+07
2.22E-05	2.20E+01	2.78E+07	2.75E+13	1.08E+08	1.92E+05	1.90E+11	1.35E+08
1.04E-05	5.59E+01	7.36E+06	3.97E+13	1.07E+08	2.29E+06	1.23E+13	5.66E+08
8.69E-42	1.49E-35	2.20E+07	3.75E+13	1.64E+08	1.61E+05	2.75E+11	8.50E+07
1.27E-12	7.86E-07	4.83E+07	2.97E+13	3.10E+07	7.90E+05	4.85E+11	5.80E+07
2.07E-07	5.03E-01	1.51E+07	3.66E+13	1.20E+08	1.03E+06	2.50E+12	4.07E+08
7.47E-30	2.30E-25	5.78E+07	1.77E+12	8.20E+07	0.00E+00	0.00E+00	0.00E+00
1.39E-19	3.97E-13	7.25E+06	2.06E+13	1.83E+08	2.42E+04	6.89E+10	1.20E+07
6.43E-11	5.39E-05	1.41E+07	1.17E+13	1.10E+07	1.94E+07	1.61E+13	1.61E+08
1.22E-07	8.50E-03	3.90E+07	2.69E+12	2.30E+07	6.11E+06	4.22E+11	6.80E+07
5.75E-07	3.74E-01	1.36E+07	8.82E+12	1.69E+08	2.16E+06	1.40E+12	1.41E+08
1.54E-05	6.90E+00	4.90E+07	2.19E+13	1.96E+08	3.77E+06	1.68E+12	5.06E+08
1.48E-07	1.70E-01	6.55E+07	7.50E+13	2.95E+08	9.06E+06	1.04E+13	3.21E+08
7.84E-08	2.49E-02	2.52E+07	8.00E+12	1.83E+08	1.97E+07	6.23E+12	1.07E+08
2.02E-10	1.43E-04	1.09E+07	7.71E+12	2.60E+08	2.54E+06	1.80E+12	1.53E+08
3.25E-07	1.69E+00	7.80E+06	4.04E+13	2.77E+08	1.71E+06	8.85E+12	3.32E+08
1.95E-19	7.41E-14	8.01E+06	3.03E+12	1.14E+08	1.10E+04	4.14E+09	1.20E+07
5.83E-25	6.66E-19	1.87E+07	2.12E+13	2.13E+08	2.35E+04	2.67E+10	2.40E+07
5.97E-06	7.65E+00	6.57E+06	8.40E+12	9.40E+07	6.20E+06	7.93E+12	2.91E+08
1.22E-07	3.37E-02	5.94E+07	1.63E+13	2.96E+08	2.04E+06	5.61E+11	1.76E+08
1.38E-05	2.03E+01	6.24E+07	9.17E+13	1.84E+08	5.01E+05	7.36E+11	3.03E+08
2.05E-09	3.62E-03	9.33E+06	1.64E+13	2.70E+08	1.20E+06	2.11E+12	2.69E+08
8.85E-08	7.24E-02	1.60E+07	1.30E+13	7.20E+07	2.78E+05	2.27E+11	1.18E+08
3.51E-14	5.00E-09	7.37E+07	1.04E+13	2.32E+08	8.45E+04	1.20E+10	2.70E+07
1.10E-04	8.87E+00	1.85E+07	1.50E+12	1.23E+08	1.11E+06	8.93E+10	1.61E+08
6.73E-10	2.96E-03	1.58E+07	6.93E+13	9.30E+07	7.73E+05	3.39E+12	3.39E+08
2.44E-11	3.20E-05	7.42E+07	9.66E+13	2.61E+08	1.13E+06	1.47E+12	1.08E+08
1.48E-07	5.99E-02	3.08E+07	1.24E+13	1.42E+08	9.20E+05	3.70E+11	6.00E+07
3.19E-09	1.27E-03	9.61E+06	3.83E+12	1.96E+08	2.04E+05	8.13E+10	1.20E+08
3.85E-17	1.76E-10	9.21E+06	4.18E+13	2.27E+08	2.46E+02	1.12E+09	6.00E+06
2.21E-05	2.47E+00	1.77E+07	1.98E+12	7.80E+07	6.63E+06	7.43E+11	3.27E+08
7.53E-10	1.00E-03	1.06E+07	1.40E+13	1.11E+08	1.67E+05	2.20E+11	1.65E+08
8.10E-06	1.78E+00	1.34E+07	2.95E+12	2.20E+07	2.27E+07	5.00E+12	3.49E+08
5.72E-19	3.67E-12	1.18E+07	7.55E+13	1.93E+08	1.55E+03	9.91E+09	3.10E+07
5.92E-07	3.16E-02	7.22E+07	3.83E+12	1.26E+08	8.98E+05	4.77E+10	8.70E+07
1.23E-06	1.18E-01	2.48E+07	2.37E+12	1.58E+08	6.72E+04	6.40E+09	2.50E+07
1.76E-15	4.06E-10	1.82E+07	4.17E+12	2.19E+08	2.07E+05	4.73E+10	1.20E+07
5.40E-08	9.14E-03	1.54E+07	2.61E+12	1.59E+08	7.23E+06	1.22E+12	1.76E+08
3.88E-50	7.57E-45	2.94E+07	5.69E+12	1.78E+08	3.20E+03	6.20E+08	1.00E+06
1.03E-03	1.18E+03	1.82E+07	2.08E+13	2.65E+08	4.13E+06	4.72E+12	5.17E+08
4.06E-04	4.89E+02	1.30E+07	1.57E+13	1.36E+08	1.23E+06	1.47E+12	3.10E+08
2.08E-11	5.88E-06	1.16E+07	3.25E+12	2.21E+08	6.65E+04	1.87E+10	3.50E+07
2.39E-04	1.25E+02	8.56E+06	4.47E+12	1.62E+08	1.19E+06	6.19E+11	3.48E+08
5.89E-46	3.13E-40	1.24E+07	6.56E+12	1.71E+08	1.53E+04	8.08E+09	6.00E+06
1.12E-14	3.28E-08	2.45E+07	7.15E+13	2.51E+08	1.28E+06	3.72E+12	2.03E+08
5.87E-06	1.49E-01	5.55E+07	1.40E+12	7.00E+07	8.87E+06	2.24E+11	9.80E+07
8.94E-25	5.52E-19	7.74E+06	4.75E+12	1.86E+08	5.56E+06	3.41E+12	8.50E+07
1.47E-05	1.38E+00	4.39E+06	4.13E+11	2.40E+07	1.26E+07	1.19E+12	1.96E+08
1.59E-06	6.11E-01	2.89E+07	1.11E+13	1.49E+08	5.04E+06	1.93E+12	2.87E+08
3.88E-48	1.89E-42	1.35E+07	6.54E+12	1.27E+08	0.00E+00	0.00E+00	0.00E+00
5.69E-34	1.05E-27	2.38E+07	4.36E+13	6.50E+07	3.94E+05	7.22E+11	1.80E+07
1.20E-13	8.04E-08	5.64E+07	3.77E+13	5.10E+07	9.78E+06	6.53E+12	2.84E+08

1.01E-07	2.85E-01	1.35E+07	3.78E+13	2.67E+08	2.43E+06	6.82E+12	2.38E+08
4.93E-10	5.99E-04	1.16E+07	1.41E+13	2.69E+08	1.12E+05	1.36E+11	9.10E+07
1.17E-29	2.65E-25	5.79E+07	1.31E+12	1.07E+08	0.00E+00	0.00E+00	0.00E+00
1.41E-08	1.29E-02	6.97E+07	6.33E+13	2.28E+08	5.62E+05	5.10E+11	1.90E+08
3.74E-16	4.56E-11	4.34E+07	5.26E+12	1.75E+08	2.43E+06	2.95E+11	8.60E+07
4.91E-23	1.05E-16	2.67E+07	5.68E+13	1.29E+08	3.70E+06	7.87E+12	4.50E+07
3.25E-12	8.61E-07	5.42E+07	1.43E+13	1.18E+08	1.16E+06	3.05E+11	1.87E+08
9.20E-17	3.70E-12	6.19E+07	2.48E+12	6.60E+07	0.00E+00	0.00E+00	0.00E+00
1.35E-20	9.88E-16	2.03E+07	1.47E+12	1.89E+08	1.52E+04	1.10E+09	4.00E+06
8.86E-05	1.17E+02	5.82E+07	7.66E+13	2.19E+08	1.50E+06	1.98E+12	1.75E+08
7.81E-04	6.63E+03	9.89E+06	8.39E+13	3.48E+08	1.34E+06	1.14E+13	8.00E+08
2.74E-04	1.32E+02	4.77E+07	2.28E+13	1.06E+08	1.82E+06	8.73E+11	2.71E+08
3.80E-21	4.52E-15	3.47E+07	4.10E+13	2.06E+08	2.99E+04	3.54E+10	2.20E+07
8.83E-18	2.18E-11	9.46E+06	2.32E+13	2.38E+08	1.30E+06	3.20E+12	1.62E+08
5.28E-11	2.35E-05	9.66E+06	4.26E+12	1.04E+08	0.00E+00	0.00E+00	0.00E+00
4.44E-07	7.02E-02	7.12E+06	1.13E+12	6.10E+07	2.05E+06	3.24E+11	1.14E+08
2.46E-14	1.44E-08	6.18E+07	3.60E+13	2.24E+08	3.59E+04	2.09E+10	3.80E+07
1.32E-05	8.65E+00	2.58E+07	1.69E+13	1.31E+08	6.08E+06	3.99E+12	2.77E+08
2.50E-41	3.15E-36	2.63E+07	3.29E+12	1.34E+08	0.00E+00	0.00E+00	0.00E+00
8.39E-05	6.47E+02	1.18E+07	9.13E+13	2.86E+08	9.90E+05	7.63E+12	8.41E+08
3.54E-12	2.31E-06	5.00E+07	3.24E+13	2.01E+08	1.22E+04	7.90E+09	1.90E+07
1.72E-19	6.74E-13	7.51E+06	2.94E+13	2.23E+08	1.34E+06	5.23E+12	1.11E+08
2.50E-05	4.73E+01	3.66E+07	6.90E+13	3.26E+08	6.07E+06	1.15E+13	5.65E+08
3.04E-05	3.73E+00	1.47E+07	1.81E+12	2.02E+08	4.33E+05	5.32E+10	8.30E+07
6.14E-09	1.08E-03	1.47E+07	2.57E+12	2.51E+08	2.74E+05	4.81E+10	9.20E+07
2.45E-05	6.66E-01	3.37E+07	9.15E+11	1.32E+08	1.15E+07	3.13E+11	1.69E+08
1.26E-06	4.85E-01	1.51E+07	5.80E+12	2.04E+08	5.98E+06	2.30E+12	2.59E+08
1.16E-05	9.31E+00	4.91E+07	3.93E+13	2.86E+08	2.29E+05	1.83E+11	1.94E+08
1.26E-07	8.53E-02	3.83E+07	2.57E+13	1.15E+08	4.79E+05	3.22E+11	7.20E+07
4.17E-05	3.00E+00	1.67E+07	1.20E+12	1.39E+08	8.19E+05	5.90E+10	7.50E+07
5.01E-08	5.60E-03	1.63E+07	1.82E+12	1.59E+08	4.46E+06	4.98E+11	1.58E+08
4.37E-03	1.64E+04	4.56E+06	1.71E+13	6.30E+07	5.18E+06	1.94E+13	8.51E+08
4.75E-15	3.73E-09	2.70E+07	2.10E+13	2.01E+08	4.07E+06	3.18E+12	1.05E+08
3.54E-22	1.72E-15	8.85E+06	4.27E+13	1.65E+08	0.00E+00	0.00E+00	0.00E+00
1.75E-04	1.00E+03	1.91E+07	1.09E+14	1.74E+08	1.21E+06	6.91E+12	6.32E+08
5.31E-04	7.17E+01	1.22E+07	1.65E+12	3.10E+07	1.50E+06	2.03E+11	7.40E+07
9.12E-09	2.35E-03	2.00E+07	5.14E+12	1.99E+08	6.47E+05	1.66E+11	1.55E+08
3.16E-12	2.06E-07	1.52E+07	9.85E+11	8.70E+07	2.97E+06	1.92E+11	5.60E+07
2.20E-05	8.43E+01	1.76E+07	6.73E+13	1.35E+08	6.56E+06	2.51E+13	3.78E+08
5.80E-06	1.11E+01	8.92E+06	1.71E+13	2.57E+08	5.72E+05	1.09E+12	3.12E+08
1.03E-13	2.17E-07	3.34E+07	7.02E+13	4.40E+07	1.51E+06	3.18E+12	9.50E+07
1.79E-26	3.04E-21	2.38E+07	4.02E+12	1.17E+08	1.26E+07	2.14E+12	1.22E+08
5.02E-08	6.63E-01	9.40E+06	1.24E+14	1.27E+08	1.83E+04	2.40E+11	1.41E+08
3.80E-05	1.35E+01	7.15E+06	2.54E+12	3.50E+07	3.11E+06	1.11E+12	1.38E+08
2.13E-13	2.81E-07	6.99E+07	9.17E+13	2.67E+08	3.70E+06	4.86E+12	1.70E+08
2.94E-10	5.63E-05	2.55E+07	4.86E+12	5.80E+07	9.84E+02	1.88E+08	1.00E+06
1.58E-30	5.99E-26	3.19E+07	1.20E+12	1.35E+08	0.00E+00	0.00E+00	0.00E+00
4.92E-08	1.93E-01	1.61E+07	6.29E+13	2.94E+08	1.04E+06	4.07E+12	3.39E+08
1.66E-09	9.77E-03	7.10E+06	4.19E+13	1.20E+07	8.41E+06	4.96E+13	3.61E+08
1.17E-04	1.16E+02	2.75E+07	2.72E+13	1.00E+08	8.00E+05	7.90E+11	2.30E+08
2.43E-25	1.32E-18	8.42E+06	4.54E+13	2.21E+08	3.34E+04	1.80E+11	3.40E+07
#####	4.24E-98	2.13E+07	3.62E+13	1.26E+08	0.00E+00	0.00E+00	0.00E+00

1.43E-09	8.85E-04	3.94E+07	2.42E+13	9.70E+07	7.36E+04	4.52E+10	3.60E+07
1.05E-05	2.54E+01	1.26E+07	3.05E+13	8.30E+07	3.58E+06	8.67E+12	2.85E+08
2.85E-15	8.72E-11	1.67E+07	5.11E+11	8.00E+06	4.33E+07	1.32E+12	1.32E+08
6.75E-27	1.93E-20	6.41E+06	1.82E+13	1.94E+08	6.81E+04	1.94E+11	9.00E+06
5.99E-07	5.01E-01	3.36E+07	2.80E+13	7.90E+07	4.50E+05	3.75E+11	1.69E+08
3.21E-07	2.23E-02	4.54E+07	3.13E+12	1.00E+08	5.19E+04	3.59E+09	9.00E+06
2.68E-09	1.74E-03	1.17E+07	7.60E+12	1.84E+08	3.86E+06	2.50E+12	1.44E+08
4.19E-04	1.87E+02	4.96E+07	2.21E+13	2.83E+08	2.62E+06	1.17E+12	3.96E+08
1.42E-08	1.63E-02	6.95E+07	7.96E+13	2.86E+08	4.61E+06	5.28E+12	2.16E+08
3.55E-06	1.13E+00	4.69E+07	1.49E+13	2.82E+08	7.57E+05	2.40E+11	1.69E+08
8.40E-24	5.98E-18	7.19E+06	5.09E+12	2.01E+08	3.96E+06	2.80E+12	8.20E+07
1.52E-03	7.85E+03	7.02E+06	3.64E+13	8.10E+07	2.49E+06	1.29E+13	8.06E+08
1.42E-19	5.42E-14	5.93E+06	2.24E+12	4.80E+07	2.53E+06	9.56E+11	7.40E+07
5.44E-04	6.18E+02	1.89E+07	2.14E+13	3.02E+08	2.02E+06	2.30E+12	2.94E+08
2.13E-06	2.72E+00	1.04E+07	1.33E+13	2.30E+08	2.34E+06	2.99E+12	2.81E+08
6.48E-06	1.79E+00	4.29E+07	1.18E+13	1.09E+08	1.86E+07	5.12E+12	2.60E+08
2.80E-04	4.11E+02	4.20E+07	6.17E+13	9.10E+07	2.10E+07	3.08E+13	7.72E+08
4.26E-06	7.51E+00	1.02E+07	1.79E+13	3.17E+08	3.63E+05	6.39E+11	3.44E+08
4.99E-12	4.09E-06	1.58E+07	1.29E+13	8.20E+07	8.37E+05	6.81E+11	6.30E+07
4.11E-07	5.84E-02	5.57E+07	7.89E+12	1.55E+08	2.05E+07	2.90E+12	2.14E+08
1.12E-12	9.10E-08	1.84E+07	1.49E+12	1.57E+08	3.00E+05	2.43E+10	1.90E+07
4.87E-06	2.14E+01	1.44E+07	6.31E+13	1.23E+08	1.86E+06	8.17E+12	2.73E+08
1.93E-07	2.52E-01	6.85E+07	8.91E+13	1.84E+08	7.77E+06	1.01E+13	3.04E+08
1.68E-50	6.81E-45	3.12E+07	1.26E+13	1.48E+08	0.00E+00	0.00E+00	0.00E+00
1.25E-06	4.97E-01	9.39E+06	3.74E+12	1.43E+08	4.37E+05	1.74E+11	1.34E+08
1.15E-07	5.23E-01	8.93E+06	4.05E+13	2.15E+08	2.82E+05	1.28E+12	1.42E+08
2.26E-07	2.54E-02	1.58E+07	1.77E+12	1.07E+08	6.29E+06	7.05E+11	1.90E+08
1.18E-06	1.56E+00	1.04E+07	1.38E+13	1.06E+08	3.63E+05	4.80E+11	1.15E+08
6.61E-03	1.45E+03	2.70E+07	5.93E+12	6.90E+07	9.20E+06	2.02E+12	3.61E+08
2.60E-08	1.67E-01	1.18E+07	7.53E+13	1.82E+08	4.57E+03	2.92E+10	3.00E+07
1.57E-09	8.33E-05	2.77E+06	1.47E+11	9.00E+06	6.93E+07	3.68E+12	2.67E+08
1.00E-04	9.55E+00	2.43E+07	2.32E+12	1.62E+08	7.52E+05	7.17E+10	8.90E+07
1.65E-06	3.79E-01	1.45E+07	3.33E+12	1.76E+08	6.70E+06	1.53E+12	1.83E+08
2.38E-18	4.04E-13	2.23E+07	3.76E+12	2.08E+08	1.15E+05	1.93E+10	2.90E+07
1.01E-07	1.96E-02	3.09E+07	5.99E+12	1.73E+08	4.69E+05	9.09E+10	1.36E+08
3.95E-06	4.52E+00	2.03E+07	2.31E+13	2.23E+08	1.84E+06	2.10E+12	3.76E+08
4.08E-28	4.94E-22	1.14E+07	1.37E+13	1.49E+08	8.97E+05	1.08E+12	5.10E+07
6.02E-05	1.70E+01	7.59E+06	2.14E+12	7.70E+07	4.05E+06	1.14E+12	4.15E+08
2.50E-08	1.31E-02	8.95E+06	4.67E+12	1.77E+08	7.85E+05	4.10E+11	2.27E+08
6.65E-07	3.53E-01	1.25E+07	6.60E+12	1.17E+08	1.64E+05	8.67E+10	1.07E+08
1.63E-04	4.76E+02	2.66E+07	7.76E+13	1.53E+08	1.34E+06	3.92E+12	4.70E+08
2.79E-14	7.09E-10	3.74E+07	9.45E+11	8.70E+07	1.98E+07	4.99E+11	1.59E+08
1.89E-03	1.16E+03	9.78E+06	6.00E+12	7.80E+07	8.23E+06	5.05E+12	6.07E+08
5.75E-04	5.40E+01	1.53E+07	1.44E+12	7.90E+07	1.73E+06	1.63E+11	1.39E+08
1.25E-12	4.82E-07	3.38E+07	1.30E+13	2.26E+08	4.07E+04	1.56E+10	3.10E+07
2.22E-13	1.08E-07	2.22E+07	1.08E+13	2.52E+08	6.92E+04	3.36E+10	6.20E+07
7.64E-07	1.41E+00	1.99E+07	3.64E+13	6.80E+07	1.53E+06	2.81E+12	1.31E+08
9.89E-15	6.65E-09	6.63E+07	4.43E+13	1.26E+08	1.05E+05	6.99E+10	2.60E+07
8.85E-11	2.49E-04	5.65E+06	1.59E+13	4.40E+07	3.70E+06	1.04E+13	1.62E+08
5.51E-04	6.66E+02	1.70E+06	2.05E+12	2.00E+07	1.13E+07	1.37E+13	7.21E+08
8.89E-06	2.01E-01	2.75E+07	6.20E+11	1.30E+07	3.29E+07	7.42E+11	1.12E+08
9.35E-05	8.49E+01	6.19E+07	5.61E+13	1.01E+08	8.09E+06	7.34E+12	4.60E+08

4.18E-05	5.07E+00	4.05E+07	4.90E+12	1.20E+08	7.09E+06	8.59E+11	4.54E+08
5.63E-11	1.20E-04	3.10E+07	6.60E+13	2.01E+08	5.67E+05	1.20E+12	3.28E+08
3.02E-38	8.02E-33	5.23E+07	1.38E+13	1.93E+08	8.66E+04	2.28E+10	6.00E+06
3.88E-24	1.56E-19	6.65E+07	2.66E+12	4.20E+07	1.19E+06	4.77E+10	1.20E+07
6.56E-11	4.78E-06	2.27E+07	1.64E+12	1.79E+08	1.41E+05	1.02E+10	1.90E+07
1.57E-07	2.07E-01	5.45E+07	7.17E+13	8.30E+07	6.59E+06	8.67E+12	2.08E+08
4.49E-16	3.83E-09	1.05E+07	8.92E+13	2.50E+08	4.83E+05	4.10E+12	1.32E+08
3.22E-07	1.55E-01	3.93E+07	1.88E+13	2.82E+08	9.72E+06	4.66E+12	2.37E+08
6.55E-07	7.74E-01	2.85E+07	3.37E+13	9.70E+07	8.23E+06	9.73E+12	4.14E+08
1.49E-08	3.67E-02	1.02E+07	2.50E+13	1.43E+08	8.10E+05	1.99E+12	2.39E+08
5.05E-10	2.24E-04	9.72E+06	4.29E+12	1.36E+08	1.72E+04	7.59E+09	1.30E+07
1.67E-05	2.64E+00	9.01E+06	1.42E+12	6.50E+07	1.41E+05	2.22E+10	5.50E+07
1.25E-11	7.33E-06	6.14E+07	3.57E+13	2.15E+08	1.51E+05	8.79E+10	7.30E+07
8.39E-08	5.52E-02	3.17E+07	2.08E+13	2.96E+08	3.14E+04	2.06E+10	6.50E+07
2.14E-09	2.70E-04	3.07E+07	3.84E+12	9.70E+07	4.82E+03	6.03E+08	4.00E+06
1.94E-06	1.50E+01	5.94E+06	4.58E+13	2.26E+08	6.82E+06	5.26E+13	4.85E+08
1.69E-06	1.10E+00	5.04E+07	3.27E+13	8.70E+07	6.65E+05	4.32E+11	1.78E+08
2.08E-08	8.15E-02	9.17E+06	3.58E+13	2.46E+08	3.69E+05	1.44E+12	2.58E+08
2.68E-04	5.05E+02	2.98E+07	5.62E+13	1.03E+08	1.25E+07	2.36E+13	8.12E+08
9.09E-09	1.12E-03	1.52E+07	1.86E+12	2.02E+08	3.62E+03	4.44E+08	3.00E+06
1.53E-06	2.70E-01	8.90E+06	1.56E+12	7.70E+07	6.10E+06	1.07E+12	1.64E+08
1.84E-13	5.02E-09	3.63E+07	9.88E+11	2.16E+08	8.15E+06	2.22E+11	1.14E+08
7.09E-07	2.74E-01	2.08E+07	8.00E+12	1.89E+08	8.89E+05	3.42E+11	7.60E+07
1.36E-06	1.09E+00	4.53E+07	3.63E+13	1.87E+08	1.05E+07	8.37E+12	3.68E+08
1.78E-09	1.21E-03	3.81E+07	2.56E+13	9.70E+07	5.73E+06	3.85E+12	1.02E+08
8.36E-05	6.02E+00	1.44E+07	1.04E+12	6.20E+07	3.38E+06	2.43E+11	2.08E+08
9.51E-13	1.07E-07	2.13E+07	2.38E+12	2.11E+08	2.63E+04	2.94E+09	1.40E+07
3.81E-10	1.44E-03	9.35E+06	3.50E+13	2.38E+08	7.93E+03	2.97E+10	3.00E+07
1.06E-11	8.32E-06	3.21E+07	2.50E+13	2.17E+08	1.05E+05	8.15E+10	1.09E+08
5.91E-08	2.85E-01	8.92E+06	4.30E+13	1.08E+08	9.35E+04	4.51E+11	2.20E+08
1.61E-07	9.22E-01	1.91E+07	1.09E+14	3.10E+08	1.96E+05	1.12E+12	3.11E+08
2.63E-07	3.58E-02	1.27E+07	1.72E+12	3.70E+07	1.10E+05	1.49E+10	2.10E+07
5.00E-43	1.29E-37	1.37E+07	3.51E+12	1.86E+08	1.36E+06	3.50E+11	4.10E+07
3.93E-22	2.55E-17	1.59E+07	1.03E+12	1.20E+08	0.00E+00	0.00E+00	0.00E+00
8.20E-09	3.15E-02	2.36E+07	9.03E+13	2.85E+08	1.61E+06	6.18E+12	3.51E+08
1.01E-05	1.93E+01	8.46E+06	1.62E+13	1.95E+08	8.77E+05	1.68E+12	2.82E+08
4.39E-10	9.26E-04	3.64E+07	7.64E+13	6.20E+07	3.20E+05	6.73E+11	6.10E+07
3.02E-09	5.12E-04	1.96E+07	3.31E+12	4.80E+07	1.78E+07	3.01E+12	1.60E+08
1.50E-08	1.99E-01	9.05E+06	1.19E+14	1.19E+08	4.48E+04	5.89E+11	1.21E+08
3.82E-11	1.37E-05	1.01E+07	3.61E+12	5.40E+07	1.94E+05	6.92E+10	3.60E+07
8.20E-17	1.08E-10	6.34E+07	8.31E+13	2.32E+08	8.02E+06	1.05E+13	1.09E+08
1.01E-32	1.94E-27	2.29E+07	4.36E+12	8.50E+07	0.00E+00	0.00E+00	0.00E+00
3.26E-17	1.23E-12	3.26E+07	1.23E+12	1.00E+08	0.00E+00	0.00E+00	0.00E+00
1.21E-03	4.74E+03	1.43E+07	5.60E+13	2.52E+08	2.89E+06	1.13E+13	7.58E+08
4.32E-36	2.56E-29	1.49E+07	8.81E+13	2.20E+08	3.32E+05	1.96E+12	1.43E+08
1.30E-06	1.29E+00	2.82E+07	2.79E+13	1.78E+08	1.50E+05	1.48E+11	1.11E+08
1.79E-11	9.71E-05	9.27E+06	4.99E+13	2.23E+08	1.40E+04	7.52E+10	8.00E+07
2.65E-06	4.54E+00	1.73E+07	2.95E+13	2.70E+07	2.78E+06	4.74E+12	1.30E+08
1.23E-13	7.59E-08	4.62E+07	2.84E+13	6.50E+07	3.00E+05	1.85E+11	3.60E+07
9.11E-15	2.22E-08	1.48E+07	3.59E+13	2.43E+08	1.18E+06	2.85E+12	1.84E+08
5.19E-46	1.60E-41	5.90E+07	1.81E+12	1.16E+08	0.00E+00	0.00E+00	0.00E+00
7.00E-25	2.00E-18	6.40E+06	1.82E+13	1.32E+08	0.00E+00	0.00E+00	0.00E+00



2.73E-53	2.29E-47	3.22E+07	2.68E+13	1.30E+08	1.08E+04	9.00E+09	4.00E+06
2.64E-49	1.83E-44	3.36E+07	2.32E+12	2.60E+07	2.99E+06	2.06E+11	1.10E+07
3.97E-07	2.58E-01	1.03E+07	6.69E+12	5.90E+07	5.19E+06	3.36E+12	1.68E+08
7.76E-08	3.48E-02	4.65E+07	2.07E+13	2.93E+08	5.76E+06	2.57E+12	2.54E+08
1.38E-03	1.58E+03	5.36E+07	6.13E+13	1.42E+08	2.18E+07	2.49E+13	7.47E+08
1.64E-03	5.21E+02	3.64E+07	1.15E+13	1.05E+08	1.14E+07	3.61E+12	6.78E+08
3.58E-23	2.55E-17	1.02E+07	7.21E+12	1.66E+08	0.00E+00	0.00E+00	0.00E+00
2.24E-06	1.16E+01	4.51E+06	2.34E+13	1.23E+08	4.96E+06	2.57E+13	3.46E+08
1.37E-15	5.19E-10	7.88E+06	2.98E+12	3.80E+07	2.52E+05	9.51E+10	4.60E+07
5.38E-38	6.14E-32	1.62E+07	1.84E+13	1.18E+08	0.00E+00	0.00E+00	0.00E+00
4.42E-08	5.67E-02	9.76E+06	1.25E+13	1.47E+08	2.92E+06	3.74E+12	1.94E+08
5.94E-06	1.64E+00	6.11E+07	1.68E+13	1.62E+08	6.37E+05	1.75E+11	1.58E+08
2.94E-07	4.34E-01	4.76E+07	7.00E+13	2.32E+08	1.50E+07	2.21E+13	4.55E+08
7.42E-06	1.31E+01	9.93E+06	1.75E+13	2.13E+08	9.41E+05	1.66E+12	2.43E+08
9.43E-11	7.71E-05	1.65E+07	1.34E+13	5.10E+07	3.84E+05	3.13E+11	1.22E+08
1.66E-03	2.35E+02	4.50E+07	6.38E+12	9.00E+07	3.49E+07	4.95E+12	7.12E+08
3.31E-06	2.68E-01	8.92E+06	7.21E+11	6.90E+07	1.06E+07	8.54E+11	1.20E+08
4.69E-23	2.07E-16	1.58E+07	6.94E+13	1.68E+08	7.78E+05	3.42E+12	1.17E+08
2.74E-03	3.57E+03	4.70E+07	6.12E+13	9.70E+07	3.05E+07	3.97E+13	7.59E+08
2.04E-10	8.24E-05	2.47E+07	9.96E+12	4.30E+07	6.10E+06	2.46E+12	1.27E+08
3.11E-07	1.24E-01	9.24E+06	3.68E+12	1.76E+08	5.83E+05	2.32E+11	9.80E+07
5.10E-13	2.33E-06	8.67E+06	3.93E+13	1.70E+08	3.46E+05	1.57E+12	1.58E+08
1.02E-20	1.15E-15	6.98E+06	7.82E+11	2.10E+07	9.26E+06	1.04E+12	3.30E+07
8.82E-08	1.17E-01	6.06E+06	8.00E+12	1.90E+07	4.63E+06	6.12E+12	1.70E+08
1.46E-07	3.23E-02	3.62E+07	7.97E+12	1.56E+08	1.11E+05	2.45E+10	5.60E+07
3.65E-10	2.35E-03	1.25E+07	7.97E+13	1.48E+08	1.58E+03	1.01E+10	3.50E+07
2.04E-06	1.08E-01	7.16E+07	3.80E+12	1.91E+08	7.68E+05	4.08E+10	5.30E+07
4.97E-07	4.75E-02	2.37E+07	2.26E+12	1.41E+08	1.51E+04	1.44E+09	7.00E+06
1.02E-02	2.33E+03	1.37E+07	3.14E+12	7.30E+07	7.65E+06	1.75E+12	3.65E+08
1.41E-26	2.39E-21	2.04E+07	3.44E+12	1.34E+08	0.00E+00	0.00E+00	0.00E+00
3.10E-58	6.05E-53	2.92E+07	5.66E+12	9.90E+07	0.00E+00	0.00E+00	0.00E+00
2.49E-06	2.85E+00	1.89E+07	2.15E+13	2.52E+08	3.63E+06	4.15E+12	4.27E+08
2.38E-02	2.86E+04	2.80E+06	3.37E+12	4.20E+07	1.12E+07	1.35E+13	6.17E+08
7.52E-04	2.12E+02	5.98E+05	1.68E+11	1.30E+07	1.14E+07	3.20E+12	5.68E+08
1.42E-09	7.42E-04	8.76E+06	4.57E+12	2.09E+08	9.66E+05	5.04E+11	2.16E+08
4.71E-10	2.50E-04	1.28E+07	6.76E+12	1.23E+08	5.09E+03	2.69E+09	1.30E+07
4.44E-02	1.29E+05	1.20E+07	3.49E+13	5.70E+07	1.59E+07	4.62E+13	8.51E+08
3.83E-05	9.69E-01	6.36E+07	1.61E+12	2.02E+08	2.39E+05	6.04E+09	2.90E+07
5.99E-05	3.67E+01	1.54E+07	9.44E+12	2.95E+08	2.50E+06	1.53E+12	2.43E+08
4.51E-06	4.25E-01	1.66E+07	1.56E+12	1.67E+08	3.38E+05	3.18E+10	3.50E+07
2.75E-05	1.06E+01	3.28E+07	1.26E+13	1.85E+08	1.51E+06	5.80E+11	3.21E+08
1.88E-04	9.10E+01	1.78E+07	8.62E+12	8.10E+07	5.25E+06	2.55E+12	6.26E+08
1.83E-18	3.34E-12	2.30E+07	4.21E+13	4.50E+07	1.24E+06	2.26E+12	1.70E+08
7.49E-04	5.01E+02	5.90E+07	3.95E+13	1.65E+08	7.04E+06	4.70E+12	2.59E+08
9.67E-11	2.73E-04	1.63E+07	4.58E+13	2.66E+08	4.17E+05	1.17E+12	1.64E+08
5.92E-04	7.17E+02	9.98E+06	1.21E+13	2.86E+08	2.06E+06	2.50E+12	5.49E+08
1.63E-09	3.69E-05	5.97E+07	1.35E+12	1.29E+08	1.63E+05	3.68E+09	1.10E+07
1.63E-09	1.49E-03	6.06E+07	5.50E+13	1.03E+08	8.09E+06	7.35E+12	1.49E+08
9.60E-06	1.16E+00	3.93E+07	4.76E+12	2.01E+08	7.26E+06	8.79E+11	2.27E+08
1.84E-23	3.94E-17	3.13E+07	6.65E+13	2.06E+08	7.16E+02	1.52E+09	4.00E+06
2.30E-07	6.06E-02	5.52E+07	1.46E+13	2.18E+08	2.50E+05	6.59E+10	9.20E+07
9.67E-07	3.89E-02	6.55E+07	2.62E+12	5.60E+07	5.98E+05	2.39E+10	2.50E+07

3.70E-23	2.70E-18	1.95E+07	1.42E+12	1.77E+08	0.00E+00	0.00E+00	0.00E+00
2.36E-07	3.11E-01	4.97E+07	6.54E+13	7.40E+07	1.01E+07	1.33E+13	3.14E+08
1.62E-13	1.38E-06	1.05E+07	8.92E+13	2.48E+08	1.56E+05	1.33E+12	1.22E+08
6.73E-18	3.24E-12	4.82E+07	2.31E+13	1.95E+08	0.00E+00	0.00E+00	0.00E+00
7.07E-03	8.35E+03	1.38E+07	1.63E+13	7.70E+07	2.17E+07	2.56E+13	1.22E+09
1.10E-07	2.70E-01	9.35E+06	2.29E+13	1.62E+08	1.66E+06	4.06E+12	3.16E+08
4.52E-20	2.01E-14	9.47E+06	4.18E+12	1.54E+08	1.66E+05	7.33E+10	6.80E+07
1.23E-03	1.95E+02	7.23E+06	1.14E+12	4.10E+07	1.97E+06	3.12E+11	1.20E+08
1.80E-08	1.05E-02	5.16E+07	3.01E+13	1.93E+08	9.93E+06	5.78E+12	1.98E+08
1.46E-22	9.64E-17	2.99E+07	1.96E+13	1.77E+08	0.00E+00	0.00E+00	0.00E+00
1.72E-08	2.15E-03	6.20E+06	7.75E+11	9.00E+06	2.46E+07	3.07E+12	2.29E+08
6.51E-16	5.04E-09	6.99E+06	5.39E+13	1.67E+08	1.41E+06	1.09E+13	1.50E+08
2.97E-05	1.94E+01	4.95E+07	3.21E+13	1.44E+08	1.85E+06	1.20E+12	2.14E+08
8.07E-06	3.16E+01	8.25E+06	3.23E+13	1.80E+08	1.29E+06	5.03E+12	6.10E+08
1.79E-13	3.40E-07	3.95E+07	7.46E+13	2.50E+08	3.54E+05	6.67E+11	1.28E+08
2.93E-28	3.62E-23	8.01E+06	9.83E+11	8.80E+07	4.29E+06	5.27E+11	9.20E+07
2.23E-08	3.93E-03	1.17E+07	2.06E+12	1.41E+08	2.90E+06	5.08E+11	6.30E+07
3.46E-06	9.42E-02	4.39E+07	1.19E+12	1.76E+08	4.33E+06	1.18E+11	1.79E+08
4.11E-06	1.58E+00	1.88E+07	7.23E+12	1.07E+08	2.61E+06	1.00E+12	1.17E+08
2.81E-04	2.25E+02	5.40E+07	4.32E+13	3.38E+08	2.15E+06	1.72E+12	5.00E+08
1.35E-16	9.15E-11	3.88E+07	2.61E+13	1.45E+08	0.00E+00	0.00E+00	0.00E+00
1.97E-05	1.42E+00	1.75E+07	1.26E+12	1.03E+08	3.81E+05	2.74E+10	8.30E+07
1.28E-14	1.44E-09	2.00E+07	2.24E+12	1.62E+08	1.37E+06	1.53E+11	1.41E+08
6.03E-19	2.27E-12	8.55E+06	3.20E+13	2.16E+08	1.42E+04	5.32E+10	2.00E+07
2.00E-06	1.56E+00	3.11E+07	2.43E+13	1.95E+08	3.22E+05	2.51E+11	5.70E+07
1.09E-04	5.28E+02	8.45E+06	4.08E+13	7.80E+07	6.98E+05	3.37E+12	2.35E+08
6.31E-12	3.63E-05	1.82E+07	1.04E+14	2.51E+08	4.69E+05	2.68E+12	2.01E+08
2.03E-09	2.76E-04	1.06E+07	1.43E+12	4.70E+07	1.53E+06	2.06E+11	3.50E+07
6.70E-03	1.72E+03	8.35E+06	2.15E+12	7.00E+07	1.23E+07	3.17E+12	6.37E+08
9.34E-08	6.06E-03	1.35E+07	8.71E+11	8.10E+07	4.92E+06	3.18E+11	7.40E+07
9.51E-09	3.65E-02	2.37E+07	9.09E+13	2.60E+08	1.44E+06	5.50E+12	2.88E+08
4.01E-06	7.67E+00	5.82E+06	1.11E+13	2.15E+08	3.66E+06	7.01E+12	3.16E+08
2.44E-11	5.16E-05	3.55E+07	7.45E+13	1.01E+08	5.15E+04	1.08E+11	3.60E+07
5.95E-06	1.01E+00	3.23E+07	5.45E+12	1.07E+08	7.87E+06	1.33E+12	2.34E+08
5.51E-12	7.30E-05	7.85E+06	1.03E+14	1.66E+08	2.12E+05	2.79E+12	9.20E+07
2.38E-08	8.49E-03	8.56E+06	3.05E+12	6.10E+07	1.73E+06	6.15E+11	6.80E+07
7.56E-06	9.94E+00	7.30E+07	9.56E+13	2.61E+08	1.86E+06	2.43E+12	4.01E+08
8.24E-16	1.58E-10	2.37E+07	4.52E+12	5.80E+07	3.33E+04	6.35E+09	1.10E+07
3.93E-05	1.49E+00	3.07E+07	1.16E+12	5.90E+07	2.09E+06	7.86E+10	9.60E+07
1.24E-06	4.85E+00	9.81E+06	3.84E+13	1.19E+08	6.04E+06	2.36E+13	3.44E+08
3.58E-08	2.12E-01	1.59E+07	9.37E+13	1.54E+08	3.94E+03	2.32E+10	5.10E+07
8.37E-15	8.32E-09	2.66E+07	2.63E+13	1.19E+08	6.90E+03	6.82E+09	4.00E+06
7.90E-07	4.26E+00	7.55E+06	4.07E+13	2.60E+08	2.12E+06	1.14E+13	3.97E+08
1.50E-09	2.57E-03	2.15E+07	3.66E+13	5.10E+07	4.92E+05	8.38E+11	8.40E+07
1.43E-09	8.81E-04	4.97E+07	3.05E+13	5.10E+07	1.62E+05	9.98E+10	3.10E+07
2.13E-07	5.17E-01	3.19E+06	7.74E+12	1.00E+07	1.29E+07	3.13E+13	3.88E+08
7.72E-34	2.37E-29	5.81E+07	1.78E+12	7.90E+07	2.14E+05	6.54E+09	1.80E+07
8.43E-14	2.41E-07	8.29E+06	2.36E+13	2.20E+08	1.72E+06	4.90E+12	1.10E+08
6.72E-06	5.62E+00	3.08E+07	2.57E+13	1.01E+08	2.29E+06	1.91E+12	2.24E+08
4.28E-12	2.97E-07	4.20E+07	2.90E+12	6.60E+07	2.20E+06	1.52E+11	4.60E+07
2.41E-25	1.57E-19	1.43E+07	9.24E+12	1.71E+08	0.00E+00	0.00E+00	0.00E+00
9.99E-21	4.48E-15	4.74E+07	2.11E+13	1.91E+08	1.24E+04	5.54E+09	9.00E+06

1.08E-04	1.24E+02	6.97E+07	7.98E+13	2.95E+08	4.05E+06	4.64E+12	3.62E+08
2.33E-02	7.40E+03	2.46E+07	7.79E+12	8.00E+07	2.32E+07	7.35E+12	6.96E+08
1.45E-04	1.02E+02	1.37E+07	9.67E+12	1.88E+08	8.38E+05	5.93E+11	3.34E+08
5.36E-07	2.78E+00	8.78E+06	4.54E+13	2.08E+08	7.35E+05	3.81E+12	2.70E+08
2.57E-08	9.76E-03	5.62E+06	2.13E+12	1.70E+07	2.41E+06	9.12E+11	7.20E+07
2.93E-07	3.33E-01	1.78E+07	2.02E+13	2.83E+08	3.09E+06	3.50E+12	3.10E+08
2.55E-05	3.26E+01	1.18E+07	1.51E+13	1.23E+08	9.65E+05	1.23E+12	4.22E+08
5.59E-17	1.54E-11	6.01E+07	1.65E+13	2.09E+08	6.54E+03	1.80E+09	5.00E+06
4.28E-04	6.28E+02	5.93E+07	8.72E+13	4.04E+08	3.68E+06	5.41E+12	6.41E+08
9.78E-05	1.72E+02	1.03E+07	1.82E+13	2.32E+08	5.21E+05	9.16E+11	4.12E+08
3.12E-05	2.54E+01	1.32E+07	1.07E+13	2.50E+07	2.80E+06	2.28E+12	1.84E+08
5.27E-06	7.48E-01	7.49E+07	1.06E+13	2.73E+08	6.02E+06	8.53E+11	1.75E+08
2.00E-11	1.62E-06	1.44E+07	1.16E+12	4.50E+07	4.62E+06	3.73E+11	5.40E+07
2.98E-34	1.32E-27	1.51E+07	6.63E+13	1.42E+08	0.00E+00	0.00E+00	0.00E+00
7.50E-07	9.79E-01	5.50E+07	7.16E+13	1.78E+08	2.10E+07	2.73E+13	2.75E+08
7.33E-07	2.96E-01	3.16E+07	1.27E+13	1.06E+08	1.79E+05	7.20E+10	8.10E+07
3.50E-08	1.39E-02	9.65E+06	3.84E+12	2.59E+08	6.13E+04	2.44E+10	5.50E+07
3.83E-21	1.75E-14	8.96E+06	4.06E+13	1.89E+08	7.23E+04	3.28E+11	1.80E+07
2.13E-12	2.39E-07	1.59E+07	1.78E+12	6.50E+07	7.07E+06	7.91E+11	1.50E+08
5.83E-08	7.73E-02	6.84E+06	9.04E+12	2.00E+07	3.92E+06	5.18E+12	2.15E+08
1.31E-06	2.89E-01	3.60E+07	7.91E+12	2.45E+08	6.25E+04	1.38E+10	4.50E+07
1.14E-04	7.29E+02	1.09E+07	6.98E+13	6.60E+07	8.48E+05	5.41E+12	3.27E+08
6.71E-08	3.57E-03	7.06E+07	3.75E+12	1.76E+08	2.13E+06	1.13E+11	1.53E+08
4.70E-03	4.48E+02	1.55E+07	1.48E+12	6.00E+07	9.31E+06	8.88E+11	3.04E+08
9.78E-10	2.25E-04	1.56E+07	3.57E+12	2.36E+08	4.98E+06	1.14E+12	1.55E+08
2.21E-05	3.73E+00	1.85E+07	3.12E+12	9.70E+07	4.16E+06	7.01E+11	3.35E+08
6.26E-35	1.22E-29	2.94E+07	5.70E+12	1.83E+08	0.00E+00	0.00E+00	0.00E+00
2.12E-36	2.43E-30	1.75E+07	2.00E+13	1.84E+08	8.56E+04	9.77E+10	2.70E+07
7.08E-08	8.53E-02	1.33E+07	1.61E+13	1.41E+08	8.84E+05	1.06E+12	3.26E+08
8.42E-09	2.38E-03	1.21E+07	3.40E+12	1.70E+08	4.64E+04	1.31E+10	4.40E+07
9.51E-07	4.97E-01	6.01E+06	3.14E+12	2.65E+08	3.63E+06	1.89E+12	2.19E+08
1.54E-16	8.21E-11	1.27E+07	6.74E+12	1.79E+08	5.77E+02	3.05E+08	2.00E+06
1.58E-24	4.64E-18	2.36E+07	6.89E+13	2.40E+08	3.49E+05	1.02E+12	6.30E+07
7.96E-04	2.01E+01	5.93E+07	1.50E+12	1.52E+08	4.54E+06	1.15E+11	1.88E+08
7.43E-04	4.56E+02	1.60E+07	9.82E+12	1.46E+08	2.02E+06	1.24E+12	4.48E+08
1.81E-10	1.71E-05	1.57E+07	1.48E+12	1.30E+08	1.05E+06	9.88E+10	4.00E+07
1.34E-05	5.15E+00	3.10E+07	1.19E+13	1.99E+08	3.34E+06	1.28E+12	2.28E+08
6.77E-05	3.29E+01	2.18E+07	1.06E+13	1.24E+08	1.30E+06	6.29E+11	3.51E+08
1.66E-08	3.05E-02	2.40E+07	4.40E+13	4.50E+07	3.53E+05	6.46E+11	6.50E+07
5.10E-08	3.42E-02	6.56E+07	4.38E+13	1.52E+08	2.01E+05	1.35E+11	1.27E+08
1.73E-14	4.88E-08	1.60E+07	4.50E+13	2.41E+08	1.02E+05	2.88E+11	5.40E+07
6.11E-07	7.40E-01	1.01E+07	1.22E+13	3.04E+08	2.84E+06	3.43E+12	2.65E+08
1.36E-06	3.09E-02	5.55E+07	1.25E+12	2.80E+07	3.98E+06	8.98E+10	3.80E+07
1.44E-05	1.31E+01	6.45E+07	5.85E+13	1.28E+08	5.62E+06	5.10E+12	4.90E+08
6.02E-07	7.30E-02	3.75E+07	4.55E+12	9.60E+07	9.74E+06	1.18E+12	2.97E+08
2.83E-11	6.06E-05	3.03E+07	6.44E+13	1.58E+08	9.49E+05	2.02E+12	7.80E+07
1.12E-09	2.97E-04	5.57E+07	1.47E+13	2.09E+08	2.61E+05	6.88E+10	8.70E+07
1.13E-10	4.57E-06	6.78E+07	2.71E+12	3.40E+07	3.52E+06	1.41E+11	2.90E+07
1.56E-07	1.13E-02	2.10E+07	1.52E+12	2.33E+08	1.07E+06	7.78E+10	1.08E+08
5.99E-10	7.93E-04	4.96E+07	6.52E+13	1.51E+08	1.13E+07	1.49E+13	2.07E+08
1.18E-06	1.00E+01	1.09E+07	9.26E+13	2.56E+08	5.09E+05	4.32E+12	4.02E+08
9.43E-05	4.52E+01	4.19E+07	2.01E+13	1.83E+08	7.40E+06	3.54E+12	2.88E+08

1.13E-09	1.34E-03	3.31E+07	3.92E+13	2.75E+08	3.62E+06	4.28E+12	2.99E+08
1.17E-10	2.89E-04	9.06E+06	2.22E+13	1.63E+08	9.73E+05	2.39E+12	1.67E+08
1.01E-05	4.46E+00	6.12E+06	2.70E+12	1.70E+07	3.57E+06	1.57E+12	1.66E+08
7.31E-12	1.16E-06	8.99E+06	1.42E+12	4.90E+07	1.64E+05	2.60E+10	2.90E+07
4.16E-06	2.43E+00	5.87E+07	3.42E+13	1.35E+08	3.61E+06	2.10E+12	1.38E+08
4.39E-06	2.88E+00	3.14E+07	2.06E+13	2.57E+08	3.99E+05	2.62E+11	2.84E+08
4.26E-06	5.35E-01	2.64E+07	3.31E+12	3.20E+07	3.86E+06	4.83E+11	7.70E+07
7.39E-12	5.72E-05	1.14E+07	8.79E+13	2.73E+08	9.18E+05	7.08E+12	1.96E+08
2.04E-05	1.32E+01	4.22E+07	2.74E+13	5.20E+07	8.64E+06	5.60E+12	2.32E+08
2.91E-20	1.14E-13	8.69E+06	3.40E+13	2.31E+08	2.52E+04	9.85E+10	5.60E+07
7.88E-10	1.49E-03	3.44E+07	6.49E+13	2.77E+08	7.14E+06	1.35E+13	3.92E+08
7.31E-04	8.97E+01	1.29E+07	1.59E+12	8.70E+07	2.23E+06	2.74E+11	2.37E+08
6.20E-06	1.09E+00	1.26E+07	2.20E+12	1.06E+08	2.28E+06	3.99E+11	2.17E+08
6.01E-04	1.63E+01	4.07E+07	1.11E+12	1.58E+08	7.62E+06	2.07E+11	1.62E+08
6.56E-05	2.52E+01	1.86E+07	7.14E+12	9.30E+07	3.39E+06	1.30E+12	2.52E+08
1.88E-06	1.51E+00	5.29E+07	4.23E+13	2.66E+08	3.33E+06	2.67E+12	4.11E+08
9.44E-47	6.38E-41	4.07E+07	2.74E+13	1.61E+08	4.81E+04	3.23E+10	1.70E+07
3.54E-13	2.56E-08	1.77E+07	1.28E+12	1.63E+08	0.00E+00	0.00E+00	0.00E+00
1.65E-15	1.84E-10	1.75E+07	1.95E+12	1.81E+08	2.48E+06	2.77E+11	1.66E+08
4.07E-12	1.53E-05	8.06E+06	3.02E+13	2.51E+08	1.39E+06	5.22E+12	1.87E+08
1.40E-12	1.10E-06	3.19E+07	2.49E+13	2.44E+08	1.53E+05	1.19E+11	4.50E+07
2.09E-15	1.01E-08	8.88E+06	4.28E+13	2.32E+08	9.50E+04	4.58E+11	1.40E+08
3.07E-10	1.76E-03	1.29E+07	7.38E+13	1.65E+08	6.15E+06	3.52E+13	2.41E+08
1.33E-08	1.81E-03	8.51E+06	1.15E+12	1.20E+07	3.67E+06	4.96E+11	4.90E+07
3.46E-08	8.94E-03	2.05E+07	5.26E+12	2.70E+08	1.24E+04	3.19E+09	1.30E+07
2.26E-04	1.46E+01	1.77E+07	1.14E+12	5.80E+07	8.21E+05	5.30E+10	6.40E+07
3.39E-07	1.30E+00	2.31E+07	8.85E+13	2.61E+08	1.96E+06	7.51E+12	3.38E+08
7.44E-09	1.43E-02	6.24E+06	1.19E+13	1.70E+08	2.94E+06	5.63E+12	2.41E+08
7.33E-16	1.55E-09	3.08E+07	6.46E+13	1.19E+08	0.00E+00	0.00E+00	0.00E+00
8.16E-12	1.38E-06	3.87E+07	6.54E+12	2.46E+08	3.73E+05	6.31E+10	1.06E+08
1.22E-21	1.62E-14	7.93E+06	1.04E+14	2.09E+08	7.14E+01	9.41E+08	5.00E+06
9.17E-08	3.28E-02	1.04E+07	3.72E+12	8.70E+07	1.30E+04	4.61E+09	1.20E+07
6.30E-13	8.26E-07	2.55E+07	3.34E+13	8.20E+07	2.23E+07	2.93E+13	3.44E+08
5.13E-36	9.84E-31	2.31E+07	4.41E+12	1.17E+08	0.00E+00	0.00E+00	0.00E+00
1.19E-14	4.50E-10	3.27E+07	1.23E+12	7.60E+07	0.00E+00	0.00E+00	0.00E+00
5.18E-08	2.03E-01	1.46E+07	5.72E+13	2.33E+08	2.35E+06	9.17E+12	1.70E+08
1.54E-06	9.08E+00	1.34E+07	7.91E+13	4.40E+07	1.51E+06	8.89E+12	1.97E+08
5.42E-07	5.38E-01	2.75E+07	2.72E+13	2.15E+08	6.24E+05	6.17E+11	1.08E+08
7.53E-05	4.06E+02	7.18E+06	3.87E+13	8.90E+07	2.53E+06	1.36E+13	8.41E+08
2.86E-21	4.90E-15	2.10E+07	3.58E+13	1.34E+08	0.00E+00	0.00E+00	0.00E+00
2.35E-31	1.45E-25	4.07E+07	2.50E+13	1.15E+08	7.90E+04	4.85E+10	2.20E+07
2.90E-06	7.05E+00	1.60E+07	3.88E+13	1.67E+08	2.11E+05	5.12E+11	1.59E+08
4.54E-12	1.39E-07	4.98E+07	1.52E+12	5.40E+07	6.00E+06	1.84E+11	2.80E+07
1.96E-14	5.60E-08	9.43E+06	2.68E+13	2.33E+08	2.00E+05	5.67E+11	8.50E+07
4.14E-08	3.46E-02	3.36E+07	2.80E+13	2.18E+08	3.07E+05	2.56E+11	1.29E+08
1.71E-05	1.18E+00	4.45E+07	3.07E+12	8.50E+07	1.62E+06	1.12E+11	1.31E+08
1.35E-07	8.81E-02	1.57E+07	1.02E+13	1.75E+08	9.87E+04	6.40E+10	1.04E+08
3.00E-08	1.34E-02	5.17E+07	2.31E+13	2.73E+08	7.05E+05	3.15E+11	1.41E+08
3.69E-02	4.22E+04	2.59E+07	2.97E+13	7.80E+07	4.92E+07	5.63E+13	1.35E+09
2.42E-45	7.70E-40	2.32E+07	7.36E+12	9.60E+07	5.29E+06	1.68E+12	5.40E+07
4.08E-09	2.89E-03	1.19E+07	8.43E+12	1.97E+08	1.54E+06	1.09E+12	9.30E+07
2.08E-06	1.08E+01	9.69E+05	5.02E+12	3.30E+07	8.37E+06	4.33E+13	3.43E+08

9.94E-06	3.77E+00	8.72E+06	3.30E+12	6.30E+07	1.12E+05	4.22E+10	6.50E+07
3.91E-27	4.47E-21	1.96E+07	2.22E+13	1.80E+08	0.00E+00	0.00E+00	0.00E+00
5.75E-06	7.36E+00	1.25E+07	1.60E+13	2.29E+08	2.50E+05	3.20E+11	2.05E+08
2.26E-18	6.25E-13	5.92E+07	1.63E+13	1.96E+08	2.62E+03	7.21E+08	2.00E+06
1.18E-08	1.75E-02	5.38E+07	7.90E+13	1.81E+08	8.11E+06	1.19E+13	2.30E+08
3.78E-07	6.66E-01	6.78E+06	1.19E+13	9.60E+07	4.07E+06	7.16E+12	3.08E+08
9.05E-14	7.41E-08	1.62E+07	1.32E+13	1.59E+08	6.48E+03	5.28E+09	1.90E+07
1.06E-06	1.50E-01	4.27E+06	6.04E+11	1.40E+07	7.50E+07	1.06E+13	4.12E+08
3.21E-23	2.61E-18	1.87E+07	1.51E+12	1.63E+08	0.00E+00	0.00E+00	0.00E+00
1.08E-04	4.75E+02	1.49E+07	6.56E+13	8.50E+07	1.62E+06	7.12E+12	3.59E+08
2.65E-12	3.47E-06	5.96E+07	7.76E+13	2.49E+08	9.61E+06	1.25E+13	7.90E+07
2.13E-07	8.60E-02	2.89E+07	1.16E+13	7.80E+07	2.71E+06	1.09E+12	7.60E+07
2.51E-05	1.00E+01	8.92E+06	3.55E+12	9.10E+07	9.15E+05	3.64E+11	1.52E+08
8.99E-14	4.10E-07	9.17E+06	4.16E+13	1.11E+08	1.00E+05	4.53E+11	1.28E+08
2.93E-06	3.29E-01	2.44E+07	2.74E+12	2.08E+08	9.51E+04	1.07E+10	2.40E+07
7.38E-07	9.79E-01	9.61E+06	1.27E+13	8.00E+07	1.04E+06	1.38E+12	2.49E+08
5.82E-08	1.29E-02	3.59E+07	7.89E+12	2.25E+08	1.98E+05	4.36E+10	1.00E+08
1.31E-22	8.41E-16	1.16E+07	7.41E+13	1.60E+08	0.00E+00	0.00E+00	0.00E+00
7.54E-37	4.03E-32	6.31E+07	3.35E+12	1.62E+08	0.00E+00	0.00E+00	0.00E+00
8.86E-06	8.46E-01	2.30E+07	2.19E+12	8.30E+07	2.02E+06	1.93E+11	1.71E+08
1.66E-06	3.79E-01	9.18E+05	2.10E+11	9.00E+06	1.94E+07	4.43E+12	3.56E+08
2.24E-07	3.79E-02	1.81E+07	3.05E+12	2.06E+08	4.58E+06	7.72E+11	1.20E+08
2.11E-03	4.09E+02	2.57E+07	4.98E+12	7.60E+07	5.61E+06	1.09E+12	2.40E+08
2.74E-26	3.14E-20	1.62E+07	1.85E+13	1.72E+08	0.00E+00	0.00E+00	0.00E+00
1.04E-05	1.26E+01	1.22E+07	1.47E+13	1.07E+08	1.87E+06	2.25E+12	3.51E+08
3.38E-11	9.57E-06	1.16E+07	3.27E+12	2.13E+08	3.45E+05	9.70E+10	8.20E+07
3.02E-28	1.59E-22	8.32E+06	4.34E+12	1.77E+08	0.00E+00	0.00E+00	0.00E+00
2.09E-15	1.11E-09	1.26E+07	6.64E+12	1.80E+08	1.29E+05	6.82E+10	3.00E+07
1.28E-03	3.74E+03	2.52E+07	7.34E+13	1.11E+08	2.74E+06	8.00E+12	7.50E+08
1.22E-20	3.11E-16	5.16E+07	1.30E+12	1.04E+08	2.69E+06	6.80E+10	4.80E+07
8.10E-38	4.99E-32	1.41E+07	8.62E+12	1.57E+08	0.00E+00	0.00E+00	0.00E+00
3.85E-19	3.64E-14	1.57E+07	1.48E+12	1.13E+08	0.00E+00	0.00E+00	0.00E+00
4.89E-36	1.89E-30	2.87E+07	1.10E+13	1.81E+08	3.40E+03	1.30E+09	2.00E+06
2.53E-06	1.23E+00	1.90E+07	9.22E+12	1.24E+08	3.90E+06	1.89E+12	3.56E+08
1.73E-07	3.18E-01	2.17E+07	3.96E+13	9.70E+07	6.40E+04	1.17E+11	1.13E+08
2.55E-14	1.71E-08	6.54E+07	4.37E+13	1.10E+08	4.24E+05	2.84E+11	4.30E+07
2.80E-05	7.87E+01	1.30E+07	3.64E+13	1.98E+08	4.37E+06	1.23E+13	5.13E+08
5.78E-03	6.99E+03	7.26E+06	8.79E+12	6.80E+07	5.82E+06	7.04E+12	6.99E+08
1.82E-08	4.12E-04	4.06E+07	9.17E+11	1.70E+07	1.97E+07	4.43E+11	7.80E+07
4.90E-08	4.45E-02	6.65E+07	6.03E+13	2.80E+08	3.64E+06	3.30E+12	3.74E+08
5.47E-10	6.65E-05	4.52E+07	5.48E+12	2.09E+08	0.00E+00	0.00E+00	0.00E+00
4.67E-19	9.98E-13	3.15E+07	6.70E+13	2.02E+08	1.00E+02	2.13E+08	1.00E+06
1.62E-30	4.31E-25	5.40E+07	1.42E+13	1.72E+08	0.00E+00	0.00E+00	0.00E+00
1.30E-02	5.20E+02	5.27E+07	2.11E+12	3.50E+07	1.74E+07	6.96E+11	1.11E+08
1.25E-02	9.04E+02	1.40E+07	1.02E+12	6.50E+07	9.45E+06	6.85E+11	3.15E+08
2.69E-07	3.54E-01	5.96E+07	7.84E+13	1.31E+08	1.12E+06	1.47E+12	3.44E+08
8.90E-04	7.55E+03	8.70E+06	7.38E+13	2.34E+08	1.61E+06	1.37E+13	5.91E+08
7.58E-06	3.64E+00	4.67E+07	2.24E+13	1.33E+08	2.46E+06	1.18E+12	2.64E+08
1.50E-07	1.77E-01	3.68E+07	4.35E+13	2.81E+08	2.37E+05	2.81E+11	2.16E+08
6.91E-05	1.70E+02	7.26E+06	1.78E+13	2.80E+08	3.77E+06	9.25E+12	3.87E+08
5.86E-09	2.60E-03	9.68E+06	4.27E+12	1.46E+08	1.56E+03	6.89E+08	4.00E+06
8.26E-13	1.31E-07	7.70E+06	1.22E+12	3.80E+07	1.46E+06	2.32E+11	1.02E+08

1.70E-09	9.95E-04	5.44E+07	3.17E+13	1.81E+08	7.31E+06	4.26E+12	1.85E+08
7.03E-23	4.64E-17	2.91E+07	1.91E+13	2.25E+08	6.66E+05	4.37E+11	5.10E+07
9.15E-06	1.15E+00	3.05E+07	3.82E+12	1.56E+08	3.16E+05	3.95E+10	3.80E+07
3.54E-04	2.73E+03	8.67E+06	6.69E+13	2.18E+08	4.13E+06	3.19E+13	1.04E+09
6.24E-05	4.06E+01	4.66E+07	3.02E+13	8.50E+07	4.43E+06	2.87E+12	2.30E+08
2.31E-12	9.05E-06	5.62E+06	2.20E+13	1.65E+08	2.52E+06	9.86E+12	1.69E+08
1.89E-32	3.58E-26	3.01E+07	5.68E+13	1.72E+08	0.00E+00	0.00E+00	0.00E+00
1.22E-04	1.49E+01	1.46E+07	1.79E+12	2.14E+08	5.49E+05	6.74E+10	1.25E+08
1.05E-07	1.84E-02	1.07E+07	1.88E+12	1.56E+08	3.84E+06	6.73E+11	2.04E+08
3.44E-06	9.38E-02	4.13E+07	1.12E+12	1.43E+08	6.67E+06	1.81E+11	1.92E+08
3.41E-05	1.31E+01	1.64E+07	6.31E+12	4.30E+07	5.85E+06	2.25E+12	1.91E+08
2.00E-17	1.61E-11	4.66E+07	3.73E+13	2.13E+08	2.10E+06	1.68E+12	8.30E+07
2.07E-28	1.40E-22	3.92E+07	2.63E+13	1.32E+08	0.00E+00	0.00E+00	0.00E+00
1.88E-07	1.36E-02	1.79E+07	1.29E+12	1.41E+08	1.27E+04	9.13E+08	6.00E+06
5.95E-20	6.64E-15	8.02E+06	8.95E+11	3.90E+07	1.25E+07	1.39E+12	2.53E+08
6.48E-19	2.44E-12	9.25E+06	3.46E+13	2.41E+08	2.80E+05	1.05E+12	1.03E+08
5.51E-07	4.31E-01	2.87E+07	2.24E+13	1.15E+08	3.24E+06	2.53E+12	2.25E+08
6.07E-12	2.95E-05	8.93E+06	4.31E+13	1.71E+08	3.03E+02	1.46E+09	8.00E+06
1.11E-08	6.37E-02	1.84E+07	1.05E+14	3.10E+08	1.51E+06	8.61E+12	2.38E+08
4.29E-06	5.82E-01	1.16E+07	1.57E+12	2.10E+07	9.00E+05	1.22E+11	4.30E+07
3.88E-26	1.00E-20	1.59E+07	4.08E+12	2.05E+08	2.03E+06	5.22E+11	8.70E+07
1.84E-11	1.19E-06	1.80E+07	1.16E+12	1.31E+08	3.39E+05	2.19E+10	5.30E+07
7.06E-07	2.70E+00	1.86E+07	7.11E+13	2.49E+08	6.17E+06	2.36E+13	3.95E+08
4.13E-07	7.92E-01	8.99E+06	1.72E+13	1.81E+08	5.28E+05	1.01E+12	3.03E+08
2.72E-05	5.71E+01	2.38E+07	4.99E+13	2.40E+07	6.49E+06	1.36E+13	2.66E+08
3.54E-11	6.01E-06	3.72E+07	6.28E+12	2.43E+08	2.42E+06	4.09E+11	7.90E+07
3.27E-20	4.33E-13	8.91E+06	1.17E+14	2.12E+08	1.84E+04	2.42E+11	1.13E+08
1.88E-08	6.74E-03	1.08E+07	3.83E+12	6.50E+07	1.05E+04	3.75E+09	8.00E+06
1.12E-06	1.47E+00	6.41E+07	8.41E+13	9.50E+07	1.05E+07	1.38E+13	4.14E+08
1.91E-11	3.66E-06	2.30E+07	4.39E+12	6.40E+07	0.00E+00	0.00E+00	0.00E+00
1.84E-05	6.94E-01	2.63E+07	9.93E+11	6.00E+07	6.22E+06	2.35E+11	9.40E+07
5.46E-09	2.14E-02	1.47E+07	5.74E+13	3.05E+08	2.44E+06	9.55E+12	3.86E+08
1.58E-04	9.33E+02	1.50E+07	8.87E+13	1.80E+08	8.30E+05	4.90E+12	1.91E+08
5.38E-03	5.32E+03	8.17E+06	8.08E+12	5.80E+07	2.02E+07	1.99E+13	7.89E+08
2.29E-05	1.24E+02	7.10E+06	3.83E+13	9.30E+07	2.59E+06	1.40E+13	4.42E+08
8.71E-12	1.49E-05	2.52E+07	4.29E+13	4.20E+07	1.51E+05	2.57E+11	5.10E+07
1.27E-12	7.86E-07	4.45E+07	2.74E+13	8.40E+07	4.24E+02	2.60E+08	1.00E+06
1.59E-43	3.87E-37	1.49E+07	3.62E+13	1.93E+08	2.47E+02	5.98E+08	1.00E+06
1.30E-11	4.01E-07	5.63E+07	1.72E+12	7.70E+07	9.05E+04	2.77E+09	9.00E+06
1.10E-04	3.14E+02	7.78E+06	2.21E+13	3.39E+08	2.33E+06	6.62E+12	4.91E+08
5.69E-06	4.75E+00	3.40E+07	2.83E+13	1.38E+08	1.90E+05	1.58E+11	1.66E+08
5.66E-06	3.93E-01	4.51E+07	3.11E+12	1.10E+08	7.58E+04	5.24E+09	1.50E+07
8.61E-11	5.61E-05	1.57E+07	1.02E+13	2.23E+08	1.43E+05	9.30E+10	1.16E+08
2.13E-05	9.52E+00	4.81E+07	2.15E+13	2.70E+08	4.35E+06	1.94E+12	3.17E+08
3.34E-03	3.83E+03	1.18E+07	1.35E+13	4.30E+07	6.22E+07	7.13E+13	7.45E+08
1.56E-03	4.93E+02	3.38E+07	1.07E+13	2.06E+08	1.05E+07	3.34E+12	4.20E+08
7.66E-05	5.42E+01	1.31E+07	9.29E+12	2.97E+08	1.32E+06	9.34E+11	3.72E+08
2.61E-05	1.35E+02	7.24E+06	3.75E+13	1.26E+08	2.17E+06	1.12E+13	6.52E+08
1.40E-17	5.32E-12	8.16E+06	3.09E+12	8.00E+07	0.00E+00	0.00E+00	0.00E+00
1.60E-05	1.82E+01	1.79E+07	2.04E+13	1.26E+08	2.80E+06	3.17E+12	3.46E+08
2.00E-15	2.57E-09	1.17E+07	1.49E+13	1.94E+08	2.15E+03	2.74E+09	5.00E+06
7.50E-05	2.06E+01	5.92E+07	1.63E+13	1.58E+08	2.43E+06	6.67E+11	1.85E+08

3.75E-12	5.53E-06	1.84E+07	2.70E+13	1.80E+07	4.00E+07	5.88E+13	1.86E+08
2.03E-07	3.58E-01	1.08E+07	1.89E+13	2.30E+08	1.16E+05	2.05E+11	2.18E+08
5.33E-08	4.36E-02	1.58E+07	1.29E+13	6.50E+07	1.07E+06	8.71E+11	8.90E+07
2.91E-02	4.12E+03	4.39E+07	6.22E+12	1.89E+08	3.71E+07	5.26E+12	7.83E+08
4.71E-09	3.81E-04	1.82E+07	1.47E+12	1.03E+08	1.26E+06	1.02E+11	9.20E+07
5.52E-05	2.42E+02	8.99E+06	3.94E+13	5.60E+07	7.56E+06	3.32E+13	7.50E+08
1.11E-07	1.45E-01	5.07E+07	6.60E+13	2.82E+08	2.32E+07	3.02E+13	3.16E+08
5.10E-18	2.07E-12	3.14E+07	1.26E+13	1.65E+08	3.43E+05	1.38E+11	5.60E+07
5.76E-07	2.30E-01	9.34E+06	3.72E+12	2.21E+08	3.83E+05	1.52E+11	1.38E+08
3.98E-06	1.81E+01	8.31E+06	3.77E+13	5.70E+07	8.60E+05	3.90E+12	2.13E+08
5.32E-17	5.99E-12	1.12E+07	1.26E+12	2.90E+07	4.32E+06	4.84E+11	2.10E+07
8.22E-33	1.09E-26	1.01E+07	1.34E+13	1.20E+08	2.83E+05	3.74E+11	4.80E+07
1.61E-06	3.55E-01	2.80E+07	6.16E+12	1.89E+08	7.67E+06	1.69E+12	2.12E+08
3.01E-11	1.93E-04	1.22E+07	7.80E+13	1.58E+08	4.09E+02	2.61E+09	1.20E+07
5.17E-04	2.75E+01	7.15E+07	3.80E+12	2.08E+08	1.32E+06	6.98E+10	8.90E+07
9.76E-08	9.34E-03	2.49E+07	2.37E+12	1.81E+08	5.51E+03	5.25E+08	3.00E+06
3.00E-21	6.92E-16	1.72E+07	3.95E+12	1.26E+08	0.00E+00	0.00E+00	0.00E+00
8.27E-07	1.40E-01	1.70E+07	2.86E+12	1.65E+08	5.16E+06	8.70E+11	1.31E+08
4.91E-16	9.56E-11	3.03E+07	5.87E+12	7.70E+07	3.77E+05	7.30E+10	1.30E+07
7.44E-11	8.53E-05	1.19E+07	1.36E+13	2.45E+08	7.85E+06	8.96E+12	2.48E+08
9.34E-17	1.13E-10	1.35E+07	1.62E+13	1.75E+08	0.00E+00	0.00E+00	0.00E+00
5.10E-06	1.44E+00	1.14E+07	3.20E+12	2.18E+08	5.06E+05	1.42E+11	1.34E+08
1.62E-19	8.51E-14	5.95E+06	3.11E+12	2.02E+08	2.67E+06	1.39E+12	1.46E+08
4.51E-07	2.40E-01	1.27E+07	6.71E+12	1.66E+08	9.32E+04	4.93E+10	3.40E+07
1.02E-09	2.98E-03	2.69E+07	7.85E+13	2.88E+08	1.98E+05	5.79E+11	2.04E+08
5.86E-07	1.48E-02	5.63E+07	1.42E+12	6.00E+07	7.87E+06	1.99E+11	1.48E+08
2.22E-10	1.37E-04	1.79E+07	1.10E+13	2.65E+08	2.08E+04	1.27E+10	3.60E+07
1.37E-10	1.29E-05	1.47E+07	1.38E+12	8.10E+07	2.04E+06	1.91E+11	1.05E+08
2.34E-09	9.00E-04	1.86E+07	7.15E+12	5.70E+07	1.37E+07	5.27E+12	2.50E+08
9.14E-04	4.44E+02	2.09E+07	1.02E+13	1.07E+08	2.16E+06	1.05E+12	3.19E+08
6.23E-11	1.15E-04	2.19E+07	4.00E+13	1.67E+08	1.57E+04	2.88E+10	4.30E+07
5.21E-07	3.50E-01	6.62E+07	4.42E+13	1.46E+08	1.89E+05	1.26E+11	1.37E+08
2.57E-07	7.23E-01	1.65E+07	4.62E+13	3.23E+08	3.18E+05	8.94E+11	2.25E+08
6.44E-05	7.79E+01	1.13E+07	1.36E+13	1.63E+08	1.67E+06	2.02E+12	3.81E+08
3.26E-15	7.40E-11	5.28E+07	1.19E+12	3.30E+07	5.57E+06	1.26E+11	4.30E+07
2.00E-05	1.82E+01	6.27E+07	5.69E+13	1.72E+08	7.32E+06	6.64E+12	3.42E+08
3.62E-07	4.39E-02	3.82E+07	4.64E+12	1.99E+08	8.64E+06	1.05E+12	2.86E+08
1.18E-13	2.52E-07	3.11E+07	6.61E+13	2.16E+08	3.49E+05	7.41E+11	6.00E+07
1.58E-06	4.20E-01	5.46E+07	1.44E+13	2.02E+08	4.08E+05	1.07E+11	5.10E+07
2.74E-08	1.10E-03	6.77E+07	2.71E+12	5.70E+07	3.99E+05	1.59E+10	1.70E+07
1.46E-03	1.06E+02	1.67E+07	1.21E+12	8.80E+07	6.79E+06	4.92E+11	2.46E+08
2.17E-04	2.86E+02	5.93E+07	7.80E+13	9.20E+07	1.39E+06	1.82E+12	2.86E+08
1.03E-21	8.76E-15	1.02E+07	8.65E+13	1.70E+08	3.27E+04	2.77E+11	4.80E+07
3.65E-08	1.76E-02	4.46E+07	2.14E+13	1.38E+08	4.40E+06	2.11E+12	1.47E+08
8.58E-09	1.02E-02	3.61E+07	4.26E+13	2.68E+08	4.14E+05	4.89E+11	1.14E+08
1.00E-20	2.48E-14	8.48E+06	2.08E+13	1.39E+08	5.19E+05	1.27E+12	6.70E+07
8.03E-05	3.55E+01	9.44E+06	4.16E+12	6.90E+07	6.05E+05	2.67E+11	8.80E+07
1.48E-43	2.36E-38	8.39E+06	1.33E+12	9.10E+07	0.00E+00	0.00E+00	0.00E+00
8.53E-17	5.00E-11	6.17E+07	3.59E+13	2.38E+08	1.39E+05	8.07E+10	8.30E+07
1.18E-17	7.80E-12	2.18E+07	1.43E+13	1.39E+08	0.00E+00	0.00E+00	0.00E+00
5.45E-06	6.84E-01	3.03E+07	3.79E+12	1.25E+08	2.97E+05	3.72E+10	5.20E+07
3.63E-05	2.80E+02	1.00E+07	7.75E+13	1.83E+08	2.72E+06	2.10E+13	9.72E+08

3.37E-06	2.19E+00	5.02E+07	3.26E+13	1.95E+08	3.14E+05	2.03E+11	1.49E+08
4.67E-06	1.83E+01	8.82E+06	3.45E+13	2.21E+08	7.09E+05	2.77E+12	5.07E+08
3.46E-11	6.56E-05	3.39E+07	6.39E+13	2.77E+08	7.05E+06	1.33E+13	3.11E+08
7.50E-17	9.26E-12	1.38E+07	1.69E+12	1.94E+08	0.00E+00	0.00E+00	0.00E+00
3.99E-06	7.00E-01	1.40E+07	2.46E+12	1.53E+08	1.05E+06	1.83E+11	1.74E+08
8.83E-05	2.40E+00	3.80E+07	1.03E+12	1.09E+08	1.00E+07	2.72E+11	3.17E+08
3.07E-20	1.19E-14	2.13E+07	8.21E+12	1.34E+08	2.44E+05	9.37E+10	5.60E+07
3.51E-11	2.81E-05	5.11E+07	4.09E+13	2.73E+08	3.31E+06	2.65E+12	3.19E+08
2.04E-16	1.38E-10	3.83E+07	2.57E+13	1.44E+08	4.21E+04	2.83E+10	5.10E+07
8.61E-56	6.23E-51	1.47E+07	1.06E+12	1.10E+08	0.00E+00	0.00E+00	0.00E+00
1.49E-07	1.67E-02	1.68E+07	1.88E+12	1.72E+08	4.64E+06	5.18E+11	9.30E+07
6.79E-22	2.56E-15	9.25E+06	3.47E+13	1.78E+08	0.00E+00	0.00E+00	0.00E+00
2.67E-07	2.09E-01	2.31E+07	1.80E+13	1.25E+08	8.15E+06	6.36E+12	1.86E+08
4.26E-09	2.06E-02	9.04E+06	4.36E+13	1.26E+08	2.91E+05	1.40E+12	2.17E+08
4.87E-03	2.78E+04	1.16E+07	6.65E+13	8.20E+07	8.50E+06	4.86E+13	1.19E+09
3.67E-06	4.98E-01	1.29E+07	1.74E+12	4.50E+07	3.60E+05	4.87E+10	3.10E+07
3.44E-04	8.85E+01	1.24E+07	3.19E+12	8.90E+07	8.11E+06	2.08E+12	5.52E+08
1.00E-31	6.50E-27	1.61E+07	1.04E+12	1.46E+08	0.00E+00	0.00E+00	0.00E+00
5.54E-26	2.13E-19	2.26E+07	8.65E+13	2.24E+08	6.24E+05	2.39E+12	6.40E+07
1.75E-05	3.36E+01	4.63E+06	8.87E+12	6.40E+07	4.88E+06	9.35E+12	3.63E+08
5.41E-26	1.14E-19	2.94E+07	6.18E+13	1.50E+08	0.00E+00	0.00E+00	0.00E+00
2.51E-10	4.26E-05	4.02E+07	6.79E+12	2.26E+08	2.12E+04	3.59E+09	8.00E+06
1.36E-10	1.80E-03	8.08E+06	1.06E+14	8.00E+07	5.26E+04	6.92E+11	1.96E+08
6.08E-08	2.17E-02	8.39E+06	2.99E+12	9.50E+07	1.68E+06	5.97E+11	6.40E+07
1.00E-10	1.32E-04	6.38E+07	8.37E+13	1.50E+08	5.28E+05	6.92E+11	6.10E+07
6.60E-26	1.27E-20	2.33E+07	4.45E+12	1.04E+08	0.00E+00	0.00E+00	0.00E+00
2.35E-19	8.90E-15	3.31E+07	1.25E+12	1.00E+08	0.00E+00	0.00E+00	0.00E+00
5.71E-08	2.24E-01	1.32E+07	5.18E+13	1.99E+08	2.59E+06	1.01E+13	3.12E+08
2.95E-10	1.75E-03	1.33E+07	7.82E+13	2.90E+07	2.29E+06	1.35E+13	1.95E+08
3.65E-12	3.63E-06	2.81E+07	2.78E+13	1.99E+08	5.12E+03	5.06E+09	9.00E+06
1.57E-03	8.47E+03	6.35E+06	3.42E+13	8.50E+07	3.36E+06	1.81E+13	1.16E+09
1.30E-08	2.23E-02	2.21E+07	3.77E+13	1.15E+08	1.01E+03	1.72E+09	8.00E+06
5.20E-32	3.21E-26	4.24E+07	2.60E+13	1.04E+08	0.00E+00	0.00E+00	0.00E+00
1.39E-04	3.37E+02	1.57E+07	3.81E+13	1.91E+08	3.98E+05	9.65E+11	3.07E+08
2.24E-11	6.88E-07	4.42E+07	1.35E+12	1.20E+07	1.33E+07	4.06E+11	4.30E+07
1.68E-06	4.79E+00	1.55E+06	4.40E+12	3.90E+07	9.21E+06	2.62E+13	4.29E+08
2.21E-03	1.85E+03	2.71E+07	2.26E+13	7.20E+07	6.31E+06	5.26E+12	4.32E+08
1.66E-09	1.15E-04	4.71E+07	3.26E+12	6.40E+07	1.26E+05	8.70E+09	1.30E+07
8.42E-14	5.48E-08	1.54E+07	9.97E+12	2.00E+08	4.26E+05	2.76E+11	1.42E+08
4.38E-07	1.96E-01	3.71E+07	1.66E+13	2.13E+08	1.18E+07	5.25E+12	2.33E+08
1.77E-05	2.03E+01	5.64E+07	6.46E+13	1.21E+08	1.85E+07	2.12E+13	8.33E+08
1.25E-05	3.96E+00	4.03E+07	1.28E+13	1.60E+08	6.32E+06	2.01E+12	2.92E+08
1.92E-10	1.37E-04	1.35E+07	9.52E+12	2.53E+08	3.52E+05	2.49E+11	1.13E+08
3.60E-03	1.87E+04	4.26E+06	2.21E+13	5.70E+07	5.16E+06	2.67E+13	7.84E+08
1.15E-39	4.39E-34	7.36E+06	2.79E+12	4.90E+07	2.99E+05	1.13E+11	5.50E+07
2.71E-09	3.08E-03	2.08E+07	2.36E+13	2.39E+08	1.06E+05	1.20E+11	1.27E+08
1.31E-06	1.67E+00	1.20E+07	1.54E+13	1.88E+08	7.89E+05	1.01E+12	3.33E+08
4.81E-41	1.33E-35	5.26E+07	1.45E+13	1.87E+08	8.99E+05	2.47E+11	2.30E+07
9.46E-07	1.39E+00	5.57E+07	8.18E+13	1.20E+08	7.14E+06	1.05E+13	3.95E+08
6.08E-12	1.07E-05	5.19E+06	9.12E+12	1.38E+08	3.83E+06	6.74E+12	3.20E+08
4.24E-30	3.47E-24	1.65E+07	1.34E+13	1.90E+08	4.01E+04	3.27E+10	2.50E+07
6.08E-48	8.67E-43	4.03E+07	5.71E+12	1.66E+08	0.00E+00	0.00E+00	0.00E+00



1.64E-05	1.33E+00	1.82E+07	1.47E+12	1.18E+08	1.16E+06	9.38E+10	6.60E+07
1.31E-21	5.77E-15	1.58E+07	6.92E+13	1.40E+08	0.00E+00	0.00E+00	0.00E+00
7.11E-10	9.28E-04	7.33E+07	9.54E+13	2.69E+08	3.36E+06	4.38E+12	2.25E+08
1.24E-07	5.00E-02	3.12E+07	1.26E+13	9.70E+07	7.62E+05	3.07E+11	5.20E+07
2.26E-06	9.01E-01	7.76E+06	3.09E+12	1.15E+08	1.12E+06	4.44E+11	1.27E+08
1.49E-17	6.81E-11	9.30E+06	4.21E+13	2.14E+08	1.30E+02	5.89E+08	3.00E+06
5.35E-13	6.02E-08	2.15E+07	2.41E+12	2.06E+08	2.73E+06	3.06E+11	1.66E+08
1.65E-05	2.18E+01	1.05E+07	1.38E+13	1.78E+08	1.09E+05	1.44E+11	8.60E+07
4.08E-05	8.99E+00	2.10E+07	4.63E+12	4.80E+07	1.51E+07	3.32E+12	3.00E+08
9.03E-11	5.77E-04	1.23E+07	7.87E+13	1.36E+08	1.77E+05	1.13E+12	2.56E+08
5.26E-11	2.80E-06	4.54E+07	2.41E+12	1.76E+08	2.33E+07	1.24E+12	1.20E+08
5.18E-08	4.96E-03	2.49E+07	2.38E+12	2.20E+08	4.00E+04	3.82E+09	1.70E+07
4.02E-06	9.20E-01	2.00E+07	4.57E+12	2.42E+08	1.18E+06	2.71E+11	1.20E+08
7.39E-05	1.25E+01	8.84E+06	1.49E+12	2.00E+07	1.39E+07	2.34E+12	2.84E+08
3.07E-05	5.97E+00	2.61E+07	5.05E+12	5.20E+07	5.37E+06	1.04E+12	1.46E+08
7.47E-10	8.54E-04	1.52E+07	1.73E+13	2.52E+08	6.62E+06	7.56E+12	2.83E+08
4.35E-10	5.26E-04	1.41E+07	1.70E+13	2.70E+08	3.01E+03	3.62E+09	1.80E+07
2.52E-03	7.09E+02	8.58E+06	2.41E+12	1.52E+08	3.00E+06	8.44E+11	3.46E+08
1.99E-28	1.05E-22	7.32E+06	3.82E+12	1.67E+08	0.00E+00	0.00E+00	0.00E+00
4.71E-08	2.50E-02	1.20E+07	6.36E+12	4.80E+07	8.44E+05	4.46E+11	9.10E+07
4.07E-39	1.19E-32	2.16E+07	6.31E+13	1.88E+08	2.47E+06	7.19E+12	5.50E+07
6.40E-04	1.62E+01	6.22E+07	1.57E+12	1.12E+08	1.83E+06	4.64E+10	7.80E+07
7.00E-05	4.29E+01	1.25E+07	7.66E+12	9.70E+07	5.56E+06	3.41E+12	3.23E+08
3.42E-14	3.23E-09	1.70E+07	1.59E+12	1.56E+08	8.21E+04	7.71E+09	2.90E+07
1.88E-07	7.25E-02	3.19E+07	1.22E+13	1.88E+08	2.29E+06	8.79E+11	1.65E+08
2.05E-22	9.99E-17	1.79E+07	8.71E+12	1.29E+08	0.00E+00	0.00E+00	0.00E+00
4.78E-05	8.76E+01	2.26E+07	4.13E+13	1.12E+08	4.05E+05	7.41E+11	1.24E+08
5.57E-09	3.74E-03	2.17E+07	1.45E+13	1.20E+07	4.35E+07	2.91E+13	1.66E+08
2.78E-08	7.83E-02	9.40E+06	2.64E+13	2.74E+08	6.81E+06	1.91E+13	3.51E+08
7.99E-08	9.70E-02	1.19E+07	1.44E+13	3.13E+08	5.69E+05	6.88E+11	1.19E+08
9.00E-05	2.03E+00	5.92E+07	1.33E+12	6.20E+07	7.14E+05	1.61E+10	4.00E+07
1.94E-11	1.76E-05	1.15E+06	1.04E+12	1.00E+07	6.76E+07	6.14E+13	2.98E+08
2.49E-28	3.04E-23	3.60E+07	4.37E+12	2.06E+08	4.29E+06	5.20E+11	4.10E+07
3.45E-13	7.37E-07	2.72E+07	5.78E+13	1.54E+08	4.30E+06	9.14E+12	2.22E+08
4.69E-05	1.24E+01	5.50E+07	1.45E+13	1.79E+08	5.86E+05	1.55E+11	8.20E+07
3.72E-09	1.49E-04	7.65E+07	3.06E+12	2.60E+07	5.64E+05	2.26E+10	2.00E+07
1.04E-06	7.54E-02	1.25E+07	9.09E+11	7.00E+07	1.11E+07	8.01E+11	1.75E+08
4.72E-08	6.24E-02	6.04E+07	7.95E+13	2.89E+08	9.74E+04	1.28E+11	1.28E+08
4.26E-12	3.63E-05	1.09E+07	9.23E+13	2.71E+08	3.33E+05	2.83E+12	1.83E+08
1.31E-08	6.31E-03	4.47E+07	2.14E+13	1.91E+08	4.16E+06	1.99E+12	2.00E+08
6.98E-05	8.26E+01	3.53E+07	4.18E+13	1.28E+08	1.72E+06	2.04E+12	4.71E+08
4.74E-06	1.16E+01	6.16E+06	1.51E+13	6.90E+07	4.72E+06	1.16E+13	3.91E+08
1.41E-16	6.25E-11	8.50E+06	3.75E+12	3.80E+07	1.29E+06	5.68E+11	1.35E+08
5.50E-09	8.74E-04	8.98E+06	1.42E+12	5.50E+07	2.68E+05	4.24E+10	3.90E+07
1.26E-31	7.41E-26	6.02E+07	3.50E+13	1.96E+08	1.80E+05	1.05E+11	1.50E+07
3.12E-16	2.06E-10	3.12E+07	2.05E+13	2.17E+08	3.45E+04	2.26E+10	2.20E+07
2.44E-18	3.07E-13	2.82E+07	3.52E+12	1.30E+08	2.26E+06	2.83E+11	1.40E+08
1.33E-02	1.02E+05	3.62E+06	2.79E+13	6.50E+07	9.09E+06	7.01E+13	1.25E+09
1.69E-07	1.10E-01	5.02E+07	3.26E+13	2.04E+08	1.64E+04	1.06E+10	3.80E+07
2.16E-09	8.47E-03	8.90E+06	3.48E+13	2.66E+08	5.84E+05	2.28E+12	2.49E+08
1.38E-04	2.60E+02	4.12E+07	7.77E+13	3.17E+08	1.74E+06	3.29E+12	4.95E+08
1.72E-04	2.12E+01	1.25E+07	1.54E+12	8.70E+07	2.64E+06	3.24E+11	2.30E+08

2.27E-08	3.98E-03	1.24E+07	2.18E+12	1.49E+08	2.61E+06	4.57E+11	2.83E+08
4.39E-20	1.20E-15	1.90E+07	5.16E+11	1.23E+08	1.42E+07	3.86E+11	7.30E+07
8.71E-07	3.36E-01	2.21E+07	8.48E+12	2.03E+08	2.41E+05	9.29E+10	1.47E+08
3.69E-09	2.96E-03	5.46E+07	4.36E+13	2.82E+08	4.31E+05	3.45E+11	1.54E+08
1.16E-04	7.78E+01	4.28E+07	2.87E+13	1.44E+08	8.96E+05	6.02E+11	9.00E+07
1.42E-08	1.02E-03	1.73E+07	1.24E+12	1.29E+08	5.24E+05	3.77E+10	7.80E+07
2.02E-10	2.26E-05	1.98E+07	2.21E+12	1.54E+08	1.79E+06	1.99E+11	1.94E+08
2.01E-06	7.52E+00	9.23E+06	3.46E+13	2.73E+08	4.86E+05	1.82E+12	3.58E+08
9.59E-34	7.52E-28	2.90E+07	2.26E+13	1.82E+08	6.89E+05	5.37E+11	4.40E+07
2.86E-25	1.38E-18	8.93E+06	4.31E+13	1.13E+08	2.98E+05	1.44E+12	1.31E+08
1.43E-27	8.21E-21	1.82E+07	1.04E+14	2.08E+08	7.13E+04	4.07E+11	3.30E+07
5.15E-14	7.00E-09	1.30E+07	1.75E+12	4.10E+07	2.71E+04	3.66E+09	9.00E+06
7.16E-10	1.84E-04	3.18E+05	8.16E+10	7.00E+06	1.76E+07	4.53E+12	1.52E+08
2.09E-07	1.36E-02	1.85E+07	1.20E+12	9.50E+07	4.34E+04	2.81E+09	9.00E+06
4.90E-10	1.88E-03	2.41E+07	9.23E+13	2.72E+08	1.08E+06	4.12E+12	2.25E+08
7.01E-15	1.35E-08	8.77E+06	1.68E+13	2.36E+08	6.88E+04	1.32E+11	7.00E+07
6.71E-11	1.42E-04	3.33E+07	6.99E+13	5.00E+07	5.00E+05	1.05E+12	8.90E+07
3.51E-33	5.97E-28	3.23E+07	5.45E+12	1.33E+08	0.00E+00	0.00E+00	0.00E+00
5.27E-55	6.98E-48	8.10E+06	1.07E+14	2.08E+08	2.04E+03	2.68E+10	1.70E+07
1.63E-08	5.83E-03	1.03E+07	3.66E+12	7.40E+07	1.63E+03	5.79E+08	4.00E+06
5.30E-08	6.98E-02	7.35E+07	9.63E+13	2.73E+08	1.24E+06	1.63E+12	1.74E+08
7.97E-12	1.53E-06	2.24E+07	4.28E+12	5.20E+07	7.00E+05	1.33E+11	8.40E+07
3.88E-18	1.47E-13	3.28E+07	1.23E+12	1.16E+08	0.00E+00	0.00E+00	0.00E+00
4.15E-06	1.62E+01	6.33E+06	2.47E+13	6.50E+07	1.08E+07	4.23E+13	4.41E+08
1.46E-16	8.65E-10	1.58E+07	9.31E+13	1.59E+08	1.03E+05	6.07E+11	1.60E+08
9.51E-19	9.46E-13	2.67E+07	2.63E+13	7.30E+07	1.39E+05	1.38E+11	1.60E+07
1.46E-46	7.92E-40	7.62E+06	4.11E+13	1.96E+08	8.18E+03	4.41E+10	6.00E+06
9.23E-19	1.58E-12	2.14E+07	3.65E+13	7.80E+07	5.55E+04	9.46E+10	3.50E+07
9.72E-09	6.00E-03	4.45E+07	2.73E+13	8.50E+07	6.76E+04	4.16E+10	2.50E+07
6.93E-21	1.69E-14	1.53E+07	3.72E+13	2.27E+08	6.86E+05	1.66E+12	1.43E+08
1.35E-12	4.16E-08	5.73E+07	1.75E+12	6.90E+07	2.48E+05	7.59E+09	1.00E+07
1.99E-03	5.66E+03	7.70E+06	2.19E+13	1.51E+08	3.27E+06	9.30E+12	1.04E+09
8.41E-06	7.03E+00	2.45E+07	2.04E+13	3.20E+07	8.88E+06	7.40E+12	2.07E+08
2.06E-35	1.43E-30	4.32E+07	2.98E+12	1.10E+08	0.00E+00	0.00E+00	0.00E+00
1.53E-07	9.99E-02	1.45E+07	9.41E+12	1.18E+08	1.30E+06	8.41E+11	2.32E+08
4.61E-15	2.07E-09	4.05E+07	1.81E+13	2.38E+08	8.73E+06	3.89E+12	1.31E+08
2.09E-06	2.39E+00	3.54E+07	4.05E+13	3.00E+08	3.93E+07	4.50E+13	4.14E+08
3.67E-04	1.16E+02	4.29E+07	1.36E+13	1.21E+08	4.84E+06	1.53E+12	4.24E+08
4.66E-14	3.31E-08	1.15E+07	8.17E+12	2.25E+08	5.55E+05	3.93E+11	5.80E+07
1.91E-07	9.91E-01	8.39E+06	4.34E+13	3.04E+08	1.12E+06	5.78E+12	4.86E+08
1.03E-08	3.91E-03	8.91E+06	3.37E+12	5.70E+07	6.38E+04	2.41E+10	2.00E+07
9.94E-05	1.13E+02	1.92E+07	2.18E+13	1.05E+08	1.75E+06	1.98E+12	4.63E+08
4.19E-06	5.36E+00	1.25E+07	1.60E+13	1.58E+08	2.67E+05	3.41E+11	2.35E+08
1.01E-05	2.78E+00	6.09E+07	1.67E+13	1.40E+08	8.37E+05	2.30E+11	1.21E+08
8.76E-08	1.29E-01	5.15E+07	7.57E+13	1.16E+08	1.15E+07	1.69E+13	2.48E+08
3.93E-05	6.92E+01	1.01E+07	1.78E+13	2.20E+08	7.61E+05	1.34E+12	4.59E+08
5.39E-14	4.42E-08	1.67E+07	1.36E+13	9.70E+07	1.31E+05	1.06E+11	1.08E+08
8.52E-05	1.21E+01	7.89E+07	1.12E+13	1.67E+08	2.35E+06	3.32E+11	2.68E+08
7.37E-06	5.97E-01	1.21E+07	9.77E+11	6.90E+07	7.53E+06	6.09E+11	1.27E+08
2.43E-10	1.07E-03	1.64E+07	7.18E+13	2.18E+08	1.47E+04	6.47E+10	4.40E+07
1.20E-07	1.57E-01	7.68E+07	1.00E+14	3.16E+08	2.41E+05	3.13E+11	1.81E+08
1.60E-19	6.49E-14	3.15E+07	1.27E+13	1.60E+08	0.00E+00	0.00E+00	0.00E+00

1.59E-10	6.37E-05	9.61E+06	3.83E+12	2.30E+08	3.03E+03	1.21E+09	7.00E+06
3.43E-08	1.56E-01	9.22E+06	4.18E+13	1.10E+08	2.03E+05	9.19E+11	2.58E+08
5.99E-12	6.75E-07	2.19E+07	2.45E+12	1.36E+08	2.32E+06	2.60E+11	1.18E+08
3.46E-09	4.59E-03	1.05E+07	1.38E+13	1.07E+08	3.69E+05	4.87E+11	2.12E+08
1.18E-02	2.59E+03	1.72E+07	3.78E+12	9.30E+07	2.02E+06	4.44E+11	2.13E+08
9.74E-10	6.25E-03	1.32E+07	8.42E+13	1.23E+08	2.27E+04	1.45E+11	5.50E+07
1.19E-13	6.37E-09	1.24E+07	6.59E+11	1.50E+07	2.89E+07	1.54E+12	9.90E+07
1.21E-16	1.16E-11	2.46E+07	2.35E+12	1.53E+08	0.00E+00	0.00E+00	0.00E+00
1.36E-11	3.14E-06	2.09E+07	4.79E+12	2.39E+08	2.73E+05	6.25E+10	7.80E+07
2.87E-06	4.85E-01	1.99E+07	3.35E+12	1.76E+08	2.92E+06	4.93E+11	1.34E+08
9.79E-07	1.90E-01	2.85E+07	5.52E+12	8.90E+07	2.62E+06	5.07E+11	1.94E+08
2.27E-04	2.59E+02	1.78E+06	2.03E+12	1.60E+07	2.03E+07	2.32E+13	5.67E+08
9.73E-24	1.17E-17	7.54E+02	9.08E+08	3.00E+06	1.22E+07	1.46E+13	3.93E+08
8.30E-11	2.35E-05	1.15E+07	3.25E+12	2.13E+08	2.77E+05	7.78E+10	5.90E+07
4.87E-07	2.55E-01	5.71E+06	2.98E+12	6.10E+07	4.03E+06	2.10E+12	2.11E+08
1.91E-08	1.01E-02	1.27E+07	6.69E+12	5.10E+07	4.14E+05	2.19E+11	5.80E+07
2.48E-08	7.25E-02	2.47E+07	7.19E+13	2.69E+08	2.77E+06	8.07E+12	1.76E+08
2.73E-03	6.90E+01	5.27E+07	1.33E+12	7.20E+07	5.20E+06	1.31E+11	8.90E+07
3.52E-11	2.17E-05	1.41E+07	8.64E+12	2.31E+08	3.38E+06	2.07E+12	2.33E+08
1.79E-06	1.68E-01	1.60E+07	1.51E+12	1.37E+08	9.94E+05	9.34E+10	5.30E+07
4.73E-07	1.82E-01	3.40E+07	1.30E+13	3.13E+08	9.04E+04	3.47E+10	7.30E+07
1.92E-09	9.37E-04	2.28E+07	1.10E+13	2.63E+08	1.05E+05	5.07E+10	8.90E+07
3.34E-10	6.15E-04	2.47E+07	4.51E+13	6.90E+07	5.36E+05	9.81E+11	5.40E+07
7.32E-05	4.91E+01	6.66E+07	4.45E+13	2.33E+08	1.03E+06	6.87E+11	2.31E+08
9.31E-05	2.61E+02	1.25E+07	3.51E+13	2.22E+08	4.70E+06	1.32E+13	5.07E+08
3.45E-18	4.20E-12	1.16E+07	1.40E+13	2.20E+08	1.91E+04	2.32E+10	2.00E+07
1.23E-09	2.79E-05	5.85E+07	1.32E+12	5.40E+07	4.15E+05	9.37E+09	1.60E+07
2.28E-05	2.07E+01	2.14E+07	1.94E+13	1.93E+08	4.03E+07	3.66E+13	5.38E+08
6.11E-06	7.41E-01	4.71E+07	5.71E+12	3.08E+08	1.79E+05	2.17E+10	7.30E+07
2.31E-03	4.91E+03	2.82E+07	6.00E+13	1.16E+08	2.05E+06	4.35E+12	2.65E+08
1.26E-05	3.33E+00	5.44E+07	1.43E+13	2.11E+08	9.51E+05	2.51E+11	7.60E+07
2.63E-05	1.05E+00	6.77E+07	2.71E+12	5.70E+07	6.50E+05	2.60E+10	4.20E+07
1.71E-46	1.25E-41	1.72E+07	1.25E+12	1.15E+08	0.00E+00	0.00E+00	0.00E+00
4.87E-08	6.45E-02	5.99E+07	7.88E+13	2.12E+08	2.14E+05	2.81E+11	1.69E+08
2.06E-10	1.76E-03	1.01E+07	8.54E+13	2.74E+08	1.00E+06	8.48E+12	1.46E+08
1.82E-03	8.72E+02	4.25E+07	2.03E+13	2.41E+08	3.95E+06	1.89E+12	2.18E+08
4.38E-06	5.18E+00	3.55E+07	4.20E+13	1.89E+08	1.46E+06	1.73E+12	3.53E+08
2.48E-10	6.10E-04	2.45E+05	6.01E+11	1.00E+07	9.65E+06	2.37E+13	1.81E+08
5.07E-10	2.25E-04	9.72E+06	4.29E+12	1.27E+08	2.71E+04	1.20E+10	3.90E+07
8.55E-06	1.36E+00	7.99E+06	1.26E+12	2.90E+07	1.16E+06	1.83E+11	6.00E+07
5.65E-13	3.31E-07	6.08E+07	3.54E+13	1.40E+08	6.42E+05	3.74E+11	9.30E+07
3.21E-06	2.11E+00	2.85E+07	1.87E+13	2.68E+08	3.17E+06	2.08E+12	1.80E+08
3.07E-56	3.86E-51	2.69E+07	3.36E+12	9.40E+07	0.00E+00	0.00E+00	0.00E+00
1.56E-21	1.21E-14	1.08E+07	8.30E+13	2.19E+08	1.96E+05	1.51E+12	6.20E+07
3.25E-09	2.12E-03	4.76E+07	3.09E+13	1.39E+08	3.11E+06	2.02E+12	1.16E+08
1.05E-06	4.10E+00	7.60E+06	2.97E+13	2.16E+08	1.91E+06	7.47E+12	3.73E+08
5.99E-18	1.14E-11	4.00E+07	7.55E+13	2.27E+08	9.22E+05	1.74E+12	9.00E+07
2.95E-06	3.63E-01	1.37E+07	1.69E+12	1.11E+08	1.44E+06	1.77E+11	1.52E+08
1.56E-03	2.73E+02	8.31E+06	1.46E+12	1.77E+08	5.58E+06	9.78E+11	2.62E+08
6.10E-11	1.66E-06	3.31E+07	9.01E+11	8.20E+07	1.00E+07	2.72E+11	1.15E+08
2.19E-04	8.41E+01	2.15E+07	8.26E+12	1.26E+08	7.38E+05	2.84E+11	1.81E+08
5.40E-09	4.33E-03	4.40E+07	3.52E+13	2.72E+08	1.26E+06	1.01E+12	3.69E+08

7.07E-19	4.78E-13	3.56E+07	2.39E+13	3.40E+07	2.52E+06	1.69E+12	5.90E+07
1.15E-10	8.29E-06	6.76E+06	4.86E+11	1.00E+07	1.11E+07	8.01E+11	1.28E+08
4.16E-04	4.64E+01	1.66E+07	1.86E+12	5.70E+07	5.02E+06	5.60E+11	1.72E+08
1.74E-08	6.53E-02	9.54E+06	3.57E+13	2.68E+08	2.77E+05	1.04E+12	2.11E+08
6.33E-07	4.95E-01	3.17E+07	2.47E+13	1.66E+08	5.57E+05	4.35E+11	2.15E+08
1.71E-24	8.29E-18	5.92E+06	2.86E+13	3.10E+07	2.36E+06	1.14E+13	9.70E+07
2.00E-06	1.14E+01	2.00E+07	1.14E+14	3.33E+08	2.61E+05	1.49E+12	4.10E+08
7.72E-11	1.05E-05	1.31E+07	1.77E+12	3.90E+07	1.84E+05	2.48E+10	3.40E+07
7.07E-12	1.83E-06	2.02E+07	5.20E+12	2.49E+08	1.62E+05	4.17E+10	8.10E+07
2.19E-08	1.42E-03	1.66E+07	1.07E+12	5.00E+07	1.91E+06	1.24E+11	5.60E+07
1.70E-05	6.53E+01	2.47E+07	9.44E+13	2.15E+08	6.84E+05	2.62E+12	3.68E+08
5.34E-12	1.03E-05	9.08E+06	1.74E+13	2.50E+08	3.31E+05	6.34E+11	1.82E+08
1.89E-08	4.00E-02	3.31E+07	6.95E+13	3.60E+07	7.12E+05	1.49E+12	8.10E+07
2.60E-06	4.41E-01	3.91E+07	6.61E+12	1.91E+08	1.66E+06	2.81E+11	2.10E+08
1.02E-07	1.35E+00	8.37E+06	1.10E+14	1.68E+08	9.58E+03	1.26E+11	7.20E+07
1.09E-09	3.90E-04	1.02E+07	3.61E+12	5.90E+07	2.08E+05	7.39E+10	3.20E+07
1.57E-06	2.06E+00	7.37E+07	9.66E+13	3.26E+08	5.20E+05	6.81E+11	3.03E+08
3.40E-43	6.53E-38	2.30E+07	4.38E+12	1.23E+08	0.00E+00	0.00E+00	0.00E+00
3.03E-07	1.15E-02	3.20E+07	1.21E+12	9.60E+07	0.00E+00	0.00E+00	0.00E+00
1.21E-20	4.76E-14	1.56E+07	6.08E+13	2.12E+08	3.22E+05	1.26E+12	4.90E+07
4.81E-23	2.85E-16	1.55E+07	9.15E+13	1.98E+08	1.69E+04	9.95E+10	1.60E+07
6.46E-04	6.38E+02	2.68E+07	2.65E+13	1.07E+08	1.35E+06	1.33E+12	3.20E+08
1.08E-07	5.85E-01	5.96E+06	3.21E+13	1.78E+08	3.32E+06	1.79E+13	4.51E+08
1.84E-44	3.16E-38	2.06E+07	3.52E+13	1.61E+08	0.00E+00	0.00E+00	0.00E+00
4.20E-28	2.60E-22	4.06E+07	2.50E+13	1.84E+08	2.94E+03	1.81E+09	9.00E+06
2.47E-09	6.00E-03	1.33E+07	3.23E+13	2.16E+08	2.81E+06	6.82E+12	1.91E+08
4.30E-10	1.32E-05	5.73E+07	1.75E+12	5.00E+07	4.50E+05	1.37E+10	9.00E+06
3.16E-04	8.99E+02	7.81E+06	2.22E+13	2.87E+08	8.53E+05	2.42E+12	5.66E+08
5.75E-15	4.82E-09	2.58E+07	2.15E+13	1.74E+08	7.97E+06	6.65E+12	1.32E+08
2.75E-13	1.91E-08	4.51E+07	3.11E+12	9.40E+07	3.82E+05	2.64E+10	6.40E+07
5.35E-06	3.48E+00	1.52E+07	9.85E+12	1.28E+08	5.96E+05	3.87E+11	1.35E+08
2.96E-11	1.33E-05	4.24E+07	1.89E+13	2.30E+08	3.74E+06	1.67E+12	8.90E+07
1.07E-03	1.23E+03	5.39E+07	6.17E+13	1.28E+08	2.14E+07	2.45E+13	8.01E+08
1.64E-06	5.20E-01	2.00E+07	6.34E+12	8.70E+07	2.31E+07	7.31E+12	4.09E+08
1.01E-08	7.16E-03	5.18E+06	3.66E+12	1.00E+08	6.75E+06	4.78E+12	2.61E+08
5.22E-11	2.72E-04	9.11E+06	4.72E+13	2.56E+08	2.55E+05	1.32E+12	1.10E+08
3.07E-11	1.17E-05	8.43E+06	3.19E+12	8.30E+07	3.82E+04	1.45E+10	1.20E+07
1.20E-08	1.37E-02	8.46E+06	9.60E+12	1.41E+08	1.22E+07	1.38E+13	1.84E+08
2.75E-07	3.52E-01	1.22E+07	1.57E+13	2.63E+08	5.44E+04	6.96E+10	1.05E+08
3.41E-08	9.42E-03	5.62E+07	1.55E+13	1.77E+08	5.22E+06	1.43E+12	1.09E+08
1.01E-11	1.49E-05	6.28E+07	9.22E+13	2.59E+08	3.61E+04	5.30E+10	3.90E+07
5.60E-22	9.90E-16	9.78E+06	1.72E+13	1.50E+08	2.22E+04	3.91E+10	3.00E+07
2.93E-29	2.40E-23	1.66E+07	1.35E+13	1.87E+08	2.32E+05	1.89E+11	6.70E+07
4.57E-18	6.51E-13	7.15E+07	1.01E+13	2.10E+08	1.75E+05	2.48E+10	2.10E+07
1.91E-13	1.55E-08	1.66E+07	1.34E+12	1.21E+08	2.64E+06	2.13E+11	1.15E+08
5.24E-10	2.30E-03	1.46E+07	6.43E+13	6.20E+07	1.95E+06	8.58E+12	3.99E+08
6.00E-07	7.81E-01	6.02E+05	7.83E+11	8.00E+06	7.27E+07	9.47E+13	5.59E+08
2.45E-47	9.91E-42	3.10E+07	1.25E+13	1.75E+08	6.77E+03	2.72E+09	3.00E+06
3.43E-22	1.37E-16	8.37E+06	3.33E+12	1.79E+08	3.71E+04	1.48E+10	1.50E+07
3.49E-63	1.59E-56	7.02E+06	3.18E+13	8.60E+07	1.48E+06	6.72E+12	9.70E+07
5.63E-37	6.34E-32	1.46E+07	1.64E+12	1.55E+08	5.11E+06	5.73E+11	9.10E+07
5.05E-07	6.68E-01	9.42E+06	1.24E+13	8.80E+07	1.10E+06	1.46E+12	1.43E+08

1.22E-11	2.70E-06	3.35E+07	7.37E+12	2.29E+08	1.86E+06	4.10E+11	6.90E+07
7.57E-07	4.84E+00	1.17E+07	7.46E+13	1.24E+08	6.97E+03	4.45E+10	7.80E+07
4.64E-04	2.46E+01	6.07E+07	3.22E+12	7.80E+07	1.22E+07	6.47E+11	3.01E+08
1.37E-04	1.31E+01	2.45E+07	2.33E+12	1.07E+08	4.43E+05	4.22E+10	6.50E+07
8.87E-08	2.03E-02	1.94E+07	4.44E+12	2.00E+08	1.47E+06	3.37E+11	6.00E+07
8.37E-05	1.41E+01	2.11E+07	3.56E+12	7.90E+07	1.69E+06	2.85E+11	2.41E+08
2.61E-24	5.09E-19	3.05E+07	5.91E+12	1.69E+08	0.00E+00	0.00E+00	0.00E+00
1.07E-26	1.22E-20	1.87E+07	2.13E+13	1.99E+08	1.54E+04	1.75E+10	1.30E+07
4.29E-10	5.17E-04	1.39E+07	1.67E+13	2.83E+08	2.74E+05	3.29E+11	1.93E+08
2.33E-09	6.58E-04	1.20E+07	3.38E+12	1.99E+08	3.16E+04	8.90E+09	1.90E+07
3.09E-06	1.61E+00	8.93E+06	4.66E+12	1.64E+08	8.48E+05	4.43E+11	1.62E+08
3.90E-10	2.07E-04	9.65E+06	5.10E+12	4.50E+07	2.84E+06	1.50E+12	1.26E+08
1.39E-03	4.04E+03	2.58E+07	7.51E+13	3.38E+08	2.02E+06	5.88E+12	7.61E+08
2.33E-05	5.90E-01	5.02E+07	1.27E+12	6.30E+07	1.40E+07	3.55E+11	1.24E+08
3.10E-16	1.91E-10	1.41E+07	8.67E+12	1.22E+08	7.29E+03	4.47E+09	7.00E+06
8.54E-06	8.04E-01	1.63E+07	1.53E+12	1.19E+08	7.54E+05	7.09E+10	4.60E+07
2.86E-02	1.10E+04	8.78E+06	3.37E+12	6.30E+07	2.52E+07	9.67E+12	9.14E+08
2.68E-05	1.30E+01	1.95E+07	9.48E+12	1.28E+08	3.52E+06	1.71E+12	4.04E+08
2.89E-19	5.32E-13	2.17E+07	3.98E+13	1.16E+08	4.08E+03	7.48E+09	2.30E+07
1.16E-10	7.81E-05	6.65E+07	4.44E+13	2.12E+08	1.53E+05	1.02E+11	1.09E+08
8.04E-17	2.27E-10	1.03E+07	2.90E+13	2.10E+08	4.47E+05	1.25E+12	7.40E+07
1.43E-07	1.73E-01	1.24E+07	1.50E+13	2.27E+08	6.67E+05	8.07E+11	2.39E+08
5.44E-06	1.23E-01	5.29E+07	1.19E+12	2.10E+07	6.83E+06	1.54E+11	4.70E+07
2.19E-08	1.99E-02	6.31E+07	5.73E+13	1.67E+08	5.80E+06	5.26E+12	2.29E+08
2.34E-06	2.84E-01	4.47E+07	5.42E+12	2.29E+08	2.76E+06	3.35E+11	2.51E+08
2.28E-09	4.87E-03	2.73E+07	5.81E+13	1.06E+08	4.33E+06	9.20E+12	2.23E+08
1.00E-05	2.65E+00	5.47E+07	1.44E+13	9.30E+07	5.01E+05	1.32E+11	1.27E+08
1.85E-13	7.44E-09	6.95E+07	2.78E+12	5.20E+07	1.16E+05	4.64E+09	1.40E+07
4.76E-04	3.45E+01	1.58E+07	1.15E+12	1.66E+08	4.17E+06	3.02E+11	1.55E+08
2.16E-04	2.84E+02	1.98E+07	2.61E+13	1.80E+07	3.99E+07	5.24E+13	4.89E+08
8.65E-09	7.36E-02	8.21E+06	6.96E+13	2.49E+08	2.87E+06	2.43E+13	2.84E+08
1.84E-04	8.80E+01	2.95E+07	1.41E+13	7.00E+07	1.98E+07	9.48E+12	3.32E+08
6.42E-07	7.59E-01	2.76E+07	3.26E+13	1.07E+08	8.31E+06	9.82E+12	3.26E+08
1.56E-06	3.84E+00	9.02E+06	2.21E+13	2.07E+08	2.01E+06	4.94E+12	2.61E+08
3.89E-23	1.73E-17	9.83E+06	4.34E+12	1.56E+08	0.00E+00	0.00E+00	0.00E+00
8.23E-09	1.31E-03	8.23E+06	1.30E+12	8.10E+07	9.12E+05	1.44E+11	5.80E+07
2.32E-12	1.36E-06	5.82E+07	3.39E+13	1.99E+08	3.73E+06	2.17E+12	1.57E+08
1.40E-04	9.21E+01	2.99E+07	1.96E+13	1.19E+08	1.90E+06	1.25E+12	3.88E+08
1.91E-04	2.39E+01	1.08E+07	1.35E+12	1.90E+07	2.00E+07	2.51E+12	2.57E+08
7.31E-14	5.67E-07	8.22E+06	6.34E+13	1.98E+08	2.89E+06	2.23E+13	1.41E+08
4.26E-08	2.78E-02	5.07E+07	3.29E+13	1.59E+08	3.15E+05	2.05E+11	6.80E+07
1.37E-07	5.37E-01	5.03E+06	1.97E+13	2.05E+08	3.34E+06	1.31E+13	3.03E+08
6.75E-03	1.27E+04	3.21E+07	6.06E+13	2.29E+08	6.58E+06	1.24E+13	6.19E+08
1.10E-04	1.35E+01	1.05E+07	1.29E+12	9.50E+07	4.60E+06	5.64E+11	3.14E+08
2.02E-33	3.57E-28	1.26E+07	2.21E+12	1.34E+08	0.00E+00	0.00E+00	0.00E+00
3.88E-03	1.05E+02	1.45E+07	3.94E+11	7.20E+07	3.10E+07	8.42E+11	4.94E+08
3.55E-08	1.37E-02	2.07E+07	7.95E+12	1.74E+08	1.50E+06	5.76E+11	2.29E+08
3.84E-08	3.07E-02	3.80E+07	3.04E+13	1.52E+08	1.74E+07	1.39E+13	5.48E+08
2.83E-93	1.91E-87	3.99E+07	2.68E+13	1.38E+08	0.00E+00	0.00E+00	0.00E+00
7.87E-19	5.70E-14	1.64E+07	1.18E+12	1.13E+08	0.00E+00	0.00E+00	0.00E+00
3.83E-08	4.29E-03	2.15E+07	2.40E+12	1.88E+08	9.17E+04	1.02E+10	4.20E+07
6.09E-15	2.29E-08	4.09E+06	1.53E+13	1.74E+08	5.23E+06	1.96E+13	1.90E+08

1.14E-03	8.90E+02	3.01E+07	2.35E+13	8.30E+07	2.03E+06	1.58E+12	2.99E+08
9.48E-10	4.59E-03	7.52E+06	3.63E+13	1.80E+08	1.36E+06	6.56E+12	1.74E+08
7.29E-25	4.19E-18	1.78E+07	1.02E+14	1.88E+08	2.95E+03	1.69E+10	5.00E+06
4.83E-13	6.57E-08	1.35E+07	1.82E+12	5.50E+07	6.29E+04	8.50E+09	2.40E+07
6.32E-10	1.63E-04	2.00E+07	5.15E+12	2.25E+08	1.73E+04	4.44E+09	1.30E+07
2.29E-11	1.48E-06	1.79E+07	1.15E+12	1.29E+08	5.51E+05	3.56E+10	6.00E+07
7.20E-04	2.76E+03	1.47E+07	5.61E+13	9.00E+07	1.04E+07	4.00E+13	1.37E+09
4.26E-06	8.17E+00	9.10E+06	1.74E+13	2.84E+08	3.85E+05	7.37E+11	2.66E+08
2.56E-13	5.42E-07	3.27E+07	6.87E+13	1.22E+08	7.93E+02	1.67E+09	8.00E+06
8.54E-08	1.45E-02	3.68E+07	6.21E+12	1.68E+08	3.90E+06	6.59E+11	9.80E+07
4.77E-11	6.31E-04	8.22E+06	1.08E+14	6.80E+07	7.65E+04	1.01E+12	2.01E+08
7.08E-23	2.53E-17	1.02E+07	3.63E+12	1.56E+08	3.25E+03	1.16E+09	7.00E+06
2.81E-06	3.69E+00	7.45E+07	9.77E+13	3.29E+08	1.90E+05	2.49E+11	2.35E+08
7.07E-33	1.36E-27	2.32E+07	4.42E+12	1.00E+08	0.00E+00	0.00E+00	0.00E+00
1.18E-24	2.09E-18	9.27E+06	1.63E+13	1.66E+08	2.69E+02	4.73E+08	2.00E+06
7.82E-07	7.10E-01	5.92E+07	5.37E+13	9.40E+07	1.07E+07	9.69E+12	3.89E+08
6.70E-11	1.77E-05	5.20E+07	1.37E+13	5.40E+07	2.48E+06	6.53E+11	8.70E+07
1.41E-08	1.29E-02	6.97E+07	6.33E+13	2.28E+08	5.62E+05	5.10E+11	1.90E+08
1.63E-04	4.76E+02	2.66E+07	7.76E+13	1.53E+08	1.34E+06	3.92E+12	4.70E+08
9.35E-05	8.49E+01	6.19E+07	5.61E+13	1.01E+08	8.09E+06	7.34E+12	4.60E+08
1.67E-05	2.64E+00	9.01E+06	1.42E+12	6.50E+07	1.41E+05	2.22E+10	5.50E+07
7.49E-04	5.01E+02	5.90E+07	3.95E+13	1.65E+08	7.04E+06	4.70E+12	2.59E+08
7.07E-03	8.35E+03	1.38E+07	1.63E+13	7.70E+07	2.17E+07	2.56E+13	1.22E+09
6.70E-03	1.72E+03	8.35E+06	2.15E+12	7.00E+07	1.23E+07	3.17E+12	6.37E+08
7.90E-07	4.26E+00	7.55E+06	4.07E+13	2.60E+08	2.12E+06	1.14E+13	3.97E+08
3.50E-08	1.39E-02	9.65E+06	3.84E+12	2.59E+08	6.13E+04	2.44E+10	5.50E+07
1.18E-06	1.00E+01	1.09E+07	9.26E+13	2.56E+08	5.09E+05	4.32E+12	4.02E+08
4.16E-06	2.43E+00	5.87E+07	3.42E+13	1.35E+08	3.61E+06	2.10E+12	1.38E+08
1.33E-08	1.81E-03	8.51E+06	1.15E+12	1.20E+07	3.67E+06	4.96E+11	4.90E+07
1.54E-06	9.08E+00	1.34E+07	7.91E+13	4.40E+07	1.51E+06	8.89E+12	1.97E+08
3.00E-08	1.34E-02	5.17E+07	2.31E+13	2.73E+08	7.05E+05	3.15E+11	1.41E+08
1.04E-05	1.26E+01	1.22E+07	1.47E+13	1.07E+08	1.87E+06	2.25E+12	3.51E+08
2.11E-03	4.09E+02	2.57E+07	4.98E+12	7.60E+07	5.61E+06	1.09E+12	2.40E+08
1.11E-07	1.45E-01	5.07E+07	6.60E+13	2.82E+08	2.32E+07	3.02E+13	3.16E+08
3.99E-06	7.00E-01	1.40E+07	2.46E+12	1.53E+08	1.05E+06	1.83E+11	1.74E+08
1.18E-02	2.59E+03	1.72E+07	3.78E+12	9.30E+07	2.02E+06	4.44E+11	2.13E+08
1.07E-03	1.23E+03	5.39E+07	6.17E+13	1.28E+08	2.14E+07	2.45E+13	8.01E+08
1.10E-04	1.35E+01	1.05E+07	1.29E+12	9.50E+07	4.60E+06	5.64E+11	3.14E+08