

Z	Element	n	Stellar Class	w (nl = 1)	R (sol. units) V	R (sol. units) V adj	M (sol. units) V
26	Fe	3	SN (I)	55.8470	15.300	13.421	37.983
27	Co	3	SN (I)	58.9332	15.300	13.421	37.983
28	Ni	3	Wr	58.6900	15.300	13.421	37.983
29	Cu	3	O0	63.5460	15.300	13.421	37.983
30	Zn	3	O1	65.3900	15.000	13.158	36.993
31	Ga	3	O2	69.7200	14.700	12.895	36.010
32	Ge	3	O3	72.5900	14.500	12.719	35.358
33	As	3	O4	74.9126	14.400	12.632	35.033
34	Se	3	O5	78.9600	14.200	12.456	34.386
35	Br	3	O6	79.9040	12.900	11.316	30.254
36	Kr	3	O7	83.8000	11.300	9.912	25.357
37	Rb	3	O8	85.4678	10.300	9.035	22.410
38	Sr	3	O9	87.6200	9.040	7.930	18.832
39	Y	3	B0	88.9059	8.340	7.316	16.913
40	Zr	3	B1	91.2240	6.970	6.114	13.314
41	Nb	3	B2	92.9064	5.590	4.904	9.921
42	Mo	3	B3	95.9400	4.710	4.132	7.895
43	Tc	3	B4	97.9072	3.820	3.351	5.972
44	Ru	3	B5	101.0700	3.260	2.860	4.834
45	Rh	3	B6	102.9060	3.070	2.693	4.462
46	Pd	3	B7	106.4200	2.940	2.579	4.212
47	Ag	3	B8	107.8680	2.730	2.395	3.815
48	Cd	3	B9	112.4100	2.730	2.395	3.815
49	In	3	A0	114.8200	2.880	2.526	4.098
50	Sn	3	A1	118.7100	2.590	2.272	3.557
51	Sb	3	A2	121.7500	2.440	2.140	3.285
52	Te	3	A3	127.6000	2.200	1.930	2.861
53	I	3	A4	126.9050	2.090	1.833	2.672
54	Xe	3	A5	131.2900	1.890	1.658	2.337
55	Cs	3	A6	132.9050	1.890	1.658	2.337
56	Ba	3	A7	137.3300	1.810	1.588	2.206
57	La	3	A8	138.9060	1.810	1.588	2.206
58	Ce	3	A9	140.1200	1.750	1.535	2.109
59	Pr	3	F0	140.9080	1.770	1.553	2.141
60	Nd	3	F1	144.2400	1.670	1.465	1.981
61	Pm	3	F2	145.0000	1.650	1.447	1.950
62	Sm	3	F3	150.3600	1.570	1.377	1.825
63	Eu	3	F4	151.9600	1.560	1.368	1.809
64	Gd	3	F5	157.2500	1.480	1.298	1.687
65	Tb	3	F6	158.9254	1.410	1.237	1.581
66	Dy	3	F7	162.5000	1.350	1.184	1.492
67	Ho	3	F8	164.9300	1.350	1.184	1.492
68	Er	3	F9	167.2600	1.300	1.140	1.419
69	Tm	3	G0	168.9340	1.250	1.096	1.347
70	Yb	4	G1	173.0400	1.190	1.044	1.261
71	Lu	4	G2	174.9670	1.140	1.000	1.191
72	Hf	4	G3	178.4900	1.150	1.009	1.205
73	Ta	4	G4	180.9480	1.100	0.965	1.136
74	W	4	G5	183.8500	1.060	0.930	1.081
75	Re	4	G6	186.2070	1.070	0.939	1.094

76	Os	4	G7	190.2000	1.040	0.912	1.054
77	Ir	4	G8	192.2200	1.060	0.930	1.081
78	Pt	4	G9	195.0800	1.030	0.904	1.040
79	Au	4	K0	196.9670	1.050	0.921	1.067
80	Hg	4	K1	200.5900	1.010	0.886	1.013
81	Tl	4	K2	204.3830	1.020	0.895	1.027
82	Pb	4	K3	207.2000	0.990	0.868	0.987
83	Bi	4	K4	208.9800	1.020	0.895	1.027
84	Po	4	K5	209.0000	1.000	0.877	1.000
85	At	4	K6	210.0000	0.957	0.839	0.943
86	Rn	4	K7	222.0000	0.967	0.848	0.956
87	Fr	4	K8	223.0000	0.946	0.830	0.929
88	Ra	4	K9	226.0250	0.982	0.861	0.976
89	Ac	4	M0	227.0280	0.990	0.868	0.987
90	Th	4	M1	232.0380	0.768	0.674	0.703
91	Pa	4	M2	231.0360	0.614	0.539	0.522
92	U	4	M3	238.0290	0.509	0.446	0.406
93	Np	4	M4	237.0480	0.440	0.386	0.335
94	Pu	4	M5	244.0000	0.381	0.334	0.276
95	Am	4	M6	243.0000	0.368	0.323	0.264
96	Cm	4	M7	247.0000	0.368	0.323	0.264
97	Bk	4	M8	247.0000	0.368	0.323	0.264
98	Cf	4	M9	252.1000	0.368	0.323	0.264
99	Es	4	L0	252.0000			
100	Fm	4	L1	257.0000			
101	Md	4	L2	258.0000			
102	No	4	L3	259.0000			
103	:Lw	4	L4	260.0000			
104	Rf	4	L5	261.1088			
105	Db	4	L6	262.1141			
106	Sg	4	L7	266.1219			
107	Bh	4	L8	264.1200			
108	Hs	4	L9	277.0000			
109	Mt	4	T0	268.1388			
110	Ds	4	T1	271.0000			
111	Rg	4	T2	272.1535			
112	Uub	4	T3	285.0000			
113	Uut	4	T4	284.0000			
114	Uuq	4	T5	289.0000			
115	Uup	4	T6	288.0000			
116	Uuh	4	T7	289.0000			
117	Uus	4	T8	294.0000			

M (sol. units)	V adj.	L (sol. units) adj.	rho_c_cgs	rho_c_SI	P_c_atm	T_c	T_el_destruc
31.89164		183176.12	0.0745	74.48	1.3891E+08	3.923977E+09	1.169285E+10
31.89164		183176.12	0.0745	74.48	1.3891E+08	3.994968E+09	1.079340E+10
31.89164		183176.12	0.0745	74.48	1.3891E+08	3.989465E+09	1.007384E+10
31.89164		183176.12	0.0745	74.48	1.3891E+08	4.096594E+09	9.485109E+09
31.06061		167007.01	0.0770	76.98	1.4263E+08	4.108632E+09	8.994500E+09
30.23510		151981.15	0.0796	79.61	1.4652E+08	4.169219E+09	8.579369E+09
29.68786		142569.35	0.0815	81.45	1.4922E+08	4.206408E+09	8.223543E+09
29.41518		138038.57	0.0824	82.40	1.5060E+08	4.241007E+09	7.915160E+09
28.87172		129316.65	0.0843	84.34	1.5344E+08	4.295975E+09	7.645325E+09
25.40239		82615.36	0.0990	98.98	1.7440E+08	4.177170E+09	7.407235E+09
21.29084		44532.28	0.1234	123.42	2.0807E+08	4.060720E+09	7.195600E+09
18.81646		28898.98	0.1440	144.03	2.3544E+08	3.963161E+09	7.006242E+09
15.81173		15719.12	0.1790	179.02	2.8018E+08	3.826062E+09	6.835820E+09
14.20070		10791.55	0.2048	204.76	3.1196E+08	3.742772E+09	6.681629E+09
11.17889		4670.84	0.2761	276.14	3.9629E+08	3.555832E+09	6.541455E+09
8.32985		1668.13	0.3989	398.87	5.3183E+08	3.323885E+09	6.413470E+09
6.62902		750.02	0.5307	530.66	6.6828E+08	3.173219E+09	6.296150E+09
5.01387		282.23	0.7523	752.34	8.8356E+08	2.979332E+09	6.188216E+09
4.05862		134.69	0.9798	979.84	1.0915E+09	2.856096E+09	6.088585E+09
3.74633		101.77	1.0830	1082.98	1.1825E+09	2.816344E+09	5.996333E+09
3.53632		83.16	1.1640	1163.96	1.2527E+09	2.807262E+09	5.910671E+09
3.20360		58.85	1.3170	1316.98	1.3828E+09	2.751130E+09	5.830917E+09
3.20360		58.85	1.3170	1316.98	1.3828E+09	2.789214E+09	5.756480E+09
3.44042		75.53	1.2047	1204.66	1.2877E+09	2.859539E+09	5.686845E+09
2.98645		46.03	1.4378	1437.75	1.4834E+09	2.790969E+09	5.621563E+09
2.75809		34.84	1.5881	1588.06	1.6062E+09	2.759173E+09	5.560236E+09
2.40244		21.49	1.8872	1887.18	1.8440E+09	2.707595E+09	5.502518E+09
2.24362		16.92	2.0556	2055.61	1.9745E+09	2.656853E+09	5.448097E+09
1.96202		10.58	2.4308	2430.79	2.2579E+09	2.598505E+09	5.396700E+09
1.96202		10.58	2.4308	2430.79	2.2579E+09	2.609117E+09	5.348081E+09
1.85208		8.65	2.6125	2612.48	2.3919E+09	2.600003E+09	5.302021E+09
1.85208		8.65	2.6125	2612.48	2.3919E+09	2.609911E+09	5.258323E+09
1.77068		7.39	2.7635	2763.47	2.5019E+09	2.588244E+09	5.216810E+09
1.79771		7.79	2.7116	2711.62	2.4643E+09	2.602928E+09	5.177322E+09
1.66358		5.94	2.9876	2987.61	2.6630E+09	2.572921E+09	5.139714E+09
1.63707		5.61	3.0482	3048.21	2.7061E+09	2.567102E+09	5.103856E+09
1.53210		4.45	3.3114	3311.45	2.8915E+09	2.555660E+09	5.069627E+09
1.51910		4.32	3.3469	3346.90	2.9162E+09	2.559236E+09	5.036920E+09
1.41613		3.38	3.6538	3653.83	3.1283E+09	2.543567E+09	5.005635E+09
1.32754		2.70	3.9611	3961.13	3.3371E+09	2.511673E+09	4.975681E+09
1.25276		2.20	4.2589	4258.87	3.5363E+09	2.493952E+09	4.946975E+09
1.25276		2.20	4.2589	4258.87	3.5363E+09	2.506322E+09	4.919441E+09
1.19128		1.85	4.5354	4535.36	3.7188E+09	2.486590E+09	4.893008E+09
1.13058		1.54	4.8417	4841.73	3.9184E+09	2.462453E+09	4.867612E+09
1.05881		1.22	5.2554	5255.40	4.1840E+09	2.441875E+09	6.627526E+09
1.00000		1.00	5.6457	5645.66	4.4312E+09	2.416302E+09	6.549841E+09
1.01162		1.04	5.5636	5563.58	4.3792E+09	2.439287E+09	6.476040E+09
0.95341		0.85	5.9914	5991.42	4.6466E+09	2.414392E+09	6.405839E+09
0.90746		0.71	6.3730	6372.96	4.8818E+09	2.397446E+09	6.338981E+09
0.91890		0.74	6.2740	6274.00	4.8211E+09	2.415195E+09	6.275233E+09

0.88471	0.65	6.5785	6578.53	5.0074E+09	2.409389E+09	6.214382E+09
0.90746	0.71	6.3730	6372.96	4.8818E+09	2.433289E+09	6.156236E+09
0.87338	0.62	6.6853	6685.32	5.0723E+09	2.422008E+09	6.100617E+09
0.89607	0.68	6.4744	6474.44	4.9439E+09	2.445419E+09	6.047366E+09
0.85084	0.57	6.9074	6907.41	5.2067E+09	2.428674E+09	5.996333E+09
0.86210	0.59	6.7949	6794.91	5.1387E+09	2.451926E+09	5.947384E+09
0.82845	0.52	7.1415	7141.55	5.3474E+09	2.438750E+09	5.900392E+09
0.86210	0.59	6.7949	6794.91	5.1387E+09	2.470172E+09	5.855243E+09
0.83963	0.54	7.0229	7022.92	5.2762E+09	2.453999E+09	5.811831E+09
0.79184	0.44	7.5567	7556.68	5.5946E+09	2.422159E+09	5.770057E+09
0.80289	0.46	7.4269	7426.89	5.5176E+09	2.476008E+09	5.729830E+09
0.77973	0.42	7.7037	7703.69	5.6816E+09	2.461639E+09	5.691065E+09
0.81954	0.50	7.2388	7238.77	5.4056E+09	2.503696E+09	5.653686E+09
0.82845	0.52	7.1415	7141.55	5.3474E+09	2.514185E+09	5.617618E+09
0.59052	0.16	10.9039	10903.91	7.5019E+09	2.327014E+09	5.582793E+09
0.43817	0.06	15.8333	15833.26	1.0110E+10	2.156626E+09	5.549149E+09
0.34123	0.02	21.6432	21643.19	1.2983E+10	2.046168E+09	5.516627E+09
0.28099	0.01	27.5907	27590.72	1.5766E+10	1.946503E+09	5.485170E+09
0.23191	0.01	35.0732	35073.24	1.9102E+10	1.873256E+09	5.454729E+09
0.22142	0.01	37.1625	37162.47	2.0007E+10	1.849170E+09	5.425254E+09
0.22142	0.01	37.1625	37162.47	2.0007E+10	1.859261E+09	5.396700E+09
0.22142	0.01	37.1625	37162.47	2.0007E+10	1.859261E+09	5.369025E+09
0.22142	0.01	37.1625	37162.47	2.0007E+10	1.871970E+09	5.342188E+09

v_el_fact1	v_el_fact2	v_el_fact3	v_el_fact4	v_el_fact5	v_el_fact6	v_el_fact7
8.168592E-06	7.964450E+15	2498399	3.044766E-13	9.711664E+14	2.449276E+09	3.116358E+07
8.168592E-06	7.964450E+15	2498399	3.127765E-13	1.024835E+15	2.584627E+09	3.201308E+07
8.168592E-06	7.964450E+15	2498399	3.121304E-13	1.020606E+15	2.573961E+09	3.194696E+07
8.168592E-06	7.964450E+15	2498399	3.247866E-13	1.105050E+15	2.786930E+09	3.324234E+07
8.168592E-06	7.859996E+15	2498399	3.294653E-13	1.114821E+15	2.793073E+09	3.338897E+07
8.168592E-06	7.754844E+15	2498399	3.401988E-13	1.164869E+15	2.898877E+09	3.413022E+07
8.168592E-06	7.684345E+15	2498399	3.471302E-13	1.196319E+15	2.963581E+09	3.458789E+07
8.168592E-06	7.648974E+15	2498399	3.526399E-13	1.226083E+15	3.030313E+09	3.501551E+07
8.168592E-06	7.577985E+15	2498399	3.620409E-13	1.274377E+15	3.135024E+09	3.569846E+07
8.168592E-06	7.108118E+15	2498399	3.641986E-13	1.171549E+15	2.791285E+09	3.422794E+07
8.168592E-06	6.507494E+15	2498399	3.729718E-13	1.076279E+15	2.453567E+09	3.280673E+07
8.168592E-06	6.117674E+15	2498399	3.766650E-13	1.000558E+15	2.211574E+09	3.163163E+07
8.168592E-06	5.607989E+15	2498399	3.813780E-13	9.002726E+14	1.905214E+09	3.000458E+07
8.168592E-06	5.314620E+15	2498399	3.841664E-13	8.427505E+14	1.736206E+09	2.903019E+07
8.168592E-06	4.715380E+15	2498399	3.891424E-13	7.226770E+14	1.402390E+09	2.688268E+07
8.168592E-06	4.070390E+15	2498399	3.927144E-13	5.902824E+14	1.064251E+09	2.429575E+07
8.168592E-06	3.631133E+15	2498399	3.990744E-13	5.135976E+14	8.746015E+08	2.266271E+07
8.168592E-06	3.157939E+15	2498399	4.031451E-13	4.250895E+14	6.750694E+08	2.061771E+07
8.168592E-06	2.841231E+15	2498399	4.096049E-13	3.744917E+14	5.641073E+08	1.935180E+07
8.168592E-06	2.729735E+15	2498399	4.133086E-13	3.590719E+14	5.301611E+08	1.894921E+07
8.168592E-06	2.652119E+15	2498399	4.203061E-13	3.556092E+14	5.175302E+08	1.885762E+07
8.168592E-06	2.524275E+15	2498399	4.231559E-13	3.347015E+14	4.752172E+08	1.829486E+07
8.168592E-06	2.524275E+15	2498399	4.319729E-13	3.487948E+14	4.952272E+08	1.867606E+07
8.168592E-06	2.615912E+15	2498399	4.365790E-13	3.758481E+14	5.432380E+08	1.938682E+07
8.168592E-06	2.437220E+15	2498399	4.439128E-13	3.494535E+14	4.875318E+08	1.869369E+07
8.168592E-06	2.342186E+15	2498399	4.495609E-13	3.376457E+14	4.617831E+08	1.837515E+07
8.168592E-06	2.185965E+15	2498399	4.602347E-13	3.190625E+14	4.215640E+08	1.786233E+07
8.168592E-06	2.112479E+15	2498399	4.589796E-13	3.014584E+14	3.915523E+08	1.736257E+07
8.168592E-06	1.975465E+15	2498399	4.668419E-13	2.820303E+14	3.542393E+08	1.679377E+07
8.168592E-06	1.975465E+15	2498399	4.697045E-13	2.854996E+14	3.585968E+08	1.689674E+07
8.168592E-06	1.919319E+15	2498399	4.774597E-13	2.825182E+14	3.497729E+08	1.680829E+07
8.168592E-06	1.919319E+15	2498399	4.801916E-13	2.857603E+14	3.537869E+08	1.690446E+07
8.168592E-06	1.876666E+15	2498399	4.822854E-13	2.787023E+14	3.411930E+08	1.669439E+07
8.168592E-06	1.890937E+15	2498399	4.836396E-13	2.834727E+14	3.483501E+08	1.683666E+07
8.168592E-06	1.819027E+15	2498399	4.893244E-13	2.737818E+14	3.299821E+08	1.654636E+07
8.168592E-06	1.804475E+15	2498399	4.906119E-13	2.719282E+14	3.264344E+08	1.649026E+07
8.168592E-06	1.745667E+15	2498399	4.995974E-13	2.683084E+14	3.167971E+08	1.638013E+07
8.168592E-06	1.738246E+15	2498399	5.022485E-13	2.694364E+14	3.174520E+08	1.641453E+07
8.168592E-06	1.678299E+15	2498399	5.109158E-13	2.645177E+14	3.062355E+08	1.626401E+07
8.168592E-06	1.624953E+15	2498399	5.136304E-13	2.546917E+14	2.901359E+08	1.595907E+07
8.168592E-06	1.578522E+15	2498399	5.193746E-13	2.493386E+14	2.799504E+08	1.579047E+07
8.168592E-06	1.578522E+15	2498399	5.232435E-13	2.530672E+14	2.841367E+08	1.590809E+07
8.168592E-06	1.539302E+15	2498399	5.269266E-13	2.471370E+14	2.740097E+08	1.572060E+07
8.168592E-06	1.499575E+15	2498399	5.295568E-13	2.400101E+14	2.626514E+08	1.549227E+07
8.168592E-06	1.451196E+15	2498399	5.359537E-13	2.340431E+14	2.519562E+08	1.529848E+07
8.168592E-06	1.410319E+15	2498399	5.389297E-13	2.267062E+14	2.406120E+08	1.505677E+07
8.168592E-06	1.418491E+15	2498399	5.443284E-13	2.332997E+14	2.483097E+08	1.527416E+07
8.168592E-06	1.377072E+15	2498399	5.480636E-13	2.262293E+14	2.372430E+08	1.504093E+07
8.168592E-06	1.343483E+15	2498399	5.524409E-13	2.214991E+14	2.294321E+08	1.488285E+07
8.168592E-06	1.351919E+15	2498399	5.559709E-13	2.264551E+14	2.353010E+08	1.504843E+07

8.168592E-06	1.326530E+15	2498399	5.619003E-13	2.248258E+14	2.314040E+08	1.499420E+07
8.168592E-06	1.343483E+15	2498399	5.648763E-13	2.315831E+14	2.398772E+08	1.521786E+07
8.168592E-06	1.318013E+15	2498399	5.690631E-13	2.283770E+14	2.343033E+08	1.511215E+07
8.168592E-06	1.335020E+15	2498399	5.718087E-13	2.350635E+14	2.427142E+08	1.533179E+07
8.168592E-06	1.300896E+15	2498399	5.770437E-13	2.302677E+14	2.347040E+08	1.517458E+07
8.168592E-06	1.309468E+15	2498399	5.824738E-13	2.369449E+14	2.423042E+08	1.539302E+07
8.168592E-06	1.283665E+15	2498399	5.864742E-13	2.331456E+14	2.360583E+08	1.526912E+07
8.168592E-06	1.309468E+15	2498399	5.889879E-13	2.422743E+14	2.477541E+08	1.556517E+07
8.168592E-06	1.292295E+15	2498399	5.890161E-13	2.375465E+14	2.413213E+08	1.541255E+07
8.168592E-06	1.254978E+15	2498399	5.904236E-13	2.284197E+14	2.286746E+08	1.511357E+07
8.168592E-06	1.263705E+15	2498399	6.070585E-13	2.439955E+14	2.451156E+08	1.562036E+07
8.168592E-06	1.245343E+15	2498399	6.084242E-13	2.397719E+14	2.391162E+08	1.548458E+07
8.168592E-06	1.276740E+15	2498399	6.125369E-13	2.522727E+14	2.547345E+08	1.588310E+07
8.168592E-06	1.283665E+15	2498399	6.138945E-13	2.554565E+14	2.586479E+08	1.598302E+07
8.168592E-06	1.083766E+15	2498399	6.206312E-13	2.025455E+14	1.884329E+08	1.423186E+07
8.168592E-06	9.335561E+14	2498399	6.192897E-13	1.612317E+14	1.392152E+08	1.269771E+07
8.168592E-06	8.238346E+14	2498399	6.285922E-13	1.377051E+14	1.116956E+08	1.173479E+07
8.168592E-06	7.475897E+14	2498399	6.272955E-13	1.185472E+14	9.159867E+07	1.088794E+07
8.168592E-06	6.791695E+14	2498399	6.364275E-13	1.056616E+14	7.781663E+07	1.027919E+07
8.168592E-06	6.636311E+14	2498399	6.351220E-13	1.016381E+14	7.399221E+07	1.008158E+07
8.168592E-06	6.636311E+14	2498399	6.403280E-13	1.033111E+14	7.521019E+07	1.016421E+07
8.168592E-06	6.636311E+14	2498399	6.403280E-13	1.033111E+14	7.521019E+07	1.016421E+07
8.168592E-06	6.636311E+14	2498399	6.469049E-13	1.054443E+14	7.676311E+07	1.026861E+07

v_el_fact8	v_el_fact9	v_SI	v_SI/c_SI	T_el_c_fact1	T_el_c_fact2	T_el_c
4.855832E+14	4.855856E+14	9.521846E+05	3.176146E-03	52021.149	0.9999950	2.029820E+09
5.124174E+14	5.124199E+14	9.521846E+05	3.176146E-03	54895.926	0.9999950	2.141991E+09
5.103028E+14	5.103053E+14	9.521846E+05	3.176146E-03	54669.386	0.9999950	2.133152E+09
5.525251E+14	5.525279E+14	9.521846E+05	3.176146E-03	59192.722	0.9999950	2.309648E+09
5.574103E+14	5.574131E+14	9.490472E+05	3.165680E-03	60910.397	0.9999950	2.361034E+09
5.824345E+14	5.824374E+14	9.458570E+05	3.155039E-03	64943.766	0.9999950	2.500481E+09
5.981597E+14	5.981627E+14	9.437000E+05	3.147844E-03	67617.154	0.9999950	2.591552E+09
6.130413E+14	6.130443E+14	9.426122E+05	3.144215E-03	69780.642	0.9999951	2.668309E+09
6.371884E+14	6.371915E+14	9.404175E+05	3.136895E-03	73550.771	0.9999951	2.799392E+09
5.857747E+14	5.857775E+14	9.254884E+05	3.087096E-03	74430.101	0.9999952	2.743629E+09
5.381395E+14	5.381419E+14	9.052860E+05	3.019709E-03	78059.202	0.9999954	2.753153E+09
5.002788E+14	5.002810E+14	8.914131E+05	2.973434E-03	79612.748	0.9999956	2.722545E+09
4.501363E+14	4.501382E+14	8.722365E+05	2.909467E-03	81617.510	0.9999958	2.672306E+09
4.213752E+14	4.213770E+14	8.605985E+05	2.870647E-03	82815.318	0.9999959	2.639648E+09
3.613385E+14	3.613399E+14	8.352409E+05	2.786063E-03	84974.614	0.9999961	2.551213E+09
2.951412E+14	2.951422E+14	8.050849E+05	2.685474E-03	86541.760	0.9999964	2.414030E+09
2.567988E+14	2.567997E+14	7.824260E+05	2.609892E-03	89367.540	0.9999966	2.354506E+09
2.125447E+14	2.125454E+14	7.555857E+05	2.520362E-03	91199.975	0.9999968	2.240760E+09
1.872459E+14	1.872464E+14	7.358843E+05	2.454645E-03	94146.105	0.9999970	2.194090E+09
1.795360E+14	1.795365E+14	7.285561E+05	2.430201E-03	95856.328	0.9999970	2.189675E+09
1.778046E+14	1.778051E+14	7.233212E+05	2.412739E-03	99129.598	0.9999971	2.232023E+09
1.673507E+14	1.673512E+14	7.144422E+05	2.383122E-03	100478.401	0.9999972	2.207190E+09
1.743974E+14	1.743979E+14	7.144422E+05	2.383122E-03	104709.247	0.9999972	2.300128E+09
1.879241E+14	1.879246E+14	7.208397E+05	2.404462E-03	106954.148	0.9999971	2.391707E+09
1.747268E+14	1.747273E+14	7.082011E+05	2.362304E-03	110577.660	0.9999972	2.386785E+09
1.688228E+14	1.688233E+14	7.011942E+05	2.338932E-03	113409.402	0.9999973	2.399708E+09
1.595312E+14	1.595317E+14	6.891977E+05	2.298916E-03	118858.642	0.9999974	2.429691E+09
1.507292E+14	1.507296E+14	6.833310E+05	2.279346E-03	118211.254	0.9999974	2.375492E+09
1.410152E+14	1.410155E+14	6.719708E+05	2.241453E-03	122295.855	0.9999975	2.376539E+09
1.427498E+14	1.427502E+14	6.719708E+05	2.241453E-03	123800.218	0.9999975	2.405773E+09
1.412591E+14	1.412594E+14	6.671444E+05	2.225354E-03	127922.079	0.9999975	2.450291E+09
1.428802E+14	1.428805E+14	6.671444E+05	2.225354E-03	129390.114	0.9999975	2.478410E+09
1.393511E+14	1.393515E+14	6.634066E+05	2.212886E-03	130520.948	0.9999976	2.472135E+09
1.417364E+14	1.417367E+14	6.646642E+05	2.217081E-03	131254.965	0.9999975	2.495472E+09
1.368909E+14	1.368912E+14	6.582530E+05	2.195695E-03	134358.703	0.9999976	2.505439E+09
1.359641E+14	1.359644E+14	6.569325E+05	2.191291E-03	135066.639	0.9999976	2.508545E+09
1.341542E+14	1.341545E+14	6.515135E+05	2.173215E-03	140059.447	0.9999976	2.558536E+09
1.347182E+14	1.347185E+14	6.508200E+05	2.170902E-03	141549.838	0.9999976	2.580260E+09
1.322589E+14	1.322592E+14	6.451347E+05	2.151938E-03	146477.441	0.9999977	2.623638E+09
1.273459E+14	1.273461E+14	6.399460E+05	2.134630E-03	148038.066	0.9999977	2.609109E+09
1.246693E+14	1.246696E+14	6.353248E+05	2.119215E-03	151367.785	0.9999978	2.629403E+09
1.265336E+14	1.265339E+14	6.353248E+05	2.119215E-03	153631.315	0.9999978	2.668723E+09
1.235685E+14	1.235688E+14	6.313411E+05	2.105927E-03	155801.697	0.9999978	2.672591E+09
1.200050E+14	1.200053E+14	6.272276E+05	2.092206E-03	157361.018	0.9999978	2.664279E+09
1.170215E+14	1.170218E+14	6.221064E+05	2.075123E-03	161185.732	0.9999978	2.684652E+09
1.133531E+14	1.133533E+14	6.176991E+05	2.060422E-03	162980.721	0.9999979	2.676223E+09
1.166498E+14	1.166501E+14	6.185714E+05	2.063332E-03	166262.375	0.9999979	2.737825E+09
1.131146E+14	1.131149E+14	6.140056E+05	2.048102E-03	168551.987	0.9999979	2.734705E+09
1.107495E+14	1.107498E+14	6.102267E+05	2.035497E-03	171255.183	0.9999979	2.744468E+09
1.132276E+14	1.132278E+14	6.111824E+05	2.038685E-03	173450.715	0.9999979	2.788366E+09

1.124129E+14	1.124132E+14	6.082925E+05	2.029045E-03	177170.170	0.9999979	2.821288E+09
1.157915E+14	1.157918E+14	6.102267E+05	2.035497E-03	179051.788	0.9999979	2.869413E+09
1.141885E+14	1.141887E+14	6.073137E+05	2.025780E-03	181715.861	0.9999979	2.884370E+09
1.175317E+14	1.175320E+14	6.092634E+05	2.032284E-03	183473.591	0.9999979	2.930999E+09
1.151338E+14	1.151341E+14	6.053322E+05	2.019171E-03	186848.394	0.9999980	2.946517E+09
1.184724E+14	1.184727E+14	6.063270E+05	2.022489E-03	190381.551	0.9999980	3.012109E+09
1.165728E+14	1.165731E+14	6.033178E+05	2.012451E-03	193005.569	0.9999980	3.023389E+09
1.211371E+14	1.211374E+14	6.063270E+05	2.022489E-03	194663.629	0.9999980	3.079857E+09
1.187733E+14	1.187735E+14	6.043292E+05	2.015825E-03	194682.259	0.9999980	3.059887E+09
1.142099E+14	1.142101E+14	5.999185E+05	2.001112E-03	195613.753	0.9999980	3.029812E+09
1.219978E+14	1.219980E+14	6.009587E+05	2.004582E-03	206791.682	0.9999980	3.214062E+09
1.198860E+14	1.198862E+14	5.987637E+05	1.997260E-03	207723.176	0.9999980	3.204998E+09
1.261364E+14	1.261366E+14	6.025025E+05	2.009732E-03	210540.945	0.9999980	3.289169E+09
1.277283E+14	1.277285E+14	6.033178E+05	2.012451E-03	211475.234	0.9999980	3.312712E+09
1.012728E+14	1.012730E+14	5.783186E+05	1.929063E-03	216142.019	0.9999981	3.111038E+09
8.061584E+13	8.061598E+13	5.571452E+05	1.858436E-03	215208.662	0.9999983	2.874936E+09
6.885255E+13	6.885266E+13	5.399995E+05	1.801244E-03	221722.600	0.9999984	2.782455E+09
5.927361E+13	5.927370E+13	5.270468E+05	1.758039E-03	220808.804	0.9999985	2.639649E+09
5.283080E+13	5.283088E+13	5.145504E+05	1.716355E-03	227284.551	0.9999985	2.589745E+09
5.081904E+13	5.081912E+13	5.115818E+05	1.706453E-03	226353.057	0.9999985	2.549458E+09
5.165557E+13	5.165564E+13	5.115818E+05	1.706453E-03	230079.033	0.9999985	2.591424E+09
5.165557E+13	5.165564E+13	5.115818E+05	1.706453E-03	230079.033	0.9999985	2.591424E+09
5.272214E+13	5.272222E+13	5.115818E+05	1.706453E-03	234829.653	0.9999985	2.644931E+09

T_el_c/Tc	T_el_c/T_el_destruc	m_el_MeV	w_el_MeV	w_el_kg	v_destruc_fact1
0.5173	0.1736	48422.29767	52021.14882	9.270602E-26	1.082480E+10
0.5362	0.1985	50284.69374	54895.92580	9.782911E-26	1.205425E+10
0.5347	0.2118	52147.08980	54669.38644	9.742540E-26	1.195497E+10
0.5638	0.2435	54009.48587	59192.72160	1.054864E-25	1.401511E+10
0.5747	0.2625	55871.88193	60910.39665	1.085474E-25	1.484031E+10
0.5997	0.2915	57734.27800	64943.76593	1.157352E-25	1.687077E+10
0.6161	0.3151	59596.67406	67617.15389	1.204994E-25	1.828832E+10
0.6292	0.3371	61459.07012	69780.64199	1.243549E-25	1.947735E+10
0.6516	0.3662	63321.46619	73550.77106	1.310736E-25	2.163886E+10
0.6568	0.3704	65183.86225	74430.10145	1.326406E-25	2.215936E+10
0.6780	0.3826	67046.25832	78059.20231	1.391080E-25	2.437296E+10
0.6870	0.3886	68908.65438	79612.74811	1.418765E-25	2.535276E+10
0.6984	0.3909	70771.05045	81617.50962	1.454492E-25	2.664567E+10
0.7053	0.3951	72633.44651	82815.31784	1.475838E-25	2.743351E+10
0.7175	0.3900	74495.84257	84974.61422	1.514318E-25	2.888274E+10
0.7263	0.3764	76358.23864	86541.75983	1.542246E-25	2.995790E+10
0.7420	0.3740	78220.63470	89367.54021	1.592604E-25	3.194623E+10
0.7521	0.3621	80083.03077	91199.97533	1.625260E-25	3.326974E+10
0.7682	0.3604	81945.42683	94146.10475	1.677762E-25	3.545396E+10
0.7775	0.3652	83807.82290	95856.32784	1.708240E-25	3.675374E+10
0.7951	0.3776	85670.21896	99129.59797	1.766572E-25	3.930671E+10
0.8023	0.3785	87532.61503	100478.40137	1.790609E-25	4.038364E+10
0.8247	0.3996	89395.01109	104709.24740	1.866006E-25	4.385611E+10
0.8364	0.4206	91257.40715	106954.14808	1.906012E-25	4.575676E+10
0.8552	0.4246	93119.80322	110577.65998	1.970586E-25	4.890968E+10
0.8697	0.4316	94982.19928	113409.40193	2.021050E-25	5.144677E+10
0.8974	0.4416	96844.59535	118858.64218	2.118160E-25	5.650951E+10
0.8941	0.4360	98706.99141	118211.25381	2.106623E-25	5.589560E+10
0.9146	0.4404	100569.38748	122295.85527	2.179414E-25	5.982510E+10
0.9221	0.4498	102431.78354	123800.21818	2.206223E-25	6.130598E+10
0.9424	0.4621	104294.17960	127922.07940	2.279678E-25	6.545623E+10
0.9496	0.4713	106156.57567	129390.11404	2.305840E-25	6.696721E+10
0.9551	0.4739	108018.97173	130520.94783	2.325992E-25	6.814287E+10
0.9587	0.4820	109881.36780	131254.96515	2.339073E-25	6.891146E+10
0.9738	0.4875	111743.76386	134358.70336	2.394384E-25	7.220904E+10
0.9772	0.4915	113606.15993	135066.63885	2.407000E-25	7.297199E+10
1.0011	0.5047	115468.55599	140059.44701	2.495976E-25	7.846659E+10
1.0082	0.5123	117330.95206	141549.83751	2.522536E-25	8.014543E+10
1.0315	0.5241	119193.34812	146477.44109	2.610350E-25	8.582256E+10
1.0388	0.5244	121055.74418	148038.06624	2.638162E-25	8.766108E+10
1.0543	0.5315	122918.14025	151367.78491	2.697500E-25	9.164883E+10
1.0648	0.5425	124780.53631	153631.31548	2.737838E-25	9.441032E+10
1.0748	0.5462	126642.93238	155801.69664	2.776516E-25	9.709667E+10
1.0820	0.5473	128505.32844	157361.01770	2.804304E-25	9.904996E+10
1.0994	0.4051	130367.72451	161185.73232	2.872464E-25	1.039234E+11
1.1076	0.4086	132230.12057	162980.72137	2.904452E-25	1.062509E+11
1.1224	0.4228	134092.51663	166262.37495	2.962934E-25	1.105727E+11
1.1327	0.4269	135954.91270	168551.98735	3.003737E-25	1.136391E+11
1.1447	0.4330	137817.30876	171255.18311	3.051910E-25	1.173134E+11
1.1545	0.4443	139679.70483	173450.71462	3.091036E-25	1.203406E+11

1.1710	0.4540	141542.10089	177170.17040	3.157320E-25	1.255571E+11
1.1792	0.4661	143404.49696	179051.78841	3.190852E-25	1.282382E+11
1.1909	0.4728	145266.89302	181715.86142	3.238328E-25	1.320826E+11
1.1986	0.4847	147129.28909	183473.59071	3.269652E-25	1.346502E+11
1.2132	0.4914	148991.68515	186848.39370	3.329794E-25	1.396493E+11
1.2285	0.5065	150854.08121	190381.55067	3.392758E-25	1.449805E+11
1.2397	0.5124	152716.47728	193005.56944	3.439520E-25	1.490046E+11
1.2468	0.5260	154578.87334	194663.62887	3.469068E-25	1.515757E+11
1.2469	0.5265	156441.26941	194682.25875	3.469400E-25	1.516047E+11
1.2509	0.5251	158303.66547	195613.75281	3.486000E-25	1.530590E+11
1.2981	0.5609	160166.06154	206791.68154	3.685200E-25	1.710512E+11
1.3020	0.5632	162028.45760	207723.17560	3.701800E-25	1.725957E+11
1.3137	0.5818	163890.85366	210540.94514	3.752015E-25	1.773100E+11
1.3176	0.5897	165753.24973	211475.23368	3.768665E-25	1.788871E+11
1.3369	0.5573	167615.64579	216142.01893	3.851831E-25	1.868695E+11
1.3331	0.5181	169478.04186	215208.66188	3.835198E-25	1.852591E+11
1.3598	0.5044	171340.43792	221722.59985	3.951281E-25	1.966436E+11
1.3561	0.4812	173202.83399	220808.80417	3.934997E-25	1.950261E+11
1.3825	0.4748	175065.23005	227284.55088	4.050400E-25	2.066331E+11
1.3787	0.4699	176927.62612	226353.05682	4.033800E-25	2.049428E+11
1.3938	0.4802	178790.02218	230079.03307	4.100200E-25	2.117454E+11
1.3938	0.4827	180652.41824	230079.03307	4.100200E-25	2.117454E+11
1.4129	0.4951	182514.81431	234829.65278	4.184860E-25	2.205799E+11

v_destruc_fact2	v_destruc_fact3	v_destruc_fact4	v_destruc_fact5	v_destruc_fact5a	v_destruc_fact6
1.00002906	9.1389913	-314527.82032	3.023076	0.000530	0.023017
1.00002542	7.7870695	-306377.68751	2.790532	0.000396	0.019908
1.00002382	6.7834027	-284772.46636	2.604497	0.000323	0.017967
1.00002071	6.0137056	-290314.94075	2.452286	0.000251	0.015845
1.00001909	5.4076871	-283287.36301	2.325443	0.000204	0.014291
1.00001708	4.9200353	-288105.51763	2.218115	0.000169	0.013015
1.00001572	4.5203850	-287524.32647	2.126120	0.000139	0.011776
1.00001466	4.1877129	-285596.84602	2.046390	0.000122	0.011041
1.00001344	3.9070540	-290764.86704	1.976627	0.000105	0.010240
1.00001286	3.6674972	-285077.86616	1.915071	0.000091	0.009549
1.00001192	3.4609198	-290435.61426	1.860355	0.000084	0.009175
1.00001138	3.2811629	-288420.75138	1.811398	0.000074	0.008629
1.00001083	3.1234801	-288491.28992	1.767337	0.000068	0.008233
1.00001043	2.9841604	-286122.32851	1.727472	0.000058	0.007617
1.00000995	2.8602643	-287423.50266	1.691232	0.000057	0.007548
1.00000958	2.7494358	-286997.10009	1.658142	0.000058	0.007595
1.00000911	2.6497667	-290946.82253	1.627810	0.000046	0.006819
1.00000877	2.5596963	-291822.60721	1.599905	0.000051	0.007161
1.00000836	2.4779366	-296399.48858	1.574146	0.000044	0.006649
1.00000809	2.4034165	-297211.28998	1.550296	0.000039	0.006276
1.00000771	2.3352380	-302969.50034	1.528149	0.000033	0.005737
1.00000750	2.2726432	-302948.17616	1.507529	0.000032	0.005695
1.00000711	2.2149886	-311674.15177	1.488284	0.000027	0.005213
1.00000687	2.1617243	-314505.16672	1.470280	0.000032	0.005680
1.00000657	2.1123778	-321427.61568	1.453402	0.000017	0.004161
1.00000634	2.0665409	-326062.65600	1.437547	0.000025	0.004956
1.00000598	2.0238597	-338182.36482	1.422624	0.000025	0.005019
1.00000596	1.9840252	-333013.94071	1.408554	0.000021	0.004607
1.00000570	1.9467674	-341270.51130	1.395266	0.000023	0.004796
1.00000558	1.9118485	-342356.15561	1.382696	0.000025	0.004950
1.00000536	1.8790589	-350708.02706	1.370788	0.000028	0.005302
1.00000525	1.8482131	-351809.13312	1.359490	0.000006	0.002400
1.00000517	1.8191460	-352082.13300	1.348757	0.000028	0.005264
1.00000510	1.7917105	-351382.12214	1.338548	0.000018	0.004277
1.00000495	1.7657754	-357078.35834	1.328825	0.000013	0.003605
1.00000488	1.7412226	-356455.43210	1.319554	0.000037	0.006060
1.00000468	1.7179462	-367153.08845	1.310704	0.000023	0.004810
1.00000460	1.6958507	-368666.07589	1.302248	0.000012	0.003440
1.00000442	1.6748496	-379130.43762	1.294160	0.000018	0.004251
1.00000434	1.6548649	-380876.92975	1.286416	0.000016	0.004057
1.00000422	1.6358254	-387196.94248	1.278994	0.000014	0.003701
1.00000414	1.6176665	-390799.71416	1.271875	0.000019	0.004400
1.00000406	1.6003293	-394191.13808	1.265041	0.000011	0.003346
1.00000400	1.5837600	-396069.89729	1.258475	0.000012	0.003417
1.00000532	2.9360296	-552378.54986	1.713485	0.000031	0.005530
1.00000520	2.8676030	-551983.05129	1.693400	0.000010	0.003163
1.00000504	2.8033450	-556752.59558	1.674319	0.000048	0.006911
1.00000491	2.7428973	-558301.30938	1.656169	0.000042	0.006480
1.00000478	2.6859406	-561334.73809	1.638884	0.000033	0.005778
1.00000468	2.6321895	-562813.70813	1.622402	0.000030	0.005522

1.00000453	2.5813885	-569307.99674	1.606670	0.000020	0.004526
1.00000444	2.5333078	-569970.84334	1.591637	0.000029	0.005363
1.00000434	2.4877405	-573225.33089	1.577257	0.000033	0.005741
1.00000426	2.4444998	-573718.11037	1.563490	0.000024	0.004849
1.00000415	2.4034165	-579340.49188	1.550296	0.000007	0.002690
1.00000404	2.3643372	-585476.62973	1.537640	0.000047	0.006856
1.00000395	2.3271224	-588856.47499	1.525491	0.000048	0.006956
1.00000389	2.2916452	-589370.63940	1.513818	0.000020	0.004500
1.00000386	2.2577894	-585056.87120	1.502594	0.000026	0.005052
1.00000381	2.2254490	-583630.80498	1.491794	0.000000	0.000678
1.00000358	2.1945270	-612679.74314	1.481394	0.000027	0.005213
1.00000354	2.1649340	-611275.91150	1.471371	0.000021	0.004568
1.00000347	2.1365882	-615498.47156	1.461707	0.000022	0.004639
1.00000343	2.1094141	-614285.73466	1.452382	0.000030	0.005438
1.00000334	2.0833420	-623949.56335	1.443379	-0.000001	#NUM!
1.00000333	2.0583077	-617511.27729	1.434680	0.000015	0.003809
1.00000322	2.0342517	-632473.45783	1.426272	0.000005	0.002185
1.00000321	2.0111190	-626275.27274	1.418139	-0.000024	#NUM!
1.00000310	1.9888584	-641064.67478	1.410269	0.000024	0.004889
1.00000310	1.9674226	-634987.51327	1.402648	0.000024	0.004898
1.00000303	1.9467674	-642042.93008	1.395266	-0.000006	#NUM!
1.00000302	1.9268517	-638750.40223	1.388111	0.000021	0.004532
1.00000294	1.9076374	-648680.49818	1.381172	0.000034	0.005829

v_el_destruc	v_el_destruc/c_SI	v_el_destruc_classical	U_el_fact1	U_el_fact2	U_el
2.282535E+06	0.007614	2.285645E+06	9.249834E-07	2.114184	2.11418
2.138750E+06	0.007134	2.137705E+06	9.417174E-07	2.013114	2.01311
2.068051E+06	0.006898	2.069493E+06	9.404202E-07	1.946193	1.94619
1.937017E+06	0.006461	1.929859E+06	9.656725E-07	1.863612	1.86361
1.842433E+06	0.006146	1.852599E+06	9.781474E-07	1.812115	1.81211
1.759093E+06	0.005868	1.752256E+06	1.002648E-06	1.756896	1.75690
1.660530E+06	0.005539	1.681279E+06	1.018544E-06	1.712457	1.71246
1.617522E+06	0.005395	1.623682E+06	1.030481E-06	1.673174	1.67317
1.553100E+06	0.005181	1.554329E+06	1.051163E-06	1.633853	1.63385
1.494781E+06	0.004986	1.520871E+06	1.072360E-06	1.630921	1.63092
1.478573E+06	0.004932	1.463727E+06	1.113827E-06	1.630339	1.63034
1.428184E+06	0.004764	1.430177E+06	1.138617E-06	1.628424	1.62842
1.396611E+06	0.004659	1.395219E+06	1.173337E-06	1.637062	1.63706
1.321803E+06	0.004409	1.369382E+06	1.194994E-06	1.636403	1.63640
1.337919E+06	0.004463	1.337615E+06	1.241884E-06	1.661163	1.66116
1.373228E+06	0.004581	1.312418E+06	1.296275E-06	1.701255	1.70125
1.255767E+06	0.004189	1.279635E+06	1.348177E-06	1.725176	1.72518
1.341821E+06	0.004476	1.255810E+06	1.405546E-06	1.765099	1.76510
1.266357E+06	0.004224	1.226015E+06	1.458552E-06	1.788206	1.78821
1.213543E+06	0.004048	1.205788E+06	1.482090E-06	1.787088	1.78709
1.125545E+06	0.003754	1.177214E+06	1.509619E-06	1.777145	1.77714
1.132567E+06	0.003778	1.161370E+06	1.535282E-06	1.783030	1.78303
1.050163E+06	0.003503	1.130380E+06	1.556535E-06	1.759476	1.75948
1.158243E+06	0.003863	1.111669E+06	1.553667E-06	1.727164	1.72716
8.583351E+05	0.002863	1.087010E+06	1.599055E-06	1.738188	1.73819
1.033558E+06	0.003448	1.067482E+06	1.628704E-06	1.738613	1.73861
1.057565E+06	0.003528	1.037299E+06	1.683181E-06	1.745962	1.74596
9.805532E+05	0.003271	1.034979E+06	1.694544E-06	1.753818	1.75382
1.030420E+06	0.003437	1.012738E+06	1.742815E-06	1.765014	1.76501
1.073247E+06	0.003580	1.002021E+06	1.749932E-06	1.753469	1.75347
1.159576E+06	0.003868	9.814916E+05	1.781940E-06	1.748959	1.74896
5.292466E+05	0.001765	9.718779E+05	1.788731E-06	1.738428	1.73843
1.169948E+06	0.003903	9.638313E+05	1.804034E-06	1.738784	1.73878
9.578907E+05	0.003195	9.574880E+05	1.803990E-06	1.727298	1.72730
8.132722E+05	0.002713	9.429208E+05	1.835806E-06	1.731020	1.73102
1.376674E+06	0.004592	9.371601E+05	1.842722E-06	1.726925	1.72693
1.100252E+06	0.003670	9.172135E+05	1.880667E-06	1.724973	1.72497
7.920371E+05	0.002642	9.094241E+05	1.889325E-06	1.718198	1.71820
9.848256E+05	0.003285	8.912157E+05	1.927840E-06	1.718121	1.71812
9.454416E+05	0.003154	8.838492E+05	1.950349E-06	1.723814	1.72381
8.674530E+05	0.002894	8.715489E+05	1.979155E-06	1.724931	1.72493
1.037202E+06	0.003460	8.626937E+05	1.988972E-06	1.715874	1.71587
7.928463E+05	0.002645	8.543592E+05	2.010903E-06	1.718034	1.71803
8.140622E+05	0.002715	8.479066E+05	2.030822E-06	1.721947	1.72195
9.676176E+05	0.003228	9.775772E+05	2.063996E-06	2.017715	2.01772
5.599104E+05	0.001868	9.664645E+05	2.086410E-06	2.016441	2.01644
1.237501E+06	0.004128	9.514729E+05	2.097359E-06	1.995580	1.99558
1.172892E+06	0.003912	9.398525E+05	2.122610E-06	1.994941	1.99494
1.057023E+06	0.003526	9.275269E+05	2.147112E-06	1.991504	1.99150
1.020315E+06	0.003403	9.169919E+05	2.152877E-06	1.974170	1.97417

8.444286E+05	0.002817	9.029055E+05	2.178457E-06	1.966941	1.96694
1.010213E+06	0.003370	8.939370E+05	2.179213E-06	1.948079	1.94808
1.091249E+06	0.003640	8.833425E+05	2.200472E-06	1.943770	1.94377
9.297443E+05	0.003101	8.752558E+05	2.200480E-06	1.925983	1.92598
5.202041E+05	0.001735	8.636481E+05	2.228267E-06	1.924439	1.92444
1.336769E+06	0.004459	8.520973E+05	2.238546E-06	1.907459	1.90746
1.366954E+06	0.004560	8.429351E+05	2.260000E-06	1.905034	1.90503
8.910830E+05	0.002972	8.361202E+05	2.255205E-06	1.885622	1.88562
1.008010E+06	0.003362	8.329749E+05	2.262732E-06	1.884799	1.88480
1.362058E+05	0.000454	8.279974E+05	2.282998E-06	1.890317	1.89032
1.054889E+06	0.003519	8.024961E+05	2.321655E-06	1.863119	1.86312
9.306696E+05	0.003104	7.979817E+05	2.333660E-06	1.862218	1.86222
9.513825E+05	0.003173	7.900165E+05	2.329618E-06	1.840437	1.84044
1.122538E+06	0.003744	7.857510E+05	2.329906E-06	1.830726	1.83073
#NUM!	#NUM!	7.748093E+05	2.448371E-06	1.897021	1.89702
7.958408E+05	0.002655	7.741444E+05	2.537755E-06	1.964589	1.96459
4.592479E+05	0.001532	7.604496E+05	2.644487E-06	2.010999	2.01100
#NUM!	#NUM!	7.598459E+05	2.705751E-06	2.055954	2.05595
1.039357E+06	0.003467	7.468618E+05	2.798296E-06	2.089940	2.08994
1.046964E+06	0.003492	7.463723E+05	2.810684E-06	2.097816	2.09782
#NUM!	#NUM!	7.383533E+05	2.826022E-06	2.086603	2.08660
9.788529E+05	0.003265	7.364577E+05	2.826022E-06	2.081246	2.08125
1.265233E+06	0.004220	7.271462E+05	2.845340E-06	2.068978	2.06898

"exp(-U_eI^2)"	NV_fact1	NV_fact2	NV	Z + (I*Z^2)/156.444444 MeV	mass with G, u
0.01145	1.027315	0.997209	0.030106		
0.01738	1.039472	0.995586	0.043886		
0.02265	1.049737	0.994083	0.055654		
0.03102	1.065236	0.991600	0.073636		
0.03749	1.076652	0.989614	0.087037		
0.04565	1.090505	0.987031	0.103473		
0.05326	1.102921	0.984555	0.118365		
0.06084	1.114864	0.982030	0.132834		
0.06929	1.127741	0.979146	0.148595		
0.06996	1.128738	0.978916	0.149822		
0.07009	1.128937	0.978870	0.150067		
0.07053	1.129591	0.978718	0.150873		
0.06857	1.126655	0.979396	0.147260		
0.06871	1.126878	0.979345	0.147533		
0.06333	1.118699	0.981188	0.137511		
0.05534	1.106233	0.983869	0.122364		
0.05098	1.099249	0.985303	0.113946		
0.04435	1.088338	0.987448	0.100890		
0.04086	1.082440	0.988558	0.093882		
0.04102	1.082718	0.988506	0.094212		
0.04250	1.085226	0.988038	0.097188		
0.04162	1.083735	0.988317	0.095418		
0.04524	1.089819	0.987164	0.102655		
0.05064	1.098684	0.985417	0.113267		
0.04874	1.095591	0.986035	0.109556		
0.04867	1.095474	0.986059	0.109415		
0.04744	1.093453	0.986457	0.106996		
0.04615	1.091328	0.986872	0.104456		
0.04437	1.088360	0.987444	0.100917		
0.04621	1.091421	0.986854	0.104568		
0.04694	1.092638	0.986617	0.106021		
0.04870	1.095525	0.986048	0.109477		
0.04864	1.095426	0.986068	0.109358		
0.05061	1.098646	0.985425	0.113221		
0.04997	1.097594	0.985636	0.111958		
0.05068	1.098752	0.985404	0.113348	224347.9603	240.8474404
0.05102	1.099307	0.985292	0.114015		
0.05222	1.101252	0.984897	0.116355		
0.05224	1.101274	0.984892	0.116381		
0.05122	1.099638	0.985225	0.114413	221648.941	237.949924
0.05103	1.099319	0.985289	0.114030		
0.05264	1.101925	0.984759	0.117166		
0.05225	1.101299	0.984887	0.116412		
0.05156	1.100172	0.985116	0.115056		
0.01706	1.038835	0.995676	0.043160		
0.01715	1.039011	0.995651	0.043360	222246.1511	238.5910553
0.01864	1.041977	0.995230	0.046747		
0.01869	1.042071	0.995217	0.046855		
0.01895	1.042578	0.995144	0.047434		
0.02030	1.045211	0.994760	0.050451		

0.02088	1.046347	0.994592	0.051755		
0.02248	1.049421	0.994131	0.055290		
0.02286	1.050145	0.994021	0.056125		
0.02449	1.053227	0.993545	0.059681	221425.4005	237.7099434
0.02464	1.053501	0.993503	0.059999		
0.02629	1.056594	0.993015	0.063579		
0.02654	1.057047	0.992943	0.064105		
0.02857	1.060778	0.992339	0.068438		
0.02865	1.060940	0.992313	0.068627		
0.02806	1.059859	0.992489	0.067369		
0.03108	1.065338	0.991583	0.073756		
0.03118	1.065526	0.991551	0.073975		
0.03380	1.070199	0.990753	0.079446		
0.03503	1.072363	0.990376	0.081987		
0.02736	1.058565	0.992699	0.065866		
0.02108	1.046722	0.994536	0.052185		
0.01753	1.039768	0.995545	0.044223		
0.01460	1.033863	0.996357	0.037506		
0.01268	1.029899	0.996880	0.033019		
0.01227	1.029038	0.996990	0.032047		
0.01286	1.030270	0.996832	0.033439		
0.01315	1.030874	0.996753	0.034121		
0.01383	1.032295	0.996566	0.035729		

mass with G, g	SN Type II Mass in Core, g	Atoms in Core	SN II Total Mev
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3.99807E-22	3.4002264E+28	8.5046748E+49	1.9080064E+55
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3.94997E-22	3.2828506E+28	8.3110800E+49	1.8421421E+55
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3.96061E-22	2.0755514E+28	5.2404822E+49	1.1646770E+55
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3.94599E-22

1.8583553E+28

4.7094839E+49

1.0427994E+55

SN II Total erg

3.0566263E+49

2.9511116E+49

1.8658125E+49

1.6705646E+49