

Radomír Kužel; Ivana Prosserová; Pavla Musilová

Tables of $G(u_s, u_B)$ function for calculation of surface conductivity of semiconductors

Acta Universitatis Carolinae. Mathematica et Physica, Vol. 16 (1975), No. 2, 3--46

Persistent URL: <http://dml.cz/dmlcz/142366>

Terms of use:

© Univerzita Karlova v Praze, 1975

Institute of Mathematics of the Academy of Sciences of the Czech Republic provides access to digitized documents strictly for personal use. Each copy of any part of this document must contain these *Terms of use*.



This paper has been digitized, optimized for electronic delivery and stamped with digital signature within the project *DML-CZ: The Czech Digital Mathematics Library* <http://project.dml.cz>

Tables of $G(u_s, u_B)$ Function for Calculation of Surface Conductivity of Semiconductors

R. KUŽEL

Departement of Semiconductor Physics, Charles University, Prague

I. PROSSEROVÁ and P. MUSILOVÁ

Popov Research Institute of Radiocommunications, Prague

Received 27 December 1973

In the previous paper [1] some functions were calculated for the determination of the surface space-charge and its capacitance in semiconductors.

Further there was another problem to calculate the third quantity, i.e. the change in concentration of electron and holes at the surface as a function of surface potential. The necessary integrals were computed in this paper. They can be used even for semiconductors with wide band gaps. The values of the surface potential u_s and of u_B are ranging from -40 to $+40$.

I. Excesses of Electrons and Holes in Semiconductor Space-Charge Region

When a space charge exists at the surface of a semiconductor, there are bending the energy bands there. The energy band diagram of a semiconductor surface is shown in the first paper [1]. This fact causes a change in concentration of electrons and holes compared to the bulk of the semiconductor. We mark the total excesses of those as I'_n and I'_p , respectively. They are equal to

$$I'_n = \int_0^{\infty} [n(x) - n_0] dx \quad (1)$$

and

$$I'_p = \int_0^{\infty} [p(x) - p_0] dx, \quad (2)$$

where n_0 and p_0 are the concentrations of electrons in the bulk, $n(x)$ and $p(x)$ are their concentrations in the space-charge region.

If we consider the expressions (7)–(11) (in the paper [1]) and that

$$dx = \frac{L_D}{F(u, u_B)} du \quad (3)$$

or

$$dx = \left(\frac{dy}{dx}\right)^{-1} dy = \frac{L_D}{F(y, \gamma)} dy, \quad (4)$$

we can write

$$\Gamma_n = L_D \int_Y^0 \frac{n_0 e^y - n_0}{F(y, \gamma)} dy = n_i L_D \gamma \int_Y^0 \frac{e^y - 1}{F(y, \gamma)} dy \quad (5)$$

and

$$\Gamma_p = L_D \int_Y^0 \frac{p_0 e^y - p_0}{F(y, \gamma)} dy = n_i L_D \gamma^{-1} \int_Y^0 \frac{e^y - 1}{F(y, \gamma)} dy \quad (6)$$

or

$$\Gamma_n = n_i L_D \int_{u_s}^{u_B} \frac{e^u - e^{u_B}}{F(u, u_B)} du, \quad (7)$$

and

$$\Gamma_p = n_i L_D \int_{u_s}^{u_B} \frac{e^{-u} - e^{-u_B}}{F(u, u_B)} du \quad (8)$$

The functions $F(u, u_B)$ and $F(y, \gamma)$ were derived in the paper [1]. n_i is the intrinsic concentration of electrons, $\gamma = n_0/n_i$, u is the value of Fermi energy E_F in the units k_0T related to a Fermi energy (E_i) of the intrinsic semiconductor ($u = (E_F - E_i)/k_0T$), u_B and u_s are the values of u in the bulk and at the surface, respectively, Y is the height of the energy barrier at the surface in the units k_0T ,

$$L_D = \left(\frac{\varepsilon_r \varepsilon_0 k_0 T}{2q^2 n_i}\right)^{1/2} \quad (9)$$

where ε_r and ε_0 are the dielectric constants of the semiconductor and vacuum, respectively, q is the electronic charge.

Now, we introduce the following marking

$$G_n(Y, \gamma) = \gamma \int_Y^0 \frac{e^y - 1}{F(y, \gamma)} dy \quad (10)$$

$$G_p(Y, \gamma) = \gamma^{-1} \int_Y^0 \frac{e^y - 1}{F(y, \gamma)} dy \quad (11)$$

and

$$G(-u_s - u_B) = \int_{u_s}^{u_B} \frac{e^u - e^{u_B}}{F(u, u_B)} du \quad (12)$$

Then the above equations become

$$\Gamma_n = n_i L_D G_n(Y, \gamma) = n_i L_D G(-u_s, -u_B) \quad (13)$$

and

$$\Gamma_p = n_i L_D G_p(Y, \gamma) = n_i L_D G(u_s, u_B). \quad (14)$$

2. Surface Conductivity

By the above method we got the very important integrals necessary for the calculation of surface conductivity σ_s for which it is possible to write

$$\sigma_s = q\mu_p n_i L_D [b\Gamma_n + \Gamma_p] \quad (15)$$

or

$$\sigma_s = q\mu_p n_i L_D [bG(-u_s, -u_B) + G(u_s, u_B)] \quad (16)$$

where μ_p is the the mobility of holes and b is the ratio of electron (μ_n) and hole mobilities.

Equation (16) expresses the change in surface conductivity as a function of u_s and u_B . The dependence of σ_s on the surface potential u_s for the given u_B reaches the minimum at the value of $u_{s,m}$ equal to

$$u_{s,m} = -u_B - \log\left(\frac{\mu_n}{\mu_p}\right) \quad (17)$$

With this value the height of the surface barrier Y_m achieves the value

$$Y_m = -2u_B - \log\left(\frac{\mu_n}{\mu_p}\right) \quad (18)$$

or

$$Y_m = \log [(n_i/n_0)^2 (\mu_p/\mu_n)] = -\log(\gamma^2 b) \quad (19)$$

The position of conductivity minimum is very important for the evaluation of experimental results, for example at field effect measurements.

The G function was integrated by Simpson's rule on a Tesla-200 computer. Entrance datas for the program were the quantities u_s and u_B . The table entries for the G function are in the notation in which the first six digits constitute the mantissa. The next digit and sign constitute the exponent of 10 by which the mantissa is multiplied, i.e. $4.84921 + 09 = 4.84921 \times 10^9$.

Reference

- [1] R. KUŽEL, I. SMETÁKOVÁ, P. MUSILOVÁ: Acta Univ. Carol., Math. Phys., 13, (1972), No 1, 3—86.

Table 1
 $G(u_s, u_B)$ Function

u_s		$\gamma = 2.35 \cdot 10^{+17}$		$\gamma = 8.66 \cdot 10^{+16}$		u_s		$\gamma = 2.35 \cdot 10^{+17}$		$\gamma = 8.66 \cdot 10^{+16}$			
		Y	$u_B = 40$	Y	$u_B = 39$			Y	$u_B = 40$	Y	$u_B = 39$		
-40	-80	5.47643	+07	-79	9.03800	+07	1	-39	1.24692	-10	-38	2.08422	-10
-39	-79	2.03172	+07	-78	3.36478	+07	2	-38	4.65053	-11	-37	7.77633	-11
-38	-78	7.52890	+06	-77	1.24859	+07	3	-37	1.73513	-11	-36	2.90257	-11
-37	-77	2.78890	+06	-76	4.62777	+06	4	-36	6.47652	-12	-35	1.08388	-11
-36	-76	1.03299	+06	-75	1.71457	+06	5	-35	2.41845	-12	-34	4.04929	-12
-35	-75	3.82628	+05	-74	6.35189	+05	6	-34	9.03518	-13	-33	1.51352	-12
-34	-74	1.41737	+05	-73	2.35322	+05	7	-33	3.37713	-13	-32	5.66015	-13
-33	-73	5.25086	+04	-72	8.71880	+04	8	-32	1.26295	-13	-31	2.11792	-13
-32	-72	1.94544	+04	-71	3.23065	+04	9	-31	4.72571	-14	-30	7.92958	-14
-31	-71	7.20858	+03	-70	1.19720	+04	10	-30	1.76933	-14	-29	2.97078	-14
-30	-70	2.67132	+03	-69	4.43702	+03	11	-29	6.62870	-15	-28	1.11375	-14
-29	-69	9.90034	+02	-68	1.64461	+03	12	-28	2.48513	-15	-27	4.17864	-15
-28	-68	3.66963	+02	-67	6.09657	+02	13	-27	9.32381	-16	-26	1.56902	-15
-27	-67	1.36033	+02	-66	2.26026	+02	14	-26	3.50097	-16	-25	5.89665	-16
-26	-66	5.04333	+01	-65	8.38081	+01	15	-25	1.31572	-16	-24	2.21818	-16
-25	-65	1.87001	+01	-64	3.10790	+01	16	-24	4.94943	-17	-23	8.35299	-17
-24	-64	6.93467	+00	-63	1.15267	+01	17	-23	1.86380	-17	-22	3.14909	-17
-23	-63	2.57195	+00	-62	4.27564	+00	18	-22	7.02658	-18	-21	1.18872	-17
-22	-62	9.54025	-01	-61	1.58620	+00	19	-21	2.65240	-18	-20	4.49354	-18
-21	-61	3.53929	-01	-60	5.88542	-01	20	-20	1.00264	-18	-19	1.70129	-18
-20	-60	1.31321	-01	-59	2.18404	-01	21	-19	3.79610	-19	-18	6.45266	-19
-19	-59	4.87326	-02	-58	8.10611	-02	22	-18	1.43978	-19	-17	2.45227	-19
-18	-58	1.80871	-02	-57	3.00907	-02	23	-17	5.47175	-20	-16	9.34097	-20
-17	-57	6.71415	-03	-56	1.11718	-02	24	-16	2.08425	-20	-15	3.56749	-20
-16	-56	2.49277	-03	-55	4.14850	-03	25	-15	7.96015	-21	-14	1.36670	-20
-15	-55	9.25656	-04	-54	1.54076	-03	26	-14	3.04952	-21	-13	5.25494	-21
-14	-54	3.43790	-04	-53	5.72348	-04	27	-13	1.17253	-21	-12	2.02938	-21
-13	-53	1.27708	-04	-52	2.12651	-04	28	-12	4.52816	-22	-11	7.87917	-22
-12	-52	4.74489	-05	-51	7.90248	-05	29	-11	1.75808	-22	-10	3.07946	-22
-11	-51	1.76328	-05	-50	2.93731	-05	30	-10	6.87121	-23	-9	1.21365	-22
-10	-50	6.55402	-06	-49	1.09201	-05	31	-9	2.70802	-23	-8	4.83407	-23
-9	-49	2.43662	-06	-48	4.06077	-06	32	-8	1.07862	-23	-7	1.95134	-23
-8	-48	9.06082	-07	-47	1.51039	-06	33	-7	4.35404	-24	-6	8.00617	-23
-7	-47	3.37015	-07	-46	5.61927	-07	34	-6	1.78642	-24	-5	3.34464	-24
-6	-46	1.25383	-07	-45	2.09113	-07	35	-5	7.46291	-25	-4	1.41872	-24
-5	-45	4.66595	-08	-44	7.78398	-08	36	-4	3.16560	-25	-3	6.01697	-25
-4	-44	1.73684	-08	-43	2.89831	-08	37	-3	1.34256	-25	-2	2.42758	-25
-3	-43	6.46700	-09	-42	1.07948	-08	38	-2	5.41666	-26	-1	7.79183	-26
-2	-42	2.40866	-09	-41	4.02185	-09	39	-1	1.73859	-26	0	0.00000	-00
-1	-41	8.97397	-10	-40	1.49892	-09	40	0	0.00000	-00	1	-3.89673	-26
0	-40	3.34454	-10	-39	5.58832	-10							

Table 2
 $G(u_s, u_B)$ Function

u_s		$\gamma = 3.19 \cdot 10^{+16}$		$\gamma = 1.17 \cdot 10^{+16}$		u_s		$\gamma = 3.19 \cdot 10^{+16}$		$\gamma = 1.17 \cdot 10^{+16}$			
		Y	$u_B = 38$	Y	$u_B = 37$			Y	$u_B = 38$	Y	$u_B = 37$		
-40	-78	1.47812	+08	-77	2.36340	+08	1	-37	3.48511	-10	-36	5.82998	-10
-39	-77	5.55320	+07	-76	9.08019	+07	2	-36	1.30084	-10	-35	2.17703	-10
-38	-76	2.06806	+07	-75	3.41322	+07	3	-35	4.85761	-11	-34	8.13321	-11
-37	-75	7.67591	+06	-74	1.27153	+07	4	-34	1.81476	-11	-33	3.03999	-11
-36	-74	2.84557	+06	-73	4.72065	+06	5	-33	6.78315	-12	-32	1.13687	-11
-35	-73	1.05448	+06	-72	1.75039	+06	6	-32	2.53670	-12	-31	4.25395	-12
-34	-72	3.90727	+05	-71	6.48780	+05	7	-31	9.49185	-13	-30	1.59270	-12
-33	-71	1.44784	+05	-70	2.40449	+05	8	-30	3.55379	-13	-29	5.96697	-13
-32	-70	5.36545	+04	-69	8.91178	+04	9	-29	1.33141	-13	-28	2.23704	-13
-31	-69	1.98853	+04	-68	3.30326	+04	10	-28	4.99151	-14	-27	8.39302	-14
-30	-68	7.37064	+03	-67	1.22452	+04	11	-27	1.87273	-14	-26	3.15147	-14
-29	-67	2.73229	+03	-66	4.53986	+03	12	-26	7.03188	-15	-25	1.18437	-14
-28	-66	1.01298	+03	-65	1.68333	+03	13	-25	2.64269	-15	-24	4.45533	-15
-27	-65	3.75602	+02	-64	6.24239	+02	14	-24	9.94119	-16	-23	1.67774	-15
-26	-64	1.39286	+02	-63	2.31520	+02	15	-23	3.74355	-16	-22	6.32513	-16
-25	-63	5.16591	+01	-62	8.58786	+01	16	-22	1.41132	-16	-21	2.38762	-16
-24	-62	1.91621	+01	-61	3.18597	+01	17	-21	5.32750	-17	-20	9.02552	-17
-23	-61	7.10886	+00	-60	1.18211	+01	18	-20	2.01386	-17	-19	3.41714	-17
-22	-60	2.63766	+00	-59	4.38677	+00	19	-19	7.62468	-18	-18	1.29605	-17
-21	-59	9.78821	-01	-58	1.62815	+00	20	-18	2.89188	-18	-17	4.92551	-18
-20	-58	3.63290	-01	-57	6.04388	-01	21	-17	1.09903	-18	-16	1.87618	-18
-19	-57	1.34857	-01	-56	2.24392	-01	22	-16	4.18633	-19	-15	7.16550	-19
-18	-56	5.00687	-02	-55	8.33249	-02	23	-15	1.59884	-19	-14	2.74509	-19
-17	-55	1.85923	-02	-54	3.09470	-02	24	-14	6.12513	-20	-13	1.05548	-19
-16	-54	6.90521	-03	-53	1.14959	-02	25	-13	2.35510	-20	-12	4.07612	-20
-15	-53	2.56508	-03	-52	4.27122	-03	26	-12	9.09506	-21	-11	1.58257	-20
-14	-52	9.53038	-04	-51	1.58725	-03	27	-11	3.53120	-21	-10	6.18527	-21
-13	-51	3.54165	-04	-50	5.89974	-04	28	-10	1.38012	-21	-9	2.43768	-21
-12	-50	1.31641	-04	-49	2.19337	-04	29	-9	5.43921	-22	-8	9.70949	-22
-11	-49	4.89409	-05	-48	8.15629	-05	30	-8	2.16648	-22	-7	3.91938	-22
-10	-48	1.81991	-05	-47	3.03371	-05	31	-7	8.74532	-23	-6	1.60808	-22
-9	-47	6.76913	-06	-46	1.12866	-05	32	-6	3.58812	-23	-5	6.71790	-23
-8	-46	2.51838	-06	-45	4.20015	-06	33	-5	1.49896	-23	-4	2.84958	-23
-7	-45	9.37182	-07	-44	1.56345	-06	34	-4	6.35828	-24	-3	1.20854	-23
-6	-44	3.48854	-07	-43	5.82141	-07	35	-3	2.69662	-24	-2	4.87592	-24
-5	-43	1.29893	-07	-42	2.16820	-07	36	-2	1.08796	-24	-1	1.56503	-24
-4	-42	4.83792	-08	-41	8.07811	-08	37	-1	3.49206	-25	0	0.00000	-00
-3	-41	1.80247	-08	-40	3.01066	-08	38	0	0.00000	-00	1	-7.82680	-25
-2	-40	6.71769	-09	-39	1.12244	-08	39	1	-1.74639	-25	2	-1.22484	-24
-1	-39	2.50451	-09	-38	4.18627	-09	40	2	-2.73300	-25	3	-1.47387	-24
0	-38	9.34084	-10	-37	1.56191	-09							

Table 3
 $G(u_s, u_B)$ Function

u_s		$\gamma = 4.31 \cdot 10^{+15}$		$\gamma = 1.59 \cdot 10^{+15}$		u_s		$\gamma = 4.31 \cdot 10^{+15}$		$\gamma = 1.59 \cdot 10^{+15}$			
		Y	$u_B = 36$	Y	$u_B = 35$			Y	$u_B = 36$	Y	$u_B = 35$		
-40	-76	3.59960	+08	-75	5.05643	+08	1	-35	9.75677	-10	-34	1.63350	-09
-39	-75	1.45080	+08	-74	2.20613	+08	2	-34	3.64505	-10	-33	6.10600	-10
-38	-74	5.57987	+07	-73	8.90861	+07	3	-33	1.36243	-10	-32	2.28347	-10
-37	-73	2.09866	+07	-72	3.43010	+07	4	-32	5.09511	-11	-31	8.54429	-11
-36	-72	7.82094	+06	-71	1.29088	+07	5	-31	1.90649	-11	-30	3.19902	-11
-35	-71	2.90432	+06	-70	4.81243	+06	6	-30	7.13798	-12	-29	1.19849	-11
-34	-70	1.07716	+06	-69	1.78760	+06	7	-29	2.67421	-12	-28	4.49322	-12
-33	-69	3.99335	+05	-68	6.63149	+05	8	-28	1.00257	-12	-27	1.68578	-12
-32	-68	1.48033	+05	-67	2.45907	+05	9	-27	3.76149	-13	-26	6.32990	-13
-31	-67	5.48782	+04	-66	9.11792	+04	10	-26	1.41239	-13	-25	2.37888	-13
-30	-66	2.03460	+04	-65	3.38097	+04	11	-25	5.30800	-14	-24	8.94877	-14
-29	-65	7.54414	+03	-64	1.25380	+04	12	-24	1.99674	-14	-23	3.36983	-14
-28	-64	2.79764	+03	-63	4.65019	+03	13	-23	7.51912	-15	-22	1.27043	-14
-27	-63	1.03760	+03	-62	1.72491	+03	14	-22	2.83472	-15	-21	4.79566	-15
-26	-62	3.84881	+02	-61	6.39919	+02	15	-21	1.07005	-15	-20	1.81282	-15
-25	-61	1.42785	+02	-60	2.37435	+02	16	-20	4.04496	-16	-19	6.85351	-16
-24	-60	5.29789	+01	-59	8.81106	+01	17	-19	1.53145	-16	-18	2.60319	-16
-23	-59	1.96601	+01	-58	3.27023	+01	18	-18	5.80850	-17	-17	9.89316	-17
-22	-58	7.29688	+00	-57	1.21394	+01	19	-17	2.20746	-17	-16	3.76841	-17
-21	-57	2.70868	+00	-56	4.50704	+00	20	-16	8.40847	-18	-15	1.43922	-17
-20	-56	1.00565	+00	-55	1.67362	+00	21	-15	3.21135	-18	-14	5.51366	-18
-19	-55	3.73436	-01	-54	6.21588	-01	22	-14	1.23026	-18	-13	2.11999	-18
-18	-54	1.38695	-01	-53	2.30901	-01	23	-13	4.73035	-19	-12	8.18712	-19
-17	-53	5.15211	-02	-52	8.57897	-02	24	-12	1.82679	-19	-11	3.17858	-19
-16	-52	1.91422	-02	-51	3.18809	-02	25	-11	7.09260	-20	-10	1.24234	-19
-15	-51	7.11359	-03	-50	1.18499	-02	26	-10	2.77204	-20	-9	4.89622	-20
-14	-50	2.64408	-03	-49	4.40552	-03	27	-9	1.09249	-20	-8	1.95020	-20
-13	-49	9.83004	-04	-48	1.63823	-03	28	-8	4.35149	-21	-7	7.87229	-21
-12	-48	3.65539	-04	-47	6.09337	-04	29	-7	1.75654	-21	-6	3.22992	-21
-11	-47	1.35961	-04	-46	2.26697	-04	30	-6	7.20693	-22	-5	1.34932	-21
-10	-46	5.05831	-05	-45	8.43624	-05	31	-5	3.01075	-22	-4	5.72355	-22
-9	-45	1.88238	-05	-44	3.14028	-05	32	-4	1.27709	-22	-3	2.42742	-22
-8	-44	7.00692	-06	-43	1.16926	-05	33	-3	5.41631	-23	-2	9.79355	-23
-7	-43	2.60897	-06	-42	4.35496	-06	34	-2	2.18523	-23	-1	3.14345	-23
-6	-42	9.71724	-07	-41	1.62253	-06	35	-1	7.01399	-24	0	0.00000	-00
-5	-41	3.62036	-07	-40	6.04708	-07	36	0	0.00000	-00	1	-1.57205	-23
-4	-40	1.34928	-07	-39	2.25449	-07	37	1	-3.50772	-24	2	-2.46017	-23
-3	-39	5.03045	-08	-38	8.40835	-08	38	2	-5.48938	-24	3	-2.96035	-23
-2	-38	1.87615	-08	-37	3.13719	-08	39	3	-6.60545	-24	4	-3.25099	-23
-1	-37	7.00003	-09	-36	1.17098	-08	40	4	-7.25394	-24	5	-3.42326	-23
0	-36	2.61281	-09	-35	4.37268	-09							

Table 4
 $G(u_s, u_B)$ Function

u_s	$\gamma = 5.83 \cdot 10^{+14}$		$\gamma = 2.15 \cdot 10^{+14}$		u_s	$\gamma = 5.83 \cdot 10^{+14}$		$\gamma = 2.15 \cdot 10^{+14}$	
	Y	$u_B = 34$	Y	$u_B = 33$		Y	$u_B = 34$	Y	$u_B = 33$
-40	-74	6.45044 +08	-73	7.56317 +08	1	-33	2.73652 -09	-32	4.58647 -09
-39	-73	3.09155 +08	-72	3.93408 +08	2	-32	1.02338 -09	-31	1.71616 -09
-38	-72	1.35241 +08	-71	1.89050 +08	3	-31	3.82928 -10	-30	6.42541 -10
-37	-71	5.47202 +07	-70	8.29262 +07	4	-30	1.43370 -10	-29	2.40724 -10
-36	-70	2.10935 +07	-69	3.36224 +07	5	-29	5.37129 -11	-28	9.02487 -11
-35	-69	7.94343 +06	-68	1.29767 +07	6	-28	2.01372 -11	-27	3.38598 -11
-34	-68	2.96247 +06	-67	4.89007 +06	7	-27	7.55516 -12	-26	1.27139 -11
-33	-67	1.10075 +06	-66	1.82449 +06	8	-26	2.83685 -12	-25	4.77811 -12
-32	-66	4.08452 +05	-65	6.78127 +05	9	-25	1.06614 -12	-24	1.79741 -12
-31	-65	1.51499 +05	-64	2.51700 +05	10	-24	4.01056 -13	-23	6.76849 -13
-30	-64	5.61881 +04	-63	9.33831 +04	11	-23	1.51025 -13	-22	2.55174 -13
-29	-63	2.08402 +04	-62	3.45433 +04	12	-22	5.69370 -14	-21	9.63234 -14
-28	-62	7.73047 +03	-61	1.28527 +04	13	-21	2.14926 -14	-20	3.64115 -14
-27	-61	2.86791 +03	-60	4.76895 +03	14	-20	8.12452 -15	-19	1.37857 -14
-26	-60	1.06410 +03	-59	1.76974 +03	15	-19	3.07601 -15	-18	5.22864 -15
-25	-59	3.94884 +02	-58	6.56844 +02	16	-18	1.16666 -15	-17	1.98709 -15
-24	-58	1.46561 +02	-57	2.43827 +02	17	-17	4.43380 -16	-16	7.56906 -16
-23	-57	5.44053 +01	-56	9.05263 +01	18	-16	1.68888 -16	-15	2.89077 -16
-22	-56	2.01991 +01	-55	3.36156 +01	19	-15	6.45017 -17	-14	1.10745 -16
-21	-55	7.50067 +00	-54	1.24849 +01	20	-14	2.47105 -17	-13	4.25812 -17
-20	-54	2.78576 +00	-53	4.63778 +00	21	-13	9.50116 -18	-12	1.64442 -17
-19	-53	1.03483 +00	-52	1.72313 +00	22	-12	3.66921 -18	-11	6.38455 -18
-18	-52	3.84483 -01	-51	6.40345 -01	23	-11	1.42458 -18	-10	2.49531 -18
-17	-51	1.42880 -01	-50	2.38012 -01	24	-10	5.56780 -19	-9	9.83432 -19
-16	-50	5.31078 -02	-49	8.84872 -02	25	-9	2.19433 -19	-8	3.91708 -19
-15	-49	1.97441 -02	-48	3.29048 -02	26	-8	8.74020 -20	-7	1.58119 -19
-14	-48	7.34205 -03	-47	1.22388 -02	27	-7	3.52811 -20	-6	6.48747 -20
-13	-47	2.73086 -03	-46	4.55334 -03	28	-6	1.44755 -20	-5	2.71019 -20
-12	-46	1.01598 -03	-45	1.69446 -03	29	-5	6.04726 -21	-4	1.14960 -20
-11	-45	3.78086 -04	-44	6.30742 -04	30	-4	2.56511 -21	-3	4.87560 -21
-10	-44	1.40737 -04	-43	2.34852 -04	31	-3	1.08789 -21	-2	1.96708 -21
-9	-43	5.24027 -05	-42	8.74718 -05	32	-2	4.38916 -22	-1	6.31379 -22
-8	-42	1.95176 -05	-41	3.25894 -05	33	-1	1.40879 -22	0	0.00000 -00
-7	-41	7.27168 -06	-40	1.21458 -05	34	0	0.00000 -00	1	-3.15755 -22
-6	-40	2.71011 -06	-39	4.52826 -06	35	1	-7.04546 -23	2	-4.94138 -22
-5	-39	1.01039 -06	-38	1.68886 -06	36	2	-1.10257 -22	3	-5.94604 -22
-4	-38	3.76836 -07	-37	6.30122 -07	37	3	-1.32674 -22	4	-6.52979 -22
-3	-37	1.40599 -07	-36	2.35198 -07	38	4	-1.45699 -22	5	-6.87581 -22
-2	-36	5.24798 -08	-35	8.78276 -08	39	5	-1.53420 -22	6	-7.08327 -22
-1	-35	1.95970 -08	-34	3.28117 -08	40	6	-1.58049 -22	7	-7.20841 -22
0	-34	7.32128 -09	-33	1.22642 -08					

Table 5
 $G(u_a, u_B)$ Function

u_a	$\gamma = 7.90 \cdot 10^{+13}$		$\gamma = 2.90 \cdot 10^{+13}$		u_a	$\gamma = 7.90 \cdot 10^{+13}$		$\gamma = 2.90 \cdot 10^{+13}$	
	Y	$u_B = 32$	Y	$u_B = 31$		Y	$u_B = 32$	Y	$u_B = 31$
-40	-72	8.34954 +08	-71	8.86689 +08	1	-31	7.69133 -09	-30	1.29057 -08
-39	-71	4.60371 +08	-70	5.07562 +08	2	-30	2.87967 -09	-29	4.83508 -09
-38	-70	2.39960 +08	-69	2.80245 +08	3	-29	1.07885 -09	-28	1.81269 -09
-37	-69	1.15624 +08	-68	1.46378 +08	4	-28	4.04467 -10	-27	6.80094 -10
-36	-68	5.08611 +07	-67	7.07280 +07	5	-27	1.51749 -10	-26	2.55366 -10
-35	-67	2.06662 +07	-66	3.12030 +07	6	-26	5.69799 -11	-25	9.59709 -11
-34	-66	7.98554 +06	-65	1.27073 +07	7	-25	2.14140 -11	-24	3.61019 -11
-33	-65	3.01176 +06	-64	4.91750 +06	8	-24	8.05543 -12	-23	1.35948 -11
-32	-64	1.12419 +06	-63	1.85582 +06	9	-23	3.03343 -12	-22	5.12530 -12
-31	-63	4.17976 +05	-62	6.93041 +05	10	-22	1.14361 -12	-21	1.93470 -12
-30	-62	1.55185 +05	-61	2.57765 +05	11	-21	4.31691 -13	-20	7.31346 -13
-29	-61	5.75917 +04	-60	9.57330 +04	12	-20	1.63185 -13	-19	2.76894 -13
-28	-60	2.13715 +04	-59	3.55387 +04	13	-19	6.17834 -14	-18	1.05020 -13
-27	-59	7.93124 +03	-58	1.31920 +04	14	-18	2.34331 -14	-17	3.99118 -14
-26	-58	2.94374 +03	-57	4.89726 +03	15	-17	8.90554 -15	-16	1.52028 -14
-25	-57	1.09275 +03	-56	1.81825 +03	16	-16	3.39222 -15	-15	5.80626 -15
-24	-56	4.05710 +02	-55	6.75186 +02	17	-15	1.29555 -15	-14	2.22437 -15
-23	-55	1.50654 +02	-54	2.50766 +02	18	-14	4.96324 -16	-13	8.55267 -16
-22	-54	5.59535 +01	-53	9.31523 +01	19	-13	1.90836 -16	-12	3.30292 -16
-21	-53	2.07851 +01	-52	3.46100 +01	20	-12	7.36981 -17	-11	1.28237 -16
-20	-52	7.72254 +00	-51	1.28616 +01	21	-11	2.86136 -17	-10	5.01197 -17
-19	-51	2.86982 +00	-50	4.78061 +00	22	-10	1.11832 -17	-9	1.97527 -17
-18	-50	1.06669 +00	-49	1.77731 +00	23	-9	4.40743 -18	-8	7.86768 -18
-17	-49	3.96572 -01	-48	6.60911 -01	24	-8	1.75551 -18	-7	3.17591 -18
-16	-48	1.47469 -01	-47	2.45824 -01	25	-7	7.08641 -19	-6	1.30304 -18
-15	-47	5.48508 -02	-46	9.14564 -02	26	-6	2.90748 -19	-5	5.44357 -19
-14	-46	2.04066 -02	-45	3.40342 -02	27	-5	1.21462 -19	-4	2.30904 -19
-13	-45	7.59406 -03	-44	1.26688 -02	28	-4	5.15217 -20	-3	9.79291 -20
-12	-44	2.82679 -03	-43	4.71714 -03	29	-3	2.18509 -20	-2	3.95100 -20
-11	-43	1.05253 -03	-42	1.75691 -03	30	-2	8.81587 -21	-1	1.26815 -20
-10	-42	3.92021 -04	-41	6.54576 -04	31	-1	2.82964 -21	0	0.00000 -00
-9	-41	1.45055 -04	-40	2.43956 -04	32	0	0.00000 -00	1	-6.34212 -21
-8	-40	5.44340 -05	-39	9.09527 -05	33	1	-1.41511 -21	2	-9.92503 -21
-7	-39	2.02943 -05	-38	3.39217 -05	34	2	-2.21457 -21	3	-1.19429 -20
-6	-38	7.56896 -06	-37	1.26563 -05	35	3	-2.66483 -21	4	-1.31154 -20
-5	-37	2.82401 -06	-36	4.72408 -06	36	4	-2.92645 -21	5	-1.38104 -20
-4	-36	1.05408 -06	-35	1.76406 -06	37	5	-3.08152 -21	6	-1.42271 -20
-3	-35	3.93616 -07	-34	6.59041 -07	38	6	-3.17450 -21	7	-1.44784 -20
-2	-34	1.47052 -07	-33	2.46333 -07	39	7	-3.23058 -21	8	-1.46305 -20
-1	-33	5.49644 -08	-32	9.21217 -08	40	8	-3.26451 -21	9	-1.47226 -20
0	-32	2.05551 -08	-31	3.44701 -08					

Table 6
 $G(u_s, u_B)$ Function

u_s		$\gamma = 1.07 \cdot 10^{+13}$		$\gamma = 3.93 \cdot 10^{+12}$		u_s		$\gamma = 1.07 \cdot 10^{+13}$		$\gamma = 3.93 \cdot 10^{+12}$			
		Y	$u_B = 30$	Y	$u_B = 29$			Y	$u_B = 30$	Y	$u_B = 29$		
-40	-70	9.19373	+08	-69	9.39548	+08	1	-29	2.16693	-08	-28	3.64089	-08
-39	-69	5.38552	+08	-68	5.58107	+08	2	-28	8.12393	-09	-27	1.36600	-08
-38	-68	3.08554	+08	-67	3.27110	+08	3	-27	3.04797	-09	-26	5.12917	-09
-37	-67	1.70606	+08	-66	1.87581	+08	4	-26	1.14447	-09	-25	1.92762	-09
-36	-66	8.93021	+07	-65	1.03857	+08	5	-25	4.30112	-10	-24	7.25127	-10
-35	-65	4.32724	+07	-64	5.44870	+07	6	-24	1.61797	-10	-23	2.73060	-10
-34	-64	1.91482	+07	-63	2.64796	+07	7	-23	6.09280	-11	-22	1.02944	-10
-33	-63	7.81660	+06	-62	1.17541	+07	8	-22	2.29700	-11	-21	3.88596	-11
-32	-62	3.02924	+06	-61	4.81016	+06	9	-21	8.67076	-12	-20	1.46894	-11
-31	-61	1.14413	+06	-60	1.86698	+06	10	-20	3.27766	-12	-19	5.56156	-12
-30	-60	4.27481	+05	-59	7.05758	+05	11	-19	1.24095	-12	-18	2.10938	-12
-29	-59	1.59055	+05	-58	2.63833	+05	12	-18	4.70667	-13	-17	8.01651	-13
-28	-58	5.90920	+04	-57	9.82053	+04	13	-17	1.78872	-13	-16	3.05358	-13
-27	-57	2.19437	+04	-56	3.64984	+04	14	-16	6.81345	-14	-15	1.16622	-13
-26	-56	8.14824	+03	-55	1.35583	+04	15	-15	2.60218	-14	-14	4.46777	-14
-25	-55	3.02589	+03	-54	5.03634	+03	16	-14	9.96894	-15	-13	1.71785	-14
-24	-54	1.12384	+03	-53	1.87095	+03	17	-13	3.83304	-15	-12	6.63409	-15
-23	-53	4.17478	+02	-52	6.95153	+02	18	-12	1.48026	-15	-11	2.57571	-15
-22	-52	1.55111	+02	-51	2.58332	+02	19	-11	5.74719	-16	-10	1.00668	-15
-21	-51	5.76420	+01	-50	9.60210	+01	20	-10	2.24521	-16	-9	3.96745	-16
-20	-50	2.14252	+01	-49	3.56982	+01	21	-9	8.85257	-17	-8	1.58026	-16
-19	-49	7.96536	+00	-48	1.32747	+01	22	-8	3.52605	-17	-7	6.37898	-17
-18	-48	2.96199	+00	-47	4.93751	+00	23	-7	1.42334	-17	-6	2.61723	-17
-17	-47	1.10170	+00	-46	1.83695	+00	24	-6	5.83983	-18	-5	1.09337	-17
-16	-46	4.09879	-01	-45	6.83596	-01	25	-5	2.43964	-18	-4	4.63784	-18
-15	-45	1.52530	-01	-44	2.54459	-01	26	-4	1.03484	-18	-3	1.96696	-18
-14	-44	5.67776	-02	-43	9.47463	-02	27	-3	4.38888	-19	-2	7.93580	-19
-13	-43	2.11407	-02	-42	3.52886	-02	28	-2	1.77071	-19	-1	2.54716	-19
-12	-42	7.87396	-03	-41	1.31475	-02	29	-1	5.68349	-20	0	0.00000	-00
-11	-41	2.93360	-03	-40	4.90000	-03	30	0	0.00000	-00	1	-1.27385	-19
-10	-40	1.09333	-03	-39	1.82683	-03	31	1	-2.84234	-20	2	-1.99349	-19
-9	-39	4.07621	-04	-38	6.81336	-04	32	2	-4.44809	-20	3	-2.39880	-19
-8	-38	1.52026	-04	-37	2.54209	-04	33	3	-5.35245	-20	4	-2.63430	-19
-7	-37	5.67218	-05	-36	9.48857	-05	34	4	-5.87793	-20	5	-2.77390	-19
-6	-36	2.11718	-05	-35	3.54322	-05	35	5	-6.18940	-20	6	-2.85759	-19
-5	-35	7.90599	-06	-34	1.32372	-05	36	6	-6.37615	-20	7	-2.90808	-19
-4	-34	2.95361	-06	-33	4.94774	-06	37	7	-6.48880	-20	8	-2.93852	-19
-3	-33	1.10399	-06	-32	1.85031	-06	38	8	-6.55696	-20	9	-2.95713	-19
-2	-32	4.12861	-07	-31	6.92351	-07	39	9	-6.59825	-20	10	-2.96835	-19
-1	-31	1.54484	-07	-30	2.59219	-07	40	10	-6.62328	-20	11	-2.97515	-19
0	-30	5.78397	-08	-29	9.71153	-08							

Table 7
 $G(u_s, u_B)$ Function

u_s		$\gamma = 1.45 \cdot 10^{+12}$		$\gamma = 5.32 \cdot 10^{+11}$		u_s		$\gamma = 1.45 \cdot 10^{+12}$		$\gamma = 5.32 \cdot 10^{+11}$			
		Y	$u_B = 28$	Y	$u_B = 27$			Y	$u_B = 28$	Y	$u_B = 27$		
-40	-68	9.51834	+08	-67	9.59254	+08	1	-27	6.12201	-08	-26	1.03022	-07
-39	-67	5.70167	+08	-66	5.77505	+08	2	-26	2.29873	-08	-25	3.87174	-08
-38	-66	3.38805	+08	-65	3.46010	+08	3	-25	8.63903	-09	-24	1.45645	-08
-37	-65	1.98688	+08	-64	2.05678	+08	4	-24	3.24979	-09	-23	5.48457	-09
-36	-64	1.14042	+08	-63	1.20686	+08	5	-23	1.22377	-09	-22	2.06769	-09
-35	-63	6.32401	+07	-62	6.93362	+07	6	-22	4.61365	-10	-21	7.80517	-10
-34	-62	3.32486	+07	-61	3.85067	+07	7	-21	1.74156	-10	-20	2.95046	-10
-33	-61	1.62068	+07	-60	2.02911	+07	8	-20	6.58336	-11	-19	1.11707	-10
-32	-60	7.21755	+06	-59	9.92140	+06	9	-19	2.49252	-11	-18	4.23681	-11
-31	-59	2.96137	+06	-58	4.43335	+06	10	-18	9.45361	-12	-17	1.61016	-11
-30	-58	1.15126	+06	-57	1.82401	+06	11	-17	3.59275	-12	-16	6.13327	-12
-29	-57	4.35603	+05	-56	7.10330	+05	12	-16	1.36851	-12	-15	2.34241	-12
-28	-56	1.62934	+05	-55	2.69031	+05	13	-15	5.22663	-13	-14	8.97375	-13
-27	-55	6.06749	+04	-54	1.00691	+05	14	-14	2.00231	-13	-13	3.45039	-13
-26	-54	2.25588	+04	-53	3.75138	+04	15	-13	7.69887	-14	-12	1.33249	-13
-25	-53	8.38329	+03	-52	1.39534	+04	16	-12	2.97319	-14	-11	5.17346	-14
-24	-52	3.11521	+03	-51	5.18747	+03	17	-11	1.15435	-14	-10	2.02197	-14
-23	-51	1.15773	+03	-50	1.92845	+03	18	-10	4.51163	-15	-9	7.96883	-15
-22	-50	4.30331	+02	-49	7.16994	+02	19	-9	1.77808	-15	-8	3.17405	-15
-21	-49	1.59987	+02	-48	2.66627	+02	20	-8	7.08226	-16	-7	1.28125	-15
-20	-48	5.94932	+01	-47	9.91721	+01	21	-7	2.85886	-16	-6	5.25685	-16
-19	-47	2.21283	+01	-46	3.68960	+01	22	-6	1.17296	-16	-5	2.19609	-16
-18	-46	8.23264	+00	-45	1.37303	+01	23	-5	4.90014	-17	-4	9.31535	-17
-17	-45	3.06366	+00	-44	5.11096	+00	24	-4	2.07853	-17	-3	3.95074	-17
-16	-44	1.14041	+00	-43	1.90303	+00	25	-3	8.81530	-18	-2	1.59394	-17
-15	-43	4.24623	-01	-42	7.08791	-01	26	-2	3.55658	-18	-1	5.11611	-18
-14	-42	1.58152	-01	-41	2.64075	-01	27	-1	1.14156	-18	0	0.00000	-00
-13	-41	5.89231	-02	-40	9.84191	-02	28	0	0.00000	-00	1	-2.55859	-18
-12	-40	2.19602	-02	-39	3.66929	-02	29	1	-5.70899	-19	2	-4.00404	-18
-11	-39	8.18730	-03	-38	1.36850	-02	30	2	-8.93423	-19	3	-4.81812	-18
-10	-38	3.05353	-03	-37	5.10593	-03	31	3	-1.07506	-18	4	-5.29114	-18
-9	-37	1.13928	-03	-36	1.90583	-03	32	4	-1.18061	-18	5	-5.57152	-18
-8	-36	4.25248	-04	-35	7.11675	-04	33	5	-1.24317	-18	6	-5.73963	-18
-7	-35	1.58796	-04	-34	2.65876	-04	34	6	-1.28068	-18	7	-5.84103	-18
-6	-34	5.93250	-05	-33	9.93781	-05	35	7	-1.30331	-18	8	-5.90238	-18
-5	-33	2.21742	-05	-32	3.71645	-05	36	8	-1.31700	-18	9	-5.93955	-18
-4	-32	8.29253	-06	-31	1.39062	-05	37	9	-1.32529	-18	10	-5.96209	-18
-3	-31	3.10290	-06	-30	5.20656	-06	38	10	-1.33032	-18	11	-5.97575	-18
-2	-30	1.16174	-06	-29	1.95061	-06	39	11	-1.33337	-18	12	-5.98404	-18
-1	-29	4.35240	-07	-28	7.31293	-07	40	12	-1.33522	-18	13	-5.98907	-18
0	-28	1.63173	-07	-27	2.74369	-07							

Table 8
 $G(u_s, u_B)$ Function

u_s		$\gamma = 1.96 \cdot 10^{+11}$		$\gamma = 7.20 \cdot 10^{+10}$		u_s		$\gamma = 1.96 \cdot 10^{+11}$		$\gamma = 7.20 \cdot 10^{+10}$			
		Y	$u_B = 26$	Y	$u_B = 25$			Y	$u_B = 26$	Y	$u_B = 25$		
-40	-66	9.63713	+08	-65	9.66383	+08	1	-25	1.73519	-07	-24	2.92537	-07
-39	-65	5.81934	+08	-64	5.84594	+08	2	-24	6.52738	-08	-23	1.10160	-07
-38	-64	3.50391	+08	-63	3.53033	+08	3	-23	2.45801	-08	-22	4.15308	-08
-37	-63	2.09981	+08	-62	2.12595	+08	4	-22	9.26677	-09	-21	1.56771	-08
-36	-62	1.24863	+08	-61	1.27431	+08	5	-21	3.49803	-09	-20	5.92615	-09
-35	-61	7.33093	+07	-60	7.58032	+07	6	-20	1.32230	-09	-19	2.24369	-09
-34	-60	4.21574	+07	-59	4.45319	+07	7	-19	5.00636	-10	-18	8.50987	-10
-33	-59	2.34484	+07	-58	2.56335	+07	8	-18	1.89881	-10	-17	3.23409	-10
-32	-58	1.23849	+07	-57	1.42799	+07	9	-17	7.21623	-11	-16	1.23190	-10
-31	-57	6.07494	+06	-56	7.56034	+06	10	-16	2.74874	-11	-15	4.70486	-11
-30	-56	2.72412	+06	-55	3.72058	+06	11	-15	1.04979	-11	-14	1.80242	-11
-29	-55	1.12403	+06	-54	1.67449	+06	12	-14	4.02175	-12	-13	6.93030	-12
-28	-54	4.38539	+05	-53	6.93044	+05	13	-13	1.54636	-12	-12	2.67638	-12
-27	-53	1.66267	+05	-52	2.70919	+05	14	-12	5.97182	-13	-11	1.03911	-12
-26	-52	6.22711	+04	-51	1.02833	+05	15	-11	2.31858	-13	-10	4.06124	-13
-25	-51	2.32116	+04	-50	3.85410	+04	16	-10	9.06186	-14	-9	1.60058	-13
-24	-50	8.63756	+03	-49	1.43740	+04	17	-9	3.57138	-14	-8	6.37525	-14
-23	-49	3.21262	+03	-48	5.35154	+03	18	-8	1.42251	-14	-7	2.57346	-14
-22	-48	1.19483	+03	-47	1.99139	+03	19	-7	5.74218	-15	-6	1.05586	-14
-21	-47	4.44444	+02	-46	7.41003	+02	20	-6	2.35595	-15	-5	4.41097	-15
-20	-46	1.65354	+02	-45	2.75771	+02	21	-5	9.84221	-16	-4	1.87103	-15
-19	-45	6.15350	+01	-44	1.02654	+02	22	-4	4.17485	-16	-3	7.93528	-16
-18	-44	2.29057	+01	-43	3.82231	+01	23	-3	1.77060	-16	-2	3.20153	-16
-17	-43	8.52878	+00	-42	1.42364	+01	24	-2	7.14358	-17	-1	1.02760	-16
-16	-42	3.17658	+00	-41	5.30408	+00	25	-1	2.29288	-17	0	0.00000	-00
-15	-41	1.18350	+00	-40	1.97680	+00	26	0	0.00000	-00	1	-5.13907	-17
-14	-40	4.41083	-01	-39	7.36997	-01	27	1	-1.14668	-17	2	-8.04234	-17
-13	-39	1.64446	-01	-38	2.74870	-01	28	2	-1.79448	-17	3	-9.67746	-17
-12	-38	6.13319	-02	-37	1.02555	-01	29	3	-2.15933	-17	4	-1.06275	-16
-11	-37	2.28832	-02	-36	3.82796	-02	30	4	-2.37132	-17	5	-1.11907	-16
-10	-36	8.54134	-03	-35	1.42943	-02	31	5	-2.49698	-17	6	-1.15283	-16
-9	-35	3.18950	-03	-34	5.34026	-03	32	6	-2.57232	-17	7	-1.17320	-16
-8	-34	1.19157	-03	-33	1.99606	-03	33	7	-2.61777	-17	8	-1.18552	-16
-6	-33	4.45381	-04	-32	7.46470	-04	34	8	-2.64526	-17	9	-1.19299	-16
-6	-32	1.66560	-04	-31	2.79314	-04	35	9	-2.66192	-17	10	-1.19751	-16
-5	-31	6.23235	-05	-30	1.04576	-04	36	10	-2.67202	-17	11	-1.20026	-16
-4	-30	2.33342	-05	-29	3.91791	-05	37	11	-2.67814	-17	12	-1.20192	-16
-3	-29	8.74204	-06	-28	1.46884	-05	38	12	-2.68186	-17	13	-1.20293	-16
-2	-28	3.27743	-06	-27	5.51086	-06	39	13	-2.68411	-17	14	-1.20354	-16
-1	-27	1.22963	-06	-26	2.06925	-06	40	14	-2.68548	-17	15	-1.20392	-16
0	-26	4.61713	-07	-25	7.77660	-07							

Table 9
 $G(u_s, u_R)$ Function

u_s		$\gamma = 2.65 \cdot 10^{+10}$		$\gamma = 9.74 \cdot 10^{+9}$		u_s		$\gamma = 2.65 \cdot 10^{+10}$		$\gamma = 9.74 \cdot 10^{+9}$			
		Y	$u_R = 24$	Y	$u_R = 23$			Y	$u_R = 24$	Y	$u_R = 23$		
-40	-64	9.67979	+08	-63	9.68931	+08	1	-23	4.93705	-07	-22	8.34168	-07
-39	-63	5.86186	+08	-62	5.87137	+08	2	-22	1.86128	-07	-21	3.14883	-07
-38	-62	3.54619	+08	-61	3.55568	+08	3	-21	7.02599	-08	-20	1.19030	-07
-37	-61	2.14170	+08	-60	2.15115	+08	4	-20	2.65592	-08	-19	4.50658	-08
-36	-60	1.28990	+08	-59	1.29929	+08	5	-19	1.00555	-08	-18	1.70925	-08
-35	-59	7.73351	+07	-58	7.82642	+07	6	-18	3.81385	-09	-17	6.49584	-09
-34	-58	4.60202	+07	-57	4.69334	+07	7	-17	1.44942	-09	-16	2.47434	-09
-33	-57	2.70518	+07	-56	2.79395	+07	8	-16	5.52100	-10	-15	9.44997	-10
-32	-56	1.55870	+07	-55	1.64337	+07	9	-15	2.10857	-10	-14	3.62027	-10
-31	-55	8.69706	+06	-54	9.47859	+06	10	-14	8.07791	-11	-13	1.39198	-10
-30	-54	4.61582	+06	-53	5.29735	+06	11	-13	3.10594	-11	-12	5.37566	-11
-29	-53	2.27921	+06	-52	2.81853	+06	12	-12	1.19947	-11	-11	2.08712	-11
-28	-52	1.02970	+06	-51	1.39659	+06	13	-11	4.65700	-12	-10	8.15723	-12
-27	-51	4.27553	+05	-50	6.33467	+05	14	-10	1.82012	-12	-9	3.21485	-12
-26	-50	1.67485	+05	-49	2.63927	+05	15	-9	7.17331	-13	-8	1.28050	-12
-25	-49	6.36506	+04	-48	1.03521	+05	16	-8	2.85718	-13	-7	5.16894	-13
-24	-48	2.38743	+04	-47	3.94317	+04	17	-7	1.15334	-13	-6	2.12076	-13
-23	-47	8.90936	+03	-46	1.48027	+04	18	-6	4.73207	-14	-5	8.85967	-14
-22	-46	3.31877	+03	-45	5.52764	+03	19	-5	1.97685	-14	-4	3.75808	-14
-21	-45	1.23561	+03	-44	2.06028	+03	20	-4	8.38541	-15	-3	1.59384	-14
-20	-44	4.60024	+02	-43	7.67508	+02	21	-3	3.55634	-15	-2	6.43044	-15
-19	-43	1.71298	+02	-42	2.85914	+02	22	-2	1.43482	-15	-1	2.06399	-15
-18	-42	6.38024	+01	-41	1.06531	+02	23	-1	4.60538	-16	0	0.00000	-00
-17	-41	2.37711	+01	-40	3.97044	+01	24	0	0.00000	-00	1	-1.03221	-15
-16	-40	8.85938	+00	-39	1.48029	+01	25	1	-2.30317	-16	2	-1.61534	-15
-15	-39	3.30299	+00	-38	5.52091	+00	26	2	-3.60432	-16	3	-1.94377	-15
-14	-38	1.23188	+00	-37	2.05988	+00	27	3	-4.33713	-16	4	-2.13460	-15
-13	-37	4.59621	-01	-36	7.68866	-01	28	4	-4.76294	-16	5	-2.24771	-15
-12	-36	1.71557	-01	-35	2.87110	-01	29	5	-5.01532	-16	6	-2.31553	-15
-11	-35	6.40629	-02	-34	1.07262	-01	30	6	-5.16665	-16	7	-2.35644	-15
-10	-34	2.39334	-02	-33	4.00919	-02	31	7	-5.25793	-16	8	-2.38119	-15
-9	-33	8.94573	-03	-32	1.49932	-02	32	8	-5.31316	-16	9	-2.39618	-15
-8	-32	3.34544	-03	-31	5.61018	-03	33	9	-5.34662	-16	10	-2.40528	-15
-7	-31	1.25180	-03	-30	2.10047	-03	34	10	-5.36690	-16	11	-2.41079	-15
-6	-30	4.68680	-04	-29	7.86933	-04	35	11	-5.37920	-16	12	-2.41413	-15
-5	-29	1.75588	-04	-28	2.95024	-04	36	12	-5.38666	-16	13	-2.41616	-15
-4	-28	6.58289	-05	-27	1.10688	-04	37	13	-5.39119	-16	14	-2.41739	-15
-3	-27	2.46979	-05	-26	4.15621	-05	38	14	-5.39393	-16	15	-2.41814	-15
-2	-26	9.27376	-06	-25	1.56197	-05	39	15	-5.39559	-16	16	-2.41859	-15
-1	-25	3.48523	-06	-24	5.87576	-06	40	16	-5.39660	-16	17	-2.41886	-15
0	-24	1.31106	-06	-23	2.21263	-06							

Table 10
 $G(u_s, u_B)$ Function

u_s	$\gamma = 3.58 \cdot 10^{+9}$		$\gamma = 1.32 \cdot 10^{+9}$		u_s	$\gamma = 3.58 \cdot 10^{+9}$		$\gamma = 1,32 \cdot 10^{+9}$	
	Y	$u_B = 22$	Y	$u_B = 21$		Y	$u_B = 22$	Y	$u_B = 21$
-40	-62	9.69499 +08	-61	9.69837 +08	1	-21	1.41120 -06	-20	2.39078 -06
-39	-61	5.87704 +08	-60	5.88041 +08	2	-20	5.33455 -07	-19	9.05171 -07
-38	-60	3.56134 +08	-59	3.56471 +08	3	-19	2.01971 -07	-18	3.43312 -07
-37	-59	2.15680 +08	-58	2.16017 +08	4	-18	7.66034 -08	-17	1.30472 -07
-36	-58	1.30491 +08	-57	1.30827 +08	5	-17	2.91123 -08	-16	4.96984 -08
-35	-57	7.88232 +07	-56	7.91578 +07	6	-16	1.10892 -08	-15	1.89807 -08
-34	-56	4.74867 +07	-55	4.78193 +07	7	-15	4.23518 -09	-14	7.27151 -09
-33	-55	2.84835 +07	-54	2.88128 +07	8	-14	1.62249 -09	-13	2.79588 -09
-32	-54	1.69628 +07	-53	1.72866 +07	9	-13	6.23846 -10	-12	1.07973 -09
-31	-53	9.98366 +06	-52	1.02987 +07	10	-12	2.40920 -10	-11	4.19209 -10
-30	-52	5.76431 +06	-51	6.06540 +06	11	-11	9.35383 -11	-10	1.63842 -10
-29	-51	3.22690 +06	-50	3.50572 +06	12	-10	3.65581 -11	-9	6.45731 -11
-28	-50	1.72134 +06	-49	1.96588 +06	13	-9	1.44080 -11	-8	2.57196 -11
-27	-49	8.56003 +05	-48	1.05143 +06	14	-8	5.73881 -12	-7	1.03821 -11
-26	-48	3.89881 +05	-47	5.24816 +05	15	-7	2.31656 -12	-6	4.25967 -12
-25	-47	1.63028 +05	-46	2.40076 +05	16	-6	9.50461 -13	-5	1.77951 -12
-24	-46	6.41616 +04	-45	1.00774 +05	17	-5	3.97063 -13	-4	7.54830 -13
-23	-45	2.44510 +04	-44	3.97642 +04	18	-4	1.68425 -13	-3	3.20132 -13
-22	-44	9.18741 +03	-43	1.51772 +04	19	-3	7.14311 -14	-2	1.29159 -13
-21	-43	3.43321 +03	-42	5.70858 +03	20	-2	2.88192 -14	-1	4.14563 -14
-20	-42	1.28046 +03	-41	2.13489 +03	21	-1	9.25016 -15	0	0.00000 -00
-19	-41	4.77309 +02	-40	7.96803 +02	22	0	0.00000 -00	1	-2.07325 -14
-18	-40	1.77924 +02	-39	2.97228 +02	23	1	-4.62604 -15	2	-3.24451 -14
-17	-39	6.63394 +01	-38	1.10876 +02	24	2	-7.23948 -15	3	-3.90416 -14
-16	-38	2.47426 +01	-37	4.13719 +01	25	3	-8.71137 -15	4	-4.28746 -14
-15	-37	9.23169 +00	-36	1.54428 +01	26	4	-9.56662 -15	5	-4.51465 -14
-14	-36	3.44581 +00	-35	5.76672 +00	27	5	-1.00735 -14	6	-4.65087 -14
-13	-35	1.28673 +00	-34	2.15441 +00	28	6	-1.03775 -14	7	-4.73304 -14
-12	-34	4.80715 -01	-33	8.05268 -01	29	7	-1.05608 -14	8	-4.78275 -14
-11	-33	1.79679 -01	-32	3.01147 -01	30	8	-1.06717 -14	9	-4.81287 -14
-10	-32	6.71951 -02	-31	1.12683 -01	31	9	-1.07389 -14	10	-4.83113 -14
-9	-31	2.51431 -02	-30	4.21892 -02	32	10	-1.07797 -14	11	-4.84220 -14
-8	-30	9.41369 -03	-29	1.58059 -02	33	11	-1.08044 -14	12	-4.84892 -14
-7	-29	3.52679 -03	-28	5.92573 -03	34	12	-1.08194 -14	13	-4.85299 -14
-6	-28	1.32221 -03	-27	2.22324 -03	35	13	-1.08284 -14	14	-4.85546 -14
-5	-27	4.96071 -04	-26	8.34797 -04	36	14	-1.08340 -14	15	-4.85696 -14
-4	-26	1.86268 -04	-25	3.13730 -04	37	15	-1.08373 -14	16	-4.85787 -14
-3	-25	7.00027 -05	-24	1.18017 -04	38	16	-1.08393 -14	17	-4.85842 -14
-2	-24	2.63333 -05	-23	4.44419 -05	39	17	-1.08406 -14	18	-4.85875 -14
-1	-23	9.91633 -06	-22	1.67547 -05	40	18	-1.08413 -14	19	-4.85896 -14
0	-22	3.73848 -06	-21	6.32459 -06					

Table 11
 $G(u_s, u_B)$ Function

u_s		$\gamma = 4.85 \cdot 10^{+8}$		$\gamma = 1.78 \cdot 10^{+8}$		u_s		$\gamma = 4.85 \cdot 10^{+8}$		$\gamma = 1.78 \cdot 10^{+8}$			
		Y	$u_B = 20$	Y	$u_B = 19$			Y	$u_B = 20$	Y	$u_B = 19$		
-40	-60	9.70037	+08	-59	9.70157	+08	1	-19	4.05669	-06	-18	6.89562	-06
-39	-59	5.88242	+08	-58	5.88361	+08	2	-18	1.53862	-06	-17	2.62061	-06
-38	-58	3.56672	+08	-57	3.56791	+08	3	-17	5.84737	-07	-16	9.98220	-07
-37	-57	2.16217	+08	-56	2.16336	+08	4	-16	2.22733	-07	-15	3.81239	-07
-36	-56	1.31027	+08	-55	1.31146	+08	5	-15	8.50659	-08	-14	1.46052	-07
-35	-55	7.93575	+07	-54	7.94764	+07	6	-14	3.25886	-08	-13	5.61568	-08
-34	-54	4.80183	+07	-53	4.81369	+07	7	-13	1.25302	-08	-12	2.16869	-08
-33	-53	2.90105	+07	-52	2.91287	+07	8	-12	4.83901	-09	-11	8.42005	-09
-32	-52	1.74824	+07	-51	1.75999	+07	9	-11	1.87876	-09	-10	3.29086	-09
-31	-51	1.04914	+07	-50	1.06077	+07	10	-10	7.34290	-10	-9	1.29696	-09
-30	-50	6.25293	+06	-49	6.36742	+06	11	-9	2.89392	-10	-8	5.16591	-10
-29	-49	3.68507	+06	-48	3.79659	+06	12	-8	1.15267	-10	-7	2.08530	-10
-28	-48	2.13224	+06	-47	2.23898	+06	13	-7	4.65293	-11	-6	8.55578	-11
-27	-47	1.19777	+06	-46	1.29695	+06	14	-6	1.90905	-11	-5	3.57424	-11
-26	-46	6.42364	+05	-45	7.29857	+05	15	-5	7.97522	-12	-4	1.51611	-11
-25	-45	3.21866	+05	-44	3.92522	+05	16	-4	3.38291	-12	-3	6.43002	-12
-24	-44	1.47908	+05	-43	1.97465	+05	17	-3	1.43473	-12	-2	2.59422	-12
-23	-43	6.23405	+04	-42	9.11761	+04	18	-2	5.78850	-13	-1	8.32672	-13
-22	-42	2.46680	+04	-41	3.85970	+04	19	-1	1.85794	-13	0	0.00000	-00
-21	-41	9.43142	+03	-40	1.53194	+04	20	0	0.00000	-00	1	-4.16423	-13
-20	-40	3.55137	+03	-39	5.86813	+03	21	1	-9.29166	-14	2	-6.51677	-13
-19	-39	1.32929	+03	-38	2.21235	+03	22	2	-1.45408	-13	3	-7.84173	-13
-18	-38	4.96521	+02	-37	8.28889	+02	23	3	-1.74972	-13	4	-8.61159	-13
-17	-37	1.85360	+02	-36	3.09881	+02	24	4	-1.92150	-13	5	-9.06792	-13
-16	-36	6.92020	+01	-35	1.15785	+02	25	5	-2.02332	-13	6	-9.34153	-13
-15	-35	2.58435	+01	-34	4.32665	+01	26	6	-2.08437	-13	7	-9.50656	-13
-14	-34	9.65524	+00	-33	1.61734	+01	27	7	-2.12120	-13	8	-9.60642	-13
-13	-33	3.60894	+00	-32	6.04858	+00	28	8	-2.14348	-13	9	-9.66691	-13
-12	-32	1.34964	+00	-31	2.26329	+00	29	9	-2.15698	-13	10	-9.70359	-13
-11	-31	5.05012	-01	-30	8.47390	-01	30	10	-2.16516	-13	11	-9.72583	-13
-10	-30	1.89078	-01	-29	3.17471	-01	31	11	-2.17012	-13	12	-9.73931	-13
-9	-29	7.08375	-02	-28	1.19021	-01	32	12	-2.17313	-13	13	-9.74750	-13
-8	-28	2.65572	-02	-27	4.46549	-02	33	13	-2.17496	-13	14	-9.75246	-13
-7	-27	9.96386	-03	-26	1.67673	-02	34	14	-2.17606	-13	15	-9.75547	-13
-6	-26	3.74130	-03	-25	6.30144	-03	35	15	-2.17674	-13	16	-9.75729	-13
-5	-25	1.40604	-03	-24	2.37045	-03	36	16	-2.17714	-13	17	-9.75840	-13
-4	-24	5.28919	-04	-23	8.92640	-04	37	17	-2.17739	-13	18	-9.75907	-13
-3	-23	1.99175	-04	-22	3.36527	-04	38	18	-2.17754	-13	19	-9.75948	-13
-2	-22	7.50894	-05	-21	1.27032	-04	39	19	-2.17763	-13	20	-9.75972	-13
-1	-21	2.83448	-05	-20	4.80201	-05	40	20	-2.17769	-13	21	-9.75987	-13
0	-20	1.07147	-05	-19	1.81808	-05							

Table 12
 $G(u_s, u_B)$ Function

u_s		$\gamma = 6.57 \cdot 10^{+7}$		$\gamma = 2.41 \cdot 10^{+7}$		u_s		$\gamma = 6.57 \cdot 10^{+7}$		$\gamma = 2.41 \cdot 10^{+7}$			
		Y	$u_B = 18$	Y	$u_B = 17$			Y	$u_B = 18$	Y	$u_B = 17$		
-40	-58	9.70227	+08	-57	9.70269	+08	1	-17	1.17447	-05	-16	2.00497	-05
-39	-57	5.88432	+08	-56	5.88474	+08	2	-16	4.47371	-06	-15	7.65739	-06
-38	-56	3.56862	+08	-55	3.56904	+08	3	-15	1.70859	-06	-14	2.93353	-06
-37	-55	2.16407	+08	-54	2.16449	+08	4	-14	6.54560	-07	-13	1.12794	-06
-35	-54	1.31217	+08	-53	1.31259	+08	5	-13	2.51677	-07	-12	4.35594	-07
-35	-53	7.95471	+07	-52	7.95890	+07	6	-12	9.71942	-08	-11	1.69121	-07
-34	-52	4.82075	+07	-51	4.82493	+07	7	-11	3.77360	-08	-10	6.60987	-08
-33	-51	2.91991	+07	-50	2.92409	+07	8	-10	1.47486	-08	-9	2.60502	-08
-32	-50	1.76700	+07	-49	1.77117	+07	9	-9	5.81260	-09	-8	1.03760	-08
-31	-49	1.06774	+07	-48	1.07190	+07	10	-8	2.31520	-09	-7	4.18844	-09
-30	-48	6.43648	+06	-47	6.47781	+06	11	-7	9.34567	-10	-6	1.71847	-09
-29	-47	3.86456	+06	-46	3.90551	+06	12	-6	3.83443	-10	-5	7.17907	-10
-28	-46	2.30523	+06	-45	2.34555	+06	13	-5	1.60186	-10	-4	3.04520	-10
-27	-45	1.36042	+06	-44	1.39974	+06	14	-4	6.79477	-11	-3	1.29150	-10
-26	-44	7.88943	+05	-43	8.26650	+05	15	-3	2.88173	-11	-2	5.21064	-11
-25	-43	4.44832	+05	-42	4.79956	+05	16	-2	1.16265	-11	-1	1.67246	-11
-24	-42	2.39904	+05	-41	2.71112	+05	17	-1	3.73178	-12	0	0.00000	-00
-23	-41	1.21189	+05	-40	1.46660	+05	18	0	0.00000	-00	1	-8.36409	-12
-22	-40	5.62382	+04	-39	7.44057	+04	19	1	-1.85628	-12	2	-1.30893	-11
-21	-39	2.39184	+04	-38	3.47111	+04	20	2	-2.92061	-12	3	-1.57505	-11
-20	-38	9.52501	+03	-37	1.48369	+04	21	3	-3.51442	-12	4	-1.72968	-11
-19	-37	3.65611	+03	-35	5.93001	+03	22	4	-3.85945	-12	5	-1.82134	-11
-18	-36	1.38028	+03	-35	2.28142	+03	23	5	-4.06396	-12	6	-1.87629	-11
-17	-35	5.17700	+02	-34	8.62618	+02	24	6	-4.18658	-12	7	-1.90944	-11
-16	-34	1.93734	+02	-33	3.23933	+02	25	7	-4.26054	-12	8	-1.92950	-11
-15	-33	7.24596	+01	-32	1.21358	+02	26	8	-4.30529	-12	9	-1.94165	-11
-14	-32	2.71044	+01	-31	4.54407	+01	27	9	-4.33241	-12	10	-1.94901	-11
-13	-31	1.01428	+01	-30	1.70176	+01	28	10	-4.34884	-12	11	-1.95348	-11
-12	-30	3.79767	+00	-29	6.37620	+00	29	11	-4.35881	-12	12	-1.95619	-11
-11	-29	1.42279	+00	-28	2.39055	+00	30	12	-4.36486	-12	13	-1.95783	-11
-10	-28	5.33415	-01	-27	8.96910	-01	31	13	-4.36852	-12	14	-1.95883	-11
-9	-27	2.00129	-01	-26	3.36780	-01	32	14	-4.37075	-12	15	-1.95943	-11
-8	-26	7.51460	-02	-25	1.26567	-01	33	15	-4.37209	-12	16	-1.95980	-11
-7	-25	2.82411	-02	-24	4.76118	-02	34	16	-4.37291	-12	17	-1.96002	-11
-6	-24	1.06236	-02	-23	1.79291	-02	35	17	-4.37341	-12	18	-1.96016	-11
-5	-23	4.00053	-03	-22	6.75933	-03	36	18	-4.37371	-12	19	-1.96024	-11
-4	-22	1.50821	-03	-21	2.55152	-03	37	19	-4.37389	-12	20	-1.96029	-11
-3	-21	5.69321	-04	-20	9.64510	-04	38	20	-4.37400	-12	21	-1.96032	-11
-2	-20	2.15211	-04	-19	3.65172	-04	39	21	-4.37407	-12	22	-1.96034	-11
-1	-19	8.14809	-05	-18	1.38502	-04	40	22	-4.37411	-12	23	-1.96035	-11
0	-18	3.09040	-05	-17	5.26364	-05							

Table 13
 $G(u_s, u_B)$ Function

u_s		$\gamma = 8.89 \cdot 10^{+6}$		$\gamma = 3.27 \cdot 10^{+6}$		u_s		$\gamma = 8.89 \cdot 10^{+6}$		$\gamma = 3.27 \cdot 10^{+6}$			
		Y	$u_B = 16$	Y	$u_B = 15$			Y	$u_B = 16$	Y	$u_B = 15$		
-40	-56	9.70294	+08	-55	9.70309	+08	1	-15	3.43180	-05	-14	5.89216	-05
-39	-55	5.88499	+08	-54	5.88514	+08	2	-14	1.31472	-05	-13	2.26552	-05
-38	-54	3.56928	+08	-53	3.56943	+08	3	-13	5.05507	-06	-12	8.74914	-06
-37	-53	2.16474	+08	-52	2.16488	+08	4	-12	1.95219	-06	-11	3.39689	-06
-36	-52	1.31284	+08	-51	1.31298	+08	5	-11	7.57949	-07	-10	1.32762	-06
-35	-51	7.96138	+07	-50	7.96285	+07	6	-10	2.96234	-07	-9	5.23233	-07
-34	-50	4.82741	+07	-49	4.82888	+07	7	-9	1.16749	-07	-8	2.08408	-07
-33	-49	2.92657	+07	-48	2.92804	+07	8	-8	4.65021	-08	-7	8.41270	-08
-32	-48	1.77365	+07	-47	1.77512	+07	9	-7	1.87712	-08	-6	3.45164	-08
-31	-47	1.07437	+07	-46	1.07583	+07	10	-6	7.70167	-09	-5	1.44195	-08
-30	-46	6.50243	+06	-45	6.51704	+06	11	-5	3.21743	-09	-4	6.11645	-09
-29	-45	3.92999	+06	-44	3.94455	+06	12	-4	1.36476	-09	-3	2.59405	-09
-28	-44	2.36981	+06	-43	2.38428	+06	13	-3	5.78812	-10	-2	1.04658	-09
-27	-43	1.42363	+06	-42	1.43798	+06	14	-2	2.33524	-10	-1	3.35924	-10
-26	-42	8.49958	+05	-41	8.64096	+05	15	-1	7.49548	-11	0	0.00000	-00
-25	-41	5.02332	+05	-40	5.16133	+05	16	0	0.00000	-00	1	-1.67997	-10
-24	-40	2.92009	+05	-39	3.05271	+05	17	1	-3.74852	-11	2	-2.62905	-10
-23	-39	1.65270	+05	-38	1.77678	+05	18	2	-5.86621	-11	3	-3.16358	-10
-22	-38	8.96802	+04	-37	1.00765	+05	19	3	-7.05890	-11	4	-3.47416	-10
-21	-37	4.57020	+04	-36	5.48528	+04	20	4	-7.75191	-11	5	-3.65826	-10
-20	-36	2.14396	+04	-35	2.80845	+04	21	5	-8.16268	-11	6	-3.76854	-10
-19	-35	9.21372	+03	-34	1.32528	+04	22	6	-8.40897	-11	7	-3.83522	-10
-18	-34	3.69723	+03	-33	5.72868	+03	23	7	-8.55754	-11	8	-3.87550	-10
-17	-33	1.42605	+03	-32	2.30890	+03	24	8	-8.64742	-11	9	-3.89991	-10
-16	-32	5.40131	+02	-31	8.93124	+02	25	9	-8.70188	-11	10	-3.91470	-10
-15	-31	2.03110	+02	-30	3.38940	+02	26	10	-8.73489	-11	11	-3.92368	-10
-14	-30	7.61903	+01	-29	1.27655	+02	27	11	-8.75491	-11	12	-3.92912	-10
-13	-29	2.85650	+01	-28	4.79561	+01	28	12	-8.76705	-11	13	-3.93242	-10
-12	-28	1.07121	+01	-27	1.80064	+01	29	13	-8.77442	-11	14	-3.93442	-10
-11	-27	4.01944	+00	-26	6.76318	+00	30	14	-8.77888	-11	15	-3.93563	-10
-10	-26	1.50931	+00	-25	2.54200	+00	31	15	-8.78159	-11	16	-3.93637	-10
-9	-25	5.67233	-01	-24	9.56282	-01	32	16	-8.78323	-11	17	-3.93682	-10
-8	-24	2.13380	-01	-23	3.60113	-01	33	17	-8.78423	-11	18	-3.93709	-10
-7	-23	8.03528	-02	-22	1.35764	-01	34	18	-8.78483	-11	19	-3.93725	-10
-6	-22	3.02932	-02	-21	5.12486	-02	35	19	-8.78520	-11	20	-3.93735	-10
-5	-21	1.14351	-02	-20	1.93727	-02	36	20	-8.78542	-11	21	-3.93741	-10
-4	-20	4.32263	-03	-19	7.33468	-03	37	21	-8.78556	-11	22	-3.93745	-10
-3	-19	1.63658	-03	-18	2.78189	-03	38	22	-8.78564	-11	23	-3.93747	-10
-2	-18	6.20724	-04	-17	1.05723	-03	39	23	-8.78569	-11	24	-3.93748	-10
-1	-17	2.35900	-04	-16	4.02710	-04	40	24	-8.78572	-11	25	-3.93749	-10
0	-16	8.98569	-05	-15	1.53802	-04							

Table 14
 $G(u_s, u_B)$ Function

u_s		$\gamma = 1.20 \cdot 10^{+6}$		$\gamma = 4.42 \cdot 10^{+5}$		u_s		$\gamma = 1.20 \cdot 10^{+6}$		$\gamma = 4.42 \cdot 10^{+5}$			
		Y	$u_B = 14$	Y	$u_B = 13$			Y	$u_B = 14$	Y	$u_B = 13$		
-40	-54	9.70318	+08	-53	9.70323	+08	1	-13	1.01533	-04	-12	1.75731	-04
-39	-53	5.88522	+08	-52	5.88527	+08	2	-12	3.92109	-05	-11	6.82284	-05
-38	-52	3.56952	+08	-51	3.56957	+08	3	-11	1.52238	-05	-10	2.66661	-05
-37	-51	2.16497	+08	-50	2.16502	+08	4	-10	5.95002	-06	-9	1.05094	-05
-36	-50	1.31307	+08	-49	1.31312	+08	5	-9	2.34497	-06	-8	4.18598	-06
-35	-49	7.96372	+07	-48	7.96423	+07	6	-8	9.34020	-07	-7	1.68973	-06
-34	-48	4.82975	+07	-47	4.83026	+07	7	-7	3.77031	-07	-6	6.93282	-07
-33	-47	2.92890	+07	-46	2.92941	+07	8	-6	1.54692	-07	-5	2.89624	-07
-32	-46	1.77598	+07	-45	1.77649	+07	9	-5	6.46239	-08	-4	1.22852	-07
-31	-45	1.07670	+07	-44	1.07721	+07	10	-4	2.74120	-08	-3	5.21030	-08
-30	-44	6.52568	+06	-43	6.53078	+06	11	-3	1.16257	-08	-2	2.10212	-08
-29	-43	3.95317	+06	-42	3.95827	+06	12	-2	4.69047	-09	-1	6.74721	-09
-28	-42	2.39288	+06	-41	2.39797	+06	13	-1	1.50550	-09	0	0.00000	-00
-27	-41	1.44653	+06	-40	1.45160	+06	14	0	0.00000	-00	1	-3.37431	-09
-26	-40	8.72572	+05	-39	8.77614	+05	15	1	-7.52911	-10	2	-5.28059	-09
-25	-39	5.24487	+05	-38	5.29486	+05	16	2	-1.17826	-09	3	-6.35422	-09
-24	-38	3.13431	+05	-37	3.18360	+05	17	3	-1.41781	-09	4	-6.97805	-09
-23	-37	1.85527	+05	-36	1.90345	+05	18	4	-1.55701	-09	5	-7.34781	-09
-22	-36	1.08123	+05	-35	1.12762	+05	19	5	-1.63952	-09	6	-7.56952	-09
-21	-35	6.14479	+04	-34	6.58042	+04	20	6	-1.68898	-09	7	-7.70325	-09
-20	-34	3.35607	+04	-33	3.74790	+04	21	7	-1.71882	-09	8	-7.78416	-09
-19	-33	1.72672	+04	-32	2.05404	+04	22	8	-1.73688	-09	9	-7.83318	-09
-18	-32	8.19937	+03	-31	1.06225	+04	23	9	-1.74781	-09	10	-7.86290	-09
-17	-31	3.56667	+03	-30	5.07776	+03	24	10	-1.75445	-09	11	-7.88092	-09
-16	-30	1.44455	+03	-29	2.22399	+03	25	11	-1.75847	-09	12	-7.89185	-09
-15	-29	5.60591	+02	-28	9.05666	+02	26	12	-1.76091	-09	13	-7.89848	-09
-14	-28	2.13221	+02	-27	3.52764	+02	27	13	-1.76238	-09	14	-7.90250	-09
-13	-27	8.04517	+01	-26	1.34521	+02	28	14	-1.76328	-09	15	-7.90494	-09
-12	-26	3.02747	+01	-25	5.08549	+01	29	15	-1.76383	-09	16	-7.90641	-09
-11	-25	1.13873	+01	-24	1.91795	+01	30	16	-1.76416	-09	17	-7.90731	-09
-10	-24	4.28501	+00	-23	7.22900	+00	31	17	-1.76436	-09	18	-7.90786	-09
-9	-23	1.61380	+00	-22	2.72631	+00	32	18	-1.76448	-09	19	-7.90819	-09
-8	-22	6.08438	-01	-21	1.02927	+00	33	19	-1.76455	-09	20	-7.90839	-09
-7	-21	2.29678	-01	-20	3.89098	-01	34	20	-1.76460	-09	21	-7.90851	-09
-6	-20	8.68221	-02	-19	1.47319	-01	35	21	-1.76462	-09	22	-7.90858	-09
-5	-19	3.28717	-02	-18	5.58755	-02	36	22	-1.76464	-09	23	-7.90863	-09
-4	-18	1.24675	-02	-17	2.12350	-02	37	23	-1.76465	-09	24	-7.90865	-09
-3	-17	4.73817	-03	-16	8.08865	-03	38	24	-1.76466	-09	25	-7.90867	-09
-2	-16	1.80482	-03	-15	3.08921	-03	39	25	-1.76466	-09	26	-7.90868	-09
-1	-15	6.89296	-04	-14	1.18347	-03	40	26	-1.76466	-09	27	-7.90869	-09
0	-14	2.64068	-04	-13	4.55043	-04							

Table 15
 $G(u_s, u_B)$ Function

u_s		$\gamma = 1.63 \cdot 10^{+5}$		$\gamma = 5.99 \cdot 10^{+4}$		u_s		$\gamma = 1.63 \cdot 10^{+5}$		$\gamma = 5.99 \cdot 10^{+4}$			
		Y	$u_B = 12$	Y	$u_B = 11$			Y	$u_B = 12$	Y	$u_B = 11$		
-40	-52	9.70326	+08	-51	9.70328	+08	1	-11	3.05778	-04	-10	5.35603	-04
-39	-51	5.88530	+08	-50	5.88532	+08	2	-10	1.19509	-04	-9	2.11087	-04
-38	-50	3.56960	+08	-49	3.56962	+08	3	-9	4.70999	-05	-8	8.40778	-05
-37	-49	2.16505	+08	-48	2.16507	+08	4	-8	1.87602	-05	-7	3.39392	-05
-36	-48	1.31315	+08	-47	1.31317	+08	5	-7	7.57287	-06	-6	1.39249	-05
-35	-47	7.96453	+07	-46	7.96471	+07	6	-6	3.10707	-06	-5	5.81726	-06
-34	-46	4.83056	+07	-45	4.83074	+07	7	-5	1.29800	-06	-4	2.46755	-06
-33	-45	2.92972	+07	-44	2.92989	+07	8	-4	5.50585	-07	-3	1.04651	-06
-32	-44	1.77679	+07	-43	1.77697	+07	9	-3	2.33509	-07	-2	4.22222	-07
-31	-43	1.07751	+07	-42	1.07769	+07	10	-2	9.42106	-08	-1	1.35521	-07
-30	-42	6.53379	+06	-41	6.53556	+06	11	-1	3.02389	-08	0	0.00000	-00
-29	-41	3.96128	+06	-40	3.96304	+06	12	0	0.00000	-00	1	-6.77749	-08
-28	-40	2.40097	+06	-39	2.40273	+06	13	1	-1.51226	-08	2	-1.06063	-07
-27	-39	1.45460	+06	-38	1.45636	+06	14	2	-2.36660	-08	3	-1.27627	-07
-26	-38	8.80599	+05	-37	8.82357	+05	15	3	-2.84776	-08	4	-1.40157	-07
-25	-37	5.32455	+05	-36	5.34208	+05	16	4	-3.12734	-08	5	-1.47584	-07
-24	-36	3.21304	+05	-35	3.23048	+05	17	5	-3.29306	-08	6	-1.52037	-07
-23	-35	1.93248	+05	-34	1.94978	+05	18	6	-3.39242	-08	7	-1.54724	-07
-22	-34	1.15601	+05	-33	1.17308	+05	19	7	-3.45235	-08	8	-1.56349	-07
-21	-33	6.85411	+04	-32	7.02113	+04	20	8	-3.48862	-08	9	-1.57333	-07
-20	-32	4.00541	+04	-31	4.16658	+04	21	9	-3.51058	-08	10	-1.57930	-07
-19	-31	2.28646	+04	-30	2.43840	+04	22	10	-3.52390	-08	11	-1.58292	-07
-18	-30	1.25761	+04	-29	1.39524	+04	23	11	-3.53198	-08	12	-1.58512	-07
-17	-29	6.53893	+03	-28	7.70319	+03	24	12	-3.53688	-08	13	-1.58645	-07
-16	-28	3.14800	+03	-27	4.02809	+03	25	13	-3.53985	-08	14	-1.58726	-07
-15	-27	1.38916	+03	-26	1.95402	+03	26	14	-3.54165	-08	15	-1.58775	-07
-14	-26	5.69172	+02	-25	8.69416	+02	27	15	-3.54274	-08	16	-1.58804	-07
-13	-25	2.22640	+02	-24	3.58696	+02	28	16	-3.54341	-08	17	-1.58822	-07
-12	-24	8.51583	+01	-23	1.41003	+02	29	17	-3.54381	-08	18	-1.58833	-07
-11	-23	3.22807	+01	-22	5.41269	+01	30	18	-3.54405	-08	19	-1.58840	-07
-10	-22	1.22013	+01	-21	2.05798	+01	31	19	-3.54420	-08	20	-1.58844	-07
-9	-21	4.61036	+00	-20	7.80146	+00	32	20	-3.54429	-08	21	-1.58846	-07
-8	-20	1.74345	+00	-19	2.95695	+00	33	21	-3.54434	-08	22	-1.58848	-07
-7	-19	6.60184	-01	-18	1.12198	+00	34	22	-3.54438	-08	23	-1.58849	-07
-6	-18	2.50408	-01	-17	4.26471	-01	35	23	-3.54440	-08	24	-1.58849	-07
-5	-17	9.51674	-02	-16	1.62458	-01	36	24	-3.54441	-08	25	-1.58850	-07
-4	-16	3.62506	-02	-15	6.20474	-02	37	25	-3.54442	-08	26	-1.58850	-07
-3	-15	1.38448	-02	-14	2.37705	-02	38	26	-3.54442	-08	27	-1.58850	-07
-2	-14	5.30395	-03	-13	9.13977	-03	39	27	-3.54442	-08	28	-1.58850	-07
-1	-13	2.03936	-03	-12	3.52965	-03	40	28	-3.54443	-08	29	-1.58850	-07
0	-12	7.87572	-04	-11	1.37040	-03							

Table 16
 $G(u_s, u_B)$ Function

u_s		$\gamma = 2.20 \cdot 10^{+4}$		$\gamma = 8.10 \cdot 10^{+3}$		u_s		$\gamma = 2.20 \cdot 10^{+4}$		$\gamma = 8.10 \cdot 10^{+3}$			
		Y	$u_B = 10$	Y	$u_B = 9$			Y	$u_B = 10$	Y	$u_B = 9$		
-40	-50	9.70329	+08	-49	9.70329	+08	1	-9	9.46028	-04	-8	1.68874	-03
-39	-49	5.88533	+08	-48	5.88534	+08	2	-8	3.76810	-04	-7	6.81688	-04
-38	-48	3.56963	+08	-47	3.56963	+08	3	-7	1.52105	-04	-6	2.79689	-04
-37	-47	2.16508	+08	-46	2.16509	+08	4	-6	6.24072	-05	-5	1.16842	-04
-36	-46	1.31318	+08	-45	1.31319	+08	5	-5	2.60711	-05	-4	4.95621	-05
-35	-45	7.96481	+07	-44	7.96487	+07	6	-4	1.10588	-05	-3	2.10198	-05
-34	-44	4.83084	+07	-43	4.83090	+07	7	-3	4.69016	-06	-2	8.48057	-06
-33	-43	2.93000	+07	-42	2.93006	+07	8	-2	1.89227	-06	-1	2.72202	-06
-32	-42	1.77707	+07	-41	1.77713	+07	9	-1	6.07365	-07	0	0.00000	-00
-31	-41	1.07779	+07	-40	1.07785	+07	10	0	0.00000	-00	1	-1.36129	-06
-30	-40	6.53659	+06	-39	6.53720	+06	11	1	-3.03746	-07	2	-2.13034	-06
-29	-39	3.96408	+06	-38	3.96468	+06	12	2	-4.75344	-07	3	-2.56347	-06
-28	-38	2.40377	+06	-37	2.40437	+06	13	3	-5.71988	-07	4	-2.81514	-06
-27	-37	1.45739	+06	-36	1.45800	+06	14	4	-6.28144	-07	5	-2.96432	-06
-26	-36	8.83390	+05	-35	8.83995	+05	15	5	-6.61429	-07	6	-3.05376	-06
-25	-35	5.35239	+05	-34	5.35843	+05	16	6	-6.81386	-07	7	-3.10771	-06
-24	-34	3.24076	+05	-33	3.24679	+05	17	7	-6.93424	-07	8	-3.14035	-06
-23	-33	1.96001	+05	-32	1.96602	+05	18	8	-7.00708	-07	9	-3.16013	-06
-22	-32	1.18322	+05	-31	1.18920	+05	19	9	-7.05120	-07	10	-3.17212	-06
-21	-31	7.12125	+04	-30	7.18058	+04	20	10	-7.07795	-07	11	-3.17939	-06
-20	-30	4.26460	+04	-29	4.32318	+04	21	11	-7.09418	-07	12	-3.18380	-06
-19	-29	2.53310	+04	-28	2.59049	+04	22	12	-7.10401	-07	13	-3.18647	-06
-18	-28	1.48469	+04	-27	1.54020	+04	23	13	-7.10998	-07	14	-3.18809	-06
-17	-27	8.51646	+03	-26	9.04185	+03	24	14	-7.11360	-07	15	-3.18908	-06
-16	-26	4.72064	+03	-25	5.20010	+03	25	15	-7.11580	-07	16	-3.18967	-06
-15	-25	2.48340	+03	-24	2.89450	+03	26	16	-7.11713	-07	17	-3.19003	-06
-14	-24	1.21460	+03	-23	1.53252	+03	27	17	-7.11793	-07	18	-3.19025	-06
-13	-23	5.45370	+02	-22	7.56218	+02	28	18	-7.11842	-07	19	-3.19039	-06
-12	-22	2.26792	+02	-21	3.43015	+02	29	19	-7.11872	-07	20	-3.19047	-06
-11	-21	8.96724	+01	-20	1.43954	+02	30	20	-7.11890	-07	21	-3.19052	-06
-10	-20	3.45716	+01	-19	5.73161	+01	31	21	-7.11901	-07	22	-3.19055	-06
-9	-19	1.31934	+01	-18	2.22151	+01	32	22	-7.11908	-07	23	-3.19056	-06
-8	-18	5.01966	+00	-17	8.51738	+00	33	23	-7.11912	-07	24	-3.19058	-06
-7	-17	1.91001	+00	-16	3.25575	+00	34	24	-7.11914	-07	25	-3.19058	-06
-6	-16	7.27892	-01	-15	1.24515	+00	35	25	-7.11916	-07	26	-3.19059	-06
-5	-15	2.78048	-01	-14	4.77275	-01	36	26	-7.11917	-07	27	-3.19059	-06
-4	-14	1.06527	-01	-13	1.83551	-01	37	27	-7.11917	-07	28	-3.19059	-06
-3	-13	4.09609	-02	-12	7.08909	-02	38	28	-7.11917	-07	29	-3.19059	-06
-2	-12	1.58187	-02	-11	2.75246	-02	39	29	-7.11918	-07	30	-3.19059	-06
-1	-11	6.14170	-03	-10	1.07577	-02	40	30	-7.11918	-07	31	-3.19059	-06
0	-10	2.40040	-03	-9	4.23978	-03							

Table 17
 $G(u_s, u_B)$ Function

u_s	$\gamma = 2.98 \cdot 10^{+3}$		$\gamma = 1.1 \cdot 10^{+3}$		u_s	$\gamma = 2.98 \cdot 10^{+3}$		$\gamma = 1.1 \cdot 10^{+3}$	
	Y	$u_B = 8$	Y	$u_B = 7$		Y	$u_B = 8$	Y	$u_B = 7$
-40	-48	9.70329 +08	-47	9.70330 +08	1	-7	3.05510 -03	-6	5.61762 -03
-39	-47	5.88534 +08	-46	5.88534 +08	2	-6	1.25348 -03	-5	2.34683 -03
-38	-46	3.56964 +08	-45	3.56964 +08	3	-5	5.23652 -04	-4	9.95479 -04
-37	-45	2.16509 +08	-44	2.16509 +08	4	-4	2.22122 -04	-3	4.22194 -04
-36	-44	1.31319 +08	-43	1.31319 +08	5	-3	9.42045 -05	-2	1.70336 -04
-35	-43	7.96490 +07	-42	7.96493 +07	6	-2	3.80072 -05	-1	5.46732 -05
-34	-42	4.83094 +07	-41	4.83096 +07	7	-1	1.21992 -05	0	0.00000 -00
-33	-41	2.93009 +07	-40	2.93011 +07	8	0	0.00000 -00	1	-2.73423 -05
-32	-40	1.77717 +07	-39	1.77719 +07	9	1	-6.10090 -06	2	-4.27891 -05
-31	-39	1.07789 +07	-38	1.07791 +07	10	2	-9.54754 -06	3	-5.14887 -05
-30	-38	6.53755 +06	-37	6.53776 +06	11	3	-1.14887 -05	4	-5.65437 -05
-29	-37	3.96504 +06	-36	3.96524 +06	12	4	-1.26166 -05	5	-5.95399 -05
-28	-36	2.40473 +06	-35	2.40493 +06	13	5	-1.32851 -05	6	-6.13364 -05
-27	-35	1.45835 +06	-34	1.45855 +06	14	6	-1.36860 -05	7	-6.24200 -05
-26	-34	8.84348 +05	-33	8.84552 +05	15	7	-1.39278 -05	8	-6.30757 -05
-25	-33	5.36195 +05	-32	5.36400 +05	16	8	-1.40741 -05	9	-6.34729 -05
-24	-32	3.25031 +05	-31	3.25235 +05	17	9	-1.41627 -05	10	-6.37137 -05
-23	-31	1.96953 +05	-30	1.97157 +05	18	10	-1.42164 -05	11	-6.38597 -05
-22	-30	1.19270 +05	-29	1.19474 +05	19	11	-1.42490 -05	12	-6.39483 -05
-21	-29	7.21544 +04	-28	7.23578 +04	20	12	-1.42688 -05	13	-6.40020 -05
-20	-28	4.35777 +04	-27	4.37803 +04	21	13	-1.42807 -05	14	-6.40346 -05
-19	-27	2.62466 +04	-26	2.64476 +04	22	14	-1.42880 -05	15	-6.40543 -05
-18	-26	1.57370 +04	-25	1.59356 +04	23	15	-1.42924 -05	16	-6.40663 -05
-17	-25	9.36622 +03	-24	9.56110 +03	24	16	-1.42951 -05	17	-6.40736 -05
-16	-24	5.50780 +03	-23	5.69673 +03	25	17	-1.42967 -05	18	-6.40780 -05
-15	-23	3.17639 +03	-22	3.35600 +03	26	18	-1.42977 -05	19	-6.40807 -05
-14	-22	1.77594 +03	-21	1.94116 +03	27	19	-1.42983 -05	20	-6.40823 -05
-13	-21	9.46785 +02	-20	1.09051 +03	28	20	-1.42987 -05	21	-6.40833 -05
-12	-20	4.71728 +02	-19	5.85705 +02	29	21	-1.42989 -05	22	-6.40839 -05
-11	-19	2.16430 +02	-18	2.94945 +02	30	22	-1.42990 -05	23	-6.40842 -05
-10	-18	9.18085 +01	-17	1.37091 +02	31	23	-1.42991 -05	24	-6.40845 -05
-9	-17	3.68655 +01	-16	5.89001 +01	32	24	-1.42991 -05	25	-6.40846 -05
-8	-16	1.43848 +01	-15	2.39031 +01	33	25	-1.42992 -05	26	-6.40847 -05
-7	-15	5.54856 +00	-14	9.40877 +00	34	26	-1.42992 -05	27	-6.40847 -05
-6	-14	2.13412 +00	-13	3.65885 +00	35	27	-1.42992 -05	28	-6.40848 -05
-5	-13	8.21868 -01	-12	1.41951 +00	36	28	-1.42992 -05	29	-6.40848 -05
-4	-12	3.17594 -01	-11	5.52157 -01	37	29	-1.42992 -05	30	-6.40848 -05
-3	-11	1.23338 -01	-10	2.15965 -01	38	30	-1.42992 -05	31	-6.40848 -05
-2	-10	4.82101 -02	-9	8.51403 -02	39	31	-1.42992 -05	32	-6.40848 -05
-1	-9	1.90009 -02	-8	3.39163 -02	40	32	-1.42992 -05	33	-6.40848 -05
0	-8	7.56835 -03	-7	1.36915 -02					

Table 18
 $G(u_s, u_B)$ Function

u_s		$\gamma = 4.03 \cdot 10^{+2}$		$\gamma = 1.48 \cdot 10^{+2}$		u_s		$\gamma = 4.03 \cdot 10^{+2}$		$\gamma = 1.48 \cdot 10^{+2}$			
		Y	$u_B = 6$	Y	$u_B = 5$			Y	$u_B = 6$	Y	$u_B = 5$		
-40	-46	9.70330	+08	-45	9.70330	+08	1	-5	1.05172	-02	-4	1.99907	-02
-39	-45	5.88535	+08	-44	5.88535	+08	2	-4	4.46132	-03	-3	8.47915	-03
-38	-44	3.56964	+08	-43	3.56964	+08	3	-3	1.89212	-03	-2	3.42111	-03
-37	-43	2.16509	+08	-42	2.16509	+08	4	-2	7.63391	-04	-1	1.09810	-03
-36	-42	1.31319	+08	-41	1.31319	+08	5	-1	2.45027	-04	0	0.00000	-00
-35	-41	7.96494	+07	-40	7.96494	+07	6	0	0.00000	-00	1	-5.49176	-04
-34	-40	4.83097	+07	-39	4.83098	+07	7	1	-1.22539	-04	2	-8.59430	-04
-33	-39	2.93012	+07	-38	2.93013	+07	8	2	-1.91767	-04	3	-1.03416	-03
-32	-38	1.77720	+07	-37	1.77721	+07	9	3	-2.30756	-04	4	-1.13569	-03
-31	-37	1.07792	+07	-36	1.07793	+07	10	4	-2.53411	-04	5	-1.19588	-03
-30	-36	6.53788	+06	-35	6.53794	+06	11	5	-2.66839	-04	6	-1.23196	-03
-29	-35	3.96536	+06	-34	3.96543	+06	12	6	-2.74890	-04	7	-1.25372	-03
-28	-34	2.40505	+06	-33	2.40512	+06	13	7	-2.79747	-04	8	-1.26689	-03
-27	-33	1.45867	+06	-32	1.45874	+06	14	8	-2.82685	-04	9	-1.27487	-03
-26	-32	8.84671	+05	-31	8.84739	+05	15	9	-2.84465	-04	10	-1.27971	-03
-25	-31	5.36519	+05	-30	5.36587	+05	16	10	-2.85544	-04	11	-1.28264	-03
-24	-30	3.25354	+05	-29	3.25422	+05	17	11	-2.86199	-04	12	-1.28442	-03
-23	-29	1.97276	+05	-28	1.97344	+05	18	12	-2.86596	-04	13	-1.28550	-03
-22	-28	1.19593	+05	-27	1.19661	+05	19	13	-2.86836	-04	14	-1.28615	-03
-21	-27	7.24759	+04	-26	7.25440	+04	20	14	-2.86982	-04	15	-1.28655	-03
-20	-26	4.38980	+04	-25	4.39660	+04	21	15	-2.87071	-04	16	-1.28679	-03
-19	-25	2.65648	+04	-24	2.66326	+04	22	16	-2.87125	-04	17	-1.28694	-03
-18	-24	1.60520	+04	-23	1.61195	+04	23	17	-2.87157	-04	18	-1.28702	-03
-17	-23	9.67612	+03	-22	9.74314	+03	24	18	-2.87177	-04	19	-1.28708	-03
-16	-22	5.80964	+03	-21	5.87592	+03	25	19	-2.87189	-04	20	-1.28711	-03
-15	-21	3.46560	+03	-20	3.53071	+03	26	20	-2.87196	-04	21	-1.28713	-03
-14	-20	2.04559	+03	-19	2.10888	+03	27	21	-2.87201	-04	22	-1.28714	-03
-13	-19	1.18697	+03	-18	1.24742	+03	28	22	-2.87203	-04	23	-1.28715	-03
-12	-18	6.70279	+02	-17	7.26365	+02	29	23	-2.87205	-04	24	-1.28715	-03
-11	-17	3.62938	+02	-16	4.12512	+02	30	24	-2.87206	-04	25	-1.28716	-03
-10	-16	1.84945	+02	-15	2.25387	+02	31	25	-2.87207	-04	26	-1.28716	-03
-9	-15	8.72614	+01	-14	1.16405	+02	32	26	-2.87207	-04	27	-1.28716	-03
-8	-14	3.80777	+01	-13	5.59019	+01	33	27	-2.87207	-04	28	-1.28716	-03
-7	-13	1.56655	+01	-12	2.48722	+01	34	28	-2.87207	-04	29	-1.28716	-03
-6	-12	6.23991	+00	-11	1.04222	+01	35	29	-2.87207	-04	30	-1.28716	-03
-5	-11	2.45483	+00	-10	4.22280	+00	36	30	-2.87207	-04	31	-1.28716	-03
-4	-10	9.64686	-01	-9	1.69069	+00	37	31	-2.87207	-04	32	-1.28716	-03
-3	-9	3.81046	-01	-8	6.77931	-01	38	32	-2.87208	-04	33	-1.28716	-03
-2	-8	1.51914	-01	-7	2.74427	-01	39	33	-2.87208	-04	34	-1.28716	-03
-1	-7	6.13459	-02	-6	1.12729	-01	40	34	-2.87208	-04	35	-1.28716	-03
0	-6	2.51736	-02	-5	4.71176	-02							

Table 19
 $G(u_s, u_B)$ Function

u_s		$\gamma = 5.46 \cdot 10^{+1}$		$\gamma = 2.01 \cdot 10^{+1}$		u_s		$\gamma = 5.46 \cdot 10^{+1}$		$\gamma = 2.01 \cdot 10^{+1}$	
	Y	$u_B = 4$		Y	$u_B = 3$		Y	$u_B = 4$		Y	$u_B = 3$
-40	-44	9.70330 +08	-43	9.70330 +08	1	-3	3.79762 -02	-2	6.85105 -02		
-39	-43	5.88535 +08	-42	5.88535 +08	2	-2	1.53269 -02	-1	2.20161 -02		
-38	-42	3.56964 +08	-41	3.56964 +08	3	-1	4.92030 -03	0	0.00000 -00		
-37	-41	2.16509 +08	-40	2.16510 +08	4	0	0.00000 -00	1	-1.10205 -02		
-36	-40	1.31319 +08	-39	1.31319 +08	5	1	-2.46097 -03	2	-1.72492 -02		
-35	-39	7.96495 +07	-38	7.96495 +07	6	2	-3.85135 -03	3	-2.07581 -02		
-34	-38	4.83098 +07	-37	4.83098 +07	7	3	-4.63445 -03	4	-2.27971 -02		
-33	-37	2.93013 +07	-36	2.93014 +07	8	4	-5.08947 -03	5	-2.40058 -02		
-32	-36	1.77721 +07	-35	1.77722 +07	9	5	-5.35918 -03	6	-2.47306 -02		
-31	-35	1.07793 +07	-34	1.07793 +07	10	6	-5.52090 -03	7	-2.51677 -02		
-30	-34	6.53798 +06	-33	6.53800 +06	11	7	-5.61844 -03	8	-2.54322 -02		
-29	-33	3.96547 +06	-32	3.96549 +06	12	8	-5.67746 -03	9	-2.55925 -02		
-28	-32	2.40516 +06	-31	2.40518 +06	13	9	-5.71322 -03	10	-2.56896 -02		
-27	-31	1.45878 +06	-30	1.45880 +06	14	10	-5.73489 -03	11	-2.57485 -02		
-26	-30	8.84778 +05	-29	8.84801 +05	15	11	-5.74804 -03	12	-2.57843 -02		
-25	-29	5.36626 +05	-28	5.36648 +05	16	12	-5.75601 -03	13	-2.58059 -02		
-24	-28	3.25461 +05	-27	3.25483 +05	17	13	-5.76085 -03	14	-2.58191 -02		
-23	-27	1.97383 +05	-26	1.97405 +05	18	14	-5.76378 -03	15	-2.58271 -02		
-22	-26	1.19700 +05	-25	1.19722 +05	19	15	-5.76556 -03	16	-2.58319 -02		
-21	-25	7.25830 +04	-24	7.26053 +04	20	16	-5.76664 -03	17	-2.58348 -02		
-20	-24	4.40050 +04	-23	4.40272 +04	21	17	-5.76729 -03	18	-2.58366 -02		
-19	-23	2.66715 +04	-22	2.66938 +04	22	18	-5.76769 -03	19	-2.58377 -02		
-18	-22	1.61583 +04	-21	1.61805 +04	23	19	-5.76793 -03	20	-2.58383 -02		
-17	-21	9.78180 +03	-20	9.80393 +03	24	20	-5.76807 -03	21	-2.58387 -02		
-16	-20	5.91432 +03	-19	5.93636 +03	25	21	-5.76816 -03	22	-2.58390 -02		
-15	-19	3.56871 +03	-18	3.59061 +03	26	22	-5.76822 -03	23	-2.58391 -02		
-14	-18	2.14623 +03	-17	2.16791 +03	27	23	-5.76825 -03	24	-2.58392 -02		
-13	-17	1.28378 +03	-16	1.30511 +03	28	24	-5.76827 -03	25	-2.58393 -02		
-12	-16	7.61179 +02	-15	7.81967 +02	29	25	-5.76828 -03	26	-2.58393 -02		
-11	-15	4.44967 +02	-14	4.64926 +02	30	26	-5.76829 -03	27	-2.58393 -02		
-10	-14	2.54325 +02	-13	2.73027 +02	31	27	-5.76829 -03	28	-2.58393 -02		
-9	-13	1.40390 +02	-12	1.57225 +02	32	28	-5.76829 -03	29	-2.58393 -02		
-8	-12	7.36476 +01	-11	8.78476 +01	33	29	-5.76830 -03	30	-2.58393 -02		
-7	-11	3.61352 +01	-10	4.69618 +01	34	30	-5.76830 -03	31	-2.58393 -02		
-6	-10	1.64891 +01	-9	2.36748 +01	35	31	-5.76830 -03	32	-2.58393 -02		
-5	-9	7.09107 +00	-8	1.11800 +01	36	32	-5.76830 -03	33	-2.58393 -02		
-4	-8	2.94846 +00	-7	4.99443 +00	37	33	-5.76830 -03	34	-2.58394 -02		
-3	-7	1.21364 +00	-6	2.16039 +00	38	34	-5.76830 -03	35	-2.58394 -02		
-2	-6	5.02227 -01	-5	9.25659 -01	39	35	-5.76830 -03	36	-2.58394 -02		
-1	-5	2.10594 -01	-4	3.97255 -01	40	36	-5.76830 -03	37	-2.58394 -02		
0	-4	8.94767 -02	-3	1.69386 -01							

Table 20
 $G(u_s, u_B)$ Function

u_s		$\gamma = 7.39 \cdot 10^0$		$\gamma = 2.72 \cdot 10^0$		u_s		$\gamma = 7.39 \cdot 10^0$		$\gamma = 2.72 \cdot 10^0$			
		Y	$u_B = 2$	Y	$u_B = 1$			Y	$u_B = 2$	Y	$u_B = 1$		
-40	-42	9.70330	+08	-41	9.70330	+08	1	-1	9.75316	-02	0	0.00000	-00
-39	-41	5.88535	+08	-40	5.88535	+08	2	0	0.00000	-00	1	-2.11204	-01
-38	-40	3.56964	+08	-39	3.56964	+08	3	1	-4.91029	-02	2	-3.33243	-01
-37	-39	2.16510	+08	-38	2.16510	+08	4	2	-7.69336	-02	3	-4.02840	-01
-36	-38	1.31319	+08	-37	1.31319	+08	5	3	-9.26353	-02	4	-4.43544	-01
-35	-37	7.96495	+07	-36	7.96495	+07	6	4	-1.01767	-01	5	-4.67751	-01
-34	-36	4.83098	+07	-35	4.83099	+07	7	5	-1.07182	-01	6	-4.82289	-01
-33	-35	2.93014	+07	-34	2.93014	+07	8	6	-1.10429	-01	7	-4.91064	-01
-32	-34	1.77722	+07	-33	1.77722	+07	9	7	-1.12389	-01	8	-4.96375	-01
-31	-33	1.07793	+07	-32	1.07793	+07	10	8	-1.13574	-01	9	-4.99594	-01
-30	-32	6.53802	+06	-31	6.53802	+06	11	9	-1.14292	-01	10	-5.01545	-01
-29	-31	3.96550	+06	-30	3.96551	+06	12	10	-1.14727	-01	11	-5.02728	-01
-28	-30	2.40519	+06	-29	2.40520	+06	13	11	-1.14991	-01	12	-5.03446	-01
-27	-29	1.45882	+06	-28	1.45882	+06	14	12	-1.15152	-01	13	-5.03881	-01
-26	-28	8.84813	+05	-27	8.84821	+05	15	13	-1.15249	-01	14	-5.04145	-01
-25	-27	5.36661	+05	-26	5.36668	+05	16	14	-1.15308	-01	15	-5.04305	-01
-24	-26	3.25496	+05	-25	3.25503	+05	17	15	-1.15343	-01	16	-5.04402	-01
-23	-25	1.97418	+05	-24	1.97425	+05	18	16	-1.15365	-01	17	-5.04461	-01
-22	-24	1.19735	+05	-23	1.19742	+05	19	17	-1.15378	-01	18	-5.04497	-01
-21	-23	7.26180	+04	-22	7.26251	+04	20	18	-1.15386	-01	19	-5.04519	-01
-20	-22	4.40399	+04	-21	4.40471	+04	21	19	-1.15391	-01	20	-5.04532	-01
-19	-21	2.67064	+04	-20	2.67136	+04	22	20	-1.15394	-01	21	-5.04540	-01
-18	-20	1.61931	+04	-19	1.62003	+04	23	21	-1.15396	-01	22	-5.04545	-01
-17	-19	9.81655	+03	-18	9.82372	+03	24	22	-1.15397	-01	23	-5.04547	-01
-16	-18	5.94895	+03	-17	5.95610	+03	25	23	-1.15397	-01	24	-5.04549	-01
-15	-17	3.60314	+03	-16	3.61028	+03	26	24	-1.15398	-01	25	-5.04550	-01
-14	-16	2.18036	+03	-15	2.18747	+03	27	25	-1.15398	-01	26	-5.04551	-01
-13	-15	1.31744	+03	-14	1.32451	+03	28	26	-1.15398	-01	27	-5.04551	-01
-12	-14	7.94115	+02	-13	8.01114	+02	29	27	-1.15398	-01	28	-5.04552	-01
-11	-13	4.76785	+02	-12	4.83684	+02	30	28	-1.15398	-01	29	-5.04552	-01
-10	-12	2.84449	+02	-11	2.91191	+02	31	29	-1.15398	-01	30	-5.04552	-01
-9	-11	1.67987	+02	-10	1.74496	+02	32	30	-1.15398	-01	31	-5.04552	-01
-8	-10	9.76380	+01	-9	1.03801	+02	33	31	-1.15398	-01	32	-5.04552	-01
-7	-9	5.53826	+01	-8	6.10432	+01	34	32	-1.15398	-01	33	-5.04552	-01
-6	-8	3.03191	+01	-7	3.52758	+01	35	33	-1.15398	-01	34	-5.04552	-01
-5	-7	1.58316	+01	-6	1.98690	+01	36	34	-1.15398	-01	35	-5.04552	-01
-4	-6	7.83078	+00	-5	1.07984	+01	37	35	-1.15398	-01	36	-5.04552	-01
-3	-5	3.68534	+00	-4	5.59860	+00	38	36	-1.15398	-01	37	-5.04552	-01
-2	-4	1.67177	+00	-3	2.72649	+00	39	37	-1.15398	-01	38	-5.04552	-01
-1	-3	7.34045	-01	-2	1.19882	+00	40	38	-1.15398	-01	39	-5.04552	-01
0	-2	3.01294	-01	-1	4.04309	-01							

Table 21
 $G(u_s, u_B)$ Function

u_s	$\gamma = 1.0 \cdot 10^0$		$\gamma = 3.68 \cdot 10^{-1}$		u_s	$\gamma = 1.0 \cdot 10^0$		$\gamma = 3.68 \cdot 10^{-1}$	
	Y	$u_B = 0$	Y	$u_B = -1$		Y	$u_B = 0$	Y	$u_B = -1$
-40	-40	9.70330 +08	-39	9.70330 +08	1	1	-7.53605 -01	2	-3.05462 +00
-39	-39	5.88535 +08	-38	5.88535 +08	2	2	-1.23090 +00	3	-3.96991 +00
-38	-38	3.56964 +08	-37	3.56964 +08	3	3	-1.52040 +00	4	-4.60464 +00
-37	-37	2.16510 +08	-36	2.16510 +08	4	4	-1.69599 +00	5	-5.02881 +00
-36	-36	1.31319 +08	-35	1.31319 +08	5	5	-1.80249 +00	6	-5.30176 +00
-35	-35	7.96495 +07	-34	7.96495 +07	6	6	-1.86709 +00	7	-5.47262 +00
-34	-34	4.83099 +07	-33	4.83099 +07	7	7	-1.90627 +00	8	-5.57784 +00
-33	-33	2.93014 +07	-32	2.93014 +07	8	8	-1.93003 +00	9	-5.64210 +00
-32	-32	1.77722 +07	-31	1.77722 +07	9	9	-1.94444 +00	10	-5.68120 +00
-31	-31	1.07794 +07	-30	1.07794 +07	10	10	-1.95319 +00	11	-5.70494 +00
-30	-30	6.53803 +06	-29	6.53803 +06	11	11	-1.95849 +00	12	-5.71935 +00
-29	-29	3.96551 +06	-28	3.96551 +06	12	12	-1.96170 +00	13	-5.72809 +00
-28	-28	2.40520 +06	-27	2.40520 +06	13	13	-1.96366 +00	14	-5.73339 +00
-27	-27	1.45883 +06	-26	1.45883 +06	14	14	-1.96484 +00	15	-5.73661 +00
-26	-26	8.84824 +05	-25	8.84826 +05	15	15	-1.96556 +00	16	-5.73856 +00
-25	-25	5.36672 +05	-24	5.36674 +05	16	16	-1.96599 +00	17	-5.73974 +00
-24	-24	3.25507 +05	-23	3.25509 +05	17	17	-1.96626 +00	18	-5.74046 +00
-23	-23	1.97429 +05	-22	1.97431 +05	18	18	-1.96642 +00	19	-5.74089 +00
-22	-22	1.19746 +05	-21	1.19747 +05	19	19	-1.96651 +00	20	-5.74116 +00
-21	-21	7.26289 +04	-20	7.26304 +04	20	20	-1.96657 +00	21	-5.74132 +00
-20	-20	4.40509 +04	-19	4.40523 +04	21	21	-1.96661 +00	22	-5.74141 +00
-19	-19	2.67174 +04	-18	2.67188 +04	22	22	-1.96663 +00	23	-5.74147 +00
-18	-18	1.62041 +04	-17	1.62055 +04	23	23	-1.96664 +00	24	-5.74151 +00
-17	-17	9.82750 +03	-16	9.82894 +03	24	24	-1.96665 +00	25	-5.74153 +00
-16	-16	5.95988 +03	-15	5.96131 +03	25	25	-1.96665 +00	26	-5.74154 +00
-15	-15	3.61405 +03	-14	3.61547 +03	26	26	-1.96666 +00	27	-5.74155 +00
-14	-14	2.19123 +03	-13	2.19264 +03	27	27	-1.96666 +00	28	-5.74155 +00
-13	-13	1.32825 +03	-12	1.32965 +03	28	28	-1.96666 +00	29	-5.74155 +00
-12	-12	8.04824 +02	-11	8.06200 +02	29	29	-1.96666 +00	30	-5.74156 +00
-11	-11	4.87350 +02	-10	4.88590 +02	30	30	-1.96666 +00	31	-5.74156 +00
-10	-10	2.94793 +02	-9	2.96080 +02	31	31	-1.96666 +00	32	-5.74156 +00
-9	-9	1.78000 +02	-8	1.79211 +02	32	32	-1.96666 +00	33	-5.74156 +00
-8	-8	1.07163 +02	-7	1.08264 +02	33	33	-1.96666 +00	34	-5.74156 +00
-7	-7	6.41975 +01	-6	6.51447 +01	34	34	-1.96666 +00	35	-5.74156 +00
-6	-6	3.81377 +01	-5	3.88749 +01	35	35	-1.96666 +00	36	-5.74156 +00
-5	-5	2.23316 +01	-4	2.27916 +01	36	36	-1.96666 +00	37	-5.74156 +00
-4	-4	1.27447 +01	-3	1.28528 +01	37	37	-1.96666 +00	38	-5.74156 +00
-3	-3	6.93004 +00	-2	6.61198 +00	38	38	-1.96666 +00	39	-5.74156 +00
-2	-2	3.40323 +00	-1	2.59584 +00	39	39	-1.96666 +00	40	-5.74156 +00
-1	-1	1.26410 +00	0	0.00000 -00	40	40	-1.96666 +00	41	-5.74156 +00
0	0	0.00000 -00	-1	-1.76164 +00					

Table 22
 $G(u_s, u_B)$ Function

u_s		$\gamma = 1.35 \cdot 10^{-1}$		$\gamma = 4.98 \cdot 10^{-2}$		u_s		$\gamma = 1.35 \cdot 10^{-1}$		$\gamma = 4.98 \cdot 10^{-2}$			
		Y	$u_B = -2$	Y	$u_B = -3$			Y	$u_B = -2$	Y	$u_B = -3$		
-40	-38	9.70330	+08	-37	9.70330	+08	1	3	-7.46081	+00	4	-1.52775	+01
-39	-37	5.88535	+08	-36	5.88535	+08	2	4	-8.97200	+00	5	-1.75783	+01
-38	-36	3.56964	+08	-35	3.56964	+08	3	5	-1.01681	+01	6	-1.95565	+01
-37	-35	2.16510	+08	-34	2.16510	+08	4	6	-1.10782	+01	7	-2.12312	+01
-36	-34	1.31319	+08	-33	1.31319	+08	5	7	-1.17281	+01	8	-2.25831	+01
-35	-33	7.96495	+07	-32	7.96495	+07	6	8	-1.21631	+01	9	-2.35948	+01
-34	-32	4.83099	+07	-31	4.83099	+07	7	9	-1.24407	+01	10	-2.42928	+01
-33	-31	2.93014	+07	-30	2.93014	+07	8	10	-1.26232	+01	11	-2.47454	+01
-32	-30	1.77722	+07	-29	1.77722	+07	9	11	-1.27189	+01	12	-2.50285	+01
-31	-29	1.07794	+07	-28	1.07794	+07	10	12	-1.27833	+01	13	-2.52024	+01
-30	-28	6.53803	+06	-27	6.53803	+06	11	13	-1.28224	+01	14	-2.53085	+01
-29	-27	3.96551	+06	-26	3.96551	+06	12	14	-1.28462	+01	15	-2.53731	+01
-28	-26	2.40520	+06	-25	2.40520	+06	13	15	-1.28506	+01	16	-2.54122	+01
-27	-25	1.45883	+06	-24	1.45883	+06	14	16	-1.28593	+01	17	-2.54360	+01
-26	-24	8.84826	+05	-23	8.84826	+05	15	17	-1.28747	+01	18	-2.54504	+01
-25	-23	5.36674	+05	-22	5.36674	+05	16	18	-1.28779	+01	19	-2.54591	+01
-24	-22	3.25509	+05	-21	3.25509	+05	17	19	-1.28798	+01	20	-2.54644	+01
-23	-21	1.97431	+05	-20	1.97431	+05	18	20	-1.28810	+01	21	-2.54676	+01
-22	-20	1.19748	+05	-19	1.19748	+05	19	21	-1.28817	+01	22	-2.54696	+01
-21	-19	7.26307	+04	-18	7.26307	+04	20	22	-1.28822	+01	23	-2.54708	+01
-20	-18	4.40526	-04	-17	4.40526	+04	21	23	-1.28824	+01	24	-2.54715	+01
-19	-17	2.67192	+04	-16	2.67191	+04	22	24	-1.28826	+01	25	-2.54719	+01
-18	-16	1.62059	+04	-15	1.62058	+04	23	25	-1.28827	+01	26	-2.54722	+01
-17	-15	9.82927	+03	-14	9.82924	+03	24	26	-1.28827	+01	27	-2.54723	+01
-16	-14	5.96163	+03	-13	5.96158	+03	25	27	-1.28828	+01	28	-2.54724	+01
-15	-13	3.61578	+03	-12	3.61570	+03	26	28	-1.28828	+01	29	-2.54725	+01
-14	-12	2.19293	+03	-11	2.19281	+03	27	29	-1.28828	+01	30	-2.54725	+01
-13	-11	1.32990	+03	-10	1.32971	+03	28	30	-1.28828	+01	31	-2.54726	+01
-12	-10	8.06415	+02	-9	8.06123	+02	29	31	-1.28828	+01	32	-2.54726	+01
-11	-9	4.88842	+02	-8	4.88409	+02	30	32	-1.28828	+01	33	-2.54726	+01
-10	-8	2.96141	+02	-7	2.95507	+02	31	33	-1.28828	+01	34	-2.54726	+01
-9	-7	1.79143	-02	-6	1.78232	+02	32	34	-1.28828	+01	35	-2.54726	+01
-8	-6	1.08017	+02	-5	1.06734	+02	33	35	-1.28828	+01	36	-2.54726	+01
-7	-5	6.46585	+01	-4	6.28958	+01	34	35	-1.28828	+01	37	-2.54726	+01
-6	-4	3.80777	-01	-3	3.57225	+01	35	37	-1.28828	+01	38	-2.54726	+01
-5	-3	2.16077	+01	-2	1.85555	+01	36	38	-1.28828	+01	39	-2.54726	+01
-4	-2	1.12103	+01	-1	7.37885	+00	37	39	-1.28828	+01	40	-2.54726	+01
-3	-1	4.45071	-00	0	0.00000	-00	38	40	-1.28828	+01	41	-2.54726	+01
-2	0	0.00000	-00	1	-5.21615	+00	39	41	-1.28828	+01	42	-2.54726	+01
-1	1	-3.12904	+00	2	-9.31627	+00	40	42	-1.28828	+01	43	-2.54726	+01
0	2	-5.56374	+00	3	-1.25762	+01							

Table 23
 $G(u_s, u_B)$ Function

u_s	$\gamma = 1.83 \cdot 10^{-2}$		$\gamma = 6.74 \cdot 10^{-3}$		u_s	$\gamma = 1.83 \cdot 10^{-2}$		$\gamma = 6.74 \cdot 10^{-3}$	
	Y	$u_B = -4$	Y	$u_B = -5$		Y	$u_B = -4$	Y	$u_B = -5$
-40	-36	9.70330 +08	-35	9.70330 +08	1	5	-2.91979 +01	6	-5.39061 +01
-39	-35	5.88535 +08	-34	5.88535 +08	2	6	-3.26389 +01	7	-5.90828 +01
-38	-34	3.56964 +08	-33	3.56964 +08	3	7	-3.57248 +01	8	-6.38313 +01
-37	-33	2.16510 +08	-32	2.16510 +08	4	8	-3.84949 +01	9	-6.82149 +01
-36	-32	1.31319 +08	-31	1.31319 +08	5	9	-4.09350 +01	10	-7.22500 +01
-35	-31	7.96495 +07	-30	7.96495 +07	6	10	-4.29826 +01	11	-7.58937 +01
-34	-30	4.83099 +07	-29	4.83099 +07	7	11	-4.45693 +01	12	-7.90348 +01
-33	-29	2.93014 +07	-28	2.93014 +07	8	12	-4.56918 +01	13	-8.15356 +01
-32	-28	1.77722 +07	-27	1.77722 +07	9	13	-4.64301 +01	14	-8.33436 +01
-31	-27	1.07794 +07	-26	1.07794 +07	10	14	-4.68948 +01	15	-8.45482 +01
-30	-26	6.53803 +06	-25	6.53803 +06	11	15	-4.71812 +01	16	-8.53112 +01
-29	-25	3.96551 +06	-24	3.96551 +06	12	16	-4.73560 +01	17	-8.57827 +01
-28	-24	2.40520 +06	-23	2.40520 +06	13	17	-4.74624 +01	18	-8.60707 +01
-27	-23	1.45883 +06	-22	1.45883 +06	14	18	-4.75269 +01	19	-8.62460 +01
-26	-22	8.84826 +05	-21	8.84826 +05	15	19	-4.75661 +01	20	-8.63524 +01
-25	-21	5.36674 +05	-20	5.36674 +05	16	20	-4.75898 +01	21	-8.64170 +01
-24	-20	3.25509 +05	-19	3.25509 +05	17	21	-4.76043 +01	22	-8.64562 +01
-23	-19	1.97431 +05	-18	1.97430 +05	18	22	-4.76130 +01	23	-8.64799 +01
-22	-18	1.19747 +05	-17	1.19747 +05	19	23	-4.76183 +01	24	-8.64943 +01
-21	-17	7.26306 +04	-16	7.26303 +04	20	24	-4.76215 +01	25	-8.65031 +01
-20	-16	4.40525 +04	-15	4.40522 +04	21	25	-4.76235 +01	26	-8.65084 +01
-19	-15	2.67190 +04	-14	2.67187 +04	22	26	-4.76247 +01	27	-8.65116 +01
-18	-14	1.62057 +04	-13	1.62053 +04	23	27	-4.76254 +01	28	-8.65136 +01
-17	-13	9.82902 +03	-12	9.82857 +03	24	28	-4.76258 +01	29	-8.65147 +01
-16	-12	5.96132 +03	-11	5.96074 +03	25	29	-4.76261 +01	30	-8.65155 +01
-15	-11	3.61536 +03	-10	3.61460 +03	26	30	-4.76262 +01	31	-8.65159 +01
-14	-10	2.19236 +03	-9	2.19133 +03	27	31	-4.76263 +01	32	-8.65162 +01
-13	-9	1.32910 +03	-8	1.32769 +03	28	32	-4.76264 +01	33	-8.65163 +01
-12	-8	8.05284 +02	-7	8.03333 +02	29	33	-4.76264 +01	34	-8.65164 +01
-11	-7	4.87242 +02	-6	4.84544 +02	30	34	-4.76264 +01	35	-8.65165 +01
-10	-6	2.93886 +02	-5	2.90189 +02	31	35	-4.76265 +01	36	-8.65165 +01
-9	-5	1.76004 +02	-4	1.71017 +02	32	36	-4.76265 +01	37	-8.65165 +01
-8	-4	1.03723 +02	-3	9.71450 +01	33	37	-4.76265 +01	38	-8.65165 +01
-7	-3	5.89185 +01	-2	5.04699 +01	34	38	-4.76265 +01	39	-8.65166 +01
-6	-2	3.06093 +01	-1	2.00750 +01	35	39	-4.76265 +01	40	-8.65166 +01
-5	-1	1.21749 +01	0	0.00000 -00	36	40	-4.76265 +01	41	-8.65166 +01
-4	0	0.00000 -00	1	-1.42033 +01	37	41	-4.76265 +01	42	-8.65166 +01
-3	1	-8.61301 +00	2	-2.53859 +01	38	42	-4.76265 +01	43	-8.65166 +01
-2	2	-1.53928 +01	3	-3.43069 +01	39	43	-4.76265 +01	44	-8.65166 +01
-1	3	-2.07994 +01	4	-4.17515 +01	40	44	-4.76265 +01	45	-8.65166 +01
0	4	-2.53072 +01	5	-4.81889 +01					

Table 24
 $G(u_s, u_B)$ Function

u_s		$\gamma = 2.48 \cdot 10^{-3}$		$\gamma = 9.12 \cdot 10^{-4}$		u_s		$\gamma = 2.48 \cdot 10^{-3}$		$\gamma = 9.12 \cdot 10^{-4}$			
		Y	$u_B = -6$	Y	$u_B = -7$			Y	$u_B = -6$	Y	$u_B = -7$		
-40	-34	9.70330	+08	-33	9.70330	+08	1	7	-9.74527	+01	8	-1.73670	+02
-39	-33	5.88535	+08	-32	5.88535	+08	2	8	-1.05325	+02	9	-1.85763	+02
-38	-32	3.56964	+08	-31	3.56964	+08	3	9	-1.12646	+02	10	-1.97118	+02
-37	-31	2.16510	+08	-30	2.16510	+08	4	10	-1.19504	+02	11	-2.07848	+02
-36	-30	1.31319	+08	-29	1.31319	+08	5	11	-1.25945	+02	12	-2.18029	+02
-35	-29	7.96495	+07	-28	7.96495	+07	6	12	-1.31969	+02	13	-2.27700	+02
-34	-28	4.83099	+07	-27	4.83099	+07	7	13	-1.37501	+02	14	-2.36843	+02
-33	-27	2.93014	+07	-26	2.93014	+07	8	14	-1.42364	+02	15	-2.45340	+02
-32	-26	1.77722	+07	-25	1.77722	+07	9	15	-1.46321	+02	16	-2.52924	+02
-31	-25	1.07794	+07	-24	1.07794	+07	10	16	-1.49236	+02	17	-2.59205	+02
-30	-24	6.53803	+06	-23	6.53803	+06	11	17	-1.51202	+02	18	-2.63910	+02
-29	-23	3.96551	+06	-22	3.96551	+06	12	18	-1.52455	+02	19	-2.67119	+02
-28	-22	2.40520	+06	-21	2.40520	+06	13	19	-1.53231	+02	20	-2.69177	+02
-27	-21	1.45883	+06	-20	1.45883	+06	14	20	-1.53706	+02	21	-2.70454	+02
-26	-20	8.84825	+05	-19	8.84825	+05	15	21	-1.53995	+02	22	-2.71236	+02
-25	-19	5.36673	+05	-18	5.36673	+05	16	22	-1.54170	+02	23	-2.71712	+02
-24	-18	3.25508	+05	-17	3.25507	+05	17	23	-1.54277	+02	24	-2.72002	+02
-23	-17	1.97430	+05	-16	1.97429	+05	18	24	-1.54341	+02	25	-2.72177	+02
-22	-16	1.19747	+05	-15	1.19746	+05	19	25	-1.54380	+02	26	-2.72284	+02
-21	-15	7.26298	+04	-14	7.26289	+04	20	26	-1.54404	+02	27	-2.72387	+02
-20	-14	4.40517	+04	-13	4.40506	+04	21	27	-1.54418	+02	28	-2.72441	+02
-19	-13	2.67180	+04	-12	2.67168	+04	22	28	-1.54427	+02	29	-2.72487	+02
-18	-12	1.62045	+04	-11	1.62029	+04	23	29	-1.54433	+02	30	-2.72426	+02
-17	-11	9.82760	+03	-10	9.82552	+03	24	30	-1.54436	+02	31	-2.72434	+02
-16	-10	5.95948	+03	-9	5.95667	+03	25	31	-1.54438	+02	32	-2.72440	+02
-15	-9	3.61290	+03	-8	3.60906	+03	26	32	-1.54439	+02	33	-2.72443	+02
-14	-8	2.18900	+03	-7	2.18369	+03	27	33	-1.54440	+02	34	-2.72445	+02
-13	-7	1.32447	+03	-6	1.31713	+03	28	34	-1.54440	+02	35	-2.72446	+02
-12	-6	7.98879	+02	-5	7.88818	+02	29	35	-1.54440	+02	36	-2.72447	+02
-11	-5	4.78442	+02	-4	4.64876	+02	30	36	-1.54440	+02	37	-2.72447	+02
-10	-4	2.81961	+02	-3	2.64069	+02	31	37	-1.54441	+02	38	-2.72447	+02
-9	-3	1.60166	+02	-2	1.37193	+02	32	38	-1.54441	+02	39	-2.72448	+02
-8	-2	8.32117	+01	-1	5.45706	+01	33	39	-1.54441	+02	40	-2.72448	+02
-7	-1	3.30986	+01	0	0.00000	-00	34	40	-1.54441	+02	41	-2.72448	+02
-6	0	0.00000	-00	1	-3.86099	+01	35	41	-1.54441	+02	42	-2.72448	+02
-5	1	-2.34180	+01	2	-6.90092	+01	36	42	-1.54441	+02	43	-2.72448	+02
-4	2	-4.18560	+01	3	-9.32621	+01	37	43	-1.54441	+02	44	-2.72448	+02
-3	3	-5.65658	+01	4	-1.13503	+02	38	44	-1.54441	+02	45	-2.72448	+02
-2	4	-6.88426	+01	5	-1.31011	+02	39	45	-1.54441	+02	46	-2.72448	+02
-1	5	-7.94612	+01	6	-1.46571	+02	40	46	-1.54441	+02	47	-2.72448	+02
0	6	-8.88973	+01	7	-1.60681	+02							

Table 25
 $G(u_s, u_B)$ Function

u_s		$\gamma = 3.35 \cdot 10^{-4}$		$\gamma = 1.23 \cdot 10^{-4}$		u_s		$\gamma = 3.35 \cdot 10^{-4}$		$\gamma = 1.23 \cdot 10^{-4}$			
		Y	$u_B = -8$	Y	$u_B = -9$			Y	$u_B = -8$	Y	$u_B = -9$		
-40	-32	9.70330	+08	-31	9.70330	+08	1	9	-3.06281	+02	10	-5.35860	+02
-39	-31	5.88535	+08	-30	5.88535	+08	2	10	-3.25012	+02	11	-5.65073	+02
-38	-30	3.56964	+08	-29	3.56964	+08	3	11	-3.42728	+02	12	-5.92859	+02
-37	-29	2.16510	+08	-28	2.16510	+08	4	12	-3.59573	+02	13	-6.19405	+02
-36	-28	1.31319	+08	-27	1.31319	+08	5	13	-3.75655	+02	14	-6.44859	+02
-35	-27	7.96495	+07	-26	7.96495	+07	6	14	-3.91049	+02	15	-6.69334	+02
-34	-26	4.83099	+07	-25	4.83099	+07	7	15	-4.05786	+02	16	-6.92909	+02
-33	-25	2.93014	+07	-24	2.93014	+07	8	16	-4.19826	+02	17	-7.15608	+02
-32	-24	1.77722	+07	-23	1.77722	+07	9	17	-4.32994	+02	18	-7.37362	+02
-31	-23	1.07793	+07	-22	1.07793	+07	10	18	-4.44886	+02	19	-7.57908	+02
-30	-22	6.53803	+06	-21	6.53803	+06	11	19	-4.54884	+02	20	-7.76643	+02
-29	-21	3.96551	+06	-20	3.96551	+06	12	20	-4.62485	+02	21	-7.92594	+02
-28	-20	2.40520	+06	-19	2.40520	+06	13	21	-4.67726	+02	22	-8.04885	+02
-27	-19	1.45883	+06	-18	1.45882	+06	14	22	-4.71104	+02	23	-8.13443	+02
-26	-18	8.84824	+05	-17	8.84822	+05	15	23	-4.73207	+02	24	-8.18990	+02
-25	-17	5.36671	+05	-16	5.36669	+05	16	24	-4.74495	+02	25	-8.22452	+02
-24	-16	3.25506	+05	-15	3.25504	+05	17	25	-4.75280	+02	26	-8.24575	+02
-23	-15	1.97428	+05	-14	1.97426	+05	18	26	-4.75757	+02	27	-8.25869	+02
-22	-14	1.19745	+05	-13	1.19742	+05	19	27	-4.76047	+02	28	-8.26655	+02
-21	-13	7.26272	+04	-12	7.26238	+04	20	28	-4.76222	+02	29	-8.27132	+02
-20	-12	4.40486	+04	-11	4.40442	+04	21	29	-4.76329	+02	30	-8.27422	+02
-19	-11	2.67142	+04	-10	2.67085	+04	22	30	-4.76393	+02	31	-8.27597	+02
-18	-10	1.61995	+04	-9	1.61919	+04	23	31	-4.76432	+02	32	-8.27704	+02
-17	-9	9.82089	+03	-8	9.81044	+03	24	32	-4.76456	+02	33	-8.27769	+02
-16	-8	5.95033	+03	-7	5.93588	+03	25	33	-4.76471	+02	34	-8.27808	+02
-15	-7	3.60029	+03	-6	3.58033	+03	26	34	-4.76479	+02	35	-8.27831	+02
-14	-6	2.17158	+03	-5	2.14423	+03	27	35	-4.76485	+02	36	-8.27846	+02
-13	-5	1.30054	+03	-4	1.26366	+03	28	36	-4.76488	+02	37	-8.27855	+02
-12	-4	7.66451	+02	-3	7.17816	+02	29	37	-4.76490	+02	38	-8.27860	+02
-11	-3	4.35377	+02	-2	3.72929	+02	30	38	-4.76491	+02	39	-8.27863	+02
-10	-2	2.26193	+02	-1	1.48338	+02	31	39	-4.76492	+02	40	-8.27865	+02
-9	-1	8.99717	+01	0	0.00000	-00	32	40	-4.76492	+02	41	-8.27866	+02
-8	0	0.00000	-00	1	-1.04952	+02	33	41	-4.76492	+02	42	-8.27867	+02
-7	1	-6.36571	+01	2	-1.87586	+02	34	42	-4.76493	+02	43	-8.27867	+02
-6	2	-1.13777	+02	3	-2.53513	+02	35	43	-4.76493	+02	44	-8.27868	+02
-5	3	-1.53763	+02	4	-3.08535	+02	36	44	-4.76493	+02	45	-8.27868	+02
-4	4	-1.87136	+02	5	-3.56128	+02	37	45	-4.76493	+02	46	-8.27868	+02
-3	5	-2.16002	+02	6	-3.98425	+02	38	46	-4.76493	+02	47	-8.27868	+02
-2	6	-2.41656	+02	7	-4.36782	+02	39	47	-4.76493	+02	48	-8.27868	+02
-1	7	-2.64921	+02	8	-4.72093	+02	40	48	-4.76493	+02	49	-8.27868	+02
0	8	-2.86338	+02	9	-5.04974	+02							

Table 26
 $G(u_s, u_B)$ Function

u_s		$\gamma = 4.54 \cdot 10^{-5}$		$\gamma = 1.67 \cdot 10^{-5}$		u_s		$\gamma = 4.54 \cdot 10^{-5}$		$\gamma = 1.67 \cdot 10^{-5}$	
		Y	$u_B = -10$	Y	$u_B = -11$			Y	$u_B = -10$	Y	$u_B = -11$
-40	-30	9.70330 +08	-29	9.70330 +08	1	11	-9.31651 +02	12	-1.61156 +03		
-39	-29	5.88535 +08	-28	5.88535 +08	2	12	-9.77464 +02	13	-1.68374 +03		
-38	-28	3.56964 +08	-27	3.56964 +08	3	13	-1.02123 +03	14	-1.75296 +03		
-37	-27	2.16510 +08	-26	2.16510 +08	4	14	-1.06322 +03	15	-1.81956 +03		
-36	-26	1.31319 +08	-25	1.31319 +08	5	15	-1.10361 +03	16	-1.88383 +03		
-35	-25	7.96495 +07	-24	7.96495 +07	6	16	-1.14258 +03	17	-1.94598 +03		
-34	-24	4.83099 +07	-23	4.83099 +07	7	17	-1.18024 +03	18	-2.00621 +03		
-33	-23	2.93014 +07	-22	2.93014 +07	8	18	-1.21669 +03	19	-2.06465 +03		
-32	-22	1.77722 +07	-21	1.77722 +07	9	19	-1.25194 +03	20	-2.12142 +03		
-31	-21	1.07793 +07	-20	1.07793 +07	10	20	-1.28588 +03	21	-2.17651 +03		
-30	-20	6.53802 +06	-19	6.53802 +06	11	21	-1.31811 +03	22	-2.22975 +03		
-29	-19	3.96551 +06	-18	3.96550 +06	12	22	-1.34774 +03	23	-2.28055 +03		
-28	-18	2.40520 +06	-17	2.40519 +06	13	23	-1.37324 +03	24	-2.32756 +03		
-27	-17	1.45882 +06	-16	1.45882 +06	14	24	-1.39313 +03	25	-2.36840 +03		
-26	-16	8.84819 +05	-15	8.84813 +05	15	25	-1.40711 +03	26	-2.40061 +03		
-25	-15	5.36666 +05	-14	5.36659 +05	16	26	-1.41622 +03	27	-2.42344 +03		
-24	-14	3.25500 +05	-13	3.25492 +05	17	27	-1.42192 +03	28	-2.43840 +03		
-23	-13	1.97421 +05	-12	1.97412 +05	18	28	-1.42542 +03	29	-2.44778 +03		
-22	-12	1.19736 +05	-11	1.19724 +05	19	29	-1.42755 +03	30	-2.45355 +03		
-21	-11	7.26167 +04	-10	7.26013 +04	20	30	-1.42884 +03	31	-2.45707 +03		
-20	-10	4.40349 +04	-9	4.40142 +04	21	31	-1.42963 +03	32	-2.45920 +03		
-19	-9	2.66959 +04	-8	2.66675 +04	22	32	-1.43011 +03	33	-2.46050 +03		
-18	-8	1.61746 +04	-7	1.61354 +04	23	33	-1.43040 +03	34	-2.46129 +03		
-17	-7	9.78662 +03	-6	9.73235 +03	24	34	-1.43057 +03	35	-2.46176 +03		
-16	-6	5.90297 +03	-5	5.82862 +03	25	35	-1.43068 +03	36	-2.46205 +03		
-15	-5	3.53524 +03	-4	3.43499 +03	26	36	-1.43074 +03	37	-2.46223 +03		
-14	-4	2.08343 +03	-3	1.95122 +03	27	37	-1.43078 +03	38	-2.46234 +03		
-13	-3	1.18347 +03	-2	1.01372 +03	28	38	-1.43081 +03	39	-2.46240 +03		
-12	-2	6.14857 +02	-1	4.03225 +02	29	39	-1.43082 +03	40	-2.46244 +03		
-11	-1	2.44568 +02	0	0.00000 -00	30	40	-1.43083 +03	41	-2.46246 +03		
-10	0	0.00000 -00	1	-2.85291 +02	31	41	-1.43084 +03	42	-2.46248 +03		
-9	1	-1.73038 +02	2	-5.09914 +02	32	42	-1.43084 +03	43	-2.46249 +03		
-8	2	-3.09278 +02	3	-6.89119 +02	33	43	-1.43084 +03	44	-2.46249 +03		
-7	3	-4.17972 +02	4	-8.38686 +02	34	44	-1.43084 +03	45	-2.46249 +03		
-6	4	-5.08689 +02	5	-9.68056 +02	35	45	-1.43084 +03	46	-2.46250 +03		
-5	5	-5.87156 +02	6	-1.08303 +03	36	46	-1.43084 +03	47	-2.46250 +03		
-4	6	-6.56892 +02	7	-1.18729 +03	37	47	-1.43084 +03	48	-2.46250 +03		
-3	7	-7.20132 +02	8	-1.28328 +03	38	48	-1.43084 +03	49	-2.46250 +03		
-2	8	-7.78351 +02	9	-1.37266 +03	39	49	-1.43084 +03	50	-2.46250 +03		
-1	9	-8.32561 +02	10	-1.45662 +03	40	50	-1.43084 +03	51	-2.46250 +03		
0	10	-8.83484 +02	11	-1.53603 +03							

Table 27
 $G(u_s, u_B)$ Function

u_s		$\gamma = 6.14 \cdot 10^{-6}$		$\gamma = 2.26 \cdot 10^{-6}$		u_s		$\gamma = 6.14 \cdot 10^{-6}$		$\gamma = 2.26 \cdot 10^{-6}$			
		Y	$u_B = -12$	Y	$u_B = -13$			Y	$u_B = -12$	Y	$u_B = -13$		
-40	-28	9.70330	+08	-27	9.70330	+08	1	13	-2.77601	+03	14	-4.76505	+03
-39	-27	5.88535	+08	-26	5.88535	+08	2	14	-2.89014	+03	15	-4.94610	+03
-38	-26	3.56964	+08	-25	3.56964	+08	3	15	-2.99996	+03	16	-5.12081	+03
-37	-25	2.16510	+08	-24	2.16510	+08	4	16	-3.10592	+03	17	-5.28977	+03
-36	-24	1.31319	+08	-23	1.31319	+08	5	17	-3.20840	+03	18	-5.45354	+03
-35	-23	7.96495	+07	-22	7.96495	+07	6	18	-3.30773	+03	19	-5.61255	+03
-34	-22	4.83098	+07	-21	4.83098	+07	7	19	-3.40417	+03	20	-5.76720	+03
-33	-21	2.93014	+07	-20	2.93014	+07	8	20	-3.49794	+03	21	-5.91782	+03
-32	-20	1.77722	+07	-19	1.77721	+07	9	21	-3.58923	+03	22	-6.06470	+03
-31	-19	1.07793	+07	-18	1.07793	+07	10	22	-3.67816	+03	23	-6.20805	+03
-30	-18	6.53801	+06	-17	6.53800	+06	11	23	-3.76471	+03	24	-6.34802	+03
-29	-17	3.96549	+06	-16	3.96548	+06	12	24	-3.84850	+03	25	-6.48456	+03
-28	-16	2.40518	+06	-15	2.40517	+06	13	25	-3.92895	+03	26	-6.61726	+03
-27	-15	1.45881	+06	-14	1.45879	+06	14	26	-4.00374	+03	27	-6.74479	+03
-26	-14	8.84802	+05	-13	8.84781	+05	15	27	-4.06927	+03	28	-6.85405	+03
-25	-13	5.36647	+05	-12	5.36621	+05	16	28	-4.12146	+03	29	-6.96933	+03
-24	-12	3.25477	+05	-11	3.25445	+05	17	29	-4.15877	+03	30	-7.05393	+03
-23	-11	1.97392	+05	-10	1.97350	+05	18	30	-4.18334	+03	31	-7.11491	+03
-22	-10	1.19699	+05	-9	1.19643	+05	19	31	-4.19878	+03	32	-7.15526	+03
-21	-9	7.25671	+04	-8	7.24899	+04	20	32	-4.20828	+03	33	-7.18068	+03
-20	-8	4.39673	+04	-7	4.38606	+04	21	33	-4.21408	+03	34	-7.19634	+03
-19	-7	2.66028	+04	-6	2.64552	+04	22	34	-4.21760	+03	35	-7.20589	+03
-18	-6	1.60459	+04	-5	1.58438	+04	23	35	-4.21974	+03	36	-7.21170	+03
-17	-5	9.60977	+03	-4	9.33729	+03	24	36	-4.22104	+03	37	-7.21522	+03
-16	-4	5.65335	+03	-3	5.30398	+03	25	37	-4.22182	+03	38	-7.21736	+03
-15	-3	3.21702	+03	-2	2.75559	+03	26	38	-4.22230	+03	39	-7.21856	+03
-14	-2	1.67135	+03	-1	1.09608	+03	27	39	-4.22259	+03	40	-7.21944	+03
-13	-1	6.64896	+02	0	0.00000	-00	28	40	-4.22276	+03	41	-7.21992	+03
-12	0	0.00000	-00	1	-7.75502	+02	29	41	-4.22287	+03	42	-7.22021	+03
-11	1	-4.70366	+02	2	-1.38609	+03	30	42	-4.22294	+03	43	-7.22039	+03
-10	2	-8.40706	+02	3	-1.87322	+03	31	43	-4.22297	+03	44	-7.22049	+03
-9	3	-1.13616	+03	4	-2.27978	+03	32	44	-4.22300	+03	45	-7.22056	+03
-8	4	-1.38276	+03	5	-2.63145	+03	33	45	-4.22301	+03	46	-7.22060	+03
-7	5	-1.59605	+03	6	-2.94398	+03	34	46	-4.22302	+03	47	-7.22062	+03
-6	6	-1.78561	+03	7	-3.22740	+03	35	47	-4.22303	+03	48	-7.22063	+03
-5	7	-1.95752	+03	8	-3.48832	+03	36	48	-4.22303	+03	49	-7.22064	+03
-4	8	-2.11577	+03	9	-3.73128	+03	37	49	-4.22303	+03	50	-7.22065	+03
-3	9	-2.26313	+03	10	-3.95950	+03	38	50	-4.22303	+03	51	-7.22065	+03
-2	10	-2.40156	+03	11	-4.17537	+03	39	51	-4.22303	+03	52	-7.22065	+03
-1	11	-2.53249	+03	12	-4.38759	+03	40	52	-4.22303	+03	53	-7.22065	+03
0	12	-2.65702	+03	13	-4.57688	+03							

Table 28
 $G(u_s, u_B)$ Function

u_s		$\gamma = 8.31 \cdot 10^{-7}$		$\gamma = 3.06 \cdot 10^{-7}$		u_s		$\gamma = 8.31 \cdot 10^{-7}$		$\gamma = 3.06 \cdot 10^{-7}$			
		Y	$u_B = -14$	Y	$u_B = -15$			Y	$u_B = -14$	Y	$u_B = -15$		
-40	-26	9.70330	+08	-25	9.70330	+08	1	15	-8.15475	+03	16	-1.39198	+04
-39	-25	5.88535	+08	-24	5.88535	+08	2	16	-8.44278	+03	17	-1.43791	+04
-38	-24	3.56964	+08	-23	3.56964	+08	3	17	-8.72136	+03	18	-1.48242	+04
-37	-23	2.16509	+08	-22	2.16509	+08	4	18	-8.99137	+03	19	-1.52565	+04
-36	-22	1.31319	+08	-21	1.31319	+08	5	19	-9.25354	+03	20	-1.56769	+04
-35	-21	7.96495	+07	-20	7.96494	+07	6	20	-9.50852	+03	21	-1.60863	+04
-34	-20	4.83098	+07	-19	4.83098	+07	7	21	-9.75688	+03	22	-1.64857	+04
-33	-19	2.93013	+07	-18	2.93013	+07	8	21	-9.99909	+03	23	-1.68757	+04
-32	-18	1.77721	+07	-17	1.77721	+07	9	23	-1.02356	+04	24	-1.72568	+04
-31	-17	1.07793	+07	-16	1.07793	+07	10	24	-1.04667	+04	25	-1.76298	+04
-30	-16	6.53797	+06	-15	6.53793	+06	11	25	-1.06928	+04	26	-1.79950	+04
-29	-15	3.96545	+06	-14	3.96540	+06	12	26	-1.09140	+04	27	-1.83528	+04
-28	-14	2.40514	+06	-13	2.40508	+06	13	27	-1.11302	+04	28	-1.87035	+04
-27	-13	1.45875	+06	-12	1.45868	+06	14	28	-1.13407	+04	29	-1.90469	+04
-26	-12	8.84739	+05	-11	8.84652	+05	15	29	-1.15436	+04	30	-1.93819	+04
-25	-11	5.36569	+05	-10	5.36455	+05	16	30	-1.17342	+04	31	-1.97056	+04
-24	-10	3.25376	+05	-9	3.25223	+05	17	31	-1.19036	+04	32	-2.00107	+04
-23	-9	1.97258	+05	-8	1.97048	+05	18	32	-1.20408	+04	33	-2.02834	+04
-22	-8	1.19515	+05	-7	1.19225	+05	19	33	-1.21405	+04	34	-2.05062	+04
-21	-7	7.23139	+04	-6	7.19129	+04	20	34	-1.22068	+04	35	-2.06692	+04
-20	-6	4.36173	+04	-5	4.30680	+04	21	35	-1.22486	+04	36	-2.07780	+04
-19	-5	2.61220	+04	-4	2.53813	+04	22	36	-1.22744	+04	37	-2.08469	+04
-18	-4	1.53945	+04	-3	1.44177	+04	23	37	-1.22902	+04	38	-2.08894	+04
-17	-3	8.74478	+03	-2	7.49049	+03	24	38	-1.22997	+04	39	-2.09153	+04
-16	-2	4.54321	+03	-1	2.97945	+03	25	39	-1.23055	+04	40	-2.09311	+04
-15	-1	1.80713	+03	0	0.00000	-00	26	40	-1.23091	+04	41	-2.09407	+04
-14	0	0.00000	-00	1	-2.10803	+03	27	41	-1.23112	+04	42	-2.09465	+04
-13	1	-1.27858	+03	2	-3.76778	+03	28	42	-1.23125	+04	43	-2.09500	+04
-12	2	-2.28527	+03	3	-5.09194	+03	29	43	-1.23133	+04	44	-2.09522	+04
-11	3	-3.08842	+03	4	-6.19710	+03	30	44	-1.23138	+04	45	-2.09535	+04
-10	4	-3.75873	+03	5	-7.15302	+03	31	45	-1.23141	+04	46	-2.09543	+04
-9	5	-4.33853	+03	6	-8.00258	+03	32	46	-1.23142	+04	47	-2.09547	+04
-8	6	-4.85381	+03	7	-8.77300	+03	33	47	-1.23143	+04	48	-2.09550	+04
-7	7	-5.32109	+03	8	-9.48225	+03	34	48	-1.23144	+04	49	-2.09552	+04
-6	8	-5.75128	+03	9	-1.01426	+04	35	49	-1.23144	+04	50	-2.09553	+04
-5	9	-6.15184	+03	10	-1.07630	+04	36	50	-1.23145	+04	51	-2.09554	+04
-4	10	-6.52812	+03	11	-1.13498	+04	37	51	-1.23145	+04	52	-2.09554	+04
-3	11	-6.88402	+03	12	-1.19079	+04	38	52	-1.23145	+04	53	-2.09554	+04
-2	12	-7.22254	+03	13	-1.24412	+04	39	53	-1.23145	+04	54	-2.09555	+04
-1	13	-7.54600	+03	14	-1.29527	+04	40	54	-1.23145	+04	55	-2.09555	+04
0	14	-7.85623	+03	15	-1.34449	+04							

Table 29
 $G(u_s, u_B)$ Function

u_s	$\gamma = 1.12 \cdot 10^{-7}$		$\gamma = 4.14 \cdot 10^{-8}$		u_s	$\gamma = 1.12 \cdot 10^{-7}$		$\gamma = 4.14 \cdot 10^{-8}$	
	Y	$u_B = -16$	Y	$u_B = -17$		Y	$u_B = -16$	Y	$u_B = -17$
-40	-24	9.70335 +08	-23	9.70335 +08	1	17	-2.37076 +04	18	-4.02970 +04
-39	-23	5.88540 +08	-22	5.88540 +08	2	18	-2.44415 +04	19	-4.14720 +04
-38	-22	3.56969 +08	-21	3.56969 +08	3	19	-2.51542 +04	20	-4.26147 +04
-37	-21	2.16514 +08	-20	2.16514 +08	4	20	-2.58473 +04	21	-4.37278 +04
-36	-20	1.31324 +08	-19	1.31324 +08	5	21	-2.65224 +04	22	-4.48134 +04
-35	-19	7.96499 +07	-18	7.96498 +07	6	22	-2.71809 +04	23	-4.58734 +04
-34	-18	4.83102 +07	-17	4.83101 +07	7	23	-2.78238 +04	24	-4.69096 +04
-33	-17	2.93017 +07	-16	2.93016 +07	8	24	-2.84523 +04	25	-4.79235 +04
-32	-16	1.77725 +07	-15	1.77724 +07	9	25	-2.90672 +04	26	-4.89165 +04
-31	-15	1.07797 +07	-14	1.07796 +07	10	26	-2.96695 +04	27	-4.98898 +04
-30	-14	6.53790 +06	-13	6.53775 +06	11	27	-3.02598 +04	28	-5.08445 +04
-29	-13	3.96536 +06	-12	3.96517 +06	12	28	-3.08388 +04	29	-5.17817 +04
-28	-12	2.40502 +06	-11	2.40478 +06	13	29	-3.14069 +04	30	-5.27032 +04
-27	-11	1.45859 +06	-10	1.45828 +06	14	30	-3.19645 +04	31	-5.36066 +04
-26	-10	8.84470 +05	-9	8.84054 +05	15	31	-3.25112 +04	32	-5.44953 +04
-25	-9	5.36207 +05	-8	5.35637 +05	16	32	-3.30455 +04	33	-5.53678 +04
-24	-8	3.24882 +05	-7	3.24093 +05	17	33	-3.35628 +04	34	-5.62217 +04
-23	-7	1.96574 +05	-6	1.95484 +05	18	34	-3.40521 +04	35	-5.70500 +04
-22	-6	1.18569 +05	-5	1.17076 +05	19	35	-3.44919 +04	36	-5.78358 +04
-21	-5	7.10076 +04	-4	6.89942 +04	20	36	-3.48536 +04	37	-5.85455 +04
-20	-4	4.18473 +04	-3	3.91919 +04	21	37	-3.51200 +04	38	-5.91331 +04
-19	-3	2.37713 +04	-2	2.03617 +04	22	38	-3.52988 +04	39	-5.95689 +04
-18	-2	1.23502 +04	-1	8.09904 +03	23	39	-3.54122 +04	40	-5.98625 +04
-17	-1	4.91234 +03	0	0.00000 -00	24	40	-3.54822 +04	41	-6.00492 +04
-16	0	0.00000 -00	1	-5.73028 +03	25	41	-3.55250 +04	42	-6.01646 +04
-15	1	-3.47561 +03	2	-1.02424 +04	26	42	-3.55510 +04	43	-6.02351 +04
-14	2	-6.21207 +03	3	-1.38418 +04	27	43	-3.55668 +04	44	-6.02780 +04
-13	3	-8.39524 +03	4	-1.68459 +04	28	44	-3.55764 +04	45	-6.03041 +04
-12	4	-1.02178 +04	5	-1.94444 +04	29	45	-3.55822 +04	46	-6.03199 +04
-11	5	-1.17938 +04	6	-2.17537 +04	30	46	-3.55858 +04	47	-6.03295 +04
-10	6	-1.31945 +04	7	-2.38480 +04	31	47	-3.55879 +04	48	-6.03353 +04
-9	7	-1.44647 +04	8	-2.57759 +04	32	48	-3.55892 +04	49	-6.03388 +04
-8	8	-1.56341 +04	9	-2.75711 +04	33	49	-3.55900 +04	50	-6.03409 +04
-7	9	-1.67229 +04	10	-2.92575 +04	34	50	-3.55905 +04	51	-6.03422 +04
-6	10	-1.77457 +04	11	-3.08525 +04	35	51	-3.55908 +04	52	-6.03430 +04
-5	11	-1.87132 +04	12	-3.23697 +04	36	52	-3.55909 +04	53	-6.03435 +04
-4	12	-1.96334 +04	13	-3.38193 +04	37	53	-3.55910 +04	54	-6.03438 +04
-3	13	-2.05126 +04	14	-3.52097 +04	38	54	-3.55911 +04	55	-6.03440 +04
-2	14	-2.13559 +04	15	-3.65475 +04	39	55	-3.55911 +04	56	-6.03441 +04
-1	15	-2.21674 +04	16	-3.78384 +04	40	56	-3.55912 +04	57	-6.03441 +04
0	16	-2.29503 +04	17	-3.90869 +04					

Table 30
 $G(u_s, u_B)$ Function

u_s		$\gamma = 1.52 \cdot 10^{-8}$		$\gamma = 5.60 \cdot 10^{-9}$		u_s		$\gamma = 1.52 \cdot 10^{-8}$		$\gamma = 5.60 \cdot 10^{-9}$	
		Y	$u_B = -18$	Y	$u_B = -19$			Y	$u_B = -18$	Y	$u_B = -19$
-40	-22	9.70335 +08	-21	9.70334 +08	1	19	-6.83754 +04	20	-1.15842 +05		
-39	-21	5.88539 +08	-20	5.88539 +08	2	20	-7.02595 +04	21	-1.18868 +05		
-38	-20	3.56969 +08	-19	3.56969 +08	3	21	-7.20947 +04	22	-1.21819 +05		
-37	-19	2.16514 +08	-18	2.16514 +08	4	22	-7.38845 +04	23	-1.24700 +05		
-36	-18	1.31324 +08	-17	1.31324 +08	5	23	-7.56321 +04	24	-1.27517 +05		
-35	-17	7.96496 +07	-16	7.96493 +07	6	24	-7.73405 +04	25	-1.30273 +05		
-34	-16	4.83099 +07	-15	4.83096 +07	7	25	-7.90122 +04	26	-1.32972 +05		
-33	-15	2.93014 +07	-14	2.93011 +07	8	26	-8.06493 +04	27	-1.35618 +05		
-32	-14	1.77722 +07	-13	1.77718 +07	9	27	-8.22540 +04	28	-1.38213 +05		
-31	-13	1.07793 +07	-12	1.07788 +07	10	28	-8.38282 +04	29	-1.40761 +05		
-30	-12	6.53744 +06	-11	6.53680 +06	11	29	-8.53734 +04	30	-1.43263 +05		
-29	-11	3.96479 +06	-10	3.96394 +06	12	30	-8.68913 +04	31	-1.45723 +05		
-28	-10	2.40427 +06	-9	2.40314 +06	13	31	-8.83831 +04	32	-1.48142 +05		
-27	-9	1.45760 +06	-8	1.45605 +06	14	32	-8.98501 +04	33	-1.50523 +05		
-26	-8	8.83113 +05	-7	8.80968 +05	15	33	-9.12932 +04	34	-1.52866 +05		
-25	-7	5.34336 +05	-6	5.31373 +05	16	34	-9.27128 +04	35	-1.55173 +05		
-24	-6	3.22296 +05	-5	3.18237 +05	17	35	-9.41080 +04	36	-1.57445 +05		
-23	-5	1.93022 +05	-4	1.87549 +05	18	36	-9.54752 +04	37	-1.59680 +05		
-22	-4	1.13756 +05	-3	1.06538 +05	19	37	-9.68036 +04	38	-1.61872 +05		
-21	-3	6.46162 +04	-2	5.53481 +04	20	38	-9.80672 +04	39	-1.64006 +05		
-20	-2	3.35705 +04	-1	2.20158 +04	21	39	-9.92135 +04	40	-1.66040 +05		
-19	-1	1.33534 +04	0	0.00000 -00	22	40	-1.00173 +05	41	-1.67893 +05		
-18	0	0.00000 -00	1	-1.55768 +04	23	41	-1.00885 +05	42	-1.69446 +05		
-17	1	-9.44760 +03	2	-2.78408 +04	24	42	-1.01368 +05	43	-1.70612 +05		
-16	2	-1.68865 +04	3	-3.76251 +04	25	43	-1.01675 +05	44	-1.71404 +05		
-15	3	-2.28210 +04	4	-4.57912 +04	26	44	-1.01865 +05	45	-1.71910 +05		
-14	4	-2.77739 +04	5	-5.28546 +04	27	45	-1.01982 +05	46	-1.72224 +05		
-13	5	-3.20581 +04	6	-5.91320 +04	28	46	-1.02052 +05	47	-1.72415 +05		
-12	6	-3.58656 +04	7	-6.48247 +04	29	47	-1.02095 +05	48	-1.72532 +05		
-11	7	-3.93183 +04	8	-7.00654 +04	30	48	-1.02121 +05	49	-1.72603 +05		
-10	8	-4.24970 +04	9	-7.49453 +04	31	49	-1.02137 +05	50	-1.72645 +05		
-9	9	-4.54568 +04	10	-7.95292 +04	32	50	-1.02147 +05	51	-1.72672 +05		
-8	10	-4.82371 +04	11	-8.38651 +04	33	51	-1.02152 +05	52	-1.72687 +05		
-7	11	-5.08669 +04	12	-8.79891 +04	34	52	-1.02156 +05	53	-1.72697 +05		
-6	12	-5.33683 +04	13	-9.19296 +04	35	53	-1.02158 +05	54	-1.72703 +05		
-5	13	-5.57583 +04	14	-9.57090 +04	36	54	-1.02159 +05	55	-1.72706 +05		
-4	14	-5.80506 +04	15	-9.93457 +04	37	55	-1.02160 +05	56	-1.72708 +05		
-3	15	-6.02564 +04	16	-1.02859 +05	38	56	-1.02161 +05	57	-1.72710 +05		
-2	16	-6.23847 +04	17	-1.06253 +05	39	57	-1.02161 +05	58	-1.72711 +05		
-1	17	-6.44431 +04	18	-1.09542 +05	40	58	-1.02161 +05	59	-1.72711 +05		
0	18	-6.64382 +04	19	-1.12736 +05							

Table 31
 $G(u_s, u_B)$ Function

u_s		$\gamma = 2.06 \cdot 10^{-9}$		$\gamma = 7.58 \cdot 10^{-10}$		u_s		$\gamma = 2.06 \cdot 10^{-9}$		$\gamma = 7.58 \cdot 10^{-10}$			
		Y	$u_B = -20$	Y	$u_B = -21$			Y	$u_B = -20$	Y	$u_B = -21$		
-40	-20	9.70334	+08	-19	9.70328	+08	1	21	-1.95977	+05	22	-3.31125	+05
-39	-19	5.88539	+08	-18	5.88533	+08	2	22	-2.00842	+05	23	-3.38957	+05
-38	-18	3.56968	+08	-17	3.56962	+08	3	23	-2.05593	+05	24	-3.46614	+05
-37	-17	2.16513	+08	-16	2.16508	+08	4	24	-2.10237	+05	25	-3.54105	+05
-36	-16	1.31323	+08	-15	1.31317	+08	5	25	-2.14781	+05	26	-3.61443	+05
-35	-15	7.96488	+07	-14	7.96473	+07	6	26	-2.19231	+05	27	-3.68635	+05
-34	-14	4.83090	+07	-13	4.83074	+07	7	27	-2.23593	+05	28	-3.75689	+05
-33	-13	2.93004	+07	-12	2.92985	+07	8	28	-2.27872	+05	29	-3.82615	+05
-32	-12	1.77709	+07	-11	1.77687	+07	9	29	-2.32072	+05	30	-3.89418	+05
-31	-11	1.07777	+07	-10	1.07749	+07	10	30	-2.36199	+05	31	-3.96104	+05
-30	-10	6.53541	+06	-9	6.53228	+06	11	31	-2.40254	+05	32	-4.02680	+05
-29	-9	3.96208	+06	-8	3.95781	+06	12	32	-2.44243	+05	33	-4.09151	+05
-28	-8	2.40058	+06	-7	2.39470	+06	13	33	-2.48167	+05	34	-4.15521	+05
-27	-7	1.45251	+06	-6	1.44440	+06	14	34	-2.52031	+05	35	-4.21795	+05
-26	-6	8.76083	+05	-5	8.65044	+05	15	35	-2.55836	+05	36	-4.27978	+05
-25	-5	5.24681	+05	-4	5.09798	+05	16	36	-2.59586	+05	37	-4.34073	+05
-24	-4	3.09213	+05	-3	2.89587	+05	17	37	-2.63281	+05	38	-4.40083	+05
-23	-3	1.75648	+05	-2	1.50450	+05	18	38	-2.66923	+05	39	-4.46011	+05
-22	-2	9.12533	+04	-1	5.98439	+04	19	39	-2.70509	+05	40	-4.51858	+05
-21	-1	3.62976	+04	0	0.00000	-00	20	40	-2.74030	+05	41	-4.57619	+05
-20	0	0.00000	-00	1	-4.23410	+04	21	41	-2.77461	+05	42	-4.63282	+05
-19	1	-2.56816	+04	2	-7.56779	+04	22	42	-2.80740	+05	43	-4.68806	+05
-18	2	-4.59015	+04	3	-1.02274	+05	23	43	-2.83738	+05	44	-4.74096	+05
-17	3	-6.20330	+04	4	-1.24472	+05	24	44	-2.86264	+05	45	-4.78949	+05
-16	4	-7.54966	+04	5	-1.43672	+05	25	45	-2.88171	+05	46	-4.83060	+05
-15	5	-8.71422	+04	6	-1.60736	+05	26	46	-2.89473	+05	47	-4.86180	+05
-14	6	-9.74919	+04	7	-1.76210	+05	27	47	-2.90306	+05	48	-4.88318	+05
-13	7	-1.06882	+05	8	-1.90456	+05	28	48	-2.90822	+05	49	-4.89689	+05
-12	8	-1.15522	+05	9	-2.03721	+05	29	49	-2.91138	+05	50	-4.90540	+05
-11	9	-1.23568	+05	10	-2.16181	+05	30	50	-2.91330	+05	51	-4.91061	+05
-10	10	-1.31125	+05	11	-2.27967	+05	31	51	-2.91447	+05	52	-4.91378	+05
-9	11	-1.38274	+05	12	-2.39177	+05	32	52	-2.91517	+05	53	-4.91570	+05
-8	12	-1.45073	+05	13	-2.49889	+05	33	53	-2.91560	+05	54	-4.91687	+05
-7	13	-1.51570	+05	14	-2.60162	+05	34	54	-2.91587	+05	55	-4.91758	+05
-6	14	-1.57801	+05	15	-2.70048	+05	35	55	-2.91602	+05	56	-4.91801	+05
-5	15	-1.63797	+05	16	-2.79586	+05	36	56	-2.91612	+05	57	-4.91827	+05
-4	16	-1.69583	+05	17	-2.88812	+05	37	57	-2.91618	+05	58	-4.91842	+05
-3	17	-1.75178	+05	18	-2.97753	+05	38	58	-2.91621	+05	59	-4.91852	+05
-2	18	-1.80601	+05	19	-3.06435	+05	39	59	-2.91623	+05	60	-4.91858	+05
-1	19	-1.85867	+05	20	-3.14879	+05	40	60	-2.91625	+05	61	-4.91861	+05
0	20	-1.90989	+05	21	-3.23103	+05							

Table 32
 $G(u_s, u_B)$ Function

u_s		$\gamma = 2.79 \cdot 10^{-10}$		$\gamma = 1.03 \cdot 10^{-10}$		u_s		$\gamma = 2.79 \cdot 10^{-10}$		$\gamma = 1.03 \cdot 10^{-10}$			
		Y	$u_B = -22$	Y	$u_B = -23$			Y	$u_B = -22$	Y	$u_B = -23$		
-40	-18	9.70327	+08	-17	9.70325	+08	1	23	-5.58846	+05	24	-9.42194	+05
-39	-17	5.88532	+08	-16	5.88529	+08	2	24	-5.71470	+05	25	-9.62559	+05
-38	-16	3.56961	+08	-15	3.56959	+08	3	25	-5.83821	+05	26	-9.82504	+05
-37	-15	2.16506	+08	-14	2.16504	+08	4	26	-5.95918	+05	27	-1.00205	+06
-36	-14	1.31316	+08	-13	1.31313	+08	5	27	-6.07776	+05	28	-1.02123	+06
-35	-13	7.96454	+07	-12	7.96417	+07	6	28	-6.19407	+05	29	-1.04005	+06
-34	-12	4.83051	+07	-11	4.83004	+07	7	29	-6.30825	+05	30	-1.05854	+06
-33	-11	2.92956	+07	-10	2.92894	+07	8	30	-6.42041	+05	31	-1.07672	+06
-32	-10	1.77649	+07	-9	1.77566	+07	9	31	-6.53065	+05	32	-1.09459	+06
-31	-9	1.07699	+07	-8	1.07584	+07	10	32	-6.63907	+05	33	-1.11218	+06
-30	-8	6.52533	+06	-7	6.50949	+06	11	33	-6.74576	+05	34	-1.12950	+06
-29	-7	3.94820	+06	-6	3.92631	+06	12	34	-6.85079	+05	35	-1.14656	+06
-28	-6	2.38142	+06	-5	2.35143	+06	13	35	-6.95424	+05	36	-1.16336	+06
-27	-5	1.42621	+06	-4	1.38577	+06	14	36	-7.05617	+05	37	-1.17993	+06
-26	-4	8.40516	+05	-3	7.87180	+05	15	37	-7.15667	+05	38	-1.19627	+06
-25	-3	4.77449	+05	-2	4.08967	+05	16	38	-7.25577	+05	39	-1.21239	+06
-24	-2	2.48051	+05	-1	1.62672	+05	17	39	-7.35354	+05	40	-1.22830	+06
-23	-1	9.86659	+04	0	0.00000	-00	18	40	-7.45003	+05	41	-1.24401	+06
-22	0	0.00000	-00	1	-1.15094	+05	19	41	-7.54526	+05	42	-1.25952	+06
-21	1	-6.98085	+04	2	-2.05714	+05	20	42	-7.63924	+05	43	-1.27484	+06
-20	2	-1.24771	+05	3	-2.78010	+05	21	43	-7.73193	+05	44	-1.28996	+06
-19	3	-1.68622	+05	4	-3.38350	+05	22	44	-7.82310	+05	45	-1.30489	+06
-18	4	-2.05219	+05	5	-3.90542	+05	23	45	-7.91215	+05	46	-1.31959	+06
-17	5	-2.36875	+05	6	-4.36926	+05	24	46	-7.99757	+05	47	-1.33395	+06
-16	6	-2.65009	+05	7	-4.78989	+05	25	47	-8.07619	+05	48	-1.34776	+06
-15	7	-2.90522	+05	8	-5.17713	+05	26	48	-8.14310	+05	49	-1.36050	+06
-14	8	-3.14009	+05	9	-5.53771	+05	27	49	-8.19416	+05	50	-1.37140	+06
-13	9	-3.35879	+05	10	-5.87642	+05	28	50	-8.22928	+05	51	-1.37975	+06
-12	10	-3.56423	+05	11	-6.19680	+05	29	51	-8.25185	+05	52	-1.38552	+06
-11	11	-3.75855	+05	12	-6.50153	+05	30	52	-8.26587	+05	53	-1.38924	+06
-10	12	-3.94337	+05	13	-6.79269	+05	31	53	-8.27445	+05	54	-1.39155	+06
-9	13	-4.11997	+05	14	-7.07196	+05	32	54	-8.27967	+05	55	-1.39296	+06
-8	14	-4.28936	+05	15	-7.34067	+05	33	55	-8.28285	+05	56	-1.39382	+06
-7	15	-4.45234	+05	16	-7.59995	+05	34	56	-8.28477	+05	57	-1.39435	+06
-6	16	-4.60960	+05	17	-7.85072	+05	35	57	-8.28594	+05	58	-1.39466	+06
-5	17	-4.76170	+05	18	-8.09377	+05	36	58	-8.28665	+05	59	-1.39486	+06
-4	18	-4.90912	+05	19	-8.32977	+05	37	59	-8.28708	+05	60	-1.39497	+06
-3	19	-5.05226	+05	20	-8.55930	+05	38	60	-8.28734	+05	61	-1.39504	+06
-2	20	-5.19148	+05	21	-8.78287	+05	39	61	-8.28749	+05	62	-1.39509	+06
-1	21	-5.32708	+05	22	-9.00091	+05	40	62	-8.28759	+05	63	-1.39511	+06
0	22	-5.45933	+05	23	-9.21382	+05							

Table 33
 $G(u_B, u_s)$ Function

u_s		$\gamma = 3.77 \cdot 10^{-11}$		$\gamma = 1.39 \cdot 10^{-11}$		u_s		$\gamma = 3.77 \cdot 10^{-11}$		$\gamma = 1.39 \cdot 10^{-11}$			
		Y	$u_B = -24$	Y	$u_B = -25$			Y	$u_B = -24$	Y	$u_B = -25$		
-40	-16	9.70321	+08	-15	9.70315	+08	1	25	-1.58699	+06	26	-2.67072	+06
-39	-15	5.88526	+08	-14	5.88518	+08	2	26	-1.61987	+06	27	-2.72386	+06
-38	-14	3.56954	+08	-13	3.56946	+08	3	27	-1.65210	+06	28	-2.77599	+06
-37	-13	2.16498	+08	-12	2.16488	+08	4	28	-1.68372	+06	29	-2.82716	+06
-36	-12	1.31307	+08	-11	1.31294	+08	5	29	-1.71476	+06	30	-2.87743	+06
-35	-11	7.96339	+07	-10	7.96170	+07	6	30	-1.74525	+06	31	-2.92683	+06
-34	-10	4.82901	+07	-9	4.82674	+07	7	31	-1.77521	+06	32	-2.97542	+06
-33	-9	2.92756	+07	-8	2.92445	+07	8	32	-1.80468	+06	33	-3.02324	+06
-32	-8	1.77377	+07	-7	1.76946	+07	9	33	-1.83368	+06	34	-3.07031	+06
-31	-7	1.07323	+07	-6	1.06728	+07	10	34	-1.86223	+06	35	-3.11667	+06
-30	-6	6.47339	+06	-5	6.39186	+06	11	35	-1.89035	+06	36	-3.16236	+06
-29	-5	3.87686	+06	-4	3.76693	+06	12	36	-1.91806	+06	37	-3.20739	+06
-28	-4	2.28476	+06	-3	2.13977	+06	13	37	-1.94538	+06	38	-3.25181	+06
-27	-3	1.29784	+06	-2	1.11168	+06	14	38	-1.97232	+06	39	-3.29563	+06
-26	-2	6.74272	+05	-1	4.42190	+05	15	39	-1.99890	+06	40	-3.33888	+06
-25	-1	2.68202	+05	0	0.00000	-00	16	40	-2.02513	+06	41	-3.38157	+06
-24	0	0.00000	-00	1	-3.12860	+05	17	41	-2.05103	+06	42	-4.42374	+06
-23	1	-1.89759	+05	2	-5.59188	+05	18	42	-2.07660	+06	43	-3.46539	+06
-22	2	-3.39165	+05	3	-7.55711	+05	19	43	-2.10186	+06	44	-3.50656	+06
-21	3	-4.58362	+05	4	-9.19731	+05	20	44	-2.12683	+06	45	-3.54724	+06
-20	4	-5.57845	+05	5	-1.06160	+06	21	45	-2.15150	+06	46	-3.58746	+06
-19	5	-6.43894	+05	6	-1.18768	+06	22	46	-2.17587	+06	47	-3.62723	+06
-18	6	-7.20369	+05	7	-1.30202	+06	23	47	-2.19994	+06	48	-3.66654	+06
-17	7	-7.89720	+05	8	-1.40729	+06	24	48	-2.22365	+06	49	-3.70538	+06
-16	8	-8.53565	+05	9	-1.50530	+06	25	49	-2.24685	+06	50	-3.74367	+06
-15	9	-9.13014	+05	10	-1.59737	+06	26	50	-2.26917	+06	51	-3.78117	+06
-14	10	-9.68858	+05	11	-1.68446	+06	27	51	-2.28984	+06	52	-3.81730	+06
-13	11	-1.02168	+06	12	-1.76729	+06	28	52	-2.30759	+06	53	-3.85084	+06
-12	12	-1.07192	+06	13	-1.84644	+06	29	53	-2.32126	+06	54	-3.87975	+06
-11	13	-1.11992	+06	14	-1.92235	+06	30	54	-2.33074	+06	55	-3.90214	+06
-10	14	-1.16596	+06	15	-1.99540	+06	31	55	-2.33686	+06	56	-3.91772	+06
-9	15	-1.21027	+06	16	-2.06588	+06	32	56	-2.34067	+06	57	-3.92779	+06
-8	16	-1.25302	+06	17	-2.13404	+06	33	57	-2.34300	+06	58	-3.93406	+06
-7	17	-1.29436	+06	18	-2.20011	+06	34	58	-2.34442	+06	59	-3.93790	+06
-6	18	-1.33443	+06	19	-2.26426	+06	35	59	-2.34528	+06	60	-3.94024	+06
-5	19	-1.37334	+06	20	-2.32666	+06	36	60	-2.34580	+06	61	-3.94166	+06
-4	20	-1.41119	+06	21	-2.38743	+06	37	61	-2.34612	+06	62	-3.94252	+06
-3	21	-1.44805	+06	22	-2.44670	+06	38	62	-2.34631	+06	63	-3.94305	+06
-2	22	-1.48400	+06	23	-2.50457	+06	39	63	-2.34643	+06	64	-3.94337	+06
-1	23	-1.51910	+06	24	-2.56115	+06	40	64	-2.34650	+06	65	-3.94356	+06
0	24	-1.55341	+06	25	-2.61650	+06							

Table 34
 $G(u_s, u_B)$ Function

u_s	$\gamma = 5.11 \cdot 10^{-12}$		$\gamma = 1.88 \cdot 10^{-12}$		u_s	$\gamma = 5.11 \cdot 10^{-12}$		$\gamma = 1.88 \cdot 10^{-12}$	
	Y	$u_B = -26$	Y	$u_B = -27$		Y	$u_B = -26$	Y	$u_B = -27$
-40	-14	9.70303 +08	-13	9.70280 +08	1	27	-4.49089 +06	28	-7.54593 +06
-39	-13	5.88505 +08	-12	5.88477 +08	2	28	-4.57683 +06	29	-7.68503 +06
-38	-12	3.59629 +08	-11	3.56894 +08	3	29	-4.66120 +06	30	-7.82167 +06
-37	-11	2.16467 +08	-10	2.16421 +08	4	30	-4.74408 +06	31	-7.95597 +06
-36	-10	1.31266 +08	-9	1.31204 +08	5	31	-4.82554 +06	32	-8.08805 +06
-35	-9	7.95795 +07	-8	7.94948 +07	6	32	-4.90565 +06	33	-8.21801 +06
-34	-8	4.82160 +07	-7	4.80989 +07	7	33	-4.89448 +06	34	-8.34597 +06
-33	-7	2.91735 +07	-6	2.90117 +07	8	34	-5.06208 +06	35	-8.47199 +06
-32	-6	1.75965 +07	-5	1.73748 +07	9	35	-5.13852 +06	36	-8.59618 +06
-31	-5	1.05384 +07	-4	1.02395 +07	10	36	-5.21385 +06	37	-8.71861 +06
-30	-4	6.21062 +06	-3	5.81652 +06	11	37	-5.28810 +06	38	-8.83934 +06
-29	-3	3.52790 +06	-2	3.02188 +06	12	38	-5.36133 +06	39	-8.95846 +06
-28	-2	1.83286 +06	-1	1.20199 +06	13	39	-5.43358 +06	40	-9.07602 +06
-27	-1	7.29048 +05	0	0.00000 -00	14	40	-5.50488 +06	41	-9.19208 +06
-26	0	0.00000 -00	1	-8.50441 +05	15	41	-5.57528 +06	42	-9.30670 +06
-25	1	-5.15819 +05	2	-1.52003 +06	16	42	-5.64480 +06	43	-9.41993 +06
-24	2	-9.21946 +05	3	-2.05423 +06	17	43	-5.71347 +06	44	-9.53182 +06
-23	3	-1.24595 +06	4	-2.50008 +06	18	44	-5.78134 +06	45	-9.64241 +06
-22	4	-1.51638 +06	5	-2.88573 +06	19	45	-5.84842 +06	46	-9.75176 +06
-21	5	-1.75028 +06	6	-3.22847 +06	20	46	-5.91474 +06	47	-9.85989 +06
-20	6	-1.95816 +06	7	-3.53928 +06	21	47	-5.98032 +06	48	-9.96686 +06
-19	7	-2.14668 +06	8	-3.82541 +06	22	48	-6.04519 +06	49	-1.00727 +07
-18	8	-2.32023 +06	9	-4.09184 +06	23	49	-6.10937 +06	50	-1.01774 +07
-17	9	-2.48183 +06	10	-4.34212 +06	24	50	-6.17284 +06	51	-1.02810 +07
-16	10	-2.63363 +06	11	-4.57885 +06	25	51	-6.23557 +06	52	-1.03836 +07
-15	11	-2.77721 +06	12	-4.80401 +06	26	52	-6.29745 +06	53	-1.04850 +07
-14	12	-2.91378 +06	13	-5.01916 +06	27	53	-6.35810 +06	54	-1.05851 +07
-13	13	-3.04427 +06	14	-5.22551 +06	28	54	-6.41662 +06	55	-1.06832 +07
-12	14	-3.16943 +06	15	-5.42406 +06	29	55	-6.47107 +06	56	-1.07781 +07
-11	15	-3.28986 +06	16	-5.61565 +06	30	56	-6.51819 +06	57	-1.08665 +07
-10	16	-3.40606 +06	17	-5.80094 +06	31	57	-6.55484 +06	58	-1.09433 +07
-9	17	-3.51845 +06	18	-5.98053 +06	32	58	-6.58043 +06	59	-1.10033 +07
-8	18	-3.62737 +06	19	-6.15491 +06	33	59	-6.59701 +06	60	-1.10454 +07
-7	19	-3.73314 +06	20	-6.32452 +06	34	60	-6.60734 +06	61	-1.10727 +07
-6	20	-3.83601 +06	21	-6.48971 +06	35	61	-6.61368 +06	62	-1.10897 +07
-5	21	-3.93621 +06	22	-6.65082 +06	36	62	-6.61754 +06	63	-1.11001 +07
-4	22	-4.03393 +06	23	-6.80814 +06	37	63	-6.61988 +06	64	-1.11065 +07
-3	23	-4.12935 +06	24	-6.96193 +06	38	64	-6.62130 +06	65	-1.11104 +07
-2	24	-4.22262 +06	25	-7.11240 +06	39	65	-6.62217 +06	66	-1.11127 +07
-1	25	-4.31389 +06	26	-7.25977 +06	40	66	-6.62269 +06	67	-1.11141 +07
0	26	-4.40327 +06	27	-7.40423 +06					

Table 35
 $G(u_s, u_B)$ Function

u_s	$\gamma = 6.91 \cdot 10^{-13}$		$\gamma = 2.54 \cdot 10^{-13}$		u_s	$\gamma = 6.91 \cdot 10^{-13}$		$\gamma = 2.54 \cdot 10^{-13}$	
	Y	$u_B = -28$	Y	$u_B = -29$		Y	$u_B = -28$	Y	$u_B = -29$
-40	-12	9.70235 +08	-11	9.70139 +08	1	29	-1.26704 +07	30	-2.12615 +07
-39	-11	5.88419 +08	-10	5.88294 +08	2	30	-1.28957 +07	31	-2.16265 +07
-38	-10	3.56818 +08	-9	3.56650 +08	3	31	-1.31171 +07	32	-2.19856 +07
-37	-9	2.16319 +08	-8	2.16089 +08	4	32	-1.33349 +07	33	-2.23388 +07
-36	-8	1.31064 +08	-7	1.30746 +08	5	33	-1.35492 +07	34	-2.26867 +07
-35	-7	7.93018 +07	-6	7.88620 +07	6	34	-1.37601 +07	35	-2.30292 +07
-34	-6	4.78322 +07	-5	4.72298 +07	7	35	-1.39679 +07	36	-2.33668 +07
-33	-5	2.86463 +07	-4	2.78340 +07	8	36	-1.41727 +07	37	-2.36996 +07
-32	-4	1.68822 +07	-3	1.58109 +07	9	37	-1.43745 +07	38	-2.40278 +07
-31	-3	9.58982 +06	-2	8.21432 +06	10	38	-1.45736 +07	39	-2.43516 +07
-30	-2	4.98223 +06	-1	3.26736 +06	11	39	-1.47700 +07	40	-2.46711 +07
-29	-1	1.98175 +06	0	0.00000 -00	12	40	-1.46938 +07	41	-2.49866 +07
-28	0	0.00000 -00	1	-2.31174 +06	13	41	-1.51551 +07	42	-2.52982 +07
-27	1	-1.40214 +06	2	-4.13187 +06	14	42	-1.53441 +07	43	-2.56060 +07
-26	2	-2.50610 +06	3	-5.58399 +06	15	43	-1.55308 +07	44	-2.59101 +07
-25	3	-3.38686 +06	4	-6.79594 +06	16	44	-1.57153 +07	45	-2.62108 +07
-24	4	-4.12195 +06	5	-7.84424 +06	17	45	-1.58976 +07	46	-2.65080 +07
-23	5	-4.75777 +06	6	-8.77589 +06	18	46	-1.60779 +07	47	-2.68019 +07
-22	6	-5.32285 +06	7	-9.62076 +06	19	47	-1.62562 +07	48	-2.70927 +07
-21	7	-5.83529 +06	8	-1.03985 +07	20	48	-1.64325 +07	49	-2.73804 +07
-20	8	-6.30704 +06	9	-1.11228 +07	21	49	-1.66070 +07	50	-2.76651 +07
-19	9	-6.74631 +06	10	-1.18031 +07	22	50	-1.67797 +07	51	-2.79469 +07
-18	10	-7.15895 +06	11	-1.24466 +07	23	51	-1.69506 +07	52	-2.82259 +07
-17	11	-7.54925 +06	12	-1.30586 +07	24	52	-1.71199 +07	53	-2.85022 +07
-16	12	-7.92048 +06	13	-1.36434 +07	25	53	-1.72874 +07	54	-2.87758 +07
-15	13	-8.27519 +06	14	-1.42044 +07	26	54	-1.74532 +07	55	-2.90468 +07
-14	14	-8.61541 +06	15	-1.47441 +07	27	55	-1.76173 +07	56	-2.93152 +07
-13	15	-8.94277 +06	16	-1.52649 +07	28	56	-1.77793 +07	57	-2.95808 +07
-12	16	-9.25864 +06	17	-1.57686 +07	29	57	-1.79383 +07	58	-2.98431 +07
-11	17	-9.56414 +06	18	-1.62567 +07	30	58	-1.80921 +07	59	-3.01008 +07
-10	18	-9.86023 +06	19	-1.67308 +07	31	59	-1.82358 +07	60	-3.03503 +07
-9	19	-1.01477 +07	20	-1.71918 +07	32	60	-1.83610 +07	61	-3.05840 +07
-8	20	-1.04273 +07	21	-1.76408 +07	33	61	-1.84593 +07	62	-3.07882 +07
-7	21	-1.06997 +07	22	-1.80788 +07	34	62	-1.85283 +07	63	-3.09491 +07
-6	22	-1.09653 +07	23	-1.85064 +07	35	63	-1.85733 +07	64	-3.10626 +07
-5	23	-1.12247 +07	24	-1.89244 +07	36	64	-1.86013 +07	65	-3.11366 +07
-4	24	-1.14782 +07	25	-1.93335 +07	37	65	-1.86186 +07	66	-3.11828 +07
-3	25	-1.17263 +07	26	-1.97341 +07	38	66	-1.86290 +07	67	-3.12112 +07
-2	26	-1.19693 +07	27	-2.01267 +07	39	67	-1.86354 +07	68	-3.12285 +07
-1	27	-1.22075 +07	28	-2.05119 +07	40	68	-1.86393 +07	69	-3.12390 +07
0	28	-1.24411 +07	29	-2.08900 +07					

Table 36
 $G(u_s, u_B)$ Function

u_s		$\gamma = 9.36 \cdot 10^{-14}$		$\gamma = 3.44 \cdot 10^{-14}$		u_s		$\gamma = 9.36 \cdot 10^{-14}$		$\gamma = 3.44 \cdot 10^{-14}$			
		Y	$u_B = -30$	Y	$u_B = -31$			Y	$u_B = -30$	Y	$u_B = -31$		
-40	-10	9.69934	+08	-9	9.69477	+08	1	31	-3.56561	+07	32	-5.97630	+07
-39	-9	5.88017	+08	-8	5.87392	+08	2	32	-3.62481	+07	33	-6.07234	+07
-38	-8	3.56271	+08	-7	3.55406	+08	3	33	-3.68306	+07	34	-6.16688	+07
-37	-7	2.15564	+08	-6	2.14369	+08	4	34	-3.74040	+07	35	-6.26000	+07
-36	-6	1.30021	+08	-5	1.28384	+08	5	35	-3.79688	+07	36	-6.35177	+07
-35	-5	7.78688	+07	-4	7.56608	+07	6	36	-3.85254	+07	37	-6.44223	+07
-34	-4	4.58906	+07	-3	4.29785	+07	7	37	-3.90741	+07	38	-6.53144	+07
-33	-3	2.60678	+07	-2	2.23288	+07	8	38	-3.96152	+07	39	-6.61945	+07
-32	-2	1.35431	+07	-1	8.88162	+06	9	39	-4.01490	+07	40	-6.70632	+07
-31	-1	5.38698	+06	0	0.00000	-00	10	40	-4.06759	+07	41	-6.79208	+07
-30	0	0.00000	-00	1	-6.28396	+06	11	41	-4.11960	+07	42	-6.87677	+07
-29	1	-3.81141	+06	2	-1.12316	+07	12	42	-4.17097	+07	43	-6.96044	+07
-28	2	-6.81231	+06	3	-1.51788	+07	13	43	-4.22172	+07	44	-7.04311	+07
-27	3	-9.20645	+06	4	-1.84733	+07	14	44	-4.27186	+07	45	-7.12483	+07
-26	4	-1.12046	+07	5	-2.13228	+07	15	45	-4.32143	+07	46	-7.20563	+07
-25	5	-1.29329	+07	6	-2.38553	+07	16	46	-4.37043	+07	47	-7.28553	+07
-24	6	-1.44690	+07	7	-2.61519	+07	17	47	-4.41890	+07	48	-7.36457	+07
-23	7	-1.58619	+07	8	-2.82662	+07	18	48	-4.46684	+07	49	-7.44277	+07
-22	8	-1.71443	+07	9	-3.02349	+07	19	49	-4.51427	+07	50	-7.52017	+07
-21	9	-1.83383	+07	10	-3.20842	+07	20	50	-4.56121	+07	51	-7.59677	+07
-20	10	-1.94600	+07	11	-3.38334	+07	21	51	-4.60767	+07	52	-7.67262	+07
-19	11	-2.05210	+07	12	-3.54971	+07	22	52	-4.65368	+07	53	-7.74772	+07
-18	12	-2.15301	+07	13	-3.70868	+07	23	53	-4.69923	+07	54	-7.82211	+07
-17	13	-2.24943	+07	14	-3.86116	+07	24	54	-4.74435	+07	55	-7.89579	+07
-16	14	-2.34191	+07	15	-4.00787	+07	25	55	-4.78904	+07	56	-7.96880	+07
-15	15	-2.43089	+07	16	-4.14943	+07	26	56	-4.83331	+07	57	-8.04115	+07
-14	16	-2.51676	+07	17	-4.28635	+07	27	57	-4.87718	+07	58	-8.11284	+07
-13	17	-2.59980	+07	18	-4.41905	+07	28	58	-4.92064	+07	59	-8.18390	+07
-12	18	-2.68029	+07	19	-4.54790	+07	29	59	-4.96366	+07	60	-8.25432	+07
-11	19	-2.75844	+07	20	-4.67322	+07	30	60	-5.00618	+07	61	-8.32405	+07
-10	20	-2.83445	+07	21	-4.79528	+07	31	61	-5.04796	+07	62	-8.39299	+07
-9	21	-2.90848	+07	22	-4.91433	+07	32	62	-5.08846	+07	63	-8.46078	+07
-8	22	-2.98069	+07	23	-5.03057	+07	33	63	-5.12645	+07	64	-8.52656	+07
-7	23	-3.05120	+07	24	-5.14421	+07	34	64	-5.15978	+07	65	-8.58836	+07
-6	24	-3.12012	+07	25	-5.25539	+07	35	65	-5.18613	+07	66	-8.64274	+07
-5	25	-3.18756	+07	26	-5.36429	+07	36	66	-5.20478	+07	67	-8.68590	+07
-4	26	-3.25360	+07	27	-5.47102	+07	37	67	-5.21696	+07	68	-8.71654	+07
-3	27	-3.31834	+07	28	-5.57573	+07	38	68	-5.22458	+07	69	-8.73659	+07
-2	28	-3.38185	+07	29	-5.67851	+07	39	69	-6.22925	+07	70	-8.74915	+07
-1	29	-3.44419	+07	30	-5.77947	+07	40	70	-5.23210	+07	71	-8.75686	+07
0	30	-3.50542	+07	31	-5.87871	+07							

Table 37
 $G(u_s, u_B)$ Function

u_s	$\gamma = 1.27 \cdot 10^{-14}$		$\gamma = 4.66 \cdot 10^{-15}$		u_s	$\gamma = 1.27 \cdot 10^{-14}$		$\gamma = 4.66 \cdot 10^{-15}$	
	Y	$u_B = -32$	Y	$u_B = -33$		Y	$u_B = -32$	Y	$u_B = -33$
-40	-8	9.68445 +08	-7	9.66094 +08	1	33	-1.00116 +08	34	-1.67633 +08
-39	-7	5.85965 +08	-6	5.82716 +08	2	34	-1.01674 +08	35	-1.70164 +08
-38	-6	3.53435 +08	-5	3.48983 +08	3	35	-1.03210 +08	36	-1.72659 +08
-37	-5	2.11669 +08	-4	2.05667 +08	4	36	-1.04723 +08	37	-1.75118 +08
-36	-4	1.24743 +08	-3	1.16828 +08	5	37	-1.06214 +08	38	-1.77543 +08
-35	-3	7.08597 +07	-2	6.06960 +07	6	38	-1.07685 +08	39	-1.79935 +08
-34	-2	3.68140 +07	-1	2.41427 +07	7	39	-1.09136 +08	40	-1.82296 +08
-33	-1	1.46433 +07	0	0.00000 -00	8	40	-1.10568 +08	41	-1.84627 +08
-32	0	0.00000 -00	1	-1.70815 +07	9	41	-1.11982 +08	42	-1.89630 +08
-31	1	-1.03605 +07	2	-3.05306 +07	10	42	-1.13387 +08	43	-1.89204 +08
-30	2	-1.85177 +07	3	-4.12604 +07	11	43	-1.14758 +08	44	-1.91451 +08
-29	3	-2.50257 +07	4	-5.02156 +07	12	44	-1.16121 +08	45	-1.93673 +08
-28	4	-3.04573 +07	5	-5.79615 +07	13	45	-1.17468 +08	46	-1.95869 +08
-27	5	-3.51554 +07	6	-6.48456 +07	14	46	-1.18800 +08	47	-1.98041 +08
-26	6	-3.93308 +07	7	-7.10883 +07	15	47	-1.20118 +08	48	-2.00189 +08
-25	7	-4.31172 +07	8	-7.68355 +07	16	48	-1.21421 +08	49	-2.02315 +08
-24	8	-4.66031 +07	9	-8.21869 +07	17	49	-1.22710 +08	50	-2.04419 +08
-23	9	-4.98489 +07	10	-8.72139 +07	18	50	-1.23986 +08	51	-2.06501 +08
-22	10	-5.28979 +07	11	-9.19687 +07	19	51	-1.25249 +08	52	-2.08563 +08
-21	11	-5.57818 +07	12	-9.64912 +07	20	52	-1.26500 +08	53	-2.10605 +08
-20	12	-5.85249 +07	13	-1.00812 +08	21	53	-1.27738 +08	54	-2.12627 +08
-19	13	-6.11458 +07	14	-1.04957 +08	22	54	-1.28964 +08	55	-2.14630 +08
-18	14	-6.36597 +07	15	-1.08945 +08	23	55	-1.30179 +08	56	-2.16614 +08
-17	15	-6.60786 +07	16	-1.12793 +08	24	56	-1.31383 +08	57	-2.18581 +08
-16	16	-6.84126 +07	17	-1.16515 +08	25	57	-1.32576 +08	58	-2.20530 +08
-15	17	-7.06699 +07	18	-1.20122 +08	26	58	-1.33758 +08	59	-2.22462 +08
-14	18	-7.28578 +07	19	-1.23624 +08	27	59	-1.34930 +08	60	-2.24377 +08
-13	19	-7.49822 +07	20	-1.27031 +08	28	60	-1.36091 +08	61	-2.26277 +08
-12	20	-7.70484 +07	21	-1.30349 +08	29	61	-1.37243 +08	62	-2.28160 +08
-11	21	-7.90608 +07	22	-1.33585 +08	30	62	-1.38385 +08	63	-2.30028 +08
-10	22	-8.10236 +07	23	-1.36745 +08	31	63	-1.39516 +08	64	-2.31880 +08
-9	23	-8.29402 +07	24	-1.39834 +08	32	64	-1.40634 +08	65	-2.33715 +08
-8	24	-8.48136 +07	25	-1.42856 +08	33	65	-1.41735 +08	66	-2.35530 +08
-7	25	-8.66468 +07	26	-1.45816 +08	34	66	-1.42803 +08	67	-2.37317 +08
-6	26	-8.84422 +07	27	-1.48718 +08	35	67	-1.43809 +08	68	-2.39054 +08
-5	27	-9.02020 +07	28	-1.51564 +08	36	68	-1.44697 +08	69	-2.40692 +08
-4	28	-9.19282 +07	29	-1.54358 +08	37	69	-1.45404 +08	70	-2.42141 +08
-3	29	-9.36228 +07	30	-1.57102 +08	38	70	-1.45907 +08	71	-2.43299 +08
-2	30	-9.52874 +07	31	-1.59800 +08	39	71	-1.46237 +08	72	-2.44126 +08
-1	31	-9.69235 +07	32	-1.62452 +08	40	72	-1.46444 +08	73	-2.44670 +08
0	32	-9.85326 +07	33	-1.65063 +08					

Table 38
 $G(u_s, u_B)$ Function

u_s	$\gamma = 1.71 \cdot 10^{-15}$		$\gamma = 6.30 \cdot 10^{-16}$		u_s	$\gamma = 1.71 \cdot 10^{-15}$		$\gamma = 6.30 \cdot 10^{-16}$	
	Y	$u_B = -34$	Y	$u_B = -35$		Y	$u_B = -34$	Y	$u_B = -35$
-40	-6	9.60736 +08	-5	9.48636 +08	1	35	-2.80554 +08	36	-4.69335 +08
-39	-5	5.75377 +08	-4	5.59062 +08	2	36	-2.84666 +08	37	-4.76020 +08
-38	-4	3.39088 +08	-3	3.17571 +08	3	37	-2.88720 +08	38	-4.82612 +08
-37	-3	1.92616 +08	-2	1.64989 +08	4	38	-2.92719 +08	39	-4.89115 +08
-36	-2	1.00070 +08	-1	6.56268 +07	5	39	-2.96663 +08	40	-4.95534 +08
-35	-1	3.98047 +07	0	0.00000 -00	6	40	-3.00556 +08	41	-5.01870 +08
-34	0	0.00000 -00	1	-4.64325 +07	7	41	-3.04400 +08	42	-5.08128 +08
-33	1	-2.81627 +07	2	-8.29909 +07	8	42	-3.08195 +08	43	-5.14310 +08
-32	2	-5.03365 +07	3	-1.12157 +08	9	43	-3.11945 +08	44	-5.20419 +08
-31	3	-6.80269 +07	4	-1.36500 +08	10	44	-3.15650 +08	45	-5.26458 +08
-30	4	-8.27915 +07	5	-1.57555 +08	11	45	-3.19313 +08	46	-5.32428 +08
-29	5	-9.55624 +07	6	-1.76268 +08	12	46	-3.22934 +08	47	-5.38332 +08
-28	6	-1.06912 +08	7	-1.93238 +08	13	47	-3.26515 +08	48	-5.44172 +08
-27	7	-1.17204 +08	8	-2.08860 +08	14	48	-3.30057 +08	49	-5.49951 +08
-26	8	-1.26680 +08	9	-2.23407 +08	15	49	-3.33562 +08	50	-5.55669 +08
-25	9	-1.35503 +08	10	-2.37072 +08	16	50	-3.37030 +08	51	-5.61330 +08
-24	10	-1.43791 +08	11	-2.49996 +08	17	51	-3.40463 +08	52	-5.66934 +08
-23	11	-1.51630 +08	12	-2.62290 +08	18	52	-3.43863 +08	53	-5.72483 +08
-22	12	-1.59087 +08	13	-2.74036 +08	19	53	-3.47229 +08	54	-5.77980 +08
-21	13	-1.66211 +08	14	-2.85303 +08	20	54	-3.50562 +08	55	-5.83425 +08
-20	14	-1.73045 +08	15	-2.96144 +08	21	55	-3.53865 +08	56	-5.88819 +08
-19	15	-1.79620 +08	16	-3.06604 +08	22	56	-3.57137 +08	57	-5.94165 +08
-18	16	-1.85964 +08	17	-3.16720 +08	23	57	-3.60379 +08	58	-5.99463 +08
-17	17	-1.92100 +08	18	-3.26526 +08	24	58	-3.63593 +08	59	-6.04715 +08
-16	18	-1.98048 +08	19	-3.36047 +08	25	59	-3.66778 +08	60	-6.09922 +08
-15	19	-2.03822 +08	20	-3.45307 +08	26	60	-3.69936 +08	61	-6.15085 +08
-14	20	-2.09439 +08	21	-3.54326 +08	27	61	-3.73068 +08	62	-6.20205 +08
-13	21	-2.14909 +08	22	-3.63122 +08	28	62	-3.76173 +08	63	-6.25283 +08
-12	22	-2.20245 +08	23	-3.71712 +08	29	63	-3.79253 +08	64	-6.30321 +08
-11	23	-2.25454 +08	24	-3.80108 +08	30	64	-3.82308 +08	65	-6.35318 +08
-10	24	-2.30547 +08	25	-3.88324 +08	31	65	-3.85339 +08	66	-6.40277 +08
-9	25	-2.35530 +08	26	-3.96370 +08	32	66	-3.88345 +08	67	-6.45196 +08
-8	26	-2.40410 +08	27	-4.04257 +08	33	67	-3.91324 +08	68	-6.50077 +08
-7	27	-2.45194 +08	28	-4.11993 +08	34	68	-3.94272 +08	69	-6.54916 +08
-6	28	-2.49887 +08	29	-4.19588 +08	35	69	-3.97176 +08	70	-6.59706 +08
-5	29	-2.54493 +08	30	-4.27048 +08	36	70	-4.00000 +08	71	-6.64425 +08
-4	30	-2.59018 +08	31	-4.34381 +08	37	71	-4.02666 +08	72	-6.69019 +08
-3	31	-2.63465 +08	32	-4.41592 +08	38	72	-4.05032 +08	73	-6.73363 +08
-2	32	-2.67839 +08	33	-4.48688 +08	39	73	-4.06929 +08	74	-6.77226 +08
-1	33	-2.72143 +08	34	-4.55674 +08	40	74	-4.08289 +08	75	-6.80334 +08
0	34	-2.76380 +08	35	-4.62555 +08					

Table 39
 $G(u_s, u_B)$ Function

u_s		$\gamma = 2.32 \cdot 10^{-16}$		$\gamma = 8.53 \cdot 10^{-17}$		u_s		$\gamma = 2.32 \cdot 10^{-16}$		$\gamma = 8.53 \cdot 10^{-17}$			
		Y	$u_B = -36$	Y	$u_B = -37$			Y	$u_B = -36$	Y	$u_B = -37$		
-40	-4	9.21738	+08	-3	8.63248	+08	1	37	-7.84824	+08	38	-1.31187	+09
-39	-3	5.23586	+08	-2	4.48486	+08	2	38	-7.95692	+08	39	-1.32955	+09
-38	-2	2.72021	+08	-1	1.78392	+08	3	39	-8.06415	+08	40	-1.34700	+09
-37	-1	1.08200	+08	0	0,00000	-00	4	40	-8.16997	+08	41	-1.36422	+09
-36	0	0.00000	-00	1	-1.26216	+08	5	41	-8.27445	+08	42	-1.38123	+09
-35	1	-7.65543	+07	2	-2.25592	+08	6	42	-8.37762	+08	43	-1.39804	+09
-34	2	-1.36828	+08	3	-3.04875	+08	7	43	-8.47955	+08	44	-1.41464	+09
-33	3	-1.84916	+08	4	-3.71046	+08	8	44	-8.58027	+08	45	-1.43106	+09
-32	4	-2.25050	+08	5	-4.28281	+08	9	45	-8.67982	+08	46	-1.44729	+09
-31	5	-2.59765	+08	6	-4.79147	+08	10	46	-8.77825	+08	47	-1.46333	+09
-30	6	-2.90617	+08	7	-5.25276	+08	11	47	-8.87559	+08	48	-1.47921	+09
-29	7	-3.18596	+08	8	-5.67742	+08	12	48	-8.97188	+08	49	-1.49492	+09
-28	8	-3.44353	+08	9	-6.07284	+08	13	49	-9.06716	+08	50	-1.51046	+09
-27	9	-3.68336	+08	10	-6.44428	+08	14	50	-9.16144	+08	51	-1.52585	+09
-26	10	-3.90865	+08	11	-6.79562	+08	15	51	-9.25477	+08	52	-1.54108	+09
-25	11	-4.12175	+08	12	-7.12979	+08	16	52	-9.34716	+08	53	-1.55617	+09
-24	12	-4.32443	+08	13	-7.44909	+08	17	53	-9.43866	+08	54	-1.57111	+09
-23	13	-4.51810	+08	14	-7.75534	+08	18	54	-9.52928	+08	55	-1.58591	+09
-22	14	-4.70385	+08	15	-8.05003	+08	19	55	-9.61905	+08	56	-1.60057	+09
-21	15	-4.88259	+08	16	-8.33436	+08	20	56	-9.70799	+08	57	-1.61510	+09
-20	16	-5.05504	+08	17	-8.60936	+08	21	57	-9.79613	+08	58	-1.62951	+09
-19	17	-5.22184	+08	18	-8.87590	+08	22	58	-9.88348	+08	59	-1.64378	+09
-18	18	-5.38350	+08	19	-9.13470	+08	23	59	-9.97007	+08	60	-1.65794	+09
-17	19	-5.54048	+08	20	-9.38641	+08	24	60	-1.00559	+09	61	-1.67197	+09
-16	20	-5.69315	+08	21	-9.63158	+08	25	61	-1.01410	+09	62	-1.68589	+09
-15	21	-5.84185	+08	22	-9.87070	+08	26	62	-1.02254	+09	63	-1.69969	+09
-14	22	-5.98688	+08	23	-1.01041	+09	27	63	-1.03091	+09	64	-1.71339	+09
-13	23	-6.12849	+08	24	-1.03324	+09	28	64	-1.03922	+09	65	-1.72697	+09
-12	24	-6.26693	+08	25	-1.05557	+09	29	65	-1.04746	+09	66	-1.74045	+09
-11	25	-6.40238	+08	26	-1.07744	+09	30	66	-1.05564	+09	67	-1.75383	+09
-10	26	-6.53504	+08	27	-1.09888	+09	31	67	-1.06375	+09	68	-1.76710	+09
-9	27	-6.66507	+08	28	-1.11991	+09	32	68	-1.07180	+09	69	-1.78028	+09
-8	28	-6.79263	+08	29	-1.14056	+09	33	69	-1.07979	+09	70	-1.79336	+09
-7	29	-6.91784	+08	30	-1.16083	+09	34	70	-1.08772	+09	71	-1.80634	+09
-6	30	-7.04084	+08	31	-1.18077	+09	35	71	-1.09558	+09	72	-1.81923	+09
-5	31	-7.16173	+08	32	-1.20037	+09	36	72	-1.10337	+09	73	-1.83201	+09
-4	32	-7.28063	+08	33	-1.21966	+09	37	73	-1.11104	+09	74	-1.84467	+09
-3	33	-7.39762	+08	34	-1.23865	+09	38	74	-1.11852	+09	75	-1.85715	+09
-2	34	-7.51280	+08	35	-1.25735	+09	39	75	-1.12559	+09	76	-1.86932	+09
-1	35	-7.62625	+08	36	-1.27578	+09	40	76	-1.13190	+09	77	-1.88085	+09
0	36	-7.73804	+08	37	-1.29395	+09							

Table 40
 $G(u_s, u_B)$ Function

u_s		$\gamma = 3.14 \cdot 10^{-17}$		$\gamma = 1.15 \cdot 10^{-17}$		u_s		$\gamma = 3.14 \cdot 10^{-17}$		$\gamma = 1.15 \cdot 10^{-17}$			
		Y	$u_B = -38$	Y	$u_B = -39$			Y	$u_B = -38$	Y	$u_B = -39$		
-40	-2	7.39429	+08	-1	4.84920	+08	1	39	-2.19206	+09	40	-3.66152	+09
-39	-1	2.94119	+08	0	0.00000	-00	2	40	-2.22083	+09	41	-3.70835	+09
-38	0	0.00000	-00	1	-3.43092	+08	3	41	-2.24922	+09	42	-3.75459	+09
-37	1	-2.08096	+08	2	-6.13224	+08	4	42	-2.27727	+09	43	-3.80027	+09
-36	2	-3.71939	+08	3	-8.28738	+08	5	43	-2.30498	+09	44	-3.84541	+09
-35	3	-5.02655	+08	4	-1.00860	+09	6	44	-2.33236	+09	45	-3.89002	+09
-34	4	-6.11751	+08	5	-1.16418	+09	7	45	-2.35942	+09	46	-3.93414	+09
-33	5	-7.06116	+08	6	-1.30245	+09	8	46	-2.38617	+09	47	-3.97776	+09
-32	6	-7.89981	+08	7	-1.42784	+09	9	47	-2.41263	+09	48	-4.02092	+09
-31	7	-8.66033	+08	8	-1.54328	+09	10	48	-2.43881	+09	49	-4.06361	+09
-30	8	-9.36048	+08	9	-1.65077	+09	11	49	-2.46471	+09	50	-4.10587	+09
-29	9	-1.00124	+09	10	-1.75173	+09	12	50	-2.49033	+09	51	-4.14770	+09
-28	10	-1.06248	+09	11	-1.84724	+09	13	51	-2.51570	+09	52	-4.18911	+09
-27	11	-1.12040	+09	12	-1.93807	+09	14	52	-2.54082	+09	53	-4.23011	+09
-26	12	-1.17550	+09	13	-2.02487	+09	15	53	-2.56569	+09	54	-4.27072	+09
-25	13	-1.22814	+09	14	-2.10812	+09	16	54	-2.59032	+09	55	-4.31096	+09
-24	14	-1.27864	+09	15	-2.18822	+09	17	55	-2.61473	+09	56	-4.35082	+09
-23	15	-1.32722	+09	16	-2.26551	+09	18	56	-2.63890	+09	57	-4.39032	+09
-22	16	-1.37410	+09	17	-2.34026	+09	19	57	-2.66286	+09	58	-4.42947	+09
-21	17	-1.41944	+09	18	-2.41272	+09	20	58	-2.68661	+09	59	-4.46827	+09
-20	18	-1.46338	+09	19	-2.48307	+09	21	59	-2.71014	+09	60	-4.50675	+09
-19	19	-1.50605	+09	20	-2.55149	+09	22	60	-2.73348	+09	61	-4.54490	+09
-18	20	-1.54755	+09	21	-2.61813	+09	23	61	-2.75662	+09	62	-4.58273	+09
-17	21	-1.58798	+09	22	-2.68313	+09	24	62	-2.77956	+09	63	-4.62025	+09
-16	22	-1.62740	+09	23	-2.74660	+09	25	63	-2.80232	+09	64	-4.65748	+09
-15	23	-1.66589	+09	24	-2.80864	+09	26	64	-2.82490	+09	65	-4.69440	+09
-14	24	-1.70352	+09	25	-2.86935	+09	27	65	-2.84730	+09	66	-4.73105	+09
-13	25	-1.74034	+09	26	-2.92880	+09	28	66	-2.86952	+09	67	-4.76741	+09
-12	26	-1.77640	+09	27	-2.98708	+09	29	67	-2.89158	+09	68	-4.80349	+09
-11	27	-1.81175	+09	28	-3.04424	+09	30	68	-2.91346	+09	69	-4.83931	+09
-10	28	-1.84642	+09	29	-3.10036	+09	31	69	-2.93519	+09	70	-4.87486	+09
-9	29	-1.88046	+09	30	-3.15548	+09	32	70	-2.95675	+09	71	-4.91016	+09
-8	30	-1.91389	+09	31	-3.20966	+09	33	71	-2.97816	+09	72	-4.94521	+09
-7	31	-1.94676	+09	32	-3.26295	+09	34	72	-2.99942	+09	73	-4.98001	+09
-6	32	-1.97908	+09	33	-3.31538	+09	35	73	-3.02052	+09	74	-5.01457	+09
-5	33	-2.01088	+09	34	-3.36700	+09	36	74	-3.04147	+09	75	-5.04888	+09
-4	34	-2.04219	+09	35	-3.41784	+09	37	75	-3.06225	+09	76	-5.08296	+09
-3	35	-2.07303	+09	36	-3.46794	+09	38	76	-3.08285	+09	77	-5.11677	+09
-2	36	-2.10341	+09	37	-3.51733	+09	39	77	-3.10316	+09	78	-5.15028	+09
-1	37	-2.13337	+09	38	-3.56604	+09	40	78	-3.12297	+09	79	-5.18334	+09
0	38	-2.16291	+09	39	-3.61410	+09							

Table 41
 $G(u_s, u_B)$ Function

u_s	$\gamma = 4.25 \cdot 10^{-18}$		u_s	$\gamma = 4.25 \cdot 10^{-18}$	
	Y	$u_B = -40$		Y	$u_B = -40$
-40	0	0.00000 -00	1	41	-6.11403 +09
-39	1	7.99498 +08	2	42	-6.19027 +09
-38	2	-1.01103 +09	3	43	-6.26558 +09
-37	3	-1.36635 +09	4	44	-6.34001 +09
-36	4	-1.66291 +09	5	45	-6.41357 +09
-35	5	-1.91942 +09	6	46	-6.48630 +09
-34	6	-2.14739 +09	7	47	-6.55823 +09
-33	7	-2.35412 +09	8	48	-6.62937 +09
-32	8	-2.54444 +09	9	49	-6.69977 +09
-31	9	-2.72165 +09	10	50	-6.76944 +09
-30	10	-2.88812 +09	11	51	-6.83840 +09
-29	11	-3.04558 +09	12	52	-6.90667 +09
-28	12	-3.19535 +09	13	53	-6.97428 +09
-27	13	-3.33845 +09	14	54	-7.04124 +09
-26	14	-3.47570 +09	15	55	-7.10757 +09
-25	15	-3.60777 +09	16	56	-7.17329 +09
-24	16	-3.73520 +09	17	57	-7.23841 +09
-23	17	-3.85845 +09	18	58	-7.30296 +09
-22	18	-3.97790 +09	19	59	-7.36694 +09
-21	19	-4.09389 +09	20	60	-7.43037 +09
-20	20	-4.20670 +09	21	61	-7.49327 +09
-19	21	-4.31657 +09	22	62	-7.55565 +09
-18	22	-4.42374 +09	23	63	-7.61751 +09
-17	23	-4.52838 +09	24	64	-7.67888 +09
-16	24	-4.63067 +09	25	65	-7.73977 +09
-15	25	-4.73075 +09	26	66	-7.80018 +09
-14	26	-4.82878 +09	27	67	-7.86013 +09
-13	27	-4.92486 +09	28	68	-7.91962 +09
-12	28	-5.01911 +09	29	69	-7.97867 +09
-11	29	-5.11163 +09	30	70	-8.03729 +09
-10	30	-5.20251 +09	31	71	-8.09549 +09
-9	31	-5.29184 +09	32	72	-8.15327 +09
-8	32	-5.37970 +09	33	73	-8.21065 +09
-7	33	-5.46614 +09	34	74	-8.26763 +09
-6	34	-5.55125 +09	35	75	-8.32422 +09
-5	35	-5.63507 +09	36	76	-8.38043 +09
-4	36	-5.71768 +09	37	77	-8.43625 +09
-3	37	-5.79911 +09	38	78	-8.49169 +09
-2	38	-5.87941 +09	39	79	-8.54672 +09
-1	39	-5.95864 +09	40	80	-8.60126 +09
0	40	-6.03684 +09			