

# Mutual planetary occultations since -3000 January 01 to +3000 December 31

Conditions of minimum geocentric angular distance (within 0.500 $\emptyset$ )

#1	#2	Date	TDT	Dm ( $\emptyset$ )	Dl	Err	RA ( $\emptyset$ )	Dec	r1	r2	p ( $\emptyset$ )	e	m1	m2	tm(s)	tw(h)		
-4	-7	-2966/01/09	11:42:02	0.00050	0.00235	0.00000	212.08	-13.07	1.84	20.14	339	-52	1.0	5.8	277.5	17.2	Mars	Uranus
-4	-5	-2947/05/09	19:27:02	0.00153	0.00637	0.00000	334.73	-12.30	1.84	5.60	22	-51	1.0	-2.0	1807	23.6	Mars	Jupiter
-1	-8	-2925/02/17	00:14:32	0.00175	0.00424	0.00000	277.42	-24.49	0.84	30.85	351	-27	0.4	8.0	258.9	14.1	Mercury	Neptune
-2	-6	-2924/12/15	14:05:10	0.00286	0.00699	0.00000	286.67	-24.66	0.95	9.97	9	44	-4.1	0.5	705.8	11.5	Venus	Saturn
-1	-2	-2908/03/27	11:06:38	0.00276	0.00531	0.00000	326.66	-15.36	0.63	1.61	210	-19	1.1	-3.8	362.5	10.1	Mercury	Venus
-1	-5	-2887/04/12	16:45:24	0.00046	0.00670	0.00000	347.81	-6.71	1.26	6.05	28	-12	-1.2	-1.9	496.9	6.7	Mercury	Jupiter
-2	-5	-2883/09/13	21:07:15	0.00613	0.00718	0.00000	122.60	21.83	1.44	6.27	349	-27	-3.9	-1.6	510.7	11.6	Venus	Jupiter
-2	-7	-2830/07/19	19:17:24	0.00091	0.00334	0.00000	71.03	23.14	1.59	19.32	190	-19	-3.9	5.6	272.3	10.2	Venus	Uranus
-2	-8	-2813/11/12	10:29:36	0.00348	0.00488	0.00000	167.82	7.70	1.02	31.04	337	-42	-4.0	8.0	267.8	10.3	Venus	Neptune
-2	-5	-2804/04/06	19:04:19	0.00243	0.00679	0.00000	346.68	-7.19	1.72	6.05	205	-8	-3.9	-1.9	938.2	12.1	Venus	Jupiter
-2	-5	-2734/04/04	16:27:12	0.00202	0.00827	0.00000	315.88	-18.58	1.17	5.75	195	-38	-3.9	-2.0	1168	12.6	Venus	Jupiter
-1	-2	-2695/11/12	09:13:43	0.01272	0.01681	0.00000	200.44	-9.48	1.43	0.27	148	-7	-0.8	-1.6	485.0	5.5	Mercury	Venus
-2	-5	-2679/11/16	17:46:02	0.01201	0.02034	0.00000	192.54	-4.52	0.29	6.18	138	-20	-3.9	-1.7	3125	21.8	Venus	Jupiter
-2	-7	-2602/02/07	16:40:41	0.00237	0.00370	0.00000	329.21	-13.67	1.41	20.69	202	29	-3.9	5.9	237.2	10.3	Venus	Uranus
-1	-6	-2557/07/29	08:31:35	0.00259	0.00429	0.00000	112.68	23.79	1.39	10.69	169	8	-1.0	0.8	233.2	7.4	Mercury	Saturn
-1	-4	-2555/07/06	10:06:25	0.00000	0.00221	0.00000	99.79	24.88	1.27	2.56	351	18	-0.3	1.6	217.8	12.2	Mercury	Mars
-1	-6	-2465/10/11	18:24:28	0.00218	0.00546	0.00000	160.77	10.90	0.92	11.03	162	-20	-0.3	0.9	823.4	20.6	Mercury	Saturn
-2	-5	-2453/11/29	14:35:13	0.00436	0.00683	0.00000	212.28	-12.79	1.65	6.16	338	-13	-3.9	-1.8	744.4	11.7	Venus	Jupiter
-1	-5	-2414/01/23	21:37:12	0.00472	0.00669	0.00000	294.59	-23.13	1.28	5.98	194	8	-1.5	-1.9	368.0	6.9	Mercury	Jupiter
-2	-6	-2352/08/09	16:53:45	0.00227	0.00479	0.00000	103.15	24.41	1.64	10.49	356	-14	-3.9	0.7	478.4	10.7	Venus	Saturn
-2	-8	-2339/08/13	12:33:15	0.00111	0.00300	0.00000	129.40	20.40	1.70	31.26	165	7	-3.9	8.0	216.6	9.9	Venus	Neptune
-2	-5	-2294/04/06	00:53:44	0.00166	0.00678	0.00000	350.39	-5.56	1.72	6.05	25	-7	-3.9	-1.9	972.7	12.1	Venus	Jupiter
-2	-7	-2290/12/25	03:20:49	0.00235	0.00320	0.00000	239.54	-21.08	1.65	20.78	166	-14	-3.9	5.9	180.3	10.1	Venus	Uranus
-1	-5	-2172/06/20	16:36:08	0.00299	0.00696	0.00000	93.86	24.73	1.09	6.29	172	24	0.1	-1.6	658.4	9.9	Mercury	Jupiter
-1	-2	-2135/06/04	19:31:46	0.00865	0.01333	0.00000	32.80	10.38	0.83	0.31	37	-20	0.2	-3.7	949.1	10.2	Mercury	Venus
-2	-4	-2119/05/18	05:52:46	0.00368	0.01600	0.00000	33.91	14.29	0.29	2.63	210	-1	2.6	1.6	1101	9.2	Venus	Mars
-1	-8	-2061/05/18	00:29:45	0.00133	0.00342	0.00000	17.21	5.37	1.05	30.81	29	-19	-0.3	7.9	121.2	7.8	Mercury	Neptune
-4	-5	-1990/02/02	07:37:00	0.00720	0.00742	0.00000	214.44	-13.18	1.31	5.33	159	-80	0.5	-2.0	475.7	22.7	Mars	Jupiter
-2	-6	-1970/08/08	00:02:46	0.00335	0.00506	0.00000	94.48	24.38	1.53	10.25	180	-23	-3.9	0.6	429.3	10.8	Venus	Saturn
-2	-6	-1968/07/24	20:27:07	0.00101	0.00471	0.00000	117.19	22.99	1.68	10.58	349	11	-3.9	0.7	525.0	10.7	Venus	Saturn
-1	-5	-1967/11/29	17:18:04	0.00192	0.00667	0.00000	210.47	-11.94	1.24	6.16	333	-19	-0.3	-1.7	711.5	10.1	Mercury	Jupiter
-2	-7	-1926/03/14	21:13:09	0.00287	0.00322	0.00000	353.62	-3.55	1.64	20.60	206	16	-3.9	5.8	123.6	10.2	Venus	Uranus
-4	-7	-1891/09/05	18:58:40	0.00063	0.00182	0.00000	156.40	10.87	2.53	19.43	157	8	1.4	5.6	249.5	19.0	Mars	Uranus
-2	-5	-1887/09/08	09:29:56	0.00345	0.00717	0.00000	124.60	21.17	1.44	6.28	348	-27	-3.9	-1.6	859.5	11.6	Venus	Jupiter
-2	-5	-1780/09/23	16:42:49	0.00703	0.00756	0.00000	135.22	18.58	1.30	6.22	345	-33	-3.9	-1.7	376.2	11.7	Venus	Jupiter
-2	-6	-1767/07/07	15:28:46	0.00334	0.00567	0.00000	52.85	18.26	1.31	9.82	17	-33	-3.8	0.4	526.3	11.2	Venus	Saturn
-2	-5	-1680/01/12	21:41:02	0.00592	0.00701	0.00000	259.11	-23.80	1.60	6.02	353	-18	-3.9	-1.9	537.7	11.9	Venus	Jupiter
-2	-5	-1678/01/29	16:49:57	0.00385	0.00725	0.00000	321.73	-16.68	1.52	5.89	200	23	-3.9	-2.0	887.0	12.0	Venus	Jupiter
-2	-6	-1638/12/02	19:30:00	0.00188	0.00629	0.00000	195.97	-4.49	1.07	10.89	156	-41	-4.0	0.9	632.4	10.9	Venus	Saturn
-4	-6	-1615/10/05	02:17:39	0.00297	0.00380	0.00000	126.32	21.15	2.03	10.13	347	-54	1.4	0.6	600.2	23.5	Mars	Saturn

-2	-5	-1588/10/31	22:45:15	0.00290	0.00671	0.00000	194.92	-5.44	1.67	6.29	155	-10	-3.9	-1.7	847.1	11.6	Venus	Jupiter
-1	-2	-1556/09/18	11:45:35	0.00168	0.00374	0.00000	146.73	15.19	0.88	1.59	147	-18	-0.2	-3.9	527.4	16.3	Mercury	Venus
-2	-5	-1488/02/28	02:40:05	0.00052	0.00685	0.00000	335.91	-11.59	1.70	5.99	23	8	-3.9	-1.9	1005	12.0	Venus	Jupiter
-4	-7	-1452/02/13	23:28:46	0.00150	0.00281	0.00000	241.93	-21.39	1.51	19.96	347	-68	0.7	5.8	281.5	17.6	Mars	Uranus
-2	-6	-1403/11/28	18:29:13	0.00472	0.00649	0.00000	192.93	-3.12	1.02	10.87	156	-42	-4.0	0.9	469.6	11.0	Venus	Saturn
-5	-7	-1402/08/30	17:58:56	0.00207	0.00529	0.00000	93.18	24.25	5.90	19.00	360	-51	-1.8	5.5	6134	92.5	Jupiter	Uranus
-1	-5	-1360/12/24	03:40:16	0.00533	0.00728	0.00000	279.92	-24.28	1.05	5.96	194	18	-0.7	-1.9	549.2	10.4	Mercury	Jupiter
-4	-5	-1300/12/27	08:13:11	0.00174	0.00597	0.00000	302.32	-21.62	2.12	5.77	193	35	1.1	-2.0	1590	22.0	Mars	Jupiter
-1	-4	-1255/12/25	09:35:57	0.00030	0.00250	0.00000	280.30	-24.64	1.13	2.31	15	16	-0.8	1.1	304.1	15.3	Mercury	Mars
-1	-2	-1237/11/24	05:16:26	0.00885	0.01492	0.00000	208.09	-9.97	1.12	0.29	147	-21	-0.2	-4.0	792.3	7.8	Mercury	Venus
-2	-7	-1233/08/07	02:04:57	0.00047	0.00346	0.00000	99.39	24.04	1.53	19.28	358	-23	-3.9	5.6	289.9	10.2	Venus	Uranus
-1	-6	-1216/01/13	14:49:25	0.00028	0.00462	0.00000	296.33	-22.80	1.23	10.55	195	12	-1.2	0.7	291.1	7.1	Mercury	Saturn
-2	-5	-1168/01/29	17:26:18	0.00570	0.00733	0.00000	326.47	-15.03	1.49	5.86	201	25	-3.9	-2.0	663.9	12.0	Venus	Jupiter
-2	-8	-1144/12/29	19:42:59	0.00290	0.00399	0.00000	231.60	-17.64	1.26	31.06	163	-35	-3.9	8.0	211.6	10.1	Venus	Neptune
-2	-5	-1127/08/06	04:19:46	0.00489	0.00692	0.00000	147.21	14.78	1.54	6.34	339	23	-3.8	-1.6	683.2	11.7	Venus	Jupiter
-1	-4	-1111/04/19	07:01:41	0.00026	0.00210	0.00000	13.01	5.38	1.32	2.53	210	-4	-1.8	1.4	141.3	8.1	Mercury	Mars
-2	-6	-1098/02/04	08:17:13	0.00103	0.00466	0.00000	302.57	-21.72	1.71	10.56	12	-6	-3.9	0.7	522.0	10.7	Venus	Saturn
-1	-6	-992/10/21	10:13:41	0.00409	0.00510	0.00000	180.28	2.46	1.03	10.92	154	-20	-0.4	0.9	311.8	12.3	Mercury	Saturn
-2	-5	-978/02/27	11:46:35	0.00566	0.00688	0.00000	340.97	-9.51	1.69	5.96	24	10	-3.9	-1.9	576.9	12.0	Venus	Jupiter
-1	-5	-967/01/26	11:02:39	0.00668	0.00675	0.00000	310.39	-19.66	1.26	5.96	20	10	-1.4	-1.9	74.1	7.2	Mercury	Jupiter
-1	-4	-928/12/11	21:11:49	0.00171	0.00204	0.00000	234.27	-20.09	1.33	2.36	338	-15	-0.5	1.2	158.4	16.1	Mercury	Mars
-1	-2	-910/09/22	00:35:30	0.00170	0.00235	0.00000	166.42	7.39	1.39	1.70	147	-5	-1.1	-3.9	559.1	27.8	Mercury	Venus
-2	-5	-891/09/02	20:04:07	0.00122	0.00716	0.00000	126.65	20.45	1.45	6.27	168	-27	-3.9	-1.6	972.2	11.7	Venus	Jupiter
-2	-5	-816/12/14	00:43:57	0.00049	0.00686	0.00000	237.89	-20.16	1.63	6.15	165	-15	-3.9	-1.8	967.3	11.7	Venus	Jupiter
-2	-8	-772/03/07	05:20:41	0.00118	0.00301	0.00000	331.66	-13.35	1.69	30.85	21	-10	-3.9	7.9	219.2	10.0	Venus	Neptune
-1	-5	-771/09/11	12:47:26	0.00292	0.00617	0.00000	162.01	9.08	1.41	6.42	154	1	-1.1	-1.6	493.1	8.1	Mercury	Jupiter
-2	-8	-763/05/04	00:22:26	0.00152	0.00544	0.00000	351.97	-5.51	0.91	30.54	201	-44	-4.0	7.9	446.2	11.4	Venus	Neptune
-2	-5	-718/03/26	10:22:12	0.00061	0.00808	0.00000	324.05	-15.67	1.23	5.76	197	-36	-3.8	-2.0	1163	12.4	Venus	Jupiter
-4	-7	-696/03/16	22:25:19	0.00300	0.00404	0.00000	253.52	-23.06	1.01	19.47	171	-94	-0.0	5.7	347.9	20.6	Mars	Uranus
-1	-5	-663/11/05	00:02:04	0.00551	0.00640	0.00000	201.40	-8.07	1.33	6.30	153	-13	-0.7	-1.7	332.1	9.2	Mercury	Jupiter
-2	-5	-621/05/21	12:31:59	0.01204	0.01925	0.00000	31.16	11.91	0.31	6.02	220	-19	-3.6	-1.9	2583	19.4	Venus	Jupiter
-4	-5	-582/07/24	17:40:14	0.00503	0.00528	0.00000	135.76	18.21	2.55	6.36	163	19	1.6	-1.6	570.1	27.6	Mars	Jupiter
-2	-7	-557/09/12	19:23:35	0.00299	0.00417	0.00000	130.11	19.31	1.24	19.12	347	-35	-3.9	5.5	243.8	10.4	Venus	Uranus
-2	-5	-553/01/27	23:02:07	0.00043	0.00712	0.00000	281.48	-23.79	1.55	5.98	182	-21	-3.8	-1.9	1018	11.9	Venus	Jupiter
-2	-8	-529/07/27	10:54:49	0.00061	0.00351	0.00000	147.15	14.79	1.44	31.13	159	28	-3.8	8.0	271.1	10.1	Venus	Neptune
-2	-5	-512/08/11	15:20:12	0.00561	0.00698	0.00000	111.52	22.90	1.54	6.26	174	-22	-3.9	-1.7	582.3	11.8	Venus	Jupiter
-2	-4	-492/04/16	14:54:51	0.00118	0.00261	0.00000	39.40	16.15	1.55	2.49	22	22	-3.9	1.5	559.3	21.6	Venus	Mars
-2	-5	-463/10/28	22:41:38	0.00377	0.01065	0.00000	165.49	-7.68	0.72	6.06	342	-47	-4.4	-1.7	1416	13.8	Venus	Jupiter
-1	-4	-439/11/08	15:14:31	0.00046	0.00191	0.00000	212.01	-13.10	1.42	2.46	153	-7	-0.8	1.3	238.3	14.4	Mercury	Mars
-1	-2	-328/07/16	12:57:33	0.00290	0.00292	0.00000	93.17	24.08	1.13	1.64	196	-15	-0.9	-3.9	77.4	23.5	Mercury	Venus
-1	-9	-293/06/25	08:24:39	0.00130	0.00250	0.00000	88.23	24.86	1.32	41.12	6	-4	-1.8	15.1	50.4	5.7	Mercury	Pluto
-1	-2	-281/11/16	11:10:34	0.00107	0.01703	0.00000	225.98	-18.52	1.45	0.26	154	-2	-0.9	1.5	735.7	5.4	Mercury	Venus
-1	-4	-268/10/02	19:36:26	0.00254	0.00403	0.00000	173.57	3.76	0.75	2.55	143	-13	0.5	1.6	199.7	10.3	Mercury	Mars
-1	-5	-265/05/21	16:55:54	0.00169	0.00675	0.00000	39.75	14.93	1.22	6.07	24	-13	-1.1	-1.9	490.1	6.8	Mercury	Jupiter
-4	-5	-184/03/25	16:08:53	0.00573	0.00584	0.00000	336.68	-11.10	2.21	5.84	202	-27	1.1	-2.0	324.2	22.3	Mars	Jupiter
-2	-6	-164/12/20	01:15:42	0.00372	0.00577	0.00000	227.20	-16.00	1.21	10.92	342	-37	-3.9	0.9	468.1	10.7	Venus	Saturn
-2	-5	-147/04/20	17:58:28	0.00618	0.00680	0.00000	18.86	6.97	1.72	6.02	204	-7	-3.9	-1.9	418.6	12.1	Venus	Jupiter
-1	-4	-43/02/07	00:19:32	0.00234	0.00262	0.00000	292.54	-23.09	1.08	2.22	176	-26	0.1	1.1	211.1	22.8	Mercury	Mars
-2	-7	-37/10/11	07:07:04	0.00018	0.00318	0.00000	204.21	-9.73	1.67	19.73	157	11	-3.9	5.6	266.3	10.1	Venus	Uranus

-4	-6	-9/01/30	15:21:50	0.00072	0.00343	0.00000	307.13	-20.41	2.37	10.71	14	-4	1.1	0.8	667.2	18.0	Mars	Saturn
-2	-5	-1/06/17	20:49:02	0.00729	0.01127	0.00000	130.83	19.44	0.65	6.08	158	45	-4.3	-1.7	1419	16.3	Venus	Jupiter
-1	-5	21/05/22	09:30:39	0.00133	0.00883	0.00000	79.17	23.39	0.69	6.17	134	22	0.7	-1.7	3254	40.2	Mercury	Jupiter
-1	-6	80/03/06	11:34:27	0.00397	0.00564	0.00000	319.88	-17.27	0.90	10.49	10	-28	0.3	0.7	417.6	12.9	Mercury	Saturn
-2	-6	209/08/10	22:32:14	0.00368	0.00510	0.00000	115.28	22.14	1.52	10.09	172	-23	-3.9	0.5	404.5	10.9	Venus	Saturn
-1	-6	241/09/06	05:31:00	0.00422	0.00494	0.00000	149.52	14.33	1.11	10.44	163	-16	-0.8	0.7	190.2	8.6	Mercury	Saturn
-4	-5	272/06/30	08:28:50	0.00112	0.00560	0.00000	140.80	16.63	2.26	6.15	341	40	1.5	-1.7	1923	27.7	Mars	Jupiter
-1	-4	317/08/09	19:30:10	0.00195	0.00207	0.00000	152.03	12.68	1.34	2.60	154	13	-0.7	1.7	64.4	11.4	Mercury	Mars
-1	-7	333/03/02	03:09:34	0.00139	0.00290	0.00000	348.77	-5.65	1.31	20.99	28	5	-1.7	5.9	86.9	6.0	Mercury	Uranus
-2	-5	363/04/19	18:34:34	0.00347	0.00680	0.00000	22.42	8.39	1.72	6.01	23	-5	-3.9	-1.9	866.7	12.1	Venus	Jupiter
-1	-2	392/12/09	02:21:16	0.00356	0.01544	0.00000	247.79	-18.94	0.69	0.27	184	-10	1.2	-2.5	3278	23.6	Mercury	Venus
-2	-5	428/10/25	03:03:03	0.00312	0.00662	0.00000	205.47	-9.59	1.70	6.37	157	-6	-3.9	-1.6	816.4	11.6	Venus	Jupiter
-4	-5	493/06/09	01:03:41	0.00312	0.00661	0.00000	21.86	7.96	1.71	5.49	203	-56	0.9	-2.1	1623	22.7	Mars	Jupiter
-1	-5	509/07/24	18:59:03	0.00340	0.00648	0.00000	142.95	15.82	1.26	6.37	157	18	-0.4	-1.6	503.2	8.3	Mercury	Jupiter
-5	-8	539/05/03	20:57:40	0.00554	0.00578	0.00000	336.03	-11.26	5.23	30.25	20	-70	-2.2	7.9	2009	91.0	Jupiter	Neptune
-1	-4	578/05/12	19:46:01	0.00135	0.00211	0.00000	46.93	17.89	1.32	2.54	22	-4	-1.9	-1.4	108.2	8.0	Mercury	Mars
-2	-6	581/01/13	02:42:30	0.00403	0.00506	0.00000	323.10	-16.33	1.50	10.52	19	24	-3.9	0.7	341.5	10.7	Venus	Saturn
-2	-5	681/12/31	22:35:09	0.00765	0.00935	0.00000	330.40	-13.40	0.94	5.63	204	44	-4.1	-2.0	755.0	12.7	Venus	Jupiter
-2	-5	700/09/17	17:08:56	0.00567	0.00656	0.00000	183.48	-0.26	1.71	6.43	335	6	-3.9	-1.6	465.2	11.6	Venus	Jupiter
-2	-8	713/04/02	06:56:45	0.00133	0.00321	0.00000	356.29	-3.29	1.58	30.79	203	-20	-3.8	7.9	231.1	10.1	Venus	Neptune
-2	-5	732/06/22	13:40:04	0.00485	0.00685	0.00000	77.09	22.82	1.65	6.13	7	-16	-3.9	-1.8	704.9	12.0	Venus	Jupiter
-1	-2	757/05/17	22:32:01	0.00081	0.01298	0.00000	81.78	25.45	0.97	0.33	7	23	0.1	-3.9	863.1	7.5	Mercury	Venus
-1	-2	796/08/20	08:02:51	0.00009	0.00236	0.00000	158.41	10.65	1.39	1.71	151	6	-1.2	-3.9	618.8	21.3	Mercury	Venus
-2	-5	829/09/28	08:07:59	0.00307	0.00791	0.00000	154.65	11.68	1.20	6.17	341	-37	-3.9	-1.7	990.3	11.9	Venus	Jupiter
-2	-6	914/07/23	18:56:31	0.00027	0.00543	0.00000	94.94	22.99	1.39	9.88	181	-30	-3.8	0.4	626.0	11.1	Venus	Saturn
-1	-6	919/09/07	11:32:16	0.00086	0.00451	0.00000	161.77	9.78	1.29	10.45	337	-9	-1.3	0.7	285.9	7.1	Mercury	Saturn
-1	-7	965/09/24	17:50:52	0.00107	0.00270	0.00000	189.85	-3.59	1.43	19.46	333	4	-1.0	5.6	110.4	7.5	Mercury	Uranus
-2	-4	992/05/24	13:16:33	0.00341	0.01486	0.00000	85.37	24.46	0.31	2.56	193	18	-3.5	1.6	1275	11.4	Venus	Mars
-1	-6	1026/04/16	19:04:03	0.00311	0.00481	0.00000	12.99	3.13	1.18	10.23	26	-19	-0.4	0.6	241.3	7.4	Mercury	Saturn
-2	-5	1043/10/25	19:27:50	0.00564	0.00999	0.00000	172.94	4.33	0.79	6.08	161	-46	-4.2	-1.7	1150	13.2	Venus	Jupiter
-4	-5	1170/09/12	20:41:35	0.00163	0.00966	0.00000	69.15	21.37	0.83	4.71	193	-106	-0.5	-2.4	3773	36.8	Mars	Jupiter
-2	-5	1191/12/31	19:57:44	0.00886	0.00962	0.00000	334.26	-11.89	0.90	5.63	25	45	-4.1	-2.0	526.7	12.8	Venus	Jupiter
-2	-8	1194/03/26	11:16:24	0.00017	0.00435	0.00000	335.71	-11.11	1.15	30.73	199	-39	-3.9	7.9	346.5	10.5	Venus	Neptune
-4	-5	1204/04/22	19:42:58	0.00567	0.00607	0.00000	2.26	-0.28	2.05	5.73	204	-37	1.0	-2.0	597.6	22.0	Mars	Jupiter
-2	-5	1210/09/17	10:50:40	0.00004	0.00657	0.00000	187.73	-2.12	1.70	6.44	335	7	-3.9	-1.6	922.7	11.6	Venus	Jupiter
-1	-6	1253/12/08	09:20:56	0.00250	0.00620	0.00000	279.69	-22.97	0.77	10.98	149	15	0.2	0.9	942.8	22.0	Mercury	Saturn
-4	-8	1278/08/25	14:41:59	0.00013	0.00160	0.00000	161.55	8.97	2.66	31.20	337	1	1.7	8.0	217.7	19.8	Mars	Neptune
-2	-8	1286/10/30	05:53:09	0.00134	0.00596	0.00000	179.42	1.82	0.83	30.94	160	-46	-4.2	8.0	482.5	11.1	Venus	Neptune
-2	-7	1362/06/18	11:26:55	0.00229	0.00309	0.00000	88.08	23.72	1.72	19.93	183	-6	-3.9	5.7	178.3	10.3	Venus	Uranus
-1	-2	1372/11/17	08:12:38	0.01328	0.01490	0.00000	264.19	-25.66	1.03	0.29	352	21	-0.3	-4.0	519.1	8.9	Mercury	Venus
-2	-7	1383/08/19	15:04:50	0.00185	0.00378	0.00000	184.25	-1.12	1.38	19.24	154	30	-3.8	5.5	279.4	10.4	Venus	Uranus
-4	-5	1387/09/22	00:13:39	0.00271	0.00525	0.00000	170.64	5.23	2.59	6.38	336	-17	1.7	-1.6	1614	27.9	Mars	Jupiter
-2	-6	1416/08/08	23:49:11	0.00089	0.00517	0.00000	121.90	20.62	1.50	9.98	350	-25	-3.8	0.5	588.0	11.0	Venus	Saturn
-2	-8	1427/08/30	07:46:18	0.00167	0.00410	0.00000	131.04	18.24	1.22	30.85	348	-36	-3.9	8.0	297.1	10.4	Venus	Neptune
-5	-8	1447/06/20	11:19:46	0.00280	0.00535	0.00000	170.33	5.57	5.67	30.53	155	72	-1.8	8.0	6782	110.7	Jupiter	Neptune
-2	-6	1477/08/10	19:49:00	0.00354	0.00469	0.00000	147.99	14.40	1.73	10.26	341	-2	-3.9	0.6	358.2	10.8	Venus	Saturn
-4	-6	1477/10/09	15:15:37	0.00167	0.00385	0.00000	154.67	12.11	2.04	9.83	339	-53	1.4	0.5	902.0	24.0	Mars	Saturn
-4	-6	1522/01/28	08:12:07	0.00155	0.00341	0.00000	320.51	-16.60	2.37	10.86	198	1	1.1	0.8	597.3	17.9	Mars	Saturn
-2	-5	1570/02/05	07:48:34	0.00502	0.00723	0.00000	304.06	-20.23	1.50	5.99	191	-25	-3.8	-1.9	735.6	11.8	Venus	Jupiter
-2	-4	1590/10/13	04:54:05	0.00194	0.00324	0.00000	167.19	6.88	1.28	2.40	160	-34	-3.9	1.6	553.9	20.4	Venus	Mars

-5	-8	1613/01/04	00:46:51	0.00128	0.00598	0.00000	177.31	2.63	5.06	29.94	165	-107	-2.1	7.9	36810	469.3	Jupiter	Neptune
-5	-7	1623/08/15	16:51:14	0.00139	0.00495	0.00000	135.79	17.52	6.33	19.44	164	-9	-1.7	5.6	4958	76.6	Jupiter	Uranus
-5	-8	1702/09/19	13:43:16	0.00070	0.00756	0.00000	10.99	2.95	3.97	28.89	24	-165	-2.8	7.8	12215	121.3	Jupiter	Neptune
-1	-5	1705/07/20	23:39:08	0.00647	0.00686	0.00000	104.02	22.90	1.15	6.17	182	-15	-0.9	-1.8	184.0	7.4	Mercury	Jupiter
-1	-7	1708/07/14	13:02:02	0.00177	0.00360	0.00000	139.29	16.52	1.04	19.31	336	25	0.2	5.6	152.7	8.9	Mercury	Uranus
-1	-5	1708/10/04	12:40:41	0.00317	0.00615	0.00000	191.05	-3.56	1.41	6.45	153	1	-1.2	-1.6	469.1	7.9	Mercury	Jupiter
-1	-2	1737/05/28	21:51:02	0.01006	0.01317	0.00000	89.47	25.62	0.98	0.32	185	22	0.0	-3.9	542.1	7.2	Mercury	Venus
-2	-6	1771/08/29	19:38:00	0.00257	0.00484	0.00000	144.56	15.27	1.65	10.16	162	-14	-3.9	0.5	475.3	10.8	Venus	Saturn
-1	-7	1793/07/21	05:37:32	0.00024	0.00345	0.00000	145.06	14.70	1.09	19.28	335	24	0.1	5.6	161.6	8.5	Mercury	Uranus
-1	-6	1808/12/09	20:34:08	0.00468	0.00489	0.00000	235.67	-17.77	1.10	10.87	161	-20	-0.4	0.9	126.9	10.7	Mercury	Saturn
-2	-5	1818/01/03	21:52:24	0.00338	0.00686	0.00000	266.27	-23.13	1.61	6.21	356	-16	-3.9	-1.7	836.1	11.6	Venus	Jupiter
-2	-5	2065/11/22	12:45:38	0.00394	0.00662	0.00000	230.77	-17.70	1.69	6.38	164	-8	-3.9	-1.6	744.0	11.6	Venus	Jupiter
-1	-8	2067/07/15	11:55:21	0.00264	0.00340	0.00000	95.10	22.29	1.06	30.86	6	-18	-0.4	8.0	80.9	7.7	Mercury	Neptune
-1	-4	2079/08/11	01:31:03	0.00033	0.00230	0.00000	130.08	19.47	1.23	2.61	351	-11	-1.3	1.6	161.7	9.1	Mercury	Mars
-1	-5	2088/10/27	13:43:20	0.00523	0.00619	0.00000	208.81	-10.69	1.40	6.44	156	-5	-1.1	-1.6	303.2	8.2	Mercury	Jupiter
-1	-5	2094/04/07	10:48:40	0.00180	0.00659	0.00000	15.82	5.57	1.34	5.95	207	-2	-1.7	-2.0	476.1	6.6	Mercury	Jupiter
-2	-8	2104/08/21	01:17:33	0.00011	0.00345	0.00000	175.69	3.13	1.47	31.13	335	27	-3.8	8.0	271.7	10.1	Venus	Neptune
-2	-5	2123/09/14	15:27:49	0.00163	0.00670	0.00000	187.43	-2.01	1.63	6.41	335	16	-3.9	-1.6	913.7	11.7	Venus	Jupiter
-1	-4	2126/07/29	16:08:52	0.00144	0.00223	0.00000	119.53	21.67	1.26	2.61	174	-9	-1.5	1.6	115.8	8.5	Mercury	Mars
-1	-2	2133/12/03	14:12:50	0.01034	0.01685	0.00000	254.22	-23.93	1.44	0.27	165	4	-0.8	-0.7	584.7	5.5	Mercury	Venus
-4	-5	2223/12/02	12:30:24	0.00570	0.00860	0.00000	340.82	-9.40	1.03	4.89	25	89	-0.1	-2.3	1547	21.3	Mars	Jupiter
-2	-6	2243/08/12	04:52:12	0.00456	0.00485	0.00000	157.54	10.98	1.64	10.23	158	16	-3.9	0.6	192.6	10.9	Venus	Saturn
-2	-7	2251/03/04	10:52:25	0.00127	0.00352	0.00000	320.50	-16.08	1.48	20.78	196	-25	-3.8	5.9	271.8	10.1	Venus	Uranus
-2	-7	2307/09/11	22:29:58	0.00310	0.00368	0.00000	195.69	-6.00	1.43	19.21	155	29	-3.8	5.5	167.5	10.4	Venus	Uranus
-2	-4	2327/06/04	00:51:59	0.00848	0.01443	0.00000	48.87	17.72	0.32	2.33	208	-22	-3.8	1.2	1066	11.7	Venus	Mars
-2	-5	2335/10/08	14:51:14	0.00573	0.00778	0.00000	161.01	8.93	1.24	6.16	340	-35	-3.9	-1.7	724.2	12.0	Venus	Jupiter
-1	-7	2351/04/07	17:22:36	0.00098	0.00287	0.00000	19.56	7.59	1.32	21.02	27	4	-1.7	5.9	91.8	6.0	Mercury	Uranus
-2	-7	2419/12/30	01:36:23	0.00106	0.01101	0.00000	323.06	-15.29	0.45	20.64	212	42	-4.7	5.9	1594	19.7	Venus	Uranus
-4	-5	2478/08/29	23:11:01	0.00390	0.00520	0.00000	169.86	5.42	2.64	6.41	336	11	1.7	-1.6	1268	28.5	Mars	Jupiter
-4	-8	2515/04/07	10:31:29	0.00112	0.00184	0.00000	357.93	-2.04	2.28	30.85	204	-20	1.0	8.0	156.2	16.0	Mars	Neptune
-2	-6	2518/01/25	22:41:12	0.00115	0.00543	0.00000	273.22	-22.25	1.32	10.87	179	-33	-3.9	0.9	570.5	10.7	Venus	Saturn
-2	-8	2649/02/16	11:13:00	0.00023	0.00404	0.00000	293.54	-20.80	1.24	31.03	186	-36	-3.9	8.0	312.4	10.1	Venus	Neptune
-2	-9	2678/07/05	19:22:04	0.00149	0.00294	0.00000	126.43	20.63	1.59	41.30	347	20	-3.9	15.1	183.1	10.0	Venus	Pluto
-2	-8	2781/12/03	06:40:03	0.00260	0.00347	0.00000	222.71	-14.60	1.46	31.24	162	-26	-3.9	8.0	177.3	9.9	Venus	Neptune
-1	-5	2816/03/25	15:47:52	0.00205	0.00788	0.00000	339.95	-9.21	0.90	5.90	9	-28	0.3	-1.9	1314	17.0	Mercury	Jupiter
-2	-6	2817/03/06	09:36:22	0.00025	0.00485	0.00000	328.49	-13.64	1.57	10.87	18	-20	-3.9	0.9	538.0	10.6	Venus	Saturn
-1	-4	2818/04/11	20:42:03	0.00128	0.00210	0.00000	25.40	9.99	1.31	2.40	208	5	-1.7	1.1	132.7	9.3	Mercury	Mars
-4	-7	2825/02/06	10:45:29	0.00018	0.00218	0.00000	268.51	-23.43	2.02	19.63	358	-49	1.3	5.7	297.8	18.9	Mars	Uranus
-2	-4	2830/12/15	07:37:20	0.01289	0.01706	0.00000	274.23	-24.05	0.27	2.42	350	11	-2.6	1.2	799.2	9.3	Venus	Mars
-1	-5	2833/07/20	05:14:58	0.00605	0.00734	0.00000	146.09	14.24	0.98	6.23	153	25	0.2	-1.7	454.0	10.6	Mercury	Jupiter
-2	-5	2912/02/12	20:59:27	0.00317	0.00814	0.00000	359.90	-1.20	1.22	5.72	206	36	-3.9	-2.0	1050	12.1	Venus	Jupiter
-2	-5	2954/11/08	02:49:16	0.00609	0.00654	0.00000	222.60	-15.26	1.72	6.45	161	-1	-3.9	-1.6	335.5	11.6	Venus	Jupiter
-1	-6	2954/11/21	01:57:57	0.00404	0.00506	0.00000	218.78	-12.78	1.06	10.61	161	-18	-0.5	0.8	278.8	10.8	Mercury	Saturn
-4	-5	2959/03/09	17:38:33	0.00124	0.00564	0.00000	354.24	-3.50	2.36	5.98	24	5	1.0	-1.9	1540	21.8	Mars	Jupiter
-1	-5	2965/10/05	16:52:17	0.00223	0.00617	0.00000	196.67	-5.90	1.40	6.45	334	5	-1.1	-1.6	497.7	7.7	Mercury	Jupiter
-2	-5	2986/08/13	09:12:35	0.00398	0.00703	0.00000	122.34	20.10	1.56	6.10	170	-21	-3.8	-1.8	836.7	12.0	Venus	Jupiter
-2	-8	2991/03/22	14:44:06	0.00328	0.00430	0.00000	325.97	-13.55	1.16	30.89	196	-38	-3.9	8.0	218.7	10.3	Venus	Neptune

(DE406)

Total events: 186  
2008 April 05

## Main Abbreviations

***Dm***: Minimum *apparent* angular separation (degrees).

***Err***: Estimated angular uncertainty (degrees) of *Dm*.

***r1* & *r2***: Geocentric (or planetocentric) distances (AU) of the two bodies at the epoch of minimum separation.

***p***: Position angle (degrees) of body #2 with respect to the center of body #1 at the minimum angular separation, measured clockwise from South = 0.

***e***: Elongation (degrees) from the Sun of body #1.

***m1* & *m2***: Approximate visual magnitudes of the two bodies.

***tm***: Maximum observable occultation time, in seconds (only present in the case of an occultation, when  $Dm < DI$ ).

***tw***: Approximate time half-window (in hours) within which the angular distance is smaller than the selected value.

***We strongly recommend to read with attention the Handbook!***

SOLEX 9.12 is used by <http://digilander.libero.it/occultazioni>