




























































































































superior conj	7600 Oct 04 21:10	17°  42'14	1°20'21	inferior conj	7603 Feb 26 09:31	8°  31'12	4°38'21
minimum elong	7600 Oct 04 15:00	17°  23'12	1°20'17	minimum elong	7603 Feb 26 00:02	8°  45'44	4°35'44
max. Earth dist.	7600 Oct 04 16:53	17°  29'01	1.73340 AU	min. Earth dist.	7603 Feb 26 08:13	8°  33'12	0.26968 AU
	7600 Oct 14 20:36	0°  ♌		morning rise	7603 Mar 03 13:07	5°  26'54	
	7600 Nov 08 04:48	0°  ♍		direct	7603 Mar 19 00:56	0°  ♋42'32	
evening rise	7600 Nov 10 07:37	2°  ♍36'33		greatest brilliancy	7603 Mar 29 02:58	2°  ♋37'29	-4.9m
	7600 Dec 02 13:33	0°  ♎			7603 May 04 22:58	0°  ♐	
desc. node	7600 Dec 12 12:22	12°  ♎14'20		morning max el	7603 May 08 12:43	3°  ♐32'55	46°58'15
	7600 Dec 26 23:06	0°  ♏		desc. node	7603 May 30 08:35	26°  ♐46'30	
	7601 Jan 20 09:24	0°  ♏			7603 Jun 02 06:06	0°  ♑	
	7601 Feb 13 21:19	0°  ♑			7603 Jun 28 09:09	0°  ♒	
	7601 Mar 10 14:20	0°  ♑			7603 Jul 23 17:28	0°  ♓	
asc. node	7601 Apr 04 11:56	29°  ♑34'52			7603 Aug 17 17:43	0°  ♓	
	7601 Apr 04 20:33	0°  ♒		asc. node	7603 Sep 11 13:18	0°  ♑	
	7601 May 01 10:31	0°  ♓			7603 Sep 20 07:21	10°  ♑37'57	
evening max el	7601 May 14 19:16	13°  ♓57'44	46°44'37		7603 Oct 06 04:42	0°  ♒	
	7601 Jun 01 01:50	0°  ♓			7603 Oct 30 16:00	0°  ♒	
greatest brilliancy	7601 Jun 23 03:23	14°  ♓10'04	-4.8m	morning set	7603 Nov 06 11:18	8°  ♒22'27	
retrograde	7601 Jul 03 23:56	16°  ♓21'00			7603 Nov 23 23:54	0°  ♍	
evening set	7601 Jul 18 21:59	11°  ♓59'23		max. Earth dist.	7603 Dec 11 02:46	21°  ♍10'57	1.72757 AU
min. Earth dist.	7601 Jul 24 17:31	8°  ♓31'20	0.27997 AU				
inferior conj	7601 Jul 25 04:22	8°  ♓14'25	0°01'01	superior conj	7603 Dec 13 07:11	23°  ♍53'19	1°00'26
minimum elong	7601 Jul 25 04:25	8°  ♓14'22	0°00'55	minimum elong	7603 Dec 13 17:02	24°  ♍23'50	1°00'12
transit middle	7601 Jul 25 04:25	8°  ♓14'22	0°00'55		7603 Dec 18 05:30	0°  ♎	
transit begin	7601 Jul 25 00:22	8°  ♓20'41		desc. node	7604 Jan 10 00:13	28°  ♎16'28	
transit end	7601 Jul 25 08:28	8°  ♓08'04			7604 Jan 11 09:31	0°  ♏	
desc. node	7601 Jul 25 06:01	8°  ♓11'52		evening rise	7604 Jan 20 19:23	11°  ♏42'15	
morning rise	7601 Jul 31 11:31	4°  ♓29'56			7604 Feb 04 12:05	0°  ♏	
direct	7601 Aug 15 07:14	0°  ♓15'45			7604 Feb 28 13:30	0°  ♐	
greatest brilliancy	7601 Aug 25 01:19	1°  ♓59'20	-4.8m		7604 Mar 23 15:11	0°  ♑	
	7601 Oct 02 23:13	0°  ♑			7604 Apr 16 20:10	0°  ♒	
morning max el	7601 Oct 03 00:30	0°  ♑03'04	45°43'38	asc. node	7604 May 01 23:42	18°  ♒35'10	
	7601 Nov 01 00:11	0°  ♒			7604 May 11 08:59	0°  ♓	
asc. node	7601 Nov 15 05:40	15°  ♒51'44			7604 Jun 05 12:26	0°  ♓	
	7601 Nov 27 13:23	0°  ♒			7604 Jul 01 19:57	0°  ♑	
	7601 Dec 22 22:51	0°  ♍		evening max el	7604 Jul 24 15:04	23°  ♑51'56	45°56'59
	7602 Jan 16 16:36	0°  ♎			7604 Jul 31 01:23	0°  ♒	
	7602 Feb 10 01:00	0°  ♏		desc. node	7604 Aug 21 17:37	17°  ♒17'17	
	7602 Mar 06 03:38	0°  ♏		greatest brilliancy	7604 Sep 01 03:35	22°  ♒34'56	-4.7m
desc. node	7602 Mar 06 22:12	0°  ♏57'58		retrograde	7604 Sep 11 22:26	24°  ♒41'48	
	7602 Mar 30 02:35	0°  ♐		evening set	7604 Sep 29 06:29	18°  ♒59'00	
morning set	7602 Apr 02 15:40	4°  ♐27'05		inferior conj	7604 Oct 03 11:32	16°  ♒23'22	-7°59'32
	7602 Apr 22 23:35	0°  ♑		minimum elong	7604 Oct 03 04:31	16°  ♒34'21	7°58'45
				min. Earth dist.	7604 Oct 03 04:14	16°  ♒34'49	0.29140 AU
superior conj	7602 May 13 08:20	25°  ♑35'31	-1°23'34	morning rise	7604 Oct 07 02:38	14°  ♒08'38	
minimum elong	7602 May 13 15:09	25°  ♑56'54	1°23'34	direct	7604 Oct 25 00:18	8°  ♒06'29	
max. Earth dist.	7602 May 15 21:06	28°  ♑46'12	1.71407 AU	greatest brilliancy	7604 Nov 04 06:48	10°  ♒01'07	-4.7m
	7602 May 16 20:38	0°  ♒			7604 Dec 03 23:46	0°  ♒	
	7602 Jun 09 19:41	0°  ♓		asc. node	7604 Dec 12 17:28	8°  ♒09'38	
evening rise	7602 Jun 22 11:19	15°  ♓46'05		morning max el	7604 Dec 13 03:54	8°  ♒34'58	45°54'31
asc. node	7602 Jun 27 21:19	22°  ♓30'13			7605 Jan 02 19:17	0°  ♍	
	7602 Jul 03 22:15	0°  ♓			7605 Jan 29 06:45	0°  ♎	
	7602 Jul 28 05:13	0°  ♑			7605 Feb 23 11:51	0°  ♏	
	7602 Aug 21 17:39	0°  ♒			7605 Mar 20 02:00	0°  ♏	
	7602 Sep 15 13:41	0°  ♒		desc. node	7605 Apr 03 10:24	17°  ♏43'11	
	7602 Oct 10 21:08	0°  ♍			7605 Apr 13 07:58	0°  ♐	
desc. node	7602 Oct 17 14:46	7°  ♍51'09			7605 May 07 09:38	0°  ♑	
	7602 Nov 05 22:28	0°  ♎			7605 May 31 09:58	0°  ♒	
	7602 Dec 03 08:29	0°  ♏		morning set	7605 Jun 16 23:41	20°  ♒40'46	
evening max el	7602 Dec 18 00:55	14°  ♏54'27	46°16'31		7605 Jun 24 11:11	0°  ♓	
	7603 Jan 03 16:18	0°  ♏			7605 Jul 18 14:28	0°  ♓	
greatest brilliancy	7603 Jan 26 22:25	14°  ♏28'45	-4.8m	asc. node	7605 Jul 25 09:10	8°  ♓24'16	
retrograde	7603 Feb 05 16:59	16°  ♏16'18					
asc. node	7603 Feb 07 14:52	16° ♏11'53		superior conj	7605 Jul 25 15:15	8° ♓43'09	0°00'37
evening set	7603 Feb 20 10:39	12° ♏00'59		minimum elong	7605 Jul 25 15:06	8° ♓42'42	0°00'31

behind sun begin	7605 Jul 24 15:20	7°Ω29'04		morning rise	7607 Dec 18 22:58	20°♄48'53	
behind sun end	7605 Jul 26 14:52	9°Ω56'20		direct	7608 Jan 03 19:38	15°♄56'18	
max. Earth dist.	7605 Jul 28 06:02	11°Ω57'37	1.72698 AU	asc. node	7608 Jan 10 05:08	16°♄43'17	
	7605 Aug 11 20:03	0°♍		greatest brilliancy	7608 Jan 14 22:55	18°♄13'46	-4.8m
evening rise	7605 Sep 01 00:13	24°♍53'26			7608 Feb 02 22:26	0°♄	
	7605 Sep 05 03:49	0°♊		morning max el	7608 Feb 23 00:47	18°♄22'10	46°38'53
	7605 Sep 29 14:14	0°♌			7608 Mar 05 05:14	0°♊	
	7605 Oct 24 04:22	0°♈			7608 Mar 31 23:13	0°♈	
desc. node	7605 Nov 14 02:33	25°♈20'09			7608 Apr 26 07:31	0°♍	
	7605 Nov 17 23:26	0°♄		desc. node	7608 Apr 30 22:34	5°♍34'24	
	7605 Dec 13 00:37	0°♊			7608 May 21 00:59	0°♈	
	7606 Jan 07 10:25	0°♈			7608 Jun 14 11:49	0°♌	
	7606 Feb 02 13:13	0°♍			7608 Jul 08 20:30	0°♄	
evening max el	7606 Feb 28 23:21	28°♍22'20	46°59'08		7608 Aug 02 05:11	0°Ω	
	7606 Mar 02 14:19	0°♈		asc. node	7608 Aug 21 21:13	24°Ω12'30	
asc. node	7606 Mar 07 02:27	4°♈24'54		morning set	7608 Aug 26 16:15	0°♍06'29	
greatest brilliancy	7606 Apr 10 14:44	29°♈30'36	-4.9m		7608 Aug 26 14:09	0°♍	
	7606 Apr 12 01:37	0°♌			7608 Sep 19 22:54	0°♊	
retrograde	7606 Apr 20 13:16	1°♌22'47					
	7606 Apr 28 17:15	30°♌♄		superior conj	7608 Oct 02 15:06	15°♊37'02	1°19'10
evening set	7606 May 08 11:54	25°♈11'01		minimum elong	7608 Oct 02 08:26	15°♊16'29	1°19'04
inferior conj	7606 May 11 05:49	23°♈30'07	8°50'20	max. Earth dist.	7608 Oct 02 10:09	15°♊21'48	1.73342 AU
minimum elong	7606 May 11 11:38	23°♈21'10	8°49'46		7608 Oct 14 07:11	0°♌	
min. Earth dist.	7606 May 11 03:40	23°♈33'27	0.27220 AU		7608 Nov 07 15:28	0°♈	
morning rise	7606 May 14 11:28	21°♈32'02		evening rise	7608 Nov 08 00:39	0°♄28'16	
direct	7606 May 31 22:30	15°♈42'08			7608 Dec 02 00:24	0°♄	
greatest brilliancy	7606 Jun 10 11:13	17°♈25'07	-4.9m	desc. node	7608 Dec 11 14:14	11°♄46'23	
desc. node	7606 Jun 26 20:15	26°♈30'48			7608 Dec 26 10:15	0°♊	
	7606 Jul 01 10:14	0°♌			7609 Jan 19 21:00	0°♈	
morning max el	7606 Jul 20 19:37	17°♌27'35	46°21'17		7609 Feb 13 09:32	0°♍	
	7606 Aug 02 03:35	0°♄			7609 Mar 10 03:26	0°♈	
	7606 Aug 29 14:31	0°Ω		asc. node	7609 Apr 03 14:01	28°♈58'15	
	7606 Sep 24 17:28	0°♍			7609 Apr 04 11:16	0°♌	
asc. node	7606 Oct 17 19:36	27°♍13'38			7609 May 01 04:57	0°♄	
	7606 Oct 20 03:26	0°♊		evening max el	7609 May 12 08:43	11°♄35'49	46°46'09
	7606 Nov 14 01:35	0°♌			7609 Jun 01 11:51	0°Ω	
	7606 Dec 08 15:00	0°♈		greatest brilliancy	7609 Jun 20 20:07	11°Ω55'43	-4.8m
	7607 Jan 01 22:22	0°♄		retrograde	7609 Jul 01 14:57	14°Ω05'41	
morning set	7607 Jan 15 04:53	16°♄28'38		evening set	7609 Jul 16 13:58	9°Ω43'02	
	7607 Jan 26 01:35	0°♊		inferior conj	7609 Jul 22 19:25	5°Ω59'48	0°22'40
desc. node	7607 Feb 06 12:06	14°♊16'31		minimum elong	7609 Jul 22 20:17	5°Ω58'28	0°22'20
	7607 Feb 19 01:48	0°♈		min. Earth dist.	7609 Jul 22 09:32	6°Ω15'11	0.27954 AU
max. Earth dist.	7607 Feb 21 04:01	2°♈37'13	1.71540 AU	desc. node	7609 Jul 24 07:52	5°Ω03'16	
				morning rise	7609 Jul 29 03:10	2°Ω14'27	
superior conj	7607 Feb 23 21:05	6°♈00'57	-0°40'39		7609 Aug 02 21:33	30°♌♄	
minimum elong	7607 Feb 23 11:42	5°♈31'36	0°40'11	direct	7609 Aug 12 21:12	28°♄01'34	
	7607 Mar 14 23:48	0°♍		greatest brilliancy	7609 Aug 22 16:38	29°♄46'05	-4.8m
evening rise	7607 Apr 05 05:52	26°♍42'10			7609 Aug 23 08:32	0°Ω	
	7607 Apr 07 20:50	0°♈		morning max el	7609 Sep 30 14:55	27°Ω49'14	45°44'12
	7607 May 01 18:53	0°♌			7609 Oct 02 21:15	0°♍	
	7607 May 25 20:25	0°♄			7609 Oct 31 15:34	0°♊	
asc. node	7607 May 30 11:28	5°♄44'11		asc. node	7609 Nov 14 07:37	15°♊17'48	
	7607 Jun 19 03:59	0°Ω			7609 Nov 27 02:26	0°♌	
	7607 Jul 13 20:35	0°♍			7609 Dec 22 10:49	0°♈	
	7607 Aug 08 03:20	0°♊			7610 Jan 16 04:00	0°♄	
	7607 Sep 03 11:06	0°♌			7610 Feb 09 12:07	0°♊	
desc. node	7607 Sep 19 05:12	16°♌58'48			7610 Mar 05 14:35	0°♈	
	7607 Oct 02 02:00	0°♈		desc. node	7610 Mar 06 00:13	0°♈30'05	
evening max el	7607 Oct 04 15:42	2°♈28'56	45°40'11		7610 Mar 29 13:27	0°♍	
	7607 Nov 11 07:47	0°♄		morning set	7610 Mar 31 01:44	1°♍53'54	
greatest brilliancy	7607 Nov 12 20:21	0°♄32'05	-4.7m		7610 Apr 22 10:24	0°♈	
retrograde	7607 Nov 22 06:52	2°♄08'44					
	7607 Dec 02 17:50	30°♌♈		superior conj	7610 May 10 19:44	23°♈06'49	-1°24'40
evening set	7607 Dec 08 20:51	26°♈56'22		minimum elong	7610 May 11 01:41	23°♈25'30	1°24'41
inferior conj	7607 Dec 13 12:01	24°♈07'19	-6°10'19	max. Earth dist.	7610 May 13 01:10	25°♈54'33	1.71377 AU
minimum elong	7607 Dec 13 22:09	23°♈51'29	6°08'02		7610 May 16 07:24	0°♌	
min. Earth dist.	7607 Dec 14 09:02	23°♈34'31	0.28325 AU		7610 Jun 09 06:26	0°♄	

evening rise	7610 Jun 20 00:20	13°☿23'48		asc. node	7612 Dec 11 19:24	7°♄22'19	
asc. node	7610 Jun 26 23:14	22°☿02'45			7613 Jan 02 11:25	0°♁	
	7610 Jul 03 09:00	0°♂			7613 Jan 28 20:13	0°♂	
	7610 Jul 27 16:04	0°♄			7613 Feb 23 00:10	0°♁	
	7610 Aug 21 04:44	0°♂			7613 Mar 19 13:41	0°♁	
	7610 Sep 15 01:16	0°♄		desc. node	7613 Apr 02 12:26	17°♁14'03	
	7610 Oct 10 09:41	0°♁			7613 Apr 12 19:15	0°♁	
desc. node	7610 Oct 16 16:47	7°♁19'32			7613 May 06 20:39	0°♁	
	7610 Nov 05 12:54	0°♂			7613 May 30 20:48	0°♄	
	7610 Dec 03 03:10	0°♁		morning set	7613 Jun 14 13:09	18°♄19'41	
evening max el	7610 Dec 15 14:47	12°♁35'33 46°14'49			7613 Jun 23 21:52	0°☿	
	7611 Jan 04 04:08	0°♁			7613 Jul 18 01:03	0°♂	
greatest brilliancy	7611 Jan 24 11:00	12°♁04'30 -4.8m					
retrograde	7611 Feb 03 06:21	13°♁52'31		superior conj	7613 Jul 23 06:13	6°♄28'01 -0°02'57	
asc. node	7611 Feb 06 16:53	13°♁38'04		minimum elong	7613 Jul 23 06:55	6°♄30'11 0°03'01	
evening set	7611 Feb 17 21:36	9°♁39'25		behind sun begin	7613 Jul 22 07:19	5°♄17'03	
inferior conj	7611 Feb 23 22:29	6°♁07'01 4°17'14		behind sun end	7613 Jul 24 06:30	7°♄43'18	
minimum elong	7611 Feb 23 13:31	6°♁20'45 4°14'41		asc. node	7613 Jul 24 11:10	7°♄57'44	
min. Earth dist.	7611 Feb 23 21:47	6°♁08'04 0.26985 AU		max. Earth dist.	7613 Jul 26 01:14	9°♄55'42 1.72657 AU	
morning rise	7611 Mar 01 05:09	2°♁58'44			7613 Aug 11 06:35	0°♄	
	7611 Mar 07 12:19	30°♁		evening rise	7613 Aug 29 17:29	22°♄46'13	
direct	7611 Mar 16 14:26	28°♁17'50			7613 Sep 04 14:23	0°♂	
	7611 Mar 26 01:33	0°♁			7613 Sep 29 00:57	0°♄	
greatest brilliancy	7611 Mar 26 17:13	0°♁13'56 -4.9m			7613 Oct 23 15:22	0°♁	
	7611 May 04 22:31	0°♁		desc. node	7613 Nov 13 04:28	24°♁51'36	
morning max el	7611 May 06 03:20	1°♁12'11 46°58'38			7613 Nov 17 10:56	0°♂	
desc. node	7611 May 29 10:31	26°♁04'55			7613 Dec 12 12:56	0°♁	
	7611 Jun 01 22:31	0°♁			7614 Jan 07 00:08	0°♁	
	7611 Jun 27 22:57	0°♄			7614 Feb 02 05:38	0°♁	
	7611 Jul 23 05:55	0°☿		evening max el	7614 Feb 26 13:27	26°♁00'02 46°58'10	
	7611 Aug 17 05:21	0°♂			7614 Mar 02 14:04	0°♁	
	7611 Sep 11 00:22	0°♄		asc. node	7614 Mar 06 04:31	3°♁28'19	
asc. node	7611 Sep 19 09:27	10°♄11'10		greatest brilliancy	7614 Apr 08 04:22	27°♁05'58 -4.9m	
	7611 Oct 05 15:24	0°♂		retrograde	7614 Apr 18 02:18	28°♁57'18	
	7611 Oct 30 02:30	0°♄		evening set	7614 May 06 03:03	22°♁43'00	
morning set	7611 Nov 04 04:49	6°♄16'19		inferior conj	7614 May 08 18:45	21°♁05'16 8°56'27	
	7611 Nov 23 10:21	0°♁		minimum elong	7614 May 08 23:42	20°♁57'37 8°56'00	
max. Earth dist.	7611 Dec 08 22:20	19°♁10'22 1.72795 AU		min. Earth dist.	7614 May 08 16:11	21°♁09'14 0.27203 AU	
				morning rise	7614 May 11 20:28	19°♁12'49	
superior conj	7611 Dec 10 23:22	21°♁42'12 1°02'48		direct	7614 May 29 11:24	13°♁17'46	
minimum elong	7611 Dec 11 09:10	22°♁12'34 1°02'35		greatest brilliancy	7614 Jun 07 23:19	14°♁59'51 -4.9m	
	7611 Dec 17 16:02	0°♂		desc. node	7614 Jun 25 22:11	25°♁15'33	
desc. node	7612 Jan 09 02:09	27°♁49'27			7614 Jul 01 21:32	0°♄	
	7612 Jan 10 20:11	0°♁		morning max el	7614 Jul 18 08:27	15°♄04'59 46°22'53	
evening rise	7612 Jan 18 09:29	9°♁23'33			7614 Aug 01 22:18	0°☿	
	7612 Feb 03 22:54	0°♁			7614 Aug 29 05:04	0°♂	
	7612 Feb 28 00:31	0°♁			7614 Sep 24 06:09	0°♄	
	7612 Mar 23 02:29	0°♁		asc. node	7614 Oct 16 21:28	26°♄44'09	
	7612 Apr 16 07:52	0°♄			7614 Oct 19 15:07	0°♂	
asc. node	7612 May 01 01:39	18°♄04'20			7614 Nov 13 12:42	0°♄	
	7612 May 10 21:22	0°☿			7614 Dec 08 01:49	0°♁	
	7612 Jun 05 02:02	0°♂			7615 Jan 01 09:01	0°♂	
	7612 Jul 01 12:13	0°♄		morning set	7615 Jan 12 19:33	14°♁12'02	
evening max el	7612 Jul 22 07:42	21°♄42'21 45°58'31			7615 Jan 25 12:12	0°♁	
	7612 Jul 31 02:29	0°♂		desc. node	7615 Feb 05 14:09	13°♁49'43	
desc. node	7612 Aug 20 19:44	16°♂00'13		max. Earth dist.	7615 Feb 18 12:12	29°♁59'13 1.71580 AU	
greatest brilliancy	7612 Aug 29 18:37	20°♂25'01 -4.7m			7615 Feb 18 12:27	0°♁	
retrograde	7612 Sep 09 15:22	22°♂33'12					
evening set	7612 Sep 26 19:49	16°♂54'59		superior conj	7615 Feb 21 09:10	3°♁35'05 -0°37'12	
inferior conj	7612 Oct 01 03:51	14°♂14'42 -7°51'57		minimum elong	7615 Feb 21 00:27	3°♁07'49 0°36'45	
minimum elong	7612 Sep 30 20:19	14°♂26'31 7°51'02			7615 Mar 14 10:33	0°♁	
min. Earth dist.	7612 Sep 30 19:05	14°♂28'28 0.29120 AU		evening rise	7615 Apr 02 16:45	24°♁11'37	
morning rise	7612 Oct 04 20:59	11°♂57'01			7615 Apr 07 07:41	0°♁	
direct	7612 Oct 22 17:01	5°♂58'30			7615 May 01 05:51	0°♄	
greatest brilliancy	7612 Nov 01 21:05	7°♂51'15 -4.7m			7615 May 25 07:32	0°☿	
	7612 Dec 04 01:03	0°♄		asc. node	7615 May 29 13:20	5°☿15'23	
morning max el	7612 Dec 10 19:50	6°♄24'48 45°53'15			7615 Jun 18 15:24	0°♂	

	7615 Jul 13 08:34	0°♍			7618 Feb 08 23:18	0°♏	
	7615 Aug 07 16:23	0°♌		desc. node	7618 Mar 05 02:14	0°♏01'53	
	7615 Sep 03 02:27	0°♍			7618 Mar 05 01:37	0°♏	
desc. node	7615 Sep 18 07:12	16°♍17'21		morning set	7618 Mar 28 12:20	29°♏22'12	
	7615 Oct 01 23:50	0°♌			7618 Mar 29 00:22	0°♏	
evening max el	7615 Oct 02 05:28	0°♌13'29	45°39'52		7618 Apr 21 21:14	0°♏	
greatest brilliancy	7615 Nov 10 11:21	28°♌19'37	-4.7m				
retrograde	7615 Nov 19 21:13	29°♌56'05		superior conj	7618 May 08 07:24	20°♏38'45	-1°25'36
evening set	7615 Dec 06 14:50	24°♌38'57		minimum elong	7618 May 08 12:25	20°♏54'31	1°25'37
inferior conj	7615 Dec 11 03:18	21°♌53'55	-6°24'38	max. Earth dist.	7618 May 10 08:26	23°♏12'46	1.71352 AU
minimum elong	7615 Dec 11 13:24	21°♌38'08	6°22'27		7618 May 15 18:12	0°♏	
min. Earth dist.	7615 Dec 12 00:31	21°♌20'47	0.28381 AU		7618 Jun 08 17:16	0°♏	
morning rise	7615 Dec 16 11:26	18°♌39'15		evening rise	7618 Jun 17 13:22	11°♏01'16	
direct	7616 Jan 01 10:42	13°♌42'02		asc. node	7618 Jun 26 01:16	21°♏35'17	
asc. node	7616 Jan 09 07:08	14°♌51'47			7618 Jul 02 19:54	0°♏	
greatest brilliancy	7616 Jan 12 15:11	16°♌00'02	-4.8m		7618 Jul 27 03:07	0°♏	
	7616 Feb 03 08:11	0°♏			7618 Aug 20 16:04	0°♏	
morning max el	7616 Feb 20 14:56	16°♏02'37	46°37'30		7618 Sep 14 13:10	0°♏	
	7616 Mar 04 23:26	0°♏			7618 Oct 09 22:36	0°♌	
	7616 Mar 31 13:45	0°♏		desc. node	7618 Oct 15 18:41	6°♌46'41	
	7616 Apr 25 20:29	0°♏			7618 Nov 05 03:48	0°♏	
desc. node	7616 Apr 30 00:28	5°♏01'34			7618 Dec 02 22:42	0°♏	
	7616 May 20 13:06	0°♏		evening max el	7618 Dec 13 05:25	10°♏17'56	46°13'10
	7616 Jun 13 23:24	0°♏			7619 Jan 04 20:29	0°♏	
	7616 Jul 08 07:42	0°♏		greatest brilliancy	7619 Jan 21 23:29	9°♏39'32	-4.8m
	7616 Aug 01 16:05	0°♏		retrograde	7619 Jan 31 19:40	11°♏27'44	
asc. node	7616 Aug 20 23:16	23°♏45'45		asc. node	7619 Feb 05 18:59	10°♏57'28	
morning set	7616 Aug 24 08:39	27°♏56'16		evening set	7619 Feb 15 08:47	7°♏16'52	
	7616 Aug 26 00:51	0°♏		inferior conj	7619 Feb 21 11:20	3°♏41'59	3°55'34
	7616 Sep 19 09:30	0°♏		minimum elong	7619 Feb 21 02:58	3°♏54'47	3°53'09
				min. Earth dist.	7619 Feb 21 11:15	3°♏42'07	0.26998 AU
superior conj	7616 Sep 30 08:41	13°♏30'50	1°17'52	morning rise	7619 Feb 26 20:57	0°♏29'48	
minimum elong	7616 Sep 30 01:32	13°♏08'46	1°17'44		7619 Feb 27 18:50	30°♏	
max. Earth dist.	7616 Sep 30 04:04	13°♏16'37	1.73342 AU	direct	7619 Mar 14 04:13	25°♏52'29	
	7616 Oct 13 17:46	0°♏		greatest brilliancy	7619 Mar 24 07:00	27°♏49'03	-4.9m
evening rise	7616 Nov 05 17:38	28°♏19'55			7619 Mar 29 06:10	0°♏	
	7616 Nov 07 02:09	0°♌		morning max el	7619 May 03 17:54	28°♏50'56	46°59'05
	7616 Dec 01 11:17	0°♏			7619 May 04 21:14	0°♏	
desc. node	7616 Dec 10 16:12	11°♏18'40		desc. node	7619 May 28 12:31	25°♏23'37	
	7616 Dec 25 21:26	0°♏			7619 Jun 01 14:44	0°♏	
	7617 Jan 19 08:35	0°♏			7619 Jun 27 12:44	0°♏	
	7617 Feb 12 21:42	0°♏			7619 Jul 22 18:28	0°♏	
	7617 Mar 09 16:31	0°♏			7619 Aug 16 17:08	0°♏	
asc. node	7617 Apr 02 15:56	28°♏21'06			7619 Sep 10 11:40	0°♏	
	7617 Apr 04 02:05	0°♏		asc. node	7619 Sep 18 11:19	9°♏42'46	
	7617 Apr 30 23:52	0°♏			7619 Oct 05 02:23	0°♏	
evening max el	7617 May 09 22:15	9°♏13'58	46°47'27		7619 Oct 29 13:18	0°♏	
	7617 Jun 02 01:42	0°♏		morning set	7619 Nov 01 22:01	4°♏08'18	
greatest brilliancy	7617 Jun 18 12:04	9°♏39'22	-4.8m		7619 Nov 22 21:07	0°♌	
retrograde	7617 Jun 29 06:03	11°♏48'59		max. Earth dist.	7619 Dec 06 16:20	17°♌04'06	1.72828 AU
evening set	7617 Jul 14 05:48	7°♏24'46					
inferior conj	7617 Jul 20 10:08	3°♏43'34	0°44'43	superior conj	7619 Dec 08 15:21	19°♌29'37	1°05'05
minimum elong	7617 Jul 20 11:50	3°♏40'56	0°44'06	minimum elong	7619 Dec 09 01:02	19°♌59'36	1°04'53
min. Earth dist.	7617 Jul 20 01:06	3°♏57'36	0.27917 AU		7619 Dec 17 02:51	0°♏	
desc. node	7617 Jul 23 10:00	1°♏53'08		desc. node	7620 Jan 08 04:11	27°♏21'47	
morning rise	7617 Jul 26 18:22	29°♏57'48			7620 Jan 10 07:08	0°♏	
	7617 Jul 26 16:44	30°♏		evening rise	7620 Jan 15 23:27	7°♏03'32	
direct	7617 Aug 10 11:00	25°♏45'35			7620 Feb 03 10:02	0°♏	
greatest brilliancy	7617 Aug 20 07:35	27°♏31'10	-4.8m		7620 Feb 27 11:52	0°♏	
	7617 Aug 26 04:02	0°♏			7620 Mar 22 14:06	0°♏	
morning max el	7617 Sep 28 05:58	25°♏36'12	45°44'53		7620 Apr 15 19:53	0°♏	
	7617 Oct 02 18:43	0°♏		asc. node	7620 Apr 30 03:36	17°♏32'41	
	7617 Oct 31 06:53	0°♏			7620 May 10 10:01	0°♏	
asc. node	7617 Nov 13 09:34	14°♏43'38			7620 Jun 04 15:55	0°♏	
	7617 Nov 26 15:31	0°♏			7620 Jul 01 04:58	0°♏	
	7617 Dec 21 22:50	0°♏		evening max el	7620 Jul 20 00:11	19°♏31'36	45°59'52
	7618 Jan 15 15:29	0°♏			7620 Jul 31 05:19	0°♏	

desc. node	7620 Aug 19 21:41	14°♄39'30		max. Earth dist.	7623 Feb 15 21:44	27°♁24'17	1.71621 AU
greatest brilliancy	7620 Aug 27 10:14	18°♄14'45	-4.7m		7623 Feb 17 23:29	0°♄	
retrograde	7620 Sep 07 07:46	20°♄23'21					
evening set	7620 Sep 24 09:05	14°♄50'01		superior conj	7623 Feb 18 21:04	1°♄07'33	-0°33'40
inferior conj	7620 Sep 28 20:10	12°♄04'57	-7°43'35	minimum elong	7623 Feb 18 13:04	0°♄42'29	0°33'14
minimum elong	7620 Sep 28 12:10	12°♄17'30	7°42'32		7623 Mar 13 21:38	0°♄	
min. Earth dist.	7620 Sep 28 10:19	12°♄20'26	0.29101 AU	evening rise	7623 Mar 31 03:35	21°♄39'50	
morning rise	7620 Oct 02 15:27	9°♄43'54			7623 Apr 06 18:51	0°♄	
direct	7620 Oct 20 09:39	3°♄49'23			7623 Apr 30 17:08	0°♄	
greatest brilliancy	7620 Oct 30 11:38	5°♄40'15	-4.7m		7623 May 24 19:00	0°♄	
	7620 Dec 04 01:38	0°♄		asc. node	7623 May 28 15:25	4°♄46'14	
morning max el	7620 Dec 08 10:59	4°♄11'25	45°51'59		7623 Jun 18 03:10	0°♄	
asc. node	7620 Dec 10 21:26	6°♄34'41			7623 Jul 12 20:54	0°♄	
	7621 Jan 02 03:44	0°♄			7623 Aug 07 05:47	0°♄	
	7621 Jan 28 09:59	0°♄			7623 Sep 02 18:13	0°♄	
	7621 Feb 22 12:46	0°♄		desc. node	7623 Sep 17 09:07	15°♄34'44	
	7621 Mar 19 01:40	0°♄		evening max el	7623 Sep 29 19:19	27°♄57'56	45°39'39
desc. node	7621 Apr 01 14:15	16°♄43'14			7623 Oct 01 22:46	0°♄	
	7621 Apr 12 06:51	0°♄		greatest brilliancy	7623 Nov 08 01:43	26°♄06'16	-4.7m
	7621 May 06 08:00	0°♄		retrograde	7623 Nov 17 12:03	27°♄43'26	
	7621 May 30 07:57	0°♄		evening set	7623 Dec 04 08:55	22°♄21'12	
morning set	7621 Jun 12 02:49	15°♄58'12		inferior conj	7623 Dec 08 18:43	19°♄40'11	-6°38'10
	7621 Jun 23 08:51	0°♄		minimum elong	7623 Dec 09 04:44	19°♄24'33	6°36'05
	7621 Jul 17 11:54	0°♄		min. Earth dist.	7623 Dec 09 15:53	19°♄07'10	0.28445 AU
				morning rise	7623 Dec 14 00:01	16°♄29'36	
superior conj	7621 Jul 20 21:30	4°♄13'03	-0°06'27	direct	7623 Dec 30 02:08	11°♄27'15	
minimum elong	7621 Jul 20 23:01	4°♄17'45	0°06'28	asc. node	7624 Jan 08 09:11	13°♄03'50	
behind sun begin	7621 Jul 20 00:51	3°♄09'00		greatest brilliancy	7624 Jan 10 07:41	13°♄46'04	-4.8m
behind sun end	7621 Jul 21 21:11	5°♄26'29			7624 Feb 03 15:41	0°♄	
asc. node	7621 Jul 23 13:12	7°♄30'29		morning max el	7624 Feb 18 06:15	13°♄44'58	46°35'59
max. Earth dist.	7621 Jul 23 21:00	7°♄54'38	1.72611 AU		7624 Mar 04 17:37	0°♄	
	7621 Aug 10 17:22	0°♄			7624 Mar 31 04:30	0°♄	
evening rise	7621 Aug 27 10:58	20°♄38'50			7624 Apr 25 09:42	0°♄	
	7621 Sep 04 01:14	0°♄		desc. node	7624 Apr 29 02:32	4°♄28'23	
	7621 Sep 28 12:00	0°♄			7624 May 20 01:27	0°♄	
	7621 Oct 23 02:46	0°♄			7624 Jun 13 11:11	0°♄	
desc. node	7621 Nov 12 06:26	24°♄21'53			7624 Jul 07 19:05	0°♄	
	7621 Nov 16 22:53	0°♄			7624 Aug 01 03:11	0°♄	
	7621 Dec 12 01:46	0°♄		asc. node	7624 Aug 20 01:09	23°♄17'51	
	7622 Jan 06 14:27	0°♄		morning set	7624 Aug 22 01:14	25°♄45'54	
	7622 Feb 01 22:51	0°♄			7624 Aug 25 11:45	0°♄	
evening max el	7622 Feb 24 02:31	23°♄33'54	46°57'12		7624 Sep 18 20:16	0°♄	
	7622 Mar 02 15:31	0°♄					
asc. node	7622 Mar 05 06:25	2°♄28'50		superior conj	7624 Sep 28 02:35	11°♄25'01	1°16'27
greatest brilliancy	7622 Apr 05 18:31	24°♄40'39	-4.9m	minimum elong	7624 Sep 27 18:59	11°♄01'34	1°16'18
retrograde	7622 Apr 15 14:57	26°♄30'42		max. Earth dist.	7624 Sep 28 00:06	11°♄17'22	1.73337 AU
evening set	7622 May 03 17:50	20°♄14'26			7624 Oct 13 04:30	0°♄	
inferior conj	7622 May 06 07:43	18°♄39'22	9°01'33	evening rise	7624 Nov 03 11:08	26°♄12'46	
minimum elong	7622 May 06 11:46	18°♄33'05	9°01'13		7624 Nov 06 12:58	0°♄	
min. Earth dist.	7622 May 06 05:07	18°♄43'22	0.27184 AU		7624 Nov 30 22:19	0°♄	
morning rise	7622 May 09 05:48	16°♄52'09		desc. node	7624 Dec 09 18:19	10°♄50'56	
direct	7622 May 26 23:43	10°♄52'07			7624 Dec 25 08:49	0°♄	
greatest brilliancy	7622 Jun 05 12:05	12°♄34'07	-4.9m		7625 Jan 18 20:26	0°♄	
desc. node	7622 Jun 25 00:15	24°♄01'46			7625 Feb 12 10:12	0°♄	
	7622 Jul 02 06:18	0°♄			7625 Mar 09 06:01	0°♄	
morning max el	7622 Jul 15 20:58	12°♄40'24	46°24'44	asc. node	7625 Apr 01 17:54	27°♄42'54	
	7622 Aug 01 16:49	0°♄			7625 Apr 03 17:24	0°♄	
	7622 Aug 28 19:41	0°♄			7625 Apr 30 19:39	0°♄	
	7622 Sep 23 18:59	0°♄		evening max el	7625 May 07 12:42	6°♄53'44	46°48'56
asc. node	7622 Oct 15 23:26	26°♄14'17			7625 Jun 02 20:40	0°♄	
	7622 Oct 19 03:01	0°♄		greatest brilliancy	7625 Jun 16 03:32	7°♄21'50	-4.8m
	7622 Nov 13 00:06	0°♄		retrograde	7625 Jun 26 21:37	9°♄31'39	
	7622 Dec 07 12:58	0°♄		evening set	7625 Jul 11 21:49	5°♄05'39	
	7622 Dec 31 20:03	0°♄		min. Earth dist.	7625 Jul 17 16:18	1°♄39'47	0.27878 AU
morning set	7623 Jan 10 10:08	11°♄53'54		inferior conj	7625 Jul 18 00:49	1°♄26'35	1°06'45
	7623 Jan 24 23:12	0°♄		minimum elong	7625 Jul 18 03:20	1°♄22'40	1°05'51
desc. node	7623 Feb 04 16:08	13°♄21'28			7625 Jul 20 09:03	30°♄	

desc. node	7625 Jul 22 11:58	28°♄44'20			7628 Jan 09 17:53	0°♊	
morning rise	7625 Jul 24 09:23	27°♄40'50		evening rise	7628 Jan 13 14:00	4°♊46'05	
direct	7625 Aug 08 01:13	23°♄28'59			7628 Feb 02 20:56	0°♊	
greatest brilliancy	7625 Aug 17 21:56	25°♄15'07	-4.8m		7628 Feb 26 22:59	0°♊	
	7625 Aug 27 21:26	0°♏			7628 Mar 22 01:33	0°♊	
morning max el	7625 Sep 25 21:59	23°♏25'16	45°45'42		7628 Apr 15 07:48	0°♊	
	7625 Oct 02 15:30	0°♏		asc. node	7628 Apr 29 05:39	17°♊01'35	
	7625 Oct 30 22:02	0°♏			7628 May 09 22:40	0°♊	
asc. node	7625 Nov 12 11:36	14°♏09'51			7628 Jun 04 05:55	0°♏	
	7625 Nov 26 04:30	0°♏			7628 Jun 30 22:04	0°♏	
	7625 Dec 21 10:48	0°♏		evening max el	7628 Jul 17 16:00	17°♏19'09	46°01'20
	7626 Jan 15 02:57	0°♏			7628 Jul 31 09:50	0°♏	
	7626 Feb 08 10:33	0°♊		desc. node	7628 Aug 18 23:37	13°♏16'17	
desc. node	7626 Mar 04 04:08	29°♊33'04		greatest brilliancy	7628 Aug 25 02:22	16°♏05'11	-4.7m
	7626 Mar 04 12:45	0°♊		retrograde	7628 Sep 04 23:43	18°♏13'44	
morning set	7626 Mar 25 22:41	26°♊49'22		evening set	7628 Sep 21 22:16	12°♏45'28	
	7626 Mar 28 11:25	0°♊		min. Earth dist.	7628 Sep 26 01:52	10°♏12'18	0.29076 AU
	7626 Apr 21 08:14	0°♊		inferior conj	7628 Sep 26 12:26	9°♏55'40	-7°34'34
				minimum elong	7628 Sep 26 04:01	10°♏08'55	7°33'23
superior conj	7626 May 05 18:29	18°♊08'15	-1°26'21	morning rise	7628 Sep 30 09:57	7°♏31'04	
minimum elong	7626 May 05 22:30	18°♊20'53	1°26'24	direct	7628 Oct 18 01:45	1°♏40'45	
max. Earth dist.	7626 May 07 16:51	20°♊33'57	1.71327 AU	greatest brilliancy	7628 Oct 28 02:37	3°♏30'15	-4.7m
	7626 May 15 05:10	0°♊			7628 Dec 04 00:48	0°♏	
	7626 Jun 08 04:13	0°♊		morning max el	7628 Dec 06 01:25	1°♏57'04	45°50'55
evening rise	7626 Jun 15 01:52	8°♊36'37		asc. node	7628 Dec 09 23:26	5°♏48'28	
asc. node	7626 Jun 25 03:15	21°♊07'25			7629 Jan 01 19:28	0°♏	
	7626 Jul 02 06:54	0°♏			7629 Jan 27 23:18	0°♏	
	7626 Jul 26 14:14	0°♏			7629 Feb 22 00:58	0°♊	
	7626 Aug 20 03:29	0°♏			7629 Mar 18 13:14	0°♊	
	7626 Sep 14 01:07	0°♏		desc. node	7629 Mar 31 16:21	16°♊14'28	
	7626 Oct 09 11:35	0°♏			7629 Apr 11 18:04	0°♊	
desc. node	7626 Oct 14 20:44	6°♏14'11			7629 May 05 19:01	0°♊	
	7626 Nov 04 18:49	0°♏			7629 May 29 18:49	0°♊	
	7626 Dec 02 18:38	0°♊		morning set	7629 Jun 09 16:08	13°♊36'19	
evening max el	7626 Dec 10 20:42	8°♊02'39	46°11'30		7629 Jun 22 19:35	0°♊	
	7627 Jan 05 17:56	0°♊			7629 Jul 16 22:32	0°♏	
greatest brilliancy	7627 Jan 19 12:23	7°♊16'20	-4.8m				
retrograde	7627 Jan 29 08:52	9°♊04'10		superior conj	7629 Jul 18 12:19	1°♏57'11	-0°09'59
asc. node	7627 Feb 04 20:48	8°♊12'38		minimum elong	7629 Jul 18 14:39	2°♏04'25	0°09'58
evening set	7627 Feb 12 20:32	4°♊55'28		behind sun begin	7629 Jul 17 19:35	1°♏05'16	
inferior conj	7627 Feb 19 00:29	1°♊18'17	3°33'36	behind sun end	7629 Jul 19 09:43	3°♏03'34	
minimum elong	7627 Feb 18 16:46	1°♊30'06	3°31'21	max. Earth dist.	7629 Jul 21 13:41	5°♏44'38	1.72565 AU
min. Earth dist.	7627 Feb 19 01:04	1°♊17'22	0.27018 AU	asc. node	7629 Jul 22 15:05	7°♏03'22	
	7627 Feb 21 03:47	30°♏			7629 Aug 10 03:57	0°♏	
morning rise	7627 Feb 24 12:49	28°♊02'12		evening rise	7629 Aug 25 03:53	18°♏30'23	
direct	7627 Mar 11 18:19	23°♊28'32			7629 Sep 03 11:53	0°♏	
greatest brilliancy	7627 Mar 21 21:10	25°♊25'16	-4.9m		7629 Sep 27 22:48	0°♏	
	7627 Mar 31 02:35	0°♊			7629 Oct 22 13:54	0°♏	
morning max el	7627 May 01 08:02	26°♊28'35	46°59'09	desc. node	7629 Nov 11 08:31	23°♏53'24	
	7627 May 04 19:04	0°♊			7629 Nov 16 10:35	0°♏	
desc. node	7627 May 27 14:34	24°♊42'42			7629 Dec 11 14:21	0°♊	
	7627 Jun 01 06:46	0°♊			7630 Jan 06 04:31	0°♊	
	7627 Jun 27 02:29	0°♊			7630 Feb 01 15:56	0°♊	
	7627 Jul 22 06:58	0°♊		evening max el	7630 Feb 21 15:10	21°♊08'20	46°56'22
	7627 Aug 16 04:52	0°♏			7630 Mar 02 17:39	0°♊	
	7627 Sep 09 22:52	0°♏		asc. node	7630 Mar 04 08:27	1°♊29'59	
asc. node	7627 Sep 17 13:17	9°♏15'02		greatest brilliancy	7630 Apr 03 08:46	22°♊17'29	-4.9m
	7627 Oct 04 13:14	0°♏		retrograde	7630 Apr 13 03:47	24°♊06'42	
	7627 Oct 28 23:59	0°♏		evening set	7630 May 01 08:17	17°♊49'00	
morning set	7627 Oct 30 15:26	2°♏01'22		inferior conj	7630 May 03 20:58	16°♊15'51	9°05'26
	7627 Nov 22 07:45	0°♏		minimum elong	7630 May 04 00:05	16°♊11'02	9°05'14
max. Earth dist.	7627 Dec 04 08:39	14°♏53'12	1.72858 AU	min. Earth dist.	7630 May 03 18:23	16°♊19'51	0.27170 AU
				morning rise	7630 May 06 15:56	14°♊33'16	
superior conj	7627 Dec 06 07:53	17°♏19'22	1°07'14	direct	7630 May 24 12:06	8°♊28'34	
minimum elong	7627 Dec 06 17:23	17°♏48'46	1°07'03	greatest brilliancy	7630 Jun 03 01:31	10°♊11'08	-4.9m
	7627 Dec 16 13:31	0°♏		desc. node	7630 Jun 24 02:14	22°♊51'34	
desc. node	7628 Jan 07 06:09	26°♏54'32			7630 Jul 02 11:58	0°♊	

morning max el	7630 Jul 13 09:58	10° Π 18'09	46°26'18	asc. node	7633 Mar 31 19:59	27° \mathcal{B} 05'44	
	7630 Aug 01 10:29	0° \mathcal{B}			7633 Apr 03 08:35	0° Π	
	7630 Aug 28 09:50	0° \mathcal{Q}			7633 Apr 30 15:38	0° \mathcal{B}	
	7630 Sep 23 07:29	0° \mathcal{M}		evening max el	7633 May 05 04:11	4° \mathcal{B} 37'09	46°50'23
asc. node	7630 Oct 15 01:31	25° \mathcal{M} 45'35			7633 Jun 03 21:45	0° \mathcal{Q}	
	7630 Oct 18 14:36	0° \mathcal{L}		greatest brilliancy	7633 Jun 13 18:56	5° \mathcal{Q} 05'29	-4.8m
	7630 Nov 12 11:09	0° \mathcal{M}		retrograde	7633 Jun 24 13:24	7° \mathcal{Q} 15'23	
	7630 Dec 06 23:44	0° \mathcal{X}		evening set	7633 Jul 09 14:06	2° \mathcal{Q} 47'39	
	7630 Dec 31 06:41	0° \mathcal{Z}			7633 Jul 14 07:39	30° \mathcal{R} \mathcal{B}	
morning set	7631 Jan 08 00:49	9° \mathcal{Z} 37'22		inferior conj	7633 Jul 15 15:31	29° \mathcal{B} 10'43	1°28'35
	7631 Jan 24 09:49	0° \mathcal{A}		minimum elong	7633 Jul 15 18:51	29° \mathcal{B} 05'33	1°27'27
desc. node	7631 Feb 03 18:02	12° \mathcal{A} 54'09		min. Earth dist.	7633 Jul 15 07:18	29° \mathcal{B} 23'27	0.27839 AU
max. Earth dist.	7631 Feb 13 09:40	24° \mathcal{A} 58'07	1.71661 AU	desc. node	7633 Jul 21 13:51	25° \mathcal{B} 39'17	
				morning rise	7633 Jul 22 00:14	25° \mathcal{B} 25'14	
superior conj	7631 Feb 16 09:11	28° \mathcal{A} 41'54	-0°30'05	direct	7633 Aug 05 15:57	21° \mathcal{B} 13'43	
minimum elong	7631 Feb 16 01:57	28° \mathcal{A} 19'15	0°29'41	greatest brilliancy	7633 Aug 15 11:47	22° \mathcal{B} 59'39	-4.8m
	7631 Feb 17 10:08	0° \mathcal{X}			7633 Aug 29 01:20	0° \mathcal{Q}	
	7631 Mar 13 08:21	0° \mathcal{Y}		morning max el	7633 Sep 23 13:59	21° \mathcal{Q} 15'19	45°46'19
evening rise	7631 Mar 28 14:50	19° \mathcal{Y} 10'45			7633 Oct 02 11:13	0° \mathcal{M}	
	7631 Apr 06 05:37	0° \mathcal{B}			7633 Oct 30 12:41	0° \mathcal{L}	
	7631 Apr 30 03:59	0° Π		asc. node	7633 Nov 11 13:33	13° \mathcal{L} 36'38	
	7631 May 24 06:01	0° \mathcal{B}			7633 Nov 25 17:12	0° \mathcal{M}	
asc. node	7631 May 27 17:23	4° \mathcal{B} 18'05			7633 Dec 20 22:34	0° \mathcal{X}	
	7631 Jun 17 14:32	0° \mathcal{Q}			7634 Jan 14 14:14	0° \mathcal{Z}	
	7631 Jul 12 08:53	0° \mathcal{M}			7634 Feb 07 21:34	0° \mathcal{A}	
	7631 Aug 06 18:57	0° \mathcal{L}		desc. node	7634 Mar 03 06:10	29° \mathcal{A} 05'27	
	7631 Sep 02 09:59	0° \mathcal{M}			7634 Mar 03 23:38	0° \mathcal{X}	
desc. node	7631 Sep 16 11:13	14° \mathcal{M} 52'39		morning set	7634 Mar 23 09:00	24° \mathcal{X} 17'18	
evening max el	7631 Sep 27 09:53	25° \mathcal{M} 44'49	45°39'32		7634 Mar 27 22:13	0° \mathcal{Y}	
	7631 Oct 01 22:29	0° \mathcal{X}			7634 Apr 20 18:59	0° \mathcal{B}	
greatest brilliancy	7631 Nov 05 15:26	23° \mathcal{X} 52'58	-4.7m				
retrograde	7631 Nov 15 03:14	25° \mathcal{X} 31'26		superior conj	7634 May 03 05:33	15° \mathcal{B} 38'23	-1°26'56
evening set	7631 Dec 02 02:54	20° \mathcal{X} 04'07		minimum elong	7634 May 03 08:33	15° \mathcal{B} 47'49	1°27'01
inferior conj	7631 Dec 06 10:02	17° \mathcal{X} 27'05	-6°51'00	max. Earth dist.	7634 May 05 02:48	18° \mathcal{B} 00'35	1.71304 AU
minimum elong	7631 Dec 06 19:54	17° \mathcal{X} 11'42	6°49'04		7634 May 14 15:54	0° Π	
min. Earth dist.	7631 Dec 07 06:46	16° \mathcal{X} 54'46	0.28504 AU		7634 Jun 07 14:58	0° \mathcal{B}	
morning rise	7631 Dec 11 12:25	14° \mathcal{X} 20'54		evening rise	7634 Jun 12 14:21	6° \mathcal{B} 12'25	
direct	7631 Dec 27 18:00	9° \mathcal{X} 13'19		asc. node	7634 Jun 24 05:09	20° \mathcal{B} 39'54	
asc. node	7632 Jan 07 11:05	11° \mathcal{X} 20'30			7634 Jul 01 17:41	0° \mathcal{Q}	
greatest brilliancy	7632 Jan 07 23:34	11° \mathcal{X} 32'32	-4.8m		7634 Jul 26 01:09	0° \mathcal{M}	
	7632 Feb 03 20:30	0° \mathcal{Z}			7634 Aug 19 14:40	0° \mathcal{L}	
morning max el	7632 Feb 15 22:12	11° \mathcal{Z} 30'16	46°34'29		7634 Sep 13 12:54	0° \mathcal{M}	
	7632 Mar 04 10:58	0° \mathcal{A}			7634 Oct 09 00:30	0° \mathcal{X}	
	7632 Mar 30 18:40	0° \mathcal{X}		desc. node	7634 Oct 13 22:46	5° \mathcal{X} 41'55	
	7632 Apr 24 22:25	0° \mathcal{Y}			7634 Nov 04 09:57	0° \mathcal{Z}	
desc. node	7632 Apr 28 04:30	3° \mathcal{Y} 56'18			7634 Dec 02 15:13	0° \mathcal{A}	
	7632 May 19 13:19	0° \mathcal{B}		evening max el	7634 Dec 08 11:28	5° \mathcal{A} 46'07	46°09'40
	7632 Jun 12 22:30	0° Π			7635 Jan 06 23:38	0° \mathcal{X}	
	7632 Jul 07 06:01	0° \mathcal{B}		greatest brilliancy	7635 Jan 17 01:53	4° \mathcal{X} 53'40	-4.8m
	7632 Jul 31 13:51	0° \mathcal{Q}		retrograde	7635 Jan 26 21:28	6° \mathcal{X} 40'18	
asc. node	7632 Aug 19 03:08	22° \mathcal{Q} 51'29		asc. node	7635 Feb 03 22:53	5° \mathcal{X} 21'34	
morning set	7632 Aug 19 17:52	23° \mathcal{Q} 36'52		evening set	7635 Feb 10 08:26	2° \mathcal{X} 33'36	
	7632 Aug 24 22:16	0° \mathcal{M}			7635 Feb 14 18:47	30° \mathcal{R} \mathcal{A}	
	7632 Sep 18 06:42	0° \mathcal{L}		inferior conj	7635 Feb 16 13:32	28° \mathcal{A} 54'33	3°11'16
				minimum elong	7635 Feb 16 06:32	29° \mathcal{A} 05'19	3°09'12
superior conj	7632 Sep 25 20:18	9° \mathcal{L} 19'33	1°14'55	min. Earth dist.	7635 Feb 16 15:12	28° \mathcal{A} 52'00	0.27036 AU
minimum elong	7632 Sep 25 12:19	8° \mathcal{L} 54'54	1°14'44	morning rise	7635 Feb 22 04:24	25° \mathcal{A} 34'36	
max. Earth dist.	7632 Sep 25 21:03	9° \mathcal{L} 21'51	1.73338 AU	direct	7635 Mar 09 07:51	21° \mathcal{A} 04'32	
	7632 Oct 12 14:57	0° \mathcal{M}		greatest brilliancy	7635 Mar 19 11:44	23° \mathcal{A} 01'52	-4.9m
evening rise	7632 Nov 01 04:23	24° \mathcal{M} 05'44			7635 Apr 01 08:53	0° \mathcal{X}	
	7632 Nov 05 23:31	0° \mathcal{X}		morning max el	7635 Apr 28 20:56	24° \mathcal{X} 03'19	46°59'13
	7632 Nov 30 09:05	0° \mathcal{Z}			7635 May 04 16:00	0° \mathcal{Y}	
desc. node	7632 Dec 08 20:11	10° \mathcal{Z} 23'20		desc. node	7635 May 26 16:31	24° \mathcal{Y} 02'18	
	7632 Dec 24 19:55	0° \mathcal{A}			7635 May 31 22:24	0° \mathcal{B}	
	7633 Jan 18 08:01	0° \mathcal{X}			7635 Jun 26 15:58	0° Π	
	7633 Feb 11 22:25	0° \mathcal{Y}			7635 Jul 21 19:18	0° \mathcal{B}	
	7633 Mar 08 19:16	0° \mathcal{B}			7635 Aug 15 16:27	0° \mathcal{Q}	

	7635 Sep 09 09:57	0°♍		evening max el	7638 Feb 19 03:37	18°♍41'07	46°55'18
asc. node	7635 Sep 16 15:22	8°♍47'53			7638 Mar 02 22:03	0°♌	
	7635 Oct 04 00:01	0°♌		asc. node	7638 Mar 03 10:30	0°♌28'13	
morning set	7635 Oct 28 08:56	29°♌54'51		greatest brilliancy	7638 Mar 31 22:13	19°♌51'17	-4.9m
	7635 Oct 28 10:36	0°♍		retrograde	7638 Apr 10 16:35	21°♌40'26	
	7635 Nov 21 18:21	0°♎		evening set	7638 Apr 28 21:52	15°♌21'46	
max. Earth dist.	7635 Dec 02 00:08	12°♎39'48	1.72894 AU	inferior conj	7638 May 01 09:53	13°♌49'53	9°08'23
				minimum elong	7638 May 01 12:01	13°♌46'35	9°08'15
superior conj	7635 Dec 04 00:29	15°♎09'19	1°09'16	min. Earth dist.	7638 May 01 07:07	13°♌54'08	0.27157 AU
minimum elong	7635 Dec 04 09:45	15°♎38'00	1°09'07	morning rise	7638 May 04 02:11	12°♌11'27	
	7635 Dec 16 00:12	0°♏		direct	7638 May 22 00:22	6°♌02'26	
desc. node	7636 Jan 06 08:07	26°♏27'08		greatest brilliancy	7638 May 31 14:30	7°♌45'45	-4.9m
	7636 Jan 09 04:43	0°♐		desc. node	7638 Jun 23 04:11	21°♌41'42	
evening rise	7636 Jan 11 04:20	2°♐27'51			7638 Jul 02 16:18	0°♑	
	7636 Feb 02 07:56	0°♒		morning max el	7638 Jul 10 23:32	7°♑56'00	46°28'06
	7636 Feb 26 10:13	0°♓			7638 Aug 01 04:08	0°♑	
	7636 Mar 21 13:06	0°♓			7638 Aug 28 00:08	0°♑	
	7636 Apr 14 19:48	0°♑			7638 Sep 22 20:12	0°♒	
asc. node	7636 Apr 28 07:36	16°♑29'55		asc. node	7638 Oct 14 03:23	25°♒15'30	
	7636 May 09 11:25	0°♒			7638 Oct 18 02:26	0°♒	
	7636 Jun 03 20:06	0°♓			7638 Nov 11 22:29	0°♓	
	7636 Jun 30 15:34	0°♓			7638 Dec 06 10:47	0°♓	
evening max el	7636 Jul 15 07:00	15°♓04'23	46°02'49		7638 Dec 30 17:36	0°♏	
	7636 Jul 31 16:31	0°♏		morning set	7639 Jan 05 16:00	7°♏21'37	
desc. node	7636 Aug 18 01:45	11°♏50'23			7639 Jan 23 20:44	0°♐	
greatest brilliancy	7636 Aug 22 18:38	13°♏55'27	-4.8m	desc. node	7639 Feb 02 20:08	12°♐26'36	
retrograde	7636 Sep 02 15:33	16°♏04'08		max. Earth dist.	7639 Feb 11 00:08	22°♐39'00	1.71704 AU
evening set	7636 Sep 19 11:26	10°♐40'43					
min. Earth dist.	7636 Sep 23 17:43	8°♐03'44	0.29050 AU	superior conj	7639 Feb 13 21:33	26°♐16'06	-0°26'29
inferior conj	7636 Sep 24 04:45	7°♐46'22	-7°24'54	minimum elong	7639 Feb 13 15:07	25°♐55'59	0°26'06
minimum elong	7636 Sep 23 19:56	8°♐00'16	7°23'34		7639 Feb 16 21:06	0°♒	
morning rise	7636 Sep 28 04:36	5°♐18'09			7639 Mar 12 19:24	0°♓	
	7636 Oct 10 20:12	30°♑♍		evening rise	7639 Mar 26 02:06	16°♑40'33	
direct	7636 Oct 15 17:22	29°♑31'56			7639 Apr 05 16:47	0°♓	
	7636 Oct 20 17:22	0°♒			7639 Apr 29 15:17	0°♑	
greatest brilliancy	7636 Oct 25 18:13	1°♒20'51	-4.7m		7639 May 23 17:32	0°♑	
morning max el	7636 Dec 03 15:33	29°♒41'49	45°49'54	asc. node	7639 May 26 19:17	3°♑48'18	
	7636 Dec 03 23:02	0°♓			7639 Jun 17 02:23	0°♓	
asc. node	7636 Dec 09 01:21	5°♓02'34			7639 Jul 11 21:21	0°♓	
	7637 Jan 01 11:04	0°♓			7639 Aug 06 08:39	0°♏	
	7637 Jan 27 12:40	0°♏			7639 Sep 02 02:24	0°♓	
	7637 Feb 21 13:19	0°♐		desc. node	7639 Sep 15 13:11	14°♓08'35	
	7637 Mar 18 01:03	0°♒		evening max el	7639 Sep 25 01:21	23°♓32'59	45°39'31
desc. node	7637 Mar 30 18:22	15°♒44'38			7639 Oct 01 23:49	0°♓	
	7637 Apr 11 05:33	0°♓		greatest brilliancy	7639 Nov 03 05:00	21°♓39'01	-4.7m
	7637 May 05 06:15	0°♓		retrograde	7639 Nov 12 18:50	23°♓18'54	
	7637 May 29 05:51	0°♑		evening set	7639 Nov 29 21:03	17°♓46'47	
morning set	7637 Jun 07 05:08	11°♑12'46		inferior conj	7639 Dec 04 01:29	15°♓13'30	-7°03'10
	7637 Jun 22 06:29	0°♑		minimum elong	7639 Dec 04 11:09	14°♓58'27	7°01'23
				min. Earth dist.	7639 Dec 04 21:24	14°♓42'30	0.28559 AU
superior conj	7637 Jul 16 03:04	29°♑40'34	-0°13'30	morning rise	7639 Dec 09 00:52	12°♓11'52	
minimum elong	7637 Jul 16 06:13	29°♑50'21	0°13'27	direct	7639 Dec 25 10:26	6°♓59'12	
behind sun begin	7637 Jul 15 16:54	29°♑09'00		greatest brilliancy	7640 Jan 05 14:53	9°♓17'50	-4.8m
behind sun end	7637 Jul 16 19:33	0°♓31'42		asc. node	7640 Jan 06 13:07	9°♓40'24	
	7637 Jul 16 09:20	0°♓			7640 Feb 03 23:51	0°♏	
max. Earth dist.	7637 Jul 19 05:00	3°♓29'50	1.72519 AU	morning max el	7640 Feb 13 14:29	9°♏15'48	46°32'56
asc. node	7637 Jul 21 17:06	6°♓36'11			7640 Mar 04 04:15	0°♐	
	7637 Aug 09 14:45	0°♑			7640 Mar 30 09:00	0°♒	
evening rise	7637 Aug 22 20:56	16°♑21'39			7640 Apr 24 11:25	0°♓	
	7637 Sep 02 22:44	0°♒		desc. node	7640 Apr 27 06:25	3°♓23'03	
	7637 Sep 27 09:50	0°♓			7640 May 19 01:34	0°♓	
	7637 Oct 22 01:15	0°♓			7640 Jun 12 10:15	0°♑	
desc. node	7637 Nov 10 10:26	23°♓23'48			7640 Jul 06 17:25	0°♑	
	7637 Nov 15 22:30	0°♏			7640 Jul 31 00:59	0°♓	
	7637 Dec 11 03:13	0°♐		morning set	7640 Aug 17 10:16	21°♓25'44	
	7638 Jan 05 19:02	0°♒		asc. node	7640 Aug 18 05:12	22°♓24'04	
	7638 Feb 01 09:47	0°♓			7640 Aug 24 09:11	0°♑	

	7640 Sep 17 17:31	0°♌		inferior conj	7643 Feb 14 02:46	26°♊30'53	2°48'43
				minimum elong	7643 Feb 13 20:31	26°♊40'30	2°46'50
superior conj	7640 Sep 23 13:51	7°♌12'24 1°13'17		min. Earth dist.	7643 Feb 14 05:49	26°♊26'12	0.27057 AU
minimum elong	7640 Sep 23 05:30	6°♌46'41 1°13'04		morning rise	7643 Feb 19 19:58	23°♊07'14	
max. Earth dist.	7640 Sep 23 19:10	7°♌28'48 1.73331 AU		direct	7643 Mar 06 21:05	18°♊40'17	
	7640 Oct 12 01:46	0°♌		greatest brilliancy	7643 Mar 17 03:02	20°♊39'01	-4.9m
evening rise	7640 Oct 29 21:42	21°♌57'46			7643 Apr 02 07:01	0°♋	
	7640 Nov 05 10:27	0°♋		morning max el	7643 Apr 26 09:17	21°♋36'06	46°59'26
	7640 Nov 29 20:15	0°♋			7643 May 04 12:24	0°♌	
desc. node	7640 Dec 07 22:11	9°♋54'56		desc. node	7643 May 25 18:29	23°♌22'01	
	7640 Dec 24 07:25	0°♌			7643 May 31 13:56	0°♍	
	7641 Jan 17 19:57	0°♋			7643 Jun 26 05:28	0°♌	
	7641 Feb 11 11:00	0°♌			7643 Jul 21 07:42	0°♍	
	7641 Mar 08 08:55	0°♍			7643 Aug 15 04:10	0°♌	
asc. node	7641 Mar 30 21:53	26°♍26'46			7643 Sep 08 21:12	0°♍	
	7641 Apr 03 00:20	0°♌		asc. node	7643 Sep 15 17:14	8°♌19'32	
	7641 Apr 30 12:45	0°♍			7643 Oct 03 10:58	0°♌	
evening max el	7641 May 02 19:54	2°♍19'54 46°51'28		morning set	7643 Oct 26 02:15	27°♌47'11	
	7641 Jun 05 10:39	0°♌			7643 Oct 27 21:24	0°♌	
greatest brilliancy	7641 Jun 11 10:27	2°♌47'29 -4.8m			7643 Nov 21 05:07	0°♋	
retrograde	7641 Jun 22 04:44	4°♌56'45		max. Earth dist.	7643 Nov 29 16:38	10°♋29'07	1.72928 AU
evening set	7641 Jul 07 06:21	0°♌27'23					
	7641 Jul 08 01:51	30°♌		superior conj	7643 Dec 01 17:02	12°♋58'49	1°11'12
inferior conj	7641 Jul 13 06:00	26°♍52'40 1°50'36		minimum elong	7643 Dec 02 02:02	13°♋26'39	1°11'04
minimum elong	7641 Jul 13 10:08	26°♍46'15 1°49'13			7643 Dec 15 11:00	0°♋	
min. Earth dist.	7641 Jul 12 22:11	27°♍04'46 0.27801 AU		desc. node	7644 Jan 05 10:09	25°♋59'37	
morning rise	7641 Jul 19 14:36	23°♍07'32		evening rise	7644 Jan 08 18:47	0°♌09'46	
desc. node	7641 Jul 20 15:59	22°♍34'24			7644 Jan 08 15:38	0°♌	
direct	7641 Aug 03 06:42	18°♍56'24			7644 Feb 01 19:03	0°♋	
greatest brilliancy	7641 Aug 13 01:22	20°♍41'46 -4.8m			7644 Feb 25 21:35	0°♌	
	7641 Aug 29 22:30	0°♌			7644 Mar 21 00:47	0°♋	
morning max el	7641 Sep 21 05:05	19°♌01'43 45°47'03			7644 Apr 14 07:57	0°♌	
	7641 Oct 02 06:51	0°♌		asc. node	7644 Apr 27 09:34	15°♌57'57	
	7641 Oct 30 03:32	0°♌			7644 May 09 00:18	0°♍	
asc. node	7641 Nov 10 15:31	13°♌02'39			7644 Jun 03 10:26	0°♌	
	7641 Nov 25 06:08	0°♌			7644 Jun 30 09:28	0°♌	
	7641 Dec 20 10:35	0°♋		evening max el	7644 Jul 12 21:22	12°♌48'04	46°04'19
	7642 Jan 14 01:47	0°♋			7644 Aug 01 01:45	0°♌	
	7642 Feb 07 08:52	0°♌		desc. node	7644 Aug 17 03:39	10°♌21'14	
desc. node	7642 Mar 02 08:10	28°♌36'48		greatest brilliancy	7644 Aug 20 10:28	11°♌45'06	-4.8m
	7642 Mar 03 10:47	0°♋		retrograde	7644 Aug 31 07:33	13°♌54'38	
morning set	7642 Mar 20 19:45	21°♋45'46		evening set	7644 Sep 17 00:36	8°♌35'40	
	7642 Mar 27 09:16	0°♌		inferior conj	7644 Sep 21 21:06	5°♌37'00	-7°14'34
	7642 Apr 20 05:59	0°♋		minimum elong	7644 Sep 21 11:56	5°♌51'25	7°13'05
				min. Earth dist.	7644 Sep 21 09:38	5°♌55'03	0.29026 AU
superior conj	7642 Apr 30 16:59	13°♋08'58 -1°27'21		morning rise	7644 Sep 25 23:24	3°♌05'10	
minimum elong	7642 Apr 30 18:55	13°♋15'04 1°27'25			7644 Oct 01 19:38	30°♌	
max. Earth dist.	7642 May 02 12:23	15°♋25'23 1.71280 AU		direct	7644 Oct 13 08:53	27°♌22'52	
	7642 May 14 02:53	0°♌		greatest brilliancy	7644 Oct 23 10:23	29°♌11'59	-4.7m
	7642 Jun 07 01:58	0°♍			7644 Oct 25 13:15	0°♌	
evening rise	7642 Jun 10 02:52	3°♍47'28		morning max el	7644 Dec 01 06:14	27°♌27'49	45°48'59
asc. node	7642 Jun 23 07:13	20°♍12'03			7644 Dec 03 20:31	0°♌	
	7642 Jul 01 04:46	0°♌		asc. node	7644 Dec 08 03:25	4°♌17'29	
	7642 Jul 25 12:22	0°♌			7645 Jan 01 02:27	0°♋	
	7642 Aug 19 02:14	0°♌			7645 Jan 27 01:55	0°♋	
	7642 Sep 13 01:05	0°♌			7645 Feb 21 01:34	0°♌	
	7642 Oct 08 13:49	0°♋			7645 Mar 17 12:45	0°♋	
desc. node	7642 Oct 13 00:40	5°♋08'14		desc. node	7645 Mar 29 20:12	15°♋14'31	
	7642 Nov 04 01:36	0°♋			7645 Apr 10 16:56	0°♌	
	7642 Dec 02 12:49	0°♌			7645 May 04 17:25	0°♋	
evening max el	7642 Dec 06 01:18	3°♌26'48 46°07'55			7645 May 28 16:51	0°♌	
	7643 Jan 08 19:06	0°♋		morning set	7645 Jun 04 18:06	8°♌49'10	
greatest brilliancy	7643 Jan 14 15:55	2°♋31'21 -4.8m			7645 Jun 21 17:18	0°♍	
retrograde	7643 Jan 24 09:46	4°♋16'32					
asc. node	7643 Feb 03 00:56	2°♋24'59		superior conj	7645 Jul 13 17:55	27°♍24'26	-0°17'00
evening set	7643 Feb 07 20:42	0°♋11'13		minimum elong	7645 Jul 13 21:53	27°♍36'43	0°16'54
	7643 Feb 08 05:02	30°♋			7645 Jul 15 20:03	0°♌	

max. Earth dist.	7645 Jul 16 19:34	1°Ω12'59	1.72472 AU	morning max el	7648 Feb 11 06:16	7°Σ00'53	46°31'13
asc. node	7645 Jul 20 19:08	6°Ω09'16			7648 Mar 03 20:58	0°≈	
	7645 Aug 09 01:25	0°Π			7648 Mar 29 22:58	0°⋈	
evening rise	7645 Aug 20 14:07	14°Π13'44			7648 Apr 24 00:03	0°Υ	
	7645 Sep 02 09:29	0°Ω		desc. node	7648 Apr 26 08:29	2°Υ51'12	
	7645 Sep 26 20:46	0°Π			7648 May 18 13:26	0°⋈	
	7645 Oct 21 12:33	0°♁			7648 Jun 11 21:37	0°Π	
desc. node	7645 Nov 09 12:24	22°♁54'28			7648 Jul 06 04:27	0°Ω	
	7645 Nov 15 10:24	0°Σ			7648 Jul 30 11:46	0°Ω	
	7645 Dec 10 16:05	0°≈		morning set	7648 Aug 15 02:35	19°Ω15'20	
	7646 Jan 05 09:37	0°⋈		asc. node	7648 Aug 17 07:03	21°Ω56'58	
	7646 Feb 01 03:55	0°Υ			7648 Aug 23 19:48	0°Π	
evening max el	7646 Feb 16 16:36	16°Υ15'53	46°54'19		7648 Sep 17 04:01	0°Ω	
asc. node	7646 Mar 02 12:23	29°Υ25'01					
	7646 Mar 03 04:13	0°⋈		superior conj	7648 Sep 21 07:25	5°Ω06'16	1°11'32
greatest brilliancy	7646 Mar 29 10:52	17°⋈24'41	-4.9m	minimum elong	7648 Sep 20 22:46	4°Ω39'36	1°11'18
retrograde	7646 Apr 08 05:50	19°⋈14'37		max. Earth dist.	7648 Sep 21 16:27	5°Ω34'07	1.73318 AU
evening set	7646 Apr 26 10:49	12°⋈55'34			7648 Oct 11 12:15	0°Π	
inferior conj	7646 Apr 28 22:42	11°⋈24'03	9°10'18	evening rise	7648 Oct 27 15:07	19°Π51'07	
minimum elong	7646 Apr 28 23:52	11°⋈22'15	9°10'12		7648 Nov 04 21:01	0°♁	
min. Earth dist.	7646 Apr 28 19:24	11°⋈29'08	0.27145 AU		7648 Nov 29 07:04	0°Σ	
morning rise	7646 May 01 12:57	9°⋈48'57		desc. node	7648 Dec 07 00:16	9°Σ27'53	
direct	7646 May 19 13:08	3°⋈36'31			7648 Dec 23 18:36	0°≈	
greatest brilliancy	7646 May 29 02:57	5°⋈20'06	-4.9m		7649 Jan 17 07:38	0°⋈	
desc. node	7646 Jun 22 06:15	20°⋈34'19			7649 Feb 10 23:24	0°Υ	
	7646 Jul 02 18:48	0°Π			7649 Mar 07 22:27	0°⋈	
morning max el	7646 Jul 08 13:55	5°Π36'13	46°29'54	asc. node	7649 Mar 29 23:53	25°⋈48'23	
	7646 Jul 31 21:12	0°Ω			7649 Apr 02 16:04	0°Π	
	7646 Aug 27 14:04	0°Ω			7649 Apr 30 10:19	0°Ω	
	7646 Sep 22 08:36	0°Π		evening max el	7649 Apr 30 10:58	0°Ω01'37	46°52'38
asc. node	7646 Oct 13 05:22	24°Π46'32			7649 Jun 07 19:32	0°Ω	
	7646 Oct 17 14:00	0°Ω		greatest brilliancy	7649 Jun 09 02:28	0°Ω30'52	-4.8m
	7646 Nov 11 09:34	0°Π		retrograde	7649 Jun 19 19:33	2°Ω38'42	
	7646 Dec 05 21:37	0°♁			7649 Jul 01 05:58	30°⋈Ω	
	7646 Dec 30 04:21	0°Σ		evening set	7649 Jul 04 22:44	28°Ω07'40	
morning set	7647 Jan 03 07:07	5°Σ06'16		inferior conj	7649 Jul 10 20:24	24°Ω35'22	2°12'33
	7647 Jan 23 07:28	0°≈		minimum elong	7649 Jul 11 01:20	24°Ω27'44	2°10'55
desc. node	7647 Feb 01 22:04	11°≈59'06		min. Earth dist.	7649 Jul 10 13:11	24°Ω46'34	0.27762 AU
max. Earth dist.	7647 Feb 08 13:39	20°≈17'33	1.71742 AU	morning rise	7649 Jul 17 04:37	20°Ω50'38	
				desc. node	7649 Jul 19 17:56	19°Ω33'53	
superior conj	7647 Feb 11 09:45	23°≈50'27	-0°22'48	direct	7649 Jul 31 21:04	16°Ω39'53	
minimum elong	7647 Feb 11 04:10	23°≈33'01	0°22'27	greatest brilliancy	7649 Aug 10 15:05	18°Ω24'40	-4.8m
	7647 Feb 16 07:53	0°⋈			7649 Aug 30 13:46	0°Ω	
	7647 Mar 12 06:14	0°Υ		morning max el	7649 Sep 18 19:19	16°Ω46'48	45°47'52
evening rise	7647 Mar 23 13:16	14°Υ10'50			7649 Oct 02 01:31	0°Π	
	7647 Apr 05 03:42	0°⋈			7649 Oct 29 17:49	0°Ω	
	7647 Apr 29 02:20	0°Π		asc. node	7649 Nov 09 17:32	12°Ω30'03	
	7647 May 23 04:48	0°Ω			7649 Nov 24 18:37	0°Π	
asc. node	7647 May 25 21:22	3°Ω19'47			7649 Dec 19 22:10	0°♁	
	7647 Jun 16 14:01	0°Ω			7650 Jan 13 12:56	0°Σ	
	7647 Jul 11 09:38	0°Π			7650 Feb 06 19:49	0°≈	
	7647 Aug 05 22:10	0°Ω		desc. node	7650 Mar 01 10:02	28°≈08'50	
	7647 Sep 01 18:47	0°Π			7650 Mar 02 21:37	0°⋈	
desc. node	7647 Sep 14 15:08	13°Π24'48		morning set	7650 Mar 18 06:13	19°⋈14'12	
evening max el	7647 Sep 22 17:11	21°Π23'00	45°39'31		7650 Mar 26 20:03	0°Υ	
	7647 Oct 02 02:07	0°♁			7650 Apr 19 16:43	0°⋈	
greatest brilliancy	7647 Oct 31 18:44	19°♁26'28	-4.7m				
retrograde	7647 Nov 10 10:17	21°♁07'16		superior conj	7650 Apr 28 03:58	10°⋈38'55	-1°27'35
evening set	7647 Nov 27 15:11	15°♁30'43		minimum elong	7650 Apr 28 04:48	10°⋈41'32	1°27'40
inferior conj	7647 Dec 01 16:58	13°♁00'58	-7°14'42	max. Earth dist.	7650 Apr 29 17:34	12°⋈37'03	1.71258 AU
minimum elong	7647 Dec 02 02:21	12°♁46'20	7°13'02		7650 May 13 13:37	0°Π	
min. Earth dist.	7647 Dec 02 11:52	12°♁31'29	0.28615 AU		7650 Jun 06 12:42	0°Ω	
morning rise	7647 Dec 06 13:13	10°♁03'47		evening rise	7650 Jun 07 14:45	1°Ω21'20	
direct	7647 Dec 23 02:58	4°♁46'19		asc. node	7650 Jun 22 09:10	19°Ω44'47	
greatest brilliancy	7648 Jan 03 05:44	7°♁03'30	-4.8m		7650 Jun 30 15:32	0°Ω	
asc. node	7648 Jan 05 15:09	8°♁04'35			7650 Jul 24 23:18	0°Π	
	7648 Feb 04 01:25	0°Σ			7650 Aug 18 13:30	0°Ω	

	7650 Sep 12 13:00	0°♌		7653 Feb 20 13:34	0°♏
	7650 Oct 08 02:56	0°♏		7653 Mar 17 00:13	0°♏
desc. node	7650 Oct 12 02:43	4°♏35'41	desc. node	7653 Mar 28 22:18	14°♏45'56
	7650 Nov 03 17:08	0°♏		7653 Apr 10 04:05	0°♏
	7650 Dec 02 10:47	0°♏		7653 May 04 04:23	0°♏
evening max el	7650 Dec 03 14:17	1°♏06'44 46°06'18		7653 May 28 03:39	0°♏
	7651 Jan 11 18:05	0°♏	morning set	7653 Jun 02 06:58	6°♏25'36
greatest brilliancy	7651 Jan 12 05:55	0°♏10'25 -4.8m		7653 Jun 21 04:00	0°♏
retrograde	7651 Jan 21 22:08	1°♏54'31			
	7651 Jan 31 16:40	30°♏	superior conj	7653 Jul 11 08:24	25°♏07'21 -0°20'30
asc. node	7651 Feb 02 02:46	29°♏25'00	minimum elong	7653 Jul 11 13:10	25°♏22'07 0°20'22
evening set	7651 Feb 05 09:13	27°♏49'48	max. Earth dist.	7653 Jul 14 09:41	28°♏54'53 1.72429 AU
inferior conj	7651 Feb 11 16:04	24°♏08'43 2°25'52		7653 Jul 15 06:40	0°♏
minimum elong	7651 Feb 11 10:36	24°♏17'07 2°24'14	asc. node	7653 Jul 19 21:00	5°♏42'12
min. Earth dist.	7651 Feb 11 20:32	24°♏01'50 0.27085 AU		7653 Aug 08 12:02	0°♏
morning rise	7651 Feb 17 11:30	20°♏41'45	evening rise	7653 Aug 18 06:55	12°♏04'51
direct	7651 Mar 04 10:09	16°♏17'16		7653 Sep 01 20:10	0°♏
greatest brilliancy	7651 Mar 14 18:42	18°♏17'59 -4.9m		7653 Sep 26 07:39	0°♏
	7651 Apr 02 22:56	0°♏		7653 Oct 20 23:48	0°♏
morning max el	7651 Apr 23 22:02	19°♏10'40 46°59'26	desc. node	7653 Nov 08 14:28	22°♏25'31
	7651 May 04 07:54	0°♏		7653 Nov 14 22:17	0°♏
desc. node	7651 May 24 20:31	22°♏42'51		7653 Dec 10 05:01	0°♏
	7651 May 31 05:03	0°♏		7654 Jan 05 00:21	0°♏
	7651 Jun 25 18:41	0°♏		7654 Jan 31 22:27	0°♏
	7651 Jul 20 19:49	0°♏	evening max el	7654 Feb 14 06:45	13°♏53'57 46°53'23
	7651 Aug 14 15:35	0°♏	asc. node	7654 Mar 01 14:27	28°♏20'55
	7651 Sep 08 08:09	0°♏		7654 Mar 03 12:37	0°♏
asc. node	7651 Sep 14 19:12	7°♏52'25	greatest brilliancy	7654 Mar 26 23:13	14°♏58'25 -4.9m
	7651 Oct 02 21:38	0°♏	retrograde	7654 Apr 05 19:36	16°♏49'24
morning set	7651 Oct 23 19:25	25°♏39'52	evening set	7654 Apr 23 23:17	10°♏31'01
	7651 Oct 27 07:57	0°♏	inferior conj	7654 Apr 26 11:37	8°♏58'52 9°11'08
	7651 Nov 20 15:38	0°♏	minimum elong	7654 Apr 26 11:49	8°♏58'33 9°11'04
max. Earth dist.	7651 Nov 27 10:32	8°♏23'34 1.72960 AU	min. Earth dist.	7654 Apr 26 07:24	9°♏05'21 0.27130 AU
			morning rise	7654 Apr 29 00:24	7°♏26'09
superior conj	7651 Nov 29 09:41	10°♏49'20 1°13'02	direct	7654 May 17 02:24	1°♏11'36
minimum elong	7651 Nov 29 18:21	11°♏16'09 1°12'54	greatest brilliancy	7654 May 26 14:49	2°♏54'29 -4.9m
	7651 Dec 14 21:34	0°♏	desc. node	7654 Jun 21 08:13	19°♏29'04
desc. node	7652 Jan 04 12:04	25°♏32'33		7654 Jul 02 19:42	0°♏
evening rise	7652 Jan 06 09:30	27°♏53'28	morning max el	7654 Jul 06 04:32	3°♏17'26 46°31'27
	7652 Jan 08 02:18	0°♏		7654 Jul 31 13:51	0°♏
	7652 Feb 01 05:54	0°♏		7654 Aug 27 03:51	0°♏
	7652 Feb 25 08:41	0°♏		7654 Sep 21 20:59	0°♏
	7652 Mar 20 12:14	0°♏	asc. node	7654 Oct 12 07:26	24°♏17'45
	7652 Apr 13 19:53	0°♏		7654 Oct 17 01:34	0°♏
asc. node	7652 Apr 26 11:36	15°♏26'46		7654 Nov 10 20:40	0°♏
	7652 May 08 13:04	0°♏		7654 Dec 05 08:28	0°♏
	7652 Jun 03 00:48	0°♏		7654 Dec 29 15:06	0°♏
	7652 Jun 30 03:42	0°♏	morning set	7654 Dec 31 22:19	2°♏51'11
evening max el	7652 Jul 10 11:57	10°♏32'32 46°06'00		7655 Jan 22 18:14	0°♏
	7652 Aug 01 14:10	0°♏	desc. node	7655 Jan 31 23:59	11°♏31'25
desc. node	7652 Aug 16 05:36	8°♏49'12	max. Earth dist.	7655 Feb 06 01:29	17°♏50'45 1.71782 AU
greatest brilliancy	7652 Aug 18 01:43	9°♏34'08 -4.8m			
retrograde	7652 Aug 28 23:55	11°♏45'14	superior conj	7655 Feb 08 22:07	21°♏25'12 -0°19'06
evening set	7652 Sep 14 13:39	6°♏30'25	minimum elong	7655 Feb 08 17:25	21°♏10'33 0°18'48
min. Earth dist.	7652 Sep 19 01:05	3°♏46'40 0.28999 AU		7655 Feb 15 18:43	0°♏
inferior conj	7652 Sep 19 13:17	3°♏27'32 -7°03'27		7655 Mar 11 17:09	0°♏
minimum elong	7652 Sep 19 03:50	3°♏42'21 7°01'51	evening rise	7655 Mar 21 00:36	11°♏41'23
morning rise	7652 Sep 23 18:10	0°♏52'08		7655 Apr 04 14:41	0°♏
	7652 Sep 25 06:11	30°♏		7655 Apr 28 13:25	0°♏
direct	7652 Oct 11 00:26	25°♏13'42		7655 May 22 16:05	0°♏
greatest brilliancy	7652 Oct 21 02:06	27°♏03'00 -4.7m	asc. node	7655 May 24 23:19	2°♏50'50
	7652 Oct 27 19:24	0°♏		7655 Jun 16 01:41	0°♏
morning max el	7652 Nov 28 21:40	25°♏16'13 45°48'08		7655 Jul 10 21:58	0°♏
	7652 Dec 03 17:02	0°♏		7655 Aug 05 11:51	0°♏
asc. node	7652 Dec 07 05:24	3°♏33'18		7655 Sep 01 11:37	0°♏
	7652 Dec 31 17:26	0°♏	desc. node	7655 Sep 13 17:13	12°♏40'20
	7653 Jan 26 14:54	0°♏	evening max el	7655 Sep 20 09:05	19°♏12'45 45°39'27

	7655 Oct 02 06:16	0°♊			7658 Apr 19 03:46	0°♋
greatest brilliancy	7655 Oct 29 09:19	17°♊14'37 -4.7m				
retrograde	7655 Nov 08 01:23	18°♊55'30	superior conj	7658 Apr 25 14:58	8°♋07'54 -1°27'38	
evening set	7655 Nov 25 09:24	13°♊14'53	minimum elong	7658 Apr 25 14:42	8°♋07'04 1°27'43	
inferior conj	7655 Nov 29 08:36	10°♊48'35 -7°25'24	max. Earth dist.	7658 Apr 26 19:55	9°♋38'54 1.71242 AU	
minimum elong	7655 Nov 29 17:39	10°♊34'25 7°23'53		7658 May 13 00:40	0°♌	
min. Earth dist.	7655 Nov 30 02:41	10°♊20'18 0.28666 AU	evening rise	7658 Jun 05 02:34	28°♌53'50	
morning rise	7655 Dec 04 01:39	7°♊55'42		7658 Jun 05 23:46	0°♍	
direct	7655 Dec 20 19:23	2°♊33'37	asc. node	7658 Jun 21 11:05	19°♍16'15	
greatest brilliancy	7655 Dec 31 20:42	4°♊49'09 -4.8m		7658 Jun 30 02:40	0°♎	
asc. node	7656 Jan 04 17:02	6°♊31'40		7658 Jul 24 10:34	0°♏	
	7656 Feb 04 01:50	0°♋		7658 Aug 18 01:06	0°♐	
morning max el	7656 Feb 08 21:10	4°♋43'25 46°29'26		7658 Sep 12 01:15	0°♑	
	7656 Mar 03 13:30	0°♌		7658 Oct 07 16:27	0°♒	
	7656 Mar 29 12:57	0°♍	desc. node	7658 Oct 11 04:43	4°♒01'58	
	7656 Apr 23 12:48	0°♎		7658 Nov 03 09:15	0°♓	
desc. node	7656 Apr 25 10:26	2°♎18'40	evening max el	7658 Dec 01 03:12	28°♓45'38 46°04'37	
	7656 May 18 01:26	0°♏		7658 Dec 02 10:08	0°♐	
	7656 Jun 11 09:07	0°♌	greatest brilliancy	7659 Jan 09 19:39	27°♐48'02 -4.8m	
	7656 Jul 05 15:36	0°♍	retrograde	7659 Jan 19 10:59	29°♐31'38	
	7656 Jul 29 22:40	0°♎	asc. node	7659 Feb 01 04:51	26°♐19'03	
morning set	7656 Aug 12 19:12	17°♎05'26	evening set	7659 Feb 02 21:59	25°♐26'53	
asc. node	7656 Aug 16 09:04	21°♎30'03	inferior conj	7659 Feb 09 05:23	21°♐45'26 2°02'47	
	7656 Aug 23 06:32	0°♏	minimum elong	7659 Feb 09 00:45	21°♐52'34 2°01'24	
	7656 Sep 16 14:40	0°♐	min. Earth dist.	7659 Feb 09 11:12	21°♐36'30 0.27118 AU	
			morning rise	7659 Feb 15 02:55	18°♐15'38	
superior conj	7656 Sep 19 01:10	3°♐00'15 1°09'41	direct	7659 Mar 01 23:23	13°♐53'02	
minimum elong	7656 Sep 18 16:17	2°♐32'51 1°09'26	greatest brilliancy	7659 Mar 12 10:21	15°♐55'56 -4.9m	
max. Earth dist.	7656 Sep 19 12:32	3°♐35'16 1.73309 AU		7659 Apr 03 11:19	0°♑	
	7656 Oct 10 22:55	0°♑	morning max el	7659 Apr 21 11:43	16°♑46'32 46°59'25	
evening rise	7656 Oct 25 08:36	17°♑44'04		7659 May 04 03:15	0°♒	
	7656 Nov 04 07:50	0°♒	desc. node	7659 May 23 22:29	22°♒02'50	
	7656 Nov 28 18:08	0°♓		7659 May 30 20:19	0°♓	
desc. node	7656 Dec 06 02:07	8°♓59'25		7659 Jun 25 08:09	0°♌	
	7656 Dec 23 06:02	0°♐		7659 Jul 20 08:15	0°♍	
	7657 Jan 16 19:35	0°♍		7659 Aug 14 03:20	0°♎	
	7657 Feb 10 12:06	0°♎		7659 Sep 07 19:26	0°♏	
	7657 Mar 07 12:23	0°♏	asc. node	7659 Sep 13 21:16	7°♏24'34	
asc. node	7657 Mar 29 01:57	25°♏08'59		7659 Oct 02 08:37	0°♐	
	7657 Apr 02 08:23	0°♌	morning set	7659 Oct 21 12:58	23°♐32'52	
evening max el	7657 Apr 28 01:14	27°♌40'19 46°53'43		7659 Oct 26 18:46	0°♑	
	7657 Apr 30 09:07	0°♍		7659 Nov 20 02:26	0°♒	
greatest brilliancy	7657 Jun 06 19:12	28°♍14'15 -4.9m	max. Earth dist.	7659 Nov 25 07:05	6°♒25'16 1.72993 AU	
	7657 Jun 13 06:32	0°♎				
retrograde	7657 Jun 17 10:05	0°♎20'08	superior conj	7659 Nov 27 02:41	8°♒40'04 1°14'43	
	7657 Jun 21 11:46	30°♎08'08	minimum elong	7659 Nov 27 10:59	9°♒05'43 1°14'37	
evening set	7657 Jul 02 15:21	25°♏47'11		7659 Dec 14 08:26	0°♓	
inferior conj	7657 Jul 08 10:57	22°♏17'45 2°34'10	desc. node	7660 Jan 03 14:04	25°♓04'37	
minimum elong	7657 Jul 08 16:37	22°♏08'56 2°32'20	evening rise	7660 Jan 04 00:30	25°♓37'00	
min. Earth dist.	7657 Jul 08 04:38	22°♏27'33 0.27721 AU		7660 Jan 07 13:20	0°♐	
morning rise	7657 Jul 14 18:31	18°♏33'33		7660 Jan 31 17:09	0°♑	
desc. node	7657 Jul 18 19:50	16°♏37'09		7660 Feb 24 20:12	0°♒	
direct	7657 Jul 29 10:59	14°♏22'55		7660 Mar 20 00:05	0°♓	
greatest brilliancy	7657 Aug 08 05:19	16°♏07'40 -4.8m		7660 Apr 13 08:15	0°♌	
	7657 Aug 31 01:17	0°♎	asc. node	7660 Apr 25 13:31	14°♌53'54	
morning max el	7657 Sep 16 08:55	14°♎29'48 45°48'46		7660 May 08 02:18	0°♍	
	7657 Oct 01 19:52	0°♏		7660 Jun 02 15:45	0°♎	
	7657 Oct 29 08:09	0°♐		7660 Jun 29 22:54	0°♏	
asc. node	7657 Nov 08 19:29	11°♐56'44	evening max el	7660 Jul 08 03:24	8°♏17'58 46°07'43	
	7657 Nov 24 07:17	0°♑		7660 Aug 02 07:36	0°♐	
	7657 Dec 19 10:02	0°♒	desc. node	7660 Aug 15 07:45	7°♐13'03	
	7658 Jan 13 00:23	0°♓	greatest brilliancy	7660 Aug 15 16:47	7°♐21'49 -4.8m	
	7658 Feb 06 07:03	0°♐	retrograde	7660 Aug 26 16:54	9°♐34'41	
desc. node	7658 Feb 28 12:08	27°♐40'37	evening set	7660 Sep 12 02:46	4°♐24'03	
	7658 Mar 02 08:44	0°♍	min. Earth dist.	7660 Sep 16 16:19	1°♐37'30 0.28967 AU	
morning set	7658 Mar 15 16:42	16°♍41'49	inferior conj	7660 Sep 17 05:26	1°♐16'58 -6°51'43	
	7658 Mar 26 07:06	0°♎	minimum elong	7660 Sep 16 19:46	1°♐32'07 6°50'00	

	7660 Sep 19 06:47	30° \mathbb{R} \mathbb{M}		behind sun end	7663 Feb 06 16:08	19° \approx 17'31	
morning rise	7660 Sep 21 12:57	28° \mathbb{M} 38'02			7663 Feb 15 05:38	0° \mathbb{H}	
direct	7660 Oct 08 16:18	23° \mathbb{M} 03'37			7663 Mar 11 04:08	0° \mathbb{Y}	
greatest brilliancy	7660 Oct 18 17:09	24° \mathbb{M} 52'31 -4.7m		evening rise	7663 Mar 18 12:11	9° \mathbb{Y} 12'25	
	7660 Oct 29 06:51	0° $\underline{\mathbb{L}}$			7663 Apr 04 01:47	0° \mathbb{B}	
morning max el	7660 Nov 26 13:50	23° $\underline{\mathbb{L}}$ 05'54 45°47'22			7663 Apr 28 00:41	0° \mathbb{I}	
	7660 Dec 03 13:09	0° \mathbb{M}			7663 May 22 03:36	0° \mathbb{G}	
asc. node	7660 Dec 06 07:19	2° \mathbb{M} 48'56		asc. node	7663 May 24 01:13	2° \mathbb{G} 21'06	
	7660 Dec 31 08:27	0° \mathbb{A}			7663 Jun 15 13:35	0° \mathbb{Q}	
	7661 Jan 26 04:03	0° \mathbb{B}			7663 Jul 10 10:36	0° \mathbb{M}	
	7661 Feb 20 01:50	0° \approx			7663 Aug 05 01:53	0° $\underline{\mathbb{L}}$	
	7661 Mar 16 12:02	0° \mathbb{H}			7663 Sep 01 05:01	0° \mathbb{M}	
desc. node	7661 Mar 28 00:17	14° \mathbb{H} 15'55		desc. node	7663 Sep 12 19:11	11° \mathbb{M} 54'22	
	7661 Apr 09 15:37	0° \mathbb{Y}		evening max el	7663 Sep 18 00:09	16° \mathbb{M} 59'52 45°39'27	
	7661 May 03 15:42	0° \mathbb{B}			7663 Oct 02 12:41	0° \mathbb{A}	
	7661 May 27 14:48	0° \mathbb{I}		greatest brilliancy	7663 Oct 27 00:23	15° \mathbb{A} 02'50 -4.7m	
morning set	7661 May 30 19:28	3° \mathbb{I} 59'47		retrograde	7663 Nov 05 16:03	16° \mathbb{A} 43'27	
	7661 Jun 20 15:01	0° \mathbb{G}		evening set	7663 Nov 23 03:30	10° \mathbb{A} 58'55	
				inferior conj	7663 Nov 27 00:14	8° \mathbb{A} 36'03 -7°35'26	
superior conj	7661 Jul 08 22:34	22° \mathbb{G} 48'10 -0°24'00		minimum elong	7663 Nov 27 08:52	8° \mathbb{A} 22'31 7°34'05	
minimum elong	7661 Jul 09 04:06	23° \mathbb{G} 05'24 0°23'51		min. Earth dist.	7663 Nov 27 17:48	8° \mathbb{A} 08'31 0.28712 AU	
max. Earth dist.	7661 Jul 12 01:28	26° \mathbb{G} 40'53 1.72386 AU		morning rise	7663 Dec 01 13:59	5° \mathbb{A} 47'35	
	7661 Jul 14 17:37	0° \mathbb{Q}		direct	7663 Dec 18 11:13	0° \mathbb{A} 20'44	
asc. node	7661 Jul 18 23:02	5° \mathbb{Q} 14'35		greatest brilliancy	7663 Dec 29 11:59	2° \mathbb{A} 35'06 -4.8m	
	7661 Aug 07 22:59	0° \mathbb{M}		asc. node	7664 Jan 03 19:05	5° \mathbb{A} 01'54	
evening rise	7661 Aug 15 23:38	9° \mathbb{M} 54'40			7664 Feb 04 01:07	0° \mathbb{B}	
	7661 Sep 01 07:11	0° $\underline{\mathbb{L}}$		morning max el	7664 Feb 06 11:22	2° \mathbb{B} 24'21 46°27'55	
	7661 Sep 25 18:51	0° \mathbb{M}			7664 Mar 03 05:40	0° \approx	
	7661 Oct 20 11:21	0° \mathbb{A}			7664 Mar 29 02:41	0° \mathbb{H}	
desc. node	7661 Nov 07 16:23	21° \mathbb{A} 55'23			7664 Apr 23 01:22	0° \mathbb{Y}	
	7661 Nov 14 10:26	0° \mathbb{B}		desc. node	7664 Apr 24 12:21	1° \mathbb{Y} 46'26	
	7661 Dec 09 18:14	0° \approx			7664 May 17 13:20	0° \mathbb{B}	
	7662 Jan 04 15:27	0° \mathbb{H}			7664 Jun 10 20:36	0° \mathbb{I}	
	7662 Jan 31 17:43	0° \mathbb{Y}			7664 Jul 05 02:46	0° \mathbb{G}	
evening max el	7662 Feb 11 21:25	11° \mathbb{Y} 32'44 46°52'07			7664 Jul 29 09:36	0° \mathbb{Q}	
asc. node	7662 Feb 28 16:28	27° \mathbb{Y} 14'09		morning set	7664 Aug 10 11:17	14° \mathbb{Q} 53'43	
	7662 Mar 04 00:29	0° \mathbb{B}		asc. node	7664 Aug 15 11:05	21° \mathbb{Q} 03'05	
greatest brilliancy	7662 Mar 24 11:33	12° \mathbb{B} 31'03 -4.9m			7664 Aug 22 17:16	0° \mathbb{M}	
retrograde	7662 Apr 03 09:09	14° \mathbb{B} 22'31			7664 Sep 16 01:19	0° $\underline{\mathbb{L}}$	
evening set	7662 Apr 21 10:58	8° \mathbb{B} 06'08					
inferior conj	7662 Apr 24 00:24	6° \mathbb{B} 32'13 9°10'54		superior conj	7664 Sep 16 18:32	0° $\underline{\mathbb{L}}$ 53'03 1°07'44	
minimum elong	7662 Apr 23 23:36	6° \mathbb{B} 33'26 9°10'50		minimum elong	7664 Sep 16 09:27	0° $\underline{\mathbb{L}}$ 25'03 1°07'27	
min. Earth dist.	7662 Apr 23 19:18	6° \mathbb{B} 40'03 0.27116 AU		max. Earth dist.	7664 Sep 17 06:56	1° $\underline{\mathbb{L}}$ 31'16 1.73297 AU	
morning rise	7662 Apr 26 12:19	5° \mathbb{B} 00'47			7664 Oct 10 09:35	0° \mathbb{M}	
	7662 May 06 20:57	30° \mathbb{R} \mathbb{Y}		evening rise	7664 Oct 23 01:53	15° \mathbb{M} 36'33	
direct	7662 May 14 15:40	28° \mathbb{Y} 45'22			7664 Nov 03 18:39	0° \mathbb{A}	
	7662 May 22 16:46	0° \mathbb{B}			7664 Nov 28 05:11	0° \mathbb{B}	
greatest brilliancy	7662 May 24 02:29	0° \mathbb{B} 27'08 -4.9m		desc. node	7664 Dec 05 04:09	8° \mathbb{B} 31'31	
desc. node	7662 Jun 20 10:11	18° \mathbb{B} 24'22			7664 Dec 22 17:26	0° \approx	
	7662 Jul 02 19:50	0° \mathbb{I}			7665 Jan 16 07:28	0° \mathbb{H}	
morning max el	7662 Jul 03 18:35	0° \mathbb{I} 56'05 46°32'58			7665 Feb 10 00:41	0° \mathbb{Y}	
	7662 Jul 31 06:30	0° \mathbb{G}			7665 Mar 07 02:11	0° \mathbb{B}	
	7662 Aug 26 17:46	0° \mathbb{Q}		asc. node	7665 Mar 28 03:51	24° \mathbb{B} 29'37	
	7662 Sep 21 09:30	0° \mathbb{M}			7665 Apr 02 00:41	0° \mathbb{I}	
asc. node	7662 Oct 11 09:17	23° \mathbb{M} 47'46		evening max el	7665 Apr 25 14:31	25° \mathbb{I} 17'16 46°54'38	
	7662 Oct 16 13:18	0° $\underline{\mathbb{L}}$			7665 Apr 30 08:37	0° \mathbb{G}	
	7662 Nov 10 07:56	0° \mathbb{M}		greatest brilliancy	7665 Jun 04 11:43	25° \mathbb{G} 57'33 -4.9m	
	7662 Dec 04 19:27	0° \mathbb{A}		retrograde	7665 Jun 15 00:16	28° \mathbb{G} 01'44	
	7662 Dec 29 01:59	0° \mathbb{B}		evening set	7665 Jun 30 07:56	23° \mathbb{G} 26'14	
morning set	7662 Dec 29 14:00	0° \mathbb{B} 37'16		inferior conj	7665 Jul 06 01:23	20° \mathbb{G} 00'03 2°55'39	
	7663 Jan 22 05:06	0° \approx		minimum elong	7665 Jul 06 07:46	19° \mathbb{G} 50'08 2°53'38	
desc. node	7663 Jan 31 02:04	11° \approx 04'05		min. Earth dist.	7665 Jul 05 20:09	20° \mathbb{G} 08'11 0.27690 AU	
max. Earth dist.	7663 Feb 03 12:37	15° \approx 21'41 1.71822 AU		morning rise	7665 Jul 12 08:06	16° \mathbb{G} 16'44	
				desc. node	7665 Jul 17 21:59	13° \mathbb{G} 44'27	
superior conj	7663 Feb 06 11:02	19° \approx 01'36 -0°15'25		direct	7665 Jul 27 00:27	12° \mathbb{G} 05'32	
minimum elong	7663 Feb 06 07:15	18° \approx 49'46 0°15'10		greatest brilliancy	7665 Aug 05 20:01	13° \mathbb{G} 51'00 -4.8m	
behind sun begin	7663 Feb 05 22:22	18° \approx 22'01			7665 Aug 31 09:46	0° \mathbb{Q}	

morning max el	7665 Sep 13 22:43	12°♎13'10	45°49'45		7668 May 07 15:10	0°♐	
	7665 Oct 01 13:43	0°♏			7668 Jun 02 06:21	0°♎	
	7665 Oct 28 22:14	0°♎			7668 Jun 29 18:00	0°♏	
asc. node	7665 Nov 07 21:27	11°♎24'01		evening max el	7668 Jul 05 19:43	6°♏07'13	46°09'25
	7665 Nov 23 19:44	0°♏			7668 Aug 03 06:09	0°♎	
	7665 Dec 18 21:42	0°♏		greatest brilliancy	7668 Aug 13 07:50	5°♎11'11	-4.8m
	7666 Jan 12 11:38	0°♐		desc. node	7668 Aug 14 09:38	5°♎34'57	
	7666 Feb 05 18:04	0°♏		retrograde	7668 Aug 24 09:52	7°♎25'31	
desc. node	7666 Feb 27 14:05	27°♏12'45		evening set	7668 Sep 09 16:03	2°♎19'07	
	7666 Mar 01 19:36	0°♏			7668 Sep 13 12:14	30°♏♏	
morning set	7666 Mar 13 03:31	14°♏11'17		inferior conj	7668 Sep 14 21:37	29°♏07'48	-6°39'26
	7666 Mar 25 17:53	0°♏		minimum elong	7668 Sep 14 11:47	29°♏23'12	6°37'35
	7666 Apr 18 14:30	0°♏		min. Earth dist.	7668 Sep 14 07:29	29°♏29'55	0.28937 AU
				morning rise	7668 Sep 19 07:49	26°♏25'11	
superior conj	7666 Apr 23 02:19	5°♏39'02	-1°27'31	direct	7668 Oct 06 08:40	20°♏55'02	
minimum elong	7666 Apr 23 00:58	5°♏34'47	1°27'35	greatest brilliancy	7668 Oct 16 07:51	22°♏42'52	-4.7m
max. Earth dist.	7666 Apr 23 23:30	6°♏45'38	1.71226 AU		7668 Oct 30 07:11	0°♎	
	7666 May 12 11:23	0°♏		morning max el	7668 Nov 24 06:11	20°♎57'07	45°46'28
evening rise	7666 Jun 02 14:41	26°♏28'19			7668 Dec 03 08:16	0°♏	
	7666 Jun 05 10:30	0°♐		asc. node	7668 Dec 05 09:23	2°♏06'29	
asc. node	7666 Jun 20 13:09	18°♐49'16			7668 Dec 30 22:57	0°♏	
	7666 Jun 29 13:28	0°♎			7669 Jan 25 16:46	0°♐	
	7666 Jul 23 21:34	0°♏			7669 Feb 19 13:42	0°♏	
	7666 Aug 17 12:29	0°♎			7669 Mar 15 23:26	0°♏	
	7666 Sep 11 13:21	0°♏		desc. node	7669 Mar 27 02:09	13°♏46'46	
	7666 Oct 07 05:51	0°♏			7669 Apr 09 02:45	0°♏	
desc. node	7666 Oct 10 06:39	3°♏28'27			7669 May 03 02:37	0°♏	
	7666 Nov 03 01:25	0°♐			7669 May 27 01:33	0°♏	
evening max el	7666 Nov 28 16:46	26°♐27'06	46°03'07	morning set	7669 May 28 08:00	1°♏35'18	
	7666 Dec 02 10:17	0°♏			7669 Jun 20 01:37	0°♐	
greatest brilliancy	7667 Jan 07 08:47	25°♏26'01	-4.8m				
retrograde	7667 Jan 17 00:16	27°♏09'43		superior conj	7669 Jul 06 12:53	20°♐30'43	-0°27'27
evening set	7667 Jan 31 10:58	23°♏04'35		minimum elong	7669 Jul 06 19:11	20°♐50'19	0°27'16
asc. node	7667 Jan 31 06:53	23°♏09'57		max. Earth dist.	7669 Jul 09 19:05	24°♐33'47	1.72337 AU
inferior conj	7667 Feb 06 18:39	19°♏22'55	1°39'33		7669 Jul 14 04:07	0°♎	
minimum elong	7667 Feb 06 14:51	19°♏28'45	1°38'25	asc. node	7669 Jul 18 01:03	4°♎48'19	
min. Earth dist.	7667 Feb 07 01:32	19°♏12'22	0.27150 AU		7669 Aug 07 09:27	0°♏	
morning rise	7667 Feb 12 18:09	15°♏50'41		evening rise	7669 Aug 13 16:35	7°♏46'32	
direct	7667 Feb 27 13:05	11°♏29'38			7669 Aug 31 17:44	0°♎	
greatest brilliancy	7667 Mar 10 01:32	13°♏34'20	-4.9m		7669 Sep 25 05:36	0°♏	
	7667 Apr 03 20:05	0°♏			7669 Oct 19 22:31	0°♏	
morning max el	7667 Apr 19 02:31	14°♏26'26	46°59'30	desc. node	7669 Nov 06 18:23	21°♏26'27	
	7667 May 03 21:39	0°♏			7669 Nov 13 22:18	0°♐	
desc. node	7667 May 23 00:28	21°♏24'39			7669 Dec 09 07:14	0°♏	
	7667 May 30 10:56	0°♏			7670 Jan 04 06:27	0°♏	
	7667 Jun 24 21:01	0°♏			7670 Jan 31 13:13	0°♏	
	7667 Jul 19 20:09	0°♐		evening max el	7670 Feb 09 11:51	9°♏11'46	46°50'51
	7667 Aug 13 14:36	0°♎		asc. node	7670 Feb 27 18:22	26°♏06'15	
	7667 Sep 07 06:19	0°♏			7670 Mar 04 15:49	0°♏	
asc. node	7667 Sep 12 23:08	6°♏57'16		greatest brilliancy	7670 Mar 22 00:28	10°♏05'17	-4.9m
	7667 Oct 01 19:16	0°♎		retrograde	7670 Mar 31 22:13	11°♏56'22	
morning set	7667 Oct 19 06:18	21°♎26'09		evening set	7670 Apr 18 22:06	5°♏43'06	
	7667 Oct 26 05:18	0°♏		inferior conj	7670 Apr 21 13:10	4°♏06'34	9°09'47
	7667 Nov 19 12:55	0°♏		minimum elong	7670 Apr 21 11:23	4°♏09'19	9°09'40
max. Earth dist.	7667 Nov 23 03:42	4°♏28'09	1.73022 AU	min. Earth dist.	7670 Apr 21 07:34	4°♏15'13	0.27099 AU
				morning rise	7670 Apr 24 00:45	2°♏35'31	
superior conj	7667 Nov 24 19:24	6°♏30'52	1°16'18		7670 Apr 28 15:13	30°♏♏	
minimum elong	7667 Nov 25 03:17	6°♏55'14	1°16'14	direct	7670 May 12 04:42	26°♏20'08	
	7667 Dec 13 18:59	0°♐		greatest brilliancy	7670 May 21 14:39	28°♏01'05	-4.9m
evening rise	7668 Jan 01 15:15	23°♐20'53			7670 May 26 09:14	0°♏	
desc. node	7668 Jan 02 16:06	24°♐37'54		desc. node	7670 Jun 19 12:16	17°♏22'34	
	7668 Jan 07 00:01	0°♏		morning max el	7670 Jul 01 07:49	28°♏33'37	46°34'35
	7668 Jan 31 04:03	0°♏			7670 Jul 02 18:31	0°♏	
	7668 Feb 24 07:23	0°♏			7670 Jul 30 22:27	0°♐	
	7668 Mar 19 11:37	0°♏			7670 Aug 26 07:09	0°♎	
	7668 Apr 12 20:16	0°♏			7670 Sep 20 21:33	0°♏	
asc. node	7668 Apr 24 15:31	14°♏22'21		asc. node	7670 Oct 10 11:19	23°♏19'42	

	7670 Oct 16 00:35	0°♌			7673 Apr 01 17:29	0°♊	
	7670 Nov 09 18:48	0°♍		evening max el	7673 Apr 23 03:34	22°♊53'03	46°55'39
	7670 Dec 04 06:07	0°♈			7673 Apr 30 09:29	0°♋	
morning set	7670 Dec 27 05:34	28°♈23'51		greatest brilliancy	7673 Jun 02 03:45	23°♋39'32	-4.9m
	7670 Dec 28 12:36	0°♊		retrograde	7673 Jun 12 14:39	25°♋42'44	
	7671 Jan 21 15:45	0°♋		evening set	7673 Jun 28 00:31	21°♋04'09	
desc. node	7671 Jan 30 04:01	10°♋36'54		inferior conj	7673 Jul 03 15:40	17°♋41'36	3°17'01
max. Earth dist.	7671 Jan 31 21:50	12°♋47'23	1.71866 AU	minimum elong	7673 Jul 03 22:44	17°♋30'37	3°14'48
				min. Earth dist.	7673 Jul 03 11:24	17°♋48'12	0.27658 AU
superior conj	7671 Feb 03 23:47	16°♋38'13	-0°11'42	morning rise	7673 Jul 09 21:22	13°♋59'41	
minimum elong	7671 Feb 03 20:55	16°♋29'16	0°11'28	desc. node	7673 Jul 16 23:54	10°♋56'09	
behind sun begin	7671 Feb 03 03:04	15°♋33'32		direct	7673 Jul 24 13:38	9°♋47'14	
behind sun end	7671 Feb 04 14:46	17°♋25'00		greatest brilliancy	7673 Aug 03 10:35	11°♋33'44	-4.8m
	7671 Feb 14 16:20	0°♉			7673 Aug 31 15:55	0°♌	
	7671 Mar 10 14:55	0°♊		morning max el	7673 Sep 11 13:24	9°♌58'23	45°50'54
evening rise	7671 Mar 15 23:30	6°♊43'22			7673 Oct 01 07:11	0°♍	
	7671 Apr 03 12:40	0°♈			7673 Oct 28 12:10	0°♌	
	7671 Apr 27 11:44	0°♊		asc. node	7673 Nov 06 23:29	10°♌51'39	
	7671 May 21 14:54	0°♋			7673 Nov 23 08:08	0°♍	
asc. node	7671 May 23 03:19	1°♋52'33			7673 Dec 18 09:19	0°♈	
	7671 Jun 15 01:18	0°♌			7674 Jan 11 22:52	0°♊	
	7671 Jul 09 23:02	0°♍			7674 Feb 05 05:06	0°♋	
	7671 Aug 04 15:45	0°♌		desc. node	7674 Feb 26 15:59	26°♋44'28	
	7671 Aug 31 22:25	0°♍			7674 Mar 01 06:33	0°♉	
desc. node	7671 Sep 11 21:09	11°♍08'51		morning set	7674 Mar 10 14:19	11°♉40'21	
evening max el	7671 Sep 15 14:34	14°♍46'29	45°39'37		7674 Mar 25 04:49	0°♊	
	7671 Oct 02 20:56	0°♈			7674 Apr 18 01:27	0°♈	
greatest brilliancy	7671 Oct 24 15:37	12°♈52'45	-4.7m				
retrograde	7671 Nov 03 06:53	14°♈33'23		superior conj	7674 Apr 20 13:10	3°♈07'47	-1°27'13
evening set	7671 Nov 20 21:41	8°♈44'50		minimum elong	7674 Apr 20 10:42	3°♈00'04	1°27'16
inferior conj	7671 Nov 24 16:09	6°♈25'20	-7°44'39	max. Earth dist.	7674 Apr 21 04:20	3°♈55'31	1.71219 AU
minimum elong	7671 Nov 25 00:19	6°♈12'31	7°43'27		7674 May 11 22:20	0°♊	
min. Earth dist.	7671 Nov 25 09:20	5°♈58'21	0.28761 AU	evening rise	7674 May 31 02:12	24°♊00'09	
morning rise	7671 Nov 29 02:41	3°♈41'19			7674 Jun 04 21:28	0°♋	
	7671 Dec 06 12:38	30°♉♍		asc. node	7674 Jun 19 15:05	18°♋21'04	
direct	7671 Dec 16 02:58	28°♉09'24			7674 Jun 29 00:30	0°♌	
	7671 Dec 26 02:52	0°♈			7674 Jul 23 08:48	0°♍	
greatest brilliancy	7671 Dec 27 04:09	0°♈23'25	-4.8m		7674 Aug 17 00:07	0°♌	
asc. node	7672 Jan 02 21:06	3°♈36'10			7674 Sep 11 01:41	0°♍	
	7672 Feb 03 23:15	0°♊			7674 Oct 06 19:33	0°♈	
morning max el	7672 Feb 04 01:40	0°♊06'02	46°26'12	desc. node	7674 Oct 09 08:42	2°♈54'37	
	7672 Mar 02 21:29	0°♋			7674 Nov 02 18:01	0°♊	
	7672 Mar 28 16:16	0°♉		evening max el	7674 Nov 26 07:30	24°♊11'29	46°01'47
	7672 Apr 22 13:49	0°♊			7674 Dec 02 11:43	0°♋	
desc. node	7672 Apr 23 14:26	1°♊14'59		greatest brilliancy	7675 Jan 04 21:44	23°♋04'26	-4.8m
	7672 May 17 01:07	0°♈		retrograde	7675 Jan 14 14:02	24°♋48'31	
	7672 Jun 10 07:56	0°♊		evening set	7675 Jan 29 00:31	20°♋42'52	
	7672 Jul 04 13:48	0°♋		asc. node	7675 Jan 30 08:44	19°♋58'50	
	7672 Jul 28 20:25	0°♌		inferior conj	7675 Feb 04 08:11	17°♋01'03	1°16'22
morning set	7672 Aug 08 03:25	12°♌42'23		minimum elong	7675 Feb 04 05:15	17°♋05'33	1°15'30
asc. node	7672 Aug 14 12:57	20°♌35'56		min. Earth dist.	7675 Feb 04 15:46	16°♋49'26	0.27187 AU
	7672 Aug 22 03:55	0°♍		morning rise	7675 Feb 10 09:28	13°♋26'38	
				direct	7675 Feb 25 03:37	9°♋07'06	
superior conj	7672 Sep 14 12:09	28°♍46'59	1°05'41	greatest brilliancy	7675 Mar 07 16:23	11°♋12'39	-4.9m
minimum elong	7672 Sep 14 02:54	28°♍18'29	1°05'23		7675 Apr 04 02:30	0°♉	
max. Earth dist.	7672 Sep 15 00:32	29°♍25'07	1.73281 AU	morning max el	7675 Apr 16 17:52	12°♉07'16	46°59'07
	7672 Sep 15 11:51	0°♌			7675 May 03 15:52	0°♊	
	7672 Oct 09 20:08	0°♍		desc. node	7675 May 22 02:30	20°♊45'53	
evening rise	7672 Oct 20 19:37	13°♍30'50			7675 May 30 01:44	0°♈	
	7672 Nov 03 05:19	0°♈			7675 Jun 24 10:13	0°♊	
	7672 Nov 27 16:07	0°♊			7675 Jul 19 08:23	0°♋	
desc. node	7672 Dec 04 06:13	8°♊04'08			7675 Aug 13 02:12	0°♌	
	7672 Dec 22 04:45	0°♋			7675 Sep 06 17:30	0°♍	
	7673 Jan 15 19:20	0°♉		asc. node	7675 Sep 12 01:08	6°♍29'31	
	7673 Feb 09 13:23	0°♊			7675 Oct 01 06:11	0°♌	
	7673 Mar 06 16:16	0°♈		morning set	7675 Oct 16 23:37	19°♌18'33	
asc. node	7673 Mar 27 05:52	23°♈49'40			7675 Oct 25 16:05	0°♍	

	7675 Nov 18 23:41	0°♁		minimum elong	7678 Apr 18 23:24	1°♁45'02	9°07'21
max. Earth dist.	7675 Nov 20 23:25	2°♁27'30	1.73047 AU	min. Earth dist.	7678 Apr 18 20:21	1°♁49'44	0.27081 AU
				morning rise	7678 Apr 21 14:02	0°♁09'06	
superior conj	7675 Nov 22 12:20	4°♁21'33	1°17'46		7678 Apr 21 20:05	30°♁	
minimum elong	7675 Nov 22 19:45	4°♁44'26	1°17'43	direct	7678 May 09 17:23	23°♁54'41	
	7675 Dec 13 05:48	0°♁		greatest brilliancy	7678 May 19 03:34	25°♁35'27	-4.9m
evening rise	7675 Dec 30 06:21	21°♁05'05			7678 May 28 10:14	0°♁	
desc. node	7676 Jan 01 18:00	24°♁09'54		desc. node	7678 Jun 18 14:11	16°♁21'17	
	7676 Jan 06 10:58	0°♁		morning max el	7678 Jun 28 20:14	26°♁08'09	46°36'01
	7676 Jan 30 15:13	0°♁			7678 Jul 02 16:36	0°♁	
	7676 Feb 23 18:49	0°♁			7678 Jul 30 14:30	0°♁	
	7676 Mar 18 23:26	0°♁			7678 Aug 25 20:50	0°♁	
	7676 Apr 12 08:39	0°♁			7678 Sep 20 10:00	0°♁	
asc. node	7676 Apr 23 17:33	13°♁49'49		asc. node	7678 Oct 09 13:21	22°♁50'16	
	7676 May 07 04:31	0°♁			7678 Oct 15 12:18	0°♁	
	7676 Jun 01 21:40	0°♁			7678 Nov 09 06:04	0°♁	
	7676 Jun 29 14:21	0°♁			7678 Dec 03 17:09	0°♁	
evening max el	7676 Jul 03 12:27	3°♁55'40	46°11'04	morning set	7678 Dec 24 21:02	26°♁09'03	
	7676 Aug 04 15:14	0°♁			7678 Dec 27 23:33	0°♁	
greatest brilliancy	7676 Aug 10 23:21	2°♁59'07	-4.8m		7679 Jan 21 02:43	0°♁	
desc. node	7676 Aug 13 11:36	3°♁51'23		desc. node	7679 Jan 29 05:55	10°♁08'35	
retrograde	7676 Aug 22 02:24	5°♁14'03		max. Earth dist.	7679 Jan 29 08:49	10°♁17'40	1.71911 AU
evening set	7676 Sep 07 05:16	0°♁12'10					
	7676 Sep 07 13:42	30°♁		superior conj	7679 Feb 01 12:38	14°♁14'11	-0°07'58
min. Earth dist.	7676 Sep 11 22:38	27°♁20'04	0.28898 AU	minimum elong	7679 Feb 01 10:41	14°♁08'07	0°07'47
inferior conj	7676 Sep 12 13:35	26°♁56'38	-6°26'28	behind sun begin	7679 Jan 31 12:35	12°♁59'09	
minimum elong	7676 Sep 12 03:40	27°♁12'10	6°24'30	behind sun end	7679 Feb 02 08:47	15°♁17'06	
morning rise	7676 Sep 17 02:27	24°♁10'13			7679 Feb 14 03:22	0°♁	
direct	7676 Oct 04 00:56	18°♁44'42			7679 Mar 10 02:01	0°♁	
greatest brilliancy	7676 Oct 13 22:06	20°♁31'01	-4.7m	evening rise	7679 Mar 13 11:05	4°♁14'13	
	7676 Oct 31 01:43	0°♁			7679 Apr 02 23:51	0°♁	
morning max el	7676 Nov 21 21:45	18°♁45'23	45°45'39		7679 Apr 26 23:04	0°♁	
	7676 Dec 03 03:16	0°♁			7679 May 21 02:28	0°♁	
asc. node	7676 Dec 04 11:22	1°♁23'21		asc. node	7679 May 22 05:15	1°♁22'43	
	7676 Dec 30 13:37	0°♁			7679 Jun 14 13:17	0°♁	
	7677 Jan 25 05:43	0°♁			7679 Jul 09 11:47	0°♁	
	7677 Feb 19 01:49	0°♁			7679 Aug 04 06:06	0°♁	
	7677 Mar 15 11:05	0°♁			7679 Aug 31 16:41	0°♁	
desc. node	7677 Mar 26 04:14	13°♁17'34		desc. node	7679 Sep 10 23:13	10°♁21'35	
	7677 Apr 08 14:07	0°♁		evening max el	7679 Sep 13 04:34	12°♁30'51	45°39'43
	7677 May 02 13:48	0°♁			7679 Oct 03 09:03	0°♁	
morning set	7677 May 25 20:35	29°♁09'56		greatest brilliancy	7679 Oct 22 06:19	10°♁40'30	-4.7m
	7677 May 26 12:35	0°♁		retrograde	7679 Oct 31 21:52	12°♁21'53	
	7677 Jun 19 12:35	0°♁		evening set	7679 Nov 18 15:34	6°♁29'12	
				inferior conj	7679 Nov 22 07:54	4°♁13'03	-7°53'09
superior conj	7677 Jul 04 02:56	18°♁11'04	-0°30'53	minimum elong	7679 Nov 22 15:35	4°♁01'01	7°52'06
minimum elong	7677 Jul 04 09:57	18°♁32'53	0°30'40	min. Earth dist.	7679 Nov 23 00:41	3°♁46'44	0.28809 AU
max. Earth dist.	7677 Jul 07 12:20	22°♁24'13	1.72293 AU	morning rise	7679 Nov 26 15:18	1°♁33'39	
	7677 Jul 13 15:04	0°♁			7679 Nov 29 09:28	30°♁	
asc. node	7677 Jul 17 02:56	4°♁20'15		direct	7679 Dec 13 18:29	25°♁56'26	
	7677 Aug 06 20:24	0°♁		greatest brilliancy	7679 Dec 24 20:29	28°♁10'49	-4.8m
evening rise	7677 Aug 11 08:58	5°♁35'14			7679 Dec 28 22:51	0°♁	
	7677 Aug 31 04:45	0°♁		asc. node	7680 Jan 01 22:59	2°♁11'50	
	7677 Sep 24 16:50	0°♁		morning max el	7680 Feb 01 16:18	27°♁47'44	46°24'37
	7677 Oct 19 10:09	0°♁			7680 Feb 03 20:54	0°♁	
desc. node	7677 Nov 05 20:25	20°♁56'17			7680 Mar 02 13:19	0°♁	
	7677 Nov 13 10:39	0°♁			7680 Mar 28 05:57	0°♁	
	7677 Dec 08 20:45	0°♁			7680 Apr 22 02:25	0°♁	
	7678 Jan 03 22:06	0°♁		desc. node	7680 Apr 22 16:21	0°♁42'29	
	7678 Jan 31 09:44	0°♁			7680 May 16 13:04	0°♁	
evening max el	7678 Feb 07 01:46	6°♁48'32	46°49'35		7680 Jun 09 19:27	0°♁	
asc. node	7678 Feb 26 20:27	24°♁56'05			7680 Jul 04 01:00	0°♁	
	7678 Mar 05 12:53	0°♁			7680 Jul 28 07:21	0°♁	
greatest brilliancy	7678 Mar 19 14:02	7°♁39'42	-4.9m	morning set	7680 Aug 05 19:38	10°♁30'45	
retrograde	7678 Mar 29 10:53	9°♁29'54		asc. node	7680 Aug 13 14:59	20°♁08'49	
evening set	7678 Apr 16 08:50	3°♁20'49			7680 Aug 21 14:41	0°♁	
inferior conj	7678 Apr 19 02:09	1°♁40'47	9°07'31				

superior conj	7680 Sep 12 05:42	26° \cap 40'04	1°03'32	greatest brilliancy	7683 Mar 05 06:50	8° \approx 49'56	-4.9m
minimum elong	7680 Sep 11 20:20	26° \cap 11'13	1°03'13		7683 Apr 04 06:58	0° H	
max. Earth dist.	7680 Sep 12 18:49	27° \cap 20'30	1.73272 AU	morning max el	7683 Apr 14 08:24	9° H 46'04	46°58'46
	7680 Sep 14 22:35	0° $\underline{\text{A}}$			7683 May 03 09:37	0° Y	
	7680 Oct 09 06:55	0° M		desc. node	7683 May 21 04:26	20° Y 07'35	
evening rise	7680 Oct 18 13:13	11° M 24'02			7683 May 29 16:14	0° B	
	7680 Nov 02 16:16	0° Z			7683 Jun 23 23:09	0° II	
	7680 Nov 27 03:19	0° Z			7683 Jul 18 20:24	0° E	
desc. node	7680 Dec 03 08:04	7° Z 35'14			7683 Aug 12 13:38	0° Ω	
	7680 Dec 21 16:19	0° \approx			7683 Sep 06 04:31	0° \cap	
	7681 Jan 15 07:27	0° H		asc. node	7683 Sep 11 03:11	6° \cap 02'21	
	7681 Feb 09 02:21	0° Y			7683 Sep 30 16:56	0° $\underline{\text{A}}$	
	7681 Mar 06 06:39	0° B		morning set	7683 Oct 14 17:10	17° $\underline{\text{A}}$ 12'18	
asc. node	7681 Mar 26 07:54	23° B 08'58			7683 Oct 25 02:41	0° M	
	7681 Apr 01 10:47	0° II			7683 Nov 18 10:15	0° Z	
evening max el	7681 Apr 20 17:14	20° II 30'03	46°56'42	max. Earth dist.	7683 Nov 18 18:16	0° Z 24'44	1.73073 AU
	7681 Apr 30 11:53	0° E					
greatest brilliancy	7681 May 30 19:12	21° E 20'23	-4.9m	superior conj	7683 Nov 20 05:31	2° Z 13'37	1°19'07
retrograde	7681 Jun 10 05:29	23° E 23'21		minimum elong	7683 Nov 20 12:24	2° Z 34'53	1°19'05
evening set	7681 Jun 25 17:12	18° E 41'19			7683 Dec 12 16:28	0° Z	
inferior conj	7681 Jul 01 05:54	15° E 22'37	3°38'04	evening rise	7683 Dec 27 21:28	18° Z 49'45	
minimum elong	7681 Jul 01 13:38	15° E 10'39	3°35'42	desc. node	7683 Dec 31 20:01	23° Z 42'38	
min. Earth dist.	7681 Jul 01 02:19	15° E 28'09	0.27626 AU		7684 Jan 05 21:49	0° \approx	
morning rise	7681 Jul 07 10:24	11° E 42'39			7684 Jan 30 02:18	0° H	
desc. node	7681 Jul 16 01:49	8° E 12'50			7684 Feb 23 06:12	0° Y	
direct	7681 Jul 22 03:10	7° E 28'28			7684 Mar 18 11:10	0° B	
greatest brilliancy	7681 Aug 01 00:42	9° E 15'49	-4.8m		7684 Apr 11 20:56	0° II	
	7681 Aug 31 20:04	0° Ω		asc. node	7684 Apr 22 19:28	13° II 17'14	
morning max el	7681 Sep 09 04:45	7° Ω 45'13	45°52'02		7684 May 06 17:48	0° E	
	7681 Oct 01 00:16	0° \cap			7684 Jun 01 12:57	0° Ω	
	7681 Oct 28 02:01	0° $\underline{\text{A}}$			7684 Jun 29 11:05	0° \cap	
asc. node	7681 Nov 06 01:24	10° $\underline{\text{A}}$ 18'57		evening max el	7684 Jul 01 04:39	1° \cap 43'24	46°12'43
	7681 Nov 22 20:34	0° M			7684 Aug 06 16:27	0° $\underline{\text{A}}$	
	7681 Dec 17 21:03	0° Z		greatest brilliancy	7684 Aug 08 15:38	0° $\underline{\text{A}}$ 48'44	-4.8m
	7682 Jan 11 10:12	0° Z		desc. node	7684 Aug 12 13:43	2° $\underline{\text{A}}$ 05'09	
	7682 Feb 04 16:13	0° \approx		retrograde	7684 Aug 19 18:36	3° $\underline{\text{A}}$ 03'26	
desc. node	7682 Feb 25 18:04	26° \approx 16'31			7684 Sep 01 04:25	30° R \cap	
	7682 Feb 28 17:34	0° H		evening set	7684 Sep 04 18:41	28° \cap 06'07	
morning set	7682 Mar 08 01:06	9° H 09'19		min. Earth dist.	7684 Sep 09 14:13	25° \cap 10'46	0.28857 AU
	7682 Mar 24 15:47	0° Y		inferior conj	7684 Sep 10 05:39	24° \cap 46'33	-6°12'52
				minimum elong	7684 Sep 09 19:42	25° \cap 02'10	6°10'50
superior conj	7682 Apr 17 23:53	0° B 36'05	-1°26'43	morning rise	7684 Sep 14 21:08	21° \cap 56'11	
minimum elong	7682 Apr 17 20:20	0° B 24'55	1°26'46	direct	7684 Oct 01 17:00	16° \cap 35'30	
	7682 Apr 17 12:24	0° B		greatest brilliancy	7684 Oct 11 12:45	18° \cap 20'31	-4.7m
max. Earth dist.	7682 Apr 18 12:21	1° B 15'19	1.71213 AU		7684 Oct 31 15:00	0° $\underline{\text{A}}$	
	7682 May 11 09:17	0° II		morning max el	7684 Nov 19 12:27	16° $\underline{\text{A}}$ 32'33	45°44'55
evening rise	7682 May 28 13:42	21° II 31'50			7684 Dec 02 21:22	0° M	
	7682 Jun 04 08:26	0° E		asc. node	7684 Dec 03 13:17	0° M 41'38	
asc. node	7682 Jun 18 17:01	17° E 52'50			7684 Dec 30 03:45	0° Z	
	7682 Jun 28 11:32	0° Ω			7685 Jan 24 18:18	0° Z	
	7682 Jul 22 20:01	0° \cap			7685 Feb 18 13:40	0° \approx	
	7682 Aug 16 11:42	0° $\underline{\text{A}}$			7685 Mar 14 22:32	0° H	
	7682 Sep 10 14:01	0° M		desc. node	7685 Mar 25 06:12	12° H 48'32	
	7682 Oct 06 09:18	0° Z			7685 Apr 08 01:18	0° Y	
desc. node	7682 Oct 08 10:42	2° Z 20'36			7685 May 02 00:47	0° B	
	7682 Nov 02 10:56	0° Z		morning set	7685 May 23 08:41	26° B 43'40	
evening max el	7682 Nov 23 22:37	21° Z 56'46	46°00'11		7685 May 25 23:24	0° II	
	7682 Dec 02 14:43	0° \approx			7685 Jun 18 23:17	0° E	
greatest brilliancy	7683 Jan 02 10:40	20° \approx 42'26	-4.8m				
retrograde	7683 Jan 12 03:28	22° \approx 26'22		superior conj	7685 Jul 01 16:44	15° E 51'33	-0°34'17
evening set	7683 Jan 26 14:07	18° \approx 20'22		minimum elong	7685 Jul 02 00:25	16° E 15'29	0°34'03
asc. node	7683 Jan 29 10:50	16° \approx 43'36		max. Earth dist.	7685 Jul 05 05:12	20° E 14'18	1.72243 AU
inferior conj	7683 Feb 01 21:30	14° \approx 38'29	0°52'52		7685 Jul 13 01:41	0° Ω	
minimum elong	7683 Feb 01 19:28	14° \approx 41'36	0°52'18	asc. node	7685 Jul 16 04:58	3° Ω 53'38	
min. Earth dist.	7683 Feb 02 05:50	14° \approx 25'42	0.27224 AU		7685 Aug 06 07:02	0° \cap	
morning rise	7683 Feb 08 00:20	11° \approx 01'57		evening rise	7685 Aug 09 01:16	3° \cap 24'33	
direct	7683 Feb 22 18:08	6° \approx 44'03			7685 Aug 30 15:27	0° $\underline{\text{A}}$	

	7685 Sep 24 03:45	0°♌		morning max el	7688 Jan 30 08:00	25°♊33'40	46°23'09
	7685 Oct 18 21:29	0°♊			7688 Feb 03 17:16	0°♊	
desc. node	7685 Nov 04 22:20	20°♊26'48			7688 Mar 02 04:25	0°♊	
	7685 Nov 12 22:40	0°♊			7688 Mar 27 19:04	0°♊	
	7685 Dec 08 09:58	0°♊		desc. node	7688 Apr 21 18:17	0°♊11'26	
	7686 Jan 03 13:33	0°♊			7688 Apr 21 14:33	0°♊	
evening max el	7686 Jan 31 06:34	0°♊			7688 May 16 00:38	0°♊	
asc. node	7686 Feb 04 14:24	4°♊23'05	46°48'00		7688 Jun 09 06:39	0°♊	
	7686 Feb 25 22:26	23°♊44'16			7688 Jul 03 11:55	0°♊	
	7686 Mar 06 17:29	0°♊			7688 Jul 27 18:02	0°♊	
greatest brilliancy	7686 Mar 17 03:27	5°♊14'01	-4.9m	morning set	7688 Aug 03 11:27	8°♊18'33	
retrograde	7686 Mar 26 23:00	7°♊03'22		asc. node	7688 Aug 12 17:00	19°♊42'24	
evening set	7686 Apr 13 18:38	0°♊59'11			7688 Aug 21 01:12	0°♊	
	7686 Apr 15 09:32	30°♊					
inferior conj	7686 Apr 16 14:51	29°♊14'49	9°04'04	superior conj	7688 Sep 09 22:54	24°♊32'56	1°01'17
minimum elong	7686 Apr 16 11:07	29°♊20'34	9°03'50	minimum elong	7688 Sep 09 13:29	24°♊03'56	1°00'56
min. Earth dist.	7686 Apr 16 09:09	29°♊23'37	0.27069 AU	max. Earth dist.	7688 Sep 10 14:29	25°♊20'58	1.73257 AU
morning rise	7686 Apr 19 03:40	27°♊41'38			7688 Sep 14 09:01	0°♊	
direct	7686 May 07 05:25	21°♊28'40			7688 Oct 08 17:23	0°♊	
greatest brilliancy	7686 May 16 16:55	23°♊10'10	-4.9m	evening rise	7688 Oct 16 06:49	9°♊18'16	
	7686 May 29 19:03	0°♊			7688 Nov 02 02:53	0°♊	
desc. node	7686 Jun 17 16:11	15°♊21'59			7688 Nov 26 14:12	0°♊	
morning max el	7686 Jun 26 08:23	23°♊42'15	46°37'40	desc. node	7688 Dec 02 10:06	7°♊07'52	
	7686 Jul 02 13:41	0°♊			7688 Dec 21 03:36	0°♊	
	7686 Jul 30 06:00	0°♊			7689 Jan 14 19:18	0°♊	
	7686 Aug 25 10:03	0°♊			7689 Feb 08 15:02	0°♊	
	7686 Sep 19 22:00	0°♊			7689 Mar 05 20:47	0°♊	
asc. node	7686 Oct 08 15:11	22°♊21'36		asc. node	7689 Mar 25 09:50	22°♊28'48	
	7686 Oct 14 23:34	0°♊			7689 Apr 01 03:59	0°♊	
	7686 Nov 08 16:55	0°♊		evening max el	7689 Apr 18 07:48	18°♊10'30	46°57'33
	7686 Dec 03 03:48	0°♊			7689 Apr 30 15:22	0°♊	
morning set	7686 Dec 22 12:59	23°♊56'57		greatest brilliancy	7689 May 28 09:56	19°♊01'19	-4.9m
	7686 Dec 27 10:07	0°♊		retrograde	7689 Jun 07 20:30	21°♊04'33	
	7687 Jan 20 13:17	0°♊		evening set	7689 Jun 23 09:59	16°♊18'53	
max. Earth dist.	7687 Jan 26 23:09	7°♊59'37	1.71957 AU	inferior conj	7689 Jun 28 20:03	13°♊04'02	3°58'48
desc. node	7687 Jan 28 08:01	9°♊42'08		minimum elong	7689 Jun 29 04:23	12°♊51'09	3°56'18
				min. Earth dist.	7689 Jun 28 16:49	13°♊09'02	0.27600 AU
superior conj	7687 Jan 30 01:58	11°♊53'02	-0°04'16	morning rise	7689 Jul 04 23:11	9°♊26'24	
minimum elong	7687 Jan 30 00:56	11°♊49'48	0°04'09	desc. node	7689 Jul 15 03:58	5°♊35'20	
behind sun begin	7687 Jan 29 00:44	10°♊34'17		direct	7689 Jul 19 17:22	5°♊10'09	
behind sun end	7687 Jan 31 01:08	13°♊05'20		greatest brilliancy	7689 Jul 29 14:21	6°♊57'44	-4.8m
	7687 Feb 13 14:00	0°♊			7689 Aug 31 22:23	0°♊	
	7687 Mar 09 12:45	0°♊		morning max el	7689 Sep 06 20:33	5°♊33'32	45°53'08
evening rise	7687 Mar 10 23:03	1°♊47'32			7689 Sep 30 16:50	0°♊	
	7687 Apr 02 10:43	0°♊			7689 Oct 27 15:31	0°♊	
	7687 Apr 26 10:07	0°♊		asc. node	7689 Nov 05 03:23	9°♊47'18	
	7687 May 20 13:48	0°♊			7689 Nov 22 08:41	0°♊	
asc. node	7687 May 21 07:10	0°♊53'38			7689 Dec 17 08:27	0°♊	
	7687 Jun 14 01:02	0°♊			7690 Jan 10 21:15	0°♊	
	7687 Jul 09 00:19	0°♊			7690 Feb 04 03:05	0°♊	
	7687 Aug 03 20:17	0°♊		desc. node	7690 Feb 24 19:59	25°♊48'48	
	7687 Aug 31 11:00	0°♊			7690 Feb 28 04:20	0°♊	
desc. node	7687 Sep 10 01:10	9°♊34'28		morning set	7690 Mar 05 12:22	6°♊40'34	
evening max el	7687 Sep 10 18:51	10°♊17'06	45°40'07		7690 Mar 24 02:31	0°♊	
	7687 Oct 04 00:30	0°♊					
greatest brilliancy	7687 Oct 19 20:29	8°♊29'15	-4.7m	superior conj	7690 Apr 15 11:00	28°♊06'24	-1°26'04
retrograde	7687 Oct 29 13:30	10°♊12'10		minimum elong	7690 Apr 15 06:25	27°♊52'00	1°26'05
evening set	7687 Nov 16 09:27	4°♊15'23		max. Earth dist.	7690 Apr 15 21:53	28°♊40'37	1.71204 AU
inferior conj	7687 Nov 19 23:47	2°♊02'21	-8°00'51		7690 Apr 16 23:07	0°♊	
minimum elong	7687 Nov 20 06:56	1°♊51'10	7°59'58		7690 May 10 19:58	0°♊	
min. Earth dist.	7687 Nov 20 15:46	1°♊37'19	0.28855 AU	evening rise	7690 May 26 01:28	19°♊05'07	
	7687 Nov 23 06:38	30°♊			7690 Jun 03 19:09	0°♊	
morning rise	7687 Nov 24 04:09	29°♊27'38		asc. node	7690 Jun 17 19:05	17°♊25'45	
direct	7687 Dec 11 10:27	23°♊45'05			7690 Jun 27 22:22	0°♊	
greatest brilliancy	7687 Dec 22 12:39	25°♊59'44	-4.8m		7690 Jul 22 07:05	0°♊	
	7687 Dec 30 14:58	0°♊			7690 Aug 15 23:12	0°♊	
asc. node	7688 Jan 01 01:04	0°♊51'55			7690 Sep 10 02:17	0°♊	

	7690 Oct 05 23:05	0°♊			7693 Apr 07 12:35	0°♎	
desc. node	7690 Oct 07 12:38	1°♊46'34			7693 May 01 11:53	0°♏	
	7690 Nov 02 04:03	0°♐		morning set	7693 May 20 20:37	24°♏16'18	
evening max el	7690 Nov 21 13:44	19°♐42'37 45°58'42			7693 May 25 10:23	0°♑	
	7690 Dec 02 19:10	0°♒			7693 Jun 18 10:10	0°♓	
greatest brilliancy	7690 Dec 31 00:16	18°♒22'19 -4.8m					
retrograde	7691 Jan 09 16:40	20°♒05'23		superior conj	7693 Jun 29 06:34	13°♓31'31 -0°37'37	
evening set	7691 Jan 24 04:11	15°♒58'55		minimum elong	7693 Jun 29 14:54	13°♓57'27 0°37'22	
asc. node	7691 Jan 28 12:50	13°♒27'59		max. Earth dist.	7693 Jul 02 19:51	17°♓56'55 1.72190 AU	
inferior conj	7691 Jan 30 11:03	12°♒17'11 0°29'34			7693 Jul 12 12:30	0°♈	
minimum elong	7691 Jan 30 09:54	12°♒18'57 0°29'17		asc. node	7693 Jul 15 06:57	3°♈26'16	
min. Earth dist.	7691 Jan 30 20:17	12°♒02'59 0.27261 AU			7693 Aug 05 17:49	0°♉	
morning rise	7691 Feb 05 15:10	8°♒38'36		evening rise	7693 Aug 06 17:35	1°♉13'24	
direct	7691 Feb 20 08:34	4°♒22'17			7693 Aug 30 02:20	0°♊	
greatest brilliancy	7691 Mar 02 21:38	6°♒28'22 -4.9m			7693 Sep 23 14:51	0°♋	
	7691 Apr 04 09:33	0°♌			7693 Oct 18 09:03	0°♍	
morning max el	7691 Apr 11 22:12	7°♌23'27 46°58'25		desc. node	7693 Nov 04 00:22	19°♌56'52	
	7691 May 03 02:50	0°♎			7693 Nov 12 11:02	0°♐	
desc. node	7691 May 20 06:26	19°♎30'13			7693 Dec 07 23:37	0°♑	
	7691 May 29 06:25	0°♏			7694 Jan 03 05:34	0°♒	
	7691 Jun 23 11:51	0°♑			7694 Jan 31 04:28	0°♓	
	7691 Jul 18 08:14	0°♒		evening max el	7694 Feb 02 02:36	1°♓55'56 46°46'37	
	7691 Aug 12 00:55	0°♈		asc. node	7694 Feb 25 00:20	22°♓29'36	
	7691 Sep 05 15:26	0°♉			7694 Mar 08 11:10	0°♈	
asc. node	7691 Sep 10 05:01	5°♉34'46		greatest brilliancy	7694 Mar 14 16:41	2°♈47'38 -4.9m	
	7691 Sep 30 03:38	0°♊		retrograde	7694 Mar 24 11:27	4°♈36'47	
morning set	7691 Oct 12 10:36	15°♊05'43			7694 Apr 08 19:11	30°♉♎	
	7691 Oct 24 13:17	0°♋		evening set	7694 Apr 11 04:04	28°♉37'43	
max. Earth dist.	7691 Nov 16 11:13	28°♋16'14 1.73097 AU		inferior conj	7694 Apr 14 03:41	26°♉48'31 8°59'38	
				minimum elong	7694 Apr 13 23:00	26°♉55'44 8°59'17	
superior conj	7691 Nov 17 22:41	0°♌05'44 1°20'20		min. Earth dist.	7694 Apr 13 21:56	26°♉57'22 0.27058 AU	
minimum elong	7691 Nov 18 05:01	0°♌25'18 1°20'20		morning rise	7694 Apr 16 17:58	25°♉13'14	
	7691 Nov 17 20:49	0°♍		direct	7694 May 04 17:36	19°♉02'08	
	7691 Dec 12 03:07	0°♐		greatest brilliancy	7694 May 14 06:23	20°♉44'41 -4.9m	
evening rise	7691 Dec 25 12:34	16°♐34'37			7694 May 30 18:54	0°♈	
desc. node	7691 Dec 30 22:02	23°♐15'29		desc. node	7694 Jun 16 18:16	14°♈23'38	
	7692 Jan 05 08:38	0°♒		morning max el	7694 Jun 23 21:18	21°♈17'27 46°39'15	
	7692 Jan 29 13:22	0°♌			7694 Jul 02 10:20	0°♑	
	7692 Feb 22 17:34	0°♎			7694 Jul 29 21:34	0°♒	
	7692 Mar 17 22:56	0°♏			7694 Aug 24 23:27	0°♈	
	7692 Apr 11 09:18	0°♑			7694 Sep 19 10:13	0°♉	
asc. node	7692 Apr 21 21:27	12°♑44'44		asc. node	7694 Oct 07 17:14	21°♉52'41	
	7692 May 06 07:12	0°♓			7694 Oct 14 11:06	0°♊	
	7692 Jun 01 04:28	0°♈			7694 Nov 08 04:03	0°♋	
evening max el	7692 Jun 28 19:56	29°♈28'50 46°14'23			7694 Dec 02 14:45	0°♌	
	7692 Jun 29 08:33	0°♉		morning set	7694 Dec 20 04:56	21°♌43'54	
greatest brilliancy	7692 Aug 06 08:16	28°♉38'44 -4.8m			7694 Dec 26 21:02	0°♐	
	7692 Aug 10 13:57	0°♊			7695 Jan 20 00:14	0°♑	
desc. node	7692 Aug 11 15:36	0°♊14'57		max. Earth dist.	7695 Jan 24 14:46	5°♑44'28 1.72003 AU	
retrograde	7692 Aug 17 10:26	0°♊52'58		desc. node	7695 Jan 27 09:56	9°♑13'53	
	7692 Aug 24 01:58	30°♋♎					
evening set	7692 Sep 02 08:15	25°♎59'53		superior conj	7695 Jan 27 15:11	9°♑30'17 -0°00'32	
inferior conj	7692 Sep 07 21:48	22°♎36'36 -5°58'49		minimum elong	7695 Jan 27 15:03	9°♑29'52 0°00'26	
minimum elong	7692 Sep 07 11:51	22°♎52'13 5°56'41		behind sun begin	7695 Jan 26 14:21	8°♑12'48	
min. Earth dist.	7692 Sep 07 06:13	23°♎01'05 0.28818 AU		behind sun end	7695 Jan 28 15:45	10°♑46'56	
morning rise	7692 Sep 12 15:51	19°♎42'16			7695 Feb 13 01:00	0°♌	
direct	7692 Sep 29 08:42	14°♎26'15		evening rise	7695 Mar 08 10:52	29°♌19'22	
greatest brilliancy	7692 Oct 09 04:09	16°♎10'36 -4.7m			7695 Mar 08 23:50	0°♎	
	7692 Nov 01 00:55	0°♏			7695 Apr 01 21:57	0°♏	
morning max el	7692 Nov 17 02:31	14°♏17'45 45°44'13			7695 Apr 25 21:32	0°♑	
asc. node	7692 Dec 02 15:20	0°♐00'24		asc. node	7695 May 20 09:15	0°♒23'55	
	7692 Dec 02 15:11	0°♑			7695 May 20 01:30	0°♓	
	7692 Dec 29 17:54	0°♒			7695 Jun 13 13:13	0°♈	
	7693 Jan 24 06:57	0°♐			7695 Jul 08 13:21	0°♉	
	7693 Feb 18 01:35	0°♒			7695 Aug 03 11:04	0°♊	
	7693 Mar 14 10:03	0°♌			7695 Aug 31 06:19	0°♋	
desc. node	7693 Mar 24 08:05	12°♌18'57		evening max el	7695 Sep 08 09:56	8°♋04'12 45°40'37	





































































































































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	7695 Oct 04 22:08	0°♊					
greatest brilliancy	7695 Oct 17 10:11	6°♊16'38	-4.7m	superior conj	7698 Apr 12 21:48	25°♍34'28	-1°25'14
retrograde	7695 Oct 27 05:36	8°♊01'28		minimum elong	7698 Apr 12 16:13	25°♍16'56	1°25'13
evening set	7695 Nov 14 03:09	2°♊00'55		max. Earth dist.	7698 Apr 13 04:49	25°♍56'33	1.71199 AU
	7695 Nov 17 09:40	30°♋♌			7698 Apr 16 10:13	0°♋	
inferior conj	7695 Nov 17 15:40	29°♌50'37	-8°07'50		7698 May 10 07:05	0°♌	
minimum elong	7695 Nov 17 22:14	29°♌40'22	8°07'05	evening rise	7698 May 23 12:35	16°♌34'58	
min. Earth dist.	7695 Nov 18 06:25	29°♌27'33	0.28898 AU		7698 Jun 03 06:17	0°♍	
morning rise	7695 Nov 21 17:06	27°♌20'31		asc. node	7698 Jun 16 21:00	16°♍56'56	
direct	7695 Dec 09 02:54	21°♌32'55			7698 Jun 27 09:36	0°♎	
greatest brilliancy	7695 Dec 20 04:08	23°♌47'02	-4.8m		7698 Jul 21 18:33	0°♏	
asc. node	7695 Dec 31 03:03	29°♌33'21			7698 Aug 15 11:06	0°♐	
	7695 Dec 31 19:13	0°♊			7698 Sep 09 15:00	0°♑	
morning max el	7696 Jan 28 00:15	23°♊19'55	46°21'28		7698 Oct 05 13:23	0°♒	
	7696 Feb 03 13:28	0°♋		desc. node	7698 Oct 06 14:42	1°♊11'37	
	7696 Mar 01 19:50	0°♌			7698 Nov 01 21:57	0°♋	
	7696 Mar 27 08:35	0°♍		evening max el	7698 Nov 19 04:10	17°♋25'59	45°57'15
desc. node	7696 Apr 20 20:23	29°♍39'30			7698 Dec 03 02:05	0°♌	
	7696 Apr 21 03:05	0°♍		greatest brilliancy	7698 Dec 28 14:33	16°♌02'32	-4.8m
	7696 May 15 12:36	0°♎		retrograde	7699 Jan 07 05:33	17°♌44'12	
	7696 Jun 08 18:14	0°♏		evening set	7699 Jan 21 18:32	13°♌36'56	
	7696 Jul 02 23:12	0°♐		asc. node	7699 Jan 27 14:41	10°♌11'24	
	7696 Jul 27 05:06	0°♑		inferior conj	7699 Jan 28 00:45	9°♌55'53	0°06'26
morning set	7696 Aug 01 03:12	6°♑04'51		minimum elong	7699 Jan 28 00:30	9°♌56'16	0°06'26
asc. node	7696 Aug 11 18:51	19°♑14'18		transit middle	7699 Jan 28 00:30	9°♌56'16	0°06'26
	7696 Aug 20 12:07	0°♒		transit begin	7699 Jan 27 20:45	10°♌02'03	
				transit end	7699 Jan 28 04:14	9°♌50'30	
superior conj	7696 Sep 07 16:04	22°♒24'21	0°58'56	min. Earth dist.	7699 Jan 28 11:09	9°♌39'50	0.27299 AU
minimum elong	7696 Sep 07 06:39	21°♒55'20	0°58'34	morning rise	7699 Feb 03 05:54	6°♌15'20	
max. Earth dist.	7696 Sep 08 11:02	23°♒22'50	1.73241 AU	direct	7699 Feb 17 22:31	2°♌00'23	
	7696 Sep 13 19:53	0°♐		greatest brilliancy	7699 Feb 28 12:55	4°♌07'07	-4.9m
	7696 Oct 08 04:17	0°♑			7699 Apr 04 10:57	0°♍	
evening rise	7696 Oct 14 00:32	7°♑11'33		morning max el	7699 Apr 09 11:09	4°♍57'59	46°57'52
	7696 Nov 01 13:55	0°♊			7699 May 02 19:57	0°♎	
	7696 Nov 26 01:29	0°♋		desc. node	7699 May 19 08:28	18°♎52'26	
desc. node	7696 Dec 01 12:11	6°♋39'25			7699 May 28 20:45	0°♏	
	7696 Dec 20 15:18	0°♌			7699 Jun 23 00:48	0°♐	
	7697 Jan 14 07:37	0°♍			7699 Jul 17 20:21	0°♑	
	7697 Feb 08 04:17	0°♎			7699 Aug 11 12:27	0°♒	
	7697 Mar 05 11:37	0°♏			7699 Sep 05 02:36	0°♓	
asc. node	7697 Mar 24 11:50	21°♏46'49		asc. node	7699 Sep 09 07:04	5°♒07'08	
	7697 Mar 31 22:12	0°♐			7699 Sep 29 14:33	0°♐	
evening max el	7697 Apr 15 22:57	15°♐50'44	46°58'25	morning set	7699 Oct 10 03:48	12°♐57'47	
	7697 Apr 30 21:29	0°♑			7699 Oct 24 00:05	0°♑	
greatest brilliancy	7697 May 26 00:40	16°♑40'32	-4.9m	max. Earth dist.	7699 Nov 14 03:24	26°♑04'43	1.73122 AU
retrograde	7697 Jun 05 11:30	18°♑43'39					
evening set	7697 Jun 21 02:48	13°♑54'32		superior conj	7699 Nov 15 15:52	27°♑57'17	1°21'26
inferior conj	7697 Jun 26 10:03	10°♑43'28	4°19'17	minimum elong	7699 Nov 15 21:38	28°♑15'04	1°21'27
minimum elong	7697 Jun 26 18:56	10°♑29'45	4°16'41		7699 Nov 17 07:37	0°♊	
min. Earth dist.	7697 Jun 26 06:54	10°♑48'19	0.27571 AU		7699 Dec 11 14:00	0°♋	
morning rise	7697 Jul 02 11:31	7°♑08'26		evening rise	7699 Dec 23 03:49	14°♋19'22	
desc. node	7697 Jul 14 05:52	3°♑01'37		desc. node	7699 Dec 29 23:57	22°♋47'21	
direct	7697 Jul 17 07:38	2°♑50'13			7700 Jan 04 19:40	0°♌	
greatest brilliancy	7697 Jul 27 03:17	4°♑37'10	-4.8m		7700 Jan 29 00:36	0°♍	
	7697 Aug 31 23:50	0°♒			7700 Feb 22 05:04	0°♎	
morning max el	7697 Sep 04 11:51	3°♒19'18	45°54'11		7700 Mar 18 10:49	0°♏	
	7697 Sep 30 09:31	0°♓			7700 Apr 11 21:49	0°♐	
	7697 Oct 27 05:19	0°♐		asc. node	7700 Apr 21 23:30	12°♐12'00	
asc. node	7697 Nov 04 05:24	9°♐14'40			7700 May 06 20:50	0°♑	
	7697 Nov 21 21:08	0°♑			7700 Jun 01 20:26	0°♒	
	7697 Dec 16 20:12	0°♊		evening max el	7700 Jun 27 10:25	27°♒11'25	46°16'00
	7698 Jan 10 08:37	0°♋			7700 Jun 30 07:11	0°♓	
	7698 Feb 03 14:16	0°♌		greatest brilliancy	7700 Aug 05 00:48	26°♓27'31	-4.8m
desc. node	7698 Feb 23 21:56	25°♌20'07		desc. node	7700 Aug 11 17:36	28°♓19'43	
	7698 Feb 27 15:27	0°♍		retrograde	7700 Aug 16 02:09	28°♓41'34	
morning set	7698 Mar 02 23:40	4°♍10'58		evening set	7700 Aug 31 21:46	23°♓52'18	

min. Earth dist.	7700 Sep 05 22:16	20° \mathbb{M} 50'08	0.28777 AU	behind sun begin	7703 Jan 25 04:49	5° \approx 54'51	
inferior conj	7700 Sep 06 13:48	20° \mathbb{M} 25'44	-5°44'05	behind sun end	7703 Jan 27 05:30	8° \approx 26'40	
minimum elong	7700 Sep 06 03:56	20° \mathbb{M} 41'14	5°41'53	desc. node	7703 Jan 27 11:53	8° \approx 46'34	
morning rise	7700 Sep 11 10:28	17° \mathbb{M} 27'32			7703 Feb 13 11:46	0° \mathbb{H}	
direct	7700 Sep 27 23:48	12° \mathbb{M} 15'58		evening rise	7703 Mar 06 22:48	26° \mathbb{H} 52'20	
greatest brilliancy	7700 Oct 07 19:51	14° \mathbb{M} 00'22	-4.7m		7703 Mar 09 10:42	0° \mathbb{Y}	
	7700 Nov 02 08:18	0° $\underline{\mathbb{A}}$			7703 Apr 02 08:56	0° \mathbb{B}	
morning max el	7700 Nov 15 16:34	12° $\underline{\mathbb{A}}$ 02'37	45°43'39		7703 Apr 26 08:41	0° \mathbb{I}	
asc. node	7700 Dec 02 17:19	29° $\underline{\mathbb{A}}$ 19'14		asc. node	7703 May 20 11:10	29° \mathbb{I} 54'43	
	7700 Dec 03 08:41	0° \mathbb{M}			7703 May 20 12:53	0° \mathbb{G}	
	7700 Dec 30 07:58	0° \mathbb{J}			7703 Jun 14 01:02	0° \mathbb{O}	
	7701 Jan 24 19:35	0° \mathbb{Z}			7703 Jul 09 02:02	0° \mathbb{M}	
	7701 Feb 18 13:30	0° \approx			7703 Aug 04 01:36	0° $\underline{\mathbb{A}}$	
	7701 Mar 14 21:33	0° \mathbb{H}			7703 Sep 01 01:46	0° \mathbb{M}	
desc. node	7701 Mar 24 10:12	11° \mathbb{H} 50'13		evening max el	7703 Sep 07 02:00	5° \mathbb{M} 54'49	45°41'01
	7701 Apr 07 23:47	0° \mathbb{Y}		desc. node	7703 Sep 09 05:14	7° \mathbb{M} 57'05	
	7701 May 01 22:53	0° \mathbb{B}			7703 Oct 07 03:21	0° \mathbb{J}	
morning set	7701 May 19 08:43	21° \mathbb{B} 49'34		greatest brilliancy	7703 Oct 16 00:03	4° \mathbb{J} 05'22	-4.7m
	7701 May 25 21:15	0° \mathbb{I}		retrograde	7703 Oct 25 21:49	5° \mathbb{J} 51'45	
	7701 Jun 18 20:58	0° \mathbb{G}		evening set	7703 Nov 12 20:48	29° \mathbb{M} 48'01	
					7703 Nov 12 12:48	30° \mathbb{R} \mathbb{M}	
superior conj	7701 Jun 27 20:25	11° \mathbb{G} 11'42	-0°40'54	inferior conj	7703 Nov 16 07:38	27° \mathbb{M} 40'05	-8°14'07
minimum elong	7701 Jun 28 05:20	11° \mathbb{G} 39'28	0°40'37	minimum elong	7703 Nov 16 13:34	27° \mathbb{M} 30'46	8°13'29
max. Earth dist.	7701 Jul 01 08:18	15° \mathbb{G} 32'48	1.72143 AU	min. Earth dist.	7703 Nov 16 20:56	27° \mathbb{M} 19'15	0.28939 AU
	7701 Jul 12 23:16	0° \mathbb{O}		morning rise	7703 Nov 20 06:13	25° \mathbb{M} 14'17	
asc. node	7701 Jul 15 08:52	2° \mathbb{O} 58'48		direct	7703 Dec 07 19:41	19° \mathbb{M} 22'13	
evening rise	7701 Aug 05 09:44	29° \mathbb{O} 01'47		greatest brilliancy	7703 Dec 18 19:01	21° \mathbb{M} 34'51	-4.8m
	7701 Aug 06 04:35	0° \mathbb{M}		asc. node	7703 Dec 31 04:57	28° \mathbb{M} 18'10	
	7701 Aug 30 13:11	0° $\underline{\mathbb{A}}$			7704 Jan 02 15:08	0° \mathbb{J}	
	7701 Sep 24 01:57	0° \mathbb{M}		morning max el	7704 Jan 26 16:30	21° \mathbb{J} 07'24	46°19'43
	7701 Oct 18 20:37	0° \mathbb{J}			7704 Feb 04 08:38	0° \mathbb{Z}	
desc. node	7701 Nov 04 02:23	19° \mathbb{J} 27'05			7704 Mar 02 10:36	0° \approx	
	7701 Nov 12 23:22	0° \mathbb{Z}			7704 Mar 27 21:37	0° \mathbb{H}	
	7701 Dec 08 13:18	0° \approx		desc. node	7704 Apr 20 22:17	29° \mathbb{H} 08'15	
	7701 Dec 03 21:47	0° \mathbb{H}			7704 Apr 21 15:12	0° \mathbb{Y}	
evening max el	7702 Jan 31 15:28	29° \mathbb{H} 30'56	46°45'18		7704 May 16 00:09	0° \mathbb{B}	
	7702 Feb 01 03:08	0° \mathbb{Y}			7704 Jun 09 05:23	0° \mathbb{I}	
asc. node	7702 Feb 25 02:27	21° \mathbb{Y} 13'28			7704 Jul 03 10:02	0° \mathbb{G}	
	7702 Mar 12 06:37	0° \mathbb{B}			7704 Jul 27 15:42	0° \mathbb{O}	
greatest brilliancy	7702 Mar 13 05:27	0° \mathbb{B} 21'17	-4.9m	morning set	7704 Jul 30 19:19	3° \mathbb{O} 53'42	
retrograde	7702 Mar 23 00:30	2° \mathbb{B} 11'02		asc. node	7704 Aug 11 20:54	18° \mathbb{O} 48'12	
	7702 Apr 02 08:46	30° \mathbb{R} \mathbb{Y}			7704 Aug 20 22:34	0° \mathbb{M}	
evening set	7702 Apr 09 13:13	26° \mathbb{Y} 17'21					
inferior conj	7702 Apr 12 16:32	24° \mathbb{Y} 22'53	8°54'13	superior conj	7704 Sep 06 09:29	20° \mathbb{M} 17'57	0°56'30
minimum elong	7702 Apr 12 10:58	24° \mathbb{Y} 31'26	8°53'43	minimum elong	7704 Sep 06 00:08	19° \mathbb{M} 49'05	0°56'08
min. Earth dist.	7702 Apr 12 10:29	24° \mathbb{Y} 32'12	0.27044 AU	max. Earth dist.	7704 Sep 07 08:59	21° \mathbb{M} 30'25	1.73224 AU
morning rise	7702 Apr 15 08:45	22° \mathbb{Y} 44'55			7704 Sep 14 06:17	0° $\underline{\mathbb{A}}$	
direct	7702 May 03 06:09	16° \mathbb{Y} 36'24			7704 Oct 08 14:45	0° \mathbb{M}	
greatest brilliancy	7702 May 12 19:21	18° \mathbb{Y} 19'36	-4.9m	evening rise	7704 Oct 12 18:25	5° \mathbb{M} 06'41	
	7702 Jun 01 12:03	0° \mathbb{B}			7704 Nov 02 00:33	0° \mathbb{J}	
desc. node	7702 Jun 16 20:11	13° \mathbb{B} 27'10			7704 Nov 26 12:23	0° \mathbb{Z}	
morning max el	7702 Jun 22 11:09	18° \mathbb{B} 55'56	46°40'51	desc. node	7704 Dec 01 14:02	6° \mathbb{Z} 11'30	
	7702 Jul 03 05:58	0° \mathbb{I}			7704 Dec 21 02:37	0° \approx	
	7702 Jul 30 12:36	0° \mathbb{G}			7705 Jan 14 19:34	0° \mathbb{H}	
	7702 Aug 25 12:29	0° \mathbb{O}			7705 Feb 08 17:13	0° \mathbb{Y}	
	7702 Sep 19 22:10	0° \mathbb{M}			7705 Mar 06 02:12	0° \mathbb{B}	
asc. node	7702 Oct 07 19:15	21° \mathbb{M} 24'23		asc. node	7705 Mar 24 13:53	21° \mathbb{B} 05'44	
	7702 Oct 14 22:23	0° $\underline{\mathbb{A}}$			7705 Apr 01 16:24	0° \mathbb{I}	
	7702 Nov 08 14:57	0° \mathbb{M}		evening max el	7705 Apr 14 14:04	13° \mathbb{I} 31'58	46°59'03
	7702 Dec 03 01:29	0° \mathbb{J}			7705 May 02 05:26	0° \mathbb{G}	
morning set	7702 Dec 18 20:55	19° \mathbb{J} 31'47		greatest brilliancy	7705 May 24 16:02	14° \mathbb{G} 21'33	-4.9m
	7702 Dec 27 07:42	0° \mathbb{Z}		retrograde	7705 Jun 04 02:14	16° \mathbb{G} 23'33	
	7703 Jan 20 10:56	0° \approx		evening set	7705 Jun 19 19:46	11° \mathbb{G} 31'11	
max. Earth dist.	7703 Jan 23 07:07	3° \approx 32'27	1.72048 AU	inferior conj	7705 Jun 25 00:01	8° \mathbb{G} 24'03	4°39'28
				minimum elong	7705 Jun 25 09:24	8° \mathbb{G} 09'33	4°36'46
superior conj	7703 Jan 26 04:22	7° \approx 08'17	0°03'13	min. Earth dist.	7705 Jun 24 21:10	8° \mathbb{G} 28'27	0.27538 AU
minimum elong	7703 Jan 26 05:09	7° \approx 10'46	0°03'17	morning rise	7705 Jun 30 23:31	4° \mathbb{G} 51'41	

desc. node	7705 Jul 14 07:49	0°☾34'32			7707 Dec 12 00:31	0°☾
direct	7705 Jul 15 21:43	0°☾31'33		evening rise	7707 Dec 21 19:27	12°☾06'26
greatest brilliancy	7705 Jul 25 16:10	2°☾17'37 -4.8m		desc. node	7707 Dec 30 01:58	22°☾20'33
	7705 Sep 01 23:25	0°♌			7708 Jan 05 06:24	0°♌
morning max el	7705 Sep 03 02:16	1°♌04'22 45°55'25			7708 Jan 29 11:36	0°♌
	7705 Oct 01 01:19	0°♍			7708 Feb 22 16:23	0°♍
	7705 Oct 27 18:28	0°♎			7708 Mar 17 22:33	0°♎
asc. node	7705 Nov 04 07:19	8°♎43'29			7708 Apr 11 10:13	0°♏
	7705 Nov 22 09:03	0°♏		asc. node	7708 Apr 21 01:24	11°♏39'15
	7705 Dec 17 07:30	0°♐			7708 May 06 10:24	0°☾
	7706 Jan 10 19:35	0°☾			7708 Jun 01 12:27	0°♌
	7706 Feb 04 01:04	0°♌		evening max el	7708 Jun 25 00:30	24°♌53'33 46°17'44
desc. node	7706 Feb 24 00:01	24°♌53'02			7708 Jun 30 06:34	0°♍
	7706 Feb 28 02:11	0°♌		greatest brilliancy	7708 Aug 02 16:54	24°♍16'04 -4.8m
morning set	7706 Mar 01 10:57	1°♌42'31		desc. node	7708 Aug 10 19:42	26°♍20'33
	7706 Mar 24 00:20	0°♍		retrograde	7708 Aug 13 18:07	26°♍30'36
				evening set	7708 Aug 29 11:16	21°♍44'39
superior conj	7706 Apr 11 08:34	23°♍03'45 -1°24'13		min. Earth dist.	7708 Sep 03 14:11	18°♍39'27 0.28735 AU
minimum elong	7706 Apr 11 02:01	22°♍43'11 1°24'10		inferior conj	7708 Sep 04 05:42	18°♍15'08 -5°28'38
max. Earth dist.	7706 Apr 11 09:29	23°♍06'39 1.71198 AU		minimum elong	7708 Sep 03 19:58	18°♍30'24 5°26'25
	7706 Apr 16 20:55	0°♎		morning rise	7708 Sep 09 04:59	15°♍13'17
	7706 May 10 17:48	0°♏		direct	7708 Sep 25 14:41	10°♍05'47
evening rise	7706 May 21 23:37	14°♏05'36		greatest brilliancy	7708 Oct 05 11:35	11°♍50'42 -4.7m
	7706 Jun 03 17:03	0°☾			7708 Nov 02 13:09	0°♎
asc. node	7706 Jun 16 22:57	16°☾29'21		morning max el	7708 Nov 13 07:29	9°♎50'23 45°43'21
	7706 Jun 27 20:29	0°♌		asc. node	7708 Dec 01 19:14	28°♎39'10
	7706 Jul 22 05:38	0°♍			7708 Dec 03 01:30	0°♎
	7706 Aug 15 22:36	0°♎			7708 Dec 29 21:35	0°♐
	7706 Sep 10 03:17	0°♏			7709 Jan 24 07:54	0°☾
	7706 Oct 06 03:18	0°♐			7709 Feb 18 01:09	0°♌
desc. node	7706 Oct 06 16:41	0°♐37'44			7709 Mar 14 08:52	0°♌
	7706 Nov 02 15:43	0°☾		desc. node	7709 Mar 23 12:07	11°♌21'15
evening max el	7706 Nov 17 17:47	15°☾08'51 45°55'43			7709 Apr 07 10:53	0°♍
	7706 Dec 04 10:55	0°♌			7709 May 01 09:50	0°♎
greatest brilliancy	7706 Dec 27 05:10	13°♌44'25 -4.8m		morning set	7709 May 16 20:15	19°♎21'12
retrograde	7707 Jan 05 18:14	15°♌24'38			7709 May 25 08:05	0°♏
evening set	7707 Jan 20 09:08	11°♌15'54			7709 Jun 18 07:42	0°☾
inferior conj	7707 Jan 26 14:33	7°♌36'02 -0°16'44				
minimum elong	7707 Jan 26 15:12	7°♌35'03 0°16'26		superior conj	7709 Jun 25 09:48	8°☾50'29 -0°44'09
transit middle	7707 Jan 26 15:12	7°♌35'03 0°16'26		minimum elong	7709 Jun 25 19:15	9°☾19'57 0°43'51
transit begin	7707 Jan 26 14:41	7°♌35'51		max. Earth dist.	7709 Jun 28 19:50	13°☾06'00 1.72095 AU
transit end	7707 Jan 26 15:43	7°♌34'15			7709 Jul 12 09:57	0°♌
min. Earth dist.	7707 Jan 27 02:26	7°♌17'42 0.27344 AU		asc. node	7709 Jul 14 10:54	2°♌31'56
asc. node	7707 Jan 27 16:49	6°♌55'31		evening rise	7709 Aug 03 01:37	26°♌49'32
morning rise	7707 Feb 01 20:34	3°♌53'49			7709 Aug 05 15:17	0°♍
	7707 Feb 12 09:59	30°♌☾			7709 Aug 29 24:00	0°♎
direct	7707 Feb 16 12:16	29°☾39'34			7709 Sep 23 13:01	0°♏
	7707 Feb 20 16:20	0°♌			7709 Oct 18 08:09	0°♐
greatest brilliancy	7707 Feb 27 04:57	1°♌47'53 -4.9m		desc. node	7709 Nov 03 04:17	18°♐57'06
	7707 Apr 05 10:46	0°♌			7709 Nov 12 11:41	0°☾
morning max el	7707 Apr 08 00:04	2°♌33'19 46°57'21			7709 Dec 08 02:57	0°♌
	7707 May 03 12:24	0°♍			7710 Jan 03 14:06	0°♌
desc. node	7707 May 19 10:23	18°♍15'40		evening max el	7710 Jan 29 05:05	27°♌08'26 46°43'50
	7707 May 29 10:35	0°♎			7710 Feb 01 02:38	0°♍
	7707 Jun 23 13:19	0°♏		asc. node	7710 Feb 24 04:24	19°♍54'42
	7707 Jul 18 08:04	0°☾		greatest brilliancy	7710 Mar 10 17:26	27°♍53'56 -4.9m
	7707 Aug 11 23:39	0°♌		retrograde	7710 Mar 20 13:51	29°♍44'42
	7707 Sep 05 13:25	0°♍		evening set	7710 Apr 06 21:48	23°♍56'49
asc. node	7707 Sep 09 09:04	4°♍40'17		inferior conj	7710 Apr 10 05:11	21°♍56'27 8°47'33
	7707 Sep 30 01:08	0°♎		minimum elong	7710 Apr 09 22:48	22°♍06'16 8°46'54
morning set	7707 Oct 08 21:17	10°♎51'39		min. Earth dist.	7710 Apr 09 22:35	22°♍06'35 0.27036 AU
	7707 Oct 24 10:31	0°♏		morning rise	7710 Apr 12 23:49	20°♍15'03
max. Earth dist.	7707 Nov 12 21:41	24°♏00'50 1.73146 AU		direct	7710 Apr 30 19:06	14°♍09'53
				greatest brilliancy	7710 May 10 07:49	15°♍53'08 -4.9m
superior conj	7707 Nov 14 09:26	25°♏51'10 1°22'25			7710 Jun 02 01:11	0°♎
minimum elong	7707 Nov 14 14:34	26°♏07'03 1°22'27		desc. node	7710 Jun 15 22:10	12°♎31'26
	7707 Nov 17 18:02	0°♐		morning max el	7710 Jun 20 01:37	16°♎35'17 46°42'18

	7710 Jul 03 01:17	0°♄			7712 Dec 20 14:20	0°♁		
	7710 Jul 30 03:37	0°♅			7713 Jan 14 07:55	0°♁		
	7710 Aug 25 01:34	0°♄			7713 Feb 08 06:31	0°♁		
	7710 Sep 19 10:09	0°♄			7713 Mar 05 17:12	0°♄		
asc. node	7710 Oct 06 21:06	20°♄55'15		asc. node	7713 Mar 23 15:48	20°♄23'13		
	7710 Oct 14 09:45	0°♄			7713 Apr 01 11:16	0°♄		
	7710 Nov 08 01:57	0°♄		evening max el	7713 Apr 12 04:29	11°♄10'43	46°59'36	
	7710 Dec 02 12:17	0°♄			7713 May 02 16:33	0°♅		
morning set	7710 Dec 16 13:12	17°♄20'24		greatest brilliancy	7713 May 22 07:47	12°♅02'19	-4.9m	
	7710 Dec 26 18:26	0°♅		retrograde	7713 Jun 01 16:21	14°♅02'37		
	7711 Jan 19 21:40	0°♁		evening set	7713 Jun 17 12:50	9°♅06'51		
max. Earth dist.	7711 Jan 20 22:38	1°♁17'45	1.72086 AU	inferior conj	7713 Jun 22 14:02	6°♅03'50	4°59'02	
				minimum elong	7713 Jun 22 23:50	5°♅48'40	4°56'18	
superior conj	7711 Jan 23 18:01	4°♁47'41	0°06'53	min. Earth dist.	7713 Jun 22 11:44	6°♅07'23	0.27513 AU	
minimum elong	7711 Jan 23 19:42	4°♁52'57	0°06'53	morning rise	7713 Jun 28 11:18	2°♅34'13		
behind sun begin	7711 Jan 22 21:09	3°♁42'42			7713 Jul 03 23:38	30°♄♄		
behind sun end	7711 Jan 24 18:14	6°♁03'12		direct	7713 Jul 13 11:28	28°♄11'52		
desc. node	7711 Jan 26 13:57	8°♁19'29		desc. node	7713 Jul 13 09:56	28°♄11'52		
	7711 Feb 12 22:33	0°♁		greatest brilliancy	7713 Jul 23 05:36	29°♄57'25	-4.8m	
evening rise	7711 Mar 04 11:07	24°♁26'22			7713 Jul 23 08:33	0°♅		
	7711 Mar 08 21:37	0°♁		morning max el	7713 Aug 31 16:02	28°♅46'15	45°56'33	
	7711 Apr 01 20:01	0°♄			7713 Sep 01 22:31	0°♄		
	7711 Apr 25 19:59	0°♄			7713 Sep 30 17:22	0°♄		
asc. node	7711 May 19 13:07	29°♄24'55		asc. node	7713 Oct 27 07:58	0°♄		
	7711 May 20 00:30	0°♅			7713 Nov 03 09:19	8°♄11'17		
	7711 Jun 13 13:09	0°♄			7713 Nov 21 21:20	0°♄		
	7711 Jul 08 15:06	0°♄			7713 Dec 16 19:08	0°♄		
	7711 Aug 03 16:40	0°♄			7714 Jan 10 06:53	0°♅		
	7711 Aug 31 22:13	0°♄			7714 Feb 03 12:12	0°♁		
evening max el	7711 Sep 04 18:10	3°♄44'43	45°41'31	desc. node	7714 Feb 23 01:54	24°♁24'15		
desc. node	7711 Sep 08 07:09	7°♄06'30		morning set	7714 Feb 26 22:19	29°♁13'15		
	7711 Oct 08 23:06	0°♄			7714 Feb 27 13:15	0°♁		
greatest brilliancy	7711 Oct 13 14:20	1°♄53'40	-4.7m		7714 Mar 23 11:22	0°♁		
retrograde	7711 Oct 23 13:34	3°♄40'52						
	7711 Nov 06 06:59	30°♄♄		superior conj	7714 Apr 08 19:37	20°♁33'01	-1°23'01	
evening set	7711 Nov 10 14:11	27°♄34'34		minimum elong	7714 Apr 08 12:11	20°♁09'38	1°22'57	
inferior conj	7711 Nov 13 23:29	25°♄28'37	-8°19'44	max. Earth dist.	7714 Apr 08 12:19	20°♁10'04	1.71194 AU	
minimum elong	7711 Nov 14 04:47	25°♄20'18	8°19'13		7714 Apr 16 07:55	0°♄		
min. Earth dist.	7711 Nov 14 11:27	25°♄09'51	0.28972 AU		7714 May 10 04:47	0°♄		
morning rise	7711 Nov 17 19:18	23°♄06'47		evening rise	7714 May 19 10:54	11°♄36'10		
direct	7711 Dec 05 12:19	17°♄10'42			7714 Jun 03 04:04	0°♅		
greatest brilliancy	7711 Dec 16 09:28	19°♄21'15	-4.8m	asc. node	7714 Jun 16 01:01	16°♅01'19		
asc. node	7711 Dec 30 07:02	27°♄04'41			7714 Jun 27 07:39	0°♄		
	7712 Jan 03 06:15	0°♄			7714 Jul 21 17:04	0°♄		
morning max el	7712 Jan 24 08:10	18°♄52'54	46°18'08		7714 Aug 15 10:31	0°♄		
	7712 Feb 04 03:29	0°♅			7714 Sep 09 16:06	0°♄		
	7712 Mar 02 01:21	0°♁		desc. node	7714 Oct 05 18:36	0°♄02'01		
	7712 Mar 27 10:41	0°♁			7714 Oct 05 17:53	0°♄		
desc. node	7712 Apr 20 00:13	28°♁36'45			7714 Nov 02 10:30	0°♅		
	7712 Apr 21 03:24	0°♁		evening max el	7714 Nov 15 06:51	12°♅49'07	45°54'23	
	7712 May 15 11:51	0°♄			7714 Dec 04 23:42	0°♁		
	7712 Jun 08 16:46	0°♄		greatest brilliancy	7714 Dec 24 19:23	11°♁24'32	-4.8m	
	7712 Jul 02 21:10	0°♅		retrograde	7715 Jan 03 07:04	13°♁03'58		
	7712 Jul 27 02:38	0°♄		evening set	7715 Jan 17 23:48	8°♁53'06		
morning set	7712 Jul 28 10:58	1°♄39'58		inferior conj	7715 Jan 24 04:17	5°♁14'47	-0°39'46	
asc. node	7712 Aug 10 22:54	18°♄20'49		minimum elong	7715 Jan 24 05:48	5°♁12'27	0°39'11	
	7712 Aug 20 09:23	0°♄		min. Earth dist.	7715 Jan 24 17:34	4°♁54'17	0.27391 AU	
				asc. node	7715 Jan 26 18:46	3°♁38'54		
superior conj	7712 Sep 04 02:22	18°♄08'46	0°53'57	morning rise	7715 Jan 30 10:59	1°♁31'26		
minimum elong	7712 Sep 03 17:08	17°♄40'18	0°53'35		7715 Feb 02 11:58	30°♄♅		
max. Earth dist.	7712 Sep 05 05:52	19°♄33'34	1.73202 AU	direct	7715 Feb 14 01:54	27°♅17'10		
	7712 Sep 13 17:02	0°♄		greatest brilliancy	7715 Feb 24 21:06	29°♅27'36	-4.9m	
	7712 Oct 08 01:33	0°♄			7715 Feb 26 05:07	0°♁		
evening rise	7712 Oct 10 11:53	2°♄59'28			7715 Apr 05 10:00	0°♁		
	7712 Nov 01 11:31	0°♄		morning max el	7715 Apr 05 13:48	0°♁09'35	46°56'57	
	7712 Nov 25 23:39	0°♅			7715 May 03 04:55	0°♁		
desc. node	7712 Nov 30 16:04	5°♅43'06		desc. node	7715 May 18 12:23	17°♁38'24		

	7715 May 29 00:35	0°♄			7718 Feb 01 03:40	0°♅	
	7715 Jun 23 02:02	0°♅		asc. node	7718 Feb 23 06:19	18°♅32'26	
	7715 Jul 17 20:00	0°♄		greatest brilliancy	7718 Mar 08 05:21	25°♅25'52	-4.9m
	7715 Aug 11 11:05	0°♄		retrograde	7718 Mar 18 03:12	27°♅17'24	
	7715 Sep 05 00:32	0°♅		evening set	7718 Apr 04 06:11	21°♅35'54	
asc. node	7715 Sep 08 10:55	4°♅12'05		inferior conj	7718 Apr 07 17:47	19°♅29'15	8°39'57
	7715 Sep 29 12:02	0°♄		minimum elong	7718 Apr 07 10:36	19°♅40'17	8°39'09
morning set	7715 Oct 06 14:33	8°♄43'46		min. Earth dist.	7718 Apr 07 10:33	19°♅40'22	0.27024 AU
	7715 Oct 23 21:19	0°♄		morning rise	7718 Apr 10 15:06	17°♅43'57	
max. Earth dist.	7715 Nov 10 16:47	21°♄58'13	1.73172 AU	direct	7718 Apr 28 08:18	11°♅42'53	
				greatest brilliancy	7718 May 07 19:57	13°♅25'37	-4.9m
superior conj	7715 Nov 12 02:43	23°♄42'58	1°23'16		7718 Jun 02 11:10	0°♄	
minimum elong	7715 Nov 12 07:13	23°♄56'53	1°23'19	desc. node	7718 Jun 15 00:16	11°♄36'37	
	7715 Nov 17 04:51	0°♄		morning max el	7718 Jun 17 15:55	14°♄13'45	46°43'41
	7715 Dec 11 11:26	0°♄			7718 Jul 02 20:13	0°♅	
evening rise	7715 Dec 19 10:51	9°♄51'41			7718 Jul 29 18:32	0°♄	
desc. node	7715 Dec 29 03:58	21°♄52'33			7718 Aug 24 14:37	0°♄	
	7716 Jan 04 17:31	0°♄			7718 Sep 18 22:09	0°♅	
	7716 Jan 28 22:58	0°♄		asc. node	7718 Oct 05 23:10	20°♅26'45	
	7716 Feb 22 04:04	0°♅			7718 Oct 13 21:06	0°♄	
	7716 Mar 17 10:41	0°♄			7718 Nov 07 12:57	0°♄	
	7716 Apr 10 23:01	0°♅			7718 Dec 01 23:08	0°♄	
asc. node	7716 Apr 20 03:24	11°♅05'38		morning set	7718 Dec 14 05:38	15°♄09'21	
	7716 May 06 00:25	0°♄			7718 Dec 26 05:16	0°♄	
	7716 Jun 01 05:02	0°♄		max. Earth dist.	7719 Jan 18 11:26	28°♄54'19	1.72132 AU
evening max el	7716 Jun 22 15:24	22°♄37'11	46°19'40		7719 Jan 19 08:32	0°♄	
	7716 Jun 30 07:18	0°♅					
greatest brilliancy	7716 Jul 31 08:30	22°♅03'43	-4.8m	superior conj	7719 Jan 21 07:42	2°♄26'53	0°10'32
desc. node	7716 Aug 09 21:33	24°♅16'42		minimum elong	7719 Jan 21 10:15	2°♄34'50	0°10'30
retrograde	7716 Aug 11 10:41	24°♅19'32		behind sun begin	7719 Jan 20 15:21	1°♄36'00	
evening set	7716 Aug 27 01:04	19°♅36'27		behind sun end	7719 Jan 22 05:08	3°♄33'40	
min. Earth dist.	7716 Sep 01 05:56	16°♅28'54	0.28696 AU	desc. node	7719 Jan 25 15:52	7°♄51'28	
inferior conj	7716 Sep 01 21:44	16°♅04'12	-5°12'49		7719 Feb 12 09:30	0°♄	
minimum elong	7716 Sep 01 12:10	16°♅19'10	5°10'33	evening rise	7719 Mar 01 23:10	21°♄59'09	
morning rise	7716 Sep 06 23:37	12°♅58'58			7719 Mar 08 08:40	0°♅	
direct	7716 Sep 23 06:03	7°♅55'17			7719 Apr 01 07:14	0°♄	
greatest brilliancy	7716 Oct 03 03:09	9°♅40'31	-4.7m		7719 Apr 25 07:23	0°♅	
	7716 Nov 02 16:30	0°♄		asc. node	7719 May 18 15:11	28°♅55'18	
morning max el	7716 Nov 10 23:28	7°♄39'59	45°42'50		7719 May 19 12:11	0°♄	
asc. node	7716 Nov 30 21:18	27°♄59'03			7719 Jun 13 01:22	0°♄	
	7716 Dec 02 18:20	0°♄			7719 Jul 08 04:18	0°♅	
	7716 Dec 29 11:28	0°♄			7719 Aug 03 07:55	0°♄	
	7717 Jan 23 20:30	0°♄			7719 Aug 31 19:16	0°♄	
	7717 Feb 17 13:07	0°♄		evening max el	7719 Sep 02 10:11	1°♄34'26	45°42'08
	7717 Mar 13 20:27	0°♄		desc. node	7719 Sep 07 09:10	6°♄15'33	
desc. node	7717 Mar 22 14:02	10°♄51'29		greatest brilliancy	7719 Oct 11 05:26	29°♄43'50	-4.7m
	7717 Apr 06 22:13	0°♅			7719 Oct 12 00:54	0°♄	
	7717 Apr 30 21:01	0°♄		retrograde	7719 Oct 21 05:07	1°♄31'21	
morning set	7717 May 14 07:42	16°♄51'45			7719 Oct 29 23:48	30°♄♄	
	7717 May 24 19:09	0°♅		evening set	7719 Nov 08 07:36	25°♄23'04	
	7717 Jun 17 18:41	0°♄		inferior conj	7719 Nov 11 15:42	23°♄18'42	-8°24'27
				minimum elong	7719 Nov 11 20:18	23°♄11'28	8°24'04
superior conj	7717 Jun 22 23:11	6°♄28'28	-0°47'18	min. Earth dist.	7719 Nov 12 02:31	23°♄01'42	0.29003 AU
minimum elong	7717 Jun 23 09:08	6°♄59'30	0°47'01	morning rise	7719 Nov 15 08:56	21°♄00'28	
max. Earth dist.	7717 Jun 26 07:57	10°♄40'14	1.72046 AU	direct	7719 Dec 03 04:57	15°♄00'47	
	7717 Jul 11 20:51	0°♄		greatest brilliancy	7719 Dec 14 00:30	17°♄09'27	-4.8m
asc. node	7717 Jul 13 12:52	2°♄04'14		asc. node	7719 Dec 29 08:59	25°♄53'51	
evening rise	7717 Jul 31 17:39	24°♄37'14			7720 Jan 03 17:08	0°♄	
	7717 Aug 05 02:09	0°♅		morning max el	7720 Jan 21 23:03	16°♄36'56	46°16'17
	7717 Aug 29 10:57	0°♄			7720 Feb 03 21:45	0°♄	
	7717 Sep 23 00:15	0°♄			7720 Mar 01 15:55	0°♄	
	7717 Oct 17 19:53	0°♄			7720 Mar 26 23:42	0°♄	
desc. node	7717 Nov 02 06:20	18°♄26'52		desc. node	7720 Apr 19 02:18	28°♄05'36	
	7717 Nov 12 00:17	0°♄			7720 Apr 20 15:37	0°♅	
	7717 Dec 07 17:02	0°♄			7720 May 14 23:33	0°♄	
	7718 Jan 03 07:04	0°♄			7720 Jun 08 04:05	0°♅	
evening max el	7718 Jan 26 19:40	24°♄47'36	46°42'20		7720 Jul 02 08:12	0°♄	

morning set	7720 Jul 26 02:30	29°  26'08		evening set	7723 Jan 15 14:58	6°  32'27	
	7720 Jul 26 13:27	0°  0		inferior conj	7723 Jan 21 18:18	2°  55'54	-1°02'22
asc. node	7720 Aug 10 00:45	17°  053'20		minimum elong	7723 Jan 21 20:41	2°  52'15	1°01'31
	7720 Aug 19 20:04	0°  0		min. Earth dist.	7723 Jan 22 08:39	2°  33'48	0.27440 AU
				asc. node	7723 Jan 25 20:38	0°  26'43	
superior conj	7720 Sep 01 19:21	16°  00'17	0°51'21		7723 Jan 26 15:05	30°  R  3	
minimum elong	7720 Sep 01 10:17	15°  032'21	0°50'57	morning rise	7723 Jan 28 01:33	29°  311'56	
max. Earth dist.	7720 Sep 03 01:16	17°  032'33	1.73176 AU	direct	7723 Feb 11 16:11	24°  357'12	
	7720 Sep 13 03:41	0°  0		greatest brilliancy	7723 Feb 22 13:09	27°  309'31	-4.9m
	7720 Oct 07 12:13	0°  0			7723 Feb 28 13:41	0°  0	
evening rise	7720 Oct 08 05:37	0°  053'32		morning max el	7723 Apr 03 04:36	27°  350'08	46°56'16
	7720 Oct 31 22:18	0°  0			7723 Apr 05 07:43	0°  H	
	7720 Nov 25 10:43	0°  0			7723 May 02 20:43	0°  Y	
desc. node	7720 Nov 29 18:07	5°  315'23		desc. node	7723 May 17 14:24	17°  Y02'24	
	7720 Dec 20 01:51	0°  0			7723 May 28 14:10	0°  B	
	7721 Jan 13 20:07	0°  H			7723 Jun 22 14:26	0°  II	
	7721 Feb 07 19:48	0°  Y			7723 Jul 17 07:41	0°  0	
	7721 Mar 05 08:20	0°  B			7723 Aug 10 22:16	0°  0	
asc. node	7721 Mar 22 17:49	19°  B40'29			7723 Sep 04 11:21	0°  0	
	7721 Apr 01 06:42	0°  II		asc. node	7723 Sep 07 12:59	3°  045'22	
evening max el	7721 Apr 09 17:56	8°  II46'50	47°00'00		7723 Sep 28 22:37	0°  0	
	7721 May 03 07:34	0°  0		morning set	7723 Oct 04 07:40	6°  036'26	
greatest brilliancy	7721 May 19 23:49	9°  042'53	-4.9m		7723 Oct 23 07:47	0°  0	
retrograde	7721 May 30 05:59	11°  041'15		max. Earth dist.	7723 Nov 08 13:18	20°  01'05	1.73193 AU
evening set	7721 Jun 15 05:48	6°  041'49					
inferior conj	7721 Jun 20 03:53	3°  043'19	5°18'13	superior conj	7723 Nov 09 20:04	21°  036'01	1°24'01
minimum elong	7721 Jun 20 14:02	3°  027'36	5°15'28	minimum elong	7723 Nov 09 23:55	21°  047'56	1°24'05
min. Earth dist.	7721 Jun 20 02:26	3°  045'35	0.27485 AU		7723 Nov 16 15:19	0°  0	
morning rise	7721 Jun 25 22:38	0°  016'47			7723 Dec 10 22:01	0°  0	
	7721 Jun 26 11:01	30°  R  II		evening rise	7723 Dec 17 02:35	7°  339'09	
direct	7721 Jul 11 00:29	25°  0II51'44		desc. node	7723 Dec 28 05:52	21°  325'23	
desc. node	7721 Jul 12 11:49	25°  0II54'16			7724 Jan 04 04:16	0°  0	
greatest brilliancy	7721 Jul 20 19:22	27°  0II37'33	-4.8m		7724 Jan 28 09:55	0°  H	
	7721 Jul 26 09:05	0°  0			7724 Feb 21 15:19	0°  Y	
morning max el	7721 Aug 29 05:25	26°  027'33	45°57'53		7724 Mar 16 22:23	0°  B	
	7721 Sep 01 20:28	0°  0			7724 Apr 10 11:28	0°  II	
	7721 Sep 30 08:54	0°  0		asc. node	7724 Apr 19 05:27	10°  0II33'21	
	7721 Oct 26 21:05	0°  0			7724 May 05 14:10	0°  0	
asc. node	7721 Nov 02 11:18	7°  039'58			7724 May 31 21:37	0°  0	
	7721 Nov 21 09:16	0°  0		evening max el	7724 Jun 20 07:11	20°  023'35	46°21'22
	7721 Dec 16 06:26	0°  0			7724 Jun 30 09:09	0°  0	
	7722 Jan 09 17:51	0°  0		greatest brilliancy	7724 Jul 28 23:40	19°  050'53	-4.8m
	7722 Feb 02 23:01	0°  0		desc. node	7724 Aug 08 23:35	22°  007'57	
desc. node	7722 Feb 22 03:51	23°  056'40		retrograde	7724 Aug 09 03:18	22°  007'58	
morning set	7722 Feb 24 10:05	26°  046'13		evening set	7724 Aug 24 14:45	17°  027'49	
	7722 Feb 27 00:02	0°  H		min. Earth dist.	7724 Aug 29 21:13	14°  018'12	0.28653 AU
	7722 Mar 22 22:09	0°  Y		inferior conj	7724 Aug 30 13:26	13°  052'54	-4°56'18
max. Earth dist.	7722 Apr 05 15:09	17°  0Y14'08	1.71204 AU	minimum elong	7724 Aug 30 04:07	14°  007'26	4°54'01
				morning rise	7724 Sep 04 17:56	10°  044'21	
superior conj	7722 Apr 06 06:35	18°  0Y02'41	-1°21'40	direct	7724 Sep 20 21:33	5°  044'36	
minimum elong	7722 Apr 05 22:20	17°  0Y36'43	1°21'33	greatest brilliancy	7724 Sep 30 17:55	7°  029'37	-4.7m
	7722 Apr 15 18:43	0°  B			7724 Nov 02 18:01	0°  0	
	7722 May 09 15:36	0°  II		morning max el	7724 Nov 08 15:41	5°  031'04	45°42'27
evening rise	7722 May 16 21:43	9°  0II05'44		asc. node	7724 Nov 29 23:15	27°  019'57	
	7722 Jun 02 14:57	0°  0			7724 Dec 02 10:29	0°  0	
asc. node	7722 Jun 15 02:54	15°  033'16			7724 Dec 29 00:50	0°  0	
	7722 Jun 26 18:39	0°  0			7725 Jan 23 08:39	0°  0	
	7722 Jul 21 04:19	0°  0			7725 Feb 17 00:38	0°  0	
	7722 Aug 14 22:13	0°  0			7725 Mar 13 07:35	0°  H	
	7722 Sep 09 04:42	0°  0		desc. node	7725 Mar 21 16:07	10°  0H23'32	
desc. node	7722 Oct 04 20:41	29°  0M27'25			7725 Apr 06 09:07	0°  Y	
	7722 Oct 05 08:19	0°  0			7725 Apr 30 07:45	0°  B	
	7722 Nov 02 05:24	0°  0		morning set	7725 May 11 19:28	14°  0B24'37	
evening max el	7722 Nov 12 20:28	10°  032'07	45°53'16		7725 May 24 05:48	0°  II	
	7722 Dec 05 15:54	0°  0			7725 Jun 17 05:16	0°  0	
greatest brilliancy	7722 Dec 22 09:18	9°  006'24	-4.8m				
retrograde	7722 Dec 31 20:46	10°  0045'51		superior conj	7725 Jun 20 12:30	4°  007'18	-0°50'24

minimum elong	7725 Jun 20 22:53	4°☿39'40	0°50'06	greatest brilliancy	7727 Dec 11 16:03	14°♄58'04	-4.8m
max. Earth dist.	7725 Jun 23 22:14	8°☿22'11	1.72005 AU	asc. node	7727 Dec 28 10:54	24°♄44'48	
	7725 Jul 11 07:25	0°♌			7728 Jan 04 01:06	0°♌	
asc. node	7725 Jul 12 14:46	1°♌37'21		morning max el	7728 Jan 19 13:08	14°♌19'05	46°14'39
evening rise	7725 Jul 29 09:22	22°♌24'44			7728 Feb 03 15:29	0°♌	
	7725 Aug 04 12:45	0°♍			7728 Mar 01 06:11	0°♍	
	7725 Aug 28 21:41	0°♎			7728 Mar 26 12:30	0°♎	
	7725 Sep 22 11:16	0°♏		desc. node	7728 Apr 18 04:13	27°♎34'29	
	7725 Oct 17 07:25	0°♐			7728 Apr 20 03:38	0°♐	
desc. node	7725 Nov 01 08:20	17°♐57'17			7728 May 14 11:05	0°♑	
	7725 Nov 11 12:40	0°♑			7728 Jun 07 15:15	0°♒	
	7725 Dec 07 06:56	0°♒			7728 Jul 01 19:05	0°♓	
	7726 Jan 03 00:01	0°♈		morning set	7728 Jul 23 18:14	27°♓13'16	
evening max el	7726 Jan 24 10:37	22°♈28'46	46°40'48		7728 Jul 26 00:08	0°♌	
	7726 Feb 01 05:35	0°♍		asc. node	7728 Aug 09 02:50	17°♌26'59	
asc. node	7726 Feb 22 08:25	17°♍08'54			7728 Aug 19 06:38	0°♍	
greatest brilliancy	7726 Mar 05 17:49	22°♍59'54	-4.9m				
retrograde	7726 Mar 15 16:20	24°♍51'30		superior conj	7728 Aug 30 12:31	13°♍52'46	0°48'40
evening set	7726 Apr 01 14:40	19°♍16'55		minimum elong	7728 Aug 30 03:41	13°♍25'31	0°48'16
inferior conj	7726 Apr 05 06:33	17°♍03'46	8°31'30	max. Earth dist.	7728 Aug 31 19:54	15°♍29'33	1.73153 AU
minimum elong	7726 Apr 04 22:38	17°♍15'55	8°30'31		7728 Sep 12 14:13	0°♎	
min. Earth dist.	7726 Apr 04 22:54	17°♍15'31	0.27008 AU	evening rise	7728 Oct 05 23:28	28°♎48'07	
morning rise	7726 Apr 08 06:43	15°♍14'07			7728 Oct 06 22:50	0°♏	
direct	7726 Apr 25 21:36	9°♍17'48			7728 Oct 31 09:07	0°♐	
greatest brilliancy	7726 May 05 08:21	10°♍59'53	-4.9m		7728 Nov 24 21:51	0°♑	
	7726 Jun 02 17:49	0°♒		desc. node	7728 Nov 28 19:59	4°♑46'55	
desc. node	7726 Jun 14 02:08	10°♒43'50			7728 Dec 19 13:28	0°♒	
morning max el	7726 Jun 15 05:23	11°♒51'30	46°44'58		7729 Jan 13 08:26	0°♈	
	7726 Jul 02 14:08	0°♒			7729 Feb 07 09:11	0°♍	
	7726 Jul 29 08:51	0°♓			7729 Mar 04 23:41	0°♎	
	7726 Aug 24 03:15	0°♌		asc. node	7729 Mar 21 19:50	18°♒57'16	
	7726 Sep 18 09:50	0°♍			7729 Apr 01 02:41	0°♒	
asc. node	7726 Oct 05 01:08	19°♍58'40		evening max el	7729 Apr 07 06:41	6°♒21'14	47°00'27
	7726 Oct 13 08:14	0°♎			7729 May 04 03:44	0°♓	
	7726 Nov 06 23:46	0°♏		greatest brilliancy	7729 May 17 15:38	7°☿23'07	-4.9m
	7726 Dec 01 09:47	0°♐		retrograde	7729 May 27 19:40	9°☿20'06	
morning set	7726 Dec 11 21:52	12°♐58'25		evening set	7729 Jun 12 22:52	4°☿16'25	
	7726 Dec 25 15:51	0°♑		inferior conj	7729 Jun 17 17:46	1°☿22'47	5°36'56
max. Earth dist.	7727 Jan 15 23:14	26°♑28'41	1.72175 AU	minimum elong	7729 Jun 18 04:13	1°☿06'37	5°34'11
				min. Earth dist.	7729 Jun 17 17:12	1°☿23'41	0.27460 AU
superior conj	7727 Jan 18 21:26	0°♒07'09	0°14'08		7729 Jun 19 23:31	30°♒♒	
minimum elong	7727 Jan 19 00:49	0°♒17'40	0°14'05	morning rise	7729 Jun 23 09:49	27°♒59'50	
behind sun begin	7727 Jan 18 12:45	29°♓40'07		direct	7729 Jul 08 13:21	23°♒31'18	
behind sun end	7727 Jan 19 12:52	0°♒55'13		desc. node	7729 Jul 11 13:50	23°♒41'53	
	7727 Jan 18 19:08	0°♒		greatest brilliancy	7729 Jul 18 09:30	25°♒18'01	-4.8m
desc. node	7727 Jan 24 17:49	7°♒24'24			7729 Jul 28 04:19	0°☿	
	7727 Feb 11 20:12	0°♈		morning max el	7729 Aug 26 19:15	24°☿09'51	45°59'22
evening rise	7727 Feb 27 11:20	19°♈33'08			7729 Sep 01 17:35	0°♌	
	7727 Mar 07 19:31	0°♍			7729 Sep 30 00:11	0°♍	
	7727 Mar 31 18:12	0°♎			7729 Oct 26 10:08	0°♎	
	7727 Apr 24 18:32	0°♏		asc. node	7729 Nov 01 13:15	7°♎08'31	
asc. node	7727 May 17 17:05	28°♏25'57			7729 Nov 20 21:15	0°♏	
	7727 May 18 23:38	0°♓			7729 Dec 15 17:51	0°♐	
	7727 Jun 12 13:20	0°♌			7730 Jan 09 04:59	0°♑	
	7727 Jul 07 17:18	0°♍			7730 Feb 02 10:02	0°♒	
	7727 Aug 02 23:09	0°♎		desc. node	7730 Feb 21 05:58	23°♒28'57	
evening max el	7727 Aug 31 01:15	29°♎22'07	45°42'31	morning set	7730 Feb 21 21:44	24°♒18'17	
	7727 Aug 31 16:58	0°♏			7730 Feb 26 10:59	0°♈	
desc. node	7727 Sep 06 11:13	5°♏23'59			7730 Mar 22 09:05	0°♍	
greatest brilliancy	7727 Oct 08 20:41	27°♏33'55	-4.7m	max. Earth dist.	7730 Apr 02 20:59	14°♍27'13	1.71214 AU
retrograde	7727 Oct 18 20:12	29°♏21'36					
evening set	7727 Nov 06 00:33	23°♏11'40		superior conj	7730 Apr 03 17:22	15°♍31'18	-1°20'08
inferior conj	7727 Nov 09 07:45	21°♏08'33	-8°28'31	minimum elong	7730 Apr 03 08:20	15°♍02'53	1°19'59
minimum elong	7727 Nov 09 11:37	21°♏02'28	8°28'13		7730 Apr 15 05:38	0°♎	
min. Earth dist.	7727 Nov 09 17:45	20°♏52'49	0.29034 AU		7730 May 09 02:33	0°♏	
morning rise	7727 Nov 12 22:34	18°♏53'42		evening rise	7730 May 14 08:34	6°♒34'59	
direct	7727 Nov 30 20:59	12°♏50'29			7730 Jun 02 02:00	0°☿	

asc. node	7730 Jun 14 04:52	15°04'57			7732 Dec 28 14:25	0°	
	7730 Jun 26 05:50	0°			7733 Jan 22 21:06	0°	
	7730 Jul 20 15:45	0°			7733 Feb 16 12:31	0°	
	7730 Aug 14 10:08	0°			7733 Mar 12 19:09	0°	
	7730 Sep 08 17:33	0°		desc. node	7733 Mar 20 18:02	9°	53'45
desc. node	7730 Oct 03 22:40	28°	51'48		7733 Apr 05 20:29	0°	
	7730 Oct 04 23:07	0°			7733 Apr 29 18:59	0°	
	7730 Nov 02 01:06	0°		morning set	7733 May 09 06:41	11°	54'11
evening max el	7730 Nov 10 10:38	8°	15'58 45°52'00		7733 May 23 16:56	0°	
	7730 Dec 06 14:27	0°			7733 Jun 16 16:18	0°	
greatest brilliancy	7730 Dec 19 22:25	6°	46'24 -4.8m				
retrograde	7730 Dec 29 10:36	8°	26'17	superior conj	7733 Jun 18 01:23	1°	43'18 -0°53'26
evening set	7731 Jan 13 06:09	4°	10'10	minimum elong	7733 Jun 18 12:06	2°	16'44 0°53'07
inferior conj	7731 Jan 19 08:07	0°	35'23 -1°25'02	max. Earth dist.	7733 Jun 21 13:58	6°	07'12 1.71957 AU
minimum elong	7731 Jan 19 11:20	0°	30'26 1°23'55		7733 Jul 10 18:23	0°	
min. Earth dist.	7731 Jan 19 23:13	0°	12'09 0.27494 AU	asc. node	7733 Jul 11 16:49	1°	09'41
	7731 Jan 20 07:07	30°		evening rise	7733 Jul 27 00:51	20°	10'13
asc. node	7731 Jan 24 22:47	27°	14'27		7733 Aug 03 23:44	0°	
morning rise	7731 Jan 25 15:43	26°	51'10		7733 Aug 28 08:49	0°	
direct	7731 Feb 09 06:57	22°	35'42		7733 Sep 21 22:42	0°	
greatest brilliancy	7731 Feb 20 04:37	24°	49'18 -4.9m		7733 Oct 16 19:21	0°	
	7731 Mar 02 02:50	0°		desc. node	7733 Oct 31 10:15	17°	26'13
morning max el	7731 Mar 31 19:53	25°	30'48 46°55'37		7733 Nov 11 01:29	0°	
	7731 Apr 05 05:07	0°			7733 Dec 06 21:19	0°	
	7731 May 02 12:38	0°			7734 Jan 02 17:40	0°	
desc. node	7731 May 16 16:22	16°	25'36	evening max el	7734 Jan 22 00:42	20°	06'50 46°39'03
	7731 May 28 03:53	0°			7734 Feb 01 09:29	0°	
	7731 Jun 22 03:01	0°		asc. node	7734 Feb 21 10:21	15°	40'53
	7731 Jul 16 19:35	0°		greatest brilliancy	7734 Mar 03 06:40	20°	43'05 -4.9m
	7731 Aug 10 09:41	0°		retrograde	7734 Mar 13 04:49	22°	42'04
	7731 Sep 03 22:26	0°		evening set	7734 Mar 29 22:57	16°	56'39
asc. node	7731 Sep 06 14:58	3°	17'38	inferior conj	7734 Apr 02 19:15	14°	36'49 8°21'56
	7731 Sep 28 09:28	0°		minimum elong	7734 Apr 02 10:42	14°	50'00 8°20'45
morning set	7731 Oct 02 01:03	4°	29'05	min. Earth dist.	7734 Apr 02 11:37	14°	48'34 0.26997 AU
	7731 Oct 22 18:31	0°		morning rise	7734 Apr 05 22:31	12°	42'22
max. Earth dist.	7731 Nov 06 10:49	18°	06'12 1.73212 AU	direct	7734 Apr 23 10:27	6°	51'03
				greatest brilliancy	7734 May 02 21:30	8°	33'06 -4.9m
superior conj	7731 Nov 07 13:39	19°	12'29'01 1°24'38		7734 Jun 02 23:07	0°	
minimum elong	7731 Nov 07 16:51	19°	12'38'51 1°24'42	morning max el	7734 Jun 12 17:49	9°	24'45 46°46'14
	7731 Nov 16 02:04	0°		desc. node	7734 Jun 13 04:11	9°	50'40
	7731 Dec 10 08:54	0°			7734 Jul 02 08:15	0°	
evening rise	7731 Dec 14 18:28	5°	26'12		7734 Jul 28 23:31	0°	
desc. node	7731 Dec 27 07:55	20°	57'41		7734 Aug 23 16:14	0°	
	7732 Jan 03 15:21	0°			7734 Sep 17 21:51	0°	
	7732 Jan 27 21:17	0°		asc. node	7734 Oct 04 03:01	19°	29'15
	7732 Feb 21 03:02	0°			7734 Oct 12 19:41	0°	
	7732 Mar 16 10:35	0°			7734 Nov 06 10:54	0°	
	7732 Apr 10 00:25	0°			7734 Nov 30 20:45	0°	
asc. node	7732 Apr 18 07:20	9°	12'59'06	morning set	7734 Dec 09 14:27	10°	27'31
	7732 May 05 04:29	0°			7734 Dec 25 02:45	0°	
	7732 May 31 14:56	0°		max. Earth dist.	7735 Jan 13 12:08	24°	05'32 1.72219 AU
evening max el	7732 Jun 17 23:27	18°	10'05 46°23'10				
	7732 Jun 30 12:59	0°		superior conj	7735 Jan 16 11:43	27°	34'13 0°17'41
greatest brilliancy	7732 Jul 26 15:10	17°	17'37'31 -4.8m	minimum elong	7735 Jan 16 15:53	28°	01'12 0°17'35
retrograde	7732 Aug 06 19:53	19°	17'55'18		7735 Jan 18 06:03	0°	
desc. node	7732 Aug 08 01:41	19°	17'53'27	desc. node	7735 Jan 23 19:54	6°	56'47
evening set	7732 Aug 22 04:41	15°	18'06		7735 Feb 11 07:12	0°	
min. Earth dist.	7732 Aug 27 12:30	12°	17'06'31 0.28607 AU	evening rise	7735 Feb 24 23:58	17°	07'46
inferior conj	7732 Aug 28 05:09	11°	17'40'33 -4°39'14		7735 Mar 07 06:39	0°	
minimum elong	7732 Aug 27 20:10	11°	17'54'35 4°37'00		7735 Mar 31 05:31	0°	
morning rise	7732 Sep 02 12:11	8°	17'28'42		7735 Apr 24 06:04	0°	
direct	7732 Sep 18 13:28	3°	17'33'02	asc. node	7735 May 16 19:04	27°	12'55'34
greatest brilliancy	7732 Sep 28 08:20	5°	17'15 -4.7m		7735 May 18 11:30	0°	
	7732 Nov 02 18:38	0°			7735 Jun 12 01:47	0°	
morning max el	7732 Nov 06 07:36	3°	12'20'34 45°42'08		7735 Jul 07 06:51	0°	
asc. node	7732 Nov 29 01:12	26°	12'40'16		7735 Aug 02 15:05	0°	
	7732 Dec 02 02:41	0°		evening max el	7735 Aug 28 15:28	27°	12'06'43 45°43'13

	7735 Aug 31 16:01	0°♌			7738 Feb 25 21:56	0°♏	
desc. node	7735 Sep 05 13:09	4°♌30'06			7738 Mar 21 20:00	0°♐	
greatest brilliancy	7735 Oct 06 11:54	25°♌23'20	-4.7m	max. Earth dist.	7738 Mar 31 05:03	11°♐47'20	1.71222 AU
retrograde	7735 Oct 16 11:38	27°♌11'40					
evening set	7735 Nov 03 17:24	21°♌00'13		superior conj	7738 Apr 01 04:18	13°♐00'27	-1°18'26
inferior conj	7735 Nov 06 23:58	18°♌58'07	-8°31'50	minimum elong	7738 Mar 31 18:34	12°♐29'52	1°18'15
minimum elong	7735 Nov 07 03:06	18°♌53'12	8°31'36		7738 Apr 14 16:32	0°♑	
min. Earth dist.	7735 Nov 07 09:13	18°♌43'34	0.29061 AU		7738 May 08 13:27	0°♒	
morning rise	7735 Nov 10 12:40	16°♌46'22		evening rise	7738 May 11 19:41	4°♒05'15	
direct	7735 Nov 28 12:48	10°♌39'45			7738 Jun 01 12:57	0°♓	
greatest brilliancy	7735 Dec 09 08:11	12°♌47'02	-4.8m	asc. node	7738 Jun 13 06:57	14°♓37'15	
asc. node	7735 Dec 27 13:01	23°♌37'21			7738 Jun 25 16:56	0°♑	
	7736 Jan 04 07:00	0°♑			7738 Jul 20 03:07	0°♒	
morning max el	7736 Jan 17 03:35	12°♑01'36	46°13'10		7738 Aug 13 22:01	0°♓	
	7736 Feb 03 09:02	0°♑			7738 Sep 08 06:26	0°♌	
	7736 Feb 29 20:30	0°♑		desc. node	7738 Oct 03 00:35	28°♌15'52	
	7736 Mar 26 01:24	0°♏			7738 Oct 04 14:04	0°♑	
desc. node	7736 Apr 17 06:10	27°♏03'02			7738 Nov 01 21:21	0°♑	
	7736 Apr 19 15:47	0°♐		evening max el	7738 Nov 08 01:44	6°♑02'31	45°50'56
	7736 May 13 22:45	0°♑			7738 Dec 07 21:14	0°♑	
	7736 Jun 07 02:36	0°♒		greatest brilliancy	7738 Dec 17 11:38	4°♑27'34	-4.8m
	7736 Jul 01 06:12	0°♓		retrograde	7738 Dec 27 00:44	6°♑07'47	
morning set	7736 Jul 21 09:35	24°♓58'15		evening set	7739 Jan 10 21:46	1°♑49'06	
	7736 Jul 25 11:05	0°♑			7739 Jan 14 01:56	30°♒♑	
asc. node	7736 Aug 08 04:48	16°♑59'28		inferior conj	7739 Jan 16 22:08	28°♑16'02	-1°47'19
	7736 Aug 18 17:28	0°♒		minimum elong	7739 Jan 17 02:09	28°♑09'50	1°45'57
				min. Earth dist.	7739 Jan 17 13:38	27°♑52'09	0.27546 AU
superior conj	7736 Aug 28 05:21	11°♒43'20	0°45'53	morning rise	7739 Jan 23 05:52	24°♑31'47	
minimum elong	7736 Aug 27 20:47	11°♒16'55	0°45'29	asc. node	7739 Jan 24 00:42	24°♑06'45	
max. Earth dist.	7736 Aug 29 12:58	13°♒20'52	1.73126 AU	direct	7739 Feb 06 22:10	20°♑15'41	
	7736 Sep 12 01:00	0°♓		greatest brilliancy	7739 Feb 17 19:35	22°♑29'31	-4.9m
evening rise	7736 Oct 03 17:09	26°♓41'39			7739 Mar 03 04:32	0°♑	
	7736 Oct 06 09:39	0°♌		morning max el	7739 Mar 29 11:21	23°♑12'38	46°54'45
	7736 Oct 30 20:06	0°♑			7739 Apr 05 01:33	0°♏	
	7736 Nov 24 09:10	0°♑			7739 May 02 04:05	0°♐	
desc. node	7736 Nov 27 22:02	4°♑18'35		desc. node	7739 May 15 18:20	15°♐49'39	
	7736 Dec 19 01:17	0°♑			7739 May 27 17:18	0°♑	
	7737 Jan 12 20:58	0°♏			7739 Jun 21 15:20	0°♒	
	7737 Feb 06 22:49	0°♐			7739 Jul 16 07:12	0°♓	
	7737 Mar 04 15:20	0°♑			7739 Aug 09 20:50	0°♑	
asc. node	7737 Mar 20 21:47	18°♑13'05			7739 Sep 03 09:16	0°♒	
	7737 Mar 31 23:21	0°♒		asc. node	7739 Sep 05 16:49	2°♒50'12	
evening max el	7737 Apr 04 19:36	3°♒56'01	47°00'55		7739 Sep 27 20:06	0°♓	
	7737 May 05 07:22	0°♓		morning set	7739 Sep 29 18:26	2°♓22'22	
greatest brilliancy	7737 May 15 06:40	5°♓02'23	-4.9m		7739 Oct 22 05:04	0°♌	
retrograde	7737 May 25 09:43	6°♓59'01		max. Earth dist.	7739 Nov 04 07:00	16°♌07'48	1.73228 AU
evening set	7737 Jun 10 15:59	1°♓50'35					
	7737 Jun 13 18:02	30°♒♒		superior conj	7739 Nov 05 07:11	17°♌22'25	1°25'07
inferior conj	7737 Jun 15 07:39	29°♒01'59	5°54'57	minimum elong	7739 Nov 05 09:40	17°♌30'05	1°25'12
minimum elong	7737 Jun 15 18:20	28°♒45'29	5°52'14		7739 Nov 15 12:39	0°♑	
min. Earth dist.	7737 Jun 15 07:37	29°♒02'03	0.27441 AU		7739 Dec 09 19:35	0°♑	
morning rise	7737 Jun 20 20:52	25°♒43'09		evening rise	7739 Dec 12 10:13	3°♑13'32	
direct	7737 Jul 06 02:29	21°♒10'28		desc. node	7739 Dec 26 09:54	20°♑30'32	
desc. node	7737 Jul 10 15:55	21°♒34'26			7740 Jan 03 02:12	0°♑	
greatest brilliancy	7737 Jul 15 23:26	22°♒58'03	-4.8m		7740 Jan 27 08:24	0°♏	
	7737 Jul 29 10:09	0°♓			7740 Feb 20 14:31	0°♐	
morning max el	7737 Aug 24 10:02	21°♓53'56	46°00'47		7740 Mar 15 22:36	0°♑	
	7737 Sep 01 14:09	0°♑			7740 Apr 09 13:13	0°♒	
	7737 Sep 29 15:24	0°♒		asc. node	7740 Apr 17 09:21	9°♒25'48	
	7737 Oct 25 23:12	0°♓			7740 May 04 18:41	0°♓	
asc. node	7737 Oct 31 15:14	6°♓37'00			7740 May 31 08:19	0°♑	
	7737 Nov 20 09:13	0°♌		evening max el	7740 Jun 15 15:47	15°♑57'29	46°24'57
	7737 Dec 15 05:15	0°♑			7740 Jun 30 18:16	0°♒	
	7738 Jan 08 16:06	0°♑		greatest brilliancy	7740 Jul 24 07:18	15°♒25'53	-4.8m
	7738 Feb 01 21:01	0°♑		retrograde	7740 Aug 04 12:11	17°♒43'30	
morning set	7738 Feb 19 09:39	21°♑51'17		desc. node	7740 Aug 07 03:31	17°♒35'08	
desc. node	7738 Feb 20 07:49	23°♑00'33		evening set	7740 Aug 19 18:51	13°♒09'23	

min. Earth dist.	7740 Aug 25 04:00	9° \mathbb{M} 55'42	0.28559 AU	evening rise	7743 Feb 22 12:23	14° \mathbb{H} 42'46	
inferior conj	7740 Aug 25 20:53	9° \mathbb{M} 29'20	-4°21'47		7743 Mar 06 17:29	0° \mathbb{Y}	
minimum elong	7740 Aug 25 12:16	9° \mathbb{M} 42'48	4°19'35		7743 Mar 30 16:30	0° \mathbb{B}	
morning rise	7740 Aug 31 06:20	6° \mathbb{M} 14'10			7743 Apr 23 17:16	0° \mathbb{I}	
direct	7740 Sep 16 05:27	1° \mathbb{M} 22'47		asc. node	7743 May 15 21:07	27° \mathbb{I} 26'28	
greatest brilliancy	7740 Sep 25 22:44	3° \mathbb{M} 05'52	-4.7m		7743 May 17 23:03	0° \mathbb{G}	
	7740 Nov 02 17:42	0° \mathbb{L}			7743 Jun 11 13:57	0° \mathbb{Q}	
morning max el	7740 Nov 03 22:40	1° \mathbb{L} 08'59	45°41'44		7743 Jul 06 20:10	0° \mathbb{M}	
asc. node	7740 Nov 28 03:16	26° \mathbb{L} 02'13			7743 Aug 02 06:53	0° \mathbb{L}	
	7740 Dec 01 18:18	0° \mathbb{M}		evening max el	7743 Aug 26 05:37	24° \mathbb{L} 52'07	45°44'02
	7740 Dec 28 03:37	0° \mathbb{J}			7743 Aug 31 15:40	0° \mathbb{M}	
	7741 Jan 22 09:11	0° \mathbb{B}		desc. node	7743 Sep 04 15:10	3° \mathbb{M} 36'21	
	7741 Feb 16 00:01	0° \approx		greatest brilliancy	7743 Oct 04 02:38	23° \mathbb{M} 13'17	-4.7m
	7741 Mar 12 06:19	0° \mathbb{H}		retrograde	7743 Oct 14 03:27	25° \mathbb{M} 03'03	
desc. node	7741 Mar 19 19:58	9° \mathbb{H} 25'08		evening set	7743 Nov 01 09:50	18° \mathbb{M} 50'24	
	7741 Apr 05 07:27	0° \mathbb{Y}		inferior conj	7743 Nov 04 16:10	16° \mathbb{M} 48'50	-8°34'16
	7741 Apr 29 05:50	0° \mathbb{B}		minimum elong	7743 Nov 04 18:32	16° \mathbb{M} 45'07	8°34'07
morning set	7741 May 06 17:48	9° \mathbb{B} 24'35		min. Earth dist.	7743 Nov 05 00:26	16° \mathbb{M} 35'50	0.29087 AU
	7741 May 23 03:42	0° \mathbb{I}		morning rise	7743 Nov 08 03:05	14° \mathbb{M} 39'53	
				direct	7743 Nov 26 04:36	8° \mathbb{M} 30'10	
superior conj	7741 Jun 15 14:16	29° \mathbb{I} 20'18	-0°56'22	greatest brilliancy	7743 Dec 07 00:15	10° \mathbb{M} 37'25	-4.8m
minimum elong	7741 Jun 16 01:15	29° \mathbb{I} 54'35	0°56'04	asc. node	7743 Dec 26 14:56	22° \mathbb{M} 32'29	
	7741 Jun 16 02:59	0° \mathbb{G}			7744 Jan 04 10:24	0° \mathbb{J}	
max. Earth dist.	7741 Jun 19 04:50	3° \mathbb{G} 50'32	1.71908 AU	morning max el	7744 Jan 14 18:36	9° \mathbb{J} 46'50	46°11'35
	7741 Jul 10 05:00	0° \mathbb{Q}			7744 Feb 03 01:50	0° \mathbb{B}	
asc. node	7741 Jul 10 18:47	0° \mathbb{Q} 42'45			7744 Feb 29 10:22	0° \approx	
evening rise	7741 Jul 24 16:14	17° \mathbb{Q} 56'23			7744 Mar 25 13:59	0° \mathbb{H}	
	7741 Aug 03 10:22	0° \mathbb{M}		desc. node	7744 Apr 16 08:14	26° \mathbb{H} 32'45	
	7741 Aug 27 19:34	0° \mathbb{L}			7744 Apr 19 03:39	0° \mathbb{Y}	
	7741 Sep 21 09:45	0° \mathbb{M}			7744 May 13 10:09	0° \mathbb{B}	
	7741 Oct 16 06:56	0° \mathbb{J}			7744 Jun 06 13:40	0° \mathbb{I}	
desc. node	7741 Oct 30 12:18	16° \mathbb{J} 56'36			7744 Jun 30 17:01	0° \mathbb{G}	
	7741 Nov 10 14:00	0° \mathbb{B}		morning set	7744 Jul 19 00:40	22° \mathbb{G} 43'13	
	7741 Dec 06 11:31	0° \approx			7744 Jul 24 21:43	0° \mathbb{Q}	
	7742 Jan 02 11:24	0° \mathbb{H}		asc. node	7744 Aug 07 06:40	16° \mathbb{Q} 32'34	
evening max el	7742 Jan 19 13:53	17° \mathbb{H} 43'40	46°37'21		7744 Aug 18 04:00	0° \mathbb{M}	
	7742 Feb 01 14:51	0° \mathbb{Y}					
asc. node	7742 Feb 20 12:18	14° \mathbb{Y} 10'44		superior conj	7744 Aug 25 21:59	9° \mathbb{M} 34'11	0°43'01
greatest brilliancy	7742 Feb 28 20:00	18° \mathbb{Y} 07'54	-4.9m	minimum elong	7744 Aug 25 13:45	9° \mathbb{M} 08'45	0°42'37
retrograde	7742 Mar 10 16:59	19° \mathbb{Y} 57'56		max. Earth dist.	7744 Aug 27 06:14	11° \mathbb{M} 13'39	1.73102 AU
evening set	7742 Mar 27 07:12	14° \mathbb{Y} 37'38			7744 Sep 11 11:30	0° \mathbb{L}	
inferior conj	7742 Mar 31 08:01	12° \mathbb{Y} 11'13	8°11'21	evening rise	7744 Oct 01 10:53	24° \mathbb{L} 36'09	
minimum elong	7742 Mar 30 22:51	12° \mathbb{Y} 25'20	8°09'59		7744 Oct 05 20:13	0° \mathbb{M}	
min. Earth dist.	7742 Mar 31 00:40	12° \mathbb{Y} 22'31	0.26987 AU		7744 Oct 30 06:49	0° \mathbb{J}	
morning rise	7742 Apr 03 14:33	10° \mathbb{Y} 11'45			7744 Nov 23 20:12	0° \mathbb{B}	
direct	7742 Apr 20 22:46	4° \mathbb{Y} 25'26		desc. node	7744 Nov 27 00:03	3° \mathbb{B} 50'57	
greatest brilliancy	7742 Apr 30 11:12	6° \mathbb{Y} 08'12	-4.9m		7744 Dec 18 12:49	0° \approx	
	7742 Jun 03 02:06	0° \mathbb{B}			7745 Jan 12 09:15	0° \mathbb{H}	
morning max el	7742 Jun 10 05:38	6° \mathbb{B} 57'29	46°47'27		7745 Feb 06 12:18	0° \mathbb{Y}	
desc. node	7742 Jun 12 06:14	8° \mathbb{B} 59'43			7745 Mar 04 07:02	0° \mathbb{B}	
	7742 Jul 02 01:31	0° \mathbb{I}		asc. node	7745 Mar 19 23:48	17° \mathbb{B} 28'51	
	7742 Jul 28 13:36	0° \mathbb{G}			7745 Mar 31 20:39	0° \mathbb{I}	
	7742 Aug 23 04:45	0° \mathbb{Q}		evening max el	7745 Apr 02 09:11	1° \mathbb{I} 32'47	47°01'15
	7742 Sep 17 09:27	0° \mathbb{M}			7745 May 06 23:13	0° \mathbb{G}	
asc. node	7742 Oct 03 05:05	19° \mathbb{M} 01'37		greatest brilliancy	7745 May 12 20:59	2° \mathbb{G} 40'29	-4.9m
	7742 Oct 12 06:43	0° \mathbb{L}		retrograde	7745 May 23 00:01	4° \mathbb{G} 37'18	
	7742 Nov 05 21:37	0° \mathbb{M}			7745 Jun 07 07:28	30° \mathbb{R} \mathbb{I}	
	7742 Nov 30 07:19	0° \mathbb{J}		evening set	7745 Jun 08 08:55	29° \mathbb{I} 23'57	
morning set	7742 Dec 07 07:00	8° \mathbb{J} 37'44		inferior conj	7745 Jun 12 21:14	26° \mathbb{I} 40'27	6°12'27
	7742 Dec 24 13:17	0° \mathbb{B}		minimum elong	7745 Jun 13 08:04	26° \mathbb{I} 23'44	6°09'49
max. Earth dist.	7743 Jan 11 02:50	21° \mathbb{B} 49'04	1.72267 AU	min. Earth dist.	7745 Jun 12 21:19	26° \mathbb{I} 40'17	0.27421 AU
				morning rise	7745 Jun 18 07:24	23° \mathbb{I} 26'15	
superior conj	7743 Jan 14 01:53	25° \mathbb{B} 30'00	0°21'12	direct	7745 Jul 03 15:50	18° \mathbb{I} 49'05	
minimum elong	7743 Jan 14 06:48	25° \mathbb{B} 45'20	0°21'04	desc. node	7745 Jul 09 17:47	19° \mathbb{I} 31'29	
	7743 Jan 17 16:39	0° \approx		greatest brilliancy	7745 Jul 13 12:26	20° \mathbb{I} 36'57	-4.8m
desc. node	7743 Jan 22 21:47	6° \approx 29'36			7745 Jul 30 07:42	0° \mathbb{G}	
	7743 Feb 10 17:55	0° \mathbb{H}		morning max el	7745 Aug 22 01:11	19° \mathbb{G} 39'18	46°02'13

	7745 Sep 01 09:51	0°♈			7748 Apr 09 02:06	0°♈	
	7745 Sep 29 06:12	0°♎		asc. node	7748 Apr 16 11:23	8°♈52'20	
	7745 Oct 25 11:59	0°♊			7748 May 04 09:05	0°♊	
asc. node	7745 Oct 30 17:14	6°♊06'12			7748 May 31 02:12	0°♈	
	7745 Nov 19 20:58	0°♎		evening max el	7748 Jun 13 07:23	13°♈42'27	46°26'30
	7745 Dec 14 16:26	0°♊			7748 Jul 01 02:08	0°♎	
	7746 Jan 08 03:00	0°♊		greatest brilliancy	7748 Jul 22 00:01	13°♎13'54	-4.8m
	7746 Feb 01 07:48	0°♊		retrograde	7748 Aug 02 03:57	15°♎30'29	
morning set	7746 Feb 16 21:58	19°♊26'16		desc. node	7748 Aug 06 05:34	15°♎10'34	
desc. node	7746 Feb 19 09:48	22°♊33'11		evening set	7748 Aug 17 09:03	10°♎59'18	
	7746 Feb 25 08:41	0°♋		min. Earth dist.	7748 Aug 22 19:48	7°♎43'13	0.28510 AU
	7746 Mar 21 06:45	0°♎		inferior conj	7748 Aug 23 12:31	7°♎17'05	-4°03'50
max. Earth dist.	7746 Mar 28 14:26	9°♎12'03	1.71237 AU	minimum elong	7748 Aug 23 04:19	7°♎29'53	4°01'40
				morning rise	7748 Aug 29 00:15	3°♎58'31	
superior conj	7746 Mar 29 15:12	10°♎29'57	-1°16'35		7748 Sep 07 10:59	30°♎♈	
minimum elong	7746 Mar 29 04:54	9°♎57'33	1°16'22	direct	7748 Sep 13 20:48	29°♈11'28	
	7746 Apr 14 03:18	0°♋			7748 Sep 20 11:07	0°♎	
	7746 May 08 00:17	0°♈		greatest brilliancy	7748 Sep 23 13:27	0°♎53'45	-4.7m
evening rise	7746 May 09 06:25	1°♈34'30		morning max el	7748 Nov 01 12:46	28°♎54'25	45°41'26
	7746 May 31 23:52	0°♊			7748 Nov 02 16:04	0°♊	
asc. node	7746 Jun 12 08:49	14°♊09'03		asc. node	7748 Nov 27 05:12	25°♊23'41	
	7746 Jun 25 03:59	0°♈			7748 Dec 01 09:51	0°♎	
	7746 Jul 19 14:27	0°♎			7748 Dec 27 16:52	0°♊	
	7746 Aug 13 09:53	0°♊			7749 Jan 21 21:24	0°♊	
	7746 Sep 07 19:21	0°♎			7749 Feb 15 11:40	0°♊	
desc. node	7746 Oct 02 02:40	27°♎40'09			7749 Mar 11 17:38	0°♋	
	7746 Oct 04 05:12	0°♊		desc. node	7749 Mar 18 22:02	8°♋56'30	
	7746 Nov 01 18:16	0°♊			7749 Apr 04 18:34	0°♎	
evening max el	7746 Nov 05 17:10	3°♊50'05	45°49'51		7749 Apr 28 16:49	0°♋	
	7746 Dec 09 18:21	0°♊		morning set	7749 May 04 05:12	6°♋55'28	
greatest brilliancy	7746 Dec 15 01:26	2°♊09'54	-4.8m		7749 May 22 14:34	0°♈	
retrograde	7746 Dec 24 14:44	3°♊49'38					
	7747 Jan 07 14:01	30°♋♊		superior conj	7749 Jun 13 03:24	26°♈57'40	-0°59'11
evening set	7747 Jan 08 13:39	29°♊28'32		minimum elong	7749 Jun 13 14:34	27°♈32'32	0°58'54
inferior conj	7747 Jan 14 12:13	25°♊57'21	-2°09'14		7749 Jun 15 13:47	0°♊	
minimum elong	7747 Jan 14 17:02	25°♊49'56	2°07'39	max. Earth dist.	7749 Jun 16 18:34	1°♊29'50	1.71861 AU
min. Earth dist.	7747 Jan 15 04:14	25°♊32'39	0.27595 AU	asc. node	7749 Jul 09 20:42	0°♈15'14	
morning rise	7747 Jan 20 19:48	22°♊13'06			7749 Jul 09 15:47	0°♈	
asc. node	7747 Jan 23 02:37	21°♊03'02		evening rise	7749 Jul 22 07:32	15°♈41'41	
direct	7747 Feb 04 13:18	17°♊56'29			7749 Aug 02 21:13	0°♎	
greatest brilliancy	7747 Feb 15 10:19	20°♊09'57	-4.9m		7749 Aug 27 06:35	0°♊	
	7747 Mar 03 23:08	0°♊			7749 Sep 20 21:04	0°♎	
morning max el	7747 Mar 27 01:59	20°♊52'51	46°53'48		7749 Oct 15 18:49	0°♊	
	7747 Apr 04 21:11	0°♋		desc. node	7749 Oct 29 14:16	16°♊25'51	
	7747 May 01 19:14	0°♎			7749 Nov 10 02:52	0°♊	
desc. node	7747 May 14 20:21	15°♎14'11			7749 Dec 06 02:10	0°♊	
	7747 May 27 06:35	0°♋			7750 Jan 02 05:53	0°♋	
	7747 Jun 21 03:37	0°♈		evening max el	7750 Jan 17 02:21	15°♋18'04	46°35'38
	7747 Jul 15 18:52	0°♊			7750 Feb 01 22:54	0°♎	
	7747 Aug 09 08:03	0°♈		asc. node	7750 Feb 19 14:24	12°♎36'36	
	7747 Sep 02 20:08	0°♎		greatest brilliancy	7750 Feb 26 09:22	15°♎41'49	-4.9m
asc. node	7747 Sep 04 18:54	2°♎23'18		retrograde	7750 Mar 08 05:12	17°♎31'12	
morning set	7747 Sep 27 11:32	0°♊14'42		evening set	7750 Mar 24 15:25	12°♎17'37	
	7747 Sep 27 06:45	0°♊		inferior conj	7750 Mar 28 20:45	9°♎44'53	7°59'52
	7747 Oct 21 15:39	0°♎		minimum elong	7750 Mar 28 11:03	9°♎59'49	7°58'18
max. Earth dist.	7747 Nov 02 01:57	14°♎05'30	1.73244 AU	min. Earth dist.	7750 Mar 28 13:52	9°♎55'29	0.26977 AU
				morning rise	7750 Apr 01 06:41	7°♎40'21	
superior conj	7747 Nov 03 00:38	15°♎15'26	1°25'29	direct	7750 Apr 18 10:48	1°♎58'49	
minimum elong	7747 Nov 03 02:24	15°♎20'56	1°25'35	greatest brilliancy	7750 Apr 28 01:07	3°♎42'55	-4.9m
	7747 Nov 14 23:17	0°♊			7750 Jun 03 03:49	0°♋	
	7747 Dec 09 06:21	0°♊		morning max el	7750 Jun 07 18:02	4°♋31'02	46°48'52
evening rise	7747 Dec 10 02:00	1°♊00'40		desc. node	7750 Jun 11 08:07	8°♋08'41	
desc. node	7747 Dec 25 11:47	20°♊02'45			7750 Jul 01 18:35	0°♈	
	7748 Jan 02 13:10	0°♊			7750 Jul 28 03:43	0°♊	
	7748 Jan 26 19:36	0°♋			7750 Aug 22 17:24	0°♈	
	7748 Feb 20 02:04	0°♎			7750 Sep 16 21:16	0°♎	
	7748 Mar 15 10:39	0°♋		asc. node	7750 Oct 02 07:02	18°♎32'51	

	7750 Oct 11 18:02	0°♄		retrograde	7753 May 20 14:33	2°♄14'13	
	7750 Nov 05 08:38	0°♍			7753 May 31 01:11	30°♋II	
	7750 Nov 29 18:10	0°♊		evening set	7753 Jun 06 01:55	26°II56'03	
morning set	7750 Dec 04 23:32	6°♊26'59		inferior conj	7753 Jun 10 10:44	24°II17'34	6°29'28
	7750 Dec 24 00:07	0°♊		minimum elong	7753 Jun 10 21:39	24°II00'45	6°26'54
max. Earth dist.	7751 Jan 08 19:53	19°♊39'00	1.72314 AU	min. Earth dist.	7753 Jun 10 10:43	24°II17'37	0.27400 AU
				morning rise	7753 Jun 15 17:38	21°II08'19	
superior conj	7751 Jan 11 16:05	23°♊11'04	0°24'40	direct	7753 Jul 01 05:34	16°II26'36	
minimum elong	7751 Jan 11 21:43	23°♊28'37	0°24'31	desc. node	7753 Jul 08 19:49	17°II32'15	
	7751 Jan 17 03:32	0°♋		greatest brilliancy	7753 Jul 11 00:50	18°II13'54	-4.8m
desc. node	7751 Jan 21 23:45	6°♋01'47			7753 Jul 31 00:10	0°♄	
	7751 Feb 10 04:55	0°♋		morning max el	7753 Aug 19 16:27	17°♄24'03	46°03'47
evening rise	7751 Feb 20 00:59	12°♋17'33			7753 Sep 01 05:17	0°♌	
	7751 Mar 06 04:38	0°♎			7753 Sep 28 21:03	0°♎	
	7751 Mar 30 03:49	0°♏			7753 Oct 25 00:53	0°♄	
	7751 Apr 23 04:48	0°II		asc. node	7753 Oct 29 19:09	5°♄34'37	
asc. node	7751 May 14 23:01	26°II55'52			7753 Nov 19 08:54	0°♍	
	7751 May 17 10:55	0°♄			7753 Dec 14 03:52	0°♊	
	7751 Jun 11 02:25	0°♌			7754 Jan 07 14:12	0°♊	
	7751 Jul 06 09:49	0°♎			7754 Jan 31 18:55	0°♋	
	7751 Aug 01 23:13	0°♄		morning set	7754 Feb 14 10:19	17°♋00'29	
evening max el	7751 Aug 23 20:35	22°♄38'53	45°44'50	desc. node	7754 Feb 18 11:53	22°♋05'09	
	7751 Aug 31 16:49	0°♍			7754 Feb 24 19:44	0°♋	
desc. node	7751 Sep 03 17:12	2°♍40'44			7754 Mar 20 17:47	0°♎	
greatest brilliancy	7751 Oct 01 16:52	21°♍01'58	-4.7m	max. Earth dist.	7754 Mar 25 22:50	6°♎32'51	1.71250 AU
retrograde	7751 Oct 11 19:50	22°♍53'45					
evening set	7751 Oct 30 02:03	16°♍40'16		superior conj	7754 Mar 27 02:02	7°♎58'21	-1°14'34
inferior conj	7751 Nov 02 08:27	14°♍38'45	-8°35'59	minimum elong	7754 Mar 26 15:14	7°♎24'26	1°14'18
minimum elong	7751 Nov 02 10:02	14°♍36'15	8°35'52		7754 Apr 13 14:22	0°♏	
min. Earth dist.	7751 Nov 02 15:25	14°♍27'48	0.29113 AU	evening rise	7754 May 06 17:03	29°♏02'28	
morning rise	7751 Nov 05 17:55	12°♍32'13			7754 May 07 11:24	0°II	
direct	7751 Nov 23 20:55	6°♍19'49			7754 May 31 11:05	0°♄	
greatest brilliancy	7751 Dec 04 16:02	8°♍26'44	-4.8m	asc. node	7754 Jun 11 10:48	13°♄40'16	
asc. node	7751 Dec 25 16:52	21°♍28'14			7754 Jun 24 15:21	0°♌	
	7752 Jan 04 12:41	0°♊			7754 Jul 19 02:05	0°♎	
morning max el	7752 Jan 12 10:40	7°♊33'52	46°10'02		7754 Aug 12 22:04	0°♄	
	7752 Feb 02 18:41	0°♊			7754 Sep 07 08:36	0°♍	
	7752 Feb 29 00:27	0°♋		desc. node	7754 Oct 01 04:37	27°♍03'18	
	7752 Mar 25 02:49	0°♋			7754 Oct 03 20:44	0°♊	
desc. node	7752 Apr 15 10:07	26°♋01'02			7754 Nov 01 16:09	0°♊	
	7752 Apr 18 15:48	0°♎		evening max el	7754 Nov 03 08:14	1°♊36'24	45°48'42
	7752 May 12 21:52	0°♏		greatest brilliancy	7754 Dec 12 15:46	29°♊52'39	-4.8m
	7752 Jun 06 01:02	0°II			7754 Dec 13 00:46	0°♋	
	7752 Jun 30 04:08	0°♄		retrograde	7754 Dec 22 04:13	1°♋31'19	
morning set	7752 Jul 16 16:01	20°♄27'57			7754 Dec 30 22:02	30°♋♊	
	7752 Jul 24 08:39	0°♌		evening set	7755 Jan 06 05:46	27°♊07'38	
asc. node	7752 Aug 06 08:45	16°♌05'30		inferior conj	7755 Jan 12 02:28	23°♊38'35	-2°30'44
	7752 Aug 17 14:49	0°♎		minimum elong	7755 Jan 12 08:00	23°♊30'01	2°28'58
				min. Earth dist.	7755 Jan 12 19:14	23°♊12'38	0.27651 AU
superior conj	7752 Aug 23 14:52	7°♎24'50	0°40'07	morning rise	7755 Jan 18 09:37	19°♊54'22	
minimum elong	7752 Aug 23 07:00	7°♎00'31	0°39'42	asc. node	7755 Jan 22 04:43	18°♊02'49	
max. Earth dist.	7752 Aug 25 01:41	9°♎12'19	1.73077 AU	direct	7755 Feb 02 04:12	15°♊37'02	
	7752 Sep 10 22:16	0°♄		greatest brilliancy	7755 Feb 13 01:41	17°♊50'28	-4.9m
evening rise	7752 Sep 29 04:56	22°♄30'47			7755 Mar 04 13:21	0°♋	
	7752 Oct 05 07:03	0°♍		morning max el	7755 Mar 24 15:52	18°♋30'12	46°52'45
	7752 Oct 29 17:52	0°♊			7755 Apr 04 16:35	0°♋	
	7752 Nov 23 07:37	0°♊			7755 May 01 10:28	0°♎	
desc. node	7752 Nov 26 01:56	3°♊21'47		desc. node	7755 May 13 22:17	14°♎37'56	
	7752 Dec 18 00:46	0°♋			7755 May 26 20:01	0°♏	
	7753 Jan 11 21:59	0°♋			7755 Jun 20 16:04	0°II	
	7753 Feb 06 02:16	0°♎			7755 Jul 15 06:41	0°♄	
	7753 Mar 03 23:22	0°♏			7755 Aug 08 19:25	0°♌	
asc. node	7753 Mar 19 01:48	16°♏42'56			7755 Sep 02 07:11	0°♎	
evening max el	7753 Mar 30 23:41	29°♏10'52	47°01'29	asc. node	7755 Sep 03 20:51	1°♎55'28	
	7753 Mar 31 19:11	0°II		morning set	7755 Sep 25 04:48	28°♎06'58	
	7753 May 09 16:49	0°♄			7755 Sep 26 17:35	0°♄	
greatest brilliancy	7753 May 10 11:02	0°♄17'15	-4.9m		7755 Oct 21 02:23	0°♍	

max. Earth dist.	7755 Oct 30 20:01	12° \mathbb{M} 00'09	1.73254 AU	min. Earth dist.	7758 Mar 26 02:58	7° Υ 29'24	0.26974 AU
				morning rise	7758 Mar 29 23:04	5° Υ 09'38	
superior conj	7755 Oct 31 18:26	13° \mathbb{M} 09'20	1°25'44		7758 Apr 11 06:23	30° \mathbb{R} \mathbb{H}	
minimum elong	7755 Oct 31 19:31	13° \mathbb{M} 12'39	1°25'49	direct	7758 Apr 15 23:16	29° \mathbb{H} 32'44	
	7755 Nov 14 10:01	0° \mathbb{A}			7758 Apr 20 18:54	0° Υ	
evening rise	7755 Dec 07 18:12	28° \mathbb{A} 48'59		greatest brilliancy	7758 Apr 25 15:06	1° Υ 18'15	-4.9m
	7755 Dec 08 17:12	0° \mathbb{B}			7758 Jun 03 04:12	0° \mathbb{B}	
desc. node	7755 Dec 24 13:52	19° \mathbb{B} 35'18		morning max el	7758 Jun 05 07:36	2° \mathbb{B} 07'35	46°50'02
	7756 Jan 02 00:13	0° \approx		desc. node	7758 Jun 10 10:11	7° \mathbb{B} 19'07	
	7756 Jan 26 06:57	0° \mathbb{H}			7758 Jul 01 11:17	0° \mathbb{H}	
	7756 Feb 19 13:49	0° Υ			7758 Jul 27 17:39	0° \mathbb{B}	
	7756 Mar 14 22:57	0° \mathbb{B}			7758 Aug 22 05:55	0° \mathbb{Q}	
	7756 Apr 08 15:15	0° \mathbb{H}			7758 Sep 16 08:56	0° \mathbb{H}	
asc. node	7756 Apr 15 13:16	8° \mathbb{H} 17'34		asc. node	7758 Oct 01 08:55	18° \mathbb{H} 04'20	
	7756 May 03 23:50	0° \mathbb{B}			7758 Oct 11 05:12	0° \mathbb{Q}	
	7756 May 30 20:43	0° \mathbb{Q}			7758 Nov 04 19:29	0° \mathbb{M}	
evening max el	7756 Jun 10 21:54	11° \mathbb{Q} 24'05	46°28'09		7758 Nov 29 04:53	0° \mathbb{A}	
	7756 Jul 01 13:07	0° \mathbb{H}		morning set	7758 Dec 02 16:11	4° \mathbb{A} 17'08	
greatest brilliancy	7756 Jul 19 16:58	11° \mathbb{H} 01'29	-4.8m		7758 Dec 23 10:46	0° \mathbb{B}	
retrograde	7756 Jul 30 19:20	13° \mathbb{H} 16'54		max. Earth dist.	7759 Jan 06 13:43	17° \mathbb{B} 32'04	1.72353 AU
desc. node	7756 Aug 05 07:38	12° \mathbb{H} 40'18					
evening set	7756 Aug 14 23:18	8° \mathbb{H} 48'10		superior conj	7759 Jan 09 06:36	20° \mathbb{B} 53'45	0°28'04
min. Earth dist.	7756 Aug 20 11:54	5° \mathbb{H} 29'35	0.28461 AU	minimum elong	7759 Jan 09 12:55	21° \mathbb{B} 13'25	0°27'54
inferior conj	7756 Aug 21 04:04	5° \mathbb{H} 04'17	-3°45'21		7759 Jan 16 14:13	0° \approx	
minimum elong	7756 Aug 20 20:21	5° \mathbb{H} 16'21	3°43'17	desc. node	7759 Jan 21 01:50	5° \approx 34'58	
morning rise	7756 Aug 26 18:01	1° \mathbb{H} 42'22			7759 Feb 09 15:41	0° \mathbb{H}	
	7756 Aug 30 01:07	30° \mathbb{R} \mathbb{Q}		evening rise	7759 Feb 17 14:04	9° \mathbb{H} 54'41	
direct	7756 Sep 11 11:30	26° \mathbb{Q} 59'22			7759 Mar 05 15:31	0° Υ	
greatest brilliancy	7756 Sep 21 04:44	28° \mathbb{Q} 41'38	-4.7m		7759 Mar 29 14:52	0° \mathbb{B}	
	7756 Sep 24 13:54	0° \mathbb{H}			7759 Apr 22 16:06	0° \mathbb{H}	
morning max el	7756 Oct 30 02:42	26° \mathbb{H} 39'06	45°41'26	asc. node	7759 May 14 01:01	26° \mathbb{H} 26'12	
	7756 Nov 02 13:39	0° \mathbb{Q}			7759 May 16 22:37	0° \mathbb{B}	
asc. node	7756 Nov 26 07:08	24° \mathbb{Q} 45'24			7759 Jun 10 14:48	0° \mathbb{Q}	
	7756 Dec 01 01:11	0° \mathbb{M}			7759 Jul 05 23:28	0° \mathbb{H}	
	7756 Dec 27 05:59	0° \mathbb{A}			7759 Aug 01 15:44	0° \mathbb{Q}	
	7757 Jan 21 09:30	0° \mathbb{B}		evening max el	7759 Aug 21 12:15	20° \mathbb{Q} 27'41	45°45'47
	7757 Feb 14 23:14	0° \approx			7759 Aug 31 19:16	0° \mathbb{M}	
	7757 Mar 11 04:55	0° \mathbb{H}		desc. node	7759 Sep 02 19:08	1° \mathbb{M} 43'57	
desc. node	7757 Mar 17 23:57	8° \mathbb{H} 27'24		greatest brilliancy	7759 Sep 29 06:42	18° \mathbb{M} 50'29	-4.7m
	7757 Apr 04 05:43	0° Υ		retrograde	7759 Oct 09 12:20	20° \mathbb{M} 44'20	
	7757 Apr 28 03:52	0° \mathbb{B}		evening set	7759 Oct 27 17:49	14° \mathbb{M} 30'37	
morning set	7757 May 01 16:01	4° \mathbb{B} 24'10		inferior conj	7759 Oct 31 00:30	12° \mathbb{M} 28'38	-8°37'05
	7757 May 22 01:31	0° \mathbb{H}		minimum elong	7759 Oct 31 01:19	12° \mathbb{M} 27'20	8°36'59
				min. Earth dist.	7759 Oct 31 05:55	12° \mathbb{M} 20'07	0.29133 AU
superior conj	7757 Jun 10 15:58	24° \mathbb{H} 32'59	-1°01'56	morning rise	7759 Nov 03 08:47	10° \mathbb{M} 24'03	
minimum elong	7757 Jun 11 03:14	25° \mathbb{H} 08'11	1°01'39	direct	7759 Nov 21 13:25	4° \mathbb{M} 09'39	
max. Earth dist.	7757 Jun 14 04:48	28° \mathbb{H} 58'01	1.71813 AU	greatest brilliancy	7759 Dec 02 06:57	6° \mathbb{M} 15'26	-4.8m
	7757 Jun 15 00:39	0° \mathbb{B}		asc. node	7759 Dec 24 18:59	20° \mathbb{M} 26'27	
asc. node	7757 Jul 08 22:45	29° \mathbb{B} 47'59			7760 Jan 04 13:21	0° \mathbb{A}	
	7757 Jul 09 02:37	0° \mathbb{Q}		morning max el	7760 Jan 10 03:13	5° \mathbb{A} 22'52	46°08'35
evening rise	7757 Jul 19 22:20	13° \mathbb{Q} 25'16			7760 Feb 02 10:55	0° \mathbb{B}	
	7757 Aug 02 08:05	0° \mathbb{H}			7760 Feb 28 14:03	0° \approx	
	7757 Aug 26 17:37	0° \mathbb{Q}			7760 Mar 24 15:12	0° \mathbb{H}	
	7757 Sep 20 08:25	0° \mathbb{M}		desc. node	7760 Apr 14 12:06	25° \mathbb{H} 30'55	
	7757 Oct 15 06:44	0° \mathbb{A}			7760 Apr 18 03:30	0° Υ	
desc. node	7757 Oct 28 16:12	15° \mathbb{A} 54'55			7760 May 12 09:08	0° \mathbb{B}	
	7757 Nov 09 15:45	0° \mathbb{B}			7760 Jun 05 12:01	0° \mathbb{H}	
	7757 Dec 05 16:52	0° \approx			7760 Jun 29 14:55	0° \mathbb{B}	
	7758 Jan 02 00:39	0° \mathbb{H}		morning set	7760 Jul 14 07:05	18° \mathbb{B} 12'44	
evening max el	7758 Jan 14 14:57	12° \mathbb{H} 53'41	46°34'02		7760 Jul 23 19:18	0° \mathbb{Q}	
	7758 Feb 02 09:24	0° Υ		asc. node	7760 Aug 05 10:42	15° \mathbb{Q} 38'50	
asc. node	7758 Feb 18 16:18	10° Υ 59'29			7760 Aug 17 01:22	0° \mathbb{H}	
greatest brilliancy	7758 Feb 23 22:12	13° Υ 15'59	-4.9m				
retrograde	7758 Mar 05 17:50	15° Υ 05'33		superior conj	7760 Aug 21 07:14	5° \mathbb{H} 14'39	0°37'05
evening set	7758 Mar 21 23:44	9° Υ 58'06		minimum elong	7760 Aug 20 23:47	4° \mathbb{H} 51'39	0°36'42
inferior conj	7758 Mar 26 09:34	7° Υ 19'15	7°47'25	max. Earth dist.	7760 Aug 22 21:42	7° \mathbb{H} 13'27	1.73051 AU
minimum elong	7758 Mar 25 23:25	7° Υ 34'51	7°45'38		7760 Sep 10 08:47	0° \mathbb{Q}	

evening rise	7760 Sep 26 22:31	20° Ω 24'49		desc. node	7763 May 13 00:18	14° Υ 03'16	
	7760 Oct 04 17:37	0° \mathbb{M}			7763 May 26 08:59	0° \mathcal{B}	
	7760 Oct 29 04:39	0° \mathcal{A}			7763 Jun 20 04:04	0° \mathbb{I}	
	7760 Nov 22 18:46	0° \mathcal{Z}			7763 Jul 14 18:03	0° \mathcal{E}	
desc. node	7760 Nov 25 04:00	2° \mathcal{Z} 54'04			7763 Aug 08 06:20	0° Ω	
	7760 Dec 17 12:27	0° \approx			7763 Sep 01 17:48	0° \mathbb{P}	
	7761 Jan 11 10:28	0° \mathcal{H}		asc. node	7763 Sep 02 22:44	1° \mathbb{P} 28'42	
	7761 Feb 05 16:00	0° Υ		morning set	7763 Sep 22 22:08	26° \mathbb{P} 00'31	
	7761 Mar 03 15:31	0° \mathcal{B}			7763 Sep 26 04:03	0° $\underline{\mathcal{B}}$	
asc. node	7761 Mar 18 03:45	15° \mathcal{B} 57'39			7763 Oct 20 12:49	0° \mathbb{M}	
evening max el	7761 Mar 28 14:50	26° \mathcal{B} 52'09	47°01'47	max. Earth dist.	7763 Oct 28 13:13	9° \mathbb{M} 53'04	1.73272 AU
	7761 Mar 31 18:01	0° \mathbb{I}					
greatest brilliancy	7761 May 08 01:23	27° \mathbb{I} 56'25	-4.9m	superior conj	7763 Oct 29 12:15	11° \mathbb{M} 04'04	1°25'52
retrograde	7761 May 18 05:09	29° \mathbb{I} 53'04		minimum elong	7763 Oct 29 12:36	11° \mathbb{M} 05'09	1°25'56
evening set	7761 Jun 03 19:12	24° \mathbb{I} 30'18			7763 Nov 13 20:31	0° \mathcal{A}	
inferior conj	7761 Jun 08 00:28	21° \mathbb{I} 56'45	6°45'43	evening rise	7763 Dec 05 10:15	26° \mathcal{A} 37'42	
minimum elong	7761 Jun 08 11:23	21° \mathbb{I} 39'55	6°43'14		7763 Dec 08 03:49	0° \mathcal{Z}	
min. Earth dist.	7761 Jun 08 00:12	21° \mathbb{I} 57'10	0.27379 AU	desc. node	7763 Dec 23 15:50	19° \mathcal{Z} 08'15	
morning rise	7761 Jun 13 03:51	18° \mathbb{I} 52'29			7764 Jan 01 11:02	0° \approx	
direct	7761 Jun 28 19:35	14° \mathbb{I} 06'21			7764 Jan 25 18:04	0° \mathcal{H}	
desc. node	7761 Jul 07 21:54	15° \mathbb{I} 39'33			7764 Feb 19 01:21	0° Υ	
greatest brilliancy	7761 Jul 08 13:12	15° \mathbb{I} 52'29	-4.8m		7764 Mar 14 11:04	0° \mathcal{B}	
	7761 Jul 31 11:45	0° \mathcal{E}			7764 Apr 08 04:15	0° \mathbb{I}	
morning max el	7761 Aug 17 07:22	15° \mathcal{E} 09'04	46°05'02	asc. node	7764 Apr 14 15:18	7° \mathbb{I} 43'52	
	7761 Aug 31 23:44	0° Ω			7764 May 03 14:29	0° \mathcal{E}	
	7761 Sep 28 11:22	0° \mathbb{P}			7764 May 30 15:22	0° Ω	
	7761 Oct 24 13:24	0° $\underline{\mathcal{B}}$		evening max el	7764 Jun 08 12:07	9° Ω 05'56	46°29'58
asc. node	7761 Oct 28 21:10	5° $\underline{\mathcal{B}}$ 04'21			7764 Jul 02 03:11	0° \mathbb{P}	
	7761 Nov 18 20:29	0° \mathbb{M}		greatest brilliancy	7764 Jul 17 09:46	8° \mathbb{P} 50'11	-4.8m
	7761 Dec 13 14:58	0° \mathcal{A}		retrograde	7764 Jul 28 10:58	11° \mathbb{P} 05'10	
	7762 Jan 07 01:04	0° \mathcal{Z}		desc. node	7764 Aug 04 09:30	10° \mathbb{P} 07'03	
	7762 Jan 31 05:40	0° \approx		evening set	7764 Aug 12 13:54	6° \mathbb{P} 38'14	
morning set	7762 Feb 11 22:39	14° \approx 35'44		min. Earth dist.	7764 Aug 18 04:15	3° \mathbb{P} 17'34	0.28414 AU
desc. node	7762 Feb 17 13:44	21° \approx 37'30		inferior conj	7764 Aug 18 19:50	2° \mathbb{P} 53'11	-3°26'33
	7762 Feb 24 06:27	0° \mathcal{H}		minimum elong	7764 Aug 18 12:38	3° \mathbb{P} 04'27	3°24'36
	7762 Mar 20 04:28	0° Υ			7764 Aug 23 13:33	30° $\mathcal{R}\Omega$	
max. Earth dist.	7762 Mar 23 04:14	3° Υ 45'26	1.71261 AU	morning rise	7764 Aug 24 11:54	29° Ω 28'15	
				direct	7764 Sep 09 02:11	24° Ω 48'46	
superior conj	7762 Mar 24 13:00	5° Υ 28'24	-1°12'25	greatest brilliancy	7764 Sep 18 20:32	26° Ω 31'38	-4.7m
minimum elong	7762 Mar 24 01:49	4° Υ 53'13	1°12'06		7764 Sep 26 15:57	0° \mathbb{P}	
	7762 Apr 13 01:02	0° \mathcal{B}		morning max el	7764 Oct 27 17:16	24° \mathbb{P} 26'24	45°41'20
evening rise	7762 May 04 03:52	26° \mathcal{B} 32'13			7764 Nov 02 10:04	0° $\underline{\mathcal{B}}$	
	7762 May 06 22:06	0° \mathbb{I}		asc. node	7764 Nov 25 09:13	24° $\underline{\mathcal{B}}$ 08'40	
	7762 May 30 21:51	0° \mathcal{E}			7764 Nov 30 16:04	0° \mathbb{M}	
asc. node	7762 Jun 10 12:52	13° \mathcal{E} 13'08			7764 Dec 26 18:52	0° \mathcal{A}	
	7762 Jun 24 02:16	0° Ω			7765 Jan 20 21:25	0° \mathcal{Z}	
	7762 Jul 18 13:18	0° \mathbb{P}			7765 Feb 14 10:40	0° \approx	
	7762 Aug 12 09:53	0° $\underline{\mathcal{B}}$			7765 Mar 10 16:04	0° \mathcal{H}	
	7762 Sep 06 21:36	0° \mathbb{M}		desc. node	7765 Mar 17 01:54	7° \mathcal{H} 58'57	
desc. node	7762 Sep 30 06:35	26° \mathbb{M} 27'01			7765 Apr 03 16:42	0° Υ	
	7762 Oct 03 12:13	0° \mathcal{A}			7765 Apr 27 14:45	0° \mathcal{B}	
evening max el	7762 Oct 31 22:31	29° \mathcal{A} 21'34	45°47'33	morning set	7765 Apr 29 02:36	1° \mathcal{B} 52'35	
	7762 Nov 01 14:38	0° \mathcal{Z}			7765 May 21 12:19	0° \mathbb{I}	
greatest brilliancy	7762 Dec 10 06:28	27° \mathcal{Z} 36'34	-4.8m				
retrograde	7762 Dec 19 17:15	29° \mathcal{Z} 13'59		superior conj	7765 Jun 08 04:29	22° \mathbb{I} 08'32	-1°04'34
evening set	7763 Jan 03 21:58	24° \mathcal{Z} 47'17		minimum elong	7765 Jun 08 15:47	22° \mathbb{I} 43'50	1°04'18
inferior conj	7763 Jan 09 16:43	21° \mathcal{Z} 20'50	-2°51'58	max. Earth dist.	7765 Jun 11 12:36	26° \mathbb{I} 18'57	1.71766 AU
minimum elong	7763 Jan 09 22:56	21° \mathcal{Z} 11'11	2°50'00		7765 Jun 14 11:22	0° \mathcal{E}	
min. Earth dist.	7763 Jan 10 10:31	20° \mathcal{Z} 53'14	0.27706 AU	asc. node	7765 Jul 08 00:41	29° \mathcal{E} 20'47	
morning rise	7763 Jan 15 23:12	17° \mathcal{Z} 36'54			7765 Jul 08 13:19	0° Ω	
asc. node	7763 Jan 21 06:38	15° \mathcal{Z} 07'57		evening rise	7765 Jul 17 13:13	11° Ω 09'35	
direct	7763 Jan 30 18:38	13° \mathcal{Z} 18'22			7765 Aug 01 18:49	0° \mathbb{P}	
greatest brilliancy	7763 Feb 10 17:32	15° \mathcal{Z} 32'32	-4.9m		7765 Aug 26 04:29	0° $\underline{\mathcal{B}}$	
	7763 Mar 04 23:33	0° \approx			7765 Sep 19 19:36	0° \mathbb{M}	
morning max el	7763 Mar 22 05:15	16° \approx 07'11	46°51'47		7765 Oct 14 18:30	0° \mathcal{A}	
	7763 Apr 04 11:06	0° \mathcal{H}		desc. node	7765 Oct 27 18:17	15° \mathcal{A} 24'50	
	7763 May 01 01:09	0° Υ			7765 Nov 09 04:36	0° \mathcal{Z}	

	7765 Dec 05 07:43	0°♊			7768 Jun 29 01:59	0°♎	
	7766 Jan 01 19:59	0°♋		morning set	7768 Jul 11 21:58	15°♎56'05	
evening max el	7766 Jan 12 04:30	10°♋31'43 46°32'21			7768 Jul 23 06:12	0°♏	
	7766 Feb 02 23:43	0°♌		asc. node	7768 Aug 04 12:35	15°♏11'11	
asc. node	7766 Feb 17 18:16	9°♌18'21			7768 Aug 16 12:10	0°♐	
greatest brilliancy	7766 Feb 21 10:26	10°♌49'05 -4.9m					
retrograde	7766 Mar 03 06:52	12°♌39'23		superior conj	7768 Aug 18 23:34	3°♐03'31 0°34'00	
evening set	7766 Mar 19 08:00	7°♌37'49		minimum elong	7768 Aug 18 16:37	2°♐42'00 0°33'38	
inferior conj	7766 Mar 23 22:14	4°♌52'59 7°33'53		max. Earth dist.	7768 Aug 20 18:36	5°♐16'24 1.73020 AU	
minimum elong	7766 Mar 23 11:43	5°♌09'06 7°31'57			7768 Sep 09 19:33	0°♑	
min. Earth dist.	7766 Mar 23 15:39	5°♌03'04 0.26970 AU		evening rise	7768 Sep 24 16:18	18°♑18'33	
morning rise	7766 Mar 27 15:24	2°♌38'15			7768 Oct 04 04:28	0°♒	
	7766 Apr 01 13:59	30°♒♋			7768 Oct 28 15:41	0°♓	
direct	7766 Apr 13 12:09	27°♒06'12			7768 Nov 22 06:09	0°♔	
greatest brilliancy	7766 Apr 23 04:28	28°♒52'37 -4.9m		desc. node	7768 Nov 24 06:00	2°♔25'27	
	7766 Apr 26 00:51	0°♌			7768 Dec 17 00:23	0°♕	
morning max el	7766 Jun 02 21:51	29°♌45'53 46°51'11			7769 Jan 10 23:13	0°♋	
	7766 Jun 03 03:29	0°♌			7769 Feb 05 06:08	0°♌	
desc. node	7766 Jun 09 12:14	6°♌30'22			7769 Mar 03 08:23	0°♍	
	7766 Jul 01 03:40	0°♎		asc. node	7769 Mar 17 05:47	15°♍10'31	
	7766 Jul 27 07:25	0°♏		evening max el	7769 Mar 26 05:29	24°♍30'31 47°01'39	
	7766 Aug 21 18:20	0°♏			7769 Mar 31 18:36	0°♎	
	7766 Sep 15 20:33	0°♐		greatest brilliancy	7769 May 05 16:08	25°♎33'40 -4.9m	
asc. node	7766 Sep 30 10:59	17°♐36'31		retrograde	7769 May 15 18:56	27°♎29'02	
	7766 Oct 10 16:18	0°♑		evening set	7769 Jun 01 12:13	22°♎01'57	
	7766 Nov 04 06:17	0°♒		inferior conj	7769 Jun 05 13:53	19°♎33'25 7°01'18	
	7766 Nov 28 15:33	0°♓		minimum elong	7769 Jun 06 00:42	19°♎16'41 6°58'58	
morning set	7766 Nov 30 09:15	2°♓08'41		min. Earth dist.	7769 Jun 05 13:44	19°♎33'39 0.27358 AU	
	7766 Dec 22 21:26	0°♔		morning rise	7769 Jun 10 13:28	16°♎34'14	
max. Earth dist.	7767 Jan 04 07:20	15°♔24'20 1.72398 AU		direct	7769 Jun 26 09:00	11°♎43'34	
				greatest brilliancy	7769 Jul 06 01:43	13°♎28'52 -4.8m	
superior conj	7767 Jan 06 21:18	18°♔36'51 0°31'25		desc. node	7769 Jul 06 23:45	13°♎48'46	
minimum elong	7767 Jan 07 04:14	18°♔58'24 0°31'12			7769 Jul 31 21:02	0°♏	
	7767 Jan 16 00:59	0°♕		morning max el	7769 Aug 14 21:04	12°♏49'29 46°06'30	
desc. node	7767 Jan 20 03:43	5°♕07'16			7769 Aug 31 18:12	0°♏	
	7767 Feb 09 02:36	0°♋			7769 Sep 28 01:55	0°♐	
evening rise	7767 Feb 15 02:58	7°♋30'52			7769 Oct 24 02:11	0°♑	
	7767 Mar 05 02:35	0°♌		asc. node	7769 Oct 27 23:08	4°♑33'02	
	7767 Mar 29 02:06	0°♍			7769 Nov 18 08:21	0°♒	
	7767 Apr 22 03:35	0°♎			7769 Dec 13 02:21	0°♓	
asc. node	7767 May 13 03:04	25°♎56'06			7770 Jan 06 12:12	0°♔	
	7767 May 16 10:30	0°♏			7770 Jan 30 16:41	0°♕	
	7767 Jun 10 03:24	0°♏		morning set	7770 Feb 09 11:34	12°♕11'57	
	7767 Jul 05 13:24	0°♐		desc. node	7770 Feb 16 15:45	21°♕09'30	
	7767 Aug 01 08:43	0°♑			7770 Feb 23 17:26	0°♋	
evening max el	7767 Aug 19 04:53	18°♑18'28 45°46'49			7770 Mar 19 15:28	0°♌	
	7767 Aug 31 23:28	0°♒		max. Earth dist.	7770 Mar 20 08:20	0°♌52'57 1.71284 AU	
desc. node	7767 Sep 01 21:10	0°♒45'59					
greatest brilliancy	7767 Sep 26 21:05	16°♒39'52 -4.7m		superior conj	7770 Mar 22 00:15	2°♌58'21 -1°10'07	
retrograde	7767 Oct 07 04:55	18°♒35'17		minimum elong	7770 Mar 21 12:46	2°♌22'16 1°09'47	
evening set	7767 Oct 25 09:31	12°♒22'11			7770 Apr 12 12:07	0°♍	
inferior conj	7767 Oct 28 16:49	10°♒19'07 -8°37'21		evening rise	7770 May 01 14:28	23°♍59'51	
minimum elong	7767 Oct 28 16:53	10°♒19'01 8°37'17			7770 May 06 09:16	0°♎	
min. Earth dist.	7767 Oct 28 20:35	10°♒13'12 0.29146 AU			7770 May 30 09:06	0°♏	
morning rise	7767 Nov 01 00:13	8°♒15'54		asc. node	7770 Jun 09 14:44	12°♏43'50	
direct	7767 Nov 19 06:22	2°♒00'22			7770 Jun 23 13:41	0°♏	
greatest brilliancy	7767 Nov 29 21:32	4°♒04'13 -4.8m			7770 Jul 18 01:02	0°♐	
asc. node	7767 Dec 23 20:52	19°♒25'48			7770 Aug 11 22:15	0°♑	
	7768 Jan 04 12:51	0°♓			7770 Sep 06 11:10	0°♒	
morning max el	7768 Jan 07 19:24	3°♓11'06 46°06'55		desc. node	7770 Sep 29 08:39	25°♒49'27	
	7768 Feb 02 03:00	0°♔			7770 Oct 03 04:25	0°♓	
	7768 Feb 28 03:46	0°♕		evening max el	7770 Oct 29 12:09	27°♓04'14 45°46'37	
	7768 Mar 24 03:50	0°♋			7770 Nov 01 14:35	0°♔	
desc. node	7768 Apr 13 14:10	25°♋00'07		greatest brilliancy	7770 Dec 07 21:22	25°♔20'20 -4.8m	
	7768 Apr 17 15:30	0°♌		retrograde	7770 Dec 17 06:42	26°♔56'56	
	7768 May 11 20:43	0°♍		evening set	7771 Jan 01 14:33	22°♔26'41	
	7768 Jun 04 23:18	0°♎		inferior conj	7771 Jan 07 07:16	19°♔03'11 -3°12'37	

minimum elong	7771 Jan 07 14:08	18° Z 52'32	3°10'29			7773 Jun 13 22:16	0° G	
min. Earth dist.	7771 Jan 08 02:08	18° Z 33'55	0.27760 AU	asc. node		7773 Jul 07 02:37	28° G 52'57	
morning rise	7771 Jan 13 12:54	15° Z 20'02				7773 Jul 08 00:13	0° Ω	
asc. node	7771 Jan 20 08:34	12° Z 18'12		evening rise		7773 Jul 15 04:07	8° Ω 53'12	
direct	7771 Jan 28 09:06	10° Z 59'43				7773 Aug 01 05:48	0° M	
greatest brilliancy	7771 Feb 08 10:00	13° Z 15'22	-4.8m			7773 Aug 25 15:39	0° Ω	
	7771 Mar 05 07:09	0° \approx				7773 Sep 19 07:06	0° M	
morning max el	7771 Mar 19 18:55	13° \approx 44'23	46°50'47			7773 Oct 14 06:37	0° X	
	7771 Apr 04 05:23	0° X		desc. node		7773 Oct 26 20:13	14° X 53'19	
	7771 Apr 30 15:56	0° Y				7773 Nov 08 17:49	0° Z	
desc. node	7771 May 12 02:17	13° Y 27'47				7773 Dec 04 23:02	0° \approx	
	7771 May 25 22:13	0° Z				7774 Jan 01 16:09	0° X	
	7771 Jun 19 16:27	0° II		evening max el		7774 Jan 09 18:51	8° X 11'26	46°30'44
	7771 Jul 14 05:51	0° G				7774 Feb 03 19:07	0° Y	
	7771 Aug 07 17:44	0° Ω		asc. node		7774 Feb 16 20:22	7° Y 33'08	
	7771 Sep 01 04:53	0° M		greatest brilliancy		7774 Feb 18 22:22	8° Y 21'43	-4.9m
asc. node	7771 Sep 02 00:49	1° M 01'09		retrograde		7774 Feb 28 20:12	10° Y 12'53	
morning set	7771 Sep 20 15:03	23° M 51'23		evening set		7774 Mar 16 16:30	5° Y 17'14	
	7771 Sep 25 14:57	0° Ω		inferior conj		7774 Mar 21 10:55	2° Y 26'26	7°19'35
	7771 Oct 19 23:38	0° M		minimum elong		7774 Mar 21 00:07	2° Y 42'58	7°17'28
max. Earth dist.	7771 Oct 26 07:26	7° M 47'57	1.73286 AU	min. Earth dist.		7774 Mar 21 04:09	2° Y 36'48	0.26964 AU
				morning rise		7774 Mar 25 07:46	0° Y 06'34	
superior conj	7771 Oct 27 05:51	8° M 57'03	1°25'51			7774 Mar 25 12:18	30° R X	
minimum elong	7771 Oct 27 05:29	8° M 55'56	1°25'57	direct		7774 Apr 11 01:28	24° X 39'39	
	7771 Nov 13 07:22	0° X		greatest brilliancy		7774 Apr 20 17:23	26° X 26'14	-4.9m
evening rise	7771 Dec 03 02:26	24° X 25'45				7774 Apr 28 10:19	0° Y	
	7771 Dec 07 14:47	0° Z		morning max el		7774 May 31 12:20	27° Y 24'41	46°52'17
desc. node	7771 Dec 22 17:43	18° Z 39'49				7774 Jun 03 01:51	0° Z	
	7771 Dec 31 22:13	0° \approx		desc. node		7774 Jun 08 14:05	5° Z 41'51	
	7772 Jan 25 05:32	0° X				7774 Jun 30 19:46	0° II	
	7772 Feb 18 13:12	0° Y				7774 Jul 26 21:06	0° G	
	7772 Mar 13 23:29	0° Z				7774 Aug 21 06:46	0° Ω	
	7772 Apr 07 17:35	0° II				7774 Sep 15 08:15	0° M	
asc. node	7772 Apr 13 17:20	7° II 09'09		asc. node		7774 Sep 29 12:56	17° M 07'58	
	7772 May 03 05:37	0° G				7774 Oct 10 03:32	0° Ω	
	7772 May 30 10:59	0° Ω				7774 Nov 03 17:15	0° M	
evening max el	7772 Jun 06 02:15	6° Ω 46'12	46°31'32	morning set		7774 Nov 28 02:02	29° M 59'00	
	7772 Jul 02 23:15	0° M				7774 Nov 28 02:21	0° X	
greatest brilliancy	7772 Jul 15 01:43	6° M 35'38	-4.8m			7774 Dec 22 08:13	0° Z	
retrograde	7772 Jul 26 02:36	8° M 50'54		max. Earth dist.		7775 Jan 01 23:16	13° Z 11'11	1.72438 AU
desc. node	7772 Aug 03 11:33	7° M 26'02						
evening set	7772 Aug 10 04:16	4° M 25'17		superior conj		7775 Jan 04 11:52	16° Z 19'22	0°34'42
inferior conj	7772 Aug 16 11:13	0° M 39'23	-3°07'09	minimum elong		7775 Jan 04 19:21	16° Z 42'37	0°34'29
minimum elong	7772 Aug 16 04:35	0° M 49'45	3°05'19			7775 Jan 15 11:50	0° \approx	
min. Earth dist.	7772 Aug 15 20:06	1° M 02'58	0.28370 AU	desc. node		7775 Jan 19 05:43	4° \approx 39'42	
	7772 Aug 17 12:30	30° R Ω				7775 Feb 08 13:33	0° X	
morning rise	7772 Aug 22 05:23	27° Ω 11'46		evening rise		7775 Feb 12 15:49	5° X 06'47	
direct	7772 Sep 06 16:37	22° Ω 35'22				7775 Mar 04 13:41	0° Y	
greatest brilliancy	7772 Sep 16 12:01	24° Ω 19'09	-4.7m			7775 Mar 28 13:23	0° Z	
	7772 Sep 28 02:12	0° M				7775 Apr 21 15:07	0° II	
morning max el	7772 Oct 25 08:28	22° M 13'45	45°41'26	asc. node		7775 May 12 04:56	25° II 25'25	
	7772 Nov 02 06:22	0° Ω				7775 May 15 22:26	0° G	
asc. node	7772 Nov 24 11:09	23° Ω 30'42				7775 Jun 09 16:01	0° Ω	
	7772 Nov 30 07:07	0° M				7775 Jul 05 03:23	0° M	
	7772 Dec 26 07:57	0° X				7775 Aug 01 01:58	0° Ω	
	7773 Jan 20 09:34	0° Z		evening max el		7775 Aug 16 21:16	16° Ω 08'40	45°47'38
	7773 Feb 13 22:18	0° \approx		desc. node		7775 Aug 31 23:12	29° Ω 46'43	
	7773 Mar 10 03:26	0° X				7775 Sep 01 05:39	0° M	
desc. node	7773 Mar 16 03:57	7° X 30'07		greatest brilliancy		7775 Sep 24 11:51	14° M 29'26	-4.7m
	7773 Apr 03 03:53	0° Y		retrograde		7775 Oct 04 20:54	16° M 25'43	
morning set	7773 Apr 26 13:36	29° Y 21'42		evening set		7775 Oct 23 00:47	10° M 14'01	
	7773 Apr 27 01:48	0° Z		inferior conj		7775 Oct 26 09:02	8° M 09'16	-8°36'54
	7773 May 20 23:16	0° II		minimum elong		7775 Oct 26 08:18	8° M 10'24	8°36'50
				min. Earth dist.		7775 Oct 26 11:21	8° M 05'37	0.29158 AU
superior conj	7773 Jun 05 17:13	19° II 44'06	-1°07'03	morning rise		7775 Oct 29 15:50	6° M 06'47	
minimum elong	7773 Jun 06 04:28	20° II 19'17	1°06'50			7775 Nov 14 04:29	30° R Ω	
max. Earth dist.	7773 Jun 08 22:22	23° II 45'24	1.71726 AU	direct		7775 Nov 16 23:11	29° Ω 50'48	

	7775 Nov 19 18:44	0°♌			7778 Jun 23 00:48	0°♏	
greatest brilliancy	7775 Nov 27 12:07	1°♌52'34	-4.8m		7778 Jul 17 12:29	0°♐	
asc. node	7775 Dec 22 22:50	18°♌26'27			7778 Aug 11 10:19	0°♑	
	7776 Jan 04 11:27	0°♐			7778 Sep 06 00:29	0°♌	
morning max el	7776 Jan 05 10:39	0°♐56'54	46°05'19	desc. node	7778 Sep 28 10:36	25°♌12'29	
	7776 Feb 01 18:49	0°♑			7778 Oct 02 20:28	0°♐	
	7776 Feb 27 17:18	0°♒		evening max el	7778 Oct 27 01:25	24°♐47'19	45°45'42
	7776 Mar 23 16:16	0°♓			7778 Nov 01 15:12	0°♑	
desc. node	7776 Apr 12 16:03	24°♓29'20		greatest brilliancy	7778 Dec 05 11:30	23°♑04'20	-4.8m
	7776 Apr 17 03:19	0°♑		retrograde	7778 Dec 14 20:26	24°♑40'56	
	7776 May 11 08:07	0°♒		evening set	7778 Dec 30 07:06	20°♑06'35	
	7776 Jun 04 10:26	0°♓		inferior conj	7779 Jan 04 21:42	16°♑46'14	-3°32'49
	7776 Jun 28 12:53	0°♑		minimum elong	7779 Jan 05 05:10	16°♑34'39	3°30'34
morning set	7776 Jul 09 12:58	13°♑40'11		min. Earth dist.	7779 Jan 05 17:25	16°♑15'41	0.27824 AU
	7776 Jul 22 16:56	0°♏		morning rise	7779 Jan 11 02:22	13°♑04'22	
asc. node	7776 Aug 03 14:40	14°♏44'41		asc. node	7779 Jan 19 10:41	9°♑33'58	
	7776 Aug 15 22:47	0°♐		direct	7779 Jan 25 23:41	8°♑41'33	
				greatest brilliancy	7779 Feb 06 02:30	10°♑58'57	-4.8m
superior conj	7776 Aug 16 16:02	0°♐53'18	0°30'54		7779 Mar 05 12:19	0°♒	
minimum elong	7776 Aug 16 09:36	0°♐33'25	0°30'31	morning max el	7779 Mar 17 09:24	11°♒24'12	46°49'46
max. Earth dist.	7776 Aug 18 15:31	3°♐20'00	1.72987 AU		7779 Apr 03 23:03	0°♓	
	7776 Sep 09 06:08	0°♑			7779 Apr 30 06:18	0°♑	
evening rise	7776 Sep 22 10:08	16°♑13'01		desc. node	7779 May 11 04:13	12°♑53'12	
	7776 Oct 03 15:08	0°♌			7779 May 25 11:05	0°♒	
	7776 Oct 28 02:36	0°♐			7779 Jun 19 04:25	0°♓	
	7776 Nov 21 17:27	0°♑			7779 Jul 13 17:14	0°♑	
desc. node	7776 Nov 23 07:53	1°♑56'42			7779 Aug 07 04:42	0°♏	
	7776 Dec 16 12:16	0°♒			7779 Aug 31 15:35	0°♐	
	7777 Jan 10 11:57	0°♓		asc. node	7779 Sep 01 02:44	0°♐34'14	
	7777 Feb 04 20:17	0°♑		morning set	7779 Sep 18 08:05	21°♐43'44	
	7777 Mar 03 01:24	0°♒			7779 Sep 25 01:28	0°♑	
asc. node	7777 Mar 16 07:47	14°♒23'15			7779 Oct 19 10:05	0°♌	
evening max el	7777 Mar 23 19:03	22°♒06'38	47°01'32	max. Earth dist.	7779 Oct 24 03:23	5°♌49'18	1.73297 AU
	7777 Mar 31 20:11	0°♓					
greatest brilliancy	7777 May 03 07:11	23°♓11'53	-4.9m	superior conj	7779 Oct 24 23:41	6°♌51'52	1°25'44
retrograde	7777 May 13 08:04	25°♓05'38		minimum elong	7779 Oct 24 22:37	6°♌48'36	1°25'49
evening set	7777 May 30 05:13	19°♓34'07			7779 Nov 12 17:50	0°♐	
inferior conj	7777 Jun 03 03:18	17°♓10'46	7°16'11	evening rise	7779 Nov 30 18:57	22°♐16'06	
minimum elong	7777 Jun 03 13:56	16°♓54'18	7°14'01		7779 Dec 07 01:23	0°♑	
min. Earth dist.	7777 Jun 03 03:30	17°♓10'28	0.27337 AU	desc. node	7779 Dec 21 19:48	18°♑13'06	
morning rise	7777 Jun 07 22:52	14°♓16'57			7779 Dec 31 09:02	0°♒	
direct	7777 Jun 23 21:57	9°♓21'17			7780 Jan 24 16:42	0°♓	
greatest brilliancy	7777 Jul 03 14:47	11°♓06'24	-4.8m		7780 Feb 18 00:49	0°♑	
desc. node	7777 Jul 06 01:50	12°♓03'04			7780 Mar 13 11:42	0°♒	
	7777 Aug 01 03:25	0°♑			7780 Apr 07 06:47	0°♓	
morning max el	7777 Aug 12 10:04	10°♑28'48	46°08'07	asc. node	7780 Apr 12 19:13	6°♓34'32	
	7777 Aug 31 11:52	0°♏			7780 May 02 20:41	0°♑	
	7777 Sep 27 15:56	0°♐			7780 May 30 06:52	0°♏	
	7777 Oct 23 14:34	0°♑		evening max el	7780 Jun 03 17:00	4°♏29'03	46°33'23
asc. node	7777 Oct 27 01:04	4°♑02'42			7780 Jul 04 02:00	0°♐	
	7777 Nov 17 19:53	0°♌		greatest brilliancy	7780 Jul 12 17:12	4°♐21'41	-4.8m
	7777 Dec 12 13:28	0°♐		retrograde	7780 Jul 23 18:46	6°♐37'48	
	7778 Jan 05 23:07	0°♑		desc. node	7780 Aug 02 13:36	4°♐41'38	
	7778 Jan 30 03:30	0°♒		evening set	7780 Aug 07 18:52	2°♐13'12	
morning set	7778 Feb 07 00:12	9°♒47'55			7780 Aug 11 14:13	30°♒♏	
desc. node	7778 Feb 15 17:48	20°♒42'14		min. Earth dist.	7780 Aug 13 11:38	28°♏49'51	0.28323 AU
	7778 Feb 23 04:12	0°♓		inferior conj	7780 Aug 14 02:35	28°♏26'36	-2°47'26
max. Earth dist.	7778 Mar 17 12:28	28°♓01'22	1.71305 AU	minimum elong	7780 Aug 13 20:34	28°♏35'58	2°45'44
				morning rise	7780 Aug 19 22:47	24°♏56'36	
superior conj	7778 Mar 19 11:14	0°♑28'14	-1°07'40	direct	7780 Sep 04 07:29	20°♏23'02	
minimum elong	7778 Mar 18 23:33	29°♓51'32	1°07'17	greatest brilliancy	7780 Sep 14 03:06	22°♏07'23	-4.7m
	7778 Mar 19 02:14	0°♑			7780 Sep 29 01:53	0°♐	
	7778 Apr 11 22:55	0°♒		morning max el	7780 Oct 23 00:25	20°♐04'14	45°41'35
evening rise	7778 Apr 29 00:55	21°♒28'02			7780 Nov 02 01:33	0°♑	
	7778 May 05 20:07	0°♓		asc. node	7780 Nov 23 13:05	22°♑54'25	
	7778 May 29 20:03	0°♑			7780 Nov 29 21:32	0°♌	
asc. node	7778 Jun 08 16:44	12°♑15'53			7780 Dec 25 20:31	0°♐	

	7781 Jan 19 21:15	0°	evening max el	7783 Aug 14 12:53	13°	45°48'40"
	7781 Feb 13 09:33	0°	desc. node	7783 Aug 31 01:07	28°	
	7781 Mar 09 14:28	0°		7783 Sep 01 14:08	0°	
desc. node	7781 Mar 15 05:51	7°	greatest brilliancy	7783 Sep 22 03:22	12°	-4.7m
	7781 Apr 02 14:47	0°	retrograde	7783 Oct 02 12:40	14°	
morning set	7781 Apr 24 00:09	26°	evening set	7783 Oct 20 15:53	8°	
	7781 Apr 26 12:36	0°	inferior conj	7783 Oct 24 01:21	6°	-8°35'51"
	7781 May 20 09:59	0°	minimum elong	7783 Oct 23 23:51	6°	8°35'44"
			min. Earth dist.	7783 Oct 24 02:31	5°	0.29164 AU
superior conj	7781 Jun 03 05:21	17°	morning rise	7783 Oct 27 07:51	3°	
minimum elong	7781 Jun 03 16:28	17°		7783 Nov 03 20:33	30°	
max. Earth dist.	7781 Jun 06 09:12	21°	direct	7783 Nov 14 15:38	27°	
	7781 Jun 13 08:55	0°	greatest brilliancy	7783 Nov 25 03:10	29°	-4.8m
asc. node	7781 Jul 06 04:40	28°		7783 Nov 25 22:08	0°	
	7781 Jul 07 10:50	0°	asc. node	7783 Dec 22 00:57	17°	
evening rise	7781 Jul 12 18:33	6°	morning max el	7784 Jan 03 01:06	28°	46°03'48"
	7781 Jul 31 16:29	0°		7784 Jan 04 08:57	0°	
	7781 Aug 25 02:30	0°		7784 Feb 01 10:13	0°	
	7781 Sep 18 18:18	0°		7784 Feb 27 06:34	0°	
	7781 Oct 13 18:27	0°		7784 Mar 23 04:29	0°	
desc. node	7781 Oct 25 22:09	14°	desc. node	7784 Apr 11 18:01	23°	
	7781 Nov 08 06:47	0°		7784 Apr 16 14:56	0°	
	7781 Dec 04 14:10	0°		7784 May 10 19:22	0°	
	7782 Jan 01 12:30	0°		7784 Jun 03 21:26	0°	
evening max el	7782 Jan 07 09:40	5°		7784 Jun 27 23:43	0°	
	7782 Feb 04 20:40	0°	morning set	7784 Jul 07 03:46	11°	
asc. node	7782 Feb 15 22:16	5°		7784 Jul 22 03:38	0°	
greatest brilliancy	7782 Feb 16 10:28	5°	asc. node	7784 Aug 02 16:35	14°	
retrograde	7782 Feb 26 09:20	7°				
evening set	7782 Mar 14 01:16	2°	superior conj	7784 Aug 14 08:12	28°	0°27'42"
inferior conj	7782 Mar 18 23:39	0°	minimum elong	7784 Aug 14 02:20	28°	0°27'20"
minimum elong	7782 Mar 18 12:41	0°		7784 Aug 15 09:23	0°	
min. Earth dist.	7782 Mar 18 16:50	0°	max. Earth dist.	7784 Aug 16 10:03	1°	1.72952 AU
	7782 Mar 19 00:24	30°		7784 Sep 08 16:43	0°	
morning rise	7782 Mar 23 00:09	27°	evening rise	7784 Sep 20 03:39	14°	
direct	7782 Apr 08 15:06	22°		7784 Oct 03 01:49	0°	
greatest brilliancy	7782 Apr 18 06:25	24°		7784 Oct 27 13:31	0°	
	7782 Apr 29 22:48	0°		7784 Nov 21 04:45	0°	
morning max el	7782 May 29 02:10	25°	desc. node	7784 Nov 22 09:58	1°	
	7782 Jun 02 23:10	0°		7784 Dec 16 00:09	0°	
desc. node	7782 Jun 07 16:10	4°		7785 Jan 10 00:45	0°	
	7782 Jun 30 11:29	0°		7785 Feb 04 10:35	0°	
	7782 Jul 26 10:32	0°		7785 Mar 02 18:45	0°	
	7782 Aug 20 18:57	0°	asc. node	7785 Mar 15 09:43	13°	
	7782 Sep 14 19:41	0°	evening max el	7785 Mar 21 07:48	19°	47°01'26"
asc. node	7782 Sep 28 14:49	16°		7785 Mar 31 23:07	0°	
	7782 Oct 09 14:29	0°				
	7782 Nov 03 03:55	0°	greatest brilliancy	7785 Apr 30 22:23	20°	-4.9m
morning set	7782 Nov 25 18:59	27°	retrograde	7785 May 10 21:18	22°	
	7782 Nov 27 12:54	0°	evening set	7785 May 27 22:21	17°	
	7782 Dec 21 18:45	0°	inferior conj	7785 May 31 16:55	14°	7°30'12"
max. Earth dist.	7782 Dec 30 13:39	10°	minimum elong	7785 Jun 01 03:17	14°	7°28'11"
			min. Earth dist.	7785 May 31 17:30	14°	0.27320 AU
superior conj	7783 Jan 02 02:54	14°	morning rise	7785 Jun 05 08:22	12°	
minimum elong	7783 Jan 02 10:53	14°	direct	7785 Jun 21 10:42	6°	
	7783 Jan 14 22:26	0°	greatest brilliancy	7785 Jul 01 04:23	8°	-4.8m
desc. node	7783 Jan 18 07:45	4°	desc. node	7785 Jul 05 03:51	10°	
	7783 Feb 08 00:16	0°		7785 Aug 01 07:42	0°	
evening rise	7783 Feb 10 05:07	2°	morning max el	7785 Aug 09 23:19	8°	46°09'38"
	7783 Mar 04 00:32	0°		7785 Aug 31 05:12	0°	
	7783 Mar 28 00:25	0°		7785 Sep 27 05:56	0°	
	7783 Apr 21 02:27	0°		7785 Oct 23 03:00	0°	
asc. node	7783 May 11 06:57	24°	asc. node	7785 Oct 26 03:04	3°	
	7783 May 15 10:14	0°		7785 Nov 17 07:31	0°	
	7783 Jun 09 04:36	0°		7785 Dec 12 00:39	0°	
	7783 Jul 04 17:26	0°		7786 Jan 05 10:05	0°	
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				7786 Feb 04 13:05	7°	




























































































































desc. node	7786 Feb 14 19:38	20° \approx 14'01		min. Earth dist.	7788 Aug 11 02:54	26° Ω 36'05	0.28275 AU
	7786 Feb 22 15:04	0° H		inferior conj	7788 Aug 11 17:55	26° Ω 12'45	-2°27'19
max. Earth dist.	7786 Mar 14 19:15	25° H 17'48	1.71331 AU	minimum elong	7788 Aug 11 12:33	26° Ω 21'06	2°25'48
				morning rise	7788 Aug 17 16:03	22° Ω 40'36	
superior conj	7786 Mar 16 22:25	27° H 58'27	-1°05'06	direct	7788 Sep 01 22:51	18° Ω 09'55	
minimum elong	7786 Mar 16 10:37	27° H 21'22	1°04'41	greatest brilliancy	7788 Sep 11 17:29	19° Ω 54'01	-4.7m
	7786 Mar 18 13:08	0° Y			7788 Sep 29 19:41	0° M	
	7786 Apr 11 09:50	0° B		morning max el	7788 Oct 20 16:24	17° M 54'00	45°41'37
evening rise	7786 Apr 26 11:41	18° B 56'50			7788 Nov 01 20:33	0° L	
	7786 May 05 07:05	0° II		asc. node	7788 Nov 22 15:09	22° L 17'47	
	7786 May 29 07:05	0° S			7788 Nov 29 12:09	0° M	
asc. node	7786 Jun 07 18:47	11° S 47'44			7788 Dec 25 09:24	0° J	
	7786 Jun 22 12:01	0° Ω			7789 Jan 19 09:18	0° Z	
	7786 Jul 17 00:04	0° M			7789 Feb 12 21:10	0° \approx	
	7786 Aug 10 22:36	0° L			7789 Mar 09 01:50	0° H	
desc. node	7786 Sep 05 14:07	0° M		desc. node	7789 Mar 14 07:51	6° H 32'43	
	7786 Sep 27 12:33	24° M 34'28			7789 Apr 02 02:01	0° Y	
	7786 Oct 02 13:05	0° J		morning set	7789 Apr 21 10:41	24° Y 17'35	
evening max el	7786 Oct 24 15:26	22° J 31'39	45°44'57		7789 Apr 25 23:43	0° B	
	7786 Nov 01 17:30	0° Z			7789 May 19 21:02	0° II	
greatest brilliancy	7786 Dec 03 01:16	20° Z 47'40	-4.8m				
retrograde	7786 Dec 12 10:52	22° Z 24'50		superior conj	7789 May 31 17:23	14° II 51'12	-1°11'46
evening set	7786 Dec 27 23:56	17° Z 46'14		minimum elong	7789 Jun 01 04:15	15° II 25'13	1°11'34
inferior conj	7787 Jan 02 12:15	14° Z 29'03	-3°52'32	max. Earth dist.	7789 Jun 03 21:32	18° II 49'36	1.71644 AU
minimum elong	7787 Jan 02 20:16	14° Z 16'39	3°50'11		7789 Jun 12 19:56	0° S	
min. Earth dist.	7787 Jan 03 08:23	13° Z 57'54	0.27886 AU	asc. node	7789 Jul 05 06:34	27° S 57'58	
morning rise	7787 Jan 08 15:48	10° Z 48'56			7789 Jul 06 21:52	0° Ω	
asc. node	7787 Jan 18 12:33	6° Z 55'12		evening rise	7789 Jul 10 08:50	4° Ω 17'32	
direct	7787 Jan 23 14:48	6° Z 23'19			7789 Jul 31 03:34	0° M	
greatest brilliancy	7787 Feb 03 18:28	8° Z 41'51	-4.8m		7789 Aug 24 13:44	0° L	
	7787 Mar 05 15:49	0° \approx			7789 Sep 18 05:53	0° M	
morning max el	7787 Mar 15 00:51	9° \approx 06'11	46°48'36		7789 Oct 13 06:42	0° J	
	7787 Apr 03 16:30	0° H		desc. node	7789 Oct 25 00:14	13° J 51'22	
	7787 Apr 29 20:44	0° Y			7789 Nov 07 20:16	0° Z	
desc. node	7787 May 10 06:14	12° Y 18'25			7789 Dec 04 06:01	0° \approx	
	7787 May 25 00:05	0° B			7790 Jan 01 10:11	0° H	
	7787 Jun 18 16:34	0° II		evening max el	7790 Jan 05 00:16	3° H 33'58	46°27'10
	7787 Jul 13 04:49	0° S			7790 Feb 06 10:01	0° Y	
	7787 Aug 06 15:52	0° Ω		greatest brilliancy	7790 Feb 13 23:14	3° Y 29'37	-4.9m
asc. node	7787 Aug 31 04:38	0° M 06'37		asc. node	7790 Feb 15 00:14	3° Y 50'51	
	7787 Aug 31 02:28	0° M		retrograde	7790 Feb 23 22:01	5° Y 20'32	
morning set	7787 Sep 16 01:14	19° M 35'42		evening set	7790 Mar 11 10:12	0° Y 36'50	
	7787 Sep 24 12:13	0° L			7790 Mar 12 11:57	30° R H	
	7787 Oct 18 20:48	0° M		min. Earth dist.	7790 Mar 16 05:51	27° H 44'31	0.26958 AU
max. Earth dist.	7787 Oct 22 00:25	3° M 53'04	1.73311 AU	inferior conj	7790 Mar 16 12:22	27° H 34'31	6°48'32
				minimum elong	7790 Mar 16 01:19	27° H 51'29	6°46'07
superior conj	7787 Oct 22 17:28	4° M 45'38	1°25'30	morning rise	7790 Mar 20 16:29	25° H 03'55	
minimum elong	7787 Oct 22 15:42	4° M 40'11	1°25'34	direct	7790 Apr 06 04:14	19° H 48'00	
	7787 Nov 12 04:36	0° J		greatest brilliancy	7790 Apr 15 19:45	21° H 34'18	-4.9m
evening rise	7787 Nov 28 11:23	20° J 05'16			7790 May 01 01:12	0° Y	
	7787 Dec 06 12:17	0° Z		morning max el	7790 May 26 14:50	22° Y 35'48	46°53'55
desc. node	7787 Dec 20 21:45	17° Z 45'03			7790 Jun 02 20:09	0° B	
	7787 Dec 30 20:10	0° \approx		desc. node	7790 Jun 06 18:12	4° B 08'05	
	7788 Jan 24 04:10	0° H			7790 Jun 30 03:17	0° II	
	7788 Feb 17 12:44	0° Y			7790 Jul 26 00:12	0° S	
	7788 Mar 13 00:16	0° B			7790 Aug 20 07:27	0° Ω	
	7788 Apr 06 20:23	0° II			7790 Sep 14 07:26	0° M	
asc. node	7788 Apr 11 21:15	5° II 59'16		asc. node	7790 Sep 27 16:54	16° M 11'40	
	7788 May 02 12:19	0° S			7790 Oct 09 01:46	0° L	
	7788 May 30 03:47	0° Ω			7790 Nov 02 14:55	0° M	
evening max el	7788 Jun 01 08:45	2° Ω 13'24	46°35'10	morning set	7790 Nov 23 12:06	25° M 41'49	
	7788 Jul 05 17:13	0° M			7790 Nov 26 23:47	0° J	
greatest brilliancy	7788 Jul 10 08:40	2° M 06'47	-4.8m		7790 Dec 21 05:39	0° Z	
retrograde	7788 Jul 21 11:08	4° M 23'35		max. Earth dist.	7790 Dec 28 03:55	8° Z 35'34	1.72519 AU
desc. node	7788 Aug 01 15:27	1° M 52'09					
evening set	7788 Aug 05 09:42	0° M 00'02		superior conj	7790 Dec 30 18:06	11° Z 48'30	0°41'01
	7788 Aug 05 09:44	30° R Ω		minimum elong	7790 Dec 31 02:31	12° Z 14'40	0°40'46

	7791 Jan 14 09:25	0°♊		desc. node	7793 Jul 04 05:44	8°♊43'01	
desc. node	7791 Jan 17 09:39	3°♊44'41			7793 Aug 01 10:38	0°♊	
	7791 Feb 07 11:23	0°♊		morning max el	7793 Aug 07 13:02	5°♊48'29	46°11'18
evening rise	7791 Feb 07 18:17	0°♊21'33			7793 Aug 30 22:20	0°♊	
	7791 Mar 03 11:48	0°♊			7793 Sep 26 19:54	0°♊	
	7791 Mar 27 11:53	0°♊			7793 Oct 22 15:29	0°♊	
asc. node	7791 Apr 20 14:12	0°♊		asc. node	7793 Oct 25 05:03	3°♊01'38	
	7791 May 10 08:59	24°♊24'42			7793 Nov 16 19:12	0°♊	
	7791 May 14 22:26	0°♊			7793 Dec 11 11:55	0°♊	
	7791 Jun 08 17:35	0°♊			7794 Jan 04 21:07	0°♊	
	7791 Jul 04 07:59	0°♊			7794 Jan 29 01:17	0°♊	
	7791 Jul 31 13:56	0°♊		morning set	7794 Feb 02 02:28	5°♊02'38	
evening max el	7791 Aug 12 03:42	11°♊42'24	45°49'41	desc. node	7794 Feb 13 21:41	19°♊46'25	
desc. node	7791 Aug 30 03:11	27°♊43'24			7794 Feb 22 01:56	0°♊	
	7791 Sep 02 02:19	0°♊		max. Earth dist.	7794 Mar 12 06:05	22°♊46'55	1.71359 AU
greatest brilliancy	7791 Sep 19 19:08	10°♊10'15	-4.7m				
retrograde	7791 Sep 30 04:20	12°♊07'06		superior conj	7794 Mar 14 09:47	25°♊29'12	-1°02'24
evening set	7791 Oct 18 06:38	5°♊59'38		minimum elong	7794 Mar 13 21:57	24°♊52'02	1°01'58
inferior conj	7791 Oct 21 17:41	3°♊50'23	-8°33'57		7794 Mar 18 00:02	0°♊	
minimum elong	7791 Oct 21 15:26	3°♊53'57	8°33'48		7794 Apr 10 20:48	0°♊	
min. Earth dist.	7791 Oct 21 17:58	3°♊49'56	0.29167 AU	evening rise	7794 Apr 23 22:28	16°♊25'30	
morning rise	7791 Oct 25 00:12	1°♊47'59			7794 May 04 18:07	0°♊	
	7791 Oct 28 02:18	30°♊			7794 May 28 18:13	0°♊	
direct	7791 Nov 12 07:33	25°♊32'23		asc. node	7794 Jun 06 20:39	11°♊18'45	
greatest brilliancy	7791 Nov 22 18:42	27°♊31'28	-4.7m		7794 Jun 21 23:20	0°♊	
	7791 Nov 28 09:08	0°♊			7794 Jul 16 11:46	0°♊	
asc. node	7791 Dec 21 02:49	16°♊32'16			7794 Aug 10 11:00	0°♊	
morning max el	7791 Dec 31 15:04	26°♊23'46	46°02'23		7794 Sep 05 03:54	0°♊	
	7792 Jan 04 05:59	0°♊		desc. node	7794 Sep 26 14:39	23°♊56'28	
	7792 Feb 01 01:41	0°♊			7794 Oct 02 06:02	0°♊	
	7792 Feb 26 20:02	0°♊		evening max el	7794 Oct 22 06:14	20°♊18'03	45°44'14
	7792 Mar 22 16:59	0°♊			7794 Nov 01 21:25	0°♊	
desc. node	7792 Apr 10 20:06	23°♊28'39		greatest brilliancy	7794 Nov 30 14:46	18°♊31'00	-4.8m
	7792 Apr 16 02:52	0°♊		retrograde	7794 Dec 10 01:33	20°♊08'48	
	7792 May 10 06:56	0°♊		evening set	7794 Dec 25 16:54	15°♊26'02	
	7792 Jun 03 08:44	0°♊		inferior conj	7794 Dec 31 02:47	12°♊12'01	-4°11'54
	7792 Jun 27 10:49	0°♊		minimum elong	7794 Dec 31 11:18	11°♊58'51	4°09'27
morning set	7792 Jul 04 18:14	9°♊05'21		min. Earth dist.	7794 Dec 31 23:03	11°♊40'40	0.27945 AU
	7792 Jul 21 14:34	0°♊		morning rise	7795 Jan 06 04:59	8°♊33'58	
asc. node	7792 Aug 01 18:29	13°♊49'54		asc. node	7795 Jan 17 14:32	4°♊21'56	
				direct	7795 Jan 21 06:20	4°♊05'30	
superior conj	7792 Aug 12 00:14	26°♊29'54	0°24'26	greatest brilliancy	7795 Feb 01 09:43	6°♊24'16	-4.8m
minimum elong	7792 Aug 11 18:59	26°♊13'40	0°24'07		7795 Mar 05 17:38	0°♊	
max. Earth dist.	7792 Aug 14 03:01	29°♊06'50	1.72918 AU	morning max el	7795 Mar 12 16:41	6°♊49'43	46°47'31
	7792 Aug 14 20:13	0°♊			7795 Apr 03 09:25	0°♊	
	7792 Sep 08 03:33	0°♊			7795 Apr 29 10:50	0°♊	
evening rise	7792 Sep 17 21:14	11°♊59'27		desc. node	7795 May 09 08:13	11°♊44'17	
	7792 Oct 02 12:46	0°♊			7795 May 24 12:50	0°♊	
	7792 Oct 27 00:41	0°♊			7795 Jun 18 04:32	0°♊	
	7792 Nov 20 16:18	0°♊			7795 Jul 12 16:15	0°♊	
desc. node	7792 Nov 21 11:57	0°♊59'35			7795 Aug 06 02:56	0°♊	
	7792 Dec 15 12:16	0°♊		asc. node	7795 Aug 30 06:43	29°♊39'53	
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asc. node	7793 Mar 14 11:45	12°♊46'02			7795 Oct 18 07:22	0°♊	
evening max el	7793 Mar 18 20:04	17°♊13'09	47°01'10				
	7793 Apr 01 04:15	0°♊		superior conj	7795 Oct 20 11:06	2°♊39'27	1°25'08
greatest brilliancy	7793 Apr 28 13:03	18°♊27'21	-4.9m	minimum elong	7795 Oct 20 08:38	2°♊31'50	1°25'11
retrograde	7793 May 08 10:37	20°♊19'05		max. Earth dist.	7795 Oct 19 22:06	1°♊59'23	1.73320 AU
evening set	7793 May 25 15:12	14°♊37'49			7795 Nov 11 15:13	0°♊	
inferior conj	7793 May 29 06:16	12°♊25'12	7°43'27	evening rise	7795 Nov 26 03:49	17°♊54'58	
minimum elong	7793 May 29 16:19	12°♊09'39	7°41'36		7795 Dec 05 23:03	0°♊	
min. Earth dist.	7793 May 29 07:10	12°♊23'48	0.27304 AU	desc. node	7795 Dec 19 23:40	17°♊17'19	
morning rise	7793 Jun 02 17:32	9°♊43'10			7795 Dec 30 07:11	0°♊	
direct	7793 Jun 18 23:09	4°♊35'49			7796 Jan 23 15:30	0°♊	
greatest brilliancy	7793 Jun 28 17:44	6°♊22'04	-4.8m		7796 Feb 17 00:29	0°♊	

	7796 Mar 12 12:36	0°♄		7798 Aug 19 19:22	0°♌	
	7796 Apr 06 09:46	0°♊		7798 Sep 13 18:41	0°♍	
asc. node	7796 Apr 10 23:17	5°♊24'51	asc. node	7798 Sep 26 18:49	15°♍44'11	
	7796 May 02 03:48	0°♌		7798 Oct 08 12:35	0°♎	
evening max el	7796 May 30 00:52	29°♌59'31 46°36'45		7798 Nov 02 01:30	0°♏	
	7796 May 30 01:04	0°♌	morning set	7798 Nov 21 05:11	23°♏34'08	
greatest brilliancy	7796 Jul 08 00:36	29°♌53'07 -4.8m		7798 Nov 26 10:15	0°♐	
	7796 Jul 08 07:45	0°♍		7798 Dec 20 16:08	0°♑	
retrograde	7796 Jul 19 03:20	2°♍09'40	max. Earth dist.	7798 Dec 25 19:11	6°♑21'31 1.72562 AU	
	7796 Jul 29 11:06	30°♍♌				
desc. node	7796 Jul 31 17:33	28°♌58'48	superior conj	7798 Dec 28 09:21	9°♑34'23 0°44'03	
evening set	7796 Aug 03 00:44	27°♌47'17	minimum elong	7798 Dec 28 18:10	10°♑01'42 0°43'47	
inferior conj	7796 Aug 09 09:12	23°♌59'22 -2°06'49		7799 Jan 13 19:59	0°♒	
minimum elong	7796 Aug 09 04:32	24°♌06'38 2°05'30	desc. node	7799 Jan 16 11:40	3°♒18'04	
min. Earth dist.	7796 Aug 08 18:15	24°♌22'36 0.28229 AU	evening rise	7799 Feb 05 07:35	28°♒00'00	
morning rise	7796 Aug 15 09:07	20°♌25'04		7799 Feb 06 22:05	0°♓	
direct	7796 Aug 30 14:21	15°♌57'25		7799 Mar 02 22:40	0°♓	
greatest brilliancy	7796 Sep 09 07:37	17°♌40'44 -4.7m		7799 Mar 26 22:59	0°♓	
	7796 Sep 30 08:38	0°♍		7799 Apr 20 01:36	0°♊	
morning max el	7796 Oct 18 07:54	15°♍43'16 45°41'42	asc. node	7799 May 09 10:52	23°♊54'31	
	7796 Nov 01 14:45	0°♎		7799 May 14 10:17	0°♌	
asc. node	7796 Nov 21 17:04	21°♎41'52		7799 Jun 08 06:12	0°♌	
	7796 Nov 29 02:17	0°♏		7799 Jul 03 22:11	0°♍	
	7796 Dec 24 21:53	0°♐		7799 Jul 31 08:09	0°♎	
	7797 Jan 18 20:59	0°♑	evening max el	7799 Aug 09 18:07	9°♎28'20 45°50'47	
	7797 Feb 12 08:27	0°♒	desc. node	7799 Aug 29 05:11	26°♎40'41	
	7797 Mar 08 12:53	0°♓		7799 Sep 02 17:38	0°♏	
desc. node	7797 Mar 13 09:52	6°♓04'44	greatest brilliancy	7799 Sep 17 10:34	8°♏01'30 -4.7m	
	7797 Apr 01 12:54	0°♓	retrograde	7799 Sep 27 20:17	9°♏59'24	
morning set	7797 Apr 18 21:28	21°♓46'57	evening set	7799 Oct 15 21:11	3°♏54'23	
	7797 Apr 25 10:29	0°♓	inferior conj	7799 Oct 19 10:10	1°♏42'21 -8°31'15	
	7797 May 19 07:41	0°♊	minimum elong	7799 Oct 19 07:09	1°♏47'07 8°31'04	
			min. Earth dist.	7799 Oct 19 09:35	1°♏43'17 0.29173 AU	
superior conj	7797 May 29 05:44	12°♊26'15 -1°13'53		7799 Oct 22 03:36	30°♏♎	
minimum elong	7797 May 29 16:16	12°♊59'14 1°13'44	morning rise	7799 Oct 22 17:06	29°♎39'19	
max. Earth dist.	7797 Jun 01 11:13	16°♊28'53 1.71601 AU	direct	7799 Nov 09 23:21	23°♎24'18	
	7797 Jun 12 06:32	0°♌	greatest brilliancy	7799 Nov 20 10:49	25°♎23'08 -4.7m	
asc. node	7797 Jul 04 08:33	27°♌31'09		7799 Nov 29 21:29	0°♏	
	7797 Jul 06 08:28	0°♌	asc. node	7799 Dec 20 04:48	15°♏37'54	
evening rise	7797 Jul 07 23:17	2°♌00'30	morning max el	7799 Dec 29 05:54	24°♏09'39 46°01'00	
	7797 Jul 30 14:15	0°♍		7800 Jan 04 01:52	0°♐	
	7797 Aug 24 00:37	0°♎		7800 Jan 31 16:32	0°♑	
	7797 Sep 17 17:08	0°♏		7800 Feb 26 09:00	0°♒	
	7797 Oct 12 18:39	0°♐		7800 Mar 23 05:01	0°♓	
desc. node	7797 Oct 24 02:11	13°♐20'36	desc. node	7800 Apr 10 21:59	22°♓58'41	
	7797 Nov 07 09:28	0°♑		7800 Apr 16 14:23	0°♓	
	7797 Dec 03 21:43	0°♒		7800 May 10 18:06	0°♓	
	7798 Jan 01 08:13	0°♓		7800 Jun 03 19:40	0°♊	
evening max el	7798 Jan 02 14:02	1°♓13'29 46°25'17		7800 Jun 27 21:33	0°♌	
	7798 Feb 08 18:40	0°♓	morning set	7800 Jul 03 08:42	6°♌47'54	
greatest brilliancy	7798 Feb 11 12:41	1°♓05'19 -4.9m		7800 Jul 22 01:08	0°♌	
asc. node	7798 Feb 14 02:20	1°♓53'37	asc. node	7800 Aug 01 20:35	13°♌23'51	
retrograde	7798 Feb 21 10:18	2°♓55'01				
	7798 Mar 05 11:30	30°♓♓	superior conj	7800 Aug 10 16:26	24°♌19'18 0°21'10	
evening set	7798 Mar 08 19:22	28°♓16'58	minimum elong	7800 Aug 10 11:49	24°♌05'03 0°20'52	
inferior conj	7798 Mar 14 01:10	25°♓09'27 6°31'45	max. Earth dist.	7800 Aug 12 19:19	26°♌56'35 1.72879 AU	
minimum elong	7798 Mar 13 14:06	25°♓26'28 6°29'15		7800 Aug 15 06:40	0°♍	
min. Earth dist.	7798 Mar 13 19:26	25°♓18'17 0.26955 AU		7800 Sep 08 13:59	0°♎	
morning rise	7798 Mar 18 08:50	22°♓33'25	evening rise	7800 Sep 16 15:09	9°♎54'43	
direct	7798 Apr 03 16:50	17°♓22'48		7800 Oct 02 23:18	0°♏	
greatest brilliancy	7798 Apr 13 09:54	19°♓09'54 -4.9m		7800 Oct 27 11:29	0°♐	
	7798 May 01 20:00	0°♓		7800 Nov 21 03:30	0°♑	
morning max el	7798 May 24 03:01	20°♓09'16 46°54'55	desc. node	7800 Nov 21 13:51	0°♑31'21	
	7798 Jun 02 15:56	0°♓		7800 Dec 16 00:06	0°♒	
desc. node	7798 Jun 05 20:03	3°♓22'38		7801 Jan 10 02:36	0°♓	
	7798 Jun 29 18:20	0°♊		7801 Feb 04 15:44	0°♓	
	7798 Jul 25 13:13	0°♌		7801 Mar 03 06:51	0°♓	

asc. node	7801 Mar 14 13:44	11°♄56'43		7803 Oct 18 17:58	0°♍	
evening max el	7801 Mar 17 09:00	14°♄48'05	47°00'56			
	7801 Apr 02 11:08	0°♈		superior conj	7803 Oct 19 04:55	0°♍33'43 1°24'39
greatest brilliancy	7801 Apr 27 02:58	16°♈03'53	-4.9m	minimum elong	7803 Oct 19 01:47	0°♍24'03 1°24'42
retrograde	7801 May 07 00:17	17°♈55'43		max. Earth dist.	7803 Oct 18 18:56	0°♍02'59 1.73321 AU
evening set	7801 May 24 07:54	12°♈09'11			7803 Nov 12 01:50	0°♊
inferior conj	7801 May 27 19:31	10°♈01'55	7°55'49	evening rise	7803 Nov 24 20:32	15°♊45'29
minimum elong	7801 May 28 05:10	9°♈47'02	7°54'10		7803 Dec 06 09:48	0°♊
min. Earth dist.	7801 May 27 20:23	10°♈00'36	0.27292 AU	desc. node	7803 Dec 20 01:45	16°♊50'08
morning rise	7801 Jun 01 02:31	7°♈26'20			7803 Dec 30 18:12	0°♊
direct	7801 Jun 17 11:59	2°♈12'28			7804 Jan 24 02:53	0°♋
greatest brilliancy	7801 Jun 27 06:34	3°♈59'05	-4.8m		7804 Feb 17 12:21	0°♋
desc. node	7801 Jul 04 07:50	7°♈08'39			7804 Mar 13 01:10	0°♋
	7801 Aug 02 11:50	0°♋			7804 Apr 06 23:29	0°♈
morning max el	7801 Aug 06 03:47	3°♋31'36	46°13'06	asc. node	7804 Apr 11 01:09	4°♈49'00
	7801 Aug 31 14:50	0°♎			7804 May 02 19:51	0°♋
	7801 Sep 27 09:26	0°♎		evening max el	7804 May 28 16:31	27°♋43'23 46°38'18
	7801 Oct 23 03:35	0°♎			7804 May 30 23:35	0°♎
asc. node	7801 Oct 25 06:58	2°♎31'50		greatest brilliancy	7804 Jul 06 16:59	27°♎38'41 -4.8m
	7801 Nov 17 06:34	0°♍		retrograde	7804 Jul 17 18:55	29°♎54'04
	7801 Dec 11 22:53	0°♊		desc. node	7804 Jul 31 19:33	25°♎59'54
	7802 Jan 05 07:54	0°♊		evening set	7804 Aug 01 15:42	25°♎32'49
	7802 Jan 29 12:01	0°♊		min. Earth dist.	7804 Aug 07 09:44	22°♎07'08 0.28179 AU
morning set	7802 Jan 31 15:55	2°♊41'35		inferior conj	7804 Aug 08 00:15	21°♎44'32 -1°46'02
desc. node	7802 Feb 13 23:44	19°♊19'16		minimum elong	7804 Aug 07 20:19	21°♎50'39 1°44'55
	7802 Feb 22 12:40	0°♋		morning rise	7804 Aug 14 01:44	18°♎08'01
max. Earth dist.	7802 Mar 10 17:31	20°♋18'22	1.71387 AU	direct	7804 Aug 29 05:20	13°♎43'29
				greatest brilliancy	7804 Sep 07 21:46	15°♎26'02 -4.7m
superior conj	7802 Mar 12 20:56	22°♋59'44	-0°59'33		7804 Oct 01 18:38	0°♎
minimum elong	7802 Mar 12 09:12	22°♋22'54	0°59'06	morning max el	7804 Oct 16 22:27	13°♎29'21 45°41'56
	7802 Mar 18 10:47	0°♋			7804 Nov 02 08:45	0°♎
	7802 Apr 11 07:36	0°♋		asc. node	7804 Nov 21 19:02	21°♎05'47
evening rise	7802 Apr 22 09:03	13°♋54'02			7804 Nov 29 16:27	0°♍
	7802 May 05 04:59	0°♈			7804 Dec 25 10:27	0°♊
	7802 May 29 05:13	0°♋			7805 Jan 19 08:47	0°♊
asc. node	7802 Jun 06 22:40	10°♋50'38			7805 Feb 12 19:50	0°♊
	7802 Jun 22 10:34	0°♎			7805 Mar 09 00:04	0°♋
	7802 Jul 16 23:24	0°♎		desc. node	7805 Mar 13 11:46	5°♋35'47
	7802 Aug 10 23:21	0°♎			7805 Apr 01 23:59	0°♋
	7802 Sep 05 17:40	0°♍		morning set	7805 Apr 17 07:55	19°♋14'26
desc. node	7802 Sep 26 16:35	23°♍18'16			7805 Apr 25 21:29	0°♋
	7802 Oct 02 23:08	0°♊			7805 May 19 18:39	0°♈
evening max el	7802 Oct 20 21:57	18°♊07'25	45°43'38			
	7802 Nov 03 02:51	0°♊		superior conj	7805 May 27 17:35	9°♈58'39 -1°15'54
greatest brilliancy	7802 Nov 29 04:28	16°♊15'55	-4.8m	minimum elong	7805 May 28 03:41	10°♈30'18 1°15'46
retrograde	7802 Dec 08 16:16	17°♊54'02		max. Earth dist.	7805 May 30 21:37	13°♈56'50 1.71560 AU
evening set	7802 Dec 24 10:14	13°♊07'17			7805 Jun 12 17:28	0°♋
inferior conj	7802 Dec 29 17:34	9°♊56'20	-4°30'31	asc. node	7805 Jul 04 10:35	27°♋03'26
minimum elong	7802 Dec 30 02:30	9°♊42'29	4°28'01	evening rise	7805 Jul 06 13:00	29°♋40'03
min. Earth dist.	7802 Dec 30 13:45	9°♊25'04	0.28006 AU		7805 Jul 06 19:25	0°♎
morning rise	7803 Jan 04 18:11	6°♊20'23			7805 Jul 31 01:17	0°♎
asc. node	7803 Jan 17 16:38	1°♊55'17			7805 Aug 24 11:50	0°♎
direct	7803 Jan 19 22:18	1°♊49'11			7805 Sep 18 04:46	0°♍
greatest brilliancy	7803 Jan 31 00:47	4°♊07'18	-4.8m		7805 Oct 13 07:01	0°♊
	7803 Mar 06 18:03	0°♊		desc. node	7805 Oct 24 04:07	12°♊48'39
morning max el	7803 Mar 11 08:23	4°♊33'12	46°46'05		7805 Nov 07 23:09	0°♊
	7803 Apr 04 02:02	0°♋			7805 Dec 04 13:59	0°♊
	7803 Apr 30 00:50	0°♋		evening max el	7806 Jan 01 03:05	28°♊50'46 46°23'36
desc. node	7803 May 09 10:10	11°♋10'07			7806 Jan 02 07:26	0°♋
	7803 May 25 01:32	0°♋		greatest brilliancy	7806 Feb 10 02:21	28°♋41'03 -4.9m
	7803 Jun 18 16:28	0°♈		asc. node	7806 Feb 14 04:13	29°♋51'17
	7803 Jul 13 03:40	0°♋			7806 Feb 14 21:13	0°♋
	7803 Aug 06 14:00	0°♎		retrograde	7806 Feb 19 22:31	0°♋29'41
asc. node	7803 Aug 30 08:37	29°♎12'26			7806 Feb 24 21:07	30°♋
	7803 Aug 31 00:06	0°♎		evening set	7806 Mar 07 04:52	25°♋56'30
morning set	7803 Sep 12 11:06	15°♎18'56		inferior conj	7806 Mar 12 14:09	22°♋44'25 6°14'23
	7803 Sep 24 09:32	0°♎		minimum elong	7806 Mar 12 03:08	23°♋01'21 6°11'46

min. Earth dist.	7806 Mar 12 09:22	22° Υ 51'47	0.26958 AU		7808 Sep 08 00:52	0° Ω	
morning rise	7806 Mar 17 01:18	20° Υ 03'08		evening rise	7808 Sep 14 08:39	7° Ω 47'19	
direct	7806 Apr 02 05:22	14° Υ 57'17			7808 Oct 02 10:18	0° \mathbb{M}	
greatest brilliancy	7806 Apr 12 00:43	16° Υ 45'59	-4.9m		7808 Oct 26 22:44	0° \mathcal{A}	
	7806 May 03 10:18	0° Υ		desc. node	7808 Nov 20 15:55	0° \mathcal{Z} 02'17	
morning max el	7806 May 22 15:22	17° Υ 42'04	46°55'36		7808 Nov 20 15:10	0° \mathcal{Z}	
	7806 Jun 03 11:32	0° \mathcal{B}			7808 Dec 15 12:26	0° \approx	
desc. node	7806 Jun 05 22:10	2° \mathcal{B} 37'23			7809 Jan 09 15:57	0° Υ	
	7806 Jun 30 09:39	0° \mathbb{I}			7809 Feb 04 06:52	0° Υ	
	7806 Jul 26 02:38	0° \mathcal{E}			7809 Mar 03 01:50	0° \mathcal{B}	
	7806 Aug 20 07:43	0° Ω		asc. node	7809 Mar 13 15:43	11° \mathcal{B} 05'33	
	7806 Sep 14 06:21	0° \mathbb{P}		evening max el	7809 Mar 14 23:09	12° \mathcal{B} 25'13	47°00'48
asc. node	7806 Sep 26 20:45	15° \mathbb{P} 15'26			7809 Apr 02 21:00	0° \mathbb{I}	
	7806 Oct 08 23:49	0° Ω		greatest brilliancy	7809 Apr 24 16:27	13° \mathbb{I} 39'29	-4.9m
	7806 Nov 02 12:28	0° \mathbb{M}		retrograde	7809 May 04 14:32	15° \mathbb{I} 31'55	
morning set	7806 Nov 19 22:02	21° \mathbb{M} 24'28		evening set	7809 May 22 00:40	9° \mathbb{I} 40'19	
	7806 Nov 26 21:08	0° \mathcal{A}		inferior conj	7809 May 25 08:53	7° \mathbb{I} 38'12	8°07'22
	7806 Dec 21 03:01	0° \mathcal{Z}		minimum elong	7809 May 25 18:04	7° \mathbb{I} 24'04	8°05'54
max. Earth dist.	7806 Dec 24 11:43	4° \mathcal{Z} 10'13	1.72602 AU	min. Earth dist.	7809 May 25 09:15	7° \mathbb{I} 37'38	0.27276 AU
				morning rise	7809 May 29 11:33	5° \mathbb{I} 09'13	
superior conj	7806 Dec 27 00:40	7° \mathcal{Z} 19'13	0°47'00		7809 Jun 12 01:19	30° \mathcal{R} \mathcal{B}	
minimum elong	7806 Dec 27 09:49	7° \mathcal{Z} 47'35	0°46'45	direct	7809 Jun 15 01:26	29° \mathcal{B} 48'58	
	7807 Jan 14 06:56	0° \approx			7809 Jun 18 02:42	0° \mathbb{I}	
desc. node	7807 Jan 16 13:40	2° \approx 50'13		greatest brilliancy	7809 Jun 24 18:49	1° \mathbb{I} 35'08	-4.8m
evening rise	7807 Feb 03 21:11	25° \approx 38'25		desc. node	7809 Jul 03 09:50	5° \mathbb{I} 37'15	
	7807 Feb 07 09:07	0° Υ			7809 Aug 02 12:02	0° \mathcal{E}	
	7807 Mar 03 09:51	0° Υ		morning max el	7809 Aug 03 19:05	1° \mathcal{E} 15'28	46°14'37
	7807 Mar 27 10:23	0° \mathcal{B}			7809 Aug 31 07:20	0° Ω	
	7807 Apr 20 13:19	0° \mathbb{I}			7809 Sep 26 23:12	0° \mathbb{P}	
asc. node	7807 May 09 12:54	23° \mathbb{I} 23'40			7809 Oct 22 16:02	0° Ω	
	7807 May 14 22:32	0° \mathcal{E}		asc. node	7809 Oct 24 08:59	2° Ω 01'13	
	7807 Jun 08 19:20	0° Ω			7809 Nov 16 18:17	0° \mathbb{M}	
	7807 Jul 04 13:04	0° \mathbb{P}			7809 Dec 11 10:12	0° \mathcal{A}	
	7807 Aug 01 03:34	0° Ω			7810 Jan 04 19:00	0° \mathcal{Z}	
evening max el	7807 Aug 08 08:40	7° Ω 12'50	45°52'01		7810 Jan 28 23:02	0° \approx	
desc. node	7807 Aug 29 07:07	25° Ω 34'17		morning set	7810 Jan 29 05:17	0° \approx 19'27	
	7807 Sep 04 15:43	0° \mathbb{M}		desc. node	7810 Feb 13 01:33	18° \approx 50'29	
greatest brilliancy	7807 Sep 16 01:17	5° \mathbb{M} 49'51	-4.7m		7810 Feb 21 23:41	0° Υ	
retrograde	7807 Sep 26 12:28	7° \mathbb{M} 49'30		max. Earth dist.	7810 Mar 08 02:57	17° Υ 42'43	1.71413 AU
evening set	7807 Oct 14 11:11	1° \mathbb{M} 47'11					
	7807 Oct 17 08:36	30° \mathcal{R} Ω		superior conj	7810 Mar 10 08:04	20° Υ 29'22	-0°56'36
inferior conj	7807 Oct 18 02:24	29° Ω 32'02	-8°27'52	minimum elong	7810 Mar 09 20:32	19° Υ 53'10	0°56'08
minimum elong	7807 Oct 17 22:37	29° Ω 37'59	8°27'36		7810 Mar 17 21:51	0° Υ	
min. Earth dist.	7807 Oct 18 00:44	29° Ω 34'39	0.29175 AU		7810 Apr 10 18:42	0° \mathcal{B}	
morning rise	7807 Oct 21 10:02	27° Ω 28'07		evening rise	7810 Apr 19 19:44	11° \mathcal{B} 22'00	
direct	7807 Nov 08 15:05	21° Ω 13'57			7810 May 04 16:07	0° \mathbb{I}	
greatest brilliancy	7807 Nov 19 02:33	23° Ω 12'40	-4.7m		7810 May 28 16:26	0° \mathcal{E}	
	7807 Dec 01 23:55	0° \mathbb{M}		asc. node	7810 Jun 06 00:42	10° \mathcal{E} 21'59	
asc. node	7807 Dec 20 06:55	14° \mathbb{M} 43'30			7810 Jun 21 21:58	0° Ω	
morning max el	7807 Dec 27 21:26	21° \mathbb{M} 56'02	45°59'43		7810 Jul 16 11:12	0° \mathbb{P}	
	7808 Jan 04 21:41	0° \mathcal{A}			7810 Aug 10 11:56	0° Ω	
	7808 Feb 01 07:38	0° \mathcal{Z}			7810 Sep 05 07:49	0° \mathbb{M}	
	7808 Feb 26 22:16	0° \approx		desc. node	7810 Sep 25 18:33	22° \mathbb{M} 38'57	
	7808 Mar 22 17:21	0° Υ			7810 Oct 02 16:56	0° \mathcal{A}	
desc. node	7808 Apr 09 23:58	22° Υ 28'02		evening max el	7810 Oct 18 13:38	15° \mathcal{A} 55'43	45°42'53
	7808 Apr 16 02:10	0° Υ			7810 Nov 03 11:08	0° \mathcal{Z}	
	7808 May 10 05:33	0° \mathcal{B}		greatest brilliancy	7810 Nov 26 18:38	14° \mathcal{Z} 00'20	-4.8m
	7808 Jun 03 06:53	0° \mathbb{I}		retrograde	7810 Dec 06 06:27	15° \mathcal{Z} 38'01	
	7808 Jun 27 08:36	0° \mathcal{E}		evening set	7810 Dec 22 03:33	10° \mathcal{Z} 47'28	
morning set	7808 Jun 30 23:06	4° \mathcal{E} 29'07		inferior conj	7810 Dec 27 08:17	7° \mathcal{Z} 39'43	-4°48'38
	7808 Jul 21 12:04	0° Ω		minimum elong	7810 Dec 27 17:35	7° \mathcal{Z} 25'17	4°46'07
asc. node	7808 Jul 31 22:29	12° Ω 55'57		min. Earth dist.	7810 Dec 28 04:33	7° \mathcal{Z} 08'15	0.28065 AU
				morning rise	7811 Jan 02 07:04	4° \mathcal{Z} 05'55	
superior conj	7808 Aug 08 08:17	22° Ω 06'14	0°17'49		7811 Jan 12 18:57	30° \mathcal{R} \mathcal{A}	
minimum elong	7808 Aug 08 04:21	21° Ω 54'04	0°17'32	asc. node	7811 Jan 16 18:30	29° \mathcal{A} 32'46	
max. Earth dist.	7808 Aug 10 11:32	24° Ω 44'42	1.72847 AU	direct	7811 Jan 17 13:56	29° \mathcal{A} 31'59	
	7808 Aug 14 17:32	0° \mathbb{P}			7811 Jan 22 11:14	0° \mathcal{Z}	

greatest brilliancy	7811 Jan 28 15:48	1°  49'19	-4.8m			7813 Oct 12 19:12	0° 	
	7811 Mar 06 17:40	0° 		desc. node		7813 Oct 23 06:13	12°  17'47	
morning max el	7811 Mar 08 23:06	2°  13'28	46°44'39			7813 Nov 07 12:44	0° 	
	7811 Apr 03 18:34	0° 				7813 Dec 04 06:24	0° 	
	7811 Apr 29 14:52	0° 		evening max el		7813 Dec 29 15:51	26°  27'47	46°21'42
desc. node	7811 May 08 12:10	10°  35'48				7814 Jan 02 07:39	0° 	
	7811 May 24 14:19	0° 		greatest brilliancy		7814 Feb 07 15:33	26°  16'04	-4.9m
	7811 Jun 18 04:29	0° 		asc. node		7814 Feb 13 06:13	27°  43'43	
	7811 Jul 12 15:09	0° 		retrograde		7814 Feb 17 10:46	28°  04'20	
	7811 Aug 06 01:06	0° 		evening set		7814 Mar 04 14:22	23°  35'19	
asc. node	7811 Aug 29 10:32	28°  044'58		inferior conj		7814 Mar 10 02:58	20°  19'06	5°56'08
	7811 Aug 30 10:57	0° 		minimum elong		7814 Mar 09 16:06	20°  35'47	5°53'27
morning set	7811 Sep 10 04:16	13°  11'05		min. Earth dist.		7814 Mar 09 23:07	20°  25'00	0.26965 AU
	7811 Sep 23 20:14	0° 		morning rise		7814 Mar 14 17:39	17°  32'50	
				direct		7814 Mar 30 17:51	12°  31'21	
superior conj	7811 Oct 16 22:49	28°  28'04	1°24'03	greatest brilliancy		7814 Apr 09 15:30	14°  22'04	-4.9m
minimum elong	7811 Oct 16 19:02	28°  16'25	1°24'04			7814 May 03 20:54	0° 	
max. Earth dist.	7811 Oct 16 14:33	28°  02'36	1.73328 AU	morning max el		7814 May 20 04:23	15°  16'53	46°56'25
	7811 Oct 18 04:39	0° 				7814 Jun 03 06:25	0° 	
	7811 Nov 11 12:35	0° 		desc. node		7814 Jun 05 00:09	1°  52'53	
evening rise	7811 Nov 22 13:08	13°  35'20				7814 Jun 30 00:33	0° 	
	7811 Dec 05 20:43	0° 				7814 Jul 25 15:44	0° 	
desc. node	7811 Dec 19 03:41	16°  32'05				7814 Aug 19 19:45	0° 	
	7811 Dec 30 05:22	0° 				7814 Sep 13 17:42	0° 	
	7812 Jan 23 14:25	0° 		asc. node		7814 Sep 25 22:49	14°  17'47	
	7812 Feb 17 00:22	0° 				7814 Oct 08 10:43	0° 	
	7812 Mar 12 13:53	0° 				7814 Nov 01 23:07	0° 	
	7812 Apr 06 13:24	0° 		morning set		7814 Nov 17 15:22	19°  17'17	
asc. node	7812 Apr 10 03:12	4°  13'16				7814 Nov 26 07:41	0° 	
	7812 May 02 12:13	0° 				7814 Dec 20 13:36	0° 	
evening max el	7812 May 26 07:35	25°  25'38	46°39'53	max. Earth dist.		7814 Dec 22 06:55	2°  08'07	1.72646 AU
	7812 May 30 23:05	0° 						
greatest brilliancy	7812 Jul 04 09:59	25°  025'10	-4.8m	superior conj		7814 Dec 24 16:21	5°  06'09	0°49'52
retrograde	7812 Jul 15 10:12	27°  038'58		minimum elong		7814 Dec 25 01:46	5°  35'21	0°49'36
evening set	7812 Jul 30 07:01	23°  018'36				7815 Jan 13 17:37	0° 	
desc. node	7812 Jul 30 21:25	22°  058'38		desc. node		7815 Jan 15 15:35	2°  22'53	
min. Earth dist.	7812 Aug 05 01:43	19°  051'53	0.28127 AU	evening rise		7815 Feb 01 10:57	23°  18'10	
inferior conj	7812 Aug 05 15:28	19°  030'26	-1°25'04			7815 Feb 06 19:57	0° 	
minimum elong	7812 Aug 05 12:18	19°  035'23	1°24'11			7815 Mar 02 20:52	0° 	
morning rise	7812 Aug 11 18:20	15°  051'46				7815 Mar 26 21:38	0° 	
direct	7812 Aug 26 19:56	11°  030'15				7815 Apr 20 00:54	0° 	
greatest brilliancy	7812 Sep 05 12:31	13°  012'34	-4.7m	asc. node		7815 May 08 14:55	22°  153'19	
	7812 Oct 02 01:38	0° 				7815 May 14 10:36	0° 	
morning max el	7812 Oct 14 12:26	11°  14'31	45°42'12			7815 Jun 08 08:17	0° 	
	7812 Nov 02 02:09	0° 				7815 Jul 04 03:51	0° 	
asc. node	7812 Nov 20 21:06	20°  030'34				7815 Jul 31 23:10	0° 	
	7812 Nov 29 06:22	0° 		evening max el		7815 Aug 06 00:14	5°  00'50	45°53'23
	7812 Dec 24 22:55	0° 		desc. node		7815 Aug 28 09:09	24°  027'30	
	7813 Jan 18 20:33	0° 				7815 Sep 05 21:26	0° 	
	7813 Feb 12 07:14	0° 		greatest brilliancy		7815 Sep 13 15:43	3°  139'16	-4.7m
	7813 Mar 08 11:15	0° 		retrograde		7815 Sep 24 05:17	5°  141'11	
desc. node	7813 Mar 12 13:46	5°  07'17				7815 Oct 11 13:01	30°  041'11	
	7813 Apr 01 11:01	0° 		evening set		7815 Oct 12 01:11	29°  041'51	
morning set	7813 Apr 14 18:09	16°  041'23		inferior conj		7815 Oct 15 18:47	27°  023'19	-8°23'48
	7813 Apr 25 08:26	0° 		minimum elong		7815 Oct 15 14:18	27°  030'20	8°23'27
	7813 May 19 05:31	0° 		min. Earth dist.		7815 Oct 15 15:44	27°  028'05	0.29171 AU
				morning rise		7815 Oct 19 03:25	25°  018'06	
superior conj	7813 May 25 05:23	7°  131'10	-1°17'47	direct		7815 Nov 06 07:27	19°  005'24	
minimum elong	7813 May 25 14:59	8°  101'13	1°17'40	greatest brilliancy		7815 Nov 16 17:54	21°  003'34	-4.7m
max. Earth dist.	7813 May 28 05:19	11°  116'35	1.71520 AU			7815 Dec 02 18:21	0° 	
	7813 Jun 12 04:19	0° 		asc. node		7815 Dec 19 08:45	13°  151'04	
asc. node	7813 Jul 03 12:29	26°  035'40		morning max el		7815 Dec 25 13:45	19°  146'01	45°58'25
evening rise	7813 Jul 04 02:40	27°  019'44				7816 Jan 04 16:22	0° 	
	7813 Jul 06 06:16	0°				7816 Jan 31 22:04	0°	
	7813 Jul 30 12:11	0°				7816 Feb 26 11:03	0°	
	7813 Aug 23 22:54	0°				7816 Mar 22 05:19	0°	
	7813 Sep 17 16:12	0°		desc. node		7816 Apr 09 02:01	21° 045'28	

	7816 Apr 15 13:40	0°♄			7818 Oct 02 10:50	0°♁	
	7816 May 09 16:45	0°♂	evening max el		7818 Oct 16 04:33	13°♁43'07	45°42'15
	7816 Jun 02 17:51	0°♂			7818 Nov 03 21:48	0°♂	
	7816 Jun 26 19:22	0°♂	greatest brilliancy		7818 Nov 24 09:29	11°♂46'54	-4.8m
morning set	7816 Jun 28 13:07	2°♂09'56	retrograde		7818 Dec 03 20:19	13°♂23'46	
	7816 Jul 20 22:40	0°♂	evening set		7818 Dec 19 21:08	8°♂29'13	
asc. node	7816 Jul 31 00:24	12°♂29'08	inferior conj		7818 Dec 24 23:13	5°♂24'56	-5°06'16
			minimum elong		7818 Dec 25 08:48	5°♂10'01	5°03'44
superior conj	7816 Aug 05 23:50	19°♂53'11	min. Earth dist.		7818 Dec 25 19:49	4°♂52'52	0.28121 AU
minimum elong	7816 Aug 05 20:37	19°♂43'14	morning rise		7818 Dec 30 19:55	1°♂53'28	
behind sun begin	7816 Aug 05 09:32	19°♂08'54			7819 Jan 03 13:12	30°♁	
behind sun end	7816 Aug 06 07:43	20°♂17'33	direct		7819 Jan 15 05:18	27°♁16'33	
max. Earth dist.	7816 Aug 08 05:42	22°♂39'50	asc. node		7819 Jan 15 20:30	27°♁17'01	
	7816 Aug 14 04:04	0°♁	greatest brilliancy		7819 Jan 26 07:26	29°♁33'38	-4.8m
	7816 Sep 07 11:24	0°♂			7819 Jan 27 09:13	0°♂	
evening rise	7816 Sep 12 02:10	5°♂41'05	morning max el		7819 Mar 06 13:00	29°♂53'03	46°43'22
	7816 Oct 01 20:58	0°♂			7819 Mar 06 15:45	0°♂	
	7816 Oct 26 09:37	0°♁			7819 Apr 03 10:19	0°♁	
desc. node	7816 Nov 19 17:53	29°♁34'07			7819 Apr 29 04:21	0°♄	
	7816 Nov 20 02:26	0°♂	desc. node		7819 May 07 14:08	10°♄02'45	
	7816 Dec 15 00:21	0°♂			7819 May 24 02:40	0°♂	
	7817 Jan 09 04:56	0°♁			7819 Jun 17 16:09	0°♂	
	7817 Feb 03 21:44	0°♄			7819 Jul 12 02:22	0°♂	
	7817 Mar 02 20:56	0°♂			7819 Aug 05 12:00	0°♂	
evening max el	7817 Mar 12 13:51	10°♂04'45	asc. node		7819 Aug 28 12:37	28°♂18'32	
asc. node	7817 Mar 12 17:44	10°♂14'31			7819 Aug 29 21:37	0°♁	
	7817 Apr 03 09:58	0°♂	morning set		7819 Sep 07 20:59	11°♁02'18	
greatest brilliancy	7817 Apr 22 05:37	11°♂14'50			7819 Sep 23 06:45	0°♂	
retrograde	7817 May 02 04:27	13°♂07'29					
evening set	7817 May 19 17:04	7°♂11'11	superior conj		7819 Oct 14 16:28	26°♂22'20	1°23'19
inferior conj	7817 May 22 21:55	5°♂14'01	minimum elong		7819 Oct 14 12:02	26°♂08'41	1°23'20
minimum elong	7817 May 23 06:33	5°♂00'43	max. Earth dist.		7819 Oct 14 08:29	25°♂57'45	1.73329 AU
min. Earth dist.	7817 May 22 21:45	5°♂14'16			7819 Oct 17 15:06	0°♂	
morning rise	7817 May 26 20:10	2°♂51'34			7819 Nov 10 23:05	0°♁	
	7817 Jun 01 07:56	30°♁♂	evening rise		7819 Nov 20 05:43	11°♁25'55	
direct	7817 Jun 12 14:53	27°♂25'10			7819 Dec 05 07:24	0°♂	
greatest brilliancy	7817 Jun 22 06:37	29°♂10'21	desc. node		7819 Dec 18 05:35	15°♂54'38	
	7817 Jun 24 10:49	0°♂			7819 Dec 29 16:20	0°♂	
desc. node	7817 Jul 02 11:42	4°♂08'54			7820 Jan 23 01:43	0°♁	
morning max el	7817 Aug 01 09:44	28°♂58'08			7820 Feb 16 12:07	0°♄	
	7817 Aug 02 10:57	0°♂			7820 Mar 12 02:21	0°♂	
	7817 Aug 30 23:14	0°♂			7820 Apr 06 03:05	0°♂	
	7817 Sep 26 12:29	0°♁	asc. node		7820 Apr 09 05:13	3°♂38'18	
	7817 Oct 22 04:02	0°♂			7820 May 02 04:31	0°♂	
asc. node	7817 Oct 23 10:56	1°♂31'36	evening max el		7820 May 23 21:35	23°♂05'59	46°41'13
	7817 Nov 16 05:34	0°♂			7820 May 30 23:20	0°♂	
	7817 Dec 10 21:06	0°♁	greatest brilliancy		7820 Jul 02 02:49	23°♂11'38	-4.8m
	7818 Jan 04 05:41	0°♂	retrograde		7820 Jul 13 01:02	25°♂24'05	
morning set	7818 Jan 26 19:22	28°♂00'53	evening set		7820 Jul 27 22:19	21°♂03'55	
	7818 Jan 28 09:38	0°♂	desc. node		7820 Jul 29 23:31	19°♂54'03	
desc. node	7818 Feb 12 03:37	18°♂23'50	min. Earth dist.		7820 Aug 02 17:51	17°♂36'12	0.28085 AU
	7818 Feb 21 10:17	0°♁	inferior conj		7820 Aug 03 06:35	17°♂16'21	-1°03'43
max. Earth dist.	7818 Mar 05 11:34	15°♁05'57	minimum elong		7820 Aug 03 04:11	17°♂20'05	1°03'04
			morning rise		7820 Aug 09 10:41	13°♂35'44	
superior conj	7818 Mar 07 19:50	18°♁02'23	direct		7820 Aug 24 10:06	9°♂16'39	
minimum elong	7818 Mar 07 08:35	17°♁27'05	greatest brilliancy		7820 Sep 03 03:55	10°♂59'38	-4.7m
	7818 Mar 17 08:29	0°♄			7820 Oct 02 06:27	0°♁	
	7818 Apr 10 05:25	0°♂	morning max el		7820 Oct 12 02:25	8°♁59'38	45°42'35
evening rise	7818 Apr 17 06:38	8°♁51'41			7820 Nov 01 19:08	0°♂	
	7818 May 04 02:56	0°♂	asc. node		7820 Nov 19 23:00	19°♂55'22	
	7818 May 28 03:23	0°♂			7820 Nov 28 20:03	0°♂	
asc. node	7818 Jun 05 02:34	9°♂53'32			7820 Dec 24 11:11	0°♁	
	7818 Jun 21 09:10	0°♂			7821 Jan 18 08:07	0°♂	
	7818 Jul 15 22:50	0°♁			7821 Feb 11 18:27	0°♂	
	7818 Aug 10 00:21	0°♂			7821 Mar 07 22:16	0°♁	
	7818 Sep 04 21:49	0°♂	desc. node		7821 Mar 11 15:46	4°♁39'14	
desc. node	7818 Sep 24 20:37	22°♂00'21			7821 Mar 31 21:53	0°♄	

morning set	7821 Apr 12 04:40	14°♈09'40		inferior conj	7823 Oct 13 11:05	25°♎13'50	-8°18'54
	7821 Apr 24 19:11	0°♉		minimum elong	7823 Oct 13 05:57	25°♎21'53	8°18'28
	7821 May 18 16:13	0°♊		min. Earth dist.	7823 Oct 13 06:26	25°♎21'07	0.29168 AU
				morning rise	7823 Oct 16 21:01	23°♎06'49	
superior conj	7821 May 22 17:32	5°♊05'16	-1°19'29	direct	7823 Nov 04 00:11	16°♎56'13	
minimum elong	7821 May 23 02:32	5°♊33'28	1°19'24	greatest brilliancy	7823 Nov 14 08:43	18°♎53'02	-4.7m
max. Earth dist.	7821 May 25 12:15	8°♊34'25	1.71482 AU		7823 Dec 03 08:26	0°♏	
	7821 Jun 11 15:00	0°♋		asc. node	7823 Dec 18 10:47	12°♏59'07	
evening rise	7821 Jul 01 16:31	25°♋00'25		morning max el	7823 Dec 23 06:11	17°♏35'26	45°57'02
asc. node	7821 Jul 02 14:28	26°♋08'36			7824 Jan 04 10:56	0°♐	
	7821 Jul 05 16:58	0°♌			7824 Jan 31 12:39	0°♑	
	7821 Jul 29 22:59	0°♍			7824 Feb 26 00:02	0°♒	
	7821 Aug 23 09:56	0°♎			7824 Mar 21 17:29	0°♓	
	7821 Sep 17 03:42	0°♏		desc. node	7824 Apr 08 03:55	21°♓27'51	
	7821 Oct 12 07:30	0°♐			7824 Apr 15 01:21	0°♈	
desc. node	7821 Oct 22 08:07	11°♐46'05			7824 May 09 04:09	0°♉	
	7821 Nov 07 02:29	0°♑			7824 Jun 02 05:01	0°♊	
	7821 Dec 03 23:08	0°♒		morning set	7824 Jun 26 03:12	29°♊50'10	
evening max el	7821 Dec 27 04:54	24°♒05'49	46°20'02		7824 Jun 26 06:21	0°♋	
	7822 Jan 02 09:06	0°♓			7824 Jul 20 09:31	0°♌	
greatest brilliancy	7822 Feb 05 04:10	23°♓50'43	-4.8m	asc. node	7824 Jul 30 02:29	12°♌02'06	
asc. node	7822 Feb 12 08:18	25°♓31'04					
retrograde	7822 Feb 14 23:35	25°♓39'21		superior conj	7824 Aug 03 15:30	17°♌39'42	0°10'59
evening set	7822 Mar 02 00:07	21°♓13'55		minimum elong	7824 Aug 03 13:02	17°♌32'02	0°10'47
inferior conj	7822 Mar 07 15:46	17°♓53'51	5°37'08	behind sun begin	7824 Aug 02 19:17	16°♌37'05	
minimum elong	7822 Mar 07 05:08	18°♓10'09	5°34'26	behind sun end	7824 Aug 04 06:46	18°♌26'59	
min. Earth dist.	7822 Mar 07 12:35	17°♓58'44	0.26972 AU	max. Earth dist.	7824 Aug 06 01:39	20°♌39'42	1.72772 AU
morning rise	7822 Mar 12 09:56	15°♓02'54			7824 Aug 13 14:49	0°♍	
direct	7822 Mar 28 06:47	10°♓05'31			7824 Sep 06 22:11	0°♎	
greatest brilliancy	7822 Apr 07 05:53	11°♓57'53	-4.9m	evening rise	7824 Sep 09 19:53	3°♎34'41	
	7822 May 04 04:37	0°♈			7824 Oct 01 07:52	0°♏	
morning max el	7822 May 17 18:27	12°♈54'31	46°57'17		7824 Oct 25 20:47	0°♐	
	7822 Jun 03 00:45	0°♉		desc. node	7824 Nov 18 19:49	29°♐04'47	
desc. node	7822 Jun 04 02:02	1°♉08'54			7824 Nov 19 14:05	0°♑	
	7822 Jun 29 15:11	0°♊			7824 Dec 14 12:43	0°♒	
	7822 Jul 25 04:38	0°♋			7825 Jan 08 18:27	0°♓	
	7822 Aug 19 07:42	0°♌			7825 Feb 03 13:15	0°♈	
	7822 Sep 13 05:02	0°♍			7825 Mar 02 17:02	0°♉	
asc. node	7822 Sep 25 00:43	14°♍19'55		evening max el	7825 Mar 10 04:32	7°♉43'04	46°59'42
	7822 Oct 07 21:41	0°♎		asc. node	7825 Mar 11 19:43	9°♉21'20	
	7822 Nov 01 09:53	0°♏			7825 Apr 04 03:54	0°♊	
morning set	7822 Nov 15 08:27	17°♏09'01		greatest brilliancy	7825 Apr 19 19:10	8°♊49'52	-4.9m
	7822 Nov 25 18:23	0°♐		retrograde	7825 Apr 29 18:03	10°♊42'08	
max. Earth dist.	7822 Dec 20 01:53	0°♑04'53	1.72684 AU	evening set	7825 May 17 09:27	4°♊41'37	
	7822 Dec 20 00:18	0°♒		inferior conj	7825 May 20 11:03	2°♊49'06	8°27'56
				minimum elong	7825 May 20 19:04	2°♊36'45	8°26'50
superior conj	7822 Dec 22 07:47	2°♑51'57	0°52'39	min. Earth dist.	7825 May 20 10:23	2°♊50'07	0.27245 AU
minimum elong	7822 Dec 22 17:24	3°♑21'46	0°52'23	morning rise	7825 May 24 04:49	0°♊33'05	
	7823 Jan 13 04:24	0°♒			7825 May 25 03:44	30°♋♌	
desc. node	7823 Jan 14 17:36	1°♒55'36		direct	7825 Jun 10 04:21	25°♋00'46	
evening rise	7823 Jan 30 00:33	20°♒57'09		greatest brilliancy	7825 Jun 19 18:35	26°♋44'48	-4.8m
	7823 Feb 06 06:52	0°♓			7825 Jun 27 00:08	0°♊	
	7823 Mar 02 07:59	0°♈		desc. node	7825 Jul 01 13:51	2°♊43'06	
	7823 Mar 26 09:01	0°♉		morning max el	7825 Jul 29 23:36	26°♊37'50	46°17'52
	7823 Apr 19 12:37	0°♊			7825 Aug 02 09:17	0°♋	
asc. node	7823 May 07 16:47	22°♊22'10			7825 Aug 30 15:12	0°♌	
	7823 May 13 22:49	0°♋			7825 Sep 26 01:59	0°♍	
	7823 Jun 07 21:25	0°♌			7825 Oct 21 16:17	0°♎	
	7823 Jul 03 18:54	0°♍		asc. node	7825 Oct 22 12:53	1°♎01'06	
	7823 Jul 31 19:30	0°♎			7825 Nov 15 17:09	0°♏	
evening max el	7823 Aug 03 16:28	2°♎50'16	45°54'43		7825 Dec 10 08:19	0°♐	
desc. node	7823 Aug 27 11:10	23°♎18'28			7826 Jan 03 16:46	0°♑	
	7823 Sep 07 17:38	0°♏		morning set	7826 Jan 24 09:14	25°♑40'22	
greatest brilliancy	7823 Sep 11 05:56	1°♏28'08	-4.7m		7826 Jan 27 20:40	0°♒	
retrograde	7823 Sep 21 22:07	3°♏32'09		desc. node	7826 Feb 11 05:39	17°♒55'38	
	7823 Oct 05 07:44	30°♋♌			7826 Feb 20 21:21	0°♓	
evening set	7823 Oct 09 14:56	27°♌36'17		max. Earth dist.	7826 Mar 02 16:59	12°♓17'52	1.71475 AU

superior conj	7826 Mar 05 07:17	15° H 33'06	-0°50'25	direct	7828 Aug 22 00:07	7° Ω 01'37	
minimum elong	7826 Mar 04 20:24	14° H 59'00	0°49'57	greatest brilliancy	7828 Aug 31 19:23	8° Ω 45'45	-4.8m
	7826 Mar 16 19:35	0° Υ			7828 Oct 02 09:52	0° M	
	7826 Apr 09 16:33	0° B		morning max el	7828 Oct 09 17:05	6° M 45'28	45°43'07
evening rise	7826 Apr 14 17:09	6° B 18'55			7828 Nov 01 12:02	0° Ω	
	7826 May 03 14:07	0° Π		asc. node	7828 Nov 19 00:58	19° Ω 19'49	
	7826 May 27 14:43	0° C			7828 Nov 28 09:52	0° M	
asc. node	7826 Jun 04 04:37	9° C 24'34			7828 Dec 23 23:38	0° A	
	7826 Jun 20 20:46	0° Ω			7829 Jan 17 19:54	0° C	
	7826 Jul 15 10:53	0° M			7829 Feb 11 05:53	0° \approx	
	7826 Aug 09 13:13	0° Ω			7829 Mar 07 09:31	0° H	
	7826 Sep 04 12:22	0° M		desc. node	7829 Mar 10 17:41	4° H 10'07	
desc. node	7826 Sep 23 22:34	21° M 20'02			7829 Mar 31 09:02	0° Υ	
	7826 Oct 02 05:33	0° A		morning set	7829 Apr 09 14:58	11° Υ 36'19	
evening max el	7826 Oct 13 18:37	11° A 27'35	45°41'42		7829 Apr 24 06:17	0° B	
	7826 Nov 04 12:39	0° C			7829 May 18 03:16	0° Π	
greatest brilliancy	7826 Nov 22 00:25	9° C 32'54	-4.8m				
retrograde	7826 Dec 01 10:10	11° C 09'11		superior conj	7829 May 20 05:07	2° Π 36'24	-1°21'02
evening set	7826 Dec 17 14:50	6° C 10'14		minimum elong	7829 May 20 13:27	3° Π 02'32	1°21'00
inferior conj	7826 Dec 22 14:17	3° C 09'39	-5°23'05	max. Earth dist.	7829 May 22 17:34	5° Π 46'00	1.71450 AU
minimum elong	7826 Dec 23 00:06	2° C 54'20	5°20'34		7829 Jun 11 02:02	0° C	
min. Earth dist.	7826 Dec 23 11:19	2° C 36'52	0.28183 AU	evening rise	7829 Jun 29 05:47	22° C 38'12	
	7826 Dec 27 19:13	30° R A		asc. node	7829 Jul 01 16:30	25° C 40'43	
morning rise	7826 Dec 28 08:46	29° A 40'49			7829 Jul 05 04:00	0° Ω	
direct	7827 Jan 12 20:28	25° A 00'20			7829 Jul 29 10:04	0° M	
asc. node	7827 Jan 14 22:34	25° A 05'29			7829 Aug 22 21:15	0° Ω	
greatest brilliancy	7827 Jan 23 23:42	27° A 17'52	-4.8m		7829 Sep 16 15:28	0° M	
	7827 Jan 29 16:44	0° C			7829 Oct 11 20:05	0° A	
morning max el	7827 Mar 04 02:41	27° C 30'37	46°41'54	desc. node	7829 Oct 21 10:06	11° A 13'52	
	7827 Mar 06 13:36	0° \approx			7829 Nov 06 16:35	0° C	
	7827 Apr 03 02:25	0° H			7829 Dec 03 16:23	0° \approx	
	7827 Apr 28 18:15	0° Υ		evening max el	7829 Dec 24 19:03	21° \approx 46'38	46°18'28
desc. node	7827 May 06 16:06	9° Υ 28'12			7830 Jan 02 12:04	0° H	
	7827 May 23 15:25	0° B		greatest brilliancy	7830 Feb 02 16:32	21° H 25'36	-4.8m
	7827 Jun 17 04:12	0° Π		asc. node	7830 Feb 11 10:10	23° H 13'27	
	7827 Jul 11 13:56	0° C		retrograde	7830 Feb 12 13:04	23° H 14'57	
	7827 Aug 04 23:14	0° Ω		evening set	7830 Feb 27 10:25	18° H 52'52	
asc. node	7827 Aug 27 14:30	27° Ω 50'25		inferior conj	7830 Mar 05 04:47	15° H 29'07	5°17'41
	7827 Aug 29 08:38	0° M		minimum elong	7830 Mar 04 18:28	15° H 44'55	5°14'59
morning set	7827 Sep 05 13:45	8° M 52'34		min. Earth dist.	7830 Mar 05 01:55	15° H 33'31	0.26983 AU
	7827 Sep 22 17:37	0° Ω		morning rise	7830 Mar 10 02:21	12° H 33'42	
				direct	7830 Mar 25 20:30	7° H 40'24	
superior conj	7827 Oct 12 10:24	24° Ω 16'25	1°22'29	greatest brilliancy	7830 Apr 04 19:53	9° H 33'35	-4.9m
minimum elong	7827 Oct 12 05:22	24° Ω 00'54	1°22'28		7830 May 04 10:09	0° Υ	
max. Earth dist.	7827 Oct 12 01:53	23° Ω 50'10	1.73330 AU	morning max el	7830 May 15 09:07	10° Υ 33'22	46°57'44
	7827 Oct 17 01:54	0° M			7830 Jun 02 18:51	0° B	
	7827 Nov 10 09:56	0° A		desc. node	7830 Jun 03 04:09	0° B 25'32	
evening rise	7827 Nov 17 22:43	9° A 16'52			7830 Jun 29 05:53	0° Π	
	7827 Dec 04 18:25	0° C			7830 Jul 24 17:43	0° C	
desc. node	7827 Dec 17 07:42	15° C 26'52			7830 Aug 18 19:48	0° Ω	
	7827 Dec 29 03:37	0° \approx			7830 Sep 12 16:30	0° M	
	7828 Jan 22 13:24	0° H		asc. node	7830 Sep 24 02:40	13° M 51'38	
	7828 Feb 16 00:20	0° Υ			7830 Oct 07 08:44	0° Ω	
	7828 Mar 11 15:20	0° B			7830 Oct 31 20:43	0° M	
	7828 Apr 05 17:26	0° Π		morning set	7830 Nov 13 01:42	15° M 01'06	
asc. node	7828 Apr 08 07:06	3° Π 01'07			7830 Nov 25 05:09	0° A	
	7828 May 01 21:42	0° C		max. Earth dist.	7830 Dec 17 20:14	27° A 59'38	1.72718 AU
evening max el	7828 May 21 11:08	20° C 43'38	46°42'48		7830 Dec 19 11:05	0° C	
	7828 May 31 01:31	0° Ω					
greatest brilliancy	7828 Jun 29 19:15	20° Ω 56'11	-4.8m	superior conj	7830 Dec 19 23:36	0° C 38'47	0°55'20
retrograde	7828 Jul 10 16:05	23° Ω 08'02		minimum elong	7830 Dec 20 09:20	1° C 08'59	0°55'05
evening set	7828 Jul 25 13:45	18° Ω 47'29			7831 Jan 12 15:14	0° \approx	
desc. node	7828 Jul 29 01:31	16° Ω 46'08		desc. node	7831 Jan 13 19:36	1° \approx 28'07	
inferior conj	7828 Jul 31 21:39	15° Ω 00'56	-0°42'17	evening rise	7831 Jan 27 14:34	18° \approx 37'22	
minimum elong	7828 Jul 31 20:03	15° Ω 03'26	0°41'53		7831 Feb 05 17:50	0° H	
min. Earth dist.	7828 Jul 31 09:49	15° Ω 19'21	0.28040 AU		7831 Mar 01 19:07	0° Υ	
morning rise	7828 Aug 07 02:53	11° Ω 18'50			7831 Mar 25 20:23	0° B	

	7831 Apr 19 00:20	0°♄		7833 Aug 02 06:21	0°♄	
asc. node	7831 May 06 18:52	21°♄51'33		7833 Aug 30 06:34	0°♄	
	7831 May 13 11:05	0°♄		7833 Sep 25 15:05	0°♄	
	7831 Jun 07 10:42	0°♄		7833 Oct 21 04:14	0°♄	
	7831 Jul 03 10:17	0°♄	asc. node	7833 Oct 21 14:54	0°♄31'42	
	7831 Jul 31 16:42	0°♄		7833 Nov 15 04:26	0°♄	
evening max el	7831 Aug 01 09:04	0°♄40'07 45°56'02		7833 Dec 09 19:14	0°♄	
desc. node	7831 Aug 26 13:06	22°♄06'56		7834 Jan 03 03:29	0°♄	
greatest brilliancy	7831 Sep 08 20:54	29°♄17'32 -4.7m	morning set	7834 Jan 21 23:12	23°♄21'17	
	7831 Sep 10 23:01	0°♄		7834 Jan 27 07:21	0°♄	
retrograde	7831 Sep 19 14:48	1°♄22'42	desc. node	7834 Feb 10 07:29	17°♄28'00	
	7831 Sep 27 21:57	30°♄		7834 Feb 20 08:02	0°♄	
evening set	7831 Oct 07 04:33	25°♄31'00	max. Earth dist.	7834 Feb 27 23:43	9°♄35'03 1.71512 AU	
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asc. node	7831 Dec 17 12:53	12°♄08'34		7834 May 27 01:43	0°♄	
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	7832 Jan 31 02:56	0°♄		7834 Jul 14 22:33	0°♄	
	7832 Feb 25 12:47	0°♄		7834 Aug 09 01:44	0°♄	
	7832 Mar 21 05:26	0°♄		7834 Sep 04 02:40	0°♄	
desc. node	7832 Apr 07 05:54	20°♄58'02	desc. node	7834 Sep 23 00:33	20°♄40'22	
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	7832 Jun 01 15:59	0°♄		7834 Nov 05 08:01	0°♄	
morning set	7832 Jun 23 17:22	27°♄31'11	greatest brilliancy	7834 Nov 19 15:14	7°♄19'52 -4.7m	
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asc. node	7832 Jul 29 04:23	11°♄34'56	inferior conj	7834 Dec 20 05:25	0°♄55'42 -5°39'14	
			minimum elong	7834 Dec 20 15:24	0°♄40'08 5°36'48	
superior conj	7832 Aug 01 07:02	15°♄26'06 0°07'33	min. Earth dist.	7834 Dec 21 02:49	0°♄22'21 0.28243 AU	
minimum elong	7832 Aug 01 05:19	15°♄20'50 0°07'22		7834 Dec 21 17:12	30°♄	
behind sun begin	7832 Jul 31 07:59	14°♄14'43	morning rise	7834 Dec 25 21:35	27°♄29'59	
behind sun end	7832 Aug 02 02:40	16°♄26'56	direct	7835 Jan 10 11:27	22°♄45'26	
max. Earth dist.	7832 Aug 03 21:39	18°♄40'02 1.72734 AU	asc. node	7835 Jan 14 00:26	23°♄00'05	
	7832 Aug 13 01:28	0°♄	greatest brilliancy	7835 Jan 21 16:12	25°♄03'57 -4.8m	
	7832 Sep 06 08:51	0°♄		7835 Jan 31 03:46	0°♄	
evening rise	7832 Sep 07 13:19	1°♄27'42	morning max el	7835 Mar 01 16:58	25°♄11'09 46°40'29	
	7832 Sep 30 18:38	0°♄		7835 Mar 06 10:07	0°♄	
	7832 Oct 25 07:49	0°♄		7835 Apr 02 17:45	0°♄	
desc. node	7832 Nov 17 21:54	28°♄36'30		7835 Apr 28 07:34	0°♄	
	7832 Nov 19 01:34	0°♄	desc. node	7835 May 05 18:07	8°♄55'25	
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	7833 Mar 02 13:29	0°♄		7835 Aug 04 10:03	0°♄	
evening max el	7833 Mar 07 18:31	5°♄20'25 46°59'05	asc. node	7835 Aug 26 16:27	27°♄23'51	
asc. node	7833 Mar 10 21:41	8°♄27'54		7835 Aug 28 19:12	0°♄	
	7833 Apr 05 03:30	0°♄	morning set	7835 Sep 03 06:37	6°♄44'26	
greatest brilliancy	7833 Apr 17 09:24	6°♄26'48 -4.9m		7835 Sep 22 04:02	0°♄	
retrograde	7833 Apr 27 07:17	8°♄18'02				
evening set	7833 May 15 01:44	2°♄13'50	superior conj	7835 Oct 10 04:21	22°♄11'48 1°21'32	
inferior conj	7833 May 18 00:20	0°♄25'40 8°36'46	minimum elong	7835 Oct 09 22:44	21°♄54'31 1°21'30	
minimum elong	7833 May 18 07:38	0°♄14'23 8°35'52	max. Earth dist.	7835 Oct 09 20:34	21°♄47'50 1.73335 AU	
min. Earth dist.	7833 May 17 23:26	0°♄27'03 0.27227 AU		7835 Oct 16 12:18	0°♄	
	7833 May 18 16:57	30°♄		7835 Nov 09 20:26	0°♄	
morning rise	7833 May 21 13:39	28°♄15'58	evening rise	7835 Nov 15 15:44	7°♄09'02	
direct	7833 Jun 07 17:26	22°♄37'47		7835 Dec 04 05:06	0°♄	
greatest brilliancy	7833 Jun 17 07:08	24°♄21'06 -4.9m	desc. node	7835 Dec 16 09:37	14°♄59'37	
	7833 Jun 28 14:10	0°♄		7835 Dec 28 14:34	0°♄	
desc. node	7833 Jun 30 15:47	1°♄21'03		7836 Jan 22 00:43	0°♄	
morning max el	7833 Jul 27 12:32	24°♄16'09 46°19'25		7836 Feb 15 12:10	0°♄	

	7836 Mar 11 03:59	0°♄			7838 Oct 31 07:20	0°♍	
	7836 Apr 05 07:30	0°♊		morning set	7838 Nov 10 19:05	12°♍54'22	
asc. node	7836 Apr 07 09:11	2°♊25'29			7838 Nov 24 15:40	0°♊	
	7836 May 01 14:49	0°♄		max. Earth dist.	7838 Dec 15 13:49	25°♊52'51	1.72753 AU
evening max el	7836 May 19 01:04	18°♄23'23	46°44'18				
	7836 May 31 04:49	0°♈		superior conj	7838 Dec 17 15:34	28°♊26'55	0°57'54
greatest brilliancy	7836 Jun 27 11:04	18°♈40'43	-4.8m	minimum elong	7838 Dec 18 01:24	28°♊57'20	0°57'40
retrograde	7836 Jul 08 07:33	20°♈52'39			7838 Dec 18 21:37	0°♄	
evening set	7836 Jul 23 05:12	16°♈31'19			7839 Jan 12 01:53	0°♌	
desc. node	7836 Jul 28 03:25	13°♈37'19		desc. node	7839 Jan 12 21:30	1°♌00'55	
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minimum elong	7836 Jul 29 11:44	12°♈47'14	0°20'25		7839 Mar 01 06:10	0°♍	
morning rise	7836 Aug 04 18:48	9°♈02'53			7839 Mar 25 07:41	0°♄	
direct	7836 Aug 19 14:12	4°♈47'05			7839 Apr 18 11:59	0°♊	
greatest brilliancy	7836 Aug 29 10:16	6°♈32'07	-4.8m	asc. node	7839 May 05 20:50	21°♊20'50	
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morning max el	7836 Oct 07 08:25	4°♍34'09	45°43'45		7839 Jun 06 23:58	0°♈	
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asc. node	7836 Nov 18 03:02	18°♊45'55		evening max el	7839 Jul 30 01:13	28°♍28'59	45°57'19
	7836 Nov 27 23:09	0°♍			7839 Jul 31 14:37	0°♊	
	7836 Dec 23 11:41	0°♊		desc. node	7839 Aug 25 15:10	20°♊53'38	
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	7837 Feb 10 17:00	0°♌		retrograde	7839 Sep 17 06:56	29°♊13'09	
	7837 Mar 06 20:26	0°♈		evening set	7839 Oct 04 17:58	23°♊26'01	
desc. node	7837 Mar 09 19:43	3°♈42'25		inferior conj	7839 Oct 08 19:36	20°♊54'52	-8°07'15
	7837 Mar 30 19:49	0°♍		minimum elong	7839 Oct 08 13:13	21°♊04'55	8°06'35
morning set	7837 Apr 07 01:13	9°♍03'59		min. Earth dist.	7839 Oct 08 12:15	21°♊06'25	0.29140 AU
	7837 Apr 23 16:59	0°♄		morning rise	7839 Oct 12 08:36	18°♊43'06	
				direct	7839 Oct 30 09:28	12°♊38'31	
superior conj	7837 May 17 16:35	0°♊08'13	-1°22'28	greatest brilliancy	7839 Nov 09 13:33	14°♊31'26	-4.7m
minimum elong	7837 May 18 00:10	0°♊32'03	1°22'27		7839 Dec 04 02:09	0°♍	
	7837 May 17 13:58	0°♊		asc. node	7839 Dec 16 14:43	11°♍18'34	
max. Earth dist.	7837 May 20 01:29	3°♊06'49	1.71422 AU	morning max el	7839 Dec 18 12:34	13°♍09'29	45°54'27
	7837 Jun 10 12:43	0°♄			7840 Jan 03 22:18	0°♊	
evening rise	7837 Jun 26 18:59	20°♄16'48			7840 Jan 30 16:57	0°♄	
asc. node	7837 Jun 30 18:24	25°♄13'22			7840 Feb 25 01:23	0°♌	
	7837 Jul 04 14:42	0°♈			7840 Mar 20 17:20	0°♈	
	7837 Jul 28 20:52	0°♍		desc. node	7840 Apr 06 07:56	20°♈28'23	
	7837 Aug 22 08:16	0°♊			7840 Apr 14 00:21	0°♍	
	7837 Sep 16 02:56	0°♍			7840 May 08 02:34	0°♄	
	7837 Oct 11 08:23	0°♊			7840 Jun 01 03:00	0°♊	
desc. node	7837 Oct 20 12:12	10°♊42'53		morning set	7840 Jun 21 07:04	25°♊10'32	
	7837 Nov 06 06:27	0°♄			7840 Jun 25 03:59	0°♄	
	7837 Dec 03 09:40	0°♌			7840 Jul 19 06:54	0°♈	
evening max el	7837 Dec 22 09:52	19°♌29'52	46°16'42	asc. node	7840 Jul 28 06:19	11°♈07'51	
	7838 Jan 02 16:28	0°♈					
greatest brilliancy	7838 Jan 31 04:51	19°♈00'50	-4.8m	superior conj	7840 Jul 29 22:12	13°♈11'24	0°04'03
retrograde	7838 Feb 10 02:21	20°♈50'26		minimum elong	7840 Jul 29 21:18	13°♈08'36	0°03'55
asc. node	7838 Feb 10 12:12	20°♈50'14		behind sun begin	7840 Jul 28 22:03	11°♈56'34	
evening set	7838 Feb 24 20:50	16°♈31'46		behind sun end	7840 Jul 30 20:33	14°♈20'38	
inferior conj	7838 Mar 02 17:37	13°♈04'25	4°57'33	max. Earth dist.	7840 Aug 01 16:44	16°♈37'26	1.72692 AU
minimum elong	7838 Mar 02 07:42	13°♈19'37	4°54'52		7840 Aug 12 12:07	0°♍	
min. Earth dist.	7838 Mar 02 15:06	13°♈08'17	0.26993 AU	evening rise	7840 Sep 05 06:32	29°♍19'56	
morning rise	7838 Mar 07 18:28	10°♈04'30			7840 Sep 05 19:33	0°♊	
direct	7838 Mar 23 10:16	5°♈15'35			7840 Sep 30 05:29	0°♍	
greatest brilliancy	7838 Apr 02 09:22	7°♈08'52	-4.9m		7840 Oct 24 18:55	0°♊	
	7838 May 04 13:36	0°♍		desc. node	7840 Nov 16 23:49	28°♊07'30	
morning max el	7838 May 12 23:21	8°♍11'49	46°58'09		7840 Nov 18 13:08	0°♄	
desc. node	7838 Jun 02 06:07	29°♍43'03			7840 Dec 13 13:13	0°♌	
	7838 Jun 02 12:15	0°♄			7841 Jan 07 21:20	0°♈	
	7838 Jun 28 20:08	0°♊			7841 Feb 02 20:30	0°♍	
	7838 Jul 24 06:26	0°♄			7841 Mar 02 10:44	0°♄	
	7838 Aug 18 07:36	0°♈		evening max el	7841 Mar 05 07:17	2°♄54'22	46°58'13
	7838 Sep 12 03:42	0°♍		asc. node	7841 Mar 09 23:43	7°♄33'10	
asc. node	7838 Sep 23 04:43	13°♍24'19			7841 Apr 06 13:01	0°♊	
	7838 Oct 06 19:34	0°♊		greatest brilliancy	7841 Apr 14 23:45	4°♊02'46	-4.9m






























































































































retrograde	7841 Apr 24 19:56	5° Π 52'41		superior conj	7843 Oct 07 21:59	20° Ω 05'10	1°20'27
	7841 May 12 07:32	30° \mathbb{R}		minimum elong	7843 Oct 07 15:49	19° Ω 46'08	1°20'23
evening set	7841 May 12 17:35	29° \mathbb{R} 44'55		max. Earth dist.	7843 Oct 07 16:40	19° Ω 48'45	1.73336 AU
inferior conj	7841 May 15 13:24	28° \mathbb{R} 00'55	8°44'44		7843 Oct 15 23:02	0° \mathbb{M}	
minimum elong	7841 May 15 19:56	27° \mathbb{R} 50'49	8°43'59		7843 Nov 09 07:15	0° \mathbb{A}	
min. Earth dist.	7841 May 15 12:34	28° \mathbb{R} 02'12	0.27213 AU	evening rise	7843 Nov 13 08:39	4° \mathbb{A} 59'57	
morning rise	7841 May 18 22:22	25° \mathbb{R} 57'27			7843 Dec 03 16:07	0° \mathbb{Z}	
direct	7841 Jun 05 05:50	20° \mathbb{R} 13'11		desc. node	7843 Dec 15 11:32	14° \mathbb{Z} 31'16	
greatest brilliancy	7841 Jun 14 20:05	21° \mathbb{R} 56'34	-4.9m		7843 Dec 28 01:54	0° \approx	
desc. node	7841 Jun 29 17:42	0° Π 00'26			7844 Jan 21 12:26	0° \mathbb{H}	
	7841 Jun 29 17:27	0° Π			7844 Feb 15 00:24	0° \mathbb{Y}	
morning max el	7841 Jul 25 00:57	21° Π 52'04	46°21'08		7844 Mar 10 17:03	0° \mathbb{B}	
	7841 Aug 02 03:00	0° \mathbb{E}			7844 Apr 04 22:01	0° Π	
	7841 Aug 29 21:56	0° Ω		asc. node	7844 Apr 06 11:10	1° Π 48'31	
	7841 Sep 25 04:17	0° \mathbb{P}			7844 May 01 08:34	0° \mathbb{E}	
asc. node	7841 Oct 20 16:51	0° Ω 01'39		evening max el	7844 May 16 15:50	16° \mathbb{E} 04'36	46°45'47
	7841 Oct 20 16:17	0° Ω			7844 May 31 10:13	0° Ω	
	7841 Nov 14 15:52	0° \mathbb{M}		greatest brilliancy	7844 Jun 25 02:28	16° Ω 24'02	-4.8m
	7841 Dec 09 06:19	0° \mathbb{A}		retrograde	7844 Jul 05 23:25	18° Ω 36'20	
	7842 Jan 02 14:24	0° \mathbb{Z}		evening set	7844 Jul 20 20:53	14° Ω 14'02	
morning set	7842 Jan 19 13:30	21° \mathbb{Z} 02'42		min. Earth dist.	7844 Jul 26 16:35	10° Ω 46'45	0.27957 AU
	7842 Jan 26 18:12	0° \approx		inferior conj	7844 Jul 27 03:23	10° Ω 30'01	0°01'19
desc. node	7842 Feb 09 09:34	17° \approx 00'39		minimum elong	7844 Jul 27 03:26	10° Ω 29'57	0°01'11
	7842 Feb 19 18:54	0° \mathbb{H}		transit middle	7844 Jul 27 03:26	10° Ω 29'57	0°01'11
max. Earth dist.	7842 Feb 25 10:04	7° \mathbb{H} 03'08	1.71548 AU	transit begin	7844 Jul 26 23:23	10° Ω 36'14	
				transit end	7844 Jul 27 07:29	10° Ω 23'40	
superior conj	7842 Feb 28 06:53	10° \mathbb{H} 38'39	-0°43'54	desc. node	7844 Jul 27 05:30	10° Ω 26'45	
minimum elong	7842 Feb 27 20:57	10° \mathbb{H} 07'34	0°43'25	morning rise	7844 Aug 02 10:35	6° Ω 46'10	
	7842 Mar 15 17:14	0° \mathbb{Y}		direct	7844 Aug 17 04:50	2° Ω 31'31	
	7842 Apr 08 14:18	0° \mathbb{B}		greatest brilliancy	7844 Aug 27 00:42	4° Ω 16'53	-4.8m
evening rise	7842 Apr 09 14:54	1° \mathbb{B} 17'14			7844 Oct 02 11:47	0° \mathbb{P}	
	7842 May 02 12:04	0° Π		morning max el	7844 Oct 05 00:26	2° \mathbb{P} 23'18	45°44'17
	7842 May 26 12:58	0° \mathbb{E}			7844 Oct 31 20:26	0° Ω	
asc. node	7842 Jun 02 08:30	8° \mathbb{E} 27'21		asc. node	7844 Nov 17 04:55	18° Ω 10'37	
	7842 Jun 19 19:32	0° Ω			7844 Nov 27 12:43	0° \mathbb{M}	
	7842 Jul 14 10:34	0° \mathbb{P}			7844 Dec 23 00:02	0° \mathbb{A}	
	7842 Aug 08 14:39	0° Ω			7845 Jan 16 19:05	0° \mathbb{Z}	
	7842 Sep 03 17:29	0° \mathbb{M}			7845 Feb 10 04:25	0° \approx	
desc. node	7842 Sep 22 02:37	19° \mathbb{M} 59'31			7845 Mar 06 07:40	0° \mathbb{H}	
	7842 Oct 01 20:10	0° \mathbb{A}		desc. node	7845 Mar 08 21:41	3° \mathbb{H} 13'32	
evening max el	7842 Oct 08 21:54	6° \mathbb{A} 55'48	45°40'51		7845 Mar 30 06:56	0° \mathbb{Y}	
	7842 Nov 06 11:13	0° \mathbb{Z}		morning set	7845 Apr 04 11:38	6° \mathbb{Y} 31'11	
greatest brilliancy	7842 Nov 17 05:27	5° \mathbb{Z} 05'23	-4.7m		7845 Apr 23 04:02	0° \mathbb{B}	
retrograde	7842 Nov 26 15:09	6° \mathbb{Z} 42'11					
evening set	7842 Dec 13 02:22	1° \mathbb{Z} 33'27		superior conj	7845 May 15 04:14	27° \mathbb{Z} 39'37	-1°23'42
	7842 Dec 15 17:16	30° \mathbb{R} \mathbb{A}		minimum elong	7845 May 15 11:00	28° \mathbb{B} 00'52	1°23'43
inferior conj	7842 Dec 17 20:30	28° \mathbb{A} 40'45	-5°54'55		7845 May 17 00:57	0° Π	
minimum elong	7842 Dec 18 06:36	28° \mathbb{A} 25'02	5°52'32	max. Earth dist.	7845 May 17 11:46	0° Π 33'57	1.71389 AU
min. Earth dist.	7842 Dec 18 18:01	28° \mathbb{A} 07'15	0.28305 AU		7845 Jun 09 23:40	0° \mathbb{E}	
morning rise	7842 Dec 23 10:13	25° \mathbb{A} 18'35		evening rise	7845 Jun 24 08:24	17° \mathbb{E} 55'07	
direct	7843 Jan 08 02:42	20° \mathbb{A} 29'26		asc. node	7845 Jun 29 20:24	24° \mathbb{E} 45'36	
asc. node	7843 Jan 13 02:29	20° \mathbb{A} 58'20			7845 Jul 04 01:40	0° Ω	
greatest brilliancy	7843 Jan 19 08:27	22° \mathbb{A} 48'56	-4.8m		7845 Jul 28 07:56	0° \mathbb{P}	
	7843 Feb 01 05:02	0° \mathbb{Z}			7845 Aug 21 19:37	0° Ω	
morning max el	7843 Feb 27 08:16	22° \mathbb{Z} 53'32	46°39'15		7845 Sep 15 14:46	0° \mathbb{M}	
	7843 Mar 06 06:18	0° \approx			7845 Oct 10 21:07	0° \mathbb{A}	
	7843 Apr 02 09:07	0° \mathbb{H}		desc. node	7845 Oct 19 14:04	10° \mathbb{A} 10'00	
	7843 Apr 27 21:00	0° \mathbb{Y}			7845 Nov 05 20:52	0° \mathbb{Z}	
desc. node	7843 May 04 20:04	8° \mathbb{Y} 21'51			7845 Dec 03 03:45	0° \approx	
	7843 May 22 16:05	0° \mathbb{B}		evening max el	7845 Dec 20 00:48	17° \approx 12'32	46°14'58
	7843 Jun 16 03:36	0° Π			7846 Jan 02 23:23	0° \mathbb{H}	
	7843 Jul 10 12:29	0° \mathbb{E}		greatest brilliancy	7846 Jan 28 17:46	16° \mathbb{H} 36'06	-4.8m
	7843 Aug 03 21:11	0° Ω		retrograde	7846 Feb 07 15:20	18° \mathbb{H} 25'05	
asc. node	7843 Aug 25 18:32	26° Ω 56'40		asc. node	7846 Feb 09 14:14	18° \mathbb{H} 20'28	
	7843 Aug 28 06:06	0° \mathbb{P}		evening set	7846 Feb 22 07:37	14° \mathbb{H} 09'46	
morning set	7843 Aug 31 23:13	4° \mathbb{P} 34'17		inferior conj	7846 Feb 28 06:32	10° \mathbb{H} 39'06	4°36'53
	7843 Sep 21 14:48	0° Ω		minimum elong	7846 Feb 27 21:06	10° \mathbb{H} 53'35	4°34'16

min. Earth dist.	7846 Feb 28 04:41	10° H 41'55	0.27004 AU	evening rise	7848 Sep 02 23:56	27° M 12'25	
morning rise	7846 Mar 05 10:29	7° H 34'37			7848 Sep 05 06:21	0° L	
direct	7846 Mar 20 23:56	2° H 50'06			7848 Sep 29 16:24	0° M	
greatest brilliancy	7846 Mar 30 23:16	4° H 43'32	-4.9m		7848 Oct 24 06:08	0° J	
	7846 May 04 15:56	0° Y		desc. node	7848 Nov 16 01:46	27° J 38'12	
morning max el	7846 May 10 12:58	5° Y 47'38	46°58'36		7848 Nov 18 00:50	0° Z	
desc. node	7846 Jun 01 07:59	28° Y 59'48			7848 Dec 13 01:44	0° \approx	
	7846 Jun 02 05:38	0° B			7849 Jan 07 11:09	0° H	
	7846 Jun 28 10:31	0° II			7849 Feb 02 12:43	0° Y	
	7846 Jul 23 19:18	0° G			7849 Mar 02 08:59	0° B	
	7846 Aug 17 19:34	0° O		evening max el	7849 Mar 02 19:33	0° B 26'40	46°57'27
	7846 Sep 11 15:06	0° M		asc. node	7849 Mar 09 01:41	6° B 36'37	
asc. node	7846 Sep 22 06:37	12° M 55'53			7849 Apr 08 15:47	0° II	
	7846 Oct 06 06:38	0° L		greatest brilliancy	7849 Apr 12 13:54	1° II 38'03	-4.9m
	7846 Oct 30 18:14	0° M		retrograde	7849 Apr 22 08:42	3° II 27'11	
morning set	7846 Nov 08 12:27	10° M 46'41			7849 May 05 11:45	30° R B	
	7846 Nov 24 02:30	0° J		evening set	7849 May 10 09:04	27° B 16'01	
max. Earth dist.	7846 Dec 13 05:22	23° J 38'50	1.72788 AU	inferior conj	7849 May 13 02:27	25° B 35'48	8°51'37
				minimum elong	7849 May 13 08:10	25° B 26'58	8°51'02
superior conj	7846 Dec 15 07:37	26° J 14'25	1°00'23	min. Earth dist.	7849 May 13 01:42	25° B 36'59	0.27201 AU
minimum elong	7846 Dec 15 17:27	26° J 44'51	1°00'09	morning rise	7849 May 16 07:20	23° B 38'24	
	7846 Dec 18 08:28	0° Z		direct	7849 Jun 02 17:57	17° B 47'58	
desc. node	7847 Jan 11 23:33	0° \approx 33'18		greatest brilliancy	7849 Jun 12 09:14	19° B 31'57	-4.9m
	7847 Jan 11 12:49	0° \approx		desc. node	7849 Jun 28 19:50	28° B 42'25	
evening rise	7847 Jan 22 18:28	13° \approx 57'45			7849 Jun 30 13:35	0° II	
	7847 Feb 04 15:45	0° H		morning max el	7849 Jul 22 14:10	19° II 29'31	46°22'56
	7847 Feb 28 17:29	0° Y			7849 Aug 01 23:05	0° G	
	7847 Mar 24 19:18	0° B			7849 Aug 29 13:08	0° O	
	7847 Apr 17 23:58	0° II			7849 Sep 24 17:23	0° M	
asc. node	7847 May 04 22:43	20° II 48'51		asc. node	7849 Oct 19 18:47	29° M 31'44	
	7847 May 12 11:53	0° G			7849 Oct 20 04:16	0° L	
	7847 Jun 06 13:36	0° O			7849 Nov 14 03:12	0° M	
	7847 Jul 02 17:44	0° M			7849 Dec 08 17:19	0° J	
evening max el	7847 Jul 27 16:43	26° M 15'45	45°58'43		7850 Jan 02 01:16	0° Z	
	7847 Jul 31 13:36	0° L		morning set	7850 Jan 17 03:59	18° Z 44'43	
desc. node	7847 Aug 24 17:08	19° L 37'52			7850 Jan 26 05:03	0° \approx	
greatest brilliancy	7847 Sep 04 04:40	24° L 58'23	-4.7m	desc. node	7850 Feb 08 11:33	16° \approx 32'58	
retrograde	7847 Sep 14 22:57	27° L 03'55			7850 Feb 19 05:47	0° H	
evening set	7847 Oct 02 07:31	21° L 21'27		max. Earth dist.	7850 Feb 22 21:52	4° H 35'38	1.71589 AU
min. Earth dist.	7847 Oct 06 03:56	18° L 58'38	0.29123 AU				
inferior conj	7847 Oct 06 12:05	18° L 45'48	-8°00'23	superior conj	7850 Feb 25 18:42	8° H 11'12	-0°40'30
minimum elong	7847 Oct 06 05:08	18° L 56'45	7°59'36	minimum elong	7850 Feb 25 09:22	7° H 41'58	0°40'02
morning rise	7847 Oct 10 02:52	16° L 31'08			7850 Mar 15 04:10	0° Y	
direct	7847 Oct 28 01:37	10° L 29'58		evening rise	7850 Apr 07 01:46	28° Y 46'06	
greatest brilliancy	7847 Nov 07 04:49	12° L 21'32	-4.7m		7850 Apr 08 01:18	0° B	
	7847 Dec 04 07:29	0° M			7850 May 01 23:09	0° II	
asc. node	7847 Dec 15 16:46	10° M 29'23			7850 May 26 00:13	0° G	
morning max el	7847 Dec 16 02:58	10° M 54'11	45°53'11	asc. node	7850 Jun 01 10:33	7° G 58'41	
	7848 Jan 03 15:34	0° J			7850 Jun 19 07:04	0° O	
	7848 Jan 30 07:03	0° Z			7850 Jul 13 22:36	0° M	
	7848 Feb 24 14:08	0° \approx			7850 Aug 08 03:37	0° L	
	7848 Mar 20 05:23	0° H			7850 Sep 03 08:25	0° M	
desc. node	7848 Apr 05 09:50	19° H 57'54		desc. node	7850 Sep 21 04:33	19° M 18'07	
	7848 Apr 13 12:00	0° Y			7850 Oct 01 16:25	0° J	
	7848 May 07 13:57	0° B		evening max el	7850 Oct 06 12:43	4° J 42'55	45°40'43
	7848 May 31 14:10	0° II			7850 Nov 08 01:29	0° Z	
morning set	7848 Jun 18 20:38	22° II 48'49		greatest brilliancy	7850 Nov 14 19:10	2° Z 51'32	-4.7m
	7848 Jun 24 14:59	0° G		retrograde	7850 Nov 24 06:25	4° Z 29'32	
	7848 Jul 18 17:47	0° O			7850 Dec 09 12:55	30° R J	
asc. node	7848 Jul 27 08:24	10° O 40'39		evening set	7850 Dec 10 20:21	29° J 15'46	
				inferior conj	7850 Dec 15 11:46	26° J 26'59	-6°09'50
superior conj	7848 Jul 27 13:31	10° O 56'33	0°00'31	minimum elong	7850 Dec 15 21:55	26° J 11'11	6°07'31
minimum elong	7848 Jul 27 13:24	10° O 56'11	0°00'26	min. Earth dist.	7850 Dec 16 08:56	25° J 54'04	0.28366 AU
behind sun begin	7848 Jul 26 13:37	9° O 42'28		morning rise	7850 Dec 20 22:56	23° J 08'38	
behind sun end	7848 Jul 28 13:11	12° O 09'53		direct	7851 Jan 05 18:39	18° J 14'52	
max. Earth dist.	7848 Jul 30 09:35	14° O 27'25	1.72645 AU	asc. node	7851 Jan 12 04:31	19° J 02'14	
	7848 Aug 11 22:55	0° M		greatest brilliancy	7851 Jan 17 00:13	20° J 34'33	-4.8m

	7851 Feb 01 23:09	0°☾			7853 Oct 10 09:41	0°☿	
morning max el	7851 Feb 25 00:30	20°☾38'58 46°37'40		desc. node	7853 Oct 18 16:04	9°☿38'05	
	7851 Mar 06 01:44	0°☿			7853 Nov 05 11:09	0°☾	
	7851 Apr 02 00:12	0°☿			7853 Dec 02 21:56	0°☿	
	7851 Apr 27 10:17	0°☿		evening max el	7853 Dec 17 15:24	14°☿55'31 46°13'18	
desc. node	7851 May 03 22:01	7°☿48'36			7854 Jan 03 08:13	0°☿	
	7851 May 22 04:24	0°☿		greatest brilliancy	7854 Jan 26 07:25	14°☿13'56 -4.8m	
	7851 Jun 15 15:18	0°☿		retrograde	7854 Feb 05 03:58	16°☿01'42	
	7851 Jul 09 23:46	0°☿		asc. node	7854 Feb 08 16:07	15°☿46'52	
	7851 Aug 03 08:09	0°☿		evening set	7854 Feb 19 18:50	11°☿49'26	
asc. node	7851 Aug 24 20:23	26°☿29'13		inferior conj	7854 Feb 25 19:41	8°☿15'59 4°15'50	
	7851 Aug 27 16:51	0°☿		minimum elong	7854 Feb 25 10:46	8°☿29'40 4°13'20	
morning set	7851 Aug 29 15:39	2°☿24'03		min. Earth dist.	7854 Feb 25 18:50	8°☿17'17 0.27015 AU	
	7851 Sep 21 01:25	0°☿		morning rise	7854 Mar 03 02:32	5°☿07'02	
				direct	7854 Mar 18 13:18	0°☿26'46	
superior conj	7851 Oct 05 15:36	17°☿58'54 1°19'15		greatest brilliancy	7854 Mar 28 13:52	2°☿20'53 -4.9m	
minimum elong	7851 Oct 05 08:54	17°☿38'14 1°19'10			7854 May 04 16:20	0°☿	
max. Earth dist.	7851 Oct 05 13:53	17°☿53'35 1.73333 AU		morning max el	7854 May 08 01:40	3°☿22'27 46°58'46	
	7851 Oct 15 09:36	0°☿		desc. node	7854 May 31 10:07	28°☿18'59	
	7851 Nov 08 17:53	0°☿			7854 Jun 01 22:15	0°☿	
evening rise	7851 Nov 11 01:46	2°☿52'07			7854 Jun 28 00:25	0°☿	
	7851 Dec 03 02:56	0°☿			7854 Jul 23 07:49	0°☿	
desc. node	7851 Dec 14 13:38	14°☿04'12			7854 Aug 17 07:14	0°☿	
	7851 Dec 27 12:58	0°☿			7854 Sep 11 02:14	0°☿	
	7852 Jan 20 23:54	0°☿		asc. node	7854 Sep 21 08:34	12°☿28'30	
	7852 Feb 14 12:28	0°☿			7854 Oct 05 17:24	0°☿	
	7852 Mar 10 06:00	0°☿			7854 Oct 30 04:48	0°☿	
	7852 Apr 04 12:34	0°☿		morning set	7854 Nov 06 05:33	8°☿39'09	
asc. node	7852 Apr 05 13:03	1°☿11'18			7854 Nov 23 13:01	0°☿	
	7852 May 01 02:38	0°☿		max. Earth dist.	7854 Dec 10 20:19	21°☿24'01 1.72823 AU	
evening max el	7852 May 14 07:27	13°☿48'04 46°47'13					
	7852 May 31 17:49	0°☿		superior conj	7854 Dec 12 23:42	24°☿03'02 1°02'46	
greatest brilliancy	7852 Jun 22 17:52	14°☿07'19 -4.8m		minimum elong	7854 Dec 13 09:28	24°☿33'16 1°02'33	
retrograde	7852 Jul 03 15:07	16°☿19'31			7854 Dec 17 19:00	0°☿	
evening set	7852 Jul 18 12:35	11°☿56'20			7855 Jan 10 23:27	0°☿	
inferior conj	7852 Jul 24 18:01	8°☿13'40 0°23'21		desc. node	7855 Jan 11 01:31	0°☿06'24	
minimum elong	7852 Jul 24 18:55	8°☿12'18 0°22'58		evening rise	7855 Jan 20 08:35	11°☿39'11	
min. Earth dist.	7852 Jul 24 07:30	8°☿29'57 0.27914 AU			7855 Feb 04 02:31	0°☿	
desc. node	7852 Jul 26 07:28	7°☿15'53			7855 Feb 28 04:27	0°☿	
morning rise	7852 Jul 31 01:55	4°☿29'17			7855 Mar 24 06:30	0°☿	
direct	7852 Aug 14 19:35	0°☿15'52			7855 Apr 17 11:32	0°☿	
greatest brilliancy	7852 Aug 24 14:24	2°☿00'52 -4.8m		asc. node	7855 May 04 00:49	20°☿18'43	
	7852 Oct 02 10:59	0°☿			7855 May 12 00:04	0°☿	
morning max el	7852 Oct 02 16:08	0°☿12'16 45°44'50			7855 Jun 06 02:58	0°☿	
	7852 Oct 31 12:09	0°☿			7855 Jul 02 09:39	0°☿	
asc. node	7852 Nov 16 06:55	17°☿36'35		evening max el	7855 Jul 25 07:26	24°☿01'06 46°00'01	
	7852 Nov 27 01:53	0°☿			7855 Jul 31 13:24	0°☿	
	7852 Dec 22 12:01	0°☿		desc. node	7855 Aug 23 19:06	18°☿20'02	
	7853 Jan 16 06:28	0°☿		greatest brilliancy	7855 Sep 01 20:40	22°☿48'53 -4.7m	
	7853 Feb 09 15:29	0°☿		retrograde	7855 Sep 12 14:43	24°☿54'46	
	7853 Mar 05 18:33	0°☿		evening set	7855 Sep 29 20:40	19°☿16'59	
desc. node	7853 Mar 07 23:35	2°☿45'30		inferior conj	7855 Oct 04 04:21	16°☿36'50 -7°52'41	
	7853 Mar 29 17:44	0°☿		minimum elong	7855 Oct 03 20:51	16°☿48'38 7°51'46	
morning set	7853 Apr 01 22:10	3°☿59'46		min. Earth dist.	7855 Oct 03 19:39	16°☿50'32 0.29106 AU	
	7853 Apr 22 14:48	0°☿		morning rise	7855 Oct 07 21:08	14°☿19'02	
				direct	7855 Oct 25 17:07	8°☿21'19	
superior conj	7853 May 12 15:35	25°☿10'43 -1°24'47		greatest brilliancy	7855 Nov 04 20:31	10°☿12'27 -4.7m	
minimum elong	7853 May 12 21:27	25°☿29'09 1°24'50			7855 Dec 04 10:40	0°☿	
max. Earth dist.	7853 May 14 21:44	28°☿00'46 1.71363 AU		morning max el	7855 Dec 13 17:09	8°☿39'07 45°52'04	
	7853 May 16 11:42	0°☿		asc. node	7855 Dec 14 18:50	9°☿41'48	
	7853 Jun 09 10:24	0°☿			7856 Jan 03 08:10	0°☿	
evening rise	7853 Jun 21 21:07	15°☿31'50			7856 Jan 29 20:42	0°☿	
asc. node	7853 Jun 28 22:24	24°☿18'26			7856 Feb 24 02:30	0°☿	
	7853 Jul 03 12:25	0°☿			7856 Mar 19 17:04	0°☿	
	7853 Jul 27 18:48	0°☿		desc. node	7856 Apr 04 11:49	19°☿28'46	
	7853 Aug 21 06:45	0°☿			7856 Apr 12 23:16	0°☿	
	7853 Sep 15 02:25	0°☿			7856 May 07 00:55	0°☿	

	7856 May 31 00:55	0°♄			7858 Nov 10 14:32	0°♄	
morning set	7856 Jun 16 10:21	20°♄28'40		greatest brilliancy	7858 Nov 12 08:44	0°♄37'41	-4.7m
	7856 Jun 24 01:35	0°♄		retrograde	7858 Nov 21 21:42	2°♄16'43	
	7856 Jul 18 04:18	0°♄			7858 Dec 02 14:55	30°♄58'13	
				evening set	7858 Dec 08 14:20	26°♄58'13	
superior conj	7856 Jul 25 04:46	8°♄42'33 -0°03'01		inferior conj	7858 Dec 13 02:59	24°♄13'09 -6°24'04	
minimum elong	7856 Jul 25 05:28	8°♄44'44 0°03'05		minimum elong	7858 Dec 13 13:07	23°♄57'22 6°21'51	
behind sun begin	7856 Jul 24 05:52	7°♄31'34		min. Earth dist.	7858 Dec 13 23:34	23°♄41'08 0.28427 AU	
behind sun end	7856 Jul 26 05:04	9°♄57'54		morning rise	7858 Dec 18 11:27	20°♄58'45	
asc. node	7856 Jul 26 10:16	10°♄13'59		direct	7859 Jan 03 10:57	16°♄00'26	
max. Earth dist.	7856 Jul 28 00:48	12°♄13'23 1.72605 AU		asc. node	7859 Jan 11 06:22	17°♄10'11	
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evening rise	7856 Aug 31 17:09	25°♄05'08			7859 Feb 02 12:39	0°♄	
	7856 Sep 04 16:53	0°♄		morning max el	7859 Feb 22 16:40	18°♄24'21 46°36'04	
	7856 Sep 29 03:05	0°♄			7859 Mar 05 20:36	0°♄	
	7856 Oct 23 17:07	0°♄			7859 Apr 01 15:03	0°♄	
desc. node	7856 Nov 15 03:51	27°♄09'56			7859 Apr 26 23:26	0°♄	
	7856 Nov 17 12:21	0°♄		desc. node	7859 May 03 00:04	7°♄15'53	
	7856 Dec 12 14:05	0°♄			7859 May 21 16:37	0°♄	
	7857 Jan 07 00:51	0°♄			7859 Jun 15 02:56	0°♄	
	7857 Feb 02 04:57	0°♄			7859 Jul 09 10:59	0°♄	
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asc. node	7857 Mar 08 03:41	5°♄39'43		morning set	7859 Aug 27 08:32	0°♄15'27	
greatest brilliancy	7857 Apr 10 03:38	29°♄13'49 -4.9m			7859 Aug 27 03:31	0°♄	
	7857 Apr 12 13:40	0°♄			7859 Sep 20 11:57	0°♄	
retrograde	7857 Apr 19 21:58	1°♄02'58					
	7857 Apr 27 01:19	30°♄		superior conj	7859 Oct 03 09:33	15°♄53'47 1°17'58	
evening set	7857 May 08 00:15	24°♄48'43		minimum elong	7859 Oct 03 02:23	15°♄31'42 1°17'51	
inferior conj	7857 May 10 15:34	23°♄11'51 8°57'28		max. Earth dist.	7859 Oct 03 12:29	16°♄02'49 1.73332 AU	
minimum elong	7857 May 10 20:26	23°♄04'21 8°57'03			7859 Oct 14 20:09	0°♄	
min. Earth dist.	7857 May 10 14:36	23°♄13'20 0.27185 AU			7859 Nov 08 04:33	0°♄	
morning rise	7857 May 13 16:38	21°♄20'19		evening rise	7859 Nov 08 19:07	0°♄44'51	
direct	7857 May 31 06:25	15°♄23'54			7859 Dec 02 13:49	0°♄	
greatest brilliancy	7857 Jun 09 22:08	17°♄08'27 -4.9m		desc. node	7859 Dec 13 15:34	13°♄36'19	
desc. node	7857 Jun 27 21:45	27°♄27'45			7859 Dec 27 00:10	0°♄	
	7857 Jul 01 03:57	0°♄			7860 Jan 20 11:31	0°♄	
morning max el	7857 Jul 20 04:16	17°♄10'25 46°24'40			7860 Feb 14 00:40	0°♄	
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minimum elong	7858 Feb 22 21:47	5°♄16'54 0°36'34		direct	7860 Aug 12 10:24	28°♄00'20	
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evening rise	7858 Apr 04 12:42	26°♄15'42			7860 Aug 22 21:35	0°♄	
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	7858 May 01 10:05	0°♄			7860 Oct 02 09:12	0°♄	
	7858 May 25 11:19	0°♄			7860 Oct 31 03:38	0°♄	
asc. node	7858 May 31 12:32	7°♄30'23		asc. node	7860 Nov 15 08:58	17°♄02'50	
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desc. node	7858 Sep 20 06:33	18°♄36'49			7861 Mar 05 05:40	0°♄	
	7858 Oct 01 13:15	0°♄		desc. node	7861 Mar 07 01:39	2°♄17'16	
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


































































































































morning set	7861 Mar 30 08:30	1°Υ26'59	inferior conj	7863 Oct 01 20:41	14°♄26'57	-7°44'25
	7861 Apr 22 01:48	0°♄	minimum elong	7863 Oct 01 12:41	14°♄39'33	7°43'21
			min. Earth dist.	7863 Oct 01 11:20	14°♄41'41	0.29084 AU
superior conj	7861 May 10 02:47	22°♄40'43 -1°25'42	morning rise	7863 Oct 05 15:36	12°♄06'03	
minimum elong	7861 May 10 07:43	22°♄56'12 1°25'46	direct	7863 Oct 23 08:40	6°♄11'40	
max. Earth dist.	7861 May 12 06:47	25°♄24'02 1.71335 AU	greatest brilliancy	7863 Nov 02 12:29	8°♄02'56	-4.7m
	7861 May 15 22:40	0°♄		7863 Dec 04 12:39	0°♄	
	7861 Jun 08 21:22	0°♄	morning max el	7863 Dec 11 08:10	6°♄25'26	45°51'11
evening rise	7861 Jun 19 09:41	13°♄07'16	asc. node	7863 Dec 13 20:40	8°♄53'38	
asc. node	7861 Jun 28 00:18	23°♄50'12		7864 Jan 03 00:44	0°♄	
	7861 Jul 02 23:25	0°♄		7864 Jan 29 10:30	0°♄	
	7861 Jul 27 05:55	0°♄		7864 Feb 23 15:06	0°♄	
	7861 Aug 20 18:07	0°♄		7864 Mar 19 05:05	0°♄	
	7861 Sep 14 14:17	0°♄	desc. node	7864 Apr 03 13:52	18°♄58'41	
	7861 Oct 09 22:28	0°♄		7864 Apr 12 10:56	0°♄	
desc. node	7861 Oct 17 18:10	9°♄05'48		7864 May 06 12:20	0°♄	
	7861 Nov 05 01:47	0°♄		7864 May 30 12:09	0°♄	
	7861 Dec 02 16:48	0°♄	morning set	7864 Jun 13 23:28	18°♄05'00	
evening max el	7861 Dec 15 05:02	12°♄35'33 46°11'23		7864 Jun 23 12:40	0°♄	
	7862 Jan 03 20:41	0°♄		7864 Jul 17 15:17	0°♄	
greatest brilliancy	7862 Jan 23 21:16	11°♄50'53 -4.8m				
retrograde	7862 Feb 02 16:05	13°♄37'18	superior conj	7864 Jul 22 19:35	6°♄25'42	-0°06'33
asc. node	7862 Feb 07 18:09	13°♄06'07	minimum elong	7864 Jul 22 21:07	6°♄30'30	0°06'35
evening set	7862 Feb 17 06:12	9°♄27'24	behind sun begin	7864 Jul 21 23:00	5°♄21'51	
inferior conj	7862 Feb 23 08:47	5°♄51'43 3°54'17	behind sun end	7864 Jul 23 19:15	7°♄39'08	
minimum elong	7862 Feb 23 00:28	6°♄04'31 3°51'54	max. Earth dist.	7864 Jul 25 15:14	9°♄55'30	1.72561 AU
min. Earth dist.	7862 Feb 23 09:17	5°♄50'56 0.27034 AU	asc. node	7864 Jul 25 12:15	9°♄46'13	
morning rise	7862 Feb 28 18:27	2°♄38'27		7864 Aug 10 20:21	0°♄	
	7862 Mar 06 06:01	30°♄	evening rise	7864 Aug 29 10:15	22°♄56'15	
direct	7862 Mar 16 02:16	28°♄01'54		7864 Sep 04 03:51	0°♄	
greatest brilliancy	7862 Mar 26 05:10	29°♄57'37 -4.9m		7864 Sep 28 14:11	0°♄	
	7862 Mar 26 07:45	0°♄		7864 Oct 23 04:31	0°♄	
	7862 May 04 16:09	0°♄	desc. node	7864 Nov 14 05:46	26°♄40'02	
morning max el	7862 May 05 14:01	0°♄54'55 46°59'03		7864 Nov 17 00:15	0°♄	
desc. node	7862 May 30 12:04	27°♄36'56		7864 Dec 12 02:48	0°♄	
	7862 Jun 01 14:59	0°♄		7865 Jan 06 14:57	0°♄	
	7862 Jun 27 14:32	0°♄		7865 Feb 01 21:44	0°♄	
	7862 Jul 22 20:35	0°♄	evening max el	7865 Feb 25 21:44	25°♄36'33	46°55'51
	7862 Aug 16 19:11	0°♄		7865 Mar 02 08:06	0°♄	
	7862 Sep 10 13:38	0°♄	asc. node	7865 Mar 07 05:42	4°♄40'45	
asc. node	7862 Sep 20 10:37	12°♄00'31	greatest brilliancy	7865 Apr 07 16:25	26°♄47'13	-4.9m
	7862 Oct 05 04:28	0°♄	retrograde	7865 Apr 17 11:27	28°♄37'07	
	7862 Oct 29 15:40	0°♄	evening set	7865 May 05 14:52	22°♄20'10	
morning set	7862 Nov 03 23:05	6°♄32'03	inferior conj	7865 May 08 04:32	20°♄45'58	9°02'20
	7862 Nov 22 23:47	0°♄	minimum elong	7865 May 08 08:30	20°♄39'52	9°02'00
max. Earth dist.	7862 Dec 08 13:40	19°♄15'51 1.72859 AU	min. Earth dist.	7865 May 08 03:01	20°♄48'19	0.27178 AU
			morning rise	7865 May 11 02:10	18°♄59'49	
superior conj	7862 Dec 10 16:19	21°♄52'34 1°05'00	direct	7865 May 28 19:30	12°♄57'57	
minimum elong	7862 Dec 11 01:59	22°♄22'29 1°04'49	greatest brilliancy	7865 Jun 07 10:34	14°♄42'32	-4.9m
	7862 Dec 17 05:48	0°♄	desc. node	7865 Jun 26 23:42	26°♄13'35	
desc. node	7863 Jan 10 03:27	29°♄38'29		7865 Jul 01 15:26	0°♄	
	7863 Jan 10 10:23	0°♄	morning max el	7865 Jul 17 19:00	14°♄51'04	46°26'22
evening rise	7863 Jan 17 23:09	9°♄21'11		7865 Aug 01 13:13	0°♄	
	7863 Feb 03 13:39	0°♄		7865 Aug 28 18:44	0°♄	
	7863 Feb 27 15:49	0°♄		7865 Sep 23 19:12	0°♄	
	7863 Mar 23 18:10	0°♄	asc. node	7865 Oct 17 22:45	28°♄32'31	
	7863 Apr 16 23:36	0°♄		7865 Oct 19 04:03	0°♄	
asc. node	7863 May 03 02:46	19°♄46'33		7865 Nov 13 01:50	0°♄	
	7863 May 11 12:49	0°♄		7865 Dec 07 15:19	0°♄	
	7863 Jun 05 16:57	0°♄		7865 Dec 31 22:59	0°♄	
	7863 Jul 02 02:20	0°♄	morning set	7866 Jan 12 09:27	14°♄10'50	
evening max el	7863 Jul 22 21:55	21°♄44'36 46°01'33		7866 Jan 25 02:42	0°♄	
	7863 Jul 31 14:57	0°♄	desc. node	7866 Feb 06 15:31	15°♄37'49	
desc. node	7863 Aug 22 21:09	16°♄58'52	max. Earth dist.	7866 Feb 18 00:12	29°♄49'48	1.71662 AU
greatest brilliancy	7863 Aug 30 12:12	20°♄37'47 -4.7m		7866 Feb 18 03:28	0°♄	
retrograde	7863 Sep 10 06:48	22°♄44'53				
evening set	7863 Sep 27 09:50	17°♄11'28	superior conj	7866 Feb 20 18:48	3°♄18'10	-0°33'31

minimum elong	7866 Feb 20 10:51	2°  53'16	0°33'05	direct	7868 Aug 10 00:52	25°  44'25	
	7866 Mar 14 01:56	0°  Y		greatest brilliancy	7868 Aug 19 18:21	27°  28'20	-4.8m
evening rise	7866 Apr 02 00:08	23°  Y46'07			7868 Aug 25 16:56	0°  Q	
	7866 Apr 06 23:13	0°  B		morning max el	7868 Sep 27 21:20	25°  Q44'12	45°46'06
	7866 Apr 30 21:18	0°  II			7868 Oct 02 06:45	0°  M	
	7866 May 24 22:44	0°  S			7868 Oct 30 19:01	0°  Q	
asc. node	7866 May 30 14:25	7°  S00'40		asc. node	7868 Nov 14 10:50	16°  Q28'31	
	7866 Jun 18 06:10	0°  Q			7868 Nov 26 04:09	0°  M	
	7866 Jul 12 22:43	0°  M			7868 Dec 21 12:10	0°  X	
	7866 Aug 07 05:46	0°  Q			7869 Jan 15 05:32	0°  S	
	7866 Sep 02 14:57	0°  M			7869 Feb 08 13:57	0°  A	
desc. node	7866 Sep 19 08:37	17°  M54'05			7869 Mar 04 16:42	0°  X	
	7866 Oct 01 11:17	0°  X		desc. node	7869 Mar 06 03:35	1°  X48'55	
evening max el	7866 Oct 01 20:15	0°  X21'28	45°40'15	morning set	7869 Mar 27 18:54	28°  X54'43	
greatest brilliancy	7866 Nov 09 22:43	28°  X23'52	-4.7m		7869 Mar 28 15:43	0°  Y	
	7866 Nov 17 19:41	0°  S			7869 Apr 21 12:40	0°  B	
retrograde	7866 Nov 19 12:48	0°  S03'23					
	7866 Nov 21 05:31	30°  R  X		superior conj	7869 May 07 14:16	20°  B12'03	-1°26'27
evening set	7866 Dec 06 08:27	24°  X40'27		minimum elong	7869 May 07 18:12	20°  B24'25	1°26'31
inferior conj	7866 Dec 10 18:18	21°  X59'02	-6°37'44	max. Earth dist.	7869 May 09 13:20	22°  B39'54	1.71305 AU
minimum elong	7866 Dec 11 04:21	21°  X43'23	6°35'39		7869 May 15 09:29	0°  II	
min. Earth dist.	7866 Dec 11 14:13	21°  X28'00	0.28481 AU		7869 Jun 08 08:08	0°  S	
morning rise	7866 Dec 15 23:51	18°  X48'37		evening rise	7869 Jun 16 22:26	10°  S43'44	
direct	7867 Jan 01 03:20	13°  X45'56		asc. node	7869 Jun 27 02:20	23°  S22'56	
asc. node	7867 Jan 10 08:27	15°  X21'58			7869 Jul 02 10:13	0°  Q	
greatest brilliancy	7867 Jan 12 06:21	16°  X03'42	-4.8m		7869 Jul 26 16:53	0°  M	
	7867 Feb 02 22:50	0°  S			7869 Aug 20 05:22	0°  Q	
morning max el	7867 Feb 20 08:11	16°  S07'52	46°34'34		7869 Sep 14 02:05	0°  M	
	7867 Mar 05 15:05	0°  A			7869 Oct 09 11:17	0°  X	
	7867 Apr 01 05:47	0°  X		desc. node	7869 Oct 16 20:02	8°  X32'51	
	7867 Apr 26 12:31	0°  Y			7869 Nov 04 16:32	0°  S	
desc. node	7867 May 02 01:59	6°  Y42'50			7869 Dec 02 12:09	0°  A	
	7867 May 21 04:49	0°  B		evening max el	7869 Dec 12 17:49	10°  A13'58	46°09'43
	7867 Jun 14 14:37	0°  II			7870 Jan 04 13:07	0°  X	
	7867 Jul 08 22:20	0°  S		greatest brilliancy	7870 Jan 21 11:02	9°  X28'20	-4.8m
	7867 Aug 02 06:07	0°  Q		retrograde	7870 Jan 31 04:23	11°  X13'53	
asc. node	7867 Aug 23 00:25	25°  Q35'16		asc. node	7870 Feb 06 20:12	10°  X20'21	
morning set	7867 Aug 25 00:58	28°  Q04'46		evening set	7870 Feb 14 17:49	7°  X05'34	
	7867 Aug 26 14:23	0°  M		inferior conj	7870 Feb 20 21:56	3°  X28'12	3°32'23
	7867 Sep 19 22:42	0°  Q		minimum elong	7870 Feb 20 14:16	3°  X39'59	3°30'08
				min. Earth dist.	7870 Feb 20 23:47	3°  X25'21	0.27055 AU
superior conj	7867 Oct 01 03:02	13°  Q46'39	1°16'33	morning rise	7870 Feb 26 10:18	0°  X11'03	
minimum elong	7867 Sep 30 19:26	13°  Q23'14	1°16'24		7870 Feb 26 18:18	30°  R  A	
max. Earth dist.	7867 Oct 01 09:09	14°  Q05'31	1.73324 AU	direct	7870 Mar 13 15:10	25°  A37'35	
	7867 Oct 14 06:53	0°  M		greatest brilliancy	7870 Mar 23 20:45	27°  A35'33	-4.9m
evening rise	7867 Nov 06 12:05	28°  M36'02			7870 Mar 29 06:03	0°  X	
	7867 Nov 07 15:22	0°  X		morning max el	7870 Mar 03 02:55	28°  X29'29	46°59'22
	7867 Dec 02 00:50	0°  S			7870 May 04 14:40	0°  Y	
desc. node	7867 Dec 12 17:29	13°  S08'04		desc. node	7870 May 29 13:58	26°  Y56'02	
	7867 Dec 26 11:29	0°  A			7870 Jun 01 07:07	0°  B	
	7868 Jan 19 23:15	0°  X			7870 Jun 27 04:12	0°  II	
	7868 Feb 13 13:00	0°  Y			7870 Jul 22 08:57	0°  S	
	7868 Mar 09 08:25	0°  B			7870 Aug 16 06:46	0°  Q	
asc. node	7868 Apr 03 17:08	29°  B56'23			7870 Sep 10 00:43	0°  M	
	7868 Apr 03 18:23	0°  II		asc. node	7870 Sep 19 12:30	11°  M32'57	
	7868 Apr 30 16:20	0°  S			7870 Oct 04 15:15	0°  Q	
evening max el	7868 May 09 14:27	9°  S13'44	46°49'44		7870 Oct 29 02:17	0°  M	
	7868 Jun 01 18:23	0°  Q		morning set	7870 Nov 01 16:21	4°  M24'47	
greatest brilliancy	7868 Jun 18 02:16	9°  Q35'17	-4.8m		7870 Nov 22 10:21	0°  X	
retrograde	7868 Jun 28 21:34	11°  Q44'56		max. Earth dist.	7870 Dec 06 07:44	17°  X10'31	1.72895 AU
evening set	7868 Jul 13 20:41	7°  Q20'04					
inferior conj	7868 Jul 19 23:25	3°  Q40'37	1°07'25	superior conj	7870 Dec 08 08:38	19°  X41'45	1°07'10
minimum elong	7868 Jul 20 01:58	3°  Q36'40	1°06'31	minimum elong	7870 Dec 08 18:08	20°  X11'12	1°07'00
min. Earth dist.	7868 Jul 19 14:08	3° Q55'02	0.27829 AU		7870 Dec 16 16:24	0° S	
desc. node	7868 Jul 24 11:29	0° Q57'06		desc. node	7871 Jan 09 05:30	29° S11'39	
morning rise	7868 Jul 26 07:58	29° S55'13			7871 Jan 09 21:05	0° A	
	7868 Jul 26 04:25	30° R S		evening rise	7871 Jan 15 13:26	7° A30'11	

	7871 Feb 03 00:32	0° H			7873 Aug 28 09:04	0° Ω	
	7871 Feb 27 02:55	0° Y			7873 Sep 23 07:46	0° M	
	7871 Mar 23 05:34	0° B		asc. node	7873 Oct 17 00:41	28° M 03'39	
	7871 Apr 16 11:25	0° II			7873 Oct 18 15:38	0° Ω	
asc. node	7871 May 02 04:40	19° II 15'06			7873 Nov 12 12:51	0° M	
	7871 May 11 01:18	0° G			7873 Dec 07 02:03	0° J	
	7871 Jun 05 06:42	0° Ω			7873 Dec 31 09:37	0° Z	
evening max el	7871 Jul 01 18:55	0° M		morning set	7874 Jan 10 00:24	11° Z 55'19	
	7871 Jul 20 12:49	19° M 30'24 46°03'11			7874 Jan 24 13:20	0° \approx	
	7871 Jul 31 17:23	0° Ω		desc. node	7874 Feb 05 17:29	15° \approx 10'45	
desc. node	7871 Aug 21 23:08	15° Ω 36'20		max. Earth dist.	7874 Feb 15 10:26	27° \approx 18'19 1.71702 AU	
greatest brilliancy	7871 Aug 28 03:06	18° Ω 27'12 -4.8m			7874 Feb 17 14:09	0° H	
retrograde	7871 Sep 07 23:25	20° Ω 36'18					
evening set	7871 Sep 24 22:57	15° Ω 07'05		superior conj	7874 Feb 18 06:52	0° H 52'17 -0°29'56	
min. Earth dist.	7871 Sep 29 02:40	12° Ω 34'22 0.29064 AU		minimum elong	7874 Feb 17 23:41	0° H 29'50 0°29'31	
inferior conj	7871 Sep 29 13:00	12° Ω 18'09 -7°35'25			7874 Mar 13 12:40	0° Y	
minimum elong	7871 Sep 29 04:33	12° Ω 31'25 7°34'12		evening rise	7874 Mar 30 11:03	21° Y 15'45	
morning rise	7871 Oct 03 10:15	9° Ω 54'03			7874 Apr 06 10:01	0° B	
direct	7871 Oct 21 00:32	4° Ω 03'06			7874 Apr 30 08:14	0° II	
greatest brilliancy	7871 Oct 31 04:10	5° Ω 54'21 -4.7m			7874 May 24 09:51	0° G	
	7871 Dec 04 12:54	0° M		asc. node	7874 May 29 16:29	6° G 32'31	
morning max el	7871 Dec 09 00:02	4° M 14'50 45°50'08			7874 Jun 17 17:34	0° Ω	
asc. node	7871 Dec 12 22:44	8° M 07'43			7874 Jul 12 10:41	0° M	
	7872 Jan 02 16:42	0° J			7874 Aug 06 18:49	0° Ω	
	7872 Jan 28 23:56	0° Z			7874 Sep 02 06:22	0° M	
	7872 Feb 23 03:22	0° \approx		desc. node	7874 Sep 18 10:32	17° M 11'40	
	7872 Mar 18 16:44	0° H		evening max el	7874 Sep 29 11:50	28° M 11'00 45°40'09	
desc. node	7872 Apr 02 15:46	18° H 29'17			7874 Oct 01 09:43	0° J	
	7872 Apr 11 22:12	0° Y		greatest brilliancy	7874 Nov 07 13:22	26° J 12'23 -4.7m	
	7872 May 05 23:21	0° B		retrograde	7874 Nov 17 03:35	27° J 51'47	
	7872 May 29 22:59	0° II		evening set	7874 Dec 04 02:43	22° J 24'36	
morning set	7872 Jun 11 12:31	15° II 42'15		inferior conj	7874 Dec 08 09:49	19° J 46'49 -6°50'39	
	7872 Jun 22 23:22	0° G		minimum elong	7874 Dec 08 19:41	19° J 31'23 6°48'41	
	7872 Jul 17 01:52	0° Ω		min. Earth dist.	7874 Dec 09 05:11	19° J 16'33 0.28535 AU	
				morning rise	7874 Dec 13 12:20	16° J 40'21	
superior conj	7872 Jul 20 10:23	4° Ω 09'56 -0°10'06		direct	7874 Dec 29 19:32	11° J 33'19	
minimum elong	7872 Jul 20 12:46	4° Ω 17'19 0°10'05		asc. node	7875 Jan 09 10:27	13° J 39'06	
behind sun begin	7872 Jul 19 17:47	3° Ω 18'22		greatest brilliancy	7875 Jan 09 21:32	13° J 49'44 -4.8m	
behind sun end	7872 Jul 21 07:45	5° Ω 16'15			7875 Feb 03 05:45	0° Z	
max. Earth dist.	7872 Jul 23 06:39	7° Ω 41'41 1.72517 AU		morning max el	7875 Feb 17 22:45	13° Z 49'57 46°32'49	
asc. node	7872 Jul 24 14:19	9° Ω 19'54			7875 Mar 05 08:49	0° \approx	
	7872 Aug 10 06:53	0° M			7875 Mar 31 20:07	0° H	
evening rise	7872 Aug 27 03:28	20° M 49'00			7875 Apr 26 01:22	0° Y	
	7872 Sep 03 14:24	0° Ω		desc. node	7875 May 01 03:58	6° Y 10'32	
	7872 Sep 28 00:52	0° M			7875 May 20 16:50	0° B	
	7872 Oct 22 15:31	0° J			7875 Jun 14 02:06	0° II	
desc. node	7872 Nov 13 07:45	26° J 11'23			7875 Jul 08 09:25	0° G	
	7872 Nov 16 11:50	0° Z			7875 Aug 01 16:54	0° Ω	
	7872 Dec 11 15:17	0° \approx		asc. node	7875 Aug 22 02:17	25° Ω 08'19	
	7873 Jan 06 04:55	0° H		morning set	7875 Aug 22 17:24	25° Ω 54'54	
	7873 Feb 01 14:35	0° Y			7875 Aug 26 00:58	0° M	
evening max el	7873 Feb 23 12:01	23° Y 15'01 46°54'59			7875 Sep 19 09:11	0° Ω	
	7873 Mar 02 09:14	0° B					
asc. node	7873 Mar 06 07:40	3° B 41'04		superior conj	7875 Sep 28 20:42	11° Ω 40'58 1°15'01	
greatest brilliancy	7873 Apr 05 04:44	24° B 21'00 -4.9m		minimum elong	7875 Sep 28 12:42	11° Ω 16'19 1°14'51	
retrograde	7873 Apr 15 01:08	26° B 11'51		max. Earth dist.	7875 Sep 29 04:14	12° Ω 04'11 1.73314 AU	
evening set	7873 May 03 04:59	19° B 53'01			7875 Oct 13 17:21	0° M	
inferior conj	7873 May 05 17:23	18° B 20'44 9°06'15		evening rise	7875 Nov 04 05:23	26° M 29'01	
minimum elong	7873 May 05 20:26	18° B 16'03 9°06'00			7875 Nov 07 01:56	0° J	
min. Earth dist.	7873 May 05 14:58	18° B 24'27 0.27165 AU			7875 Dec 01 11:34	0° Z	
morning rise	7873 May 08 11:56	16° B 39'21		desc. node	7875 Dec 11 19:35	12° Z 41'09	
direct	7873 May 26 08:47	10° B 33'01			7875 Dec 25 22:31	0° \approx	
greatest brilliancy	7873 Jun 04 22:15	12° B 16'46 -4.9m			7876 Jan 19 10:45	0° H	
desc. node	7873 Jun 26 01:50	25° B 03'09			7876 Feb 13 01:11	0° Y	
	7873 Jul 01 23:25	0° II			7876 Mar 08 21:39	0° B	
morning max el	7873 Jul 15 09:39	12° II 32'44 46°27'58		asc. node	7876 Apr 02 19:01	29° B 18'19	
	7873 Aug 01 07:23	0° G			7876 Apr 03 09:29	0° II	

	7876 Apr 30 11:56	0°☿			7878 Oct 04 02:08	0°♊	
evening max el	7876 May 07 04:31	6°☿52'49 46°50'51			7878 Oct 28 12:59	0°♊	
	7876 Jun 02 13:23	0°♊	morning set		7878 Oct 30 09:34	2°♊17'10	
greatest brilliancy	7876 Jun 15 18:56	7°♊19'23 -4.8m			7878 Nov 21 20:59	0°♊	
retrograde	7876 Jun 26 11:55	9°♊27'11	max. Earth dist.		7878 Dec 04 03:47	15°♊11'04 1.72929 AU	
evening set	7876 Jul 11 12:47	5°♊01'00					
min. Earth dist.	7876 Jul 17 05:42	1°♊36'38 0.27786 AU	superior conj		7878 Dec 06 01:02	17°♊31'00 1°09'13	
inferior conj	7876 Jul 17 13:57	1°♊23'49 1°29'32	minimum elong		7878 Dec 06 10:20	17°♊59'46 1°09'04	
minimum elong	7876 Jul 17 17:19	1°♊18'35 1°28'22			7878 Dec 16 03:05	0°♊	
	7876 Jul 19 20:16	30°☿	desc. node		7879 Jan 08 07:26	28°♊44'04	
morning rise	7876 Jul 23 22:30	27°☿38'07			7879 Jan 09 07:54	0°♊	
desc. node	7876 Jul 23 13:26	27°☿50'22	evening rise		7879 Jan 13 04:02	4°♊45'50	
direct	7876 Aug 07 14:41	23°☿28'13			7879 Feb 02 11:32	0°♊	
greatest brilliancy	7876 Aug 17 08:54	25°☿12'27 -4.8m			7879 Feb 26 14:08	0°♊	
	7876 Aug 27 09:58	0°♊			7879 Mar 22 17:03	0°♊	
morning max el	7876 Sep 25 10:51	23°♊27'34 45°46'54			7879 Apr 15 23:20	0°♊	
	7876 Oct 02 03:19	0°♊	asc. node		7879 May 01 06:46	18°♊43'53	
	7876 Oct 30 09:59	0°♊			7879 May 10 13:57	0°♊	
asc. node	7876 Nov 13 12:52	15°♊55'26			7879 Jun 04 20:45	0°♊	
	7876 Nov 25 17:00	0°♊			7879 Jul 01 12:05	0°♊	
	7876 Dec 20 24:00	0°♊	evening max el		7879 Jul 18 04:36	17°♊17'33 46°04'44	
	7877 Jan 14 16:49	0°♊			7879 Jul 31 21:55	0°♊	
	7877 Feb 08 00:57	0°♊	desc. node		7879 Aug 21 01:04	14°♊09'58	
	7877 Mar 04 03:34	0°♊	greatest brilliancy		7879 Aug 25 17:50	16°♊15'20 -4.8m	
desc. node	7877 Mar 05 05:30	1°♊20'59	retrograde		7879 Sep 05 16:21	18°♊26'22	
morning set	7877 Mar 25 05:28	26°♊23'19	evening set		7879 Sep 22 11:57	13°♊01'33	
	7877 Mar 28 02:32	0°♊	min. Earth dist.		7879 Sep 26 17:39	10°♊26'09 0.29039 AU	
	7877 Apr 20 23:29	0°♊	inferior conj		7879 Sep 27 05:10	10°♊08'05 -7°25'38	
			minimum elong		7879 Sep 26 20:21	10°♊21'55 7°24'18	
superior conj	7877 May 05 01:34	17°♊42'50 -1°27'01	morning rise		7879 Oct 01 04:53	7°♊40'39	
minimum elong	7877 May 05 04:27	17°♊51'54 1°27'06	direct		7879 Oct 18 16:43	1°♊53'31	
max. Earth dist.	7877 May 06 16:17	19°♊44'29 1.71285 AU	greatest brilliancy		7879 Oct 28 19:08	3°♊44'06 -4.7m	
	7877 May 14 20:17	0°♊			7879 Dec 04 12:18	0°♊	
	7877 Jun 07 18:56	0°♊	morning max el		7879 Dec 06 16:11	2°♊04'29 45°49'09	
evening rise	7877 Jun 14 10:37	8°♊18'21	asc. node		7879 Dec 12 00:47	7°♊21'54	
asc. node	7877 Jun 26 04:19	22°♊55'26			7880 Jan 02 08:36	0°♊	
	7877 Jul 01 21:05	0°♊			7880 Jan 28 13:24	0°♊	
	7877 Jul 26 03:52	0°♊			7880 Feb 22 15:46	0°♊	
	7877 Aug 19 16:39	0°♊			7880 Mar 18 04:33	0°♊	
	7877 Sep 13 13:55	0°♊	desc. node		7880 Apr 01 17:45	17°♊59'37	
	7877 Oct 09 00:08	0°♊			7880 Apr 11 09:39	0°♊	
desc. node	7877 Oct 15 22:02	8°♊00'16			7880 May 05 10:32	0°♊	
	7877 Nov 04 07:26	0°♊			7880 May 29 09:58	0°♊	
	7877 Dec 02 08:00	0°♊	morning set		7880 Jun 09 01:50	13°♊19'43	
evening max el	7877 Dec 10 06:56	7°♊53'41 46°08'11			7880 Jun 22 10:14	0°♊	
	7878 Jan 05 10:57	0°♊			7880 Jul 16 12:41	0°♊	
greatest brilliancy	7878 Jan 19 00:32	7°♊06'17 -4.8m					
retrograde	7878 Jan 28 17:25	8°♊51'43	superior conj		7880 Jul 18 01:11	1°♊53'21 -0°13'37	
asc. node	7878 Feb 05 22:05	7°♊30'24	minimum elong		7880 Jul 18 04:23	2°♊03'18 0°13'34	
evening set	7878 Feb 12 05:54	4°♊44'21	behind sun begin		7880 Jul 17 15:17	1°♊22'37	
inferior conj	7878 Feb 18 11:16	1°♊05'38 3°10'08	behind sun end		7880 Jul 18 17:29	2°♊43'58	
minimum elong	7878 Feb 18 04:18	1°♊16'20 3°08'05	max. Earth dist.		7880 Jul 21 00:04	5°♊33'22 1.72478 AU	
min. Earth dist.	7878 Feb 18 14:13	1°♊01'07 0.27079 AU	asc. node		7880 Jul 23 16:11	8°♊52'13	
	7878 Feb 20 06:07	30°☿			7880 Aug 09 17:40	0°♊	
morning rise	7878 Feb 24 02:14	27°☿45'04	evening rise		7880 Aug 24 20:33	18°♊40'23	
direct	7878 Mar 11 04:31	23°☿14'13			7880 Sep 03 01:14	0°♊	
greatest brilliancy	7878 Mar 21 12:07	25°☿14'09 -4.9m			7880 Sep 27 11:52	0°♊	
	7878 Mar 30 23:56	0°♊			7880 Oct 22 02:52	0°♊	
morning max el	7878 Apr 30 16:46	26°♊06'48 46°59'30	desc. node		7880 Nov 12 09:48	25°♊41'59	
	7878 May 04 12:13	0°♊			7880 Nov 15 23:44	0°♊	
desc. node	7878 May 28 16:06	26°♊16'13			7880 Dec 11 04:07	0°♊	
	7878 May 31 22:59	0°♊			7881 Jan 05 19:19	0°♊	
	7878 Jun 26 17:50	0°♊			7881 Feb 01 08:06	0°♊	
	7878 Jul 21 21:24	0°♊	evening max el		7881 Feb 21 02:41	20°♊53'39 46°53'58	
	7878 Aug 15 18:28	0°♊			7881 Mar 02 12:09	0°♊	
	7878 Sep 09 11:56	0°♊	asc. node		7881 Mar 05 09:39	2°♊39'12	
asc. node	7878 Sep 18 14:29	11°♊05'19	greatest brilliancy		7881 Apr 02 17:28	21°♊54'34 -4.9m	

retrograde	7881 Apr 12 14:45	23°♄45'38		max. Earth dist.	7883 Sep 26 22:29	9°♊59'21	1.73305 AU
evening set	7881 Apr 30 18:37	17°♄26'10			7883 Oct 13 04:09	0°♌	
inferior conj	7881 May 03 06:17	15°♄54'52	9°09'05	evening rise	7883 Nov 01 22:46	24°♌21'19	
minimum elong	7881 May 03 08:23	15°♄51'38	9°08'56		7883 Nov 06 12:50	0°♍	
min. Earth dist.	7881 May 03 03:03	15°♄59'50	0.27148 AU		7883 Nov 30 22:42	0°♎	
morning rise	7881 May 05 22:13	14°♄17'21		desc. node	7883 Dec 10 21:29	12°♎12'26	
direct	7881 May 23 22:09	8°♄07'39			7883 Dec 25 09:58	0°♏	
greatest brilliancy	7881 Jun 02 09:56	9°♄50'11	-4.9m		7884 Jan 18 22:40	0°♐	
desc. node	7881 Jun 25 03:43	23°♄53'37			7884 Feb 12 13:46	0°♑	
	7881 Jul 02 05:21	0°♒			7884 Mar 08 11:18	0°♓	
morning max el	7881 Jul 12 23:30	10°♒11'41	46°29'35	asc. node	7884 Apr 01 21:06	28°♓39'36	
	7881 Aug 01 01:21	0°♓			7884 Apr 03 01:07	0°♐	
	7881 Aug 27 23:30	0°♑			7884 Apr 30 08:30	0°♒	
	7881 Sep 22 20:33	0°♒		evening max el	7884 May 04 17:37	4°♒28'28	46°51'56
asc. node	7881 Oct 16 02:43	27°♒34'05			7884 Jun 03 15:57	0°♑	
	7881 Oct 18 03:31	0°♓		greatest brilliancy	7884 Jun 13 11:27	5°♑02'04	-4.8m
	7881 Nov 12 00:13	0°♌		retrograde	7884 Jun 24 02:16	7°♑08'26	
	7881 Dec 06 13:08	0°♍		evening set	7884 Jul 09 04:57	2°♑40'18	
	7881 Dec 30 20:35	0°♎			7884 Jul 13 17:29	30°♒♓	
morning set	7882 Jan 07 15:26	9°♎39'11		inferior conj	7884 Jul 15 04:26	29°♓05'48	1°51'33
	7882 Jan 24 00:16	0°♏		minimum elong	7884 Jul 15 08:36	28°♓59'19	1°50'08
desc. node	7882 Feb 04 19:20	14°♏42'23		min. Earth dist.	7884 Jul 14 21:19	29°♓16'52	0.27748 AU
max. Earth dist.	7882 Feb 12 19:54	24°♏43'38	1.71743 AU	morning rise	7884 Jul 21 12:47	25°♓20'14	
				desc. node	7884 Jul 22 15:23	24°♓45'29	
superior conj	7882 Feb 15 19:10	28°♏26'21	-0°26'19	direct	7884 Aug 05 04:06	21°♓10'35	
minimum elong	7882 Feb 15 12:48	28°♏06'28	0°25'57	greatest brilliancy	7884 Aug 14 23:42	22°♓55'44	-4.8m
	7882 Feb 17 01:07	0°♐			7884 Aug 28 14:55	0°♑	
	7882 Mar 12 23:42	0°♑		morning max el	7884 Sep 23 00:48	21°♑11'00	45°47'54
evening rise	7882 Mar 27 22:12	18°♑45'04			7884 Oct 01 23:32	0°♒	
	7882 Apr 05 21:10	0°♓			7884 Oct 30 01:01	0°♓	
	7882 Apr 29 19:31	0°♒		asc. node	7884 Nov 12 14:52	15°♓21'45	
	7882 May 23 21:18	0°♓			7884 Nov 25 06:01	0°♌	
asc. node	7882 May 28 18:27	6°♓02'57			7884 Dec 20 12:03	0°♍	
	7882 Jun 17 05:19	0°♑			7885 Jan 14 04:23	0°♎	
	7882 Jul 11 23:00	0°♒			7885 Feb 07 12:16	0°♏	
	7882 Aug 06 08:17	0°♓			7885 Mar 03 14:45	0°♐	
	7882 Sep 01 22:24	0°♌		desc. node	7885 Mar 04 07:34	0°♐52'30	
desc. node	7882 Sep 17 12:33	16°♌27'53		morning set	7885 Mar 22 15:51	23°♐50'27	
evening max el	7882 Sep 27 02:34	25°♌57'15	45°39'55		7885 Mar 27 13:39	0°♑	
	7882 Oct 01 09:41	0°♍			7885 Apr 20 10:32	0°♓	
greatest brilliancy	7882 Nov 05 04:33	24°♍00'11	-4.7m				
retrograde	7882 Nov 14 18:04	25°♍39'08		superior conj	7885 May 02 12:38	15°♓12'10	-1°27'24
evening set	7882 Dec 01 20:56	20°♍07'38		minimum elong	7885 May 02 14:27	15°♓17'54	1°27'31
inferior conj	7882 Dec 06 01:22	17°♍33'36	-7°02'49	max. Earth dist.	7885 May 03 19:55	16°♓50'30	1.71267 AU
minimum elong	7882 Dec 06 11:02	17°♍18'28	7°00'59		7885 May 14 07:18	0°♒	
min. Earth dist.	7882 Dec 06 20:30	17°♍03'38	0.28587 AU		7885 Jun 07 05:58	0°♓	
morning rise	7882 Dec 11 00:46	14°♍31'12		evening rise	7885 Jun 11 22:42	5°♓51'54	
direct	7882 Dec 27 11:15	9°♍19'34		asc. node	7885 Jun 25 06:13	22°♓26'52	
greatest brilliancy	7883 Jan 07 13:15	11°♍35'19	-4.8m		7885 Jul 01 08:10	0°♑	
asc. node	7883 Jan 08 12:20	11°♍58'38			7885 Jul 25 15:07	0°♒	
	7883 Feb 03 11:01	0°♓			7885 Aug 19 04:11	0°♓	
morning max el	7883 Feb 15 12:38	11°♓29'16	46°31'11		7885 Sep 13 02:01	0°♌	
	7883 Mar 05 02:31	0°♏			7885 Oct 08 13:17	0°♍	
	7883 Mar 31 10:38	0°♐		desc. node	7885 Oct 15 00:07	7°♍27'12	
	7883 Apr 25 14:26	0°♑			7885 Nov 03 22:44	0°♎	
desc. node	7883 Apr 30 06:00	5°♑37'40			7885 Dec 02 04:45	0°♏	
	7883 May 20 05:07	0°♓		evening max el	7885 Dec 07 20:35	5°♏34'20	46°06'34
	7883 Jun 13 13:53	0°♒			7886 Jan 06 17:46	0°♐	
	7883 Jul 07 20:49	0°♓		greatest brilliancy	7886 Jan 16 13:17	4°♐42'30	-4.8m
	7883 Aug 01 04:00	0°♑		retrograde	7886 Jan 26 06:46	6°♐28'16	
morning set	7883 Aug 20 09:54	23°♑44'11		asc. node	7886 Feb 05 00:07	4°♐33'36	
asc. node	7883 Aug 21 04:16	24°♑40'48		evening set	7886 Feb 09 18:01	2°♐21'33	
	7883 Aug 25 11:51	0°♒			7886 Feb 13 20:57	30°♒♏	
	7883 Sep 18 19:58	0°♓		inferior conj	7886 Feb 16 00:22	28°♏41'38	2°47'26
				minimum elong	7886 Feb 15 18:09	28°♏51'10	2°45'35
superior conj	7883 Sep 26 14:29	9°♓34'43	1°13'23	min. Earth dist.	7886 Feb 16 04:10	28°♏35'49	0.27108 AU
minimum elong	7883 Sep 26 06:09	9°♓09'01	1°13'12	morning rise	7886 Feb 21 17:50	25°♏17'55	

direct	7886 Mar 08 18:10	20°  49'27		7888 Sep 02 11:58	0° 	
greatest brilliancy	7886 Mar 19 02:52	22°  50'49	-4.9m	7888 Sep 26 22:48	0° 	
	7886 Apr 01 05:27	0° 		7888 Oct 21 14:08	0° 	
morning max el	7886 Apr 28 07:29	23°  45'27	46°59'37	desc. node	7888 Nov 11 11:43	25°  12'30
	7886 May 04 09:20	0° 			7888 Nov 15 11:35	0° 
desc. node	7886 May 27 18:00	25°  35'34			7888 Dec 10 16:53	0° 
	7886 May 31 14:49	0° 			7889 Jan 05 09:39	0° 
	7886 Jun 26 07:30	0° 			7889 Feb 01 01:43	0° 
	7886 Jul 21 09:54	0° 		evening max el	7889 Feb 18 16:52	18°  31'47
	7886 Aug 15 06:14	0° 			7889 Mar 02 16:26	0° 
	7886 Sep 08 23:14	0° 		asc. node	7889 Mar 04 11:41	1°  36'41
asc. node	7886 Sep 17 16:31	10°  37'30		greatest brilliancy	7889 Mar 31 06:37	19°  29'09
	7886 Oct 03 13:07	0° 		retrograde	7889 Apr 10 03:44	21°  19'41
	7886 Oct 27 23:46	0° 		evening set	7889 Apr 28 07:38	15°  00'42
morning set	7886 Oct 28 03:00	0°  10'55		inferior conj	7889 Apr 30 19:10	13°  29'26
	7886 Nov 21 07:42	0° 		minimum elong	7889 Apr 30 20:16	13°  27'44
max. Earth dist.	7886 Dec 02 00:35	13°  13'43	1.72958 AU	min. Earth dist.	7889 Apr 30 15:24	13°  35'13
				morning rise	7889 May 03 08:59	11°  54'56
superior conj	7886 Dec 03 17:43	15°  20'57	1°11'09	direct	7889 May 21 11:10	5°  42'37
minimum elong	7886 Dec 04 02:44	15°  48'50	1°11'01	greatest brilliancy	7889 May 30 22:10	7°  24'18
	7886 Dec 15 13:50	0° 		desc. node	7889 Jun 24 05:42	22°  46'28
desc. node	7887 Jan 07 09:23	28°  16'22			7889 Jul 02 09:14	0° 
	7887 Jan 08 18:48	0° 		morning max el	7889 Jul 10 12:27	7°  11'48'25
evening rise	7887 Jan 10 18:50	2°  29'00			7889 Jul 31 18:47	0° 
	7887 Feb 01 22:37	0° 			7889 Aug 27 13:37	0° 
	7887 Feb 26 01:28	0° 			7889 Sep 22 09:02	0° 
	7887 Mar 22 04:41	0° 		asc. node	7889 Oct 15 04:39	27°  05'04
	7887 Apr 15 11:26	0° 			7889 Oct 17 15:06	0° 
asc. node	7887 Apr 30 08:41	18°  11'41			7889 Nov 11 11:17	0° 
	7887 May 10 02:48	0° 			7889 Dec 05 23:58	0° 
	7887 Jun 04 11:01	0° 			7889 Dec 30 07:18	0° 
	7887 Jul 01 05:41	0° 		morning set	7890 Jan 05 06:41	7°  24'25
evening max el	7887 Jul 15 20:56	15°  05'56	46°06'23		7890 Jan 23 10:57	0° 
	7887 Aug 01 04:34	0° 		desc. node	7890 Feb 03 21:27	14°  15'42
desc. node	7887 Aug 20 03:08	12°  40'49		max. Earth dist.	7890 Feb 10 05:28	22°  10'15
greatest brilliancy	7887 Aug 23 08:48	14°  03'38	-4.8m			1.71781 AU
retrograde	7887 Sep 03 09:12	16°  16'00		superior conj	7890 Feb 13 07:52	26°  02'43
evening set	7887 Sep 20 00:58	10°  55'52		minimum elong	7890 Feb 13 02:21	25°  45'29
inferior conj	7887 Sep 24 21:16	7°  57'44	-7°15'15		7890 Feb 16 11:47	0° 
minimum elong	7887 Sep 24 12:06	8°  12'06	7°13'47		7890 Mar 12 10:26	0° 
min. Earth dist.	7887 Sep 24 08:30	8°  17'45	0.29009 AU	evening rise	7890 Mar 25 09:43	16°  16'43
morning rise	7887 Sep 28 23:29	5°  26'46			7890 Apr 05 07:59	0° 
	7887 Oct 12 16:35	30°  16'35			7890 Apr 29 06:28	0° 
direct	7887 Oct 16 09:06	29°  43'50			7890 May 23 08:28	0° 
	7887 Oct 20 03:18	0° 		asc. node	7890 May 27 20:21	5°  34'06
greatest brilliancy	7887 Oct 26 09:27	1°  33'00	-4.7m		7890 Jun 16 16:50	0° 
	7887 Dec 04 10:40	0° 			7890 Jul 11 11:08	0° 
morning max el	7887 Dec 04 08:14	29°  54'06	45°48'16		7890 Aug 05 21:37	0° 
asc. node	7887 Dec 11 02:37	6°  11'36'21			7890 Sep 01 14:26	0° 
	7888 Jan 02 00:09	0° 		desc. node	7890 Sep 16 14:36	15°  11'44'28
	7888 Jan 28 02:41	0° 		evening max el	7890 Sep 24 16:31	23°  11'42'34
	7888 Feb 22 04:01	0° 			7890 Oct 01 10:27	0° 
	7888 Mar 17 16:16	0° 		greatest brilliancy	7890 Nov 02 19:39	21°  11'48'57
desc. node	7888 Mar 31 19:47	17°  11'30'19		retrograde	7890 Nov 12 08:38	23°  11'27'51
	7888 Apr 10 21:02	0° 		evening set	7890 Nov 29 15:05	17°  11'51'49
	7888 May 04 21:42	0° 		inferior conj	7890 Dec 03 16:58	15°  11'21'35
	7888 May 28 20:58	0° 		minimum elong	7890 Dec 04 02:19	15°  11'06'54
morning set	7888 Jun 06 14:37	10°  11'55'33		min. Earth dist.	7890 Dec 04 11:58	14°  11'51'48
	7888 Jun 21 21:05	0° 		morning rise	7890 Dec 08 13:11	12°  11'23'32
				direct	7890 Dec 25 02:37	7°  11'06'47
superior conj	7888 Jul 15 15:30	29°  35'21	-0°17'09	greatest brilliancy	7891 Jan 05 05:28	9°  11'22'40
minimum elong	7888 Jul 15 19:31	29°  35'47'51	0°17'05	asc. node	7891 Jan 07 14:25	10°  11'22'58
	7888 Jul 15 23:26	0° 			7891 Feb 03 14:01	0° 
max. Earth dist.	7888 Jul 18 18:23	3°  11'27'57	1.72432 AU	morning max el	7891 Feb 13 02:52	9°  11'30'30
asc. node	7888 Jul 22 18:11	8°  11'25'11			7891 Mar 04 19:27	0° 
	7888 Aug 09 04:22	0° 			7891 Mar 31 00:34	0° 
evening rise	7888 Aug 22 13:19	16°  11'31'05			7891 Apr 25 03:00	0° 

desc. node	7891 Apr 29 07:55	5°Υ05'53			7893 Dec 02 01:51	0°≈	
	7891 May 19 16:56	0°Ϸ		evening max el	7893 Dec 05 11:21	3°≈18'58	46°05'04
	7891 Jun 13 01:12	0°Π			7894 Jan 08 13:46	0°ϥ	
	7891 Jul 07 07:47	0°Ϣ		greatest brilliancy	7894 Jan 14 02:04	2°ϥ20'23	-4.8m
	7891 Jul 31 14:43	0°Ω		retrograde	7894 Jan 23 20:23	4°ϥ06'23	
morning set	7891 Aug 18 02:10	21°Ω33'45		asc. node	7894 Feb 04 02:09	1°ϥ33'44	
asc. node	7891 Aug 20 06:19	24°Ω14'33		evening set	7894 Feb 07 06:38	0°ϥ00'16	
	7891 Aug 24 22:23	0°ϯ			7894 Feb 07 06:50	30°ϥ≈	
	7891 Sep 18 06:24	0°♁		inferior conj	7894 Feb 13 13:39	26°≈19'13	2°24'39
				minimum elong	7894 Feb 13 08:13	26°≈27'33	2°23'02
superior conj	7891 Sep 24 08:03	7°♁28'50	1°11'39	min. Earth dist.	7894 Feb 13 18:07	26°≈12'22	0.27137 AU
minimum elong	7891 Sep 23 23:24	7°♁02'11	1°11'25	morning rise	7894 Feb 19 09:25	22°≈52'32	
max. Earth dist.	7891 Sep 24 15:48	7°♁52'43	1.73296 AU	direct	7894 Mar 06 08:27	18°≈26'28	
	7891 Oct 12 14:35	0°ϯ		greatest brilliancy	7894 Mar 16 17:20	20°≈28'30	-4.9m
evening rise	7891 Oct 30 16:04	22°ϯ14'34			7894 Apr 02 02:17	0°ϥ	
	7891 Nov 05 23:22	0°ϣ		morning max el	7894 Apr 25 22:35	21°ϥ26'10	46°59'32
	7891 Nov 30 09:27	0°ϣ			7894 May 04 05:24	0°Υ	
desc. node	7891 Dec 09 23:27	11°ϣ45'03		desc. node	7894 May 26 19:57	24°Υ56'23	
	7891 Dec 24 21:04	0°≈			7894 May 31 06:05	0°Ϸ	
	7892 Jan 18 10:15	0°ϥ			7894 Jun 25 20:44	0°Π	
	7892 Feb 12 02:03	0°Υ			7894 Jul 20 22:00	0°Ϣ	
	7892 Mar 08 00:39	0°Ϸ			7894 Aug 14 17:38	0°Ω	
asc. node	7892 Mar 31 23:05	28°Ϸ01'35			7894 Sep 08 10:10	0°ϯ	
	7892 Apr 02 16:30	0°Π		asc. node	7894 Sep 16 18:24	10°ϯ10'19	
	7892 Apr 30 05:09	0°Ϣ			7894 Oct 02 23:46	0°♁	
evening max el	7892 May 02 06:52	2°Ϣ06'07	46°53'10	morning set	7894 Oct 25 20:35	28°♁04'07	
	7892 Jun 05 04:24	0°Ω			7894 Oct 27 10:16	0°ϯ	
greatest brilliancy	7892 Jun 11 03:32	2°Ω46'01	-4.9m		7894 Nov 20 18:10	0°ϣ	
retrograde	7892 Jun 21 17:09	4°Ω51'46		max. Earth dist.	7894 Nov 29 19:48	11°ϣ12'19	1.72988 AU
evening set	7892 Jul 06 21:24	0°Ω21'08					
	7892 Jul 07 12:32	30°ϥ≈		superior conj	7894 Dec 01 10:32	13°ϣ12'01	1°12'57
inferior conj	7892 Jul 12 19:04	26°Ϣ49'36	2°13'18	minimum elong	7894 Dec 01 19:13	13°ϣ38'54	1°12'52
minimum elong	7892 Jul 13 00:01	26°Ϣ41'56	2°11'40		7894 Dec 15 00:22	0°ϣ	
min. Earth dist.	7892 Jul 12 12:51	26°Ϣ59'15	0.27714 AU	desc. node	7895 Jan 06 11:26	27°ϣ49'41	
morning rise	7892 Jul 19 03:05	23°Ϣ04'38		evening rise	7895 Jan 08 09:35	0°≈12'45	
desc. node	7892 Jul 21 17:28	21°Ϣ46'18			7895 Jan 08 05:28	0°≈	
direct	7892 Aug 02 17:46	18°Ϣ54'34			7895 Feb 01 09:29	0°ϥ	
greatest brilliancy	7892 Aug 12 14:37	20°Ϣ40'48	-4.8m		7895 Feb 25 12:35	0°Υ	
	7892 Aug 29 11:09	0°Ω			7895 Mar 21 16:08	0°Ϸ	
morning max el	7892 Sep 20 15:50	18°Ω58'18	45°48'49		7895 Apr 14 23:23	0°Π	
	7892 Oct 01 18:40	0°ϯ		asc. node	7895 Apr 29 10:36	17°Π39'53	
	7892 Oct 29 15:27	0°♁			7895 May 09 15:34	0°Ϣ	
asc. node	7892 Nov 11 16:46	14°♁49'04			7895 Jun 04 01:17	0°Ω	
	7892 Nov 24 18:34	0°ϯ			7895 Jun 30 23:28	0°ϯ	
	7892 Dec 19 23:41	0°ϣ		evening max el	7895 Jul 13 13:36	12°ϯ55'37	46°08'04
	7893 Jan 13 15:32	0°ϣ			7895 Aug 01 13:23	0°♁	
	7893 Feb 06 23:11	0°≈		desc. node	7895 Aug 19 05:07	11°♁09'32	
desc. node	7893 Mar 03 09:30	0°ϥ24'51		greatest brilliancy	7895 Aug 21 00:36	11°♁53'51	-4.8m
	7893 Mar 03 01:33	0°ϥ		retrograde	7895 Sep 01 01:54	14°♁06'41	
morning set	7893 Mar 20 02:24	21°ϥ19'16		evening set	7895 Sep 17 14:16	8°♁51'25	
	7893 Mar 27 00:23	0°Υ		min. Earth dist.	7895 Sep 21 23:47	6°♁10'16	0.28975 AU
	7893 Apr 19 21:14	0°Ϸ		inferior conj	7895 Sep 22 13:33	5°♁48'41	-7°04'23
				minimum elong	7895 Sep 22 04:07	6°♁03'29	7°02'46
superior conj	7893 Apr 29 23:49	12°Ϸ42'52	-1°27'38	morning rise	7895 Sep 26 18:16	3°♁13'58	
minimum elong	7893 Apr 30 00:33	12°Ϸ45'13	1°27'43		7895 Oct 03 00:20	30°ϥ≈	
max. Earth dist.	7893 May 01 01:29	14°Ϸ03'34	1.71249 AU	direct	7895 Oct 14 01:38	27°ϥ35'37	
	7893 May 13 17:57	0°Π		greatest brilliancy	7895 Oct 23 23:48	29°ϥ22'57	-4.7m
	7893 Jun 06 16:35	0°Ϣ			7895 Oct 25 15:54	0°♁	
evening rise	7893 Jun 09 11:00	3°Ϣ27'21		morning max el	7895 Dec 01 23:43	27°♁43'02	45°47'14
asc. node	7893 Jun 24 08:16	22°Ϣ00'05			7895 Dec 04 07:55	0°ϯ	
	7893 Jun 30 18:51	0°Ω		asc. node	7895 Dec 10 04:43	5°ϯ52'48	
	7893 Jul 25 01:57	0°ϯ			7896 Jan 01 15:20	0°ϣ	
	7893 Aug 18 15:21	0°♁			7896 Jan 27 15:48	0°ϣ	
	7893 Sep 12 13:46	0°ϯ			7896 Feb 21 16:10	0°≈	
	7893 Oct 08 02:10	0°ϣ			7896 Mar 17 03:52	0°ϥ	
desc. node	7893 Oct 14 02:00	6°ϣ54'22		desc. node	7896 Mar 30 21:42	17°ϥ00'55	
	7893 Nov 03 13:55	0°ϣ			7896 Apr 10 08:18	0°Υ	

	7896 May 04 08:45	0°♄		inferior conj	7898 Dec 01 08:44	13°♄09'33	-7°24'58
	7896 May 28 07:52	0°♂		minimum elong	7898 Dec 01 17:45	12°♄55'24	7°23'26
morning set	7896 Jun 04 03:15	8°♂31'00		min. Earth dist.	7898 Dec 02 03:24	12°♄40'19	0.28691 AU
	7896 Jun 21 07:54	0°♄		morning rise	7898 Dec 06 01:48	10°♄16'06	
				direct	7898 Dec 22 18:09	4°♄53'59	
superior conj	7896 Jul 13 05:46	27°♄17'14	-0°20'41	greatest brilliancy	7899 Jan 02 21:49	7°♄10'16	-4.8m
minimum elong	7896 Jul 13 10:35	27°♄32'14	0°20'34	asc. node	7899 Jan 06 16:24	8°♄50'26	
	7896 Jul 15 10:09	0°♂			7899 Feb 03 15:42	0°♄	
max. Earth dist.	7896 Jul 16 12:01	1°♂20'20	1.72384 AU	morning max el	7899 Feb 10 17:58	6°♄53'33	46°28'08
asc. node	7896 Jul 21 20:13	7°♂58'16			7899 Mar 04 12:17	0°♄	
	7896 Aug 08 15:03	0°♄			7899 Mar 30 14:42	0°♄	
evening rise	7896 Aug 20 06:07	14°♄21'50			7899 Apr 24 15:52	0°♄	
	7896 Sep 01 22:40	0°♄		desc. node	7899 Apr 28 09:54	4°♄33'16	
	7896 Sep 26 09:40	0°♄			7899 May 19 05:05	0°♄	
	7896 Oct 21 01:22	0°♄			7899 Jun 12 12:53	0°♂	
desc. node	7896 Nov 10 13:43	24°♄43'24			7899 Jul 06 19:06	0°♄	
	7896 Nov 14 23:26	0°♄			7899 Jul 31 01:46	0°♂	
	7896 Dec 10 05:43	0°♄		morning set	7899 Aug 15 18:10	19°♂21'16	
	7897 Jan 05 00:12	0°♄		asc. node	7899 Aug 19 08:10	23°♂46'31	
	7897 Jan 31 19:53	0°♄			7899 Aug 24 09:17	0°♄	
evening max el	7897 Feb 16 06:17	16°♄07'38	46°51'29		7899 Sep 17 17:14	0°♄	
	7897 Mar 02 22:55	0°♄					
asc. node	7897 Mar 03 13:38	0°♄32'00		superior conj	7899 Sep 22 01:28	5°♄21'17	1°09'48
greatest brilliancy	7897 Mar 28 20:19	17°♄03'56	-4.9m	minimum elong	7899 Sep 21 16:33	4°♄53'46	1°09'33
retrograde	7897 Apr 07 16:17	18°♄53'24		max. Earth dist.	7899 Sep 22 10:05	5°♄47'49	1.73287 AU
evening set	7897 Apr 25 20:02	12°♄35'53			7899 Oct 12 01:25	0°♄	
inferior conj	7897 Apr 28 08:04	11°♄03'45	9°11'44	evening rise	7899 Oct 28 09:29	20°♄07'04	
minimum elong	7897 Apr 28 08:09	11°♄03'37	9°11'38		7899 Nov 05 10:18	0°♄	
min. Earth dist.	7897 Apr 28 04:09	11°♄09'47	0.27121 AU		7899 Nov 29 20:34	0°♄	
morning rise	7897 Apr 30 20:22	9°♄31'23		desc. node	7899 Dec 09 01:32	11°♄17'01	
direct	7897 May 18 23:35	3°♄17'09			7899 Dec 24 08:31	0°♄	
greatest brilliancy	7897 May 28 11:00	4°♄58'42	-4.9m		7900 Jan 17 22:11	0°♄	
desc. node	7897 Jun 23 07:50	21°♄41'09			7900 Feb 11 14:43	0°♄	
	7897 Jul 02 11:40	0°♂			7900 Mar 08 14:30	0°♄	
morning max el	7897 Jul 08 00:51	5°♂23'12	46°32'41	asc. node	7900 Apr 01 00:59	27°♄21'42	
	7897 Jul 31 11:59	0°♄			7900 Apr 03 08:37	0°♂	
	7897 Aug 27 03:42	0°♂		evening max el	7900 Apr 30 20:55	29°♂44'05	46°54'12
	7897 Sep 21 21:36	0°♄			7900 May 01 03:15	0°♄	
asc. node	7897 Oct 14 06:35	26°♄35'43			7900 Jun 08 15:59	0°♂	
	7897 Oct 17 02:46	0°♄		greatest brilliancy	7900 Jun 09 18:47	0°♂26'31	-4.9m
	7897 Nov 10 22:28	0°♄		retrograde	7900 Jun 20 08:08	2°♂32'12	
	7897 Dec 05 10:53	0°♄			7900 Jul 01 12:44	30°♄	
	7897 Dec 29 18:07	0°♄		evening set	7900 Jul 05 13:39	27°♄58'46	
morning set	7898 Jan 02 22:10	5°♄10'05		inferior conj	7900 Jul 11 09:17	24°♄30'24	2°35'12
	7898 Jan 22 21:46	0°♄		minimum elong	7900 Jul 11 15:01	24°♄21'33	2°33'20
desc. node	7898 Feb 02 23:24	13°♄47'54		min. Earth dist.	7900 Jul 11 03:43	24°♄39'01	0.27682 AU
max. Earth dist.	7898 Feb 07 16:32	19°♄41'02	1.71829 AU	morning rise	7900 Jul 17 16:48	20°♄46'32	
				desc. node	7900 Jul 21 19:24	18°♄48'19	
superior conj	7898 Feb 10 20:37	23°♄38'37	-0°19'02	direct	7900 Aug 01 07:27	16°♄35'36	
minimum elong	7898 Feb 10 15:58	23°♄24'07	0°18'42	greatest brilliancy	7900 Aug 11 04:40	18°♄22'33	-4.8m
	7898 Feb 15 22:40	0°♄			7900 Aug 31 03:08	0°♂	
	7898 Mar 11 21:24	0°♄		morning max el	7900 Sep 19 07:23	16°♂45'08	45°49'48
evening rise	7898 Mar 22 21:03	13°♄47'01			7900 Oct 02 13:52	0°♄	
	7898 Apr 04 19:05	0°♄			7900 Oct 30 06:13	0°♄	
	7898 Apr 28 17:42	0°♂		asc. node	7900 Nov 11 18:48	14°♄15'36	
	7898 May 22 19:55	0°♄			7900 Nov 25 07:30	0°♄	
asc. node	7898 May 26 22:25	5°♄04'55			7900 Dec 20 11:42	0°♄	
	7898 Jun 16 04:38	0°♂			7901 Jan 14 03:03	0°♄	
	7898 Jul 10 23:36	0°♄			7901 Feb 07 10:26	0°♄	
	7898 Aug 05 11:23	0°♄		desc. node	7901 Mar 03 11:26	29°♄56'07	
	7898 Sep 01 07:07	0°♄			7901 Mar 03 12:40	0°♄	
desc. node	7898 Sep 15 16:32	14°♄59'19		morning set	7901 Mar 18 13:22	18°♄48'28	
evening max el	7898 Sep 22 06:33	21°♄27'18	45°40'06		7901 Mar 27 11:28	0°♄	
	7898 Oct 01 12:57	0°♄			7901 Apr 20 08:17	0°♄	
greatest brilliancy	7898 Oct 31 10:22	19°♄37'01	-4.7m				
retrograde	7898 Nov 09 23:47	21°♄16'41		superior conj	7901 Apr 28 10:56	10°♄12'06	-1°27'40
evening set	7898 Nov 27 09:19	15°♄35'57		minimum elong	7901 Apr 28 10:34	10°♄10'57	1°27'45

max. Earth dist.	7901 Apr 29 10:06	11°♄24'59	1.71241 AU	direct	7903 Oct 12 17:36	25°♎25'36	
	7901 May 14 05:00	0°♈		greatest brilliancy	7903 Oct 22 14:35	27°♎11'38	-4.7m
	7901 Jun 07 03:41	0°♊			7903 Oct 29 01:56	0°♈	
evening rise	7901 Jun 07 22:54	1°♊00'01		morning max el	7903 Nov 30 14:05	25°♈28'08	45°46'19
asc. node	7901 Jun 24 10:14	21°♊31'33			7903 Dec 05 04:51	0°♎	
	7901 Jul 01 06:01	0°♏		asc. node	7903 Dec 10 06:44	5°♎08'35	
	7901 Jul 25 13:17	0°♎			7904 Jan 02 06:38	0°♈	
	7901 Aug 19 03:01	0°♈			7904 Jan 28 05:04	0°♊	
	7901 Sep 13 02:04	0°♎			7904 Feb 22 04:29	0°♌	
	7901 Oct 08 15:40	0°♈			7904 Mar 17 15:39	0°♈	
desc. node	7901 Oct 14 04:02	6°♈20'24		desc. node	7904 Mar 30 23:41	16°♈31'10	
	7901 Nov 04 05:53	0°♊			7904 Apr 10 19:44	0°♎	
	7901 Dec 03 00:20	0°♌			7904 May 04 19:56	0°♈	
evening max el	7901 Dec 04 02:46	1°♌03'57	46°03'36		7904 May 28 18:53	0°♈	
greatest brilliancy	7902 Jan 12 15:14	29°♌57'56	-4.8m	morning set	7904 Jun 02 16:11	6°♈07'03	
	7902 Jan 12 17:39	0°♈			7904 Jun 21 18:47	0°♊	
retrograde	7902 Jan 22 09:50	1°♈43'34					
	7902 Jan 31 15:33	30°♌		superior conj	7904 Jul 11 20:19	24°♊59'41	-0°24'09
asc. node	7902 Feb 04 04:02	28°♌28'49		minimum elong	7904 Jul 12 01:54	25°♊17'04	0°24'00
evening set	7902 Feb 05 19:37	27°♌38'12		max. Earth dist.	7904 Jul 15 05:13	29°♊11'07	1.72338 AU
inferior conj	7902 Feb 12 03:01	23°♌56'12	2°01'40		7904 Jul 15 20:58	0°♏	
minimum elong	7902 Feb 11 22:25	24°♌03'16	2°00'18	asc. node	7904 Jul 21 22:06	7°♏30'35	
min. Earth dist.	7902 Feb 12 08:13	23°♌48'13	0.27162 AU		7904 Aug 09 01:50	0°♎	
morning rise	7902 Feb 18 00:50	20°♌26'37		evening rise	7904 Aug 18 22:53	12°♎12'07	
direct	7902 Mar 04 22:51	16°♌03'10			7904 Sep 02 09:32	0°♈	
greatest brilliancy	7902 Mar 15 07:38	18°♌05'20	-4.9m		7904 Sep 26 20:44	0°♎	
	7902 Apr 03 18:03	0°♈			7904 Oct 21 12:49	0°♈	
morning max el	7902 Apr 24 12:56	19°♈04'21	46°59'19	desc. node	7904 Nov 10 15:45	24°♈13'47	
	7902 May 05 01:05	0°♎			7904 Nov 15 11:30	0°♊	
desc. node	7902 May 26 22:04	24°♎17'16			7904 Dec 10 18:49	0°♌	
	7902 May 31 21:25	0°♈			7905 Jan 05 15:07	0°♈	
	7902 Jun 26 10:12	0°♈			7905 Feb 01 14:41	0°♎	
	7902 Jul 21 10:27	0°♊		evening max el	7905 Feb 14 18:50	13°♎40'56	46°50'13
	7902 Aug 15 05:27	0°♏		asc. node	7905 Mar 03 15:38	29°♎25'24	
	7902 Sep 08 21:32	0°♎			7905 Mar 04 08:03	0°♈	
asc. node	7902 Sep 16 20:24	9°♎42'08		greatest brilliancy	7905 Mar 27 10:11	14°♈38'27	-4.9m
	7902 Oct 03 10:49	0°♈		retrograde	7905 Apr 06 04:44	16°♈27'01	
morning set	7902 Oct 24 13:47	25°♈55'55		evening set	7905 Apr 24 07:46	10°♈11'46	
	7902 Oct 27 21:09	0°♎		inferior conj	7905 Apr 26 20:58	8°♈37'58	9°11'27
	7902 Nov 21 05:00	0°♈		minimum elong	7905 Apr 26 20:03	8°♈39'22	9°11'21
max. Earth dist.	7902 Nov 28 13:18	9°♈04'31	1.73015 AU	min. Earth dist.	7905 Apr 26 17:09	8°♈43'51	0.27105 AU
				morning rise	7905 Apr 29 08:24	7°♈06'50	
superior conj	7902 Nov 30 03:08	11°♈01'25	1°14'41	direct	7905 May 17 11:39	0°♈51'19	
minimum elong	7902 Nov 30 11:27	11°♈27'06	1°14'36	greatest brilliancy	7905 May 27 00:19	2°♈33'36	-4.9m
	7902 Dec 15 11:16	0°♊		desc. node	7905 Jun 23 09:41	20°♈37'07	
desc. node	7903 Jan 06 13:21	27°♊21'25			7905 Jul 03 12:36	0°♈	
evening rise	7903 Jan 07 00:14	27°♊55'07		morning max el	7905 Jul 06 13:21	2°♈58'22	46°34'28
	7903 Jan 08 16:31	0°♌			7905 Aug 01 04:42	0°♊	
	7903 Feb 01 20:43	0°♈			7905 Aug 27 17:32	0°♏	
	7903 Feb 26 00:01	0°♎			7905 Sep 22 10:00	0°♎	
	7903 Mar 22 03:52	0°♈		asc. node	7905 Oct 14 08:38	26°♎06'49	
	7903 Apr 15 11:35	0°♈			7905 Oct 17 14:23	0°♈	
asc. node	7903 Apr 29 12:43	17°♈07'59			7905 Nov 11 09:38	0°♎	
	7903 May 10 04:37	0°♊			7905 Dec 05 21:49	0°♈	
	7903 Jun 04 15:56	0°♏			7905 Dec 30 04:57	0°♊	
	7903 Jul 01 18:02	0°♎		morning set	7906 Jan 01 13:29	2°♊55'10	
evening max el	7903 Jul 12 05:38	10°♎42'33	46°09'29		7906 Jan 23 08:34	0°♌	
	7903 Aug 03 02:05	0°♈		desc. node	7906 Feb 03 01:17	13°♌20'00	
desc. node	7903 Aug 19 07:04	9°♈33'23		max. Earth dist.	7906 Feb 06 06:11	17°♌19'57	1.71875 AU
greatest brilliancy	7903 Aug 19 16:47	9°♈42'49	-4.8m				
retrograde	7903 Aug 30 17:52	11°♈55'24		superior conj	7906 Feb 09 09:10	21°♌14'05	-0°15'18
evening set	7903 Sep 16 03:22	6°♈45'07		minimum elong	7906 Feb 09 05:25	21°♌02'22	0°15'02
min. Earth dist.	7903 Sep 20 15:21	4°♈00'17	0.28942 AU	behind sun begin	7906 Feb 08 20:06	20°♌33'15	
inferior conj	7903 Sep 21 05:37	3°♈37'53	-6°52'39	behind sun end	7906 Feb 09 14:45	21°♌31'29	
minimum elong	7903 Sep 20 19:58	3°♈53'02	6°50'55		7906 Feb 16 09:31	0°♈	
morning rise	7903 Sep 25 12:54	0°♈59'12			7906 Mar 12 08:21	0°♎	
	7903 Sep 27 06:19	30°♌		evening rise	7906 Mar 21 08:26	11°♎17'42	

	7906 Apr 05 06:08	0°♄			7908 Oct 29 20:19	0°♎
	7906 Apr 29 04:54	0°♈		asc. node	7908 Nov 10 20:47	13°♎43'32
	7906 May 23 07:17	0°♊			7908 Nov 24 19:53	0°♎
asc. node	7906 May 27 00:22	4°♊35'39			7908 Dec 19 23:15	0°♊
	7906 Jun 16 16:20	0°♋			7909 Jan 13 14:11	0°♊
	7906 Jul 11 11:56	0°♌			7909 Feb 06 21:22	0°♌
	7906 Aug 06 01:02	0°♍		desc. node	7909 Mar 02 13:30	29°♌28'40
desc. node	7906 Sep 01 23:50	0°♎			7909 Mar 02 23:32	0°♌
	7906 Sep 15 18:33	14°♎14'27		morning set	7909 Mar 16 00:07	16°♌17'58
evening max el	7906 Sep 20 21:04	19°♎13'56	45°40'14		7909 Mar 26 22:15	0°♍
	7906 Oct 02 16:49	0°♊			7909 Apr 19 19:01	0°♄
greatest brilliancy	7906 Oct 30 00:21	17°♊24'45	-4.7m			
retrograde	7906 Nov 08 15:20	19°♊05'54		superior conj	7909 Apr 25 21:45	7°♄41'23 -1°27'31
evening set	7906 Nov 26 03:26	13°♊20'26		minimum elong	7909 Apr 25 20:16	7°♄36'44 1°27'37
inferior conj	7906 Nov 30 00:27	10°♊57'42	-7°34'56	max. Earth dist.	7909 Apr 26 19:41	8°♄50'23 1.71228 AU
minimum elong	7906 Nov 30 09:06	10°♊44'11	7°33'33		7909 May 13 15:43	0°♈
min. Earth dist.	7906 Nov 30 18:29	10°♊29'31	0.28745 AU	evening rise	7909 Jun 05 10:35	28°♈33'01
morning rise	7906 Dec 04 14:25	8°♊09'01			7909 Jun 06 14:25	0°♊
direct	7906 Dec 21 10:12	2°♊41'24		asc. node	7909 Jun 23 12:08	21°♊03'52
greatest brilliancy	7907 Jan 01 13:56	4°♊58'00	-4.8m		7909 Jun 30 16:51	0°♋
asc. node	7907 Jan 06 18:17	7°♊21'09			7909 Jul 25 00:17	0°♌
	7907 Feb 04 16:00	0°♊			7909 Aug 18 14:19	0°♍
morning max el	7907 Feb 09 09:54	4°♊39'05	46°26'32		7909 Sep 12 13:58	0°♎
	7907 Mar 05 04:40	0°♌			7909 Oct 08 04:46	0°♊
	7907 Mar 31 04:31	0°♌		desc. node	7909 Oct 13 06:05	5°♊47'48
	7907 Apr 25 04:29	0°♍			7909 Nov 03 21:32	0°♊
desc. node	7907 Apr 28 11:56	4°♍01'32		evening max el	7909 Dec 01 17:46	28°♊49'35 46°01'58
	7907 May 19 17:00	0°♄			7909 Dec 02 23:08	0°♌
	7907 Jun 13 00:18	0°♈		greatest brilliancy	7910 Jan 10 04:52	27°♌37'36 -4.8m
	7907 Jul 07 06:11	0°♊		retrograde	7910 Jan 19 22:47	29°♌22'13
	7907 Jul 31 12:34	0°♋		evening set	7910 Feb 03 08:55	25°♌17'18
morning set	7907 Aug 14 10:28	17°♋10'35		asc. node	7910 Feb 03 06:06	25°♌21'03
asc. node	7907 Aug 19 10:11	23°♋19'57		inferior conj	7910 Feb 09 16:28	21°♌34'39 1°38'29
	7907 Aug 24 19:53	0°♌		minimum elong	7910 Feb 09 12:43	21°♌40'25 1°37'23
	7907 Sep 18 03:43	0°♍		min. Earth dist.	7910 Feb 09 22:41	21°♌25'05 0.27195 AU
				morning rise	7910 Feb 15 16:08	18°♌02'09
superior conj	7907 Sep 20 19:10	3°♍15'33	1°07'51	direct	7910 Mar 02 13:01	13°♌41'09
minimum elong	7907 Sep 20 10:01	2°♍47'23	1°07'35	greatest brilliancy	7910 Mar 12 22:34	15°♌43'46 -4.9m
max. Earth dist.	7907 Sep 21 07:06	3°♍52'23	1.73276 AU		7910 Apr 04 05:29	0°♌
	7907 Oct 12 11:55	0°♎		morning max el	7910 Apr 22 02:25	16°♌40'59 46°59'01
evening rise	7907 Oct 27 03:15	18°♎01'36			7910 May 04 19:58	0°♍
	7907 Nov 05 20:55	0°♊		desc. node	7910 May 25 23:57	23°♍38'37
	7907 Nov 30 07:26	0°♊			7910 May 31 12:16	0°♄
desc. node	7907 Dec 09 03:26	10°♊49'08			7910 Jun 25 23:14	0°♈
	7907 Dec 24 19:45	0°♌			7910 Jul 20 22:29	0°♊
	7908 Jan 18 09:57	0°♌			7910 Aug 14 16:50	0°♋
	7908 Feb 12 03:15	0°♍			7910 Sep 08 08:28	0°♌
	7908 Mar 08 04:14	0°♄		asc. node	7910 Sep 15 22:25	9°♌15'12
asc. node	7908 Mar 31 03:05	26°♄42'47			7910 Oct 02 21:28	0°♍
	7908 Apr 03 00:43	0°♈		morning set	7910 Oct 22 07:18	23°♍49'55
evening max el	7908 Apr 28 11:48	27°♈24'57	46°55'13		7910 Oct 27 07:37	0°♎
	7908 May 01 01:54	0°♊			7910 Nov 20 15:24	0°♊
greatest brilliancy	7908 Jun 07 09:44	28°♊07'31	-4.9m	max. Earth dist.	7910 Nov 26 06:00	6°♊55'39 1.73039 AU
	7908 Jun 14 15:15	0°♋				
retrograde	7908 Jun 17 23:20	0°♋13'16		superior conj	7910 Nov 27 20:18	8°♊53'57 1°16'15
	7908 Jun 21 06:10	30°♋06		minimum elong	7910 Nov 28 04:10	9°♊18'16 1°16'12
evening set	7908 Jul 03 06:04	25°♊37'01			7910 Dec 14 21:45	0°♊
inferior conj	7908 Jul 08 23:27	22°♊11'51	2°56'55	evening rise	7911 Jan 04 15:23	25°♊40'29
minimum elong	7908 Jul 09 05:55	22°♊01'52	2°54'51	desc. node	7911 Jan 05 15:18	26°♊54'37
min. Earth dist.	7908 Jul 08 18:17	22°♊19'50	0.27648 AU		7911 Jan 08 03:08	0°♌
morning rise	7908 Jul 15 06:14	18°♊29'25			7911 Feb 01 07:32	0°♌
desc. node	7908 Jul 20 21:22	15°♊55'45			7911 Feb 25 11:08	0°♍
direct	7908 Jul 29 21:36	14°♊17'31			7911 Mar 21 15:21	0°♄
greatest brilliancy	7908 Aug 08 18:08	16°♊04'30	-4.8m		7911 Apr 14 23:37	0°♈
	7908 Aug 31 14:32	0°♋		asc. node	7911 Apr 28 14:37	16°♈36'04
morning max el	7908 Sep 16 23:14	14°♋33'56	45°50'56		7911 May 09 17:31	0°♊
	7908 Oct 02 08:02	0°♌			7911 Jun 04 06:31	0°♋

	7911 Jul 01 12:46	0°♍			7913 Dec 05 08:34	0°♊	
evening max el	7911 Jul 09 20:42	8°♍27'51 46°11'05			7913 Dec 29 15:36	0°♊	
	7911 Aug 03 18:33	0°♌	morning set		7913 Dec 30 05:07	0°♊41'53	
greatest brilliancy	7911 Aug 17 09:14	7°♌32'59 -4.8m			7914 Jan 22 19:12	0°♋	
desc. node	7911 Aug 18 09:07	7°♌54'57	desc. node		7914 Feb 02 03:22	12°♋53'15	
retrograde	7911 Aug 28 09:36	9°♌45'20	max. Earth dist.		7914 Feb 03 21:38	15°♋05'07 1.71916 AU	
evening set	7911 Sep 13 16:33	4°♌39'46					
inferior conj	7911 Sep 18 21:45	1°♌28'19 -6°40'21	superior conj		7914 Feb 06 22:13	18°♋51'40 -0°11'37	
minimum elong	7911 Sep 18 11:56	1°♌43'45 6°38'30	minimum elong		7914 Feb 06 19:23	18°♋42'48 0°11'23	
min. Earth dist.	7911 Sep 18 07:14	1°♌51'07 0.28904 AU	behind sun begin		7914 Feb 06 01:25	17°♋46'44	
	7911 Sep 21 06:18	30°♋♍	behind sun end		7914 Feb 07 13:20	19°♋38'52	
morning rise	7911 Sep 23 07:36	28°♋45'40			7914 Feb 15 20:11	0°♋	
direct	7911 Oct 10 09:05	23°♋16'42			7914 Mar 11 19:05	0°♋	
greatest brilliancy	7911 Oct 20 06:01	25°♋02'11 -4.7m	evening rise		7914 Mar 18 20:26	8°♋51'03	
	7911 Oct 30 14:08	0°♌			7914 Apr 04 16:59	0°♋	
morning max el	7911 Nov 28 04:12	23°♌13'50 45°45'40			7914 Apr 28 15:54	0°♌	
	7911 Dec 05 00:36	0°♌			7914 May 22 18:32	0°♌	
asc. node	7911 Dec 09 08:34	4°♌25'47	asc. node		7914 May 26 02:17	4°♌06'36	
	7912 Jan 01 21:15	0°♊			7914 Jun 16 04:00	0°♌	
	7912 Jan 27 17:48	0°♊			7914 Jul 11 00:21	0°♍	
	7912 Feb 21 16:20	0°♋			7914 Aug 05 14:52	0°♌	
	7912 Mar 17 03:01	0°♋			7914 Sep 01 17:00	0°♌	
desc. node	7912 Mar 30 01:41	16°♋02'33	desc. node		7914 Sep 14 20:35	13°♌28'41	
	7912 Apr 10 06:50	0°♋	evening max el		7914 Sep 18 12:22	17°♌02'19 45°40'35	
	7912 May 04 06:52	0°♋			7914 Oct 02 22:44	0°♊	
	7912 May 28 05:42	0°♌	greatest brilliancy		7914 Oct 27 13:53	15°♊12'08 -4.7m	
morning set	7912 May 31 04:28	3°♌41'34	retrograde		7914 Nov 06 07:10	16°♊55'02	
	7912 Jun 21 05:29	0°♌	evening set		7914 Nov 23 21:27	11°♊05'06	
			inferior conj		7914 Nov 27 16:08	8°♊45'47 -7°44'11	
superior conj	7912 Jul 09 10:17	22°♌40'53 -0°27'38	minimum elong		7914 Nov 28 00:21	8°♊32'56 7°42'58	
minimum elong	7912 Jul 09 16:37	23°♌00'37 0°27'28	min. Earth dist.		7914 Nov 28 09:04	8°♊19'20 0.28793 AU	
max. Earth dist.	7912 Jul 12 19:27	26°♌53'14 1.72287 AU	morning rise		7914 Dec 02 02:58	6°♊01'54	
	7912 Jul 15 07:34	0°♌	direct		7914 Dec 19 02:41	0°♊29'01	
asc. node	7912 Jul 21 00:06	7°♌03'54	greatest brilliancy		7914 Dec 30 05:20	2°♊45'04 -4.8m	
	7912 Aug 08 12:24	0°♍	asc. node		7915 Jan 05 20:24	5°♊55'11	
evening rise	7912 Aug 16 15:14	10°♍01'43			7915 Feb 04 15:10	0°♊	
	7912 Sep 01 20:10	0°♌	morning max el		7915 Feb 07 02:16	2°♊26'03 46°24'57	
	7912 Sep 26 07:35	0°♌			7915 Mar 04 20:43	0°♋	
	7912 Oct 21 00:02	0°♊			7915 Mar 30 18:09	0°♋	
desc. node	7912 Nov 09 17:39	23°♊44'28			7915 Apr 24 16:56	0°♋	
	7912 Nov 14 23:21	0°♊	desc. node		7915 Apr 27 13:49	3°♋29'38	
	7912 Dec 10 07:41	0°♋			7915 May 19 04:47	0°♋	
	7913 Jan 05 05:50	0°♋			7915 Jun 12 11:39	0°♌	
	7913 Feb 01 09:32	0°♋			7915 Jul 06 17:13	0°♌	
evening max el	7913 Feb 12 07:12	11°♋15'09 46°48'57			7915 Jul 30 23:24	0°♌	
asc. node	7913 Mar 02 17:39	28°♋18'11	morning set		7915 Aug 12 02:29	14°♌58'37	
	7913 Mar 04 19:46	0°♋	asc. node		7915 Aug 18 12:12	22°♌53'02	
greatest brilliancy	7913 Mar 24 23:19	12°♋13'10 -4.9m			7915 Aug 24 06:35	0°♍	
retrograde	7913 Apr 03 17:18	14°♋01'46			7915 Sep 17 14:22	0°♌	
evening set	7913 Apr 21 18:44	7°♋49'22					
inferior conj	7913 Apr 24 09:51	6°♋12'53 9°09'57	superior conj		7915 Sep 18 12:22	1°♌07'50 1°05'47	
minimum elong	7913 Apr 24 07:56	6°♋15'50 9°09'50	minimum elong		7915 Sep 18 03:04	0°♌39'12 1°05'29	
min. Earth dist.	7913 Apr 24 05:54	6°♋18'59 0.27098 AU	max. Earth dist.		7915 Sep 19 04:08	1°♌56'28 1.73264 AU	
morning rise	7913 Apr 26 21:11	4°♋42'02			7915 Oct 11 22:33	0°♌	
	7913 May 06 05:59	30°♋♋	evening rise		7915 Oct 24 20:36	15°♌54'25	
direct	7913 May 14 23:59	28°♋25'55			7915 Nov 05 07:40	0°♊	
	7913 May 24 02:52	0°♋			7915 Nov 29 18:25	0°♊	
greatest brilliancy	7913 May 24 13:40	0°♋09'07 -4.9m	desc. node		7915 Dec 08 05:23	10°♊21'07	
desc. node	7913 Jun 22 11:41	19°♋35'14			7915 Dec 24 07:08	0°♋	
	7913 Jul 03 12:17	0°♌			7916 Jan 17 21:53	0°♋	
morning max el	7913 Jul 04 02:43	0°♌35'42 46°36'05			7916 Feb 11 15:57	0°♋	
	7913 Jul 31 21:04	0°♌			7916 Mar 07 18:10	0°♋	
	7913 Aug 27 07:11	0°♌	asc. node		7916 Mar 30 05:02	26°♋02'53	
	7913 Sep 21 22:15	0°♍			7916 Apr 02 17:09	0°♌	
asc. node	7913 Oct 13 10:32	25°♍37'56	evening max el		7916 Apr 26 03:17	25°♌07'20 46°56'15	
	7913 Oct 17 01:49	0°♌			7916 May 01 01:32	0°♌	
	7913 Nov 10 20:37	0°♌	greatest brilliancy		7916 Jun 05 00:53	25°♌49'02 -4.9m	

retrograde	7916 Jun 15 14:32	27°☿54'24		minimum elong	7918 Nov 25 20:45	7°♁07'49	1°17'42
evening set	7916 Jun 30 22:46	23°☿15'27			7918 Dec 14 08:38	0°☿	
inferior conj	7916 Jul 06 13:44	19°☿53'25	3°18'12	evening rise	7919 Jan 02 06:18	23°☿23'59	
minimum elong	7916 Jul 06 20:53	19°☿42'23	3°15'58	desc. node	7919 Jan 04 17:22	26°☿26'54	
min. Earth dist.	7916 Jul 06 08:50	20°☿00'59	0.27617 AU		7919 Jan 07 14:10	0°≈	
morning rise	7916 Jul 12 19:32	16°☿12'33			7919 Jan 31 18:46	0°✠	
desc. node	7916 Jul 19 23:26	13°☿08'21			7919 Feb 24 22:37	0°☿	
direct	7916 Jul 27 12:13	11°☿59'43			7919 Mar 21 03:13	0°♄	
greatest brilliancy	7916 Aug 06 07:28	13°☿46'04	-4.8m		7919 Apr 14 12:02	0°♁	
	7916 Aug 31 23:03	0°♁		asc. node	7919 Apr 27 16:33	16°♁03'02	
morning max el	7916 Sep 14 14:31	12°♁20'47	45°51'47		7919 May 09 06:51	0°☿	
	7916 Oct 02 02:01	0°♁			7919 Jun 03 21:38	0°♁	
	7916 Oct 29 10:33	0°♁			7919 Jul 01 08:25	0°♁	
asc. node	7916 Nov 09 22:40	13°♁10'29		evening max el	7919 Jul 07 11:05	6°♁10'22	46°12'49
	7916 Nov 24 08:29	0°♁			7919 Aug 04 17:28	0°♁	
	7916 Dec 19 11:01	0°♁		greatest brilliancy	7919 Aug 15 01:31	5°♁22'00	-4.8m
	7917 Jan 13 01:31	0°☿		desc. node	7919 Aug 17 11:05	6°♁12'01	
	7917 Feb 06 08:30	0°≈		retrograde	7919 Aug 26 01:28	7°♁34'42	
desc. node	7917 Mar 01 15:24	29°≈00'07		evening set	7919 Sep 11 05:52	2°♁33'20	
	7917 Mar 02 10:34	0°✠			7919 Sep 15 11:13	30°♁	
morning set	7917 Mar 13 10:57	13°✠47'07		min. Earth dist.	7919 Sep 15 23:14	29°♁41'10	0.28867 AU
	7917 Mar 26 09:14	0°☿		inferior conj	7919 Sep 16 13:56	29°♁18'04	-6°27'30
	7917 Apr 19 05:58	0°♄		minimum elong	7919 Sep 16 04:00	29°♁33'41	6°25'32
				morning rise	7919 Sep 21 02:23	26°♁31'34	
superior conj	7917 Apr 23 08:43	5°♄10'31	-1°27'12	direct	7919 Oct 08 00:21	21°♁06'54	
minimum elong	7917 Apr 23 06:10	5°♄02'30	1°27'17	greatest brilliancy	7919 Oct 17 21:55	22°♁52'32	-4.7m
max. Earth dist.	7917 Apr 24 02:48	6°♄07'23	1.71213 AU		7919 Oct 31 16:00	0°♁	
	7917 May 13 02:39	0°♁		morning max el	7919 Nov 25 18:36	20°♁59'14	45°44'55
evening rise	7917 Jun 02 22:19	26°♁05'32			7919 Dec 04 20:11	0°♁	
	7917 Jun 06 01:21	0°☿		asc. node	7919 Dec 08 10:41	3°♁43'09	
asc. node	7917 Jun 22 14:11	20°☿36'10			7920 Jan 01 12:09	0°♁	
	7917 Jun 30 03:51	0°♁			7920 Jan 27 06:57	0°☿	
	7917 Jul 24 11:28	0°♁			7920 Feb 21 04:37	0°≈	
	7917 Aug 18 01:52	0°♁			7920 Mar 16 14:48	0°✠	
	7917 Sep 12 02:13	0°♁		desc. node	7920 Mar 29 03:37	15°✠32'27	
	7917 Oct 07 18:21	0°♁			7920 Apr 09 18:19	0°☿	
desc. node	7917 Oct 12 07:57	5°♁13'21			7920 May 03 18:08	0°♄	
	7917 Nov 03 13:54	0°☿			7920 May 27 16:51	0°♁	
evening max el	7917 Nov 29 07:51	26°☿31'49	46°00'24	morning set	7920 May 28 16:33	1°♁14'15	
	7917 Dec 02 23:32	0°≈			7920 Jun 20 16:32	0°☿	
greatest brilliancy	7918 Jan 07 19:02	25°≈16'50	-4.8m				
retrograde	7918 Jan 17 11:17	26°≈59'58		superior conj	7920 Jul 07 00:12	20°☿20'47	-0°31'04
evening set	7918 Jan 31 22:23	22°≈55'04		minimum elong	7920 Jul 07 07:17	20°☿42'48	0°30'53
asc. node	7918 Feb 02 08:05	22°≈08'49		max. Earth dist.	7920 Jul 10 07:57	24°☿28'50	1.72238 AU
inferior conj	7918 Feb 07 05:56	19°≈12'20	1°15'20		7920 Jul 14 18:31	0°♁	
minimum elong	7918 Feb 07 03:03	19°≈16'47	1°14'30	asc. node	7920 Jul 20 02:07	6°♁36'11	
min. Earth dist.	7918 Feb 07 13:28	19°≈00'44	0.27228 AU		7920 Aug 07 23:19	0°♁	
morning rise	7918 Feb 13 07:14	15°≈37'06		evening rise	7920 Aug 14 07:39	7°♁50'29	
direct	7918 Feb 28 02:39	11°≈18'10			7920 Sep 01 07:09	0°♁	
greatest brilliancy	7918 Mar 10 13:59	13°≈21'54	-4.9m		7920 Sep 25 18:46	0°♁	
	7918 Apr 04 14:17	0°✠			7920 Oct 20 11:37	0°♁	
morning max el	7918 Apr 19 15:00	14°✠14'22	46°58'42	desc. node	7920 Nov 08 19:41	23°♁14'31	
	7918 May 04 14:39	0°☿			7920 Nov 14 11:36	0°☿	
desc. node	7918 May 25 01:55	22°☿59'41			7920 Dec 09 21:04	0°≈	
	7918 May 31 03:12	0°♄			7921 Jan 04 21:16	0°✠	
	7918 Jun 25 12:28	0°♁			7921 Feb 01 05:35	0°☿	
	7918 Jul 20 10:44	0°☿		evening max el	7921 Feb 09 20:08	8°☿49'19	46°47'39
	7918 Aug 14 04:27	0°♁		asc. node	7921 Mar 01 19:35	27°☿07'07	
	7918 Sep 07 19:39	0°♁			7921 Mar 05 12:27	0°♄	
asc. node	7918 Sep 15 00:18	8°♁47'05		greatest brilliancy	7921 Mar 22 11:47	9°♄45'21	-4.9m
	7918 Oct 02 08:23	0°♁		retrograde	7921 Apr 01 06:20	11°♄34'45	
morning set	7918 Oct 20 00:41	21°♁42'34		evening set	7921 Apr 19 05:00	5°♄25'49	
	7918 Oct 26 18:24	0°♁		inferior conj	7921 Apr 21 22:34	3°♄45'53	9°07'31
	7918 Nov 20 02:12	0°♁		minimum elong	7921 Apr 21 19:40	3°♄50'21	9°07'20
max. Earth dist.	7918 Nov 23 21:59	4°♁43'26	1.73069 AU	min. Earth dist.	7921 Apr 21 18:06	3°♄52'45	0.27087 AU
				morning rise	7921 Apr 24 10:22	2°♄14'34	
superior conj	7918 Nov 25 13:20	6°♁44'56	1°17'43		7921 Apr 28 08:25	30°♁	

direct	7921 May 12 12:36	25° Υ 58'49			7923 Oct 11 09:18	0° \mathbb{M}	
greatest brilliancy	7921 May 22 02:17	27° Υ 42'28	-4.9m	evening rise	7923 Oct 22 14:11	13° \mathbb{M} 47'37	
	7921 May 27 11:39	0° \mathcal{B}			7923 Nov 04 18:32	0° \mathcal{A}	
desc. node	7921 Jun 21 13:49	18° \mathcal{B} 34'05			7923 Nov 29 05:30	0° \mathcal{Z}	
morning max el	7921 Jul 01 16:46	28° \mathcal{B} 13'46	46°37'42	desc. node	7923 Dec 07 07:29	9° \mathcal{Z} 53'19	
	7921 Jul 03 11:20	0° \mathbb{I}			7923 Dec 23 18:35	0° \approx	
	7921 Jul 31 13:26	0° \mathcal{E}			7924 Jan 17 09:52	0° \mathcal{H}	
	7921 Aug 26 20:59	0° Ω			7924 Feb 11 04:45	0° Υ	
	7921 Sep 21 10:43	0° \mathbb{P}			7924 Mar 07 08:19	0° \mathcal{B}	
asc. node	7921 Oct 12 12:30	25° \mathbb{P} 08'24		asc. node	7924 Mar 29 06:57	25° \mathcal{B} 22'07	
	7921 Oct 16 13:31	0° \mathcal{E}			7924 Apr 02 10:03	0° \mathbb{I}	
	7921 Nov 10 07:53	0° \mathbb{M}		evening max el	7924 Apr 23 18:26	22° \mathbb{I} 48'02	46°56'55
	7921 Dec 04 19:35	0° \mathcal{A}			7924 May 01 02:40	0° \mathcal{E}	
morning set	7921 Dec 27 21:04	28° \mathcal{A} 28'47		greatest brilliancy	7924 Jun 02 16:28	23° \mathcal{E} 29'50	-4.9m
	7921 Dec 29 02:31	0° \mathcal{Z}		retrograde	7924 Jun 13 05:08	25° \mathcal{E} 33'54	
	7922 Jan 22 06:08	0° \approx		evening set	7924 Jun 28 15:25	20° \mathcal{E} 52'22	
desc. node	7922 Feb 01 05:19	12° \approx 25'04		inferior conj	7924 Jul 04 03:47	17° \mathcal{E} 33'41	3°39'28
max. Earth dist.	7922 Feb 01 12:59	12° \approx 48'59	1.71962 AU	minimum elong	7924 Jul 04 11:34	17° \mathcal{E} 21'38	3°37'04
				min. Earth dist.	7924 Jul 03 23:23	17° \mathcal{E} 40'29	0.27582 AU
superior conj	7922 Feb 04 11:16	16° \approx 28'14	-0°07'54	morning rise	7924 Jul 10 08:18	13° \mathcal{E} 54'29	
minimum elong	7922 Feb 04 09:20	16° \approx 22'15	0°07'42	desc. node	7924 Jul 19 01:22	10° \mathcal{E} 24'41	
behind sun begin	7922 Feb 03 11:12	15° \approx 13'11		direct	7924 Jul 25 02:20	9° \mathcal{E} 40'46	
behind sun end	7922 Feb 05 07:29	17° \approx 31'20		greatest brilliancy	7924 Aug 03 20:43	11° \mathcal{E} 26'27	-4.8m
	7922 Feb 15 07:12	0° \mathcal{H}			7924 Sep 01 05:20	0° Ω	
	7922 Mar 11 06:13	0° Υ		morning max el	7924 Sep 12 04:40	10° Ω 04'29	45°52'50
evening rise	7922 Mar 16 08:08	6° Υ 22'16			7924 Oct 01 19:35	0° \mathbb{P}	
	7922 Apr 04 04:14	0° \mathcal{B}			7924 Oct 29 00:34	0° \mathcal{E}	
	7922 Apr 28 03:17	0° \mathbb{I}		asc. node	7924 Nov 09 00:44	12° \mathcal{E} 38'15	
	7922 May 22 06:08	0° \mathcal{E}			7924 Nov 23 20:56	0° \mathbb{M}	
asc. node	7922 May 25 04:21	3° \mathcal{E} 37'04			7924 Dec 18 22:40	0° \mathcal{A}	
	7922 Jun 15 16:00	0° Ω			7925 Jan 12 12:45	0° \mathcal{Z}	
	7922 Jul 10 13:06	0° \mathbb{P}			7925 Feb 05 19:31	0° \approx	
	7922 Aug 05 05:06	0° \mathcal{E}		desc. node	7925 Feb 28 17:21	28° \approx 32'08	
	7922 Sep 01 10:47	0° \mathbb{M}			7925 Mar 01 21:28	0° \mathcal{H}	
desc. node	7922 Sep 13 22:31	12° \mathbb{M} 41'22		morning set	7925 Mar 10 22:17	11° \mathcal{H} 18'16	
evening max el	7922 Sep 16 04:29	14° \mathbb{M} 52'08	45°40'58		7925 Mar 25 20:06	0° Υ	
	7922 Oct 03 07:16	0° \mathcal{A}			7925 Apr 18 16:49	0° \mathcal{B}	
greatest brilliancy	7922 Oct 25 03:51	13° \mathcal{A} 00'00	-4.7m				
retrograde	7922 Nov 03 23:13	14° \mathcal{A} 44'11		superior conj	7925 Apr 20 19:53	2° \mathcal{B} 40'36	-1°26'43
evening set	7922 Nov 21 15:34	8° \mathcal{A} 50'24		minimum elong	7925 Apr 20 16:16	2° \mathcal{B} 29'14	1°26'45
inferior conj	7922 Nov 25 08:01	6° \mathcal{A} 34'07	-7°52'43	max. Earth dist.	7925 Apr 21 07:33	3° \mathcal{B} 17'16	1.71208 AU
minimum elong	7922 Nov 25 15:44	6° \mathcal{A} 22'02	7°51'39		7925 May 12 13:30	0° \mathbb{I}	
min. Earth dist.	7922 Nov 25 23:35	6° \mathcal{A} 09'45	0.28837 AU	evening rise	7925 May 31 09:44	23° \mathbb{I} 37'02	
morning rise	7922 Nov 29 15:43	3° \mathcal{A} 54'53			7925 Jun 05 12:16	0° \mathcal{E}	
	7922 Dec 07 14:20	30° \mathcal{R} \mathbb{M}		asc. node	7925 Jun 21 16:08	20° \mathcal{E} 08'11	
direct	7922 Dec 16 19:28	28° \mathbb{M} 17'11			7925 Jun 29 14:52	0° Ω	
	7922 Dec 26 09:30	0° \mathcal{A}			7925 Jul 23 22:39	0° \mathbb{P}	
greatest brilliancy	7922 Dec 27 20:10	0° \mathcal{A} 31'38	-4.8m		7925 Aug 17 13:24	0° \mathcal{E}	
asc. node	7923 Jan 04 22:20	4° \mathcal{A} 31'48			7925 Sep 11 14:26	0° \mathbb{M}	
	7923 Feb 04 13:28	0° \mathcal{Z}			7925 Oct 07 07:55	0° \mathcal{A}	
morning max el	7923 Feb 04 18:21	0° \mathcal{Z} 12'09	46°23'11	desc. node	7925 Oct 11 10:02	4° \mathcal{A} 39'45	
	7923 Mar 04 12:40	0° \approx			7925 Nov 03 06:24	0° \mathcal{Z}	
	7923 Mar 30 07:54	0° \mathcal{H}		evening max el	7925 Nov 26 21:16	24° \mathcal{Z} 13'11	45°58'56
	7923 Apr 24 05:38	0° Υ			7925 Dec 03 00:55	0° \approx	
desc. node	7923 Apr 26 15:50	2° Υ 57'24		greatest brilliancy	7926 Jan 05 09:34	22° \approx 57'37	-4.8m
	7923 May 18 16:50	0° \mathcal{B}		retrograde	7926 Jan 15 00:01	24° \approx 39'32	
	7923 Jun 11 23:15	0° \mathbb{I}		evening set	7926 Jan 29 12:17	20° \approx 33'59	
	7923 Jul 06 04:28	0° \mathcal{E}		asc. node	7926 Feb 01 10:00	18° \approx 55'45	
	7923 Jul 30 10:24	0° Ω		inferior conj	7926 Feb 04 19:40	16° \approx 51'41	0°52'11
morning set	7923 Aug 09 18:24	12° Ω 45'55		minimum elong	7926 Feb 04 17:40	16° \approx 54'47	0°51'38
asc. node	7923 Aug 17 14:03	22° Ω 25'13		min. Earth dist.	7926 Feb 05 04:39	16° \approx 37'50	0.27263 AU
	7923 Aug 23 17:25	0° \mathbb{P}		morning rise	7926 Feb 10 22:24	13° \approx 14'07	
				direct	7926 Feb 25 16:12	8° \approx 56'41	
superior conj	7923 Sep 16 05:37	28° \mathbb{P} 59'53	1°03'38	greatest brilliancy	7926 Mar 08 05:56	11° \approx 02'12	-4.9m
minimum elong	7923 Sep 15 20:13	28° \mathbb{P} 30'55	1°03'18		7926 Apr 04 20:08	0° \mathcal{H}	
max. Earth dist.	7923 Sep 17 01:43	0° \mathcal{E} 01'52	1.73247 AU	morning max el	7926 Apr 17 03:52	11° \mathcal{H} 49'32	46°58'25
	7923 Sep 17 01:06	0° \mathcal{E}			7926 May 04 08:29	0° Υ	

desc. node	7926 May 24 04:02	22° Υ 22'24		7928 Dec 09 10:07	0° \approx	
	7926 May 30 17:39	0° \mathcal{B}		7929 Jan 04 12:26	0° \mathcal{H}	
	7926 Jun 25 01:22	0° Π		7929 Feb 01 01:43	0° Υ	
	7926 Jul 19 22:44	0° \mathcal{E}	evening max el	7929 Feb 07 10:01	6° Υ 27'32	46°46'21
	7926 Aug 13 15:52	0° Ω	asc. node	7929 Feb 28 21:37	25° Υ 55'37	
	7926 Sep 07 06:39	0° \mathcal{M}		7929 Mar 06 09:58	0° \mathcal{B}	
asc. node	7926 Sep 14 02:18	8° \mathcal{M} 19'53	greatest brilliancy	7929 Mar 19 23:55	7° \mathcal{B} 18'47	-4.9m
	7926 Oct 01 19:05	0° $\underline{\mathcal{A}}$	retrograde	7929 Mar 29 19:53	9° \mathcal{B} 09'13	
morning set	7926 Oct 17 17:57	19° $\underline{\mathcal{A}}$ 35'28	evening set	7929 Apr 16 14:51	3° \mathcal{B} 04'32	
	7926 Oct 26 04:57	0° \mathcal{M}	inferior conj	7929 Apr 19 11:20	1° \mathcal{B} 20'18	9°04'01
	7926 Nov 19 12:43	0° \mathcal{A}	minimum elong	7929 Apr 19 07:30	1° \mathcal{B} 26'12	9°03'44
max. Earth dist.	7926 Nov 21 16:15	2° \mathcal{A} 39'07	1.73097 AU	min. Earth dist.	7929 Apr 19 06:08	1° \mathcal{B} 28'18
					0.27075 AU	
				7929 Apr 21 15:56	30° $\mathcal{R}\Upsilon$	
superior conj	7926 Nov 23 06:26	4° \mathcal{A} 37'01	1°19'04	morning rise	7929 Apr 22 00:11	29° Υ 47'35
minimum elong	7926 Nov 23 13:21	4° \mathcal{A} 58'23	1°19'04	direct	7929 May 10 01:44	23° Υ 33'20
	7926 Dec 13 19:14	0° \mathcal{B}		greatest brilliancy	7929 May 19 14:24	25° Υ 16'39
evening rise	7926 Dec 30 21:32	21° \mathcal{B} 09'27				-4.9m
desc. node	7927 Jan 03 19:17	25° \mathcal{B} 59'37		desc. node	7929 May 29 09:08	0° \mathcal{B}
	7927 Jan 07 00:55	0° \approx		morning max el	7929 Jun 20 15:39	17° \mathcal{B} 35'06
	7927 Jan 31 05:42	0° \mathcal{H}			7929 Jun 29 07:15	25° \mathcal{B} 54'20
	7927 Feb 24 09:48	0° Υ			7929 Jul 03 08:53	46°39'19
	7927 Mar 20 14:46	0° \mathcal{B}			7929 Jul 31 05:00	0° \mathcal{E}
	7927 Apr 14 00:08	0° Π			7929 Aug 26 10:11	0° Ω
asc. node	7927 Apr 26 18:40	15° Π 31'41		asc. node	7929 Sep 20 22:41	0° \mathcal{M}
	7927 May 08 19:53	0° \mathcal{E}			7929 Oct 11 14:31	24° \mathcal{M} 40'19
	7927 Jun 03 12:33	0° Ω			7929 Oct 16 00:48	0° $\underline{\mathcal{A}}$
	7927 Jul 01 04:17	0° \mathcal{M}			7929 Nov 09 18:45	0° \mathcal{M}
evening max el	7927 Jul 05 01:29	3° \mathcal{M} 53'50	46°14'23	morning set	7929 Dec 04 06:14	0° \mathcal{A}
	7927 Aug 06 01:01	0° $\underline{\mathcal{A}}$			7929 Dec 25 13:00	26° \mathcal{A} 16'51
greatest brilliancy	7927 Aug 12 17:14	3° $\underline{\mathcal{A}}$ 10'47	-4.8m		7929 Dec 28 13:04	0° \mathcal{B}
desc. node	7927 Aug 16 13:03	4° $\underline{\mathcal{A}}$ 25'44			7930 Jan 21 16:41	0° \approx
retrograde	7927 Aug 23 17:40	5° $\underline{\mathcal{A}}$ 24'31		max. Earth dist.	7930 Jan 30 03:25	10° \approx 31'22
evening set	7927 Sep 08 19:07	0° $\underline{\mathcal{A}}$ 26'57		desc. node	7930 Jan 31 07:13	1.72003 AU
	7927 Sep 09 13:47	30° $\mathcal{R}\mathcal{M}$				11° \approx 58'03
min. Earth dist.	7927 Sep 13 15:00	27° \mathcal{M} 31'35	0.28832 AU	superior conj	7930 Feb 02 00:21	14° \approx 06'19
inferior conj	7927 Sep 14 06:00	27° \mathcal{M} 08'05	-6°13'53	minimum elong	7930 Feb 01 23:21	-0°04'11
minimum elong	7927 Sep 13 20:00	27° \mathcal{M} 23'45	6°11'49	behind sun begin	7930 Feb 01 23:21	14° \approx 03'12
morning rise	7927 Sep 18 21:09	24° \mathcal{M} 17'53		behind sun end	7930 Jan 31 23:10	0°04'02
direct	7927 Oct 05 15:36	18° \mathcal{M} 57'20			7930 Jan 31 23:10	12° \approx 47'45
greatest brilliancy	7927 Oct 15 13:45	20° \mathcal{M} 43'26	-4.7m		7930 Feb 02 23:33	15° \approx 18'39
	7927 Nov 01 10:33	0° $\underline{\mathcal{A}}$			7930 Feb 14 17:49	0° \mathcal{H}
morning max el	7927 Nov 23 09:43	18° $\underline{\mathcal{A}}$ 47'24	45°44'23	evening rise	7930 Mar 10 16:57	0° Υ
	7927 Dec 04 14:51	0° \mathcal{M}			7930 Mar 13 19:55	3° Υ 55'01
asc. node	7927 Dec 07 12:40	3° \mathcal{M} 01'38			7930 Apr 03 15:06	0° \mathcal{B}
	7928 Jan 01 02:29	0° \mathcal{A}		asc. node	7930 Apr 27 14:18	0° Π
	7928 Jan 26 19:35	0° \mathcal{B}			7930 May 21 17:24	0° \mathcal{E}
	7928 Feb 20 16:25	0° \approx			7930 May 24 06:17	3° \mathcal{E} 08'08
	7928 Mar 16 02:09	0° \mathcal{H}			7930 Jun 15 03:41	0° Ω
desc. node	7928 Mar 28 05:36	15° \mathcal{H} 03'48			7930 Jul 10 01:32	0° \mathcal{M}
	7928 Apr 09 05:22	0° Υ		desc. node	7930 Aug 04 19:04	0° $\underline{\mathcal{A}}$
	7928 May 03 05:00	0° \mathcal{B}		evening max el	7930 Sep 01 04:33	0° \mathcal{M}
morning set	7928 May 26 04:53	28° \mathcal{B} 48'59			7930 Sep 13 00:34	11° \mathcal{M} 54'41
	7928 May 27 03:33	0° Π			7930 Sep 13 20:29	12° \mathcal{M} 42'42
	7928 Jun 20 03:07	0° \mathcal{E}			7930 Oct 03 18:19	45°41'13
					7930 Oct 03 18:19	0° \mathcal{A}
				greatest brilliancy	7930 Oct 22 18:20	10° \mathcal{A} 49'19
				retrograde	7930 Oct 22 18:20	-4.7m
				evening set	7930 Nov 01 14:46	12° \mathcal{A} 34'00
				inferior conj	7930 Nov 19 09:31	6° \mathcal{A} 36'47
				minimum elong	7930 Nov 22 23:51	4° \mathcal{A} 23'20
superior conj	7928 Jul 04 14:19	18° \mathcal{E} 02'34	-0°34'27		7930 Nov 22 23:51	-8°00'36
minimum elong	7928 Jul 04 22:05	18° \mathcal{E} 26'43	0°34'13		7930 Nov 23 07:03	4° \mathcal{A} 12'03
max. Earth dist.	7928 Jul 07 21:15	22° \mathcal{E} 08'13	1.72194 AU	min. Earth dist.	7930 Nov 23 14:18	7°59'40
	7928 Jul 14 05:02	0° Ω		morning rise	7930 Nov 23 14:18	4° \mathcal{A} 00'42
	7928 Jul 19 03:59	6° Ω 09'22			7930 Nov 27 04:26	0.28878 AU
	7928 Aug 07 09:50	0° \mathcal{M}			7930 Nov 30 09:48	1° \mathcal{A} 48'29
evening rise	7928 Aug 12 00:11	5° \mathcal{M} 40'52			7930 Nov 30 09:48	30° $\mathcal{R}\mathcal{M}$
	7928 Aug 31 17:47	0° $\underline{\mathcal{A}}$		direct	7930 Nov 30 09:48	30° $\mathcal{R}\mathcal{M}$
	7928 Sep 25 05:37	0° \mathcal{M}		greatest brilliancy	7930 Dec 14 12:06	26° \mathcal{M} 06'16
	7928 Oct 19 22:51	0° \mathcal{A}			7930 Dec 25 10:55	28° \mathcal{M} 18'47
desc. node	7928 Nov 07 21:43	22° \mathcal{A} 45'35			7930 Dec 29 07:10	-4.8m
	7928 Nov 13 23:30	0° \mathcal{B}		asc. node	7931 Jan 04 00:14	0° \mathcal{A}
				morning max el	7931 Jan 04 00:14	3° \mathcal{A} 11'35
					7931 Feb 02 09:36	27° \mathcal{A} 57'02
					7931 Feb 04 10:38	46°21'28
						0° \mathcal{B}
					7931 Mar 04 04:04	0° \approx
					7931 Mar 29 21:12	0° \mathcal{H}

	7931 Apr 23 17:54	0°♿			7933 Dec 03 03:44	0°♿	
desc. node	7931 Apr 25 17:52	2°♿26'23		greatest brilliancy	7934 Jan 02 23:34	20°♿37'46	-4.8m
	7931 May 18 04:29	0°♿		retrograde	7934 Jan 12 13:00	22°♿19'06	
	7931 Jun 11 10:29	0°♿		evening set	7934 Jan 27 02:17	18°♿12'12	
	7931 Jul 05 15:24	0°♿		asc. node	7934 Jan 31 12:03	15°♿40'04	
	7931 Jul 29 21:06	0°♿		inferior conj	7934 Feb 02 09:19	14°♿30'41	0°28'54
morning set	7931 Aug 07 10:24	10°♿34'18		minimum elong	7934 Feb 02 08:12	14°♿32'24	0°28'39
asc. node	7931 Aug 16 16:06	21°♿58'51		min. Earth dist.	7934 Feb 02 19:39	14°♿14'46	0.27306 AU
	7931 Aug 23 03:58	0°♿		morning rise	7934 Feb 08 13:23	10°♿51'13	
				direct	7934 Feb 23 05:46	6°♿34'34	
superior conj	7931 Sep 13 22:59	26°♿53'12	1°01'23	greatest brilliancy	7934 Mar 05 22:00	8°♿42'14	-4.9m
minimum elong	7931 Sep 13 13:32	26°♿24'05	1°01'02		7934 Apr 05 00:18	0°♿	
max. Earth dist.	7931 Sep 14 22:34	28°♿05'56	1.73227 AU	morning max el	7934 Apr 14 17:44	9°♿26'35	46°58'03
	7931 Sep 16 11:34	0°♿			7934 May 04 02:09	0°♿	
	7931 Oct 10 19:47	0°♿		desc. node	7934 May 23 05:54	21°♿44'10	
evening rise	7931 Oct 20 07:52	11°♿41'57			7934 May 30 08:07	0°♿	
	7931 Nov 04 05:08	0°♿			7934 Jun 24 14:19	0°♿	
	7931 Nov 28 16:24	0°♿			7934 Jul 19 10:48	0°♿	
desc. node	7931 Dec 06 09:22	9°♿25'30			7934 Aug 13 03:21	0°♿	
	7931 Dec 23 05:53	0°♿			7934 Sep 06 17:45	0°♿	
	7932 Jan 16 21:45	0°♿		asc. node	7934 Sep 13 04:19	7°♿52'20	
	7932 Feb 10 17:27	0°♿			7934 Oct 01 05:55	0°♿	
	7932 Mar 06 22:26	0°♿		morning set	7934 Oct 15 11:12	17°♿27'50	
asc. node	7932 Mar 28 09:03	24°♿42'00			7934 Oct 25 15:39	0°♿	
	7932 Apr 02 03:04	0°♿			7934 Nov 18 23:24	0°♿	
evening max el	7932 Apr 21 08:26	20°♿26'21	46°57'35	max. Earth dist.	7934 Nov 19 12:03	0°♿39'02	1.73120 AU
	7932 May 01 04:53	0°♿					
greatest brilliancy	7932 May 31 08:31	21°♿11'35	-4.9m	superior conj	7934 Nov 20 23:38	2°♿28'58	1°20'18
retrograde	7932 Jun 10 19:10	23°♿13'43		minimum elong	7934 Nov 21 06:01	2°♿48'38	1°20'19
evening set	7932 Jun 26 08:09	18°♿29'19			7934 Dec 13 05:59	0°♿	
inferior conj	7932 Jul 01 17:48	15°♿14'18	4°00'26	evening rise	7934 Dec 28 12:58	18°♿55'11	
minimum elong	7932 Jul 02 02:11	15°♿01'19	3°57'53	desc. node	7935 Jan 02 21:15	25°♿32'08	
min. Earth dist.	7932 Jul 01 14:12	15°♿19'53	0.27551 AU		7935 Jan 06 11:48	0°♿	
morning rise	7932 Jul 07 20:45	11°♿36'53			7935 Jan 30 16:49	0°♿	
desc. node	7932 Jul 18 03:22	7°♿46'23			7935 Feb 23 21:14	0°♿	
direct	7932 Jul 22 15:54	7°♿21'55			7935 Mar 20 02:36	0°♿	
greatest brilliancy	7932 Aug 01 10:24	9°♿07'24	-4.8m		7935 Apr 13 12:35	0°♿	
	7932 Sep 01 09:27	0°♿		asc. node	7935 Apr 25 20:32	14°♿58'29	
morning max el	7932 Sep 09 18:09	7°♿46'42	45°54'04		7935 May 08 09:20	0°♿	
	7932 Oct 01 12:38	0°♿			7935 Jun 03 04:00	0°♿	
	7932 Oct 28 14:17	0°♿			7935 Jul 01 01:11	0°♿	
asc. node	7932 Nov 08 02:41	12°♿06'16		evening max el	7935 Jul 02 16:26	1°♿37'48	46°16'12
	7932 Nov 23 09:11	0°♿			7935 Aug 08 01:17	0°♿	
	7932 Dec 18 10:10	0°♿		greatest brilliancy	7935 Aug 10 08:22	0°♿57'49	-4.8m
	7933 Jan 11 23:54	0°♿		desc. node	7935 Aug 15 15:07	2°♿34'23	
	7933 Feb 05 06:30	0°♿		retrograde	7935 Aug 21 10:15	3°♿13'04	
desc. node	7933 Feb 27 19:26	28°♿04'34			7935 Sep 03 03:57	30°♿	
	7933 Mar 01 08:22	0°♿		evening set	7935 Sep 06 08:19	28°♿19'04	
morning set	7933 Mar 08 09:18	8°♿48'24		inferior conj	7935 Sep 11 21:52	24°♿56'42	-5°59'35
	7933 Mar 25 06:56	0°♿		minimum elong	7935 Sep 11 11:53	25°♿12'19	5°57'27
				min. Earth dist.	7935 Sep 11 06:18	25°♿21'02	0.28794 AU
superior conj	7933 Apr 18 06:45	0°♿09'51	-1°26'02	morning rise	7935 Sep 16 15:46	22°♿02'55	
minimum elong	7933 Apr 18 02:05	29°♿55'08	1°26'03	direct	7935 Oct 03 07:01	16°♿46'23	
	7933 Apr 18 03:38	0°♿		greatest brilliancy	7935 Oct 13 04:54	18°♿32'29	-4.7m
max. Earth dist.	7933 Apr 18 09:37	0°♿18'51	1.71203 AU		7935 Nov 02 00:48	0°♿	
	7933 May 12 00:20	0°♿		morning max el	7935 Nov 21 01:42	16°♿36'48	45°43'55
evening rise	7933 May 28 20:55	21°♿07'54			7935 Dec 04 09:21	0°♿	
	7933 Jun 04 23:09	0°♿		asc. node	7935 Dec 06 14:32	2°♿19'27	
asc. node	7933 Jun 20 18:03	19°♿40'12			7935 Dec 31 16:55	0°♿	
	7933 Jun 29 01:50	0°♿			7936 Jan 26 08:24	0°♿	
	7933 Jul 23 09:50	0°♿			7936 Feb 20 04:26	0°♿	
	7933 Aug 17 00:57	0°♿			7936 Mar 15 13:44	0°♿	
	7933 Sep 11 02:43	0°♿		desc. node	7936 Mar 27 07:37	14°♿34'26	
	7933 Oct 06 21:37	0°♿			7936 Apr 08 16:42	0°♿	
desc. node	7933 Oct 10 12:04	4°♿05'49			7936 May 02 16:12	0°♿	
	7933 Nov 02 23:13	0°♿		morning set	7936 May 23 16:45	26°♿21'03	
evening max el	7933 Nov 24 10:13	21°♿53'38	45°57'32		7936 May 26 14:38	0°♿	

	7936 Jun 19 14:05	0°☿	evening set	7938 Nov 17 03:23	4°♊22'35	
			inferior conj	7938 Nov 20 15:49	2°♊11'45	-8°07'40
superior conj	7936 Jul 02 03:50	15°☿41'08 -0°37'49	minimum elong	7938 Nov 20 22:25	2°♊01'22	8°06'52
minimum elong	7936 Jul 02 12:14	16°☿07'19 0°37'34	min. Earth dist.	7938 Nov 21 05:22	1°♊50'28	0.28917 AU
max. Earth dist.	7936 Jul 05 10:50	19°☿47'09 1.72148 AU		7938 Nov 24 04:44	30°♋♌	
	7936 Jul 13 15:55	0°♌	morning rise	7938 Nov 24 17:19	29°♌41'07	
asc. node	7936 Jul 18 06:01	5°♌41'54	direct	7938 Dec 12 04:23	23°♌54'31	
	7936 Aug 06 20:43	0°♍	greatest brilliancy	7938 Dec 23 02:04	26°♌05'26	-4.8m
evening rise	7936 Aug 09 16:15	3°♍28'40		7938 Dec 31 01:25	0°♊	
	7936 Aug 31 04:45	0°♎	asc. node	7939 Jan 03 02:22	1°♊53'06	
	7936 Sep 24 16:50	0°♌	morning max el	7939 Jan 31 00:10	25°♊39'03	46°19'45
	7936 Oct 19 10:30	0°♊		7939 Feb 04 07:31	0°♋	
desc. node	7936 Nov 06 23:36	22°♊14'59		7939 Mar 03 19:38	0°♌	
	7936 Nov 13 11:51	0°♋		7939 Mar 29 10:46	0°♍	
	7936 Dec 08 23:40	0°♌		7939 Apr 23 06:25	0°♎	
	7937 Jan 04 04:14	0°♍	desc. node	7939 Apr 24 19:44	1°♎54'00	
	7937 Jan 31 22:54	0°♎		7939 May 17 16:22	0°♏	
evening max el	7937 Feb 05 00:41	4°♎06'56 46°45'03		7939 Jun 10 21:57	0°♐	
asc. node	7937 Feb 27 23:38	24°♎41'06		7939 Jul 05 02:35	0°☿	
	7937 Mar 07 16:12	0°♏		7939 Jul 29 08:06	0°♌	
greatest brilliancy	7937 Mar 17 11:59	4°♏51'32 -4.9m	morning set	7939 Aug 05 02:24	8°♌21'40	
retrograde	7937 Mar 27 09:24	6°♏42'41	asc. node	7939 Aug 15 18:06	21°♌31'27	
evening set	7937 Apr 14 00:18	0°♏43'10		7939 Aug 22 14:49	0°♍	
	7937 Apr 15 04:55	30°♋♌				
inferior conj	7937 Apr 17 00:07	28°♎53'51 8°59'27	superior conj	7939 Sep 11 16:15	24°♍45'10	0°59'02
minimum elong	7937 Apr 16 19:23	29°♎01'08 8°59'04	minimum elong	7939 Sep 11 06:49	24°♍16'06	0°58'41
min. Earth dist.	7937 Apr 16 18:06	29°♎03'06 0.27064 AU	max. Earth dist.	7939 Sep 12 17:13	26°♍02'11	1.73207 AU
morning rise	7937 Apr 19 14:31	27°♎18'48		7939 Sep 15 22:22	0°♎	
direct	7937 May 07 15:07	21°♎07'10		7939 Oct 10 06:35	0°♌	
greatest brilliancy	7937 May 17 02:21	22°♎49'32 -4.9m	evening rise	7939 Oct 18 01:24	9°♌34'49	
	7937 May 30 16:35	0°♏		7939 Nov 03 16:04	0°♊	
desc. node	7937 Jun 19 17:42	16°♏36'40		7939 Nov 28 03:36	0°♋	
morning max el	7937 Jun 26 21:28	23°♏32'52 46°40'39	desc. node	7939 Dec 05 11:20	8°♋56'57	
	7937 Jul 03 06:10	0°♐		7939 Dec 22 17:32	0°♌	
	7937 Jul 30 20:49	0°☿		7940 Jan 16 10:00	0°♍	
	7937 Aug 25 23:44	0°♌		7940 Feb 10 06:34	0°♎	
	7937 Sep 20 11:02	0°♍		7940 Mar 06 13:01	0°♏	
asc. node	7937 Oct 10 16:27	24°♍10'47	asc. node	7940 Mar 27 11:00	24°♏00'03	
	7937 Oct 15 12:27	0°♎		7940 Apr 01 20:47	0°♐	
	7937 Nov 09 05:59	0°♌	evening max el	7940 Apr 18 21:45	18°♐02'07	46°58'18
	7937 Dec 03 17:16	0°♊		7940 May 01 09:00	0°☿	
morning set	7937 Dec 23 04:56	24°♊03'45	greatest brilliancy	7940 May 29 00:54	18°☿53'15	-4.9m
	7937 Dec 28 00:01	0°♋	retrograde	7940 Jun 08 09:07	20°☿53'32	
	7938 Jan 21 03:38	0°♌	evening set	7940 Jun 24 01:06	16°☿05'53	
max. Earth dist.	7938 Jan 27 15:13	8°♌04'26 1.72042 AU	inferior conj	7940 Jun 29 08:00	12°☿54'55	4°20'46
desc. node	7938 Jan 30 09:18	11°♌30'19	minimum elong	7940 Jun 29 16:55	12°☿41'05	4°18'08
			min. Earth dist.	7940 Jun 29 05:22	12°☿59'00	0.27521 AU
superior conj	7938 Jan 30 13:42	11°♌44'05 -0°00'27	morning rise	7940 Jul 05 09:09	9°☿19'37	
minimum elong	7938 Jan 30 13:36	11°♌43'45 0°00'21	desc. node	7940 Jul 17 05:24	5°☿13'30	
behind sun begin	7938 Jan 29 12:58	10°♌26'58	direct	7940 Jul 20 05:11	5°☿02'51	
behind sun end	7938 Jan 31 14:14	13°♌00'33	greatest brilliancy	7940 Jul 30 00:39	6°☿48'49	-4.8m
	7938 Feb 14 04:49	0°♍		7940 Sep 01 12:03	0°♌	
	7938 Mar 10 04:01	0°♎	morning max el	7940 Sep 07 07:46	5°♌28'40	45°55'15
evening rise	7938 Mar 11 07:57	1°♎27'31		7940 Oct 01 05:31	0°♍	
	7938 Apr 03 02:17	0°♏		7940 Oct 28 04:07	0°♎	
	7938 Apr 27 01:39	0°♐	asc. node	7940 Nov 07 04:36	11°♎33'33	
	7938 May 21 05:01	0°☿		7940 Nov 22 21:36	0°♌	
asc. node	7938 May 23 08:13	2°☿38'09		7940 Dec 17 21:51	0°♊	
	7938 Jun 14 15:46	0°♌		7941 Jan 11 11:13	0°♋	
	7938 Jul 09 14:27	0°♍		7941 Feb 04 17:38	0°♌	
	7938 Aug 04 09:39	0°♎	desc. node	7941 Feb 26 21:18	27°♌35'51	
	7938 Aug 31 23:17	0°♌		7941 Feb 28 19:26	0°♍	
evening max el	7938 Sep 11 12:00	10°♌30'40 45°41'35	morning set	7941 Mar 05 20:20	6°♍18'09	
desc. node	7938 Sep 12 02:35	11°♌05'42		7941 Mar 24 17:58	0°♎	
	7938 Oct 04 09:59	0°♊				
greatest brilliancy	7938 Oct 20 09:25	8°♊38'11 -4.7m	superior conj	7941 Apr 15 17:39	27°♎38'32	-1°25'10
retrograde	7938 Oct 30 05:52	10°♊22'53	minimum elong	7941 Apr 15 11:58	27°♎20'41	1°25'11

max. Earth dist.	7941 Apr 15 11:58	27° Υ 20'40	1.71202 AU	minimum elong	7943 Sep 09 03:54	23° Π 01'31	5°42'39
	7941 Apr 17 14:38	0° \mathcal{B}		morning rise	7943 Sep 14 10:24	19° Π 48'43	
	7941 May 11 11:20	0° Π		direct	7943 Sep 30 22:53	14° Π 36'26	
evening rise	7941 May 26 08:12	18° Π 38'33		greatest brilliancy	7943 Oct 10 19:29	16° Π 21'49	-4.7m
	7941 Jun 04 10:11	0° \mathcal{E}			7943 Nov 02 10:58	0° \mathcal{E}	
asc. node	7941 Jun 19 20:07	19° \mathcal{E} 12'18		morning max el	7943 Nov 18 18:00	14° \mathcal{E} 27'53	45°43'21
	7941 Jun 28 12:56	0° Ω			7943 Dec 04 03:08	0° Π	
	7941 Jul 22 21:05	0° Π		asc. node	7943 Dec 05 16:39	1° Π 39'06	
	7941 Aug 16 12:36	0° \mathcal{E}			7943 Dec 31 07:01	0° \mathcal{X}	
	7941 Sep 10 15:09	0° Π			7944 Jan 25 21:00	0° \mathcal{Z}	
	7941 Oct 06 11:34	0° \mathcal{X}			7944 Feb 19 16:17	0° \approx	
desc. node	7941 Oct 09 13:55	3° \mathcal{X} 30'48			7944 Mar 15 01:10	0° \mathcal{H}	
	7941 Nov 02 16:33	0° \mathcal{Z}		desc. node	7944 Mar 26 09:31	14° \mathcal{H} 05'09	
evening max el	7941 Nov 21 23:55	19° \mathcal{Z} 35'50	45°56'15		7944 Apr 08 03:53	0° Υ	
	7941 Dec 03 08:27	0° \approx			7944 May 02 03:13	0° \mathcal{B}	
greatest brilliancy	7941 Dec 31 13:09	18° \approx 17'29	-4.8m	morning set	7944 May 21 04:28	23° \mathcal{B} 53'11	
retrograde	7942 Jan 10 02:35	19° \approx 58'52			7944 May 26 01:31	0° Π	
evening set	7942 Jan 24 16:37	15° \approx 50'13			7944 Jun 19 00:52	0° \mathcal{E}	
inferior conj	7942 Jan 30 23:04	12° \approx 09'41	0°05'46				
minimum elong	7942 Jan 30 22:50	12° \approx 10'02	0°05'48	superior conj	7944 Jun 29 17:12	13° \mathcal{E} 19'38	-0°41'08
transit middle	7942 Jan 30 22:50	12° \approx 10'02	0°05'48	minimum elong	7944 Jun 30 02:12	13° \mathcal{E} 47'44	0°40'52
transit begin	7942 Jan 30 19:02	12° \approx 15'54		max. Earth dist.	7944 Jul 03 01:52	17° \mathcal{E} 31'00	1.72103 AU
transit end	7942 Jan 31 02:39	12° \approx 04'11			7944 Jul 13 02:39	0° Ω	
asc. node	7942 Jan 30 14:01	12° \approx 23'36		asc. node	7944 Jul 17 08:01	5° Ω 14'47	
min. Earth dist.	7942 Jan 31 10:26	11° \approx 52'11	0.27352 AU		7944 Aug 06 07:27	0° Π	
morning rise	7942 Feb 06 04:18	8° \approx 28'49		evening rise	7944 Aug 07 08:16	1° Π 16'43	
direct	7942 Feb 20 19:53	4° \approx 12'33			7944 Aug 30 15:34	0° \mathcal{E}	
greatest brilliancy	7942 Mar 03 13:44	6° \approx 22'03	-4.9m		7944 Sep 24 03:50	0° Π	
	7942 Apr 05 02:53	0° \mathcal{H}			7944 Oct 18 21:54	0° \mathcal{X}	
morning max el	7942 Apr 12 08:38	7° \mathcal{H} 06'14	46°57'32	desc. node	7944 Nov 06 01:39	21° \mathcal{X} 45'41	
	7942 May 03 19:30	0° Υ			7944 Nov 12 23:58	0° \mathcal{Z}	
desc. node	7942 May 22 07:53	21° Υ 06'20			7944 Dec 08 13:03	0° \approx	
	7942 May 29 22:30	0° \mathcal{B}			7945 Jan 03 20:02	0° \mathcal{H}	
	7942 Jun 24 03:15	0° Π			7945 Jan 31 20:43	0° Υ	
	7942 Jul 18 22:51	0° \mathcal{E}		evening max el	7945 Feb 02 15:21	1° Υ 46'48	46°43'28
	7942 Aug 12 14:48	0° Ω		asc. node	7945 Feb 27 01:33	23° Υ 24'16	
	7942 Sep 06 04:46	0° Π			7945 Mar 09 12:13	0° \mathcal{B}	
asc. node	7942 Sep 12 06:11	7° Π 24'34		greatest brilliancy	7945 Mar 15 00:33	2° \mathcal{B} 24'59	-4.9m
	7942 Sep 30 16:40	0° \mathcal{E}		retrograde	7945 Mar 24 22:22	4° \mathcal{B} 15'56	
morning set	7942 Oct 13 04:41	15° \mathcal{E} 21'10			7945 Apr 08 13:13	30° \mathcal{R} Υ	
	7942 Oct 25 02:18	0° Π		evening set	7945 Apr 11 09:15	28° Υ 22'37	
max. Earth dist.	7942 Nov 17 09:06	28° Π 42'54	1.73146 AU	inferior conj	7945 Apr 14 12:47	26° Υ 27'34	8°53'49
	7942 Nov 18 10:04	0° \mathcal{X}		minimum elong	7945 Apr 14 07:09	26° Υ 36'13	8°53'19
				min. Earth dist.	7945 Apr 14 06:18	26° Υ 37'31	0.27052 AU
superior conj	7942 Nov 18 16:58	0° \mathcal{X} 21'20	1°21'24	morning rise	7945 Apr 17 05:09	24° Υ 49'26	
minimum elong	7942 Nov 18 22:46	0° \mathcal{X} 39'14	1°21'27	direct	7945 May 05 04:09	18° Υ 41'14	
	7942 Dec 12 16:43	0° \mathcal{Z}		greatest brilliancy	7945 May 14 14:39	20° Υ 22'55	-4.9m
evening rise	7942 Dec 26 04:25	16° \mathcal{Z} 41'01			7945 May 31 15:05	0° \mathcal{B}	
desc. node	7943 Jan 01 23:18	25° \mathcal{Z} 04'52		desc. node	7945 Jun 18 19:46	15° \mathcal{B} 40'07	
	7943 Jan 05 22:42	0° \approx		morning max el	7945 Jun 24 10:38	21° \mathcal{B} 09'19	46°41'59
	7943 Jan 30 03:56	0° \mathcal{H}			7945 Jul 03 02:28	0° Π	
	7943 Feb 23 08:39	0° Υ			7945 Jul 30 12:07	0° \mathcal{E}	
	7943 Mar 19 14:27	0° \mathcal{B}			7945 Aug 25 12:55	0° Ω	
	7943 Apr 13 01:03	0° Π			7945 Sep 19 23:03	0° Π	
asc. node	7943 Apr 24 22:30	14° Π 25'29		asc. node	7945 Oct 09 18:23	23° Π 42'14	
	7943 May 07 22:51	0° \mathcal{E}			7945 Oct 14 23:46	0° \mathcal{E}	
	7943 Jun 02 19:40	0° Ω			7945 Nov 08 16:53	0° Π	
evening max el	7943 Jun 30 08:31	29° Ω 24'44	46°18'03		7945 Dec 03 03:55	0° \mathcal{X}	
	7943 Jun 30 22:47	0° Π		morning set	7945 Dec 20 21:15	21° \mathcal{X} 53'00	
greatest brilliancy	7943 Aug 07 23:40	28° Π 45'34	-4.8m		7945 Dec 27 10:35	0° \mathcal{Z}	
	7943 Aug 11 17:35	0° \mathcal{E}			7946 Jan 20 14:14	0° \approx	
desc. node	7943 Aug 14 17:04	0° \mathcal{E} 39'26		max. Earth dist.	7946 Jan 25 02:44	5° \approx 37'46	1.72089 AU
retrograde	7943 Aug 19 03:12	1° \mathcal{E} 02'08					
	7943 Aug 26 06:42	30° \mathcal{R} Π		superior conj	7946 Jan 28 03:23	9° \approx 24'02	0°03'15
evening set	7943 Sep 03 21:49	26° Π 11'49		minimum elong	7946 Jan 28 04:11	9° \approx 26'31	0°03'19
min. Earth dist.	7943 Sep 08 21:33	23° Π 11'27	0.28750 AU	behind sun begin	7946 Jan 27 03:56	8° \approx 10'58	
inferior conj	7943 Sep 09 13:49	22° Π 46'01	-5°44'51	behind sun end	7946 Jan 29 04:26	10° \approx 42'04	

desc. node	7946 Jan 29 11:13	11° \approx 03'12		greatest brilliancy	7948 Jul 27 14:49	4° \approx 30'01	-4.8m
	7946 Feb 13 15:31	0° \mathbb{H}			7948 Sep 01 13:02	0° Ω	
evening rise	7946 Mar 08 20:00	29° \mathbb{H} 00'57		morning max el	7948 Sep 04 21:53	3° Ω 12'11	45°56'35
	7946 Mar 09 14:51	0° \mathbb{Y}			7948 Sep 30 21:48	0° \mathbb{M}	
	7946 Apr 02 13:14	0° \mathbb{B}			7948 Oct 27 17:30	0° $\underline{\Omega}$	
	7946 Apr 26 12:46	0° \mathbb{II}		asc. node	7948 Nov 06 06:39	11° $\underline{\Omega}$ 02'20	
	7946 May 20 16:24	0° \mathbb{D}			7948 Nov 22 09:38	0° \mathbb{M}	
asc. node	7946 May 22 10:17	2° \mathbb{D} 09'18			7948 Dec 17 09:13	0° \mathbb{X}	
	7946 Jun 14 03:37	0° Ω			7949 Jan 10 22:13	0° \mathbb{Z}	
	7946 Jul 09 03:10	0° \mathbb{M}			7949 Feb 04 04:27	0° \approx	
	7946 Aug 04 00:06	0° $\underline{\Omega}$		desc. node	7949 Feb 25 23:16	27° \approx 08'34	
	7946 Aug 31 18:11	0° \mathbb{M}			7949 Feb 28 06:08	0° \mathbb{H}	
evening max el	7946 Sep 09 02:46	8° \mathbb{M} 17'37	45°42'01	morning set	7949 Mar 03 08:00	3° \mathbb{H} 51'00	
desc. node	7946 Sep 11 04:30	10° \mathbb{M} 16'32			7949 Mar 24 04:37	0° \mathbb{Y}	
	7946 Oct 05 06:27	0° \mathbb{X}					
greatest brilliancy	7946 Oct 18 00:51	6° \mathbb{X} 28'30	-4.7m	superior conj	7949 Apr 13 04:48	25° \mathbb{Y} 09'10	-1°24'09
retrograde	7946 Oct 27 20:58	8° \mathbb{X} 13'16		minimum elong	7949 Apr 12 22:11	24° \mathbb{Y} 48'21	1°24'07
evening set	7946 Nov 14 21:05	2° \mathbb{X} 10'07		max. Earth dist.	7949 Apr 12 18:52	24° \mathbb{Y} 37'57	1.71209 AU
inferior conj	7946 Nov 18 07:52	0° \mathbb{X} 01'44	-8°13'58		7949 Apr 17 01:17	0° \mathbb{B}	
minimum elong	7946 Nov 18 13:50	29° \mathbb{M} 52'21	8°13'19		7949 May 10 22:02	0° \mathbb{II}	
	7946 Nov 18 08:58	30° \mathbb{R} \mathbb{M}		evening rise	7949 May 23 19:28	16° \mathbb{II} 10'03	
min. Earth dist.	7946 Nov 18 20:46	29° \mathbb{M} 41'25	0.28950 AU		7949 Jun 03 20:56	0° \mathbb{D}	
morning rise	7946 Nov 22 06:25	27° \mathbb{M} 35'16		asc. node	7949 Jun 18 22:02	18° \mathbb{D} 44'43	
direct	7946 Dec 09 20:12	21° \mathbb{M} 44'15			7949 Jun 27 23:48	0° Ω	
greatest brilliancy	7946 Dec 20 17:45	23° \mathbb{M} 54'19	-4.8m		7949 Jul 22 08:10	0° \mathbb{M}	
	7947 Jan 01 05:33	0° \mathbb{X}			7949 Aug 16 00:07	0° $\underline{\Omega}$	
asc. node	7947 Jan 02 04:16	0° \mathbb{X} 38'00			7949 Sep 10 03:28	0° \mathbb{M}	
morning max el	7947 Jan 28 14:19	23° \mathbb{X} 21'35	46°18'07		7949 Oct 06 01:29	0° \mathbb{X}	
	7947 Feb 04 03:10	0° \mathbb{Z}		desc. node	7949 Oct 08 16:00	2° \mathbb{X} 56'46	
	7947 Mar 03 10:32	0° \approx			7949 Nov 02 10:03	0° \mathbb{Z}	
	7947 Mar 28 23:50	0° \mathbb{H}		evening max el	7949 Nov 19 14:28	17° \mathbb{Z} 20'49	45°55'02
	7947 Apr 22 18:35	0° \mathbb{Y}			7949 Dec 03 14:59	0° \approx	
desc. node	7947 Apr 23 21:45	1° \mathbb{Y} 23'05		greatest brilliancy	7949 Dec 29 02:18	15° \approx 57'36	-4.8m
	7947 May 17 03:58	0° \mathbb{B}		retrograde	7950 Jan 07 16:28	17° \approx 39'22	
	7947 Jun 10 09:10	0° \mathbb{II}		evening set	7950 Jan 22 07:11	13° \approx 28'58	
	7947 Jul 04 13:30	0° \mathbb{D}		inferior conj	7950 Jan 28 12:46	9° \approx 49'27	-0°17'19
	7947 Jul 28 18:48	0° Ω		minimum elong	7950 Jan 28 13:26	9° \approx 48'26	0°17'00
morning set	7947 Aug 02 17:53	6° Ω 08'16		min. Earth dist.	7950 Jan 29 00:53	9° \approx 30'48	0.27394 AU
asc. node	7947 Aug 14 19:56	21° Ω 04'27		asc. node	7950 Jan 29 15:58	9° \approx 07'40	
	7947 Aug 22 01:23	0° \mathbb{M}		morning rise	7950 Feb 03 18:59	6° \approx 07'30	
				direct	7950 Feb 18 10:32	1° \approx 51'32	
superior conj	7947 Sep 09 09:12	22° \mathbb{M} 37'08	0°56'35	greatest brilliancy	7950 Mar 01 04:49	4° \approx 02'03	-4.9m
minimum elong	7947 Sep 08 23:50	22° \mathbb{M} 08'15	0°56'13		7950 Apr 05 03:38	0° \mathbb{H}	
max. Earth dist.	7947 Sep 10 10:40	23° \mathbb{M} 55'40	1.73186 AU	morning max el	7950 Apr 10 00:03	4° \mathbb{H} 48'24	46°57'04
	7947 Sep 15 08:50	0° $\underline{\Omega}$			7950 May 03 12:06	0° \mathbb{Y}	
	7947 Oct 09 17:06	0° \mathbb{M}		desc. node	7950 May 21 09:58	20° \mathbb{Y} 30'12	
evening rise	7947 Oct 15 18:53	7° \mathbb{M} 28'31			7950 May 29 12:23	0° \mathbb{B}	
	7947 Nov 03 02:43	0° \mathbb{X}			7950 Jun 23 15:48	0° \mathbb{II}	
	7947 Nov 27 14:31	0° \mathbb{Z}			7950 Jul 18 10:38	0° \mathbb{D}	
desc. node	7947 Dec 04 13:24	8° \mathbb{Z} 29'42			7950 Aug 12 02:03	0° Ω	
	7947 Dec 22 04:50	0° \approx			7950 Sep 05 15:39	0° \mathbb{M}	
	7948 Jan 15 21:52	0° \mathbb{H}		asc. node	7950 Sep 11 08:13	6° \mathbb{M} 57'39	
	7948 Feb 09 19:20	0° \mathbb{Y}			7950 Sep 30 03:19	0° $\underline{\Omega}$	
	7948 Mar 06 03:21	0° \mathbb{B}		morning set	7950 Oct 10 21:50	13° $\underline{\Omega}$ 13'52	
asc. node	7948 Mar 26 12:56	23° \mathbb{B} 18'40			7950 Oct 24 12:49	0° \mathbb{M}	
	7948 Apr 01 14:31	0° \mathbb{II}		max. Earth dist.	7950 Nov 15 06:03	26° \mathbb{M} 46'58	1.73167 AU
evening max el	7948 Apr 16 10:33	15° \mathbb{II} 37'22	46°58'47				
	7948 May 01 14:48	0° \mathbb{D}		superior conj	7950 Nov 16 10:03	28° \mathbb{M} 13'23	1°22'24
greatest brilliancy	7948 May 26 16:39	16° \mathbb{D} 34'01	-4.9m	minimum elong	7950 Nov 16 15:14	28° \mathbb{M} 29'25	1°22'27
retrograde	7948 Jun 05 22:56	18° \mathbb{D} 33'04			7950 Nov 17 20:35	0° \mathbb{X}	
evening set	7948 Jun 21 17:50	13° \mathbb{D} 41'33			7950 Dec 12 03:20	0° \mathbb{Z}	
inferior conj	7948 Jun 26 21:52	10° \mathbb{D} 35'01	4°40'54	evening rise	7950 Dec 23 19:45	14° \mathbb{Z} 26'57	
minimum elong	7948 Jun 27 07:16	10° \mathbb{D} 20'27	4°38'12	desc. node	7951 Jan 01 01:11	24° \mathbb{Z} 37'28	
min. Earth dist.	7948 Jun 26 20:12	10° \mathbb{D} 37'36	0.27496 AU		7951 Jan 05 09:28	0° \approx	
morning rise	7948 Jul 02 21:01	7° \mathbb{D} 02'24			7951 Jan 29 14:56	0° \mathbb{H}	
desc. node	7948 Jul 16 07:19	2° \mathbb{D} 45'32			7951 Feb 22 19:57	0° \mathbb{Y}	
direct	7948 Jul 17 17:59	2° \mathbb{D} 43'04			7951 Mar 19 02:09	0° \mathbb{B}	

	7951 Apr 12 13:21	0°♂		7953 Oct 14 11:08	0°♂	
asc. node	7951 Apr 24 00:36	13°♂53'32		7953 Nov 08 03:54	0°♂	
	7951 May 07 12:13	0°♂		7953 Dec 02 14:45	0°♂	
	7951 Jun 02 11:17	0°♂	morning set	7953 Dec 18 13:25	19°♂41'08	
evening max el	7951 Jun 28 01:08	27°♂13'29 46°19'40		7953 Dec 26 21:22	0°♂	
	7951 Jun 30 20:59	0°♂		7954 Jan 20 01:02	0°♂	
greatest brilliancy	7951 Aug 05 15:11	26°♂33'41 -4.8m	max. Earth dist.	7954 Jan 22 15:05	3°♂13'06 1.72135 AU	
desc. node	7951 Aug 13 19:02	28°♂40'07				
retrograde	7951 Aug 16 19:45	28°♂50'50	superior conj	7954 Jan 25 16:58	7°♂03'09 0°06'55	
evening set	7951 Sep 01 11:23	24°♂04'16	minimum elong	7954 Jan 25 18:40	7°♂08'25 0°06'57	
min. Earth dist.	7951 Sep 06 12:48	21°♂01'23 0.28708 AU	behind sun begin	7954 Jan 24 20:14	5°♂58'34	
inferior conj	7951 Sep 07 05:39	20°♂35'02 -5°29'28	behind sun end	7954 Jan 26 17:05	8°♂18'16	
minimum elong	7951 Sep 06 19:53	20°♂50'19 5°27'13	desc. node	7954 Jan 28 13:09	10°♂35'31	
morning rise	7951 Sep 12 04:54	17°♂34'05		7954 Feb 13 02:25	0°♂	
direct	7951 Sep 28 14:59	12°♂26'15	evening rise	7954 Mar 06 08:01	26°♂33'50	
greatest brilliancy	7951 Oct 08 09:51	14°♂10'31 -4.7m		7954 Mar 09 01:51	0°♂	
	7951 Nov 02 18:25	0°♂		7954 Apr 02 00:23	0°♂	
morning max el	7951 Nov 16 09:44	12°♂17'32 45°42'47		7954 Apr 26 00:06	0°♂	
	7951 Dec 03 20:32	0°♂		7954 May 20 04:01	0°♂	
asc. node	7951 Dec 04 18:36	0°♂58'41	asc. node	7954 May 21 12:11	1°♂39'15	
	7951 Dec 30 20:57	0°♂		7954 Jun 13 15:43	0°♂	
	7952 Jan 25 09:29	0°♂		7954 Jul 08 16:07	0°♂	
	7952 Feb 19 04:03	0°♂		7954 Aug 03 14:51	0°♂	
	7952 Mar 14 12:32	0°♂		7954 Aug 31 13:45	0°♂	
desc. node	7952 Mar 25 11:31	13°♂36'23	evening max el	7954 Sep 06 16:57	6°♂02'56 45°42'31	
	7952 Apr 07 15:01	0°♂	desc. node	7954 Sep 10 06:35	9°♂26'38	
	7952 May 01 14:11	0°♂		7954 Oct 06 10:54	0°♂	
morning set	7952 May 18 16:27	21°♂26'22	greatest brilliancy	7954 Oct 15 15:53	4°♂18'08 -4.7m	
	7952 May 25 12:19	0°♂	retrograde	7954 Oct 25 12:19	6°♂03'41	
	7952 Jun 18 11:33	0°♂	evening set	7954 Nov 12 14:39	29°♂57'40	
				7954 Nov 12 13:06	30°♂	
superior conj	7952 Jun 27 06:50	10°♂59'16 -0°44'21	inferior conj	7954 Nov 16 00:03	27°♂51'28 -8°19'30	
minimum elong	7952 Jun 27 16:23	11°♂29'02 0°44'04	minimum elong	7954 Nov 16 05:21	27°♂43'08 8°18'58	
max. Earth dist.	7952 Jun 30 18:53	15°♂21'15 1.72056 AU	min. Earth dist.	7954 Nov 16 12:20	27°♂32'10 0.28989 AU	
	7952 Jul 12 13:17	0°♂	morning rise	7954 Nov 19 19:52	25°♂29'02	
asc. node	7952 Jul 16 09:53	4°♂47'38	direct	7954 Dec 07 12:03	19°♂33'27	
evening rise	7952 Aug 05 00:24	29°♂05'18	greatest brilliancy	7954 Dec 18 10:12	21°♂43'33 -4.8m	
	7952 Aug 05 18:06	0°♂	asc. node	7955 Jan 01 06:13	29°♂24'17	
	7952 Aug 30 02:21	0°♂		7955 Jan 02 02:20	0°♂	
	7952 Sep 23 14:52	0°♂	morning max el	7955 Jan 26 05:02	21°♂04'31 46°16'31	
	7952 Oct 18 09:23	0°♂		7955 Feb 03 22:39	0°♂	
desc. node	7952 Nov 05 03:39	21°♂15'50		7955 Mar 03 01:36	0°♂	
	7952 Nov 12 12:14	0°♂		7955 Mar 28 13:09	0°♂	
	7952 Dec 08 02:40	0°♂		7955 Apr 22 06:58	0°♂	
	7953 Jan 03 12:15	0°♂	desc. node	7955 Apr 22 23:48	0°♂51'30	
evening max el	7953 Jan 31 05:11	29°♂24'18 46°41'50		7955 May 16 15:48	0°♂	
	7953 Jan 31 19:34	0°♂		7955 Jun 09 20:37	0°♂	
asc. node	7953 Feb 26 03:35	22°♂04'49		7955 Jul 04 00:42	0°♂	
greatest brilliancy	7953 Mar 12 13:39	29°♂58'46 -4.9m		7955 Jul 28 05:47	0°♂	
	7953 Mar 12 15:03	0°♂	morning set	7955 Jul 31 09:31	3°♂54'20	
retrograde	7953 Mar 22 10:43	1°♂48'51	asc. node	7955 Aug 13 22:00	20°♂37'18	
	7953 Mar 31 20:50	30°♂		7955 Aug 21 12:12	0°♂	
evening set	7953 Apr 08 17:57	26°♂02'11				
inferior conj	7953 Apr 12 01:27	24°♂01'05 8°47'19	superior conj	7955 Sep 07 02:28	20°♂29'14 0°54'04	
minimum elong	7953 Apr 11 18:59	24°♂11'04 8°46'38	minimum elong	7955 Sep 06 17:12	20°♂00'38 0°53'41	
min. Earth dist.	7953 Apr 11 18:58	24°♂11'06 0.27037 AU	max. Earth dist.	7955 Sep 08 04:29	21°♂49'30 1.73162 AU	
morning rise	7953 Apr 14 20:05	22°♂19'22		7955 Sep 14 19:34	0°♂	
direct	7953 May 02 16:44	16°♂14'58		7955 Oct 09 03:51	0°♂	
greatest brilliancy	7953 May 12 03:39	17°♂56'41 -4.9m	evening rise	7955 Oct 13 12:50	5°♂22'57	
	7953 Jun 01 07:51	0°♂		7955 Nov 02 13:38	0°♂	
desc. node	7953 Jun 17 21:37	14°♂44'04		7955 Nov 27 01:45	0°♂	
morning max el	7953 Jun 21 22:55	18°♂43'14 46°43'31	desc. node	7955 Dec 03 15:19	8°♂00'57	
	7953 Jul 02 22:10	0°♂		7955 Dec 21 16:31	0°♂	
	7953 Jul 30 03:12	0°♂		7956 Jan 15 10:11	0°♂	
	7953 Aug 25 01:59	0°♂		7956 Feb 09 08:37	0°♂	
	7953 Sep 19 11:03	0°♂		7956 Mar 05 18:18	0°♂	
asc. node	7953 Oct 08 20:26	23°♂13'48	asc. node	7956 Mar 25 15:02	22°♂36'00	

	7956 Apr 01 09:10	0° Π		morning set	7958 Oct 08 15:12	11° Ω 06'13	
evening max el	7956 Apr 13 23:42	13° Π 12'24	46°59'24		7958 Oct 23 23:39	0° \mathbb{M}	
	7956 May 01 23:31	0° \mathfrak{E}		max. Earth dist.	7958 Nov 13 01:43	24° \mathbb{M} 46'12	1.73182 AU
greatest brilliancy	7956 May 24 07:46	14° \mathfrak{E} 12'57	-4.9m				
retrograde	7956 Jun 03 13:12	16° \mathfrak{E} 11'39		superior conj	7958 Nov 14 03:34	26° \mathbb{M} 05'59	1°23'17
evening set	7956 Jun 19 10:41	11° \mathfrak{E} 15'48		minimum elong	7958 Nov 14 08:07	26° \mathbb{M} 20'02	1°23'20
inferior conj	7956 Jun 24 11:44	8° \mathfrak{E} 13'54	5°00'40		7958 Nov 17 07:23	0° \mathfrak{A}	
minimum elong	7956 Jun 24 21:35	7° \mathfrak{E} 58'41	4°57'54		7958 Dec 11 14:11	0° \mathfrak{Z}	
min. Earth dist.	7956 Jun 24 10:44	8° \mathfrak{E} 15'26	0.27472 AU	evening rise	7958 Dec 21 11:35	12° \mathfrak{Z} 13'41	
morning rise	7956 Jun 30 08:43	4° \mathfrak{E} 44'30		desc. node	7958 Dec 31 03:12	24° \mathfrak{Z} 09'44	
direct	7956 Jul 15 07:08	0° \mathfrak{E} 21'57			7959 Jan 04 20:29	0° \approx	
desc. node	7956 Jul 15 09:21	0° \mathfrak{E} 21'57			7959 Jan 29 02:12	0° \mathfrak{H}	
greatest brilliancy	7956 Jul 25 04:44	2° \mathfrak{E} 09'50	-4.8m		7959 Feb 22 07:34	0° \mathfrak{Y}	
	7956 Sep 01 13:13	0° Ω			7959 Mar 18 14:14	0° \mathfrak{B}	
morning max el	7956 Sep 02 13:00	0° Ω 57'05	45°58'03		7959 Apr 12 02:06	0° Π	
	7956 Sep 30 14:07	0° \mathbb{P}		asc. node	7959 Apr 23 02:28	13° Π 19'21	
	7956 Oct 27 07:04	0° $\underline{\Omega}$			7959 May 07 02:08	0° \mathfrak{E}	
asc. node	7956 Nov 05 08:35	10° $\underline{\Omega}$ 30'01			7959 Jun 02 03:40	0° Ω	
	7956 Nov 21 21:55	0° \mathbb{M}		evening max el	7959 Jun 25 17:22	24° Ω 59'48	46°21'22
	7956 Dec 16 20:51	0° \mathfrak{A}			7959 Jun 30 20:44	0° \mathbb{P}	
	7957 Jan 10 09:32	0° \mathfrak{Z}		greatest brilliancy	7959 Aug 03 07:20	24° \mathbb{P} 21'12	-4.8m
	7957 Feb 03 15:37	0° \approx		desc. node	7959 Aug 12 21:05	26° \mathbb{P} 34'59	
desc. node	7957 Feb 25 01:21	26° \approx 40'20		retrograde	7959 Aug 14 11:51	26° \mathbb{P} 38'03	
	7957 Feb 27 17:15	0° \mathfrak{H}		evening set	7959 Aug 30 01:02	21° \mathbb{P} 55'18	
morning set	7957 Feb 28 19:36	1° \mathfrak{H} 22'21		min. Earth dist.	7959 Sep 04 04:17	18° \mathbb{P} 49'38	0.28660 AU
	7957 Mar 23 15:42	0° \mathfrak{Y}		inferior conj	7959 Sep 04 21:25	18° \mathbb{P} 22'51	-5°13'30
max. Earth dist.	7957 Apr 10 02:54	21° \mathfrak{Y} 57'17	1.71214 AU	minimum elong	7959 Sep 04 11:51	18° \mathbb{P} 37'49	5°11'14
				morning rise	7959 Sep 09 23:13	15° \mathbb{P} 18'10	
superior conj	7957 Apr 10 15:34	22° \mathfrak{Y} 37'08	-1°22'57	direct	7959 Sep 26 06:51	10° \mathbb{P} 15'00	
minimum elong	7957 Apr 10 08:02	22° \mathfrak{Y} 13'28	1°22'52	greatest brilliancy	7959 Oct 06 00:17	11° \mathbb{P} 58'06	-4.7m
	7957 Apr 16 12:23	0° \mathfrak{B}			7959 Nov 03 00:00	0° $\underline{\Omega}$	
	7957 May 10 09:09	0° Π		morning max el	7959 Nov 14 00:38	10° $\underline{\Omega}$ 04'24	45°42'23
evening rise	7957 May 21 06:26	13° Π 39'17		asc. node	7959 Dec 03 20:28	0° \mathbb{M} 17'51	
	7957 Jun 03 08:06	0° \mathfrak{E}			7959 Dec 03 13:48	0° \mathbb{M}	
asc. node	7957 Jun 17 23:57	18° \mathfrak{E} 15'51			7959 Dec 30 10:56	0° \mathfrak{A}	
	7957 Jun 27 11:04	0° Ω			7960 Jan 24 22:03	0° \mathfrak{Z}	
	7957 Jul 21 19:40	0° \mathbb{P}			7960 Feb 18 15:55	0° \approx	
	7957 Aug 15 12:03	0° $\underline{\Omega}$			7960 Mar 14 00:02	0° \mathfrak{H}	
	7957 Sep 09 16:13	0° \mathbb{M}		desc. node	7960 Mar 24 13:31	13° \mathfrak{H} 07'11	
	7957 Oct 05 15:52	0° \mathfrak{A}			7960 Apr 07 02:19	0° \mathfrak{Y}	
desc. node	7957 Oct 07 18:01	2° \mathfrak{A} 21'21			7960 May 01 01:20	0° \mathfrak{B}	
	7957 Nov 02 04:15	0° \mathfrak{Z}		morning set	7960 May 16 04:01	18° \mathfrak{B} 57'24	
evening max el	7957 Nov 17 05:45	15° \mathfrak{Z} 07'07	45°53'51		7960 May 24 23:23	0° Π	
	7957 Dec 04 00:18	0° \approx			7960 Jun 17 22:31	0° \mathfrak{E}	
greatest brilliancy	7957 Dec 26 15:30	13° \approx 37'48	-4.8m				
retrograde	7958 Jan 05 06:27	15° \approx 19'41		superior conj	7960 Jun 24 19:56	8° \mathfrak{E} 36'14	-0°47'33
evening set	7958 Jan 19 22:12	11° \approx 07'36		minimum elong	7960 Jun 25 05:56	9° \mathfrak{E} 07'27	0°47'15
inferior conj	7958 Jan 26 02:41	7° \approx 29'02	-0°40'12	max. Earth dist.	7960 Jun 28 09:52	13° \mathfrak{E} 04'14	1.72007 AU
minimum elong	7958 Jan 26 04:13	7° \approx 26'41	0°39'36		7960 Jul 12 00:12	0° Ω	
min. Earth dist.	7958 Jan 26 15:21	7° \approx 09'33	0.27443 AU	asc. node	7960 Jul 15 11:57	4° Ω 20'08	
asc. node	7958 Jan 28 18:00	5° \approx 52'15		evening rise	7960 Aug 02 15:54	26° Ω 51'02	
morning rise	7958 Feb 01 09:39	3° \approx 46'08			7960 Aug 05 05:02	0° \mathbb{P}	
	7958 Feb 11 04:26	30° \mathfrak{R} \mathfrak{Z}			7960 Aug 29 13:22	0° $\underline{\Omega}$	
direct	7958 Feb 16 01:44	29° \mathfrak{Z} 30'30			7960 Sep 23 02:08	0° \mathbb{M}	
	7958 Feb 21 01:30	0° \approx			7960 Oct 17 21:06	0° \mathfrak{A}	
greatest brilliancy	7958 Feb 26 19:47	1° \approx 41'13	-4.9m	desc. node	7960 Nov 04 05:33	20° \mathfrak{A} 45'06	
	7958 Apr 05 03:45	0° \mathfrak{H}			7960 Nov 12 00:44	0° \mathfrak{Z}	
morning max el	7958 Apr 07 15:17	2° \mathfrak{H} 28'50	46°56'15		7960 Dec 07 16:32	0° \approx	
	7958 May 03 04:56	0° \mathfrak{Y}			7961 Jan 03 04:46	0° \mathfrak{H}	
desc. node	7958 May 20 11:50	19° \mathfrak{Y} 52'10		evening max el	7961 Jan 28 18:18	27° \mathfrak{H} 00'21	46°40'20
	7958 May 29 02:37	0° \mathfrak{B}			7961 Jan 31 19:19	0° \mathfrak{Y}	
	7958 Jun 23 04:44	0° Π		asc. node	7961 Feb 25 05:36	20° \mathfrak{Y} 43'21	
	7958 Jul 17 22:45	0° \mathfrak{E}		greatest brilliancy	7961 Mar 10 03:08	27° \mathfrak{Y} 33'47	-4.9m
	7958 Aug 11 13:37	0° Ω		retrograde	7961 Mar 19 23:05	29° \mathfrak{Y} 23'07	
	7958 Sep 05 02:50	0° \mathbb{P}		evening set	7961 Apr 06 02:43	23° \mathfrak{Y} 43'10	
asc. node	7958 Sep 10 10:11	6° \mathbb{P} 29'38		inferior conj	7961 Apr 09 14:28	21° \mathfrak{Y} 35'49	8°39'41
	7958 Sep 29 14:16	0° $\underline{\Omega}$		minimum elong	7961 Apr 09 07:13	21° \mathfrak{Y} 47'00	8°38'50

min. Earth dist.	7961 Apr 09 08:08	21° Υ 45'36	0.27028 AU	max. Earth dist.	7963 Sep 05 22:30	19° η 44'25	1.73145 AU
morning rise	7961 Apr 12 11:45	19° Υ 50'01			7963 Sep 14 06:07	0° $\underline{\text{A}}$	
direct	7961 Apr 30 05:12	13° Υ 49'37			7963 Oct 08 14:26	0° \mathbb{M}	
greatest brilliancy	7961 May 09 17:30	15° Υ 32'05	-4.9m	evening rise	7963 Oct 11 06:26	3° \mathbb{M} 16'50	
	7961 Jun 01 20:16	0° B			7963 Nov 02 00:24	0° Z	
desc. node	7961 Jun 16 23:41	13° B 49'38			7963 Nov 26 12:48	0° Z	
morning max el	7961 Jun 19 11:11	16° B 16'46	46°44'44	desc. node	7963 Dec 02 17:18	7° Z 33'05	
	7961 Jul 02 17:23	0° II			7963 Dec 21 04:00	0° \approx	
	7961 Jul 29 18:14	0° E			7964 Jan 14 22:18	0° H	
	7961 Aug 24 15:09	0° Ω			7964 Feb 08 21:43	0° Υ	
	7961 Sep 18 23:09	0° η			7964 Mar 05 09:09	0° B	
asc. node	7961 Oct 07 22:20	22° η 44'44		asc. node	7964 Mar 24 16:56	21° B 53'17	
	7961 Oct 13 22:35	0° $\underline{\text{A}}$			7964 Apr 01 03:55	0° II	
	7961 Nov 07 14:57	0° \mathbb{M}		evening max el	7964 Apr 11 13:55	10° II 51'16	47°00'05
	7961 Dec 02 01:35	0° Z			7964 May 02 10:38	0° E	
morning set	7961 Dec 16 05:38	17° Z 29'25		greatest brilliancy	7964 May 21 22:19	11° E 52'39	-4.9m
	7961 Dec 26 08:08	0° Z		retrograde	7964 Jun 01 03:56	13° E 51'38	
	7962 Jan 19 11:50	0° \approx		evening set	7964 Jun 17 03:43	8° E 51'20	
max. Earth dist.	7962 Jan 20 05:33	0° \approx 55'10	1.72179 AU	inferior conj	7964 Jun 22 01:39	5° E 54'05	5°19'45
				minimum elong	7964 Jun 22 11:52	5° E 38'19	5°16'58
superior conj	7962 Jan 23 06:51	4° \approx 43'20	0°10'33	min. Earth dist.	7964 Jun 22 00:52	5° E 55'17	0.27449 AU
minimum elong	7962 Jan 23 09:24	4° \approx 51'16	0°10'32	morning rise	7964 Jun 27 20:17	2° E 28'20	
behind sun begin	7962 Jan 22 14:36	3° \approx 52'43			7964 Jul 03 00:48	30° R II	
behind sun end	7962 Jan 24 04:13	5° \approx 49'49		direct	7964 Jul 12 21:01	28° II 02'22	
desc. node	7962 Jan 27 15:15	10° \approx 08'25		desc. node	7964 Jul 14 11:23	28° II 05'23	
	7962 Feb 12 13:16	0° H		greatest brilliancy	7964 Jul 22 18:02	29° II 50'27	-4.8m
evening rise	7962 Mar 03 20:33	24° H 08'40			7964 Jul 23 04:47	0° E	
	7962 Mar 08 12:46	0° Υ		morning max el	7964 Aug 31 04:33	28° E 44'14	45°59'17
	7962 Apr 01 11:24	0° B			7964 Sep 01 11:49	0° Ω	
	7962 Apr 25 11:19	0° II			7964 Sep 30 05:46	0° η	
	7962 May 19 15:34	0° E			7964 Oct 26 20:14	0° $\underline{\text{A}}$	
asc. node	7962 May 20 14:10	1° E 09'42		asc. node	7964 Nov 04 10:31	9° $\underline{\text{A}}$ 58'40	
	7962 Jun 13 03:47	0° Ω			7964 Nov 21 09:53	0° \mathbb{M}	
	7962 Jul 08 05:09	0° η			7964 Dec 16 08:11	0° Z	
	7962 Aug 03 05:50	0° $\underline{\text{A}}$			7965 Jan 09 20:32	0° Z	
	7962 Aug 31 10:03	0° \mathbb{M}			7965 Feb 03 02:27	0° \approx	
evening max el	7962 Sep 04 07:11	3° \mathbb{M} 48'06	45°43'08	desc. node	7965 Feb 24 03:13	26° \approx 12'39	
desc. node	7962 Sep 09 08:34	8° \mathbb{M} 35'17		morning set	7965 Feb 26 07:12	28° \approx 55'01	
	7962 Oct 08 04:37	0° Z			7965 Feb 27 03:59	0° H	
greatest brilliancy	7962 Oct 13 06:14	2° Z 06'40	-4.7m		7965 Mar 23 02:25	0° Υ	
retrograde	7962 Oct 23 04:01	3° Z 53'49		max. Earth dist.	7965 Apr 07 11:23	19° Υ 19'18	1.71219 AU
	7962 Nov 06 08:38	30° R \mathbb{M}					
evening set	7962 Nov 10 07:50	27° \mathbb{M} 45'03		superior conj	7965 Apr 08 02:18	20° Υ 06'11	-1°21'33
inferior conj	7962 Nov 13 16:03	25° \mathbb{M} 40'49	-8°24'19	minimum elong	7965 Apr 07 17:57	19° Υ 39'55	1°21'27
minimum elong	7962 Nov 13 20:40	25° \mathbb{M} 33'34	8°23'53		7965 Apr 15 23:06	0° B	
min. Earth dist.	7962 Nov 14 03:24	25° \mathbb{M} 23'00	0.29022 AU		7965 May 09 19:53	0° II	
morning rise	7962 Nov 17 09:21	23° \mathbb{M} 22'20		evening rise	7965 May 18 17:27	11° II 09'49	
direct	7962 Dec 05 03:53	17° \mathbb{M} 22'21			7965 Jun 02 18:52	0° E	
greatest brilliancy	7962 Dec 16 02:17	19° \mathbb{M} 32'36	-4.8m	asc. node	7965 Jun 17 02:02	17° E 48'44	
asc. node	7962 Dec 31 08:20	28° \mathbb{M} 13'09			7965 Jun 26 21:55	0° Ω	
	7963 Jan 02 17:38	0° Z			7965 Jul 21 06:43	0° η	
morning max el	7963 Jan 23 20:26	18° Z 49'42	46°15'00		7965 Aug 14 23:34	0° $\underline{\text{A}}$	
	7963 Feb 03 17:25	0° Z			7965 Sep 09 04:38	0° \mathbb{M}	
	7963 Mar 02 16:17	0° \approx			7965 Oct 05 06:03	0° Z	
	7963 Mar 28 02:09	0° H		desc. node	7965 Oct 06 19:54	1° Z 46'17	
	7963 Apr 21 19:03	0° Υ			7965 Nov 01 22:36	0° Z	
desc. node	7963 Apr 22 01:39	0° Υ 20'14		evening max el	7965 Nov 14 21:05	12° Z 54'20	45°52'32
	7963 May 16 03:19	0° B			7965 Dec 04 12:31	0° \approx	
	7963 Jun 09 07:46	0° II		greatest brilliancy	7965 Dec 24 05:14	11° \approx 19'20	-4.8m
	7963 Jul 03 11:36	0° E		retrograde	7966 Jan 02 20:01	13° \approx 00'33	
	7963 Jul 27 16:31	0° Ω		evening set	7966 Jan 17 13:20	8° \approx 46'50	
morning set	7963 Jul 29 01:06	1° Ω 40'53		inferior conj	7966 Jan 23 16:32	5° \approx 09'29	-1°02'59
asc. node	7963 Aug 12 23:59	20° Ω 10'38		minimum elong	7966 Jan 23 18:56	5° \approx 05'48	1°02'07
	7963 Aug 20 22:48	0° η		min. Earth dist.	7966 Jan 24 05:54	4° \approx 48'53	0.27489 AU
				asc. node	7966 Jan 27 19:58	2° \approx 38'52	
superior conj	7963 Sep 04 19:25	18° η 20'50	0°51'27	morning rise	7966 Jan 29 23:58	1° \approx 25'41	
minimum elong	7963 Sep 04 10:18	17° η 52'44	0°51'03		7966 Feb 01 20:13	30° R Z	

direct	7966 Feb 13 16:34	27° Z 10'29		7968 Sep 22 13:05	0° M	
greatest brilliancy	7966 Feb 24 10:37	29° Z 21'08 -4.9m		7968 Oct 17 08:31	0° X	
	7966 Feb 26 00:32	0° \approx	desc. node	7968 Nov 03 07:37	20° X 15'45	
morning max el	7966 Apr 05 05:22	0° X 07'33 46°55'25		7968 Nov 11 12:59	0° Z	
	7966 Apr 05 02:22	0° X		7968 Dec 07 06:16	0° \approx	
	7966 May 02 21:00	0° Y		7969 Jan 02 21:27	0° X	
desc. node	7966 May 19 13:52	19° Y 16'18	evening max el	7969 Jan 26 06:33	24° X 34'32 46°38'37	
	7966 May 28 16:17	0° B		7969 Jan 31 20:12	0° Y	
	7966 Jun 22 17:09	0° II	asc. node	7969 Feb 24 07:32	19° Y 18'43	
	7966 Jul 17 10:23	0° E	greatest brilliancy	7969 Mar 07 16:15	25° Y 07'47 -4.9m	
	7966 Aug 11 00:43	0° O	retrograde	7969 Mar 17 11:18	26° Y 56'47	
	7966 Sep 04 13:34	0° M	evening set	7969 Apr 03 10:54	21° Y 23'31	
asc. node	7966 Sep 09 12:05	6° M 02'48	inferior conj	7969 Apr 07 03:09	19° Y 09'48 8°30'53	
	7966 Sep 29 00:47	0° E	minimum elong	7969 Apr 06 19:09	19° Y 22'07 8°29'53	
morning set	7966 Oct 06 08:40	9° E 00'15	min. Earth dist.	7969 Apr 06 21:02	19° Y 19'13 0.27020 AU	
	7966 Oct 23 10:05	0° M	morning rise	7969 Apr 10 03:25	17° Y 19'36	
max. Earth dist.	7966 Nov 10 19:46	22° M 41'39 1.73203 AU	direct	7969 Apr 27 17:14	11° Y 23'19	
			greatest brilliancy	7969 May 07 07:12	13° Y 07'03 -4.9m	
superior conj	7966 Nov 11 21:06	23° M 59'47 1°24'01		7969 Jun 02 05:26	0° B	
minimum elong	7966 Nov 12 00:59	24° M 11'47 1°24'05	desc. node	7969 Jun 16 01:45	12° B 56'37	
	7966 Nov 16 17:50	0° X	morning max el	7969 Jun 16 23:41	13° B 51'09 46°46'11	
	7966 Dec 11 00:44	0° Z		7969 Jul 02 11:54	0° II	
evening rise	7966 Dec 19 03:09	10° Z 00'38		7969 Jul 29 08:52	0° E	
desc. node	7966 Dec 30 05:15	23° Z 43'01		7969 Aug 24 03:59	0° O	
	7967 Jan 04 07:13	0° \approx		7969 Sep 18 10:58	0° M	
	7967 Jan 28 13:11	0° X	asc. node	7969 Oct 07 00:18	22° M 16'32	
	7967 Feb 21 18:53	0° Y		7969 Oct 13 09:47	0° E	
	7967 Mar 18 01:59	0° B		7969 Nov 07 01:47	0° M	
	7967 Apr 11 14:33	0° II		7969 Dec 01 12:14	0° X	
asc. node	7967 Apr 22 04:27	12° II 46'34	morning set	7969 Dec 13 22:11	15° X 19'24	
	7967 May 06 15:48	0° E		7969 Dec 25 18:43	0° Z	
	7967 Jun 01 19:56	0° O	max. Earth dist.	7970 Jan 17 22:52	28° Z 46'34 1.72228 AU	
evening max el	7967 Jun 23 08:47	22° O 45'05 46°23'02		7970 Jan 18 22:29	0° \approx	
	7967 Jun 30 21:08	0° M				
greatest brilliancy	7967 Aug 01 00:06	22° M 10'34 -4.8m	superior conj	7970 Jan 20 20:53	2° \approx 24'27 0°14'08	
desc. node	7967 Aug 11 23:03	24° M 26'32	minimum elong	7970 Jan 21 00:16	2° \approx 34'57 0°14'05	
retrograde	7967 Aug 12 03:38	24° M 26'34	behind sun begin	7970 Jan 20 12:14	1° \approx 57'30	
evening set	7967 Aug 27 14:52	19° M 47'27	behind sun end	7970 Jan 21 12:18	3° \approx 12'24	
min. Earth dist.	7967 Sep 01 20:11	16° M 38'50 0.28611 AU	desc. node	7970 Jan 26 17:08	9° \approx 41'04	
inferior conj	7967 Sep 02 13:14	16° M 12'08 -4°57'02		7970 Feb 12 00:01	0° X	
minimum elong	7967 Sep 02 03:55	16° M 26'43 4°54'47	evening rise	7970 Mar 01 09:00	21° X 43'29	
morning rise	7967 Sep 07 17:31	13° M 03'43		7970 Mar 07 23:40	0° Y	
direct	7967 Sep 23 22:15	8° M 05'11		7970 Mar 31 22:27	0° B	
greatest brilliancy	7967 Oct 03 15:15	9° M 47'36 -4.7m		7970 Apr 24 22:35	0° II	
	7967 Nov 03 03:05	0° E		7970 May 19 03:08	0° E	
morning max el	7967 Nov 11 14:33	7° E 50'11 45°41'59	asc. node	7970 May 19 16:13	0° E 40'19	
asc. node	7967 Dec 02 22:37	29° E 39'25		7970 Jun 12 15:53	0° O	
	7967 Dec 03 06:16	0° M		7970 Jul 07 18:12	0° M	
	7967 Dec 30 00:26	0° X		7970 Aug 02 20:56	0° E	
	7968 Jan 24 10:18	0° Z		7970 Aug 31 06:55	0° M	
	7968 Feb 18 03:31	0° \approx	evening max el	7970 Sep 01 22:14	1° M 35'34 45°43'56	
	7968 Mar 13 11:17	0° X	desc. node	7970 Sep 08 10:30	7° M 43'10	
desc. node	7968 Mar 23 15:27	12° X 38'32	greatest brilliancy	7970 Oct 10 20:18	29° M 55'32 -4.7m	
	7968 Apr 06 13:20	0° Y		7970 Oct 11 01:29	0° X	
	7968 Apr 30 12:11	0° B	retrograde	7970 Oct 20 20:25	1° X 44'41	
morning set	7968 May 13 15:17	16° B 28'27		7970 Oct 30 05:17	30° R M	
	7968 May 24 10:06	0° II	evening set	7970 Nov 08 00:52	25° M 33'38	
	7968 Jun 17 09:10	0° E	inferior conj	7970 Nov 11 08:12	23° M 30'50 -8°28'19	
			minimum elong	7970 Nov 11 12:06	23° M 24'42 8°27'59	
superior conj	7968 Jun 22 09:00	6° E 14'06 -0°50'38	min. Earth dist.	7970 Nov 11 18:12	23° M 15'08 0.29051 AU	
minimum elong	7968 Jun 22 19:25	6° E 46'36 0°50'22	morning rise	7970 Nov 14 23:12	21° M 16'02	
max. Earth dist.	7968 Jun 25 23:18	10° E 43'18 1.71958 AU	direct	7970 Dec 02 20:17	15° M 12'07	
	7968 Jul 11 10:49	0° O	greatest brilliancy	7970 Dec 13 17:49	17° M 21'51 -4.8m	
asc. node	7968 Jul 14 13:55	3° O 53'18	asc. node	7970 Dec 30 10:13	27° M 04'09	
evening rise	7968 Jul 31 07:25	24° O 37'39		7971 Jan 03 04:44	0° X	
	7968 Aug 04 15:40	0° M	morning max el	7971 Jan 21 12:37	16° X 37'28 46°13'27	
	7968 Aug 29 00:06	0° E		7971 Feb 03 11:35	0° Z	

	7971 Mar 02 06:44	0°♊			7973 Oct 04 20:43	0°♊
	7971 Mar 27 15:04	0°♋		desc. node	7973 Oct 05 21:59	1°♊10'43
desc. node	7971 Apr 21 03:42	29°♋49'20			7973 Nov 01 17:46	0°♋
	7971 Apr 21 07:10	0°♌		evening max el	7973 Nov 12 11:51	10°♋39'31 45°51'19
	7971 May 15 14:57	0°♍			7973 Dec 05 05:15	0°♍
	7971 Jun 08 19:04	0°♎		greatest brilliancy	7973 Dec 21 19:44	9°♍01'29 -4.8m
	7971 Jul 02 22:39	0°♏		retrograde	7973 Dec 31 09:18	10°♍41'25
morning set	7971 Jul 26 16:23	29°♏26'05		evening set	7974 Jan 15 04:51	6°♍25'48
	7971 Jul 27 03:21	0°♐		inferior conj	7974 Jan 21 06:38	2°♍50'02 -1°25'24
asc. node	7971 Aug 12 01:50	19°♐43'15		minimum elong	7974 Jan 21 09:52	2°♍45'03 1°24'16
	7971 Aug 20 09:29	0°♑		min. Earth dist.	7974 Jan 21 20:58	2°♍27'52 0.27535 AU
					7974 Jan 25 23:10	30°♑♋
superior conj	7971 Sep 02 12:10	16°♑11'35 0°48'44		asc. node	7974 Jan 26 21:55	29°♑♋27'49
minimum elong	7971 Sep 02 03:17	15°♑44'09 0°48'20		morning rise	7974 Jan 27 14:16	29°♑05'24
max. Earth dist.	7971 Sep 03 18:30	17°♑45'13 1.73122 AU		direct	7974 Feb 11 07:05	24°♑50'22
	7971 Sep 13 16:45	0°♒		greatest brilliancy	7974 Feb 22 02:01	27°♑01'19 -4.9m
	7971 Oct 08 01:07	0°♓			7974 Feb 28 08:21	0°♓
evening rise	7971 Oct 09 00:10	1°♓10'55		morning max el	7974 Apr 02 18:50	27°♓44'01 46°54'40
	7971 Nov 01 11:15	0°♈			7974 Apr 05 00:21	0°♈
	7971 Nov 25 23:56	0°♉			7974 May 02 13:02	0°♉
desc. node	7971 Dec 01 19:21	7°♉05'04		desc. node	7974 May 18 15:54	18°♉39'58
	7971 Dec 20 15:34	0°♊			7974 May 28 06:04	0°♊
	7972 Jan 14 10:31	0°♋			7974 Jun 22 05:47	0°♋
	7972 Feb 08 10:58	0°♌			7974 Jul 16 22:18	0°♌
	7972 Mar 05 00:18	0°♍			7974 Aug 10 12:09	0°♍
asc. node	7972 Mar 23 18:55	21°♍09'45			7974 Sep 04 00:41	0°♎
	7972 Mar 31 23:27	0°♎		asc. node	7974 Sep 08 14:07	5°♎35'07
evening max el	7972 Apr 09 04:43	8°♎30'53 47°00'21			7974 Sep 28 11:41	0°♏
	7972 May 03 02:13	0°♏		morning set	7974 Oct 04 01:51	6°♏52'14
greatest brilliancy	7972 May 19 12:29	9°♏30'26 -4.9m			7974 Oct 22 20:52	0°♐
retrograde	7972 May 29 18:31	11°♏29'27		max. Earth dist.	7974 Nov 08 13:03	20°♐33'45 1.73219 AU
evening set	7972 Jun 14 20:36	6°♏24'49				
inferior conj	7972 Jun 19 15:14	3°♏32'09 5°38'30		superior conj	7974 Nov 09 14:33	21°♐52'22 1°24'38
minimum elong	7972 Jun 20 01:46	3°♏15'57 5°35'43		minimum elong	7974 Nov 09 17:46	22°♐02'17 1°24'44
min. Earth dist.	7972 Jun 19 14:28	3°♏33'21 0.27427 AU			7974 Nov 16 04:36	0°♈
morning rise	7972 Jun 25 07:15	0°♏10'23			7974 Dec 10 11:36	0°♉
	7972 Jun 25 14:51	30°♑♒		evening rise	7974 Dec 16 18:49	7°♉47'00
direct	7972 Jul 10 10:56	25°♒40'54		desc. node	7974 Dec 29 07:06	23°♉14'42
desc. node	7972 Jul 13 13:17	25°♒52'12			7975 Jan 03 18:16	0°♊
greatest brilliancy	7972 Jul 20 06:35	27°♒28'24 -4.8m			7975 Jan 28 00:31	0°♋
	7972 Jul 26 03:09	0°♓			7975 Feb 21 06:33	0°♌
morning max el	7972 Aug 28 19:43	26°♓29'20 46°00'39			7975 Mar 17 14:06	0°♍
	7972 Sep 01 09:55	0°♐			7975 Apr 11 03:21	0°♎
	7972 Sep 29 21:27	0°♑		asc. node	7975 Apr 21 06:32	12°♒13'04
	7972 Oct 26 09:29	0°♒			7975 May 06 05:52	0°♓
asc. node	7972 Nov 03 12:34	9°♒27'18			7975 Jun 01 12:48	0°♔
	7972 Nov 20 21:58	0°♓		evening max el	7975 Jun 20 23:14	20°♓26'58 46°24'36
	7972 Dec 15 19:41	0°♈			7975 Jun 30 23:14	0°♑
	7973 Jan 09 07:43	0°♉		greatest brilliancy	7975 Jul 29 16:51	19°♑58'34 -4.8m
	7973 Feb 02 13:27	0°♊		retrograde	7975 Aug 09 19:07	22°♑13'53
desc. node	7973 Feb 23 05:11	25°♊44'38		desc. node	7975 Aug 11 00:59	22°♑12'03
morning set	7973 Feb 23 19:24	26°♊29'03		evening set	7975 Aug 25 04:47	17°♑37'50
	7973 Feb 26 14:54	0°♋		min. Earth dist.	7975 Aug 30 12:19	14°♑26'16 0.28565 AU
	7973 Mar 22 13:19	0°♌		inferior conj	7975 Aug 31 05:01	14°♑00'07 -4°40'05
max. Earth dist.	7973 Apr 04 19:35	16°♌39'49 1.71228 AU		minimum elong	7975 Aug 30 20:00	14°♑14'14 4°37'50
				morning rise	7975 Sep 05 11:44	10°♑48'05
superior conj	7973 Apr 05 13:28	17°♌36'02 -1°20'01		direct	7975 Sep 21 13:10	5°♑53'48
minimum elong	7973 Apr 05 04:23	17°♌07'30 1°19'53		greatest brilliancy	7975 Oct 01 06:52	7°♑36'20 -4.7m
	7973 Apr 15 10:02	0°♍			7975 Nov 03 05:12	0°♒
	7973 May 09 06:52	0°♎		morning max el	7975 Nov 09 04:30	5°♒34'39 45°41'45
evening rise	7973 May 16 04:31	8°♒39'36		asc. node	7975 Dec 02 00:31	28°♒59'34
	7973 Jun 02 05:55	0°♓			7975 Dec 02 22:51	0°♓
asc. node	7973 Jun 16 03:57	17°♓20'07			7975 Dec 29 14:09	0°♈
	7973 Jun 26 09:06	0°♔			7976 Jan 23 22:46	0°♉
	7973 Jul 20 18:10	0°♕			7976 Feb 17 15:22	0°♊
	7973 Aug 14 11:30	0°♖			7976 Mar 12 22:48	0°♋
	7973 Sep 08 17:28	0°♗		desc. node	7976 Mar 22 17:26	12°♋09'12

	7976 Apr 06 00:39	0°♄		inferior conj	7978 Nov 09 00:19	21°♌20'17	-8°31'39
	7976 Apr 29 23:21	0°♄		minimum elong	7978 Nov 09 03:29	21°♌15'19	8°31'24
morning set	7976 May 11 02:39	13°♄58'40		min. Earth dist.	7978 Nov 09 08:44	21°♌07'06	0.29080 AU
	7976 May 23 21:08	0°♄		morning rise	7978 Nov 12 13:15	19°♌08'45	
	7976 Jun 16 20:06	0°♄		direct	7978 Nov 30 13:04	13°♌01'31	
				greatest brilliancy	7978 Dec 11 08:46	15°♌09'53	-4.8m
superior conj	7976 Jun 19 22:17	3°♄51'38	-0°53'38	asc. node	7978 Dec 29 12:10	25°♌56'27	
minimum elong	7976 Jun 20 09:02	4°♄25'13	0°53'21		7979 Jan 03 13:10	0°♄	
max. Earth dist.	7976 Jun 23 10:49	8°♄15'27	1.71908 AU	morning max el	7979 Jan 19 05:03	14°♄25'19	46°11'48
	7976 Jul 10 21:42	0°♄			7979 Feb 03 05:35	0°♄	
asc. node	7976 Jul 13 15:48	3°♄25'21			7979 Mar 01 21:14	0°♄	
evening rise	7976 Jul 28 23:01	22°♄23'41			7979 Mar 27 04:03	0°♄	
	7976 Aug 04 02:35	0°♄		desc. node	7979 Apr 20 05:43	29°♄18'09	
	7976 Aug 28 11:09	0°♄			7979 Apr 20 19:21	0°♄	
	7976 Sep 22 00:24	0°♄			7979 May 15 02:39	0°♄	
	7976 Oct 16 20:20	0°♄			7979 Jun 08 06:27	0°♄	
desc. node	7976 Nov 02 09:35	19°♄44'51			7979 Jul 02 09:47	0°♄	
	7976 Nov 11 01:40	0°♄		morning set	7979 Jul 24 07:38	27°♄10'44	
	7976 Dec 06 20:30	0°♄			7979 Jul 26 14:17	0°♄	
	7977 Jan 02 14:48	0°♄		asc. node	7979 Aug 11 03:54	19°♄16'09	
evening max el	7977 Jan 23 19:07	22°♄08'56	46°37'03		7979 Aug 19 20:16	0°♄	
	7977 Jan 31 22:47	0°♄					
asc. node	7977 Feb 23 09:33	17°♄50'37		superior conj	7979 Aug 31 04:53	14°♄01'49	0°45'57
greatest brilliancy	7977 Mar 05 04:50	22°♄40'31	-4.9m	minimum elong	7979 Aug 30 20:15	13°♄35'13	0°45'32
retrograde	7977 Mar 14 23:59	24°♄29'57		max. Earth dist.	7979 Sep 01 15:24	15°♄48'22	1.73095 AU
evening set	7977 Mar 31 19:01	19°♄03'01			7979 Sep 13 03:27	0°♄	
inferior conj	7977 Apr 04 15:50	16°♄42'56	8°21'11	evening rise	7979 Oct 06 17:57	29°♄04'53	
minimum elong	7977 Apr 04 07:10	16°♄56'16	8°19'58		7979 Oct 07 11:52	0°♄	
min. Earth dist.	7977 Apr 04 09:42	16°♄52'23	0.27015 AU		7979 Oct 31 22:11	0°♄	
morning rise	7977 Apr 07 19:19	14°♄48'10			7979 Nov 25 11:10	0°♄	
direct	7977 Apr 25 05:42	8°♄56'05		desc. node	7979 Nov 30 21:14	6°♄36'19	
greatest brilliancy	7977 May 04 20:38	10°♄40'54	-4.9m		7979 Dec 20 03:16	0°♄	
	7977 Jun 02 12:26	0°♄			7980 Jan 13 22:56	0°♄	
morning max el	7977 Jun 14 13:18	11°♄27'27	46°47'39		7980 Feb 08 00:29	0°♄	
desc. node	7977 Jun 15 03:34	12°♄03'11			7980 Mar 04 15:47	0°♄	
	7977 Jul 02 06:16	0°♄		asc. node	7980 Mar 22 20:59	20°♄25'41	
	7977 Jul 28 23:34	0°♄			7980 Mar 31 19:39	0°♄	
	7977 Aug 23 16:58	0°♄		evening max el	7980 Apr 06 19:33	6°♄10'21	47°00'40
	7977 Sep 17 22:59	0°♄			7980 May 03 23:14	0°♄	
asc. node	7977 Oct 06 02:19	21°♄47'50		greatest brilliancy	7980 May 17 03:03	7°♄08'37	-4.9m
	7977 Oct 12 21:13	0°♄		retrograde	7980 May 27 08:52	9°♄06'52	
	7977 Nov 06 12:52	0°♄		evening set	7980 Jun 12 13:34	3°♄58'08	
	7977 Nov 30 23:09	0°♄		inferior conj	7980 Jun 17 04:48	1°♄10'03	5°56'46
morning set	7977 Dec 11 14:42	13°♄08'28		minimum elong	7980 Jun 17 15:32	0°♄53'29	5°54'01
	7977 Dec 25 05:35	0°♄		min. Earth dist.	7980 Jun 17 04:04	1°♄11'11	0.27405 AU
max. Earth dist.	7978 Jan 15 16:39	26°♄38'39	1.72270 AU		7980 Jun 19 02:25	30°♄	
				morning rise	7980 Jun 22 17:52	27°♄52'20	
superior conj	7978 Jan 18 10:53	0°♄04'42	0°17'41	direct	7980 Jul 08 00:44	23°♄19'24	
minimum elong	7978 Jan 18 15:04	0°♄17'41	0°17'37	desc. node	7980 Jul 12 15:20	23°♄44'07	
	7978 Jan 18 09:23	0°♄		greatest brilliancy	7980 Jul 17 19:01	25°♄05'54	-4.8m
desc. node	7978 Jan 25 19:06	9°♄13'11			7980 Jul 27 21:42	0°♄	
	7978 Feb 11 11:00	0°♄		morning max el	7980 Aug 26 10:09	24°♄12'30	46°02'01
evening rise	7978 Feb 26 21:32	19°♄17'59			7980 Sep 01 07:11	0°♄	
	7978 Mar 07 10:45	0°♄			7980 Sep 29 12:50	0°♄	
	7978 Mar 31 09:43	0°♄			7980 Oct 25 22:35	0°♄	
	7978 Apr 24 10:04	0°♄		asc. node	7980 Nov 02 14:28	8°♄55'45	
asc. node	7978 May 18 18:06	0°♄09'40			7980 Nov 20 09:57	0°♄	
	7978 May 18 14:58	0°♄			7980 Dec 15 07:04	0°♄	
	7978 Jun 12 04:15	0°♄			7981 Jan 08 18:48	0°♄	
	7978 Jul 07 07:33	0°♄			7981 Feb 02 00:24	0°♄	
	7978 Aug 02 12:27	0°♄		morning set	7981 Feb 21 07:25	24°♄02'35	
evening max el	7978 Aug 30 14:05	29°♄24'38	45°44'45	desc. node	7981 Feb 22 07:15	25°♄17'02	
	7978 Aug 31 04:45	0°♄			7981 Feb 26 01:49	0°♄	
desc. node	7978 Sep 07 12:34	6°♄49'59			7981 Mar 22 00:14	0°♄	
greatest brilliancy	7978 Oct 08 10:10	27°♄43'53	-4.7m	max. Earth dist.	7981 Apr 01 23:55	13°♄48'19	1.71236 AU
retrograde	7978 Oct 18 12:55	29°♄34'56					
evening set	7978 Nov 05 17:39	23°♄22'11		superior conj	7981 Apr 03 00:18	15°♄04'58	-1°18'19

minimum elong	7981 Apr 02 14:34	14° Υ 34'23	1°18'08	greatest brilliancy	7983 Sep 28 22:31	5° η 25'46	-4.7m
	7981 Apr 14 20:57	0° \mathcal{B}			7983 Nov 03 05:36	0° \mathcal{B}	
	7981 May 08 17:47	0° Π		morning max el	7983 Nov 06 19:11	3° \mathcal{B} 21'47	45°41'37
evening rise	7981 May 13 15:07	6° Π 08'04		asc. node	7983 Dec 01 02:26	28° \mathcal{B} 21'06	
	7981 Jun 01 16:53	0° \mathcal{B}			7983 Dec 02 14:47	0° \mathcal{M}	
asc. node	7981 Jun 15 05:52	16° \mathcal{B} 51'48			7983 Dec 29 03:26	0° \mathcal{X}	
	7981 Jun 25 20:12	0° Ω			7984 Jan 23 10:51	0° \mathcal{B}	
	7981 Jul 20 05:33	0° η			7984 Feb 17 02:50	0° \approx	
	7981 Aug 13 23:23	0° \mathcal{B}			7984 Mar 12 09:57	0° \mathcal{H}	
	7981 Sep 08 06:17	0° \mathcal{M}		desc. node	7984 Mar 21 19:25	11° \mathcal{H} 41'02	
	7981 Oct 04 11:25	0° \mathcal{X}			7984 Apr 05 11:36	0° Υ	
desc. node	7981 Oct 04 23:59	0° \mathcal{X} 34'58			7984 Apr 29 10:10	0° \mathcal{B}	
	7981 Nov 01 13:17	0° \mathcal{B}		morning set	7984 May 08 13:47	11° \mathcal{B} 29'09	
evening max el	7981 Nov 10 01:42	8° \mathcal{B} 23'05	45°50'11		7984 May 23 07:52	0° Π	
	7981 Dec 06 03:24	0° \approx			7984 Jun 16 06:46	0° \mathcal{B}	
greatest brilliancy	7981 Dec 19 10:29	6° \approx 44'42	-4.8m				
retrograde	7981 Dec 28 22:18	8° \approx 23'18		superior conj	7984 Jun 17 11:07	1° \mathcal{B} 28'33	-0°56'35
evening set	7982 Jan 12 20:30	4° \approx 05'15		minimum elong	7984 Jun 17 22:08	2° \mathcal{B} 02'58	0°56'17
inferior conj	7982 Jan 18 20:47	0° \approx 31'32	-1°47'30	max. Earth dist.	7984 Jun 20 19:44	5° \mathcal{B} 40'18	1.71863 AU
minimum elong	7982 Jan 19 00:48	0° \approx 25'18	1°46'08		7984 Jul 10 08:20	0° Ω	
min. Earth dist.	7982 Jan 19 12:19	0° \approx 07'28	0.27587 AU	asc. node	7984 Jul 12 17:51	2° Ω 58'44	
	7982 Jan 19 17:09	30° \mathcal{R} \mathcal{B}		evening rise	7984 Jul 26 14:08	20° Ω 09'02	
morning rise	7982 Jan 25 04:24	26° \mathcal{B} 46'20			7984 Aug 03 13:14	0° η	
asc. node	7982 Jan 25 23:57	26° \mathcal{B} 20'19			7984 Aug 27 21:54	0° \mathcal{B}	
direct	7982 Feb 08 21:16	22° \mathcal{B} 30'55			7984 Sep 21 11:25	0° \mathcal{M}	
greatest brilliancy	7982 Feb 19 18:01	24° \mathcal{B} 42'58	-4.9m		7984 Oct 16 07:53	0° \mathcal{X}	
	7982 Mar 01 20:05	0° \approx		desc. node	7984 Nov 01 11:30	19° \mathcal{X} 14'41	
morning max el	7982 Mar 31 08:01	25° \approx 20'03	46°53'46		7984 Nov 10 14:08	0° \mathcal{B}	
	7982 Apr 04 21:24	0° \mathcal{H}			7984 Dec 06 10:34	0° \approx	
	7982 May 02 04:44	0° Υ			7985 Jan 02 08:09	0° \mathcal{H}	
desc. node	7982 May 17 17:46	18° Υ 03'43		evening max el	7985 Jan 21 08:50	19° \mathcal{H} 47'41	46°35'36
	7982 May 27 19:39	0° \mathcal{B}			7985 Feb 01 02:25	0° Υ	
	7982 Jun 21 18:12	0° Π		asc. node	7985 Feb 22 11:34	16° Υ 20'57	
	7982 Jul 16 10:00	0° \mathcal{B}		greatest brilliancy	7985 Mar 02 16:57	20° Υ 14'26	-4.9m
	7982 Aug 09 23:21	0° Ω		retrograde	7985 Mar 12 13:22	22° Υ 04'52	
	7982 Sep 03 11:33	0° η		evening set	7985 Mar 29 03:17	16° Υ 44'14	
asc. node	7982 Sep 07 16:04	5° η 08'00		inferior conj	7985 Apr 02 04:38	14° Υ 17'44	8°10'33
	7982 Sep 27 22:21	0° \mathcal{B}		minimum elong	7985 Apr 01 19:22	14° Υ 31'56	8°09'08
morning set	7982 Oct 01 18:53	4° \mathcal{B} 44'25		min. Earth dist.	7985 Apr 01 22:09	14° Υ 27'40	0.27008 AU
	7982 Oct 22 07:26	0° \mathcal{M}		morning rise	7985 Apr 05 11:28	12° Υ 18'13	
max. Earth dist.	7982 Nov 06 06:12	18° \mathcal{M} 26'05	1.73234 AU	direct	7985 Apr 22 18:45	6° Υ 30'45	
				greatest brilliancy	7985 May 02 09:34	8° Υ 15'55	-4.9m
superior conj	7982 Nov 07 08:06	19° \mathcal{M} 46'00	1°25'08		7985 Jun 02 16:44	0° \mathcal{B}	
minimum elong	7982 Nov 07 10:38	19° \mathcal{M} 53'48	1°25'14	morning max el	7985 Jun 12 03:50	9° \mathcal{B} 07'23	46°48'50
	7982 Nov 15 15:09	0° \mathcal{X}		desc. node	7985 Jun 14 05:41	11° \mathcal{B} 12'47	
	7982 Dec 09 22:13	0° \mathcal{B}			7985 Jul 01 23:47	0° Π	
evening rise	7982 Dec 14 10:45	5° \mathcal{B} 35'05			7985 Jul 28 13:47	0° \mathcal{B}	
desc. node	7982 Dec 28 09:07	22° \mathcal{B} 47'42			7985 Aug 23 05:35	0° Ω	
	7983 Jan 03 05:04	0° \approx			7985 Sep 17 10:39	0° η	
	7983 Jan 27 11:35	0° \mathcal{H}		asc. node	7985 Oct 05 04:13	21° η 19'47	
	7983 Feb 20 17:58	0° Υ			7985 Oct 12 08:17	0° \mathcal{B}	
	7983 Mar 17 02:01	0° \mathcal{B}			7985 Nov 05 23:35	0° \mathcal{M}	
	7983 Apr 10 16:01	0° Π			7985 Nov 30 09:42	0° \mathcal{X}	
asc. node	7983 Apr 20 08:23	11° Π 39'15		morning set	7985 Dec 09 07:14	10° \mathcal{X} 58'43	
	7983 May 05 19:54	0° \mathcal{B}			7985 Dec 24 16:08	0° \mathcal{B}	
	7983 Jun 01 05:50	0° Ω		max. Earth dist.	7986 Jan 13 08:52	24° \mathcal{B} 26'58	1.72311 AU
evening max el	7983 Jun 18 13:11	18° Ω 08'02	46°26'22				
	7983 Jul 01 02:41	0° η		superior conj	7986 Jan 16 01:02	27° \mathcal{B} 46'28	0°21'13
greatest brilliancy	7983 Jul 27 09:13	17° η 46'24	-4.8m	minimum elong	7986 Jan 16 05:58	28° \mathcal{B} 01'49	0°21'06
retrograde	7983 Aug 07 10:46	20° η 01'42			7986 Jan 17 19:58	0° \approx	
desc. node	7983 Aug 10 03:04	19° η 53'05		desc. node	7986 Jan 24 21:09	8° \approx 46'35	
evening set	7983 Aug 22 18:42	15° η 28'08			7986 Feb 10 21:40	0° \mathcal{H}	
min. Earth dist.	7983 Aug 28 04:19	12° η 14'03	0.28519 AU	evening rise	7986 Feb 24 10:17	16° \mathcal{H} 54'13	
inferior conj	7983 Aug 28 20:40	11° η 48'28	-4°22'32		7986 Mar 06 21:31	0° Υ	
minimum elong	7983 Aug 28 12:02	12° η 01'59	4°20'19		7986 Mar 30 20:36	0° \mathcal{B}	
morning rise	7983 Sep 03 05:49	8° η 33'02			7986 Apr 23 21:10	0° Π	
direct	7983 Sep 19 03:45	3° η 42'37		asc. node	7986 May 17 20:06	29° Π 40'35	

	7986 May 18 02:24	0°☿			7988 Dec 14 18:19	0°♄	
	7986 Jun 11 16:15	0°♌			7989 Jan 08 05:45	0°♄	
	7986 Jul 06 20:38	0°♍			7989 Feb 01 11:13	0°♌	
	7986 Aug 02 03:51	0°♊		morning set	7989 Feb 18 19:33	21°♌36'57	
evening max el	7986 Aug 28 06:39	27°♊16'09 45°45'33		desc. node	7989 Feb 21 09:07	24°♌49'11	
	7986 Aug 31 03:08	0°♋			7989 Feb 25 12:35	0°♋	
desc. node	7986 Sep 06 14:33	5°♋56'23			7989 Mar 21 11:01	0°♍	
greatest brilliancy	7986 Oct 06 00:35	25°♋33'45 -4.7m		max. Earth dist.	7989 Mar 30 02:54	10°♍52'55 1.71252 AU	
retrograde	7986 Oct 16 05:12	27°♋26'00					
evening set	7986 Nov 03 10:14	21°♋12'22		superior conj	7989 Mar 31 11:16	12°♍34'38 -1°16'27	
inferior conj	7986 Nov 06 16:30	19°♋10'50 -8°34'17		minimum elong	7989 Mar 31 00:57	12°♍02'12 1°16'13	
minimum elong	7986 Nov 06 18:56	19°♋07'01 8°34'05			7989 Apr 14 07:46	0°♎	
min. Earth dist.	7986 Nov 06 23:19	19°♋00'08 0.29102 AU			7989 May 08 04:39	0°♎	
morning rise	7986 Nov 10 03:36	17°♋02'00		evening rise	7989 May 11 01:47	3°♎36'53	
direct	7986 Nov 28 05:56	10°♋52'12			7989 Jun 01 03:47	0°☿	
greatest brilliancy	7986 Dec 08 23:14	12°♋58'27 -4.8m		asc. node	7989 Jun 14 07:57	16°☿24'09	
asc. node	7986 Dec 28 14:17	24°♋51'55			7989 Jun 25 07:13	0°♌	
	7987 Jan 03 18:44	0°♄			7989 Jul 19 16:49	0°♍	
morning max el	7987 Jan 16 21:00	12°♄13'07 46°10'06			7989 Aug 13 11:10	0°♊	
	7987 Feb 02 22:49	0°♄			7989 Sep 07 19:03	0°♋	
	7987 Mar 01 11:15	0°♌		desc. node	7989 Oct 04 01:52	29°♋58'58	
	7987 Mar 26 16:39	0°♋			7989 Oct 04 02:15	0°♄	
desc. node	7987 Apr 19 07:33	28°♋47'28			7989 Nov 01 09:23	0°♄	
	7987 Apr 20 07:10	0°♍		evening max el	7989 Nov 07 15:14	6°♄06'04 45°49'01	
	7987 May 14 13:59	0°♎			7989 Dec 07 10:03	0°♌	
	7987 Jun 07 17:27	0°♎		greatest brilliancy	7989 Dec 17 01:12	4°♌28'05 -4.8m	
	7987 Jul 01 20:32	0°☿		retrograde	7989 Dec 26 11:35	6°♌05'53	
morning set	7987 Jul 21 23:05	24°☿57'08		evening set	7990 Jan 10 12:25	1°♌44'47	
	7987 Jul 26 00:52	0°♌			7990 Jan 13 13:30	30°♋	
asc. node	7987 Aug 10 05:51	18°♌49'42		inferior conj	7990 Jan 16 11:06	28°♄13'30 -2°09'19	
	7987 Aug 19 06:44	0°♍		minimum elong	7990 Jan 16 15:54	28°♄06'05 2°07'43	
				min. Earth dist.	7990 Jan 17 03:53	27°♄47'31 0.27641 AU	
superior conj	7987 Aug 28 21:37	11°♍52'59 0°43'05		morning rise	7990 Jan 22 18:32	24°♄28'15	
minimum elong	7987 Aug 28 13:19	11°♍27'23 0°42'41		asc. node	7990 Jan 25 01:54	23°♄17'09	
max. Earth dist.	7987 Aug 30 12:14	13°♍52'14 1.73070 AU		direct	7990 Feb 06 11:30	20°♄11'47	
	7987 Sep 12 13:54	0°♊		greatest brilliancy	7990 Feb 17 10:31	22°♄25'37 -4.9m	
evening rise	7987 Oct 04 11:39	26°♊59'19			7990 Mar 02 21:16	0°♌	
	7987 Oct 06 22:24	0°♋		morning max el	7990 Mar 28 21:48	22°♌57'40 46°52'51	
	7987 Oct 31 08:53	0°♄			7990 Apr 04 17:46	0°♋	
	7987 Nov 24 22:11	0°♄			7990 May 01 20:13	0°♍	
desc. node	7987 Nov 29 23:16	6°♄08'39		desc. node	7990 May 16 19:50	17°♍28'13	
	7987 Dec 19 14:46	0°♌			7990 May 27 09:09	0°♎	
	7988 Jan 13 11:10	0°♋			7990 Jun 21 06:37	0°♎	
	7988 Feb 07 13:53	0°♍			7990 Jul 15 21:43	0°☿	
	7988 Mar 04 07:18	0°♎			7990 Aug 09 10:35	0°♌	
asc. node	7988 Mar 21 22:54	19°♎41'14			7990 Sep 02 22:27	0°♍	
	7988 Mar 31 16:17	0°♎		asc. node	7990 Sep 06 17:58	4°♍40'33	
evening max el	7988 Apr 04 10:09	3°♎49'44 47°00'53			7990 Sep 27 09:02	0°♊	
	7988 May 05 03:35	0°☿		morning set	7990 Sep 29 12:16	2°♊37'26	
greatest brilliancy	7988 May 14 18:25	4°☿48'38 -4.9m			7990 Oct 21 18:02	0°♋	
retrograde	7988 May 24 22:52	6°☿45'21		max. Earth dist.	7990 Nov 04 01:26	16°♋24'42 1.73254 AU	
evening set	7988 Jun 10 06:47	1°☿32'37					
	7988 Jun 12 20:42	30°♋		superior conj	7990 Nov 05 01:57	17°♋40'20 1°25'31	
inferior conj	7988 Jun 14 18:33	28°♋49'19 6°14'20		minimum elong	7990 Nov 05 03:47	17°♋45'56 1°25'36	
minimum elong	7988 Jun 15 05:26	28°♋32'30 6°11'38			7990 Nov 15 01:46	0°♄	
min. Earth dist.	7988 Jun 14 18:08	28°♋49'57 0.27379 AU			7990 Dec 09 08:58	0°♄	
morning rise	7988 Jun 20 04:25	25°♋35'45		evening rise	7990 Dec 12 02:57	3°♄23'37	
direct	7988 Jul 05 14:17	20°♋59'16		desc. node	7990 Dec 27 11:10	22°♄20'20	
desc. node	7988 Jul 11 17:20	21°♋42'21			7991 Jan 02 16:02	0°♌	
greatest brilliancy	7988 Jul 15 07:56	22°♋45'01 -4.8m			7991 Jan 26 22:50	0°♋	
	7988 Jul 29 02:21	0°☿			7991 Feb 20 05:35	0°♍	
morning max el	7988 Aug 23 23:50	21°☿54'38 46°03'22			7991 Mar 16 14:08	0°♎	
	7988 Sep 01 03:20	0°♌			7991 Apr 10 04:56	0°♎	
	7988 Sep 29 03:45	0°♍		asc. node	7991 Apr 19 10:24	11°♎05'15	
	7988 Oct 25 11:25	0°♊			7991 May 05 10:17	0°☿	
asc. node	7988 Nov 01 16:24	8°♊24'58			7991 May 31 23:29	0°♌	
	7988 Nov 19 21:45	0°♋		evening max el	7991 Jun 16 03:41	15°♌49'50 46°28'08	

	7991 Jul 01 08:21	0°♍		superior conj	7994 Jan 13 15:39	25°♌28'44	0°24'40
greatest brilliancy	7991 Jul 25 01:08	15°♍32'55	-4.8m	minimum elong	7994 Jan 13 21:16	25°♌46'14	0°24'30
retrograde	7991 Aug 05 02:54	17°♍48'51			7994 Jan 17 06:53	0°♍	
desc. node	7991 Aug 09 05:01	17°♍28'36		desc. node	7994 Jan 23 23:03	8°♍18'26	
evening set	7991 Aug 20 08:46	13°♍17'22			7994 Feb 10 08:41	0°♋	
min. Earth dist.	7991 Aug 25 20:07	10°♍01'16	0.28471 AU	evening rise	7994 Feb 21 23:11	14°♋29'48	
inferior conj	7991 Aug 26 12:18	9°♍36'01	-4°04'27		7994 Mar 06 08:41	0°♐	
minimum elong	7991 Aug 26 04:04	9°♍48'52	4°02'18		7994 Mar 30 07:57	0°♌	
morning rise	7991 Aug 31 23:50	6°♍17'34			7994 Apr 23 08:47	0°♈	
direct	7991 Sep 16 18:29	1°♍30'39		asc. node	7994 May 16 22:08	29°♈10'03	
greatest brilliancy	7991 Sep 26 13:55	3°♍14'27	-4.7m		7994 May 17 14:22	0°♍	
	7991 Nov 03 05:02	0°♊			7994 Jun 11 04:49	0°♎	
morning max el	7991 Nov 04 10:44	1°♊10'39	45°41'35		7994 Jul 06 10:20	0°♍	
asc. node	7991 Nov 30 04:33	27°♊43'09			7994 Aug 01 20:04	0°♊	
	7991 Dec 02 06:37	0°♌		evening max el	7994 Aug 25 22:47	25°♊04'58	45°46'20
	7991 Dec 28 16:48	0°♌			7994 Aug 31 03:12	0°♌	
	7992 Jan 22 23:08	0°♌		desc. node	7994 Sep 05 16:30	5°♌00'02	
	7992 Feb 16 14:35	0°♍		greatest brilliancy	7994 Oct 03 15:38	23°♌22'45	-4.7m
	7992 Mar 11 21:23	0°♋		retrograde	7994 Oct 13 20:57	25°♌15'28	
desc. node	7992 Mar 20 21:22	11°♋11'44		evening set	7994 Nov 01 02:29	19°♌01'40	
	7992 Apr 04 22:51	0°♐		inferior conj	7994 Nov 04 08:38	17°♌00'04	-8°36'10
	7992 Apr 28 21:17	0°♌		minimum elong	7994 Nov 04 10:19	16°♌57'26	8°36'02
morning set	7992 May 06 00:42	8°♌57'57		min. Earth dist.	7994 Nov 04 14:12	16°♌51'19	0.29117 AU
	7992 May 22 18:52	0°♈		morning rise	7994 Nov 07 18:07	14°♌53'27	
				direct	7994 Nov 25 22:31	8°♌41'39	
superior conj	7992 Jun 14 23:43	29°♈03'41	-0°59'25	greatest brilliancy	7994 Dec 06 13:48	10°♌45'49	-4.8m
minimum elong	7992 Jun 15 10:55	29°♈38'45	0°59'09	asc. node	7994 Dec 27 16:10	23°♌47'27	
	7992 Jun 15 17:44	0°♍			7995 Jan 03 22:52	0°♌	
max. Earth dist.	7992 Jun 18 05:56	3°♍08'06	1.71821 AU	morning max el	7995 Jan 14 12:02	9°♌57'39	46°08'34
	7992 Jul 09 19:17	0°♎			7995 Feb 02 16:02	0°♌	
asc. node	7992 Jul 11 19:48	2°♎30'46			7995 Mar 01 01:27	0°♍	
evening rise	7992 Jul 24 05:10	17°♎53'07			7995 Mar 26 05:31	0°♋	
	7992 Aug 03 00:13	0°♍		desc. node	7995 Apr 18 09:38	28°♋16'25	
	7992 Aug 27 08:59	0°♊			7995 Apr 19 19:20	0°♐	
	7992 Sep 20 22:47	0°♌			7995 May 14 01:44	0°♌	
	7992 Oct 15 19:45	0°♌			7995 Jun 07 04:55	0°♈	
desc. node	7992 Oct 31 13:35	18°♌44'10			7995 Jul 01 07:46	0°♍	
	7992 Nov 10 02:56	0°♌		morning set	7995 Jul 19 14:05	22°♍40'35	
	7992 Dec 06 01:04	0°♍			7995 Jul 25 11:53	0°♎	
	7993 Jan 02 02:14	0°♋		asc. node	7995 Aug 09 07:45	18°♎21'39	
evening max el	7993 Jan 18 23:26	17°♋27'42	46°33'54		7995 Aug 18 17:38	0°♍	
	7993 Feb 01 08:29	0°♐					
asc. node	7993 Feb 21 13:28	14°♐46'29		superior conj	7995 Aug 26 14:00	9°♍41'45	0°40'08
greatest brilliancy	7993 Feb 28 04:52	17°♐46'47	-4.9m	minimum elong	7995 Aug 26 06:06	9°♍17'22	0°39'44
retrograde	7993 Mar 10 02:43	19°♐37'59		max. Earth dist.	7995 Aug 28 08:14	11°♍52'10	1.73040 AU
evening set	7993 Mar 26 11:28	14°♐23'54			7995 Sep 12 00:47	0°♊	
inferior conj	7993 Mar 30 17:18	11°♐50'51	7°58'48	evening rise	7995 Oct 02 05:11	24°♊51'55	
minimum elong	7993 Mar 30 07:33	12°♐05'48	7°57'13		7995 Oct 06 09:21	0°♌	
min. Earth dist.	7993 Mar 30 10:29	12°♐01'19	0.27003 AU		7995 Oct 30 20:01	0°♌	
morning rise	7993 Apr 03 03:41	9°♐46'15			7995 Nov 24 09:37	0°♌	
direct	7993 Apr 20 08:06	4°♐03'55		desc. node	7995 Nov 29 01:17	5°♌39'46	
greatest brilliancy	7993 Apr 29 22:14	5°♐48'55	-4.9m		7995 Dec 19 02:40	0°♍	
	7993 Jun 02 19:56	0°♌			7996 Jan 12 23:47	0°♋	
morning max el	7993 Jun 09 18:12	6°♌45'30	46°49'56		7996 Feb 07 03:40	0°♐	
desc. node	7993 Jun 13 07:43	10°♌21'49			7996 Mar 03 23:20	0°♌	
	7993 Jul 01 17:23	0°♈		asc. node	7996 Mar 21 00:54	18°♌55'40	
	7993 Jul 28 04:15	0°♍			7996 Mar 31 14:01	0°♈	
	7993 Aug 22 18:31	0°♎		evening max el	7996 Apr 01 23:34	1°♈25'10	47°00'49
	7993 Sep 16 22:40	0°♍			7996 May 06 21:43	0°♍	
asc. node	7993 Oct 04 06:13	20°♍50'48		greatest brilliancy	7996 May 12 09:53	2°♍27'08	-4.9m
	7993 Oct 11 19:44	0°♊		retrograde	7996 May 22 12:09	4°♍22'02	
	7993 Nov 05 10:41	0°♌			7996 Jun 06 08:58	30°♋♈	
	7993 Nov 29 20:37	0°♌		evening set	7996 Jun 07 23:50	29°♈05'01	
morning set	7993 Dec 07 00:10	8°♌49'10		inferior conj	7996 Jun 12 08:08	26°♈26'44	6°31'13
	7993 Dec 24 03:00	0°♌		minimum elong	7996 Jun 12 19:04	26°♈09'48	6°28'37
max. Earth dist.	7994 Jan 11 00:22	22°♌12'06	1.72352 AU	min. Earth dist.	7996 Jun 12 08:21	26°♈26'24	0.27360 AU
				morning rise	7996 Jun 17 14:34	23°♈17'36	

direct	7996 Jul 03 03:13	18° Π 36'57		desc. node	7998 Dec 26 13:01	21° \mathfrak{Z} 52'12	
desc. node	7996 Jul 10 19:16	19° Π 43'24			7999 Jan 02 03:03	0° \approx	
greatest brilliancy	7996 Jul 12 21:23	20° Π 22'46	-4.8m		7999 Jan 26 10:08	0° \mathfrak{H}	
	7996 Jul 30 00:03	0° \mathfrak{E}			7999 Feb 19 17:14	0° Υ	
morning max el	7996 Aug 21 13:00	19° \mathfrak{E} 33'47	46°04'50		7999 Mar 16 02:16	0° \mathfrak{B}	
	7996 Aug 31 23:25	0° Ω			7999 Apr 09 17:50	0° Π	
	7996 Sep 28 18:54	0° \mathfrak{M}		asc. node	7999 Apr 18 12:29	10° Π 31'42	
	7996 Oct 25 00:32	0° $\underline{\mathfrak{A}}$			7999 May 05 00:39	0° \mathfrak{E}	
asc. node	7996 Oct 31 18:30	7° $\underline{\mathfrak{A}}$ 53'42			7999 May 31 17:19	0° Ω	
	7996 Nov 19 09:50	0° \mathfrak{M}		evening max el	7999 Jun 13 19:02	13° Ω 34'23	46°29'53
	7996 Dec 14 05:51	0° \mathfrak{A}			7999 Jul 01 15:59	0° \mathfrak{M}	
	7997 Jan 07 16:59	0° \mathfrak{Z}		greatest brilliancy	7999 Jul 22 16:26	13° \mathfrak{M} 19'14	-4.8m
	7997 Jan 31 22:17	0° \approx		retrograde	7999 Aug 02 19:19	15° \mathfrak{M} 36'17	
morning set	7997 Feb 16 08:04	19° \approx 11'45		desc. node	7999 Aug 08 06:58	14° \mathfrak{M} 59'35	
desc. node	7997 Feb 20 11:07	24° \approx 21'03		evening set	7999 Aug 17 22:59	11° \mathfrak{M} 06'39	
	7997 Feb 24 23:34	0° \mathfrak{H}		min. Earth dist.	7999 Aug 23 11:36	7° \mathfrak{M} 49'02	0.28429 AU
	7997 Mar 20 21:59	0° Υ		inferior conj	7999 Aug 24 03:52	7° \mathfrak{M} 23'42	-3°45'56
max. Earth dist.	7997 Mar 27 08:04	8° Υ 03'59	1.71268 AU	minimum elong	7999 Aug 23 20:06	7° \mathfrak{M} 35'47	3°43'52
				morning rise	7999 Aug 29 17:45	4° \mathfrak{M} 02'25	
superior conj	7997 Mar 28 22:37	10° Υ 05'04	-1°14'27		7999 Sep 08 12:50	30° \mathfrak{R} Ω	
minimum elong	7997 Mar 28 11:48	9° Υ 31'07	1°14'11	direct	7999 Sep 14 09:44	29° Ω 18'50	
	7997 Apr 13 18:45	0° \mathfrak{B}			7999 Sep 20 11:23	0° \mathfrak{M}	
	7997 May 07 15:39	0° Π		greatest brilliancy	7999 Sep 24 04:55	1° \mathfrak{M} 02'51	-4.7m
evening rise	7997 May 08 12:44	1° Π 06'09		morning max el	7999 Nov 02 02:57	29° \mathfrak{M} 01'19	45°41'28
	7997 May 31 14:53	0° \mathfrak{E}			7999 Nov 03 03:25	0° $\underline{\mathfrak{A}}$	
asc. node	7997 Jun 13 09:51	15° \mathfrak{E} 55'18		asc. node	7999 Nov 29 06:27	27° $\underline{\mathfrak{A}}$ 05'04	
	7997 Jun 24 18:29	0° Ω			7999 Dec 01 22:08	0° \mathfrak{M}	
	7997 Jul 19 04:24	0° \mathfrak{M}			7999 Dec 28 05:59	0° \mathfrak{A}	
	7997 Aug 12 23:18	0° $\underline{\mathfrak{A}}$			8000 Jan 22 11:15	0° \mathfrak{Z}	
	7997 Sep 07 08:13	0° \mathfrak{M}			8000 Feb 16 02:10	0° \approx	
desc. node	7997 Oct 03 03:59	29° \mathfrak{M} 22'28			8000 Mar 11 08:40	0° \mathfrak{H}	
	7997 Oct 03 17:34	0° \mathfrak{A}		desc. node	8000 Mar 19 23:21	10° \mathfrak{H} 43'06	
	7997 Nov 01 06:30	0° \mathfrak{Z}			8000 Apr 04 09:56	0° Υ	
evening max el	7997 Nov 05 04:37	3° \mathfrak{Z} 48'04	45°48'03		8000 Apr 28 08:12	0° \mathfrak{B}	
	7997 Dec 09 07:48	0° \approx		morning set	8000 May 03 11:41	6° \mathfrak{B} 27'34	
greatest brilliancy	7997 Dec 14 15:13	2° \approx 10'04	-4.8m		8000 May 22 05:40	0° Π	
retrograde	7997 Dec 24 01:18	3° \approx 47'53					
	7998 Jan 07 00:41	30° \mathfrak{R} \mathfrak{Z}		superior conj	8000 Jun 12 12:30	26° Π 40'06	-1°02'08
evening set	7998 Jan 08 04:24	29° \mathfrak{Z} 23'15		minimum elong	8000 Jun 12 23:50	27° Π 15'34	1°01'53
inferior conj	7998 Jan 14 01:18	25° \mathfrak{Z} 54'37	-2°30'53		8000 Jun 15 04:26	0° \mathfrak{E}	
minimum elong	7998 Jan 14 06:50	25° \mathfrak{Z} 46'03	2°29'04	max. Earth dist.	8000 Jun 15 18:44	0° \mathfrak{E} 44'42	1.71775 AU
min. Earth dist.	7998 Jan 14 19:03	25° \mathfrak{Z} 27'08	0.27696 AU		8000 Jul 09 05:57	0° Ω	
morning rise	7998 Jan 20 08:24	22° \mathfrak{Z} 09'51		asc. node	8000 Jul 10 21:43	2° Ω 03'37	
asc. node	7998 Jan 24 03:53	20° \mathfrak{Z} 17'08		evening rise	8000 Jul 21 20:28	15° Ω 38'53	
direct	7998 Feb 04 01:52	17° \mathfrak{Z} 51'44			8000 Aug 02 10:53	0° \mathfrak{M}	
greatest brilliancy	7998 Feb 15 02:45	20° \mathfrak{Z} 07'26	-4.9m		8000 Aug 26 19:48	0° $\underline{\mathfrak{A}}$	
	7998 Mar 03 16:02	0° \approx			8000 Sep 20 09:54	0° \mathfrak{M}	
morning max el	7998 Mar 26 12:33	20° \approx 37'33	46°52'08		8000 Oct 15 07:27	0° \mathfrak{A}	
	7998 Apr 04 13:34	0° \mathfrak{H}		desc. node	8000 Oct 30 15:32	18° \mathfrak{A} 13'45	
	7998 May 01 11:29	0° Υ			8000 Nov 09 15:38	0° \mathfrak{Z}	
desc. node	7998 May 15 21:50	16° Υ 52'53			8000 Dec 05 15:32	0° \approx	
	7998 May 26 22:29	0° \mathfrak{B}			8001 Jan 01 20:34	0° \mathfrak{H}	
	7998 Jun 20 18:56	0° Π		evening max el	8001 Jan 16 14:17	15° \mathfrak{H} 09'04	46°32'13
	7998 Jul 15 09:24	0° \mathfrak{E}			8001 Feb 01 16:37	0° Υ	
	7998 Aug 08 21:51	0° Ω		asc. node	8001 Feb 20 15:32	13° Υ 09'23	
	7998 Sep 02 09:26	0° \mathfrak{M}		greatest brilliancy	8001 Feb 25 17:03	15° Υ 20'17	-4.9m
asc. node	7998 Sep 05 20:01	4° \mathfrak{M} 13'14		retrograde	8001 Mar 07 15:40	17° Υ 11'36	
	7998 Sep 26 19:50	0° $\underline{\mathfrak{A}}$		evening set	8001 Mar 23 19:45	12° Υ 04'16	
morning set	7998 Sep 27 05:15	0° $\underline{\mathfrak{A}}$ 28'59		inferior conj	8001 Mar 28 05:57	9° Υ 24'42	7°46'14
	7998 Oct 21 04:43	0° \mathfrak{M}		minimum elong	8001 Mar 27 19:46	9° Υ 40'20	7°44'28
max. Earth dist.	7998 Nov 01 21:44	14° \mathfrak{M} 26'18	1.73270 AU	min. Earth dist.	8001 Mar 27 22:57	9° Υ 35'27	0.26995 AU
				morning rise	8001 Mar 31 19:51	7° Υ 14'50	
superior conj	7998 Nov 02 19:24	15° \mathfrak{M} 33'09	1°25'45	direct	8001 Apr 17 21:29	1° Υ 37'56	
minimum elong	7998 Nov 02 20:30	15° \mathfrak{M} 36'34	1°25'52	greatest brilliancy	8001 Apr 27 11:00	3° Υ 22'36	-4.9m
	7998 Nov 14 12:27	0° \mathfrak{A}			8001 Jun 02 21:18	0° \mathfrak{B}	
	7998 Dec 08 19:46	0° \mathfrak{Z}		morning max el	8001 Jun 07 07:48	4° \mathfrak{B} 22'35	46°51'05
evening rise	7998 Dec 09 18:53	1° \mathfrak{Z} 11'19		desc. node	8001 Jun 12 09:34	9° \mathfrak{B} 32'11	

	8001 Jul 01 10:14	0°♊		asc. node	8004 Mar 20 02:58	18°♎10'24	
	8001 Jul 27 18:09	0°♋		evening max el	8004 Mar 30 12:07	28°♎59'09	47°00'50
	8001 Aug 22 06:55	0°♌			8004 Mar 31 12:17	0°♊	
	8001 Sep 16 10:12	0°♍			8004 May 09 18:34	0°♋	
asc. node	8001 Oct 03 08:13	20°♍23'15		greatest brilliancy	8004 May 10 01:11	0°♋06'04	-4.9m
	8001 Oct 11 06:44	0°♎		retrograde	8004 May 20 01:20	1°♋59'35	
	8001 Nov 04 21:23	0°♏			8004 May 29 23:06	30°♎♊	
	8001 Nov 29 07:13	0°♐		evening set	8004 Jun 05 16:48	26°♊37'52	
morning set	8001 Dec 04 17:00	6°♐40'23		inferior conj	8004 Jun 09 21:38	24°♊04'52	6°47'28
	8001 Dec 23 13:35	0°♑		minimum elong	8004 Jun 10 08:32	23°♊48'00	6°44'59
max. Earth dist.	8002 Jan 08 13:35	19°♑51'10	1.72394 AU	min. Earth dist.	8004 Jun 09 22:31	24°♊03'28	0.27342 AU
				morning rise	8004 Jun 15 00:25	21°♊00'39	
superior conj	8002 Jan 11 06:10	23°♑11'47	0°28'03	direct	8004 Jun 30 15:47	16°♊15'07	
minimum elong	8002 Jan 11 12:27	23°♑31'18	0°27'53	desc. node	8004 Jul 09 21:19	17°♊50'00	
	8002 Jan 16 17:30	0°♒		greatest brilliancy	8004 Jul 10 11:07	18°♊01'42	-4.8m
desc. node	8002 Jan 23 01:02	7°♒51'28			8004 Jul 30 15:42	0°♋	
	8002 Feb 09 19:23	0°♓		morning max el	8004 Aug 19 02:28	17°♋14'33	46°06'29
evening rise	8002 Feb 19 11:53	12°♓05'49			8004 Aug 31 18:27	0°♌	
	8002 Mar 05 19:31	0°♑			8004 Sep 28 09:25	0°♍	
	8002 Mar 29 19:00	0°♒			8004 Oct 24 13:06	0°♎	
	8002 Apr 22 20:04	0°♊		asc. node	8004 Oct 30 20:21	7°♎23'10	
asc. node	8002 May 16 00:02	28°♊40'06			8004 Nov 18 21:25	0°♏	
	8002 May 17 02:01	0°♋			8004 Dec 13 16:54	0°♐	
	8002 Jun 10 17:03	0°♌			8005 Jan 07 03:46	0°♑	
	8002 Jul 05 23:42	0°♍			8005 Jan 31 08:58	0°♒	
	8002 Aug 01 12:02	0°♎		morning set	8005 Feb 13 20:37	16°♒47'46	
evening max el	8002 Aug 23 14:15	22°♎53'45	45°47'14	desc. node	8005 Feb 19 13:09	23°♒54'01	
	8002 Aug 31 03:42	0°♏			8005 Feb 24 10:16	0°♓	
desc. node	8002 Sep 04 18:35	4°♏04'39			8005 Mar 20 08:42	0°♑	
greatest brilliancy	8002 Oct 01 07:07	21°♏14'17	-4.7m	max. Earth dist.	8005 Mar 24 14:21	5°♑19'14	1.71292 AU
retrograde	8002 Oct 11 12:33	23°♏07'19					
evening set	8002 Oct 29 18:36	16°♏53'51		superior conj	8005 Mar 26 09:35	7°♑35'02	-1°12'16
inferior conj	8002 Nov 02 01:03	14°♏51'39	-8°37'15	minimum elong	8005 Mar 25 22:23	6°♑59'51	1°11'58
minimum elong	8002 Nov 02 01:56	14°♏50'16	8°37'09		8005 Apr 13 05:29	0°♒	
min. Earth dist.	8002 Nov 02 05:33	14°♏44'34	0.29134 AU	evening rise	8005 May 05 23:14	28°♒34'42	
morning rise	8002 Nov 05 09:14	12°♏46'47			8005 May 07 02:26	0°♊	
direct	8002 Nov 23 14:58	6°♏33'21			8005 May 31 01:44	0°♋	
greatest brilliancy	8002 Dec 04 05:17	8°♏36'06	-4.8m	asc. node	8005 Jun 12 11:48	15°♋27'23	
asc. node	8002 Dec 26 18:09	22°♏46'14			8005 Jun 24 05:30	0°♌	
	8003 Jan 04 00:46	0°♐			8005 Jul 18 15:43	0°♍	
morning max el	8003 Jan 12 02:27	7°♐41'52	46°06'52		8005 Aug 12 11:10	0°♎	
	8003 Feb 02 08:32	0°♑			8005 Sep 06 21:08	0°♏	
	8003 Feb 28 15:10	0°♒		desc. node	8005 Oct 02 05:56	28°♏46'18	
	8003 Mar 25 17:58	0°♓			8005 Oct 03 08:44	0°♐	
desc. node	8003 Apr 17 11:37	27°♓46'15			8005 Nov 01 03:52	0°♑	
	8003 Apr 19 07:06	0°♑		evening max el	8005 Nov 02 18:55	1°♑33'52	45°47'19
	8003 May 13 13:04	0°♒		greatest brilliancy	8005 Dec 12 04:51	29°♑53'49	-4.8m
	8003 Jun 06 15:57	0°♊			8005 Dec 12 12:23	0°♒	
	8003 Jun 30 18:34	0°♋		retrograde	8005 Dec 21 15:45	1°♒32'16	
morning set	8003 Jul 17 05:03	20°♋25'04			8005 Dec 30 10:15	30°♎♑	
	8003 Jul 24 22:30	0°♌		evening set	8006 Jan 05 20:50	27°♑03'58	
asc. node	8003 Aug 08 09:48	17°♌55'26		inferior conj	8006 Jan 11 15:48	23°♑37'56	-2°51'47
	8003 Aug 18 04:07	0°♍		minimum elong	8006 Jan 11 22:01	23°♑28'19	2°49'49
				min. Earth dist.	8006 Jan 12 10:02	23°♑09'45	0.27755 AU
superior conj	8003 Aug 24 06:35	7°♍32'26	0°37'08	morning rise	8006 Jan 17 22:24	19°♑54'04	
minimum elong	8003 Aug 23 23:07	7°♍09'23	0°36'44	asc. node	8006 Jan 23 05:54	17°♑24'14	
max. Earth dist.	8003 Aug 26 02:32	9°♍48'10	1.73004 AU	direct	8006 Feb 01 17:10	15°♑34'04	
	8003 Sep 11 11:12	0°♎		greatest brilliancy	8006 Feb 12 18:41	17°♑50'53	-4.8m
evening rise	8003 Sep 29 23:01	22°♎46'57			8006 Mar 04 05:22	0°♒	
	8003 Oct 05 19:49	0°♏		morning max el	8006 Mar 24 04:11	18°♒20'42	46°50'58
	8003 Oct 30 06:39	0°♐			8006 Apr 04 08:33	0°♓	
	8003 Nov 23 20:36	0°♑			8006 May 01 02:24	0°♑	
desc. node	8003 Nov 28 03:11	5°♑11'54		desc. node	8006 May 14 23:41	16°♑17'35	
	8003 Dec 18 14:11	0°♒			8006 May 26 11:39	0°♒	
	8004 Jan 12 12:06	0°♓			8006 Jun 20 07:06	0°♊	
	8004 Feb 06 17:17	0°♑			8006 Jul 14 20:56	0°♋	
	8004 Mar 03 15:21	0°♒			8006 Aug 08 08:57	0°♌	

	8006 Sep 01 20:14	0°♍		greatest brilliancy	8009 Feb 23 06:00	12°♍55'16	-4.9m
asc. node	8006 Sep 04 21:57	3°♍46'13		retrograde	8009 Mar 05 04:23	14°♍46'02	
morning set	8006 Sep 24 22:16	28°♍21'07		evening set	8009 Mar 21 04:26	9°♍45'24	
	8006 Sep 26 06:26	0°♌		inferior conj	8009 Mar 25 18:51	6°♍59'31	7°32'56
	8006 Oct 20 15:13	0°♌		minimum elong	8009 Mar 25 08:20	7°♍15'42	7°30'58
max. Earth dist.	8006 Oct 30 18:47	12°♌30'50	1.73280 AU	min. Earth dist.	8009 Mar 25 11:59	7°♍10'05	0.26988 AU
				morning rise	8009 Mar 29 12:17	4°♍44'16	
superior conj	8006 Oct 31 13:03	13°♌27'11	1°25'54		8009 Apr 09 06:02	30°♌	
minimum elong	8006 Oct 31 13:28	13°♌28'25	1°26'00	direct	8009 Apr 15 10:39	29°♌12'56	
	8006 Nov 13 22:57	0°♌			8009 Apr 21 18:54	0°♍	
evening rise	8006 Dec 07 11:14	29°♌00'56		greatest brilliancy	8009 Apr 25 00:25	0°♍57'32	-4.9m
	8006 Dec 08 06:22	0°♌			8009 Jun 02 21:27	0°♌	
desc. node	8006 Dec 25 15:03	21°♌25'20		morning max el	8009 Jun 04 20:25	1°♌56'57	46°51'56
	8007 Jan 01 13:51	0°♌		desc. node	8009 Jun 11 11:40	8°♌43'55	
	8007 Jan 25 21:13	0°♌			8009 Jul 01 02:55	0°♌	
	8007 Feb 19 04:43	0°♍			8009 Jul 27 08:09	0°♌	
	8007 Mar 15 14:18	0°♌			8009 Aug 21 19:33	0°♌	
	8007 Apr 09 06:47	0°♌			8009 Sep 15 21:59	0°♍	
asc. node	8007 Apr 17 14:19	9°♌57'15		asc. node	8009 Oct 02 10:07	19°♍54'29	
	8007 May 04 15:15	0°♌			8009 Oct 10 17:58	0°♌	
	8007 May 31 11:43	0°♌			8009 Nov 04 08:19	0°♌	
evening max el	8007 Jun 11 11:00	11°♌20'03	46°31'36		8009 Nov 28 18:00	0°♌	
	8007 Jul 02 02:45	0°♍		morning set	8009 Dec 02 09:39	4°♌30'22	
greatest brilliancy	8007 Jul 20 07:47	11°♍04'56	-4.8m		8009 Dec 23 00:21	0°♌	
retrograde	8007 Jul 31 11:38	13°♍22'37		max. Earth dist.	8010 Jan 06 02:47	17°♌29'41	1.72437 AU
desc. node	8007 Aug 07 09:01	12°♍24'35					
evening set	8007 Aug 15 13:14	8°♍54'58		superior conj	8010 Jan 08 20:49	20°♌54'42	0°31'23
min. Earth dist.	8007 Aug 21 02:44	5°♍36'03	0.28379 AU	minimum elong	8010 Jan 09 03:43	21°♌16'08	0°31'13
inferior conj	8007 Aug 21 19:11	5°♍10'28	-3°26'57		8010 Jan 16 04:19	0°♌	
minimum elong	8007 Aug 21 11:57	5°♍21'43	3°24'58	desc. node	8010 Jan 22 03:04	7°♌24'01	
morning rise	8007 Aug 27 11:19	1°♍46'27			8010 Feb 09 06:17	0°♌	
	8007 Aug 30 22:24	30°♌		evening rise	8010 Feb 17 00:52	9°♌42'13	
direct	8007 Sep 12 01:09	27°♌06'23			8010 Mar 05 06:33	0°♍	
greatest brilliancy	8007 Sep 21 19:09	28°♌49'54	-4.7m		8010 Mar 29 06:12	0°♌	
	8007 Sep 24 20:29	0°♍			8010 Apr 22 07:31	0°♌	
morning max el	8007 Oct 30 18:52	26°♍51'25	45°41'26	asc. node	8010 May 15 02:02	28°♌10'02	
	8007 Nov 03 00:53	0°♌			8010 May 16 13:50	0°♌	
asc. node	8007 Nov 28 08:23	26°♌27'41			8010 Jun 10 05:32	0°♌	
	8007 Dec 01 13:21	0°♌			8010 Jul 05 13:28	0°♍	
	8007 Dec 27 18:58	0°♌			8010 Aug 01 04:41	0°♌	
	8008 Jan 21 23:13	0°♌		evening max el	8010 Aug 21 04:47	20°♌38'49	45°48'02
	8008 Feb 15 13:36	0°♌			8010 Aug 31 06:12	0°♌	
	8008 Mar 10 19:48	0°♌		desc. node	8010 Sep 03 20:32	3°♌06'12	
desc. node	8008 Mar 19 01:19	10°♌14'42		greatest brilliancy	8010 Sep 28 22:32	19°♌03'53	-4.7m
	8008 Apr 03 20:54	0°♍		retrograde	8010 Oct 09 04:00	20°♌57'27	
	8008 Apr 27 19:04	0°♌		evening set	8010 Oct 27 10:10	14°♌44'39	
morning set	8008 Apr 30 22:41	3°♌57'20		inferior conj	8010 Oct 30 17:16	12°♌41'30	-8°37'39
	8008 May 21 16:30	0°♌		minimum elong	8010 Oct 30 17:21	12°♌41'22	8°37'33
				min. Earth dist.	8010 Oct 30 20:54	12°♌35'46	0.29147 AU
superior conj	8008 Jun 10 00:52	24°♌14'48	-1°04'47	morning rise	8010 Nov 03 00:28	10°♌38'01	
minimum elong	8008 Jun 10 12:13	24°♌50'20	1°04'32	direct	8010 Nov 21 06:43	4°♌23'11	
max. Earth dist.	8008 Jun 13 08:07	28°♌22'41	1.71736 AU	greatest brilliancy	8010 Dec 01 21:02	6°♌25'18	-4.8m
	8008 Jun 14 15:14	0°♌		asc. node	8010 Dec 25 20:15	21°♌45'33	
	8008 Jul 08 16:45	0°♌			8011 Jan 04 01:49	0°♌	
asc. node	8008 Jul 09 23:46	1°♌36'26		morning max el	8011 Jan 09 16:32	5°♌24'17	46°05'23
evening rise	8008 Jul 19 11:03	13°♌21'52			8011 Feb 02 01:02	0°♌	
	8008 Aug 01 21:43	0°♍			8011 Feb 28 05:02	0°♌	
	8008 Aug 26 06:45	0°♌			8011 Mar 25 06:37	0°♌	
	8008 Sep 19 21:11	0°♌		desc. node	8011 Apr 16 13:28	27°♌14'55	
	8008 Oct 14 19:19	0°♌			8011 Apr 18 19:05	0°♍	
desc. node	8008 Oct 29 17:26	17°♌42'48			8011 May 13 00:38	0°♌	
	8008 Nov 09 04:31	0°♌			8011 Jun 06 03:12	0°♌	
	8008 Dec 05 06:17	0°♌			8011 Jun 30 05:36	0°♌	
	8009 Jan 01 15:24	0°♌		morning set	8011 Jul 14 20:05	18°♌08'54	
evening max el	8009 Jan 14 04:46	12°♌49'37	46°30'34		8011 Jul 24 09:22	0°♌	
	8009 Feb 02 03:33	0°♍		asc. node	8011 Aug 07 11:45	17°♌27'55	
asc. node	8009 Feb 19 17:31	11°♍28'59			8011 Aug 17 14:55	0°♍	

superior conj	8011 Aug 21 23:02	5° \cap 21'45	0°34'04			8014 Mar 04 15:55	0° \approx	
minimum elong	8011 Aug 21 16:03	5° \cap 00'10	0°33'41	morning max el		8014 Mar 21 19:42	16° \approx 02'29	46°49'51
max. Earth dist.	8011 Aug 23 19:20	7° \cap 38'32	1.72976 AU			8014 Apr 04 03:26	0° H	
	8011 Sep 10 22:00	0° $\underline{\text{L}}$				8014 Apr 30 17:26	0° Y	
evening rise	8011 Sep 27 16:37	20° $\underline{\text{L}}$ 40'03		desc. node		8014 May 14 01:47	15° Y 42'19	
	8011 Oct 05 06:42	0° \cap				8014 May 26 01:00	0° B	
	8011 Oct 29 17:44	0° J				8014 Jun 19 19:30	0° II	
	8011 Nov 23 08:00	0° Z				8014 Jul 14 08:44	0° G	
desc. node	8011 Nov 27 05:12	4° Z 43'05				8014 Aug 07 20:19	0° Ω	
	8011 Dec 18 02:08	0° \approx				8014 Sep 01 07:17	0° \cap	
	8012 Jan 12 00:53	0° H		asc. node		8014 Sep 03 23:52	3° \cap 18'14	
	8012 Feb 06 07:25	0° Y		morning set		8014 Sep 22 15:29	26° \cap 13'09	
	8012 Mar 03 08:02	0° B				8014 Sep 25 17:16	0° $\underline{\text{L}}$	
asc. node	8012 Mar 19 04:51	17° B 22'59				8014 Oct 20 01:58	0° \cap	
evening max el	8012 Mar 28 00:44	26° B 32'24	47°00'54	max. Earth dist.		8014 Oct 28 16:21	10° \cap 36'06	1.73292 AU
	8012 Mar 31 11:54	0° II						
greatest brilliancy	8012 May 07 15:58	27° II 43'32	-4.9m	superior conj		8014 Oct 29 06:49	11° \cap 20'42	1°25'54
retrograde	8012 May 17 14:56	29° II 36'33		minimum elong		8014 Oct 29 06:29	11° \cap 19'43	1°26'00
evening set	8012 Jun 03 09:51	24° II 09'44				8014 Nov 13 09:44	0° J	
inferior conj	8012 Jun 07 11:10	21° II 42'11	7°03'00	evening rise		8014 Dec 05 03:31	26° J 49'22	
minimum elong	8012 Jun 07 21:59	21° II 25'29	7°00'39			8014 Dec 07 17:19	0° Z	
min. Earth dist.	8012 Jun 07 12:27	21° II 40'12	0.27324 AU	desc. node		8014 Dec 24 17:05	20° Z 57'21	
morning rise	8012 Jun 12 10:14	18° II 43'24				8015 Jan 01 01:02	0° \approx	
direct	8012 Jun 28 04:31	13° II 52'25				8015 Jan 25 08:42	0° H	
greatest brilliancy	8012 Jul 08 00:36	15° II 39'47	-4.8m			8015 Feb 18 16:34	0° Y	
desc. node	8012 Jul 08 23:18	16° II 00'22				8015 Mar 15 02:43	0° B	
	8012 Jul 31 03:39	0° G				8015 Apr 08 20:06	0° II	
morning max el	8012 Aug 16 16:40	14° G 56'17	46°08'05	asc. node		8015 Apr 16 16:21	9° II 22'25	
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	8012 Sep 28 00:05	0° \cap				8015 May 31 06:53	0° Ω	
	8012 Oct 24 02:00	0° $\underline{\text{L}}$		evening max el		8015 Jun 09 03:09	9° Ω 05'21	46°33'16
asc. node	8012 Oct 29 22:20	6° $\underline{\text{L}}$ 51'56				8015 Jul 02 17:35	0° \cap	
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	8012 Dec 13 04:22	0° J		retrograde		8015 Jul 29 03:45	11° \cap 08'07	
	8013 Jan 06 14:58	0° Z		desc. node		8015 Aug 06 10:58	9° \cap 44'08	
	8013 Jan 30 20:03	0° \approx		evening set		8015 Aug 13 03:44	6° \cap 42'33	
morning set	8013 Feb 11 09:13	14° \approx 22'53		inferior conj		8015 Aug 19 10:32	2° \cap 56'37	-3°07'28
desc. node	8013 Feb 18 15:01	23° \approx 25'19		minimum elong		8015 Aug 19 03:53	3° \cap 06'58	3°05'38
	8013 Feb 23 21:18	0° H		min. Earth dist.		8015 Aug 18 18:05	3° \cap 22'13	0.28327 AU
	8013 Mar 19 19:46	0° Y				8015 Aug 24 07:21	30° R Ω	
max. Earth dist.	8013 Mar 21 23:54	2° Y 43'42	1.71316 AU	morning rise		8015 Aug 25 04:46	29° Ω 29'52	
				direct		8015 Sep 09 16:43	24° Ω 53'32	
superior conj	8013 Mar 23 20:30	5° Y 03'49	-1°09'57	greatest brilliancy		8015 Sep 19 09:17	26° Ω 36'11	-4.7m
minimum elong	8013 Mar 23 09:00	4° Y 27'39	1°09'36			8015 Sep 27 01:24	0° \cap	
	8013 Apr 12 16:35	0° B		morning max el		8015 Oct 28 09:56	24° \cap 38'59	45°41'25
evening rise	8013 May 03 09:54	26° B 02'38				8015 Nov 02 21:45	0° $\underline{\text{L}}$	
	8013 May 06 13:33	0° II		asc. node		8015 Nov 27 10:29	25° $\underline{\text{L}}$ 50'36	
	8013 May 30 12:56	0° G				8015 Dec 01 04:30	0° \cap	
asc. node	8013 Jun 11 13:51	14° G 58'48				8015 Dec 27 08:04	0° J	
	8013 Jun 23 16:51	0° Ω				8016 Jan 21 11:23	0° Z	
	8013 Jul 18 03:22	0° \cap				8016 Feb 15 01:18	0° \approx	
	8013 Aug 11 23:23	0° $\underline{\text{L}}$				8016 Mar 10 07:14	0° H	
	8013 Sep 06 10:29	0° \cap		desc. node		8016 Mar 18 03:15	9° H 45'23	
desc. node	8013 Oct 01 07:51	28° \cap 08'38				8016 Apr 03 08:08	0° Y	
	8013 Oct 03 00:32	0° J				8016 Apr 27 06:10	0° B	
evening max el	8013 Oct 31 09:58	29° J 20'11	45°46'23	morning set		8016 Apr 28 09:22	1° B 25'25	
	8013 Nov 01 02:41	0° Z				8016 May 21 03:30	0° II	
greatest brilliancy	8013 Dec 09 18:10	27° Z 35'39	-4.8m					
retrograde	8013 Dec 19 06:09	29° Z 14'36		superior conj		8016 Jun 07 13:05	21° II 48'37	-1°07'19
evening set	8014 Jan 03 13:15	24° Z 42'47		minimum elong		8016 Jun 08 00:21	22° II 23'52	1°07'05
inferior conj	8014 Jan 09 06:05	21° Z 19'19	-3°12'34	max. Earth dist.		8016 Jun 10 22:06	26° II 02'03	1.71692 AU
minimum elong	8014 Jan 09 12:58	21° Z 08'41	3°10'25			8016 Jun 14 02:11	0° G	
min. Earth dist.	8014 Jan 10 00:33	20° Z 50'47	0.27813 AU			8016 Jul 08 03:40	0° Ω	
morning rise	8014 Jan 15 11:58	17° Z 36'38		asc. node		8016 Jul 09 01:41	1° Ω 08'26	
asc. node	8014 Jan 22 07:51	14° Z 34'08		evening rise		8016 Jul 17 01:33	11° Ω 04'06	
direct	8014 Jan 30 08:37	13° Z 14'44				8016 Aug 01 08:40	0° \cap	
greatest brilliancy	8014 Feb 10 09:49	15° Z 31'45	-4.8m			8016 Aug 25 17:51	0° $\underline{\text{L}}$	




































































































































	8016 Sep 19 08:36	0°♌		desc. node	8019 Apr 15 15:33	26°♎44'53	
	8016 Oct 14 07:19	0°♊			8019 Apr 18 06:52	0°♊	
desc. node	8016 Oct 28 19:33	17°♊12'12			8019 May 12 12:03	0°♎	
	8016 Nov 08 17:33	0°♎			8019 Jun 05 14:21	0°♌	
	8016 Dec 04 21:17	0°♎			8019 Jun 29 16:30	0°♎	
	8017 Jan 01 10:55	0°♎		morning set	8019 Jul 12 10:39	15°♎51'29	
evening max el	8017 Jan 11 18:04	10°♎26'47	46°28'37		8019 Jul 23 20:06	0°♌	
	8017 Feb 02 18:38	0°♊		asc. node	8019 Aug 06 13:38	17°♌00'46	
asc. node	8017 Feb 18 19:26	9°♊43'22			8019 Aug 17 01:31	0°♎	
greatest brilliancy	8017 Feb 20 19:15	10°♊29'26	-4.9m				
retrograde	8017 Mar 02 16:27	12°♊19'07		superior conj	8019 Aug 19 15:11	3°♎10'35	0°30'55
evening set	8017 Mar 18 12:55	7°♊24'57		minimum elong	8019 Aug 19 08:43	2°♎50'36	0°30'33
inferior conj	8017 Mar 23 07:32	4°♊33'03	7°18'31	max. Earth dist.	8019 Aug 21 12:01	5°♎29'07	1.72942 AU
minimum elong	8017 Mar 22 20:45	4°♊49'40	7°16'23		8019 Sep 10 08:35	0°♌	
min. Earth dist.	8017 Mar 23 01:17	4°♊42'40	0.26985 AU	evening rise	8019 Sep 25 10:15	18°♌33'58	
morning rise	8017 Mar 27 04:35	2°♊12'15			8019 Oct 04 17:22	0°♌	
	8017 Mar 31 06:25	30°♎			8019 Oct 29 04:35	0°♊	
direct	8017 Apr 12 23:02	26°♎46'20			8019 Nov 22 19:12	0°♎	
greatest brilliancy	8017 Apr 22 14:25	28°♎31'50	-4.9m	desc. node	8019 Nov 26 07:13	4°♎15'05	
	8017 Apr 26 05:16	0°♊			8019 Dec 17 13:51	0°♎	
morning max el	8017 Jun 02 08:10	29°♊28'18	46°53'00		8020 Jan 11 13:25	0°♎	
	8017 Jun 02 20:47	0°♎			8020 Feb 05 21:19	0°♊	
desc. node	8017 Jun 10 13:40	7°♎55'35			8020 Mar 03 00:37	0°♎	
	8017 Jun 30 19:24	0°♌		asc. node	8020 Mar 18 06:53	16°♎36'18	
	8017 Jul 26 22:03	0°♎		evening max el	8020 Mar 25 13:56	24°♎08'12	47°00'45
	8017 Aug 21 08:04	0°♌			8020 Mar 31 12:14	0°♌	
	8017 Sep 15 09:41	0°♎		greatest brilliancy	8020 May 05 05:53	25°♌20'31	-4.9m
asc. node	8017 Oct 01 12:06	19°♎26'07		retrograde	8020 May 15 04:52	27°♌13'48	
	8017 Oct 10 05:10	0°♌		evening set	8020 Jun 01 02:45	21°♌41'38	
	8017 Nov 03 19:13	0°♌		inferior conj	8020 Jun 05 00:32	19°♌19'30	7°17'46
	8017 Nov 28 04:45	0°♊		minimum elong	8020 Jun 05 11:12	19°♌03'04	7°15'34
morning set	8017 Nov 30 02:42	2°♊21'45		min. Earth dist.	8020 Jun 05 01:51	19°♌17'29	0.27312 AU
	8017 Dec 22 11:03	0°♎		morning rise	8020 Jun 09 19:44	16°♌26'33	
max. Earth dist.	8018 Jan 03 18:50	15°♎17'15	1.72482 AU	direct	8020 Jun 25 17:39	11°♌29'43	
				greatest brilliancy	8020 Jul 05 13:31	13°♌17'23	-4.8m
superior conj	8018 Jan 06 11:56	18°♎39'21	0°34'39	desc. node	8020 Jul 08 01:14	14°♌15'01	
minimum elong	8018 Jan 06 19:24	19°♎02'30	0°34'26		8020 Jul 31 12:20	0°♎	
	8018 Jan 15 15:04	0°♎		morning max el	8020 Aug 14 07:38	12°♎40'19	46°09'44
desc. node	8018 Jan 21 04:58	6°♎56'22			8020 Aug 31 07:23	0°♌	
	8018 Feb 08 17:09	0°♎			8020 Sep 27 14:19	0°♎	
evening rise	8018 Feb 14 14:10	7°♎19'48			8020 Oct 23 14:29	0°♌	
	8018 Mar 04 17:36	0°♊		asc. node	8020 Oct 29 00:23	6°♌21'57	
	8018 Mar 28 17:27	0°♎			8020 Nov 17 20:57	0°♌	
	8018 Apr 21 19:01	0°♌			8020 Dec 12 15:26	0°♊	
asc. node	8018 May 14 04:04	27°♌39'52			8021 Jan 06 01:47	0°♎	
	8018 May 16 01:43	0°♎			8021 Jan 30 06:45	0°♎	
	8018 Jun 09 18:05	0°♌		morning set	8021 Feb 08 22:25	12°♎01'07	
	8018 Jul 05 03:19	0°♎		desc. node	8021 Feb 17 17:02	22°♎58'14	
	8018 Jul 31 21:34	0°♌			8021 Feb 23 07:59	0°♎	
evening max el	8018 Aug 18 18:56	18°♌23'23	45°49'06		8021 Mar 19 06:25	0°♊	
	8018 Aug 31 10:07	0°♌		max. Earth dist.	8021 Mar 19 11:04	0°♊14'35	1.71337 AU
desc. node	8018 Sep 02 22:29	2°♌06'59					
greatest brilliancy	8018 Sep 26 13:45	16°♌53'58	-4.7m	superior conj	8021 Mar 21 07:56	2°♊35'27	-1°07'31
retrograde	8018 Oct 06 20:00	18°♌48'45		minimum elong	8021 Mar 20 20:13	1°♊58'40	1°07'09
evening set	8018 Oct 25 01:34	12°♌36'52			8021 Apr 12 03:15	0°♎	
inferior conj	8018 Oct 28 09:39	10°♌32'24	-8°37'15	evening rise	8021 Apr 30 20:55	23°♎32'59	
minimum elong	8018 Oct 28 08:57	10°♌33'29	8°37'10		8021 May 06 00:17	0°♌	
min. Earth dist.	8018 Oct 28 12:21	10°♌28'08	0.29158 AU		8021 May 29 23:46	0°♎	
morning rise	8018 Oct 31 16:17	8°♌29'51		asc. node	8021 Jun 10 15:45	14°♎30'48	
direct	8018 Nov 18 22:30	2°♌13'58			8021 Jun 23 03:53	0°♌	
greatest brilliancy	8018 Nov 29 13:08	4°♌15'59	-4.8m		8021 Jul 17 14:44	0°♎	
asc. node	8018 Dec 24 22:06	20°♌46'35			8021 Aug 11 11:21	0°♌	
	8019 Jan 04 01:18	0°♊			8021 Sep 05 23:37	0°♌	
morning max el	8019 Jan 07 07:29	3°♊09'45	46°04'04	desc. node	8021 Sep 30 09:58	27°♌32'13	
	8019 Feb 01 16:58	0°♎			8021 Oct 02 16:13	0°♊	
	8019 Feb 27 18:31	0°♎		evening max el	8021 Oct 29 01:29	27°♊08'56	45°45'38
	8019 Mar 24 19:00	0°♎			8021 Nov 01 02:00	0°♎	

greatest brilliancy	8021 Dec 07 08:00	25° Z 19'56	-4.8m	superior conj	8024 Jun 05 01:31	19° II 23'58	-1°09'41
retrograde	8021 Dec 16 20:35	26° Z 58'46		minimum elong	8024 Jun 05 12:37	19° II 58'43	1°09'30
evening set	8022 Jan 01 06:03	22° Z 23'35		max. Earth dist.	8024 Jun 08 09:42	23° II 34'57	1.71645 AU
inferior conj	8022 Jan 06 20:36	19° Z 02'43	-3°32'50		8024 Jun 13 12:48	0° Z	
minimum elong	8022 Jan 07 04:04	18° Z 51'09	3°30'33		8024 Jul 07 14:15	0° Z	
min. Earth dist.	8022 Jan 07 15:14	18° Z 33'52	0.27869 AU	asc. node	8024 Jul 08 03:37	0° Z 41'34	
morning rise	8022 Jan 13 01:29	15° Z 21'15		evening rise	8024 Jul 14 16:08	8° Z 47'32	
asc. node	8022 Jan 21 09:49	11° Z 51'02			8024 Jul 31 19:17	0° Z	
direct	8022 Jan 28 00:14	10° Z 57'33			8024 Aug 25 04:39	0° Z	
greatest brilliancy	8022 Feb 08 00:44	13° Z 14'00	-4.8m		8024 Sep 18 19:45	0° Z	
	8022 Mar 04 23:01	0° Z			8024 Oct 13 19:06	0° Z	
morning max el	8022 Mar 19 10:59	13° Z 45'08	46°48'43	desc. node	8024 Oct 27 21:28	16° Z 41'37	
	8022 Apr 03 21:19	0° Z			8024 Nov 08 06:26	0° Z	
	8022 Apr 30 07:48	0° Z			8024 Dec 04 12:14	0° Z	
desc. node	8022 May 13 03:45	15° Z 08'19			8025 Jan 01 06:43	0° Z	
	8022 May 25 13:46	0° Z		evening max el	8025 Jan 09 06:49	8° Z 03'37	46°26'54
	8022 Jun 19 07:22	0° Z			8025 Feb 03 14:12	0° Z	
	8022 Jul 13 20:03	0° Z		asc. node	8025 Feb 17 21:30	7° Z 54'59	
	8022 Aug 07 07:16	0° Z		greatest brilliancy	8025 Feb 18 08:43	8° Z 05'08	-4.9m
	8022 Aug 31 17:57	0° Z		retrograde	8025 Feb 28 04:39	9° Z 54'02	
asc. node	8022 Sep 03 01:54	2° Z 51'47		evening set	8025 Mar 15 21:44	5° Z 05'37	
morning set	8022 Sep 20 08:32	24° Z 05'43		inferior conj	8025 Mar 20 20:26	2° Z 08'13	7°03'19
	8022 Sep 25 03:46	0° Z		minimum elong	8025 Mar 20 09:27	2° Z 25'06	7°01'02
	8022 Oct 19 12:22	0° Z		min. Earth dist.	8025 Mar 20 14:54	2° Z 16'43	0.26984 AU
max. Earth dist.	8022 Oct 26 12:19	8° Z 37'37	1.73298 AU		8025 Mar 24 08:50	30° Z	
				morning rise	8025 Mar 24 21:06	29° Z 42'02	
superior conj	8022 Oct 27 00:27	9° Z 15'01	1°25'47	direct	8025 Apr 10 11:23	24° Z 21'02	
minimum elong	8022 Oct 26 23:25	9° Z 11'49	1°25'53	greatest brilliancy	8025 Apr 20 04:57	26° Z 08'04	-4.9m
	8022 Nov 12 20:10	0° Z			8025 Apr 28 10:05	0° Z	
evening rise	8022 Dec 02 19:46	24° Z 38'55		morning max el	8025 May 30 20:38	27° Z 02'13	46°54'00
	8022 Dec 07 03:53	0° Z			8025 Jun 02 18:51	0° Z	
desc. node	8022 Dec 23 18:56	20° Z 30'07		desc. node	8025 Jun 09 15:33	7° Z 08'30	
	8022 Dec 31 11:49	0° Z			8025 Jun 30 11:20	0° Z	
	8023 Jan 24 19:47	0° Z			8025 Jul 26 11:34	0° Z	
	8023 Feb 18 04:04	0° Z			8025 Aug 20 20:17	0° Z	
	8023 Mar 14 14:47	0° Z			8025 Sep 14 21:07	0° Z	
	8023 Apr 08 09:06	0° Z		asc. node	8025 Sep 30 14:07	18° Z 58'32	
asc. node	8023 Apr 15 18:25	8° Z 48'48			8025 Oct 09 16:08	0° Z	
	8023 May 03 21:04	0° Z			8025 Nov 03 05:56	0° Z	
	8023 May 31 02:02	0° Z		morning set	8025 Nov 27 19:39	0° Z 13'11	
evening max el	8023 Jun 06 18:49	6° Z 50'45	46°34'49		8025 Nov 27 15:22	0° Z	
	8023 Jul 03 12:39	0° Z			8025 Dec 21 21:40	0° Z	
greatest brilliancy	8023 Jul 15 16:24	6° Z 38'39	-4.8m	max. Earth dist.	8026 Jan 01 11:54	13° Z 08'16	1.72525 AU
retrograde	8023 Jul 26 19:28	8° Z 54'55					
desc. node	8023 Aug 05 12:56	7° Z 00'17		superior conj	8026 Jan 04 02:55	16° Z 23'51	0°37'51
evening set	8023 Aug 10 18:29	4° Z 31'17		minimum elong	8026 Jan 04 10:53	16° Z 48'35	0°37'37
min. Earth dist.	8023 Aug 16 09:51	1° Z 09'18	0.28279 AU		8026 Jan 15 01:43	0° Z	
inferior conj	8023 Aug 17 01:57	0° Z 44'11	-2°47'42	desc. node	8026 Jan 20 06:58	6° Z 29'23	
minimum elong	8023 Aug 16 19:55	0° Z 53'35	2°46'02		8026 Feb 08 03:55	0° Z	
	8023 Aug 18 06:22	30° Z		evening rise	8026 Feb 12 03:22	4° Z 57'38	
morning rise	8023 Aug 22 22:07	27° Z 14'38			8026 Mar 04 04:31	0° Z	
direct	8023 Sep 07 08:02	22° Z 42'01			8026 Mar 28 04:35	0° Z	
greatest brilliancy	8023 Sep 16 23:53	24° Z 23'55	-4.7m		8026 Apr 21 06:26	0° Z	
	8023 Sep 28 11:20	0° Z		asc. node	8026 May 13 05:56	27° Z 09'27	
morning max el	8023 Oct 26 00:21	22° Z 25'47	45°41'26		8026 May 15 13:33	0° Z	
	8023 Nov 02 17:34	0° Z			8026 Jun 09 06:38	0° Z	
asc. node	8023 Nov 26 12:21	25° Z 14'04			8026 Jul 04 17:15	0° Z	
	8023 Nov 30 19:08	0° Z			8026 Jul 31 14:44	0° Z	
	8023 Dec 26 20:45	0° Z		evening max el	8026 Aug 16 09:41	16° Z 09'37	45°50'18
	8024 Jan 20 23:09	0° Z			8026 Aug 31 15:55	0° Z	
	8024 Feb 14 12:35	0° Z		desc. node	8026 Sep 02 00:36	1° Z 06'51	
	8024 Mar 09 18:15	0° Z		greatest brilliancy	8026 Sep 24 04:13	14° Z 43'26	-4.7m
desc. node	8024 Mar 17 05:16	9° Z 17'26		retrograde	8026 Oct 04 12:24	16° Z 40'14	
	8024 Apr 02 19:00	0° Z		evening set	8026 Oct 22 16:33	10° Z 29'35	
morning set	8024 Apr 25 20:04	28° Z 54'31		inferior conj	8026 Oct 26 01:58	8° Z 23'16	-8°36'03
	8024 Apr 26 16:55	0° Z		minimum elong	8026 Oct 26 00:30	8° Z 25'35	8°35'57
	8024 May 20 14:11	0° Z		min. Earth dist.	8026 Oct 26 03:25	8° Z 21'00	0.29169 AU

morning rise	8026 Oct 29 08:23	6° \mathbb{M} 21'14		asc. node	8029 Jun 09 17:43	14° \mathbb{S} 01'59	
direct	8026 Nov 16 14:36	0° \mathbb{M} 04'44			8029 Jun 22 15:16	0° \mathbb{Q}	
greatest brilliancy	8026 Nov 27 04:52	2° \mathbb{M} 06'28	-4.7m		8029 Jul 17 02:28	0° \mathbb{P}	
asc. node	8026 Dec 24 00:07	19° \mathbb{M} 49'10			8029 Aug 10 23:43	0° \mathbb{A}	
	8027 Jan 03 23:51	0° \mathbb{A}			8029 Sep 05 13:14	0° \mathbb{M}	
morning max el	8027 Jan 04 23:19	0° \mathbb{A} 57'24	46°02'37	desc. node	8029 Sep 29 11:55	26° \mathbb{M} 53'53	
	8027 Feb 01 08:44	0° \mathbb{S}			8029 Oct 02 08:35	0° \mathbb{A}	
	8027 Feb 27 08:00	0° \approx		evening max el	8029 Oct 26 16:54	24° \mathbb{A} 56'25	45°44'53
	8027 Mar 24 07:24	0° \mathbb{H}			8029 Nov 01 02:53	0° \mathbb{S}	
desc. node	8027 Apr 14 17:32	26° \mathbb{H} 14'28		greatest brilliancy	8029 Dec 04 22:28	23° \mathbb{S} 04'17	-4.8m
	8027 Apr 17 18:40	0° \mathbb{Y}		retrograde	8029 Dec 14 10:36	24° \mathbb{S} 42'21	
	8027 May 11 23:28	0° \mathbb{B}		evening set	8029 Dec 29 23:03	20° \mathbb{S} 03'50	
	8027 Jun 05 01:30	0° \mathbb{II}		inferior conj	8030 Jan 04 11:15	16° \mathbb{S} 45'48	-3°52'28
	8027 Jun 29 03:27	0° \mathbb{S}		minimum elong	8030 Jan 04 19:16	16° \mathbb{S} 33'22	3°50'05
morning set	8027 Jul 10 01:06	13° \mathbb{S} 33'28		min. Earth dist.	8030 Jan 05 06:16	16° \mathbb{S} 16'18	0.27925 AU
	8027 Jul 23 06:54	0° \mathbb{Q}		morning rise	8030 Jan 10 14:53	13° \mathbb{S} 05'34	
asc. node	8027 Aug 05 15:42	16° \mathbb{Q} 33'53		asc. node	8030 Jan 20 11:52	9° \mathbb{S} 12'30	
	8027 Aug 16 12:14	0° \mathbb{P}		direct	8030 Jan 25 15:38	8° \mathbb{S} 40'03	
				greatest brilliancy	8030 Feb 05 15:56	10° \mathbb{S} 55'56	-4.8m
superior conj	8027 Aug 17 07:16	0° \mathbb{P} 58'52	0°27'43		8030 Mar 05 04:20	0° \approx	
minimum elong	8027 Aug 17 01:23	0° \mathbb{P} 40'39	0°27'21	morning max el	8030 Mar 17 01:19	11° \approx 24'17	46°47'20
max. Earth dist.	8027 Aug 19 05:12	3° \mathbb{P} 20'51	1.72910 AU		8030 Apr 03 15:14	0° \mathbb{H}	
	8027 Sep 09 19:16	0° \mathbb{A}			8030 Apr 29 22:28	0° \mathbb{Y}	
evening rise	8027 Sep 23 03:59	16° \mathbb{A} 27'57		desc. node	8030 May 12 05:38	14° \mathbb{Y} 32'46	
	8027 Oct 04 04:07	0° \mathbb{M}			8030 May 25 02:55	0° \mathbb{B}	
	8027 Oct 28 15:31	0° \mathbb{A}			8030 Jun 18 19:40	0° \mathbb{II}	
	8027 Nov 22 06:31	0° \mathbb{S}			8030 Jul 13 07:47	0° \mathbb{S}	
desc. node	8027 Nov 25 09:08	3° \mathbb{S} 46'21			8030 Aug 06 18:36	0° \mathbb{Q}	
	8027 Dec 17 01:46	0° \approx			8030 Aug 31 05:01	0° \mathbb{P}	
	8028 Jan 11 02:15	0° \mathbb{H}		asc. node	8030 Sep 02 03:50	2° \mathbb{P} 23'51	
	8028 Feb 05 11:37	0° \mathbb{Y}		morning set	8030 Sep 18 01:27	21° \mathbb{P} 56'39	
	8028 Mar 02 17:50	0° \mathbb{B}			8030 Sep 24 14:38	0° \mathbb{A}	
asc. node	8028 Mar 17 08:56	15° \mathbb{B} 48'02			8030 Oct 18 23:11	0° \mathbb{M}	
evening max el	8028 Mar 23 04:08	21° \mathbb{B} 45'50	47°00'42				
	8028 Mar 31 14:11	0° \mathbb{II}		superior conj	8030 Oct 24 18:09	7° \mathbb{M} 08'17	1°25'33
greatest brilliancy	8028 May 02 19:27	22° \mathbb{II} 56'24	-4.9m	minimum elong	8030 Oct 24 16:25	7° \mathbb{M} 02'57	1°25'38
retrograde	8028 May 12 19:07	24° \mathbb{II} 50'04		max. Earth dist.	8030 Oct 24 06:33	6° \mathbb{M} 32'30	1.73304 AU
evening set	8028 May 29 19:38	19° \mathbb{II} 12'41			8030 Nov 12 07:01	0° \mathbb{A}	
inferior conj	8028 Jun 02 13:50	16° \mathbb{II} 55'50	7°31'45	evening rise	8030 Nov 30 12:09	22° \mathbb{A} 27'43	
minimum elong	8028 Jun 03 00:14	16° \mathbb{II} 39'49	7°29'44		8030 Dec 06 14:51	0° \mathbb{S}	
min. Earth dist.	8028 Jun 02 14:46	16° \mathbb{II} 54'23	0.27297 AU	desc. node	8030 Dec 22 20:59	20° \mathbb{S} 02'15	
morning rise	8028 Jun 07 05:00	14° \mathbb{II} 08'58			8030 Dec 30 23:00	0° \approx	
direct	8028 Jun 23 07:10	9° \mathbb{II} 06'18			8031 Jan 24 07:16	0° \mathbb{H}	
greatest brilliancy	8028 Jul 03 01:41	10° \mathbb{II} 53'23	-4.8m		8031 Feb 17 15:57	0° \mathbb{Y}	
desc. node	8028 Jul 07 03:19	12° \mathbb{II} 33'06			8031 Mar 14 03:18	0° \mathbb{B}	
	8028 Jul 31 18:50	0° \mathbb{S}			8031 Apr 07 22:39	0° \mathbb{II}	
morning max el	8028 Aug 11 22:48	10° \mathbb{S} 24'09	46°11'16	asc. node	8031 Apr 14 20:15	8° \mathbb{II} 12'53	
	8028 Aug 31 01:19	0° \mathbb{Q}			8031 May 03 12:35	0° \mathbb{S}	
	8028 Sep 27 04:38	0° \mathbb{P}			8031 May 30 22:27	0° \mathbb{Q}	
	8028 Oct 23 03:08	0° \mathbb{A}		evening max el	8031 Jun 04 09:29	4° \mathbb{Q} 31'46	46°36'19
asc. node	8028 Oct 28 02:15	5° \mathbb{A} 50'47			8031 Jul 04 16:09	0° \mathbb{P}	
	8028 Nov 17 08:44	0° \mathbb{M}		greatest brilliancy	8031 Jul 13 09:23	4° \mathbb{P} 24'47	-4.8m
	8028 Dec 12 02:44	0° \mathbb{A}		retrograde	8031 Jul 24 10:40	6° \mathbb{P} 39'32	
	8029 Jan 05 12:50	0° \mathbb{S}		desc. node	8031 Aug 04 15:00	4° \mathbb{P} 09'19	
	8029 Jan 29 17:44	0° \approx		evening set	8031 Aug 08 09:12	2° \mathbb{P} 17'27	
morning set	8029 Feb 06 11:37	9° \approx 38'32			8031 Aug 12 07:03	30° \mathbb{R} \mathbb{Q}	
desc. node	8029 Feb 16 19:05	22° \approx 30'20		min. Earth dist.	8031 Aug 14 01:48	28° \mathbb{Q} 53'44	0.28228 AU
	8029 Feb 22 18:58	0° \mathbb{H}		inferior conj	8031 Aug 14 17:12	28° \mathbb{Q} 29'42	-2°27'35
max. Earth dist.	8029 Mar 16 19:54	27° \mathbb{H} 37'03	1.71361 AU	minimum elong	8031 Aug 14 11:49	28° \mathbb{Q} 38'05	2°26'04
				morning rise	8031 Aug 20 15:09	24° \mathbb{Q} 57'26	
superior conj	8029 Mar 18 19:01	0° \mathbb{Y} 04'59	-1°04'55	direct	8031 Sep 04 22:30	20° \mathbb{Q} 28'19	
minimum elong	8029 Mar 18 07:14	29° \mathbb{H} 27'58	1°04'31	greatest brilliancy	8031 Sep 14 14:48	22° \mathbb{Q} 10'07	-4.7m
	8029 Mar 18 17:26	0° \mathbb{Y}			8031 Sep 29 12:19	0° \mathbb{P}	
	8029 Apr 11 14:17	0° \mathbb{B}		morning max el	8031 Oct 23 14:09	20° \mathbb{P} 09'40	45°41'34
evening rise	8029 Apr 28 07:25	21° \mathbb{B} 00'27			8031 Nov 02 13:17	0° \mathbb{A}	
	8029 May 05 11:22	0° \mathbb{II}		asc. node	8031 Nov 25 14:20	24° \mathbb{A} 36'52	
	8029 May 29 10:57	0° \mathbb{S}			8031 Nov 30 10:01	0° \mathbb{M}	

	8031 Dec 26 09:47	0°♊			8034 Jul 31 08:31	0°♎	
	8032 Jan 20 11:17	0°♋		evening max el	8034 Aug 14 01:29	13°♎57'52	45°51'25
	8032 Feb 14 00:14	0°♌		desc. node	8034 Sep 01 02:31	0°♏04'06	
	8032 Mar 09 05:37	0°♍			8034 Sep 01 00:26	0°♏	
desc. node	8032 Mar 16 07:13	8°♍48'15		greatest brilliancy	8034 Sep 21 18:26	12°♏31'58	-4.7m
	8032 Apr 02 06:11	0°♎		retrograde	8034 Oct 02 05:12	14°♏30'58	
morning set	8032 Apr 23 06:45	26°♎22'28		evening set	8034 Oct 20 07:16	8°♏22'09	
	8032 Apr 26 04:01	0°♏		inferior conj	8034 Oct 23 18:17	6°♏13'29	-8°34'11
	8032 May 20 01:14	0°♐		minimum elong	8034 Oct 23 16:02	6°♏17'00	8°34'02
				min. Earth dist.	8034 Oct 23 18:11	6°♏13'37	0.29175 AU
superior conj	8032 Jun 02 13:45	16°♐57'28	-1°11'57	morning rise	8034 Oct 27 00:48	4°♏11'31	
minimum elong	8032 Jun 03 00:36	17°♐31'27	1°11'48		8034 Nov 04 02:07	30°♑♎	
max. Earth dist.	8032 Jun 05 17:55	20°♐55'59	1.71604 AU	direct	8034 Nov 14 07:05	27°♎55'06	
	8032 Jun 12 23:50	0°♑		greatest brilliancy	8034 Nov 24 19:59	29°♎55'54	-4.7m
asc. node	8032 Jul 07 05:41	0°♒13'47			8034 Nov 25 00:27	0°♏	
	8032 Jul 07 01:15	0°♒		asc. node	8034 Dec 23 02:12	18°♏52'44	
evening rise	8032 Jul 12 06:13	6°♒28'05		morning max el	8035 Jan 02 15:48	28°♏46'30	46°01'10
	8032 Jul 31 06:20	0°♓			8035 Jan 03 21:39	0°♊	
	8032 Aug 24 15:52	0°♎			8035 Feb 01 00:20	0°♋	
	8032 Sep 18 07:20	0°♏			8035 Feb 26 21:27	0°♌	
	8032 Oct 13 07:20	0°♊			8035 Mar 23 19:50	0°♍	
desc. node	8032 Oct 26 23:24	16°♊09'48		desc. node	8035 Apr 13 19:23	25°♍43'23	
	8032 Nov 07 19:49	0°♋			8035 Apr 17 06:31	0°♎	
	8032 Dec 04 03:50	0°♌			8035 May 11 10:55	0°♏	
	8033 Jan 01 03:37	0°♍			8035 Jun 04 12:39	0°♐	
evening max el	8033 Jan 06 19:37	5°♍39'43	46°25'16		8035 Jun 28 14:22	0°♑	
	8033 Feb 04 17:31	0°♎		morning set	8035 Jul 07 15:53	11°♑16'29	
greatest brilliancy	8033 Feb 15 21:53	5°♎39'41	-4.9m		8035 Jul 22 17:40	0°♒	
asc. node	8033 Feb 16 23:29	6°♎01'18		asc. node	8035 Aug 04 17:38	16°♒06'41	
retrograde	8033 Feb 25 17:18	7°♎28'30					
evening set	8033 Mar 13 06:46	2°♎45'11		superior conj	8035 Aug 14 23:30	28°♒47'33	0°24'28
	8033 Mar 17 22:07	30°♏♍		minimum elong	8035 Aug 14 18:12	28°♒31'11	0°24'08
inferior conj	8033 Mar 18 09:22	29°♏42'43	6°47'24		8035 Aug 15 22:56	0°♓	
minimum elong	8033 Mar 17 22:16	29°♏59'46	6°44'59	max. Earth dist.	8035 Aug 17 00:34	1°♓19'18	1.72879 AU
min. Earth dist.	8033 Mar 18 04:25	29°♏50'19	0.26984 AU		8035 Sep 09 05:58	0°♎	
morning rise	8033 Mar 22 13:39	27°♏11'26		evening rise	8035 Sep 20 21:48	14°♎22'06	
direct	8033 Apr 07 23:56	21°♏55'02			8035 Oct 03 14:53	0°♏	
greatest brilliancy	8033 Apr 17 19:21	23°♏43'45	-4.9m		8035 Oct 28 02:30	0°♊	
	8033 Apr 29 21:04	0°♎			8035 Nov 21 17:52	0°♋	
morning max el	8033 May 28 10:04	24°♎37'57	46°54'56	desc. node	8035 Nov 24 11:10	3°♋17'55	
	8033 Jun 02 16:20	0°♏			8035 Dec 16 13:43	0°♌	
desc. node	8033 Jun 08 17:39	6°♏22'04			8036 Jan 10 15:08	0°♍	
	8033 Jun 30 03:16	0°♐			8036 Feb 05 02:03	0°♎	
	8033 Jul 26 01:15	0°♑			8036 Mar 02 11:25	0°♏	
	8033 Aug 20 08:46	0°♒		asc. node	8036 Mar 16 10:49	14°♏58'33	
	8033 Sep 14 08:51	0°♓		evening max el	8036 Mar 20 19:07	19°♏25'24	47°00'26
asc. node	8033 Sep 29 16:00	18°♓29'37			8036 Mar 31 17:38	0°♐	
	8033 Oct 09 03:24	0°♎		greatest brilliancy	8036 Apr 30 09:11	20°♐32'33	-4.9m
	8033 Nov 02 16:55	0°♏		retrograde	8036 May 10 09:18	22°♐26'05	
morning set	8033 Nov 25 12:33	28°♏03'48		evening set	8036 May 27 12:30	16°♐43'55	
	8033 Nov 27 02:13	0°♊		inferior conj	8036 May 31 03:05	14°♐32'13	7°45'04
	8033 Dec 21 08:30	0°♋		minimum elong	8036 May 31 13:09	14°♐16'42	7°43'12
max. Earth dist.	8033 Dec 30 06:26	11°♋03'08	1.72567 AU	min. Earth dist.	8036 May 31 03:38	14°♐31'22	0.27278 AU
				morning rise	8036 Jun 04 14:00	11°♐51'31	
superior conj	8034 Jan 01 17:56	14°♋07'46	0°40'58	direct	8036 Jun 20 20:45	6°♐43'12	
minimum elong	8034 Jan 02 02:22	14°♋33'54	0°40'44	greatest brilliancy	8036 Jun 30 13:32	8°♐29'07	-4.8m
	8034 Jan 14 12:38	0°♌		desc. node	8036 Jul 06 05:15	10°♐55'03	
desc. node	8034 Jan 19 08:59	6°♌01'39			8036 Jul 31 23:05	0°♑	
	8034 Feb 07 14:56	0°♍		morning max el	8036 Aug 09 13:27	8°♑07'10	46°12'53
evening rise	8034 Feb 09 16:45	2°♍35'17			8036 Aug 30 18:37	0°♒	
	8034 Mar 03 15:41	0°♎			8036 Sep 26 18:35	0°♓	
	8034 Mar 27 15:56	0°♏			8036 Oct 22 15:33	0°♎	
	8034 Apr 20 18:01	0°♐		asc. node	8036 Oct 27 04:14	5°♎20'34	
asc. node	8034 May 12 07:59	26°♐39'03			8036 Nov 16 20:19	0°♏	
	8034 May 15 01:33	0°♑			8036 Dec 11 13:52	0°♊	
	8034 Jun 08 19:23	0°♒			8037 Jan 04 23:45	0°♋	
	8034 Jul 04 07:30	0°♓			8037 Jan 29 04:33	0°♌	

morning set	8037 Feb 04 00:54	7° \approx 16'47			8039 Aug 06 02:44	30° \mathbb{R} Ω	
desc. node	8037 Feb 15 20:56	22° \approx 02'25		min. Earth dist.	8039 Aug 11 17:54	26° Ω 38'29	0.28178 AU
	8037 Feb 22 05:46	0° \mathbb{H}		inferior conj	8039 Aug 12 08:21	26° Ω 15'57	-2°07'00
max. Earth dist.	8037 Mar 14 02:54	24° \mathbb{H} 54'30	1.71389 AU	minimum elong	8039 Aug 12 03:41	26° Ω 23'14	2°05'41
				morning rise	8039 Aug 18 08:00	22° Ω 41'12	
superior conj	8037 Mar 16 06:12	27° \mathbb{H} 35'26	-1°02'13	direct	8039 Sep 02 12:33	18° Ω 15'05	
minimum elong	8037 Mar 15 18:25	26° \mathbb{H} 58'29	1°01'47	greatest brilliancy	8039 Sep 12 06:10	19° Ω 57'39	-4.7m
	8037 Mar 18 04:15	0° \mathbb{Y}			8039 Sep 30 06:08	0° \mathbb{M}	
	8037 Apr 11 01:09	0° \mathbb{B}		morning max el	8039 Oct 21 04:15	17° \mathbb{M} 55'27	45°42'01
evening rise	8037 Apr 25 17:55	18° \mathbb{B} 28'23			8039 Nov 02 07:56	0° \mathbb{L}	
	8037 May 04 22:18	0° \mathbb{I}		asc. node	8039 Nov 24 16:25	24° \mathbb{L} 01'34	
	8037 May 28 22:00	0° \mathbb{G}			8039 Nov 30 00:14	0° \mathbb{M}	
asc. node	8037 Jun 08 19:46	13° \mathbb{G} 33'56			8039 Dec 25 22:16	0° \mathbb{J}	
	8037 Jun 22 02:29	0° Ω			8040 Jan 19 22:57	0° \mathbb{Z}	
	8037 Jul 16 14:00	0° \mathbb{M}			8040 Feb 13 11:29	0° \approx	
	8037 Aug 10 11:51	0° \mathbb{L}			8040 Mar 08 16:37	0° \mathbb{H}	
	8037 Sep 05 02:38	0° \mathbb{M}		desc. node	8040 Mar 15 09:10	8° \mathbb{H} 20'05	
desc. node	8037 Sep 28 13:50	26° \mathbb{M} 16'04			8040 Apr 01 17:03	0° \mathbb{Y}	
	8037 Oct 02 00:53	0° \mathbb{J}		morning set	8040 Apr 20 17:08	23° \mathbb{Y} 50'24	
evening max el	8037 Oct 24 07:41	22° \mathbb{J} 43'17	45°44'01		8040 Apr 25 14:48	0° \mathbb{B}	
	8037 Nov 01 04:45	0° \mathbb{Z}			8040 May 19 11:57	0° \mathbb{I}	
greatest brilliancy	8037 Dec 02 13:24	20° \mathbb{Z} 50'09	-4.8m				
retrograde	8037 Dec 12 00:13	22° \mathbb{Z} 27'12		superior conj	8040 May 31 01:42	14° \mathbb{I} 31'07	-1°14'06
evening set	8037 Dec 27 16:15	17° \mathbb{Z} 45'03		minimum elong	8040 May 31 12:12	15° \mathbb{I} 04'02	1°13'57
inferior conj	8038 Jan 02 02:04	14° \mathbb{Z} 30'10	-4°11'36	max. Earth dist.	8040 Jun 03 00:26	18° \mathbb{I} 12'43	1.71566 AU
minimum elong	8038 Jan 02 10:33	14° \mathbb{Z} 16'58	4°09'09		8040 Jun 12 10:30	0° \mathbb{G}	
min. Earth dist.	8038 Jan 02 21:43	13° \mathbb{Z} 59'36	0.27983 AU	asc. node	8040 Jul 06 07:35	29° \mathbb{G} 46'32	
morning rise	8038 Jan 08 04:12	10° \mathbb{Z} 51'23			8040 Jul 06 11:55	0° Ω	
asc. node	8038 Jan 19 13:47	6° \mathbb{Z} 40'18		evening rise	8040 Jul 09 20:06	4° Ω 09'03	
direct	8038 Jan 23 06:44	6° \mathbb{Z} 23'39			8040 Jul 30 17:04	0° \mathbb{M}	
greatest brilliancy	8038 Feb 03 07:51	8° \mathbb{Z} 39'44	-4.8m		8040 Aug 24 02:47	0° \mathbb{L}	
	8038 Mar 05 07:29	0° \approx			8040 Sep 17 18:35	0° \mathbb{M}	
morning max el	8038 Mar 14 15:00	9° \approx 02'39	46°45'59		8040 Oct 12 19:13	0° \mathbb{J}	
	8038 Apr 03 08:26	0° \mathbb{H}		desc. node	8040 Oct 26 01:30	15° \mathbb{J} 39'36	
	8038 Apr 29 12:39	0° \mathbb{Y}			8040 Nov 07 08:51	0° \mathbb{Z}	
desc. node	8038 May 11 07:43	13° \mathbb{Y} 58'59			8040 Dec 03 19:09	0° \approx	
	8038 May 24 15:42	0° \mathbb{B}			8041 Jan 01 00:43	0° \mathbb{H}	
	8038 Jun 18 07:38	0° \mathbb{I}		evening max el	8041 Jan 04 09:00	3° \mathbb{H} 18'53	46°23'34
	8038 Jul 12 19:13	0° \mathbb{G}			8041 Feb 06 07:36	0° \mathbb{Y}	
	8038 Aug 06 05:38	0° Ω		greatest brilliancy	8041 Feb 13 10:17	3° \mathbb{Y} 14'26	-4.9m
	8038 Aug 30 15:44	0° \mathbb{M}		asc. node	8041 Feb 16 01:24	4° \mathbb{Y} 03'50	
asc. node	8038 Sep 01 05:45	1° \mathbb{M} 56'48		retrograde	8041 Feb 23 06:17	5° \mathbb{Y} 03'50	
morning set	8038 Sep 15 18:34	19° \mathbb{M} 49'10		evening set	8041 Mar 10 15:52	0° \mathbb{Y} 25'08	
	8038 Sep 24 01:09	0° \mathbb{L}			8041 Mar 11 09:44	30° \mathbb{R} \mathbb{H}	
	8038 Oct 18 09:36	0° \mathbb{M}		inferior conj	8041 Mar 15 22:11	27° \mathbb{H} 17'47	6°30'32
max. Earth dist.	8038 Oct 22 00:47	4° \mathbb{M} 28'39	1.73309 AU	minimum elong	8041 Mar 15 11:05	27° \mathbb{H} 34'48	6°27'59
				min. Earth dist.	8041 Mar 15 17:37	27° \mathbb{H} 24'47	0.26991 AU
superior conj	8038 Oct 22 12:09	5° \mathbb{M} 03'40	1°25'12	morning rise	8041 Mar 20 06:10	24° \mathbb{H} 41'26	
minimum elong	8038 Oct 22 09:44	4° \mathbb{M} 56'13	1°25'16	direct	8041 Apr 05 13:00	19° \mathbb{H} 29'35	
	8038 Nov 11 17:30	0° \mathbb{J}		greatest brilliancy	8041 Apr 15 09:25	21° \mathbb{H} 19'38	-4.9m
evening rise	8038 Nov 28 04:51	20° \mathbb{J} 18'36			8041 Apr 30 21:40	0° \mathbb{Y}	
	8038 Dec 06 01:30	0° \mathbb{Z}		morning max el	8041 May 26 00:19	22° \mathbb{Y} 16'25	46°55'45
desc. node	8038 Dec 21 23:00	19° \mathbb{Z} 35'17			8041 Jun 02 12:49	0° \mathbb{B}	
	8038 Dec 30 09:53	0° \approx		desc. node	8041 Jun 07 19:38	5° \mathbb{B} 36'32	
	8039 Jan 23 18:27	0° \mathbb{H}			8041 Jun 29 18:41	0° \mathbb{I}	
	8039 Feb 17 03:35	0° \mathbb{Y}			8041 Jul 25 14:32	0° \mathbb{G}	
	8039 Mar 13 15:35	0° \mathbb{B}			8041 Aug 19 20:52	0° Ω	
	8039 Apr 07 12:00	0° \mathbb{I}			8041 Sep 13 20:15	0° \mathbb{M}	
asc. node	8039 Apr 13 22:18	7° \mathbb{I} 38'20		asc. node	8041 Sep 28 18:01	18° \mathbb{M} 02'01	
	8039 May 03 03:59	0° \mathbb{G}			8041 Oct 08 14:20	0° \mathbb{L}	
	8039 May 30 19:11	0° Ω			8041 Nov 02 03:35	0° \mathbb{M}	
evening max el	8039 Jun 01 23:22	2° Ω 11'37	46°37'49	morning set	8041 Nov 23 05:42	25° \mathbb{M} 56'14	
	8039 Jul 06 07:01	0° \mathbb{M}			8041 Nov 26 12:45	0° \mathbb{J}	
greatest brilliancy	8039 Jul 11 02:11	2° \mathbb{M} 11'15	-4.8m		8041 Dec 20 18:58	0° \mathbb{Z}	
retrograde	8039 Jul 22 01:41	4° \mathbb{M} 24'54		max. Earth dist.	8041 Dec 28 01:39	9° \mathbb{Z} 01'19	1.72603 AU
desc. node	8039 Aug 03 16:56	1° \mathbb{M} 14'47					
evening set	8039 Aug 05 23:58	0° \mathbb{M} 03'47		superior conj	8041 Dec 30 09:20	11° \mathbb{Z} 54'00	0°44'00

minimum elong	8041 Dec 30 18:09	12°  21'21	0°43'46	greatest brilliancy	8044 Jun 28 01:50	6°  05'13	-4.8m
	8042 Jan 13 23:10	0° 		desc. node	8044 Jul 05 07:13	9°  20'30	
desc. node	8042 Jan 18 10:52	5°  34'40			8044 Aug 01 01:42	0° 	
evening rise	8042 Feb 07 06:28	0°  15'09		morning max el	8044 Aug 07 03:14	5°  47'43	46°14'22
	8042 Feb 07 01:37	0° 			8044 Aug 30 11:36	0° 	
	8042 Mar 03 02:33	0° 			8044 Sep 26 08:26	0° 	
	8042 Mar 27 03:01	0° 			8044 Oct 22 03:53	0° 	
	8042 Apr 20 05:25	0° 		asc. node	8044 Oct 26 06:17	4°  50'37	
asc. node	8042 May 11 09:59	26°  09'05			8044 Nov 16 07:50	0° 	
	8042 May 14 13:23	0° 			8044 Dec 11 00:57	0° 	
	8042 Jun 08 08:01	0° 			8045 Jan 04 10:38	0° 	
	8042 Jul 03 21:41	0° 			8045 Jan 28 15:21	0° 	
	8042 Jul 31 02:30	0° 		morning set	8045 Feb 01 14:21	4°  55'37	
evening max el	8042 Aug 11 17:46	11°  47'47	45°52'37	desc. node	8045 Feb 14 22:56	21°  35'04	
desc. node	8042 Aug 31 04:29	29°  00'23			8045 Feb 21 16:32	0° 	
	8042 Sep 01 11:45	0° 		max. Earth dist.	8045 Mar 11 08:02	22°  06'20	1.71413 AU
greatest brilliancy	8042 Sep 19 08:41	10°  01'01	-4.7m				
retrograde	8042 Sep 29 21:48	12°  01'46		superior conj	8045 Mar 13 17:47	25°  07'29	-0°59'24
evening set	8042 Oct 17 21:36	6°  15'25		minimum elong	8045 Mar 13 06:07	24°  30'51	0°58'57
inferior conj	8042 Oct 21 10:25	4°  03'55	-8°31'39		8045 Mar 17 15:01	0° 	
minimum elong	8042 Oct 21 07:27	4°  08'35	8°31'26		8045 Apr 10 11:56	0° 	
min. Earth dist.	8042 Oct 21 08:44	4°  06'35	0.29175 AU	evening rise	8045 Apr 23 04:50	15°  57'55	
morning rise	8042 Oct 24 17:20	2°  01'26			8045 May 04 09:09	0° 	
	8042 Oct 28 05:36	30°  05'1			8045 May 28 08:59	0° 	
direct	8042 Nov 11 23:43	25°  45'51		asc. node	8045 Jun 07 21:39	13°  05'29	
greatest brilliancy	8042 Nov 22 10:26	27°  45'00	-4.7m		8045 Jun 21 13:42	0° 	
	8042 Nov 27 14:39	0° 			8045 Jul 16 01:35	0° 	
asc. node	8042 Dec 22 04:03	17°  05'39			8045 Aug 10 00:08	0° 	
morning max el	8042 Dec 31 08:05	26°  03'00	45°59'52		8045 Sep 04 16:18	0° 	
	8043 Jan 03 18:20	0° 		desc. node	8045 Sep 27 15:58	25°  03'55	
	8043 Jan 31 15:23	0° 			8045 Oct 01 17:43	0° 	
	8043 Feb 26 10:29	0° 		evening max el	8045 Oct 21 21:23	20°  27'02	45°43'19
	8043 Mar 23 07:54	0° 			8045 Nov 01 08:26	0° 	
desc. node	8043 Apr 12 21:28	25°  01'40		greatest brilliancy	8045 Nov 30 04:15	18°  35'26	-4.8m
	8043 Apr 16 18:04	0° 		retrograde	8045 Dec 09 13:45	20°  31'46	
	8043 May 10 22:08	0° 		evening set	8045 Dec 25 09:25	15°  25'27	
	8043 Jun 03 23:38	0° 		inferior conj	8045 Dec 30 16:48	12°  31'40	-4°30'20
	8043 Jun 28 01:10	0° 		minimum elong	8045 Dec 31 01:42	12°  30'11	4°27'49
morning set	8043 Jul 05 06:07	8°  58'04		min. Earth dist.	8045 Dec 31 13:13	11°  42'15	0.28043 AU
	8043 Jul 22 04:20	0° 		morning rise	8046 Jan 05 17:16	8°  37'07	
asc. node	8043 Aug 03 19:32	15°  03'44		asc. node	8046 Jan 18 15:47	4°  31'23	
				direct	8046 Jan 20 21:26	4°  06'30	
superior conj	8043 Aug 12 15:05	26°  03'42	0°21'08	greatest brilliancy	8046 Feb 01 00:13	6°  23'36	-4.8m
minimum elong	8043 Aug 12 10:27	26°  02'12	0°20'49		8046 Mar 05 09:19	0° 	
max. Earth dist.	8043 Aug 14 20:42	29°  02'24	1.72844 AU	morning max el	8046 Mar 12 04:47	6°  40'49	46°44'52
	8043 Aug 15 09:30	0° 			8046 Apr 03 01:22	0° 	
	8043 Sep 08 16:31	0° 			8046 Apr 29 02:44	0° 	
evening rise	8043 Sep 18 15:09	12°  01'51		desc. node	8046 May 10 09:39	13°  09'24	47
	8043 Oct 03 01:32	0° 			8046 May 24 04:24	0° 	
	8043 Oct 27 13:23	0° 			8046 Jun 17 19:34	0° 	
	8043 Nov 21 05:09	0° 			8046 Jul 12 06:38	0° 	
desc. node	8043 Nov 23 13:09	2°  34'37			8046 Aug 05 16:43	0° 	
	8043 Dec 16 01:36	0° 			8046 Aug 30 02:34	0° 	
	8044 Jan 10 03:56	0° 		asc. node	8046 Aug 31 07:47	1°  09'46	
	8044 Feb 04 16:25	0° 		morning set	8046 Sep 13 11:23	17°  09'40	14
	8044 Mar 02 05:05	0° 			8046 Sep 23 11:51	0° 	
asc. node	8044 Mar 15 12:53	14°  09'27			8046 Oct 17 20:15	0° 	
evening max el	8044 Mar 18 09:41	17°  04'40	47°00'01				
	8044 Mar 31 22:33	0° 		superior conj	8046 Oct 20 05:50	2°  05'26	1°24'43
greatest brilliancy	8044 Apr 27 23:11	18°  09'33	-4.9m	minimum elong	8046 Oct 20 02:43	2°  04'51	1°24'46
retrograde	8044 May 07 22:53	20°  02'17		max. Earth dist.	8046 Oct 19 18:20	2°  22'02	1.73316 AU
evening set	8044 May 25 05:19	14°  01'53			8046 Nov 11 04:11	0° 	
inferior conj	8044 May 28 16:19	12°  08'53	7°57'31	evening rise	8046 Nov 25 21:17	18°  08'08	
minimum elong	8044 May 29 01:59	11°  05'59	7°55'49		8046 Dec 05 12:21	0° 	
min. Earth dist.	8044 May 28 16:40	12°  08'22	0.27264 AU	desc. node	8046 Dec 21 00:51	19°  07'09	
morning rise	8044 Jun 01 22:50	9°  03'41			8046 Dec 29 20:58	0° 	
direct	8044 Jun 18 10:10	4°  02'18			8047 Jan 23 05:54	0° 	

	8047 Feb 16 15:30	0°♿		8049 Jul 25 04:00	0°♄	
	8047 Mar 13 04:09	0°♄		8049 Aug 19 09:11	0°♂	
	8047 Apr 07 01:38	0°♂		8049 Sep 13 07:51	0°♊	
asc. node	8047 Apr 13 00:21	7°♂02'59	asc. node	8049 Sep 27 20:00	17°♊33'42	
	8047 May 02 19:44	0°♄		8049 Oct 08 01:31	0°♊	
evening max el	8047 May 30 13:15	29°♄51'20 46°39'29		8049 Nov 01 14:32	0°♊	
	8047 May 30 16:42	0°♂	morning set	8049 Nov 20 22:58	23°♊48'06	
	8047 Jul 08 21:24	0°♊		8049 Nov 25 23:35	0°♊	
greatest brilliancy	8047 Jul 08 18:24	29°♂57'06 -4.8m		8049 Dec 20 05:50	0°♄	
retrograde	8047 Jul 19 17:06	2°♊10'40	max. Earth dist.	8049 Dec 25 18:54	6°♄52'14 1.72643 AU	
	8047 Jul 30 02:57	30°♊♂				
desc. node	8047 Aug 02 18:54	28°♂16'45	superior conj	8049 Dec 28 00:45	9°♄39'10 0°46'57	
evening set	8047 Aug 03 15:03	27°♂49'50	minimum elong	8049 Dec 28 09:53	10°♄07'28 0°46'42	
inferior conj	8047 Aug 09 23:40	24°♂02'12 -1°46'13		8050 Jan 13 10:06	0°♊	
minimum elong	8047 Aug 09 19:43	24°♂08'21 1°45'07	desc. node	8050 Jan 17 12:54	5°♊06'58	
min. Earth dist.	8047 Aug 09 09:56	24°♂23'35 0.28134 AU	evening rise	8050 Feb 04 20:00	27°♊53'13	
morning rise	8047 Aug 16 00:55	20°♂25'24		8050 Feb 06 12:41	0°♊	
direct	8047 Aug 31 02:52	16°♂01'41		8050 Mar 02 13:48	0°♿	
greatest brilliancy	8047 Sep 09 21:46	17°♂45'16 -4.7m		8050 Mar 26 14:30	0°♄	
	8047 Sep 30 19:34	0°♊		8050 Apr 19 17:11	0°♂	
morning max el	8047 Oct 18 19:23	15°♊42'59 45°42'18	asc. node	8050 May 10 11:52	25°♂37'29	
	8047 Nov 02 02:24	0°♊		8050 May 14 01:39	0°♄	
asc. node	8047 Nov 23 18:16	23°♊25'00		8050 Jun 07 21:06	0°♂	
	8047 Nov 29 14:37	0°♊		8050 Jul 03 12:24	0°♊	
	8047 Dec 25 11:00	0°♊		8050 Jul 30 21:16	0°♊	
	8048 Jan 19 10:53	0°♄	evening max el	8050 Aug 09 10:27	9°♊37'52 45°53'57	
	8048 Feb 12 22:59	0°♊	desc. node	8050 Aug 30 06:34	27°♊54'44	
	8048 Mar 08 03:53	0°♊		8050 Sep 02 03:16	0°♊	
desc. node	8048 Mar 14 11:10	7°♊51'17	greatest brilliancy	8050 Sep 16 23:42	8°♊10'45 -4.7m	
	8048 Apr 01 04:11	0°♿	retrograde	8050 Sep 27 14:19	10°♊12'35	
morning set	8048 Apr 18 03:27	21°♿17'16	evening set	8050 Oct 15 11:59	4°♊09'24	
	8048 Apr 25 01:52	0°♄	inferior conj	8050 Oct 19 02:52	1°♊54'34 -8°28'20	
	8048 May 18 22:56	0°♂	minimum elong	8050 Oct 18 23:11	2°♊00'22 8°28'04	
			min. Earth dist.	8050 Oct 18 23:38	1°♊59'39 0.29171 AU	
superior conj	8048 May 28 13:42	12°♂04'02 -1°16'06	morning rise	8050 Oct 22 10:26	29°♊51'02	
minimum elong	8048 May 28 23:47	12°♂35'39 1°15'59		8050 Oct 22 04:32	30°♊♄	
max. Earth dist.	8048 May 31 07:31	15°♂30'20 1.71526 AU	direct	8050 Nov 09 16:43	23°♊37'00	
	8048 Jun 11 21:24	0°♄	greatest brilliancy	8050 Nov 20 00:58	25°♊34'03 -4.7m	
asc. node	8048 Jul 05 09:32	29°♄18'49		8050 Nov 29 05:20	0°♊	
	8048 Jul 05 22:47	0°♂	asc. node	8050 Dec 21 06:04	17°♊03'21	
evening rise	8048 Jul 07 10:11	1°♂49'59	morning max el	8050 Dec 28 23:41	24°♊23'11 45°58'19	
	8048 Jul 30 04:00	0°♊		8051 Jan 03 14:39	0°♊	
	8048 Aug 23 13:55	0°♊		8051 Jan 31 06:37	0°♄	
	8048 Sep 17 06:07	0°♊		8051 Feb 25 23:50	0°♊	
	8048 Oct 12 07:27	0°♊		8051 Mar 22 20:21	0°♊	
desc. node	8048 Oct 25 03:24	15°♊07'39	desc. node	8051 Apr 11 23:26	24°♊43'06	
	8048 Nov 06 22:21	0°♄		8051 Apr 16 05:59	0°♿	
	8048 Dec 03 11:09	0°♊		8051 May 10 09:42	0°♄	
	8048 Dec 31 23:09	0°♊		8051 Jun 03 10:56	0°♂	
evening max el	8049 Jan 01 23:17	0°♊59'14 46°21'54		8051 Jun 27 12:17	0°♄	
	8049 Feb 08 20:50	0°♿	morning set	8051 Jul 02 20:17	6°♄38'24	
greatest brilliancy	8049 Feb 10 22:13	0°♿47'38 -4.9m		8051 Jul 21 15:19	0°♂	
asc. node	8049 Feb 15 03:27	2°♿00'19	asc. node	8051 Aug 02 21:36	15°♂12'21	
retrograde	8049 Feb 20 19:30	2°♿37'50				
	8049 Mar 04 04:50	30°♊♊	superior conj	8051 Aug 10 06:46	24°♂20'48 0°17'46	
evening set	8049 Mar 08 01:10	28°♊03'39	minimum elong	8051 Aug 10 02:50	24°♂08'37 0°17'29	
inferior conj	8049 Mar 13 10:54	24°♊51'31 6°12'52	max. Earth dist.	8051 Aug 12 16:32	27°♂19'34 1.72804 AU	
minimum elong	8049 Mar 12 23:53	25°♊08'23 6°10'15		8051 Aug 14 20:24	0°♊	
min. Earth dist.	8049 Mar 13 06:28	24°♊58'19 0.26997 AU		8051 Sep 08 03:23	0°♊	
morning rise	8049 Mar 17 22:31	22°♊10'13	evening rise	8051 Sep 16 08:43	10°♊07'59	
direct	8049 Apr 03 02:30	17°♊03'04		8051 Oct 02 12:28	0°♊	
greatest brilliancy	8049 Apr 12 22:53	18°♊53'37 -4.9m		8051 Oct 27 00:31	0°♊	
	8049 May 01 16:21	0°♿		8051 Nov 20 16:41	0°♄	
morning max el	8049 May 23 14:54	19°♿54'41 46°56'30	desc. node	8051 Nov 22 15:05	2°♄20'25	
	8049 Jun 02 09:03	0°♄		8051 Dec 15 13:48	0°♊	
desc. node	8049 Jun 06 21:31	4°♄50'22		8052 Jan 09 17:09	0°♊	
	8049 Jun 29 10:13	0°♂		8052 Feb 04 07:22	0°♿	

	8052 Mar 01 23:41	0°♄			8054 Sep 22 22:34	0°♌	
asc. node	8052 Mar 14 14:52	13°♄17'52			8054 Oct 17 06:56	0°♌	
evening max el	8052 Mar 15 23:24	14°♄40'18	46°59'27				
	8052 Apr 01 06:18	0°♈		superior conj	8054 Oct 17 23:33	0°♌51'15	1°24'07
greatest brilliancy	8052 Apr 25 13:41	15°♈45'36	-4.9m	minimum elong	8054 Oct 17 19:47	0°♌39'38	1°24'10
retrograde	8052 May 05 11:50	17°♈36'57		max. Earth dist.	8054 Oct 17 13:08	0°♌19'07	1.73321 AU
evening set	8052 May 22 21:57	11°♈45'53			8054 Nov 10 14:55	0°♊	
inferior conj	8052 May 26 05:31	9°♈44'16	8°09'01	evening rise	8054 Nov 23 14:04	15°♊58'50	
minimum elong	8052 May 26 14:40	9°♈30'07	8°07'32		8054 Dec 04 23:12	0°♐	
min. Earth dist.	8052 May 26 05:56	9°♈43'37	0.27248 AU	desc. node	8054 Dec 20 02:55	18°♐39'48	
morning rise	8052 May 30 07:32	7°♈15'54			8054 Dec 29 08:01	0°♑	
direct	8052 Jun 15 23:03	1°♈56'02			8055 Jan 22 17:15	0°♑	
greatest brilliancy	8052 Jun 25 14:35	3°♈40'35	-4.8m		8055 Feb 16 03:19	0°♑	
desc. node	8052 Jul 04 09:17	7°♈48'21			8055 Mar 12 16:42	0°♄	
	8052 Aug 01 03:16	0°♑			8055 Apr 06 15:21	0°♈	
morning max el	8052 Aug 04 16:05	3°♑24'53	46°15'59	asc. node	8055 Apr 12 02:11	6°♈26'50	
	8052 Aug 30 04:31	0°♏			8055 May 02 11:47	0°♑	
	8052 Sep 25 22:23	0°♏		evening max el	8055 May 28 03:37	27°♑31'50	46°40'59
	8052 Oct 21 16:22	0°♌			8055 May 30 15:17	0°♏	
asc. node	8052 Oct 25 08:07	4°♌19'34		greatest brilliancy	8055 Jul 06 09:58	27°♏41'06	-4.8m
	8052 Nov 15 19:30	0°♌		retrograde	8055 Jul 17 08:47	29°♏55'03	
	8052 Dec 10 12:11	0°♊		evening set	8055 Aug 01 06:01	25°♏34'13	
	8053 Jan 03 21:39	0°♐		desc. node	8055 Aug 01 20:57	25°♏13'37	
	8053 Jan 28 02:19	0°♑		min. Earth dist.	8055 Aug 07 01:23	22°♏07'35	0.28089 AU
morning set	8053 Jan 30 04:09	2°♑35'03		inferior conj	8055 Aug 07 14:37	21°♏47'02	-1°25'04
desc. node	8053 Feb 14 00:59	21°♑07'15		minimum elong	8055 Aug 07 11:26	21°♏52'00	1°24'10
	8053 Feb 21 03:31	0°♑		morning rise	8055 Aug 13 17:24	18°♏08'35	
max. Earth dist.	8053 Mar 08 14:01	19°♑20'09	1.71449 AU	direct	8055 Aug 28 17:10	13°♏46'57	
				greatest brilliancy	8055 Sep 07 12:39	15°♏31'22	-4.7m
superior conj	8053 Mar 11 05:23	22°♑38'47	-0°56'27		8055 Oct 01 05:40	0°♏	
minimum elong	8053 Mar 10 17:53	22°♑02'46	0°56'00	morning max el	8055 Oct 16 10:57	13°♏31'37	45°42'43
	8053 Mar 17 02:02	0°♑			8055 Nov 01 20:22	0°♌	
	8053 Apr 09 23:00	0°♄		asc. node	8055 Nov 22 20:17	22°♌49'28	
evening rise	8053 Apr 20 15:24	13°♄25'26			8055 Nov 29 04:45	0°♌	
	8053 May 03 20:18	0°♈			8055 Dec 24 23:32	0°♊	
	8053 May 27 20:16	0°♑			8056 Jan 18 22:37	0°♐	
asc. node	8053 Jun 06 23:38	12°♑36'30			8056 Feb 12 10:16	0°♑	
	8053 Jun 21 01:10	0°♏			8056 Mar 07 14:55	0°♑	
	8053 Jul 15 13:25	0°♏		desc. node	8056 Mar 13 13:07	7°♑23'03	
	8053 Aug 09 12:42	0°♌			8056 Mar 31 15:05	0°♑	
	8053 Sep 04 06:18	0°♌		morning set	8056 Apr 15 14:09	18°♑46'07	
desc. node	8053 Sep 26 17:52	24°♌58'21			8056 Apr 24 12:42	0°♄	
	8053 Oct 01 11:03	0°♊			8056 May 18 09:43	0°♈	
evening max el	8053 Oct 19 10:57	18°♊10'27	45°42'51				
	8053 Nov 01 14:01	0°♐		superior conj	8056 May 26 01:37	9°♈37'03	-1°17'56
greatest brilliancy	8053 Nov 27 18:58	16°♐21'10	-4.8m	minimum elong	8056 May 26 11:12	10°♈07'06	1°17'52
retrograde	8053 Dec 07 04:04	17°♐57'34		max. Earth dist.	8056 May 28 17:02	12°♈55'57	1.71497 AU
evening set	8053 Dec 23 02:56	13°♐06'41			8056 Jun 11 08:10	0°♑	
inferior conj	8053 Dec 28 07:51	9°♐58'57	-4°48'15	asc. node	8056 Jul 04 11:35	28°♑51'41	
minimum elong	8053 Dec 28 17:07	9°♐44'31	4°45'43	evening rise	8056 Jul 04 23:51	29°♑29'49	
min. Earth dist.	8053 Dec 29 04:48	9°♐26'21	0.28103 AU		8056 Jul 05 09:34	0°♏	
morning rise	8054 Jan 03 06:33	6°♐24'25			8056 Jul 29 14:53	0°♏	
asc. node	8054 Jan 17 17:47	1°♐51'07			8056 Aug 23 00:59	0°♌	
direct	8054 Jan 18 12:28	1°♐50'23			8056 Sep 16 17:34	0°♌	
greatest brilliancy	8054 Jan 29 16:52	4°♐08'49	-4.8m		8056 Oct 11 19:36	0°♊	
	8054 Mar 05 09:45	0°♑		desc. node	8056 Oct 24 05:22	14°♊36'15	
morning max el	8054 Mar 09 19:17	4°♑21'04	46°43'30		8056 Nov 06 11:48	0°♐	
	8054 Apr 02 18:02	0°♑			8056 Dec 03 03:12	0°♑	
	8054 Apr 28 16:49	0°♑		evening max el	8056 Dec 30 14:18	28°♑42'23	46°20'18
desc. node	8054 May 09 11:33	12°♑50'12			8056 Dec 31 22:13	0°♑	
	8054 May 23 17:13	0°♄		greatest brilliancy	8057 Feb 08 10:40	28°♑23'03	-4.9m
	8054 Jun 17 07:39	0°♈		asc. node	8057 Feb 14 05:26	29°♑53'20	
	8054 Jul 11 18:13	0°♑			8057 Feb 14 23:44	0°♑	
	8054 Aug 05 03:54	0°♏		retrograde	8057 Feb 18 08:56	0°♑13'32	
	8054 Aug 29 13:28	0°♏			8057 Feb 21 16:45	30°♑	
asc. node	8054 Aug 30 09:43	1°♏02'14		evening set	8057 Mar 05 11:03	25°♑43'56	
morning set	8054 Sep 11 04:02	15°♏30'32		inferior conj	8057 Mar 10 23:53	22°♑27'14	5°54'42

minimum elong	8057 Mar 10 13:02	22° H 43'52	5°52'02	behind sun end	8059 Aug 08 06:39	22° Ω 33'51	
min. Earth dist.	8057 Mar 10 19:35	22° H 33'49	0.26998 AU	max. Earth dist.	8059 Aug 10 11:51	25° Ω 18'30	1.72767 AU
morning rise	8057 Mar 15 14:59	19° H 41'01			8059 Aug 14 06:51	0° M	
direct	8057 Mar 31 16:21	14° H 38'50			8059 Sep 07 13:51	0° Ω	
greatest brilliancy	8057 Apr 10 12:17	16° H 29'18	-4.9m	evening rise	8059 Sep 14 02:16	8° Ω 01'56	
	8057 May 02 05:31	0° Y			8059 Oct 01 23:02	0° M	
morning max el	8057 May 21 04:59	17° Y 33'11	46°57'02		8059 Oct 26 11:21	0° J	
	8057 Jun 02 04:09	0° B			8059 Nov 20 03:57	0° Z	
desc. node	8057 Jun 05 23:39	4° B 06'55		desc. node	8059 Nov 21 17:07	1° Z 52'27	
	8057 Jun 29 01:06	0° II			8059 Dec 15 01:43	0° \approx	
	8057 Jul 24 17:02	0° G			8060 Jan 09 06:06	0° H	
	8057 Aug 18 21:12	0° Ω			8060 Feb 03 22:05	0° Y	
	8057 Sep 12 19:13	0° M			8060 Mar 01 18:20	0° B	
asc. node	8057 Sep 26 21:54	17° M 05'45		evening max el	8060 Mar 13 12:05	12° B 14'31	46°58'54
	8057 Oct 07 12:28	0° Ω		asc. node	8060 Mar 13 16:47	12° B 26'23	
	8057 Nov 01 01:13	0° M			8060 Apr 01 16:13	0° II	
morning set	8057 Nov 18 16:02	21° M 40'14		greatest brilliancy	8060 Apr 23 04:24	13° II 23'04	-4.9m
	8057 Nov 25 10:09	0° J		retrograde	8060 May 03 00:41	15° II 13'08	
	8057 Dec 19 16:22	0° Z		evening set	8060 May 20 14:31	9° II 17'41	
max. Earth dist.	8057 Dec 23 10:46	4° Z 39'57	1.72679 AU	inferior conj	8060 May 23 18:46	7° II 21'03	8°19'40
				minimum elong	8060 May 24 03:20	7° II 07'49	8°18'23
superior conj	8057 Dec 25 16:12	7° Z 25'30	0°49'49	min. Earth dist.	8060 May 23 19:24	7° II 20'05	0.27231 AU
minimum elong	8057 Dec 26 01:35	7° Z 54'35	0°49'35	morning rise	8060 May 27 16:15	4° II 59'09	
	8058 Jan 12 20:44	0° \approx			8060 Jun 08 18:09	30° R B	
desc. node	8058 Jan 16 14:54	4° \approx 40'06		direct	8060 Jun 13 11:30	29° B 32'58	
evening rise	8058 Feb 02 09:37	25° \approx 32'37			8060 Jun 18 07:18	0° II	
	8058 Feb 05 23:27	0° H		greatest brilliancy	8060 Jun 23 03:45	1° II 17'48	-4.8m
	8058 Mar 02 00:44	0° Y		desc. node	8060 Jul 03 11:14	6° II 20'39	
	8058 Mar 26 01:36	0° B			8060 Aug 01 02:58	0° G	
	8058 Apr 19 04:34	0° II		morning max el	8060 Aug 02 04:49	1° G 03'02	46°17'44
asc. node	8058 May 09 13:55	25° II 07'45			8060 Aug 29 20:35	0° Ω	
	8058 May 13 13:30	0° G			8060 Sep 25 11:43	0° M	
	8058 Jun 07 09:50	0° Ω			8060 Oct 21 04:23	0° Ω	
	8058 Jul 03 02:52	0° M		asc. node	8060 Oct 24 10:09	3° Ω 50'18	
	8058 Jul 30 16:11	0° Ω			8060 Nov 15 06:49	0° M	
evening max el	8058 Aug 07 02:24	7° Ω 26'48	45°54'58		8060 Dec 09 23:07	0° J	
desc. node	8058 Aug 29 08:30	26° Ω 47'33			8061 Jan 03 08:25	0° Z	
	8058 Sep 02 23:57	0° M		morning set	8061 Jan 27 17:49	0° \approx 15'00	
greatest brilliancy	8058 Sep 14 15:15	6° M 01'17	-4.7m		8061 Jan 27 13:00	0° \approx	
retrograde	8058 Sep 25 06:14	8° M 03'24		desc. node	8061 Feb 13 02:51	20° \approx 39'51	
evening set	8058 Oct 13 01:54	2° M 03'59			8061 Feb 20 14:10	0° H	
	8058 Oct 16 09:52	30° R Ω		max. Earth dist.	8061 Mar 05 23:22	16° H 45'33	1.71484 AU
inferior conj	8058 Oct 16 19:07	29° Ω 45'26	-8°24'17				
minimum elong	8058 Oct 16 14:42	29° Ω 52'23	8°23'57	superior conj	8061 Mar 08 16:48	20° H 10'38	-0°53'25
min. Earth dist.	8058 Oct 16 14:43	29° Ω 52'21	0.29164 AU	minimum elong	8061 Mar 08 05:35	19° H 35'30	0°52'56
morning rise	8058 Oct 20 03:35	27° Ω 40'21			8061 Mar 16 12:43	0° Y	
direct	8058 Nov 07 09:09	21° Ω 28'23			8061 Apr 09 09:45	0° B	
greatest brilliancy	8058 Nov 17 15:42	23° Ω 23'38	-4.7m	evening rise	8061 Apr 18 02:01	10° B 54'12	
	8058 Nov 30 07:57	0° M			8061 May 03 07:08	0° II	
asc. node	8058 Dec 20 08:09	16° M 10'58			8061 May 27 07:13	0° G	
morning max el	8058 Dec 26 14:08	22° M 08'21	45°56'57	asc. node	8061 Jun 06 01:41	12° G 08'40	
	8059 Jan 03 10:01	0° J			8061 Jun 20 12:19	0° Ω	
	8059 Jan 30 21:16	0° Z			8061 Jul 15 00:56	0° M	
	8059 Feb 25 12:43	0° \approx			8061 Aug 09 00:56	0° Ω	
	8059 Mar 22 08:21	0° H			8061 Sep 03 20:03	0° M	
desc. node	8059 Apr 11 01:18	24° H 13'12		desc. node	8061 Sep 25 19:51	24° M 19'38	
	8059 Apr 15 17:27	0° Y			8061 Oct 01 04:24	0° J	
	8059 May 09 20:48	0° B		evening max el	8061 Oct 17 00:49	15° J 55'34	45°42'16
	8059 Jun 02 21:46	0° II			8061 Nov 01 21:34	0° Z	
	8059 Jun 26 22:56	0° G		greatest brilliancy	8061 Nov 25 08:51	14° Z 06'31	-4.8m
morning set	8059 Jun 30 10:42	4° G 20'53		retrograde	8061 Dec 04 18:41	15° Z 43'37	
	8059 Jul 21 01:49	0° Ω		evening set	8061 Dec 20 20:22	10° Z 47'54	
asc. node	8059 Aug 01 23:30	14° Ω 45'52		inferior conj	8061 Dec 25 22:43	7° Z 43'53	-5°05'43
				minimum elong	8061 Dec 26 08:17	7° Z 29'00	5°03'11
superior conj	8059 Aug 07 22:38	22° Ω 09'01	0°14'24	min. Earth dist.	8061 Dec 26 19:53	7° Z 11'00	0.28167 AU
minimum elong	8059 Aug 07 19:25	21° Ω 59'04	0°14'08	morning rise	8061 Dec 31 19:31	4° Z 12'12	
behind sun begin	8059 Aug 07 08:11	21° Ω 24'17			8062 Jan 11 13:38	30° R J	




























































































































direct	8062 Jan 16 03:44	29°♊34'17		8064 Jul 29 01:48	0°♎	
asc. node	8062 Jan 16 19:44	29°♊34'49		8064 Aug 22 12:07	0°♌	
	8062 Jan 20 20:24	0°♊		8064 Sep 16 05:05	0°♍	
greatest brilliancy	8062 Jan 27 09:01	1°♊53'45 -4.8m		8064 Oct 11 07:50	0°♎	
	8062 Mar 05 08:56	0°♊		8064 Oct 23 07:28	14°♊05'01	
morning max el	8062 Mar 07 10:39	2°♊03'58 46°42'13		8064 Nov 06 01:22	0°♊	
	8062 Apr 02 10:12	0°♋		8064 Dec 02 19:34	0°♊	
	8062 Apr 28 06:31	0°♋		8064 Dec 28 05:02	26°♊24'45 46°18'27	
desc. node	8062 May 08 13:40	12°♋17'12		8064 Dec 31 22:25	0°♋	
	8062 May 23 05:43	0°♌		8065 Feb 05 23:29	25°♋58'23 -4.8m	
	8062 Jun 16 19:26	0°♌		8065 Feb 13 07:21	27°♋40'16	
	8062 Jul 11 05:31	0°♍		8065 Feb 15 21:43	27°♋48'14	
	8062 Aug 04 14:50	0°♍		8065 Mar 02 21:02	23°♋23'07	
asc. node	8062 Aug 29 11:38	0°♎35'21		8065 Mar 08 12:45	20°♋02'03 5°35'49	
	8062 Aug 29 00:08	0°♎		8065 Mar 08 02:09	20°♋18'19 5°33'07	
morning set	8062 Sep 08 20:56	13°♎22'15		8065 Mar 08 08:59	20°♋07'49 0.27006 AU	
	8062 Sep 22 09:04	0°♏		8065 Mar 13 07:15	17°♋10'46	
				8065 Mar 29 05:52	12°♋13'34	
superior conj	8062 Oct 15 17:29	28°♏46'21 1°23'24		8065 Apr 08 02:06	14°♋04'09 -4.9m	
minimum elong	8062 Oct 15 13:05	28°♏32'46 1°23'26		8065 May 02 15:50	0°♋	
max. Earth dist.	8062 Oct 15 10:17	28°♏24'07 1.73326 AU		8065 May 18 18:04	15°♋07'57 46°57'33	
	8062 Oct 16 17:23	0°♎		8065 Jun 01 23:07	0°♌	
	8062 Nov 10 01:26	0°♎		8065 Jun 05 01:35	3°♌22'26	
evening rise	8062 Nov 21 07:04	13°♎50'44		8065 Jun 28 16:05	0°♌	
	8062 Dec 04 09:53	0°♏		8065 Jul 24 06:12	0°♍	
desc. node	8062 Dec 19 04:56	18°♏12'35		8065 Aug 18 09:20	0°♍	
	8062 Dec 28 18:59	0°♏		8065 Sep 12 06:43	0°♎	
	8063 Jan 22 04:35	0°♋		8065 Sep 25 23:55	16°♎37'47	
	8063 Feb 15 15:10	0°♋		8065 Oct 06 23:33	0°♏	
	8063 Mar 12 05:15	0°♌		8065 Oct 31 12:03	0°♎	
	8063 Apr 06 05:07	0°♌		8065 Nov 16 09:25	19°♎32'50	
asc. node	8063 Apr 11 04:16	5°♌51'25		8065 Nov 24 20:52	0°♎	
	8063 May 02 04:01	0°♍		8065 Dec 19 03:05	0°♏	
evening max el	8063 May 25 18:47	25°♍14'40 46°42'35		8065 Dec 21 02:21	2°♏26'24 1.72714 AU	
	8063 May 30 14:40	0°♍				
greatest brilliancy	8063 Jul 04 01:20	25°♍25'13 -4.8m		8065 Dec 23 08:10	5°♏13'04 0°52'34	
retrograde	8063 Jul 15 00:45	27°♍39'38		8065 Dec 23 17:45	5°♏42'45 0°52'21	
evening set	8063 Jul 29 21:12	23°♍18'43		8066 Jan 12 07:31	0°♏	
desc. node	8063 Jul 31 22:54	22°♍08'17		8066 Jan 15 16:47	4°♏12'23	
min. Earth dist.	8063 Aug 04 16:33	19°♍52'08 0.28043 AU		8066 Jan 30 23:37	23°♏12'49	
inferior conj	8063 Aug 05 05:33	19°♍31'59 -1°03'37		8066 Feb 05 10:24	0°♋	
minimum elong	8063 Aug 05 03:09	19°♍35'42 1°02'58		8066 Mar 01 11:53	0°♋	
morning rise	8063 Aug 11 09:44	15°♍52'09		8066 Mar 25 13:01	0°♌	
direct	8063 Aug 26 08:02	11°♍32'28		8066 Apr 18 16:19	0°♌	
greatest brilliancy	8063 Sep 05 02:58	13°♍17'02 -4.8m		8066 May 08 15:54	24°♌36'29	
	8063 Oct 01 12:51	0°♎		8066 May 13 01:48	0°♍	
morning max el	8063 Oct 14 02:52	11°♎21'29 45°43'13		8066 Jun 06 23:03	0°♍	
	8063 Nov 01 13:46	0°♏		8066 Jul 02 17:56	0°♎	
asc. node	8063 Nov 21 22:20	22°♏14'39		8066 Jul 30 12:04	0°♏	
	8063 Nov 28 18:36	0°♎		8066 Aug 04 17:23	5°♏12'20 45°56'16	
	8063 Dec 24 11:55	0°♎		8066 Aug 28 10:28	25°♏37'51	
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	8064 Mar 07 02:02	0°♋		8066 Sep 22 22:03	5°♎53'48	
desc. node	8064 Mar 12 15:05	6°♋54'37		8066 Oct 10 15:46	29°♏58'18	
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morning set	8064 Apr 13 00:26	16°♋13'17		8066 Oct 14 11:29	27°♏35'53 -8°19'40	
	8064 Apr 23 23:38	0°♌		8066 Oct 14 06:23	27°♏43'55 8°19'12	
	8064 May 17 20:35	0°♌		8066 Oct 14 06:15	27°♏44'09 0.29153 AU	
				8066 Oct 17 21:04	25°♏28'55	
superior conj	8064 May 23 13:07	7°♌08'30 -1°19'40		8066 Nov 05 01:07	19°♏19'12	
minimum elong	8064 May 23 22:06	7°♌36'41 1°19'36		8066 Nov 15 07:05	21°♏13'21 -4.7m	
max. Earth dist.	8064 May 26 04:06	10°♌26'07 1.71462 AU		8066 Dec 01 03:39	0°♎	
	8064 Jun 10 18:59	0°♍		8066 Dec 19 10:00	15°♎18'27	
evening rise	8064 Jul 02 13:19	27°♍08'47		8066 Dec 24 04:15	19°♎52'00 45°55'46	
asc. node	8064 Jul 03 13:29	28°♍23'54		8067 Jan 03 05:04	0°♎	
	8064 Jul 04 20:24	0°♍		8067 Jan 30 11:59	0°♏	

	8067 Feb 25 01:44	0°♊			8069 Aug 08 13:41	0°♎	
	8067 Mar 21 20:32	0°♋			8069 Sep 03 10:25	0°♏	
desc. node	8067 Apr 10 03:24	23°♋43'17		desc. node	8069 Sep 24 21:56	23°♏39'33	
	8067 Apr 15 05:10	0°♌			8069 Sep 30 22:39	0°♐	
	8067 May 09 08:14	0°♍		evening max el	8069 Oct 14 15:40	13°♐42'02	45°41'58
	8067 Jun 02 08:59	0°♎			8069 Nov 02 08:28	0°♑	
	8067 Jun 26 10:00	0°♏		greatest brilliancy	8069 Nov 22 22:32	11°♑51'15	-4.7m
morning set	8067 Jun 28 00:33	2°♏00'06		retrograde	8069 Dec 02 09:50	13°♑29'18	
	8067 Jul 20 12:46	0°♐		evening set	8069 Dec 18 14:04	8°♑28'51	
asc. node	8067 Aug 01 01:26	14°♐18'08		inferior conj	8069 Dec 23 13:46	5°♑28'28	-5°22'37
				minimum elong	8069 Dec 23 23:35	5°♑13'12	5°20'06
superior conj	8067 Aug 05 14:02	19°♐54'29	0°10'57	min. Earth dist.	8069 Dec 24 10:43	4°♑55'55	0.28228 AU
minimum elong	8067 Aug 05 11:34	19°♐46'51	0°10'44	morning rise	8069 Dec 29 08:28	1°♑59'53	
behind sun begin	8067 Aug 04 17:44	18°♐51'36			8070 Jan 02 06:25	30°♒♊	
behind sun end	8067 Aug 06 05:25	20°♐42'06		direct	8070 Jan 13 19:39	27°♒18'03	
max. Earth dist.	8067 Aug 08 04:35	23°♐08'06	1.72723 AU	asc. node	8070 Jan 15 21:44	27°♒23'15	
	8067 Aug 13 17:42	0°♓		greatest brilliancy	8070 Jan 25 00:38	29°♒37'41	-4.8m
	8067 Sep 07 00:41	0°♎			8070 Jan 25 22:30	0°♑	
evening rise	8067 Sep 11 19:33	5°♎53'53		morning max el	8070 Mar 05 02:52	29°♑48'29	46°40'50
	8067 Oct 01 09:59	0°♏			8070 Mar 05 07:27	0°♊	
	8067 Oct 25 22:33	0°♐			8070 Apr 02 02:21	0°♋	
	8067 Nov 19 15:35	0°♑			8070 Apr 27 20:21	0°♌	
desc. node	8067 Nov 20 19:05	1°♑23'05		desc. node	8070 May 07 15:34	11°♌42'58	
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	8068 Jan 08 19:27	0°♋			8070 Jun 16 07:24	0°♎	
	8068 Feb 03 13:18	0°♌			8070 Jul 10 17:01	0°♏	
	8068 Mar 01 13:46	0°♍			8070 Aug 04 02:00	0°♐	
evening max el	8068 Mar 11 00:13	9°♍46'40	46°58'18		8070 Aug 28 11:05	0°♑	
asc. node	8068 Mar 12 18:52	11°♍33'35		asc. node	8070 Aug 28 13:41	0°♒07'59	
	8068 Apr 02 05:59	0°♎		morning set	8070 Sep 06 13:42	11°♒12'35	
greatest brilliancy	8068 Apr 20 18:39	10°♎59'01	-4.9m		8070 Sep 21 19:53	0°♎	
retrograde	8068 Apr 30 13:42	12°♎48'28					
evening set	8068 May 18 06:52	6°♎48'26		superior conj	8070 Oct 13 11:09	26°♎39'36	1°22'34
inferior conj	8068 May 21 08:00	4°♎56'40	8°29'20	minimum elong	8070 Oct 13 06:07	26°♎24'06	1°22'34
minimum elong	8068 May 21 15:56	4°♎44'25	8°28'14	max. Earth dist.	8070 Oct 13 07:37	26°♎28'45	1.73327 AU
min. Earth dist.	8068 May 21 08:45	4°♎55'30	0.27223 AU		8070 Oct 16 04:09	0°♏	
morning rise	8068 May 25 01:03	2°♎41'18			8070 Nov 09 12:16	0°♐	
	8068 May 30 01:50	30°♒♋		evening rise	8070 Nov 18 23:50	11°♒41'06	
direct	8068 Jun 10 23:53	27°♒08'24			8070 Dec 03 20:51	0°♑	
greatest brilliancy	8068 Jun 20 17:05	28°♒53'53	-4.8m	desc. node	8070 Dec 18 06:47	17°♑44'06	
	8068 Jun 23 12:56	0°♒			8070 Dec 28 06:12	0°♊	
desc. node	8068 Jul 02 13:11	4°♒54'32			8071 Jan 21 16:11	0°♋	
morning max el	8068 Jul 30 18:21	28°♒41'26	46°19'26		8071 Feb 15 03:17	0°♌	
	8068 Aug 01 02:15	0°♏			8071 Mar 11 18:08	0°♍	
	8068 Aug 29 12:55	0°♐			8071 Apr 05 19:15	0°♎	
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asc. node	8068 Oct 23 12:11	3°♎19'54		evening max el	8071 May 23 10:37	22°♏58'42	46°44'07
	8068 Nov 14 18:27	0°♏			8071 May 30 15:22	0°♐	
	8068 Dec 09 10:22	0°♐		greatest brilliancy	8071 Jul 01 16:56	23°♐09'16	-4.8m
	8069 Jan 02 19:29	0°♑		retrograde	8071 Jul 12 16:41	25°♐23'34	
morning set	8069 Jan 25 07:51	27°♑55'08		evening set	8071 Jul 27 12:38	21°♐02'41	
	8069 Jan 27 00:00	0°♊		desc. node	8071 Jul 31 00:52	19°♐00'30	
desc. node	8069 Feb 12 04:52	20°♊11'54		inferior conj	8071 Aug 02 20:28	17°♐16'25	-0°42'00
	8069 Feb 20 01:09	0°♋		minimum elong	8071 Aug 02 18:52	17°♐18'53	0°41'37
max. Earth dist.	8069 Mar 03 11:22	14°♋18'16	1.71517 AU	min. Earth dist.	8071 Aug 02 07:39	17°♐36'17	0.27998 AU
				morning rise	8071 Aug 09 01:52	13°♐35'19	
superior conj	8069 Mar 06 04:36	17°♋42'43	-0°50'17	direct	8071 Aug 23 23:10	9°♐17'44	
minimum elong	8069 Mar 05 17:45	17°♋08'41	0°49'47	greatest brilliancy	8071 Sep 02 16:49	11°♐01'39	-4.8m
	8069 Mar 15 23:42	0°♌			8071 Oct 01 18:04	0°♑	
	8069 Apr 08 20:47	0°♍		morning max el	8071 Oct 11 18:29	9°♑10'01	45°43'35
evening rise	8069 Apr 15 13:09	8°♍23'43			8071 Nov 01 07:01	0°♎	
	8069 May 02 18:16	0°♎		asc. node	8071 Nov 21 00:11	21°♎38'52	
	8069 May 26 18:30	0°♏			8071 Nov 28 08:33	0°♐	
asc. node	8069 Jun 05 03:34	11°♏39'18			8071 Dec 24 00:26	0°♑	
	8069 Jun 19 23:50	0°♐			8072 Jan 17 22:03	0°♒	
	8069 Jul 14 12:53	0°♑			8072 Feb 11 08:57	0°♊	

	8072 Mar 06 13:13	0°♄	retrograde	8074 Sep 20 13:58	3°♎44'53	
desc. node	8072 Mar 11 17:04	6°♄26'04		8074 Oct 04 11:07	30°♎	
	8072 Mar 30 13:11	0°♅	evening set	8074 Oct 08 05:23	27°♎53'22	
morning set	8072 Apr 10 10:48	13°♅40'33	inferior conj	8074 Oct 12 03:51	25°♎26'59	-8°14'11
	8072 Apr 23 10:39	0°♄	minimum elong	8074 Oct 11 22:06	25°♎36'02	8°13'38
	8072 May 17 07:32	0°♂	min. Earth dist.	8074 Oct 11 21:52	25°♎36'25	0.29141 AU
			morning rise	8074 Oct 15 14:52	23°♎17'49	
superior conj	8072 May 21 00:43	4°♂39'56	direct	8074 Nov 02 16:41	17°♎10'33	
minimum elong	8072 May 21 09:00	5°♂05'56	greatest brilliancy	8074 Nov 12 22:51	19°♎04'16	-4.7m
max. Earth dist.	8072 May 23 14:50	7°♂54'50		8074 Dec 01 17:56	0°♎	
	8072 Jun 10 05:53	0°♄	asc. node	8074 Dec 18 12:03	14°♎27'57	
evening rise	8072 Jun 30 02:44	24°♄47'20	morning max el	8074 Dec 21 18:40	17°♎37'04	45°54'33
asc. node	8072 Jul 02 15:27	27°♄56'09		8075 Jan 02 23:26	0°♏	
	8072 Jul 04 07:18	0°♂		8075 Jan 30 02:23	0°♏	
	8072 Jul 28 12:47	0°♎		8075 Feb 24 14:34	0°♏	
	8072 Aug 21 23:18	0°♎		8075 Mar 21 08:34	0°♄	
	8072 Sep 15 16:41	0°♎	desc. node	8075 Apr 09 05:19	23°♄13'20	
	8072 Oct 10 20:12	0°♏		8075 Apr 14 16:43	0°♅	
desc. node	8072 Oct 22 09:20	13°♏32'41		8075 May 08 19:26	0°♄	
	8072 Nov 05 15:11	0°♏		8075 Jun 01 19:58	0°♂	
	8072 Dec 02 12:23	0°♏	morning set	8075 Jun 25 14:12	29°♂39'20	
evening max el	8072 Dec 25 19:12	24°♏05'31		8075 Jun 25 20:50	0°♄	
	8073 Jan 01 00:01	0°♄		8075 Jul 19 23:29	0°♂	
greatest brilliancy	8073 Feb 03 13:02	23°♄34'40	asc. node	8075 Jul 31 03:30	13°♂51'28	
asc. node	8073 Feb 12 09:25	25°♄22'02				
retrograde	8073 Feb 13 10:10	25°♄23'18	superior conj	8075 Aug 03 05:21	17°♂40'17	0°07'28
evening set	8073 Feb 28 07:22	21°♄02'17	minimum elong	8075 Aug 03 03:39	17°♂35'03	0°07'17
inferior conj	8073 Mar 06 01:45	17°♄37'24	behind sun begin	8075 Aug 02 06:13	16°♂28'39	
minimum elong	8073 Mar 05 15:30	17°♄53'11	behind sun end	8075 Aug 04 01:05	18°♂41'27	
min. Earth dist.	8073 Mar 05 22:54	17°♄41'47	max. Earth dist.	8075 Aug 05 19:11	20°♂51'47	1.72683 AU
morning rise	8073 Mar 10 23:31	14°♄41'08		8075 Aug 13 04:20	0°♎	
direct	8073 Mar 26 18:51	9°♄48'43		8075 Sep 06 11:18	0°♎	
greatest brilliancy	8073 Apr 05 16:33	11°♄40'02	evening rise	8075 Sep 09 12:51	3°♎46'34	
	8073 May 02 23:17	0°♅		8075 Sep 30 20:42	0°♎	
morning max el	8073 May 16 06:29	12°♅41'05		8075 Oct 25 09:31	0°♏	
	8073 Jun 01 17:32	0°♄		8075 Nov 19 02:59	0°♏	
desc. node	8073 Jun 04 03:30	2°♄38'40	desc. node	8075 Nov 19 21:02	0°♏54'29	
	8073 Jun 28 06:51	0°♂		8075 Dec 14 02:08	0°♏	
	8073 Jul 23 19:15	0°♄		8076 Jan 08 08:41	0°♄	
	8073 Aug 17 21:23	0°♂		8076 Feb 03 04:33	0°♅	
	8073 Sep 11 18:08	0°♎		8076 Mar 01 09:40	0°♄	
asc. node	8073 Sep 25 01:54	16°♎09'56	evening max el	8076 Mar 08 12:56	7°♄20'47	46°57'41
	8073 Oct 06 10:33	0°♎	asc. node	8076 Mar 11 20:51	10°♄39'52	
	8073 Oct 30 22:49	0°♎		8076 Apr 03 00:19	0°♂	
morning set	8073 Nov 14 02:41	17°♎25'12	greatest brilliancy	8076 Apr 18 08:13	8°♂34'14	-4.9m
	8073 Nov 24 07:32	0°♏	retrograde	8076 Apr 28 03:01	10°♂23'48	
max. Earth dist.	8073 Dec 18 17:37	0°♏11'54	evening set	8076 May 15 22:49	4°♂19'18	
	8073 Dec 18 13:47	0°♏	inferior conj	8076 May 18 21:01	2°♂32'10	8°38'02
			minimum elong	8076 May 19 04:15	2°♂21'00	8°37'07
superior conj	8073 Dec 21 00:02	3°♏00'24	min. Earth dist.	8076 May 18 21:35	2°♂31'17	0.27212 AU
minimum elong	8073 Dec 21 09:45	3°♏30'30	morning rise	8076 May 22 09:44	0°♂23'25	
	8074 Jan 11 18:19	0°♏		8076 May 23 01:43	30°♄	
desc. node	8074 Jan 14 18:50	3°♏45'11	direct	8076 Jun 08 12:25	24°♄43'47	
evening rise	8074 Jan 28 13:26	20°♏52'36	greatest brilliancy	8076 Jun 18 05:44	26°♄29'41	-4.9m
	8074 Feb 04 21:20	0°♄		8076 Jun 25 21:59	0°♂	
	8074 Feb 28 22:59	0°♅	desc. node	8076 Jul 01 15:15	3°♂32'10	
	8074 Mar 25 00:20	0°♄	morning max el	8076 Jul 28 08:35	26°♂22'27	46°21'09
	8074 Apr 18 03:59	0°♂		8076 Aug 01 00:14	0°♄	
asc. node	8074 May 07 17:48	24°♂05'12		8076 Aug 29 04:38	0°♂	
	8074 May 12 14:01	0°♄		8076 Sep 24 14:41	0°♎	
	8074 Jun 06 12:14	0°♂		8076 Oct 20 04:45	0°♎	
	8074 Jul 02 09:04	0°♎	asc. node	8076 Oct 22 14:00	2°♎49'58	
	8074 Jul 30 08:25	0°♎		8076 Nov 14 05:44	0°♎	
evening max el	8074 Aug 02 07:54	2°♎56'59		8076 Dec 08 21:17	0°♏	
desc. node	8074 Aug 27 12:35	24°♎26'54		8077 Jan 02 06:13	0°♏	
	8074 Sep 05 23:19	0°♎	morning set	8077 Jan 22 22:08	25°♏37'12	
greatest brilliancy	8074 Sep 09 23:03	1°♎41'56		8077 Jan 26 10:40	0°♏	

desc. node	8077 Feb 11 06:53	19° \approx 44'54		inferior conj	8079 Jul 31 11:13	15° Ω 00'53	-0°20'08
	8077 Feb 19 11:49	0° \mathcal{H}		minimum elong	8079 Jul 31 10:27	15° Ω 02'05	0°20'01
max. Earth dist.	8077 Mar 01 00:13	11° \mathcal{H} 54'36	1.71555 AU	min. Earth dist.	8079 Jul 30 22:55	15° Ω 19'59	0.27950 AU
				morning rise	8079 Aug 06 17:36	11° Ω 18'29	
superior conj	8077 Mar 03 16:17	15° \mathcal{H} 15'20	-0°47'02	direct	8079 Aug 21 13:55	7° Ω 03'09	
minimum elong	8077 Mar 03 05:53	14° \mathcal{H} 42'43	0°46'33	greatest brilliancy	8079 Aug 31 06:39	8° Ω 46'20	-4.8m
	8077 Mar 15 10:26	0° Υ			8079 Oct 01 21:10	0° \mathcal{M}	
	8077 Apr 08 07:35	0° \mathcal{B}		morning max el	8079 Oct 09 09:05	6° \mathcal{M} 56'46	45°44'01
evening rise	8077 Apr 12 23:57	5° \mathcal{B} 52'55			8079 Oct 31 23:37	0° Ω	
	8077 May 02 05:10	0° Π		asc. node	8079 Nov 20 02:13	21° Ω 04'49	
	8077 May 26 05:30	0° \mathcal{G}			8079 Nov 27 22:04	0° \mathcal{M}	
asc. node	8077 Jun 04 05:34	11° \mathcal{G} 11'07			8079 Dec 23 12:35	0° \mathcal{A}	
	8077 Jun 19 11:03	0° Ω			8080 Jan 17 09:31	0° \mathcal{B}	
	8077 Jul 14 00:32	0° \mathcal{M}			8080 Feb 10 20:03	0° \approx	
	8077 Aug 08 02:11	0° Ω			8080 Mar 06 00:07	0° \mathcal{H}	
	8077 Sep 03 00:37	0° \mathcal{M}		desc. node	8080 Mar 10 19:00	5° \mathcal{H} 58'14	
desc. node	8077 Sep 23 23:50	22° \mathcal{M} 59'28			8080 Mar 29 23:58	0° Υ	
	8077 Sep 30 17:00	0° \mathcal{A}		morning set	8080 Apr 07 21:30	11° Υ 09'51	
evening max el	8077 Oct 12 07:24	11° \mathcal{A} 31'41	45°41'41		8080 Apr 22 21:20	0° \mathcal{B}	
	8077 Nov 02 22:32	0° \mathcal{B}			8080 May 16 18:11	0° Π	
greatest brilliancy	8077 Nov 20 12:19	9° \mathcal{B} 37'23	-4.7m				
retrograde	8077 Nov 30 00:57	11° \mathcal{B} 16'05		superior conj	8080 May 18 12:30	2° Π 12'50	-1°22'36
evening set	8077 Dec 16 07:54	6° \mathcal{B} 11'10		minimum elong	8080 May 18 20:01	2° Π 36'26	1°22'37
inferior conj	8077 Dec 21 04:49	3° \mathcal{B} 14'21	-5°38'54	max. Earth dist.	8080 May 21 00:23	5° Π 20'46	1.71397 AU
minimum elong	8077 Dec 21 14:50	2° \mathcal{B} 58'48	5°36'25		8080 Jun 09 16:32	0° \mathcal{G}	
min. Earth dist.	8077 Dec 22 01:22	2° \mathcal{B} 42'24	0.28285 AU	evening rise	8080 Jun 27 15:54	22° \mathcal{G} 25'43	
morning rise	8077 Dec 26 21:15	29° \mathcal{A} 49'00		asc. node	8080 Jul 01 17:30	27° \mathcal{G} 29'19	
	8077 Dec 26 13:28	30° \mathcal{R} \mathcal{A}			8080 Jul 03 17:59	0° Ω	
direct	8078 Jan 11 11:47	25° \mathcal{A} 03'25			8080 Jul 27 23:34	0° \mathcal{M}	
asc. node	8078 Jan 14 23:44	25° \mathcal{A} 17'54			8080 Aug 21 10:18	0° Ω	
greatest brilliancy	8078 Jan 22 15:35	27° \mathcal{A} 22'14	-4.8m		8080 Sep 15 04:07	0° \mathcal{M}	
	8078 Jan 28 05:26	0° \mathcal{B}			8080 Oct 10 08:26	0° \mathcal{A}	
morning max el	8078 Mar 02 18:44	27° \mathcal{B} 33'30	46°39'17	desc. node	8080 Oct 21 11:19	13° \mathcal{A} 01'12	
	8078 Mar 05 04:37	0° \approx			8080 Nov 05 04:56	0° \mathcal{B}	
	8078 Apr 01 17:51	0° \mathcal{H}			8080 Dec 02 05:20	0° \approx	
	8078 Apr 27 09:45	0° Υ		evening max el	8080 Dec 23 08:33	21° \approx 45'00	46°14'55
desc. node	8078 May 06 17:28	11° Υ 09'52			8081 Jan 01 02:48	0° \mathcal{H}	
	8078 May 22 06:44	0° \mathcal{B}		greatest brilliancy	8081 Feb 01 03:00	21° \mathcal{H} 12'07	-4.8m
	8078 Jun 15 19:06	0° Π		retrograde	8081 Feb 10 22:25	22° \mathcal{H} 59'27	
	8078 Jul 10 04:14	0° \mathcal{G}		asc. node	8081 Feb 11 11:23	22° \mathcal{H} 59'06	
	8078 Aug 03 12:52	0° Ω		evening set	8081 Feb 25 17:57	18° \mathcal{H} 41'51	
asc. node	8078 Aug 27 15:35	29° Ω 41'12		inferior conj	8081 Mar 03 14:50	15° \mathcal{H} 13'49	4°56'15
	8078 Aug 27 21:41	0° \mathcal{M}		minimum elong	8081 Mar 03 04:58	15° \mathcal{H} 29'01	4°53'35
morning set	8078 Sep 04 06:14	9° \mathcal{M} 03'17		min. Earth dist.	8081 Mar 03 13:14	15° \mathcal{H} 16'17	0.27023 AU
	8078 Sep 21 06:22	0° Ω		morning rise	8081 Mar 08 15:45	12° \mathcal{H} 12'46	
				direct	8081 Mar 24 07:35	7° \mathcal{H} 24'35	
superior conj	8078 Oct 11 04:41	24° Ω 33'32	1°21'36	greatest brilliancy	8081 Apr 03 07:40	9° \mathcal{H} 17'36	-4.9m
minimum elong	8078 Oct 10 23:04	24° Ω 16'13	1°21'35		8081 May 03 04:09	0° Υ	
max. Earth dist.	8078 Oct 11 04:52	24° Ω 34'04	1.73326 AU	morning max el	8081 May 13 18:50	10° Υ 14'50	46°58'29
	8078 Oct 15 14:37	0° \mathcal{M}			8081 Jun 01 11:11	0° \mathcal{B}	
	8078 Nov 08 22:47	0° \mathcal{A}		desc. node	8081 Jun 03 05:36	1° \mathcal{B} 56'53	
evening rise	8078 Nov 16 16:38	9° \mathcal{A} 32'30			8081 Jun 27 21:09	0° Π	
	8078 Dec 03 07:31	0° \mathcal{B}			8081 Jul 23 07:59	0° \mathcal{G}	
desc. node	8078 Dec 17 08:51	17° \mathcal{B} 17'16			8081 Aug 17 09:13	0° Ω	
	8078 Dec 27 17:06	0° \approx			8081 Sep 11 05:23	0° \mathcal{M}	
	8079 Jan 21 03:27	0° \mathcal{H}		asc. node	8081 Sep 24 03:47	15° \mathcal{M} 42'13	
	8079 Feb 14 15:04	0° Υ			8081 Oct 05 21:26	0° Ω	
	8079 Mar 11 06:42	0° \mathcal{B}			8081 Oct 30 09:27	0° \mathcal{M}	
	8079 Apr 05 09:09	0° Π		morning set	8081 Nov 11 19:48	15° \mathcal{M} 17'33	
asc. node	8079 Apr 09 08:08	4° Π 38'34			8081 Nov 23 18:04	0° \mathcal{A}	
	8079 May 01 13:28	0° \mathcal{G}		max. Earth dist.	8081 Dec 16 10:46	28° \mathcal{A} 03'43	1.72793 AU
evening max el	8079 May 21 02:21	20° \mathcal{G} 42'54	46°45'25		8081 Dec 18 00:20	0° \mathcal{B}	
	8079 May 30 17:09	0° Ω					
greatest brilliancy	8079 Jun 29 09:08	20° Ω 54'09	-4.8m	superior conj	8081 Dec 18 15:56	0° \mathcal{B} 48'17	0°57'50
retrograde	8079 Jul 10 08:09	23° Ω 07'14		minimum elong	8081 Dec 19 01:44	1° \mathcal{B} 18'37	0°57'37
evening set	8079 Jul 25 04:07	18° Ω 46'27			8082 Jan 11 05:00	0° \approx	
desc. node	8079 Jul 30 02:55	15° Ω 50'59		desc. node	8082 Jan 13 20:48	3° \approx 18'06	

evening rise	8082 Jan 26 03:27	18° \approx 33'28		greatest brilliancy	8084 Jun 15 17:50	24° \approx 04'15	-4.9m
	8082 Feb 04 08:11	0° H			8084 Jun 27 10:59	0° II	
	8082 Feb 28 10:01	0° Y		desc. node	8084 Jun 30 17:12	2° II 11'50	
	8082 Mar 24 11:35	0° B		morning max el	8084 Jul 25 23:35	24° II 04'54	46°22'59
	8082 Apr 17 15:35	0° II			8084 Jul 31 21:31	0° E	
asc. node	8082 May 06 19:51	23° II 34'50			8084 Aug 28 20:10	0° Ω	
	8082 May 12 02:09	0° E			8084 Sep 24 03:55	0° M	
	8082 Jun 06 01:21	0° Ω			8084 Oct 19 16:48	0° $\underline{\text{A}}$	
	8082 Jul 02 00:13	0° M		asc. node	8084 Oct 21 16:04	2° $\underline{\text{A}}$ 20'27	
	8082 Jul 30 05:19	0° $\underline{\text{A}}$			8084 Nov 13 17:10	0° M	
evening max el	8082 Jul 30 22:32	0° $\underline{\text{A}}$ 42'18	45°58'59		8084 Dec 08 08:23	0° A	
desc. node	8082 Aug 26 14:27	23° $\underline{\text{A}}$ 13'47			8085 Jan 01 17:10	0° Z	
greatest brilliancy	8082 Sep 07 14:19	29° $\underline{\text{A}}$ 31'49	-4.7m	morning set	8085 Jan 20 12:36	23° Z 19'09	
	8082 Sep 08 22:24	0° M			8085 Jan 25 21:33	0° \approx	
retrograde	8082 Sep 18 06:15	1° M 36'15		desc. node	8085 Feb 10 08:45	19° \approx 16'47	
	8082 Sep 27 05:44	30° R $\underline{\text{A}}$			8085 Feb 18 22:42	0° H	
evening set	8082 Oct 05 18:50	25° $\underline{\text{A}}$ 48'41		max. Earth dist.	8085 Feb 26 11:58	9° H 26'57	1.71590 AU
inferior conj	8082 Oct 09 20:16	23° $\underline{\text{A}}$ 18'09	-8°07'55				
minimum elong	8082 Oct 09 13:53	23° $\underline{\text{A}}$ 28'12	8°07'15	superior conj	8085 Mar 01 04:03	12° H 47'35	-0°43'43
min. Earth dist.	8082 Oct 09 13:24	23° $\underline{\text{A}}$ 28'57	0.29130 AU	minimum elong	8085 Feb 28 18:11	12° H 16'41	0°43'15
morning rise	8082 Oct 13 08:58	21° $\underline{\text{A}}$ 06'35			8085 Mar 14 21:22	0° Y	
direct	8082 Oct 31 08:23	15° $\underline{\text{A}}$ 01'51			8085 Apr 07 18:38	0° B	
greatest brilliancy	8082 Nov 10 14:47	16° $\underline{\text{A}}$ 55'33	-4.7m	evening rise	8085 Apr 10 10:50	3° B 21'40	
	8082 Dec 02 04:28	0° M			8085 May 01 16:19	0° II	
asc. node	8082 Dec 17 14:05	13° M 38'25			8085 May 25 16:49	0° E	
morning max el	8082 Dec 19 10:04	15° M 24'39	45°53'24	asc. node	8085 Jun 03 07:35	10° E 42'03	
	8083 Jan 02 17:19	0° A			8085 Jun 18 22:36	0° Ω	
	8083 Jan 29 16:37	0° Z			8085 Jul 13 12:31	0° M	
	8083 Feb 24 03:18	0° \approx			8085 Aug 07 15:01	0° $\underline{\text{A}}$	
	8083 Mar 20 20:33	0° H			8085 Sep 02 15:12	0° M	
desc. node	8083 Apr 08 07:12	22° H 43'17		desc. node	8085 Sep 23 01:51	22° M 18'42	
	8083 Apr 14 04:14	0° Y			8085 Sep 30 12:05	0° A	
	8083 May 08 06:39	0° B		evening max el	8085 Oct 09 23:22	9° A 21'19	45°41'19
	8083 Jun 01 06:58	0° II			8085 Nov 03 17:49	0° Z	
morning set	8083 Jun 23 04:04	27° II 19'09		greatest brilliancy	8085 Nov 18 02:32	7° Z 23'40	-4.7m
	8083 Jun 25 07:39	0° E		retrograde	8085 Nov 27 15:45	9° Z 02'25	
	8083 Jul 19 10:11	0° Ω		evening set	8085 Dec 14 01:54	3° Z 53'14	
asc. node	8083 Jul 30 05:23	13° Ω 24'21		inferior conj	8085 Dec 18 20:04	0° Z 59'56	-5°54'28
				minimum elong	8085 Dec 19 06:10	0° Z 44'10	5°52'03
superior conj	8083 Jul 31 20:52	15° Ω 26'42	0°04'01	min. Earth dist.	8085 Dec 19 16:16	0° Z 28'27	0.28344 AU
minimum elong	8083 Jul 31 19:58	15° Ω 23'56	0°03'51		8085 Dec 20 10:36	30° R A	
behind sun begin	8083 Jul 30 20:39	14° Ω 11'38		morning rise	8085 Dec 24 09:59	27° A 37'48	
behind sun end	8083 Aug 01 19:17	16° Ω 36'13		direct	8086 Jan 09 04:01	22° A 48'29	
max. Earth dist.	8083 Aug 03 10:53	18° Ω 38'53	1.72643 AU	asc. node	8086 Jan 14 01:41	23° A 16'36	
	8083 Aug 12 14:57	0° M		greatest brilliancy	8086 Jan 20 06:42	25° A 06'08	-4.8m
	8083 Sep 05 21:56	0° $\underline{\text{A}}$			8086 Jan 29 17:20	0° Z	
evening rise	8083 Sep 07 06:24	1° $\underline{\text{A}}$ 39'59		morning max el	8086 Feb 28 10:03	25° Z 16'03	46°37'41
	8083 Sep 30 07:28	0° M			8086 Mar 05 01:29	0° \approx	
	8083 Oct 24 20:35	0° A			8086 Apr 01 09:30	0° H	
desc. node	8083 Nov 18 23:04	0° Z 25'44			8086 Apr 26 23:23	0° Y	
	8083 Nov 18 14:32	0° Z		desc. node	8086 May 05 19:36	10° Y 36'38	
	8083 Dec 13 14:24	0° \approx			8086 May 21 19:20	0° B	
	8084 Jan 07 22:07	0° H			8086 Jun 15 07:04	0° II	
	8084 Feb 02 20:08	0° Y			8086 Jul 09 15:46	0° E	
	8084 Mar 01 06:22	0° B			8086 Aug 03 00:04	0° Ω	
evening max el	8084 Mar 06 02:42	4° B 57'15	46°56'58	asc. node	8086 Aug 26 17:31	29° Ω 13'23	
asc. node	8084 Mar 10 22:45	9° B 44'30			8086 Aug 27 08:39	0° M	
	8084 Apr 04 01:31	0° II		morning set	8086 Sep 01 22:59	6° M 53'32	
greatest brilliancy	8084 Apr 15 21:11	6° II 08'20	-4.9m		8086 Sep 20 17:11	0° $\underline{\text{A}}$	
retrograde	8084 Apr 25 16:45	7° II 58'33					
evening set	8084 May 13 14:30	1° II 49'51		superior conj	8086 Oct 08 22:35	22° $\underline{\text{A}}$ 27'35	1°20'33
inferior conj	8084 May 16 09:59	0° II 06'56	8°45'48	minimum elong	8086 Oct 08 16:25	22° $\underline{\text{A}}$ 08'37	1°20'30
minimum elong	8084 May 16 16:28	29° B 56'58	8°45'04	max. Earth dist.	8086 Oct 09 01:41	22° $\underline{\text{A}}$ 37'09	1.73319 AU
min. Earth dist.	8084 May 16 10:01	0° II 06'53	0.27200 AU		8086 Oct 15 01:22	0° M	
	8084 May 16 14:29	30° R B			8086 Nov 08 09:35	0° A	
morning rise	8084 May 19 18:28	28° B 04'41		evening rise	8086 Nov 14 09:49	7° A 24'09	
direct	8084 Jun 06 01:29	22° B 18'38			8086 Dec 02 18:30	0° Z	

desc. node	8086 Dec 16 10:51	16°  49'05	desc. node	8089 Jun 02 07:32	1°  13'45
	8086 Dec 27 04:23	0° 		8089 Jun 27 11:44	0° 
	8087 Jan 20 15:09	0° 		8089 Jul 22 21:01	0° 
	8087 Feb 14 03:19	0° 		8089 Aug 16 21:21	0° 
	8087 Mar 10 19:46	0° 		8089 Sep 10 16:57	0° 
	8087 Apr 04 23:38	0° 	asc. node	8089 Sep 23 05:48	15°  13'55
asc. node	8087 Apr 08 10:13	4°  01'30		8089 Oct 05 08:36	0° 
	8087 May 01 07:01	0° 		8089 Oct 29 20:24	0° 
evening max el	8087 May 18 17:14	18°  23'39 46°46'39	morning set	8089 Nov 09 13:02	13°  09'13
	8087 May 30 21:01	0° 		8089 Nov 23 04:55	0° 
greatest brilliancy	8087 Jun 27 01:46	18°  03'03 -4.8m	max. Earth dist.	8089 Dec 14 05:43	26°  00'12 1.72826 AU
retrograde	8087 Jul 07 23:00	20°  09'21			
evening set	8087 Jul 22 19:42	16°  08'25	superior conj	8089 Dec 16 08:08	28°  36'16 1°00'18
min. Earth dist.	8087 Jul 28 14:32	13°  01'41 0.27904 AU	minimum elong	8089 Dec 16 17:58	29°  06'42 1°00'06
inferior conj	8087 Jul 29 01:56	12°  04'58 0°01'50		8089 Dec 17 11:11	0° 
minimum elong	8087 Jul 29 02:00	12°  04'52 0°01'42		8090 Jan 10 15:55	0° 
transit middle	8087 Jul 29 02:00	12°  04'52 0°01'42	desc. node	8090 Jan 12 22:42	2°  00'04
transit begin	8087 Jul 28 21:58	12°  05'08	evening rise	8090 Jan 23 17:53	16°  00'15'02
transit end	8087 Jul 29 06:02	12°  03'35		8090 Feb 03 19:15	0° 
desc. node	8087 Jul 29 04:52	12°  03'25		8090 Feb 27 21:16	0° 
morning rise	8087 Aug 04 09:04	9°  00'16		8090 Mar 23 23:07	0° 
direct	8087 Aug 19 04:11	4°  04'58		8090 Apr 17 03:30	0° 
greatest brilliancy	8087 Aug 28 21:02	6°  02'59 -4.8m	asc. node	8090 May 05 21:50	23°  03'06
	8087 Oct 01 23:17	0° 		8090 May 11 14:41	0° 
morning max el	8087 Oct 06 23:03	4°  00'34 45°44'42		8090 Jun 05 14:56	0° 
	8087 Oct 31 16:17	0° 		8090 Jul 01 16:01	0° 
asc. node	8087 Nov 19 04:14	20°  02'54	evening max el	8090 Jul 28 13:37	28°  00'27'38 46°00'30
	8087 Nov 27 11:47	0° 		8090 Jul 30 03:30	0° 
	8087 Dec 23 00:59	0° 	desc. node	8090 Aug 25 16:28	21°  05'34
	8088 Jan 16 21:17	0° 	greatest brilliancy	8090 Sep 05 04:50	27°  01'35 -4.7m
	8088 Feb 10 07:29	0° 	retrograde	8090 Sep 15 22:49	29°  02'09
	8088 Mar 05 11:24	0° 	evening set	8090 Oct 03 07:58	23°  02'34
desc. node	8088 Mar 09 20:59	5°  00'29'19	min. Earth dist.	8090 Oct 07 04:25	21°  02'20 0.29115 AU
	8088 Mar 29 11:10	0° 	inferior conj	8090 Oct 07 12:26	21°  02'46 -8°01'02
morning set	8088 Apr 05 07:47	8°  00'36'26	minimum elong	8090 Oct 07 05:27	21°  02'18'43 8°00'14
	8088 Apr 22 08:28	0° 	morning rise	8090 Oct 11 03:00	18°  02'53'38
			direct	8090 Oct 29 00:19	12°  02'51'39
superior conj	8088 May 15 23:52	29°  04'3'06 -1°23'50	greatest brilliancy	8090 Nov 08 06:09	14°  02'45'09 -4.7m
minimum elong	8088 May 16 06:34	0°  02'04'06 1°23'53		8090 Dec 02 12:35	0° 
	8088 May 16 05:15	0° 	asc. node	8090 Dec 16 15:57	12°  02'48'37
max. Earth dist.	8088 May 18 06:37	2°  02'34'57 1.71365 AU	morning max el	8090 Dec 17 02:08	13°  02'13'19 45°52'26
	8088 Jun 09 03:35	0° 		8091 Jan 02 11:03	0° 
evening rise	8088 Jun 25 04:38	20°  02'01'24		8091 Jan 29 06:51	0° 
asc. node	8088 Jun 30 19:21	27°  02'00'38		8091 Feb 23 16:05	0° 
	8088 Jul 03 05:04	0° 		8091 Mar 20 08:34	0° 
	8088 Jul 27 10:47	0° 	desc. node	8091 Apr 07 09:19	22°  02'13'45
	8088 Aug 20 21:45	0° 		8091 Apr 13 15:48	0° 
	8088 Sep 14 16:00	0° 		8091 May 07 17:57	0° 
	8088 Oct 09 21:07	0° 		8091 May 31 18:06	0° 
desc. node	8088 Oct 20 13:25	12°  02'28'49	morning set	8091 Jun 20 17:30	24°  02'11'57'00
	8088 Nov 04 19:10	0° 		8091 Jun 24 18:39	0° 
	8088 Dec 01 22:58	0° 		8091 Jul 18 21:03	0° 
evening max el	8088 Dec 20 21:23	19°  02'22'42 46°13'13			
	8089 Jan 01 07:40	0° 	superior conj	8091 Jul 29 11:47	13°  02'10'36 0°00'27
greatest brilliancy	8089 Jan 29 16:30	18°  02'48'23 -4.8m	minimum elong	8091 Jul 29 11:43	13°  02'10'23 0°00'20
retrograde	8089 Feb 08 10:47	20°  02'35'11	behind sun begin	8091 Jul 28 11:52	11°  02'56'24
asc. node	8089 Feb 10 13:18	20°  02'29'51	behind sun end	8091 Jul 30 11:34	14°  02'24'21
evening set	8089 Feb 23 04:47	16°  02'20'08	asc. node	8091 Jul 29 07:20	12°  02'56'45
inferior conj	8089 Mar 01 03:58	12°  02'49'25 4°35'41	max. Earth dist.	8091 Aug 01 03:13	16°  02'27'13 1.72603 AU
minimum elong	8089 Feb 28 18:33	13°  02'03'53 4°33'04		8091 Aug 12 01:45	0° 
min. Earth dist.	8089 Mar 01 03:31	12°  02'50'05 0.27041 AU	evening rise	8091 Sep 04 23:31	29°  02'10'31'35
morning rise	8089 Mar 06 07:59	9°  02'43'58		8091 Sep 05 08:44	0° 
direct	8089 Mar 21 20:29	4°  02'59'23		8091 Sep 29 18:25	0° 
greatest brilliancy	8089 Mar 31 23:06	6° 02'54'35 -4.9m		8091 Oct 24 07:49	0°
	8089 May 03 07:47	0°	desc. node	8091 Nov 18 01:02	29° 02'15'6'22
morning max el	8089 May 11 07:59	7° 02'49'12 46°58'53		8091 Nov 18 02:14	0°
	8089 Jun 01 04:55	0°		8091 Dec 13 02:50	0°

	8092 Jan 07 11:44	0° H			8094 Jun 14 18:38	0° II	
	8092 Feb 02 11:58	0° Y			8094 Jul 09 02:53	0° G	
	8092 Mar 01 03:41	0° B			8094 Aug 02 10:52	0° Q	
evening max el	8092 Mar 03 17:19	2° $\text{B}36'20$	46°56'19	asc. node	8094 Aug 25 19:34	28° $\text{Q}46'59$	
asc. node	8092 Mar 10 00:51	8° $\text{B}48'58$			8094 Aug 26 19:16	0° M	
	8092 Apr 05 12:33	0° II		morning set	8094 Aug 30 15:42	4° $\text{M}44'38$	
greatest brilliancy	8092 Apr 13 09:57	3° $\text{II}43'01$	-4.9m		8094 Sep 20 03:42	0° A	
retrograde	8092 Apr 23 06:42	5° $\text{II}33'53$					
	8092 May 10 04:16	30° $\text{R}8$		superior conj	8094 Oct 06 16:19	20° $\text{A}22'04$	1°19'22
evening set	8092 May 11 06:05	29° $\text{B}21'37$		minimum elong	8094 Oct 06 09:39	20° $\text{A}01'30$	1°19'17
inferior conj	8092 May 13 23:06	27° $\text{B}42'21$	8°52'38	max. Earth dist.	8094 Oct 06 20:09	20° $\text{A}33'52$	1.73316 AU
minimum elong	8092 May 14 04:46	27° $\text{B}33'38$	8°52'02		8094 Oct 14 11:51	0° M	
min. Earth dist.	8092 May 13 22:19	27° $\text{B}43'33$	0.27190 AU		8094 Nov 07 20:08	0° A	
morning rise	8092 May 17 03:32	25° $\text{B}46'14$		evening rise	8094 Nov 12 02:44	5° $\text{A}15'52$	
direct	8092 Jun 03 15:05	19° $\text{B}54'22$			8094 Dec 02 05:13	0° B	
greatest brilliancy	8092 Jun 13 05:45	21° $\text{B}39'00$	-4.9m	desc. node	8094 Dec 15 12:43	16° $\text{B}21'25$	
	8092 Jun 28 12:54	0° II			8094 Dec 26 15:24	0° \approx	
desc. node	8092 Jun 29 19:11	0° $\text{II}54'29$			8095 Jan 20 02:34	0° H	
morning max el	8092 Jul 23 14:25	21° $\text{II}46'56$	46°24'28		8095 Feb 13 15:19	0° Y	
	8092 Jul 31 18:04	0° G			8095 Mar 10 08:36	0° B	
	8092 Aug 28 11:31	0° Q			8095 Apr 04 13:55	0° II	
	8092 Sep 23 17:05	0° M		asc. node	8095 Apr 07 12:13	3° $\text{II}24'55$	
	8092 Oct 19 04:50	0° A			8095 May 01 00:30	0° G	
asc. node	8092 Oct 20 18:04	1° $\text{A}50'48$		evening max el	8095 May 16 07:21	16° $\text{G}03'37$	46°48'02
	8092 Nov 13 04:33	0° M			8095 May 31 02:05	0° Q	
	8092 Dec 07 19:26	0° A		greatest brilliancy	8095 Jun 24 18:39	16° $\text{Q}23'57$	-4.8m
	8093 Jan 01 04:02	0° B		retrograde	8095 Jul 05 13:41	18° $\text{Q}33'38$	
morning set	8093 Jan 18 03:03	21° $\text{B}01'23$		evening set	8095 Jul 20 11:37	14° $\text{Q}12'00$	
	8093 Jan 25 08:21	0° \approx		inferior conj	8095 Jul 26 16:51	10° $\text{Q}29'09$	0°23'44
desc. node	8093 Feb 09 10:48	18° $\approx 49'25$		minimum elong	8095 Jul 26 17:45	10° $\text{Q}27'45$	0°23'20
	8093 Feb 18 09:30	0° H		min. Earth dist.	8095 Jul 26 06:30	10° $\text{Q}45'15$	0.27860 AU
max. Earth dist.	8093 Feb 23 20:56	6° $\text{H}50'59$	1.71622 AU	desc. node	8095 Jul 28 06:51	9° $\text{Q}30'17$	
				morning rise	8095 Aug 02 00:33	6° $\text{Q}44'24$	
superior conj	8093 Feb 26 16:02	10° $\text{H}20'56$	-0°40'20	direct	8095 Aug 16 18:12	2° $\text{Q}32'43$	
minimum elong	8093 Feb 26 06:46	9° $\text{H}51'56$	0°39'52	greatest brilliancy	8095 Aug 26 12:04	4° $\text{Q}16'14$	-4.8m
	8093 Mar 14 08:12	0° Y			8095 Oct 01 23:23	0° M	
	8093 Apr 07 05:30	0° B		morning max el	8095 Oct 04 12:59	2° $\text{M}25'42$	45°45'16
evening rise	8093 Apr 07 21:59	0° $\text{B}51'45$			8095 Oct 31 08:11	0° A	
	8093 May 01 03:16	0° II		asc. node	8095 Nov 18 06:06	19° $\text{A}55'56$	
	8093 May 25 03:53	0° G			8095 Nov 27 01:01	0° M	
asc. node	8093 Jun 02 09:29	10° $\text{G}13'19$			8095 Dec 22 12:59	0° A	
	8093 Jun 18 09:57	0° Q			8096 Jan 16 08:39	0° B	
	8093 Jul 13 00:22	0° M			8096 Feb 09 18:32	0° \approx	
	8093 Aug 07 03:47	0° A			8096 Mar 04 22:17	0° H	
	8093 Sep 02 05:51	0° M		desc. node	8096 Mar 08 22:59	5° $\text{H}01'39$	
desc. node	8093 Sep 22 03:56	21° $\text{M}37'57$			8096 Mar 28 21:58	0° Y	
	8093 Sep 30 07:38	0° A		morning set	8096 Apr 02 17:55	6° $\text{Y}03'43$	
evening max el	8093 Oct 07 14:35	7° $\text{A}09'18$	45°40'58		8096 Apr 21 19:12	0° B	
	8093 Nov 04 20:04	0° B					
greatest brilliancy	8093 Nov 15 17:14	5° $\text{B}10'47$	-4.7m	superior conj	8096 May 13 11:13	27° $\text{B}14'25$	-1°24'55
retrograde	8093 Nov 25 06:00	6° $\text{B}49'04$		minimum elong	8096 May 13 17:00	27° $\text{B}32'36$	1°24'58
evening set	8093 Dec 11 19:52	1° $\text{B}35'39$		max. Earth dist.	8096 May 15 10:15	29° $\text{B}42'07$	1.71336 AU
	8093 Dec 14 11:40	30° $\text{R}8$			8096 May 15 15:56	0° II	
inferior conj	8093 Dec 16 11:15	28° $\text{A}46'01$	-6°09'27		8096 Jun 08 14:14	0° G	
minimum elong	8093 Dec 16 21:23	28° $\text{A}30'11$	6°07'08	evening rise	8096 Jun 22 17:25	17° $\text{G}38'32$	
min. Earth dist.	8093 Dec 17 07:20	28° $\text{A}14'40$	0.28400 AU	asc. node	8096 Jun 29 21:22	26° $\text{G}33'44$	
morning rise	8093 Dec 21 22:29	25° $\text{A}27'14$			8096 Jul 02 15:44	0° Q	
direct	8094 Jan 06 19:47	20° $\text{A}34'02$			8096 Jul 26 21:31	0° M	
asc. node	8094 Jan 13 03:41	21° $\text{A}20'13$			8096 Aug 20 08:42	0° A	
greatest brilliancy	8094 Jan 17 22:06	22° $\text{A}50'53$	-4.8m		8096 Sep 14 03:24	0° M	
	8094 Jan 30 18:25	0° B			8096 Oct 09 09:24	0° A	
morning max el	8094 Feb 26 00:18	22° $\text{B}56'34$	46°36'08	desc. node	8096 Oct 19 15:18	11° $\text{A}57'00$	
	8094 Mar 04 21:25	0° \approx			8096 Nov 04 09:09	0° B	
	8094 Apr 01 00:40	0° H			8096 Dec 01 16:38	0° \approx	
	8094 Apr 26 12:38	0° Y		evening max el	8096 Dec 18 10:37	17° $\approx 02'36$	46°11'34
desc. node	8094 May 04 21:28	10° $\text{Y}03'37$			8097 Jan 01 14:10	0° H	
	8094 May 21 07:33	0° B		greatest brilliancy	8097 Jan 27 05:29	16° $\text{H}25'13$	-4.8m

retrograde	8097 Feb 05 23:43	18° H 12'12		behind sun begin	8099 Jul 26 03:43	9° Ω 43'44	
asc. node	8097 Feb 09 15:23	17° H 56'00		behind sun end	8099 Jul 28 03:01	12° Ω 10'30	
evening set	8097 Feb 20 15:52	13° H 59'10		asc. node	8099 Jul 28 09:23	12° Ω 30'15	
inferior conj	8097 Feb 26 17:03	10° H 26'02	4°14'35	max. Earth dist.	8099 Jul 29 21:04	14° Ω 20'53	1.72562 AU
minimum elong	8097 Feb 26 08:10	10° H 39'40	4°12'04		8099 Aug 11 12:19	0° M	
min. Earth dist.	8097 Feb 26 17:30	10° H 25'21	0.27061 AU	evening rise	8099 Sep 02 16:42	27° M 24'03	
morning rise	8097 Mar 04 00:07	7° H 16'35			8099 Sep 04 19:19	0° Ω	
direct	8097 Mar 19 09:43	2° H 35'16			8099 Sep 29 05:07	0° M	
greatest brilliancy	8097 Mar 29 14:06	4° H 32'20	-4.9m		8099 Oct 23 18:47	0° H	
	8097 May 03 09:23	0° Y		desc. node	8099 Nov 17 02:59	29° H 27'51	
morning max el	8097 May 08 22:03	5° Y 27'12	46°59'12		8099 Nov 17 13:39	0° Ω	
	8097 May 31 21:51	0° Ω			8099 Dec 12 15:01	0° \approx	
desc. node	8097 Jun 01 09:29	0° Ω 32'26			8100 Jan 07 01:14	0° H	
	8097 Jun 27 01:44	0° II			8100 Feb 02 03:55	0° Y	
	8097 Jul 22 09:34	0° Ω			8100 Mar 02 01:49	0° Ω	
	8097 Aug 16 09:01	0° Ω		evening max el	8100 Mar 02 08:00	0° Ω 15'32	46°55'17
	8097 Sep 10 04:01	0° M		asc. node	8100 Mar 10 02:48	7° Ω 51'43	
asc. node	8097 Sep 22 07:47	14° M 46'56			8100 Apr 08 18:40	0° II	
	8097 Oct 04 19:17	0° Ω		greatest brilliancy	8100 Apr 11 22:53	1° II 17'19	-4.9m
	8097 Oct 29 06:52	0° M		retrograde	8100 Apr 21 20:03	3° II 08'05	
morning set	8097 Nov 07 06:35	11° M 03'17			8100 May 04 06:02	30° R Ω	
	8097 Nov 22 15:20	0° H		evening set	8100 May 09 21:05	26° Ω 53'07	
max. Earth dist.	8097 Dec 12 01:40	24° H 01'01	1.72864 AU	inferior conj	8100 May 12 11:56	25° Ω 16'56	8°58'29
				minimum elong	8100 May 12 16:45	25° Ω 09'31	8°58'02
superior conj	8097 Dec 14 00:28	26° H 25'50	1°02'40	min. Earth dist.	8100 May 12 10:31	25° Ω 19'08	0.27177 AU
minimum elong	8097 Dec 14 10:15	26° H 56'08	1°02'29	morning rise	8100 May 15 12:31	23° Ω 26'28	
	8097 Dec 16 21:39	0° Ω		direct	8100 Jun 02 04:23	17° Ω 29'23	
	8098 Jan 10 02:31	0° \approx		greatest brilliancy	8100 Jun 11 17:29	19° Ω 12'53	-4.9m
desc. node	8098 Jan 12 00:46	2° \approx 23'33		desc. node	8100 Jun 29 21:15	29° Ω 39'28	
evening rise	8098 Jan 21 08:15	13° \approx 57'23			8100 Jun 30 08:04	0° II	
	8098 Feb 03 06:00	0° H		morning max el	8100 Jul 22 04:03	19° II 25'51	46°26'03
	8098 Feb 27 08:13	0° Y			8100 Aug 01 13:54	0° Ω	
	8098 Mar 23 10:20	0° Ω			8100 Aug 29 02:33	0° Ω	
	8098 Apr 16 15:08	0° II			8100 Sep 24 06:03	0° M	
asc. node	8098 May 04 23:43	22° II 32'04			8100 Oct 19 16:42	0° Ω	
	8098 May 11 02:56	0° Ω		asc. node	8100 Oct 20 19:54	1° Ω 21'03	
	8098 Jun 05 04:17	0° Ω			8100 Nov 13 15:48	0° M	
	8098 Jul 01 07:41	0° M			8100 Dec 08 06:20	0° H	
evening max el	8098 Jul 26 05:49	26° M 16'46	46°02'08		8101 Jan 01 14:46	0° Ω	
	8098 Jul 30 02:06	0° Ω		morning set	8101 Jan 16 18:00	18° Ω 45'37	
desc. node	8098 Aug 24 18:34	20° Ω 40'36			8101 Jan 25 19:02	0° \approx	
greatest brilliancy	8098 Sep 02 19:26	25° Ω 09'02	-4.7m	desc. node	8101 Feb 09 12:47	18° \approx 22'12	
retrograde	8098 Sep 13 15:52	27° Ω 17'42			8101 Feb 18 20:14	0° H	
evening set	8098 Sep 30 21:16	21° Ω 38'25		max. Earth dist.	8101 Feb 22 05:25	4° H 13'47	1.71664 AU
inferior conj	8098 Oct 05 04:46	18° Ω 59'09	-7°53'29				
minimum elong	8098 Oct 04 21:17	19° Ω 10'54	7°52'32	superior conj	8101 Feb 25 04:19	7° H 55'32	-0°36'54
min. Earth dist.	8098 Oct 04 19:20	19° Ω 13'58	0.29094 AU	minimum elong	8101 Feb 24 19:42	7° H 28'36	0°36'26
morning rise	8098 Oct 08 21:25	16° Ω 42'12			8101 Mar 14 19:01	0° Y	
direct	8098 Oct 26 16:49	10° Ω 43'33		evening rise	8101 Apr 06 08:58	28° Y 21'12	
greatest brilliancy	8098 Nov 05 20:58	12° Ω 35'59	-4.7m		8101 Apr 07 16:26	0° Ω	
	8098 Dec 02 17:37	0° M			8101 May 01 14:18	0° II	
morning max el	8098 Dec 14 18:31	11° M 04'19	45°51'16		8101 May 25 15:05	0° Ω	
asc. node	8098 Dec 15 18:01	12° M 01'34		asc. node	8101 Jun 02 11:29	9° Ω 44'33	
	8099 Jan 02 03:55	0° H			8101 Jun 18 21:25	0° Ω	
	8099 Jan 28 20:37	0° Ω			8101 Jul 13 12:21	0° M	
	8099 Feb 23 04:32	0° \approx			8101 Aug 07 16:43	0° Ω	
	8099 Mar 19 20:20	0° H			8101 Sep 02 20:46	0° M	
desc. node	8099 Apr 06 11:14	21° H 44'12		desc. node	8101 Sep 22 05:49	20° M 56'01	
	8099 Apr 13 03:10	0° Y			8101 Oct 01 03:50	0° H	
	8099 May 07 05:02	0° Ω		evening max el	8101 Oct 06 05:06	4° H 55'31	45°40'48
	8099 May 31 04:59	0° II			8101 Nov 07 09:13	0° Ω	
morning set	8099 Jun 18 06:45	22° II 34'58		greatest brilliancy	8101 Nov 14 08:33	2° Ω 59'04	-4.7m
	8099 Jun 24 05:23	0° Ω		retrograde	8101 Nov 23 20:24	4° Ω 36'52	
	8099 Jul 18 07:41	0° Ω			8101 Dec 09 09:18	30° R H	
				evening set	8101 Dec 10 14:07	29° H 18'59	
superior conj	8099 Jul 27 02:37	10° Ω 54'50	-0°03'08	inferior conj	8101 Dec 15 02:46	26° H 33'13	-6°23'45
minimum elong	8099 Jul 27 03:22	10° Ω 57'08	0°03'13	minimum elong	8101 Dec 15 12:53	26° H 17'25	6°21'30

min. Earth dist.	8101 Dec 15 22:53	26° 27 01'46	0.28452 AU
morning rise	8101 Dec 20 11:10	23° 27 18'02	
direct	8102 Jan 05 11:21	18° 27 20'38	
asc. node	8102 Jan 13 05:42	19° 27 29'03	