




































































































































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minimum elong	15100 May 06 17:04	26° ♄ 50'24	0°53'24	morning rise	15102 Oct 09 00:16	21° ♄ 48'32	
	15100 May 09 06:14	0° ♄		direct	15102 Oct 23 14:57	17° ♄ 39'49	
	15100 Jun 02 09:41	0° ♄		greatest brilliancy	15102 Nov 02 10:05	19° ♄ 25'23	-4.8m
evening rise	15100 Jun 15 01:33	15° ♄ 46'17			15102 Nov 20 20:46	0° ♄	
	15100 Jun 26 11:24	0° ♄		morning max el	15102 Dec 12 02:11	18° ♄ 35'38	46°13'23
	15100 Jul 20 12:49	0° ♄			15102 Dec 23 10:10	0° ♄	
asc. node	15100 Aug 04 07:08	18° ♄ 22'27			15103 Jan 19 23:33	0° ♄	
	15100 Aug 13 15:47	0° ♄		asc. node	15103 Jan 20 10:12	0° ♄ 30'03	
	15100 Sep 06 22:25	0° ♄			15103 Feb 14 23:19	0° ♄	
	15100 Oct 01 12:11	0° ♄			15103 Mar 12 04:56	0° ♄	
	15100 Oct 26 15:45	0° ♄			15103 Apr 06 00:26	0° ♄	
	15100 Nov 21 23:12	0° ♄			15103 Apr 30 13:30	0° ♄	
desc. node	15100 Nov 24 02:02	2° ♄ 19'21		desc. node	15103 May 12 07:02	14° ♄ 25'52	
evening max el	15100 Dec 16 17:33	25° ♄ 50'20	46°08'40		15103 May 24 21:32	0° ♄	
	15100 Dec 21 02:09	0° ♄		morning set	15103 Jun 10 20:06	21° ♄ 00'58	
greatest brilliancy	15101 Jan 24 22:17	24° ♄ 32'22	-4.8m		15103 Jun 18 01:17	0° ♄	
retrograde	15101 Feb 03 22:16	26° ♄ 21'03			15103 Jul 12 01:47	0° ♄	
evening set	15101 Feb 20 01:11	21° ♄ 21'29		max. Earth dist.	15103 Jul 18 13:20	8° ♄ 06'53	1.71642 AU
inferior conj	15101 Feb 25 07:19	18° ♄ 09'02	-4°39'18				
minimum elong	15101 Feb 25 16:29	17° ♄ 54'37	4°36'35	superior conj	15103 Jul 20 14:05	10° ♄ 39'31	-1°22'02
min. Earth dist.	15101 Feb 25 14:16	17° ♄ 58'07	0.28602 AU	minimum elong	15103 Jul 20 21:57	11° ♄ 04'10	1°22'42
morning rise	15101 Mar 03 07:46	14° ♄ 31'08			15103 Aug 05 00:34	0° ♄	
asc. node	15101 Mar 17 03:06	10° ♄ 01'04			15103 Aug 28 23:09	0° ♄	
direct	15101 Mar 18 15:09	9° ♄ 58'24		evening rise	15103 Aug 29 17:37	0° ♄ 57'48	
greatest brilliancy	15101 Mar 29 08:36	12° ♄ 05'07	-4.8m	asc. node	15103 Sep 01 21:28	4° ♄ 55'10	
	15101 Apr 25 03:40	0° ♄			15103 Sep 21 22:55	0° ♄	
morning max el	15101 May 06 23:31	11° ♄ 02'22	46°02'36		15103 Oct 16 01:23	0° ♄	
	15101 May 25 06:53	0° ♄			15103 Nov 09 09:00	0° ♄	
	15101 Jun 20 23:00	0° ♄			15103 Dec 04 01:36	0° ♄	
desc. node	15101 Jul 07 05:19	19° ♄ 06'57		desc. node	15103 Dec 22 13:37	22° ♄ 01'50	
	15101 Jul 16 07:52	0° ♄			15103 Dec 29 08:49	0° ♄	
	15101 Aug 10 00:49	0° ♄			15104 Jan 24 15:52	0° ♄	
	15101 Sep 03 09:21	0° ♄			15104 Feb 21 22:29	0° ♄	
	15101 Sep 27 13:54	0° ♄		evening max el	15104 Feb 26 13:53	4° ♄ 33'26	45°58'40
	15101 Oct 21 16:45	0° ♄			15104 Mar 29 09:33	0° ♄	
asc. node	15101 Oct 28 00:02	7° ♄ 50'52		greatest brilliancy	15104 Apr 05 18:44	3° ♄ 22'02	-4.8m
morning set	15101 Nov 07 20:44	21° ♄ 22'28		asc. node	15104 Apr 13 12:29	5° ♄ 07'22	
	15101 Nov 14 18:59	0° ♄		retrograde	15104 Apr 15 19:00	5° ♄ 13'27	
	15101 Dec 08 21:27	0° ♄		evening set	15104 May 01 03:27	0° ♄ 36'40	
					15104 May 02 05:12	30° ♄	
superior conj	15101 Dec 15 19:14	8° ♄ 35'08	1°24'58	inferior conj	15104 May 06 21:11	27° ♄ 09'05	5°27'55
minimum elong	15101 Dec 15 15:22	8° ♄ 23'09	1°25'55	minimum elong	15104 May 06 11:00	27° ♄ 25'01	5°24'37
max. Earth dist.	15101 Dec 18 05:13	11° ♄ 35'14	1.72542 AU	min. Earth dist.	15104 May 06 19:54	27° ♄ 11'06	0.28136 AU
	15102 Jan 02 01:22	0° ♄		morning rise	15104 May 11 18:19	24° ♄ 09'59	
evening rise	15102 Jan 22 01:59	24° ♄ 45'22		direct	15104 May 27 23:29	19° ♄ 00'22	
	15102 Jan 26 08:05	0° ♄		greatest brilliancy	15104 Jun 07 05:44	20° ♄ 58'04	-4.8m
desc. node	15102 Feb 16 14:35	26° ♄ 07'53			15104 Jun 23 03:48	0° ♄	
	15102 Feb 19 18:24	0° ♄		morning max el	15104 Jul 17 03:48	21° ♄ 15'07	46°44'55
	15102 Mar 16 08:10	0° ♄			15104 Jul 25 16:17	0° ♄	
	15102 Apr 10 01:07	0° ♄		desc. node	15104 Aug 03 15:35	9° ♄ 37'54	
	15102 May 04 22:18	0° ♄			15104 Aug 21 18:27	0° ♄	
	15102 May 30 03:54	0° ♄			15104 Sep 16 07:27	0° ♄	
asc. node	15102 Jun 09 07:14	11° ♄ 50'50			15104 Oct 11 04:58	0° ♄	
	15102 Jun 25 04:03	0° ♄			15104 Nov 04 19:15	0° ♄	
	15102 Jul 23 02:39	0° ♄		asc. node	15104 Nov 24 13:09	24° ♄ 14'06	
evening max el	15102 Jul 23 21:44	0° ♄ 47'50	46°40'11		15104 Nov 29 05:34	0° ♄	
	15102 Aug 29 21:51	0° ♄			15104 Dec 23 13:21	0° ♄	
greatest brilliancy	15102 Sep 01 15:20	1° ♄ 07'54	-4.9m		15105 Jan 16 19:51	0° ♄	
retrograde	15102 Sep 12 02:04	3° ♄ 10'15		morning set	15105 Jan 17 04:10	0° ♄ 25'43	
	15102 Sep 24 17:36	30° ♄			15105 Feb 10 02:23	0° ♄	
evening set	15102 Sep 26 13:37	29° ♄ 04'17					
desc. node	15102 Sep 29 08:08	27° ♄ 31'12		superior conj	15105 Feb 23 02:36	16° ♄ 03'36	0°48'17
inferior conj	15102 Oct 02 20:58	25° ♄ 23'35	-0°55'22	minimum elong	15105 Feb 23 11:48	16° ♄ 32'00	0°48'14
minimum elong	15102 Oct 02 18:48	25° ♄ 26'53	0°54'21	max. Earth dist.	15105 Feb 23 23:38	17° ♄ 08'31	1.73122 AU

	15105 Mar 06 09:50	0° Υ		direct	15107 Aug 08 18:00	0° Ω 57'08	
desc. node	15105 Mar 16 04:56	12° Υ 04'23		greatest brilliancy	15107 Aug 18 20:34	2° Ω 52'53	-4.9m
	15105 Mar 30 18:04	0° \mathcal{B}		desc. node	15107 Sep 01 00:55	10° Ω 00'43	
evening rise	15105 Apr 02 01:18	2° \mathcal{B} 50'09			15107 Sep 24 11:25	0° \mathcal{M}	
	15105 Apr 24 02:21	0° Π		morning max el	15107 Sep 28 05:15	3° \mathcal{M} 42'01	46°53'11
	15105 May 18 10:19	0° \mathcal{G}			15107 Oct 22 22:36	0° \mathcal{L}	
	15105 Jun 11 18:56	0° Ω			15107 Nov 18 05:28	0° \mathcal{M}	
	15105 Jul 06 06:36	0° \mathcal{M}			15107 Dec 13 15:35	0° \mathcal{A}	
asc. node	15105 Jul 06 19:34	0° \mathcal{M} 39'32		asc. node	15107 Dec 23 01:18	11° \mathcal{A} 15'27	
	15105 Jul 31 01:24	0° \mathcal{L}			15108 Jan 07 14:25	0° \mathcal{B}	
	15105 Aug 25 10:37	0° \mathcal{M}			15108 Feb 01 06:16	0° \approx	
	15105 Sep 21 04:05	0° \mathcal{A}			15108 Feb 25 18:01	0° \mathcal{H}	
evening max el	15105 Oct 03 22:21	13° \mathcal{A} 15'53	46°35'00		15108 Mar 21 03:30	0° Υ	
	15105 Oct 22 03:21	0° \mathcal{B}		morning set	15108 Mar 27 04:54	7° Υ 27'55	
desc. node	15105 Oct 26 17:36	3° \mathcal{B} 36'47		desc. node	15108 Apr 12 19:11	27° Υ 56'10	
greatest brilliancy	15105 Nov 12 08:04	13° \mathcal{B} 17'43	-4.8m		15108 Apr 14 11:17	0° \mathcal{B}	
retrograde	15105 Nov 23 02:26	15° \mathcal{B} 25'55		max. Earth dist.	15108 May 02 04:21	21° \mathcal{B} 54'34	1.72640 AU
evening set	15105 Dec 11 02:20	9° \mathcal{B} 18'01					
inferior conj	15105 Dec 14 09:56	7° \mathcal{B} 15'56	-8°46'19	superior conj	15108 May 04 17:54	25° \mathcal{B} 05'14	-0°50'09
minimum elong	15105 Dec 14 05:38	7° \mathcal{B} 22'36	8°45'05	minimum elong	15108 May 04 07:43	24° \mathcal{B} 33'40	0°50'28
min. Earth dist.	15105 Dec 13 18:48	7° \mathcal{B} 39'22	0.28374 AU		15108 May 08 17:02	0° Π	
morning rise	15105 Dec 17 09:07	5° \mathcal{B} 26'55			15108 Jun 01 20:32	0° \mathcal{G}	
	15105 Dec 29 11:37	30° \mathcal{R} \mathcal{A}		evening rise	15108 Jun 12 14:33	13° \mathcal{G} 23'10	
direct	15106 Jan 04 13:48	29° \mathcal{A} 15'29			15108 Jun 25 22:23	0° Ω	
	15106 Jan 10 20:28	0° \mathcal{B}			15108 Jul 20 00:01	0° \mathcal{M}	
greatest brilliancy	15106 Jan 14 08:27	1° \mathcal{B} 00'21	-4.8m	asc. node	15108 Aug 03 09:03	17° \mathcal{M} 53'13	
asc. node	15106 Feb 16 19:51	24° \mathcal{B} 08'31			15108 Aug 13 03:15	0° \mathcal{L}	
morning max el	15106 Feb 22 14:54	29° \mathcal{B} 37'21	45°44'11		15108 Sep 06 10:18	0° \mathcal{M}	
	15106 Feb 23 00:15	0° \approx			15108 Oct 01 00:42	0° \mathcal{A}	
	15106 Mar 23 14:40	0° \mathcal{H}			15108 Oct 26 05:27	0° \mathcal{B}	
	15106 Apr 18 22:15	0° Υ			15108 Nov 21 15:31	0° \approx	
	15106 May 14 06:20	0° \mathcal{B}		desc. node	15108 Nov 23 03:59	1° \approx 39'30	
	15106 Jun 08 01:05	0° Π		evening max el	15108 Dec 14 07:53	23° \approx 34'43	46°09'29
desc. node	15106 Jun 08 19:44	0° Π 56'56			15108 Dec 21 02:47	0° \mathcal{H}	
	15106 Jul 02 10:54	0° \mathcal{G}		greatest brilliancy	15109 Jan 22 14:36	22° \mathcal{H} 21'47	-4.8m
	15106 Jul 26 14:41	0° Ω		retrograde	15109 Feb 01 13:22	24° \mathcal{H} 09'44	
	15106 Aug 19 15:00	0° \mathcal{M}		evening set	15109 Feb 17 19:40	19° \mathcal{H} 06'20	
morning set	15106 Aug 24 08:30	5° \mathcal{M} 55'05		inferior conj	15109 Feb 22 23:13	15° \mathcal{H} 57'42	-4°56'50
	15106 Sep 12 14:00	0° \mathcal{L}		minimum elong	15109 Feb 23 08:44	15° \mathcal{H} 42'45	4°54'05
asc. node	15106 Sep 29 11:46	21° \mathcal{L} 10'19		min. Earth dist.	15109 Feb 23 06:29	15° \mathcal{H} 46'17	0.28617 AU
				morning rise	15109 Feb 28 21:43	12° \mathcal{H} 22'11	
superior conj	15106 Oct 02 22:23	25° \mathcal{L} 28'54	0°08'27	direct	15109 Mar 16 06:36	7° \mathcal{H} 46'59	
minimum elong	15106 Oct 02 20:13	25° \mathcal{L} 22'07	0°08'39	asc. node	15109 Mar 16 05:01	7° \mathcal{H} 47'00	
behind sun begin	15106 Oct 01 23:01	24° \mathcal{L} 15'43		greatest brilliancy	15109 Mar 27 00:49	9° \mathcal{H} 53'46	-4.8m
behind sun end	15106 Oct 03 17:26	26° \mathcal{L} 28'32			15109 Apr 25 07:00	0° Υ	
max. Earth dist.	15106 Oct 04 03:44	27° \mathcal{L} 00'44	1.71688 AU	morning max el	15109 May 04 13:54	8° Υ 46'03	46°01'15
	15106 Oct 06 13:01	0° \mathcal{M}			15109 May 24 23:49	0° \mathcal{B}	
	15106 Oct 30 13:00	0° \mathcal{A}			15109 Jun 20 12:57	0° Π	
evening rise	15106 Nov 10 11:25	13° \mathcal{A} 38'15		desc. node	15109 Jul 06 07:20	18° Π 34'11	
	15106 Nov 23 15:08	0° \mathcal{B}			15109 Jul 15 20:29	0° \mathcal{G}	
	15106 Dec 17 21:22	0° \approx			15109 Aug 09 12:43	0° Ω	
	15107 Jan 11 09:55	0° \mathcal{H}			15109 Sep 02 20:51	0° \mathcal{M}	
desc. node	15107 Jan 19 02:37	9° \mathcal{H} 19'55			15109 Sep 27 01:06	0° \mathcal{L}	
	15107 Feb 05 06:44	0° Υ			15109 Oct 21 03:44	0° \mathcal{M}	
	15107 Mar 02 13:44	0° \mathcal{B}		asc. node	15109 Oct 27 01:46	7° \mathcal{M} 22'12	
	15107 Mar 28 11:27	0° Π		morning set	15109 Nov 05 10:54	19° \mathcal{M} 03'16	
	15107 Apr 24 14:35	0° \mathcal{G}			15109 Nov 14 05:49	0° \mathcal{A}	
evening max el	15107 May 09 11:35	15° \mathcal{G} 16'26	46°16'32		15109 Dec 08 08:10	0° \mathcal{B}	
asc. node	15107 May 11 22:16	17° \mathcal{G} 39'31					
	15107 May 25 13:17	0° Ω		superior conj	15109 Dec 13 11:18	6° \mathcal{B} 22'42	1°24'16
greatest brilliancy	15107 Jun 18 15:37	15° Ω 04'51	-4.8m	minimum elong	15109 Dec 13 06:41	6° \mathcal{B} 08'23	1°25'11
retrograde	15107 Jun 28 03:08	16° Ω 45'14		max. Earth dist.	15109 Dec 15 18:24	9° \mathcal{B} 13'53	1.72507 AU
evening set	15107 Jul 15 22:35	10° Ω 41'25			15110 Jan 01 12:03	0° \approx	
inferior conj	15107 Jul 18 19:50	8° Ω 55'06	8°42'36	evening rise	15110 Jan 19 18:03	22° \approx 33'53	
minimum elong	15107 Jul 19 02:29	8° Ω 44'46	8°41'08		15110 Jan 25 18:49	0° \mathcal{H}	
min. Earth dist.	15107 Jul 19 10:17	8° Ω 32'41	0.27478 AU	desc. node	15110 Feb 15 16:25	25° \mathcal{H} 40'19	
morning rise	15107 Jul 22 06:19	6° Ω 48'47			15110 Feb 19 05:16	0° Υ	

	15110 Mar 15 19:20	0°♄		15112 Aug 21 09:13	0°♏	
	15110 Apr 09 12:45	0°♅		15112 Sep 15 20:28	0°♎	
	15110 May 04 10:42	0°♆		15112 Oct 10 17:02	0°♍	
	15110 May 29 17:36	0°♎		15112 Nov 04 06:42	0°♌	
asc. node	15110 Jun 08 09:12	11°♏14'43	asc. node	15112 Nov 23 15:07	23°♌45'56	
	15110 Jun 24 20:15	0°♎		15112 Nov 28 16:36	0°♌	
evening max el	15110 Jul 21 10:16	28°♎22'22 46°39'47		15112 Dec 23 00:07	0°♏	
	15110 Jul 23 01:35	0°♍	morning set	15113 Jan 14 20:43	28°♏15'48	
greatest brilliancy	15110 Aug 30 05:48	28°♍44'44 -4.9m		15113 Jan 16 06:25	0°♎	
	15110 Sep 03 07:41	0°♌		15113 Feb 09 12:52	0°♋	
retrograde	15110 Sep 09 15:07	0°♌46'15				
	15110 Sep 15 18:57	30°♋♍	superior conj	15113 Feb 20 18:48	13°♋53'07 0°51'05	
evening set	15110 Sep 24 02:59	26°♍39'32	minimum elong	15113 Feb 21 04:17	14°♋22'23 0°51'04	
desc. node	15110 Sep 28 10:00	24°♍12'32	max. Earth dist.	15113 Feb 21 20:26	15°♋12'11 1.73116 AU	
inferior conj	15110 Sep 30 09:50	23°♍00'01 -0°31'16		15113 Mar 05 20:19	0°♐	
minimum elong	15110 Sep 30 08:37	23°♍01'52 0°30'34	desc. node	15113 Mar 15 06:41	11°♐37'24	
min. Earth dist.	15110 Sep 30 05:02	23°♍07'20 0.26998 AU		15113 Mar 30 04:38	0°♄	
morning rise	15110 Oct 06 14:26	19°♍23'22	evening rise	15113 Mar 30 17:04	0°♄38'16	
direct	15110 Oct 21 03:09	15°♍15'55		15113 Apr 23 13:03	0°♅	
greatest brilliancy	15110 Oct 31 00:08	17°♍03'12 -4.8m		15113 May 17 21:16	0°♆	
	15110 Nov 21 11:14	0°♌		15113 Jun 11 06:14	0°♎	
morning max el	15110 Dec 09 16:07	16°♌16'24 46°15'01	asc. node	15113 Jul 05 21:30	0°♎09'10	
	15110 Dec 23 05:17	0°♌		15113 Jul 05 18:29	0°♎	
asc. node	15111 Jan 19 12:06	29°♌53'56		15113 Jul 30 14:14	0°♍	
	15111 Jan 19 14:15	0°♏		15113 Aug 25 01:11	0°♌	
	15111 Feb 14 12:06	0°♎		15113 Sep 20 22:35	0°♌	
	15111 Mar 11 16:43	0°♋	evening max el	15113 Oct 01 14:11	11°♌00'43 46°35'39	
	15111 Apr 05 11:39	0°♐		15113 Oct 22 14:49	0°♏	
	15111 Apr 30 00:25	0°♄	desc. node	15113 Oct 25 19:38	2°♏24'52	
desc. node	15111 May 11 08:54	13°♄58'12	greatest brilliancy	15113 Nov 09 22:11	11°♏00'49 -4.8m	
	15111 May 24 08:18	0°♅	retrograde	15113 Nov 20 17:50	13°♏09'43	
morning set	15111 Jun 08 08:38	18°♅37'18	evening set	15113 Dec 08 14:10	7°♏06'43	
	15111 Jun 17 12:01	0°♆	min. Earth dist.	15113 Dec 11 08:17	5°♏25'33 0.28330 AU	
	15111 Jul 11 12:32	0°♎	inferior conj	15113 Dec 12 00:34	5°♏00'20 -8°41'54	
max. Earth dist.	15111 Jul 16 00:42	5°♎38'34 1.71668 AU	minimum elong	15113 Dec 11 19:28	5°♏08'14 8°40'33	
			morning rise	15113 Dec 15 00:59	3°♏09'29	
superior conj	15111 Jul 18 02:14	8°♎13'38 -1°23'18		15113 Dec 20 20:50	30°♋♌	
minimum elong	15111 Jul 18 09:19	8°♎35'49 1°24'01	direct	15114 Jan 02 04:41	27°♌00'52	
	15111 Aug 04 11:19	0°♎	greatest brilliancy	15114 Jan 11 21:02	28°♌43'56 -4.8m	
evening rise	15111 Aug 27 05:36	28°♎31'16		15114 Jan 15 03:29	0°♏	
	15111 Aug 28 09:57	0°♍	asc. node	15114 Feb 15 21:47	23°♏16'02	
asc. node	15111 Aug 31 23:09	4°♍26'37	morning max el	15114 Feb 20 05:40	27°♏23'16 45°44'23	
	15111 Sep 21 09:49	0°♌		15114 Feb 22 21:48	0°♎	
	15111 Oct 15 12:29	0°♌		15114 Mar 23 05:53	0°♋	
	15111 Nov 08 20:25	0°♏		15114 Apr 18 11:13	0°♐	
	15111 Dec 03 13:35	0°♎		15114 May 13 18:13	0°♄	
desc. node	15111 Dec 21 15:37	21°♎30'26	desc. node	15114 Jun 07 21:43	0°♅28'36	
	15111 Dec 28 21:50	0°♋		15114 Jun 07 12:21	0°♅	
	15112 Jan 24 07:03	0°♐		15114 Jul 01 21:49	0°♆	
	15112 Feb 21 19:24	0°♄		15114 Jul 26 01:23	0°♎	
evening max el	15112 Feb 24 05:38	2°♄21'51 45°58'43		15114 Aug 19 01:36	0°♎	
	15112 Mar 31 13:28	0°♅	morning set	15114 Aug 21 21:13	3°♎31'31	
greatest brilliancy	15112 Apr 03 08:32	1°♅06'18 -4.8m		15114 Sep 12 00:33	0°♍	
asc. node	15112 Apr 12 14:22	2°♅57'57	asc. node	15114 Sep 28 13:35	20°♍43'01	
retrograde	15112 Apr 13 10:26	2°♅58'47				
	15112 Apr 25 14:39	30°♋♄	superior conj	15114 Sep 30 11:24	23°♍06'25 0°04'42	
evening set	15112 Apr 28 16:09	28°♄24'56	minimum elong	15114 Sep 30 10:10	23°♍02'33 0°04'55	
inferior conj	15112 May 04 12:15	24°♄53'53 5°10'07	behind sun begin	15114 Sep 29 10:19	21°♍47'53	
minimum elong	15112 May 04 02:22	25°♄09'22 5°06'50	behind sun end	15114 Oct 01 10:01	24°♍17'14	
min. Earth dist.	15112 May 04 10:35	24°♄56'30 0.28149 AU	max. Earth dist.	15114 Oct 01 16:31	24°♍37'33 1.71670 AU	
morning rise	15112 May 09 12:24	21°♄50'40		15114 Oct 05 23:33	0°♌	
direct	15112 May 25 15:10	16°♄45'09		15114 Oct 29 23:32	0°♌	
greatest brilliancy	15112 Jun 04 20:59	18°♄42'52 -4.8m	evening rise	15114 Nov 08 02:13	11°♌21'56	
	15112 Jun 23 18:38	0°♅		15114 Nov 23 01:44	0°♏	
morning max el	15112 Jul 14 19:41	19°♅00'40 46°43'35		15114 Dec 17 08:06	0°♎	
	15112 Jul 25 11:11	0°♆		15115 Jan 10 20:58	0°♋	
desc. node	15112 Aug 02 17:32	8°♆56'23	desc. node	15115 Jan 18 04:26	8°♋51'36	

	15115 Feb 04 18:21	0°Υ			15117 Sep 02 07:58	0°ϯ		
	15115 Mar 02 02:18	0°Ϡ			15117 Sep 26 11:54	0°♁		
	15115 Mar 28 01:44	0°Π			15117 Oct 20 14:18	0°♌		
	15115 Apr 24 08:48	0°♄		asc. node	15117 Oct 26 03:42	6°♌55'23		
evening max el	15115 May 07 01:12	12°♄56'49	46°15'38	morning set	15117 Nov 03 01:21	16°♌46'05		
asc. node	15115 May 11 00:21	16°♄47'27			15117 Nov 13 16:14	0°♌		
	15115 May 25 23:27	0°♌			15117 Dec 07 18:33	0°♄		
greatest brilliancy	15115 Jun 16 05:35	12°♌45'00	-4.8m					
retrograde	15115 Jun 25 15:54	14°♌24'33		superior conj	15117 Dec 11 03:26	4°♄11'29	1°23'24	
evening set	15115 Jul 13 14:31	8°♌17'14		minimum elong	15117 Dec 10 22:05	3°♄54'53	1°24'18	
inferior conj	15115 Jul 16 09:30	6°♌34'12	8°49'15	max. Earth dist.	15117 Dec 13 08:04	6°♄55'03	1.72482 AU	
minimum elong	15115 Jul 16 15:21	6°♌25'06	8°47'55		15117 Dec 31 22:26	0°♌		
min. Earth dist.	15115 Jul 16 23:45	6°♌12'04	0.27509 AU	evening rise	15118 Jan 17 10:03	20°♌22'58		
morning rise	15115 Jul 19 16:06	4°♌33'25			15118 Jan 25 05:18	0°♌		
	15115 Jul 29 00:13	30°♌		desc. node	15118 Feb 14 18:08	25°♌13'03		
direct	15115 Aug 06 07:29	28°♌35'40			15118 Feb 18 15:56	0°Υ		
	15115 Aug 14 21:45	0°♌			15118 Mar 15 06:18	0°Ϡ		
greatest brilliancy	15115 Aug 16 10:30	0°♌31'20	-4.9m		15118 Apr 09 00:14	0°Π		
desc. node	15115 Aug 31 02:47	8°♌42'23			15118 May 03 22:59	0°♄		
	15115 Sep 24 10:39	0°ϯ			15118 May 29 07:13	0°♌		
morning max el	15115 Sep 25 18:11	1°ϯ18'40	46°53'44	asc. node	15118 Jun 07 11:06	10°♌38'45		
	15115 Oct 22 14:44	0°♁			15118 Jun 24 12:32	0°ϯ		
	15115 Nov 17 19:01	0°♌		evening max el	15118 Jul 18 23:41	25°ϯ59'56	46°39'29	
	15115 Dec 13 03:48	0°♌			15118 Jul 23 01:18	0°♁		
asc. node	15115 Dec 22 03:11	10°♌45'24		greatest brilliancy	15118 Aug 27 19:48	26°♁21'55	-4.9m	
	15116 Jan 07 01:50	0°♄		retrograde	15118 Sep 07 04:43	28°♁23'12		
	15116 Jan 31 17:12	0°♌		evening set	15118 Sep 21 16:39	24°♁15'25		
	15116 Feb 25 04:39	0°♌		inferior conj	15118 Sep 27 22:44	20°♁37'15	-0°07'00	
	15116 Mar 20 13:59	0°Υ		minimum elong	15118 Sep 27 22:28	20°♁37'40	0°06'40	
morning set	15116 Mar 24 20:35	5°Υ16'05		transit middle	15118 Sep 27 22:28	20°♁37'40	0°06'40	
desc. node	15116 Apr 11 20:59	27°Υ29'34		transit begin	15118 Sep 27 18:43	20°♁43'21		
	15116 Apr 13 21:43	0°Ϡ		transit end	15118 Sep 28 02:12	20°♁31'59		
max. Earth dist.	15116 Apr 29 18:45	19°Ϡ38'15	1.72675 AU	desc. node	15118 Sep 27 12:02	20°♁53'31		
				min. Earth dist.	15118 Sep 27 19:10	20°♁42'40	0.26977 AU	
superior conj	15116 May 02 08:05	22°Ϡ48'10	-0°47'09	morning rise	15118 Oct 04 04:26	16°♁59'30		
minimum elong	15116 May 01 22:16	22°Ϡ17'46	0°47'26	direct	15118 Oct 18 15:58	12°♁53'01		
	15116 May 08 03:29	0°Π		greatest brilliancy	15118 Oct 28 13:38	14°♁41'29	-4.8m	
	15116 Jun 01 07:04	0°♄			15118 Nov 21 21:29	0°♌		
evening rise	15116 Jun 10 03:39	11°♄01'36		morning max el	15118 Dec 07 06:45	13°♌59'57	46°16'37	
	15116 Jun 25 09:02	0°♌			15118 Dec 22 23:29	0°♌		
	15116 Jul 19 10:50	0°ϯ		asc. node	15119 Jan 18 13:59	29°♌18'49		
asc. node	15116 Aug 02 10:47	17°ϯ24'42			15119 Jan 19 04:27	0°♄		
	15116 Aug 12 14:18	0°♁			15119 Feb 14 00:36	0°♌		
	15116 Sep 05 21:44	0°♌			15119 Mar 11 04:19	0°♌		
	15116 Sep 30 12:49	0°♌			15119 Apr 04 22:46	0°Υ		
	15116 Oct 25 18:51	0°♄			15119 Apr 29 11:14	0°Ϡ		
	15116 Nov 21 07:47	0°♌		desc. node	15119 May 10 10:50	13°Ϡ30'59		
desc. node	15116 Nov 22 05:57	1°♌00'10			15119 May 23 19:00	0°Π		
evening max el	15116 Dec 11 21:45	21°♌18'39	46°10'11	morning set	15119 Jun 05 21:00	16°♌13'30		
	15116 Dec 21 04:29	0°♌			15119 Jun 16 22:40	0°♄		
greatest brilliancy	15117 Jan 20 06:19	20°♌10'38	-4.8m		15119 Jul 10 23:11	0°♌		
retrograde	15117 Jan 30 04:24	21°♌58'34		max. Earth dist.	15119 Jul 13 12:57	3°♌13'17	1.71691 AU	
evening set	15117 Feb 15 13:57	16°♌50'50						
inferior conj	15117 Feb 20 14:53	13°♌46'19	-5°14'05	superior conj	15119 Jul 15 14:13	5°♌47'31	-1°24'25	
minimum elong	15117 Feb 21 00:42	13°♌30'54	5°11'17	minimum elong	15119 Jul 15 20:26	6°♌06'58	1°25'11	
min. Earth dist.	15117 Feb 20 22:27	13°♌34'26	0.28635 AU		15119 Aug 03 22:00	0°ϯ		
morning rise	15117 Feb 26 11:16	10°♌13'42		evening rise	15119 Aug 24 17:33	26°ϯ04'47		
direct	15117 Mar 13 21:44	5°♌35'23			15119 Aug 27 20:42	0°♁		
asc. node	15117 Mar 15 06:57	5°♌37'38		asc. node	15119 Aug 31 01:00	3°♁58'44		
greatest brilliancy	15117 Mar 24 17:06	7°♌42'54	-4.8m		15119 Sep 20 20:40	0°♌		
	15117 Apr 25 08:30	0°Υ			15119 Oct 14 23:30	0°♌		
morning max el	15117 May 02 04:39	6°Υ31'20	46°00'02		15119 Nov 08 07:44	0°♄		
	15117 May 24 16:07	0°Ϡ			15119 Dec 03 01:27	0°♌		
	15117 Jun 20 02:27	0°Π		desc. node	15119 Dec 20 17:27	20°♌58'55		
desc. node	15117 Jul 05 09:09	18°♌01'54			15119 Dec 28 10:47	0°♌		
	15117 Jul 15 08:43	0°♄			15120 Jan 23 22:20	0°Υ		
	15117 Aug 09 00:16	0°♌			15120 Feb 21 17:06	0°Ϡ		




































































































































evening max el	15120 Feb 21 21:53	0° R 11'32	45°58'30			15122 Aug 18 12:34	0° M	
greatest brilliancy	15120 Mar 31 22:36	28° R 50'38	-4.8m	morning set		15122 Aug 19 09:32	1° M 05'38	
	15120 Apr 04 21:17	0° II				15122 Sep 11 11:26	0° A	
retrograde	15120 Apr 11 01:31	0° II 43'27		asc. node		15122 Sep 27 15:25	20° A 14'48	
asc. node	15120 Apr 11 16:28	0° II 42'59						
	15120 Apr 17 00:57	30° R 8		superior conj		15122 Sep 28 00:13	20° A 42'20	0°00'55
evening set	15120 Apr 26 05:00	26° R 12'36		minimum elong		15122 Sep 27 23:55	20° A 41'25	0°01'09
inferior conj	15120 May 02 03:14	22° R 38'14	4°51'40	behind sun begin		15122 Sep 26 23:09	19° A 23'53	
minimum elong	15120 May 01 17:43	22° R 53'08	4°48'26	behind sun end		15122 Sep 29 00:42	21° A 58'58	
min. Earth dist.	15120 May 02 01:20	22° R 41'12	0.28162 AU	max. Earth dist.		15122 Sep 29 03:26	22° A 07'33	1.71649 AU
morning rise	15120 May 07 06:20	19° R 30'48				15122 Oct 05 10:24	0° M	
direct	15120 May 23 06:57	14° R 29'34				15122 Oct 29 10:23	0° A	
greatest brilliancy	15120 Jun 02 12:04	16° R 26'55	-4.8m	evening rise		15122 Nov 05 16:57	9° A 04'22	
	15120 Jun 24 05:49	0° II				15122 Nov 22 12:38	0° Z	
morning max el	15120 Jul 12 10:48	16° II 44'00	46°42'13			15122 Dec 16 19:11	0° \approx	
	15120 Jul 25 05:41	0° E				15123 Jan 10 08:22	0° H	
desc. node	15120 Aug 01 19:28	8° E 14'57		desc. node		15123 Jan 17 06:13	8° H 22'15	
	15120 Aug 20 23:51	0° O				15123 Feb 04 06:17	0° Y	
	15120 Sep 15 09:27	0° M				15123 Mar 01 15:11	0° R	
	15120 Oct 10 05:06	0° A				15123 Mar 27 16:28	0° II	
	15120 Nov 03 18:12	0° M				15123 Apr 24 03:50	0° E	
asc. node	15120 Nov 22 16:58	23° M 17'18		evening max el		15123 May 04 13:49	10° E 33'50	46°14'33
	15120 Nov 28 03:41	0° A		asc. node		15123 May 10 02:12	15° E 52'42	
	15120 Dec 22 10:53	0° Z				15123 May 26 13:53	0° O	
morning set	15121 Jan 12 13:39	26° Z 07'01		greatest brilliancy		15123 Jun 13 19:17	10° O 23'19	-4.8m
	15121 Jan 15 17:00	0° \approx		retrograde		15123 Jun 23 04:32	12° O 02'25	
	15121 Feb 08 23:23	0° H		evening set		15123 Jul 11 05:56	5° O 51'45	
				inferior conj		15123 Jul 13 23:04	4° O 11'32	8°54'50
superior conj	15121 Feb 18 11:24	11° H 43'44	0°53'46	minimum elong		15123 Jul 14 04:05	4° O 03'45	8°53'36
minimum elong	15121 Feb 18 21:04	12° H 13'37	0°53'46	min. Earth dist.		15123 Jul 14 13:15	3° O 49'29	0.27548 AU
max. Earth dist.	15121 Feb 19 17:12	13° H 15'42	1.73109 AU	morning rise		15123 Jul 17 02:06	2° O 15'59	
	15121 Mar 05 06:52	0° Y				15123 Jul 21 01:51	30° R 8	
desc. node	15121 Mar 14 08:34	11° Y 10'38		direct		15123 Aug 03 20:43	26° E 12'07	
evening rise	15121 Mar 28 08:56	28° Y 26'27		greatest brilliancy		15123 Aug 14 00:53	28° E 08'31	-4.9m
	15121 Mar 29 15:19	0° R				15123 Aug 18 08:42	0° O	
	15121 Apr 22 23:57	0° II		desc. node		15123 Aug 30 04:49	7° O 24'54	
	15121 May 17 08:26	0° E		morning max el		15123 Sep 23 07:17	28° O 53'52	46°54'24
	15121 Jun 10 17:47	0° O				15123 Sep 24 09:34	0° M	
asc. node	15121 Jul 04 23:15	29° O 37'31				15123 Oct 22 07:08	0° A	
	15121 Jul 05 06:39	0° M				15123 Nov 17 08:53	0° M	
	15121 Jul 30 03:23	0° A				15123 Dec 12 16:21	0° A	
	15121 Aug 24 16:10	0° M		asc. node		15123 Dec 21 04:58	10° A 13'57	
	15121 Sep 20 17:50	0° A				15124 Jan 06 13:36	0° Z	
evening max el	15121 Sep 29 05:29	8° A 43'26	46°36'15			15124 Jan 31 04:29	0° \approx	
	15121 Oct 23 06:34	0° Z				15124 Feb 24 15:39	0° H	
desc. node	15121 Oct 24 21:39	1° Z 10'06				15124 Mar 20 00:49	0° Y	
greatest brilliancy	15121 Nov 07 13:04	8° Z 44'06	-4.8m	morning set		15124 Mar 22 12:45	3° Y 04'38	
retrograde	15121 Nov 18 08:47	10° Z 52'52		desc. node		15124 Apr 10 22:53	27° Y 02'11	
evening set	15121 Dec 06 01:50	4° Z 55'26				15124 Apr 13 08:28	0° R	
min. Earth dist.	15121 Dec 08 22:16	3° Z 10'45	0.28281 AU	max. Earth dist.		15124 Apr 27 12:04	17° R 29'58	1.72708 AU
inferior conj	15121 Dec 09 15:15	2° Z 44'23	-8°36'38					
minimum elong	15121 Dec 09 09:25	2° Z 53'27	8°35'10	superior conj		15124 Apr 29 22:44	20° R 31'35	-0°44'06
morning rise	15121 Dec 12 17:13	0° Z 51'07		minimum elong		15124 Apr 29 13:21	20° R 02'29	0°44'22
	15121 Dec 14 04:02	30° R 8				15124 May 07 14:16	0° II	
direct	15121 Dec 30 19:16	24° A 45'56				15124 May 31 17:56	0° E	
greatest brilliancy	15122 Jan 09 10:08	26° A 27'32	-4.8m	evening rise		15124 Jun 07 17:13	8° E 40'25	
	15122 Jan 17 07:48	0° Z				15124 Jun 24 20:05	0° O	
asc. node	15122 Feb 14 23:44	22° Z 24'16				15124 Jul 18 22:06	0° M	
morning max el	15122 Feb 17 19:31	25° Z 06'35	45°44'44	asc. node		15124 Aug 01 12:39	16° M 55'01	
	15122 Feb 22 18:40	0° \approx				15124 Aug 12 01:53	0° A	
	15122 Mar 22 21:01	0° H				15124 Sep 05 09:44	0° M	
	15122 Apr 18 00:15	0° Y				15124 Sep 30 01:32	0° A	
	15122 May 13 06:16	0° R				15124 Oct 25 08:56	0° Z	
desc. node	15122 Jun 06 23:29	29° R 58'45		desc. node		15124 Nov 21 07:49	0° \approx 18'37	
	15122 Jun 06 23:53	0° II				15124 Nov 21 00:54	0° \approx	
	15122 Jul 01 09:03	0° E		evening max el		15124 Dec 09 11:49	19° \approx 01'48	46°11'08
	15122 Jul 25 12:27	0° O				15124 Dec 21 08:20	0° H	

greatest brilliancy	15125 Jan 17 21:29	17°  57'51	-4.8m	superior conj	15127 Jul 13 02:46	3°  22'43	-1°25'22
retrograde	15125 Jan 27 20:04	19°  46'34		minimum elong	15127 Jul 13 08:04	3°  39'18	1°26'10
evening set	15125 Feb 13 08:24	14°  34'11			15127 Aug 03 08:49	0° 	
inferior conj	15125 Feb 18 06:36	11°  33'55	-5°30'50	evening rise	15127 Aug 22 05:53	23° 	39'05
minimum elong	15125 Feb 18 16:41	11°  18'08	5°28'00		15127 Aug 27 07:35	0° 	
min. Earth dist.	15125 Feb 18 14:09	11°  22'05	0.28649 AU	asc. node	15127 Aug 30 02:54	3° 	30'37
morning rise	15125 Feb 24 00:46	8°  04'42			15127 Sep 20 07:42	0° 	
direct	15125 Mar 11 13:11	3°  22'49			15127 Oct 14 10:45	0° 	
asc. node	15125 Mar 14 09:02	3°  32'07			15127 Nov 07 19:20	0° 	
greatest brilliancy	15125 Mar 22 09:13	5°  31'02	-4.8m		15127 Dec 02 13:40	0° 	
	15125 Apr 25 09:04	0° 		desc. node	15127 Dec 19 19:17	20° 	26'16
morning max el	15125 Apr 29 20:25	4°  18'20	45°59'00		15127 Dec 28 00:11	0° 	
	15125 May 24 08:24	0° 			15128 Jan 23 14:11	0° 	
	15125 Jun 19 16:07	0° 		evening max el	15128 Feb 19 13:45	27° 	59'34 45°58'26
desc. node	15125 Jul 04 11:04	17°  29'09			15128 Feb 21 16:02	0° 	
	15125 Jul 14 21:12	0° 		greatest brilliancy	15128 Mar 29 13:17	26° 	35'16 -4.8m
	15125 Aug 08 12:09	0° 		retrograde	15128 Apr 08 16:11	28° 	27'42
	15125 Sep 01 19:29	0° 		asc. node	15128 Apr 10 18:21	28° 	22'29
	15125 Sep 25 23:10	0° 		evening set	15128 Apr 23 18:07	23° 	59'46
	15125 Oct 20 01:22	0° 		inferior conj	15128 Apr 29 18:15	20° 	22'23 4°32'48
asc. node	15125 Oct 25 05:30	6°  26'37		minimum elong	15128 Apr 29 09:10	20° 	36'38 4°29'40
morning set	15125 Oct 31 15:19	14°  25'47		min. Earth dist.	15128 Apr 29 16:23	20° 	25'18 0.28171 AU
	15125 Nov 13 03:09	0° 		morning rise	15128 May 05 00:07	17° 	10'46
	15125 Dec 07 05:23	0° 		direct	15128 May 20 22:30	12° 	13'52
				greatest brilliancy	15128 May 31 03:23	14° 	10'52 -4.8m
superior conj	15125 Dec 08 19:06	1°  57'20	1°22'24		15128 Jun 24 14:08	0° 	
minimum elong	15125 Dec 08 13:03	1°  38'32	1°23'17	morning max el	15128 Jul 10 01:04	14° 	25'04 46°40'58
max. Earth dist.	15125 Dec 10 23:07	4°  39'04	1.72451 AU		15128 Jul 24 23:45	0° 	
	15125 Dec 31 09:15	0° 		desc. node	15128 Jul 31 21:25	7° 	33'58
evening rise	15126 Jan 15 01:52	18°  22'10	16		15128 Aug 20 14:19	0° 	
	15126 Jan 24 16:11	0° 			15128 Sep 14 22:19	0° 	
desc. node	15126 Feb 13 20:04	24°  45'11			15128 Oct 09 17:06	0° 	
	15126 Feb 18 03:00	0° 			15128 Nov 03 05:39	0° 	
	15126 Mar 14 17:42	0° 		asc. node	15128 Nov 21 18:43	22° 	48'19
	15126 Apr 08 12:07	0° 			15128 Nov 27 14:47	0° 	
	15126 May 03 11:38	0° 			15128 Dec 21 21:44	0° 	
	15126 May 28 21:14	0° 		morning set	15129 Jan 10 06:08	23° 	56'26
asc. node	15126 Jun 06 12:58	10°  01'43			15129 Jan 15 03:41	0° 	
	15126 Jun 24 05:22	0° 			15129 Feb 08 10:00	0° 	
evening max el	15126 Jul 16 13:49	23°  38'41	46°38'56				
	15126 Jul 23 02:31	0° 		superior conj	15129 Feb 16 03:36	9° 	32'53 0°56'23
greatest brilliancy	15126 Aug 25 09:12	23°  25'20	-4.9m	minimum elong	15129 Feb 16 13:25	10° 	03'11 0°56'26
retrograde	15126 Sep 04 18:23	25°  25'58'35		max. Earth dist.	15129 Feb 17 11:19	11° 	10'45 1.73099 AU
evening set	15126 Sep 19 06:27	21°  24'49'37			15129 Mar 04 17:31	0° 	
inferior conj	15126 Sep 25 11:28	18°  24'46	0°17'24	desc. node	15129 Mar 13 10:21	10° 	43'18
minimum elong	15126 Sep 25 12:09	18°  11'42	0°17'22	evening rise	15129 Mar 26 00:25	26° 	13'18
min. Earth dist.	15126 Sep 25 08:54	18°  16'39	0.26965 AU		15129 Mar 29 02:03	0° 	
desc. node	15126 Sep 26 14:02	17°  23'22'29			15129 Apr 22 10:52	0° 	
morning rise	15126 Oct 01 18:05	14°  23'40'09			15129 May 16 19:37	0° 	
direct	15126 Oct 16 05:10	10°  28'27			15129 Jun 10 05:22	0° 	
greatest brilliancy	15126 Oct 26 02:39	12°  28'17'22	-4.8m	asc. node	15129 Jul 04 01:11	29° 	06'20
	15126 Nov 22 05:40	0° 			15129 Jul 04 18:50	0° 	
morning max el	15126 Dec 04 21:29	11°  42'09	46°18'08		15129 Jul 29 16:34	0° 	
	15126 Dec 22 17:48	0° 			15129 Aug 24 07:12	0° 	
asc. node	15127 Jan 17 16:00	28°  43'02			15129 Sep 20 13:25	0° 	
	15127 Jan 18 18:57	0° 		evening max el	15129 Sep 26 19:50	6° 	24'19 46°36'50
	15127 Feb 13 13:23	0° 		desc. node	15129 Oct 23 23:28	29° 	53'25
	15127 Mar 10 16:11	0° 			15129 Oct 24 03:22	0° 	
	15127 Apr 04 10:07	0° 		greatest brilliancy	15129 Nov 05 04:12	6° 	28'15 -4.8m
	15127 Apr 28 22:18	0° 		retrograde	15129 Nov 15 23:15	8° 	36'44
desc. node	15127 May 09 12:32	13°  02'19		evening set	15129 Dec 03 13:17	2° 	45'08
	15127 May 23 05:55	0° 		min. Earth dist.	15129 Dec 06 12:35	0° 	56'12 0.28237 AU
morning set	15127 Jun 03 09:48	13°  25'03'30		inferior conj	15129 Dec 07 06:02	0° 	29'08 -8°30'26
	15127 Jun 16 09:30	0° 		minimum elong	15129 Dec 06 23:26	0° 	39'21 8°28'51
	15127 Jul 10 09:59	0° 			15129 Dec 08 00:49	30° 	
max. Earth dist.	15127 Jul 11 00:42	0°  46'02	1.71711 AU	morning rise	15129 Dec 10 09:49	28° 	33'00
				direct	15129 Dec 28 09:33	22° 	31'27

greatest brilliancy	15130 Jan 07 00:03	24° ♁ 12'21	-4.8m	evening rise	15132 Jun 05 06:31	6° ♁ 19'25	
	15130 Jan 18 17:52	0° ♁			15132 Jun 24 06:49	0° ♁	
asc. node	15130 Feb 14 01:45	21° ♁ 33'45			15132 Jul 18 09:03	0° ♁	
morning max el	15130 Feb 15 08:46	22° ♁ 48'26	45°45'02	asc. node	15132 Jul 31 14:33	16° ♁ 26'32	
	15130 Feb 22 14:49	0° ♁			15132 Aug 11 13:06	0° ♁	
	15130 Mar 22 11:55	0° ♁			15132 Sep 04 21:24	0° ♁	
	15130 Apr 17 13:09	0° ♁			15132 Sep 29 13:57	0° ♁	
	15130 May 12 18:10	0° ♁			15132 Oct 24 22:44	0° ♁	
desc. node	15130 Jun 06 01:21	29° ♁ 29'45		desc. node	15132 Nov 20 09:47	29° ♁ 38'14	
	15130 Jun 06 11:15	0° ♁			15132 Nov 20 17:54	0° ♁	
	15130 Jun 30 20:06	0° ♁		evening max el	15132 Dec 07 02:45	16° ♁ 48'29	46°12'10
	15130 Jul 24 23:19	0° ♁			15132 Dec 21 13:23	0° ♁	
morning set	15130 Aug 16 21:53	28° ♁ 40'23		greatest brilliancy	15133 Jan 15 12:06	15° ♁ 46'09	-4.8m
	15130 Aug 17 23:19	0° ♁		retrograde	15133 Jan 25 12:12	17° ♁ 36'07	
	15130 Sep 10 22:07	0° ♁		evening set	15133 Feb 11 02:57	12° ♁ 19'05	
				inferior conj	15133 Feb 15 22:21	9° ♁ 22'59	-5°46'54
superior conj	15130 Sep 25 13:15	18° ♁ 19'41	-0°02'53	minimum elong	15133 Feb 16 08:37	9° ♁ 06'55	5°44'05
minimum elong	15130 Sep 25 13:55	18° ♁ 21'44	0°02'39	min. Earth dist.	15133 Feb 16 05:26	9° ♁ 11'54	0.28666 AU
behind sun begin	15130 Sep 24 13:15	17° ♁ 04'33		morning rise	15133 Feb 21 14:10	5° ♁ 57'28	
behind sun end	15130 Sep 26 14:34	19° ♁ 38'55		direct	15133 Mar 09 05:11	1° ♁ 11'50	
max. Earth dist.	15130 Sep 26 12:07	19° ♁ 31'16	1.71626 AU	asc. node	15133 Mar 13 10:55	1° ♁ 32'37	
asc. node	15130 Sep 26 17:12	19° ♁ 47'11		greatest brilliancy	15133 Mar 20 00:48	3° ♁ 20'05	-4.8m
	15130 Oct 04 21:01	0° ♁			15133 Apr 25 08:02	0° ♁	
	15130 Oct 28 20:57	0° ♁		morning max el	15133 Apr 27 12:43	2° ♁ 07'52	45°57'42
evening rise	15130 Nov 03 07:56	6° ♁ 48'26			15133 May 24 00:05	0° ♁	
	15130 Nov 21 23:16	0° ♁			15133 Jun 19 05:23	0° ♁	
	15130 Dec 16 06:00	0° ♁		desc. node	15133 Jul 03 13:04	16° ♁ 57'40	
	15131 Jan 09 19:33	0° ♁			15133 Jul 14 09:20	0° ♁	
desc. node	15131 Jan 16 08:10	7° ♁ 54'00			15133 Aug 07 23:39	0° ♁	
	15131 Feb 03 18:04	0° ♁			15133 Sep 01 06:35	0° ♁	
	15131 Mar 01 04:00	0° ♁			15133 Sep 25 09:59	0° ♁	
	15131 Mar 27 07:14	0° ♁			15133 Oct 19 12:00	0° ♁	
	15131 Apr 23 23:16	0° ♁		asc. node	15133 Oct 24 07:16	5° ♁ 59'05	
evening max el	15131 May 02 02:19	8° ♁ 11'15	46°13'41	morning set	15133 Oct 29 05:15	12° ♁ 06'42	
asc. node	15131 May 09 04:08	14° ♁ 57'29			15133 Nov 12 13:40	0° ♁	
	15131 May 27 08:55	0° ♁					
greatest brilliancy	15131 Jun 11 08:29	8° ♁ 01'52	-4.8m	superior conj	15133 Dec 06 10:48	29° ♁ 44'26	1°21'16
retrograde	15131 Jun 20 17:39	9° ♁ 41'19		minimum elong	15133 Dec 06 04:06	29° ♁ 23'35	1°22'07
evening set	15131 Jul 08 20:56	3° ♁ 27'39			15133 Dec 06 15:48	0° ♁	
inferior conj	15131 Jul 11 12:38	1° ♁ 49'42	8°59'23	max. Earth dist.	15133 Dec 08 15:35	2° ♁ 28'37	1.72420 AU
minimum elong	15131 Jul 11 16:45	1° ♁ 43'17	8°58'17		15133 Dec 30 19:40	0° ♁	
min. Earth dist.	15131 Jul 12 02:27	1° ♁ 28'14	0.27584 AU	evening rise	15134 Jan 12 17:52	15° ♁ 59'19	
	15131 Jul 14 11:49	30° ♁			15134 Jan 24 02:39	0° ♁	
morning rise	15131 Jul 14 12:28	29° ♁ 59'02		desc. node	15134 Feb 12 21:52	24° ♁ 18'16	
direct	15131 Aug 01 10:05	23° ♁ 49'22			15134 Feb 17 13:39	0° ♁	
greatest brilliancy	15131 Aug 11 15:02	25° ♁ 46'32	-4.9m		15134 Mar 14 04:40	0° ♁	
	15131 Aug 20 07:03	0° ♁			15134 Apr 07 23:39	0° ♁	
desc. node	15131 Aug 29 06:49	6° ♁ 10'39			15134 May 03 00:02	0° ♁	
morning max el	15131 Sep 20 21:13	26° ♁ 32'11	46°55'05		15134 May 28 11:07	0° ♁	
	15131 Sep 24 07:13	0° ♁		asc. node	15134 Jun 05 14:56	9° ♁ 25'20	
	15131 Oct 21 22:52	0° ♁			15134 Jun 23 22:18	0° ♁	
	15131 Nov 16 22:15	0° ♁		evening max el	15134 Jul 14 04:23	21° ♁ 19'12	46°38'26
	15131 Dec 12 04:26	0° ♁			15134 Jul 23 04:52	0° ♁	
asc. node	15131 Dec 20 06:59	9° ♁ 44'27		greatest brilliancy	15134 Aug 22 22:55	21° ♁ 33'57	-4.9m
	15132 Jan 06 00:55	0° ♁		retrograde	15134 Sep 02 07:53	23° ♁ 34'27	
	15132 Jan 30 15:22	0° ♁		evening set	15134 Sep 16 20:27	19° ♁ 24'26	
	15132 Feb 24 02:17	0° ♁		inferior conj	15134 Sep 23 00:07	15° ♁ 49'01	0°41'45
	15132 Mar 19 11:20	0° ♁		minimum elong	15134 Sep 23 01:46	15° ♁ 46'31	0°41'23
morning set	15132 Mar 20 04:50	0° ♁ 53'54		min. Earth dist.	15134 Sep 22 22:32	15° ♁ 51'26	0.26949 AU
desc. node	15132 Apr 10 00:37	26° ♁ 35'11		desc. node	15134 Sep 25 15:53	14° ♁ 12'59	
	15132 Apr 12 18:57	0° ♁		morning rise	15134 Sep 29 07:23	12° ♁ 09'40	
max. Earth dist.	15132 Apr 25 06:15	15° ♁ 25'09	1.72743 AU	direct	15134 Oct 13 18:26	8° ♁ 04'55	
				greatest brilliancy	15134 Oct 23 15:17	9° ♁ 53'43	-4.8m
superior conj	15132 Apr 27 13:04	18° ♁ 14'50	-0°40'57		15134 Nov 22 10:59	0° ♁	
minimum elong	15132 Apr 27 04:10	17° ♁ 47'18	0°41'12	morning max el	15134 Dec 02 11:28	9° ♁ 23'40	46°19'37
	15132 May 07 00:47	0° ♁			15134 Dec 22 11:12	0° ♁	
	15132 May 31 04:32	0° ♁		asc. node	15135 Jan 16 17:54	28° ♁ 08'27	

	15135 Jan 18 08:51	0°☾		evening max el	15137 Sep 24 09:21	4°☾02'43	46°37'23
	15135 Feb 13 01:40	0°☾		desc. node	15137 Oct 23 01:31	28°☾34'16	
	15135 Mar 10 03:35	0°☾			15137 Oct 25 08:25	0°☾	
	15135 Apr 03 21:02	0°☾		greatest brilliancy	15137 Nov 02 19:18	4°☾11'40	-4.8m
	15135 Apr 28 08:58	0°☾		retrograde	15137 Nov 13 13:42	6°☾20'08	
desc. node	15135 May 08 14:26	12°☾35'29		evening set	15137 Dec 01 00:23	0°☾34'23	
	15135 May 22 16:29	0°☾			15137 Dec 01 23:21	30°☾☾	
morning set	15135 May 31 22:36	11°☾28'31		min. Earth dist.	15137 Dec 04 02:56	28°☾40'51	0.28188 AU
	15135 Jun 15 20:03	0°☾		inferior conj	15137 Dec 04 20:39	28°☾13'21	-8°23'28
max. Earth dist.	15135 Jul 08 09:02	28°☾08'57	1.71736 AU	minimum elong	15137 Dec 04 13:22	28°☾24'40	8°21'42
	15135 Jul 09 20:33	0°☾		morning rise	15137 Dec 08 02:32	26°☾14'08	
				direct	15137 Dec 25 23:14	20°☾16'20	
superior conj	15135 Jul 10 15:03	0°☾57'52	-1°26'08	greatest brilliancy	15138 Jan 04 14:11	21°☾57'13	-4.8m
minimum elong	15135 Jul 10 19:24	1°☾11'28	1°26'59		15138 Jan 19 18:03	0°☾	
	15135 Aug 02 19:25	0°☾		morning max el	15138 Feb 12 22:06	20°☾30'38	45°45'32
evening rise	15135 Aug 19 17:34	21°☾12'00		asc. node	15138 Feb 13 03:41	20°☾44'07	
	15135 Aug 26 18:15	0°☾			15138 Feb 22 10:13	0°☾	
asc. node	15135 Aug 29 04:36	3°☾02'32			15138 Mar 22 02:31	0°☾	
	15135 Sep 19 18:29	0°☾			15138 Apr 17 01:51	0°☾	
	15135 Oct 13 21:44	0°☾			15138 May 12 05:57	0°☾	
	15135 Nov 07 06:39	0°☾		desc. node	15138 Jun 05 03:20	29°☾01'20	
	15135 Dec 02 01:37	0°☾			15138 Jun 05 22:30	0°☾	
desc. node	15135 Dec 18 21:16	19°☾54'52			15138 Jun 30 07:03	0°☾	
	15135 Dec 27 13:21	0°☾			15138 Jul 24 10:06	0°☾	
	15136 Jan 23 05:58	0°☾		morning set	15138 Aug 14 10:24	26°☾15'47	
evening max el	15136 Feb 17 04:59	25°☾47'09	45°58'24		15138 Aug 17 10:02	0°☾	
	15136 Feb 21 15:32	0°☾			15138 Sep 10 08:48	0°☾	
greatest brilliancy	15136 Mar 27 04:42	24°☾22'12	-4.8m				
retrograde	15136 Apr 06 06:40	26°☾13'46		superior conj	15138 Sep 23 02:08	15°☾56'22	-0°06'39
asc. node	15136 Apr 09 20:17	25°☾58'33		minimum elong	15138 Sep 23 03:45	16°☾01'26	0°06'24
evening set	15136 Apr 21 07:38	21°☾48'22		behind sun begin	15138 Sep 22 04:36	14°☾48'56	
inferior conj	15136 Apr 27 09:30	18°☾08'24	4°13'44	behind sun end	15138 Sep 24 02:54	17°☾13'55	
minimum elong	15136 Apr 27 00:53	18°☾21'58	4°10'41	max. Earth dist.	15138 Sep 23 20:03	16°☾52'27	1.71613 AU
min. Earth dist.	15136 Apr 27 07:59	18°☾10'48	0.28182 AU	asc. node	15138 Sep 25 19:02	19°☾19'34	
morning rise	15136 May 02 17:59	14°☾52'42			15138 Oct 04 07:41	0°☾	
direct	15136 May 18 13:45	9°☾59'55			15138 Oct 28 07:39	0°☾	
greatest brilliancy	15136 May 28 19:21	11°☾57'03	-4.8m	evening rise	15138 Oct 31 22:34	4°☾31'06	
	15136 Jun 24 19:34	0°☾			15138 Nov 21 10:02	0°☾	
morning max el	15136 Jul 07 14:31	12°☾04'57	46°39'30		15138 Dec 15 16:57	0°☾	
	15136 Jul 24 17:08	0°☾		desc. node	15139 Jan 09 06:50	0°☾	
desc. node	15136 Jul 30 23:24	6°☾54'05			15139 Jan 15 09:58	7°☾24'57	
	15136 Aug 20 04:27	0°☾			15139 Feb 03 05:58	0°☾	
	15136 Sep 14 11:00	0°☾			15139 Feb 28 16:58	0°☾	
	15136 Oct 09 04:58	0°☾			15139 Mar 26 22:15	0°☾	
	15136 Nov 02 16:58	0°☾			15139 Apr 23 19:21	0°☾	
asc. node	15136 Nov 20 20:43	22°☾20'35		evening max el	15139 Apr 29 15:50	5°☾51'18	46°12'56
	15136 Nov 27 01:42	0°☾		asc. node	15139 May 08 06:12	14°☾01'26	
	15136 Dec 21 08:22	0°☾			15139 May 28 10:51	0°☾	
morning set	15137 Jan 07 22:34	21°☾46'17		greatest brilliancy	15139 Jun 08 21:18	5°☾40'31	-4.8m
	15137 Jan 14 14:10	0°☾		retrograde	15139 Jun 18 07:35	7°☾20'59	
	15137 Feb 07 20:25	0°☾		evening set	15139 Jul 06 11:41	1°☾04'52	
					15139 Jul 08 06:04	30°☾☾	
superior conj	15137 Feb 13 20:05	7°☾23'29	0°58'54	inferior conj	15139 Jul 09 02:24	29°☾28'29	9°03'00
minimum elong	15137 Feb 14 06:00	7°☾54'05	0°59'00	minimum elong	15139 Jul 09 05:38	29°☾23'29	9°01'58
max. Earth dist.	15137 Feb 15 03:52	9°☾01'34	1.73088 AU	min. Earth dist.	15139 Jul 09 15:26	29°☾08'16	0.27618 AU
	15137 Mar 04 03:58	0°☾		morning rise	15139 Jul 11 23:28	27°☾42'09	
desc. node	15137 Mar 12 12:07	10°☾16'31		direct	15139 Jul 30 00:05	21°☾27'26	
evening rise	15137 Mar 23 16:17	24°☾01'56		greatest brilliancy	15139 Aug 09 04:41	23°☾24'39	-4.9m
	15137 Mar 28 12:37	0°☾			15139 Aug 21 14:06	0°☾	
	15137 Apr 21 21:35	0°☾		desc. node	15139 Aug 28 08:42	4°☾58'36	
	15137 May 16 06:36	0°☾		morning max el	15139 Sep 18 12:09	24°☾13'10	46°55'34
	15137 Jun 09 16:48	0°☾			15139 Sep 24 04:03	0°☾	
asc. node	15137 Jul 03 03:06	28°☾35'31			15139 Oct 21 14:25	0°☾	
	15137 Jul 04 06:56	0°☾			15139 Nov 16 11:38	0°☾	
	15137 Jul 29 05:45	0°☾			15139 Dec 11 16:40	0°☾	
	15137 Aug 23 22:26	0°☾		asc. node	15139 Dec 19 08:51	9°☾13'58	
	15137 Sep 20 09:43	0°☾			15140 Jan 05 12:27	0°☾	

	15140 Jan 30 02:27	0°♊		greatest brilliancy	15142 Aug 20 13:24	19°♊10'42	-4.9m
	15140 Feb 23 13:07	0°♋		retrograde	15142 Aug 30 21:02	21°♊09'31	
morning set	15140 Mar 17 21:01	28°♋42'59		evening set	15142 Sep 14 10:48	16°♊58'25	
	15140 Mar 18 22:01	0°♌		inferior conj	15142 Sep 20 12:55	13°♊24'42	1°06'03
desc. node	15140 Apr 09 02:27	26°♌08'02		minimum elong	15142 Sep 20 15:31	13°♊20'45	1°05'20
	15140 Apr 12 05:36	0°♍		min. Earth dist.	15142 Sep 20 12:35	13°♊25'13	0.26935 AU
max. Earth dist.	15140 Apr 23 01:46	13°♍24'02	1.72774 AU	desc. node	15142 Sep 24 17:58	10°♊54'12	
				morning rise	15142 Sep 26 20:31	9°♊44'39	
superior conj	15140 Apr 25 03:33	15°♍58'04	-0°37'45	direct	15142 Oct 11 07:32	5°♊40'48	
minimum elong	15140 Apr 24 19:12	15°♍32'16	0°37'59	greatest brilliancy	15142 Oct 21 04:19	7°♊29'31	-4.8m
	15140 May 06 11:27	0°♎			15142 Nov 22 14:48	0°♎	
	15140 May 30 15:20	0°♏		morning max el	15142 Nov 30 00:35	7°♎02'04	46°21'09
evening rise	15140 Jun 02 20:10	3°♏58'56			15142 Dec 22 04:33	0°♐	
	15140 Jun 23 17:46	0°♑		asc. node	15143 Jan 15 19:47	27°♐33'04	
	15140 Jul 17 20:11	0°♒			15143 Jan 17 22:56	0°♑	
asc. node	15140 Jul 30 16:17	15°♒56'58			15143 Feb 12 14:14	0°♒	
	15140 Aug 11 00:31	0°♓			15143 Mar 09 15:21	0°♋	
	15140 Sep 04 09:16	0°♐			15143 Apr 03 08:21	0°♌	
	15140 Sep 29 02:36	0°♑			15143 Apr 27 20:03	0°♍	
	15140 Oct 24 12:55	0°♒		desc. node	15143 May 07 16:21	12°♒07'30	
desc. node	15140 Nov 19 11:45	28°♒56'29			15143 May 22 03:26	0°♎	
	15140 Nov 20 11:37	0°♓		morning set	15143 May 29 11:24	9°♎05'25	
evening max el	15140 Dec 04 18:34	14°♓36'16	46°13'00		15143 Jun 15 06:57	0°♏	
	15140 Dec 21 21:15	0°♋		max. Earth dist.	15143 Jul 05 16:45	25°♏28'57	1.71764 AU
greatest brilliancy	15141 Jan 13 02:43	13°♋33'15	-4.8m				
retrograde	15141 Jan 23 04:20	15°♋24'10		superior conj	15143 Jul 08 03:25	28°♏32'24	-1°26'46
evening set	15141 Feb 08 21:31	10°♋02'43		minimum elong	15143 Jul 08 06:47	28°♏42'56	1°27'38
inferior conj	15141 Feb 13 14:01	7°♋10'42	-6°02'34		15143 Jul 09 07:26	0°♑	
minimum elong	15141 Feb 14 00:24	6°♋54'27	5°59'47		15143 Aug 02 06:21	0°♒	
min. Earth dist.	15141 Feb 13 20:22	7°♋00'45	0.28678 AU	evening rise	15143 Aug 17 05:17	18°♒43'56	
morning rise	15141 Feb 19 03:16	3°♋49'07			15143 Aug 26 05:18	0°♓	
	15141 Feb 27 20:22	30°♌		asc. node	15143 Aug 28 06:28	2°♓33'48	
direct	15141 Mar 06 21:27	28°♌59'46			15143 Sep 19 05:40	0°♐	
asc. node	15141 Mar 12 12:52	29°♌36'21			15143 Oct 13 09:07	0°♑	
	15141 Mar 14 04:21	0°♋			15143 Nov 06 18:23	0°♒	
greatest brilliancy	15141 Mar 17 15:38	1°♋07'09	-4.8m		15143 Dec 01 13:59	0°♓	
morning max el	15141 Apr 25 04:53	29°♋56'19	45°56'30	desc. node	15143 Dec 17 23:08	19°♓21'54	
	15141 Apr 25 06:24	0°♌			15143 Dec 27 03:00	0°♋	
	15141 May 23 15:47	0°♍			15144 Jan 22 22:26	0°♌	
	15141 Jun 18 18:47	0°♎		evening max el	15144 Feb 14 19:22	23°♌31'30	45°58'15
desc. node	15141 Jul 02 14:52	16°♎25'00			15144 Feb 21 16:47	0°♍	
	15141 Jul 13 21:40	0°♏		greatest brilliancy	15144 Mar 24 20:14	22°♍07'45	-4.8m
	15141 Aug 07 11:24	0°♑		retrograde	15144 Apr 03 21:01	23°♍58'33	
	15141 Aug 31 17:57	0°♒		asc. node	15144 Apr 08 22:22	23°♍27'51	
	15141 Sep 24 21:04	0°♓		evening set	15144 Apr 18 21:14	19°♍35'03	
	15141 Oct 18 22:53	0°♐		inferior conj	15144 Apr 25 00:42	15°♍53'05	3°54'09
asc. node	15141 Oct 23 09:11	5°♐31'15		minimum elong	15144 Apr 24 16:37	16°♍05'49	3°51'14
morning set	15141 Oct 26 19:32	9°♐47'53		min. Earth dist.	15144 Apr 24 23:50	15°♍54'27	0.28195 AU
	15141 Nov 12 00:25	0°♑		morning rise	15144 Apr 30 11:44	12°♍33'29	
				direct	15144 May 16 04:31	7°♍44'22	
superior conj	15141 Dec 04 02:40	27°♑31'07	1°20'01	greatest brilliancy	15144 May 26 11:54	9°♍42'32	-4.8m
minimum elong	15141 Dec 03 19:20	27°♑08'19	1°20'50		15144 Jun 24 23:38	0°♎	
	15141 Dec 06 02:31	0°♒		morning max el	15144 Jul 05 03:53	9°♎43'27	46°38'12
max. Earth dist.	15141 Dec 06 09:25	0°♒21'28	1.72392 AU		15144 Jul 24 10:31	0°♏	
	15141 Dec 30 06:23	0°♓		desc. node	15144 Jul 30 01:19	6°♏13'30	
evening rise	15142 Jan 10 09:53	13°♓47'21			15144 Aug 19 18:45	0°♑	
	15142 Jan 23 13:28	0°♋			15144 Sep 13 23:54	0°♒	
desc. node	15142 Feb 11 23:38	23°♋50'03			15144 Oct 08 17:05	0°♓	
	15142 Feb 17 00:41	0°♌			15144 Nov 02 04:35	0°♐	
	15142 Mar 13 16:03	0°♍		asc. node	15144 Nov 19 22:31	21°♐51'17	
	15142 Apr 07 11:35	0°♎			15144 Nov 26 12:56	0°♑	
	15142 May 02 12:51	0°♏			15144 Dec 20 19:20	0°♒	
	15142 May 28 01:28	0°♑		morning set	15145 Jan 05 15:05	19°♒35'19	
asc. node	15142 Jun 04 16:50	8°♑47'33			15145 Jan 14 00:57	0°♓	
	15142 Jun 23 15:57	0°♒			15145 Feb 07 07:09	0°♋	
evening max el	15142 Jul 11 18:48	18°♒58'25	46°37'47				
	15142 Jul 23 09:16	0°♓		superior conj	15145 Feb 11 12:44	5°♋13'39	1°01'20

minimum elong	15145 Feb 11 22:41	5°  44'23	1°01'28	minimum elong	15147 Jul 06 18:21	27°  02'42	9°04'43
max. Earth dist.	15145 Feb 12 20:32	6°  51'49	1.73079 AU	min. Earth dist.	15147 Jul 07 04:02	26°  47'41	0.27654 AU
	15145 Mar 03 14:44	0°  Y		morning rise	15147 Jul 09 10:45	25°  23'34	
desc. node	15145 Mar 11 14:01	9°  Y49'11		direct	15147 Jul 27 14:28	19°  20'42	
evening rise	15145 Mar 21 08:14	21°  Y49'56		greatest brilliancy	15147 Aug 06 17:49	21°  20'18	-4.9m
	15145 Mar 27 23:31	0°  B			15147 Aug 22 12:52	0°  Q	
	15145 Apr 21 08:41	0°  II		desc. node	15147 Aug 27 10:46	3°  Q48'15	
	15145 May 15 17:59	0°  E		morning max el	15147 Sep 16 03:25	21°  Q54'25	46°55'58
	15145 Jun 09 04:37	0°  Q			15147 Sep 24 00:26	0°  P	
asc. node	15145 Jul 02 04:52	28°  Q03'08			15147 Oct 21 05:52	0°  E	
	15145 Jul 03 19:25	0°  P			15147 Nov 16 01:00	0°  P	
	15145 Jul 28 19:22	0°  E			15147 Dec 11 04:52	0°  A	
	15145 Aug 23 14:12	0°  P		asc. node	15147 Dec 18 10:40	8°  A43'19	
	15145 Sep 20 07:04	0°  A			15148 Jan 04 23:59	0°  B	
evening max el	15145 Sep 21 22:32	1°  A39'26	46°37'56		15148 Jan 29 13:34	0°  B	
desc. node	15145 Oct 22 03:31	27°  A11'25			15148 Feb 22 23:58	0°  A	
	15145 Oct 27 03:41	0°  B		morning set	15148 Mar 15 13:24	26°  A32'38	
greatest brilliancy	15145 Oct 31 09:50	1°  B53'07	-4.8m		15148 Mar 18 08:43	0°  Y	
retrograde	15145 Nov 11 04:22	4°  B02'15		desc. node	15148 Apr 08 04:21	25°  Y41'03	
	15145 Nov 25 13:25	30°  R			15148 Apr 11 16:13	0°  B	
evening set	15145 Nov 28 11:08	28°  A22'16		max. Earth dist.	15148 Apr 20 20:49	11°  B21'38	1.72799 AU
min. Earth dist.	15145 Dec 01 17:03	26°  A24'04	0.28142 AU				
inferior conj	15145 Dec 02 11:06	25°  A56'07	-8°15'30	superior conj	15148 Apr 22 18:14	13°  B42'05	-0°34'31
minimum elong	15145 Dec 02 03:10	26°  A08'25	8°13'35	minimum elong	15148 Apr 22 10:30	13°  B18'07	0°34'44
morning rise	15145 Dec 05 19:24	23°  A53'30			15148 May 05 22:07	0°  II	
direct	15145 Dec 23 12:41	17°  A59'35			15148 May 30 02:05	0°  E	
greatest brilliancy	15146 Jan 02 04:14	19°  A40'48	-4.8m	evening rise	15148 May 31 09:58	1°  E39'06	
	15146 Jan 20 12:19	0°  B			15148 Jun 23 04:41	0°  Q	
morning max el	15146 Feb 10 12:09	18°  B13'43	45°46'14		15148 Jul 17 07:19	0°  P	
asc. node	15146 Feb 12 05:37	19°  B54'36		asc. node	15148 Jul 29 18:11	15°  P27'45	
	15146 Feb 22 05:22	0°  B			15148 Aug 10 11:58	0°  E	
	15146 Mar 21 17:10	0°  A			15148 Sep 03 21:13	0°  P	
	15146 Apr 16 14:43	0°  Y			15148 Sep 28 15:23	0°  A	
	15146 May 11 17:55	0°  B			15148 Oct 24 03:16	0°  B	
desc. node	15146 Jun 04 05:06	28°  B31'34		desc. node	15148 Nov 18 13:37	28°  B14'03	
	15146 Jun 05 09:59	0°  II			15148 Nov 20 05:44	0°  B	
	15146 Jun 29 18:16	0°  E		evening max el	15148 Dec 02 10:26	12°  B24'10	46°13'54
	15146 Jul 23 21:10	0°  Q			15148 Dec 22 07:57	0°  A	
morning set	15146 Aug 11 22:35	23°  Q49'18		greatest brilliancy	15149 Jan 10 17:43	11°  A20'54	-4.8m
	15146 Aug 16 20:59	0°  P		retrograde	15149 Jan 20 20:07	13°  A12'01	
	15146 Sep 09 19:41	0°  E		evening set	15149 Feb 06 16:05	7°  A46'21	
				inferior conj	15149 Feb 11 05:35	4°  A58'25	-6°17'50
superior conj	15146 Sep 20 14:41	13°  E31'24	-0°10'26	minimum elong	15149 Feb 11 16:02	4°  A42'02	6°15'03
minimum elong	15146 Sep 20 17:16	13°  E39'28	0°10'10	min. Earth dist.	15149 Feb 11 11:16	4°  A49'30	0.28688 AU
behind sun begin	15146 Sep 19 21:33	12°  E37'43		morning rise	15149 Feb 16 16:03	1°  A40'49	
behind sun end	15146 Sep 21 12:59	14°  E41'13			15149 Feb 19 20:25	30°  R	
max. Earth dist.	15146 Sep 21 06:02	14°  E19'29	1.71600 AU	direct	15149 Mar 04 13:36	26°  B24'52	
asc. node	15146 Sep 24 20:54	18°  E51'28		asc. node	15149 Mar 11 14:57	27°  B24'42'27	
	15146 Oct 03 18:31	0°  P		greatest brilliancy	15149 Mar 15 06:00	28°  B24'53'43	-4.8m
	15146 Oct 27 18:30	0°  A			15149 Mar 17 22:15	0°  A	
evening rise	15146 Oct 29 13:09	2°  A13'02		morning max el	15149 Apr 22 20:28	27°  A43'40	45°55'24
	15146 Nov 20 20:59	0°  B			15149 Apr 25 03:45	0°  Y	
	15146 Dec 15 04:07	0°  B			15149 May 23 07:03	0°  B	
	15147 Jan 08 18:21	0°  A			15149 Jun 18 07:53	0°  II	
desc. node	15147 Jan 14 11:48	6°  A55'24		desc. node	15149 Jul 01 16:49	15°  II53'34	
	15147 Feb 02 18:05	0°  Y			15149 Jul 13 09:44	0°  E	
	15147 Feb 28 06:10	0°  B			15149 Aug 06 22:54	0°  Q	
	15147 Mar 26 13:36	0°  II			15149 Aug 31 05:06	0°  P	
	15147 Apr 23 16:15	0°  E			15149 Sep 24 08:00	0°  E	
evening max el	15147 Apr 27 06:07	3°  E33'04	46°12'05		15149 Oct 18 09:38	0°  P	
asc. node	15147 May 07 08:03	13°  E03'12		asc. node	15149 Oct 22 10:59	5°  P03'27	
	15147 May 30 00:14	0°  Q		morning set	15149 Oct 24 09:26	7°  P28'13	
greatest brilliancy	15147 Jun 06 09:34	3°  Q18'01	-4.8m		15149 Nov 11 11:03	0°  A	
retrograde	15147 Jun 15 21:34	4°  Q59'40					
	15147 Jul 01 20:55	30°  R		superior conj	15149 Dec 01 18:07	25°  A17'02	1°18'37
evening set	15147 Jul 04 01:54	28°  E41'52		minimum elong	15149 Dec 01 10:13	24°  A52'26	1°19'24
inferior conj	15147 Jul 06 16:02	27°  E06'17	9°05'42	max. Earth dist.	15149 Dec 04 02:21	28°  A12'02	1.72358 AU

	15149 Dec 05 13:03	0° Z			15152 Jul 24 03:05	0° G	
	15149 Dec 29 16:55	0° \approx		desc. node	15152 Jul 29 03:18	5° G 34'49	
evening rise	15150 Jan 08 01:35	11° \approx 34'57			15152 Aug 19 08:26	0° Ω	
	15150 Jan 23 00:05	0° H			15152 Sep 13 12:15	0° M	
desc. node	15150 Feb 11 01:34	23° H 22'57			15152 Oct 08 04:39	0° L	
	15150 Feb 16 11:31	0° Y			15152 Nov 01 15:39	0° M	
	15150 Mar 13 03:16	0° B		asc. node	15152 Nov 19 00:18	21° M 23'30	
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	15150 May 02 01:28	0° G			15152 Dec 20 05:49	0° Z	
	15150 May 27 15:40	0° Ω		morning set	15153 Jan 03 07:29	17° Z 25'15	
asc. node	15150 Jun 03 18:43	8° Ω 10'24			15153 Jan 13 11:19	0° \approx	
	15150 Jun 23 09:36	0° M			15153 Feb 06 17:28	0° H	
evening max el	15150 Jul 09 08:15	16° M 36'21 46°37'04					
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greatest brilliancy	15150 Aug 18 04:15	16° L 48'55 -4.9m		minimum elong	15153 Feb 09 15:09	3° H 35'10 1°03'51	
retrograde	15150 Aug 28 09:39	18° L 45'36		max. Earth dist.	15153 Feb 10 13:50	4° H 45'13 1.73070 AU	
evening set	15150 Sep 12 01:18	14° L 32'59			15153 Mar 03 01:06	0° Y	
inferior conj	15150 Sep 18 01:44	11° L 01'23 1°30'15		desc. node	15153 Mar 10 15:47	9° Y 22'40	
minimum elong	15150 Sep 18 05:15	10° L 56'01 1°29'11		evening rise	15153 Mar 19 00:02	19° Y 38'52	
min. Earth dist.	15150 Sep 18 02:58	10° L 59'31 0.26927 AU			15153 Mar 27 09:59	0° B	
desc. node	15150 Sep 23 19:57	7° L 38'43			15153 Apr 20 19:21	0° II	
morning rise	15150 Sep 24 09:24	7° L 20'45			15153 May 15 04:59	0° G	
direct	15150 Oct 08 20:01	3° L 17'23			15153 Jun 08 16:04	0° Ω	
greatest brilliancy	15150 Oct 18 17:58	5° L 06'38 -4.8m		asc. node	15153 Jul 01 06:48	27° Ω 32'21	
	15150 Nov 22 16:44	0° M			15153 Jul 03 07:35	0° M	
morning max el	15150 Nov 27 13:13	4° M 39'40 46°22'40			15153 Jul 28 08:40	0° L	
	15150 Dec 21 21:16	0° A			15153 Aug 23 05:43	0° M	
asc. node	15151 Jan 14 21:49	26° A 59'11		evening max el	15153 Sep 19 12:44	29° M 20'20 46°38'39	
	15151 Jan 17 12:35	0° Z			15153 Sep 20 04:36	0° A	
	15151 Feb 12 02:25	0° \approx		desc. node	15153 Oct 21 05:21	25° A 47'30	
	15151 Mar 09 02:44	0° H		greatest brilliancy	15153 Oct 28 23:51	29° A 35'49 -4.8m	
	15151 Apr 02 19:18	0° Y			15153 Oct 30 02:12	0° Z	
	15151 Apr 27 06:46	0° B		retrograde	15153 Nov 08 19:37	1° Z 46'26	
desc. node	15151 May 06 18:03	11° B 39'54			15153 Nov 18 04:37	30° R 21	
	15151 May 21 14:02	0° II		evening set	15153 Nov 25 21:56	26° A 12'04	
morning set	15151 May 27 00:11	6° II 43'24		min. Earth dist.	15153 Nov 29 06:58	24° A 09'39 0.28095 AU	
	15151 Jun 14 17:29	0° G		inferior conj	15153 Nov 30 01:41	23° A 40'47 -8°06'41	
max. Earth dist.	15151 Jul 03 00:32	22° G 50'22 1.71790 AU		minimum elong	15153 Nov 29 17:09	23° A 53'57 8°04'36	
				morning rise	15153 Dec 03 12:34	21° A 34'37	
superior conj	15151 Jul 05 16:01	26° G 08'51 -1°27'13		direct	15153 Dec 21 02:42	15° A 44'44	
minimum elong	15151 Jul 05 18:23	26° G 16'12 1°28'06		greatest brilliancy	15153 Dec 30 18:00	17° A 25'57 -4.8m	
	15151 Jul 08 17:57	0° Ω			15154 Jan 21 01:06	0° Z	
	15151 Aug 01 16:54	0° M		morning max el	15154 Feb 08 03:19	16° Z 00'56 45°46'48	
evening rise	15151 Aug 14 17:15	16° M 17'57		asc. node	15154 Feb 11 07:38	19° Z 07'30	
	15151 Aug 25 15:55	0° L			15154 Feb 21 23:31	0° \approx	
asc. node	15151 Aug 27 08:21	2° L 06'26			15154 Mar 21 07:15	0° H	
	15151 Sep 18 16:26	0° M			15154 Apr 16 03:07	0° Y	
	15151 Oct 12 20:06	0° A			15154 May 11 05:27	0° B	
	15151 Nov 06 05:45	0° Z		desc. node	15154 Jun 03 07:00	28° B 03'29	
	15151 Dec 01 02:03	0° \approx			15154 Jun 04 21:03	0° II	
desc. node	15151 Dec 17 00:58	18° \approx 49'50			15154 Jun 29 05:04	0° G	
	15151 Dec 26 16:25	0° H			15154 Jul 23 07:50	0° Ω	
	15152 Jan 22 14:49	0° Y		morning set	15154 Aug 09 10:46	21° Ω 24'00	
evening max el	15152 Feb 12 09:22	21° Y 16'10 45°58'20			15154 Aug 16 07:36	0° M	
	15152 Feb 21 18:55	0° B			15154 Sep 09 06:14	0° L	
greatest brilliancy	15152 Mar 22 11:24	19° B 54'10 -4.8m					
retrograde	15152 Apr 01 11:36	21° B 44'51		superior conj	15154 Sep 18 03:18	11° L 07'34 -0°14'11	
asc. node	15152 Apr 08 00:15	20° B 53'31		minimum elong	15154 Sep 18 06:49	11° L 18'37 0°13'55	
evening set	15152 Apr 16 11:02	17° B 22'35		behind sun begin	15154 Sep 17 17:50	10° L 37'54	
inferior conj	15152 Apr 22 15:55	13° B 39'03 3°34'10		behind sun end	15154 Sep 18 19:49	11° L 59'19	
minimum elong	15152 Apr 22 08:23	13° B 50'53 3°31'25		max. Earth dist.	15154 Sep 18 17:44	11° L 52'48 1.71585 AU	
min. Earth dist.	15152 Apr 22 15:38	13° B 39'30 0.28210 AU		asc. node	15154 Sep 23 22:39	18° L 24'00	
morning rise	15152 Apr 28 05:25	10° B 15'56			15154 Oct 03 05:01	0° M	
direct	15152 May 13 19:12	5° B 29'55		evening rise	15154 Oct 27 03:56	29° M 56'43	
greatest brilliancy	15152 May 24 04:38	7° B 29'37 -4.8m			15154 Oct 27 04:59	0° A	
	15152 Jun 25 01:32	0° II			15154 Nov 20 07:33	0° Z	
morning max el	15152 Jul 02 18:16	7° II 25'46 46°36'58			15154 Dec 14 14:52	0° \approx	




































































































































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	15155 Feb 02 05:52	0° Y			15157 Jul 12 21:49	0° G	
	15155 Feb 27 19:08	0° B			15157 Aug 06 10:26	0° Q	
	15155 Mar 26 04:54	0° II			15157 Aug 30 16:17	0° M	
	15155 Apr 23 13:37	0° G			15157 Sep 23 18:56	0° A	
evening max el	15155 Apr 24 21:17	1° G 17'59 46°11'16			15157 Oct 17 20:26	0° M	
asc. node	15155 May 06 10:00	12° G 04'49		morning set	15157 Oct 21 23:10	5° M 07'50	
	15155 Jun 01 10:00	0° Q		asc. node	15157 Oct 21 12:45	4° M 35'22	
greatest brilliancy	15155 Jun 03 22:04	0° Q 57'01 -4.8m			15157 Nov 10 21:45	0° A	
retrograde	15155 Jun 13 11:30	2° Q 39'24					
	15155 Jun 24 22:07	30° R G		superior conj	15157 Nov 29 09:34	23° A 02'38 1°17'05	
evening set	15155 Jul 01 15:41	26° G 21'04		minimum elong	15157 Nov 29 01:08	22° A 36'25 1°17'51	
inferior conj	15155 Jul 04 05:48	24° G 45'20 9°07'21		max. Earth dist.	15157 Dec 01 17:01	25° A 55'12 1.72322 AU	
minimum elong	15155 Jul 04 07:12	24° G 43'10 9°06'25			15157 Dec 04 23:41	0° Z	
min. Earth dist.	15155 Jul 04 16:39	24° G 28'28 0.27687 AU			15157 Dec 29 03:32	0° \approx	
morning rise	15155 Jul 06 22:39	23° G 05'19		evening rise	15158 Jan 05 17:23	9° \approx 22'29	
direct	15155 Jul 25 05:07	16° G 43'25			15158 Jan 22 10:47	0° H	
greatest brilliancy	15155 Aug 04 06:48	18° G 38'46 -4.9m		desc. node	15158 Feb 10 03:20	22° H 55'10	
	15155 Aug 23 05:17	0° Q			15158 Feb 15 22:25	0° Y	
desc. node	15155 Aug 26 12:45	2° Q 40'35			15158 Mar 12 14:32	0° B	
morning max el	15155 Sep 13 18:22	19° Q 35'39 46°56'12			15158 Apr 06 11:12	0° II	
	15155 Sep 23 19:53	0° M			15158 May 01 14:18	0° G	
	15155 Oct 20 20:50	0° A			15158 May 27 06:13	0° Q	
	15155 Nov 15 14:00	0° M		asc. node	15158 Jun 02 20:40	7° Q 32'30	
	15155 Dec 10 16:46	0° A			15158 Jun 23 04:00	0° M	
asc. node	15155 Dec 17 12:40	8° A 14'07		evening max el	15158 Jul 06 20:51	14° M 11'15 46°36'18	
	15156 Jan 04 11:12	0° Z			15158 Jul 23 23:57	0° A	
	15156 Jan 29 00:22	0° \approx		greatest brilliancy	15158 Aug 15 19:15	14° A 26'07 -4.9m	
	15156 Feb 22 10:32	0° H		retrograde	15158 Aug 25 21:57	16° A 20'41	
morning set	15156 Mar 13 05:57	24° H 23'33		evening set	15158 Sep 09 15:50	12° A 05'54	
	15156 Mar 17 19:11	0° Y		inferior conj	15158 Sep 15 14:27	8° A 37'00 1°54'15	
desc. node	15156 Apr 07 06:04	25° Y 14'05		minimum elong	15158 Sep 15 18:52	8° A 30'16 1°52'52	
	15156 Apr 11 02:41	0° B		min. Earth dist.	15158 Sep 15 17:30	8° A 32'22 0.26923 AU	
max. Earth dist.	15156 Apr 18 13:47	9° B 13'17 1.72827 AU		morning rise	15158 Sep 21 21:56	4° A 56'08	
				desc. node	15158 Sep 22 21:48	4° A 25'18	
superior conj	15156 Apr 20 08:58	11° B 26'45 -0°31'12		direct	15158 Oct 06 08:04	0° A 52'33	
minimum elong	15156 Apr 20 01:52	11° B 04'50 0°31'26		greatest brilliancy	15158 Oct 16 08:01	2° A 43'11 -4.8m	
	15156 May 05 08:38	0° II			15158 Nov 22 17:39	0° M	
evening rise	15156 May 28 23:38	29° II 19'19		morning max el	15158 Nov 25 01:50	2° M 16'17 46°24'16	
	15156 May 29 12:43	0° G			15158 Dec 21 13:55	0° A	
	15156 Jun 22 15:29	0° Q		asc. node	15159 Jan 13 23:41	26° A 24'22	
	15156 Jul 16 18:21	0° M			15159 Jan 17 02:21	0° Z	
asc. node	15156 Jul 28 20:04	14° M 58'52			15159 Feb 11 14:46	0° \approx	
	15156 Aug 09 23:20	0° A			15159 Mar 08 14:19	0° H	
	15156 Sep 03 09:07	0° M			15159 Apr 02 06:26	0° Y	
	15156 Sep 28 04:10	0° A			15159 Apr 26 17:41	0° B	
	15156 Oct 23 17:42	0° Z		desc. node	15159 May 05 19:57	11° B 12'22	
desc. node	15156 Nov 17 15:35	27° Z 31'42			15159 May 21 00:51	0° II	
	15156 Nov 20 00:11	0° \approx		morning set	15159 May 24 13:16	4° II 21'39	
evening max el	15156 Nov 30 02:05	10° \approx 11'51 46°14'51			15159 Jun 14 04:16	0° G	
	15156 Dec 22 22:02	0° H		max. Earth dist.	15159 Jun 30 10:23	20° G 17'23 1.71826 AU	
greatest brilliancy	15157 Jan 08 09:27	9° H 10'10 -4.8m					
retrograde	15157 Jan 18 11:39	11° H 00'52		superior conj	15159 Jul 03 04:39	23° G 44'28 -1°27'30	
evening set	15157 Feb 04 10:51	5° H 31'10		minimum elong	15159 Jul 03 05:59	23° G 48'39 1°28'25	
inferior conj	15157 Feb 08 21:22	2° H 47'22 -6°32'17			15159 Jul 08 04:46	0° Q	
minimum elong	15157 Feb 09 07:49	2° H 30'58 6°29'35			15159 Aug 01 03:47	0° M	
min. Earth dist.	15157 Feb 09 02:37	2° H 39'07 0.28693 AU		evening rise	15159 Aug 12 04:58	13° M 50'09	
	15157 Feb 13 10:39	30° R \approx			15159 Aug 25 02:55	0° A	
morning rise	15157 Feb 14 04:51	29° \approx 33'45		asc. node	15159 Aug 26 10:03	1° A 37'22	
direct	15157 Mar 02 05:38	24° \approx 37'13			15159 Sep 18 03:34	0° M	
asc. node	15157 Mar 10 16:48	25° \approx 57'30			15159 Oct 12 07:28	0° A	
greatest brilliancy	15157 Mar 12 20:45	26° \approx 41'35 -4.8m			15159 Nov 05 17:31	0° Z	
	15157 Mar 19 21:59	0° H			15159 Nov 30 14:35	0° \approx	
morning max el	15157 Apr 20 11:18	25° H 29'30 45°54'10		desc. node	15159 Dec 16 02:57	18° \approx 16'48	
	15157 Apr 25 00:11	0° Y			15159 Dec 26 06:22	0° H	
	15157 May 22 22:04	0° B			15160 Jan 22 07:59	0° Y	

evening max el	15160 Feb 09 23:53	19° Υ 01'08	45°58'35	superior conj	15162 Sep 15 15:56	8° Ω 42'38	-0°17'55
	15160 Feb 21 23:11	0° \mathcal{B}		minimum elong	15162 Sep 15 20:23	8° Ω 56'34	0°17'39
greatest brilliancy	15160 Mar 20 02:09	17° \mathcal{B} 39'25	-4.8m	max. Earth dist.	15162 Sep 16 07:37	9° Ω 31'47	1.71575 AU
retrograde	15160 Mar 30 02:46	19° \mathcal{B} 30'43		asc. node	15162 Sep 23 00:30	17° Ω 55'41	
asc. node	15160 Apr 07 02:11	18° \mathcal{B} 13'46			15162 Oct 02 15:54	0° \mathcal{M}	
evening set	15160 Apr 14 01:09	15° \mathcal{B} 09'17		evening rise	15162 Oct 24 18:26	27° \mathcal{M} 38'07	
inferior conj	15160 Apr 20 07:13	11° \mathcal{B} 24'27	3°13'59		15162 Oct 26 15:55	0° \mathcal{A}	
minimum elong	15160 Apr 20 00:17	11° \mathcal{B} 35'19	3°11'24		15162 Nov 19 18:35	0° \mathcal{B}	
min. Earth dist.	15160 Apr 20 07:15	11° \mathcal{B} 24'24	0.28224 AU		15162 Dec 14 02:08	0° \approx	
morning rise	15160 Apr 25 23:05	7° \mathcal{B} 58'14			15163 Jan 07 17:08	0° \mathcal{H}	
direct	15160 May 11 10:25	3° \mathcal{B} 14'58		desc. node	15163 Jan 12 15:31	5° \mathcal{H} 57'11	
greatest brilliancy	15160 May 21 21:06	5° \mathcal{B} 16'02	-4.8m		15163 Feb 01 18:12	0° Υ	
	15160 Jun 25 02:23	0° Π			15163 Feb 27 08:42	0° \mathcal{B}	
morning max el	15160 Jun 30 09:30	5° Π 09'37	46°35'33		15163 Mar 25 20:57	0° Π	
	15160 Jul 23 19:40	0° \mathcal{E}		evening max el	15163 Apr 22 12:19	29° Π 01'13	46°10'26
desc. node	15160 Jul 28 05:13	4° \mathcal{E} 55'23			15163 Apr 23 12:24	0° \mathcal{E}	
	15160 Aug 18 22:24	0° Ω		asc. node	15163 May 05 12:03	11° \mathcal{E} 04'01	
	15160 Sep 13 01:00	0° \mathcal{M}		greatest brilliancy	15163 Jun 01 11:10	28° \mathcal{E} 35'43	-4.8m
	15160 Oct 07 16:41	0° Ω			15163 Jun 07 02:28	0° Ω	
	15160 Nov 01 03:12	0° \mathcal{M}		retrograde	15163 Jun 11 01:07	0° Ω 18'08	
asc. node	15160 Nov 18 02:17	20° \mathcal{M} 54'52			15163 Jun 14 21:49	30° \mathcal{R} \mathcal{E}	
	15160 Nov 25 10:51	0° \mathcal{A}		evening set	15163 Jun 29 05:04	24° \mathcal{E} 00'26	
	15160 Dec 19 16:46	0° \mathcal{B}		inferior conj	15163 Jul 01 19:38	22° \mathcal{E} 23'44	9°08'08
morning set	15160 Dec 31 23:33	15° \mathcal{B} 12'40		minimum elong	15163 Jul 01 20:05	22° \mathcal{E} 23'02	9°07'13
	15161 Jan 12 22:07	0° \approx		min. Earth dist.	15163 Jul 02 05:34	22° \mathcal{E} 08'16	0.27712 AU
	15161 Feb 06 04:15	0° \mathcal{H}		morning rise	15163 Jul 04 11:03	20° \mathcal{E} 45'39	
				direct	15163 Jul 22 19:29	14° \mathcal{E} 21'40	
superior conj	15161 Feb 06 21:30	0° \mathcal{H} 53'17	1°05'55	greatest brilliancy	15163 Aug 01 20:03	16° \mathcal{E} 15'51	-4.9m
minimum elong	15161 Feb 07 07:22	1° \mathcal{H} 23'44	1°06'09		15163 Aug 23 17:46	0° Ω	
max. Earth dist.	15161 Feb 08 08:37	2° \mathcal{H} 41'45	1.73060 AU	desc. node	15163 Aug 25 14:36	1° Ω 33'55	
	15161 Mar 02 11:55	0° Υ		morning max el	15163 Sep 11 08:18	17° Ω 13'44	46°56'25
desc. node	15161 Mar 09 17:33	8° Υ 54'42			15163 Sep 23 15:00	0° \mathcal{M}	
evening rise	15161 Mar 16 15:51	17° Υ 26'26			15163 Oct 20 11:50	0° Ω	
	15161 Mar 26 20:54	0° \mathcal{B}			15163 Nov 15 03:11	0° \mathcal{M}	
	15161 Apr 20 06:27	0° Π			15163 Dec 10 04:57	0° \mathcal{A}	
	15161 May 14 16:22	0° \mathcal{E}		asc. node	15163 Dec 16 14:30	7° \mathcal{A} 43'28	
	15161 Jun 08 03:56	0° Ω			15164 Jan 03 22:47	0° \mathcal{B}	
asc. node	15161 Jun 30 08:42	27° Ω 00'12			15164 Jan 28 11:33	0° \approx	
	15161 Jul 02 20:11	0° \mathcal{M}			15164 Feb 21 21:28	0° \mathcal{H}	
	15161 Jul 27 22:31	0° Ω		morning set	15164 Mar 10 22:14	22° \mathcal{H} 12'32	
	15161 Aug 22 22:02	0° \mathcal{M}			15164 Mar 17 05:58	0° Υ	
evening max el	15161 Sep 17 03:44	27° \mathcal{M} 01'30	46°39'08	desc. node	15164 Apr 06 07:55	24° Υ 46'30	
	15161 Sep 20 03:45	0° \mathcal{A}			15164 Apr 10 13:27	0° \mathcal{B}	
desc. node	15161 Oct 20 07:24	24° \mathcal{A} 18'45		max. Earth dist.	15164 Apr 16 05:08	6° \mathcal{B} 59'04	1.72854 AU
greatest brilliancy	15161 Oct 26 13:22	27° \mathcal{A} 15'29	-4.8m				
retrograde	15161 Nov 06 10:52	29° \mathcal{A} 27'38		superior conj	15164 Apr 17 23:34	9° \mathcal{B} 10'11	-0°27'51
evening set	15161 Nov 23 08:20	23° \mathcal{A} 59'09		minimum elong	15164 Apr 17 17:11	8° \mathcal{B} 50'26	0°28'04
min. Earth dist.	15161 Nov 26 20:22	21° \mathcal{A} 52'34	0.28046 AU		15164 May 04 19:29	0° Π	
inferior conj	15161 Nov 27 15:54	21° \mathcal{A} 22'30	-7°56'59	evening rise	15164 May 26 13:19	26° Π 58'41	
minimum elong	15161 Nov 27 06:49	21° \mathcal{A} 36'29	7°54'44		15164 May 28 23:41	0° \mathcal{E}	
morning rise	15161 Dec 01 05:35	19° \mathcal{A} 12'34			15164 Jun 22 02:35	0° Ω	
direct	15161 Dec 18 16:53	13° \mathcal{A} 27'11			15164 Jul 16 05:38	0° \mathcal{M}	
greatest brilliancy	15161 Dec 28 06:53	15° \mathcal{A} 07'47	-4.8m	asc. node	15164 Jul 27 21:48	14° \mathcal{M} 28'48	
	15162 Jan 21 11:23	0° \mathcal{B}			15164 Aug 09 10:56	0° Ω	
morning max el	15162 Feb 05 18:34	13° \mathcal{B} 46'47	45°47'24		15164 Sep 02 21:13	0° \mathcal{M}	
asc. node	15162 Feb 10 09:33	18° \mathcal{B} 19'20			15164 Sep 27 17:09	0° \mathcal{A}	
	15162 Feb 21 17:47	0° \approx			15164 Oct 23 08:27	0° \mathcal{B}	
	15162 Mar 20 21:40	0° \mathcal{H}		desc. node	15164 Nov 16 17:32	26° \mathcal{B} 48'15	
	15162 Apr 15 15:54	0° Υ			15164 Nov 19 19:22	0° \approx	
	15162 May 10 17:23	0° \mathcal{B}		evening max el	15164 Nov 27 16:51	7° \approx 56'31	46°15'32
desc. node	15162 Jun 02 08:55	27° \mathcal{B} 34'13			15164 Dec 23 17:37	0° \mathcal{H}	
	15162 Jun 04 08:30	0° Π		greatest brilliancy	15165 Jan 06 01:22	6° \mathcal{H} 58'26	-4.8m
	15162 Jun 28 16:14	0° \mathcal{E}		retrograde	15165 Jan 16 02:37	8° \mathcal{H} 48'32	
	15162 Jul 22 18:51	0° Ω		evening set	15165 Feb 02 05:30	3° \mathcal{H} 14'42	
morning set	15162 Aug 06 23:18	18° Ω 58'49		inferior conj	15165 Feb 06 13:04	0° \mathcal{H} 35'11	-6°46'10
	15162 Aug 15 18:32	0° \mathcal{M}		minimum elong	15165 Feb 06 23:26	0° \mathcal{H} 18'55	6°43'34
	15162 Sep 08 17:07	0° Ω		min. Earth dist.	15165 Feb 06 18:09	0° \mathcal{H} 27'11	0.28702 AU

	15165 Feb 07 11:29	30° \approx			15167 Jul 31 14:33	0° \cap	
morning rise	15165 Feb 11 17:24	27° \approx 25'45		evening rise	15167 Aug 09 16:37	11° \cap 22'39	
direct	15165 Feb 27 21:04	22° \approx 25'16			15167 Aug 24 13:47	0° $\underline{\cap}$	
asc. node	15165 Mar 09 18:48	24° \approx 13'22		asc. node	15167 Aug 25 11:55	1° $\underline{\cap}$ 09'14	
greatest brilliancy	15165 Mar 10 12:02	24° \approx 28'53 -4.8m			15167 Sep 17 14:34	0° \cap	
	15165 Mar 21 06:23	0° \times			15167 Oct 11 18:40	0° \nearrow	
morning max el	15165 Apr 18 01:27	23° \times 12'49 45°53'05			15167 Nov 05 05:06	0° \searrow	
	15165 Apr 24 20:17	0° Υ			15167 Nov 30 02:52	0° \approx	
	15165 May 22 13:07	0° \mathcal{B}		desc. node	15167 Dec 15 04:47	17° \approx 44'13	
	15165 Jun 17 10:03	0° Π			15167 Dec 25 20:07	0° \times	
desc. node	15165 Jun 29 20:35	14° Π 49'55			15168 Jan 22 01:07	0° Υ	
	15165 Jul 12 09:59	0° \ominus		evening max el	15168 Feb 07 15:12	16° Υ 49'09 45°58'42	
	15165 Aug 05 22:03	0° Ω			15168 Feb 22 05:01	0° \mathcal{B}	
	15165 Aug 30 03:32	0° \cap		greatest brilliancy	15168 Mar 17 16:21	15° \mathcal{B} 24'57 -4.8m	
	15165 Sep 23 05:56	0° $\underline{\cap}$		retrograde	15168 Mar 27 18:14	17° \mathcal{B} 17'13	
	15165 Oct 17 07:15	0° \cap		asc. node	15168 Apr 06 04:16	15° \mathcal{B} 29'46	
morning set	15165 Oct 19 13:13	2° \cap 48'22		evening set	15168 Apr 11 15:28	12° \mathcal{B} 56'27	
asc. node	15165 Oct 20 14:41	4° \cap 07'47		inferior conj	15168 Apr 17 22:28	9° \mathcal{B} 10'21 2°53'27	
	15165 Nov 10 08:26	0° \nearrow		minimum elong	15168 Apr 17 16:12	9° \mathcal{B} 20'11 2°51'03	
				min. Earth dist.	15168 Apr 17 22:35	9° \mathcal{B} 10'11 0.28242 AU	
superior conj	15165 Nov 27 01:20	20° \nearrow 49'16 1°15'28		morning rise	15168 Apr 23 16:39	5° \mathcal{B} 41'17	
minimum elong	15165 Nov 26 16:26	20° \nearrow 21'34 1°16'10		direct	15168 May 09 02:11	1° \mathcal{B} 00'40	
max. Earth dist.	15165 Nov 29 07:00	23° \nearrow 36'21 1.72291 AU		greatest brilliancy	15168 May 19 13:11	3° \mathcal{B} 02'32 -4.8m	
	15165 Dec 04 10:18	0° \searrow			15168 Jun 25 01:52	0° Π	
	15165 Dec 28 14:10	0° \approx		morning max el	15168 Jun 28 01:20	2° Π 55'35 46°34'06	
evening rise	15166 Jan 03 09:23	7° \approx 10'37			15168 Jul 23 11:45	0° \ominus	
	15166 Jan 21 21:33	0° \times		desc. node	15168 Jul 27 07:09	4° \ominus 16'58	
desc. node	15166 Feb 09 05:07	22° \times 27'09			15168 Aug 18 12:00	0° Ω	
	15166 Feb 15 09:26	0° Υ			15168 Sep 12 13:24	0° \cap	
	15166 Mar 12 01:56	0° \mathcal{B}			15168 Oct 07 04:23	0° $\underline{\cap}$	
	15166 Apr 05 23:12	0° Π			15168 Oct 31 14:25	0° \cap	
	15166 May 01 03:17	0° \ominus		asc. node	15168 Nov 17 04:03	20° \cap 26'30	
	15166 May 26 21:02	0° Ω			15168 Nov 24 21:42	0° \nearrow	
asc. node	15166 Jun 01 22:34	6° Ω 53'57			15168 Dec 19 03:22	0° \searrow	
	15166 Jun 22 22:57	0° \cap		morning set	15168 Dec 29 15:56	13° \searrow 02'09	
evening max el	15166 Jul 04 09:02	11° \cap 45'10 46°35'36			15169 Jan 12 08:34	0° \approx	
	15166 Jul 24 11:54	0° $\underline{\cap}$					
greatest brilliancy	15166 Aug 13 09:50	12° $\underline{\cap}$ 02'47 -4.9m		superior conj	15169 Feb 04 14:12	28° \approx 44'32 1°08'03	
retrograde	15166 Aug 23 10:26	13° $\underline{\cap}$ 56'02		minimum elong	15169 Feb 04 23:56	29° \approx 14'36 1°08'19	
evening set	15166 Sep 07 06:33	9° $\underline{\cap}$ 38'27			15169 Feb 05 14:38	0° \times	
inferior conj	15166 Sep 13 03:10	6° $\underline{\cap}$ 12'40 2°18'04		max. Earth dist.	15169 Feb 06 05:40	0° \times 46'25 1.73045 AU	
minimum elong	15166 Sep 13 08:28	6° $\underline{\cap}$ 04'36 2°16'24			15169 Mar 01 22:20	0° Υ	
min. Earth dist.	15166 Sep 13 07:55	6° $\underline{\cap}$ 05'25 0.26920 AU		desc. node	15169 Mar 08 19:28	8° Υ 28'23	
morning rise	15166 Sep 19 10:17	2° $\underline{\cap}$ 32'09		evening rise	15169 Mar 14 08:03	15° Υ 16'21	
desc. node	15166 Sep 21 23:53	1° $\underline{\cap}$ 15'41			15169 Mar 26 07:27	0° \mathcal{B}	
	15166 Sep 25 02:30	30° \mathcal{R} \cap			15169 Apr 19 17:14	0° Π	
direct	15166 Oct 03 20:11	28° \cap 27'38			15169 May 14 03:30	0° \ominus	
	15166 Oct 12 22:33	0° $\underline{\cap}$			15169 May 07 15:34	0° Ω	
greatest brilliancy	15166 Oct 13 22:06	0° $\underline{\cap}$ 20'05 -4.9m		asc. node	15169 Jun 29 10:29	26° Ω 28'25	
morning max el	15166 Nov 22 15:14	29° $\underline{\cap}$ 55'15 46°26'03			15169 Jul 02 08:34	0° \cap	
	15166 Nov 22 17:10	0° \cap			15169 Jul 27 12:11	0° $\underline{\cap}$	
	15166 Dec 21 06:01	0° \nearrow			15169 Aug 22 14:18	0° \cap	
asc. node	15167 Jan 13 01:35	25° \nearrow 50'29		evening max el	15169 Sep 14 19:17	24° \cap 45'02 46°39'38	
	15167 Jan 16 15:45	0° \searrow			15169 Sep 20 03:32	0° \nearrow	
	15167 Feb 11 02:52	0° \approx		desc. node	15169 Oct 19 09:23	22° \nearrow 47'56	
	15167 Mar 08 01:43	0° \times		greatest brilliancy	15169 Oct 24 03:13	24° \nearrow 56'40 -4.8m	
	15167 Apr 01 17:29	0° Υ		retrograde	15169 Nov 04 02:08	27° \nearrow 09'43	
	15167 Apr 26 04:31	0° \mathcal{B}		evening set	15169 Nov 20 18:50	21° \nearrow 47'23	
desc. node	15167 May 04 21:51	10° \mathcal{B} 44'59		min. Earth dist.	15169 Nov 24 09:51	19° \nearrow 36'27 0.27991 AU	
	15167 May 20 11:34	0° Π		inferior conj	15169 Nov 25 06:07	19° \nearrow 05'16 -7°46'32	
morning set	15167 May 22 02:15	1° Π 59'51		minimum elong	15169 Nov 24 20:34	19° \nearrow 19'58 7°44'06	
	15167 Jun 13 14:56	0° \ominus		morning rise	15169 Nov 28 22:40	16° \nearrow 51'19	
max. Earth dist.	15167 Jun 27 22:45	17° \ominus 52'40 1.71859 AU		direct	15169 Dec 16 07:21	11° \nearrow 10'54	
				greatest brilliancy	15169 Dec 25 19:33	12° \nearrow 50'24 -4.8m	
superior conj	15167 Jun 30 17:04	21° \ominus 19'50 -1°27'37			15170 Jan 21 18:17	0° \searrow	
minimum elong	15167 Jun 30 17:23	21° \ominus 20'52 1°28'33		morning max el	15170 Feb 03 09:25	11° \searrow 33'02 45°48'09	
	15167 Jul 07 15:27	0° Ω		asc. node	15170 Feb 09 11:31	17° \searrow 33'31	

	15170 Feb 21 11:04	0°♊		desc. node	15172 Nov 15 19:25	26°♊04'41	
	15170 Mar 20 11:24	0°♋			15172 Nov 19 14:53	0°♊	
	15170 Apr 15 04:06	0°♌		evening max el	15172 Nov 25 06:36	5°♊39'17	46°16'27
	15170 May 10 04:49	0°♍			15172 Dec 24 19:57	0°♋	
desc. node	15170 Jun 01 10:41	27°♍05'45		greatest brilliancy	15173 Jan 03 17:11	4°♋47'21	-4.8m
	15170 Jun 03 19:32	0°♎		retrograde	15173 Jan 13 17:37	6°♋37'17	
	15170 Jun 28 03:04	0°♏		evening set	15173 Jan 31 00:08	0°♋58'57	
	15170 Jul 22 05:34	0°♐			15173 Feb 01 15:10	30°♌	
morning set	15170 Aug 04 11:31	16°♐33'34		inferior conj	15173 Feb 04 04:46	28°♌23'57	-6°59'32
	15170 Aug 15 05:10	0°♑		minimum elong	15173 Feb 04 15:00	28°♌07'54	6°57'01
	15170 Sep 08 03:41	0°♒		min. Earth dist.	15173 Feb 04 09:47	28°♌16'05	0.28708 AU
				morning rise	15173 Feb 09 05:50	25°♌19'04	
superior conj	15170 Sep 13 04:13	6°♒17'39	-0°21'39	direct	15173 Feb 25 12:12	20°♌14'03	
minimum elong	15170 Sep 13 09:34	6°♒34'24	0°21'23	greatest brilliancy	15173 Mar 08 03:46	22°♌17'44	-4.8m
max. Earth dist.	15170 Sep 13 20:15	7°♒07'51	1.71561 AU	asc. node	15173 Mar 08 20:52	22°♌34'02	
asc. node	15170 Sep 22 02:21	17°♒28'25			15173 Mar 22 04:57	0°♍	
	15170 Oct 02 02:26	0°♎		morning max el	15173 Apr 15 15:54	20°♍57'51	45°52'16
evening rise	15170 Oct 22 08:40	25°♎19'44			15173 Apr 24 15:21	0°♌	
	15170 Oct 26 02:29	0°♏			15173 May 22 03:33	0°♍	
	15170 Nov 19 05:17	0°♐			15173 Jun 16 22:41	0°♎	
	15170 Dec 13 13:02	0°♑		desc. node	15173 Jun 28 22:32	14°♎19'26	
	15171 Jan 07 04:24	0°♒			15173 Jul 11 21:44	0°♏	
desc. node	15171 Jan 11 17:22	5°♒28'30			15173 Aug 05 09:18	0°♐	
	15171 Feb 01 06:08	0°♌			15173 Aug 29 14:30	0°♑	
	15171 Feb 26 21:52	0°♍			15173 Sep 22 16:43	0°♒	
	15171 Mar 25 12:42	0°♎			15173 Oct 16 17:54	0°♓	
evening max el	15171 Apr 20 02:31	26°♎44'02	46°09'29	morning set	15173 Oct 17 02:46	0°♓27'40	
	15171 Apr 23 11:32	0°♏		asc. node	15173 Oct 19 16:26	3°♓40'06	
asc. node	15171 May 04 13:54	10°♏02'58			15173 Nov 09 18:58	0°♏	
greatest brilliancy	15171 May 30 00:45	26°♏16'36	-4.8m				
retrograde	15171 Jun 08 14:16	27°♏58'37		superior conj	15173 Nov 24 16:32	18°♏34'31	1°13'40
evening set	15171 Jun 26 17:59	21°♏42'23		minimum elong	15173 Nov 24 07:12	18°♏05'27	1°14'20
inferior conj	15171 Jun 29 09:37	20°♏03'53	9°07'56	max. Earth dist.	15173 Nov 26 18:55	21°♏11'24	1.72258 AU
minimum elong	15171 Jun 29 09:07	20°♏04'40	9°07'00		15173 Dec 03 20:46	0°♐	
min. Earth dist.	15171 Jun 29 18:57	19°♏49'19	0.27744 AU		15173 Dec 28 00:39	0°♑	
morning rise	15171 Jul 02 00:12	18°♏26'50		evening rise	15174 Jan 01 01:02	4°♑58'12	
direct	15171 Jul 20 09:36	12°♏01'21			15174 Jan 21 08:09	0°♒	
greatest brilliancy	15171 Jul 30 10:12	13°♏55'08	-4.9m	desc. node	15174 Feb 08 07:03	22°♒00'09	
	15171 Aug 24 02:39	0°♐			15174 Feb 14 20:17	0°♌	
desc. node	15171 Aug 24 16:41	0°♐30'21			15174 Mar 11 13:11	0°♍	
morning max el	15171 Sep 08 21:25	14°♐50'22	46°56'30		15174 Apr 05 11:03	0°♎	
	15171 Sep 23 09:20	0°♑			15174 Apr 30 16:07	0°♏	
	15171 Oct 20 02:23	0°♒			15174 May 26 11:43	0°♐	
	15171 Nov 14 15:58	0°♓		asc. node	15174 Jun 01 00:28	6°♐16'05	
	15171 Dec 09 16:45	0°♏			15174 Jun 22 18:01	0°♑	
asc. node	15171 Dec 15 16:20	7°♏13'56		evening max el	15174 Jul 01 21:41	9°♑21'33	46°35'00
	15172 Jan 03 09:57	0°♐			15174 Jul 25 03:13	0°♒	
	15172 Jan 27 22:20	0°♑		greatest brilliancy	15174 Aug 10 23:43	9°♒40'03	-4.9m
	15172 Feb 21 08:00	0°♒		retrograde	15174 Aug 20 23:30	11°♒32'56	
morning set	15172 Mar 08 14:52	20°♒03'44		evening set	15174 Sep 04 21:34	7°♒11'59	
	15172 Mar 16 16:22	0°♌		inferior conj	15174 Sep 10 16:02	3°♒49'21	2°41'32
desc. node	15172 Apr 05 09:47	24°♌20'15		minimum elong	15174 Sep 10 22:09	3°♒40'03	2°39'34
	15172 Apr 09 23:49	0°♍		min. Earth dist.	15174 Sep 10 22:03	3°♒40'12	0.26928 AU
max. Earth dist.	15172 Apr 13 20:40	4°♍46'45	1.72877 AU	morning rise	15174 Sep 16 22:36	0°♒09'46	
					15174 Sep 17 05:59	30°♓	
superior conj	15172 Apr 15 14:46	6°♍56'47	-0°24'30	desc. node	15174 Sep 21 01:50	28°♓12'09	
minimum elong	15172 Apr 15 09:05	6°♍39'13	0°24'43	direct	15174 Oct 01 08:58	26°♓03'39	
	15172 May 04 05:53	0°♎		greatest brilliancy	15174 Oct 11 11:59	27°♓57'30	-4.9m
evening rise	15172 May 24 03:36	24°♎41'21			15174 Oct 16 06:45	0°♏	
	15172 May 28 10:12	0°♏		morning max el	15174 Nov 20 05:42	27°♏36'57	46°27'34
	15172 Jun 21 13:17	0°♐			15174 Nov 22 15:37	0°♑	
	15172 Jul 15 16:36	0°♑			15174 Dec 20 21:51	0°♒	
asc. node	15172 Jul 26 23:43	14°♑00'13		asc. node	15175 Jan 12 03:35	25°♒17'02	
	15172 Aug 08 22:17	0°♒			15175 Jan 16 05:04	0°♓	
	15172 Sep 02 09:09	0°♓			15175 Feb 10 14:55	0°♏	
	15172 Sep 27 06:02	0°♏			15175 Mar 07 13:04	0°♋	
	15172 Oct 22 23:10	0°♐			15175 Apr 01 04:26	0°♌	

	15175 Apr 25 15:16	0°♄	greatest brilliancy	15177 Oct 21 17:38	22°♄38'25	-4.8m
desc. node	15175 May 03 23:33	10°♄17'14	retrograde	15177 Nov 01 17:03	24°♄51'32	
morning set	15175 May 19 15:29	29°♄39'12	evening set	15177 Nov 18 05:28	19°♄19'55	0.27939 AU
	15175 May 19 22:12	0°♄	min. Earth dist.	15177 Nov 21 23:41	17°♄19'55	0.27939 AU
	15175 Jun 13 01:32	0°♄	inferior conj	15177 Nov 22 20:26	16°♄47'58	-7°35'13
max. Earth dist.	15175 Jun 25 12:16	15°♄31'48 1.71887 AU	minimum elong	15177 Nov 22 10:30	17°♄03'15	7°32'38
			morning rise	15177 Nov 26 15:56	14°♄29'40	
superior conj	15175 Jun 28 05:49	18°♄56'34 -1°27'35	direct	15177 Dec 13 21:51	8°♄54'35	
minimum elong	15175 Jun 28 05:07	18°♄54'23 1°28'31	greatest brilliancy	15177 Dec 23 08:29	10°♄32'49	-4.8m
	15175 Jul 07 02:03	0°♄		15178 Jan 21 23:17	0°♄	
	15175 Jul 31 01:12	0°♄	morning max el	15178 Jan 31 23:23	9°♄16'16	45°48'42
evening rise	15175 Aug 07 04:42	8°♄56'53	asc. node	15178 Feb 08 13:32	16°♄47'44	
	15175 Aug 24 00:31	0°♄		15178 Feb 21 04:20	0°♄	
asc. node	15175 Aug 24 13:47	0°♄41'29		15178 Mar 20 01:22	0°♄	
	15175 Sep 17 01:28	0°♄		15178 Apr 14 16:37	0°♄	
	15175 Oct 11 05:51	0°♄		15178 May 09 16:34	0°♄	
	15175 Nov 04 16:44	0°♄	desc. node	15178 May 31 12:38	26°♄36'56	
	15175 Nov 29 15:21	0°♄		15178 Jun 03 06:51	0°♄	
desc. node	15175 Dec 14 06:40	17°♄11'10		15178 Jun 27 14:10	0°♄	
	15175 Dec 25 10:12	0°♄		15178 Jul 21 16:33	0°♄	
	15176 Jan 21 18:53	0°♄	morning set	15178 Aug 01 23:36	14°♄07'07	
evening max el	15176 Feb 05 07:08	14°♄38'13 45°58'58		15178 Aug 14 16:04	0°♄	
	15176 Feb 22 13:32	0°♄		15178 Sep 07 14:32	0°♄	
greatest brilliancy	15176 Mar 15 06:38	13°♄10'18 -4.8m				
retrograde	15176 Mar 25 09:46	15°♄03'10	superior conj	15178 Sep 10 16:38	3°♄52'07 -0°25'20	
asc. node	15176 Apr 05 06:07	12°♄40'58	minimum elong	15178 Sep 10 22:50	4°♄11'34 0°25'04	
evening set	15176 Apr 09 06:01	10°♄43'09	max. Earth dist.	15178 Sep 11 06:06	4°♄34'20 1.71546 AU	
inferior conj	15176 Apr 15 13:40	6°♄55'51 2°32'38	asc. node	15178 Sep 21 04:05	16°♄59'54	
minimum elong	15176 Apr 15 08:05	7°♄04'35 2°30'27		15178 Oct 01 13:16	0°♄	
min. Earth dist.	15176 Apr 15 13:41	6°♄55'50 0.28255 AU	evening rise	15178 Oct 19 23:00	23°♄00'45	
morning rise	15176 Apr 21 09:58	3°♄24'02		15178 Oct 25 13:20	0°♄	
	15176 Apr 28 24:00	30°♄		15178 Nov 18 16:14	0°♄	
direct	15176 May 06 18:06	28°♄46'13		15178 Dec 13 00:12	0°♄	
	15176 May 14 19:04	0°♄		15179 Jan 06 16:00	0°♄	
greatest brilliancy	15176 May 17 04:36	0°♄48'01 -4.8m	desc. node	15179 Jan 10 19:20	4°♄59'11	
	15176 Jun 25 00:24	0°♄		15179 Jan 31 18:29	0°♄	
morning max el	15176 Jun 25 17:05	0°♄41'17 46°32'39		15179 Feb 26 11:37	0°♄	
	15176 Jul 23 03:35	0°♄		15179 Mar 25 05:17	0°♄	
desc. node	15176 Jul 26 09:08	3°♄39'00	evening max el	15179 Apr 17 15:50	24°♄23'16 46°08'37	
	15176 Aug 18 01:30	0°♄		15179 Apr 23 12:27	0°♄	
	15176 Sep 12 01:44	0°♄	asc. node	15179 May 03 15:52	8°♄59'05	
	15176 Oct 06 16:03	0°♄	greatest brilliancy	15179 May 27 14:33	23°♄56'14 -4.8m	
	15176 Oct 31 01:37	0°♄	retrograde	15179 Jun 06 03:16	25°♄37'54	
asc. node	15176 Nov 16 05:52	19°♄58'12	evening set	15179 Jun 24 06:20	19°♄23'47	
	15176 Nov 24 08:36	0°♄	inferior conj	15179 Jun 26 23:36	17°♄42'47 9°06'46	
	15176 Dec 18 14:04	0°♄	minimum elong	15179 Jun 26 22:09	17°♄45'01 9°05'47	
morning set	15176 Dec 27 08:09	10°♄50'42	min. Earth dist.	15179 Jun 27 08:30	17°♄28'50 0.27772 AU	
	15177 Jan 11 19:11	0°♄	morning rise	15179 Jun 29 13:54	16°♄06'00	
			direct	15179 Jul 17 23:16	9°♄39'42	
superior conj	15177 Feb 02 06:38	26°♄34'12 1°10'06	greatest brilliancy	15179 Jul 28 00:43	11°♄33'46 -4.9m	
minimum elong	15177 Feb 02 16:09	27°♄03'36 1°10'25	desc. node	15179 Aug 23 18:40	29°♄27'06	
max. Earth dist.	15177 Feb 04 01:43	28°♄47'20 1.73031 AU		15179 Aug 24 09:28	0°♄	
	15177 Feb 05 01:15	0°♄	morning max el	15179 Sep 06 10:14	12°♄25'06 46°56'38	
	15177 Mar 01 08:59	0°♄		15179 Sep 23 03:34	0°♄	
desc. node	15177 Mar 07 21:14	8°♄00'57		15179 Oct 19 17:05	0°♄	
evening rise	15177 Mar 11 23:47	13°♄04'10		15179 Nov 14 05:00	0°♄	
	15177 Mar 25 18:14	0°♄		15179 Dec 09 04:50	0°♄	
	15177 Apr 19 04:14	0°♄	asc. node	15179 Dec 14 18:20	6°♄43'58	
	15177 May 13 14:52	0°♄		15180 Jan 02 21:26	0°♄	
	15177 Jun 07 03:26	0°♄		15180 Jan 27 09:25	0°♄	
asc. node	15177 Jun 28 12:26	25°♄56'32		15180 Feb 20 18:51	0°♄	
	15177 Jul 01 21:14	0°♄	morning set	15180 Mar 06 07:28	17°♄53'40	
	15177 Jul 27 02:10	0°♄		15180 Mar 16 03:09	0°♄	
	15177 Aug 22 07:01	0°♄	desc. node	15180 Apr 04 11:32	23°♄52'16	
evening max el	15177 Sep 12 10:50	22°♄28'09 46°40'07		15180 Apr 09 10:38	0°♄	
	15177 Sep 20 04:37	0°♄	max. Earth dist.	15180 Apr 11 13:02	2°♄35'38 1.72907 AU	
desc. node	15177 Oct 18 11:14	21°♄13'37				

superior conj	15180 Apr 13 05:43	4°  41'19	-0°21'05	desc. node	15182 Sep 20 03:44	25°  11'28	
minimum elong	15180 Apr 13 00:47	4°  26'03	0°21'18	direct	15182 Sep 28 21:58	23°  37'48	
	15180 May 03 16:47	0°  II		greatest brilliancy	15182 Oct 09 00:56	25°  32'16	-4.9m
evening rise	15180 May 21 17:34	22°  II21'41			15182 Oct 18 05:44	0°  II	
	15180 May 27 21:12	0°  III		morning max el	15182 Nov 17 20:22	25°  II18'08	46°29'06
	15180 Jun 21 00:26	0°  II			15182 Nov 22 13:33	0°  III	
	15180 Jul 15 04:00	0°  III			15182 Dec 20 13:42	0°  IV	
asc. node	15180 Jul 26 01:34	13°  III30'10		asc. node	15183 Jan 11 05:28	24°  IV42'41	
	15180 Aug 08 10:04	0°  II			15183 Jan 15 18:31	0°  III	
	15180 Sep 01 21:32	0°  III			15183 Feb 10 03:09	0°  III	
	15180 Sep 26 19:25	0°  IV			15183 Mar 07 00:37	0°  IV	
	15180 Oct 22 14:31	0°  III			15183 Mar 31 15:36	0°  IV	
desc. node	15180 Nov 14 21:25	25°  III19'40			15183 Apr 25 02:13	0°  III	
	15180 Nov 19 11:28	0°  III		desc. node	15183 May 03 01:29	9°  III49'34	
evening max el	15180 Nov 22 20:17	3°  III20'40	46°17'28	morning set	15183 May 17 05:00	27°  III18'47	
	15180 Dec 26 10:29	0°  IV			15183 May 19 09:03	0°  II	
greatest brilliancy	15181 Jan 01 08:29	2°  IV34'40	-4.8m		15183 Jun 12 12:22	0°  III	
retrograde	15181 Jan 11 09:04	4°  IV25'17		max. Earth dist.	15183 Jun 23 01:23	13°  III08'58	1.71922 AU
	15181 Jan 26 12:19	30°  III					
evening set	15181 Jan 28 18:45	28°  III42'10		superior conj	15183 Jun 25 18:28	16°  III32'09	-1°27'22
inferior conj	15181 Feb 01 20:30	26°  III11'45	-7°12'08	minimum elong	15183 Jun 25 16:45	16°  III26'48	1°28'19
minimum elong	15181 Feb 02 06:32	25°  III56'01	7°09'43		15183 Jul 06 12:57	0°  II	
min. Earth dist.	15181 Feb 02 01:11	26°  III04'24	0.28714 AU		15183 Jul 30 12:11	0°  III	
morning rise	15181 Feb 06 18:16	23°  III11'48		evening rise	15183 Aug 04 16:20	6°  III28'38	
direct	15181 Feb 23 03:23	18°  III01'51			15183 Aug 23 11:36	0°  II	
greatest brilliancy	15181 Mar 05 19:30	20°  III05'52	-4.8m	asc. node	15183 Aug 23 15:30	0°  II12'11	
asc. node	15181 Mar 07 22:43	20°  III57'11			15183 Sep 16 12:42	0°  III	
	15181 Mar 22 22:00	0°  IV			15183 Oct 10 17:19	0°  IV	
morning max el	15181 Apr 13 06:57	18°  IV43'17	45°51'20		15183 Nov 04 04:39	0°  III	
	15181 Apr 24 10:20	0°  IV			15183 Nov 29 04:06	0°  III	
	15181 May 21 18:19	0°  III		desc. node	15183 Dec 13 08:39	16°  III37'46	
	15181 Jun 16 11:44	0°  II			15183 Dec 25 00:36	0°  IV	
desc. node	15181 Jun 28 00:30	13°  II47'33			15184 Jan 21 13:14	0°  IV	
	15181 Jul 11 09:56	0°  III		evening max el	15184 Feb 02 23:24	12°  IV27'44	45°59'13
	15181 Aug 04 20:59	0°  II			15184 Feb 23 01:13	0°  III	
	15181 Aug 29 01:51	0°  III		greatest brilliancy	15184 Mar 12 21:42	10°  III56'38	-4.8m
	15181 Sep 22 03:52	0°  II		retrograde	15184 Mar 23 01:10	12°  III49'13	
morning set	15181 Oct 14 16:13	28°  II05'33		asc. node	15184 Apr 04 08:06	9°  III48'12	
	15181 Oct 16 04:53	0°  III		evening set	15184 Apr 06 20:59	8°  III30'03	
asc. node	15181 Oct 18 18:14	3°  III11'28		inferior conj	15184 Apr 13 05:02	4°  III41'47	2°11'40
	15181 Nov 09 05:51	0°  IV		minimum elong	15184 Apr 13 00:10	4°  III49'24	2°09'45
				min. Earth dist.	15184 Apr 13 05:07	4°  III41'39	0.28266 AU
superior conj	15181 Nov 22 07:45	16°  IV18'38	1°11'45	morning rise	15184 Apr 19 03:16	1°  III07'14	
minimum elong	15181 Nov 21 22:03	15°  IV48'23	1°12'23		15184 Apr 21 05:57	30°  III	
max. Earth dist.	15181 Nov 24 07:28	18°  IV47'14	1.72228 AU	direct	15184 May 04 10:08	26°  IV32'22	
	15181 Dec 03 07:36	0°  III		greatest brilliancy	15184 May 14 19:59	28°  IV33'38	-4.8m
	15181 Dec 27 11:29	0°  III			15184 May 18 06:10	0°  III	
evening rise	15181 Dec 29 16:55	2°  III45'18		morning max el	15184 Jun 23 08:00	28°  III24'59	46°31'01
	15182 Jan 20 19:06	0°  IV			15184 Jun 24 22:04	0°  II	
desc. node	15182 Feb 07 08:49	21°  IV31'39			15184 Jul 22 19:15	0°  III	
	15182 Feb 14 07:28	0°  IV		desc. node	15184 Jul 25 11:03	3°  III00'56	
	15182 Mar 11 00:46	0°  III			15184 Aug 17 15:01	0°  II	
	15182 Apr 04 23:16	0°  II			15184 Sep 11 14:12	0°  III	
	15182 Apr 30 05:26	0°  III			15184 Oct 06 03:51	0°  II	
	15182 May 26 03:05	0°  II			15184 Oct 30 12:58	0°  III	
asc. node	15182 May 31 02:27	5°  II36'38		asc. node	15184 Nov 15 07:50	19°  III29'55	
	15182 Jun 22 14:19	0°  III			15184 Nov 23 19:36	0°  IV	
evening max el	15182 Jun 29 11:08	6°  III58'26	46°34'18		15184 Dec 18 00:51	0°  III	
	15182 Jul 26 01:02	0°  II		morning set	15184 Dec 25 00:12	8°  III38'31	
greatest brilliancy	15182 Aug 08 13:06	7°  II14'54	-4.9m		15185 Jan 11 05:50	0°  III	
retrograde	15182 Aug 18 12:55	9°  II07'38					
evening set	15182 Sep 02 12:36	4°  II43'15		superior conj	15185 Jan 30 23:07	24°  III24'03	1°12'01
inferior conj	15182 Sep 08 04:39	1°  II23'53	3°04'51	minimum elong	15185 Jan 31 08:22	24°  III52'37	1°12'24
minimum elong	15182 Sep 08 11:33	1°  II13'22	3°02'37	max. Earth dist.	15185 Feb 01 20:57	26°  III45'41	1.73013 AU
min. Earth dist.	15182 Sep 08 11:36	1°  II13'18	0.26934 AU		15185 Feb 04 11:51	0°  IV	
	15182 Sep 10 12:08	30°  III			15185 Feb 28 19:39	0°  IV	
morning rise	15182 Sep 14 10:25	27°  III45'41		desc. node	15185 Mar 06 23:00	7°  IV33'30	

evening rise	15185 Mar 09 15:39	10° Υ 52'24			15187 Nov 13 17:35	0° \mathbb{M}		
	15185 Mar 25 05:01	0° \mathcal{B}			15187 Dec 08 16:32	0° \mathcal{A}		
	15185 Apr 18 15:14	0° Π		asc. node	15187 Dec 13 20:09	6° \mathcal{A} 14'25		
	15185 May 13 02:11	0° \mathcal{E}			15188 Jan 02 08:35	0° \mathcal{Z}		
	15185 Jun 06 15:16	0° Ω			15188 Jan 26 20:11	0° \approx		
asc. node	15185 Jun 27 14:20	25° Ω 24'36			15188 Feb 20 05:24	0° \mathcal{H}		
	15185 Jul 01 09:52	0° \mathbb{M}		morning set	15188 Mar 03 23:59	15° \mathcal{H} 44'21		
	15185 Jul 26 16:14	0° $\underline{\mathcal{A}}$			15188 Mar 15 13:35	0° Υ		
	15185 Aug 22 00:07	0° \mathbb{M}		desc. node	15188 Apr 03 13:23	23° Υ 25'47		
evening max el	15185 Sep 10 01:25	20° \mathbb{M} 08'21	46°40'17		15188 Apr 08 21:03	0° \mathcal{B}		
	15185 Sep 20 07:18	0° \mathcal{A}		max. Earth dist.	15188 Apr 09 07:50	0° \mathcal{B} 33'19	1.72933 AU	
desc. node	15185 Oct 17 13:18	19° \mathcal{A} 35'10						
greatest brilliancy	15185 Oct 19 08:35	20° \mathcal{A} 19'44	-4.8m	superior conj	15188 Apr 10 20:39	2° \mathcal{B} 26'59	-0°17'39	
retrograde	15185 Oct 30 07:15	22° \mathcal{A} 32'05		minimum elong	15188 Apr 10 16:28	2° \mathcal{B} 14'06	0°17'52	
evening set	15185 Nov 15 15:50	17° \mathcal{A} 22'39			15188 May 03 03:16	0° Π		
min. Earth dist.	15185 Nov 19 13:43	15° \mathcal{A} 01'40	0.27882 AU	evening rise	15188 May 19 07:46	20° Π 04'05		
inferior conj	15185 Nov 20 10:28	14° \mathcal{A} 29'40	-7°23'00		15188 May 27 07:49	0° \mathcal{E}		
minimum elong	15185 Nov 20 00:12	14° \mathcal{A} 45'30	7°20'16		15188 Jun 20 11:13	0° Ω		
morning rise	15185 Nov 24 09:00	12° \mathcal{A} 06'51			15188 Jul 14 15:02	0° \mathbb{M}		
direct	15185 Dec 11 11:34	6° \mathcal{A} 37'16		asc. node	15188 Jul 25 03:20	13° \mathbb{M} 01'01		
greatest brilliancy	15185 Dec 20 21:43	8° \mathcal{A} 14'49	-4.8m		15188 Aug 07 21:28	0° $\underline{\mathcal{A}}$		
	15186 Jan 22 02:29	0° \mathcal{Z}			15188 Sep 01 09:30	0° \mathbb{M}		
morning max el	15186 Jan 29 12:15	6° \mathcal{Z} 56'48	45°49'29		15188 Sep 26 08:23	0° \mathcal{A}		
asc. node	15186 Feb 07 15:25	16° \mathcal{Z} 02'32			15188 Oct 22 05:34	0° \mathcal{Z}		
	15186 Feb 20 21:06	0° \approx		desc. node	15188 Nov 13 23:21	24° \mathcal{Z} 35'12		
	15186 Mar 19 15:02	0° \mathcal{H}			15188 Nov 19 08:13	0° \approx		
	15186 Apr 14 04:52	0° Υ		evening max el	15188 Nov 20 10:37	1° \approx 05'04	46°18'20	
	15186 May 09 04:05	0° \mathcal{B}			15188 Dec 28 22:57	0° \mathcal{H}		
desc. node	15186 May 30 14:30	26° \mathcal{B} 08'28		greatest brilliancy	15188 Dec 29 23:06	0° \mathcal{H} 22'16	-4.8m	
	15186 Jun 02 17:58	0° Π		retrograde	15189 Jan 09 01:02	2° \mathcal{H} 14'11		
	15186 Jun 27 01:02	0° \mathcal{E}			15189 Jan 19 15:21	30° $\mathcal{R}\approx$		
	15186 Jul 21 03:17	0° Ω		evening set	15189 Jan 26 13:15	26° \approx 26'17		
morning set	15186 Jul 30 12:01	11° Ω 42'23		inferior conj	15189 Jan 30 12:08	24° \approx 00'21	-7°24'02	
	15186 Aug 14 02:43	0° \mathbb{M}		minimum elong	15189 Jan 30 21:55	23° \approx 45'03	7°21'46	
	15186 Sep 07 01:09	0° $\underline{\mathcal{A}}$		min. Earth dist.	15189 Jan 30 16:09	23° \approx 54'03	0.28721 AU	
				morning rise	15189 Feb 04 06:33	21° \approx 05'38		
superior conj	15186 Sep 08 05:14	1° $\underline{\mathcal{A}}$ 27'59	-0°28'57	direct	15189 Feb 20 18:50	15° \approx 50'30		
minimum elong	15186 Sep 08 12:15	1° $\underline{\mathcal{A}}$ 49'58	0°28'41	greatest brilliancy	15189 Mar 03 10:45	17° \approx 54'32	-4.8m	
max. Earth dist.	15186 Sep 08 14:11	1° $\underline{\mathcal{A}}$ 56'00	1.71538 AU	asc. node	15189 Mar 07 00:43	19° \approx 24'53		
asc. node	15186 Sep 20 05:57	16° $\underline{\mathcal{A}}$ 32'23			15189 Mar 23 10:08	0° \mathcal{H}		
	15186 Sep 30 23:54	0° \mathbb{M}		morning max el	15189 Apr 10 22:52	16° \mathcal{H} 32'10	45°50'30	
evening rise	15186 Oct 17 13:12	20° \mathbb{M} 41'52			15189 Apr 24 04:20	0° Υ		
	15186 Oct 25 00:03	0° \mathcal{A}			15189 May 21 08:24	0° \mathcal{B}		
	15186 Nov 18 03:03	0° \mathcal{Z}			15189 Jun 16 00:13	0° Π		
	15186 Dec 12 11:14	0° \approx		desc. node	15189 Jun 27 02:17	13° Π 16'44		
	15187 Jan 06 03:26	0° \mathcal{H}			15189 Jul 10 21:34	0° \mathcal{E}		
desc. node	15187 Jan 09 21:05	4° \mathcal{H} 29'46			15189 Aug 04 08:09	0° Ω		
	15187 Jan 31 06:41	0° Υ			15189 Aug 28 12:44	0° \mathbb{M}		
	15187 Feb 26 01:13	0° \mathcal{B}			15189 Sep 21 14:32	0° $\underline{\mathcal{A}}$		
	15187 Mar 24 21:52	0° Π		morning set	15189 Oct 12 06:00	25° $\underline{\mathcal{A}}$ 45'53		
evening max el	15187 Apr 15 04:50	22° Π 02'49	46°07'53		15189 Oct 15 15:24	0° \mathbb{M}		
	15187 Apr 23 14:17	0° \mathcal{E}		asc. node	15189 Oct 17 20:09	2° \mathbb{M} 44'39		
asc. node	15187 May 02 17:55	7° \mathcal{E} 54'50			15189 Nov 08 16:15	0° \mathcal{A}		
greatest brilliancy	15187 May 25 04:20	21° \mathcal{E} 37'09	-4.8m					
retrograde	15187 Jun 03 16:48	23° \mathcal{E} 19'01		superior conj	15189 Nov 19 23:08	14° \mathcal{A} 04'41	1°09'44	
evening set	15187 Jun 21 18:18	17° \mathcal{E} 07'35		minimum elong	15189 Nov 19 13:07	13° \mathcal{A} 33'29	1°10'19	
inferior conj	15187 Jun 24 13:45	15° \mathcal{E} 23'20	9°04'32	max. Earth dist.	15189 Nov 21 22:31	16° \mathcal{A} 32'21	1.72200 AU	
minimum elong	15187 Jun 24 11:23	15° \mathcal{E} 27'01	9°03'32		15189 Dec 02 17:56	0° \mathcal{Z}		
min. Earth dist.	15187 Jun 24 22:13	15° \mathcal{E} 10'06	0.27799 AU		15189 Dec 26 21:52	0° \approx		
morning rise	15187 Jun 27 04:23	13° \mathcal{E} 46'03		evening rise	15189 Dec 27 08:57	0° \approx 34'20		
direct	15187 Jul 15 12:56	7° \mathcal{E} 19'35			15190 Jan 20 05:37	0° \mathcal{H}		
greatest brilliancy	15187 Jul 25 15:30	9° \mathcal{E} 14'23	-4.9m	desc. node	15190 Feb 06 10:37	21° \mathcal{H} 04'29		
desc. node	15187 Aug 22 20:30	28° \mathcal{E} 26'31			15190 Feb 13 18:15	0° Υ		
	15187 Aug 24 13:36	0° Ω			15190 Mar 10 11:58	0° \mathcal{B}		
morning max el	15187 Sep 03 23:53	10° Ω 03'22	46°56'48		15190 Apr 04 11:07	0° Π		
	15187 Sep 22 20:53	0° \mathbb{M}			15190 Apr 29 18:24	0° \mathcal{E}		
	15187 Oct 19 07:11	0° $\underline{\mathcal{A}}$			15190 May 25 18:13	0° Ω		

asc. node	15190 May 30 04:19	4°♌57'55		asc. node	15192 Nov 14 09:35	19°♍01'37	
	15190 Jun 22 10:46	0°♍			15192 Nov 23 06:24	0°♌	
evening max el	15190 Jun 27 01:21	4°♍38'45	46°33'34		15192 Dec 17 11:26	0°♌	
	15190 Jul 27 06:12	0°♌		morning set	15192 Dec 22 16:14	6°♌26'49	
greatest brilliancy	15190 Aug 06 02:27	4°♌51'14	-4.9m		15193 Jan 10 16:18	0°♌	
retrograde	15190 Aug 16 02:20	6°♌43'31					
evening set	15190 Aug 31 03:50	2°♌15'47		superior conj	15193 Jan 28 15:47	22°♌15'04	1°13'50
	15190 Sep 04 01:29	30°♌		minimum elong	15193 Jan 29 00:43	22°♌42'41	1°14'16
inferior conj	15190 Sep 05 17:14	28°♌59'40	3°27'45	max. Earth dist.	15193 Jan 30 14:41	24°♌40'01	1.72991 AU
minimum elong	15190 Sep 06 00:54	28°♌48'01	3°25'19		15193 Feb 03 22:16	0°♌	
min. Earth dist.	15190 Sep 06 00:58	28°♌47'55	0.26941 AU		15193 Feb 28 06:06	0°♌	
morning rise	15190 Sep 11 21:56	25°♌23'02		desc. node	15193 Mar 06 00:54	7°♌07'04	
desc. node	15190 Sep 19 05:49	22°♌17'13		evening rise	15193 Mar 07 07:38	8°♌41'35	
direct	15190 Sep 26 11:16	21°♌13'22			15193 Mar 24 15:37	0°♌	
greatest brilliancy	15190 Oct 06 13:26	23°♌07'37	-4.9m		15193 Apr 18 02:07	0°♌	
	15190 Oct 19 12:50	0°♌			15193 May 12 13:27	0°♌	
morning max el	15190 Nov 15 10:51	23°♌00'11	46°30'42		15193 Jun 06 03:05	0°♌	
	15190 Nov 22 10:10	0°♌		asc. node	15193 Jun 26 16:06	24°♌52'22	
	15190 Dec 20 04:47	0°♌			15193 Jun 30 22:32	0°♌	
asc. node	15191 Jan 10 07:21	24°♌09'56			15193 Jul 26 06:23	0°♌	
	15191 Jan 15 07:22	0°♌			15193 Aug 21 17:29	0°♌	
	15191 Feb 09 14:52	0°♌		evening max el	15193 Sep 07 14:56	17°♌46'10	46°40'34
	15191 Mar 06 11:45	0°♌			15193 Sep 20 11:32	0°♌	
	15191 Mar 31 02:23	0°♌		desc. node	15193 Oct 16 15:14	17°♌53'03	
	15191 Apr 24 12:48	0°♌		greatest brilliancy	15193 Oct 16 23:46	18°♌01'23	-4.8m
desc. node	15191 May 02 03:21	9°♌22'43		retrograde	15193 Oct 27 21:08	20°♌12'53	
morning set	15191 May 14 18:26	24°♌59'19		evening set	15193 Nov 13 02:14	15°♌09'33	
	15191 May 18 19:32	0°♌		min. Earth dist.	15193 Nov 17 04:04	12°♌43'01	0.27828 AU
	15191 Jun 11 22:50	0°♌		inferior conj	15193 Nov 18 00:30	12°♌11'31	-7°10'03
max. Earth dist.	15191 Jun 20 12:58	10°♌42'36	1.71953 AU	minimum elong	15193 Nov 17 13:57	12°♌27'46	7°07'09
				morning rise	15193 Nov 22 02:04	9°♌44'09	
superior conj	15191 Jun 23 07:05	14°♌08'56	-1°27'00	direct	15193 Dec 09 00:45	4°♌19'47	
minimum elong	15191 Jun 23 04:23	14°♌00'31	1°27'57	greatest brilliancy	15193 Dec 18 11:35	5°♌57'27	-4.8m
	15191 Jul 05 23:27	0°♌			15194 Jan 22 04:06	0°♌	
	15191 Jul 29 22:46	0°♌		morning max el	15194 Jan 27 01:01	4°♌37'05	45°50'28
evening rise	15191 Aug 02 03:57	4°♌01'34		asc. node	15194 Feb 06 17:25	15°♌18'23	
asc. node	15191 Aug 22 17:23	29°♌44'34			15194 Feb 20 13:28	0°♌	
	15191 Aug 22 22:19	0°♌			15194 Mar 19 04:29	0°♌	
	15191 Sep 15 23:35	0°♌			15194 Apr 13 17:00	0°♌	
	15191 Oct 10 04:28	0°♌			15194 May 08 15:32	0°♌	
	15191 Nov 03 16:16	0°♌		desc. node	15194 May 29 16:17	25°♌39'43	
	15191 Nov 28 16:34	0°♌			15194 Jun 02 05:04	0°♌	
desc. node	15191 Dec 12 10:28	16°♌04'50			15194 Jun 26 11:58	0°♌	
	15191 Dec 24 14:46	0°♌			15194 Jul 20 14:07	0°♌	
	15192 Jan 21 07:39	0°♌		morning set	15194 Jul 27 23:58	9°♌15'54	
evening max el	15192 Jan 31 15:07	10°♌16'57	45°59'20		15194 Aug 13 13:28	0°♌	
	15192 Feb 23 16:24	0°♌					
greatest brilliancy	15192 Mar 10 13:13	8°♌44'20	-4.8m	superior conj	15194 Sep 05 17:27	29°♌02'17	-0°32'33
retrograde	15192 Mar 20 15:57	10°♌36'00		minimum elong	15194 Sep 06 01:14	29°♌26'44	0°32'18
asc. node	15192 Apr 03 10:09	6°♌51'59		max. Earth dist.	15194 Sep 05 20:42	29°♌12'28	1.71529 AU
evening set	15192 Apr 04 12:04	6°♌17'25			15194 Sep 06 11:52	0°♌	
inferior conj	15192 Apr 10 20:22	2°♌28'30	1°50'34	asc. node	15194 Sep 19 07:47	16°♌04'36	
minimum elong	15192 Apr 10 16:16	2°♌34'57	1°48'53		15194 Sep 30 10:37	0°♌	
min. Earth dist.	15192 Apr 10 20:54	2°♌27'40	0.28280 AU	evening rise	15194 Oct 15 03:07	18°♌21'53	
	15192 Apr 14 20:37	30°♌			15194 Oct 24 10:49	0°♌	
morning rise	15192 Apr 16 20:21	28°♌51'13			15194 Nov 17 13:57	0°♌	
direct	15192 May 02 01:48	24°♌19'11			15194 Dec 11 22:22	0°♌	
greatest brilliancy	15192 May 12 11:50	26°♌20'16	-4.8m		15195 Jan 05 15:01	0°♌	
	15192 May 20 04:11	0°♌		desc. node	15195 Jan 08 22:56	4°♌00'15	
morning max el	15192 Jun 20 22:06	26°♌07'09	46°29'27		15195 Jan 30 19:04	0°♌	
	15192 Jun 24 18:44	0°♌			15195 Feb 25 15:05	0°♌	
	15192 Jul 22 10:27	0°♌			15195 Mar 24 14:54	0°♌	
desc. node	15192 Jul 24 12:59	2°♌23'52		evening max el	15195 Apr 12 18:10	19°♌43'11	46°07'12
	15192 Aug 17 04:10	0°♌			15195 Apr 23 17:49	0°♌	
	15192 Sep 11 02:19	0°♌		asc. node	15195 May 01 19:45	6°♌48'03	
	15192 Oct 05 15:21	0°♌		greatest brilliancy	15195 May 22 17:19	19°♌16'49	-4.8m
	15192 Oct 30 00:03	0°♌		retrograde	15195 Jun 01 06:39	20°♌59'39	

evening set	15195 Jun 19 05:41	14°☿51'16		superior conj	15197 Nov 17 14:00	11°♂47'42	1°07'34
inferior conj	15195 Jun 22 03:48	13°☿03'07	9°01'26	minimum elong	15197 Nov 17 03:45	11°♂15'44	1°08'06
minimum elong	15195 Jun 22 00:32	13°☿08'14	9°00'20	max. Earth dist.	15197 Nov 19 14:15	14°♂18'06	1.72170 AU
min. Earth dist.	15195 Jun 22 11:32	12°☿51'03	0.27831 AU		15197 Dec 02 04:43	0°☿	
morning rise	15195 Jun 24 19:17	11°☿24'40		evening rise	15197 Dec 25 00:35	28°☿20'42	
direct	15195 Jul 13 02:57	4°☿58'36			15197 Dec 26 08:40	0°♊	
greatest brilliancy	15195 Jul 23 05:59	6°☿53'58	-4.9m		15198 Jan 19 16:35	0°♋	
desc. node	15195 Aug 21 22:36	27°☿26'57		desc. node	15198 Feb 05 12:32	20°♋36'23	
	15195 Aug 24 16:28	0°♌			15198 Feb 13 05:29	0°♌	
morning max el	15195 Sep 01 14:33	7°♌43'15	46°56'49		15198 Mar 09 23:38	0°♍	
	15195 Sep 22 14:12	0°♍			15198 Apr 03 23:29	0°♎	
	15195 Oct 18 21:27	0°♎			15198 Apr 29 07:56	0°☿	
	15195 Nov 13 06:22	0°♏			15198 May 25 10:01	0°♌	
	15195 Dec 08 04:26	0°♊		asc. node	15198 May 29 06:15	4°♌17'47	
asc. node	15195 Dec 12 22:00	5°♊44'25			15198 Jun 22 08:22	0°♍	
	15196 Jan 01 19:55	0°☿		evening max el	15198 Jun 24 15:49	2°♍18'44	46°32'51
	15196 Jan 26 07:10	0°♊			15198 Jul 29 01:18	0°♎	
	15196 Feb 19 16:10	0°♋		greatest brilliancy	15198 Aug 03 16:17	2°♎27'35	-4.9m
morning set	15196 Mar 01 16:35	13°♋34'28		retrograde	15198 Aug 13 15:29	4°♎18'43	
	15196 Mar 15 00:17	0°♌			15198 Aug 28 10:25	30°♏♍	
desc. node	15196 Apr 02 15:13	22°♌58'30		evening set	15198 Aug 28 19:24	29°♏47'44	
max. Earth dist.	15196 Apr 07 03:57	28°♌34'12	1.72953 AU	inferior conj	15198 Sep 03 06:01	26°♏34'59	3°50'09
				minimum elong	15198 Sep 03 14:20	26°♏22'17	3°47'31
superior conj	15196 Apr 08 11:44	0°♍12'19	-0°14'11	min. Earth dist.	15198 Sep 03 14:35	26°♏21'55	0.26950 AU
minimum elong	15196 Apr 08 08:21	0°♍01'53	0°14'24	morning rise	15198 Sep 09 09:18	22°♏59'57	
behind sun begin	15196 Apr 07 21:51	29°♌29'27		desc. node	15198 Sep 18 07:44	19°♏28'08	
behind sun end	15196 Apr 08 18:51	0°♍34'19		direct	15198 Sep 24 00:39	18°♏48'30	
	15196 Apr 08 07:44	0°♍		greatest brilliancy	15198 Oct 04 02:13	20°♏42'20	-4.9m
	15196 May 02 14:00	0°♎			15198 Oct 20 11:45	0°♎	
evening rise	15196 May 16 22:15	17°♎46'42		morning max el	15198 Nov 13 00:44	20°♎39'20	46°32'02
	15196 May 26 18:39	0°☿			15198 Nov 22 06:34	0°♏	
	15196 Jun 19 22:15	0°♌			15198 Dec 19 20:08	0°♊	
	15196 Jul 14 02:22	0°♍		asc. node	15199 Jan 09 09:21	23°♊36'15	
asc. node	15196 Jul 24 05:15	12°♍31'27			15199 Jan 14 20:37	0°☿	
	15196 Aug 07 09:14	0°♎			15199 Feb 09 03:01	0°♊	
	15196 Aug 31 21:55	0°♏			15199 Mar 05 23:16	0°♋	
	15196 Sep 25 21:53	0°♊			15199 Mar 30 13:33	0°♌	
	15196 Oct 21 21:17	0°☿			15199 Apr 23 23:47	0°♍	
desc. node	15196 Nov 13 01:13	23°☿48'40		desc. node	15199 May 01 05:02	8°♍54'07	
evening max el	15196 Nov 18 01:43	28°☿50'07	46°19'25	morning set	15199 May 12 07:55	22°♍38'47	
	15196 Nov 19 06:17	0°♊			15199 May 18 06:26	0°♎	
greatest brilliancy	15196 Dec 27 13:20	28°♊08'14	-4.8m		15199 Jun 11 09:43	0°☿	
	15197 Jan 05 13:11	0°♋		max. Earth dist.	15199 Jun 17 21:50	8°☿06'36	1.71983 AU
retrograde	15197 Jan 06 17:07	0°♋01'36					
	15197 Jan 07 20:53	30°♏♊		superior conj	15199 Jun 20 19:57	11°☿45'18	-1°26'29
evening set	15197 Jan 24 07:39	24°♊09'00		minimum elong	15199 Jun 20 16:18	11°☿33'54	1°27'24
inferior conj	15197 Jan 28 03:38	21°♊47'26	-7°35'27		15199 Jul 05 10:22	0°♌	
minimum elong	15197 Jan 28 13:06	21°♊32'39	7°33'17		15199 Jul 29 09:44	0°♍	
min. Earth dist.	15197 Jan 28 06:39	21°♊42'44	0.28724 AU	evening rise	15199 Jul 30 15:46	1°♍34'01	
morning rise	15197 Feb 01 18:35	18°♊58'04		asc. node	15199 Aug 21 19:14	29°♍15'51	
direct	15197 Feb 18 10:35	13°♊37'46			15199 Aug 22 09:22	0°♎	
greatest brilliancy	15197 Mar 01 01:13	15°♊41'00	-4.8m		15199 Sep 15 10:47	0°♏	
asc. node	15197 Mar 06 02:47	17°♊54'32			15199 Oct 09 15:58	0°♊	
	15197 Mar 23 19:36	0°♋			15199 Nov 03 04:17	0°☿	
morning max el	15197 Apr 08 15:14	14°♋21'03	45°49'43		15199 Nov 28 05:30	0°♊	
	15197 Apr 23 22:20	0°♌		desc. node	15199 Dec 11 12:21	15°♊30'40	
	15197 May 20 22:42	0°♍			15199 Dec 24 05:34	0°♋	
	15197 Jun 15 12:57	0°♎			15200 Jan 21 03:05	0°♌	
desc. node	15197 Jun 26 04:15	12°♎45'33		evening max el	15200 Jan 29 06:07	8°♌03'07	45°59'32
	15197 Jul 10 09:30	0°☿			15200 Feb 24 13:41	0°♍	
	15197 Aug 03 19:38	0°♌		greatest brilliancy	15200 Mar 08 05:12	6°♍31'29	-4.8m
	15197 Aug 27 23:57	0°♍		retrograde	15200 Mar 18 06:33	8°♍22'03	
	15197 Sep 21 01:36	0°♎		evening set	15200 Apr 02 03:24	4°♍03'35	
morning set	15197 Oct 09 19:29	23°♎24'00		asc. node	15200 Apr 02 12:00	3°♍51'45	
	15197 Oct 15 02:20	0°♏		inferior conj	15200 Apr 08 11:50	0°♍14'32	1°29'22
asc. node	15197 Oct 16 21:54	2°♏16'01		minimum elong	15200 Apr 08 08:30	0°♍19'46	1°27'56
	15197 Nov 08 03:05	0°♊		min. Earth dist.	15200 Apr 08 13:06	0°♍12'31	0.28295 AU

	15200 Apr 08 21:04	30° Υ			15202 Oct 23 21:41	0° \mathcal{X}	
morning rise	15200 Apr 14 13:22	26° Υ 34'41			15202 Nov 17 00:54	0° \mathcal{Z}	
direct	15200 Apr 29 17:00	22° Υ 05'08			15202 Dec 11 09:33	0° \approx	
greatest brilliancy	15200 May 10 04:17	24° Υ 06'44	-4.8m		15203 Jan 05 02:39	0° \mathcal{H}	
	15200 May 21 11:38	0° \mathcal{B}		desc. node	15203 Jan 08 00:55	3° \mathcal{H} 31'02	
morning max el	15200 Jun 18 11:53	23° \mathcal{B} 47'29	46°27'55		15203 Jan 30 07:33	0° Υ	
	15200 Jun 24 15:07	0° Π			15203 Feb 25 05:08	0° \mathcal{B}	
	15200 Jul 22 01:48	0° \mathcal{E}			15203 Mar 24 08:24	0° Π	
desc. node	15200 Jul 23 14:57	1° \mathcal{E} 46'11		evening max el	15203 Apr 10 08:43	17° Π 26'26	46°06'32
	15200 Aug 16 17:34	0° Ω			15203 Apr 23 23:21	0° \mathcal{E}	
	15200 Sep 10 14:41	0° \mathcal{M}		asc. node	15203 Apr 30 21:44	5° \mathcal{E} 39'30	
	15200 Oct 05 03:05	0° \mathcal{L}		greatest brilliancy	15203 May 20 05:53	16° \mathcal{E} 56'07	-4.8m
	15200 Oct 29 11:21	0° \mathcal{M}		retrograde	15203 May 29 21:00	18° \mathcal{E} 40'24	
asc. node	15200 Nov 13 11:25	18° \mathcal{M} 32'53		evening set	15203 Jun 16 16:49	12° \mathcal{E} 35'41	
	15200 Nov 22 17:24	0° \mathcal{X}		inferior conj	15203 Jun 19 17:56	10° \mathcal{E} 43'02	8°57'23
	15200 Dec 16 22:16	0° \mathcal{Z}		minimum elong	15203 Jun 19 13:49	10° \mathcal{E} 49'29	8°56'10
morning set	15200 Dec 20 08:18	4° \mathcal{Z} 14'21		min. Earth dist.	15203 Jun 20 00:37	10° \mathcal{E} 32'37	0.27860 AU
	15201 Jan 10 03:02	0° \approx		morning rise	15203 Jun 22 10:44	9° \mathcal{E} 02'43	
				direct	15203 Jul 10 17:36	2° \mathcal{E} 38'03	
superior conj	15201 Jan 26 08:27	20° \approx 05'12	1°15'33	greatest brilliancy	15203 Jul 20 19:58	4° \mathcal{E} 33'18	-4.9m
minimum elong	15201 Jan 26 17:01	20° \approx 31'41	1°16'01	desc. node	15203 Aug 21 00:32	26° \mathcal{E} 28'31	
max. Earth dist.	15201 Jan 28 06:40	22° \approx 28'02	1.72973 AU		15203 Aug 24 17:49	0° Ω	
	15201 Feb 03 08:59	0° \mathcal{H}		morning max el	15203 Aug 30 05:59	5° Ω 25'21	46°56'40
	15201 Feb 27 16:52	0° Υ			15203 Sep 22 07:07	0° \mathcal{M}	
evening rise	15201 Mar 04 23:32	6° Υ 29'38			15203 Oct 18 11:33	0° \mathcal{L}	
desc. node	15201 Mar 05 02:40	6° Υ 39'15			15203 Nov 12 19:03	0° \mathcal{M}	
	15201 Mar 24 02:32	0° \mathcal{B}			15203 Dec 07 16:15	0° \mathcal{X}	
	15201 Apr 17 13:17	0° Π		asc. node	15203 Dec 11 23:58	5° \mathcal{X} 14'53	
	15201 May 12 01:01	0° \mathcal{E}			15204 Jan 01 07:08	0° \mathcal{Z}	
	15201 Jun 05 15:13	0° Ω			15204 Jan 25 18:01	0° \approx	
asc. node	15201 Jun 25 18:04	24° Ω 19'49			15204 Feb 19 02:49	0° \mathcal{H}	
	15201 Jun 30 11:32	0° \mathcal{M}		morning set	15204 Feb 28 09:35	11° \mathcal{H} 26'17	
	15201 Jul 25 20:59	0° \mathcal{L}			15204 Mar 14 10:51	0° Υ	
	15201 Aug 21 11:31	0° \mathcal{M}		desc. node	15204 Apr 01 16:58	22° Υ 31'16	
evening max el	15201 Sep 05 04:18	15° \mathcal{M} 23'02	46°40'59	max. Earth dist.	15204 Apr 05 00:35	26° Υ 37'01	1.72977 AU
	15201 Sep 20 18:00	0° \mathcal{X}					
greatest brilliancy	15201 Oct 14 14:47	15° \mathcal{X} 42'35	-4.8m	superior conj	15204 Apr 06 03:03	27° Υ 58'42	-0°10'44
desc. node	15201 Oct 15 17:07	16° \mathcal{X} 06'51		minimum elong	15204 Apr 06 00:28	27° Υ 50'45	0°10'57
retrograde	15201 Oct 25 11:23	17° \mathcal{X} 53'58		behind sun begin	15204 Apr 05 06:52	26° Υ 56'23	
evening set	15201 Nov 10 12:53	12° \mathcal{X} 56'10		behind sun end	15204 Apr 06 18:05	28° Υ 45'07	
min. Earth dist.	15201 Nov 14 18:36	10° \mathcal{X} 24'28	0.27774 AU		15204 Apr 07 18:20	0° \mathcal{B}	
inferior conj	15201 Nov 15 14:42	9° \mathcal{X} 53'31	-6°56'20		15204 May 02 00:40	0° Π	
minimum elong	15201 Nov 15 03:58	10° \mathcal{X} 10'03	6°53'18	evening rise	15204 May 14 12:48	15° Π 29'44	
morning rise	15201 Nov 19 19:24	7° \mathcal{X} 21'43			15204 May 26 05:27	0° \mathcal{E}	
direct	15201 Dec 06 13:48	2° \mathcal{X} 02'18			15204 Jun 19 09:14	0° Ω	
greatest brilliancy	15201 Dec 16 01:50	3° \mathcal{X} 40'36	-4.8m		15204 Jul 13 13:38	0° \mathcal{M}	
	15202 Jan 22 04:27	0° \mathcal{Z}		asc. node	15204 Jul 23 07:06	12° \mathcal{M} 01'54	
morning max el	15202 Jan 24 14:39	2° \mathcal{Z} 19'14	45°51'23		15204 Aug 06 20:56	0° \mathcal{L}	
asc. node	15202 Feb 05 19:23	14° \mathcal{Z} 34'31			15204 Aug 31 10:16	0° \mathcal{M}	
	15202 Feb 20 05:40	0° \approx			15204 Sep 25 11:23	0° \mathcal{X}	
	15202 Mar 18 18:00	0° \mathcal{H}			15204 Oct 21 13:09	0° \mathcal{Z}	
	15202 Apr 13 05:15	0° Υ		desc. node	15204 Nov 12 03:14	23° \mathcal{Z} 02'05	
	15202 May 08 03:08	0° \mathcal{B}		evening max el	15204 Nov 15 17:49	26° \mathcal{Z} 37'52	46°20'27
desc. node	15202 May 28 18:14	25° \mathcal{B} 11'03			15204 Nov 19 05:07	0° \approx	
	15202 Jun 01 16:18	0° Π		greatest brilliancy	15204 Dec 25 03:54	25° \approx 55'19	-4.8m
	15202 Jun 25 23:00	0° \mathcal{E}		retrograde	15205 Jan 04 09:15	27° \approx 49'41	
	15202 Jul 20 01:02	0° Ω		evening set	15205 Jan 22 02:08	21° \approx 52'52	
morning set	15202 Jul 25 11:54	6° Ω 49'00		inferior conj	15205 Jan 25 19:15	19° \approx 35'30	-7°46'09
	15202 Aug 13 00:20	0° \mathcal{M}		minimum elong	15205 Jan 26 04:21	19° \approx 21'16	7°44'06
				min. Earth dist.	15205 Jan 25 21:08	19° \approx 32'33	0.28721 AU
superior conj	15202 Sep 03 05:38	26° \mathcal{M} 36'07	-0°36'05	morning rise	15205 Jan 30 06:39	16° \approx 51'28	
minimum elong	15202 Sep 03 14:10	27° \mathcal{M} 02'51	0°35'50	direct	15205 Feb 16 02:42	11° \approx 26'21	
max. Earth dist.	15202 Sep 03 04:48	26° \mathcal{M} 33'29	1.71525 AU	greatest brilliancy	15205 Feb 26 15:09	13° \approx 27'58	-4.8m
	15202 Sep 05 22:42	0° \mathcal{L}		asc. node	15205 Mar 05 04:36	16° \approx 27'56	
asc. node	15202 Sep 18 09:31	15° \mathcal{L} 36'03			15205 Mar 24 01:57	0° \mathcal{H}	
	15202 Sep 29 21:27	0° \mathcal{M}		morning max el	15205 Apr 06 07:14	12° \mathcal{H} 10'07	45°48'52
evening rise	15202 Oct 12 17:07	16° \mathcal{M} 01'50			15205 Apr 23 15:34	0° Υ	

	15205 May 20 12:35	0°♄		desc. node	15207 Dec 10 14:20	14°♁57'24	
	15205 Jun 15 01:24	0°♂			15207 Dec 23 20:15	0°♁	
desc. node	15205 Jun 25 06:11	12°♂14'51			15208 Jan 20 22:47	0°♁	
	15205 Jul 09 21:13	0°♄		evening max el	15208 Jan 26 20:21	5°♁48'20	45°59'49
	15205 Aug 03 06:55	0°♂			15208 Feb 25 18:24	0°♄	
	15205 Aug 27 10:59	0°♁		greatest brilliancy	15208 Mar 05 21:06	4°♄19'28	-4.8m
	15205 Sep 20 12:26	0°♂		retrograde	15208 Mar 15 21:12	6°♄09'22	
morning set	15205 Oct 07 08:51	21°♂02'26		evening set	15208 Mar 30 18:52	1°♄50'26	
	15205 Oct 14 13:01	0°♂		asc. node	15208 Apr 01 14:00	0°♄49'25	
asc. node	15205 Oct 15 23:43	1°♂48'20			15208 Apr 02 23:10	30°♁♂	
	15205 Nov 07 13:40	0°♄		inferior conj	15208 Apr 06 03:16	28°♁01'47	1°07'58
				minimum elong	15208 Apr 06 00:43	28°♁05'48	1°06'49
superior conj	15205 Nov 15 04:46	9°♄31'04	1°05'17	min. Earth dist.	15208 Apr 06 05:25	27°♁58'25	0.28307 AU
minimum elong	15205 Nov 14 18:21	8°♄58'34	1°05'47	morning rise	15208 Apr 12 06:14	24°♁19'44	
max. Earth dist.	15205 Nov 17 06:20	12°♄05'35	1.72140 AU	direct	15208 Apr 27 07:55	19°♁52'09	
	15205 Dec 01 15:16	0°♄		greatest brilliancy	15208 May 07 21:08	21°♁55'04	-4.8m
evening rise	15205 Dec 22 16:15	26°♄07'45			15208 May 22 09:26	0°♄	
	15205 Dec 25 19:16	0°♁		morning max el	15208 Jun 16 01:48	21°♄29'40	46°26'31
	15206 Jan 19 03:18	0°♁			15208 Jun 24 10:19	0°♂	
desc. node	15206 Feb 04 14:18	20°♁08'42			15208 Jul 21 16:27	0°♄	
	15206 Feb 12 16:26	0°♁		desc. node	15208 Jul 22 16:52	1°♄10'04	
	15206 Mar 09 11:00	0°♄			15208 Aug 16 06:26	0°♂	
	15206 Apr 03 11:33	0°♂			15208 Sep 10 02:39	0°♁	
	15206 Apr 28 21:14	0°♄			15208 Oct 04 14:29	0°♂	
	15206 May 25 01:45	0°♂			15208 Oct 28 22:20	0°♂	
asc. node	15206 May 28 08:13	3°♂38'14		asc. node	15208 Nov 12 13:23	18°♂05'29	
evening max el	15206 Jun 22 05:44	29°♂58'00	46°31'52		15208 Nov 22 04:07	0°♄	
	15206 Jun 22 06:33	0°♁			15208 Dec 16 08:47	0°♄	
	15206 Aug 01 01:01	0°♂		morning set	15208 Dec 17 23:54	2°♄01'20	
greatest brilliancy	15206 Aug 01 06:41	0°♂05'03	-4.9m		15209 Jan 09 13:27	0°♁	
retrograde	15206 Aug 11 04:02	1°♂54'18					
	15206 Aug 20 20:56	30°♁♂		superior conj	15209 Jan 24 00:53	17°♁55'29	1°17'09
evening set	15206 Aug 26 11:03	27°♁19'57		minimum elong	15209 Jan 24 09:01	18°♁20'38	1°17'40
inferior conj	15206 Aug 31 18:46	24°♁10'53	4°12'11	max. Earth dist.	15209 Jan 25 22:27	20°♁16'21	1.72956 AU
minimum elong	15206 Sep 01 03:42	23°♁57'13	4°09'22		15209 Feb 02 19:22	0°♁	
min. Earth dist.	15206 Sep 01 04:30	23°♁56'00	0.26962 AU		15209 Feb 27 03:19	0°♁	
morning rise	15206 Sep 06 20:20	20°♁37'38		evening rise	15209 Mar 02 15:22	4°♁18'29	
desc. node	15206 Sep 17 09:38	16°♁45'06		desc. node	15209 Mar 04 04:27	6°♁12'31	
direct	15206 Sep 21 13:30	16°♁24'08			15209 Mar 23 13:09	0°♄	
greatest brilliancy	15206 Oct 01 15:31	18°♁18'05	-4.9m		15209 Apr 17 00:08	0°♂	
	15206 Oct 21 04:24	0°♂			15209 May 11 12:13	0°♄	
morning max el	15206 Nov 10 13:34	18°♂16'30	46°33'24		15209 Jun 05 02:57	0°♂	
	15206 Nov 22 02:00	0°♂		asc. node	15209 Jun 24 19:57	23°♂48'08	
	15206 Dec 19 10:57	0°♄			15209 Jun 30 00:11	0°♁	
asc. node	15207 Jan 08 11:13	23°♄03'17			15209 Jul 25 11:18	0°♂	
	15207 Jan 14 09:26	0°♄			15209 Aug 21 05:35	0°♂	
	15207 Feb 08 14:47	0°♁		evening max el	15209 Sep 02 17:46	13°♂01'09	46°41'11
	15207 Mar 05 10:25	0°♁			15209 Sep 21 02:38	0°♄	
	15207 Mar 30 00:20	0°♁		greatest brilliancy	15209 Oct 12 04:59	13°♄22'51	-4.8m
	15207 Apr 23 10:21	0°♄		desc. node	15209 Oct 14 19:12	14°♄16'44	
desc. node	15207 Apr 30 07:00	8°♄27'37		retrograde	15209 Oct 23 01:42	15°♄34'51	
morning set	15207 May 09 21:49	20°♄20'46		evening set	15209 Nov 07 23:15	10°♄42'09	
	15207 May 17 16:55	0°♂		min. Earth dist.	15209 Nov 12 08:41	8°♄05'39	0.27724 AU
	15207 Jun 10 20:12	0°♄		inferior conj	15209 Nov 13 04:35	7°♄35'06	-6°41'32
max. Earth dist.	15207 Jun 15 07:17	5°♄33'41	1.72021 AU	minimum elong	15209 Nov 12 17:43	7°♄51'48	6°38'24
				morning rise	15209 Nov 17 12:30	4°♄58'56	
superior conj	15207 Jun 18 09:05	9°♄23'47	-1°25'48		15209 Nov 30 11:24	30°♁♂	
minimum elong	15207 Jun 18 04:30	9°♄09'29	1°26'42	direct	15209 Dec 04 02:51	29°♂44'14	
	15207 Jul 04 20:55	0°♂			15209 Dec 07 20:06	0°♄	
evening rise	15207 Jul 28 03:31	29°♂07'13		greatest brilliancy	15209 Dec 13 15:44	1°♄23'20	-4.8m
	15207 Jul 28 20:23	0°♁		morning max el	15210 Jan 22 04:54	0°♄03'23	45°52'24
asc. node	15207 Aug 20 20:57	28°♁47'36			15210 Jan 22 03:30	0°♄	
	15207 Aug 21 20:09	0°♂		asc. node	15210 Feb 04 21:19	13°♄51'39	
	15207 Sep 14 21:44	0°♂			15210 Feb 19 21:20	0°♁	
	15207 Oct 09 03:13	0°♄			15210 Mar 18 07:07	0°♁	
	15207 Nov 02 16:04	0°♄			15210 Apr 12 17:11	0°♁	
	15207 Nov 27 18:15	0°♁			15210 May 07 14:26	0°♄	

desc. node	15210 May 27 20:06	24°♄43'03			15212 Nov 19 04:48	0°♊	
	15210 Jun 01 03:15	0°♈		greatest brilliancy	15212 Dec 22 18:47	23°♊42'51	-4.8m
	15210 Jun 25 09:44	0°♊		retrograde	15213 Jan 02 00:52	25°♊37'31	
	15210 Jul 19 11:37	0°♈		evening set	15213 Jan 19 20:28	19°♊36'49	
morning set	15210 Jul 23 00:14	4°♈24'26		inferior conj	15213 Jan 23 10:48	17°♊23'24	-7°56'05
	15210 Aug 12 10:50	0°♈		minimum elong	15213 Jan 23 19:28	17°♊09'50	7°54'10
				min. Earth dist.	15213 Jan 23 11:42	17°♊21'59	0.28719 AU
superior conj	15210 Aug 31 18:06	24°♈11'50	-0°39'32	morning rise	15213 Jan 27 18:35	14°♊44'35	
minimum elong	15210 Sep 01 03:18	24°♈40'39	0°39'18	direct	15213 Feb 13 18:43	9°♊14'46	
max. Earth dist.	15210 Aug 31 16:40	24°♈07'20	1.71523 AU	greatest brilliancy	15213 Feb 24 05:09	11°♊14'32	-4.8m
	15210 Sep 05 09:11	0°♈		asc. node	15213 Mar 04 06:39	15°♊04'06	
asc. node	15210 Sep 17 11:24	15°♈09'03			15213 Mar 24 06:22	0°♈	
	15210 Sep 29 07:59	0°♈		morning max el	15213 Apr 03 22:24	9°♈56'45	45°48'00
evening rise	15210 Oct 10 07:14	13°♈43'04			15213 Apr 23 08:33	0°♈	
	15210 Oct 23 08:17	0°♈			15213 May 20 02:25	0°♈	
	15210 Nov 16 11:39	0°♈			15213 Jun 14 13:50	0°♈	
	15210 Dec 10 20:34	0°♈		desc. node	15213 Jun 24 08:00	11°♈43'47	
	15211 Jan 04 14:10	0°♈			15213 Jul 09 08:55	0°♈	
desc. node	15211 Jan 07 02:39	3°♈01'32			15213 Aug 02 18:13	0°♈	
	15211 Jan 29 19:57	0°♈			15213 Aug 26 22:01	0°♈	
	15211 Feb 24 19:11	0°♈			15213 Sep 19 23:17	0°♈	
	15211 Mar 24 02:08	0°♈		morning set	15213 Oct 04 22:27	18°♈41'34	
evening max el	15211 Apr 07 23:54	15°♈11'50	46°05'54		15213 Oct 13 23:43	0°♈	
	15211 Apr 24 06:57	0°♈		asc. node	15213 Oct 15 01:37	1°♈20'54	
asc. node	15211 Apr 29 23:47	4°♈29'32			15213 Nov 07 00:14	0°♈	
greatest brilliancy	15211 May 17 18:24	14°♈36'02	-4.8m				
retrograde	15211 May 27 11:25	16°♈21'34		superior conj	15213 Nov 12 19:53	7°♈15'35	1°02'54
evening set	15211 Jun 14 03:39	10°♈21'14		minimum elong	15213 Nov 12 09:22	6°♈42'48	1°03'23
inferior conj	15211 Jun 17 08:03	8°♈23'32	8°52'27	max. Earth dist.	15213 Nov 14 22:29	9°♈53'22	1.72106 AU
minimum elong	15211 Jun 17 03:06	8°♈31'14	8°51'09		15213 Dec 01 01:48	0°♈	
min. Earth dist.	15211 Jun 17 13:33	8°♈14'57	0.27882 AU	evening rise	15213 Dec 20 08:13	23°♈55'43	
morning rise	15211 Jun 20 02:30	6°♈40'41			15213 Dec 25 05:52	0°♈	
direct	15211 Jul 08 08:32	0°♈18'21			15214 Jan 18 14:04	0°♈	
greatest brilliancy	15211 Jul 18 09:29	2°♈12'47	-4.9m	desc. node	15214 Feb 03 16:08	19°♈40'56	
desc. node	15211 Aug 20 02:26	25°♈32'04			15214 Feb 12 03:30	0°♈	
	15211 Aug 24 17:35	0°♈			15214 Mar 08 22:32	0°♈	
morning max el	15211 Aug 27 21:16	3°♈08'05	46°56'35		15214 Apr 02 23:51	0°♈	
	15211 Sep 21 23:22	0°♈			15214 Apr 28 10:51	0°♈	
	15211 Oct 18 01:11	0°♈			15214 May 24 17:59	0°♈	
	15211 Nov 12 07:22	0°♈		asc. node	15214 May 27 10:05	2°♈57'21	
	15211 Dec 07 03:48	0°♈		evening max el	15214 Jun 19 18:32	27°♈33'55	46°30'56
asc. node	15211 Dec 11 01:47	4°♈45'35			15214 Jun 22 05:57	0°♈	
	15211 Dec 31 18:12	0°♈		greatest brilliancy	15214 Jul 29 21:17	27°♈42'08	-4.9m
	15212 Jan 25 04:46	0°♈		retrograde	15214 Aug 08 16:09	29°♈29'25	
	15212 Feb 18 13:23	0°♈		evening set	15214 Aug 24 02:47	24°♈51'12	
morning set	15212 Feb 26 02:17	9°♈17'24		inferior conj	15214 Aug 29 07:31	21°♈46'14	4°33'39
	15212 Mar 13 21:21	0°♈		minimum elong	15214 Aug 29 17:00	21°♈31'43	4°30'42
desc. node	15212 Mar 31 18:51	22°♈04'41		min. Earth dist.	15214 Aug 29 18:39	21°♈29'11	0.26976 AU
max. Earth dist.	15212 Apr 02 19:45	24°♈35'36	1.72994 AU	morning rise	15214 Sep 04 07:04	18°♈15'06	
				desc. node	15214 Sep 16 11:45	14°♈06'58	
superior conj	15212 Apr 03 18:04	25°♈44'30	-0°07'14	direct	15214 Sep 19 01:52	13°♈58'54	
minimum elong	15212 Apr 03 16:19	25°♈39'04	0°07'28	greatest brilliancy	15214 Sep 29 05:19	15°♈53'44	-4.9m
behind sun begin	15212 Apr 02 19:01	24°♈33'19			15214 Oct 21 17:04	0°♈	
behind sun end	15212 Apr 04 13:37	26°♈44'50		morning max el	15214 Nov 08 02:09	15°♈52'24	46°35'02
	15212 Apr 07 04:50	0°♈			15214 Nov 21 21:01	0°♈	
	15212 May 01 11:15	0°♈			15214 Dec 19 01:39	0°♈	
evening rise	15212 May 12 03:08	13°♈12'24		asc. node	15215 Jan 07 13:07	22°♈30'17	
	15212 May 25 16:10	0°♈			15215 Jan 13 22:15	0°♈	
	15212 Jun 18 20:10	0°♈			15215 Feb 08 02:37	0°♈	
	15212 Jul 13 00:51	0°♈			15215 Mar 04 21:43	0°♈	
asc. node	15212 Jul 22 08:52	11°♈32'20			15215 Mar 29 11:21	0°♈	
	15212 Aug 06 08:33	0°♈			15215 Apr 22 21:12	0°♈	
	15212 Aug 30 22:32	0°♈		desc. node	15215 Apr 29 08:50	7°♈59'52	
	15212 Sep 25 00:47	0°♈		morning set	15215 May 07 11:31	18°♈01'15	
	15212 Oct 21 05:04	0°♈			15215 May 17 03:43	0°♈	
desc. node	15212 Nov 11 05:10	22°♈15'03			15215 Jun 10 07:00	0°♈	
evening max el	15212 Nov 13 09:43	24°♈25'30	46°21'15	max. Earth dist.	15215 Jun 12 18:00	3°♈03'49	1.72058 AU

superior conj	15215 Jun 15 21:57	7°☿00'36	-1°24'56			15217 Nov 20 06:02	30°♁♂	
minimum elong	15215 Jun 15 16:29	6°☿43'32	1°25'50	direct		15217 Dec 01 16:25	27°♁♂24'30	
	15215 Jul 04 07:46	0°♁		greatest brilliancy		15217 Dec 11 05:02	29°♁♂03'57	-4.8m
evening rise	15215 Jul 25 15:06	26°♁39'08				15217 Dec 13 17:33	0°♁	
	15215 Jul 28 07:19	0°♁		morning max el		15218 Jan 19 19:48	27°♁♂47'56	45°53'33
asc. node	15215 Aug 19 22:52	28°♁19'02				15218 Jan 22 02:02	0°♁	
	15215 Aug 21 07:12	0°♁		asc. node		15218 Feb 03 23:17	13°♁♂08'21	
	15215 Sep 14 09:01	0°♁♂				15218 Feb 19 13:06	0°♁♂	
	15215 Oct 08 14:49	0°♁♂				15218 Mar 17 20:27	0°♁♂	
	15215 Nov 02 04:11	0°♁♂				15218 Apr 12 05:21	0°♁♂	
	15215 Nov 27 07:19	0°♁♂				15218 May 07 02:01	0°♁♂	
desc. node	15215 Dec 09 16:10	14°♁♂22'52		desc. node		15218 May 26 21:52	24°♁♂13'44	
	15215 Dec 23 11:20	0°♁♂				15218 May 31 14:31	0°♁♂	
	15216 Jan 20 19:18	0°♁♂				15218 Jun 24 20:50	0°♁♂	
evening max el	15216 Jan 24 10:29	3°♁♂32'57	46°00'12			15218 Jul 18 22:38	0°♁♂	
	15216 Feb 27 12:38	0°♁♂		morning set		15218 Jul 20 12:15	1°♁♂57'32	
greatest brilliancy	15216 Mar 03 12:24	2°♁♂06'25	-4.8m			15218 Aug 11 21:49	0°♁♂	
retrograde	15216 Mar 13 12:14	3°♁♂56'33						
	15216 Mar 27 17:05	30°♁♂		superior conj		15218 Aug 29 06:03	21°♁♂44'26	-0°42'56
evening set	15216 Mar 28 10:38	29°♁♂36'30		minimum elong		15218 Aug 29 15:51	22°♁♂15'09	0°42'45
asc. node	15216 Mar 31 16:02	27°♁♂44'30		max. Earth dist.		15218 Aug 29 04:35	21°♁♂39'50	1.71520 AU
inferior conj	15216 Apr 03 18:49	25°♁♂48'30	0°46'35			15218 Sep 04 20:10	0°♁♂	
minimum elong	15216 Apr 03 17:04	25°♁♂51'15	0°45'43	asc. node		15218 Sep 16 13:14	14°♁♂40'29	
min. Earth dist.	15216 Apr 03 21:35	25°♁♂44'09	0.28328 AU			15218 Sep 28 18:58	0°♁♂	
morning rise	15216 Apr 09 23:08	22°♁♂04'42		evening rise		15218 Oct 07 20:53	11°♁♂21'28	
direct	15216 Apr 24 23:14	17°♁♂38'25				15218 Oct 22 19:19	0°♁♂	
greatest brilliancy	15216 May 05 14:14	19°♁♂42'56	-4.8m			15218 Nov 15 22:49	0°♁♂	
	15216 May 23 02:01	0°♁♂				15218 Dec 10 08:00	0°♁♂	
morning max el	15216 Jun 13 16:45	19°♁♂13'12	46°25'00			15219 Jan 04 02:07	0°♁♂	
	15216 Jun 24 05:29	0°♁♂		desc. node		15219 Jan 06 04:33	2°♁♂31'14	
	15216 Jul 21 07:23	0°♁♂				15219 Jan 29 08:47	0°♁♂	
desc. node	15216 Jul 21 18:48	0°♁♂32'53				15219 Feb 24 09:43	0°♁♂	
	15216 Aug 15 19:38	0°♁♂				15219 Mar 23 20:35	0°♁♂	
	15216 Sep 09 14:55	0°♁♂		evening max el		15219 Apr 05 15:23	12°♁♂57'25	46°05'17
	15216 Oct 04 02:11	0°♁♂				15219 Apr 24 17:39	0°♁♂	
	15216 Oct 28 09:40	0°♁♂		asc. node		15219 Apr 29 01:36	3°♁♂16'34	
asc. node	15216 Nov 11 15:07	17°♁♂36'14		greatest brilliancy		15219 May 15 07:19	12°♁♂16'15	-4.8m
	15216 Nov 21 15:10	0°♁♂		retrograde		15219 May 25 01:41	14°♁♂02'26	
morning set	15216 Dec 15 15:39	29°♁♂47'34		evening set		15219 Jun 11 14:25	8°♁♂07'12	
	15216 Dec 15 19:39	0°♁♂		inferior conj		15219 Jun 14 22:22	6°♁♂03'52	8°46'38
	15217 Jan 09 00:11	0°♁♂		minimum elong		15219 Jun 14 16:38	6°♁♂12'49	8°45'12
				min. Earth dist.		15219 Jun 15 02:44	5°♁♂57'02	0.27907 AU
superior conj	15217 Jan 21 17:37	15°♁♂45'41	1°18'36	morning rise		15219 Jun 17 18:49	4°♁♂17'50	
minimum elong	15217 Jan 22 01:18	16°♁♂09'27	1°19'11			15219 Jun 26 00:48	30°♁♂	
max. Earth dist.	15217 Jan 23 15:49	18°♁♂08'33	1.72934 AU	direct		15219 Jul 05 23:39	27°♁♂58'36	
	15217 Feb 02 06:04	0°♁♂		greatest brilliancy		15219 Jul 15 23:16	29°♁♂51'53	-4.9m
	15217 Feb 26 14:04	0°♁♂				15219 Jul 16 08:05	0°♁♂	
evening rise	15217 Feb 28 07:37	2°♁♂07'45		desc. node		15219 Aug 19 04:30	24°♁♂36'02	
desc. node	15217 Mar 03 06:22	5°♁♂45'16				15219 Aug 24 16:48	0°♁♂	
	15217 Mar 23 00:05	0°♁♂		morning max el		15219 Aug 25 11:49	0°♁♂47'38	46°56'08
	15217 Apr 16 11:22	0°♁♂				15219 Sep 21 15:50	0°♁♂	
	15217 May 10 23:52	0°♁♂				15219 Oct 17 15:11	0°♁♂	
	15217 Jun 04 15:13	0°♁♂				15219 Nov 11 20:04	0°♁♂	
asc. node	15217 Jun 23 21:45	23°♁♂14'35				15219 Dec 06 15:41	0°♁♂	
	15217 Jun 29 13:25	0°♁♂		asc. node		15219 Dec 10 03:39	4°♁♂15'20	
	15217 Jul 25 02:20	0°♁♂				15219 Dec 31 05:33	0°♁♂	
	15217 Aug 21 00:44	0°♁♂				15220 Jan 24 15:48	0°♁♂	
evening max el	15217 Aug 31 07:57	10°♁♂39'40	46°41'31			15220 Feb 18 00:14	0°♁♂	
	15217 Sep 21 15:10	0°♁♂		morning set		15220 Feb 23 19:07	7°♁♂08'02	
greatest brilliancy	15217 Oct 09 18:34	11°♁♂00'56	-4.8m			15220 Mar 13 08:07	0°♁♂	
desc. node	15217 Oct 13 21:06	12°♁♂20'32		desc. node		15220 Mar 30 20:40	21°♁♂37'08	
retrograde	15217 Oct 20 16:20	13°♁♂14'04		max. Earth dist.		15220 Mar 31 13:18	22°♁♂28'28	1.73007 AU
evening set	15217 Nov 05 09:41	8°♁♂26'11						
min. Earth dist.	15217 Nov 09 22:21	5°♁♂45'28	0.27672 AU	superior conj		15220 Apr 01 09:29	23°♁♂30'47	-0°03'46
inferior conj	15217 Nov 10 18:19	5°♁♂14'54	-6°26'05	minimum elong		15220 Apr 01 08:33	23°♁♂27'54	0°04'00
minimum elong	15217 Nov 10 07:23	5°♁♂31'38	6°22'50	behind sun begin		15220 Mar 31 09:23	22°♁♂16'22	
morning rise	15217 Nov 15 05:29	2°♁♂34'31		behind sun end		15220 Apr 02 07:44	24°♁♂39'26	

	15220 Apr 06 15:35	0°♄			15222 Nov 21 15:30	0°♍		
	15220 Apr 30 22:03	0°♊			15222 Dec 18 16:13	0°♈		
evening rise	15220 May 09 17:53	10°♊55'47		asc. node	15223 Jan 06 15:06	21°♈57'32		
	15220 May 25 03:05	0°♎			15223 Jan 13 11:03	0°♎		
	15220 Jun 18 07:18	0°♏			15223 Feb 07 14:27	0°♐		
	15220 Jul 12 12:19	0°♑			15223 Mar 04 08:58	0°♑		
asc. node	15220 Jul 21 10:48	11°♑02'32			15223 Mar 28 22:15	0°♑		
	15220 Aug 05 20:30	0°♐			15223 Apr 22 07:55	0°♄		
	15220 Aug 30 11:12	0°♍		desc. node	15223 Apr 28 10:31	7°♄32'03		
	15220 Sep 24 14:44	0°♈		morning set	15223 May 05 01:15	15°♄42'16		
	15220 Oct 20 21:44	0°♎			15223 May 16 14:21	0°♊		
desc. node	15220 Nov 10 07:02	21°♎25'49			15223 Jun 09 17:39	0°♎		
evening max el	15220 Nov 11 00:41	22°♎09'26	46°22'08	max. Earth dist.	15223 Jun 10 06:59	0°♎41'33	1.72095 AU	
	15220 Nov 19 06:13	0°♐						
greatest brilliancy	15220 Dec 20 10:13	21°♐29'49	-4.8m	superior conj	15223 Jun 13 10:58	4°♎38'21	-1°23'57	
retrograde	15220 Dec 30 16:00	23°♐24'12		minimum elong	15223 Jun 13 04:40	4°♎18'42	1°24'49	
evening set	15221 Jan 17 14:38	17°♐19'57			15223 Jul 03 18:27	0°♏		
inferior conj	15221 Jan 21 02:17	15°♐10'24	-8°05'24	evening rise	15223 Jul 23 03:03	24°♏12'53		
minimum elong	15221 Jan 21 10:26	14°♐57'38	8°03'38		15223 Jul 27 18:03	0°♑		
min. Earth dist.	15221 Jan 21 02:28	15°♐10'07	0.28711 AU	asc. node	15223 Aug 19 00:41	27°♑50'56		
morning rise	15221 Jan 25 06:21	12°♐36'49			15223 Aug 20 18:02	0°♐		
direct	15221 Feb 11 10:11	7°♐02'19			15223 Sep 13 20:02	0°♍		
greatest brilliancy	15221 Feb 21 19:26	9°♐00'38	-4.8m		15223 Oct 08 02:10	0°♈		
asc. node	15221 Mar 03 08:40	13°♐42'09			15223 Nov 01 16:07	0°♎		
	15221 Mar 24 09:18	0°♑			15223 Nov 26 20:19	0°♐		
morning max el	15221 Apr 01 12:39	7°♑40'34	45°47'20	desc. node	15223 Dec 08 18:04	13°♐48'38		
	15221 Apr 23 01:20	0°♑			15223 Dec 23 02:30	0°♑		
	15221 May 19 16:11	0°♄			15224 Jan 20 16:30	0°♑		
	15221 Jun 14 02:15	0°♊		evening max el	15224 Jan 22 01:08	1°♑19'04	46°00'37	
desc. node	15221 Jun 23 09:56	11°♊13'04		greatest brilliancy	15224 Mar 01 03:10	29°♑52'55	-4.8m	
	15221 Jul 08 20:38	0°♎			15224 Mar 01 11:20	0°♄		
	15221 Aug 02 05:32	0°♏		retrograde	15224 Mar 11 03:44	1°♄43'45		
	15221 Aug 26 09:07	0°♑			15224 Mar 20 10:25	30°♑♑		
	15221 Sep 19 10:13	0°♐		evening set	15224 Mar 26 02:25	27°♑22'23		
morning set	15221 Oct 02 11:48	16°♐19'23		asc. node	15224 Mar 30 17:53	24°♑38'05		
	15221 Oct 13 10:33	0°♍		inferior conj	15224 Apr 01 10:11	23°♑35'10	0°25'07	
asc. node	15221 Oct 14 03:21	0°♍52'30		minimum elong	15224 Apr 01 09:14	23°♑36'39	0°24'31	
	15221 Nov 06 11:00	0°♈		min. Earth dist.	15224 Apr 01 13:17	23°♑30'19	0.28346 AU	
				morning rise	15224 Apr 07 15:43	19°♑50'05		
superior conj	15221 Nov 10 10:33	4°♈58'05	1°00'24	direct	15224 Apr 22 14:44	15°♑24'50		
minimum elong	15221 Nov 10 00:01	4°♈25'15	1°00'49	greatest brilliancy	15224 May 03 06:37	17°♑30'31	-4.8m	
max. Earth dist.	15221 Nov 12 11:15	7°♈30'00	1.72074 AU		15224 May 23 14:03	0°♄		
	15221 Nov 30 12:32	0°♎		morning max el	15224 Jun 11 08:23	16°♄59'20	46°23'31	
evening rise	15221 Dec 17 23:40	21°♎41'30			15224 Jun 23 23:49	0°♊		
	15221 Dec 24 16:39	0°♐		desc. node	15224 Jul 20 20:45	29°♊56'59		
	15222 Jan 18 00:59	0°♑			15224 Jul 20 21:48	0°♎		
desc. node	15222 Feb 02 18:02	19°♑13'01			15224 Aug 15 08:24	0°♏		
	15222 Feb 11 14:42	0°♑			15224 Sep 09 02:47	0°♑		
	15222 Mar 08 10:12	0°♄			15224 Oct 03 13:29	0°♐		
	15222 Apr 02 12:17	0°♊			15224 Oct 27 20:35	0°♍		
	15222 Apr 28 00:37	0°♎		asc. node	15224 Nov 10 16:58	17°♍08'39		
	15222 May 24 10:28	0°♏			15224 Nov 21 01:51	0°♈		
asc. node	15222 May 26 12:01	2°♏16'20		morning set	15224 Dec 13 07:23	27°♈34'50		
evening max el	15222 Jun 17 06:38	25°♏08'35	46°30'09		15224 Dec 15 06:10	0°♎		
	15222 Jun 22 06:18	0°♑			15225 Jan 08 10:37	0°♐		
greatest brilliancy	15222 Jul 27 11:48	25°♑19'59	-4.9m					
retrograde	15222 Aug 06 04:32	27°♑05'55		superior conj	15225 Jan 19 10:07	13°♐35'58	1°19'58	
evening set	15222 Aug 21 18:46	22°♑23'14		minimum elong	15225 Jan 19 17:17	13°♐58'10	1°20'36	
inferior conj	15222 Aug 26 20:30	19°♑22'40	4°54'18	max. Earth dist.	15225 Jan 21 10:05	16°♐04'24	1.72918 AU	
minimum elong	15222 Aug 27 06:26	19°♑07'27	4°51'17		15225 Feb 01 16:29	0°♑		
min. Earth dist.	15222 Aug 27 08:54	19°♑03'40	0.26997 AU	evening rise	15225 Feb 25 23:28	29°♑56'35		
morning rise	15222 Sep 01 17:51	15°♑54'12			15225 Feb 26 00:35	0°♑		
desc. node	15222 Sep 15 13:37	11°♑35'47		desc. node	15225 Mar 02 08:05	5°♑18'13		
direct	15222 Sep 16 14:20	11°♑34'31			15225 Mar 22 10:45	0°♄		
greatest brilliancy	15222 Sep 26 19:31	13°♑30'43	-4.9m		15225 Apr 15 22:19	0°♊		
	15222 Oct 22 02:17	0°♐			15225 May 10 11:12	0°♎		
morning max el	15222 Nov 05 15:17	13°♐29'45	46°36'24		15225 Jun 04 03:10	0°♏		

asc. node	15225 Jun 22 23:43	22°Ω42'29			15227 Dec 06 03:07	0°♊	
	15225 Jun 29 02:24	0°♎		asc. node	15227 Dec 09 05:37	3°♊46'45	
	15225 Jul 24 17:11	0°♊			15227 Dec 30 16:28	0°♊	
	15225 Aug 20 19:57	0°♎			15228 Jan 24 02:23	0°♎	
evening max el	15225 Aug 28 23:05	8°♎21'55	46°41'52		15228 Feb 17 10:39	0°♎	
	15225 Sep 22 07:08	0°♊		morning set	15228 Feb 21 12:06	5°♎00'26	
greatest brilliancy	15225 Oct 07 08:13	8°♊40'42	-4.9m		15228 Mar 12 18:29	0°♎	
desc. node	15225 Oct 12 23:00	10°♊21'23		max. Earth dist.	15228 Mar 29 05:51	20°♎19'29	1.73027 AU
retrograde	15225 Oct 18 07:17	10°♊54'46		desc. node	15228 Mar 29 22:21	21°♎10'22	
evening set	15225 Nov 02 20:27	6°♊11'44					
min. Earth dist.	15225 Nov 07 11:53	3°♊27'09	0.27618 AU	superior conj	15228 Mar 30 01:00	21°♎18'34	-0°00'16
inferior conj	15225 Nov 08 08:06	2°♊56'15	-6°09'57	minimum elong	15228 Mar 30 00:52	21°♎18'10	0°00'30
minimum elong	15225 Nov 07 21:13	3°♊12'53	6°06'37	behind sun begin	15228 Mar 29 01:14	20°♎05'12	
morning rise	15225 Nov 12 22:29	0°♊11'42		behind sun end	15228 Mar 31 00:31	22°♎31'07	
	15225 Nov 13 06:47	30°♎			15228 Apr 06 01:59	0°♎	
direct	15225 Nov 29 06:24	25°♎06'41			15228 Apr 30 08:33	0°♎	
greatest brilliancy	15225 Dec 08 17:46	26°♎45'35	-4.8m	evening rise	15228 May 07 08:29	8°♎39'40	
	15225 Dec 16 03:47	0°♊			15228 May 24 13:44	0°♎	
morning max el	15226 Jan 17 10:35	25°♊33'48	45°54'28		15228 Jun 17 18:11	0°♎	
	15226 Jan 21 23:05	0°♊			15228 Jul 11 23:31	0°♎	
asc. node	15226 Feb 03 01:15	12°♊27'01		asc. node	15228 Jul 20 12:37	10°♎33'10	
	15226 Feb 19 04:09	0°♎			15228 Aug 05 08:09	0°♎	
	15226 Mar 17 09:18	0°♎			15228 Aug 29 23:35	0°♎	
	15226 Apr 11 17:09	0°♎			15228 Sep 24 04:26	0°♊	
	15226 May 06 13:14	0°♎			15228 Oct 20 14:21	0°♊	
desc. node	15226 May 25 23:50	23°♎46'10		evening max el	15228 Nov 08 14:49	19°♎52'14	46°23'03
	15226 May 31 01:25	0°♎		desc. node	15228 Nov 09 09:03	20°♎37'10	
	15226 Jun 24 07:32	0°♎			15228 Nov 19 08:36	0°♎	
morning set	15226 Jul 18 00:11	29°♎31'46		greatest brilliancy	15228 Dec 18 01:57	19°♎18'11	-4.8m
	15226 Jul 18 09:14	0°♎		retrograde	15228 Dec 28 06:59	21°♎12'20	
	15226 Aug 11 08:22	0°♎		evening set	15229 Jan 15 08:44	15°♎04'33	
				inferior conj	15229 Jan 18 17:52	12°♎58'49	-8°14'00
superior conj	15226 Aug 26 18:01	19°♎18'21	-0°46'17	minimum elong	15229 Jan 19 01:28	12°♎46'55	8°12'21
minimum elong	15226 Aug 27 04:20	19°♎50'43	0°46'06	min. Earth dist.	15229 Jan 18 17:30	12°♎59'23	0.28701 AU
max. Earth dist.	15226 Aug 26 16:06	19°♎12'20	1.71516 AU	morning rise	15229 Jan 22 18:17	10°♎30'30	
	15226 Sep 04 06:43	0°♎		direct	15229 Feb 09 01:15	4°♎51'08	
asc. node	15226 Sep 15 14:57	14°♎12'51		greatest brilliancy	15229 Feb 19 10:14	6°♎48'41	-4.8m
	15226 Sep 28 05:32	0°♎		asc. node	15229 Mar 02 10:31	12°♎23'45	
evening rise	15226 Oct 05 10:31	9°♎01'04			15229 Mar 24 10:13	0°♎	
	15226 Oct 22 05:55	0°♊		morning max el	15229 Mar 30 02:30	5°♎24'32	45°46'42
	15226 Nov 15 09:31	0°♊			15229 Apr 22 17:23	0°♎	
	15226 Dec 09 18:59	0°♎			15229 May 19 05:32	0°♎	
	15227 Jan 03 13:37	0°♎			15229 Jun 13 14:23	0°♎	
desc. node	15227 Jan 05 06:29	2°♎02'28		desc. node	15229 Jun 22 11:51	10°♎42'55	
	15227 Jan 28 21:15	0°♎			15229 Jul 08 08:08	0°♎	
	15227 Feb 24 00:01	0°♎			15229 Aug 01 16:41	0°♎	
	15227 Mar 23 15:10	0°♎			15229 Aug 25 20:01	0°♎	
evening max el	15227 Apr 03 06:22	10°♎42'36	46°04'29		15229 Sep 18 20:57	0°♎	
	15227 Apr 25 07:41	0°♎		morning set	15229 Sep 30 00:54	13°♎57'05	
asc. node	15227 Apr 28 03:37	2°♎02'22			15229 Oct 12 21:08	0°♎	
greatest brilliancy	15227 May 12 20:54	9°♎57'48	-4.8m	asc. node	15229 Oct 13 05:11	0°♎25'10	
retrograde	15227 May 22 15:23	11°♎43'50			15229 Nov 05 21:30	0°♊	
evening set	15227 Jun 09 00:54	5°♎54'17					
inferior conj	15227 Jun 12 12:35	3°♎45'02	8°40'00	superior conj	15229 Nov 08 01:07	2°♊41'04	0°57'46
minimum elong	15227 Jun 12 06:07	3°♎55'11	8°38'25	minimum elong	15229 Nov 07 14:37	2°♊08'18	0°58'10
min. Earth dist.	15227 Jun 12 16:12	3°♎39'23	0.27927 AU	max. Earth dist.	15229 Nov 09 22:20	5°♊02'05	1.72043 AU
morning rise	15227 Jun 15 11:16	1°♎55'23			15229 Nov 29 23:02	0°♊	
	15227 Jun 18 18:37	30°♎		evening rise	15229 Dec 15 15:14	19°♎28'23	
direct	15227 Jul 03 14:10	25°♎39'42			15229 Dec 24 03:12	0°♎	
greatest brilliancy	15227 Jul 13 13:19	27°♎32'12	-4.9m		15230 Jan 17 11:41	0°♎	
	15227 Jul 19 02:58	0°♎		desc. node	15230 Feb 01 19:47	18°♎45'15	
desc. node	15227 Aug 18 06:26	23°♎41'56			15230 Feb 11 01:40	0°♎	
morning max el	15227 Aug 23 01:12	28°♎25'29	46°55'44		15230 Mar 07 21:38	0°♎	
	15227 Aug 24 14:37	0°♎			15230 Apr 02 00:33	0°♎	
	15227 Sep 21 07:34	0°♎			15230 Apr 27 14:20	0°♎	
	15227 Oct 17 04:36	0°♎			15230 May 24 03:11	0°♎	
	15227 Nov 11 08:16	0°♎		asc. node	15230 May 25 13:59	1°♎35'12	

evening max el	15230 Jun 14 18:39	22°♎43'13	46°29'11		15232 Nov 20 12:46	0°♊	
	15230 Jun 22 07:59	0°♍		morning set	15232 Dec 10 22:50	25°♊20'32	
greatest brilliancy	15230 Jul 25 01:36	22°♍56'21	-4.9m		15232 Dec 14 16:53	0°♊	
retrograde	15230 Aug 03 17:06	24°♍41'37			15233 Jan 07 21:13	0°♋	
evening set	15230 Aug 19 10:35	19°♍53'58					
inferior conj	15230 Aug 24 09:09	16°♍58'02	5°14'39	superior conj	15233 Jan 17 02:30	11°♋25'18	1°21'13
minimum elong	15230 Aug 24 19:30	16°♍42'13	5°11'34	minimum elong	15233 Jan 17 09:06	11°♋45'43	1°21'53
min. Earth dist.	15230 Aug 24 22:39	16°♍37'24	0.27020 AU	max. Earth dist.	15233 Jan 19 05:47	14°♋04'00	1.72896 AU
morning rise	15230 Aug 30 04:07	13°♍32'53			15233 Feb 01 03:05	0°♋	
direct	15230 Sep 14 02:47	9°♍09'00		evening rise	15233 Feb 23 15:25	27°♋45'06	
desc. node	15230 Sep 14 15:33	9°♍09'20			15233 Feb 25 11:17	0°♌	
greatest brilliancy	15230 Sep 24 09:10	11°♍06'32	-4.9m	desc. node	15233 Mar 01 09:54	4°♌50'52	
	15230 Oct 22 09:00	0°♌			15233 Mar 21 21:39	0°♌	
morning max el	15230 Nov 03 05:04	11°♌08'37	46°37'57		15233 Apr 15 09:28	0°♍	
	15230 Nov 21 09:27	0°♍			15233 May 09 22:45	0°♍	
	15230 Dec 18 06:30	0°♊			15233 Jun 03 15:20	0°♎	
asc. node	15231 Jan 05 16:57	21°♊24'55		asc. node	15233 Jun 22 01:34	22°♎09'26	
	15231 Jan 12 23:38	0°♊			15233 Jun 28 15:37	0°♎	
	15231 Feb 07 02:06	0°♋			15233 Jul 24 08:26	0°♏	
	15231 Mar 03 20:05	0°♋			15233 Aug 20 16:03	0°♏	
	15231 Mar 28 09:02	0°♌		evening max el	15233 Aug 26 14:22	6°♏03'40	46°41'52
	15231 Apr 21 18:32	0°♌			15233 Sep 23 05:28	0°♊	
desc. node	15231 Apr 27 12:29	7°♌05'23		greatest brilliancy	15233 Oct 04 22:20	6°♊19'32	-4.9m
morning set	15231 May 02 15:30	13°♌25'14		desc. node	15233 Oct 12 01:04	8°♊15'53	
	15231 May 16 00:55	0°♍		retrograde	15233 Oct 15 21:52	8°♊33'27	
max. Earth dist.	15231 Jun 07 22:55	28°♍28'38	1.72135 AU	evening set	15233 Oct 31 07:12	3°♊55'25	
	15231 Jun 09 04:15	0°♍		min. Earth dist.	15233 Nov 05 01:34	1°♊06'34	0.27565 AU
				inferior conj	15233 Nov 05 21:41	0°♊35'48	-5°52'53
superior conj	15231 Jun 11 00:12	2°♍16'57	-1°22'48	minimum elong	15233 Nov 05 10:56	0°♊52'14	5°49'31
minimum elong	15231 Jun 10 17:06	1°♍54'50	1°23'38		15233 Nov 06 21:07	30°♋♌	
	15231 Jul 03 05:07	0°♎		morning rise	15233 Nov 10 15:16	27°♌46'52	
evening rise	15231 Jul 20 15:00	21°♎46'31		direct	15233 Nov 26 20:15	22°♌47'07	
greatest brilliancy	15231 Jul 21 23:07	23°♎26'58	-3.9m	greatest brilliancy	15233 Dec 06 06:26	24°♌25'14	-4.8m
	15231 Jul 27 04:50	0°♎			15233 Dec 17 17:48	0°♊	
asc. node	15231 Aug 18 02:25	27°♎22'15		morning max el	15234 Jan 15 00:34	23°♊16'20	45°55'31
	15231 Aug 20 04:58	0°♏			15234 Jan 21 19:51	0°♊	
	15231 Sep 13 07:12	0°♏		asc. node	15234 Feb 02 03:09	11°♊44'50	
	15231 Oct 07 13:41	0°♊			15234 Feb 18 19:21	0°♋	
	15231 Nov 01 04:12	0°♊			15234 Mar 16 22:21	0°♋	
	15231 Nov 26 09:27	0°♋			15234 Apr 11 05:10	0°♌	
desc. node	15231 Dec 07 20:02	13°♋14'15			15234 May 06 00:42	0°♌	
	15231 Dec 22 17:57	0°♋		desc. node	15234 May 25 01:38	23°♌17'21	
evening max el	15232 Jan 19 16:42	29°♋07'32	46°01'10		15234 May 30 12:34	0°♍	
	15232 Jan 20 14:32	0°♌			15234 Jun 23 18:30	0°♍	
greatest brilliancy	15232 Feb 27 17:57	27°♌39'50	-4.8m	morning set	15234 Jul 15 12:35	27°♍06'38	
retrograde	15232 Mar 08 19:41	29°♌31'18			15234 Jul 17 20:05	0°♎	
evening set	15232 Mar 23 18:37	25°♌08'39			15234 Aug 10 19:11	0°♎	
asc. node	15232 Mar 29 19:55	21°♌31'16					
inferior conj	15232 Mar 30 01:41	21°♌22'14	0°03'36	superior conj	15234 Aug 24 06:26	16°♌52'57	-0°49'29
minimum elong	15232 Mar 30 01:34	21°♌22'26	0°03'18	minimum elong	15234 Aug 24 17:11	17°♌26'39	0°49'20
transit middle	15232 Mar 30 01:34	21°♌22'26	0°03'18	max. Earth dist.	15234 Aug 24 02:37	16°♌41'00	1.71513 AU
transit begin	15232 Mar 29 21:36	21°♌28'38			15234 Sep 03 17:31	0°♏	
transit end	15232 Mar 30 05:32	21°♌16'13		asc. node	15234 Sep 14 16:50	13°♏44'57	
min. Earth dist.	15232 Mar 30 04:51	21°♌17'16	0.28361 AU		15234 Sep 27 16:22	0°♏	
morning rise	15232 Apr 05 08:17	17°♌36'06		evening rise	15234 Oct 03 00:16	6°♏40'01	
direct	15232 Apr 20 06:45	13°♌11'51			15234 Oct 21 16:51	0°♊	
greatest brilliancy	15232 Apr 30 22:28	15°♌17'50	-4.8m		15234 Nov 14 20:37	0°♊	
	15232 May 23 22:48	0°♌			15234 Dec 09 06:24	0°♋	
morning max el	15232 Jun 09 00:25	14°♌46'43	46°22'01		15235 Jan 03 01:35	0°♋	
	15232 Jun 23 17:41	0°♍		desc. node	15235 Jan 04 08:13	1°♋31'41	
desc. node	15232 Jul 19 22:39	29°♍21'03			15235 Jan 28 10:13	0°♌	
	15232 Jul 20 12:06	0°♍			15235 Feb 23 14:54	0°♌	
	15232 Aug 14 21:11	0°♎			15235 Mar 23 10:42	0°♍	
	15232 Sep 08 14:47	0°♎		evening max el	15235 Mar 31 20:31	8°♍24'49	46°03'48
	15232 Oct 03 00:59	0°♏			15235 Apr 26 03:06	0°♍	
	15232 Oct 27 07:46	0°♏		asc. node	15235 Apr 27 05:37	0°♍45'03	
asc. node	15232 Nov 09 18:55	16°♏40'34		greatest brilliancy	15235 May 10 11:09	7°♍39'27	-4.8m

retrograde	15235 May 20 04:56	9°☿24'59		15237 Nov 05 08:17	0°♊	
evening set	15235 Jun 06 11:27	3°☿41'10				
inferior conj	15235 Jun 10 03:02	1°☿25'57 8°32'29	superior conj	15237 Nov 05 15:52	0°♊23'39 0°55'03	
minimum elong	15235 Jun 09 19:52	1°☿37'12 8°30'45	minimum elong	15237 Nov 05 05:28	29°♌51'12 0°55'25	
min. Earth dist.	15235 Jun 10 06:18	1°☿20'50 0.27946 AU	max. Earth dist.	15237 Nov 07 09:37	2°♊33'57 1.72013 AU	
	15235 Jun 12 10:06	30°♌II		15237 Nov 29 09:48	0°♊	
morning rise	15235 Jun 13 04:12	29°♌32'15	evening rise	15237 Dec 13 07:07	17°♊15'22	
direct	15235 Jul 01 04:23	23°♌20'18		15237 Dec 23 14:03	0°♌	
greatest brilliancy	15235 Jul 11 04:14	25°♌12'52 -4.9m		15238 Jan 16 22:42	0°♌	
	15235 Jul 20 20:08	0°☿	desc. node	15238 Jan 31 21:39	18°♌16'52	
desc. node	15235 Aug 17 08:18	22°☿47'57		15238 Feb 10 12:59	0°♌	
morning max el	15235 Aug 20 14:16	26°☿01'38 46°55'28		15238 Mar 07 09:29	0°♌	
	15235 Aug 24 11:56	0°♌		15238 Apr 01 13:15	0°♌	
	15235 Sep 20 23:20	0°♌		15238 Apr 27 04:33	0°☿	
	15235 Oct 16 18:11	0°♌		15238 May 23 20:33	0°♌	
	15235 Nov 10 20:42	0°♌	asc. node	15238 May 24 15:51	0°♌52'27	
	15235 Dec 05 14:50	0°♊	evening max el	15238 Jun 12 07:38	20°♌19'45 46°28'24	
asc. node	15235 Dec 08 07:24	3°♊16'40		15238 Jun 22 11:28	0°♌	
	15235 Dec 30 03:44	0°♊	greatest brilliancy	15238 Jul 22 14:55	20°♌31'59 -4.9m	
	15236 Jan 23 13:22	0°♌	retrograde	15238 Aug 01 06:25	22°♌17'14	
	15236 Feb 16 21:29	0°♌	evening set	15238 Aug 17 02:41	17°♌24'22	
morning set	15236 Feb 19 04:54	2°♌50'55	inferior conj	15238 Aug 21 21:59	14°♌33'05 5°34'16	
	15236 Mar 12 05:14	0°♌	minimum elong	15238 Aug 22 08:40	14°♌16'46 5°31'08	
max. Earth dist.	15236 Mar 26 22:27	18°♌09'28 1.73042 AU	min. Earth dist.	15238 Aug 22 12:07	14°♌11'30 0.27046 AU	
			morning rise	15238 Aug 27 14:22	11°♌11'41	
superior conj	15236 Mar 27 16:28	19°♌05'04 0°03'15	direct	15238 Sep 11 15:53	6°♌43'16	
minimum elong	15236 Mar 27 17:09	19°♌07'11 0°03'00	desc. node	15238 Sep 13 17:40	6°♌48'24	
behind sun begin	15236 Mar 26 17:46	17°♌55'02	greatest brilliancy	15238 Sep 21 22:25	8°♌41'27 -4.9m	
behind sun end	15236 Mar 28 16:32	20°♌19'19		15238 Oct 22 13:54	0°♌	
desc. node	15236 Mar 29 00:17	20°♌43'15	morning max el	15238 Oct 31 20:00	8°♌49'44 46°39'26	
	15236 Apr 05 12:45	0°♌		15238 Nov 21 03:13	0°♌	
	15236 Apr 29 19:23	0°♌		15238 Dec 17 20:50	0°♊	
evening rise	15236 May 04 23:15	6°♌23'06	asc. node	15239 Jan 04 18:52	20°♊52'04	
	15236 May 24 00:45	0°☿		15239 Jan 12 12:20	0°♊	
	15236 Jun 17 05:26	0°♌		15239 Feb 06 13:55	0°♌	
	15236 Jul 11 11:06	0°♌		15239 Mar 03 07:23	0°♌	
asc. node	15236 Jul 19 14:24	10°♌02'34		15239 Mar 27 20:03	0°♌	
	15236 Aug 04 20:11	0°♌		15239 Apr 21 05:25	0°♌	
	15236 Aug 29 12:21	0°♌	desc. node	15239 Apr 26 14:19	6°♌37'32	
	15236 Sep 23 18:35	0°♊	morning set	15239 Apr 30 05:44	11°♌07'24	
	15236 Oct 20 07:36	0°♊		15239 May 15 11:45	0°♌	
evening max el	15236 Nov 06 04:19	17°♊32'35 46°23'53	max. Earth dist.	15239 Jun 05 14:17	26°♌13'18 1.72169 AU	
desc. node	15236 Nov 08 10:58	19°♊46'31				
	15236 Nov 19 13:05	0°♌	superior conj	15239 Jun 08 13:17	29°♌54'23 -1°21'30	
greatest brilliancy	15236 Dec 15 17:19	17°♌04'56 -4.8m	minimum elong	15239 Jun 08 05:27	29°♌29'59 1°22'18	
retrograde	15236 Dec 25 22:10	18°♌59'28		15239 Jun 08 15:05	0°☿	
evening set	15237 Jan 13 02:36	12°♌48'07		15239 Jul 02 15:59	0°♌	
inferior conj	15237 Jan 16 09:27	10°♌46'02 -8°21'43	evening rise	15239 Jul 18 02:52	19°♌19'26	
minimum elong	15237 Jan 16 16:26	10°♌35'05 8°20'12	greatest brilliancy	15239 Jul 21 05:51	23°♌13'49 -3.9m	
min. Earth dist.	15237 Jan 16 08:35	10°♌47'24 0.28696 AU		15239 Jul 26 15:47	0°♌	
morning rise	15237 Jan 20 06:20	8°♌22'59	asc. node	15239 Aug 17 04:19	26°♌53'34	
direct	15237 Feb 06 16:06	2°♌38'31		15239 Aug 19 16:05	0°♌	
greatest brilliancy	15237 Feb 17 01:25	4°♌35'56 -4.8m		15239 Sep 12 18:33	0°♌	
asc. node	15237 Mar 01 12:33	11°♌06'45		15239 Oct 07 01:24	0°♊	
	15237 Mar 24 10:27	0°♌		15239 Oct 31 16:31	0°♊	
morning max el	15237 Mar 27 17:04	3°♌08'56 45°46'13		15239 Nov 25 22:53	0°♌	
	15237 Apr 22 09:36	0°♌	desc. node	15239 Dec 06 21:52	12°♌38'47	
	15237 May 18 19:08	0°♌		15239 Dec 22 09:49	0°♌	
	15237 Jun 13 02:48	0°♌	evening max el	15240 Jan 17 08:53	26°♌57'07 46°01'40	
desc. node	15237 Jun 21 13:40	10°♌11'39		15240 Jan 20 13:39	0°♌	
	15237 Jul 07 19:55	0°☿	greatest brilliancy	15240 Feb 25 08:49	25°♌26'39 -4.8m	
	15237 Aug 01 04:07	0°♌	retrograde	15240 Mar 06 11:22	27°♌18'15	
	15237 Aug 25 07:14	0°♌	evening set	15240 Mar 21 10:58	22°♌54'26	
	15237 Sep 18 07:59	0°♌	inferior conj	15240 Mar 27 17:09	19°♌08'52 -0°17'54	
morning set	15237 Sep 27 14:08	11°♌34'11	minimum elong	15240 Mar 27 17:50	19°♌07'47 0°17'54	
asc. node	15237 Oct 12 07:05	29°♌57'05	min. Earth dist.	15240 Mar 27 20:21	19°♌03'51 0.28378 AU	
	15237 Oct 12 08:01	0°♌	asc. node	15240 Mar 28 21:55	18°♌23'52	

morning rise	15240 Apr 03 00:34	15° Υ 21'43		evening rise	15242 Sep 30 13:29	4° \mathbb{M} 17'41	
direct	15240 Apr 17 22:57	10° Υ 58'35			15242 Oct 21 03:37	0° \mathcal{X}	
greatest brilliancy	15240 Apr 28 13:53	13° Υ 04'05	-4.8m		15242 Nov 14 07:34	0° \mathcal{Z}	
	15240 May 24 05:19	0° \mathcal{B}			15242 Dec 08 17:40	0° \approx	
morning max el	15240 Jun 06 16:11	12° \mathcal{B} 32'53	46°20'23		15243 Jan 02 13:26	0° \mathcal{H}	
	15240 Jun 23 11:21	0° \mathbb{I}		desc. node	15243 Jan 03 10:09	1° \mathcal{H} 01'56	
desc. node	15240 Jul 19 00:36	28° \mathbb{I} 45'04			15243 Jan 27 23:05	0° Υ	
	15240 Jul 20 02:24	0° \mathcal{D}			15243 Feb 23 05:45	0° \mathcal{B}	
	15240 Aug 14 10:00	0° \mathcal{Q}			15243 Mar 23 06:31	0° \mathbb{I}	
	15240 Sep 08 02:47	0° \mathbb{M}		evening max el	15243 Mar 29 10:06	6° \mathbb{I} 06'33	46°03'15
	15240 Oct 02 12:29	0° \mathcal{D}		asc. node	15243 Apr 26 07:29	29° \mathbb{I} 25'59	
	15240 Oct 26 18:56	0° \mathbb{M}			15243 Apr 27 05:01	0° \mathcal{D}	
asc. node	15240 Nov 08 20:38	16° \mathbb{M} 11'45		greatest brilliancy	15243 May 08 01:16	5° \mathcal{D} 21'56	-4.8m
	15240 Nov 19 23:41	0° \mathcal{X}		retrograde	15243 May 17 18:33	7° \mathcal{D} 07'26	
morning set	15240 Dec 08 14:17	23° \mathcal{X} 06'06		evening set	15243 Jun 03 21:52	1° \mathcal{D} 29'13	
	15240 Dec 14 03:38	0° \mathcal{Z}			15243 Jun 06 08:19	30° \mathcal{R} \mathbb{I}	
	15241 Jan 07 07:51	0° \approx		inferior conj	15243 Jun 07 17:32	29° \mathbb{I} 08'02	8°24'03
				minimum elong	15243 Jun 07 09:42	29° \mathbb{I} 20'19	8°22'11
superior conj	15241 Jan 14 19:00	9° \approx 14'52	1°22'20	min. Earth dist.	15243 Jun 07 20:32	29° \mathbb{I} 03'19	0.27967 AU
minimum elong	15241 Jan 15 01:00	9° \approx 33'25	1°23'03	morning rise	15243 Jun 10 21:25	27° \mathbb{I} 10'06	
max. Earth dist.	15241 Jan 17 01:09	12° \approx 02'28	1.72870 AU	direct	15243 Jun 28 18:24	21° \mathbb{I} 01'52	
	15241 Jan 31 13:42	0° \mathcal{H}		greatest brilliancy	15243 Jul 08 19:38	22° \mathbb{I} 55'14	-4.9m
evening rise	15241 Feb 21 07:26	25° \mathcal{H} 33'50			15243 Jul 22 00:03	0° \mathcal{D}	
	15241 Feb 24 21:58	0° Υ		desc. node	15243 Aug 16 10:25	21° \mathcal{D} 56'19	
desc. node	15241 Feb 28 11:49	4° Υ 23'50		morning max el	15243 Aug 18 03:39	23° \mathcal{D} 39'16	46°55'00
	15241 Mar 21 08:31	0° \mathcal{B}			15243 Aug 24 08:17	0° \mathcal{Q}	
	15241 Apr 14 20:38	0° \mathbb{I}			15243 Sep 20 14:40	0° \mathbb{M}	
	15241 May 09 10:21	0° \mathcal{D}			15243 Oct 16 07:28	0° \mathcal{D}	
	15241 Jun 03 03:37	0° \mathcal{Q}			15243 Nov 10 08:51	0° \mathbb{M}	
asc. node	15241 Jun 21 03:24	21° \mathcal{Q} 35'56			15243 Dec 05 02:16	0° \mathcal{X}	
	15241 Jun 28 05:01	0° \mathbb{M}		asc. node	15243 Dec 07 09:18	2° \mathcal{X} 47'47	
	15241 Jul 23 23:57	0° \mathcal{D}			15243 Dec 29 14:42	0° \mathcal{Z}	
	15241 Aug 20 12:51	0° \mathbb{M}			15244 Jan 23 00:03	0° \approx	
evening max el	15241 Aug 24 05:10	3° \mathbb{M} 44'09	46°41'58		15244 Feb 16 08:01	0° \mathcal{H}	
	15241 Sep 24 12:23	0° \mathcal{X}		morning set	15244 Feb 16 21:38	0° \mathcal{H} 42'01	
greatest brilliancy	15241 Oct 02 13:03	3° \mathcal{X} 59'11	-4.9m		15244 Mar 11 15:42	0° Υ	
desc. node	15241 Oct 11 02:59	6° \mathcal{X} 05'26		max. Earth dist.	15244 Mar 24 15:58	16° Υ 03'11	1.73057 AU
retrograde	15241 Oct 13 11:53	6° \mathcal{X} 12'04					
evening set	15241 Oct 28 18:08	1° \mathcal{X} 38'57		superior conj	15244 Mar 25 07:59	16° Υ 52'37	0°06'43
	15241 Oct 31 14:35	30° \mathcal{R} \mathbb{M}		minimum elong	15244 Mar 25 09:29	16° Υ 57'15	0°06'27
min. Earth dist.	15241 Nov 02 15:36	28° \mathbb{M} 45'36	0.27512 AU	behind sun begin	15244 Mar 24 11:36	15° Υ 49'43	
inferior conj	15241 Nov 03 11:15	28° \mathbb{M} 15'30	-5°35'11	behind sun end	15244 Mar 26 07:22	18° Υ 04'46	
minimum elong	15241 Nov 03 00:43	28° \mathbb{M} 31'40	5°31'48	desc. node	15244 Mar 28 02:06	20° Υ 16'33	
morning rise	15241 Nov 08 07:54	25° \mathbb{M} 22'08			15244 Apr 04 23:13	0° \mathcal{B}	
direct	15241 Nov 24 09:45	20° \mathbb{M} 27'42			15244 Apr 29 05:55	0° \mathbb{I}	
greatest brilliancy	15241 Dec 03 19:30	22° \mathbb{M} 05'19	-4.8m	evening rise	15244 May 02 14:13	4° \mathbb{I} 08'17	
	15241 Dec 18 20:22	0° \mathcal{X}			15244 May 23 11:26	0° \mathcal{D}	
morning max el	15242 Jan 12 13:42	20° \mathcal{X} 56'56	45°56'36		15244 Jun 16 16:21	0° \mathcal{Q}	
	15242 Jan 21 15:49	0° \mathcal{Z}			15244 Jul 10 22:20	0° \mathbb{M}	
asc. node	15242 Feb 01 05:10	11° \mathcal{Z} 03'47		asc. node	15244 Jul 18 16:22	9° \mathbb{M} 33'34	
	15242 Feb 18 10:12	0° \approx			15244 Aug 04 07:56	0° \mathcal{D}	
	15242 Mar 16 11:11	0° \mathcal{H}			15244 Aug 29 00:54	0° \mathbb{M}	
	15242 Apr 10 17:00	0° Υ			15244 Sep 23 08:37	0° \mathcal{X}	
	15242 May 05 12:00	0° \mathcal{B}			15244 Oct 20 01:01	0° \mathcal{Z}	
desc. node	15242 May 24 03:26	22° \mathcal{B} 49'00		evening max el	15244 Nov 03 18:09	15° \mathcal{Z} 14'21	46°24'54
	15242 May 29 23:33	0° \mathbb{I}		desc. node	15244 Nov 07 12:53	18° \mathcal{Z} 55'38	
	15242 Jun 23 05:19	0° \mathcal{D}			15244 Nov 19 19:18	0° \approx	
morning set	15242 Jul 13 00:35	24° \mathcal{D} 40'37		greatest brilliancy	15244 Dec 13 08:02	14° \approx 51'32	-4.8m
	15242 Jul 17 06:50	0° \mathcal{Q}		retrograde	15244 Dec 23 13:43	16° \approx 47'13	
	15242 Aug 10 05:54	0° \mathbb{M}		evening set	15245 Jan 10 20:08	10° \approx 32'24	
				inferior conj	15245 Jan 14 00:52	8° \approx 33'44	-8°28'40
superior conj	15242 Aug 21 18:25	14° \mathbb{M} 26'33	-0°52'37	minimum elong	15245 Jan 14 07:12	8° \approx 23'50	8°27'17
minimum elong	15242 Aug 22 05:31	15° \mathbb{M} 01'20	0°52'31	min. Earth dist.	15245 Jan 13 23:13	8° \approx 36'20	0.28687 AU
max. Earth dist.	15242 Aug 21 09:31	13° \mathbb{M} 58'38	1.71512 AU	morning rise	15245 Jan 17 18:21	6° \approx 16'00	
	15242 Sep 03 04:14	0° \mathcal{D}		direct	15245 Feb 04 06:54	0° \approx 26'23	
asc. node	15242 Sep 13 18:39	13° \mathcal{D} 17'08		greatest brilliancy	15245 Feb 14 16:16	2° \approx 23'45	-4.8m
	15242 Sep 27 03:06	0° \mathbb{M}		asc. node	15245 Feb 28 14:35	9° \approx 52'57	

	15245 Mar 24 09:10	0° H				15247 Nov 25 12:02	0° \approx		
morning max el	15245 Mar 25 08:25	0° H 56'21	45°45'45		desc. node	15247 Dec 05 23:47	12° \approx 04'22		
	15245 Apr 22 01:09	0° Y				15247 Dec 22 01:34	0° H		
	15245 May 18 08:15	0° B			evening max el	15248 Jan 15 01:07	24° H 47'39	46°02'05	
	15245 Jun 12 14:45	0° II				15248 Jan 20 13:30	0° Y		
desc. node	15245 Jun 20 15:38	9° II 42'07			greatest brilliancy	15248 Feb 23 00:23	23° Y 15'08	-4.8m	
	15245 Jul 07 07:16	0° G			retrograde	15248 Mar 04 02:40	25° Y 06'05		
	15245 Jul 31 15:06	0° Q			evening set	15248 Mar 19 03:33	20° Y 41'06		
	15245 Aug 24 17:59	0° P			inferior conj	15248 Mar 25 08:41	16° Y 56'37	-0°39'13	
	15245 Sep 17 18:35	0° A			minimum elong	15248 Mar 25 10:10	16° Y 54'17	0°38'56	
morning set	15245 Sep 25 03:20	9° A 12'19			min. Earth dist.	15248 Mar 25 12:09	16° Y 51'09	0.28393 AU	
asc. node	15245 Oct 11 08:48	29° A 29'38			asc. node	15248 Mar 27 23:45	15° Y 18'25		
	15245 Oct 11 18:32	0° M			morning rise	15248 Mar 31 16:42	13° Y 08'29		
					direct	15248 Apr 15 15:02	8° Y 46'31		
superior conj	15245 Nov 03 06:17	28° M 06'10	0°52'13		greatest brilliancy	15248 Apr 26 05:26	10° Y 51'26	-4.8m	
minimum elong	15245 Nov 02 20:04	27° M 34'16	0°52'33			15248 May 24 09:20	0° B		
	15245 Nov 04 18:45	0° A			morning max el	15248 Jun 04 07:06	10° B 17'57	46°18'41	
max. Earth dist.	15245 Nov 04 21:36	0° A 08'55	1.71987 AU			15248 Jun 23 04:18	0° II		
	15245 Nov 28 20:16	0° B			desc. node	15248 Jul 18 02:33	28° II 10'14		
evening rise	15245 Dec 10 22:41	15° B 02'21				15248 Jul 19 16:15	0° G		
	15245 Dec 23 00:33	0° \approx				15248 Aug 13 22:27	0° Q		
	15246 Jan 16 09:21	0° H				15248 Sep 07 14:28	0° P		
desc. node	15246 Jan 30 23:33	17° H 49'37				15248 Oct 01 23:41	0° A		
	15246 Feb 09 23:57	0° Y				15248 Oct 26 05:47	0° M		
	15246 Mar 06 21:00	0° B			asc. node	15248 Nov 07 22:30	15° M 44'27		
	15246 Apr 01 01:40	0° II				15248 Nov 19 10:17	0° A		
	15246 Apr 26 18:32	0° G			morning set	15248 Dec 06 05:59	20° A 53'23		
asc. node	15246 May 23 17:49	0° Q 10'35				15248 Dec 13 14:04	0° B		
	15246 May 23 13:53	0° Q				15249 Jan 06 18:13	0° \approx		
evening max el	15246 Jun 09 21:46	18° Q 00'32	46°27'41						
	15246 Jun 22 16:11	0° P			superior conj	15249 Jan 12 11:43	7° \approx 05'52	1°23'19	
greatest brilliancy	15246 Jul 20 04:02	18° P 09'14	-4.9m		minimum elong	15249 Jan 12 17:04	7° \approx 22'27	1°24'04	
retrograde	15246 Jul 29 20:01	19° P 54'32			max. Earth dist.	15249 Jan 14 19:30	9° \approx 58'37	1.72846 AU	
evening set	15246 Aug 14 19:01	14° P 56'38				15249 Jan 31 00:05	0° H		
inferior conj	15246 Aug 19 10:56	12° P 09'55	5°53'02		evening rise	15249 Feb 18 23:25	23° H 23'05		
minimum elong	15246 Aug 19 21:51	11° P 53'14	5°49'56			15249 Feb 24 08:28	0° Y		
min. Earth dist.	15246 Aug 20 01:20	11° P 47'54	0.27071 AU		desc. node	15249 Feb 27 13:32	3° Y 56'50		
morning rise	15246 Aug 25 00:28	8° P 52'32				15249 Mar 20 19:12	0° B		
direct	15246 Sep 09 05:31	4° P 19'36				15249 Apr 14 07:37	0° II		
desc. node	15246 Sep 12 19:31	4° P 34'50				15249 May 08 21:48	0° G		
greatest brilliancy	15246 Sep 19 11:09	6° P 17'32	-4.9m			15249 Jun 02 15:46	0° Q		
	15246 Oct 22 16:24	0° A			asc. node	15249 Jun 20 05:22	21° Q 03'13		
morning max el	15246 Oct 29 11:06	6° A 32'42	46°40'40			15249 Jun 27 18:23	0° P		
	15246 Nov 20 20:07	0° M				15249 Jul 23 15:36	0° A		
	15246 Dec 17 10:37	0° A				15249 Aug 20 10:16	0° M		
asc. node	15247 Jan 03 20:50	20° A 20'38			evening max el	15249 Aug 21 19:17	1° M 23'10	46°41'59	
	15247 Jan 12 00:37	0° B				15249 Sep 26 09:35	0° A		
	15247 Feb 06 01:21	0° \approx			greatest brilliancy	15249 Sep 30 04:22	1° A 39'54	-4.9m	
	15247 Mar 02 18:17	0° H			desc. node	15249 Oct 10 04:54	3° A 50'28		
	15247 Mar 27 06:40	0° Y			retrograde	15249 Oct 11 01:33	3° A 51'21		
	15247 Apr 20 15:54	0° B				15249 Oct 25 01:29	30° R M		
desc. node	15247 Apr 25 16:01	6° B 10'27			evening set	15249 Oct 26 05:19	29° M 22'46		
morning set	15247 Apr 27 19:58	8° B 50'51			min. Earth dist.	15249 Oct 31 06:09	26° M 24'47	0.27457 AU	
	15247 May 14 22:13	0° II			inferior conj	15249 Nov 01 00:54	25° M 56'01	-5°16'58	
max. Earth dist.	15247 Jun 03 03:38	23° II 52'49	1.72204 AU		minimum elong	15249 Oct 31 14:38	26° M 11'47	5°13'34	
					morning rise	15249 Nov 06 00:30	22° M 58'17		
superior conj	15247 Jun 06 02:23	27° II 33'04	-1°20'03		direct	15249 Nov 21 22:43	18° M 08'55		
minimum elong	15247 Jun 05 17:55	27° II 06'41	1°20'50		greatest brilliancy	15249 Dec 01 09:13	19° M 46'43	-4.8m	
	15247 Jun 08 01:34	0° G				15249 Dec 19 15:22	0° A		
	15247 Jul 02 02:32	0° Q			morning max el	15250 Jan 10 02:23	18° A 37'01	45°57'48	
evening rise	15247 Jul 15 14:49	16° Q 53'36				15250 Jan 21 10:55	0° B		
	15247 Jul 26 02:24	0° P			asc. node	15250 Jan 31 07:06	10° B 23'39		
asc. node	15247 Aug 16 06:08	26° P 25'43				15250 Feb 18 00:41	0° \approx		
	15247 Aug 19 02:50	0° A				15250 Mar 15 23:49	0° H		
	15247 Sep 12 05:31	0° M				15250 Apr 10 04:44	0° Y		
	15247 Oct 06 12:44	0° A				15250 May 04 23:13	0° B		
	15247 Oct 31 04:28	0° B			desc. node	15250 May 23 05:25	22° B 21'20		

	15250 May 29 10:29	0°♊		desc. node	15252 Nov 06 14:53	18°♊02'59	
	15250 Jun 22 16:05	0°♋			15252 Nov 20 04:35	0°♋	
morning set	15250 Jul 10 12:27	22°♋14'20		greatest brilliancy	15252 Dec 10 22:09	12°♋36'22	-4.8m
	15250 Jul 16 17:32	0°♌		retrograde	15252 Dec 21 05:37	14°♋33'46	
	15250 Aug 09 16:36	0°♍		evening set	15253 Jan 08 13:23	8°♋15'48	
max. Earth dist.	15250 Aug 18 15:37	11°♍13'50	1.71517 AU	inferior conj	15253 Jan 11 16:13	6°♋20'15	-8°34'59
				minimum elong	15253 Jan 11 21:52	6°♋11'27	8°33'42
superior conj	15250 Aug 19 06:25	12°♍00'12	-0°55'40	min. Earth dist.	15253 Jan 11 13:27	6°♋24'35	0.28673 AU
minimum elong	15250 Aug 19 17:48	12°♍35'53	0°55'36	morning rise	15253 Jan 15 06:24	4°♋07'44	
	15250 Sep 02 14:58	0°♎			15253 Jan 23 12:00	30°♋♊	
asc. node	15250 Sep 12 20:23	12°♎48'57		direct	15253 Feb 01 22:04	28°♊13'13	
	15250 Sep 26 13:51	0°♏			15253 Feb 11 19:05	0°♋	
evening rise	15250 Sep 28 02:43	1°♏55'17		greatest brilliancy	15253 Feb 12 06:28	0°♋10'02	-4.8m
	15250 Oct 20 14:26	0°♐		asc. node	15253 Feb 27 16:24	8°♋40'14	
	15250 Nov 13 18:32	0°♑		morning max el	15253 Mar 23 00:25	28°♋44'47	45°45'25
	15250 Dec 08 04:57	0°♒			15253 Mar 24 07:13	0°♋	
	15251 Jan 02 01:17	0°♓			15253 Apr 21 16:40	0°♌	
desc. node	15251 Jan 02 12:05	0°♓32'15			15253 May 17 21:31	0°♍	
	15251 Jan 27 12:00	0°♑			15253 Jun 12 02:59	0°♎	
	15251 Feb 22 20:49	0°♒		desc. node	15253 Jun 19 17:31	9°♎11'26	
	15251 Mar 23 03:05	0°♊			15253 Jul 06 18:57	0°♋	
evening max el	15251 Mar 26 23:49	3°♊48'32	46°02'39		15253 Jul 31 02:29	0°♌	
asc. node	15251 Apr 25 09:28	28°♊04'17			15253 Aug 24 05:09	0°♍	
	15251 Apr 28 18:15	0°♋			15253 Sep 17 05:35	0°♎	
greatest brilliancy	15251 May 05 14:58	3°♋03'38	-4.8m	morning set	15253 Sep 22 16:17	6°♎48'30	
retrograde	15251 May 15 08:37	4°♋49'50		asc. node	15253 Oct 10 10:40	29°♎01'24	
	15251 May 31 02:30	30°♋♊			15253 Oct 11 05:25	0°♏	
evening set	15251 Jun 01 08:14	29°♊16'57					
inferior conj	15251 Jun 05 08:04	26°♊49'49	8°14'48	superior conj	15253 Oct 31 20:23	25°♏46'27	0°49'17
minimum elong	15251 Jun 04 23:38	27°♊03'01	8°12'44	minimum elong	15253 Oct 31 10:25	25°♏15'18	0°49'35
min. Earth dist.	15251 Jun 05 10:39	26°♊45'47	0.27990 AU	max. Earth dist.	15253 Nov 02 11:58	27°♏50'02	1.71963 AU
morning rise	15251 Jun 08 14:54	24°♊47'32			15253 Nov 04 05:36	0°♐	
direct	15251 Jun 26 08:37	18°♊43'03			15253 Nov 28 07:07	0°♑	
greatest brilliancy	15251 Jul 06 11:03	20°♊37'25	-4.9m	evening rise	15253 Dec 08 14:11	12°♑47'47	
	15251 Jul 22 20:31	0°♋			15253 Dec 22 11:28	0°♒	
morning max el	15251 Aug 15 17:56	21°♋18'52	46°54'30		15254 Jan 15 20:26	0°♓	
desc. node	15251 Aug 15 12:18	21°♋04'44		desc. node	15254 Jan 30 01:17	17°♓20'37	
	15251 Aug 24 04:08	0°♌			15254 Feb 09 11:21	0°♑	
	15251 Sep 20 05:55	0°♍			15254 Mar 06 08:56	0°♒	
	15251 Oct 15 20:48	0°♎			15254 Mar 31 14:30	0°♊	
	15251 Nov 09 21:06	0°♏			15254 Apr 26 09:02	0°♋	
	15251 Dec 04 13:50	0°♐		asc. node	15254 May 22 19:46	29°♋27'03	
asc. node	15251 Dec 06 11:14	2°♐18'30			15254 May 23 08:04	0°♌	
	15251 Dec 29 01:49	0°♑		evening max el	15254 Jun 07 12:18	15°♌41'01	46°26'40
	15252 Jan 22 10:53	0°♒			15254 Jun 22 23:45	0°♍	
morning set	15252 Feb 14 14:42	28°♒33'44		greatest brilliancy	15254 Jul 17 17:06	15°♍44'39	-4.9m
	15252 Feb 15 18:40	0°♓		retrograde	15254 Jul 27 09:04	17°♍29'29	
	15252 Mar 11 02:18	0°♑		evening set	15254 Aug 12 11:16	12°♍26'42	
				inferior conj	15254 Aug 16 23:41	9°♍44'33	6°11'18
superior conj	15252 Mar 22 23:46	14°♑40'30	0°10'08	minimum elong	15254 Aug 17 10:45	9°♍27'37	6°08'13
minimum elong	15252 Mar 23 02:03	14°♑47'33	0°09'53	min. Earth dist.	15254 Aug 17 14:21	9°♍22'06	0.27099 AU
behind sun begin	15252 Mar 22 07:14	13°♑49'30		morning rise	15254 Aug 22 10:05	6°♍31'20	
behind sun end	15252 Mar 23 20:52	15°♑45'36		direct	15254 Sep 06 19:11	1°♍53'49	
max. Earth dist.	15252 Mar 22 12:03	14°♑04'22	1.73073 AU	desc. node	15254 Sep 11 21:28	2°♍24'23	
desc. node	15252 Mar 27 03:52	19°♑49'15		greatest brilliancy	15254 Sep 16 23:41	3°♍51'07	-4.9m
	15252 Apr 04 09:51	0°♒			15254 Oct 22 18:14	0°♎	
	15252 Apr 28 16:40	0°♊		morning max el	15254 Oct 27 01:18	4°♎11'33	46°41'52
evening rise	15252 Apr 30 05:21	1°♊53'22			15254 Nov 20 13:16	0°♏	
	15252 May 22 22:22	0°♋			15254 Dec 17 00:47	0°♐	
	15252 Jun 16 03:33	0°♌		asc. node	15255 Jan 02 22:41	19°♐47'34	
	15252 Jul 10 09:54	0°♍			15255 Jan 11 13:19	0°♑	
asc. node	15252 Jul 17 18:08	9°♍03'00			15255 Feb 05 13:12	0°♒	
	15252 Aug 03 20:00	0°♎			15255 Mar 02 05:38	0°♓	
	15252 Aug 28 13:50	0°♏			15255 Mar 26 17:43	0°♑	
	15252 Sep 22 23:09	0°♐			15255 Apr 20 02:49	0°♒	
	15252 Oct 19 19:13	0°♑		desc. node	15255 Apr 24 17:59	5°♒42'59	
evening max el	15252 Nov 01 08:56	12°♑57'28	46°25'53	morning set	15255 Apr 25 10:37	6°♒34'20	

	15255 May 14 09:04	0°♄		inferior conj	15257 Oct 29 14:22	23°♄34'56	-4°57'51
max. Earth dist.	15255 May 31 16:09	21°♄28'46	1.72239 AU	minimum elong	15257 Oct 29 04:27	23°♄50'08	4°54'29
				morning rise	15257 Nov 03 16:55	20°♄32'57	
superior conj	15255 Jun 03 15:54	25°♄11'57	-1°18'29	direct	15257 Nov 19 11:13	15°♄48'09	
minimum elong	15255 Jun 03 06:51	24°♄43'49	1°19'13	greatest brilliancy	15257 Nov 28 23:30	17°♄27'05	-4.8m
	15255 Jun 07 12:26	0°♄			15257 Dec 20 06:09	0°♄	
	15255 Jul 01 13:27	0°♄		morning max el	15258 Jan 07 15:10	16°♄15'56	45°59'05
evening rise	15255 Jul 13 02:55	14°♄26'58			15258 Jan 21 05:55	0°♄	
	15255 Jul 25 13:27	0°♄		asc. node	15258 Jan 30 09:00	9°♄42'48	
asc. node	15255 Aug 15 07:53	25°♄56'10			15258 Feb 17 15:20	0°♄	
	15255 Aug 18 14:05	0°♄			15258 Mar 15 12:40	0°♄	
	15255 Sep 11 17:02	0°♄			15258 Apr 09 16:39	0°♄	
	15255 Oct 06 00:37	0°♄			15258 May 04 10:38	0°♄	
	15255 Oct 30 17:00	0°♄		desc. node	15258 May 22 07:11	21°♄52'27	
	15255 Nov 25 01:50	0°♄			15258 May 28 21:36	0°♄	
desc. node	15255 Dec 05 01:44	11°♄28'17			15258 Jun 22 03:02	0°♄	
	15255 Dec 21 18:12	0°♄		morning set	15258 Jul 08 00:33	19°♄48'19	
evening max el	15256 Jan 12 16:30	22°♄34'31	46°02'31		15258 Jul 16 04:23	0°♄	
	15256 Jan 20 15:16	0°♄			15258 Aug 09 03:24	0°♄	
greatest brilliancy	15256 Feb 20 16:24	21°♄02'38	-4.8m	max. Earth dist.	15258 Aug 15 23:51	8°♄35'25	1.71520 AU
retrograde	15256 Mar 01 17:28	22°♄52'29					
evening set	15256 Mar 16 20:15	18°♄26'04		superior conj	15258 Aug 16 18:46	9°♄34'43	-0°58'34
inferior conj	15256 Mar 23 00:11	14°♄43'04	-1°00'33	minimum elong	15258 Aug 17 06:21	10°♄11'02	0°58'33
minimum elong	15256 Mar 23 02:28	14°♄39'28	1°00'00		15258 Sep 02 01:44	0°♄	
min. Earth dist.	15256 Mar 23 04:16	14°♄36'39	0.28406 AU	asc. node	15258 Sep 11 22:17	12°♄21'06	
asc. node	15256 Mar 27 01:49	12°♄12'24		evening rise	15258 Sep 25 16:12	29°♄33'33	
morning rise	15256 Mar 29 08:34	10°♄54'04			15258 Sep 26 00:39	0°♄	
direct	15256 Apr 13 06:38	6°♄33'05			15258 Oct 20 01:21	0°♄	
greatest brilliancy	15256 Apr 23 21:27	8°♄37'58	-4.8m		15258 Nov 13 05:38	0°♄	
	15256 May 24 12:08	0°♄			15258 Dec 07 16:25	0°♄	
morning max el	15256 Jun 01 21:06	7°♄59'40	46°17'14	desc. node	15259 Jan 01 13:48	0°♄01'17	
	15256 Jun 22 21:14	0°♄			15259 Jan 01 13:23	0°♄	
desc. node	15256 Jul 17 04:26	27°♄34'35			15259 Jan 27 01:12	0°♄	
	15256 Jul 19 06:15	0°♄			15259 Feb 22 12:18	0°♄	
	15256 Aug 13 11:08	0°♄			15259 Mar 23 00:36	0°♄	
	15256 Sep 07 02:27	0°♄		evening max el	15259 Mar 24 13:55	1°♄31'12	46°02'14
	15256 Oct 01 11:16	0°♄		asc. node	15259 Apr 24 11:28	26°♄39'24	
	15256 Oct 25 17:03	0°♄			15259 May 01 05:21	0°♄	
asc. node	15256 Nov 07 00:26	15°♄15'54		greatest brilliancy	15259 May 03 03:59	0°♄44'12	-4.8m
	15256 Nov 18 21:20	0°♄		retrograde	15259 May 12 23:02	2°♄31'44	
morning set	15256 Dec 03 21:07	18°♄37'26			15259 May 24 03:37	30°♄	
	15256 Dec 13 00:55	0°♄		evening set	15259 May 29 18:29	27°♄04'02	
	15257 Jan 06 04:59	0°♄		inferior conj	15259 Jun 02 22:27	24°♄31'00	8°04'44
				minimum elong	15259 Jun 02 13:31	24°♄44'59	8°02'30
superior conj	15257 Jan 10 04:01	4°♄54'24	1°24'12	min. Earth dist.	15259 Jun 03 00:21	24°♄28'02	0.28009 AU
minimum elong	15257 Jan 10 08:41	5°♄08'50	1°24'58	morning rise	15259 Jun 06 08:23	22°♄24'13	
max. Earth dist.	15257 Jan 12 11:58	7°♄47'37	1.72818 AU	direct	15259 Jun 23 23:15	16°♄23'45	
	15257 Jan 30 10:52	0°♄		greatest brilliancy	15259 Jul 04 01:54	18°♄18'46	-4.9m
evening rise	15257 Feb 16 15:07	21°♄10'19			15259 Jul 23 11:48	0°♄	
	15257 Feb 23 19:22	0°♄		morning max el	15259 Aug 13 09:02	19°♄00'42	46°54'08
desc. node	15257 Feb 26 15:21	3°♄28'53		desc. node	15259 Aug 14 14:12	20°♄14'12	
	15257 Mar 20 06:18	0°♄			15259 Aug 23 23:23	0°♄	
	15257 Apr 13 19:00	0°♄			15259 Sep 19 20:51	0°♄	
	15257 May 08 09:36	0°♄			15259 Oct 15 09:53	0°♄	
	15257 Jun 02 04:16	0°♄			15259 Nov 09 09:10	0°♄	
asc. node	15257 Jun 19 07:13	20°♄29'15			15259 Dec 04 01:16	0°♄	
	15257 Jun 27 08:05	0°♄		asc. node	15259 Dec 05 13:00	1°♄49'09	
	15257 Jul 23 07:42	0°♄			15259 Dec 28 12:51	0°♄	
evening max el	15257 Aug 19 08:20	28°♄58'52	46°41'49		15260 Jan 21 21:39	0°♄	
	15257 Aug 20 08:48	0°♄		morning set	15260 Feb 12 07:31	26°♄24'39	
greatest brilliancy	15257 Sep 27 19:21	29°♄18'51	-4.9m		15260 Feb 15 05:19	0°♄	
	15257 Sep 29 17:46	0°♄			15260 Mar 10 12:53	0°♄	
retrograde	15257 Oct 08 14:52	1°♄29'14					
desc. node	15257 Oct 09 06:57	1°♄28'41		superior conj	15260 Mar 20 15:12	12°♄27'23	0°13'34
	15257 Oct 17 05:06	30°♄		minimum elong	15260 Mar 20 18:16	12°♄36'50	0°13'19
evening set	15257 Oct 23 16:26	27°♄04'27		behind sun begin	15260 Mar 20 05:04	11°♄56'08	
min. Earth dist.	15257 Oct 28 20:45	24°♄01'55	0.27411 AU	behind sun end	15260 Mar 21 07:27	13°♄17'32	

max. Earth dist.	15260 Mar 20 08:33	12°Υ06'51	1.73086 AU	direct	15262 Sep 04 08:29	29°Ω29'16	
desc. node	15260 Mar 26 05:44	19°Υ22'22			15262 Sep 09 11:19	0°Π	
	15260 Apr 03 20:27	0°Ϸ		desc. node	15262 Sep 10 23:34	0°Π20'17	
evening rise	15260 Apr 27 20:14	29°Ϸ37'57		greatest brilliancy	15262 Sep 14 12:33	1°Π26'02	-4.9m
	15260 Apr 28 03:22	0°Π			15262 Oct 22 18:19	0°Ω	
	15260 May 22 09:16	0°Ω		morning max el	15262 Oct 24 14:39	1°Ω49'17	46°43'10
	15260 Jun 15 14:42	0°Ω			15262 Nov 20 05:38	0°Π	
	15260 Jul 09 21:23	0°Π			15262 Dec 16 14:20	0°Ϸ	
asc. node	15260 Jul 16 19:57	8°Π32'48		asc. node	15263 Jan 02 00:35	19°Ϸ16'12	
	15260 Aug 03 07:59	0°Ω			15263 Jan 11 01:26	0°Ϸ	
	15260 Aug 28 02:40	0°Π			15263 Feb 05 00:30	0°≈	
	15260 Sep 22 13:35	0°Ϸ			15263 Mar 01 16:28	0°Ϸ	
	15260 Oct 19 13:31	0°Ϸ			15263 Mar 26 04:19	0°Υ	
evening max el	15260 Oct 30 00:29	10°Ϸ43'30	46°26'53		15263 Apr 19 13:19	0°Ϸ	
desc. node	15260 Nov 05 16:48	17°Ϸ10'13		morning set	15263 Apr 23 01:13	4°Ϸ18'50	
	15260 Nov 20 16:33	0°≈		desc. node	15263 Apr 23 19:46	5°Ϸ16'05	
greatest brilliancy	15260 Dec 08 12:01	10°≈22'04	-4.8m		15263 May 13 19:34	0°Π	
retrograde	15260 Dec 18 21:42	12°≈21'14		max. Earth dist.	15263 May 29 02:30	18°Π59'05	1.72278 AU
evening set	15261 Jan 06 06:30	6°≈00'36					
inferior conj	15261 Jan 09 07:38	4°≈07'40	-8°40'27	superior conj	15263 Jun 01 05:16	22°Π51'33	-1°16'46
minimum elong	15261 Jan 09 12:34	3°≈59'58	8°39'15	minimum elong	15263 May 31 19:42	22°Π21'48	1°17'27
min. Earth dist.	15261 Jan 09 03:27	4°≈14'10	0.28661 AU		15263 Jun 06 22:56	0°Ω	
morning rise	15261 Jan 12 18:45	1°≈59'58			15263 Jul 01 00:01	0°Ω	
	15261 Jan 16 07:31	30°Ϸ3		evening rise	15263 Jul 10 14:47	12°Ω00'49	
direct	15261 Jan 30 13:50	26°Ϸ01'07			15263 Jul 25 00:08	0°Π	
greatest brilliancy	15261 Feb 09 20:15	27°Ϸ56'37	-4.8m	asc. node	15263 Aug 14 09:47	25°Π28'18	
	15261 Feb 14 16:11	0°≈			15263 Aug 18 00:57	0°Ω	
asc. node	15261 Feb 26 18:29	7°≈30'44			15263 Sep 11 04:09	0°Π	
morning max el	15261 Mar 20 16:35	26°≈34'11	45°44'54		15263 Oct 05 12:08	0°Ϸ	
	15261 Mar 24 04:13	0°Ϸ			15263 Oct 30 05:11	0°Ϸ	
	15261 Apr 21 07:48	0°Υ			15263 Nov 24 15:17	0°≈	
	15261 May 17 10:30	0°Ϸ		desc. node	15263 Dec 04 03:34	10°≈53'04	
	15261 Jun 11 14:57	0°Π			15263 Dec 21 10:34	0°Ϸ	
desc. node	15261 Jun 18 19:20	8°Π41'16		evening max el	15264 Jan 10 07:04	20°Ϸ21'09	46°03'05
	15261 Jul 06 06:22	0°Ω			15264 Jan 20 17:42	0°Υ	
	15261 Jul 30 13:35	0°Ω		greatest brilliancy	15264 Feb 18 08:37	18°Υ52'31	-4.8m
	15261 Aug 23 16:01	0°Π		retrograde	15264 Feb 28 08:19	20°Υ41'31	
	15261 Sep 16 16:18	0°Ω		evening set	15264 Mar 14 13:17	16°Υ13'07	
morning set	15261 Sep 20 05:25	4°Ω26'03		inferior conj	15264 Mar 20 15:57	12°Υ32'00	-1°21'36
asc. node	15261 Oct 09 12:31	28°Ω34'05		minimum elong	15264 Mar 20 19:01	12°Υ27'11	1°20'45
	15261 Oct 10 16:00	0°Π		min. Earth dist.	15264 Mar 20 20:44	12°Υ24'29	0.28424 AU
				asc. node	15264 Mar 26 03:46	9°Υ11'22	
superior conj	15261 Oct 29 10:43	23°Π28'23	0°46'15	morning rise	15264 Mar 27 00:31	8°Υ42'24	
minimum elong	15261 Oct 29 01:04	22°Π58'14	0°46'33	direct	15264 Apr 10 22:04	4°Υ21'52	
max. Earth dist.	15261 Oct 31 04:08	25°Π37'45	1.71931 AU	greatest brilliancy	15264 Apr 21 14:13	6°Υ27'24	-4.8m
	15261 Nov 03 16:06	0°Ϸ			15264 May 24 12:54	0°Ϸ	
	15261 Nov 27 17:35	0°Ϸ		morning max el	15264 May 30 11:07	5°Ϸ42'42	46°15'36
evening rise	15261 Dec 06 06:00	10°Ϸ35'21			15264 Jun 22 13:26	0°Π	
	15261 Dec 21 22:00	0°≈		desc. node	15264 Jul 16 06:22	27°Π00'19	
	15262 Jan 15 07:09	0°Ϸ			15264 Jul 18 19:47	0°Ω	
desc. node	15262 Jan 29 03:10	16°Ϸ53'08			15264 Aug 12 23:26	0°Ω	
	15262 Feb 08 22:26	0°Υ			15264 Sep 06 14:03	0°Π	
	15262 Mar 05 20:36	0°Ϸ			15264 Sep 30 22:25	0°Ω	
	15262 Mar 31 03:09	0°Π			15264 Oct 25 03:54	0°Π	
	15262 Apr 25 23:27	0°Ω		asc. node	15264 Nov 06 02:07	14°Π47'56	
asc. node	15262 May 21 21:38	28°Ω43'33			15264 Nov 18 07:56	0°Ϸ	
	15262 May 23 02:24	0°Ω		morning set	15264 Dec 01 12:11	16°Ϸ22'27	
evening max el	15262 Jun 05 02:19	13°Ω21'07	46°25'39		15264 Dec 12 11:22	0°Ϸ	
	15262 Jun 23 09:39	0°Π			15265 Jan 05 15:21	0°≈	
greatest brilliancy	15262 Jul 15 06:38	13°Π21'45	-4.9m				
retrograde	15262 Jul 24 21:44	15°Π05'29		superior conj	15265 Jan 07 20:33	2°≈44'50	1°24'56
evening set	15262 Aug 10 03:39	9°Π57'54		minimum elong	15265 Jan 08 00:29	2°≈57'04	1°25'45
inferior conj	15262 Aug 14 12:30	7°Π20'25	6°28'51	max. Earth dist.	15265 Jan 10 02:50	5°≈33'01	1.72788 AU
minimum elong	15262 Aug 14 23:38	7°Π03'19	6°25'49		15265 Jan 29 21:13	0°Ϸ	
min. Earth dist.	15262 Aug 15 03:34	6°Π57'16	0.27126 AU	evening rise	15265 Feb 14 07:12	19°Ϸ00'07	
morning rise	15262 Aug 19 19:28	4°Π11'30			15265 Feb 23 05:48	0°Υ	
	15262 Aug 30 08:06	30°ϷΩ		desc. node	15265 Feb 25 17:15	3°Υ02'35	

	15265 Mar 19 16:55	0°♄			15267 Oct 14 22:51	0°♊		
	15265 Apr 13 05:56	0°♈			15267 Nov 08 21:09	0°♎		
	15265 May 07 21:03	0°♊			15267 Dec 03 12:37	0°♏		
	15265 Jun 01 16:30	0°♎		asc. node	15267 Dec 04 14:56	1°♏20'25		
asc. node	15265 Jun 18 09:03	19°♎55'58			15267 Dec 27 23:47	0°♎		
	15265 Jun 26 21:39	0°♎			15268 Jan 21 08:20	0°♎		
	15265 Jul 22 23:51	0°♊		morning set	15268 Feb 10 00:21	24°♎16'00		
evening max el	15265 Aug 16 21:12	26°♊34'52	46°41'49		15268 Feb 14 15:51	0°♏		
	15265 Aug 20 08:02	0°♎			15268 Mar 09 23:22	0°♎		
greatest brilliancy	15265 Sep 25 09:47	26°♎57'48	-4.9m					
retrograde	15265 Oct 06 04:22	29°♎07'56		superior conj	15268 Mar 18 06:54	10°♎15'22	0°16'59	
desc. node	15265 Oct 08 08:49	29°♎02'10		minimum elong	15268 Mar 18 10:42	10°♎27'07	0°16'43	
evening set	15265 Oct 21 03:39	24°♎46'17		max. Earth dist.	15268 Mar 18 04:55	10°♎09'15	1.73092 AU	
min. Earth dist.	15265 Oct 26 11:05	21°♎39'56	0.27365 AU	desc. node	15268 Mar 25 07:31	18°♎55'28		
inferior conj	15265 Oct 27 03:44	21°♎14'27	-4°38'04		15268 Apr 03 06:57	0°♄		
minimum elong	15265 Oct 26 18:14	21°♎29'00	4°34'46	evening rise	15268 Apr 25 11:31	27°♄24'07		
morning rise	15265 Nov 01 09:12	18°♎08'36			15268 Apr 27 13:58	0°♈		
direct	15265 Nov 16 23:43	13°♎27'50			15268 May 21 20:01	0°♊		
greatest brilliancy	15265 Nov 26 13:37	15°♎08'09	-4.8m		15268 Jun 15 01:42	0°♎		
	15265 Dec 20 16:42	0°♏			15268 Jul 09 08:45	0°♎		
morning max el	15266 Jan 05 04:46	13°♏57'50	46°00'30	asc. node	15268 Jul 15 21:55	8°♎03'24		
	15266 Jan 21 00:01	0°♎			15268 Aug 02 19:57	0°♊		
asc. node	15266 Jan 29 11:00	9°♎03'48			15268 Aug 27 15:35	0°♎		
	15266 Feb 17 05:25	0°♎			15268 Sep 22 04:19	0°♏		
	15266 Mar 15 01:02	0°♏			15268 Oct 19 08:32	0°♎		
	15266 Apr 09 04:08	0°♎		evening max el	15268 Oct 27 16:19	8°♎29'27	46°27'44	
	15266 May 03 21:37	0°♄		desc. node	15268 Nov 04 18:42	16°♎15'41		
desc. node	15266 May 21 09:00	21°♄24'53			15268 Nov 21 09:09	0°♎		
	15266 May 28 08:20	0°♈		greatest brilliancy	15268 Dec 06 02:15	8°♎07'15	-4.8m	
	15266 Jun 21 13:39	0°♊		retrograde	15268 Dec 16 13:26	10°♎07'22		
morning set	15266 Jul 05 12:39	17°♊23'11		evening set	15269 Jan 03 23:07	3°♎44'53		
	15266 Jul 15 14:58	0°♎		inferior conj	15269 Jan 06 22:50	1°♎54'01	-8°45'09	
	15266 Aug 08 14:00	0°♎		minimum elong	15269 Jan 07 03:00	1°♎47'30	8°44'04	
max. Earth dist.	15266 Aug 13 09:04	6°♎00'40	1.71531 AU	min. Earth dist.	15269 Jan 06 17:17	2°♎02'40	0.28642 AU	
				morning rise	15269 Jan 10 07:01	29°♎50'45		
superior conj	15266 Aug 14 06:45	7°♎08'37	-1°01'24		15269 Jan 10 00:52	30°♎♎		
minimum elong	15266 Aug 14 18:26	7°♎45'15	1°01'25	direct	15269 Jan 28 05:33	23°♎48'13		
	15266 Sep 01 12:21	0°♊		greatest brilliancy	15269 Feb 07 09:29	25°♎41'49	-4.8m	
asc. node	15266 Sep 11 00:05	11°♊53'28			15269 Feb 16 09:57	0°♎		
evening rise	15266 Sep 23 05:11	27°♊10'48		asc. node	15269 Feb 25 20:28	6°♎22'36		
	15266 Sep 25 11:18	0°♎		morning max el	15269 Mar 18 07:49	24°♎21'02	45°44'29	
	15266 Oct 19 12:04	0°♏			15269 Mar 24 00:35	0°♏		
	15266 Nov 12 16:34	0°♎			15269 Apr 20 22:45	0°♎		
	15266 Dec 07 03:42	0°♎			15269 May 16 23:26	0°♄		
desc. node	15266 Dec 31 15:45	29°♎31'33			15269 Jun 11 02:53	0°♈		
	15267 Jan 01 01:18	0°♏		desc. node	15269 Jun 17 21:18	8°♈11'37		
	15267 Jan 26 14:16	0°♎			15269 Jul 05 17:46	0°♊		
	15267 Feb 22 03:43	0°♄			15269 Jul 30 00:39	0°♎		
evening max el	15267 Mar 22 05:11	29°♄17'57	46°01'57		15269 Aug 23 02:54	0°♎		
	15267 Mar 22 22:32	0°♈			15269 Sep 16 03:03	0°♊		
asc. node	15267 Apr 23 13:20	25°♈12'59		morning set	15269 Sep 17 18:38	2°♊03'44		
greatest brilliancy	15267 Apr 30 16:54	28°♈26'28	-4.8m	asc. node	15269 Oct 08 14:15	28°♊06'01		
	15267 May 06 22:47	0°♊			15269 Oct 10 02:42	0°♎		
retrograde	15267 May 10 14:01	0°♊15'32						
	15267 May 14 03:39	30°♈♈		superior conj	15269 Oct 27 00:47	21°♈08'59	0°43'08	
evening set	15267 May 27 05:09	24°♈53'05		minimum elong	15269 Oct 26 15:33	20°♈40'09	0°43'24	
inferior conj	15267 May 31 13:08	22°♈14'02	7°53'53	max. Earth dist.	15269 Oct 28 18:55	23°♈20'38	1.71906 AU	
minimum elong	15267 May 31 03:45	22°♈28'42	7°51'31		15269 Nov 03 02:47	0°♏		
min. Earth dist.	15267 May 31 14:00	22°♈12'41	0.28029 AU		15269 Nov 27 04:17	0°♎		
morning rise	15267 Jun 04 02:15	20°♈02'38		evening rise	15269 Dec 03 21:19	8°♎20'35		
direct	15267 Jun 21 14:38	14°♈06'37			15269 Dec 21 08:46	0°♎		
greatest brilliancy	15267 Jul 01 16:23	16°♈01'17	-4.8m		15270 Jan 14 18:07	0°♏		
	15267 Jul 23 22:38	0°♊		desc. node	15270 Jan 28 05:02	16°♏24'54		
morning max el	15267 Aug 11 00:34	16°♊44'29	46°53'20		15270 Feb 08 09:45	0°♎		
desc. node	15267 Aug 13 16:17	19°♊25'45			15270 Mar 05 08:33	0°♄		
	15267 Aug 23 17:53	0°♎			15270 Mar 30 16:05	0°♈		
	15267 Sep 19 11:32	0°♎			15270 Apr 25 14:13	0°♊		

asc. node	15270 May 20 23:36	27°☿59'22			15272 Nov 17 18:50	0°♊	
	15270 May 22 21:24	0°♋		morning set	15272 Nov 29 03:29	14°♊07'14	
evening max el	15270 Jun 02 15:40	10°♋59'16	46°24'46		15272 Dec 11 22:07	0°♋	
	15270 Jun 23 23:02	0°♌			15273 Jan 05 02:04	0°♌	
greatest brilliancy	15270 Jul 12 20:59	11°♌00'09	-4.9m				
retrograde	15270 Jul 22 10:19	12°♌42'23		superior conj	15273 Jan 05 13:10	0°♌34'26	1°25'32
evening set	15270 Aug 07 20:22	7°♌29'56		minimum elong	15273 Jan 05 16:24	0°♌44'25	1°26'23
inferior conj	15270 Aug 12 01:42	4°♌57'17	6°45'20	max. Earth dist.	15273 Jan 07 18:04	3°♌18'19	1.72767 AU
minimum elong	15270 Aug 12 12:48	4°♌40'12	6°42'25		15273 Jan 29 07:59	0°♌	
min. Earth dist.	15270 Aug 12 17:21	4°♌33'12	0.27153 AU	evening rise	15273 Feb 11 23:13	16°♌48'26	
morning rise	15270 Aug 17 05:03	1°♌52'53			15273 Feb 22 16:42	0°♌	
	15270 Aug 20 20:18	30°♌♋		desc. node	15273 Feb 24 18:59	2°♌34'26	
direct	15270 Sep 01 21:34	27°♌05'36			15273 Mar 19 04:01	0°♌	
desc. node	15270 Sep 10 01:24	28°♌21'40			15273 Apr 12 17:21	0°♌	
greatest brilliancy	15270 Sep 12 02:09	29°♌02'23	-4.9m		15273 May 07 08:58	0°♌	
	15270 Sep 14 11:27	0°♌			15273 Jun 01 05:14	0°♌	
morning max el	15270 Oct 22 03:19	29°♌25'02	46°44'15	asc. node	15273 Jun 17 11:02	19°♌21'50	
	15270 Oct 22 17:23	0°♌			15273 Jun 26 11:45	0°♌	
	15270 Nov 19 21:51	0°♌			15273 Jul 22 16:42	0°♌	
	15270 Dec 16 04:01	0°♌		evening max el	15273 Aug 14 10:42	24°♌11'30	46°41'53
asc. node	15271 Jan 01 02:34	18°♌44'21			15273 Aug 20 08:49	0°♌	
	15271 Jan 10 13:48	0°♋		greatest brilliancy	15273 Sep 22 23:51	24°♌35'21	-4.9m
	15271 Feb 04 12:07	0°♌		retrograde	15273 Oct 03 18:30	26°♌45'53	
	15271 Mar 01 03:39	0°♌		desc. node	15273 Oct 07 10:48	26°♌29'22	
	15271 Mar 25 15:14	0°♌		evening set	15273 Oct 18 15:12	22°♌26'54	
	15271 Apr 19 00:07	0°♌		min. Earth dist.	15273 Oct 24 01:08	19°♌17'24	0.27319 AU
morning set	15271 Apr 20 15:42	2°♌02'08		inferior conj	15273 Oct 24 17:09	18°♌53'00	-4°17'48
desc. node	15271 Apr 22 21:29	4°♌48'08		minimum elong	15273 Oct 24 08:07	19°♌06'46	4°14'35
	15271 May 13 06:20	0°♌		morning rise	15273 Oct 30 01:28	15°♌43'39	
max. Earth dist.	15271 May 26 14:23	16°♌33'23	1.72316 AU	direct	15273 Nov 14 12:41	11°♌06'40	
				greatest brilliancy	15273 Nov 24 03:12	12°♌47'53	-4.8m
superior conj	15271 May 29 18:42	20°♌30'36	-1°14'55		15273 Dec 21 00:42	0°♌	
minimum elong	15271 May 29 08:42	19°♌59'29	1°15'34	morning max el	15274 Jan 02 19:11	11°♌41'00	46°01'51
	15271 Jun 06 09:44	0°♌			15274 Jan 20 17:58	0°♋	
	15271 Jun 30 10:52	0°♋		asc. node	15274 Jan 28 12:56	8°♋24'09	
evening rise	15271 Jul 08 02:54	9°♋34'42			15274 Feb 16 19:42	0°♌	
	15271 Jul 24 11:06	0°♌			15274 Mar 14 13:44	0°♌	
asc. node	15271 Aug 13 11:35	24°♌59'19			15274 Apr 08 16:02	0°♌	
	15271 Aug 17 12:04	0°♌			15274 May 03 09:04	0°♌	
	15271 Sep 10 15:31	0°♌		desc. node	15274 May 20 10:59	20°♌56'26	
	15271 Oct 04 23:53	0°♌			15274 May 27 19:30	0°♌	
	15271 Oct 29 17:40	0°♋			15274 Jun 21 00:40	0°♌	
	15271 Nov 24 05:12	0°♌		morning set	15274 Jul 03 00:35	14°♌56'26	
desc. node	15271 Dec 03 05:31	10°♌16'53			15274 Jul 15 01:56	0°♋	
	15271 Dec 21 03:45	0°♌			15274 Aug 08 00:57	0°♌	
evening max el	15272 Jan 07 20:55	18°♌04'29	46°03'31	max. Earth dist.	15274 Aug 10 20:42	3°♌32'23	1.71540 AU
	15272 Jan 20 22:38	0°♌					
greatest brilliancy	15272 Feb 16 00:27	16°♌39'57	-4.8m	superior conj	15274 Aug 11 18:36	4°♌41'01	-1°04'06
retrograde	15272 Feb 25 23:12	18°♌28'36		minimum elong	15274 Aug 12 06:19	5°♌17'43	1°04'11
evening set	15272 Mar 12 06:13	13°♌57'40			15274 Aug 31 23:19	0°♌	
inferior conj	15272 Mar 18 07:29	10°♌18'51	-1°42'35	asc. node	15274 Sep 10 01:49	11°♌24'31	
minimum elong	15272 Mar 18 11:19	10°♌12'50	1°41'29	evening rise	15274 Sep 20 18:11	24°♌46'57	
min. Earth dist.	15272 Mar 18 13:00	10°♌10'11	0.28443 AU		15274 Sep 24 22:18	0°♌	
morning rise	15272 Mar 24 16:06	6°♌29'06			15274 Oct 18 23:10	0°♌	
asc. node	15272 Mar 25 05:39	6°♌10'45			15274 Nov 12 03:50	0°♋	
direct	15272 Apr 08 13:08	2°♌08'25			15274 Dec 06 15:19	0°♌	
greatest brilliancy	15272 Apr 19 07:02	4°♌15'13	-4.8m	desc. node	15274 Dec 30 17:41	29°♌00'53	
	15272 May 24 13:02	0°♌			15274 Dec 31 13:34	0°♌	
morning max el	15272 May 28 01:29	3°♌25'18	46°14'10		15275 Jan 26 03:46	0°♌	
	15272 Jun 22 05:45	0°♌			15275 Feb 21 19:48	0°♌	
desc. node	15272 Jul 15 08:20	26°♌25'20		evening max el	15275 Mar 19 20:53	27°♌04'26	46°01'24
	15272 Jul 18 09:32	0°♌			15275 Mar 22 22:01	0°♌	
	15272 Aug 12 11:59	0°♋		asc. node	15275 Apr 22 15:21	23°♌41'56	
	15272 Sep 06 01:56	0°♌		greatest brilliancy	15275 Apr 28 06:01	26°♌07'12	-4.8m
	15272 Sep 30 09:52	0°♌		retrograde	15275 May 08 04:44	27°♌57'04	
	15272 Oct 24 15:02	0°♌		evening set	15275 May 24 15:38	22°♌40'16	
asc. node	15272 Nov 05 04:02	14°♌19'44		inferior conj	15275 May 29 03:36	19°♌55'04	7°42'12

minimum elong	15275 May 28 17:50	20°II10'22	7°39'41		15277 Nov 02 13:33	0°♊	
min. Earth dist.	15275 May 29 03:32	19°II55'11	0.28045 AU		15277 Nov 26 15:02	0°♋	
morning rise	15275 Jun 01 19:57	17°II38'48		evening rise	15277 Dec 01 12:40	6°♋05'40	
direct	15275 Jun 19 05:51	11°II47'43			15277 Dec 20 19:36	0°♌	
greatest brilliancy	15275 Jun 29 06:24	13°II41'29	-4.8m		15278 Jan 14 05:08	0°♍	
	15275 Jul 24 07:12	0°♎		desc. node	15278 Jan 27 06:48	15°♍56'11	
morning max el	15275 Aug 08 15:30	14°♎25'34	46°52'33		15278 Feb 07 21:08	0°♏	
desc. node	15275 Aug 12 18:10	18°♎36'24			15278 Mar 04 20:31	0°♐	
	15275 Aug 23 12:20	0°♑			15278 Mar 30 05:05	0°♑	
	15275 Sep 19 02:19	0°♒			15278 Apr 25 05:08	0°♒	
	15275 Oct 14 11:59	0°♓		asc. node	15278 May 20 01:34	27°♒14'33	
	15275 Nov 08 09:20	0°♐			15278 May 22 16:57	0°♑	
	15275 Dec 03 00:12	0°♊		evening max el	15278 May 31 03:58	8°♑34'44	46°23'39
asc. node	15275 Dec 03 16:50	0°♊50'52			15278 Jun 24 17:17	0°♒	
	15275 Dec 27 10:58	0°♋		greatest brilliancy	15278 Jul 10 11:11	8°♒37'38	-4.9m
	15276 Jan 20 19:15	0°♌		retrograde	15278 Jul 19 22:31	10°♒18'31	
morning set	15276 Feb 07 17:29	22°♌07'34		evening set	15278 Aug 05 12:52	5°♒00'47	
	15276 Feb 14 02:36	0°♍		inferior conj	15278 Aug 09 14:42	2°♒33'11	7°01'07
	15276 Mar 09 10:04	0°♎		minimum elong	15278 Aug 10 01:41	2°♒16'16	6°58'19
				min. Earth dist.	15278 Aug 10 07:06	2°♒07'55	0.27185 AU
superior conj	15276 Mar 15 22:49	8°♏03'24	0°20'19		15278 Aug 13 19:59	30°♒♑	
minimum elong	15276 Mar 16 03:21	8°♏17'21	0°20'04	morning rise	15278 Aug 14 14:16	29°♒33'46	
max. Earth dist.	15276 Mar 16 00:59	8°♏10'02	1.73101 AU	direct	15278 Aug 30 10:08	24°♒40'37	
desc. node	15276 Mar 24 09:19	18°♏27'53		desc. node	15278 Sep 09 03:24	26°♒26'52	
	15276 Apr 02 17:42	0°♐		greatest brilliancy	15278 Sep 09 16:05	26°♒38'14	-4.9m
evening rise	15276 Apr 23 02:45	25°♐09'15			15278 Sep 16 20:16	0°♒	
	15276 Apr 27 00:52	0°♑		morning max el	15278 Oct 19 16:04	27°♒00'22	46°45'32
	15276 May 21 07:08	0°♒			15278 Oct 22 15:40	0°♓	
	15276 Jun 14 13:04	0°♑			15278 Nov 19 13:51	0°♐	
	15276 Jul 08 20:29	0°♒			15278 Dec 15 17:31	0°♊	
asc. node	15276 Jul 14 23:41	7°♒32'23		asc. node	15278 Dec 31 04:24	18°♊12'27	
	15276 Aug 02 08:15	0°♓			15279 Jan 10 02:00	0°♋	
	15276 Aug 27 04:52	0°♐			15279 Feb 03 23:34	0°♌	
	15276 Sep 21 19:28	0°♊			15279 Feb 28 14:40	0°♍	
	15276 Oct 19 04:22	0°♋			15279 Mar 25 02:01	0°♎	
evening max el	15276 Oct 25 07:43	6°♋13'35	46°28'32	morning set	15279 Apr 18 06:41	29°♎47'24	
desc. node	15276 Nov 03 20:44	15°♋19'47			15279 Apr 18 10:46	0°♏	
	15276 Nov 22 07:59	0°♌		desc. node	15279 Apr 21 23:28	4°♏21'24	
greatest brilliancy	15276 Dec 03 17:12	5°♌52'43	-4.8m		15279 May 12 16:55	0°♑	
retrograde	15276 Dec 14 04:49	7°♌52'58		max. Earth dist.	15279 May 24 05:39	14°♑18'47	1.72356 AU
evening set	15277 Jan 01 15:30	1°♌29'24					
	15277 Jan 04 01:18	30°♒♋		superior conj	15279 May 27 08:31	18°♑11'24	-1°12'57
inferior conj	15277 Jan 04 14:04	29°♋40'04	-8°49'08	minimum elong	15279 May 26 22:09	17°♑39'10	1°13'34
minimum elong	15277 Jan 04 17:27	29°♋34'49	8°48'07		15279 Jun 05 20:20	0°♒	
min. Earth dist.	15277 Jan 04 07:23	29°♋50'31	0.28617 AU		15279 Jun 29 21:34	0°♑	
morning rise	15277 Jan 07 19:32	27°♋40'48		evening rise	15279 Jul 05 15:19	7°♑10'02	
direct	15277 Jan 25 20:56	21°♋35'08			15279 Jul 23 21:57	0°♒	
greatest brilliancy	15277 Feb 04 22:52	23°♋26'47	-4.8m	asc. node	15279 Aug 12 13:22	24°♒30'32	
	15277 Feb 17 14:45	0°♌			15279 Aug 16 23:07	0°♓	
asc. node	15277 Feb 24 22:18	5°♌15'49			15279 Sep 10 02:50	0°♐	
morning max el	15277 Mar 15 22:09	22°♌05'22	45°44'12		15279 Oct 04 11:38	0°♊	
	15277 Mar 23 20:23	0°♍			15279 Oct 29 06:09	0°♋	
	15277 Apr 20 13:36	0°♎			15279 Nov 23 19:08	0°♌	
	15277 May 16 12:23	0°♏		desc. node	15279 Dec 02 07:28	9°♌40'54	
	15277 Jun 10 14:57	0°♑			15279 Dec 20 21:07	0°♍	
desc. node	15277 Jun 16 23:10	7°♑41'13		evening max el	15280 Jan 05 11:01	15°♍49'17	46°04'13
	15277 Jul 05 05:21	0°♒			15280 Jan 21 05:19	0°♎	
	15277 Jul 29 11:56	0°♑		greatest brilliancy	15280 Feb 13 15:52	14°♎28'01	-4.8m
	15277 Aug 22 13:58	0°♒		retrograde	15280 Feb 23 14:43	16°♎17'01	
morning set	15277 Sep 15 07:28	29°♒39'39		evening set	15280 Mar 09 23:25	11°♎43'10	
	15277 Sep 15 13:58	0°♓		inferior conj	15280 Mar 15 23:08	8°♎06'50	-2°03'20
asc. node	15277 Oct 07 16:08	27°♓38'02		minimum elong	15280 Mar 16 03:42	7°♎59'40	2°02'00
	15277 Oct 09 13:31	0°♐		min. Earth dist.	15280 Mar 16 05:06	7°♎57'29	0.28462 AU
				morning rise	15280 Mar 22 07:40	4°♎17'29	
superior conj	15277 Oct 24 14:39	18°♐48'46	0°39'56	asc. node	15280 Mar 24 07:43	3°♎14'35	
minimum elong	15277 Oct 24 05:54	18°♐21'24	0°40'10		15280 Apr 04 09:23	30°♒♍	
max. Earth dist.	15277 Oct 26 08:00	20°♐57'57	1.71876 AU	direct	15280 Apr 06 04:33	29°♍56'07	

	15280 Apr 08 00:09	0°♄				15282 Dec 06 02:35	0°♁	
greatest brilliancy	15280 Apr 16 23:42	2°♄04'10	-4.8m	desc. node		15282 Dec 29 19:25	28°♁30'36	
	15280 May 24 11:38	0°♄				15282 Dec 31 01:30	0°♄	
morning max el	15280 May 25 16:56	1°♄11'48	46°12'50			15283 Jan 25 16:58	0°♄	
	15280 Jun 21 21:23	0°♄				15283 Feb 21 11:42	0°♄	
desc. node	15280 Jul 14 10:12	25°♄51'19		evening max el		15283 Mar 17 12:34	24°♄52'22	46°01'00
	15280 Jul 17 22:48	0°♄				15283 Mar 22 21:59	0°♄	
	15280 Aug 12 00:09	0°♄		asc. node		15283 Apr 21 17:19	22°♄09'24	
	15280 Sep 05 13:30	0°♄		greatest brilliancy		15283 Apr 25 19:57	23°♄50'48	-4.8m
	15280 Sep 29 21:03	0°♄		retrograde		15283 May 05 19:13	25°♄40'38	
	15280 Oct 24 01:56	0°♄		evening set		15283 May 22 02:31	20°♄29'31	
asc. node	15280 Nov 04 05:56	13°♄52'06		inferior conj		15283 May 26 18:18	17°♄38'24	7°29'59
	15280 Nov 17 05:30	0°♄		minimum elong		15283 May 26 08:13	17°♄54'13	7°27'18
morning set	15280 Nov 26 18:22	11°♄51'17		min. Earth dist.		15283 May 26 17:39	17°♄39'25	0.28058 AU
	15280 Dec 11 08:38	0°♄		morning rise		15283 May 30 13:51	15°♄17'06	
				direct		15283 Jun 16 21:03	9°♄31'05	
superior conj	15281 Jan 03 05:28	28°♄23'48	1°26'01	greatest brilliancy		15283 Jun 26 20:57	11°♄24'05	-4.8m
minimum elong	15281 Jan 03 07:56	28°♄31'27	1°26'53			15283 Jul 24 12:39	0°♄	
	15281 Jan 04 12:30	0°♄		morning max el		15283 Aug 06 05:49	12°♄06'40	46°51'45
max. Earth dist.	15281 Jan 05 10:19	1°♄07'37	1.72741 AU	desc. node		15283 Aug 11 20:06	17°♄49'31	
	15281 Jan 28 18:26	0°♄				15283 Aug 23 05:47	0°♄	
evening rise	15281 Feb 09 15:09	14°♄37'32				15283 Sep 18 16:25	0°♄	
	15281 Feb 22 03:15	0°♄				15283 Oct 14 00:31	0°♄	
desc. node	15281 Feb 23 20:49	2°♄07'35				15283 Nov 07 20:59	0°♄	
	15281 Mar 18 14:47	0°♄				15283 Dec 02 11:18	0°♄	
	15281 Apr 12 04:27	0°♄		asc. node		15283 Dec 02 18:37	0°♄22'24	
	15281 May 06 20:33	0°♄				15283 Dec 26 21:43	0°♄	
	15281 May 31 17:37	0°♄				15284 Jan 20 05:46	0°♄	
asc. node	15281 Jun 16 12:52	18°♄48'20		morning set		15284 Feb 05 10:27	19°♄59'42	
	15281 Jun 26 01:32	0°♄				15284 Feb 13 12:59	0°♄	
	15281 Jul 22 09:23	0°♄				15284 Mar 08 20:24	0°♄	
evening max el	15281 Aug 12 00:58	21°♄51'31	46°41'47					
	15281 Aug 20 10:22	0°♄		superior conj		15284 Mar 13 14:39	5°♄52'19	0°23'39
greatest brilliancy	15281 Sep 20 13:28	22°♄13'20	-4.9m	minimum elong		15284 Mar 13 19:52	6°♄08'23	0°23'24
retrograde	15281 Oct 01 08:51	24°♄24'19		max. Earth dist.		15284 Mar 13 18:53	6°♄05'20	1.73104 AU
desc. node	15281 Oct 06 12:50	23°♄51'33		desc. node		15284 Mar 23 11:11	18°♄01'42	
evening set	15281 Oct 16 02:50	20°♄07'50				15284 Apr 02 04:04	0°♄	
min. Earth dist.	15281 Oct 21 14:54	16°♄55'27	0.27278 AU	evening rise		15284 Apr 20 17:53	22°♄55'25	
inferior conj	15281 Oct 22 06:22	16°♄31'54	-3°56'51			15284 Apr 26 11:22	0°♄	
minimum elong	15281 Oct 21 21:54	16°♄44'48	3°53'46			15284 May 20 17:49	0°♄	
morning rise	15281 Oct 27 17:28	13°♄19'12				15284 Jun 14 00:02	0°♄	
direct	15281 Nov 12 02:03	8°♄45'56				15284 Jul 08 07:52	0°♄	
greatest brilliancy	15281 Nov 21 16:15	10°♄27'27	-4.8m	asc. node		15284 Jul 14 01:30	7°♄02'39	
	15281 Dec 21 06:05	0°♄				15284 Aug 01 20:14	0°♄	
morning max el	15281 Dec 31 09:57	9°♄25'39	46°03'13			15284 Aug 26 17:52	0°♄	
	15282 Jan 20 11:12	0°♄				15284 Sep 21 10:24	0°♄	
asc. node	15282 Jan 27 14:50	7°♄45'42				15284 Oct 19 00:16	0°♄	
	15282 Feb 16 09:29	0°♄		evening max el		15284 Oct 22 22:13	3°♄56'44	46°29'20
	15282 Mar 14 01:57	0°♄		desc. node		15284 Nov 02 22:37	14°♄23'47	
	15282 Apr 08 03:26	0°♄				15284 Nov 23 14:47	0°♄	
	15282 May 02 20:01	0°♄		greatest brilliancy		15284 Dec 01 08:38	3°♄40'00	-4.8m
desc. node	15282 May 19 12:44	20°♄28'40		retrograde		15284 Dec 11 19:48	5°♄40'00	
	15282 May 27 06:12	0°♄				15284 Dec 29 02:16	30°♄3	
	15282 Jun 20 11:15	0°♄		evening set		15284 Dec 30 07:35	29°♄15'54	
morning set	15282 Jun 30 12:50	12°♄32'06		inferior conj		15285 Jan 02 05:24	27°♄27'38	-8°52'19
	15282 Jul 14 12:27	0°♄		minimum elong		15285 Jan 02 07:57	27°♄23'39	8°51'20
	15282 Aug 07 11:26	0°♄		min. Earth dist.		15285 Jan 01 21:55	27°♄39'19	0.28594 AU
max. Earth dist.	15282 Aug 08 08:53	1°♄07'16	1.71546 AU	morning rise		15285 Jan 05 08:27	25°♄31'49	
				direct		15285 Jan 23 11:53	19°♄23'18	
superior conj	15282 Aug 09 06:49	2°♄15'58	-1°06'40	greatest brilliancy		15285 Feb 02 12:54	21°♄13'38	-4.8m
minimum elong	15282 Aug 09 18:27	2°♄52'27	1°06'48			15285 Feb 18 10:59	0°♄	
	15282 Aug 31 09:47	0°♄		asc. node		15285 Feb 24 00:24	4°♄12'18	
asc. node	15282 Sep 09 03:43	10°♄57'34		morning max el		15285 Mar 13 12:02	19°♄49'27	45°43'56
evening rise	15282 Sep 18 07:23	22°♄25'12				15285 Mar 23 15:15	0°♄	
	15282 Sep 24 08:49	0°♄				15285 Apr 20 03:57	0°♄	
	15282 Oct 18 09:49	0°♄				15285 May 16 00:57	0°♄	
	15282 Nov 11 14:43	0°♄				15285 Jun 10 02:38	0°♄	

desc. node	15285 Jun 16 01:01	7° Π 11'48	evening max el	15288 Jan 03 02:02	13° X 36'14	46°05'00
	15285 Jul 04 16:32	0° G		15288 Jan 21 14:40	0° Υ	
	15285 Jul 28 22:50	0° Ω	greatest brilliancy	15288 Feb 11 06:41	12° Υ 15'29	-4.8m
	15285 Aug 22 00:42	0° Π	retrograde	15288 Feb 21 06:38	14° Υ 05'17	
morning set	15285 Sep 12 20:18	27° Π 16'27	evening set	15288 Mar 07 16:45	9° Υ 28'25	
	15285 Sep 15 00:36	0° L	inferior conj	15288 Mar 13 14:43	5° Υ 54'34	-2°23'55
asc. node	15285 Oct 06 17:58	27° L 10'45	minimum elong	15288 Mar 13 20:00	5° Υ 46'18	2°22'20
	15285 Oct 09 00:04	0° Π	min. Earth dist.	15288 Mar 13 20:46	5° Υ 45'05	0.28482 AU
			morning rise	15288 Mar 19 23:00	2° Υ 05'57	
superior conj	15285 Oct 22 04:39	16° Π 29'46	asc. node	15288 Mar 23 09:39	0° Υ 22'13	
minimum elong	15285 Oct 21 20:25	16° Π 04'02		15288 Mar 24 06:02	30° R X	
max. Earth dist.	15285 Oct 23 18:29	18° Π 27'58	direct	15288 Apr 03 20:23	27° X 43'41	
	15285 Nov 02 00:02	0° X	greatest brilliancy	15288 Apr 14 15:43	29° X 52'15	-4.8m
	15285 Nov 26 01:30	0° Z		15288 Apr 14 23:49	0° Υ	
evening rise	15285 Nov 29 04:11	3° Z 52'09	morning max el	15288 May 23 09:11	28° Υ 59'57	46°11'19
	15285 Dec 20 06:09	0° \approx		15288 May 24 09:30	0° B	
	15286 Jan 13 15:54	0° X		15288 Jun 21 12:59	0° Π	
desc. node	15286 Jan 26 08:42	15° X 28'42	desc. node	15288 Jul 13 12:10	25° Π 17'08	
	15286 Feb 07 08:19	0° Υ		15288 Jul 17 12:11	0° G	
	15286 Mar 04 08:21	0° B		15288 Aug 11 12:28	0° Ω	
	15286 Mar 29 18:00	0° Π		15288 Sep 05 01:13	0° Π	
	15286 Apr 24 20:06	0° G		15288 Sep 29 08:22	0° L	
asc. node	15286 May 19 03:25	26° G 29'20		15288 Oct 23 12:57	0° Π	
	15286 May 22 12:56	0° Ω	asc. node	15288 Nov 03 07:38	13° Π 23'25	
evening max el	15286 May 28 16:03	6° Ω 10'21		15288 Nov 16 16:19	0° X	
	15286 Jun 25 17:41	0° Π	morning set	15288 Nov 24 09:07	9° X 34'25	
greatest brilliancy	15286 Jul 08 01:02	6° Π 15'31		15288 Dec 10 19:20	0° Z	
retrograde	15286 Jul 17 11:08	7° Π 55'46				
evening set	15286 Aug 03 05:25	2° Π 32'18	superior conj	15288 Dec 31 21:41	26° Z 12'11	1°26'22
inferior conj	15286 Aug 07 03:47	0° Π 09'52	minimum elong	15288 Dec 31 23:22	26° Z 17'23	1°27'15
minimum elong	15286 Aug 07 14:34	29° Ω 53'15	max. Earth dist.	15289 Jan 03 03:45	28° Z 59'50	1.72714 AU
	15286 Aug 07 10:11	30° R Ω		15289 Jan 03 23:09	0° \approx	
min. Earth dist.	15286 Aug 07 20:44	29° Ω 43'46		15289 Jan 28 05:06	0° X	
morning rise	15286 Aug 11 23:27	27° Ω 15'53	evening rise	15289 Feb 07 07:07	12° X 25'59	
direct	15286 Aug 27 22:51	22° Ω 16'14		15289 Feb 21 14:01	0° Υ	
greatest brilliancy	15286 Sep 07 06:02	24° Ω 14'55	desc. node	15289 Feb 22 22:41	1° Υ 40'15	
desc. node	15286 Sep 08 05:29	24° Ω 37'21		15289 Mar 18 01:45	0° B	
	15286 Sep 18 08:35	0° Π		15289 Apr 11 15:46	0° Π	
morning max el	15286 Oct 17 05:52	24° Π 38'43		15289 May 06 08:27	0° G	
	15286 Oct 22 12:56	0° L		15289 May 31 06:24	0° Ω	
	15286 Nov 19 05:26	0° Π	asc. node	15289 Jun 15 14:43	18° Ω 13'46	
	15286 Dec 15 06:47	0° X		15289 Jun 25 15:51	0° Π	
asc. node	15286 Dec 30 06:18	17° X 41'11		15289 Jul 22 02:52	0° L	
	15287 Jan 09 14:02	0° Z	evening max el	15289 Aug 09 15:59	19° L 32'11	46°41'41
	15287 Feb 03 10:52	0° \approx		15289 Aug 20 14:00	0° Π	
	15287 Feb 28 01:34	0° X	greatest brilliancy	15289 Sep 18 03:16	19° Π 50'15	-4.9m
	15287 Mar 24 12:43	0° Υ	retrograde	15289 Sep 28 23:04	22° Π 01'02	
morning set	15287 Apr 15 21:35	27° Υ 32'34	desc. node	15289 Oct 05 14:42	21° Π 06'41	
	15287 Apr 17 21:23	0° B	evening set	15289 Oct 13 14:38	17° Π 47'06	
desc. node	15287 Apr 21 01:13	3° B 54'05	min. Earth dist.	15289 Oct 19 04:32	14° Π 31'59	0.27235 AU
	15287 May 12 03:31	0° Π	inferior conj	15289 Oct 19 19:27	14° Π 09'16	-3°35'18
max. Earth dist.	15287 May 21 21:44	12° Π 06'39	minimum elong	15289 Oct 19 11:37	14° Π 21'12	3°32'23
			morning rise	15289 Oct 25 09:11	10° Π 53'14	
superior conj	15287 May 24 22:03	15° Π 51'18	direct	15289 Nov 09 15:28	6° Π 23'54	
minimum elong	15287 May 24 11:22	15° Π 18'08	greatest brilliancy	15289 Nov 19 04:49	8° Π 05'04	-4.8m
	15287 Jun 05 06:58	0° G		15289 Dec 21 10:00	0° X	
	15287 Jun 29 08:16	0° Ω	morning max el	15289 Dec 29 00:13	7° X 08'07	46°04'30
evening rise	15287 Jul 03 03:32	4° Ω 44'52		15290 Jan 20 04:26	0° Z	
	15287 Jul 23 08:48	0° Π	asc. node	15290 Jan 26 16:51	7° Z 06'58	
asc. node	15287 Aug 11 15:15	24° Π 02'10		15290 Feb 15 23:28	0° \approx	
	15287 Aug 16 10:10	0° L		15290 Mar 13 14:28	0° X	
	15287 Sep 09 14:11	0° Π		15290 Apr 07 15:08	0° Υ	
	15287 Oct 03 23:26	0° X		15290 May 02 07:16	0° B	
	15287 Oct 28 18:44	0° Z	desc. node	15290 May 18 14:33	20° B 00'07	
	15287 Nov 23 09:16	0° \approx		15290 May 26 17:14	0° Π	
desc. node	15287 Dec 01 09:18	9° \approx 04'08		15290 Jun 19 22:11	0° G	
	15287 Dec 20 14:56	0° X	morning set	15290 Jun 28 01:02	10° G 06'33	

	15290 Jul 13 23:22	0°♎		minimum elong	15292 Dec 30 22:17	25°♊10'34	8°53'39
max. Earth dist.	15290 Aug 05 18:38	28°♎33'09	1.71556 AU	min. Earth dist.	15292 Dec 30 12:33	25°♊25'48	0.28568 AU
				morning rise	15293 Jan 02 21:37	23°♊20'25	
superior conj	15290 Aug 06 18:47	29°♎48'49	-1°09'07	direct	15293 Jan 21 02:16	17°♊09'23	
minimum elong	15290 Aug 07 06:13	0°♎24'41	1°09'18	greatest brilliancy	15293 Jan 31 03:18	18°♊59'12	-4.8m
	15290 Aug 06 22:21	0°♎			15293 Feb 19 02:40	0°♊	
	15290 Aug 30 20:43	0°♎		asc. node	15293 Feb 23 02:20	3°♊08'40	
asc. node	15290 Sep 08 05:31	10°♎28'53		morning max el	15293 Mar 11 01:50	17°♊31'56	45°43'47
evening rise	15290 Sep 15 20:01	20°♎00'12			15293 Mar 23 10:04	0°♊	
	15290 Sep 23 19:48	0°♎			15293 Apr 19 18:34	0°♊	
	15290 Oct 17 20:54	0°♎			15293 May 15 13:51	0°♊	
	15290 Nov 11 02:02	0°♊			15293 Jun 09 14:40	0°♊	
	15290 Dec 05 14:18	0°♊		desc. node	15293 Jun 15 02:56	6°♊41'32	
desc. node	15290 Dec 28 21:22	27°♊59'38			15293 Jul 04 04:05	0°♊	
	15290 Dec 30 13:56	0°♊			15293 Jul 28 10:03	0°♊	
	15291 Jan 25 06:46	0°♊			15293 Aug 21 11:44	0°♊	
	15291 Feb 21 04:24	0°♊		morning set	15293 Sep 10 09:19	24°♊52'47	
evening max el	15291 Mar 15 03:43	22°♊37'41	46°00'38		15293 Sep 14 11:31	0°♊	
	15291 Mar 22 23:48	0°♊		asc. node	15293 Oct 05 19:41	26°♊42'09	
asc. node	15291 Apr 20 19:12	20°♊32'11			15293 Oct 08 10:56	0°♊	
greatest brilliancy	15291 Apr 23 10:26	21°♊33'55	-4.8m				
retrograde	15291 May 03 09:11	23°♊23'16		superior conj	15293 Oct 19 18:36	14°♊09'29	0°33'18
evening set	15291 May 19 13:33	18°♊17'42		minimum elong	15293 Oct 19 10:57	13°♊45'35	0°33'32
inferior conj	15291 May 24 09:05	15°♊20'58	7°16'59	max. Earth dist.	15293 Oct 21 03:55	15°♊53'36	1.71824 AU
minimum elong	15291 May 23 22:45	15°♊37'11	7°14'10		15293 Nov 01 10:52	0°♊	
min. Earth dist.	15291 May 24 08:13	15°♊22'18	0.28071 AU		15293 Nov 25 12:21	0°♊	
morning rise	15291 May 28 07:51	12°♊54'32		evening rise	15293 Nov 26 19:31	1°♊36'54	
direct	15291 Jun 14 11:52	7°♊13'36			15293 Dec 19 17:05	0°♊	
greatest brilliancy	15291 Jun 24 12:06	9°♊06'27	-4.8m		15294 Jan 13 03:04	0°♊	
	15291 Jul 24 16:40	0°♊		desc. node	15294 Jan 25 10:32	14°♊59'52	
morning max el	15291 Aug 03 19:12	9°♊44'14	46°50'47		15294 Feb 06 19:52	0°♊	
desc. node	15291 Aug 10 22:09	17°♊02'29			15294 Mar 03 20:35	0°♊	
	15291 Aug 22 23:19	0°♊			15294 Mar 29 07:22	0°♊	
	15291 Sep 18 06:51	0°♊			15294 Apr 24 11:40	0°♊	
	15291 Oct 13 13:30	0°♊		asc. node	15294 May 18 05:24	25°♊42'43	
	15291 Nov 07 09:07	0°♊			15294 May 22 10:00	0°♊	
asc. node	15291 Dec 01 20:33	29°♊52'53		evening max el	15294 May 26 04:56	3°♊47'12	46°21'57
	15291 Dec 01 22:52	0°♊			15294 Jun 27 04:37	0°♊	
	15291 Dec 26 08:54	0°♊		greatest brilliancy	15294 Jul 05 14:23	3°♊52'16	-4.9m
	15292 Jan 19 16:42	0°♊		retrograde	15294 Jul 15 00:24	5°♊32'39	
morning set	15292 Feb 03 03:10	17°♊49'41		evening set	15294 Jul 31 22:01	0°♊03'20	
	15292 Feb 12 23:47	0°♊			15294 Aug 01 00:18	30°♊	
	15292 Mar 08 07:10	0°♊		inferior conj	15294 Aug 04 16:56	27°♊46'05	7°30'03
				minimum elong	15294 Aug 05 03:28	27°♊29'52	7°27'31
superior conj	15292 Mar 11 06:29	3°♊39'53	0°26'57	min. Earth dist.	15294 Aug 05 10:06	27°♊19'40	0.27256 AU
minimum elong	15292 Mar 11 12:21	3°♊57'57	0°26'41	morning rise	15294 Aug 09 08:39	24°♊57'53	
max. Earth dist.	15292 Mar 11 11:28	3°♊55'16	1.73109 AU	direct	15294 Aug 25 12:05	19°♊51'33	
desc. node	15292 Mar 22 12:56	17°♊33'45		greatest brilliancy	15294 Sep 04 19:33	21°♊50'54	-4.9m
	15292 Apr 01 14:55	0°♊		desc. node	15294 Sep 07 07:16	22°♊51'27	
evening rise	15292 Apr 18 09:07	20°♊40'35			15294 Sep 19 10:26	0°♊	
	15292 Apr 25 22:19	0°♊		morning max el	15294 Oct 14 20:34	22°♊18'58	46°47'53
	15292 May 20 04:57	0°♊			15294 Oct 22 09:36	0°♊	
	15292 Jun 13 11:25	0°♊			15294 Nov 18 20:56	0°♊	
	15292 Jul 07 19:39	0°♊			15294 Dec 14 20:08	0°♊	
asc. node	15292 Jul 13 03:29	6°♊32'11		asc. node	15294 Dec 29 08:15	17°♊09'29	
	15292 Aug 01 08:41	0°♊			15295 Jan 09 02:14	0°♊	
	15292 Aug 26 07:25	0°♊			15295 Feb 02 22:24	0°♊	
	15292 Sep 21 02:05	0°♊			15295 Feb 27 12:41	0°♊	
	15292 Oct 18 21:32	0°♊			15295 Mar 23 23:36	0°♊	
evening max el	15292 Oct 20 12:00	1°♊36'14	46°30'06	morning set	15295 Apr 13 12:34	25°♊17'29	
desc. node	15292 Nov 02 00:32	13°♊24'44			15295 Apr 17 08:10	0°♊	
	15292 Nov 25 14:22	0°♊		desc. node	15295 Apr 20 02:58	3°♊26'11	
greatest brilliancy	15292 Nov 29 00:01	1°♊25'05	-4.8m		15295 May 11 14:16	0°♊	
retrograde	15292 Dec 09 10:35	3°♊25'04		max. Earth dist.	15295 May 19 14:54	9°♊57'28	1.72433 AU
	15292 Dec 22 15:22	30°♊					
evening set	15292 Dec 27 23:04	27°♊00'57		superior conj	15295 May 22 11:37	13°♊30'49	-1°08'37
inferior conj	15292 Dec 30 20:36	25°♊13'13	-8°54'34	minimum elong	15295 May 22 00:43	12°♊56'58	1°09'08

	15295 Jun 04 17:46	0°☿			15297 Dec 21 11:58	0°♊	
	15295 Jun 28 19:10	0°♈	morning max el		15297 Dec 26 13:40	4°♊49'18	46°05'55
evening rise	15295 Jun 30 15:58	2°♈19'48			15298 Jan 19 20:58	0°♊	
	15295 Jul 22 19:49	0°♉	asc. node		15298 Jan 25 18:44	6°♊29'11	
asc. node	15295 Aug 10 17:03	23°♉33'01			15298 Feb 15 13:00	0°♊	
	15295 Aug 15 21:22	0°♊			15298 Mar 13 02:37	0°♋	
	15295 Sep 09 01:37	0°♋			15298 Apr 07 02:35	0°♋	
	15295 Oct 03 11:18	0°♌			15298 May 01 18:18	0°♌	
	15295 Oct 28 07:26	0°♍	desc. node		15298 May 17 16:31	19°♌32'38	
desc. node	15295 Nov 22 23:37	0°♎			15298 May 26 04:03	0°♎	
	15295 Nov 30 11:15	8°♎27'18			15298 Jun 19 08:54	0°♏	
	15295 Dec 20 09:17	0°♐	morning set		15298 Jun 25 13:10	7°♏41'34	
evening max el	15295 Dec 31 18:02	11°♐25'23			15298 Jul 13 10:01	0°♐	
	15296 Jan 22 03:31	0°♑	max. Earth dist.		15298 Aug 03 02:20	25°♐53'34	1.71567 AU
greatest brilliancy	15296 Feb 08 21:36	10°♑02'51					
retrograde	15296 Feb 18 22:40	11°♑53'13	superior conj		15298 Aug 04 06:46	27°♐22'39	-1°11'25
evening set	15296 Mar 05 10:19	7°♑13'28	minimum elong		15298 Aug 04 17:56	27°♐57'36	1°11'41
inferior conj	15296 Mar 11 06:22	3°♑42'08			15298 Aug 06 09:00	0°♑	
minimum elong	15296 Mar 11 12:20	3°♑32'47			15298 Aug 30 07:24	0°♒	
min. Earth dist.	15296 Mar 11 12:20	3°♑32'47	asc. node		15298 Sep 07 07:15	10°♒00'46	
	15296 Mar 17 10:10	30°♒♋	evening rise		15298 Sep 13 08:34	17°♒35'39	
morning rise	15296 Mar 17 14:12	29°♒54'27			15298 Sep 23 06:33	0°♓	
asc. node	15296 Mar 22 11:31	27°♒33'56			15298 Oct 17 07:47	0°♓	
direct	15296 Apr 01 12:37	25°♒31'19			15298 Nov 10 13:07	0°♊	
greatest brilliancy	15296 Apr 12 07:17	27°♒39'40			15298 Dec 05 01:45	0°♋	
	15296 Apr 17 12:02	0°♑	desc. node		15298 Dec 27 23:17	27°♋29'29	
morning max el	15296 May 21 01:27	26°♑48'12			15298 Dec 30 02:04	0°♋	
	15296 May 24 06:34	0°♌			15299 Jan 24 20:17	0°♑	
	15296 Jun 21 04:20	0°♎			15299 Feb 20 21:02	0°♌	
desc. node	15296 Jul 12 14:05	24°♎43'04	evening max el		15299 Mar 12 18:01	20°♌22'02	46°00'07
	15296 Jul 17 01:27	0°♏			15299 Mar 23 02:40	0°♎	
	15296 Aug 11 00:43	0°♐	asc. node		15299 Apr 19 21:13	18°♎52'26	
	15296 Sep 04 12:53	0°♑	greatest brilliancy		15299 Apr 21 01:07	19°♎18'10	-4.8m
	15296 Sep 28 19:38	0°♒	retrograde		15299 Apr 30 23:03	21°♎07'08	
	15296 Oct 22 23:54	0°♓	evening set		15299 May 17 00:41	16°♎06'39	
asc. node	15296 Nov 02 09:33	12°♓55'39	inferior conj		15299 May 21 23:55	13°♎04'38	7°03'11
	15296 Nov 16 03:03	0°♊	minimum elong		15299 May 21 13:24	13°♎21'10	7°00'15
morning set	15296 Nov 22 00:15	7°♊19'02	min. Earth dist.		15299 May 21 23:08	13°♎05'51	0.28086 AU
	15296 Dec 10 05:55	0°♋	morning rise		15299 May 26 01:57	10°♎33'09	
			direct		15299 Jun 12 02:20	4°♎57'00	
superior conj	15296 Dec 29 14:10	24°♋01'43	greatest brilliancy		15299 Jun 22 04:02	6°♎50'38	-4.8m
minimum elong	15296 Dec 29 15:04	24°♋04'28			15299 Jul 24 18:42	0°♏	
max. Earth dist.	15296 Dec 31 23:09	26°♋58'27	morning max el		15299 Aug 01 08:26	7°♏22'15	46°49'53
	15297 Jan 03 09:41	0°♌	desc. node		15299 Aug 10 00:01	16°♏16'30	
	15297 Jan 27 15:41	0°♋			15299 Aug 22 16:08	0°♐	
evening rise	15297 Feb 04 23:12	10°♋15'01			15299 Sep 17 20:47	0°♑	
	15297 Feb 21 00:44	0°♑			15299 Oct 13 02:02	0°♒	
desc. node	15297 Feb 22 00:25	1°♑12'40			15299 Nov 06 20:51	0°♓	
	15297 Mar 17 12:41	0°♌	asc. node		15299 Nov 30 22:26	29°♓24'17	
	15297 Apr 11 03:04	0°♎			15299 Dec 01 10:04	0°♊	
	15297 May 05 20:18	0°♏			15299 Dec 25 19:44	0°♋	
	15297 May 30 19:10	0°♐			15300 Jan 19 03:16	0°♌	
asc. node	15297 Jun 14 16:42	17°♐39'40	morning set		15300 Jan 31 20:09	15°♌41'35	
	15297 Jun 25 06:12	0°♑			15300 Feb 12 10:11	0°♋	
	15297 Jul 21 20:37	0°♒			15300 Mar 08 17:32	0°♑	
evening max el	15297 Aug 07 07:01	17°♒13'09					
	15297 Aug 20 19:19	0°♓	superior conj		15300 Mar 09 22:42	1°♑29'58	0°30'09
greatest brilliancy	15297 Sep 15 17:47	17°♓28'22	minimum elong		15300 Mar 10 05:11	1°♑49'55	0°29'55
retrograde	15297 Sep 26 12:53	19°♓37'58	max. Earth dist.		15300 Mar 10 05:04	1°♑49'33	1.73113 AU
desc. node	15297 Oct 04 16:41	18°♓16'38	desc. node		15300 Mar 22 14:44	17°♑07'16	
evening set	15297 Oct 11 02:43	15°♓26'39			15300 Apr 02 01:20	0°♌	
inferior conj	15297 Oct 17 08:33	11°♓47'14	evening rise		15300 Apr 17 00:43	18°♌28'15	
minimum elong	15297 Oct 17 01:24	11°♓58'07			15300 Apr 26 08:54	0°♎	
min. Earth dist.	15297 Oct 16 18:35	12°♓08'31			15300 May 20 15:43	0°♏	
morning rise	15297 Oct 23 00:42	8°♓27'49			15300 Jun 13 22:29	0°♐	
direct	15297 Nov 07 04:43	4°♓02'33			15300 Jul 08 07:09	0°♑	
greatest brilliancy	15297 Nov 16 17:43	5°♓43'27	asc. node		15300 Jul 13 05:13	6°♑01'57	

	15300 Aug 01 20:51	0°♄			15303 Jan 09 14:04	0°♄		
	15300 Aug 26 20:43	0°♍			15303 Feb 03 09:36	0°♍		
	15300 Sep 21 17:37	0°♎			15303 Feb 27 23:31	0°♎		
evening max el	15300 Oct 19 01:32	29°♎16'10	46°30'54		15303 Mar 24 10:13	0°♏		
	15300 Oct 19 19:11	0°♄		morning set	15303 Apr 12 03:52	23°♏04'20		
desc. node	15300 Nov 02 02:34	12°♄25'35			15303 Apr 17 18:39	0°♐		
greatest brilliancy	15300 Nov 27 14:47	29°♄10'18	-4.8m	desc. node	15303 Apr 20 04:56	2°♐59'53		
	15300 Nov 30 03:03	0°♍			15303 May 12 00:43	0°♑		
retrograde	15300 Dec 08 01:36	1°♍11'08		max. Earth dist.	15303 May 18 07:44	7°♑48'17	1.72464 AU	
	15300 Dec 15 18:17	30°♎♄						
evening set	15300 Dec 26 14:00	24°♄47'22		superior conj	15303 May 21 01:32	11°♑12'30	-1°06'16	
inferior conj	15300 Dec 29 11:42	22°♄59'37	-8°56'00	minimum elong	15303 May 20 14:31	10°♑38'19	1°06'46	
minimum elong	15300 Dec 29 12:31	22°♄58'21	8°55'07		15303 Jun 05 04:13	0°♒		
min. Earth dist.	15300 Dec 29 02:58	23°♄13'14	0.28541 AU	evening rise	15303 Jun 29 04:43	29°♒56'50		
morning rise	15301 Jan 01 11:06	21°♄09'25			15303 Jun 29 05:44	0°♓		
direct	15301 Jan 19 16:28	14°♄56'08			15303 Jul 23 06:33	0°♑		
greatest brilliancy	15301 Jan 29 17:47	16°♄45'56	-4.8m	asc. node	15303 Aug 10 18:50	23°♑04'44		
	15301 Feb 20 13:46	0°♍			15303 Aug 16 08:19	0°♄		
asc. node	15301 Feb 23 04:12	2°♍07'36			15303 Sep 09 12:53	0°♍		
morning max el	15301 Mar 09 16:25	15°♍17'36	45°43'54		15303 Oct 03 23:04	0°♎		
	15301 Mar 24 03:55	0°♎			15303 Oct 28 20:04	0°♄		
	15301 Apr 20 08:31	0°♏			15303 Nov 23 13:59	0°♍		
	15301 May 16 02:13	0°♐		desc. node	15303 Nov 30 13:11	7°♍50'29		
	15301 Jun 10 02:14	0°♑			15303 Dec 21 04:00	0°♎		
desc. node	15301 Jun 15 04:48	6°♑12'22		evening max el	15303 Dec 30 10:08	9°♎15'05	46°06'19	
	15301 Jul 04 15:13	0°♒			15304 Jan 23 20:37	0°♏		
	15301 Jul 28 20:57	0°♓		greatest brilliancy	15304 Feb 07 12:40	7°♏50'44	-4.8m	
	15301 Aug 21 22:28	0°♑		retrograde	15304 Feb 17 14:11	9°♏41'04		
morning set	15301 Sep 08 21:57	22°♑28'51		evening set	15304 Mar 04 03:53	4°♏58'31		
	15301 Sep 14 22:09	0°♄		inferior conj	15304 Mar 09 21:50	1°♏29'46	-3°04'19	
asc. node	15301 Oct 05 21:35	26°♄15'05		minimum elong	15304 Mar 10 04:27	1°♏19'24	3°02'20	
	15301 Oct 08 21:29	0°♍		min. Earth dist.	15304 Mar 10 03:46	1°♏20'28	0.28516 AU	
					15304 Mar 12 07:30	30°♎♎		
superior conj	15301 Oct 18 08:07	11°♍48'52	0°29'52	morning rise	15304 Mar 16 04:58	27°♎43'06		
minimum elong	15301 Oct 18 01:08	11°♍26'59	0°30'04	asc. node	15304 Mar 22 13:38	24°♎49'35		
max. Earth dist.	15301 Oct 19 14:43	13°♍24'32	1.71802 AU	direct	15304 Mar 31 04:51	23°♎19'06		
	15301 Nov 01 21:22	0°♎		greatest brilliancy	15304 Apr 10 22:27	25°♎26'43	-4.8m	
evening rise	15301 Nov 25 10:43	29°♎22'13			15304 Apr 20 01:36	0°♏		
	15301 Nov 25 22:52	0°♄		morning max el	15304 May 19 16:58	24°♏35'08	46°08'24	
	15301 Dec 20 03:43	0°♍			15304 May 25 02:42	0°♐		
	15302 Jan 13 13:56	0°♎			15304 Jun 21 19:13	0°♑		
desc. node	15302 Jan 25 12:18	14°♎31'46		desc. node	15304 Jul 12 15:57	24°♑09'45		
	15302 Feb 07 07:08	0°♏			15304 Jul 17 14:21	0°♒		
	15302 Mar 04 08:29	0°♐			15304 Aug 11 12:40	0°♓		
	15302 Mar 29 20:24	0°♑			15304 Sep 05 00:17	0°♑		
	15302 Apr 25 02:59	0°♒			15304 Sep 29 06:41	0°♄		
asc. node	15302 May 18 07:22	24°♒56'42			15304 Oct 23 10:43	0°♍		
	15302 May 23 07:19	0°♓		asc. node	15304 Nov 02 11:25	12°♍28'02		
evening max el	15302 May 24 18:42	1°♓27'43	46°21'02		15304 Nov 16 13:41	0°♎		
	15302 Jun 30 08:57	0°♑		morning set	15304 Nov 20 14:56	5°♎02'26		
greatest brilliancy	15302 Jul 04 02:57	1°♑29'26	-4.9m		15304 Dec 10 16:27	0°♄		
retrograde	15302 Jul 13 13:52	3°♑10'27						
	15302 Jul 26 03:29	30°♎♓		superior conj	15304 Dec 28 06:15	21°♄50'07	1°26'40	
evening set	15302 Jul 30 14:34	27°♓35'20		minimum elong	15304 Dec 28 06:20	21°♄50'25	1°27'35	
inferior conj	15302 Aug 03 06:03	25°♓23'03	7°43'09	max. Earth dist.	15304 Dec 30 17:31	24°♄54'02	1.72658 AU	
minimum elong	15302 Aug 03 16:15	25°♓07'22	7°40'47		15305 Jan 03 20:10	0°♍		
min. Earth dist.	15302 Aug 03 22:59	24°♓57'01	0.27295 AU		15305 Jan 28 02:12	0°♎		
morning rise	15302 Aug 07 17:42	22°♓40'50		evening rise	15305 Feb 03 14:54	8°♎03'04		
direct	15302 Aug 24 01:56	17°♓27'46			15305 Feb 21 11:22	0°♏		
greatest brilliancy	15302 Sep 03 08:34	19°♓27'00	-4.9m	desc. node	15305 Feb 22 02:16	0°♏45'42		
desc. node	15302 Sep 07 09:19	21°♓10'28			15305 Mar 17 23:35	0°♐		
	15302 Sep 21 05:06	0°♑			15305 Apr 11 14:21	0°♑		
morning max el	15302 Oct 13 11:45	20°♑01'03	46°48'53		15305 May 06 08:10	0°♒		
	15302 Oct 23 05:22	0°♄			15305 May 31 07:54	0°♓		
	15302 Nov 19 11:58	0°♍		asc. node	15305 Jun 14 18:32	17°♓05'19		
	15302 Dec 15 09:05	0°♎			15305 Jun 25 20:33	0°♑		
asc. node	15302 Dec 29 10:06	16°♎38'29			15305 Jul 22 14:34	0°♄		

evening max el	15305 Aug 05 21:13	14°♄52'42	46°41'08	superior conj	15308 Mar 07 14:42	29°♄18'26	0°33'20
	15305 Aug 22 02:32	0°♍		minimum elong	15308 Mar 07 21:45	29°♄40'12	0°33'07
greatest brilliancy	15305 Sep 14 08:43	15°♍07'40	-4.9m	max. Earth dist.	15308 Mar 07 22:55	29°♄43'47	1.73119 AU
retrograde	15305 Sep 25 02:06	17°♍15'34			15308 Mar 08 04:10	0°♄	
desc. node	15305 Oct 04 18:43	15°♍21'49		desc. node	15308 Mar 21 16:38	16°♄40'13	
evening set	15305 Oct 09 15:07	13°♍06'23			15308 Apr 01 12:03	0°♄	
inferior conj	15305 Oct 15 21:47	9°♍25'48	-2°51'02	evening rise	15308 Apr 14 16:04	16°♄14'20	
minimum elong	15305 Oct 15 15:22	9°♍35'35	2°48'31		15308 Apr 25 19:45	0°♄	
min. Earth dist.	15305 Oct 15 09:05	9°♍45'11	0.27152 AU		15308 May 20 02:47	0°♄	
morning rise	15305 Oct 21 16:10	6°♍03'02			15308 Jun 13 09:51	0°♄	
direct	15305 Nov 05 17:43	1°♍41'32			15308 Jul 07 18:59	0°♄	
greatest brilliancy	15305 Nov 15 07:27	3°♍22'48	-4.8m	asc. node	15308 Jul 12 07:05	5°♄31'06	
	15305 Dec 22 12:39	0°♄			15308 Aug 01 09:23	0°♄	
morning max el	15305 Dec 25 02:22	2°♄28'15	46°07'12		15308 Aug 26 10:24	0°♍	
	15306 Jan 20 13:18	0°♄			15308 Sep 21 09:38	0°♄	
asc. node	15306 Jan 25 20:39	5°♄51'27		evening max el	15308 Oct 16 15:43	26°♄57'19	46°31'53
	15306 Feb 16 02:31	0°♄			15308 Oct 19 17:52	0°♄	
	15306 Mar 13 14:48	0°♄		desc. node	15308 Nov 01 04:28	11°♄24'24	
	15306 Apr 07 14:02	0°♄		greatest brilliancy	15308 Nov 25 04:55	26°♄54'42	-4.8m
	15306 May 02 05:23	0°♄		retrograde	15308 Dec 05 17:14	28°♄57'17	
desc. node	15306 May 17 18:16	19°♄04'19		evening set	15308 Dec 24 04:40	22°♄34'14	
	15306 May 26 14:55	0°♄		min. Earth dist.	15308 Dec 26 17:09	21°♄01'07	0.28515 AU
	15306 Jun 19 19:40	0°♄		inferior conj	15308 Dec 27 02:57	20°♄45'52	-8°56'38
morning set	15306 Jun 24 01:18	5°♄16'22		minimum elong	15308 Dec 27 02:53	20°♄45'58	8°55'44
	15306 Jul 13 20:44	0°♄		morning rise	15308 Dec 30 01:12	18°♄57'39	
max. Earth dist.	15306 Aug 01 08:21	23°♄08'40	1.71576 AU	direct	15309 Jan 17 07:13	12°♄42'41	
				greatest brilliancy	15309 Jan 27 08:07	14°♄32'17	-4.8m
superior conj	15306 Aug 02 19:04	24°♄57'24	-1°13'34		15309 Feb 20 22:07	0°♄	
minimum elong	15306 Aug 03 05:53	25°♄31'16	1°13'54	asc. node	15309 Feb 22 06:18	1°♄07'49	
	15306 Aug 06 19:40	0°♄		morning max el	15309 Mar 07 07:56	13°♄04'48	45°43'49
	15306 Aug 30 18:04	0°♄			15309 Mar 23 21:41	0°♄	
asc. node	15306 Sep 07 09:10	9°♄33'18			15309 Apr 19 22:43	0°♄	
evening rise	15306 Sep 11 21:23	15°♄12'02			15309 May 15 14:55	0°♄	
	15306 Sep 23 17:17	0°♍			15309 Jun 09 14:09	0°♄	
	15306 Oct 17 18:40	0°♄		desc. node	15309 Jun 14 06:40	5°♄42'05	
	15306 Nov 11 00:15	0°♄			15309 Jul 04 02:41	0°♄	
	15306 Dec 05 13:19	0°♄			15309 Jul 28 08:09	0°♄	
desc. node	15306 Dec 28 01:01	26°♄58'15			15309 Aug 21 09:31	0°♄	
	15306 Dec 30 14:27	0°♄		morning set	15309 Sep 06 10:31	20°♄03'36	
	15307 Jan 25 10:11	0°♄			15309 Sep 14 09:07	0°♄	
	15307 Feb 21 14:16	0°♄		asc. node	15309 Oct 04 23:24	25°♄46'43	
evening max el	15307 Mar 11 07:40	18°♄04'14	45°59'47		15309 Oct 08 08:22	0°♍	
	15307 Mar 24 07:39	0°♄					
greatest brilliancy	15307 Apr 19 15:25	17°♄01'16	-4.8m	superior conj	15309 Oct 15 21:39	9°♍27'08	0°26'22
asc. node	15307 Apr 19 23:10	17°♄08'00		minimum elong	15309 Oct 15 15:21	9°♍07'26	0°26'34
retrograde	15307 Apr 29 13:05	18°♄50'26		max. Earth dist.	15309 Oct 17 03:19	10°♍59'55	1.71776 AU
evening set	15307 May 15 11:50	13°♄54'26			15309 Nov 01 08:11	0°♄	
inferior conj	15307 May 20 14:40	10°♄47'33	6°48'46	evening rise	15309 Nov 23 02:11	27°♄07'27	
minimum elong	15307 May 20 04:01	11°♄04'16	6°45'43		15309 Nov 25 09:40	0°♄	
min. Earth dist.	15307 May 20 13:56	10°♄48'42	0.28102 AU		15309 Dec 19 14:37	0°♄	
morning rise	15307 May 24 19:59	8°♄11'11			15310 Jan 13 01:05	0°♄	
direct	15307 Jun 10 16:39	2°♄39'26		desc. node	15310 Jan 24 14:15	14°♄03'22	
greatest brilliancy	15307 Jun 20 20:09	4°♄34'25	-4.8m		15310 Feb 06 18:43	0°♄	
	15307 Jul 25 19:38	0°♄			15310 Mar 03 20:48	0°♄	
morning max el	15307 Jul 30 22:15	5°♄01'11	46°49'08		15310 Mar 29 09:59	0°♄	
desc. node	15307 Aug 10 01:59	15°♄30'54			15310 Apr 24 19:03	0°♄	
	15307 Aug 23 08:48	0°♄		asc. node	15310 May 17 09:13	24°♄08'09	
	15307 Sep 18 10:42	0°♄		evening max el	15310 May 22 09:07	29°♄08'29	46°20'07
	15307 Oct 13 14:36	0°♄			15310 May 23 06:05	0°♄	
	15307 Nov 07 08:37	0°♍		greatest brilliancy	15310 Jul 01 15:27	29°♄05'18	-4.8m
asc. node	15307 Dec 01 00:13	28°♍55'11			15310 Jul 04 18:40	0°♄	
	15307 Dec 01 21:21	0°♄		retrograde	15310 Jul 11 03:19	0°♄46'44	
	15307 Dec 26 06:40	0°♄			15310 Jul 17 07:21	30°♄00'00	
	15308 Jan 19 14:00	0°♄		evening set	15310 Jul 28 07:06	25°♄06'12	
morning set	15308 Jan 30 13:01	13°♄32'22		inferior conj	15310 Jul 31 19:09	22°♄58'40	7°55'27
	15308 Feb 12 20:49	0°♄		minimum elong	15310 Aug 01 04:55	22°♄43'38	7°53'14
				min. Earth dist.	15310 Aug 01 11:35	22°♄33'23	0.27331 AU

morning rise	15310 Aug 05 02:35	20°Ω22'31		evening rise	15313 Feb 01 06:52	5°✠51'02	
direct	15310 Aug 21 16:01	15°Ω02'54			15313 Feb 20 22:16	0°Υ	
greatest brilliancy	15310 Aug 31 21:08	17°Ω01'15	-4.9m	desc. node	15313 Feb 21 04:09	0°Υ18'04	
desc. node	15310 Sep 06 11:23	19°Ω31'56			15313 Mar 17 10:41	0°♄	
	15310 Sep 21 19:36	0°♍			15313 Apr 11 01:50	0°♂	
morning max el	15310 Oct 11 02:31	17°♍40'55	46°49'48		15313 May 05 20:16	0°♄	
	15310 Oct 23 00:59	0°♌			15313 May 30 21:01	0°Ω	
	15310 Nov 19 03:09	0°♍		asc. node	15313 Jun 13 20:25	16°Ω29'57	
	15310 Dec 14 22:18	0°♊			15313 Jun 25 11:26	0°♍	
asc. node	15310 Dec 28 12:00	16°♊06'41			15313 Jul 22 09:27	0°♌	
	15311 Jan 09 02:11	0°♊		evening max el	15313 Aug 03 10:23	12°♌28'14	46°40'43
	15311 Feb 02 21:04	0°♐			15313 Aug 22 13:15	0°♍	
	15311 Feb 27 10:36	0°✠		greatest brilliancy	15313 Sep 11 23:47	12°♍45'17	-4.9m
	15311 Mar 23 21:07	0°Υ		retrograde	15313 Sep 22 14:54	14°♍51'24	
morning set	15311 Apr 09 19:25	20°Υ50'54		desc. node	15313 Oct 03 20:35	12°♍20'02	
	15311 Apr 17 05:28	0°♄		evening set	15313 Oct 07 03:30	10°♍43'50	
desc. node	15311 Apr 19 06:41	2°♄31'54		inferior conj	15313 Oct 13 10:47	7°♍02'39	-2°28'10
	15311 May 11 11:32	0°♂		minimum elong	15313 Oct 13 05:10	7°♍11'14	2°25'55
max. Earth dist.	15311 May 15 22:08	5°♂30'26	1.72500 AU	min. Earth dist.	15313 Oct 12 23:39	7°♍19'40	0.27116 AU
				morning rise	15313 Oct 19 07:17	3°♍36'48	
superior conj	15311 May 18 15:24	8°♂52'54	-1°03'50		15313 Oct 28 08:34	30°♍	
minimum elong	15311 May 18 04:22	8°♂18'38	1°04'17	direct	15313 Nov 03 06:00	29°♌18'37	
	15311 Jun 04 15:07	0°♄			15313 Nov 09 07:11	0°♍	
evening rise	15311 Jun 26 17:11	27°♄31'38		greatest brilliancy	15313 Nov 12 21:28	1°♍00'59	-4.8m
	15311 Jun 28 16:44	0°Ω		morning max el	15313 Dec 22 14:42	0°♊05'21	46°08'43
	15311 Jul 22 17:42	0°♍			15313 Dec 22 12:30	0°♊	
asc. node	15311 Aug 09 20:44	22°♍35'30			15314 Jan 20 05:34	0°♊	
	15311 Aug 15 19:41	0°♌		asc. node	15314 Jan 24 22:40	5°♊13'43	
	15311 Sep 09 00:34	0°♍			15314 Feb 15 16:06	0°♐	
	15311 Oct 03 11:17	0°♊			15314 Mar 13 03:04	0°✠	
	15311 Oct 28 09:12	0°♊			15314 Apr 07 01:35	0°Υ	
	15311 Nov 23 04:57	0°♐			15314 May 01 16:31	0°♄	
desc. node	15311 Nov 29 15:02	7°♐12'00		desc. node	15314 May 16 20:06	18°♄36'08	
	15311 Dec 20 23:37	0°✠			15314 May 26 01:51	0°♂	
evening max el	15311 Dec 28 02:00	7°✠03'14	46°07'05		15314 Jun 19 06:31	0°♄	
	15312 Jan 24 20:11	0°Υ		morning set	15314 Jun 21 13:38	2°♄51'32	
greatest brilliancy	15312 Feb 05 04:31	5°Υ39'19	-4.8m		15314 Jul 13 07:33	0°Ω	
retrograde	15312 Feb 15 05:36	7°Υ29'02		max. Earth dist.	15314 Jul 29 15:06	20°Ω25'29	1.71597 AU
evening set	15312 Mar 01 21:52	2°Υ43'43					
	15312 Mar 06 10:39	30°♍		superior conj	15314 Jul 31 07:15	22°Ω31'16	-1°15'36
inferior conj	15312 Mar 07 13:38	29°✠17'42	-3°23'57	minimum elong	15314 Jul 31 17:37	23°Ω03'44	1°15'58
minimum elong	15312 Mar 07 20:51	29°✠06'23	3°21'47		15314 Aug 06 06:30	0°♍	
min. Earth dist.	15312 Mar 07 19:38	29°✠08'16	0.28529 AU		15314 Aug 30 04:57	0°♌	
morning rise	15312 Mar 13 19:48	25°✠32'08		asc. node	15314 Sep 06 10:56	9°♌04'42	
asc. node	15312 Mar 21 15:31	22°✠10'28		evening rise	15314 Sep 09 09:43	12°♌46'14	
direct	15312 Mar 28 21:04	21°✠07'19			15314 Sep 23 04:16	0°♍	
greatest brilliancy	15312 Apr 08 13:59	23°✠14'05	-4.8m		15314 Oct 17 05:46	0°♊	
	15312 Apr 21 03:55	0°Υ			15314 Nov 10 11:35	0°♊	
morning max el	15312 May 17 07:40	22°Υ19'20	46°06'47		15314 Dec 05 01:05	0°♐	
	15312 May 24 22:29	0°♄		desc. node	15314 Dec 27 03:00	26°♐27'14	
	15312 Jun 21 10:16	0°♂			15314 Dec 30 03:01	0°✠	
desc. node	15312 Jul 11 17:56	23°♂35'39			15315 Jan 25 00:19	0°Υ	
	15312 Jul 17 03:36	0°♄			15315 Feb 21 07:57	0°♄	
	15312 Aug 11 00:59	0°Ω		evening max el	15315 Mar 08 21:53	15°♄48'06	45°59'41
	15312 Sep 04 12:04	0°♍			15315 Mar 24 14:42	0°♂	
	15312 Sep 28 18:06	0°♌		greatest brilliancy	15315 Apr 17 05:29	14°♂44'53	-4.8m
	15312 Oct 22 21:51	0°♍		asc. node	15315 Apr 19 01:04	15°♂20'19	
asc. node	15312 Nov 01 13:08	11°♍58'59		retrograde	15315 Apr 27 03:57	16°♂35'03	
	15312 Nov 16 00:37	0°♊		evening set	15315 May 12 23:29	11°♂43'02	
morning set	15312 Nov 18 05:31	2°♊44'31		inferior conj	15315 May 18 05:42	8°♂31'36	6°33'48
	15312 Dec 10 03:17	0°♊		minimum elong	15315 May 17 19:00	8°♂48'21	6°30'39
				min. Earth dist.	15315 May 18 04:41	8°♂33'11	0.28116 AU
superior conj	15312 Dec 25 22:28	19°♊38'04	1°26'37	morning rise	15315 May 22 14:18	5°♂50'37	
minimum elong	15312 Dec 25 21:45	19°♊35'50	1°27'32	direct	15315 Jun 08 07:32	0°♂23'09	
max. Earth dist.	15312 Dec 28 10:04	22°♊43'00	1.72624 AU	greatest brilliancy	15315 Jun 18 12:00	2°♂19'09	-4.8m
	15313 Jan 03 06:57	0°♐			15315 Jul 25 19:08	0°♄	
	15313 Jan 27 13:00	0°✠		morning max el	15315 Jul 28 13:02	2°♄43'13	46°48'06

desc. node	15315 Aug 09 04:01	14°☿46'31			15318 Apr 24 11:02	0°☿		
	15315 Aug 23 01:03	0°♊		asc. node	15318 May 16 11:13	23°☿20'16		
	15315 Sep 18 00:29	0°♋		evening max el	15318 May 19 23:42	26°☿50'49	46°19'14	
	15315 Oct 13 03:10	0°♌			15318 May 23 05:25	0°♊		
	15315 Nov 06 20:28	0°♍		greatest brilliancy	15318 Jun 29 04:40	26°♊43'45	-4.8m	
asc. node	15315 Nov 30 02:09	28°♍26'17		retrograde	15318 Jul 08 16:42	28°♊24'51		
	15315 Dec 01 08:40	0°♎		evening set	15318 Jul 25 23:47	22°♊39'23		
	15315 Dec 25 17:37	0°♏		inferior conj	15318 Jul 29 08:29	20°♊36'25	8°06'51	
	15316 Jan 19 00:42	0°♐		minimum elong	15318 Jul 29 17:46	20°♊22'07	8°04'47	
morning set	15316 Jan 28 05:39	11°♐22'33		min. Earth dist.	15318 Jul 30 00:29	20°♊11'44	0.27363 AU	
	15316 Feb 12 07:25	0°♑		morning rise	15318 Aug 02 11:37	18°♊06'15		
				direct	15318 Aug 19 06:02	12°♊40'23		
superior conj	15316 Mar 05 06:39	27°♑06'59	0°36'28	greatest brilliancy	15318 Aug 29 09:52	14°♊37'34	-4.9m	
minimum elong	15316 Mar 05 14:15	27°♑30'25	0°36'16	desc. node	15318 Sep 05 13:11	17°♊58'25		
max. Earth dist.	15316 Mar 05 18:27	27°♑43'22	1.73121 AU		15318 Sep 22 05:36	0°♋		
	15316 Mar 07 14:45	0°♌		morning max el	15318 Oct 08 16:23	15°♋20'05	46°50'35	
desc. node	15316 Mar 20 18:22	16°♌12'54			15318 Oct 22 19:26	0°♌		
	15316 Mar 31 22:42	0°♍			15318 Nov 18 17:39	0°♍		
evening rise	15316 Apr 12 07:38	14°♍01'27			15318 Dec 14 11:00	0°♎		
	15316 Apr 25 06:29	0°♏		asc. node	15318 Dec 27 13:57	15°♎36'15		
	15316 May 19 13:42	0°☿			15319 Jan 08 13:54	0°♏		
	15316 Jun 12 21:03	0°♊			15319 Feb 02 08:12	0°♐		
	15316 Jul 07 06:38	0°♋			15319 Feb 26 21:23	0°♑		
asc. node	15316 Jul 11 09:03	5°♋01'10			15319 Mar 23 07:41	0°♒		
	15316 Jul 31 21:47	0°♌		morning set	15319 Apr 07 10:41	18°♒37'45		
	15316 Aug 26 00:04	0°♍			15319 Apr 16 15:56	0°♓		
	15316 Sep 21 01:52	0°♎		desc. node	15319 Apr 18 08:26	2°♓05'02		
evening max el	15316 Oct 14 06:40	24°♎40'13	46°32'38		15319 May 10 21:59	0°♏		
	15316 Oct 19 17:39	0°♏		max. Earth dist.	15319 May 13 11:34	3°♏10'51	1.72535 AU	
desc. node	15316 Oct 31 06:24	10°♏21'22						
greatest brilliancy	15316 Nov 22 18:29	24°♏37'37	-4.8m	superior conj	15319 May 16 05:12	6°♏34'22	-1°01'17	
retrograde	15316 Dec 03 08:54	26°♏42'08		minimum elong	15319 May 15 18:11	6°♏00'12	1°01'41	
evening set	15316 Dec 21 18:31	20°♏20'37			15319 Jun 04 01:37	0°☿		
inferior conj	15316 Dec 24 17:48	18°♏30'56	-8°56'23	evening rise	15319 Jun 24 05:44	25°☿07'59		
minimum elong	15316 Dec 24 16:53	18°♏32'21	8°55'27		15319 Jun 28 03:21	0°♊		
min. Earth dist.	15316 Dec 24 06:40	18°♏48'12	0.28484 AU		15319 Jul 22 04:28	0°♋		
morning rise	15316 Dec 27 15:22	16°♏44'02		asc. node	15319 Aug 08 22:30	22°♋07'10		
direct	15317 Jan 14 22:08	10°♏28'21			15319 Aug 15 06:37	0°♌		
greatest brilliancy	15317 Jan 24 21:28	12°♏17'07	-4.8m		15319 Sep 08 11:48	0°♍		
asc. node	15317 Feb 21 08:12	0°♐09'06			15319 Oct 02 23:01	0°♎		
	15317 Feb 21 04:00	0°♑			15319 Oct 27 21:53	0°♏		
morning max el	15317 Mar 04 23:28	10°♑52'27	45°43'52		15319 Nov 22 19:34	0°♐		
	15317 Mar 23 14:53	0°♑		desc. node	15319 Nov 28 17:01	6°♐34'56		
	15317 Apr 19 12:33	0°♒			15319 Dec 20 19:20	0°♑		
	15317 May 15 03:16	0°♓		evening max el	15319 Dec 25 16:45	4°♑49'47	46°07'34	
	15317 Jun 09 01:44	0°♏			15320 Jan 26 04:40	0°♒		
desc. node	15317 Jun 13 08:35	5°♏12'57		greatest brilliancy	15320 Feb 02 20:41	3°♒28'46	-4.8m	
	15317 Jul 03 13:48	0°☿		retrograde	15320 Feb 12 20:28	5°♒17'27		
	15317 Jul 27 19:00	0°♊		evening set	15320 Feb 28 15:44	0°♒29'03		
	15317 Aug 20 20:13	0°♋			15320 Feb 29 11:56	30°♒♑		
morning set	15317 Sep 03 23:34	17°♋40'59		inferior conj	15320 Mar 05 05:15	27°♑06'09	-3°43'24	
	15317 Sep 13 19:43	0°♌		minimum elong	15320 Mar 05 13:01	26°♑53'56	3°41'03	
asc. node	15317 Oct 04 01:08	25°♌19'07		min. Earth dist.	15320 Mar 05 11:40	26°♑56'03	0.28545 AU	
	15317 Oct 07 18:55	0°♍		morning rise	15320 Mar 11 10:13	23°♑21'51		
				asc. node	15320 Mar 20 17:25	19°♑36'13		
superior conj	15317 Oct 13 11:14	7°♍06'29	0°22'49	direct	15320 Mar 26 12:33	18°♑55'50		
minimum elong	15317 Oct 13 05:42	6°♍49'09	0°23'01	greatest brilliancy	15320 Apr 06 05:54	21°♑02'27	-4.8m	
max. Earth dist.	15317 Oct 14 17:49	8°♍42'08	1.71759 AU		15320 Apr 21 22:43	0°♒		
	15317 Oct 31 18:43	0°♎		morning max el	15320 May 14 21:31	20°♒02'20	46°05'22	
evening rise	15317 Nov 20 17:27	24°♎52'44			15320 May 24 17:19	0°♓		
	15317 Nov 24 20:15	0°♏			15320 Jun 21 00:43	0°♏		
	15317 Dec 19 01:20	0°♐		desc. node	15320 Jul 10 19:51	23°♏02'55		
	15318 Jan 12 12:02	0°♑			15320 Jul 16 16:17	0°☿		
desc. node	15318 Jan 23 16:04	13°♑35'13			15320 Aug 10 12:48	0°♊		
	15318 Feb 06 06:06	0°♒			15320 Sep 03 23:22	0°♋		
	15318 Mar 03 08:54	0°♓			15320 Sep 28 05:01	0°♌		
	15318 Mar 28 23:22	0°♏			15320 Oct 22 08:30	0°♍		

asc. node	15320 Oct 31 15:04	11°♍32'05		retrograde	15323 Apr 24 18:59	14°♊19'24	
	15320 Nov 15 11:05	0°♊		evening set	15323 May 10 11:03	9°♊31'12	
morning set	15320 Nov 15 20:18	0°♊28'39		inferior conj	15323 May 15 20:28	6°♊15'15	6°17'58
	15320 Dec 09 13:38	0°♊		minimum elong	15323 May 15 09:49	6°♊31'56	6°14'45
				min. Earth dist.	15323 May 15 19:01	6°♊17'31	0.28133 AU
superior conj	15320 Dec 23 14:53	17°♊28'02	1°26'26	morning rise	15323 May 20 08:24	3°♊29'40	
minimum elong	15320 Dec 23 13:21	17°♊23'16	1°27'21		15323 May 27 08:14	30°♊	
max. Earth dist.	15320 Dec 26 01:23	20°♊29'38	1.72595 AU	direct	15323 Jun 05 22:43	28°♊06'31	
	15321 Jan 02 17:16	0°♊			15323 Jun 15 23:57	0°♊	
	15321 Jan 26 23:22	0°♊		greatest brilliancy	15323 Jun 16 03:15	0°♊02'59	-4.8m
evening rise	15321 Jan 29 22:50	3°♊40'18			15323 Jul 25 17:37	0°♊	
desc. node	15321 Feb 20 05:53	29°♊51'05		morning max el	15323 Jul 26 04:29	0°♊27'07	46°47'06
	15321 Feb 20 08:47	0°♊		desc. node	15323 Aug 08 05:52	14°♊02'18	
	15321 Mar 16 21:29	0°♊			15323 Aug 22 16:56	0°♊	
	15321 Apr 10 13:03	0°♊			15323 Sep 17 14:00	0°♊	
	15321 May 05 08:06	0°♊			15323 Oct 12 15:31	0°♊	
	15321 May 30 09:51	0°♊			15323 Nov 06 08:05	0°♊	
asc. node	15321 Jun 12 22:23	15°♊55'42		asc. node	15323 Nov 29 04:01	27°♊57'45	
	15321 Jun 25 02:07	0°♊			15323 Nov 30 19:49	0°♊	
	15321 Jul 22 04:25	0°♊			15323 Dec 25 04:25	0°♊	
evening max el	15321 Jul 31 22:43	10°♊02'58	46°40'23		15324 Jan 18 11:17	0°♊	
	15321 Aug 23 02:57	0°♊		morning set	15324 Jan 25 22:33	9°♊13'54	
greatest brilliancy	15321 Sep 09 14:37	10°♊23'44	-4.9m		15324 Feb 11 17:53	0°♊	
retrograde	15321 Sep 20 03:51	12°♊28'37					
desc. node	15321 Oct 02 22:35	9°♊14'34		superior conj	15324 Mar 02 22:52	24°♊56'43	0°39'32
evening set	15321 Oct 04 16:04	8°♊21'53		minimum elong	15324 Mar 03 06:57	25°♊21'37	0°39'20
inferior conj	15321 Oct 10 23:47	4°♊40'39	-2°04'54	max. Earth dist.	15324 Mar 03 15:48	25°♊48'57	1.73121 AU
minimum elong	15321 Oct 10 19:00	4°♊47'57	2°02'56		15324 Mar 07 01:12	0°♊	
min. Earth dist.	15321 Oct 10 14:13	4°♊55'14	0.27082 AU	desc. node	15324 Mar 19 20:11	15°♊46'17	
morning rise	15321 Oct 16 22:15	1°♊12'04			15324 Mar 31 09:13	0°♊	
	15321 Oct 19 07:04	30°♊		evening rise	15324 Apr 09 23:21	11°♊49'19	
direct	15321 Oct 31 18:03	26°♊56'35			15324 Apr 24 17:11	0°♊	
greatest brilliancy	15321 Nov 10 11:37	28°♊40'33	-4.8m		15324 May 19 00:38	0°♊	
	15321 Nov 13 20:44	0°♊			15324 Jun 12 08:20	0°♊	
morning max el	15321 Dec 20 03:42	27°♊45'15	46°10'22		15324 Jul 06 18:25	0°♊	
	15321 Dec 22 10:46	0°♊		asc. node	15324 Jul 10 10:47	4°♊30'11	
	15322 Jan 19 21:03	0°♊			15324 Jul 31 10:19	0°♊	
asc. node	15322 Jan 24 00:33	4°♊37'14			15324 Aug 25 13:54	0°♊	
	15322 Feb 15 05:06	0°♊			15324 Sep 20 18:24	0°♊	
	15322 Mar 12 14:54	0°♊		evening max el	15324 Oct 11 22:12	22°♊24'37	46°33'28
	15322 Apr 06 12:47	0°♊			15324 Oct 19 18:35	0°♊	
	15322 May 01 03:24	0°♊		desc. node	15324 Oct 30 08:23	9°♊16'57	
desc. node	15322 May 15 22:03	18°♊09'00		greatest brilliancy	15324 Nov 20 08:18	22°♊21'00	-4.8m
	15322 May 25 12:34	0°♊		retrograde	15324 Dec 01 00:40	24°♊26'56	
	15322 Jun 18 17:07	0°♊		evening set	15324 Dec 19 08:01	18°♊07'48	
morning set	15322 Jun 19 01:42	0°♊26'41		inferior conj	15324 Dec 22 08:40	16°♊16'01	-8°55'19
	15322 Jul 12 18:07	0°♊		minimum elong	15324 Dec 22 06:54	16°♊18'46	8°54'22
max. Earth dist.	15322 Jul 27 00:41	17°♊52'08	1.71616 AU	min. Earth dist.	15324 Dec 21 20:05	16°♊35'32	0.28448 AU
				morning rise	15324 Dec 25 05:56	14°♊29'44	
superior conj	15322 Jul 28 19:14	20°♊05'24	-1°17'29	direct	15325 Jan 12 13:21	8°♊14'16	
minimum elong	15322 Jul 29 05:04	20°♊36'12	1°17'55	greatest brilliancy	15325 Jan 22 10:16	10°♊01'20	-4.8m
	15322 Aug 05 17:03	0°♊		asc. node	15325 Feb 20 10:06	29°♊11'43	
	15322 Aug 29 15:34	0°♊			15325 Feb 21 07:53	0°♊	
asc. node	15322 Sep 05 12:41	8°♊36'55		morning max el	15325 Mar 02 14:52	8°♊39'50	45°43'59
evening rise	15322 Sep 06 22:03	10°♊21'21			15325 Mar 23 07:41	0°♊	
	15322 Sep 22 14:58	0°♊			15325 Apr 19 02:14	0°♊	
	15322 Oct 16 16:37	0°♊			15325 May 14 15:35	0°♊	
	15322 Nov 09 22:40	0°♊			15325 Jun 08 13:21	0°♊	
	15322 Dec 04 12:35	0°♊		desc. node	15325 Jun 12 10:26	4°♊43'23	
desc. node	15322 Dec 26 04:53	25°♊56'42			15325 Jul 03 01:03	0°♊	
	15322 Dec 29 15:20	0°♊			15325 Jul 27 06:03	0°♊	
	15323 Jan 24 14:17	0°♊			15325 Aug 20 07:08	0°♊	
	15323 Feb 21 01:46	0°♊		morning set	15325 Sep 01 12:10	15°♊16'18	
evening max el	15323 Mar 06 12:42	13°♊34'11	45°59'26		15325 Sep 13 06:32	0°♊	
	15323 Mar 25 00:12	0°♊		asc. node	15325 Oct 03 03:03	24°♊51'30	
greatest brilliancy	15323 Apr 14 18:56	12°♊28'01	-4.8m		15325 Oct 07 05:39	0°♊	
asc. node	15323 Apr 18 03:05	13°♊28'31					

superior conj	15325 Oct 11 00:25	4° \mathbb{M} 43'59	0°19'11	direct	15328 Mar 24 03:48	16° \mathbb{H} 43'29	
minimum elong	15325 Oct 10 19:41	4° \mathbb{M} 29'11	0°19'24	greatest brilliancy	15328 Apr 03 22:19	18° \mathbb{H} 50'37	-4.8m
max. Earth dist.	15325 Oct 12 08:08	6° \mathbb{M} 23'14	1.71734 AU		15328 Apr 22 13:03	0° \mathbb{Y}	
	15325 Oct 31 05:24	0° \mathbb{J}		morning max el	15328 May 12 11:53	17° \mathbb{Y} 45'36	46°04'09
evening rise	15325 Nov 18 08:31	22° \mathbb{J} 36'48			15328 May 24 11:59	0° \mathbb{B}	
	15325 Nov 24 06:59	0° \mathbb{B}			15328 Jun 20 15:18	0° \mathbb{I}	
	15325 Dec 18 12:12	0° \approx		desc. node	15328 Jul 09 21:41	22° \mathbb{I} 29'12	
	15326 Jan 11 23:10	0° \mathbb{H}			15328 Jul 16 05:13	0° \mathbb{G}	
desc. node	15326 Jan 22 17:49	13° \mathbb{H} 06'17			15328 Aug 10 00:54	0° \mathbb{Q}	
	15326 Feb 05 17:40	0° \mathbb{Y}			15328 Sep 03 10:58	0° \mathbb{M}	
	15326 Mar 02 21:12	0° \mathbb{B}			15328 Sep 27 16:18	0° \mathbb{L}	
	15326 Mar 28 13:01	0° \mathbb{I}			15328 Oct 21 19:35	0° \mathbb{M}	
	15326 Apr 24 03:28	0° \mathbb{G}		asc. node	15328 Oct 30 16:54	11° \mathbb{M} 03'31	
asc. node	15326 May 15 13:10	22° \mathbb{G} 30'57		morning set	15328 Nov 13 10:40	28° \mathbb{M} 09'56	
evening max el	15326 May 17 13:29	24° \mathbb{G} 30'46	46°18'08		15328 Nov 14 22:01	0° \mathbb{J}	
	15326 May 23 06:06	0° \mathbb{Q}			15328 Dec 09 00:27	0° \mathbb{B}	
greatest brilliancy	15326 Jun 26 18:13	24° \mathbb{Q} 21'45	-4.8m				
retrograde	15326 Jul 06 05:24	26° \mathbb{Q} 01'56		superior conj	15328 Dec 21 06:55	15° \mathbb{B} 15'19	1°26'06
evening set	15326 Jul 23 16:15	20° \mathbb{Q} 11'44		minimum elong	15328 Dec 21 04:35	15° \mathbb{B} 08'05	1°27'01
inferior conj	15326 Jul 26 21:46	18° \mathbb{Q} 13'11	8°17'11	max. Earth dist.	15328 Dec 23 14:27	18° \mathbb{B} 07'46	1.72563 AU
minimum elong	15326 Jul 27 06:28	17° \mathbb{Q} 59'44	8°15'19		15329 Jan 02 04:02	0° \approx	
min. Earth dist.	15326 Jul 27 13:37	17° \mathbb{Q} 48'39	0.27400 AU		15329 Jan 26 10:09	0° \mathbb{H}	
morning rise	15326 Jul 30 20:35	15° \mathbb{Q} 48'52		evening rise	15329 Jan 27 14:36	1° \mathbb{H} 27'40	
direct	15326 Aug 16 19:29	10° \mathbb{Q} 16'33		desc. node	15329 Feb 19 07:44	29° \mathbb{H} 23'14	
greatest brilliancy	15326 Aug 26 23:10	12° \mathbb{Q} 13'07	-4.9m		15329 Feb 19 19:43	0° \mathbb{Y}	
desc. node	15326 Sep 04 15:13	16° \mathbb{Q} 27'06			15329 Mar 16 08:42	0° \mathbb{B}	
	15326 Sep 22 13:29	0° \mathbb{M}			15329 Apr 10 00:42	0° \mathbb{I}	
morning max el	15326 Oct 06 05:28	12° \mathbb{M} 55'44	46°51'25		15329 May 04 20:23	0° \mathbb{G}	
	15326 Oct 22 13:55	0° \mathbb{L}			15329 May 29 23:09	0° \mathbb{Q}	
	15326 Nov 18 08:21	0° \mathbb{M}		asc. node	15329 Jun 12 00:12	15° \mathbb{Q} 19'42	
	15326 Dec 13 23:56	0° \mathbb{J}			15329 Jun 24 17:21	0° \mathbb{M}	
asc. node	15326 Dec 26 15:48	15° \mathbb{J} 04'42			15329 Jul 22 00:17	0° \mathbb{L}	
	15327 Jan 08 01:51	0° \mathbb{B}		evening max el	15329 Jul 29 11:29	7° \mathbb{L} 38'06	46°40'05
	15327 Feb 01 19:34	0° \approx			15329 Aug 23 21:50	0° \mathbb{M}	
	15327 Feb 26 08:25	0° \mathbb{H}		greatest brilliancy	15329 Sep 07 04:55	8° \mathbb{M} 00'48	-4.9m
	15327 Mar 22 18:30	0° \mathbb{Y}		retrograde	15329 Sep 17 17:16	10° \mathbb{M} 05'17	
morning set	15327 Apr 05 02:18	16° \mathbb{Y} 24'46		evening set	15329 Oct 02 04:57	5° \mathbb{M} 58'43	
	15327 Apr 16 02:39	0° \mathbb{B}		desc. node	15329 Oct 02 00:35	6° \mathbb{M} 04'29	
desc. node	15327 Apr 17 10:23	1° \mathbb{B} 37'56		min. Earth dist.	15329 Oct 08 04:37	2° \mathbb{M} 30'17	0.27058 AU
	15327 May 10 08:41	0° \mathbb{I}		inferior conj	15329 Oct 08 12:51	2° \mathbb{M} 17'44	-1°41'29
max. Earth dist.	15327 May 11 01:27	0° \mathbb{I} 51'55	1.72568 AU	minimum elong	15329 Oct 08 08:56	2° \mathbb{M} 23'42	1°39'48
					15329 Oct 12 08:52	30° \mathbb{R} \mathbb{L}	
superior conj	15327 May 13 19:30	4° \mathbb{I} 16'38	-0°58'38	morning rise	15329 Oct 14 13:11	28° \mathbb{L} 46'54	
minimum elong	15327 May 13 08:34	3° \mathbb{I} 42'47	0°59'02	direct	15329 Oct 29 06:37	24° \mathbb{L} 33'27	
	15327 Jun 03 12:23	0° \mathbb{G}		greatest brilliancy	15329 Nov 08 01:37	26° \mathbb{L} 18'55	-4.8m
evening rise	15327 Jun 21 18:45	22° \mathbb{G} 45'05			15329 Nov 16 03:30	0° \mathbb{M}	
	15327 Jun 27 14:15	0° \mathbb{Q}		morning max el	15329 Dec 17 17:50	25° \mathbb{M} 26'34	46°11'53
	15327 Jul 21 15:32	0° \mathbb{M}			15329 Dec 22 08:43	0° \mathbb{J}	
asc. node	15327 Aug 08 00:20	21° \mathbb{M} 37'53			15330 Jan 19 12:48	0° \mathbb{B}	
	15327 Aug 14 17:56	0° \mathbb{L}		asc. node	15330 Jan 23 02:28	3° \mathbb{B} 59'42	
	15327 Sep 07 23:28	0° \mathbb{M}			15330 Feb 14 18:29	0° \approx	
	15327 Oct 02 11:17	0° \mathbb{J}			15330 Mar 12 03:05	0° \mathbb{H}	
	15327 Oct 27 11:09	0° \mathbb{B}			15330 Apr 06 00:20	0° \mathbb{Y}	
	15327 Nov 22 10:53	0° \approx			15330 Apr 30 14:36	0° \mathbb{B}	
desc. node	15327 Nov 27 18:55	5° \approx 55'56		desc. node	15330 May 14 23:46	17° \mathbb{B} 40'10	
	15327 Dec 20 16:14	0° \mathbb{H}			15330 May 24 23:35	0° \mathbb{I}	
evening max el	15327 Dec 23 06:44	2° \mathbb{H} 33'10	46°08'22	morning set	15330 Jun 16 14:03	28° \mathbb{I} 01'47	
	15328 Jan 28 06:35	0° \mathbb{Y}			15330 Jun 18 04:03	0° \mathbb{G}	
greatest brilliancy	15328 Jan 31 12:54	1° \mathbb{Y} 17'23	-4.8m		15330 Jul 12 05:00	0° \mathbb{Q}	
retrograde	15328 Feb 10 11:27	3° \mathbb{Y} 05'23		max. Earth dist.	15330 Jul 24 12:38	15° \mathbb{Q} 25'07	1.71633 AU
	15328 Feb 23 00:35	30° \mathbb{R} \mathbb{H}					
evening set	15328 Feb 26 09:49	28° \mathbb{H} 13'22		superior conj	15330 Jul 26 07:32	17° \mathbb{Q} 39'30	-1°19'12
inferior conj	15328 Mar 02 21:00	24° \mathbb{H} 53'58	-4°02'20	minimum elong	15330 Jul 26 16:47	18° \mathbb{Q} 08'29	1°19'42
minimum elong	15328 Mar 03 05:17	24° \mathbb{H} 40'56	3°59'52		15330 Aug 05 03:56	0° \mathbb{M}	
min. Earth dist.	15328 Mar 03 03:55	24° \mathbb{H} 43'05	0.28561 AU		15330 Aug 29 02:28	0° \mathbb{L}	
morning rise	15328 Mar 09 00:36	21° \mathbb{H} 11'17		evening rise	15330 Sep 04 10:43	7° \mathbb{L} 56'37	
asc. node	15328 Mar 19 19:31	17° \mathbb{H} 06'06		asc. node	15330 Sep 04 14:36	8° \mathbb{L} 08'46	

	15330 Sep 22 01:57	0°♌			15333 Apr 18 15:57	0°♑		
	15330 Oct 16 03:45	0°♊			15333 May 14 03:58	0°♉		
	15330 Nov 09 10:04	0°♎			15333 Jun 08 01:02	0°♊		
	15330 Dec 04 00:29	0°♋		desc. node	15333 Jun 11 12:17	4°♊13'37		
desc. node	15330 Dec 25 06:38	25°♋24'29			15333 Jul 02 12:20	0°♋		
	15330 Dec 29 04:09	0°♌			15333 Jul 26 17:06	0°♌		
	15331 Jan 24 04:51	0°♑			15333 Aug 19 18:04	0°♍		
	15331 Feb 20 20:30	0°♉		morning set	15333 Aug 30 00:43	12°♍51'25		
evening max el	15331 Mar 04 04:31	11°♉21'46 45°59'21			15333 Sep 12 17:23	0°♎		
	15331 Mar 25 13:38	0°♊		asc. node	15333 Oct 02 04:50	24°♎23'21		
greatest brilliancy	15331 Apr 12 08:35	10°♊10'50 -4.8m			15333 Oct 06 16:25	0°♌		
asc. node	15331 Apr 17 05:02	11°♊31'42						
retrograde	15331 Apr 22 10:16	12°♊03'07		superior conj	15333 Oct 08 13:37	2°♌21'24 0°15'32		
evening set	15331 May 07 23:01	7°♊18'50		minimum elong	15333 Oct 08 09:44	2°♌09'16 0°15'45		
inferior conj	15331 May 13 11:23	3°♊58'27 6°01'42		behind sun begin	15333 Oct 08 04:02	1°♌51'26		
minimum elong	15331 May 13 00:49	4°♊15'00 5°58'26		behind sun end	15333 Oct 08 15:26	2°♌27'05		
min. Earth dist.	15331 May 13 09:22	4°♊01'37 0.28145 AU		max. Earth dist.	15333 Oct 09 20:21	3°♌57'34 1.71709 AU		
morning rise	15331 May 18 02:30	1°♊08'19			15333 Oct 30 16:08	0°♊		
	15331 May 20 03:01	30°♋♉		evening rise	15333 Nov 15 23:35	20°♊20'46		
direct	15331 Jun 03 14:20	25°♉49'44			15333 Nov 23 17:44	0°♎		
greatest brilliancy	15331 Jun 13 18:06	27°♉45'52 -4.8m			15333 Dec 17 23:04	0°♋		
	15331 Jun 18 20:45	0°♊			15334 Jan 11 10:18	0°♌		
morning max el	15331 Jul 23 20:07	28°♊10'57 46°45'59		desc. node	15334 Jan 21 19:47	12°♌38'01		
	15331 Jul 25 15:29	0°♋			15334 Feb 05 05:16	0°♑		
desc. node	15331 Aug 07 07:50	13°♋18'19			15334 Mar 02 09:36	0°♉		
	15331 Aug 22 08:48	0°♌			15334 Mar 28 02:51	0°♊		
	15331 Sep 17 03:38	0°♍			15334 Apr 23 20:20	0°♋		
	15331 Oct 12 04:00	0°♎		asc. node	15334 May 14 15:02	21°♋40'21		
	15331 Nov 05 19:52	0°♌		evening max el	15334 May 15 02:32	22°♋08'43 46°17'08		
asc. node	15331 Nov 28 05:48	27°♌28'26			15334 May 23 08:13	0°♌		
	15331 Nov 30 07:07	0°♊		greatest brilliancy	15334 Jun 24 08:16	22°♌00'29 -4.8m		
	15331 Dec 24 15:23	0°♎		retrograde	15334 Jul 03 17:58	23°♌39'35		
	15332 Jan 17 22:04	0°♋		evening set	15334 Jul 21 08:37	17°♌44'50		
morning set	15332 Jan 23 15:24	7°♋04'25		inferior conj	15334 Jul 24 11:12	15°♌50'35 8°26'35		
	15332 Feb 11 04:35	0°♌		minimum elong	15334 Jul 24 19:14	15°♌38'08 8°24'53		
				min. Earth dist.	15334 Jul 25 03:07	15°♌25'54 0.27435 AU		
superior conj	15332 Feb 29 14:59	22°♌45'18 0°42'32		morning rise	15334 Jul 28 05:43	13°♌32'14		
minimum elong	15332 Feb 29 23:29	23°♌11'32 0°42'23		direct	15334 Aug 14 08:36	7°♌53'13		
max. Earth dist.	15332 Mar 01 12:15	23°♌50'54 1.73119 AU		greatest brilliancy	15334 Aug 24 13:06	9°♌50'00 -4.9m		
	15332 Mar 06 11:55	0°♑		desc. node	15334 Sep 03 17:16	14°♌59'27		
desc. node	15332 Mar 18 22:03	15°♑19'00			15334 Sep 22 18:54	0°♍		
	15332 Mar 30 20:00	0°♉		morning max el	15334 Oct 03 18:19	10°♍31'08 46°52'10		
evening rise	15332 Apr 07 14:51	9°♉35'49			15334 Oct 22 07:46	0°♎		
	15332 Apr 24 04:05	0°♊			15334 Nov 17 22:45	0°♌		
	15332 May 18 11:45	0°♋			15334 Dec 13 12:40	0°♊		
	15332 Jun 11 19:49	0°♌		asc. node	15334 Dec 25 17:41	14°♊33'48		
	15332 Jul 06 06:25	0°♍			15335 Jan 07 13:38	0°♎		
asc. node	15332 Jul 09 12:40	3°♍59'05			15335 Feb 01 06:46	0°♋		
	15332 Jul 30 23:06	0°♎			15335 Feb 25 19:16	0°♌		
	15332 Aug 25 04:01	0°♌			15335 Mar 22 05:10	0°♑		
	15332 Sep 20 11:23	0°♊		morning set	15335 Apr 02 17:59	14°♑12'25		
evening max el	15332 Oct 09 13:56	20°♊09'05 46°34'15			15335 Apr 15 13:15	0°♉		
	15332 Oct 19 21:00	0°♎		desc. node	15335 Apr 16 12:07	1°♉10'35		
desc. node	15332 Oct 29 10:18	8°♎10'26		max. Earth dist.	15335 May 08 16:06	28°♉35'44 1.72607 AU		
greatest brilliancy	15332 Nov 17 22:48	20°♎05'07 -4.8m			15335 May 09 19:18	0°♊		
retrograde	15332 Nov 28 16:16	22°♎11'33						
evening set	15332 Dec 16 21:14	15°♎55'49		superior conj	15335 May 11 09:39	1°♊58'50 -0°55'54		
inferior conj	15332 Dec 19 23:39	14°♎01'12 -8°53'27		minimum elong	15335 May 10 22:55	1°♊25'33 0°56'15		
minimum elong	15332 Dec 19 21:00	14°♎05'18 8°52'26			15335 Jun 02 23:05	0°♋		
min. Earth dist.	15332 Dec 19 09:50	14°♎22'38 0.28411 AU		evening rise	15335 Jun 19 07:34	20°♋21'56		
morning rise	15332 Dec 22 20:58	12°♎14'47			15335 Jun 27 01:03	0°♌		
direct	15333 Jan 10 04:32	6°♎00'26			15335 Jul 21 02:28	0°♍		
greatest brilliancy	15333 Jan 19 23:09	7°♎45'31 -4.8m		asc. node	15335 Aug 07 02:14	21°♍09'19		
asc. node	15333 Feb 19 12:11	28°♎15'46			15335 Aug 14 05:05	0°♎		
	15333 Feb 21 10:13	0°♋			15335 Sep 07 11:00	0°♌		
morning max el	15333 Feb 28 05:33	6°♋25'08 45°43'57			15335 Oct 01 23:24	0°♊		
	15333 Mar 23 00:19	0°♌			15335 Oct 27 00:20	0°♎		

	15335 Nov 22 02:14	0°♊		15338 Apr 30 01:26	0°♎	
desc. node	15335 Nov 26 20:47	5°♊17'01		desc. node	15338 May 14 01:39	17°♎13'03
	15335 Dec 20 13:40	0°♋			15338 May 24 10:14	0°♎
evening max el	15335 Dec 20 20:37	0°♋16'56 46°09'12		morning set	15338 Jun 14 02:37	25°♎38'48
greatest brilliancy	15336 Jan 29 04:38	29°♋06'07 -4.8m			15338 Jun 17 14:36	0°♎
	15336 Feb 01 04:07	0°♌			15338 Jul 11 15:32	0°♎
retrograde	15336 Feb 08 02:47	0°♌54'13		max. Earth dist.	15338 Jul 22 01:12	13°♎01'09 1.71655 AU
	15336 Feb 14 20:24	30°♌				
evening set	15336 Feb 24 03:55	25°♌58'12		superior conj	15338 Jul 23 19:43	15°♎14'14 -1°20'46
inferior conj	15336 Feb 29 12:43	22°♌42'32 -4°20'50		minimum elong	15338 Jul 24 04:18	15°♎41'06 1°21'20
minimum elong	15336 Feb 29 21:28	22°♌28'48 4°18'17			15338 Aug 04 14:30	0°♎
min. Earth dist.	15336 Feb 29 19:59	22°♌31'08 0.28577 AU			15338 Aug 28 13:06	0°♎
morning rise	15336 Mar 06 14:49	19°♌02'01		evening rise	15338 Sep 01 22:55	5°♎31'19
asc. node	15336 Mar 18 21:23	14°♌41'54		asc. node	15338 Sep 03 16:22	7°♎41'02
direct	15336 Mar 21 18:59	14°♌31'50			15338 Sep 21 12:40	0°♎
greatest brilliancy	15336 Apr 01 14:42	16°♌39'49 -4.8m			15338 Oct 15 14:36	0°♎
	15336 Apr 22 23:16	0°♌			15338 Nov 08 21:10	0°♎
morning max el	15336 May 10 03:00	15°♌31'39 46°02'51			15338 Dec 03 12:06	0°♎
	15336 May 24 05:53	0°♎		desc. node	15338 Dec 24 08:38	24°♎53'54
	15336 Jun 20 05:30	0°♎			15338 Dec 28 16:42	0°♎
desc. node	15336 Jul 08 23:41	21°♎56'37			15339 Jan 23 19:15	0°♌
	15336 Jul 15 17:53	0°♎			15339 Feb 20 15:22	0°♎
	15336 Aug 09 12:46	0°♎		evening max el	15339 Mar 01 20:48	9°♎11'33 45°59'13
	15336 Sep 02 22:20	0°♎			15339 Mar 26 07:00	0°♎
	15336 Sep 27 03:19	0°♎		greatest brilliancy	15339 Apr 09 22:44	7°♎55'29 -4.8m
	15336 Oct 21 06:21	0°♎		asc. node	15339 Apr 16 06:56	9°♎31'32
asc. node	15336 Oct 29 18:37	10°♎35'35		retrograde	15339 Apr 20 01:15	9°♎47'57
morning set	15336 Nov 11 00:52	25°♎51'35		evening set	15339 May 05 11:15	5°♎07'39
	15336 Nov 14 08:38	0°♎		inferior conj	15339 May 11 02:19	1°♎43'05 5°44'57
	15336 Dec 08 10:58	0°♎		minimum elong	15339 May 10 15:56	1°♎59'22 5°41'39
				min. Earth dist.	15339 May 10 23:57	1°♎46'48 0.28153 AU
superior conj	15336 Dec 18 22:53	13°♎03'14 1°25'39			15339 May 13 20:36	30°♎
minimum elong	15336 Dec 18 19:46	12°♎53'33 1°26'33		morning rise	15339 May 15 20:33	28°♎48'20
max. Earth dist.	15336 Dec 21 04:09	15°♎48'42 1.72535 AU		direct	15339 Jun 01 05:55	23°♎34'32
	15337 Jan 01 14:31	0°♎		greatest brilliancy	15339 Jun 11 08:52	25°♎29'59 -4.8m
evening rise	15337 Jan 25 06:30	29°♎16'17			15339 Jun 20 13:21	0°♎
	15337 Jan 25 20:41	0°♋		morning max el	15339 Jul 21 11:01	25°♎54'18 46°44'45
desc. node	15337 Feb 18 09:36	28°♋56'20			15339 Jul 25 12:03	0°♎
	15337 Feb 19 06:23	0°♌		desc. node	15339 Aug 06 09:53	12°♎36'23
	15337 Mar 15 19:37	0°♎			15339 Aug 22 00:01	0°♎
	15337 Apr 09 12:02	0°♎			15339 Sep 16 16:49	0°♎
	15337 May 04 08:22	0°♎			15339 Oct 11 16:08	0°♎
	15337 May 29 12:14	0°♎			15339 Nov 05 07:20	0°♎
asc. node	15337 Jun 11 02:07	14°♎44'35		asc. node	15339 Nov 27 07:45	27°♎00'33
	15337 Jun 24 08:33	0°♎			15339 Nov 29 18:07	0°♎
	15337 Jul 21 20:35	0°♎			15339 Dec 24 02:03	0°♎
evening max el	15337 Jul 27 01:11	5°♎16'17 46°39'45			15340 Jan 17 08:32	0°♎
	15337 Aug 24 23:20	0°♎		morning set	15340 Jan 21 08:05	4°♎55'21
greatest brilliancy	15337 Sep 04 18:39	5°♎37'29 -4.9m			15340 Feb 10 14:58	0°♋
retrograde	15337 Sep 15 07:01	7°♎41'58				
evening set	15337 Sep 29 17:53	3°♎35'21		superior conj	15340 Feb 27 07:06	20°♋34'57 0°45'28
desc. node	15337 Oct 01 02:27	2°♎50'59		minimum elong	15340 Feb 27 15:59	21°♋02'21 0°45'21
	15337 Oct 05 22:13	30°♋		max. Earth dist.	15340 Feb 28 07:49	21°♋51'12 1.73115 AU
inferior conj	15337 Oct 06 01:41	29°♎54'44 -1°17'40			15340 Mar 05 22:19	0°♌
minimum elong	15337 Oct 05 22:40	29°♎59'19 1°16'17		desc. node	15340 Mar 17 23:47	14°♌52'16
min. Earth dist.	15337 Oct 05 18:30	0°♎05'39 0.27032 AU			15340 Mar 30 06:28	0°♎
morning rise	15337 Oct 12 03:44	26°♎22'04		evening rise	15340 Apr 05 06:24	7°♎23'25
direct	15337 Oct 26 19:26	22°♎10'30			15340 Apr 23 14:42	0°♎
greatest brilliancy	15337 Nov 05 14:50	23°♎56'50 -4.8m			15340 May 17 22:35	0°♎
	15337 Nov 17 14:50	0°♎			15340 Jun 11 06:58	0°♎
morning max el	15337 Dec 15 08:33	23°♎10'15 46°13'23			15340 Jul 05 18:04	0°♎
	15337 Dec 22 05:27	0°♎		asc. node	15340 Jul 08 14:37	3°♎29'14
	15338 Jan 19 03:55	0°♎			15340 Jul 30 11:34	0°♎
asc. node	15338 Jan 22 04:29	3°♎23'54			15340 Aug 24 17:55	0°♎
	15338 Feb 14 07:23	0°♎			15340 Sep 20 04:25	0°♎
	15338 Mar 11 14:52	0°♋		evening max el	15340 Oct 07 05:03	17°♎52'33 46°34'48
	15338 Apr 05 11:30	0°♌			15340 Oct 20 00:48	0°♎

desc. node	15340 Oct 28 12:15	7°30'243		max. Earth dist.	15343 May 06 09:17	26°8'27'37	1.72644 AU
greatest brilliancy	15340 Nov 15 13:51	17°34'57	-4.8m				
retrograde	15340 Nov 26 07:08	19°35'08		superior conj	15343 May 08 23:47	29°8'41'14	-0°53'04
evening set	15340 Dec 14 09:55	13°34'36		minimum elong	15343 May 08 13:17	29°8'08'40	0°53'23
min. Earth dist.	15340 Dec 16 23:56	12°30'9'16	0.28371 AU		15343 May 09 05:51	0°II	
inferior conj	15340 Dec 17 14:30	11°34'6'37	-8°50'46		15343 Jun 02 09:43	0°☾	
minimum elong	15340 Dec 17 11:01	11°35'2'02	8°49'39	evening rise	15343 Jun 16 20:35	17°55'59'37	
morning rise	15340 Dec 20 12:17	9°35'9'23			15343 Jun 26 11:49	0°♊	
direct	15341 Jan 07 19:11	3°34'6'45			15343 Jul 20 13:24	0°♋	
greatest brilliancy	15341 Jan 17 12:28	5°33'0'22	-4.8m	asc. node	15343 Aug 06 03:59	20°11'40'16	
asc. node	15341 Feb 18 14:05	27°32'1'13			15343 Aug 13 16:15	0°♌	
	15341 Feb 21 10:53	0°♍			15343 Sep 06 22:32	0°♎	
morning max el	15341 Feb 25 19:15	4°48'08'38	45°44'05		15343 Oct 01 11:31	0°♏	
	15341 Mar 22 16:21	0°♐			15343 Oct 26 13:31	0°♑	
	15341 Apr 18 05:15	0°♒			15343 Nov 21 17:42	0°♓	
	15341 May 13 16:02	0°♈		desc. node	15343 Nov 25 22:47	4°48'38'19	
	15341 Jun 07 12:25	0°♉		evening max el	15343 Dec 18 11:09	28°48'02'29	46°10'00
desc. node	15341 Jun 10 14:14	3°11'44'57			15343 Dec 20 11:52	0°♊	
	15341 Jul 01 23:21	0°☾		greatest brilliancy	15344 Jan 26 19:46	26°11'54'13	-4.8m
	15341 Jul 26 03:54	0°♊		retrograde	15344 Feb 05 18:35	28°11'43'06	
	15341 Aug 19 04:43	0°♋		evening set	15344 Feb 21 22:09	23°11'42'47	
morning set	15341 Aug 27 13:33	10°11'28'14		inferior conj	15344 Feb 27 04:28	20°11'30'57	-4°39'01
	15341 Sep 12 03:56	0°♌		minimum elong	15344 Feb 27 13:39	20°11'16'34	4°36'21
asc. node	15341 Oct 01 06:35	23°11'56'00		min. Earth dist.	15344 Feb 27 11:47	20°11'19'29	0.28596 AU
				morning rise	15344 Mar 04 04:56	16°11'53'01	
superior conj	15341 Oct 06 03:02	0°11'00'23	0°11'52	asc. node	15344 Mar 17 23:19	12°11'22'37	
minimum elong	15341 Oct 06 00:02	29°11'50'59	0°12'05	direct	15344 Mar 19 10:38	12°11'20'02	
behind sun begin	15341 Oct 05 07:23	28°11'58'51		greatest brilliancy	15344 Mar 30 06:56	14°11'28'44	-4.8m
behind sun end	15341 Oct 06 16:42	0°11'43'06			15344 Apr 23 06:45	0°♈	
	15341 Oct 06 02:55	0°♉		morning max el	15344 May 07 19:01	13°11'19'46	46°01'34
max. Earth dist.	15341 Oct 07 07:11	1°11'28'25	1.71688 AU		15344 May 23 23:28	0°♊	
	15341 Oct 30 02:38	0°♋			15344 Jun 19 19:38	0°♌	
evening rise	15341 Nov 13 14:42	18°11'05'29		desc. node	15344 Jul 08 01:36	21°11'23'51	
	15341 Nov 23 04:18	0°♈			15344 Jul 15 06:33	0°☾	
	15341 Dec 17 09:47	0°♉			15344 Aug 09 00:40	0°♊	
	15342 Jan 10 21:17	0°♋			15344 Sep 02 09:45	0°♌	
desc. node	15342 Jan 20 21:35	12°11'09'43			15344 Sep 26 14:26	0°♍	
	15342 Feb 04 16:43	0°♈			15344 Oct 20 17:15	0°♎	
	15342 Mar 01 21:53	0°♉		asc. node	15344 Oct 28 20:34	10°11'07'57	
	15342 Mar 27 16:39	0°♊		morning set	15344 Nov 08 15:20	23°11'33'42	
	15342 Apr 23 13:21	0°☾			15344 Nov 13 19:21	0°♋	
evening max el	15342 May 12 15:05	19°11'46'05	46°16'11		15344 Dec 07 21:34	0°♈	
asc. node	15342 May 13 17:02	20°11'49'41					
	15342 May 23 11:42	0°♊		superior conj	15344 Dec 16 15:06	10°11'51'39	1°25'03
greatest brilliancy	15342 Jun 21 22:13	19°11'39'37	-4.8m	minimum elong	15344 Dec 16 11:12	10°11'39'31	1°25'57
retrograde	15342 Jul 01 06:41	21°11'18'12		max. Earth dist.	15344 Dec 18 20:41	13°11'38'09	1.72506 AU
evening set	15342 Jul 19 00:51	15°11'18'47			15345 Jan 01 01:04	0°♉	
inferior conj	15342 Jul 22 00:43	13°11'28'42	8°35'06	evening rise	15345 Jan 22 22:42	27°11'48'53'2	
minimum elong	15342 Jul 22 08:02	13°11'17'21	8°33'33		15345 Jan 25 07:18	0°♋	
min. Earth dist.	15342 Jul 22 16:45	13°11'03'50	0.27470 AU	desc. node	15345 Feb 17 11:21	28°11'28'36	
morning rise	15342 Jul 25 15:03	11°11'16'26			15345 Feb 18 17:11	0°♈	
direct	15342 Aug 11 21:43	5°11'30'24			15345 Mar 15 06:44	0°♉	
greatest brilliancy	15342 Aug 22 03:22	7°11'28'02	-4.9m		15345 Apr 08 23:35	0°♊	
desc. node	15342 Sep 02 19:05	13°11'34'59			15345 May 03 20:37	0°☾	
	15342 Sep 22 22:09	0°♋			15345 May 29 01:39	0°♌	
morning max el	15342 Oct 01 07:43	8°11'08'32	46°53'05	asc. node	15345 Jun 10 04:05	14°11'08'42	
	15342 Oct 22 00:58	0°♌			15345 Jun 24 00:13	0°♍	
	15342 Nov 17 12:45	0°♎			15345 Jul 21 17:53	0°♏	
	15342 Dec 13 01:08	0°♏		evening max el	15345 Jul 24 15:40	2°11'55'47	46°39'18
asc. node	15342 Dec 24 19:38	14°11'03'40			15345 Aug 26 12:06	0°♐	
	15343 Jan 07 01:15	0°♑		greatest brilliancy	15345 Sep 02 08:16	3°11'13'16	-4.9m
	15343 Jan 31 17:53	0°♒		retrograde	15345 Sep 12 20:50	5°11'17'26	
	15343 Feb 25 06:03	0°♈		evening set	15345 Sep 27 07:02	1°11'10'48	
	15343 Mar 21 15:46	0°♈			15345 Sep 29 10:11	30°11'11'11	
morning set	15343 Mar 31 09:41	12°11'00'20		desc. node	15345 Sep 30 04:30	29°11'03'29	
	15343 Apr 14 23:46	0°♉		inferior conj	15345 Oct 03 14:26	27°11'30'36	-0°53'28
desc. node	15343 Apr 15 13:55	0°♊		minimum elong	15345 Oct 03 12:20	27°11'33'46	0°52'27

min. Earth dist.	15345 Oct 03 08:15	27° Ω 39'59	0.27007 AU		15348 Mar 29 17:17	0° \mathcal{B}	
morning rise	15345 Oct 09 18:00	23° Ω 56'12		evening rise	15348 Apr 02 22:13	5° \mathcal{B} 10'52	
direct	15345 Oct 24 08:36	19° Ω 46'30			15348 Apr 23 01:40	0° Π	
greatest brilliancy	15345 Nov 03 03:39	21° Ω 33'05	-4.8m		15348 May 17 09:49	0° \mathcal{C}	
	15345 Nov 18 16:24	0° \mathcal{M}			15348 Jun 10 18:35	0° Ω	
morning max el	15345 Dec 12 23:10	20° \mathcal{M} 52'54	46°15'02		15348 Jul 05 06:15	0° \mathcal{M}	
	15345 Dec 22 01:45	0° \mathcal{A}		asc. node	15348 Jul 07 16:21	2° \mathcal{M} 57'10	
	15346 Jan 18 19:01	0° \mathcal{B}			15348 Jul 30 00:36	0° Ω	
asc. node	15346 Jan 21 06:20	2° \mathcal{B} 47'18			15348 Aug 24 08:30	0° \mathcal{M}	
	15346 Feb 13 20:22	0° \approx			15348 Sep 19 22:24	0° \mathcal{A}	
	15346 Mar 11 02:49	0° \mathcal{H}		evening max el	15348 Oct 04 19:01	15° \mathcal{A} 31'27	46°35'21
	15346 Apr 04 22:54	0° \mathcal{Y}			15348 Oct 20 07:17	0° \mathcal{B}	
	15346 Apr 29 12:32	0° \mathcal{B}		desc. node	15348 Oct 27 14:15	5° \mathcal{B} 51'37	
desc. node	15346 May 13 03:35	16° \mathcal{B} 45'11		greatest brilliancy	15348 Nov 13 04:57	15° \mathcal{B} 32'55	-4.8m
	15346 May 23 21:11	0° Π		retrograde	15348 Nov 23 21:28	17° \mathcal{B} 38'50	
morning set	15346 Jun 11 15:08	23° Π 14'44		evening set	15348 Dec 11 22:02	11° \mathcal{B} 31'57	
	15346 Jun 17 01:28	0° \mathcal{C}		min. Earth dist.	15348 Dec 14 14:11	9° \mathcal{B} 53'27	0.28329 AU
	15346 Jul 11 02:22	0° Ω		inferior conj	15348 Dec 15 05:10	9° \mathcal{B} 30'09	-8°47'07
max. Earth dist.	15346 Jul 19 12:06	10° Ω 30'59	1.71675 AU	minimum elong	15348 Dec 15 00:51	9° \mathcal{B} 36'52	8°45'56
				morning rise	15348 Dec 18 03:50	7° \mathcal{B} 41'29	
superior conj	15346 Jul 21 07:49	12° Ω 47'50	-1°22'12	direct	15349 Jan 05 09:10	1° \mathcal{B} 30'58	
minimum elong	15346 Jul 21 15:38	13° Ω 12'18	1°22'48	greatest brilliancy	15349 Jan 15 02:19	3° \mathcal{B} 14'00	-4.8m
	15346 Aug 04 01:22	0° \mathcal{M}		asc. node	15349 Feb 17 16:00	26° \mathcal{B} 26'25	
	15346 Aug 28 00:03	0° Ω			15349 Feb 21 10:55	0° \approx	
evening rise	15346 Aug 30 11:00	3° Ω 04'32		morning max el	15349 Feb 23 08:36	1° \approx 49'50	45°44'30
asc. node	15346 Sep 02 18:08	7° Ω 12'13			15349 Mar 22 08:31	0° \mathcal{H}	
	15346 Sep 20 23:45	0° \mathcal{M}			15349 Apr 17 18:47	0° \mathcal{Y}	
	15346 Oct 15 01:51	0° \mathcal{A}			15349 May 13 04:21	0° \mathcal{B}	
	15346 Nov 08 08:42	0° \mathcal{B}			15349 Jun 07 00:06	0° Π	
	15346 Dec 03 00:07	0° \approx		desc. node	15349 Jun 09 16:03	3° Π 15'02	
desc. node	15346 Dec 23 10:31	24° \approx 21'50			15349 Jul 01 10:41	0° \mathcal{C}	
	15346 Dec 28 05:39	0° \mathcal{H}			15349 Jul 25 15:04	0° Ω	
	15347 Jan 23 10:07	0° \mathcal{Y}			15349 Aug 18 15:47	0° \mathcal{M}	
	15347 Feb 20 11:06	0° \mathcal{B}		morning set	15349 Aug 25 01:58	8° \mathcal{M} 02'24	
evening max el	15347 Feb 27 12:36	6° \mathcal{B} 59'25	45°59'01		15349 Sep 11 14:54	0° Ω	
	15347 Mar 27 07:09	0° Π		asc. node	15349 Sep 30 08:30	23° Ω 27'49	
greatest brilliancy	15347 Apr 07 13:30	5° Π 40'14	-4.8m				
asc. node	15347 Apr 15 08:57	7° Π 26'09		superior conj	15349 Oct 03 16:01	27° Ω 36'41	0°08'08
retrograde	15347 Apr 17 15:46	7° Π 32'14		minimum elong	15349 Oct 03 13:55	27° Ω 30'06	0°08'23
evening set	15347 May 02 23:50	2° Π 55'41		behind sun begin	15349 Oct 02 16:28	26° Ω 22'56	
	15347 May 07 20:35	30° \mathcal{R} \mathcal{B}		behind sun end	15349 Oct 04 11:23	28° Ω 37'17	
inferior conj	15347 May 08 17:26	29° \mathcal{B} 27'15	5°27'37	max. Earth dist.	15349 Oct 04 15:53	28° Ω 51'21	1.71668 AU
minimum elong	15347 May 08 07:18	29° \mathcal{B} 43'10	5°24'20		15349 Oct 05 13:49	0° \mathcal{M}	
min. Earth dist.	15347 May 08 15:05	29° \mathcal{B} 30'57	0.28165 AU		15349 Oct 29 13:32	0° \mathcal{A}	
morning rise	15347 May 13 14:41	26° \mathcal{B} 27'50		evening rise	15349 Nov 11 05:28	15° \mathcal{A} 47'57	
direct	15347 May 29 21:25	21° \mathcal{B} 18'46			15349 Nov 22 15:16	0° \mathcal{B}	
greatest brilliancy	15347 Jun 09 00:26	23° \mathcal{B} 14'00	-4.8m		15349 Dec 16 20:54	0° \approx	
	15347 Jun 21 17:53	0° Π			15350 Jan 10 08:42	0° \mathcal{H}	
morning max el	15347 Jul 19 01:05	23° Π 34'19	46°43'25	desc. node	15350 Jan 19 23:22	11° \mathcal{H} 40'03	
	15347 Jul 25 08:26	0° \mathcal{C}			15350 Feb 04 04:37	0° \mathcal{Y}	
desc. node	15347 Aug 05 11:43	11° \mathcal{C} 53'07			15350 Mar 01 10:37	0° \mathcal{B}	
	15347 Aug 21 15:27	0° Ω			15350 Mar 27 06:56	0° Π	
	15347 Sep 16 06:18	0° \mathcal{M}			15350 Apr 23 07:02	0° \mathcal{C}	
	15347 Oct 11 04:35	0° Ω		evening max el	15350 May 10 03:47	17° \mathcal{C} 23'20	46°15'22
	15347 Nov 04 19:09	0° \mathcal{M}		asc. node	15350 May 12 18:59	19° \mathcal{C} 57'18	
asc. node	15347 Nov 26 09:35	26° \mathcal{M} 31'04			15350 May 23 17:22	0° Ω	
	15347 Nov 29 05:29	0° \mathcal{A}		greatest brilliancy	15350 Jun 19 11:20	17° Ω 17'27	-4.8m
	15347 Dec 23 13:08	0° \mathcal{B}		retrograde	15350 Jun 28 19:55	18° Ω 56'30	
	15348 Jan 16 19:24	0° \approx		evening set	15350 Jul 16 16:51	12° Ω 52'26	
morning set	15348 Jan 19 00:49	2° \approx 45'08		inferior conj	15350 Jul 19 14:16	11° Ω 06'08	8°42'30
	15348 Feb 10 01:45	0° \mathcal{H}		minimum elong	15350 Jul 19 20:51	10° Ω 55'56	8°41'06
				min. Earth dist.	15350 Jul 20 06:02	10° Ω 41'43	0.27512 AU
superior conj	15348 Feb 24 23:31	18° \mathcal{H} 24'26	0°48'20	morning rise	15350 Jul 23 00:41	8° Ω 59'49	
minimum elong	15348 Feb 25 08:43	18° \mathcal{H} 52'48	0°48'13	direct	15350 Aug 09 11:13	3° Ω 06'51	
max. Earth dist.	15348 Feb 26 02:08	19° \mathcal{H} 46'32	1.73105 AU	greatest brilliancy	15350 Aug 19 17:27	5° Ω 05'12	-4.9m
	15348 Mar 05 09:04	0° \mathcal{Y}		desc. node	15350 Sep 01 21:08	12° Ω 12'49	
desc. node	15348 Mar 17 01:38	14° \mathcal{Y} 24'48			15350 Sep 23 00:21	0° \mathcal{M}	

morning max el	15350 Sep 28 22:08	5° \mathbb{M} 47'17	46°53'46	asc. node	15353 Jun 09 05:54	13° Ω 32'23	
	15350 Oct 21 18:14	0° \mathbb{L}			15353 Jun 23 16:00	0° \mathbb{M}	
	15350 Nov 17 03:01	0° \mathbb{M}			15353 Jul 21 15:45	0° \mathbb{L}	
	15350 Dec 12 13:55	0° \mathbb{A}		evening max el	15353 Jul 22 06:33	0° \mathbb{L} 37'00	46°38'56
asc. node	15350 Dec 23 21:28	13° \mathbb{A} 32'12			15353 Aug 28 20:08	0° \mathbb{M}	
	15351 Jan 06 13:10	0° \mathbb{Z}		greatest brilliancy	15353 Aug 30 22:16	0° \mathbb{M} 50'42	-4.9m
	15351 Jan 31 05:15	0° \approx		retrograde	15353 Sep 10 10:27	2° \mathbb{M} 54'01	
	15351 Feb 24 17:06	0° \mathbb{H}			15353 Sep 22 10:34	30° \mathbb{R} \mathbb{L}	
	15351 Mar 21 02:37	0° \mathbb{Y}		evening set	15353 Sep 24 20:38	28° \mathbb{L} 47'20	
morning set	15351 Mar 29 01:26	9° \mathbb{Y} 47'34		desc. node	15353 Sep 29 06:27	26° \mathbb{L} 15'42	
	15351 Apr 14 10:33	0° \mathbb{Z}		inferior conj	15353 Oct 01 03:20	25° \mathbb{L} 07'42	-0°29'22
desc. node	15351 Apr 14 15:51	0° \mathbb{Z} 16'22		minimum elong	15353 Oct 01 02:12	25° \mathbb{L} 09'27	0°28'42
max. Earth dist.	15351 May 04 03:41	24° \mathbb{Z} 22'34	1.72674 AU	min. Earth dist.	15353 Sep 30 22:10	25° \mathbb{L} 15'35	0.26985 AU
				morning rise	15353 Oct 07 08:10	21° \mathbb{L} 31'39	
superior conj	15351 May 06 14:05	27° \mathbb{Z} 23'26	-0°50'09	direct	15353 Oct 21 22:03	17° \mathbb{L} 23'54	
minimum elong	15351 May 06 03:52	26° \mathbb{Z} 51'48	0°50'27	greatest brilliancy	15353 Oct 31 16:35	19° \mathbb{L} 10'20	-4.8m
	15351 May 08 16:37	0° \mathbb{I}			15353 Nov 19 10:46	0° \mathbb{M}	
	15351 Jun 01 20:32	0° \mathbb{G}		morning max el	15353 Dec 10 13:03	18° \mathbb{M} 34'10	46°16'22
evening rise	15351 Jun 14 09:58	15° \mathbb{G} 38'03			15353 Dec 21 21:14	0° \mathbb{A}	
	15351 Jun 25 22:43	0° Ω			15354 Jan 18 09:48	0° \mathbb{Z}	
	15351 Jul 20 00:29	0° \mathbb{M}		asc. node	15354 Jan 20 08:16	2° \mathbb{Z} 11'32	
asc. node	15351 Aug 05 05:50	20° \mathbb{M} 10'59			15354 Feb 13 09:11	0° \approx	
	15351 Aug 13 03:37	0° \mathbb{L}			15354 Mar 10 14:36	0° \mathbb{H}	
	15351 Sep 06 10:18	0° \mathbb{M}			15354 Apr 04 10:08	0° \mathbb{Y}	
	15351 Sep 30 23:57	0° \mathbb{A}			15354 Apr 28 23:27	0° \mathbb{Z}	
	15351 Oct 26 03:06	0° \mathbb{Z}		desc. node	15354 May 12 05:17	16° \mathbb{Z} 17'10	
	15351 Nov 21 09:45	0° \approx			15354 May 23 07:55	0° \mathbb{I}	
desc. node	15351 Nov 25 00:41	3° \approx 58'03		morning set	15354 Jun 09 03:30	20° \mathbb{I} 50'53	
evening max el	15351 Dec 16 02:21	25° \approx 48'49	46°10'55		15354 Jun 16 12:08	0° \mathbb{G}	
	15351 Dec 20 11:26	0° \mathbb{H}			15354 Jul 10 13:00	0° Ω	
greatest brilliancy	15352 Jan 24 10:14	24° \mathbb{H} 40'44	-4.8m	max. Earth dist.	15354 Jul 16 19:42	7° Ω 51'19	1.71692 AU
retrograde	15352 Feb 03 10:31	26° \mathbb{H} 30'44					
evening set	15352 Feb 19 16:20	21° \mathbb{H} 26'09		superior conj	15354 Jul 18 20:04	10° Ω 22'38	-1°23'27
inferior conj	15352 Feb 24 19:59	18° \mathbb{H} 18'08	-4°56'48	minimum elong	15354 Jul 19 03:03	10° Ω 44'31	1°24'07
minimum elong	15352 Feb 25 05:33	18° \mathbb{H} 03'11	4°54'04		15354 Aug 03 12:01	0° \mathbb{M}	
min. Earth dist.	15352 Feb 25 03:00	18° \mathbb{H} 07'10	0.28613 AU		15354 Aug 27 10:43	0° \mathbb{L}	
morning rise	15352 Mar 01 18:38	14° \mathbb{H} 43'09		evening rise	15354 Aug 27 23:12	0° \mathbb{L} 39'03	
direct	15352 Mar 17 02:34	10° \mathbb{H} 07'13		asc. node	15354 Sep 01 20:02	6° \mathbb{L} 44'47	
asc. node	15352 Mar 17 01:25	10° \mathbb{H} 07'13			15354 Sep 20 10:28	0° \mathbb{M}	
greatest brilliancy	15352 Mar 27 22:21	12° \mathbb{H} 15'55	-4.8m		15354 Oct 14 12:43	0° \mathbb{A}	
	15352 Apr 23 12:15	0° \mathbb{Y}			15354 Nov 07 19:52	0° \mathbb{Z}	
morning max el	15352 May 05 11:24	11° \mathbb{Y} 08'24	46°00'22		15354 Dec 02 11:51	0° \approx	
	15352 May 23 16:47	0° \mathbb{Z}		desc. node	15354 Dec 22 12:16	23° \approx 50'10	
	15352 Jun 19 09:40	0° \mathbb{I}			15354 Dec 27 18:26	0° \mathbb{H}	
desc. node	15352 Jul 07 03:25	20° \mathbb{I} 50'55			15355 Jan 23 00:58	0° \mathbb{Y}	
	15352 Jul 14 19:09	0° \mathbb{G}			15355 Feb 20 07:14	0° \mathbb{Z}	
	15352 Aug 08 12:29	0° Ω		evening max el	15355 Feb 25 03:27	4° \mathbb{Z} 45'30	45°58'50
	15352 Sep 01 21:07	0° \mathbb{M}			15355 Mar 28 16:45	0° \mathbb{I}	
	15352 Sep 26 01:31	0° \mathbb{L}		greatest brilliancy	15355 Apr 05 04:37	3° \mathbb{I} 25'47	-4.8m
	15352 Oct 20 04:08	0° \mathbb{M}		asc. node	15355 Apr 14 10:53	5° \mathbb{I} 16'19	
asc. node	15352 Oct 27 22:22	9° \mathbb{M} 39'52		retrograde	15355 Apr 15 05:52	5° \mathbb{I} 17'03	
morning set	15352 Nov 06 05:33	21° \mathbb{M} 14'56		evening set	15355 Apr 30 12:27	0° \mathbb{I} 43'51	
	15352 Nov 13 06:07	0° \mathbb{A}			15355 May 01 19:06	30° \mathbb{R} \mathbb{Z}	
	15352 Dec 07 08:14	0° \mathbb{Z}		inferior conj	15355 May 06 08:27	27° \mathbb{Z} 12'01	5°09'44
				minimum elong	15355 May 05 22:37	27° \mathbb{Z} 27'30	5°06'29
superior conj	15352 Dec 14 06:51	8° \mathbb{Z} 38'14	1°24'19	min. Earth dist.	15355 May 06 06:25	27° \mathbb{Z} 15'14	0.28176 AU
minimum elong	15352 Dec 14 02:11	8° \mathbb{Z} 23'45	1°25'12	morning rise	15355 May 11 08:36	24° \mathbb{Z} 08'04	
max. Earth dist.	15352 Dec 16 13:46	11° \mathbb{Z} 28'58	1.72477 AU	direct	15355 May 27 12:19	19° \mathbb{Z} 03'28	
	15352 Dec 31 11:42	0° \approx		greatest brilliancy	15355 Jun 06 16:26	20° \mathbb{Z} 59'13	-4.8m
evening rise	15353 Jan 20 14:24	24° \approx 52'58			15355 Jun 22 14:12	0° \mathbb{I}	
	15353 Jan 24 17:59	0° \mathbb{H}		morning max el	15355 Jul 16 14:17	21° \mathbb{I} 13'02	46°42'10
desc. node	15353 Feb 16 13:13	28° \mathbb{H} 01'06			15355 Jul 25 03:49	0° \mathbb{G}	
	15353 Feb 18 04:02	0° \mathbb{Y}		desc. node	15355 Aug 04 13:43	11° \mathbb{G} 11'52	
	15353 Mar 14 17:53	0° \mathbb{Z}			15355 Aug 21 06:18	0° Ω	
	15353 Apr 08 11:12	0° \mathbb{I}			15355 Sep 15 19:17	0° \mathbb{M}	
	15353 May 03 08:55	0° \mathbb{G}			15355 Oct 10 16:34	0° \mathbb{L}	
	15353 May 28 15:07	0° Ω			15355 Nov 04 06:29	0° \mathbb{M}	

asc. node	15355 Nov 25 11:23	26°♍03'01		evening max el	15358 May 07 17:20	15°♊03'49	46°14'30
	15355 Nov 28 16:22	0°♊		asc. node	15358 May 11 20:51	19°♊04'39	
	15355 Dec 22 23:43	0°♊			15358 May 24 00:56	0°♊	
	15356 Jan 16 05:50	0°♊		greatest brilliancy	15358 Jun 16 23:52	14°♊55'36	-4.8m
morning set	15356 Jan 16 17:32	0°♊36'12		retrograde	15358 Jun 26 09:38	16°♊35'38	
	15356 Feb 09 12:07	0°♊		evening set	15358 Jul 14 08:29	10°♊27'23	
				inferior conj	15358 Jul 17 03:45	8°♊44'20	8°48'54
superior conj	15356 Feb 22 15:53	16°♊14'52	0°51'06	minimum elong	15358 Jul 17 09:33	8°♊35'22	8°47'38
minimum elong	15356 Feb 23 01:20	16°♊44'03	0°51'02	min. Earth dist.	15358 Jul 17 18:49	8°♊21'01	0.27551 AU
max. Earth dist.	15356 Feb 23 18:22	17°♊36'35	1.73101 AU	morning rise	15358 Jul 20 10:29	6°♊43'41	
	15356 Mar 04 19:27	0°♊		direct	15358 Aug 07 01:12	0°♊44'17	
desc. node	15356 Mar 16 03:30	13°♊58'25		greatest brilliancy	15358 Aug 17 06:51	2°♊42'38	-4.9m
	15356 Mar 29 03:45	0°♊		desc. node	15358 Aug 31 23:09	10°♊54'17	
evening rise	15356 Mar 31 13:47	2°♊58'41			15358 Sep 23 00:44	0°♊	
	15356 Apr 22 12:18	0°♊		morning max el	15358 Sep 26 13:07	3°♊28'40	46°54'22
	15356 May 16 20:43	0°♊			15358 Oct 21 10:44	0°♊	
	15356 Jun 10 05:52	0°♊			15358 Nov 16 16:44	0°♊	
	15356 Jul 04 18:06	0°♊			15358 Dec 12 02:13	0°♊	
asc. node	15356 Jul 06 18:16	2°♊26'40		asc. node	15358 Dec 22 23:23	13°♊02'18	
	15356 Jul 29 13:20	0°♊			15359 Jan 06 00:37	0°♊	
	15356 Aug 23 22:49	0°♊			15359 Jan 30 16:10	0°♊	
	15356 Sep 19 16:17	0°♊			15359 Feb 24 03:41	0°♊	
evening max el	15356 Oct 02 08:32	13°♊10'42	46°36'07		15359 Mar 20 13:02	0°♊	
	15356 Oct 20 15:24	0°♊		morning set	15359 Mar 26 17:36	7°♊37'29	
desc. node	15356 Oct 26 16:08	4°♊40'09		desc. node	15359 Apr 13 17:34	29°♊49'36	
greatest brilliancy	15356 Nov 10 19:58	13°♊17'44	-4.8m		15359 Apr 13 20:56	0°♊	
retrograde	15356 Nov 21 12:11	15°♊24'03		max. Earth dist.	15359 May 01 22:26	22°♊19'45	1.72709 AU
evening set	15356 Dec 09 10:02	9°♊21'59					
min. Earth dist.	15356 Dec 12 04:37	7°♊40'04	0.28286 AU	superior conj	15359 May 04 04:29	25°♊07'06	-0°47'09
inferior conj	15356 Dec 12 20:05	7°♊16'03	-8°42'39	minimum elong	15359 May 03 18:40	24°♊36'42	0°47'26
minimum elong	15356 Dec 12 14:56	7°♊24'03	8°41'21		15359 May 08 03:03	0°♊	
morning rise	15356 Dec 15 19:59	5°♊25'36			15359 Jun 01 07:04	0°♊	
	15356 Dec 27 23:21	30°♊♊		evening rise	15359 Jun 11 23:16	13°♊17'02	
direct	15357 Jan 02 23:07	29°♊17'27			15359 Jun 25 09:23	0°♊	
	15357 Jan 09 03:11	0°♊			15359 Jul 19 11:20	0°♊	
greatest brilliancy	15357 Jan 12 16:43	1°♊00'31	-4.8m	asc. node	15359 Aug 04 07:43	19°♊42'33	
asc. node	15357 Feb 16 18:05	25°♊35'00			15359 Aug 12 14:44	0°♊	
morning max el	15357 Feb 20 22:24	29°♊33'52	45°44'47		15359 Sep 05 21:51	0°♊	
	15357 Feb 21 09:11	0°♊			15359 Sep 30 12:09	0°♊	
	15357 Mar 21 23:53	0°♊			15359 Oct 25 16:30	0°♊	
	15357 Apr 17 07:47	0°♊			15359 Nov 21 01:46	0°♊	
	15357 May 12 16:13	0°♊		desc. node	15359 Nov 24 02:32	3°♊18'12	
	15357 Jun 06 11:22	0°♊		evening max el	15359 Dec 13 18:23	23°♊38'04	46°11'53
desc. node	15357 Jun 08 17:56	2°♊46'28			15359 Dec 20 11:41	0°♊	
	15357 Jun 30 21:38	0°♊		greatest brilliancy	15360 Jan 22 01:06	22°♊29'13	-4.8m
	15357 Jul 25 01:49	0°♊		retrograde	15360 Feb 01 02:39	24°♊19'54	
	15357 Aug 18 02:25	0°♊		evening set	15360 Feb 17 10:49	19°♊11'19	
morning set	15357 Aug 22 14:14	5°♊37'20		inferior conj	15360 Feb 22 11:44	16°♊07'03	-5°13'59
	15357 Sep 11 01:28	0°♊		minimum elong	15360 Feb 22 21:35	15°♊51'37	5°11'13
asc. node	15357 Sep 29 10:16	23°♊00'24		min. Earth dist.	15360 Feb 22 18:10	15°♊56'58	0.28624 AU
				morning rise	15360 Feb 28 08:20	12°♊35'09	
superior conj	15357 Oct 01 04:59	25°♊14'07	0°04'24	direct	15360 Mar 14 18:59	7°♊56'24	
minimum elong	15357 Oct 01 03:48	25°♊10'26	0°04'38	asc. node	15360 Mar 16 03:16	7°♊58'33	
behind sun begin	15357 Sep 30 03:48	23°♊55'18		greatest brilliancy	15360 Mar 25 13:16	10°♊04'09	-4.8m
behind sun end	15357 Oct 02 03:48	26°♊25'34			15360 Apr 23 15:16	0°♊	
max. Earth dist.	15357 Oct 02 00:24	26°♊14'56	1.71650 AU	morning max el	15360 May 03 03:27	8°♊57'33	45°59'01
	15357 Oct 05 00:20	0°♊			15360 May 23 09:22	0°♊	
	15357 Oct 29 00:01	0°♊			15360 Jun 18 23:19	0°♊	
evening rise	15357 Nov 08 20:25	13°♊32'17		desc. node	15360 Jul 06 05:24	20°♊19'10	
	15357 Nov 22 01:47	0°♊			15360 Jul 14 07:30	0°♊	
	15357 Dec 16 07:32	0°♊			15360 Aug 08 00:09	0°♊	
	15358 Jan 09 19:35	0°♊			15360 Sep 01 08:21	0°♊	
desc. node	15358 Jan 19 01:19	11°♊12'27			15360 Sep 25 12:29	0°♊	
	15358 Feb 03 16:01	0°♊			15360 Oct 19 14:54	0°♊	
	15358 Feb 28 22:56	0°♊		asc. node	15360 Oct 27 00:07	9°♊12'00	
	15358 Mar 26 20:57	0°♊		morning set	15360 Nov 03 19:37	18°♊56'03	
	15358 Apr 23 00:46	0°♊			15360 Nov 12 16:43	0°♊	

	15360 Dec 06 18:44	0°♁		asc. node	15363 Apr 13 12:49	3°♁01'54	
					15363 Apr 25 05:26	30°♁	
superior conj	15360 Dec 11 22:32	6°♁25'04 1°23'27		evening set	15363 Apr 28 01:28	28°♁31'57	
minimum elong	15360 Dec 11 17:09	6°♁08'21 1°24'19		inferior conj	15363 May 03 23:42	24°♁57'16 4°51'32	
max. Earth dist.	15360 Dec 14 07:36	9°♁22'31 1.72445 AU		minimum elong	15363 May 03 14:12	25°♁12'12 4°48'19	
	15360 Dec 30 22:11	0°♁		min. Earth dist.	15363 May 03 22:05	24°♁59'49 0.28185 AU	
evening rise	15361 Jan 18 06:12	22°♁41'06		morning rise	15363 May 09 02:41	21°♁49'05	
	15361 Jan 24 04:32	0°♁		direct	15363 May 25 03:02	16°♁48'30	
desc. node	15361 Feb 15 15:02	27°♁33'56		greatest brilliancy	15363 Jun 04 08:55	18°♁45'21 -4.8m	
	15361 Feb 17 14:45	0°♁			15363 Jun 23 05:10	0°♁	
	15361 Mar 14 04:52	0°♁		morning max el	15363 Jul 14 03:48	18°♁52'30 46°40'57	
	15361 Apr 07 22:38	0°♁			15363 Jul 24 22:42	0°♁	
	15361 May 02 21:05	0°♁		desc. node	15363 Aug 03 15:42	10°♁30'53	
	15361 May 28 04:35	0°♁			15363 Aug 20 21:05	0°♁	
asc. node	15361 Jun 08 07:50	12°♁56'28			15363 Sep 15 08:23	0°♁	
	15361 Jun 23 08:02	0°♁			15363 Oct 10 04:46	0°♁	
evening max el	15361 Jul 19 20:46	28°♁16'13 46°38'13			15363 Nov 03 18:06	0°♁	
	15361 Jul 21 14:39	0°♁		asc. node	15363 Nov 24 13:20	25°♁34'21	
greatest brilliancy	15361 Aug 28 12:45	28°♁27'50 -4.9m			15363 Nov 28 03:35	0°♁	
	15361 Sep 02 22:43	0°♁			15363 Dec 22 10:39	0°♁	
retrograde	15361 Sep 07 23:20	0°♁29'21		morning set	15364 Jan 14 09:55	28°♁25'05	
	15361 Sep 12 21:13	30°♁			15364 Jan 15 16:35	0°♁	
evening set	15361 Sep 22 10:14	26°♁22'31			15364 Feb 08 22:47	0°♁	
desc. node	15361 Sep 28 08:20	22°♁55'32					
inferior conj	15361 Sep 28 16:02	22°♁43'47 -0°05'03		superior conj	15364 Feb 20 08:07	14°♁04'01 0°53'48	
minimum elong	15361 Sep 28 15:51	22°♁44'05 0°04'43		minimum elong	15364 Feb 20 17:48	14°♁33'54 0°53'46	
transit middle	15361 Sep 28 15:51	22°♁44'05 0°04'43		max. Earth dist.	15364 Feb 21 11:05	15°♁27'12 1.73094 AU	
transit begin	15361 Sep 28 11:56	22°♁50'02			15364 Mar 04 06:08	0°♁	
transit end	15361 Sep 28 19:46	22°♁38'07		desc. node	15364 Mar 15 05:13	13°♁30'41	
min. Earth dist.	15361 Sep 28 12:14	22°♁49'35 0.26965 AU			15364 Mar 28 14:31	0°♁	
morning rise	15361 Oct 04 21:51	19°♁06'08		evening rise	15364 Mar 29 05:30	0°♁46'07	
direct	15361 Oct 19 10:54	15°♁00'13			15364 Apr 21 23:14	0°♁	
greatest brilliancy	15361 Oct 29 05:43	16°♁46'49 -4.8m			15364 May 16 07:54	0°♁	
	15361 Nov 20 00:42	0°♁			15364 Jun 09 17:25	0°♁	
morning max el	15361 Dec 08 01:45	16°♁12'06 46°17'52			15364 Jul 04 06:12	0°♁	
	15361 Dec 21 16:13	0°♁		asc. node	15364 Jul 05 20:12	1°♁55'38	
	15362 Jan 18 00:23	0°♁			15364 Jul 29 02:20	0°♁	
asc. node	15362 Jan 19 10:17	1°♁36'17			15364 Aug 23 13:32	0°♁	
	15362 Feb 12 21:53	0°♁			15364 Sep 19 10:59	0°♁	
	15362 Mar 10 02:20	0°♁		evening max el	15364 Sep 29 22:03	10°♁48'55 46°36'35	
	15362 Apr 03 21:20	0°♁			15364 Oct 21 03:18	0°♁	
	15362 Apr 28 10:20	0°♁		desc. node	15364 Oct 25 18:05	3°♁25'05	
desc. node	15362 May 11 07:10	15°♁49'47		greatest brilliancy	15364 Nov 08 10:10	10°♁59'32 -4.8m	
	15362 May 22 18:38	0°♁		retrograde	15364 Nov 19 03:02	13°♁07'02	
morning set	15362 Jun 06 16:23	18°♁28'44		evening set	15364 Dec 06 21:23	7°♁09'56	
	15362 Jun 15 22:46	0°♁		inferior conj	15364 Dec 10 10:40	4°♁59'31 -8°37'14	
	15362 Jul 09 23:39	0°♁		minimum elong	15364 Dec 10 04:44	5°♁08'42 8°35'48	
max. Earth dist.	15362 Jul 14 02:47	5°♁09'59 1.71720 AU		min. Earth dist.	15364 Dec 09 18:35	5°♁24'26 0.28246 AU	
				morning rise	15364 Dec 13 12:14	3°♁06'49	
superior conj	15362 Jul 16 08:38	7°♁58'25 -1°24'32			15364 Dec 19 05:41	30°♁	
minimum elong	15362 Jul 16 14:47	8°♁17'38 1°25'15		direct	15364 Dec 31 12:55	27°♁01'19	
	15362 Aug 02 22:44	0°♁		greatest brilliancy	15365 Jan 10 06:47	28°♁44'36 -4.8m	
evening rise	15362 Aug 25 11:13	28°♁12'33			15365 Jan 13 12:51	0°♁	
	15362 Aug 26 21:33	0°♁		asc. node	15365 Feb 15 19:56	24°♁42'30	
asc. node	15362 Aug 31 21:48	6°♁16'22		morning max el	15365 Feb 18 12:48	27°♁17'46 45°45'17	
	15362 Sep 19 21:25	0°♁			15365 Feb 21 07:10	0°♁	
	15362 Oct 13 23:50	0°♁			15365 Mar 21 15:28	0°♁	
	15362 Nov 07 07:18	0°♁			15365 Apr 16 21:04	0°♁	
	15362 Dec 01 23:51	0°♁			15365 May 12 04:24	0°♁	
desc. node	15362 Dec 21 14:17	23°♁18'31			15365 Jun 05 22:58	0°♁	
	15362 Dec 27 07:30	0°♁		desc. node	15365 Jun 07 19:50	2°♁16'59	
	15363 Jan 22 16:13	0°♁			15365 Jun 30 08:53	0°♁	
	15363 Feb 20 04:16	0°♁			15365 Jul 24 12:53	0°♁	
evening max el	15363 Feb 22 17:38	2°♁29'39 45°58'49			15365 Aug 17 13:20	0°♁	
	15363 Mar 30 19:55	0°♁		morning set	15365 Aug 20 02:58	3°♁12'51	
greatest brilliancy	15363 Apr 02 19:58	1°♁11'36 -4.8m			15365 Sep 10 12:17	0°♁	
retrograde	15363 Apr 12 20:20	3°♁02'27					

superior conj	15365 Sep 28 18:10	22° Ω 51'19	0°00'38	minimum elong	15368 Feb 20 13:27	13° \mathbb{H} 38'34	5°28'01
minimum elong	15365 Sep 28 17:56	22° Ω 50'34	0°00'53	min. Earth dist.	15368 Feb 20 09:24	13° \mathbb{H} 44'56	0.28638 AU
behind sun begin	15365 Sep 27 17:07	21° Ω 32'52		morning rise	15368 Feb 25 21:40	10° \mathbb{H} 25'39	
behind sun end	15365 Sep 29 18:44	24° Ω 08'16		direct	15368 Mar 12 11:16	5° \mathbb{H} 44'04	
asc. node	15365 Sep 28 12:01	22° Ω 32'02		asc. node	15368 Mar 15 05:14	5° \mathbb{H} 52'56	
max. Earth dist.	15365 Sep 29 12:02	23° Ω 47'18	1.71638 AU	greatest brilliancy	15368 Mar 23 04:06	7° \mathbb{H} 50'32	-4.8m
	15365 Oct 04 11:07	0° \mathbb{M}			15368 Apr 23 17:24	0° \mathbb{Y}	
	15365 Oct 28 10:50	0° \mathbb{J}		morning max el	15368 Apr 30 18:37	6° \mathbb{Y} 42'59	45°57'44
evening rise	15365 Nov 06 11:27	11° \mathbb{J} 15'46			15368 May 23 02:08	0° \mathbb{B}	
	15365 Nov 21 12:42	0° \mathbb{Z}			15368 Jun 18 13:14	0° \mathbb{I}	
	15365 Dec 15 18:38	0° \approx		desc. node	15368 Jul 05 07:19	19° \mathbb{I} 46'19	
	15366 Jan 09 06:59	0° \mathbb{H}			15368 Jul 13 20:07	0° \mathbb{G}	
desc. node	15366 Jan 18 03:06	10° \mathbb{H} 42'49			15368 Aug 07 12:04	0° Ω	
	15366 Feb 03 03:58	0° \mathbb{Y}			15368 Aug 31 19:52	0° \mathbb{M}	
	15366 Feb 28 11:51	0° \mathbb{B}			15368 Sep 24 23:42	0° Ω	
	15366 Mar 26 11:38	0° \mathbb{I}			15368 Oct 19 01:55	0° \mathbb{M}	
	15366 Apr 22 19:28	0° \mathbb{G}		asc. node	15368 Oct 26 02:04	8° \mathbb{M} 44'00	
evening max el	15366 May 05 07:46	12° \mathbb{G} 45'20	46°13'43	morning set	15368 Nov 01 09:54	16° \mathbb{M} 37'06	
asc. node	15366 May 10 22:51	18° \mathbb{G} 10'04			15368 Nov 12 03:33	0° \mathbb{J}	
	15366 May 24 11:58	0° Ω			15368 Dec 06 05:27	0° \mathbb{Z}	
greatest brilliancy	15366 Jun 14 12:15	12° Ω 32'41	-4.8m				
retrograde	15366 Jun 23 23:34	14° Ω 13'43		superior conj	15368 Dec 09 14:32	4° \mathbb{Z} 12'14	1°22'28
evening set	15366 Jul 11 23:55	8° Ω 01'56		minimum elong	15368 Dec 09 08:28	3° \mathbb{Z} 53'21	1°23'17
inferior conj	15366 Jul 14 17:18	6° Ω 21'36	8°54'31	max. Earth dist.	15368 Dec 12 01:03	7° \mathbb{Z} 14'14	1.72411 AU
minimum elong	15366 Jul 14 22:15	6° Ω 13'56	8°53'22		15368 Dec 30 08:53	0° \approx	
min. Earth dist.	15366 Jul 15 07:20	5° Ω 59'52	0.27584 AU	evening rise	15369 Jan 15 22:15	20° \approx 29'13	
morning rise	15366 Jul 17 20:30	4° Ω 26'17			15369 Jan 23 15:19	0° \mathbb{H}	
	15366 Jul 26 16:55	30° \mathbb{R} \mathbb{G}		desc. node	15369 Feb 14 16:49	27° \mathbb{H} 05'45	
direct	15366 Aug 04 15:35	28° \mathbb{G} 21'07			15369 Feb 17 01:45	0° \mathbb{Y}	
	15366 Aug 13 22:42	0° Ω			15369 Mar 13 16:12	0° \mathbb{B}	
greatest brilliancy	15366 Aug 14 19:39	0° Ω 18'33	-4.9m		15369 Apr 07 10:27	0° \mathbb{I}	
desc. node	15366 Aug 31 00:57	9° Ω 37'03			15369 May 02 09:41	0° \mathbb{G}	
	15366 Sep 23 00:20	0° \mathbb{M}			15369 May 27 18:31	0° Ω	
morning max el	15366 Sep 24 04:13	1° \mathbb{M} 09'36	46°54'59	asc. node	15369 Jun 07 09:47	12° Ω 19'26	
	15366 Oct 21 03:12	0° Ω			15369 Jun 23 00:40	0° \mathbb{M}	
	15366 Nov 16 06:36	0° \mathbb{M}		evening max el	15369 Jul 17 09:54	25° \mathbb{M} 52'01	46°37'36
	15366 Dec 11 14:46	0° \mathbb{J}			15369 Jul 21 14:54	0° Ω	
asc. node	15366 Dec 22 01:19	12° \mathbb{J} 31'34		greatest brilliancy	15369 Aug 26 03:47	26° Ω 05'04	-4.9m
	15367 Jan 05 12:24	0° \mathbb{Z}		retrograde	15369 Sep 05 11:56	28° Ω 04'23	
	15367 Jan 30 03:29	0° \approx		evening set	15369 Sep 20 00:06	23° Ω 56'53	
	15367 Feb 23 14:43	0° \mathbb{H}		inferior conj	15369 Sep 26 04:50	20° Ω 19'34	0°19'21
	15367 Mar 19 23:55	0° \mathbb{Y}		minimum elong	15369 Sep 26 05:37	20° Ω 18'24	0°19'20
morning set	15367 Mar 24 09:35	5° \mathbb{Y} 25'25		min. Earth dist.	15369 Sep 26 02:44	20° Ω 22'47	0.26947 AU
desc. node	15367 Apr 12 19:24	29° \mathbb{Y} 21'51		desc. node	15369 Sep 27 10:24	19° Ω 34'35	
	15367 Apr 13 07:45	0° \mathbb{B}		morning rise	15369 Oct 02 11:23	16° Ω 40'29	
max. Earth dist.	15367 Apr 29 16:07	20° \mathbb{B} 12'25	1.72738 AU	direct	15369 Oct 16 23:13	12° Ω 35'59	
				greatest brilliancy	15369 Oct 26 19:32	14° Ω 23'27	-4.8m
superior conj	15367 May 01 18:43	22° \mathbb{B} 49'00	-0°44'05		15369 Nov 20 11:15	0° \mathbb{M}	
minimum elong	15367 May 01 09:21	22° \mathbb{B} 20'00	0°44'20	morning max el	15369 Dec 05 14:04	13° \mathbb{M} 48'28	46°19'32
	15367 May 07 13:54	0° \mathbb{I}			15369 Dec 21 10:48	0° \mathbb{J}	
	15367 May 31 18:00	0° \mathbb{G}			15370 Jan 17 14:53	0° \mathbb{Z}	
evening rise	15367 Jun 09 12:30	10° \mathbb{G} 54'42		asc. node	15370 Jan 18 12:07	1° \mathbb{Z} 00'31	
	15367 Jun 24 20:26	0° Ω			15370 Feb 12 10:37	0° \approx	
	15367 Jul 18 22:34	0° \mathbb{M}			15370 Mar 09 14:09	0° \mathbb{H}	
asc. node	15367 Aug 03 09:28	19° \mathbb{M} 12'35			15370 Apr 03 08:40	0° \mathbb{Y}	
	15367 Aug 12 02:14	0° Ω			15370 Apr 27 21:24	0° \mathbb{B}	
	15367 Sep 05 09:45	0° \mathbb{M}		desc. node	15370 May 10 09:06	15° \mathbb{B} 21'58	
	15367 Sep 30 00:43	0° \mathbb{J}			15370 May 22 05:33	0° \mathbb{I}	
	15367 Oct 25 06:18	0° \mathbb{Z}		morning set	15370 Jun 04 04:56	16° \mathbb{I} 04'52	
	15367 Nov 20 18:22	0° \approx			15370 Jun 15 09:37	0° \mathbb{G}	
desc. node	15367 Nov 23 04:33	2° \approx 37'32			15370 Jul 09 10:29	0° Ω	
evening max el	15367 Dec 11 10:14	21° \approx 25'54	46°12'34	max. Earth dist.	15370 Jul 11 10:17	2° Ω 29'27	1.71746 AU
	15367 Dec 20 13:40	0° \mathbb{H}					
greatest brilliancy	15368 Jan 19 16:20	20° \mathbb{H} 16'47	-4.8m	superior conj	15370 Jul 13 20:55	5° Ω 32'49	-1°25'29
retrograde	15368 Jan 29 18:15	22° \mathbb{H} 07'21		minimum elong	15370 Jul 14 02:09	5° Ω 49'11	1°26'13
evening set	15368 Feb 15 05:17	16° \mathbb{H} 54'54			15370 Aug 02 09:36	0° \mathbb{M}	
inferior conj	15368 Feb 20 03:21	13° \mathbb{H} 54'23	-5°30'48	evening rise	15370 Aug 22 23:01	25° \mathbb{M} 45'03	

	15370 Aug 26 08:28	0°♄		asc. node	15373 Feb 14 21:54	23°♄52'04	
asc. node	15370 Aug 30 23:35	5°♄47'42		morning max el	15373 Feb 16 04:06	25°♄04'45	45°45'51
	15370 Sep 19 08:26	0°♍			15373 Feb 21 04:01	0°♍	
	15370 Oct 13 11:03	0°♎			15373 Mar 21 06:30	0°♎	
	15370 Nov 06 18:50	0°♏			15373 Apr 16 09:56	0°♏	
	15370 Dec 01 11:58	0°♐			15373 May 11 16:14	0°♐	
desc. node	15370 Dec 20 16:09	22°♐46'14			15373 Jun 05 10:15	0°♑	
	15370 Dec 26 20:41	0°♒		desc. node	15373 Jun 06 21:40	1°♑48'13	
	15371 Jan 22 07:40	0°♓			15373 Jun 29 19:54	0°♒	
	15371 Feb 20 02:02	0°♑			15373 Jul 23 23:44	0°♑	
evening max el	15371 Feb 20 07:31	0°♑13'14	45°58'47		15373 Aug 17 00:05	0°♒	
greatest brilliancy	15371 Mar 31 10:43	28°♑56'38	-4.8m	morning set	15373 Aug 17 15:17	0°♒47'33	
	15371 Apr 03 23:43	0°♒			15373 Sep 09 22:58	0°♑	
retrograde	15371 Apr 10 11:02	0°♒47'46					
asc. node	15371 Apr 12 14:50	0°♒42'11		superior conj	15373 Sep 26 06:44	20°♑27'00	-0°03'13
	15371 Apr 16 17:52	30°♒♑		minimum elong	15373 Sep 26 07:28	20°♑29'19	0°02'57
evening set	15371 Apr 25 14:34	26°♒19'18		behind sun begin	15373 Sep 25 06:50	19°♑12'09	
inferior conj	15371 May 01 14:51	22°♒42'08	4°32'45	behind sun end	15373 Sep 27 08:06	21°♑46'28	
minimum elong	15371 May 01 05:46	22°♒56'24	4°29'37	max. Earth dist.	15373 Sep 27 00:24	21°♑22'20	1.71622 AU
min. Earth dist.	15371 May 01 13:35	22°♒44'08	0.28202 AU	asc. node	15373 Sep 27 13:57	22°♑04'47	
morning rise	15371 May 06 20:40	19°♒29'59			15373 Oct 03 21:45	0°♒	
direct	15371 May 22 17:47	14°♒32'56			15373 Oct 27 21:28	0°♑	
greatest brilliancy	15371 Jun 02 01:30	16°♒31'16	-4.8m	evening rise	15373 Nov 04 02:05	8°♑58'40	
	15371 Jun 23 16:30	0°♒			15373 Nov 20 23:23	0°♑	
morning max el	15371 Jul 11 18:16	16°♒33'54	46°39'42		15373 Dec 15 05:27	0°♒	
	15371 Jul 24 17:16	0°♒			15374 Jan 08 18:07	0°♑	
desc. node	15371 Aug 02 17:33	9°♒49'37		desc. node	15374 Jan 17 04:55	10°♑14'07	
	15371 Aug 20 11:48	0°♑			15374 Feb 02 15:39	0°♓	
	15371 Sep 14 21:26	0°♒			15374 Feb 28 00:30	0°♑	
	15371 Oct 09 16:53	0°♑			15374 Mar 26 02:05	0°♒	
	15371 Nov 03 05:37	0°♒			15374 Apr 22 14:11	0°♒	
asc. node	15371 Nov 23 15:09	25°♒05'37		evening max el	15374 May 02 22:44	10°♒29'39	46°12'53
	15371 Nov 27 14:41	0°♑		asc. node	15374 May 10 00:49	17°♒15'42	
	15371 Dec 21 21:28	0°♑			15374 May 25 01:58	0°♑	
morning set	15372 Jan 12 02:26	26°♑14'39		greatest brilliancy	15374 Jun 12 00:56	10°♑11'54	-4.8m
	15372 Jan 15 03:14	0°♒		retrograde	15374 Jun 21 13:25	11°♑53'23	
	15372 Feb 08 09:21	0°♑		evening set	15374 Jul 09 15:09	5°♑38'56	
				inferior conj	15374 Jul 12 07:02	4°♑00'37	8°59'06
superior conj	15372 Feb 18 00:39	11°♑54'21	0°56'25	minimum elong	15374 Jul 12 11:07	3°♑54'15	8°58'02
minimum elong	15372 Feb 18 10:30	12°♑24'46	0°56'24	min. Earth dist.	15374 Jul 12 20:02	3°♑40'25	0.27621 AU
max. Earth dist.	15372 Feb 19 05:25	13°♑23'11	1.73085 AU	morning rise	15374 Jul 15 07:02	2°♑09'54	
	15372 Mar 03 16:40	0°♓			15374 Jul 19 02:02	30°♒♑	
desc. node	15372 Mar 14 07:05	13°♓03'54		direct	15374 Aug 02 06:08	25°♒59'47	
evening rise	15372 Mar 26 21:32	28°♓35'03		greatest brilliancy	15374 Aug 12 08:34	27°♒55'49	-4.9m
	15372 Mar 28 01:08	0°♑			15374 Aug 17 02:33	0°♑	
	15372 Apr 21 10:02	0°♒		desc. node	15374 Aug 30 03:04	8°♑23'44	
	15372 May 15 19:00	0°♒		morning max el	15374 Sep 21 18:55	28°♑50'16	46°55'17
	15372 Jun 09 04:56	0°♑			15374 Sep 22 22:38	0°♒	
	15372 Jul 03 18:19	0°♒			15374 Oct 20 19:09	0°♑	
asc. node	15372 Jul 04 21:56	1°♒23'55			15374 Nov 15 20:06	0°♒	
	15372 Jul 28 15:25	0°♑			15374 Dec 11 02:59	0°♑	
	15372 Aug 23 04:25	0°♒		asc. node	15374 Dec 21 03:09	12°♑01'30	
	15372 Sep 19 06:08	0°♑			15375 Jan 04 23:49	0°♑	
evening max el	15372 Sep 27 12:17	8°♑29'15	46°37'20		15375 Jan 29 14:24	0°♒	
	15372 Oct 21 19:00	0°♑			15375 Feb 23 01:20	0°♑	
desc. node	15372 Oct 24 20:06	2°♑08'23			15375 Mar 19 10:23	0°♓	
greatest brilliancy	15372 Nov 05 23:55	8°♑41'23	-4.8m	morning set	15375 Mar 22 01:50	3°♓15'26	
retrograde	15372 Nov 16 18:25	10°♑50'33		desc. node	15375 Apr 11 21:18	28°♓55'33	
evening set	15372 Dec 04 08:34	4°♑58'35			15375 Apr 12 18:11	0°♑	
min. Earth dist.	15372 Dec 07 08:13	3°♑09'43	0.28202 AU	max. Earth dist.	15375 Apr 27 08:12	18°♑01'28	1.72763 AU
inferior conj	15372 Dec 08 01:15	2°♑43'24	-8°31'00				
minimum elong	15372 Dec 07 18:35	2°♑53'42	8°29'25	superior conj	15375 Apr 29 09:24	20°♑33'41	-0°40'57
morning rise	15372 Dec 11 04:47	0°♑48'04		minimum elong	15375 Apr 29 00:32	20°♑06'14	0°41'12
	15372 Dec 12 13:32	30°♒♑			15375 May 07 00:20	0°♒	
direct	15372 Dec 29 03:07	24°♑45'46			15375 May 31 04:29	0°♒	
greatest brilliancy	15373 Jan 07 20:13	26°♑28'44	-4.8m	evening rise	15375 Jun 07 02:12	8°♒35'14	
	15373 Jan 15 17:12	0°♑			15375 Jun 24 07:03	0°♑	

	15375 Jul 18 09:23	0°♍			15378 Mar 09 01:39	0°♋		
asc. node	15375 Aug 02 11:21	18°♍44'14			15378 Apr 02 19:39	0°♍		
	15375 Aug 11 13:22	0°♌			15378 Apr 27 08:06	0°♌		
	15375 Sep 04 21:21	0°♍		desc. node	15378 May 09 10:48	14°♌54'28		
	15375 Sep 29 13:02	0°♎			15378 May 21 16:06	0°♍		
	15375 Oct 24 19:57	0°♏		morning set	15378 Jun 01 17:35	13°♍42'27		
	15375 Nov 20 11:00	0°♐			15378 Jun 14 20:07	0°♎		
desc. node	15375 Nov 22 06:26	1°♐56'53			15378 Jul 08 21:00	0°♏		
evening max el	15375 Dec 09 01:31	19°♐12'59 46°13'25		max. Earth dist.	15378 Jul 08 20:17	29°♏57'45 1.71774 AU		
	15375 Dec 20 16:49	0°♋						
greatest brilliancy	15376 Jan 17 08:16	18°♋06'13 -4.8m		superior conj	15378 Jul 11 09:22	3°♏08'46 -1°26'15		
retrograde	15376 Jan 27 09:32	19°♋56'06		minimum elong	15378 Jul 11 13:39	3°♏22'08 1°27'02		
evening set	15376 Feb 12 23:53	14°♋39'47			15378 Aug 01 20:09	0°♍		
inferior conj	15376 Feb 17 19:04	11°♋43'13 -5°47'06		evening rise	15378 Aug 20 11:04	23°♍19'23		
minimum elong	15376 Feb 18 05:21	11°♋27'05 5°44'19			15378 Aug 25 19:04	0°♌		
min. Earth dist.	15376 Feb 18 00:55	11°♋34'01 0.28647 AU		asc. node	15378 Aug 30 01:29	5°♌20'25		
morning rise	15376 Feb 23 10:52	8°♋17'43			15378 Sep 18 19:08	0°♍		
direct	15376 Mar 10 03:02	3°♋33'14			15378 Oct 12 21:56	0°♎		
asc. node	15376 Mar 14 07:19	3°♋53'23			15378 Nov 06 06:04	0°♏		
greatest brilliancy	15376 Mar 20 19:10	5°♋38'35 -4.8m			15378 Nov 30 23:50	0°♐		
	15376 Apr 23 17:37	0°♍		desc. node	15378 Dec 19 17:56	22°♐14'25		
morning max el	15376 Apr 28 09:09	4°♍28'14 45°56'33			15378 Dec 26 09:44	0°♋		
	15376 May 22 18:04	0°♌			15379 Jan 21 23:09	0°♍		
	15376 Jun 18 02:31	0°♍		evening max el	15379 Feb 17 22:17	27°♍59'40 45°58'54		
desc. node	15376 Jul 04 09:09	19°♍14'48			15379 Feb 20 00:30	0°♌		
	15376 Jul 13 08:11	0°♎		greatest brilliancy	15379 Mar 29 01:07	26°♌42'02 -4.8m		
	15376 Aug 06 23:28	0°♏		retrograde	15379 Apr 08 02:16	28°♌33'59		
	15376 Aug 31 06:52	0°♍		asc. node	15379 Apr 11 16:44	28°♌18'17		
	15376 Sep 24 10:29	0°♌		evening set	15379 Apr 23 03:58	24°♌07'15		
	15376 Oct 18 12:31	0°♍		inferior conj	15379 Apr 29 06:03	20°♌27'50 4°13'33		
asc. node	15376 Oct 25 03:50	8°♍16'34		minimum elong	15379 Apr 28 21:26	20°♌41'21 4°10'31		
morning set	15376 Oct 29 23:57	14°♍18'30		min. Earth dist.	15379 Apr 29 04:52	20°♌29'41 0.28215 AU		
	15376 Nov 11 14:02	0°♎		morning rise	15379 May 04 14:36	17°♌12'04		
	15376 Dec 05 15:52	0°♏		direct	15379 May 20 09:03	12°♌18'21		
				greatest brilliancy	15379 May 30 17:40	14°♌17'46 -4.8m		
superior conj	15376 Dec 07 06:13	1°♏59'19 1°21'19			15379 Jun 24 00:24	0°♍		
minimum elong	15376 Dec 06 23:28	1°♏38'21 1°22'08		morning max el	15379 Jul 09 09:43	14°♍18'50 46°38'22		
max. Earth dist.	15376 Dec 09 15:12	4°♏56'35 1.72377 AU			15379 Jul 24 11:04	0°♎		
	15376 Dec 29 19:16	0°♐		desc. node	15379 Aug 01 19:35	9°♎10'04		
evening rise	15377 Jan 13 13:55	18°♐17'09			15379 Aug 20 02:04	0°♏		
	15377 Jan 23 01:47	0°♋			15379 Sep 14 10:10	0°♍		
desc. node	15377 Feb 13 18:42	26°♋39'00			15379 Oct 09 04:44	0°♌		
	15377 Feb 16 12:24	0°♍			15379 Nov 02 16:53	0°♍		
	15377 Mar 13 03:09	0°♌		asc. node	15379 Nov 22 16:57	24°♍37'25		
	15377 Apr 06 21:54	0°♍			15379 Nov 27 01:34	0°♎		
	15377 May 01 21:56	0°♎			15379 Dec 21 08:06	0°♏		
	15377 May 27 08:09	0°♏		morning set	15380 Jan 09 19:00	24°♏04'48		
asc. node	15377 Jun 06 11:36	11°♏43'03			15380 Jan 14 13:44	0°♐		
	15377 Jun 22 17:08	0°♍			15380 Feb 07 19:48	0°♋		
evening max el	15377 Jul 14 22:28	23°♍27'59 46°37'03						
	15377 Jul 21 15:45	0°♌		superior conj	15380 Feb 15 17:04	9°♋44'35 0°58'57		
greatest brilliancy	15377 Aug 23 18:52	23°♌44'04 -4.9m		minimum elong	15380 Feb 16 03:00	10°♋15'17 0°58'59		
retrograde	15377 Sep 03 00:34	25°♌41'35		max. Earth dist.	15380 Feb 17 00:57	11°♋23'01 1.73079 AU		
evening set	15377 Sep 17 14:16	21°♌32'40			15380 Mar 03 03:08	0°♍		
inferior conj	15377 Sep 23 17:49	17°♌57'18 0°43'35		desc. node	15380 Mar 13 08:57	12°♍37'12		
minimum elong	15377 Sep 23 19:32	17°♌54'41 0°43'12		evening rise	15380 Mar 24 13:21	26°♍23'30		
min. Earth dist.	15377 Sep 23 17:28	17°♌57'50 0.26936 AU			15380 Mar 27 11:43	0°♌		
desc. node	15377 Sep 26 12:21	16°♌16'42			15380 Apr 20 20:47	0°♍		
morning rise	15377 Sep 30 00:54	14°♌17'09			15380 May 15 06:02	0°♎		
direct	15377 Oct 14 11:24	10°♌13'20			15380 Jun 08 16:24	0°♏		
greatest brilliancy	15377 Oct 24 09:48	12°♌02'16 -4.8m			15380 Jul 03 06:24	0°♍		
	15377 Nov 20 18:22	0°♍		asc. node	15380 Jul 03 23:52	0°♍52'59		
morning max el	15377 Dec 03 03:00	11°♍27'18 46°21'04			15380 Jul 28 04:33	0°♌		
	15377 Dec 21 04:32	0°♎			15380 Aug 22 19:28	0°♍		
	15378 Jan 17 04:55	0°♏			15380 Sep 19 01:51	0°♎		
asc. node	15378 Jan 17 14:03	0°♏26'07		evening max el	15380 Sep 25 03:35	6°♎12'15 46°38'00		
	15378 Feb 11 22:59	0°♐			15380 Oct 22 16:12	0°♏		

desc. node	15380 Oct 23 22:00	0° Z 49'04			15383 Mar 18 21:08	0° Y	
greatest brilliancy	15380 Nov 03 13:35	6° Z 23'04	-4.8m	morning set	15383 Mar 19 18:09	1° Y 04'44	
retrograde	15380 Nov 14 10:00	8° Z 33'46		desc. node	15383 Apr 10 23:01	28° Y 27'44	
evening set	15380 Dec 01 19:30	2° Z 47'23			15383 Apr 12 04:54	0° B	
min. Earth dist.	15380 Dec 04 21:37	0° Z 55'00	0.28154 AU	max. Earth dist.	15383 Apr 24 23:14	15° B 46'23	1.72793 AU
inferior conj	15380 Dec 05 15:43	0° Z 27'05	-8°23'50				
minimum elong	15380 Dec 05 08:22	0° Z 38'25	8°22'06	superior conj	15383 Apr 27 00:04	18° B 17'21	-0°37'46
	15380 Dec 06 09:17	30° R 7		minimum elong	15383 Apr 26 15:45	17° B 51'38	0°38'01
morning rise	15380 Dec 08 21:29	28° Z 28'42			15383 May 06 11:07	0° II	
direct	15380 Dec 26 17:42	22° Z 30'13			15383 May 30 15:21	0° G	
greatest brilliancy	15381 Jan 05 08:58	24° Z 12'06	-4.8m	evening rise	15383 Jun 04 15:41	6° G 13'58	
	15381 Jan 17 03:22	0° Z			15383 Jun 23 18:04	0° O	
asc. node	15381 Feb 13 23:58	23° Z 02'51			15383 Jul 17 20:37	0° M	
morning max el	15381 Feb 13 19:24	22° Z 51'49	45°46'18	asc. node	15383 Aug 01 13:13	18° M 14'39	
	15381 Feb 21 00:08	0° \approx			15383 Aug 11 00:54	0° L	
	15381 Mar 20 21:22	0° H			15383 Sep 04 09:20	0° M	
	15381 Apr 15 22:48	0° Y			15383 Sep 29 01:47	0° Z	
	15381 May 11 04:08	0° B			15383 Oct 24 10:08	0° Z	
	15381 Jun 04 21:38	0° II			15383 Nov 20 04:26	0° \approx	
desc. node	15381 Jun 05 23:34	1° II 19'16		desc. node	15383 Nov 21 08:19	1° \approx 14'32	
	15381 Jun 29 06:59	0° G		evening max el	15383 Dec 06 15:52	16° \approx 56'28	46°14'12
	15381 Jul 23 10:38	0° O			15383 Dec 20 22:24	0° H	
morning set	15381 Aug 15 03:37	28° O 22'10		greatest brilliancy	15384 Jan 15 00:26	15° H 54'28	-4.8m
	15381 Aug 16 10:53	0° M		retrograde	15384 Jan 25 00:29	17° H 43'34	
	15381 Sep 09 09:42	0° L		evening set	15384 Feb 10 18:26	12° H 23'08	
				inferior conj	15384 Feb 15 10:43	9° H 30'50	-6°02'47
superior conj	15381 Sep 23 19:19	18° L 02'25	-0°07'01	minimum elong	15384 Feb 15 21:07	9° H 14'29	6°00'02
minimum elong	15381 Sep 23 21:01	18° L 07'45	0°06'44	min. Earth dist.	15384 Feb 15 16:41	9° H 21'28	0.28654 AU
behind sun begin	15381 Sep 22 22:03	16° L 55'48		morning rise	15384 Feb 20 23:49	6° H 08'50	
behind sun end	15381 Sep 24 20:00	19° L 19'42		direct	15384 Mar 07 18:14	1° H 20'58	
max. Earth dist.	15381 Sep 24 13:36	18° L 59'41	1.71609 AU	asc. node	15384 Mar 13 09:09	1° H 56'53	
asc. node	15381 Sep 26 15:42	21° L 36'35		greatest brilliancy	15384 Mar 18 10:37	3° H 25'53	-4.8m
	15381 Oct 03 08:29	0° M			15384 Apr 23 17:09	0° Y	
	15381 Oct 27 08:14	0° Z		morning max el	15384 Apr 25 23:15	2° Y 11'16	45°55'28
evening rise	15381 Nov 01 16:45	6° Z 41'06			15384 May 22 10:08	0° B	
	15381 Nov 20 10:12	0° Z			15384 Jun 17 16:08	0° II	
	15381 Dec 14 16:25	0° \approx		desc. node	15384 Jul 03 11:09	18° II 42'32	
	15382 Jan 08 05:24	0° H			15384 Jul 12 20:40	0° G	
desc. node	15382 Jan 16 06:53	9° H 45'29			15384 Aug 06 11:19	0° O	
	15382 Feb 02 03:31	0° Y			15384 Aug 30 18:22	0° M	
	15382 Feb 27 13:25	0° B			15384 Sep 23 21:43	0° L	
	15382 Mar 25 16:59	0° II			15384 Oct 17 23:33	0° M	
	15382 Apr 22 09:48	0° G		asc. node	15384 Oct 24 05:37	7° M 47'51	
evening max el	15382 Apr 30 13:26	8° G 12'17	46°11'56	morning set	15384 Oct 27 13:43	11° M 57'38	
asc. node	15382 May 09 02:40	16° G 18'52			15384 Nov 11 00:55	0° Z	
	15382 May 25 21:32	0° O					
greatest brilliancy	15382 Jun 09 14:15	7° O 50'45	-4.8m	superior conj	15384 Dec 04 21:45	29° Z 44'41	1°20'03
retrograde	15382 Jun 19 02:45	9° O 31'52		minimum elong	15384 Dec 04 14:24	29° Z 21'47	1°20'50
evening set	15382 Jul 07 05:55	3° O 15'46			15384 Dec 05 02:40	0° Z	
inferior conj	15382 Jul 09 20:44	1° O 38'46	9°02'40	max. Earth dist.	15384 Dec 07 03:58	2° Z 33'23	1.72346 AU
minimum elong	15382 Jul 09 23:56	1° O 33'47	9°01'42		15384 Dec 29 06:06	0° \approx	
min. Earth dist.	15382 Jul 10 09:01	1° O 19'38	0.27652 AU	evening rise	15385 Jan 11 05:37	16° \approx 03'48	
morning rise	15382 Jul 12 17:54	29° G 52'02			15385 Jan 22 12:43	0° H	
	15382 Jul 12 12:39	30° R 5		desc. node	15385 Feb 12 20:31	26° H 10'41	
direct	15382 Jul 30 20:15	23° G 37'37			15385 Feb 15 23:31	0° Y	
greatest brilliancy	15382 Aug 09 21:52	25° G 32'39	-4.9m		15385 Mar 12 14:34	0° B	
	15382 Aug 18 23:22	0° O			15385 Apr 06 09:49	0° II	
desc. node	15382 Aug 29 05:02	7° O 11'37			15385 May 01 10:40	0° G	
morning max el	15382 Sep 19 08:30	26° O 27'21	46°55'32		15385 May 26 22:24	0° O	
	15382 Sep 22 20:20	0° M		asc. node	15385 Jun 05 13:34	11° O 05'27	
	15382 Oct 20 11:04	0° L			15385 Jun 22 10:31	0° M	
	15382 Nov 15 09:45	0° M		evening max el	15385 Jul 12 10:44	21° M 01'36	46°36'22
	15382 Dec 10 15:24	0° Z			15385 Jul 21 18:49	0° L	
asc. node	15382 Dec 20 05:03	11° Z 30'53		greatest brilliancy	15385 Aug 21 09:17	21° L 19'54	-4.9m
	15383 Jan 04 11:30	0° Z		retrograde	15385 Aug 31 13:13	23° L 16'18	
	15383 Jan 29 01:35	0° \approx		evening set	15385 Sep 15 04:21	19° L 05'20	
	15383 Feb 22 12:13	0° H		inferior conj	15385 Sep 21 06:29	15° L 32'18	1°07'54

minimum elong	15385 Sep 21 09:09	15° Ω 28'15	1°07'11	evening rise	15388 Mar 22 05:04	24° Υ 10'53	
min. Earth dist.	15385 Sep 21 07:49	15° Ω 30'17	0.26929 AU		15388 Mar 26 22:33	0° \mathcal{B}	
desc. node	15385 Sep 25 14:14	12° Ω 57'31			15388 Apr 20 07:50	0° Π	
morning rise	15385 Sep 27 13:56	11° Ω 51'40			15388 May 14 17:22	0° \mathcal{E}	
direct	15385 Oct 11 23:27	7° Ω 47'49			15388 Jun 08 04:07	0° Ω	
greatest brilliancy	15385 Oct 21 23:46	9° Ω 38'30	-4.8m		15388 Jul 02 18:44	0° \mathcal{M}	
	15385 Nov 21 00:04	0° \mathcal{M}		asc. node	15388 Jul 03 01:48	0° \mathcal{M} 21'25	
morning max el	15385 Nov 30 16:37	9° \mathcal{M} 06'12	46°22'44		15388 Jul 27 17:55	0° Ω	
	15385 Dec 20 22:22	0° \mathcal{A}			15388 Aug 22 10:53	0° \mathcal{M}	
asc. node	15386 Jan 16 16:05	29° \mathcal{A} 50'52			15388 Sep 18 22:22	0° \mathcal{A}	
	15386 Jan 16 19:16	0° \mathcal{Z}		evening max el	15388 Sep 22 19:21	3° \mathcal{A} 55'57	46°38'25
	15386 Feb 11 11:44	0° \approx		desc. node	15388 Oct 22 23:57	29° \mathcal{A} 26'29	
	15386 Mar 08 13:33	0° \mathcal{H}			15388 Oct 23 22:04	0° \mathcal{Z}	
	15386 Apr 02 07:03	0° Υ		greatest brilliancy	15388 Nov 01 03:31	4° \mathcal{Z} 04'13	-4.8m
	15386 Apr 26 19:13	0° \mathcal{B}		retrograde	15388 Nov 12 01:15	6° \mathcal{Z} 15'40	
desc. node	15386 May 08 12:42	14° \mathcal{B} 26'20		evening set	15388 Nov 29 06:13	0° \mathcal{Z} 35'27	
	15386 May 21 03:03	0° Π			15388 Nov 30 06:01	30° \mathcal{R} \mathcal{A}	
morning set	15386 May 30 06:34	11° Π 19'54		min. Earth dist.	15388 Dec 02 11:03	28° \mathcal{A} 39'00	0.28105 AU
	15386 Jun 14 07:01	0° \mathcal{E}		inferior conj	15388 Dec 03 06:04	28° \mathcal{A} 09'40	-8°15'51
max. Earth dist.	15386 Jul 06 09:13	27° \mathcal{E} 34'01	1.71805 AU	minimum elong	15388 Dec 02 22:04	28° \mathcal{A} 22'00	8°13'58
	15386 Jul 08 07:55	0° Ω		morning rise	15388 Dec 06 14:14	26° \mathcal{A} 07'49	
				direct	15388 Dec 24 08:18	20° \mathcal{A} 13'48	
superior conj	15386 Jul 08 21:56	0° Ω 43'51	-1°26'51	greatest brilliancy	15389 Jan 02 21:32	21° \mathcal{A} 54'12	-4.8m
minimum elong	15386 Jul 09 01:14	0° Ω 54'12	1°27'41		15389 Jan 18 04:00	0° \mathcal{Z}	
	15386 Aug 01 07:07	0° \mathcal{M}		morning max el	15389 Feb 11 10:06	20° \mathcal{Z} 36'47	45°46'48
evening rise	15386 Aug 17 23:02	20° \mathcal{M} 52'10		asc. node	15389 Feb 13 01:48	22° \mathcal{Z} 13'23	
	15386 Aug 25 06:08	0° Ω			15389 Feb 20 19:49	0° \approx	
asc. node	15386 Aug 29 03:15	4° Ω 51'16			15389 Mar 20 12:10	0° \mathcal{H}	
	15386 Sep 18 06:18	0° \mathcal{M}			15389 Apr 15 11:40	0° Υ	
	15386 Oct 12 09:18	0° \mathcal{A}			15389 May 10 16:03	0° \mathcal{B}	
	15386 Nov 05 17:48	0° \mathcal{Z}			15389 Jun 04 09:03	0° Π	
	15386 Nov 30 12:13	0° \approx		desc. node	15389 Jun 05 01:26	0° Π 50'06	
desc. node	15386 Dec 18 19:56	21° \approx 41'48			15389 Jun 28 18:07	0° \mathcal{E}	
	15386 Dec 25 23:19	0° \mathcal{H}			15389 Jul 22 21:35	0° Ω	
	15387 Jan 21 15:21	0° Υ		morning set	15389 Aug 12 16:13	25° Ω 57'38	
evening max el	15387 Feb 15 13:52	25° Υ 46'59	45°59'03		15389 Aug 15 21:42	0° \mathcal{M}	
	15387 Feb 20 00:31	0° \mathcal{B}			15389 Sep 08 20:26	0° Ω	
greatest brilliancy	15387 Mar 26 15:14	24° \mathcal{B} 26'01	-4.8m				
retrograde	15387 Apr 05 17:46	26° \mathcal{B} 18'54		superior conj	15389 Sep 21 08:13	15° Ω 38'57	-0°10'45
asc. node	15387 Apr 10 18:42	25° \mathcal{B} 48'01		minimum elong	15389 Sep 21 10:52	15° Ω 47'16	0°10'28
evening set	15387 Apr 20 17:34	21° \mathcal{B} 53'52		behind sun begin	15389 Sep 20 15:32	14° Ω 46'42	
inferior conj	15387 Apr 26 21:11	18° \mathcal{B} 12'16	3°53'57	behind sun end	15389 Sep 22 06:13	16° Ω 47'51	
minimum elong	15387 Apr 26 13:04	18° \mathcal{B} 24'58	3°51'03	max. Earth dist.	15389 Sep 22 02:49	16° Ω 37'12	1.71592 AU
min. Earth dist.	15387 Apr 26 19:52	18° \mathcal{B} 14'18	0.28226 AU	asc. node	15389 Sep 25 17:29	21° Ω 08'37	
morning rise	15387 May 02 08:23	14° \mathcal{B} 53'04			15389 Oct 02 19:11	0° \mathcal{M}	
direct	15387 May 18 00:41	10° \mathcal{B} 02'44			15389 Oct 26 18:56	0° \mathcal{A}	
greatest brilliancy	15387 May 28 09:12	12° \mathcal{B} 02'32	-4.8m	evening rise	15389 Oct 30 07:33	4° \mathcal{A} 24'05	
	15387 Jun 24 06:23	0° Π			15389 Nov 19 20:59	0° \mathcal{Z}	
morning max el	15387 Jul 07 01:37	12° Π 04'13	46°37'03		15389 Dec 14 03:23	0° \approx	
	15387 Jul 24 04:45	0° \mathcal{E}			15390 Jan 07 16:42	0° \mathcal{H}	
desc. node	15387 Jul 31 21:32	8° \mathcal{E} 29'58		desc. node	15390 Jan 15 08:38	9° \mathcal{H} 16'12	
	15387 Aug 19 16:28	0° Ω			15390 Feb 01 15:26	0° Υ	
	15387 Sep 13 23:06	0° \mathcal{M}			15390 Feb 27 02:24	0° \mathcal{B}	
	15387 Oct 08 16:51	0° Ω			15390 Mar 25 08:03	0° Π	
	15387 Nov 02 04:29	0° \mathcal{M}			15390 Apr 22 05:57	0° \mathcal{E}	
asc. node	15387 Nov 21 18:55	24° \mathcal{M} 08'38		evening max el	15390 Apr 28 03:18	5° \mathcal{E} 53'10	46°11'00
	15387 Nov 26 12:47	0° \mathcal{A}		asc. node	15390 May 08 04:41	15° \mathcal{E} 21'27	
	15387 Dec 20 19:04	0° \mathcal{Z}			15390 May 27 00:05	0° Ω	
morning set	15388 Jan 07 11:17	21° \mathcal{Z} 53'11		greatest brilliancy	15390 Jun 07 04:01	5° Ω 30'31	-4.8m
	15388 Jan 14 00:32	0° \approx		retrograde	15390 Jun 16 15:38	7° Ω 11'00	
	15388 Feb 07 06:30	0° \mathcal{H}		evening set	15390 Jul 04 20:14	0° Ω 53'59	
					15390 Jul 06 07:19	30° \mathcal{R} \mathcal{E}	
superior conj	15388 Feb 13 09:17	7° \mathcal{H} 33'23	1°01'23	inferior conj	15390 Jul 07 10:33	29° \mathcal{E} 17'37	9°05'17
minimum elong	15388 Feb 13 19:16	8° \mathcal{H} 04'14	1°01'29	minimum elong	15390 Jul 07 12:48	29° \mathcal{E} 14'06	9°04'23
max. Earth dist.	15388 Feb 14 21:58	9° \mathcal{H} 26'41	1.73069 AU	min. Earth dist.	15390 Jul 07 22:25	28° \mathcal{E} 59'05	0.27683 AU
	15388 Mar 02 13:52	0° Υ		morning rise	15390 Jul 10 05:18	27° \mathcal{E} 34'17	
desc. node	15388 Mar 12 10:38	12° Υ 09'14		direct	15390 Jul 28 09:59	21° \mathcal{E} 15'57	

greatest brilliancy	15390 Aug 07 11:57	23°☿10'48	-4.9m	desc. node	15393 Feb 11 22:17	25°♄43'31	
	15390 Aug 20 05:41	0°♌			15393 Feb 15 10:12	0°♍	
desc. node	15390 Aug 28 06:51	6°♌01'38			15393 Mar 12 01:36	0°♄	
morning max el	15390 Sep 16 21:31	24°♌03'25	46°55'59		15393 Apr 05 21:23	0°♌	
	15390 Sep 22 17:05	0°♍			15393 Apr 30 23:07	0°☿	
	15390 Oct 20 02:31	0°♎			15393 May 26 12:25	0°♌	
	15390 Nov 14 23:02	0°♏		asc. node	15393 Jun 04 15:30	10°♌28'35	
	15390 Dec 10 03:30	0°♐			15393 Jun 22 03:50	0°♍	
asc. node	15390 Dec 19 06:58	11°♐01'04		evening max el	15393 Jul 09 23:37	18°♍38'11	46°35'47
	15391 Jan 03 22:54	0°♑			15393 Jul 21 23:02	0°♎	
	15391 Jan 28 12:33	0°♒		greatest brilliancy	15393 Aug 18 23:03	18°♎56'21	-4.9m
	15391 Feb 21 22:56	0°♓		retrograde	15393 Aug 29 02:20	20°♎52'23	
morning set	15391 Mar 17 10:25	28°♓54'23		evening set	15393 Sep 12 18:38	16°♏38'56	
	15391 Mar 18 07:43	0°♑		inferior conj	15393 Sep 18 19:07	13°♎08'22	1°32'08
desc. node	15391 Apr 10 00:51	28°♑00'53		minimum elong	15393 Sep 18 22:43	13°♎02'54	1°31'06
	15391 Apr 11 15:26	0°♒		min. Earth dist.	15393 Sep 18 21:49	13°♎04'17	0.26926 AU
max. Earth dist.	15391 Apr 22 14:35	13°♒32'57	1.72823 AU	desc. node	15393 Sep 24 16:17	9°♎41'46	
				morning rise	15393 Sep 25 02:46	9°♎27'45	
superior conj	15391 Apr 24 14:43	16°♒01'42	-0°34'31	direct	15393 Oct 09 12:07	5°♎23'21	
minimum elong	15391 Apr 24 07:00	15°♒37'51	0°34'45	greatest brilliancy	15393 Oct 19 13:21	7°♎15'27	-4.8m
	15391 May 05 21:40	0°♌			15393 Nov 21 03:22	0°♏	
	15391 May 30 02:00	0°☿		morning max el	15393 Nov 28 07:10	6°♏48'34	46°24'28
evening rise	15391 Jun 02 05:18	3°☿53'56			15393 Dec 20 15:20	0°♐	
	15391 Jun 23 04:52	0°♌		asc. node	15394 Jan 15 17:53	29°♐16'37	
	15391 Jul 17 07:39	0°♍			15394 Jan 16 08:57	0°♑	
asc. node	15391 Jul 31 14:58	17°♍45'23			15394 Feb 10 23:53	0°♒	
	15391 Aug 10 12:15	0°♎			15394 Mar 08 00:53	0°♓	
	15391 Sep 03 21:08	0°♏			15394 Apr 01 17:57	0°♑	
	15391 Sep 28 14:19	0°♐			15394 Apr 26 05:52	0°♒	
	15391 Oct 24 00:05	0°♑		desc. node	15394 May 07 14:36	13°♒59'29	
	15391 Nov 19 21:49	0°♒			15394 May 20 13:35	0°♌	
desc. node	15391 Nov 20 10:20	0°♒33'15		morning set	15394 May 27 19:34	8°♌58'45	
evening max el	15391 Dec 04 05:44	14°♒39'58	46°15'03		15394 Jun 13 17:31	0°☿	
	15391 Dec 21 05:37	0°♓		max. Earth dist.	15394 Jul 03 22:16	25°☿11'54	1.71834 AU
greatest brilliancy	15392 Jan 12 16:17	13°♓43'45	-4.8m				
retrograde	15392 Jan 22 15:38	15°♓32'48		superior conj	15394 Jul 06 10:21	28°☿19'43	-1°27'17
evening set	15392 Feb 08 13:06	10°♓07'51		minimum elong	15394 Jul 06 12:40	28°☿26'57	1°28'08
inferior conj	15392 Feb 13 02:33	7°♓19'59	-6°17'50		15394 Jul 07 18:26	0°♌	
minimum elong	15392 Feb 13 13:00	7°♓03'34	6°15'09		15394 Jul 31 17:40	0°♍	
min. Earth dist.	15392 Feb 13 08:37	7°♓10'27	0.28667 AU	evening rise	15394 Aug 15 10:50	18°♍25'45	
morning rise	15392 Feb 18 12:50	4°♓01'51			15394 Aug 24 16:45	0°♎	
	15392 Feb 27 22:37	30°♒		asc. node	15394 Aug 28 05:01	4°♎23'31	
direct	15392 Mar 05 09:31	29°♒10'00			15394 Sep 17 17:05	0°♏	
asc. node	15392 Mar 12 11:08	0°♓06'05			15394 Oct 11 20:19	0°♐	
	15392 Mar 12 01:26	0°♓			15394 Nov 05 05:12	0°♑	
greatest brilliancy	15392 Mar 16 02:48	1°♓15'20	-4.8m		15394 Nov 30 00:15	0°♒	
morning max el	15392 Apr 23 14:01	29°♓56'53	45°54'25	desc. node	15394 Dec 17 21:46	21°♒09'45	
	15392 Apr 23 15:18	0°♑			15394 Dec 25 12:34	0°♓	
	15392 May 22 01:35	0°♒			15395 Jan 21 07:18	0°♑	
	15392 Jun 17 05:17	0°♌		evening max el	15395 Feb 13 06:04	23°♑37'26	45°59'15
desc. node	15392 Jul 02 13:01	18°♌11'02			15395 Feb 20 01:01	0°♒	
	15392 Jul 12 08:42	0°☿		greatest brilliancy	15395 Mar 24 05:33	22°♒12'15	-4.8m
	15392 Aug 05 22:47	0°♌		retrograde	15395 Apr 03 09:14	24°♒05'36	
	15392 Aug 30 05:29	0°♍		asc. node	15395 Apr 09 20:41	23°♒14'35	
	15392 Sep 23 08:35	0°♎		evening set	15395 Apr 18 07:34	19°♒42'17	
	15392 Oct 17 10:14	0°♏		inferior conj	15395 Apr 24 12:27	15°♒58'35	3°34'09
asc. node	15392 Oct 23 07:32	7°♏20'41		minimum elong	15395 Apr 24 04:55	16°♒10'23	3°31'23
morning set	15392 Oct 25 03:35	9°♏38'03		min. Earth dist.	15395 Apr 24 10:59	16°♒00'52	0.28240 AU
	15392 Nov 10 11:26	0°♐		morning rise	15395 Apr 30 02:08	12°♒35'59	
				direct	15395 May 15 16:44	7°♒49'08	
superior conj	15392 Dec 02 13:30	27°♐31'54	1°18'40	greatest brilliancy	15395 May 26 00:37	9°♒48'40	-4.8m
minimum elong	15392 Dec 02 05:34	27°♐07'11	1°19'24		15395 Jun 24 09:53	0°♌	
max. Earth dist.	15392 Dec 04 16:48	0°♑11'34	1.72312 AU	morning max el	15395 Jul 04 17:12	9°♌49'58	46°35'30
	15392 Dec 04 13:05	0°♑			15395 Jul 23 21:43	0°☿	
	15392 Dec 28 16:29	0°♒		desc. node	15395 Jul 30 23:22	7°☿50'51	
evening rise	15393 Jan 08 21:40	13°♒52'58			15395 Aug 19 06:23	0°♌	
	15393 Jan 21 23:12	0°♓			15395 Sep 13 11:37	0°♍	

	15395 Oct 08 04:34	0°♄			15398 Mar 24 23:13	0°♄	
	15395 Nov 01 15:40	0°♄			15398 Apr 22 02:36	0°♄	
asc. node	15395 Nov 20 20:42	23°♄40'27		evening max el	15398 Apr 25 16:21	3°♄32'38	46°10'14
	15395 Nov 25 23:38	0°♄		asc. node	15398 May 07 06:38	14°♄23'05	
	15395 Dec 20 05:41	0°♄			15398 May 28 13:26	0°♄	
morning set	15396 Jan 05 03:34	19°♄42'30		greatest brilliancy	15398 Jun 04 17:50	3°♄11'14	-4.8m
	15396 Jan 13 10:59	0°♄		retrograde	15398 Jun 14 04:39	4°♄51'28	
	15396 Feb 06 16:52	0°♄			15398 Jun 29 23:53	30°♄	
				evening set	15398 Jul 02 10:11	28°♄34'01	
superior conj	15396 Feb 11 01:44	5°♄23'55	1°03'44	inferior conj	15398 Jul 05 00:33	26°♄57'35	9°06'57
minimum elong	15396 Feb 11 11:42	5°♄54'42	1°03'52	minimum elong	15398 Jul 05 01:51	26°♄55'32	9°06'04
max. Earth dist.	15396 Feb 12 18:24	7°♄29'30	1.73051 AU	min. Earth dist.	15398 Jul 05 12:04	26°♄39'36	0.27717 AU
	15396 Mar 02 00:14	0°♄		morning rise	15398 Jul 07 17:26	25°♄16'58	
desc. node	15396 Mar 11 12:32	11°♄43'02		direct	15398 Jul 25 23:38	18°♄55'11	
evening rise	15396 Mar 19 21:02	22°♄00'10		greatest brilliancy	15398 Aug 05 02:36	20°♄50'33	-4.9m
	15396 Mar 26 09:01	0°♄			15398 Aug 21 03:17	0°♄	
	15396 Apr 19 18:30	0°♄		desc. node	15398 Aug 27 08:58	4°♄54'34	
	15396 May 14 04:21	0°♄		morning max el	15398 Sep 14 10:43	21°♄39'58	46°56'11
	15396 Jun 07 15:32	0°♄			15398 Sep 22 13:07	0°♄	
asc. node	15396 Jul 02 03:32	29°♄50'01			15398 Oct 19 17:48	0°♄	
	15396 Jul 02 06:50	0°♄			15398 Nov 14 12:16	0°♄	
	15396 Jul 27 07:09	0°♄			15398 Dec 09 15:38	0°♄	
	15396 Aug 22 02:18	0°♄		asc. node	15398 Dec 18 08:49	10°♄30'55	
	15396 Sep 18 19:23	0°♄			15399 Jan 03 10:19	0°♄	
evening max el	15396 Sep 20 10:37	1°♄38'53	46°38'52		15399 Jan 27 23:31	0°♄	
desc. node	15396 Oct 22 01:56	28°♄01'45			15399 Feb 21 09:39	0°♄	
	15396 Oct 25 17:19	0°♄		morning set	15399 Mar 15 02:36	26°♄43'35	
greatest brilliancy	15396 Oct 29 18:01	1°♄46'33	-4.8m		15399 Mar 17 18:20	0°♄	
retrograde	15396 Nov 09 15:56	3°♄57'52		desc. node	15399 Apr 09 02:45	27°♄34'02	
	15396 Nov 23 20:17	30°♄			15399 Apr 11 02:02	0°♄	
evening set	15396 Nov 26 16:48	28°♄24'07		max. Earth dist.	15399 Apr 20 06:57	11°♄22'28	1.72850 AU
min. Earth dist.	15396 Nov 30 00:48	26°♄22'58	0.28054 AU				
inferior conj	15396 Nov 30 20:20	25°♄52'47	-8°07'05	superior conj	15399 Apr 22 05:28	13°♄46'13	-0°31'14
minimum elong	15396 Nov 30 11:46	26°♄06'01	8°05'01	minimum elong	15399 Apr 21 22:23	13°♄24'19	0°31'27
morning rise	15396 Dec 04 07:04	23°♄47'03			15399 May 05 08:17	0°♄	
direct	15396 Dec 21 22:36	17°♄57'52			15399 May 29 12:40	0°♄	
greatest brilliancy	15396 Dec 31 10:26	19°♄37'00	-4.8m	evening rise	15399 May 30 19:16	1°♄35'00	
	15397 Jan 18 21:47	0°♄			15399 Jun 22 15:41	0°♄	
morning max el	15397 Feb 08 23:54	18°♄20'09	45°47'23		15399 Jul 16 18:41	0°♄	
asc. node	15397 Feb 12 03:47	21°♄25'45		asc. node	15399 Jul 30 16:52	17°♄16'32	
	15397 Feb 20 14:40	0°♄			15399 Aug 09 23:38	0°♄	
	15397 Mar 20 02:30	0°♄			15399 Sep 03 09:01	0°♄	
	15397 Apr 15 00:11	0°♄			15399 Sep 28 03:02	0°♄	
	15397 May 10 03:40	0°♄			15399 Oct 23 14:23	0°♄	
	15397 Jun 03 20:11	0°♄		desc. node	15399 Nov 19 12:12	29°♄50'15	
desc. node	15397 Jun 04 03:16	0°♄21'40			15399 Nov 19 15:54	0°♄	
	15397 Jun 28 04:59	0°♄		evening max el	15399 Dec 01 19:35	12°♄22'36	46°15'58
	15397 Jul 22 08:19	0°♄			15399 Dec 21 16:07	0°♄	
morning set	15397 Aug 10 04:33	23°♄32'42		greatest brilliancy	15400 Jan 10 07:19	11°♄31'00	-4.8m
	15397 Aug 15 08:21	0°♄		retrograde	15400 Jan 20 07:02	13°♄20'51	
	15397 Sep 08 07:03	0°♄		evening set	15400 Feb 06 07:35	7°♄51'00	
				inferior conj	15400 Feb 10 18:08	5°♄07'42	-6°32'27
superior conj	15397 Sep 18 20:43	13°♄14'30	-0°14'32	minimum elong	15400 Feb 11 04:35	4°♄51'19	6°29'48
minimum elong	15397 Sep 19 00:18	13°♄25'46	0°14'14	min. Earth dist.	15400 Feb 11 00:00	4°♄58'30	0.28678 AU
behind sun begin	15397 Sep 18 12:10	12°♄47'44		morning rise	15400 Feb 16 01:30	1°♄53'58	
behind sun end	15397 Sep 19 12:27	14°♄03'48			15400 Feb 19 15:56	30°♄	
max. Earth dist.	15397 Sep 19 12:41	14°♄04'32	1.71577 AU	direct	15400 Mar 04 00:41	26°♄57'36	
asc. node	15397 Sep 24 19:25	20°♄41'26		asc. node	15400 Mar 12 13:12	28°♄18'13	
	15397 Oct 02 05:48	0°♄		greatest brilliancy	15400 Mar 14 18:36	29°♄03'27	-4.8m
	15397 Oct 26 05:34	0°♄			15400 Mar 17 02:19	0°♄	
evening rise	15397 Oct 27 21:49	2°♄05'38		morning max el	15400 Apr 22 05:27	27°♄43'29	45°53'29
	15397 Nov 19 07:41	0°♄			15400 Apr 24 12:51	0°♄	
	15397 Dec 13 14:16	0°♄			15400 May 22 17:01	0°♄	
	15398 Jan 07 03:58	0°♄			15400 Jun 17 18:30	0°♄	
desc. node	15398 Jan 14 10:28	8°♄47'15		desc. node	15400 Jul 02 14:52	17°♄39'08	
	15398 Feb 01 03:21	0°♄			15400 Jul 12 20:51	0°♄	
	15398 Feb 26 15:25	0°♄			15400 Aug 06 10:20	0°♄	

	15400 Aug 30 16:41	0°♍		asc. node	15403 Apr 09 22:37	20°♋34'23	
	15400 Sep 23 19:34	0°♊		evening set	15403 Apr 16 21:43	17°♋28'58	
	15400 Oct 17 21:02	0°♌		inferior conj	15403 Apr 23 03:39	13°♋43'26	3°13'53
asc. node	15400 Oct 23 09:18	6°♌52'32		minimum elong	15403 Apr 22 20:44	13°♋54'17	3°11'18
morning set	15400 Oct 23 17:25	7°♌17'52		min. Earth dist.	15403 Apr 23 02:17	13°♋45'34	0.28251 AU
	15400 Nov 10 22:09	0°♌		morning rise	15403 Apr 28 19:40	10°♋17'24	
				direct	15403 May 14 08:36	5°♋34'10	
superior conj	15400 Dec 01 04:56	25°♌17'17	1°17'07	greatest brilliancy	15403 May 24 16:02	7°♋33'18	-4.8m
minimum elong	15400 Nov 30 20:27	24°♌50'51	1°17'49		15403 Jun 25 12:21	0°♌	
max. Earth dist.	15400 Dec 03 06:14	27°♌50'47	1.72286 AU	morning max el	15403 Jul 03 07:41	7°♌31'43	46°33'57
	15400 Dec 04 23:45	0°♌			15403 Jul 24 14:46	0°♌	
	15400 Dec 29 03:11	0°♌		desc. node	15403 Jul 31 01:26	7°♌11'32	
evening rise	15401 Jan 07 13:23	11°♌40'08			15403 Aug 19 20:34	0°♌	
	15401 Jan 22 09:59	0°♌			15403 Sep 14 00:27	0°♌	
desc. node	15401 Feb 12 00:10	25°♌15'49			15403 Oct 08 16:36	0°♌	
	15401 Feb 15 21:12	0°♌			15403 Nov 02 03:10	0°♌	
	15401 Mar 12 12:57	0°♌		asc. node	15403 Nov 20 22:32	23°♌11'29	
	15401 Apr 06 09:18	0°♌			15403 Nov 26 10:45	0°♌	
	15401 May 01 11:59	0°♌			15403 Dec 20 16:34	0°♌	
	15401 May 27 02:54	0°♌		morning set	15404 Jan 03 20:08	17°♌31'51	
asc. node	15401 Jun 04 17:19	9°♌50'11			15404 Jan 13 21:43	0°♌	
	15401 Jun 22 21:52	0°♌			15404 Feb 07 03:34	0°♌	
evening max el	15401 Jul 08 13:41	16°♌17'10	46°35'20				
	15401 Jul 23 05:32	0°♌		superior conj	15404 Feb 09 18:25	3°♌14'08	1°05'59
greatest brilliancy	15401 Aug 17 12:33	16°♌32'31	-4.9m	minimum elong	15404 Feb 10 04:17	3°♌44'36	1°06'08
retrograde	15401 Aug 27 16:02	18°♌28'31		max. Earth dist.	15404 Feb 11 13:24	5°♌26'54	1.73039 AU
evening set	15401 Sep 11 09:23	14°♌12'34			15404 Mar 02 10:59	0°♌	
inferior conj	15401 Sep 17 07:58	10°♌44'28	1°56'06	desc. node	15404 Mar 11 14:23	11°♌15'28	
minimum elong	15401 Sep 17 12:28	10°♌37'38	1°54'44	evening rise	15404 Mar 18 12:56	19°♌47'59	
min. Earth dist.	15401 Sep 17 11:35	10°♌38'59	0.26923 AU		15404 Mar 26 19:55	0°♌	
morning rise	15401 Sep 23 15:34	7°♌04'14			15404 Apr 20 05:37	0°♌	
desc. node	15401 Sep 24 18:13	6°♌29'54			15404 May 14 15:45	0°♌	
direct	15401 Oct 08 01:27	2°♌59'15			15404 Jun 08 03:24	0°♌	
greatest brilliancy	15401 Oct 18 02:26	4°♌51'46	-4.8m	asc. node	15404 Jul 02 05:30	29°♌17'58	
	15401 Nov 22 05:16	0°♌			15404 Jul 02 19:24	0°♌	
morning max el	15401 Nov 26 22:03	4°♌31'15	46°25'52		15404 Jul 27 20:56	0°♌	
	15401 Dec 21 08:12	0°♌			15404 Aug 22 18:25	0°♌	
asc. node	15402 Jan 15 19:51	28°♌42'07		evening max el	15404 Sep 19 01:10	29°♌18'45	46°39'19
	15402 Jan 16 22:51	0°♌			15404 Sep 19 17:40	0°♌	
	15402 Feb 11 12:22	0°♌		desc. node	15404 Oct 22 03:51	26°♌33'06	
	15402 Mar 08 12:36	0°♌		greatest brilliancy	15404 Oct 28 09:15	29°♌28'50	-4.8m
	15402 Apr 02 05:12	0°♌			15404 Oct 29 19:47	0°♌	
	15402 Apr 26 16:52	0°♌		retrograde	15404 Nov 08 06:19	1°♌39'33	
desc. node	15402 May 07 16:19	13°♌31'02			15404 Nov 17 08:28	30°♌	
	15402 May 21 00:28	0°♌		evening set	15404 Nov 25 03:31	26°♌12'24	
morning set	15402 May 26 08:32	6°♌36'28		min. Earth dist.	15404 Nov 28 15:05	24°♌06'02	0.27998 AU
	15402 Jun 14 04:22	0°♌		inferior conj	15404 Nov 29 10:48	23°♌35'35	-7°57'26
max. Earth dist.	15402 Jul 02 09:54	22°♌44'20	1.71861 AU	minimum elong	15404 Nov 29 01:42	23°♌49'38	7°55'13
				morning rise	15404 Dec 03 00:12	21°♌25'47	
superior conj	15402 Jul 04 22:46	25°♌54'31	-1°27'35	direct	15404 Dec 20 12:34	15°♌41'36	
minimum elong	15402 Jul 05 00:04	25°♌58'32	1°28'26	greatest brilliancy	15404 Dec 30 00:02	17°♌20'06	-4.8m
	15402 Jul 08 05:18	0°♌			15405 Jan 20 11:10	0°♌	
	15402 Aug 01 04:35	0°♌		morning max el	15405 Feb 07 12:55	16°♌00'57	45°48'01
evening rise	15402 Aug 13 22:42	15°♌58'23		asc. node	15405 Feb 12 05:50	20°♌38'30	
	15402 Aug 25 03:43	0°♌			15405 Feb 21 09:12	0°♌	
asc. node	15402 Aug 28 06:56	3°♌55'09			15405 Mar 20 16:57	0°♌	
	15402 Sep 18 04:09	0°♌			15405 Apr 15 12:58	0°♌	
	15402 Oct 12 07:36	0°♌			15405 May 10 15:38	0°♌	
	15402 Nov 05 16:52	0°♌		desc. node	15405 Jun 04 05:10	29°♌52'15	
	15402 Nov 30 12:38	0°♌			15405 Jun 04 07:42	0°♌	
desc. node	15402 Dec 17 23:36	20°♌36'36			15405 Jun 28 16:13	0°♌	
	15402 Dec 26 02:18	0°♌			15405 Jul 22 19:22	0°♌	
	15403 Jan 22 00:02	0°♌		morning set	15405 Aug 08 16:40	21°♌06'01	
evening max el	15403 Feb 11 22:17	21°♌26'29	45°59'15		15405 Aug 15 19:19	0°♌	
	15403 Feb 21 03:32	0°♌			15405 Sep 08 18:00	0°♌	
greatest brilliancy	15403 Mar 22 20:26	19°♌57'34	-4.8m				
retrograde	15403 Apr 02 00:12	21°♌50'34		superior conj	15405 Sep 17 09:07	10°♌48'51	-0°18'17

minimum elong	15405 Sep 17 13:38	11° Ω 03'00	0°17'58	morning rise	15408 Feb 14 14:09	29° \approx 46'33	
max. Earth dist.	15405 Sep 17 20:05	11° Ω 23'11	1.71565 AU	direct	15408 Mar 01 16:20	24° \approx 45'32	
asc. node	15405 Sep 24 21:08	20° Ω 12'35		asc. node	15408 Mar 11 15:01	26° \approx 34'24	
	15405 Oct 02 16:44	0° \mathbb{M}		greatest brilliancy	15408 Mar 12 09:52	26° \approx 51'24	-4.8m
evening rise	15405 Oct 26 12:05	29° \mathbb{M} 46'13			15408 Mar 19 04:14	0° \mathbb{H}	
	15405 Oct 26 16:30	0° \mathbb{J}		morning max el	15408 Apr 19 21:35	25° \mathbb{H} 32'15	45°52'36
	15405 Nov 19 18:41	0° \mathbb{Z}			15408 Apr 24 09:30	0° \mathbb{Y}	
	15405 Dec 14 01:26	0° \approx			15408 May 22 08:07	0° \mathbb{B}	
	15406 Jan 07 15:29	0° \mathbb{H}			15408 Jun 17 07:34	0° \mathbb{I}	
desc. node	15406 Jan 14 12:27	8° \mathbb{H} 18'10		desc. node	15408 Jul 01 16:52	17° \mathbb{I} 07'44	
	15406 Feb 01 15:30	0° \mathbb{Y}			15408 Jul 12 08:58	0° \mathbb{G}	
	15406 Feb 27 04:45	0° \mathbb{B}			15408 Aug 05 21:56	0° Ω	
	15406 Mar 25 14:52	0° \mathbb{I}			15408 Aug 30 03:58	0° \mathbb{M}	
	15406 Apr 23 00:25	0° \mathbb{G}			15408 Sep 23 06:37	0° Ω	
evening max el	15406 Apr 24 05:10	1° \mathbb{G} 10'44	46°09'19		15408 Oct 17 07:54	0° \mathbb{M}	
asc. node	15406 May 07 08:30	13° \mathbb{G} 22'04		morning set	15408 Oct 21 06:58	4° \mathbb{M} 56'36	
	15406 Jun 01 01:38	0° Ω		asc. node	15408 Oct 22 11:06	6° \mathbb{M} 24'20	
greatest brilliancy	15406 Jun 03 07:15	0° Ω 50'16	-4.8m		15408 Nov 10 08:52	0° \mathbb{J}	
retrograde	15406 Jun 12 18:03	2° Ω 30'54					
	15406 Jun 23 22:28	30° \mathbb{R} \mathbb{G}		superior conj	15408 Nov 28 20:08	23° \mathbb{J} 01'50	1°15'26
evening set	15406 Jun 30 23:28	26° \mathbb{G} 13'37		minimum elong	15408 Nov 28 11:10	22° \mathbb{J} 33'53	1°16'07
inferior conj	15406 Jul 03 14:29	24° \mathbb{G} 36'18	9°07'32	max. Earth dist.	15408 Nov 30 21:45	25° \mathbb{J} 36'23	1.72257 AU
minimum elong	15406 Jul 03 14:51	24° \mathbb{G} 35'43	9°06'39		15408 Dec 04 10:24	0° \mathbb{Z}	
min. Earth dist.	15406 Jul 04 01:32	24° \mathbb{G} 19'03	0.27752 AU		15408 Dec 28 13:51	0° \approx	
morning rise	15406 Jul 06 06:08	22° \mathbb{G} 57'38		evening rise	15409 Jan 05 05:10	9° \approx 27'28	
direct	15406 Jul 24 13:17	16° \mathbb{G} 33'08			15409 Jan 21 20:45	0° \mathbb{H}	
greatest brilliancy	15406 Aug 03 17:11	18° \mathbb{G} 29'15	-4.9m	desc. node	15409 Feb 11 02:00	24° \mathbb{H} 48'05	
	15406 Aug 22 19:46	0° Ω			15409 Feb 15 08:09	0° \mathbb{Y}	
desc. node	15406 Aug 27 10:55	3° Ω 47'58			15409 Mar 12 00:13	0° \mathbb{B}	
morning max el	15406 Sep 13 00:29	19° Ω 17'09	46°56'26		15409 Apr 05 21:07	0° \mathbb{I}	
	15406 Sep 23 08:51	0° \mathbb{M}			15409 May 01 00:43	0° \mathbb{G}	
	15406 Oct 20 09:05	0° Ω			15409 May 26 17:23	0° Ω	
	15406 Nov 15 01:38	0° \mathbb{M}		asc. node	15409 Jun 03 19:19	9° Ω 12'29	
	15406 Dec 10 03:53	0° \mathbb{J}			15409 Jun 22 16:12	0° \mathbb{M}	
asc. node	15406 Dec 18 10:43	10° \mathbb{J} 00'22		evening max el	15409 Jul 06 04:05	13° \mathbb{M} 57'20	46°34'30
	15407 Jan 03 21:52	0° \mathbb{Z}			15409 Jul 23 14:33	0° Ω	
	15407 Jan 28 10:38	0° \approx		greatest brilliancy	15409 Aug 15 02:01	14° Ω 08'21	-4.9m
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morning set	15407 Mar 13 19:19	24° \mathbb{H} 34'08		evening set	15409 Sep 09 00:08	11° Ω 45'21	
	15407 Mar 18 05:03	0° \mathbb{Y}		inferior conj	15409 Sep 14 20:35	8° Ω 19'45	2°20'00
desc. node	15407 Apr 09 04:28	27° \mathbb{Y} 06'23		minimum elong	15409 Sep 15 01:57	8° Ω 11'35	2°18'19
	15407 Apr 11 12:43	0° \mathbb{B}		min. Earth dist.	15409 Sep 15 01:06	8° Ω 12'52	0.26926 AU
max. Earth dist.	15407 Apr 19 02:18	9° \mathbb{B} 20'52	1.72880 AU	morning rise	15409 Sep 21 03:50	4° Ω 40'02	
				desc. node	15409 Sep 23 20:07	3° Ω 20'45	
superior conj	15407 Apr 20 20:34	11° \mathbb{B} 31'28	-0°27'54	direct	15409 Oct 05 14:46	0° Ω 34'27	
minimum elong	15407 Apr 20 14:09	11° \mathbb{B} 11'38	0°28'08	greatest brilliancy	15409 Oct 15 15:05	2° Ω 26'49	-4.9m
	15407 May 05 19:01	0° \mathbb{I}			15409 Nov 22 05:55	0° \mathbb{M}	
evening rise	15407 May 29 09:26	29° \mathbb{I} 16'15		morning max el	15409 Nov 24 12:12	2° \mathbb{M} 11'56	46°27'21
	15407 May 29 23:32	0° \mathbb{G}			15409 Dec 21 00:42	0° \mathbb{J}	
	15407 Jun 23 02:43	0° Ω		asc. node	15410 Jan 14 21:50	28° \mathbb{J} 08'10	
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asc. node	15407 Jul 30 18:43	16° \mathbb{M} 46'54			15410 Feb 11 00:37	0° \approx	
	15407 Aug 10 11:14	0° Ω			15410 Mar 08 00:04	0° \mathbb{H}	
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	15407 Sep 28 16:00	0° \mathbb{J}			15410 Apr 26 03:37	0° \mathbb{B}	
	15407 Oct 24 05:02	0° \mathbb{Z}		desc. node	15410 May 06 18:13	13° \mathbb{B} 03'57	
desc. node	15407 Nov 19 14:07	29° \mathbb{Z} 06'26			15410 May 20 11:05	0° \mathbb{I}	
	15407 Nov 20 10:37	0° \approx		morning set	15410 May 23 22:03	4° \mathbb{I} 16'52	
evening max el	15407 Nov 30 10:14	10° \approx 06'52	46°17'00		15410 Jun 13 14:56	0° \mathbb{G}	
	15407 Dec 23 06:24	0° \mathbb{H}		max. Earth dist.	15410 Jun 29 20:51	20° \mathbb{G} 15'39	1.71891 AU
greatest brilliancy	15408 Jan 08 22:00	9° \mathbb{H} 17'53	-4.8m				
retrograde	15408 Jan 18 23:09	11° \mathbb{H} 09'01		superior conj	15410 Jul 02 11:41	23° \mathbb{G} 31'54	-1°27'41
evening set	15408 Feb 05 02:13	5° \mathbb{H} 34'19		minimum elong	15410 Jul 02 11:57	23° \mathbb{G} 32'43	1°28'34
inferior conj	15408 Feb 09 09:48	2° \mathbb{H} 55'33	-6°46'23		15410 Jul 07 15:53	0° Ω	
minimum elong	15408 Feb 09 20:12	2° \mathbb{H} 39'17	6°43'49		15410 Jul 31 15:14	0° \mathbb{M}	
min. Earth dist.	15408 Feb 09 15:06	2° \mathbb{H} 47'16	0.28684 AU	evening rise	15410 Aug 11 10:40	13° \mathbb{M} 32'05	
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


























































































































asc. node	15410 Aug 27 08:41	3°♌26'57			15413 May 10 03:08	0°♏	
	15410 Sep 17 15:04	0°♍		desc. node	15413 Jun 03 07:03	29°♏24'09	
	15410 Oct 11 18:46	0°♎			15413 Jun 03 18:45	0°♐	
	15410 Nov 05 04:27	0°♑			15413 Jun 28 03:00	0°♑	
	15410 Nov 30 00:55	0°♒			15413 Jul 22 05:59	0°♒	
desc. node	15410 Dec 17 01:37	20°♑04'18		morning set	15413 Aug 06 05:02	18°♒41'34	
	15410 Dec 25 15:57	0°♓			15413 Aug 15 05:50	0°♓	
	15411 Jan 21 16:50	0°♓			15413 Sep 08 04:27	0°♓	
evening max el	15411 Feb 09 13:42	19°♓14'23	45°59'23				
	15411 Feb 21 07:18	0°♏		superior conj	15413 Sep 14 21:56	8°♓25'58	-0°21'57
greatest brilliancy	15411 Mar 20 12:05	17°♏44'53	-4.8m	minimum elong	15413 Sep 15 03:20	8°♓42'54	0°21'39
retrograde	15411 Mar 30 14:56	19°♏36'56		max. Earth dist.	15413 Sep 15 04:17	8°♓45'51	1.71554 AU
asc. node	15411 Apr 09 00:34	17°♏50'36		asc. node	15413 Sep 23 22:56	19°♓45'35	
evening set	15411 Apr 14 12:11	15°♏16'47			15413 Oct 02 03:10	0°♍	
inferior conj	15411 Apr 20 18:59	11°♏29'51	2°53'25	evening rise	15413 Oct 24 02:41	27°♍29'19	
minimum elong	15411 Apr 20 12:44	11°♏39'41	2°51'02		15413 Oct 26 02:58	0°♎	
min. Earth dist.	15411 Apr 20 18:04	11°♏31'17	0.28257 AU		15413 Nov 19 05:15	0°♑	
morning rise	15411 Apr 26 13:09	8°♏00'29			15413 Dec 13 12:14	0°♒	
direct	15411 May 12 00:01	3°♏20'45			15414 Jan 07 02:42	0°♓	
greatest brilliancy	15411 May 22 07:58	5°♏19'54	-4.8m	desc. node	15414 Jan 13 14:12	7°♓49'16	
	15411 Jun 25 12:51	0°♐			15414 Feb 01 03:24	0°♓	
morning max el	15411 Jun 30 21:26	5°♐13'04	46°32'33		15414 Feb 26 17:51	0°♏	
	15411 Jul 24 06:57	0°♑			15414 Mar 25 06:26	0°♐	
desc. node	15411 Jul 30 03:20	6°♑33'37		evening max el	15414 Apr 21 18:35	28°♐51'32	46°08'39
	15411 Aug 19 10:06	0°♒			15414 Apr 22 22:40	0°♑	
	15411 Sep 13 12:45	0°♓		asc. node	15414 May 06 10:32	12°♑20'59	
	15411 Oct 08 04:12	0°♓		greatest brilliancy	15414 May 31 20:04	28°♑30'00	-4.8m
	15411 Nov 01 14:20	0°♍			15414 Jun 07 04:31	0°♒	
asc. node	15411 Nov 20 00:28	22°♍43'43		retrograde	15414 Jun 10 08:00	0°♒11'43	
	15411 Nov 25 21:37	0°♎			15414 Jun 13 10:23	30°♒♑	
	15411 Dec 20 03:11	0°♑		evening set	15414 Jun 28 12:14	23°♑55'14	
morning set	15412 Jan 01 12:09	15°♑20'11		inferior conj	15414 Jul 01 04:25	22°♑16'15	9°07'11
	15412 Jan 13 08:11	0°♒		minimum elong	15414 Jul 01 03:51	22°♑17'08	9°06'18
	15412 Feb 06 13:57	0°♓		min. Earth dist.	15414 Jul 01 14:37	22°♑00'20	0.27783 AU
				morning rise	15414 Jul 03 19:22	20°♑38'46	
superior conj	15412 Feb 07 10:45	1°♓04'14	1°08'07	direct	15414 Jul 22 03:20	14°♑12'22	
minimum elong	15412 Feb 07 20:28	1°♓34'14	1°08'21	greatest brilliancy	15414 Aug 01 07:14	16°♑08'46	-4.9m
max. Earth dist.	15412 Feb 09 06:23	3°♓19'01	1.73021 AU		15414 Aug 23 07:29	0°♒	
	15412 Mar 01 21:24	0°♓		desc. node	15414 Aug 26 12:46	2°♒44'09	
desc. node	15412 Mar 10 16:05	10°♓48'32		morning max el	15414 Sep 10 15:20	16°♒58'32	46°56'45
evening rise	15412 Mar 16 04:37	17°♓36'16			15414 Sep 23 03:30	0°♓	
	15412 Mar 26 06:28	0°♏			15414 Oct 19 23:40	0°♓	
	15412 Apr 19 16:22	0°♐			15414 Nov 14 14:23	0°♍	
	15412 May 14 02:48	0°♑			15414 Dec 09 15:37	0°♎	
	15412 Jun 07 14:53	0°♒		asc. node	15414 Dec 17 12:38	9°♓31'18	
asc. node	15412 Jul 01 07:23	28°♒47'01			15415 Jan 03 09:00	0°♑	
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	15412 Jul 27 10:19	0°♓			15415 Feb 21 07:04	0°♓	
	15412 Aug 22 10:14	0°♍		morning set	15415 Mar 11 11:44	22°♓24'35	
evening max el	15412 Sep 16 14:34	26°♍57'05	46°39'31		15415 Mar 17 15:30	0°♓	
	15412 Sep 19 16:18	0°♎		desc. node	15415 Apr 08 06:20	26°♓40'01	
desc. node	15412 Oct 21 05:49	25°♎02'09			15415 Apr 10 23:08	0°♏	
greatest brilliancy	15412 Oct 26 00:11	27°♎11'16	-4.8m	max. Earth dist.	15415 Apr 16 22:17	7°♓22'06	1.72905 AU
retrograde	15412 Nov 05 20:19	29°♎21'38					
evening set	15412 Nov 22 13:51	24°♎00'49		superior conj	15415 Apr 18 11:14	9°♓16'16	-0°24'30
min. Earth dist.	15412 Nov 26 05:22	21°♎48'54	0.27950 AU	minimum elong	15415 Apr 18 05:33	8°♓58'41	0°24'44
inferior conj	15412 Nov 27 01:00	21°♎18'34	-7°46'47		15415 May 05 05:27	0°♐	
minimum elong	15412 Nov 26 15:25	21°♎33'23	7°44'24	evening rise	15415 May 26 23:22	26°♐57'46	
morning rise	15412 Nov 30 17:17	19°♎04'30			15415 May 29 10:05	0°♑	
direct	15412 Dec 18 01:55	13°♎25'12			15415 Jun 22 13:27	0°♒	
greatest brilliancy	15412 Dec 27 14:05	15°♎03'52	-4.8m		15415 Jul 16 16:57	0°♓	
	15413 Jan 20 20:50	0°♑		asc. node	15415 Jul 29 20:29	16°♓17'49	
morning max el	15413 Feb 05 01:51	13°♑42'00	45°48'49		15415 Aug 09 22:35	0°♓	
asc. node	15413 Feb 11 07:40	19°♑52'03			15415 Sep 03 08:58	0°♍	
	15413 Feb 21 03:00	0°♒			15415 Sep 28 04:42	0°♎	
	15413 Mar 20 06:55	0°♓			15415 Oct 23 19:27	0°♑	
	15413 Apr 15 01:18	0°♓		desc. node	15415 Nov 18 16:08	28°♑23'28	

	15415 Nov 20 05:23	0°♊		desc. node	15418 May 05 20:06	12°♊36'34	
evening max el	15415 Nov 28 01:39	7°♊54'14	46°17'57		15418 May 19 21:48	0°♊	
	15415 Dec 24 00:57	0°♋		morning set	15418 May 21 11:14	1°♊55'53	
greatest brilliancy	15416 Jan 06 12:18	7°♋05'23	-4.8m		15418 Jun 13 01:39	0°♋	
retrograde	15416 Jan 16 15:16	8°♋57'49		max. Earth dist.	15418 Jun 27 04:57	17°♋37'41	1.71921 AU
evening set	15416 Feb 02 20:47	3°♋18'24					
inferior conj	15416 Feb 07 01:24	0°♋44'00	-6°59'41	superior conj	15418 Jun 30 00:15	21°♋07'44	-1°27'37
minimum elong	15416 Feb 07 11:40	0°♋27'56	6°57'13	minimum elong	15418 Jun 29 23:30	21°♋05'24	1°28'31
min. Earth dist.	15416 Feb 07 05:46	0°♋37'10	0.28693 AU		15418 Jul 07 02:38	0°♌	
	15416 Feb 08 05:36	30°♌			15418 Jul 31 02:01	0°♌	
morning rise	15416 Feb 12 02:35	27°♌39'51		evening rise	15418 Aug 08 22:10	11°♌03'59	
direct	15416 Feb 28 08:27	22°♌34'10			15418 Aug 24 01:21	0°♌	
greatest brilliancy	15416 Mar 10 00:31	24°♌39'09	-4.8m	asc. node	15418 Aug 26 10:29	2°♌58'33	
asc. node	15416 Mar 10 17:04	24°♌54'57			15418 Sep 17 02:07	0°♍	
	15416 Mar 20 12:48	0°♋			15418 Oct 11 06:05	0°♋	
morning max el	15416 Apr 17 13:51	23°♋21'48	45°51'35		15418 Nov 04 16:10	0°♌	
	15416 Apr 24 05:19	0°♎			15418 Nov 29 13:22	0°♊	
	15416 May 21 22:53	0°♋		desc. node	15418 Dec 16 03:25	19°♊30'53	
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desc. node	15416 Jun 30 18:44	16°♊36'35			15419 Jan 21 10:06	0°♎	
	15416 Jul 11 20:51	0°♋		evening max el	15419 Feb 07 04:16	17°♎00'01	45°59'34
	15416 Aug 05 09:18	0°♌			15419 Feb 21 13:07	0°♋	
	15416 Aug 29 15:01	0°♌		greatest brilliancy	15419 Mar 18 03:57	15°♋32'15	-4.8m
	15416 Sep 22 17:27	0°♌		retrograde	15419 Mar 28 05:28	17°♋23'20	
	15416 Oct 16 18:33	0°♍		asc. node	15419 Apr 08 02:34	15°♋01'55	
morning set	15416 Oct 18 20:39	2°♍36'18		evening set	15419 Apr 12 02:52	13°♋03'59	
asc. node	15416 Oct 21 13:01	5°♍57'10		inferior conj	15419 Apr 18 10:24	9°♋16'09	2°32'50
	15416 Nov 09 19:23	0°♋		minimum elong	15419 Apr 18 04:50	9°♋24'56	2°30'39
				min. Earth dist.	15419 Apr 18 10:11	9°♋16'30	0.28271 AU
superior conj	15416 Nov 26 11:28	20°♋47'24	1°13'39	morning rise	15419 Apr 24 06:35	5°♋43'38	
minimum elong	15416 Nov 26 02:05	20°♋18'09	1°14'17	direct	15419 May 09 15:05	1°♋06'53	
max. Earth dist.	15416 Nov 28 14:35	23°♋26'41	1.72224 AU	greatest brilliancy	15419 May 20 00:34	3°♋06'48	-4.8m
	15416 Dec 03 20:52	0°♌			15419 Jun 25 12:33	0°♊	
	15416 Dec 28 00:19	0°♊		morning max el	15419 Jun 28 11:00	2°♊52'59	46°31'01
evening rise	15417 Jan 02 21:07	7°♊15'56			15419 Jul 23 23:14	0°♋	
	15417 Jan 21 07:20	0°♋		desc. node	15419 Jul 29 05:12	5°♋54'48	
desc. node	15417 Feb 10 03:46	24°♋20'41			15419 Aug 18 23:54	0°♌	
	15417 Feb 14 18:57	0°♎			15419 Sep 13 01:19	0°♌	
	15417 Mar 11 11:25	0°♋			15419 Oct 07 16:03	0°♌	
	15417 Apr 05 08:57	0°♊			15419 Nov 01 01:43	0°♍	
	15417 Apr 30 13:34	0°♋		asc. node	15419 Nov 19 02:15	22°♍14'50	
	15417 May 26 08:04	0°♌			15419 Nov 25 08:41	0°♋	
asc. node	15417 Jun 02 21:13	8°♌34'04			15419 Dec 19 14:02	0°♌	
	15417 Jun 22 11:03	0°♌		morning set	15419 Dec 30 04:11	13°♌07'45	
evening max el	15417 Jul 03 18:15	11°♌36'54	46°33'46		15420 Jan 12 18:53	0°♊	
	15417 Jul 24 02:43	0°♌					
greatest brilliancy	15417 Aug 12 16:02	11°♌45'02	-4.9m	superior conj	15420 Feb 05 03:21	28°♊54'20	1°10'09
retrograde	15417 Aug 22 18:18	13°♌38'52		minimum elong	15420 Feb 05 12:53	29°♊23'46	1°10'26
evening set	15417 Sep 06 15:04	9°♌18'05			15420 Feb 06 00:36	0°♋	
inferior conj	15417 Sep 12 09:11	5°♌55'11	2°43'34	max. Earth dist.	15420 Feb 06 22:04	1°♋06'19	1.73002 AU
minimum elong	15417 Sep 12 15:22	5°♌45'45	2°41'37		15420 Mar 01 08:05	0°♎	
min. Earth dist.	15417 Sep 12 14:48	5°♌46'37	0.26928 AU	desc. node	15420 Mar 09 17:59	10°♎21'27	
morning rise	15417 Sep 18 15:47	2°♌16'03		evening rise	15420 Mar 13 20:37	15°♎24'49	
desc. node	15417 Sep 22 22:11	0°♌15'49			15420 Mar 25 17:16	0°♋	
	15417 Sep 23 14:24	30°♌			15420 Apr 19 03:24	0°♊	
direct	15417 Oct 03 03:51	28°♌09'48			15420 May 13 14:10	0°♋	
greatest brilliancy	15417 Oct 13 03:55	0°♌01'58	-4.9m		15420 Jun 07 02:45	0°♌	
	15417 Oct 13 01:42	0°♌		asc. node	15420 Jun 30 09:09	28°♌14'15	
morning max el	15417 Nov 22 01:30	29°♌50'30	46°28'52		15420 Jul 01 20:14	0°♌	
	15417 Nov 22 05:23	0°♍			15420 Jul 27 00:19	0°♌	
	15417 Dec 20 16:50	0°♋			15420 Aug 22 02:55	0°♍	
asc. node	15418 Jan 13 23:38	27°♋34'03		evening max el	15420 Sep 14 03:37	24°♍33'01	46°39'57
	15418 Jan 16 01:56	0°♌			15420 Sep 19 16:38	0°♋	
	15418 Feb 10 12:45	0°♊		desc. node	15420 Oct 20 07:48	23°♋26'24	
	15418 Mar 07 11:28	0°♋		greatest brilliancy	15420 Oct 23 14:46	24°♋51'45	-4.8m
	15418 Apr 01 03:13	0°♎		retrograde	15420 Nov 03 10:36	27°♋02'24	
	15418 Apr 25 14:24	0°♋		evening set	15420 Nov 20 00:08	21°♋47'32	

min. Earth dist.	15420 Nov 23 19:30	19° ♁ 30'23	0.27898 AU	evening rise	15423 May 24 13:39	24° ♁ 39'17	
inferior conj	15420 Nov 24 15:08	19° ♁ 00'08	-7°35'26		15423 May 28 21:00	0° ♁	
minimum elong	15420 Nov 24 05:07	19° ♁ 15'34	7°32'51		15423 Jun 22 00:32	0° ♁	
morning rise	15420 Nov 28 10:23	16° ♁ 41'51			15423 Jul 16 04:17	0° ♁	
direct	15420 Dec 15 14:58	11° ♁ 07'14		asc. node	15423 Jul 28 22:23	15° ♁ 48'11	
greatest brilliancy	15420 Dec 25 04:05	12° ♁ 46'27	-4.8m		15423 Aug 09 10:16	0° ♁	
	15421 Jan 21 04:16	0° ♁			15423 Sep 02 21:13	0° ♁	
morning max el	15421 Feb 02 15:35	11° ♁ 24'00	45°49'43		15423 Sep 27 17:55	0° ♁	
asc. node	15421 Feb 10 09:40	19° ♁ 05'47			15423 Oct 23 10:34	0° ♁	
	15421 Feb 20 20:44	0° ♁		desc. node	15423 Nov 17 17:58	27° ♁ 37'47	
	15421 Mar 19 21:03	0° ♁			15423 Nov 20 01:20	0° ♁	
	15421 Apr 14 13:54	0° ♁		evening max el	15423 Nov 25 17:40	5° ♁ 41'20	46°18'54
	15421 May 09 14:56	0° ♁			15423 Dec 25 03:31	0° ♁	
desc. node	15421 Jun 02 08:51	28° ♁ 54'50		greatest brilliancy	15424 Jan 04 03:03	4° ♁ 51'54	-4.8m
	15421 Jun 03 06:07	0° ♁		retrograde	15424 Jan 14 07:14	6° ♁ 44'56	
	15421 Jun 27 14:07	0° ♁		evening set	15424 Jan 31 15:22	1° ♁ 01'11	
	15421 Jul 21 16:59	0° ♁			15424 Feb 02 07:46	30° ♁	
morning set	15421 Aug 03 17:12	16° ♁ 15'06		inferior conj	15424 Feb 04 16:57	28° ♁ 31'03	-7°12'28
	15421 Aug 14 16:48	0° ♁		minimum elong	15424 Feb 05 03:02	28° ♁ 15'17	7°10'06
	15421 Sep 07 15:24	0° ♁		min. Earth dist.	15424 Feb 04 20:20	28° ♁ 25'45	0.28694 AU
				morning rise	15424 Feb 09 14:48	25° ♁ 31'49	
superior conj	15421 Sep 12 10:14	5° ♁ 59'52	-0°25'39	direct	15424 Feb 26 00:34	20° ♁ 21'44	
minimum elong	15421 Sep 12 16:31	6° ♁ 19'32	0°25'21	greatest brilliancy	15424 Mar 07 14:32	22° ♁ 25'01	-4.8m
max. Earth dist.	15421 Sep 12 12:50	6° ♁ 08'01	1.71549 AU	asc. node	15424 Mar 09 19:04	23° ♁ 17'48	
asc. node	15421 Sep 23 00:51	19° ♁ 17'23			15424 Mar 21 12:31	0° ♁	
	15421 Oct 01 14:06	0° ♁		morning max el	15424 Apr 15 05:36	21° ♁ 09'11	45°50'36
evening rise	15421 Oct 21 16:47	25° ♁ 09'18			15424 Apr 24 00:52	0° ♁	
	15421 Oct 25 13:55	0° ♁			15424 May 21 13:45	0° ♁	
	15421 Nov 18 16:17	0° ♁			15424 Jun 16 09:25	0° ♁	
	15421 Dec 12 23:29	0° ♁		desc. node	15424 Jun 29 20:33	16° ♁ 04'32	
	15422 Jan 06 14:21	0° ♁			15424 Jul 11 08:57	0° ♁	
desc. node	15422 Jan 12 16:02	7° ♁ 19'18			15424 Aug 04 20:53	0° ♁	
	15422 Jan 31 15:46	0° ♁			15424 Aug 29 02:17	0° ♁	
	15422 Feb 26 07:30	0° ♁			15424 Sep 22 04:29	0° ♁	
	15422 Mar 24 22:39	0° ♁		morning set	15424 Oct 16 10:28	0° ♁ 15'39	
evening max el	15422 Apr 19 09:09	26° ♁ 34'26	46°08'05		15424 Oct 16 05:27	0° ♁	
	15422 Apr 22 22:18	0° ♁		asc. node	15424 Oct 20 14:45	5° ♁ 28'37	
asc. node	15422 May 05 12:28	11° ♁ 17'16			15424 Nov 09 06:12	0° ♁	
greatest brilliancy	15422 May 29 08:35	26° ♁ 08'59	-4.8m				
retrograde	15422 Jun 07 22:25	27° ♁ 52'07		superior conj	15424 Nov 24 02:39	18° ♁ 31'30	1°11'44
evening set	15422 Jun 26 00:40	21° ♁ 37'17		minimum elong	15424 Nov 23 16:54	18° ♁ 01'08	1°12'19
inferior conj	15422 Jun 28 18:31	19° ♁ 55'44	9°05'55	max. Earth dist.	15424 Nov 26 06:38	21° ♁ 13'31	1.72194 AU
minimum elong	15422 Jun 28 17:01	19° ♁ 58'04	9°05'00		15424 Dec 03 07:39	0° ♁	
min. Earth dist.	15422 Jun 29 03:32	19° ♁ 41'42	0.27816 AU		15424 Dec 27 11:07	0° ♁	
morning rise	15422 Jul 01 09:18	18° ♁ 18'35		evening rise	15424 Dec 31 12:44	5° ♁ 02'18	
direct	15422 Jul 19 18:04	11° ♁ 51'22			15425 Jan 20 18:13	0° ♁	
greatest brilliancy	15422 Jul 29 20:50	13° ♁ 47'14	-4.9m	desc. node	15425 Feb 09 05:39	23° ♁ 52'41	
	15422 Aug 23 16:31	0° ♁			15425 Feb 14 06:03	0° ♁	
desc. node	15422 Aug 25 14:51	1° ♁ 41'22			15425 Mar 10 22:54	0° ♁	
morning max el	15422 Sep 08 06:51	14° ♁ 40'27	46°56'41		15425 Apr 04 21:04	0° ♁	
	15422 Sep 22 22:10	0° ♁			15425 Apr 30 02:45	0° ♁	
	15422 Oct 19 14:37	0° ♁			15425 May 25 23:10	0° ♁	
	15422 Nov 14 03:37	0° ♁		asc. node	15425 Jun 01 23:03	7° ♁ 54'27	
	15422 Dec 09 03:50	0° ♁			15425 Jun 22 06:39	0° ♁	
asc. node	15422 Dec 16 14:27	9° ♁ 00'28		evening max el	15425 Jul 01 07:59	9° ♁ 14'53	46°32'59
	15423 Jan 02 20:34	0° ♁			15425 Jul 24 19:13	0° ♁	
	15423 Jan 27 08:33	0° ♁		greatest brilliancy	15425 Aug 10 06:48	9° ♁ 22'34	-4.9m
	15423 Feb 20 17:59	0° ♁		retrograde	15425 Aug 20 06:58	11° ♁ 14'22	
morning set	15423 Mar 09 04:15	20° ♁ 14'15		evening set	15425 Sep 04 06:22	6° ♁ 50'57	
	15423 Mar 17 02:19	0° ♁		inferior conj	15425 Sep 09 22:03	3° ♁ 31'08	3°06'40
desc. node	15423 Apr 07 08:11	26° ♁ 12'24		minimum elong	15425 Sep 10 05:00	3° ♁ 20'30	3°04'29
	15423 Apr 10 09:55	0° ♁		min. Earth dist.	15425 Sep 10 05:01	3° ♁ 20'29	0.26931 AU
max. Earth dist.	15423 Apr 14 17:54	5° ♁ 21'04	1.72926 AU		15425 Sep 15 22:15	30° ♁	
				morning rise	15425 Sep 16 03:40	29° ♁ 52'46	
superior conj	15423 Apr 16 02:09	7° ♁ 00'41	-0°21'06	desc. node	15425 Sep 22 00:05	27° ♁ 16'31	
minimum elong	15423 Apr 15 21:13	6° ♁ 45'24	0°21'19	direct	15425 Sep 30 16:31	25° ♁ 45'34	
	15423 May 04 16:17	0° ♁		greatest brilliancy	15425 Oct 10 17:23	27° ♁ 38'00	-4.9m

	15425 Oct 16 03:26	0°♄			15428 May 13 01:24	0°♄		
morning max el	15425 Nov 19 14:15	27°♄27'22	46°30'18		15428 Jun 06 14:28	0°♄		
	15425 Nov 22 03:53	0°♄		asc. node	15428 Jun 29 11:07	27°♄42'37		
	15425 Dec 20 08:48	0°♄			15428 Jul 01 08:46	0°♄		
asc. node	15426 Jan 13 01:37	27°♄00'08			15428 Jul 26 14:15	0°♄		
	15426 Jan 15 15:26	0°♄			15428 Aug 21 19:40	0°♄		
	15426 Feb 10 01:00	0°♄		evening max el	15428 Sep 11 17:25	22°♄11'36	46°40'22	
	15426 Mar 06 23:00	0°♄			15428 Sep 19 17:55	0°♄		
	15426 Mar 31 14:20	0°♄		desc. node	15428 Oct 19 09:42	21°♄47'43		
	15426 Apr 25 01:17	0°♄		greatest brilliancy	15428 Oct 21 04:51	22°♄32'12	-4.8m	
desc. node	15426 May 04 21:48	12°♄08'25		retrograde	15428 Nov 01 01:20	24°♄43'51		
morning set	15426 May 19 00:31	29°♄35'03		evening set	15428 Nov 17 10:25	19°♄34'37		
	15426 May 19 08:35	0°♄		min. Earth dist.	15428 Nov 21 09:24	17°♄12'42	0.27846 AU	
	15426 Jun 12 12:25	0°♄		inferior conj	15428 Nov 22 05:12	16°♄42'15	-7°23'07	
max. Earth dist.	15426 Jun 24 13:44	15°♄01'46	1.71956 AU	minimum elong	15428 Nov 21 18:51	16°♄58'10	7°20'23	
				morning rise	15428 Nov 26 03:35	14°♄19'44		
superior conj	15426 Jun 27 13:01	18°♄44'12	-1°27'25	direct	15428 Dec 13 04:19	8°♄49'51		
minimum elong	15426 Jun 27 11:16	18°♄38'44	1°28'18	greatest brilliancy	15428 Dec 22 17:40	10°♄29'27	-4.8m	
	15426 Jul 06 13:25	0°♄			15429 Jan 21 09:02	0°♄		
	15426 Jul 30 12:51	0°♄		morning max el	15429 Jan 31 06:11	9°♄09'08	45°50'39	
evening rise	15426 Aug 06 09:55	8°♄36'30		asc. node	15429 Feb 09 11:41	18°♄21'11		
	15426 Aug 23 12:16	0°♄			15429 Feb 20 13:43	0°♄		
asc. node	15426 Aug 25 12:23	2°♄30'21			15429 Mar 19 10:45	0°♄		
	15426 Sep 16 13:11	0°♄			15429 Apr 14 02:10	0°♄		
	15426 Oct 10 17:23	0°♄			15429 May 09 02:29	0°♄		
	15426 Nov 04 03:53	0°♄		desc. node	15429 Jun 01 10:45	28°♄26'33		
	15426 Nov 29 01:51	0°♄			15429 Jun 02 17:14	0°♄		
desc. node	15426 Dec 15 05:16	18°♄57'27			15429 Jun 27 01:00	0°♄		
	15426 Dec 24 19:55	0°♄			15429 Jul 21 03:43	0°♄		
	15427 Jan 21 03:49	0°♄		morning set	15429 Aug 01 05:17	13°♄49'24		
evening max el	15427 Feb 04 18:30	14°♄44'41	45°59'45		15429 Aug 14 03:27	0°♄		
	15427 Feb 21 21:26	0°♄			15429 Sep 07 02:01	0°♄		
greatest brilliancy	15427 Mar 15 19:35	13°♄19'07	-4.8m					
retrograde	15427 Mar 25 20:12	15°♄09'49		superior conj	15429 Sep 09 22:25	3°♄34'21	-0°29'19	
asc. node	15427 Apr 07 04:28	12°♄08'54		minimum elong	15429 Sep 10 05:32	3°♄56'37	0°29'00	
evening set	15427 Apr 09 17:43	10°♄50'41		max. Earth dist.	15429 Sep 10 00:30	3°♄40'52	1.71545 AU	
inferior conj	15427 Apr 16 01:50	7°♄02'28	2°11'57	asc. node	15429 Sep 22 02:33	18°♄49'30		
minimum elong	15427 Apr 15 20:58	7°♄10'06	2°09'59		15429 Oct 01 00:43	0°♄		
min. Earth dist.	15427 Apr 16 02:21	7°♄01'39	0.28285 AU	evening rise	15429 Oct 19 06:52	22°♄50'11		
morning rise	15427 Apr 21 23:55	3°♄27'11			15429 Oct 25 00:34	0°♄		
	15427 Apr 29 19:41	30°♄			15429 Nov 18 03:02	0°♄		
direct	15427 May 07 05:56	28°♄52'54			15429 Dec 12 10:26	0°♄		
	15427 May 14 22:54	0°♄			15430 Jan 06 01:42	0°♄		
greatest brilliancy	15427 May 17 17:26	0°♄54'15	-4.8m	desc. node	15430 Jan 11 18:00	6°♄50'42		
	15427 Jun 25 11:07	0°♄			15430 Jan 31 03:50	0°♄		
morning max el	15427 Jun 26 01:10	0°♄34'45	46°29'33		15430 Feb 25 20:53	0°♄		
	15427 Jul 23 15:07	0°♄			15430 Mar 24 14:49	0°♄		
desc. node	15427 Jul 28 07:15	5°♄17'11		evening max el	15430 Apr 17 00:25	24°♄19'55	46°07'18	
	15427 Aug 18 13:25	0°♄			15430 Apr 22 22:46	0°♄		
	15427 Sep 12 13:41	0°♄		asc. node	15430 May 04 14:20	10°♄12'22		
	15427 Oct 07 03:45	0°♄		greatest brilliancy	15430 May 26 21:05	23°♄48'30	-4.8m	
	15427 Oct 31 12:58	0°♄		retrograde	15430 Jun 05 12:36	25°♄32'36		
asc. node	15427 Nov 18 04:05	21°♄46'33		evening set	15430 Jun 23 12:32	19°♄20'28		
	15427 Nov 24 19:36	0°♄		inferior conj	15430 Jun 26 08:28	17°♄35'34	9°03'45	
	15427 Dec 19 00:42	0°♄		minimum elong	15430 Jun 26 06:05	17°♄39'17	9°02'46	
morning set	15427 Dec 27 20:18	10°♄56'04		min. Earth dist.	15430 Jun 26 16:18	17°♄23'22	0.27844 AU	
	15428 Jan 12 05:25	0°♄		morning rise	15430 Jun 28 23:35	15°♄57'53		
				direct	15430 Jul 17 08:53	9°♄30'59		
superior conj	15428 Feb 02 19:59	26°♄44'59	1°12'05	greatest brilliancy	15430 Jul 27 10:05	11°♄25'46	-4.9m	
minimum elong	15428 Feb 03 05:16	27°♄13'39	1°12'24		15430 Aug 23 22:44	0°♄		
max. Earth dist.	15428 Feb 04 14:33	28°♄56'32	1.72989 AU	desc. node	15430 Aug 24 16:47	0°♄40'34		
	15428 Feb 05 11:06	0°♄		morning max el	15430 Sep 05 21:52	12°♄22'05	46°56'36	
	15428 Feb 29 18:39	0°♄			15430 Sep 22 16:01	0°♄		
desc. node	15428 Mar 08 19:48	9°♄54'28			15430 Oct 19 04:58	0°♄		
evening rise	15428 Mar 11 12:34	13°♄13'39			15430 Nov 13 16:19	0°♄		
	15428 Mar 25 03:59	0°♄			15430 Dec 08 15:36	0°♄		
	15428 Apr 18 14:19	0°♄		asc. node	15430 Dec 15 16:23	8°♄31'14		

	15431 Jan 02 07:43	0° Z			15433 Jul 25 17:09	0° L	
	15431 Jan 26 19:20	0° \approx		greatest brilliancy	15433 Aug 07 21:34	7° L 00'22	-4.9m
	15431 Feb 20 04:32	0° H		retrograde	15433 Aug 17 19:06	8° L 50'05	
morning set	15431 Mar 06 21:04	18° H 05'59		evening set	15433 Sep 01 21:37	4° L 23'23	
	15431 Mar 16 12:45	0° Y		inferior conj	15433 Sep 07 10:45	1° L 07'10	3°29'35
desc. node	15431 Apr 06 09:54	25° Y 45'41		minimum elong	15433 Sep 07 18:26	0° L 55'25	3°27'09
	15431 Apr 09 20:19	0° B		min. Earth dist.	15433 Sep 07 19:23	0° L 53'59	0.26941 AU
max. Earth dist.	15431 Apr 12 12:50	3° B 19'08	1.72947 AU		15433 Sep 09 06:50	30° R M	
				morning rise	15433 Sep 13 15:08	27° M 29'53	
superior conj	15431 Apr 13 17:19	4° B 47'05	-0°17'40	desc. node	15433 Sep 21 02:01	24° M 22'10	
minimum elong	15431 Apr 13 13:08	4° B 34'12	0°17'54	direct	15433 Sep 28 04:42	23° M 20'59	
	15431 May 04 02:44	0° II		greatest brilliancy	15433 Oct 08 07:24	25° M 14'40	-4.9m
evening rise	15431 May 22 03:58	22° II 22'00			15433 Oct 17 23:14	0° L	
	15431 May 28 07:36	0° E		morning max el	15433 Nov 17 02:50	25° L 04'02	46°31'52
	15431 Jun 21 11:20	0° O			15433 Nov 22 01:21	0° M	
	15431 Jul 15 15:21	0° M			15433 Dec 20 00:17	0° X	
asc. node	15431 Jul 28 00:14	15° M 19'12		asc. node	15434 Jan 12 03:36	26° X 27'16	
	15431 Aug 08 21:41	0° L			15434 Jan 15 04:33	0° Z	
	15431 Sep 02 09:11	0° M			15434 Feb 09 12:54	0° \approx	
	15431 Sep 27 06:53	0° X			15434 Mar 06 10:14	0° H	
	15431 Oct 23 01:31	0° Z			15434 Mar 31 01:10	0° Y	
desc. node	15431 Nov 16 19:55	26° Z 52'53			15434 Apr 24 11:56	0° B	
	15431 Nov 19 21:30	0° \approx		desc. node	15434 May 03 23:44	11° B 41'42	
evening max el	15431 Nov 23 09:17	3° \approx 28'27	46°19'45	morning set	15434 May 16 14:07	27° B 15'54	
	15431 Dec 26 16:37	0° H			15434 May 18 19:07	0° II	
greatest brilliancy	15432 Jan 01 18:23	2° H 40'04	-4.8m		15434 Jun 11 22:55	0° E	
retrograde	15432 Jan 11 22:43	4° H 32'54		max. Earth dist.	15434 Jun 22 01:09	12° E 34'55	1.71991 AU
	15432 Jan 27 06:02	30° R \approx					
evening set	15432 Jan 29 09:55	28° \approx 45'04		superior conj	15434 Jun 25 02:06	16° E 22'27	-1°27'03
inferior conj	15432 Feb 02 08:28	26° \approx 19'11	-7°24'38	minimum elong	15434 Jun 24 23:21	16° E 13'53	1°27'56
minimum elong	15432 Feb 02 18:18	26° \approx 03'48	7°22'22		15434 Jul 05 23:56	0° O	
min. Earth dist.	15432 Feb 02 11:10	26° \approx 14'57	0.28693 AU		15434 Jul 29 23:26	0° M	
morning rise	15432 Feb 07 02:48	23° \approx 24'51		evening rise	15434 Aug 03 21:51	6° M 10'26	
direct	15432 Feb 23 16:22	18° \approx 10'24			15434 Aug 22 22:59	0° L	
greatest brilliancy	15432 Mar 05 04:39	20° \approx 11'58	-4.8m	asc. node	15434 Aug 24 14:07	2° L 02'15	
asc. node	15432 Mar 08 20:56	21° \approx 44'51			15434 Sep 16 00:06	0° M	
	15432 Mar 22 05:21	0° H			15434 Oct 10 04:34	0° X	
morning max el	15432 Apr 12 20:27	18° H 55'31	45°49'45		15434 Nov 03 15:31	0° Z	
	15432 Apr 23 19:23	0° Y			15434 Nov 28 14:18	0° \approx	
	15432 May 21 04:00	0° B		desc. node	15434 Dec 14 07:17	18° \approx 24'39	
	15432 Jun 15 21:58	0° II			15434 Dec 24 09:59	0° H	
desc. node	15432 Jun 28 22:34	15° II 34'20			15435 Jan 20 21:48	0° Y	
	15432 Jul 10 20:41	0° E		evening max el	15435 Feb 02 08:45	12° Y 29'56	46°00'04
	15432 Aug 04 08:10	0° O			15435 Feb 22 08:33	0° B	
	15432 Aug 28 13:16	0° M		greatest brilliancy	15435 Mar 13 10:39	11° B 05'47	-4.8m
	15432 Sep 21 15:15	0° L		retrograde	15435 Mar 23 11:17	12° B 56'50	
morning set	15432 Oct 13 23:54	27° L 54'41		asc. node	15435 Apr 06 06:28	9° B 12'13	
	15432 Oct 15 16:03	0° M		evening set	15435 Apr 07 08:42	8° B 37'24	
asc. node	15432 Oct 19 16:35	5° M 01'19		inferior conj	15435 Apr 13 17:11	4° B 49'03	1°50'44
	15432 Nov 08 16:41	0° X		minimum elong	15435 Apr 13 13:04	4° B 55'30	1°49'03
				min. Earth dist.	15435 Apr 13 18:16	4° B 47'21	0.28300 AU
superior conj	15432 Nov 21 17:36	16° X 15'55	1°09'41	morning rise	15435 Apr 19 17:06	1° B 11'24	
minimum elong	15432 Nov 21 07:33	15° X 44'36	1°10'15		15435 Apr 21 23:01	30° R Y	
max. Earth dist.	15432 Nov 23 21:40	18° X 58'12	1.72161 AU	direct	15435 May 04 21:04	26° Y 39'05	
	15432 Dec 02 18:05	0° Z		greatest brilliancy	15435 May 15 10:09	28° Y 41'58	-4.8m
	15432 Dec 26 21:36	0° \approx			15435 May 18 13:09	0° B	
evening rise	15432 Dec 29 04:18	2° \approx 49'26		morning max el	15435 Jun 23 16:20	28° B 19'36	46°28'15
	15433 Jan 20 04:48	0° H			15435 Jun 25 08:37	0° II	
desc. node	15433 Feb 08 07:28	23° H 25'19			15435 Jul 23 06:32	0° E	
	15433 Feb 13 16:52	0° Y		desc. node	15435 Jul 27 09:08	4° E 40'00	
	15433 Mar 10 10:07	0° B			15435 Aug 18 02:39	0° O	
	15433 Apr 04 08:55	0° II			15435 Sep 12 01:50	0° M	
	15433 Apr 29 15:39	0° E			15435 Oct 06 15:18	0° L	
	15433 May 25 14:06	0° O			15435 Oct 31 00:07	0° M	
asc. node	15433 Jun 01 01:04	7° O 16'02		asc. node	15435 Nov 17 06:01	21° M 18'44	
	15433 Jun 22 02:29	0° M			15435 Nov 24 06:27	0° X	
evening max el	15433 Jun 28 20:32	6° M 50'52	46°32'01		15435 Dec 18 11:20	0° Z	

morning set	15435 Dec 25 12:07	8°  43'23		min. Earth dist.	15438 Jun 24 05:25	15°  04'49	0.27870 AU
	15436 Jan 11 15:55	0° 		morning rise	15438 Jun 26 14:31	13°  36'22	
				direct	15438 Jul 14 23:42	7°  10'41	
superior conj	15436 Jan 31 12:24	24°  34'58	1°13'55	greatest brilliancy	15438 Jul 24 23:44	9°  04'21	-4.9m
minimum elong	15436 Jan 31 21:22	25°  02'40	1°14'17	desc. node	15438 Aug 23 18:39	29°  40'27	
max. Earth dist.	15436 Feb 02 08:44	26°  52'02	1.72972 AU		15438 Aug 24 03:10	0° 	
	15436 Feb 04 21:34	0° 		morning max el	15438 Sep 03 12:15	10°  01'32	46°56'31
	15436 Feb 29 05:11	0° 			15438 Sep 22 09:39	0° 	
desc. node	15436 Mar 07 21:31	9°  02'19			15438 Oct 18 19:21	0° 	
evening rise	15436 Mar 09 04:29	11°  02'32			15438 Nov 13 05:07	0° 	
	15436 Mar 24 14:39	0° 			15438 Dec 08 03:28	0° 	
	15436 Apr 18 01:14	0° 		asc. node	15438 Dec 14 18:16	8°  01'27	
	15436 May 12 12:40	0° 			15439 Jan 01 19:02	0° 	
	15436 Jun 06 02:14	0° 			15439 Jan 26 06:19	0° 	
asc. node	15436 Jun 28 12:59	27°  01'39			15439 Feb 19 15:20	0° 	
	15436 Jun 30 21:20	0° 		morning set	15439 Mar 04 13:53	15°  05'55	
	15436 Jul 26 04:14	0° 			15439 Mar 15 23:27	0° 	
	15436 Aug 21 12:39	0° 		desc. node	15439 Apr 05 11:49	25°  01'38	
evening max el	15436 Sep 09 08:10	19°  05'57	46°40'43		15439 Apr 09 07:00	0° 	
	15436 Sep 19 20:30	0° 		max. Earth dist.	15439 Apr 10 05:37	1°  09'49	1.72966 AU
desc. node	15436 Oct 18 11:41	20°  05'36					
greatest brilliancy	15436 Oct 18 18:26	20°  12'12	-4.8m	superior conj	15439 Apr 11 08:30	2°  32'46	-0°14'13
retrograde	15436 Oct 29 16:22	22°  25'13		minimum elong	15439 Apr 11 05:07	2°  22'20	0°14'27
evening set	15436 Nov 14 20:47	17°  21'27		behind sun begin	15439 Apr 10 18:48	1°  50'29	
min. Earth dist.	15436 Nov 18 23:03	14°  55'06	0.27796 AU	behind sun end	15439 Apr 11 15:26	2°  54'11	
inferior conj	15436 Nov 19 19:15	14°  24'07	-7°09'56		15439 May 03 13:29	0° 	
minimum elong	15436 Nov 19 08:38	14°  40'24	7°07'04	evening rise	15439 May 19 18:16	20°  03'55	
morning rise	15436 Nov 23 20:51	11°  57'19			15439 May 27 18:29	0° 	
direct	15436 Dec 10 18:18	6°  32'17			15439 Jun 20 22:25	0° 	
greatest brilliancy	15436 Dec 20 06:53	8°  11'43	-4.8m		15439 Jul 15 02:43	0° 	
	15437 Jan 21 12:09	0° 		asc. node	15439 Jul 27 02:00	14°  04'58	
morning max el	15437 Jan 28 21:28	6°  55'37	45°51'32		15439 Aug 08 09:26	0° 	
asc. node	15437 Feb 08 13:30	17°  36'24			15439 Sep 01 21:32	0° 	
	15437 Feb 20 06:28	0° 			15439 Sep 26 20:16	0° 	
	15437 Mar 19 00:25	0° 			15439 Oct 22 16:59	0° 	
	15437 Apr 13 14:28	0° 		desc. node	15439 Nov 15 21:56	26°  06'46	
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desc. node	15437 May 31 12:38	27°  05'01		evening max el	15439 Nov 21 00:13	1°  13'03	46°20'39
	15437 Jun 02 04:24	0° 			15439 Dec 29 03:51	0° 	
	15437 Jun 26 11:56	0° 		greatest brilliancy	15439 Dec 30 10:09	0°  28'15	-4.8m
	15437 Jul 20 14:32	0° 		retrograde	15440 Jan 09 13:50	2°  04'40	
morning set	15437 Jul 29 17:37	11°  02'40'9			15440 Jan 20 10:55	30° 	
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				minimum elong	15440 Jan 31 09:42	23°  52'18	7°33'50
superior conj	15437 Sep 07 10:53	1°  09'25	-0°32'53	min. Earth dist.	15440 Jan 31 02:26	24°  03'41	0.28693 AU
minimum elong	15437 Sep 07 18:45	1°  34'06	0°32'35	morning rise	15440 Feb 04 14:57	21°  51'47	
max. Earth dist.	15437 Sep 07 14:06	1°  19'31	1.71536 AU	direct	15440 Feb 21 07:55	15°  58'46	
asc. node	15437 Sep 21 04:23	18°  02'14'9		greatest brilliancy	15440 Mar 02 19:31	17°  59'11	-4.8m
	15437 Sep 30 11:24	0° 		asc. node	15440 Mar 07 22:57	20°  14'39	
evening rise	15437 Oct 16 21:13	20°  03'14'1			15440 Mar 22 18:10	0° 	
	15437 Oct 24 11:17	0° 		morning max el	15440 Apr 10 10:49	16°  39'35	45°48'52
	15437 Nov 17 13:52	0° 			15440 Apr 23 13:48	0° 	
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	15438 Jan 05 13:16	0° 			15440 Jun 15 10:49	0° 	
desc. node	15438 Jan 10 19:45	6°  02'52		desc. node	15440 Jun 28 00:25	15°  02'37	
	15438 Jan 30 16:10	0° 			15440 Jul 10 08:43	0° 	
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	15438 Mar 24 07:31	0° 			15440 Aug 28 00:34	0° 	
evening max el	15438 Apr 14 15:47	22°  05'09	46°06'34		15440 Sep 21 02:21	0° 	
	15438 Apr 23 00:48	0° 		morning set	15440 Oct 11 13:16	25°  03'21'9	
asc. node	15438 May 03 16:22	9°  05'39			15440 Oct 15 03:00	0° 	
greatest brilliancy	15438 May 24 10:08	21°  08'33	-4.8m	asc. node	15440 Oct 18 18:29	4°  03'08	
retrograde	15438 Jun 03 02:32	23° 02'57			15440 Nov 08 03:32	0°	
evening set	15438 Jun 21 00:08	17° 04'28					
inferior conj	15438 Jun 23 22:37	15° 05'28	9°00'37	superior conj	15440 Nov 19 08:40	13° 59'34	1°07'31
minimum elong	15438 Jun 23 19:21	15° 02'03'3	8°59'35	minimum elong	15440 Nov 18 22:24	13° 27'32	1°08'02




































































































































max. Earth dist.	15440 Nov 21 10:17	16° ♊ 34'15	1.72125 AU	direct	15443 May 02 12:53	24° ♊ 25'14	
	15440 Dec 02 04:53	0° ♊		greatest brilliancy	15443 May 13 02:30	26° ♊ 29'04	-4.8m
	15440 Dec 26 08:23	0° \approx			15443 May 20 12:31	0° ♊	
evening rise	15440 Dec 26 20:07	0° \approx 36'20		morning max el	15443 Jun 21 08:15	26° ♊ 05'41	46°26'40
	15441 Jan 19 15:42	0° ♋			15443 Jun 25 05:37	0° ♋	
desc. node	15441 Feb 07 09:17	22° ♋ 57'02			15443 Jul 22 22:03	0° ♋	
	15441 Feb 13 04:00	0° ♌		desc. node	15443 Jul 26 11:01	4° ♋ 02'09	
	15441 Mar 09 21:42	0° ♌			15443 Aug 17 16:07	0° ♌	
	15441 Apr 03 21:11	0° ♍			15443 Sep 11 14:17	0° ♍	
	15441 Apr 29 05:05	0° ♍			15443 Oct 06 03:07	0° ♍	
	15441 May 25 05:41	0° ♎			15443 Oct 30 11:32	0° ♎	
asc. node	15441 May 31 02:57	6° ♎ 35'33		asc. node	15443 Nov 16 07:48	20° ♎ 49'41	
	15441 Jun 21 23:27	0° ♏			15443 Nov 23 17:34	0° ♏	
evening max el	15441 Jun 26 08:39	4° ♏ 24'42	46°31'13		15443 Dec 17 22:14	0° ♏	
	15441 Jul 27 00:16	0° ♏		morning set	15443 Dec 23 03:48	6° ♏ 29'26	
greatest brilliancy	15441 Aug 05 12:01	4° ♏ 36'49	-4.9m		15444 Jan 11 02:42	0° \approx	
retrograde	15441 Aug 15 07:24	6° ♏ 25'13					
evening set	15441 Aug 30 13:04	1° ♏ 54'34		superior conj	15444 Jan 29 04:49	22° \approx 24'00	1°15'38
	15441 Sep 02 20:23	30° ♏		minimum elong	15444 Jan 29 13:25	22° \approx 50'36	1°16'03
inferior conj	15441 Sep 04 23:33	28° ♏ 42'17	3°51'52	max. Earth dist.	15444 Jan 31 03:45	24° \approx 49'10	1.72952 AU
minimum elong	15441 Sep 05 07:54	28° ♏ 29'31	3°49'15		15444 Feb 04 08:19	0° ♋	
min. Earth dist.	15441 Sep 05 09:42	28° ♏ 26'46	0.26956 AU		15444 Feb 28 15:58	0° ♌	
morning rise	15441 Sep 11 02:31	25° ♏ 06'40		evening rise	15444 Mar 06 20:29	8° ♌ 50'53	
desc. node	15441 Sep 20 04:05	21° ♏ 32'30		desc. node	15444 Mar 06 23:27	9° ♌ 00'02	
direct	15441 Sep 25 17:02	20° ♏ 55'14			15444 Mar 24 01:33	0° ♌	
greatest brilliancy	15441 Oct 05 21:38	22° ♏ 50'37	-4.9m		15444 Apr 17 12:20	0° ♍	
	15441 Oct 19 05:52	0° ♏			15444 May 12 00:06	0° ♍	
morning max el	15441 Nov 14 16:13	22° ♏ 41'24	46°33'27		15444 Jun 05 14:14	0° ♎	
	15441 Nov 21 22:31	0° ♏		asc. node	15444 Jun 27 14:46	26° ♏ 37'34	
	15441 Dec 19 15:57	0° ♏			15444 Jun 30 10:14	0° ♏	
asc. node	15442 Jan 11 05:23	25° ♏ 52'50			15444 Jul 25 18:41	0° ♏	
	15442 Jan 14 17:56	0° ♏			15444 Aug 21 06:23	0° ♏	
	15442 Feb 09 01:06	0° \approx		evening max el	15444 Sep 06 23:28	17° ♏ 34'33	46°41'00
	15442 Mar 05 21:45	0° ♋			15444 Sep 20 01:18	0° ♏	
	15442 Mar 30 12:19	0° ♌		greatest brilliancy	15444 Oct 16 07:59	17° ♏ 50'48	-4.8m
	15442 Apr 23 22:53	0° ♌		desc. node	15444 Oct 17 13:39	18° ♏ 18'09	
desc. node	15442 May 03 01:36	11° ♌ 13'49		retrograde	15444 Oct 27 07:15	20° ♏ 04'39	
morning set	15442 May 14 03:49	24° ♌ 56'02		evening set	15444 Nov 12 07:01	15° ♏ 06'36	
	15442 May 18 06:01	0° ♍		min. Earth dist.	15444 Nov 16 12:23	12° ♏ 35'50	0.27744 AU
	15442 Jun 11 09:49	0° ♍		inferior conj	15444 Nov 17 09:00	12° ♏ 04'15	-6°55'59
max. Earth dist.	15442 Jun 19 14:10	10° ♍ 11'49	1.72029 AU	minimum elong	15444 Nov 16 22:12	12° ♏ 20'48	6°52'58
				morning rise	15444 Nov 21 13:50	9° ♏ 33'05	
superior conj	15442 Jun 22 14:59	13° ♍ 58'55	-1°26'30	direct	15444 Dec 08 08:19	4° ♏ 13'15	
minimum elong	15442 Jun 22 11:18	13° ♍ 47'23	1°27'23	greatest brilliancy	15444 Dec 17 19:27	5° ♏ 51'56	-4.8m
	15442 Jul 05 10:51	0° ♎			15445 Jan 21 14:03	0° ♏	
	15442 Jul 29 10:25	0° ♏		morning max el	15445 Jan 26 12:07	4° ♏ 39'52	45°52'25
evening rise	15442 Aug 01 09:35	3° ♏ 42'36		asc. node	15445 Feb 07 15:33	16° ♏ 52'10	
	15442 Aug 22 10:06	0° ♏			15445 Feb 19 23:07	0° \approx	
asc. node	15442 Aug 23 15:57	1° ♏ 33'15			15445 Mar 18 14:08	0° ♋	
	15442 Sep 15 11:24	0° ♏			15445 Apr 13 02:49	0° ♌	
	15442 Oct 09 16:10	0° ♏			15445 May 08 01:40	0° ♌	
	15442 Nov 03 03:35	0° ♏		desc. node	15445 May 30 14:27	27° ♏ 29'12	
	15442 Nov 28 03:13	0° \approx			15445 Jun 01 15:36	0° ♍	
desc. node	15442 Dec 13 09:06	17° \approx 49'54			15445 Jun 25 22:54	0° ♍	
	15442 Dec 24 00:37	0° ♋			15445 Jul 20 01:24	0° ♎	
	15443 Jan 20 16:39	0° ♌		morning set	15445 Jul 27 05:54	8° ♎ 58'42	
evening max el	15443 Jan 30 23:53	10° ♌ 16'38	46°00'35		15445 Aug 13 01:01	0° ♏	
	15443 Feb 22 23:55	0° ♌					
greatest brilliancy	15443 Mar 11 01:17	8° ♌ 51'44	-4.8m	superior conj	15445 Sep 04 23:03	28° ♏ 43'14	-0°36'25
retrograde	15443 Mar 21 02:59	10° ♌ 43'41		minimum elong	15445 Sep 05 07:38	29° ♏ 10'10	0°36'08
evening set	15443 Apr 05 00:04	6° ♌ 23'47		max. Earth dist.	15445 Sep 05 01:50	28° ♏ 51'58	1.71532 AU
asc. node	15443 Apr 05 08:26	6° ♌ 12'17			15445 Sep 05 23:32	0° ♏	
inferior conj	15443 Apr 11 08:40	2° ♌ 35'22	1°29'37	asc. node	15445 Sep 20 06:18	17° ♏ 53'58	
minimum elong	15443 Apr 11 05:19	2° ♌ 40'37	1°28'10		15445 Sep 29 22:13	0° ♏	
min. Earth dist.	15443 Apr 11 09:56	2° ♌ 33'24	0.28315 AU	evening rise	15445 Oct 14 11:00	18° ♏ 10'55	
	15443 Apr 15 13:38	30° ♌			15445 Oct 23 22:07	0° ♏	
morning rise	15443 Apr 17 10:17	28° ♌ 55'46			15445 Nov 17 00:50	0° ♏	

	15445 Dec 11 08:46	0°♊			15448 May 20 08:30	0°♎		
	15446 Jan 05 00:56	0°♋			15448 Jun 14 23:18	0°♌		
desc. node	15446 Jan 09 21:37	5°♋51'00		desc. node	15448 Jun 27 02:16	14°♌31'58		
	15446 Jan 30 04:37	0°♌			15448 Jul 09 20:24	0°♍		
	15446 Feb 25 00:31	0°♎			15448 Aug 03 06:57	0°♎		
	15446 Mar 24 00:35	0°♏			15448 Aug 27 11:27	0°♐		
evening max el	15446 Apr 12 06:28	19°♏48'49	46°05'56		15448 Sep 20 13:01	0°♑		
	15446 Apr 23 04:18	0°♑		morning set	15448 Oct 09 02:53	23°♑11'56		
asc. node	15446 May 02 18:18	7°♑57'12			15448 Oct 14 13:32	0°♒		
greatest brilliancy	15446 May 21 23:55	19°♑10'00	-4.8m	asc. node	15448 Oct 17 20:13	4°♒05'40		
retrograde	15446 May 31 16:09	20°♑54'11			15448 Nov 07 14:01	0°♓		
evening set	15446 Jun 18 11:33	14°♑50'06						
inferior conj	15446 Jun 21 12:56	12°♑56'27	8°56'40	superior conj	15448 Nov 16 23:46	11°♓44'23	1°05'15	
minimum elong	15446 Jun 21 08:48	13°♑02'56	8°55'32	minimum elong	15448 Nov 16 13:19	11°♓11'50	1°05'43	
min. Earth dist.	15446 Jun 21 18:59	12°♑46'59	0.27892 AU	max. Earth dist.	15448 Nov 18 21:48	14°♓07'59	1.72098 AU	
morning rise	15446 Jun 24 06:00	11°♑15'20			15448 Dec 01 15:20	0°♔		
direct	15446 Jul 12 14:10	4°♑51'31		evening rise	15448 Dec 24 11:48	28°♔23'45		
greatest brilliancy	15446 Jul 22 13:59	6°♑44'33	-4.9m		15448 Dec 25 18:52	0°♕		
desc. node	15446 Aug 22 20:45	28°♑42'55			15449 Jan 19 02:18	0°♋		
	15446 Aug 24 05:38	0°♎		desc. node	15449 Feb 06 11:09	22°♋29'48		
morning max el	15446 Sep 01 01:32	7°♎38'44	46°56'11		15449 Feb 12 14:52	0°♌		
	15446 Sep 22 02:46	0°♐			15449 Mar 09 09:00	0°♎		
	15446 Oct 18 09:29	0°♑			15449 Apr 03 09:12	0°♏		
	15446 Nov 12 17:47	0°♒			15449 Apr 28 18:17	0°♑		
	15446 Dec 07 15:17	0°♓			15449 May 24 21:09	0°♎		
asc. node	15446 Dec 13 20:06	7°♓31'39		asc. node	15449 May 30 04:48	5°♎55'38		
	15447 Jan 01 06:17	0°♔			15449 Jun 21 20:46	0°♐		
	15447 Jan 25 17:13	0°♕		evening max el	15449 Jun 23 21:08	2°♐00'45	46°30'32	
	15447 Feb 19 02:01	0°♋			15449 Jul 28 20:55	0°♑		
morning set	15447 Mar 02 06:24	13°♋47'08		greatest brilliancy	15449 Aug 03 01:56	2°♑14'11	-4.9m	
	15447 Mar 15 10:02	0°♌		retrograde	15449 Aug 12 20:22	4°♑02'09		
desc. node	15447 Apr 04 13:37	24°♌51'38			15449 Aug 27 04:20	30°♒♐		
max. Earth dist.	15447 Apr 07 20:46	28°♌55'50	1.72985 AU	evening set	15449 Aug 28 04:43	29°♐27'08		
				inferior conj	15449 Sep 02 12:23	26°♐18'57	4°13'40	
superior conj	15447 Apr 08 23:35	0°♎18'34	-0°10'44	minimum elong	15449 Sep 02 21:22	26°♐05'15	4°10'54	
minimum elong	15447 Apr 08 21:01	0°♎10'38	0°10'59	min. Earth dist.	15449 Sep 02 23:40	26°♐01'45	0.26970 AU	
behind sun begin	15447 Apr 08 03:28	29°♌16'29		morning rise	15449 Sep 08 13:44	22°♐45'40		
behind sun end	15447 Apr 09 14:33	1°♎04'47		desc. node	15449 Sep 19 05:59	18°♐50'34		
	15447 Apr 08 17:34	0°♎		direct	15449 Sep 23 05:44	18°♐31'10		
	15447 May 03 00:06	0°♏		greatest brilliancy	15449 Oct 03 11:20	20°♐27'51	-4.9m	
evening rise	15447 May 17 08:38	17°♏46'35			15449 Oct 20 03:09	0°♑		
	15447 May 27 05:12	0°♑		morning max el	15449 Nov 12 06:28	20°♑22'41	46°34'58	
	15447 Jun 20 09:18	0°♎			15449 Nov 21 18:18	0°♒		
	15447 Jul 14 13:50	0°♐			15449 Dec 19 06:48	0°♓		
asc. node	15447 Jul 26 03:55	14°♐20'01		asc. node	15450 Jan 10 07:23	25°♓20'44		
	15447 Aug 07 20:56	0°♑			15450 Jan 14 06:44	0°♔		
	15447 Sep 01 09:41	0°♒			15450 Feb 08 12:49	0°♕		
	15447 Sep 26 09:31	0°♓			15450 Mar 05 08:52	0°♋		
	15447 Oct 22 08:30	0°♔			15450 Mar 29 23:04	0°♌		
desc. node	15447 Nov 14 23:46	25°♔19'48			15450 Apr 23 09:28	0°♎		
evening max el	15447 Nov 18 14:07	28°♔55'13	46°21'24	desc. node	15450 May 02 03:18	10°♎46'37		
	15447 Nov 19 16:31	0°♕		morning set	15450 May 11 17:20	22°♎36'57		
greatest brilliancy	15447 Dec 28 01:46	28°♕15'59	-4.8m		15450 May 17 16:31	0°♏		
	15448 Jan 04 12:34	0°♋			15450 Jun 10 20:18	0°♑		
retrograde	15448 Jan 07 04:40	0°♋08'14		max. Earth dist.	15450 Jun 17 04:39	7°♑54'35	1.72066 AU	
	15448 Jan 09 20:00	30°♒♊						
evening set	15448 Jan 24 22:51	24°♒12'17		superior conj	15450 Jun 20 03:41	11°♑36'04	-1°25'48	
inferior conj	15448 Jan 28 15:41	21°♒54'58	-7°46'39	minimum elong	15450 Jun 19 23:04	11°♑21'40	1°26'40	
minimum elong	15448 Jan 29 00:47	21°♒40'42	7°44'40		15450 Jul 04 21:22	0°♎		
min. Earth dist.	15448 Jan 28 17:37	21°♒51'57	0.28691 AU		15450 Jul 28 21:01	0°♐		
morning rise	15448 Feb 02 02:47	19°♒10'45		evening rise	15450 Jul 29 21:19	1°♐16'01		
direct	15448 Feb 18 22:51	13°♒46'46		greatest brilliancy	15450 Aug 01 00:13	3°♐55'12	-3.9m	
greatest brilliancy	15448 Feb 29 10:39	15°♒46'51	-4.8m		15450 Aug 21 20:48	0°♑		
asc. node	15448 Mar 07 00:58	18°♒47'39		asc. node	15450 Aug 22 17:50	1°♑05'40		
	15448 Mar 23 03:27	0°♋			15450 Sep 14 22:15	0°♒		
morning max el	15448 Apr 08 00:52	14°♋23'25	45°48'09		15450 Oct 09 03:16	0°♓		
	15448 Apr 23 07:31	0°♌			15450 Nov 02 15:08	0°♔		

	15450 Nov 27 15:39	0°♊			15453 Jun 01 02:34	0°♊	
desc. node	15450 Dec 12 10:59	17°♊16'50			15453 Jun 25 09:41	0°♊	
	15450 Dec 23 14:53	0°♊			15453 Jul 19 12:04	0°♊	
	15451 Jan 20 11:31	0°♊	morning set		15453 Jul 24 17:57	6°♊33'08	
evening max el	15451 Jan 28 15:47	8°♊06'31 46°00'53			15453 Aug 12 11:38	0°♊	
	15451 Feb 23 20:01	0°♊					
greatest brilliancy	15451 Mar 08 15:46	6°♊38'31 -4.8m	superior conj		15453 Sep 02 11:07	26°♊17'26 -0°39'53	
retrograde	15451 Mar 18 18:42	8°♊31'06	minimum elong		15453 Sep 02 20:21	26°♊46'24 0°39'37	
evening set	15451 Apr 02 15:33	4°♊10'48	max. Earth dist.		15453 Sep 02 11:21	26°♊18'10 1.71527 AU	
asc. node	15451 Apr 04 10:21	3°♊10'12			15453 Sep 05 10:08	0°♊	
inferior conj	15451 Apr 09 00:02	0°♊22'20 1°08'14	asc. node		15453 Sep 19 07:59	17°♊26'02	
minimum elong	15451 Apr 08 21:28	0°♊26'20 1°07'03			15453 Sep 29 08:49	0°♊	
min. Earth dist.	15451 Apr 09 01:17	0°♊20'22 0.28331 AU	evening rise		15453 Oct 12 00:42	15°♊50'25	
	15451 Apr 09 14:17	30°♊			15453 Oct 23 08:48	0°♊	
morning rise	15451 Apr 15 03:12	26°♊40'56			15453 Nov 16 11:38	0°♊	
direct	15451 Apr 30 04:56	22°♊12'14			15453 Dec 10 19:48	0°♊	
greatest brilliancy	15451 May 10 18:11	24°♊16'11 -4.8m			15454 Jan 04 12:23	0°♊	
	15451 May 21 19:39	0°♊	desc. node		15454 Jan 08 23:34	5°♊22'07	
morning max el	15451 Jun 19 00:05	23°♊52'44 46°25'04			15454 Jan 29 16:52	0°♊	
	15451 Jun 25 01:31	0°♊			15454 Feb 24 14:17	0°♊	
	15451 Jul 22 12:57	0°♊			15454 Mar 23 17:45	0°♊	
desc. node	15451 Jul 25 13:04	3°♊26'17	evening max el		15454 Apr 09 20:14	17°♊30'48 46°05'06	
	15451 Aug 17 05:04	0°♊			15454 Apr 23 09:30	0°♊	
	15451 Sep 11 02:16	0°♊	asc. node		15454 May 01 20:10	6°♊47'04	
	15451 Oct 05 14:31	0°♊	greatest brilliancy		15454 May 19 13:56	16°♊51'50 -4.8m	
	15451 Oct 29 22:30	0°♊	retrograde		15454 May 29 05:27	18°♊35'39	
asc. node	15451 Nov 15 09:38	20°♊22'11	evening set		15454 Jun 15 22:33	12°♊36'17	
	15451 Nov 23 04:12	0°♊	inferior conj		15454 Jun 19 03:15	10°♊37'33 8°51'45	
	15451 Dec 17 08:39	0°♊	minimum elong		15454 Jun 18 22:17	10°♊45'21 8°50'29	
morning set	15451 Dec 20 19:53	4°♊18'13	min. Earth dist.		15454 Jun 19 08:53	10°♊28'44 0.27918 AU	
	15452 Jan 10 12:59	0°♊	morning rise		15454 Jun 21 21:56	8°♊53'47	
			direct		15454 Jul 10 04:14	2°♊32'09	
superior conj	15452 Jan 26 21:32	20°♊15'25 1°17'13	greatest brilliancy		15454 Jul 20 04:54	4°♊25'27 -4.9m	
minimum elong	15452 Jan 27 05:43	20°♊40'45 1°17'41	desc. node		15454 Aug 21 22:38	27°♊46'01	
max. Earth dist.	15452 Jan 29 00:23	22°♊52'45 1.72934 AU			15454 Aug 24 06:44	0°♊	
	15452 Feb 03 18:36	0°♊	morning max el		15454 Aug 29 14:22	5°♊14'34 46°55'57	
	15452 Feb 28 02:20	0°♊			15454 Sep 21 19:31	0°♊	
evening rise	15452 Mar 04 12:34	6°♊40'43			15454 Oct 17 23:26	0°♊	
desc. node	15452 Mar 06 01:14	8°♊33'29			15454 Nov 12 06:20	0°♊	
	15452 Mar 23 12:05	0°♊			15454 Dec 07 03:00	0°♊	
	15452 Apr 16 23:07	0°♊	asc. node		15454 Dec 12 22:02	7°♊02'19	
	15452 May 11 11:16	0°♊			15454 Dec 31 17:29	0°♊	
	15452 Jun 05 01:59	0°♊			15455 Jan 25 04:03	0°♊	
asc. node	15452 Jun 26 16:45	26°♊05'54			15455 Feb 18 12:38	0°♊	
	15452 Jun 29 22:54	0°♊	morning set		15455 Feb 27 23:19	11°♊38'48	
	15452 Jul 25 08:59	0°♊			15455 Mar 14 20:32	0°♊	
	15452 Aug 21 00:11	0°♊	desc. node		15455 Apr 03 15:21	24°♊24'36	
evening max el	15452 Sep 04 14:49	15°♊17'11 46°41'10	max. Earth dist.		15455 Apr 05 13:59	26°♊48'29 1.73004 AU	
	15452 Sep 20 07:46	0°♊					
greatest brilliancy	15452 Oct 13 22:14	15°♊31'11 -4.8m	superior conj		15455 Apr 06 15:08	28°♊06'07 -0°07'17	
desc. node	15452 Oct 16 15:33	16°♊27'31	minimum elong		15455 Apr 06 13:22	28°♊00'39 0°07'32	
retrograde	15452 Oct 24 21:50	17°♊44'53	behind sun begin		15455 Apr 05 16:09	26°♊55'08	
evening set	15452 Nov 09 17:28	12°♊52'42	behind sun end		15455 Apr 07 10:36	29°♊06'09	
min. Earth dist.	15452 Nov 14 02:04	10°♊17'15 0.27685 AU			15455 Apr 08 04:03	0°♊	
inferior conj	15452 Nov 14 22:46	9°♊45'29 -6°41'18			15455 May 02 10:41	0°♊	
minimum elong	15452 Nov 14 11:53	10°♊02'12 6°38'09	evening rise		15455 May 14 23:24	15°♊30'38	
morning rise	15452 Nov 19 06:48	7°♊09'48			15455 May 26 15:57	0°♊	
direct	15452 Dec 05 22:17	1°♊55'31			15455 Jun 19 20:17	0°♊	
greatest brilliancy	15452 Dec 15 08:05	3°♊33'14 -4.8m			15455 Jul 14 01:06	0°♊	
	15453 Jan 21 14:05	0°♊	asc. node		15455 Jul 25 05:45	13°♊50'14	
morning max el	15453 Jan 24 01:51	2°♊23'06 45°53'26			15455 Aug 07 08:38	0°♊	
asc. node	15453 Feb 06 17:31	16°♊09'43			15455 Aug 31 22:02	0°♊	
	15453 Feb 19 14:57	0°♊			15455 Sep 25 23:03	0°♊	
	15453 Mar 18 03:18	0°♊			15455 Oct 22 00:26	0°♊	
	15453 Apr 12 14:46	0°♊	desc. node		15455 Nov 14 01:43	24°♊32'03	
	15453 May 07 12:59	0°♊	evening max el		15455 Nov 16 03:32	26°♊35'48 46°22'20	
desc. node	15453 May 29 16:20	27°♊01'18			15455 Nov 19 15:27	0°♊	

greatest brilliancy	15455 Dec 25 17:04	26° \approx 03'01	-4.8m	max. Earth dist.	15458 Jun 14 19:45	5° \approx 38'27	1.72098 AU
retrograde	15456 Jan 04 19:55	27° \approx 55'48					
evening set	15456 Jan 22 17:08	21° \approx 55'30		superior conj	15458 Jun 17 16:57	9° \approx 14'05	-1°24'58
inferior conj	15456 Jan 26 07:14	19° \approx 42'32	-7°56'44	minimum elong	15458 Jun 17 11:27	8° \approx 56'56	1°25'48
minimum elong	15456 Jan 26 15:54	19° \approx 28'59	7°54'52		15458 Jul 04 08:10	0° Ω	
min. Earth dist.	15456 Jan 26 08:45	19° \approx 40'11	0.28687 AU	evening rise	15458 Jul 27 09:29	28° Ω 49'50	
morning rise	15456 Jan 30 14:41	17° \approx 03'48			15458 Jul 28 07:55	0° Π	
direct	15456 Feb 16 13:43	11° \approx 34'28		greatest brilliancy	15458 Aug 01 02:42	4° Π 43'51	-3.9m
greatest brilliancy	15456 Feb 27 02:01	13° \approx 34'43	-4.8m		15458 Aug 21 07:52	0° $\underline{\Omega}$	
asc. node	15456 Mar 06 02:48	17° \approx 23'10		asc. node	15458 Aug 21 19:34	0° \approx 36'32	
	15456 Mar 23 10:08	0° X			15458 Sep 14 09:32	0° Π	
morning max el	15456 Apr 05 15:37	12° X 08'51	45°47'39		15458 Oct 08 14:52	0° X	
	15456 Apr 23 00:51	0° Υ			15458 Nov 02 03:15	0° Z	
	15456 May 19 22:25	0° B			15458 Nov 27 04:44	0° \approx	
	15456 Jun 14 11:48	0° Π		desc. node	15458 Dec 11 12:57	16° \approx 42'14	
desc. node	15456 Jun 26 04:15	14° Π 01'29			15458 Dec 23 05:54	0° X	
	15456 Jul 09 08:11	0° \approx			15459 Jan 20 07:34	0° Υ	
	15456 Aug 02 18:21	0° Ω		evening max el	15459 Jan 26 07:53	5° Υ 55'27	46°01'20
	15456 Aug 26 22:36	0° Π			15459 Feb 25 00:44	0° B	
	15456 Sep 19 24:00	0° $\underline{\Omega}$		greatest brilliancy	15459 Mar 06 06:48	4° B 24'43	-4.8m
morning set	15456 Oct 06 16:00	20° $\underline{\Omega}$ 48'58		retrograde	15459 Mar 16 10:14	6° B 17'10	
	15456 Oct 14 00:23	0° Π		evening set	15459 Mar 31 07:18	1° B 56'34	
asc. node	15456 Oct 16 22:04	3° Π 37'38		asc. node	15459 Apr 03 12:20	0° B 04'41	
	15456 Nov 07 00:46	0° X			15459 Apr 03 15:24	30° R Υ	
				inferior conj	15459 Apr 06 15:24	28° Υ 08'10	0°46'43
superior conj	15456 Nov 14 14:23	9° X 26'51	1°02'50	minimum elong	15459 Apr 06 13:39	28° Υ 10'56	0°45'50
minimum elong	15456 Nov 14 03:50	8° X 53'55	1°03'16	min. Earth dist.	15459 Apr 06 16:45	28° Υ 06'04	0.28342 AU
max. Earth dist.	15456 Nov 16 09:30	11° X 41'20	1.72069 AU	morning rise	15459 Apr 12 19:55	24° Υ 25'00	
	15456 Dec 01 02:03	0° Z		direct	15459 Apr 27 21:01	19° Υ 58'16	
evening rise	15456 Dec 22 03:21	26° Z 09'57		greatest brilliancy	15459 May 08 09:33	22° Υ 01'45	-4.8m
	15456 Dec 25 05:37	0° \approx			15459 May 22 18:31	0° B	
	15457 Jan 18 13:12	0° X		morning max el	15459 Jun 16 15:25	21° B 37'34	46°23'34
desc. node	15457 Feb 05 12:56	22° X 01'24			15459 Jun 24 21:11	0° Π	
	15457 Feb 12 02:02	0° Υ			15459 Jul 22 03:57	0° \approx	
	15457 Mar 08 20:36	0° B		desc. node	15459 Jul 24 14:54	2° \approx 49'09	
	15457 Apr 02 21:30	0° Π			15459 Aug 16 18:15	0° Ω	
	15457 Apr 28 07:46	0° \approx			15459 Sep 10 14:31	0° Π	
	15457 May 24 13:04	0° Ω			15459 Oct 05 02:14	0° $\underline{\Omega}$	
asc. node	15457 May 29 06:49	5° Ω 15'13			15459 Oct 29 09:51	0° Π	
evening max el	15457 Jun 21 10:17	29° Ω 37'55	46°29'40	asc. node	15459 Nov 14 11:33	19° Π 53'34	
	15457 Jun 21 19:12	0° Π			15459 Nov 22 15:18	0° X	
greatest brilliancy	15457 Jul 31 15:05	29° Π 49'34	-4.9m		15459 Dec 16 19:34	0° Z	
	15457 Aug 01 03:12	0° $\underline{\Omega}$		morning set	15459 Dec 18 11:27	2° Z 03'48	
retrograde	15457 Aug 10 09:38	1° $\underline{\Omega}$ 37'30			15460 Jan 09 23:48	0° \approx	
	15457 Aug 19 07:55	30° R Π					
evening set	15457 Aug 25 20:22	26° Π 57'54		superior conj	15460 Jan 24 13:48	18° \approx 03'55	1°18'43
inferior conj	15457 Aug 31 01:03	23° Π 53'47	4°35'06	minimum elong	15460 Jan 24 21:30	18° \approx 27'43	1°19'13
minimum elong	15457 Aug 31 10:34	23° Π 39'17	4°32'13	max. Earth dist.	15460 Jan 26 19:32	20° \approx 50'07	1.72910 AU
min. Earth dist.	15457 Aug 31 13:06	23° Π 35'25	0.26994 AU		15460 Feb 03 05:23	0° X	
morning rise	15457 Sep 06 00:33	20° Π 23'14			15460 Feb 27 13:11	0° Υ	
desc. node	15457 Sep 18 07:53	16° Π 12'39		evening rise	15460 Mar 02 04:15	4° Υ 27'54	
direct	15457 Sep 20 18:52	16° Π 05'18		desc. node	15460 Mar 05 02:57	8° Υ 05'22	
greatest brilliancy	15457 Oct 01 00:28	18° Π 02'34	-4.9m		15460 Mar 22 23:05	0° B	
	15457 Oct 20 19:45	0° $\underline{\Omega}$			15460 Apr 16 10:22	0° Π	
morning max el	15457 Nov 09 21:14	18° $\underline{\Omega}$ 03'31	46°36'27		15460 May 10 22:53	0° \approx	
	15457 Nov 21 14:05	0° Π			15460 Jun 04 14:11	0° Ω	
	15457 Dec 18 21:57	0° X		asc. node	15460 Jun 25 18:36	25° Ω 32'37	
asc. node	15458 Jan 09 09:20	24° X 47'21			15460 Jun 29 12:01	0° Π	
	15458 Jan 13 19:52	0° Z			15460 Jul 24 23:45	0° $\underline{\Omega}$	
	15458 Feb 08 00:52	0° \approx			15460 Aug 20 18:42	0° Π	
	15458 Mar 04 20:18	0° X		evening max el	15460 Sep 02 05:26	12° Π 57'08	46°41'14
	15458 Mar 29 10:10	0° Υ			15460 Sep 20 17:06	0° X	
	15458 Apr 22 20:23	0° B		greatest brilliancy	15460 Oct 11 13:02	13° X 11'21	-4.9m
desc. node	15458 May 01 05:13	10° B 19'04		desc. node	15460 Oct 15 17:32	14° X 31'50	
morning set	15458 May 09 07:26	20° B 18'42		retrograde	15460 Oct 22 11:53	15° X 24'10	
	15458 May 17 03:20	0° Π		evening set	15460 Nov 07 04:06	10° X 37'41	
	15458 Jun 10 07:04	0° \approx		min. Earth dist.	15460 Nov 11 16:11	7° X 57'11	0.27634 AU

inferior conj	15460 Nov 12 12:36	7°♊25'50	-6°25'45	behind sun end	15463 Apr 05 04:35	27°♍00'28	
minimum elong	15460 Nov 12 01:41	7°♊42'36	6°22'31		15463 Apr 07 14:46	0°♋	
morning rise	15460 Nov 16 23:47	4°♊45'28			15463 May 01 21:28	0°♈	
	15460 Nov 29 01:32	30°♌♌		evening rise	15463 May 12 13:57	13°♈13'30	
direct	15460 Dec 03 11:57	29°♌36'42			15463 May 26 02:53	0°♎	
	15460 Dec 08 00:24	0°♊			15463 Jun 19 07:24	0°♏	
greatest brilliancy	15460 Dec 12 21:25	1°♊13'53	-4.8m		15463 Jul 13 12:31	0°♐	
morning max el	15461 Jan 21 14:50	0°♋02'55	45°54'21	asc. node	15463 Jul 24 07:31	13°♐19'55	
	15461 Jan 21 13:37	0°♋			15463 Aug 06 20:28	0°♑	
asc. node	15461 Feb 05 19:21	15°♋26'04			15463 Aug 31 10:34	0°♒	
	15461 Feb 19 07:05	0°♌			15463 Sep 25 12:46	0°♊	
	15461 Mar 17 16:51	0°♌			15463 Oct 21 16:39	0°♋	
	15461 Apr 12 03:05	0°♍		desc. node	15463 Nov 13 03:44	23°♋43'51	
	15461 May 07 00:38	0°♌		evening max el	15463 Nov 13 17:34	24°♋18'04	46°23'25
desc. node	15461 May 28 18:12	26°♌32'18			15463 Nov 19 15:22	0°♌	
	15461 May 31 13:51	0°♈		greatest brilliancy	15463 Dec 23 07:38	23°♌49'34	-4.8m
	15461 Jun 24 20:45	0°♎		retrograde	15464 Jan 02 11:44	25°♌43'44	
	15461 Jul 18 23:03	0°♏		evening set	15464 Jan 20 11:18	19°♌39'05	
morning set	15461 Jul 22 06:05	4°♏06'52		inferior conj	15464 Jan 23 22:49	17°♌30'16	-8°05'54
	15461 Aug 11 22:33	0°♐		minimum elong	15464 Jan 24 07:00	17°♌17'29	8°04'11
				min. Earth dist.	15464 Jan 23 23:31	17°♌29'11	0.28686 AU
superior conj	15461 Aug 30 23:31	23°♐51'52	-0°43'16	morning rise	15464 Jan 28 02:43	14°♌57'04	
minimum elong	15461 Aug 31 09:20	24°♐22'38	0°43'01	direct	15464 Feb 14 04:55	9°♌22'17	
max. Earth dist.	15461 Aug 30 18:41	23°♐36'42	1.71520 AU	greatest brilliancy	15464 Feb 24 17:03	11°♌22'28	-4.8m
	15461 Sep 04 21:00	0°♑		asc. node	15464 Mar 05 04:52	16°♌01'51	
asc. node	15461 Sep 18 09:50	16°♑57'51			15464 Mar 23 14:45	0°♌	
	15461 Sep 28 19:40	0°♒		morning max el	15464 Apr 03 07:19	9°♌56'30	45°47'00
evening rise	15461 Oct 09 14:38	13°♒29'56			15464 Apr 22 17:56	0°♍	
	15461 Oct 22 19:41	0°♊			15464 May 19 12:20	0°♋	
	15461 Nov 15 22:41	0°♋			15464 Jun 14 00:20	0°♈	
	15461 Dec 10 07:08	0°♌		desc. node	15464 Jun 25 06:05	13°♈30'26	
	15462 Jan 04 00:13	0°♌			15464 Jul 08 19:59	0°♎	
desc. node	15462 Jan 08 01:18	4°♌51'29			15464 Aug 02 05:43	0°♏	
	15462 Jan 29 05:34	0°♍			15464 Aug 26 09:41	0°♐	
	15462 Feb 24 04:37	0°♌			15464 Sep 19 10:54	0°♑	
	15462 Mar 23 11:46	0°♈		morning set	15464 Oct 04 05:07	18°♑26'11	
evening max el	15462 Apr 07 09:22	15°♈10'17	46°04'30		15464 Oct 13 11:10	0°♒	
	15462 Apr 23 17:29	0°♎		asc. node	15464 Oct 15 23:57	3°♒09'52	
asc. node	15462 Apr 30 22:12	5°♎34'12			15464 Nov 06 11:28	0°♊	
greatest brilliancy	15462 May 17 03:45	14°♎32'29	-4.8m				
retrograde	15462 May 26 19:01	16°♎16'30		superior conj	15464 Nov 12 05:03	7°♊09'31	1°00'18
evening set	15462 Jun 13 09:14	10°♎21'56		minimum elong	15464 Nov 11 18:27	6°♊36'27	1°00'43
inferior conj	15462 Jun 16 17:32	8°♎17'52	8°45'54	max. Earth dist.	15464 Nov 13 22:28	9°♊18'47	1.72039 AU
minimum elong	15462 Jun 16 11:46	8°♎26'54	8°44'30		15464 Nov 30 12:41	0°♋	
min. Earth dist.	15462 Jun 16 22:46	8°♎09'40	0.27942 AU	evening rise	15464 Dec 19 19:08	23°♋57'09	
morning rise	15462 Jun 19 14:12	6°♎31'01			15464 Dec 24 16:15	0°♌	
direct	15462 Jul 07 18:02	0°♎11'52			15465 Jan 17 23:57	0°♌	
greatest brilliancy	15462 Jul 17 19:58	2°♎05'56	-4.9m	desc. node	15465 Feb 04 14:46	21°♌33'33	
desc. node	15462 Aug 21 00:33	26°♎49'50			15465 Feb 11 13:05	0°♍	
	15462 Aug 24 06:54	0°♏			15465 Mar 08 08:08	0°♋	
morning max el	15462 Aug 27 03:56	2°♏51'41	46°55'49		15465 Apr 02 09:48	0°♈	
	15462 Sep 21 12:08	0°♐			15465 Apr 27 21:22	0°♎	
	15462 Oct 17 13:23	0°♑			15465 May 24 05:17	0°♏	
	15462 Nov 11 18:55	0°♒		asc. node	15465 May 28 08:41	4°♏33'55	
	15462 Dec 06 14:46	0°♊		evening max el	15465 Jun 19 00:25	27°♏17'42	46°28'54
asc. node	15462 Dec 11 23:54	6°♊32'39			15465 Jun 21 18:37	0°♐	
	15462 Dec 31 04:45	0°♋		greatest brilliancy	15465 Jul 29 04:11	27°♐25'22	-4.9m
	15463 Jan 24 15:01	0°♌		retrograde	15465 Aug 07 23:01	29°♐13'06	
	15463 Feb 17 23:25	0°♌		evening set	15465 Aug 23 12:13	24°♐29'05	
morning set	15463 Feb 25 16:02	9°♌29'11		inferior conj	15465 Aug 28 13:45	21°♐29'03	4°55'58
	15463 Mar 14 07:14	0°♍		minimum elong	15465 Aug 28 23:44	21°♐13'48	4°52'58
desc. node	15463 Apr 02 17:15	23°♍57'24		min. Earth dist.	15465 Aug 29 02:16	21°♐09'57	0.27014 AU
max. Earth dist.	15463 Apr 03 07:59	24°♍42'49	1.73025 AU	morning rise	15465 Sep 03 11:07	18°♐01'29	
				desc. node	15465 Sep 17 09:58	13°♐41'13	
superior conj	15463 Apr 04 06:23	25°♍51'59	-0°03'48	direct	15465 Sep 18 08:19	13°♐40'10	
minimum elong	15463 Apr 04 05:26	25°♍49'01	0°04'04	greatest brilliancy	15465 Sep 28 12:59	15°♐37'07	-4.9m
behind sun begin	15463 Apr 03 06:16	24°♍37'34			15465 Oct 21 07:54	0°♑	

morning max el	15465 Nov 07 11:57	15°  44'50	46°37'48		15468 May 10 10:07	0° 	
	15465 Nov 21 09:03	0° 			15468 Jun 04 02:02	0° 	
	15465 Dec 18 12:39	0° 		asc. node	15468 Jun 24 20:24	25°  00'07	
asc. node	15466 Jan 08 11:07	24°  14'23			15468 Jun 29 00:53	0° 	
	15466 Jan 13 08:39	0° 			15468 Jul 24 14:26	0° 	
	15466 Feb 07 12:36	0° 			15468 Aug 20 13:30	0° 	
	15466 Mar 04 07:27	0° 		evening max el	15468 Aug 30 19:08	10°  13'14	46°41'17
	15466 Mar 28 21:00	0° 			15468 Sep 21 05:28	0° 	
	15466 Apr 22 07:03	0° 		greatest brilliancy	15468 Oct 09 04:15	10°  12'12	-4.9m
desc. node	15466 Apr 30 07:04	9°  51'58		desc. node	15468 Oct 14 19:30	12°  13'53	
morning set	15466 May 06 21:33	18°  01'12		retrograde	15468 Oct 20 01:31	13°  03'47	
	15466 May 16 13:57	0° 		evening set	15468 Nov 04 14:42	8°  12'39	
	15466 Jun 09 17:42	0° 		min. Earth dist.	15468 Nov 09 06:34	5°  13'56	0.27579 AU
max. Earth dist.	15466 Jun 12 08:09	3°  14'26	1.72133 AU	inferior conj	15468 Nov 10 02:18	5°  06'38	-6°09'29
				minimum elong	15468 Nov 09 15:25	5°  12'21	6°06'10
superior conj	15466 Jun 15 05:57	6°  51'52	-1°23'57	morning rise	15468 Nov 14 16:36	2°  12'39	
minimum elong	15466 Jun 14 23:37	6°  32'08	1°24'47		15468 Nov 19 07:05	30°  11'11	
	15466 Jul 03 18:50	0° 		direct	15468 Dec 01 00:51	27°  18'11	
evening rise	15466 Jul 24 21:10	26°  02'23'39		greatest brilliancy	15468 Dec 10 11:10	28°  15'39	-4.8m
	15466 Jul 27 18:40	0° 			15468 Dec 13 07:55	0° 	
greatest brilliancy	15466 Aug 03 17:49	8°  14'22'34	-3.9m	morning max el	15469 Jan 19 03:23	27°  14'43	45°55'29
asc. node	15466 Aug 20 21:25	0°  08'20			15469 Jan 21 11:41	0° 	
	15466 Aug 20 18:45	0° 		asc. node	15469 Feb 04 21:24	14°  34'48	
	15466 Sep 13 20:35	0° 			15469 Feb 18 22:28	0° 	
	15466 Oct 08 02:13	0° 			15469 Mar 17 05:50	0° 	
	15466 Nov 01 15:09	0° 			15469 Apr 11 14:54	0° 	
	15466 Nov 26 17:36	0° 			15469 May 06 11:49	0° 	
desc. node	15466 Dec 10 14:45	16°  07'52		desc. node	15469 May 27 20:00	26°  04'32	
	15466 Dec 22 20:48	0° 			15469 May 31 00:40	0° 	
	15467 Jan 20 03:50	0° 			15469 Jun 24 07:24	0° 	
evening max el	15467 Jan 23 23:54	3°  14'51'11	46°01'47		15469 Jul 18 09:37	0° 	
	15467 Feb 26 17:15	0° 		morning set	15469 Jul 19 18:19	1°  02'07	
greatest brilliancy	15467 Mar 03 22:32	2°  13'16	-4.8m		15469 Aug 11 09:06	0° 	
retrograde	15467 Mar 14 01:25	4°  04'53					
	15467 Mar 28 11:31	30°  11'11		superior conj	15469 Aug 28 11:44	21°  12'45	-0°46'34
evening set	15467 Mar 28 23:24	29°  14'33'53		minimum elong	15469 Aug 28 22:04	21°  12'59'07	0°46'21
asc. node	15467 Apr 02 14:18	26°  14'59'34		max. Earth dist.	15469 Aug 28 00:49	20°  12'52'30	1.71524 AU
inferior conj	15467 Apr 04 06:58	25°  14'55'53	0°25'20		15469 Sep 04 07:33	0° 	
minimum elong	15467 Apr 04 06:01	25°  14'57'22	0°24'44	asc. node	15469 Sep 17 11:44	16°  12'30'41	
min. Earth dist.	15467 Apr 04 08:39	25°  14'53'14	0.28355 AU		15469 Sep 28 06:14	0° 	
morning rise	15467 Apr 10 12:34	22°  14'10'57		evening rise	15469 Oct 07 04:05	11°  12'08'47	
direct	15467 Apr 25 13:00	17°  14'46'11			15469 Oct 22 06:19	0° 	
greatest brilliancy	15467 May 06 01:17	19°  14'49'12	-4.8m		15469 Nov 15 09:27	0° 	
	15467 May 23 10:40	0° 			15469 Dec 09 18:10	0° 	
morning max el	15467 Jun 14 05:53	19°  14'21'16	46°21'51		15470 Jan 03 11:44	0° 	
	15467 Jun 24 15:55	0° 		desc. node	15470 Jan 07 03:12	4°  14'22'19	
	15467 Jul 21 18:31	0° 			15470 Jan 28 17:57	0° 	
desc. node	15467 Jul 23 16:49	2°  13'17			15470 Feb 23 18:43	0° 	
	15467 Aug 16 07:07	0° 			15470 Mar 23 05:46	0° 	
	15467 Sep 10 02:30	0° 		evening max el	15470 Apr 04 23:07	12°  12'52'49	46°04'03
	15467 Oct 04 13:39	0° 			15470 Apr 24 03:35	0° 	
	15467 Oct 28 20:53	0° 		asc. node	15470 Apr 30 00:07	4°  12'20'37	
asc. node	15467 Nov 13 13:18	19°  14'25'31		greatest brilliancy	15470 May 14 17:20	12°  12'14'51	-4.8m
	15467 Nov 22 02:01	0° 		retrograde	15470 May 24 09:19	13°  12'59'45	
morning set	15467 Dec 16 02:58	29°  14'10'50'18		evening set	15470 Jun 10 19:57	8°  12'10'04	
	15467 Dec 16 06:05	0° 		inferior conj	15470 Jun 14 08:05	6°  12'00'26	8°39'08
	15468 Jan 09 10:14	0° 		minimum elong	15470 Jun 14 01:35	6°  12'10'38	8°37'37
				min. Earth dist.	15470 Jun 14 12:40	5°  12'53'16	0.27966 AU
superior conj	15468 Jan 22 06:19	15°  14'54'16	1°20'05	morning rise	15470 Jun 17 07:05	4°  12'10'10	
minimum elong	15468 Jan 22 13:29	16°  14'56'27	1°20'39		15470 Jun 25 05:20	30°  14'11'11	
max. Earth dist.	15468 Jan 24 12:55	18°  14'43'14	1.72883 AU	direct	15470 Jul 05 08:20	27°  14'11'53'51	
	15468 Feb 02 15:47	0° 		greatest brilliancy	15470 Jul 15 11:02	29°  14'11'48'38	-4.9m
	15468 Feb 26 23:38	0° 			15470 Jul 15 23:19	0° 	
evening rise	15468 Feb 28 20:13	2°  14'17'08		desc. node	15470 Aug 20 02:38	25°  14'56'47	
desc. node	15468 Mar 04 04:53	7°  14'39'04			15470 Aug 24 05:23	0° 	
	15468 Mar 22 09:40	0° 		morning max el	15470 Aug 24 18:34	0°  14'33'04	46°55'26
	15468 Apr 15 21:11	0° 			15470 Sep 21 04:02	0° 	

	15470 Oct 17 02:52	0°♄			15473 May 23 21:38	0°♄	
	15470 Nov 11 07:11	0°♍		asc. node	15473 May 27 10:33	3°♄52'36	
	15470 Dec 06 02:17	0°♊		evening max el	15473 Jun 16 15:02	24°♄59'09	46°28'04
asc. node	15470 Dec 11 01:44	6°♊03'34			15473 Jun 21 18:58	0°♎	
	15470 Dec 30 15:46	0°♊		greatest brilliancy	15473 Jul 26 17:51	25°♎02'38	-4.9m
	15471 Jan 24 01:42	0°♋		retrograde	15473 Aug 05 12:16	26°♎49'28	
	15471 Feb 17 09:53	0°♌		evening set	15473 Aug 21 04:23	22°♎01'13	
morning set	15471 Feb 23 08:47	7°♌20'36		inferior conj	15473 Aug 26 02:38	19°♎05'19	5°16'04
	15471 Mar 13 17:37	0°♍		minimum elong	15473 Aug 26 13:01	18°♎49'26	5°13'02
max. Earth dist.	15471 Apr 01 03:59	22°♍44'21	1.73041 AU	min. Earth dist.	15473 Aug 26 15:41	18°♎45'22	0.27033 AU
				morning rise	15473 Aug 31 21:33	15°♎40'49	
superior conj	15471 Apr 01 21:45	23°♍39'12	-0°00'17	direct	15473 Sep 15 21:53	11°♎16'09	
minimum elong	15471 Apr 01 21:38	23°♍38'50	0°00'33	desc. node	15473 Sep 16 11:51	11°♎16'33	
behind sun begin	15471 Mar 31 21:58	22°♍25'49		greatest brilliancy	15473 Sep 26 01:39	13°♎12'27	-4.9m
behind sun end	15471 Apr 02 21:18	24°♍51'51			15473 Oct 21 16:36	0°♄	
desc. node	15471 Apr 01 19:01	23°♍30'43		morning max el	15473 Nov 05 02:02	13°♄25'02	46°39'05
	15471 Apr 07 01:09	0°♅			15473 Nov 21 03:20	0°♍	
	15471 May 01 07:57	0°♆			15473 Dec 18 03:03	0°♊	
evening rise	15471 May 10 04:51	10°♆58'33		asc. node	15474 Jan 07 13:08	23°♊42'24	
	15471 May 25 13:30	0°♄			15474 Jan 12 21:18	0°♊	
	15471 Jun 18 18:12	0°♄			15474 Feb 07 00:20	0°♋	
	15471 Jul 12 23:35	0°♎			15474 Mar 03 18:38	0°♌	
asc. node	15471 Jul 23 09:28	12°♎51'09			15474 Mar 28 07:53	0°♍	
	15471 Aug 06 08:00	0°♄			15474 Apr 21 17:46	0°♅	
	15471 Aug 30 22:50	0°♍		desc. node	15474 Apr 29 08:48	9°♅24'23	
	15471 Sep 25 02:20	0°♊		morning set	15474 May 04 11:38	15°♅43'35	
	15471 Oct 21 08:57	0°♊			15474 May 16 00:35	0°♆	
evening max el	15471 Nov 11 08:36	22°♊03'05	46°24'17		15474 Jun 09 04:19	0°♄	
desc. node	15471 Nov 12 05:33	22°♊54'40		max. Earth dist.	15474 Jun 09 19:12	0°♄46'19	1.72169 AU
	15471 Nov 19 16:23	0°♋					
greatest brilliancy	15471 Dec 20 21:48	21°♋35'34	-4.8m	superior conj	15474 Jun 12 19:04	4°♄30'01	-1°22'48
retrograde	15471 Dec 31 03:47	23°♋31'20		minimum elong	15474 Jun 12 11:58	4°♄07'56	1°23'36
evening set	15472 Jan 18 05:12	17°♋22'38			15474 Jul 03 05:32	0°♄	
inferior conj	15472 Jan 21 14:12	15°♋17'44	-8°14'25	evening rise	15474 Jul 22 08:58	23°♄55'43	
minimum elong	15472 Jan 21 21:50	15°♋05'50	8°12'50		15474 Jul 27 05:29	0°♎	
min. Earth dist.	15472 Jan 21 13:47	15°♋18'23	0.28680 AU	asc. node	15474 Aug 19 23:16	29°♎39'58	
morning rise	15472 Jan 25 14:32	12°♋50'08			15474 Aug 20 05:42	0°♄	
direct	15472 Feb 11 20:21	7°♋10'04			15474 Sep 13 07:44	0°♍	
greatest brilliancy	15472 Feb 22 07:13	9°♋09'28	-4.8m		15474 Oct 07 13:39	0°♊	
asc. node	15472 Mar 04 06:50	14°♋43'20			15474 Nov 01 03:08	0°♊	
	15472 Mar 23 17:23	0°♌			15474 Nov 26 06:37	0°♋	
morning max el	15472 Mar 31 23:29	7°♌45'58	45°46'27	desc. node	15474 Dec 09 16:41	15°♋33'27	
	15472 Apr 22 10:24	0°♍			15474 Dec 22 12:01	0°♌	
	15472 May 19 01:52	0°♅			15475 Jan 20 01:02	0°♍	
	15472 Jun 13 12:33	0°♆		evening max el	15475 Jan 21 15:07	1°♍32'26	46°02'01
desc. node	15472 Jun 24 07:57	13°♆00'18		greatest brilliancy	15475 Mar 01 14:38	0°♅01'20	-4.8m
	15472 Jul 08 07:31	0°♄			15475 Mar 01 13:07	0°♅	
	15472 Aug 01 16:49	0°♄		retrograde	15475 Mar 11 16:09	1°♅51'47	
	15472 Aug 25 20:32	0°♎			15475 Mar 21 08:11	30°♎♎	
	15472 Sep 18 21:34	0°♄		evening set	15475 Mar 26 15:34	27°♍29'59	
morning set	15472 Oct 01 18:39	16°♄05'21		inferior conj	15475 Apr 01 22:29	23°♍42'50	0°03'55
	15472 Oct 12 21:44	0°♍		minimum elong	15475 Apr 01 22:21	23°♍43'03	0°03'35
asc. node	15472 Oct 15 01:40	2°♍42'17		transit middle	15475 Apr 01 22:21	23°♍43'03	0°03'35
	15472 Nov 05 21:58	0°♊		transit begin	15475 Apr 01 18:25	23°♍49'16	
				transit end	15475 Apr 02 02:18	23°♍36'51	
superior conj	15472 Nov 09 19:45	4°♊52'48	0°57'41	asc. node	15475 Apr 01 16:12	23°♍52'43	
minimum elong	15472 Nov 09 09:12	4°♊19'53	0°58'03	min. Earth dist.	15475 Apr 02 00:54	23°♍39'03	0.28368 AU
max. Earth dist.	15472 Nov 11 13:47	7°♊04'02	1.72016 AU	morning rise	15475 Apr 08 05:00	19°♍56'16	
	15472 Nov 29 23:10	0°♊		direct	15475 Apr 23 04:22	15°♍33'11	
evening rise	15472 Dec 17 10:50	21°♊44'20		greatest brilliancy	15475 May 03 17:32	17°♍36'24	-4.8m
	15472 Dec 24 02:48	0°♋			15475 May 23 22:59	0°♅	
	15473 Jan 17 10:40	0°♌		morning max el	15475 Jun 11 19:44	17°♅02'48	46°20'17
desc. node	15473 Feb 03 16:39	21°♌06'04			15475 Jun 24 10:22	0°♆	
	15473 Feb 11 00:05	0°♍			15475 Jul 21 09:03	0°♄	
	15473 Mar 07 19:36	0°♅		desc. node	15475 Jul 22 18:53	1°♄37'41	
	15473 Apr 01 22:02	0°♆			15475 Aug 15 20:03	0°♄	
	15473 Apr 27 10:58	0°♄			15475 Sep 09 14:36	0°♎	

	15475 Oct 04 01:14	0°♄			15478 Apr 24 18:07	0°♄	
	15475 Oct 28 08:04	0°♍		asc. node	15478 Apr 29 02:01	3°♄03'06	
asc. node	15475 Nov 12 15:10	18°♍57'10		greatest brilliancy	15478 May 12 06:06	9°♄54'36	-4.8m
	15475 Nov 21 12:56	0°♌		retrograde	15478 May 21 23:46	11°♄40'57	
morning set	15475 Dec 13 18:39	27°♌36'41		evening set	15478 Jun 08 06:19	5°♄56'16	
	15475 Dec 15 16:49	0°♋		inferior conj	15478 Jun 11 22:26	3°♄40'50	8°31'33
	15476 Jan 08 20:52	0°♊		minimum elong	15478 Jun 11 15:13	3°♄52'06	8°29'51
				min. Earth dist.	15478 Jun 12 02:05	3°♄35'07	0.27991 AU
superior conj	15476 Jan 19 23:02	13°♊44'38	1°21'19	morning rise	15478 Jun 15 00:00	1°♄46'49	
minimum elong	15476 Jan 20 05:39	14°♊05'06	1°21'55		15478 Jun 18 01:11	30°♌II	
max. Earth dist.	15476 Jan 22 05:21	16°♊32'44	1.72860 AU	direct	15478 Jul 02 23:06	25°♌33'46	
	15476 Feb 02 02:26	0°♐		greatest brilliancy	15478 Jul 13 01:31	27°♌28'48	-4.9m
	15476 Feb 26 10:22	0°♑			15478 Jul 18 17:38	0°♄	
evening rise	15476 Feb 26 12:14	0°♑05'45		desc. node	15478 Aug 19 04:31	25°♄02'39	
desc. node	15476 Mar 03 06:41	7°♑11'26		morning max el	15478 Aug 22 09:54	28°♄14'41	46°55'02
	15476 Mar 21 20:34	0°♒			15478 Aug 24 03:36	0°♏	
	15476 Apr 15 08:22	0°♑			15478 Sep 20 20:10	0°♐	
	15476 May 09 21:43	0°♄			15478 Oct 16 16:41	0°♄	
	15476 Jun 03 14:16	0°♏			15478 Nov 10 19:47	0°♍	
asc. node	15476 Jun 23 22:23	24°♏27'09			15478 Dec 05 14:10	0°♌	
	15476 Jun 28 14:09	0°♐		asc. node	15478 Dec 10 03:40	5°♌33'38	
	15476 Jul 24 05:36	0°♄			15478 Dec 30 03:10	0°♋	
	15476 Aug 20 09:10	0°♍			15479 Jan 23 12:46	0°♊	
evening max el	15476 Aug 28 08:10	8°♍10'48	46°41'18		15479 Feb 16 20:46	0°♐	
	15476 Sep 21 22:40	0°♌		morning set	15479 Feb 21 01:40	5°♐11'11	
greatest brilliancy	15476 Oct 06 19:10	8°♌31'26	-4.9m		15479 Mar 13 04:24	0°♑	
desc. node	15476 Oct 13 21:25	10°♌25'55		max. Earth dist.	15479 Mar 30 01:13	20°♑48'27	1.73054 AU
retrograde	15476 Oct 17 15:06	10°♌42'17					
evening set	15476 Nov 02 01:20	6°♌05'49		superior conj	15479 Mar 30 13:16	21°♑25'41	0°03'14
min. Earth dist.	15476 Nov 06 21:00	3°♌15'07	0.27527 AU	minimum elong	15479 Mar 30 13:57	21°♑27'47	0°02'57
inferior conj	15476 Nov 07 15:54	2°♌46'08	-5°52'26	behind sun begin	15479 Mar 29 14:32	20°♑15'32	
minimum elong	15476 Nov 07 05:08	3°♌02'39	5°49'03	behind sun end	15479 Mar 31 13:22	22°♑40'01	
morning rise	15476 Nov 12 09:21	29°♍56'42		desc. node	15479 Mar 31 20:48	23°♑02'58	
	15476 Nov 12 07:01	30°♌III			15479 Apr 06 11:57	0°♒	
direct	15476 Nov 28 13:21	24°♍58'03			15479 Apr 30 18:50	0°♑	
greatest brilliancy	15476 Dec 08 01:15	26°♍36'28	-4.8m	evening rise	15479 May 07 19:49	8°♑42'36	
	15476 Dec 15 17:55	0°♌			15479 May 25 00:32	0°♄	
morning max el	15477 Jan 16 16:27	25°♌22'40	45°56'48		15479 Jun 18 05:28	0°♏	
	15477 Jan 21 09:17	0°♋			15479 Jul 12 11:10	0°♐	
asc. node	15477 Feb 03 23:21	14°♋02'49		asc. node	15479 Jul 22 11:17	12°♐20'27	
	15477 Feb 18 13:57	0°♊			15479 Aug 05 20:04	0°♄	
	15477 Mar 16 19:04	0°♐			15479 Aug 30 11:40	0°♍	
	15477 Apr 11 03:03	0°♑			15479 Sep 24 16:30	0°♌	
	15477 May 05 23:23	0°♒			15479 Oct 21 02:03	0°♋	
desc. node	15477 May 26 21:56	25°♒35'47		evening max el	15479 Nov 09 00:15	19°♋48'20	46°25'14
	15477 May 30 11:55	0°♑		desc. node	15479 Nov 11 07:33	22°♋03'48	
	15477 Jun 23 18:29	0°♄			15479 Nov 19 19:23	0°♊	
morning set	15477 Jul 17 06:15	29°♄15'13		greatest brilliancy	15479 Dec 18 11:50	19°♊20'10	-4.8m
	15477 Jul 17 20:36	0°♏		retrograde	15479 Dec 28 19:40	21°♊17'14	
	15477 Aug 10 20:02	0°♐		evening set	15480 Jan 15 22:52	15°♊04'55	
				inferior conj	15480 Jan 19 05:28	13°♊03'37	-8°22'20
superior conj	15477 Aug 25 23:46	18°♐59'51	-0°49'47	minimum elong	15480 Jan 19 12:29	12°♊52'39	8°20'52
minimum elong	15477 Aug 26 10:33	19°♐33'39	0°49'36	min. Earth dist.	15480 Jan 19 03:46	13°♊06'15	0.28670 AU
max. Earth dist.	15477 Aug 25 09:30	18°♐15'06	1.71528 AU	morning rise	15480 Jan 23 02:13	10°♊41'30	
	15477 Sep 03 18:27	0°♄		direct	15480 Feb 09 12:03	4°♊56'27	
asc. node	15477 Sep 16 13:25	16°♄01'42		greatest brilliancy	15480 Feb 19 20:46	6°♊54'20	-4.8m
	15477 Sep 27 17:10	0°♍		asc. node	15480 Mar 03 08:41	13°♊25'49	
evening rise	15477 Oct 04 17:31	8°♍46'27			15480 Mar 23 19:03	0°♐	
	15477 Oct 21 17:21	0°♌		morning max el	15480 Mar 29 15:25	5°♐33'47	45°45'59
	15477 Nov 14 20:39	0°♋			15480 Apr 22 02:57	0°♑	
	15477 Dec 09 05:38	0°♊			15480 May 18 15:37	0°♒	
	15478 Jan 02 23:41	0°♐			15480 Jun 13 01:02	0°♑	
desc. node	15478 Jan 06 05:09	3°♐52'03		desc. node	15480 Jun 23 09:56	12°♑29'35	
	15478 Jan 28 06:50	0°♑			15480 Jul 07 19:20	0°♄	
	15478 Feb 23 09:24	0°♒			15480 Aug 01 04:16	0°♏	
	15478 Mar 23 00:44	0°♑			15480 Aug 25 07:45	0°♐	
evening max el	15478 Apr 02 13:34	10°♑35'54	46°03'31		15480 Sep 18 08:39	0°♄	

morning set	15480 Sep 29 07:45	13°♌41'57		min. Earth dist.	15483 Mar 30 17:19	21°♍24'48	0.28383 AU
	15480 Oct 12 08:41	0°♌		asc. node	15483 Mar 31 18:12	20°♍45'42	
asc. node	15480 Oct 14 03:32	2°♌13'56		morning rise	15483 Apr 05 21:18	17°♍42'04	
	15480 Nov 05 08:49	0°♌		direct	15483 Apr 20 19:28	13°♍20'04	
				greatest brilliancy	15483 May 01 10:24	15°♍24'23	-4.8m
superior conj	15480 Nov 07 10:01	2°♌33'37	0°54'56		15483 May 24 08:02	0°♌	
minimum elong	15480 Nov 06 23:35	2°♌01'03	0°55'16	morning max el	15483 Jun 09 09:49	14°♌44'56	46°18'53
max. Earth dist.	15480 Nov 09 05:40	4°♌49'53	1.71986 AU		15483 Jun 24 04:19	0°♌	
	15480 Nov 29 09:59	0°♌			15483 Jul 20 23:21	0°♌	
evening rise	15480 Dec 15 02:16	19°♌29'43		desc. node	15483 Jul 21 20:40	1°♌01'45	
	15480 Dec 23 13:40	0°♌			15483 Aug 15 08:47	0°♌	
	15481 Jan 16 21:42	0°♌			15483 Sep 09 02:30	0°♌	
desc. node	15481 Feb 02 18:26	20°♌37'14			15483 Oct 03 12:37	0°♌	
	15481 Feb 10 11:25	0°♌			15483 Oct 27 19:07	0°♌	
	15481 Mar 07 07:26	0°♌		asc. node	15483 Nov 11 17:04	18°♌29'16	
	15481 Apr 01 10:38	0°♌			15483 Nov 20 23:44	0°♌	
	15481 Apr 27 00:58	0°♌		morning set	15483 Dec 11 10:03	25°♌22'19	
	15481 May 23 14:34	0°♌			15483 Dec 15 03:27	0°♌	
asc. node	15481 May 26 12:36	3°♌10'39			15484 Jan 08 07:25	0°♌	
evening max el	15481 Jun 14 04:55	22°♌38'10	46°27'05				
	15481 Jun 21 20:55	0°♌		superior conj	15484 Jan 17 15:30	11°♌34'28	1°22'26
greatest brilliancy	15481 Jul 24 07:50	22°♌39'28	-4.9m	minimum elong	15484 Jan 17 21:30	11°♌53'03	1°23'04
retrograde	15481 Aug 03 00:51	24°♌24'47		max. Earth dist.	15484 Jan 19 20:26	14°♌18'20	1.72835 AU
evening set	15481 Aug 18 20:33	19°♌32'14			15484 Feb 01 12:57	0°♌	
inferior conj	15481 Aug 23 15:29	16°♌40'38	5°35'38	evening rise	15484 Feb 24 04:04	27°♌54'17	
minimum elong	15481 Aug 24 02:09	16°♌24'16	5°32'34		15484 Feb 25 20:57	0°♌	
min. Earth dist.	15481 Aug 24 05:18	16°♌19'27	0.27057 AU	desc. node	15484 Mar 02 08:24	6°♌44'06	
morning rise	15481 Aug 29 07:38	13°♌19'22			15484 Mar 21 07:19	0°♌	
direct	15481 Sep 13 11:02	8°♌51'02			15484 Apr 14 19:24	0°♌	
desc. node	15481 Sep 15 13:48	8°♌56'21			15484 May 09 09:12	0°♌	
greatest brilliancy	15481 Sep 23 14:53	10°♌47'10	-4.9m		15484 Jun 03 02:24	0°♌	
	15481 Oct 21 23:19	0°♌		asc. node	15484 Jun 23 00:12	23°♌54'07	
morning max el	15481 Nov 02 15:09	11°♌01'34	46°40'20		15484 Jun 28 03:19	0°♌	
	15481 Nov 20 21:31	0°♌			15484 Jul 23 20:44	0°♌	
	15481 Dec 17 17:34	0°♌			15484 Aug 20 05:05	0°♌	
asc. node	15482 Jan 06 15:03	23°♌09'34		evening max el	15484 Aug 25 21:21	5°♌47'51	46°41'26
	15482 Jan 12 10:06	0°♌			15484 Sep 22 21:10	0°♌	
	15482 Feb 06 12:11	0°♌		greatest brilliancy	15484 Oct 04 09:29	6°♌11'06	-4.9m
	15482 Mar 03 05:57	0°♌		desc. node	15484 Oct 12 23:23	8°♌16'16	
	15482 Mar 27 18:54	0°♌		retrograde	15484 Oct 15 05:06	8°♌22'13	
	15482 Apr 21 04:37	0°♌		evening set	15484 Oct 30 12:14	3°♌49'43	
desc. node	15482 Apr 28 10:43	8°♌56'53		min. Earth dist.	15484 Nov 04 11:19	0°♌54'44	0.27480 AU
morning set	15482 May 02 01:51	13°♌25'53		inferior conj	15484 Nov 05 05:35	0°♌26'47	-5°34'41
	15482 May 15 11:21	0°♌		minimum elong	15484 Nov 04 19:01	0°♌42'58	5°31'17
max. Earth dist.	15482 Jun 07 05:33	28°♌15'44	1.72202 AU		15484 Nov 05 23:05	30°♌	
	15482 Jun 08 15:04	0°♌		morning rise	15484 Nov 10 02:10	27°♌33'10	
				direct	15484 Nov 26 02:10	22°♌38'55	
superior conj	15482 Jun 10 08:27	2°♌08'49	-1°21'31	greatest brilliancy	15484 Dec 05 15:20	24°♌18'27	-4.8m
minimum elong	15482 Jun 10 00:39	1°♌44'32	1°22'16		15484 Dec 17 06:26	0°♌	
	15482 Jul 02 16:18	0°♌		morning max el	15485 Jan 14 06:37	23°♌06'07	45°58'01
evening rise	15482 Jul 19 21:01	21°♌29'26			15485 Jan 21 05:48	0°♌	
	15482 Jul 26 16:21	0°♌		asc. node	15485 Feb 03 01:10	13°♌21'49	
asc. node	15482 Aug 19 01:01	29°♌11'02			15485 Feb 18 04:56	0°♌	
	15482 Aug 19 16:43	0°♌			15485 Mar 16 07:54	0°♌	
	15482 Sep 12 18:59	0°♌			15485 Apr 10 14:49	0°♌	
	15482 Oct 07 01:15	0°♌			15485 May 05 10:34	0°♌	
	15482 Oct 31 15:18	0°♌		desc. node	15485 May 25 23:45	25°♌07'50	
	15482 Nov 25 19:53	0°♌			15485 May 29 22:48	0°♌	
desc. node	15482 Dec 08 18:39	14°♌58'36			15485 Jun 23 05:13	0°♌	
	15482 Dec 22 03:34	0°♌		morning set	15485 Jul 14 18:14	26°♌49'28	
evening max el	15483 Jan 19 05:22	29°♌17'10	46°02'29		15485 Jul 17 07:15	0°♌	
	15483 Jan 19 23:09	0°♌			15485 Aug 10 06:37	0°♌	
greatest brilliancy	15483 Feb 27 06:42	27°♌49'21	-4.8m				
retrograde	15483 Mar 09 06:51	29°♌38'59		superior conj	15485 Aug 23 11:55	16°♌34'18	-0°52'55
evening set	15483 Mar 24 07:53	25°♌15'47		minimum elong	15485 Aug 23 23:04	17°♌09'16	0°52'45
inferior conj	15483 Mar 30 14:03	21°♌29'57	-0°17'31	max. Earth dist.	15485 Aug 22 20:00	15°♌44'27	1.71530 AU
minimum elong	15483 Mar 30 14:43	21°♌28'54	0°17'33		15485 Sep 03 05:00	0°♌	

asc. node	15485 Sep 15 15:17	15° Ω 34'27	greatest brilliancy	15488 Feb 17 10:20	4° \approx 41'15	-4.8m
	15485 Sep 27 03:44	0° \mathbb{M}	asc. node	15488 Mar 02 10:45	12° \approx 12'53	
evening rise	15485 Oct 02 07:10	6° \mathbb{M} 26'04		15488 Mar 23 18:44	0° \mathbb{H}	
	15485 Oct 21 03:58	0° \mathbb{H}	morning max el	15488 Mar 27 06:45	3° \mathbb{H} 21'45	45°45'22
	15485 Nov 14 07:25	0° \mathbb{Z}		15488 Apr 21 18:40	0° \mathbb{Y}	
	15485 Dec 08 16:41	0° \approx		15488 May 18 04:48	0° \mathbb{B}	
	15486 Jan 02 11:16	0° \mathbb{H}		15488 Jun 12 13:03	0° \mathbb{I}	
desc. node	15486 Jan 05 06:52	3° \mathbb{H} 22'19	desc. node	15488 Jun 22 11:44	11° \mathbb{I} 59'41	
	15486 Jan 27 19:23	0° \mathbb{Y}		15488 Jul 07 06:42	0° \mathbb{G}	
	15486 Feb 22 23:52	0° \mathbb{B}		15488 Jul 31 15:16	0° Ω	
	15486 Mar 22 19:49	0° \mathbb{I}		15488 Aug 24 18:32	0° \mathbb{N}	
evening max el	15486 Mar 31 04:54	8° \mathbb{I} 22'31 46°03'04		15488 Sep 17 19:18	0° \mathbb{A}	
	15486 Apr 25 12:53	0° \mathbb{G}	morning set	15488 Sep 26 20:46	11° \mathbb{A} 19'33	
asc. node	15486 Apr 28 04:03	1° \mathbb{G} 44'44		15488 Oct 11 19:15	0° \mathbb{M}	
greatest brilliancy	15486 May 09 18:46	7° \mathbb{G} 35'54 -4.8m	asc. node	15488 Oct 13 05:24	1° \mathbb{M} 46'46	
retrograde	15486 May 19 14:29	9° \mathbb{G} 23'42		15488 Nov 04 19:18	0° \mathbb{H}	
evening set	15486 Jun 05 16:47	3° \mathbb{G} 44'20				
inferior conj	15486 Jun 09 12:52	1° \mathbb{G} 22'50 8°23'08	superior conj	15488 Nov 05 00:17	0° \mathbb{H} 15'33 0°52'04	
minimum elong	15486 Jun 09 05:03	1° \mathbb{G} 35'04 8°21'17	minimum elong	15488 Nov 04 14:03	29° \mathbb{M} 43'36 0°52'23	
min. Earth dist.	15486 Jun 09 15:24	1° \mathbb{G} 18'53 0.28014 AU	max. Earth dist.	15488 Nov 06 20:00	2° \mathbb{H} 32'05 1.71955 AU	
	15486 Jun 11 18:07	30° \mathbb{R} \mathbb{I}		15488 Nov 28 20:25	0° \mathbb{Z}	
morning rise	15486 Jun 12 17:14	29° \mathbb{I} 24'40	evening rise	15488 Dec 12 17:48	17° \mathbb{Z} 16'27	
direct	15486 Jun 30 14:20	23° \mathbb{I} 15'35		15488 Dec 23 00:08	0° \approx	
greatest brilliancy	15486 Jul 10 15:36	25° \mathbb{I} 10'02 -4.9m		15489 Jan 16 08:19	0° \mathbb{H}	
	15486 Jul 20 09:21	0° \mathbb{G}	desc. node	15489 Feb 01 20:15	20° \mathbb{H} 09'59	
desc. node	15486 Aug 18 06:25	24° \mathbb{G} 10'58		15489 Feb 09 22:20	0° \mathbb{Y}	
morning max el	15486 Aug 20 01:29	25° \mathbb{G} 58'23 46°54'29		15489 Mar 06 18:50	0° \mathbb{B}	
	15486 Aug 24 00:30	0° Ω		15489 Mar 31 22:53	0° \mathbb{I}	
	15486 Sep 20 11:34	0° \mathbb{N}		15489 Apr 26 14:43	0° \mathbb{G}	
	15486 Oct 16 05:54	0° \mathbb{A}		15489 May 23 07:30	0° Ω	
	15486 Nov 10 07:51	0° \mathbb{M}	asc. node	15489 May 25 14:26	2° Ω 28'32	
	15486 Dec 05 01:30	0° \mathbb{H}	evening max el	15489 Jun 11 17:59	20° Ω 15'58 46°26'04	
asc. node	15486 Dec 09 05:31	5° \mathbb{H} 05'01		15489 Jun 22 00:03	0° \mathbb{N}	
	15486 Dec 29 14:02	0° \mathbb{Z}	greatest brilliancy	15489 Jul 21 22:10	20° \mathbb{N} 17'38 -4.9m	
	15487 Jan 22 23:20	0° \approx	retrograde	15489 Jul 31 12:59	22° \mathbb{N} 01'14	
	15487 Feb 16 07:09	0° \mathbb{H}	evening set	15489 Aug 16 12:49	17° \mathbb{N} 04'04	
morning set	15487 Feb 18 18:43	3° \mathbb{H} 03'42	inferior conj	15489 Aug 21 04:23	14° \mathbb{N} 17'05 5°54'28	
	15487 Mar 12 14:44	0° \mathbb{Y}	minimum elong	15489 Aug 21 15:17	14° \mathbb{N} 00'21 5°51'24	
			min. Earth dist.	15489 Aug 21 19:10	13° \mathbb{N} 54'22 0.27084 AU	
superior conj	15487 Mar 28 04:49	19° \mathbb{Y} 13'37 0°06'42	morning rise	15489 Aug 26 17:32	10° \mathbb{N} 59'22	
minimum elong	15487 Mar 28 06:19	19° \mathbb{Y} 18'12 0°06'25	direct	15489 Sep 10 23:43	6° \mathbb{N} 26'48	
behind sun begin	15487 Mar 27 08:24	18° \mathbb{Y} 10'36	desc. node	15489 Sep 14 15:50	6° \mathbb{N} 42'38	
behind sun end	15487 Mar 29 04:13	20° \mathbb{Y} 25'48	greatest brilliancy	15489 Sep 21 04:37	8° \mathbb{N} 23'29 -4.9m	
max. Earth dist.	15487 Mar 27 21:17	18° \mathbb{Y} 50'22 1.73066 AU		15489 Oct 22 03:34	0° \mathbb{A}	
desc. node	15487 Mar 30 22:43	22° \mathbb{Y} 36'53	morning max el	15489 Oct 31 03:43	8° \mathbb{A} 37'28 46°41'36	
	15487 Apr 05 22:19	0° \mathbb{B}		15489 Nov 20 14:56	0° \mathbb{M}	
	15487 Apr 30 05:18	0° \mathbb{I}		15489 Dec 17 07:36	0° \mathbb{H}	
evening rise	15487 May 05 10:43	6° \mathbb{I} 27'47	asc. node	15490 Jan 05 16:50	22° \mathbb{H} 37'23	
	15487 May 24 11:08	0° \mathbb{G}		15490 Jan 11 22:30	0° \mathbb{Z}	
	15487 Jun 17 16:17	0° Ω		15490 Feb 05 23:41	0° \approx	
	15487 Jul 11 22:21	0° \mathbb{N}		15490 Mar 02 16:55	0° \mathbb{H}	
asc. node	15487 Jul 21 13:03	11° \mathbb{N} 50'57		15490 Mar 27 05:34	0° \mathbb{Y}	
	15487 Aug 05 07:46	0° \mathbb{A}		15490 Apr 20 15:07	0° \mathbb{B}	
	15487 Aug 30 00:09	0° \mathbb{M}	desc. node	15490 Apr 27 12:32	8° \mathbb{B} 30'06	
	15487 Sep 24 06:22	0° \mathbb{H}	morning set	15490 Apr 29 16:19	11° \mathbb{B} 09'58	
	15487 Oct 20 18:58	0° \mathbb{Z}		15490 May 14 21:49	0° \mathbb{I}	
evening max el	15487 Nov 06 16:16	17° \mathbb{Z} 35'54 46°26'13	max. Earth dist.	15490 Jun 04 17:20	25° \mathbb{I} 50'26 1.72244 AU	
desc. node	15487 Nov 10 09:32	21° \mathbb{Z} 13'33				
	15487 Nov 19 23:19	0° \approx	superior conj	15490 Jun 07 21:54	29° \mathbb{I} 48'38 -1°20'04	
greatest brilliancy	15487 Dec 16 02:30	17° \approx 07'29 -4.8m	minimum elong	15490 Jun 07 13:26	29° \mathbb{I} 22'16 1°20'48	
retrograde	15487 Dec 26 11:28	19° \approx 05'13		15490 Jun 08 01:33	0° \mathbb{G}	
evening set	15488 Jan 13 16:36	12° \approx 49'51		15490 Jul 02 02:53	0° Ω	
inferior conj	15488 Jan 16 20:56	10° \approx 51'48 -8°29'27	evening rise	15490 Jul 17 08:57	19° Ω 03'27	
minimum elong	15488 Jan 17 03:20	10° \approx 41'50 8°28'06		15490 Jul 26 03:03	0° \mathbb{N}	
min. Earth dist.	15488 Jan 16 18:01	10° \approx 56'22 0.28655 AU	asc. node	15490 Aug 18 02:52	28° \mathbb{N} 42'59	
morning rise	15488 Jan 20 14:12	8° \approx 34'51		15490 Aug 19 03:34	0° \mathbb{A}	
direct	15488 Feb 07 03:59	2° \approx 45'22		15490 Sep 12 06:02	0° \mathbb{M}	

	15490 Oct 06 12:40	0°♊			15493 May 04 21:54	0°♋		
	15490 Oct 31 03:21	0°♌		desc. node	15493 May 25 01:33	24°♋39'22		
	15490 Nov 25 09:06	0°♍			15493 May 29 09:49	0°♌		
desc. node	15490 Dec 07 20:26	14°♍23'24			15493 Jun 22 16:04	0°♍		
	15490 Dec 21 19:13	0°♎		morning set	15493 Jul 12 06:34	24°♍24'31		
evening max el	15491 Jan 16 19:26	27°♎01'59	46°03'05		15493 Jul 16 18:01	0°♏		
	15491 Jan 19 21:59	0°♐			15493 Aug 09 17:22	0°♑		
greatest brilliancy	15491 Feb 24 22:23	25°♐37'41	-4.8m	max. Earth dist.	15493 Aug 20 08:11	13°♑18'24	1.71538 AU	
retrograde	15491 Mar 06 21:54	27°♐27'17						
evening set	15491 Mar 22 00:25	23°♐02'08		superior conj	15493 Aug 21 00:03	14°♑08'10	-0°55'57	
inferior conj	15491 Mar 28 05:40	19°♐17'59	-0°38'51	minimum elong	15493 Aug 21 11:28	14°♑43'58	0°55'50	
minimum elong	15491 Mar 28 07:08	19°♐15'40	0°38'36		15493 Sep 02 15:46	0°♒		
min. Earth dist.	15491 Mar 28 09:37	19°♐11'46	0.28398 AU	asc. node	15493 Sep 14 17:09	15°♒06'29		
asc. node	15491 Mar 30 20:10	17°♐40'27			15493 Sep 26 14:33	0°♓		
morning rise	15491 Apr 03 13:32	15°♐29'16		evening rise	15493 Sep 29 20:29	4°♓03'44		
direct	15491 Apr 18 10:40	11°♐07'48			15493 Oct 20 14:54	0°♊		
greatest brilliancy	15491 Apr 29 03:21	13°♐13'34	-4.8m		15493 Nov 13 18:30	0°♌		
	15491 May 24 14:10	0°♋			15493 Dec 08 04:04	0°♍		
morning max el	15491 Jun 07 00:29	12°♋29'19	46°17'23		15494 Jan 01 23:13	0°♎		
	15491 Jun 23 21:38	0°♌		desc. node	15494 Jan 04 08:46	2°♎52'02		
desc. node	15491 Jul 20 22:36	0°♍26'49			15494 Jan 27 08:23	0°♐		
	15491 Jul 20 13:22	0°♎			15494 Feb 22 14:55	0°♋		
	15491 Aug 14 21:25	0°♏			15494 Mar 22 15:54	0°♌		
	15491 Sep 08 14:22	0°♑		evening max el	15494 Mar 28 20:38	6°♌09'10	46°02'38	
	15491 Oct 02 24:00	0°♒			15494 Apr 26 15:09	0°♍		
	15491 Oct 27 06:08	0°♓		asc. node	15494 Apr 27 05:57	0°♍22'43		
asc. node	15491 Nov 10 18:50	18°♓00'59		greatest brilliancy	15494 May 07 07:59	5°♍17'14	-4.8m	
	15491 Nov 20 10:31	0°♊		retrograde	15494 May 17 05:08	7°♍05'43		
morning set	15491 Dec 09 01:04	23°♊06'46		evening set	15494 Jun 03 03:19	1°♍32'10		
	15491 Dec 14 14:04	0°♌			15494 Jun 05 15:49	30°♒♌		
	15492 Jan 07 17:58	0°♍		inferior conj	15494 Jun 07 03:23	29°♌04'27	8°13'54	
				minimum elong	15494 Jun 06 19:00	29°♌17'35	8°11'55	
superior conj	15492 Jan 15 07:47	9°♍23'37	1°23'26	min. Earth dist.	15494 Jun 07 04:53	29°♌02'07	0.28028 AU	
minimum elong	15492 Jan 15 13:08	9°♍40'11	1°24'07	morning rise	15494 Jun 10 10:38	27°♌01'50		
max. Earth dist.	15492 Jan 17 11:46	12°♍04'36	1.72812 AU	direct	15494 Jun 28 05:36	20°♌57'18		
	15492 Jan 31 23:30	0°♎		greatest brilliancy	15494 Jul 08 05:31	22°♌50'40	-4.9m	
evening rise	15492 Feb 21 19:57	25°♎42'52			15494 Jul 21 13:04	0°♍		
	15492 Feb 25 07:33	0°♐		desc. node	15494 Aug 17 08:30	23°♍20'08		
desc. node	15492 Mar 01 10:19	6°♐17'18		morning max el	15494 Aug 17 16:10	23°♍39'22	46°53'49	
	15492 Mar 20 18:05	0°♋			15494 Aug 23 20:52	0°♏		
	15492 Apr 14 06:27	0°♌			15494 Sep 20 02:58	0°♑		
	15492 May 08 20:41	0°♍			15494 Oct 15 19:20	0°♒		
	15492 Jun 02 14:34	0°♎			15494 Nov 09 20:13	0°♓		
asc. node	15492 Jun 22 02:02	23°♏20'54			15494 Dec 04 13:13	0°♊		
	15492 Jun 27 16:37	0°♑		asc. node	15494 Dec 08 07:22	4°♊35'10		
	15492 Jul 23 12:12	0°♒			15494 Dec 29 01:17	0°♌		
	15492 Aug 20 01:55	0°♓			15495 Jan 22 10:17	0°♍		
evening max el	15492 Aug 23 11:13	3°♓26'02	46°41'28		15495 Feb 15 17:55	0°♎		
	15492 Sep 24 05:16	0°♊		morning set	15495 Feb 16 11:28	0°♎54'05		
greatest brilliancy	15492 Oct 01 23:08	3°♊48'45	-4.9m		15495 Mar 12 01:28	0°♐		
desc. node	15492 Oct 12 01:21	5°♊59'55						
retrograde	15492 Oct 12 19:18	6°♊00'35		superior conj	15495 Mar 25 20:14	17°♐00'01	0°10'09	
evening set	15492 Oct 27 23:02	1°♊31'45		minimum elong	15495 Mar 25 22:31	17°♐07'03	0°09'52	
	15492 Oct 30 15:20	30°♒♓		behind sun begin	15495 Mar 25 03:42	16°♐09'00		
min. Earth dist.	15492 Nov 02 01:04	28°♓33'02	0.27433 AU	behind sun end	15495 Mar 26 17:20	18°♐05'06		
inferior conj	15492 Nov 02 18:57	28°♓05'44	-5°16'04	max. Earth dist.	15495 Mar 25 15:46	16°♐46'12	1.73076 AU	
minimum elong	15492 Nov 02 08:39	28°♓21'28	5°12'40	desc. node	15495 Mar 30 00:28	22°♐09'09		
morning rise	15492 Nov 07 18:41	25°♓08'10			15495 Apr 05 09:05	0°♋		
direct	15492 Nov 23 15:19	20°♓18'14			15495 Apr 29 16:09	0°♌		
greatest brilliancy	15492 Dec 03 04:41	21°♓58'28	-4.8m	evening rise	15495 May 03 01:34	4°♌11'38		
	15492 Dec 18 08:38	0°♊			15495 May 23 22:08	0°♍		
morning max el	15493 Jan 11 21:07	20°♊49'49	45°59'15		15495 Jun 17 03:30	0°♎		
	15493 Jan 21 01:51	0°♌			15495 Jul 11 09:52	0°♑		
asc. node	15493 Feb 02 03:16	12°♌41'28		asc. node	15495 Jul 20 15:00	11°♑21'02		
	15493 Feb 17 19:53	0°♍			15495 Aug 04 19:47	0°♒		
	15493 Mar 15 20:49	0°♎			15495 Aug 29 12:59	0°♓		
	15493 Apr 10 02:42	0°♐			15495 Sep 23 20:41	0°♊		

	15495 Oct 20 12:42	0°♁			15498 May 14 08:39	0°♂	
evening max el	15495 Nov 04 07:27	15°♁19'50	46°26'53	max. Earth dist.	15498 Jun 02 07:38	23°♂31'54	1.72284 AU
desc. node	15495 Nov 09 11:21	20°♁20'31					
	15495 Nov 20 06:00	0°♁		superior conj	15498 Jun 05 11:11	27°♂26'49	-1°18'29
greatest brilliancy	15495 Dec 13 17:37	14°♁53'17	-4.8m	minimum elong	15498 Jun 05 02:07	26°♂58'38	1°19'11
retrograde	15495 Dec 24 02:36	16°♁50'54			15498 Jun 07 12:25	0°♁	
evening set	15496 Jan 11 09:53	10°♁33'06			15498 Jul 01 13:50	0°♂	
inferior conj	15496 Jan 14 12:14	8°♁37'55	-8°35'42	evening rise	15498 Jul 14 20:56	16°♂36'34	
minimum elong	15496 Jan 14 17:55	8°♁29'01	8°34'29		15498 Jul 25 14:06	0°♂	
min. Earth dist.	15496 Jan 14 08:23	8°♁43'55	0.28640 AU	asc. node	15498 Aug 17 04:44	28°♂13'55	
morning rise	15496 Jan 18 02:06	6°♁25'50			15498 Aug 18 14:46	0°♂	
direct	15496 Feb 04 19:18	0°♁32'08			15498 Sep 11 17:26	0°♂	
greatest brilliancy	15496 Feb 15 00:07	2°♁26'21	-4.8m		15498 Oct 06 00:24	0°♂	
asc. node	15496 Mar 01 12:42	11°♁00'06			15498 Oct 30 15:42	0°♁	
	15496 Mar 23 18:00	0°♂			15498 Nov 24 22:37	0°♁	
morning max el	15496 Mar 24 20:54	1°♂05'11	45°44'52	desc. node	15498 Dec 06 22:24	13°♁47'56	
	15496 Apr 21 10:39	0°♂			15498 Dec 21 11:21	0°♂	
	15496 May 17 18:19	0°♂		evening max el	15499 Jan 14 09:54	24°♂47'14	46°03'34
	15496 Jun 12 01:25	0°♂			15499 Jan 19 22:11	0°♂	
desc. node	15496 Jun 21 13:36	11°♂28'45		greatest brilliancy	15499 Feb 22 13:28	23°♂24'34	-4.8m
	15496 Jul 06 18:27	0°♁		retrograde	15499 Mar 04 13:29	25°♂14'47	
	15496 Jul 31 02:38	0°♂		evening set	15499 Mar 19 17:07	20°♂47'20	
	15496 Aug 24 05:39	0°♂		inferior conj	15499 Mar 25 21:15	17°♂04'57	-1°00'05
	15496 Sep 17 06:15	0°♂		minimum elong	15499 Mar 25 23:32	17°♂01'23	0°59'33
morning set	15496 Sep 24 10:08	8°♂57'15		min. Earth dist.	15499 Mar 26 01:36	16°♂58'08	0.28419 AU
	15496 Oct 11 06:05	0°♂		asc. node	15499 Mar 29 22:04	14°♂35'40	
asc. node	15496 Oct 12 07:06	1°♂18'14		morning rise	15499 Apr 01 05:38	13°♂15'53	
				direct	15499 Apr 16 02:16	8°♂54'28	
superior conj	15496 Nov 02 14:47	27°♂57'19	0°49'09	greatest brilliancy	15499 Apr 26 20:00	11°♂01'28	-4.8m
minimum elong	15496 Nov 02 04:50	27°♂26'14	0°49'26		15499 May 24 18:44	0°♂	
	15496 Nov 04 06:04	0°♂		morning max el	15499 Jun 04 16:07	10°♂15'08	46°15'55
max. Earth dist.	15496 Nov 04 09:27	0°♂10'35	1.71927 AU		15499 Jun 23 14:56	0°♂	
	15496 Nov 28 07:11	0°♁		desc. node	15499 Jul 20 00:38	29°♂51'29	
evening rise	15496 Dec 10 09:22	15°♁02'09			15499 Jul 20 03:34	0°♁	
	15496 Dec 22 11:00	0°♁			15499 Aug 14 10:13	0°♂	
	15497 Jan 15 19:22	0°♂			15499 Sep 08 02:26	0°♂	
desc. node	15497 Jan 31 22:08	19°♂41'29			15499 Oct 02 11:34	0°♂	
	15497 Feb 09 09:43	0°♂			15499 Oct 26 17:21	0°♂	
	15497 Mar 06 06:45	0°♂		asc. node	15499 Nov 09 20:41	17°♂32'25	
	15497 Mar 31 11:42	0°♂			15499 Nov 19 21:28	0°♂	
	15497 Apr 26 05:07	0°♁		morning set	15499 Dec 06 16:26	20°♂51'46	
	15497 May 23 01:21	0°♂			15499 Dec 14 00:50	0°♁	
asc. node	15497 May 24 16:19	1°♂44'39			15500 Jan 07 04:37	0°♁	
evening max el	15497 Jun 09 06:04	17°♂50'07	46°25'07				
	15497 Jun 22 05:37	0°♂		superior conj	15500 Jan 13 00:27	7°♁13'33	1°24'17
greatest brilliancy	15497 Jul 19 12:33	17°♂54'38	-4.9m	minimum elong	15500 Jan 13 05:08	7°♁28'04	1°25'01
retrograde	15497 Jul 29 01:16	19°♂36'54		max. Earth dist.	15500 Jan 15 05:49	9°♁58'54	1.72788 AU
evening set	15497 Aug 14 05:11	14°♂34'38			15500 Jan 31 10:09	0°♂	
inferior conj	15497 Aug 18 17:20	11°♂52'37	6°12'31	evening rise	15500 Feb 19 12:12	23°♂32'14	
minimum elong	15497 Aug 19 04:23	11°♂35'39	6°09'30		15500 Feb 24 18:18	0°♂	
min. Earth dist.	15497 Aug 19 09:09	11°♂28'19	0.27109 AU	desc. node	15500 Mar 01 12:06	5°♂49'39	
morning rise	15497 Aug 24 03:18	8°♂39'00			15500 Mar 21 05:01	0°♂	
direct	15497 Sep 08 12:11	4°♂01'29			15500 Apr 14 17:43	0°♂	
desc. node	15497 Sep 13 17:43	4°♂33'15			15500 May 09 08:25	0°♁	
greatest brilliancy	15497 Sep 18 18:37	5°♂59'18	-4.9m		15500 Jun 03 03:00	0°♂	
	15497 Oct 22 06:25	0°♂		asc. node	15500 Jun 22 04:01	22°♂47'26	
morning max el	15497 Oct 28 16:40	6°♂13'28	46°43'02		15500 Jun 28 06:13	0°♂	
	15497 Nov 20 08:12	0°♂			15500 Jul 24 04:05	0°♂	
	15497 Dec 16 21:44	0°♂			15500 Aug 20 23:42	0°♂	
asc. node	15498 Jan 04 18:51	22°♂05'10		evening max el	15500 Aug 22 01:54	1°♂05'53	46°41'29
	15498 Jan 11 11:07	0°♁			15500 Sep 27 05:26	0°♂	
	15498 Feb 05 11:29	0°♁		greatest brilliancy	15500 Sep 30 12:41	1°♂25'55	-4.9m
	15498 Mar 02 04:15	0°♂		retrograde	15500 Oct 11 09:47	3°♂38'23	
	15498 Mar 26 16:38	0°♂		desc. node	15500 Oct 12 03:16	3°♂37'45	
	15498 Apr 20 02:02	0°♂			15500 Oct 24 22:34	30°♂	
desc. node	15498 Apr 26 14:17	8°♂01'54		evening set	15500 Oct 26 10:06	29°♂13'12	
morning set	15498 Apr 27 06:40	8°♂52'29		min. Earth dist.	15500 Oct 31 14:37	26°♂11'03	0.27383 AU

inferior conj	15500 Nov 01 08:16	25° \mathbb{M} 44'08	-4°56'52	max. Earth dist.	15503 Mar 24 09:26	14° \mathbb{Y} 40'23	1.73081 AU
minimum elong	15500 Oct 31 22:19	25° \mathbb{M} 59'18	4°53'29	desc. node	15503 Mar 30 02:15	21° \mathbb{Y} 42'18	
morning rise	15500 Nov 06 11:03	22° \mathbb{M} 42'47			15503 Apr 05 19:35	0° \mathcal{B}	
direct	15500 Nov 22 04:51	17° \mathbb{M} 57'15			15503 Apr 30 02:45	0° \mathbb{I}	
greatest brilliancy	15500 Dec 01 17:28	19° \mathbb{M} 37'25	-4.8m	evening rise	15503 May 01 16:53	1° \mathbb{I} 57'51	
	15500 Dec 20 03:55	0° \mathcal{A}			15503 May 24 08:53	0° \mathcal{E}	
morning max el	15501 Jan 10 11:48	18° \mathcal{A} 33'53	46°00'37		15503 Jun 17 14:30	0° \mathcal{Q}	
	15501 Jan 21 21:15	0° \mathcal{Z}			15503 Jul 11 21:16	0° \mathbb{M}	
asc. node	15501 Feb 02 05:09	12° \mathcal{Z} 01'05		asc. node	15503 Jul 20 16:48	10° \mathbb{M} 51'02	
	15501 Feb 18 10:35	0° \approx			15503 Aug 05 07:43	0° \mathcal{L}	
	15501 Mar 16 09:35	0° \mathcal{H}			15503 Aug 30 01:46	0° \mathbb{M}	
	15501 Apr 10 14:31	0° \mathbb{Y}			15503 Sep 24 11:02	0° \mathcal{A}	
	15501 May 05 09:13	0° \mathcal{B}			15503 Oct 21 06:40	0° \mathcal{Z}	
desc. node	15501 May 25 03:29	24° \mathcal{B} 11'08		evening max el	15503 Nov 02 21:32	13° \mathcal{Z} 01'28	46°27'42
	15501 May 29 20:53	0° \mathbb{I}		desc. node	15503 Nov 09 13:22	19° \mathcal{Z} 27'28	
	15501 Jun 23 03:00	0° \mathcal{E}			15503 Nov 21 14:57	0° \approx	
morning set	15501 Jul 10 18:41	21° \mathcal{E} 58'47		greatest brilliancy	15503 Dec 12 09:06	12° \approx 40'02	-4.8m
	15501 Jul 17 04:52	0° \mathcal{Q}		retrograde	15503 Dec 22 17:25	14° \approx 37'23	
	15501 Aug 10 04:10	0° \mathbb{M}		evening set	15504 Jan 10 02:55	8° \approx 17'26	
				inferior conj	15504 Jan 13 03:32	6° \approx 24'51	-8°41'19
superior conj	15501 Aug 19 11:58	11° \mathbb{M} 41'13	-0°58'52	minimum elong	15504 Jan 13 08:28	6° \approx 17'08	8°40'12
minimum elong	15501 Aug 19 23:34	12° \mathbb{M} 17'35	0°58'48	min. Earth dist.	15504 Jan 12 23:02	6° \approx 31'52	0.28620 AU
max. Earth dist.	15501 Aug 18 19:51	10° \mathbb{M} 50'41	1.71542 AU	morning rise	15504 Jan 16 14:07	4° \approx 17'31	
	15501 Sep 03 02:34	0° \mathcal{L}			15504 Jan 25 05:29	30° \mathcal{R} \mathcal{Z}	
asc. node	15501 Sep 14 18:50	14° \mathcal{L} 37'55		direct	15504 Feb 03 10:08	28° \mathcal{Z} 19'36	
	15501 Sep 27 01:23	0° \mathbb{M}			15504 Feb 12 23:36	0° \approx	
evening rise	15501 Sep 28 09:35	1° \mathbb{M} 40'42		greatest brilliancy	15504 Feb 13 14:26	0° \approx 12'51	-4.8m
	15501 Oct 21 01:50	0° \mathcal{A}		asc. node	15504 Mar 01 14:35	9° \approx 50'06	
	15501 Nov 14 05:35	0° \mathcal{Z}		morning max el	15504 Mar 23 10:37	28° \approx 48'28	45°44'40
	15501 Dec 08 15:27	0° \approx			15504 Mar 24 15:54	0° \mathcal{H}	
	15502 Jan 02 11:09	0° \mathcal{H}			15504 Apr 22 01:58	0° \mathbb{Y}	
desc. node	15502 Jan 04 10:43	2° \mathcal{H} 22'02			15504 May 18 07:20	0° \mathcal{B}	
	15502 Jan 27 21:21	0° \mathbb{Y}			15504 Jun 12 13:19	0° \mathbb{I}	
	15502 Feb 23 05:59	0° \mathcal{B}		desc. node	15504 Jun 21 15:35	10° \mathbb{I} 59'25	
	15502 Mar 23 12:24	0° \mathbb{I}			15504 Jul 07 05:47	0° \mathcal{E}	
evening max el	15502 Mar 27 12:01	3° \mathbb{I} 55'36	46°02'04		15504 Jul 31 13:39	0° \mathcal{Q}	
asc. node	15502 Apr 27 07:51	28° \mathbb{I} 58'28			15504 Aug 24 16:31	0° \mathbb{M}	
	15502 Apr 29 04:13	0° \mathcal{E}			15504 Sep 17 16:59	0° \mathcal{L}	
greatest brilliancy	15502 May 05 21:47	2° \mathcal{E} 59'49	-4.8m	morning set	15504 Sep 22 23:01	6° \mathcal{L} 34'00	
retrograde	15502 May 15 19:18	4° \mathcal{E} 48'17			15504 Oct 11 16:43	0° \mathbb{M}	
	15502 May 31 10:52	30° \mathcal{R} \mathbb{I}		asc. node	15504 Oct 12 09:00	0° \mathbb{M} 50'56	
evening set	15502 Jun 01 13:55	29° \mathbb{I} 20'44					
inferior conj	15502 Jun 05 18:01	26° \mathbb{I} 46'44	8°03'54	superior conj	15504 Nov 01 04:49	25° \mathbb{M} 38'16	0°46'06
minimum elong	15502 Jun 05 09:06	27° \mathbb{I} 00'43	8°01'44	minimum elong	15504 Oct 31 19:12	25° \mathbb{M} 08'13	0°46'22
min. Earth dist.	15502 Jun 05 18:48	26° \mathbb{I} 45'30	0.28047 AU	max. Earth dist.	15504 Nov 02 19:41	27° \mathbb{M} 39'42	1.71898 AU
morning rise	15502 Jun 09 04:14	24° \mathbb{I} 39'21			15504 Nov 04 16:37	0° \mathcal{A}	
direct	15502 Jun 26 20:39	18° \mathbb{I} 39'33			15504 Nov 28 17:42	0° \mathcal{Z}	
greatest brilliancy	15502 Jul 06 20:04	20° \mathbb{I} 32'10	-4.8m	evening rise	15504 Dec 09 00:39	12° \mathcal{Z} 47'47	
	15502 Jul 23 09:10	0° \mathcal{E}			15504 Dec 22 21:35	0° \approx	
morning max el	15502 Aug 16 06:01	21° \mathcal{E} 18'13	46°53'04		15505 Jan 16 06:09	0° \mathcal{H}	
desc. node	15502 Aug 17 10:21	22° \mathcal{E} 29'38		desc. node	15505 Jan 31 23:55	19° \mathcal{H} 13'36	
	15502 Aug 24 16:37	0° \mathcal{Q}			15505 Feb 09 20:48	0° \mathbb{Y}	
	15502 Sep 20 18:07	0° \mathbb{M}			15505 Mar 06 18:21	0° \mathcal{B}	
	15502 Oct 16 08:34	0° \mathcal{L}			15505 Apr 01 00:10	0° \mathbb{I}	
	15502 Nov 10 08:24	0° \mathbb{M}			15505 Apr 26 19:12	0° \mathcal{E}	
	15502 Dec 05 00:44	0° \mathcal{A}			15505 May 23 19:02	0° \mathcal{Q}	
asc. node	15502 Dec 08 09:17	4° \mathcal{A} 06'07		asc. node	15505 May 24 18:23	1° \mathcal{Q} 02'15	
	15502 Dec 29 12:21	0° \mathcal{Z}		evening max el	15505 Jun 07 18:10	15° \mathcal{Q} 26'08	46°24'16
	15503 Jan 22 21:02	0° \approx			15505 Jun 23 12:37	0° \mathbb{M}	
morning set	15503 Feb 15 04:29	28° \approx 45'56		greatest brilliancy	15505 Jul 18 02:22	15° \mathbb{M} 32'53	-4.9m
	15503 Feb 16 04:30	0° \mathcal{H}		retrograde	15505 Jul 27 14:05	17° \mathbb{M} 14'42	
	15503 Mar 12 11:57	0° \mathbb{Y}		evening set	15505 Aug 12 21:40	12° \mathbb{M} 06'49	
				inferior conj	15505 Aug 17 06:27	9° \mathbb{M} 29'48	6°29'40
superior conj	15503 Mar 24 12:11	14° \mathbb{Y} 48'51	0°13'33	minimum elong	15505 Aug 17 17:33	9° \mathbb{M} 12'46	6°26'44
minimum elong	15503 Mar 24 15:14	14° \mathbb{Y} 58'15	0°13'15	min. Earth dist.	15505 Aug 17 22:58	9° \mathbb{M} 04'27	0.27146 AU
behind sun begin	15503 Mar 24 01:56	14° \mathbb{Y} 17'13		morning rise	15505 Aug 22 13:06	6° \mathbb{M} 20'47	
behind sun end	15503 Mar 25 04:32	15° \mathbb{Y} 39'16		direct	15505 Sep 07 01:06	1° \mathbb{M} 37'37	

desc. node	15505 Sep 13 19:42	2°♍30'26		15508 May 08 19:53	0°♋	
greatest brilliancy	15505 Sep 17 08:40	3°♍36'36	-4.9m	15508 Jun 02 15:10	0°♌	
	15505 Oct 23 07:30	0°♌		asc. node	15508 Jun 21 05:50	22°♌14'15
morning max el	15505 Oct 27 06:41	3°♌52'50	46°44'15		15508 Jun 27 19:35	0°♍
	15505 Nov 21 00:52	0°♍			15508 Jul 23 19:49	0°♎
	15505 Dec 17 11:27	0°♎		evening max el	15508 Aug 19 17:04	28°♎48'20 46°41'31
asc. node	15506 Jan 04 20:45	21°♎33'34			15508 Aug 20 21:48	0°♏
	15506 Jan 11 23:23	0°♏		greatest brilliancy	15508 Sep 28 02:41	29°♏05'16 -4.9m
	15506 Feb 05 22:55	0°♐			15508 Sep 30 18:12	0°♑
	15506 Mar 02 15:12	0°♑		retrograde	15508 Oct 09 00:15	1°♑17'34
	15506 Mar 27 03:18	0°♒		desc. node	15508 Oct 11 05:16	1°♑11'37
	15506 Apr 20 12:32	0°♒			15508 Oct 16 23:12	30°♒♌
morning set	15506 Apr 25 21:19	6°♒37'08		evening set	15508 Oct 23 21:34	26°♒55'59
desc. node	15506 Apr 26 16:12	7°♒35'25		min. Earth dist.	15508 Oct 29 04:22	23°♒50'25 0.27338 AU
	15506 May 14 19:05	0°♓		inferior conj	15508 Oct 29 21:42	23°♓24'01 -4°37'08
max. Earth dist.	15506 Jun 01 00:18	21°♓22'00	1.72318 AU	minimum elong	15508 Oct 29 12:11	23°♓38'31 4°33'49
				morning rise	15508 Nov 04 03:25	20°♓18'46
superior conj	15506 Jun 04 00:49	25°♓07'28	-1°16'46	direct	15508 Nov 19 18:37	15°♓37'50
minimum elong	15506 Jun 03 15:14	24°♓37'42	1°17'25	greatest brilliancy	15508 Nov 29 06:12	17°♓17'24 -4.8m
	15506 Jun 07 22:51	0°♋			15508 Dec 20 17:44	0°♑
	15506 Jul 02 00:19	0°♌		morning max el	15509 Jan 08 01:58	16°♑17'26 46°01'42
evening rise	15506 Jul 13 09:25	14°♌12'50			15509 Jan 21 15:51	0°♒
	15506 Jul 26 00:41	0°♍		asc. node	15509 Feb 01 07:00	11°♒21'37
asc. node	15506 Aug 17 06:29	27°♍45'54			15509 Feb 18 00:55	0°♓
	15506 Aug 19 01:31	0°♎			15509 Mar 15 22:07	0°♑
	15506 Sep 12 04:27	0°♏			15509 Apr 10 02:08	0°♒
	15506 Oct 06 11:50	0°♑			15509 May 04 20:20	0°♒
	15506 Oct 31 03:50	0°♒		desc. node	15509 May 24 05:19	23°♒43'19
	15506 Nov 25 12:01	0°♓			15509 May 29 07:43	0°♓
desc. node	15506 Dec 07 00:21	13°♓12'51			15509 Jun 22 13:41	0°♋
	15506 Dec 22 03:31	0°♑		morning set	15509 Jul 08 06:43	19°♋33'31
evening max el	15507 Jan 13 01:03	22°♑34'55	46°04'16		15509 Jul 16 15:29	0°♌
	15507 Jan 20 23:19	0°♒			15509 Aug 09 14:44	0°♍
greatest brilliancy	15507 Feb 21 04:13	21°♒11'55	-4.8m	max. Earth dist.	15509 Aug 16 05:07	8°♍16'10 1.71544 AU
retrograde	15507 Mar 03 05:24	23°♒02'51				
evening set	15507 Mar 18 09:54	18°♒33'07		superior conj	15509 Aug 17 00:03	9°♍15'29 -1°01'41
inferior conj	15507 Mar 24 12:43	14°♒52'31	-1°21'17	minimum elong	15509 Aug 17 11:45	9°♍52'08 1°01'39
minimum elong	15507 Mar 24 15:46	14°♒47'43	1°20'29		15509 Sep 02 13:08	0°♎
min. Earth dist.	15507 Mar 24 17:09	14°♒45'34	0.28435 AU	asc. node	15509 Sep 13 20:43	14°♎10'42
asc. node	15507 Mar 30 00:05	11°♒33'13		evening rise	15509 Sep 25 22:49	29°♎18'47
morning rise	15507 Mar 30 21:26	11°♒03'26			15509 Sep 26 11:59	0°♏
direct	15507 Apr 14 18:08	6°♒41'57			15509 Oct 20 12:30	0°♑
greatest brilliancy	15507 Apr 25 11:53	8°♒49'24	-4.8m		15509 Nov 13 16:25	0°♒
	15507 May 25 21:06	0°♒			15509 Dec 08 02:38	0°♓
morning max el	15507 Jun 03 08:17	8°♒03'34	46°14'31		15510 Jan 01 22:58	0°♑
	15507 Jun 24 07:26	0°♓		desc. node	15510 Jan 03 12:28	1°♑51'51
desc. node	15507 Jul 20 02:26	29°♓17'01			15510 Jan 27 10:19	0°♒
	15507 Jul 20 17:08	0°♋			15510 Feb 22 21:15	0°♒
	15507 Aug 14 22:29	0°♌			15510 Mar 23 09:41	0°♓
	15507 Sep 08 13:57	0°♍		evening max el	15510 Mar 25 02:36	1°♓40'01 46°01'33
	15507 Oct 02 22:38	0°♎		asc. node	15510 Apr 26 09:54	27°♓31'23
	15507 Oct 27 04:08	0°♏			15510 May 01 14:42	0°♋
asc. node	15507 Nov 09 22:34	17°♏05'09		greatest brilliancy	15510 May 03 12:10	0°♋42'59 -4.8m
	15507 Nov 20 08:03	0°♑		retrograde	15510 May 13 09:03	2°♋30'56
morning set	15507 Dec 05 07:32	18°♑36'55			15510 May 24 13:38	30°♒♓
	15507 Dec 14 11:19	0°♒		evening set	15510 May 30 00:32	27°♓09'17
	15508 Jan 07 15:01	0°♓		inferior conj	15510 Jun 03 08:37	24°♓29'14 7°53'11
				minimum elong	15510 Jun 02 23:15	24°♓43'57 7°50'50
superior conj	15508 Jan 11 16:40	5°♓02'48	1°25'02	min. Earth dist.	15510 Jun 03 09:07	24°♓28'27 0.28062 AU
minimum elong	15508 Jan 11 20:39	5°♓15'07	1°25'47	morning rise	15510 Jun 06 21:54	22°♓16'58
max. Earth dist.	15508 Jan 13 23:59	7°♓54'16	1.72764 AU	direct	15510 Jun 24 11:07	16°♓21'54
	15508 Jan 31 20:32	0°♑		greatest brilliancy	15510 Jul 04 11:07	18°♓14'29 -4.8m
evening rise	15508 Feb 18 03:56	21°♑20'46			15510 Jul 23 23:59	0°♋
	15508 Feb 25 04:46	0°♒		morning max el	15510 Aug 13 19:11	18°♋55'36 46°52'21
desc. node	15508 Feb 29 13:51	5°♒22'46		desc. node	15510 Aug 16 12:20	21°♋40'33
	15508 Mar 20 15:42	0°♒			15510 Aug 24 11:40	0°♌
	15508 Apr 14 04:43	0°♓			15510 Sep 20 08:58	0°♍

	15510 Oct 15 21:35	0°♄		asc. node	15513 May 23 20:10	0°♄17'09	
	15510 Nov 09 20:25	0°♍			15513 May 23 13:42	0°♄	
	15510 Dec 04 12:05	0°♊		evening max el	15513 Jun 05 07:07	13°♄03'02	46°23'23
asc. node	15510 Dec 07 11:08	3°♊37'11			15513 Jun 23 23:10	0°♎	
	15510 Dec 28 23:16	0°♈		greatest brilliancy	15513 Jul 15 15:30	13°♎08'45	-4.9m
	15511 Jan 22 07:42	0°♏		retrograde	15513 Jul 25 03:18	14°♎50'41	
morning set	15511 Feb 12 21:27	26°♏37'34		evening set	15513 Aug 10 14:03	9°♎37'03	
	15511 Feb 15 15:03	0°♋		inferior conj	15513 Aug 14 19:21	7°♎05'06	6°46'14
	15511 Mar 11 22:29	0°♐		minimum elong	15513 Aug 15 06:26	6°♎48'06	6°43'23
				min. Earth dist.	15513 Aug 15 12:11	6°♎39'17	0.27180 AU
superior conj	15511 Mar 22 03:56	12°♐36'57	0°16'57	morning rise	15513 Aug 19 22:31	4°♎01'10	
minimum elong	15511 Mar 22 07:44	12°♐48'38	0°16'39		15513 Aug 29 08:37	30°♌♄	
max. Earth dist.	15511 Mar 22 01:37	12°♐29'48	1.73093 AU	direct	15513 Sep 04 14:14	29°♄12'04	
desc. node	15511 Mar 29 04:10	21°♐15'40			15513 Sep 11 00:34	0°♎	
	15511 Apr 05 06:10	0°♌		desc. node	15513 Sep 12 21:43	0°♎30'57	
evening rise	15511 Apr 29 07:51	29°♌42'48		greatest brilliancy	15513 Sep 14 21:52	1°♎11'34	-4.9m
	15511 Apr 29 13:25	0°♈			15513 Oct 23 07:45	0°♄	
	15511 May 23 19:44	0°♌		morning max el	15513 Oct 24 21:26	1°♄33'04	46°45'28
	15511 Jun 17 01:36	0°♄			15513 Nov 20 17:31	0°♍	
	15511 Jul 11 08:45	0°♎			15513 Dec 17 01:21	0°♊	
asc. node	15511 Jul 19 18:36	10°♎20'50		asc. node	15514 Jan 03 22:33	21°♊00'49	
	15511 Aug 04 19:46	0°♄			15514 Jan 11 11:53	0°♈	
	15511 Aug 29 14:43	0°♍			15514 Feb 05 10:37	0°♏	
	15511 Sep 24 01:38	0°♊			15514 Mar 02 02:26	0°♋	
	15511 Oct 21 01:08	0°♈			15514 Mar 26 14:14	0°♐	
evening max el	15511 Oct 31 11:08	10°♈41'41	46°28'36		15514 Apr 19 23:21	0°♌	
desc. node	15511 Nov 08 15:20	18°♈33'07		morning set	15514 Apr 23 12:11	4°♌21'35	
	15511 Nov 22 03:06	0°♏		desc. node	15514 Apr 25 18:00	7°♌07'38	
greatest brilliancy	15511 Dec 10 00:26	10°♏26'34	-4.8m		15514 May 14 05:53	0°♈	
retrograde	15511 Dec 20 08:26	12°♏24'12		max. Earth dist.	15514 May 29 17:02	19°♈11'11	1.72358 AU
evening set	15512 Jan 07 19:42	6°♏02'18					
inferior conj	15512 Jan 10 18:55	4°♏11'59	-8°46'04	superior conj	15514 Jun 01 14:16	22°♈46'20	-1°14'55
minimum elong	15512 Jan 10 23:04	4°♏05'28	8°45'01	minimum elong	15514 Jun 01 04:15	22°♈15'11	1°15'31
min. Earth dist.	15512 Jan 10 13:47	4°♏19'59	0.28602 AU		15514 Jun 07 09:42	0°♌	
morning rise	15512 Jan 14 02:32	2°♏09'07			15514 Jul 01 11:16	0°♄	
	15512 Jan 17 21:41	30°♌♄		evening rise	15514 Jul 10 21:31	11°♄46'22	
direct	15512 Feb 01 00:44	26°♄07'06			15514 Jul 25 11:46	0°♎	
greatest brilliancy	15512 Feb 11 05:06	27°♄59'56	-4.8m	asc. node	15514 Aug 16 08:21	27°♎16'47	
	15512 Feb 15 22:57	0°♏			15514 Aug 18 12:45	0°♄	
asc. node	15512 Feb 29 16:38	8°♏42'18			15514 Sep 11 15:56	0°♍	
morning max el	15512 Mar 21 00:46	26°♏32'30	45°44'20		15514 Oct 05 23:44	0°♊	
	15512 Mar 24 13:05	0°♋			15514 Oct 30 16:26	0°♈	
	15512 Apr 21 17:15	0°♐			15514 Nov 25 01:56	0°♏	
	15512 May 17 20:29	0°♌		desc. node	15514 Dec 06 02:08	12°♏35'50	
	15512 Jun 12 01:27	0°♈			15514 Dec 21 20:24	0°♋	
desc. node	15512 Jun 20 17:23	10°♈28'44		evening max el	15515 Jan 10 17:13	20°♋24'03	46°05'00
	15512 Jul 06 17:20	0°♌			15515 Jan 21 02:20	0°♐	
	15512 Jul 31 00:53	0°♄		greatest brilliancy	15515 Feb 18 19:14	18°♐59'00	-4.8m
	15512 Aug 24 03:32	0°♎		retrograde	15515 Feb 28 21:21	20°♐50'15	
	15512 Sep 17 03:53	0°♄		evening set	15515 Mar 16 03:02	16°♐18'23	
morning set	15512 Sep 20 11:46	4°♄09'45		inferior conj	15515 Mar 22 04:19	12°♐39'37	-1°42'17
asc. node	15512 Oct 11 10:50	0°♍22'55		minimum elong	15515 Mar 22 08:09	12°♐33'38	1°41'13
	15512 Oct 11 03:31	0°♍		min. Earth dist.	15515 Mar 22 08:41	12°♐32'47	0.28449 AU
				morning rise	15515 Mar 28 13:09	8°♐50'38	
superior conj	15512 Oct 29 18:49	23°♍18'30	0°42'58	asc. node	15515 Mar 29 02:01	8°♐33'15	
minimum elong	15512 Oct 29 09:36	22°♍49'40	0°43'13	direct	15515 Apr 12 10:24	4°♐29'13	
max. Earth dist.	15512 Oct 31 05:02	25°♍05'23	1.71872 AU	greatest brilliancy	15515 Apr 23 03:16	6°♐36'10	-4.8m
	15512 Nov 04 03:21	0°♊			15515 May 25 22:25	0°♌	
	15512 Nov 28 04:26	0°♈		morning max el	15515 Jun 01 00:13	5°♌50'35	46°12'53
evening rise	15512 Dec 06 16:06	10°♈33'20			15515 Jun 24 00:02	0°♈	
	15512 Dec 22 08:23	0°♏		desc. node	15515 Jul 19 04:23	28°♈41'50	
	15513 Jan 15 17:07	0°♋			15515 Jul 20 07:05	0°♌	
desc. node	15513 Jan 31 01:46	18°♋45'22			15515 Aug 14 11:12	0°♄	
	15513 Feb 09 08:06	0°♐			15515 Sep 08 01:59	0°♎	
	15513 Mar 06 06:13	0°♌			15515 Oct 02 10:13	0°♄	
	15513 Mar 31 13:00	0°♈			15515 Oct 26 15:23	0°♍	
	15513 Apr 26 09:50	0°♌		asc. node	15515 Nov 09 00:20	16°♍36'05	

	15515 Nov 19 19:04	0°♊		evening set	15518 May 27 11:23	24°♊57'49	
morning set	15515 Dec 02 22:31	16°♊20'24		inferior conj	15518 May 31 23:28	22°♊12'02	7°41'39
	15515 Dec 13 22:11	0°♊		minimum elong	15518 May 31 13:43	22°♊27'22	7°39'09
	15516 Jan 07 01:49	0°♊		min. Earth dist.	15518 May 31 23:54	22°♊11'22	0.28076 AU
				morning rise	15518 Jun 04 15:54	19°♊54'53	
superior conj	15516 Jan 09 08:58	2°♊51'02	1°25'39	direct	15518 Jun 22 01:27	14°♊04'23	
minimum elong	15516 Jan 09 12:11	3°♊01'01	1°26'26	greatest brilliancy	15518 Jul 02 02:54	15°♊57'45	-4.8m
max. Earth dist.	15516 Jan 11 18:50	5°♊50'26	1.72736 AU		15518 Jul 24 11:01	0°♊	
	15516 Jan 31 07:20	0°♊		morning max el	15518 Aug 11 08:32	16°♊33'14	46°51'37
evening rise	15516 Feb 15 19:52	19°♊08'39		desc. node	15518 Aug 15 14:20	20°♊52'08	
	15516 Feb 24 15:39	0°♊			15518 Aug 24 06:18	0°♊	
desc. node	15516 Feb 28 15:47	4°♊55'13			15518 Sep 19 23:45	0°♊	
	15516 Mar 20 02:46	0°♊			15518 Oct 15 10:43	0°♊	
	15516 Apr 13 16:05	0°♊			15518 Nov 09 08:37	0°♊	
	15516 May 08 07:43	0°♊			15518 Dec 03 23:41	0°♊	
	15516 Jun 02 03:46	0°♊		asc. node	15518 Dec 06 12:58	3°♊07'29	
asc. node	15516 Jun 20 07:41	21°♊39'48			15518 Dec 28 10:26	0°♊	
	15516 Jun 27 09:31	0°♊			15519 Jan 21 18:35	0°♊	
	15516 Jul 23 12:23	0°♊		morning set	15519 Feb 10 14:11	24°♊27'54	
evening max el	15516 Aug 17 07:52	26°♊27'58	46°41'13		15519 Feb 15 01:46	0°♊	
	15516 Aug 20 21:39	0°♊			15519 Mar 11 09:09	0°♊	
greatest brilliancy	15516 Sep 25 17:15	26°♊42'49	-4.9m				
retrograde	15516 Oct 06 13:58	28°♊53'50		superior conj	15519 Mar 19 19:41	10°♊24'37	0°20'19
desc. node	15516 Oct 10 07:11	28°♊37'02		minimum elong	15519 Mar 20 00:11	10°♊38'32	0°20'01
evening set	15516 Oct 21 08:58	24°♊35'54		max. Earth dist.	15519 Mar 19 19:08	10°♊22'56	1.73101 AU
inferior conj	15516 Oct 27 10:50	21°♊01'24	-4°16'36	desc. node	15519 Mar 28 05:53	20°♊48'04	
minimum elong	15516 Oct 27 01:50	21°♊15'08	4°13'24		15519 Apr 04 16:52	0°♊	
min. Earth dist.	15516 Oct 26 18:22	21°♊26'33	0.27290 AU	evening rise	15519 Apr 26 23:04	27°♊28'16	
morning rise	15516 Nov 01 19:21	17°♊52'11			15519 Apr 29 00:13	0°♊	
direct	15516 Nov 17 07:48	13°♊15'58			15519 May 23 06:41	0°♊	
greatest brilliancy	15516 Nov 26 19:07	14°♊55'14	-4.8m		15519 Jun 16 12:49	0°♊	
	15516 Dec 21 04:44	0°♊			15519 Jul 10 20:19	0°♊	
morning max el	15517 Jan 05 14:58	13°♊56'37	46°02'59	asc. node	15519 Jul 18 20:33	9°♊50'51	
	15517 Jan 21 10:26	0°♊			15519 Aug 04 07:53	0°♊	
asc. node	15517 Jan 31 09:05	10°♊41'58			15519 Aug 29 03:44	0°♊	
	15517 Feb 17 15:26	0°♊			15519 Sep 23 16:25	0°♊	
	15517 Mar 15 10:54	0°♊			15519 Oct 20 20:12	0°♊	
	15517 Apr 09 14:01	0°♊		evening max el	15519 Oct 29 00:46	8°♊21'41	46°29'21
	15517 May 04 07:44	0°♊		desc. node	15519 Nov 07 17:09	17°♊36'48	
desc. node	15517 May 23 07:07	23°♊14'31			15519 Nov 22 19:47	0°♊	
	15517 May 28 18:51	0°♊		greatest brilliancy	15519 Dec 07 15:07	8°♊11'30	-4.8m
	15517 Jun 22 00:39	0°♊		retrograde	15519 Dec 17 23:42	10°♊10'09	
morning set	15517 Jul 05 19:06	17°♊08'27		evening set	15520 Jan 05 11:54	3°♊46'40	
	15517 Jul 16 02:22	0°♊		inferior conj	15520 Jan 08 10:07	1°♊58'07	-8°49'54
	15517 Aug 09 01:37	0°♊		minimum elong	15520 Jan 08 13:28	1°♊52'52	8°48'57
max. Earth dist.	15517 Aug 13 12:36	5°♊35'09	1.71555 AU	min. Earth dist.	15520 Jan 08 04:15	2°♊07'15	0.28583 AU
				morning rise	15520 Jan 11 15:06	29°♊59'24	
superior conj	15517 Aug 14 12:17	6°♊49'20	-1°04'22		15520 Jan 11 14:42	30°♊	
minimum elong	15517 Aug 14 23:58	7°♊25'55	1°04'23	direct	15520 Jan 29 15:08	23°♊53'31	
	15517 Sep 02 00:03	0°♊		greatest brilliancy	15520 Feb 08 19:41	25°♊46'19	-4.8m
asc. node	15517 Sep 12 22:35	13°♊42'17			15520 Feb 17 17:37	0°♊	
evening rise	15517 Sep 23 11:44	26°♊54'39		asc. node	15520 Feb 28 18:33	7°♊35'35	
	15517 Sep 25 22:59	0°♊		morning max el	15520 Mar 18 15:42	24°♊18'17	45°44'14
	15517 Oct 19 23:35	0°♊			15520 Mar 24 09:35	0°♊	
	15517 Nov 13 03:41	0°♊			15520 Apr 21 08:17	0°♊	
	15517 Dec 07 14:13	0°♊			15520 May 17 09:28	0°♊	
	15518 Jan 01 11:11	0°♊			15520 Jun 11 13:26	0°♊	
desc. node	15518 Jan 02 14:22	1°♊21'00		desc. node	15520 Jun 19 19:16	9°♊58'43	
	15518 Jan 26 23:43	0°♊			15520 Jul 06 04:46	0°♊	
	15518 Feb 22 13:02	0°♊			15520 Jul 30 12:00	0°♊	
evening max el	15518 Mar 22 16:38	29°♊22'33	46°01'10		15520 Aug 23 14:27	0°♊	
	15518 Mar 23 08:05	0°♊			15520 Sep 16 14:39	0°♊	
asc. node	15518 Apr 25 11:47	26°♊00'42		morning set	15520 Sep 18 00:54	1°♊47'05	
greatest brilliancy	15518 May 01 02:52	28°♊26'17	-4.8m	asc. node	15520 Oct 10 12:33	29°♊54'57	
	15518 May 07 11:56	0°♊			15520 Oct 10 14:10	0°♊	
retrograde	15518 May 10 23:02	0°♊13'58					
	15518 May 14 08:47	30°♊		superior conj	15520 Oct 27 09:00	20°♊59'41	0°39'46

minimum elong	15520 Oct 27 00:14	20° \mathbb{M} 32'16	0°40'00	direct	15523 Apr 10 02:36	2° Υ 17'23	
max. Earth dist.	15520 Oct 28 17:03	22° \mathbb{M} 39'50	1.71850 AU	greatest brilliancy	15523 Apr 20 18:38	4° Υ 23'36	-4.8m
	15520 Nov 03 13:56	0° \mathcal{X}			15523 May 25 22:09	0° \mathcal{B}	
	15520 Nov 27 15:02	0° \mathcal{Z}		morning max el	15523 May 29 15:30	3° \mathcal{B} 36'53	46°11'20
evening rise	15520 Dec 04 07:42	8° \mathcal{Z} 19'40			15523 Jun 23 15:58	0° \mathbb{I}	
	15520 Dec 21 19:06	0° \approx		desc. node	15523 Jul 18 06:23	28° \mathbb{I} 08'12	
	15521 Jan 15 04:01	0° \mathcal{H}			15523 Jul 19 20:29	0° \mathcal{E}	
desc. node	15521 Jan 30 03:39	18° \mathcal{H} 17'22			15523 Aug 13 23:25	0° \mathcal{O}	
	15521 Feb 08 19:20	0° Υ			15523 Sep 07 13:32	0° \mathbb{P}	
	15521 Mar 05 18:01	0° \mathcal{B}			15523 Oct 01 21:21	0° \mathcal{L}	
	15521 Mar 31 01:48	0° \mathbb{I}			15523 Oct 26 02:13	0° \mathbb{M}	
	15521 Apr 26 00:29	0° \mathcal{E}		asc. node	15523 Nov 08 02:12	16° \mathbb{M} 08'35	
asc. node	15521 May 22 22:06	29° \mathcal{E} 32'23			15523 Nov 19 05:42	0° \mathcal{X}	
	15521 May 23 08:38	0° \mathcal{O}		morning set	15523 Nov 30 13:34	14° \mathcal{X} 05'14	
evening max el	15521 Jun 02 21:04	10° \mathcal{O} 43'14	46°22'33		15523 Dec 13 08:38	0° \mathcal{Z}	
	15521 Jun 24 12:54	0° \mathbb{P}			15524 Jan 06 12:10	0° \approx	
greatest brilliancy	15521 Jul 13 04:21	10° \mathbb{P} 45'25	-4.9m				
retrograde	15521 Jul 22 16:50	12° \mathbb{P} 27'39		superior conj	15524 Jan 07 01:23	0° \approx 40'58	1°26'07
evening set	15521 Aug 08 06:37	7° \mathbb{P} 08'23		minimum elong	15524 Jan 07 03:50	0° \approx 48'35	1°26'56
inferior conj	15521 Aug 12 08:21	4° \mathbb{P} 41'24	7°01'56	max. Earth dist.	15524 Jan 09 13:25	3° \approx 47'07	1.72705 AU
minimum elong	15521 Aug 12 19:21	4° \mathbb{P} 24'33	6°59'11		15524 Jan 30 17:41	0° \mathcal{H}	
min. Earth dist.	15521 Aug 13 01:11	4° \mathbb{P} 15'36	0.27214 AU	evening rise	15524 Feb 13 11:50	16° \mathcal{H} 57'56	
morning rise	15521 Aug 17 07:51	1° \mathbb{P} 42'44			15524 Feb 24 02:07	0° Υ	
	15521 Aug 20 13:34	30° \mathcal{R} \mathcal{O}		desc. node	15524 Feb 27 17:31	4° Υ 28'21	
direct	15521 Sep 02 03:56	26° \mathcal{O} 47'43			15524 Mar 19 13:28	0° \mathcal{B}	
desc. node	15521 Sep 11 23:36	28° \mathcal{O} 36'56			15524 Apr 13 03:08	0° \mathbb{I}	
greatest brilliancy	15521 Sep 12 10:40	28° \mathcal{O} 46'58	-4.9m		15524 May 07 19:16	0° \mathcal{E}	
	15521 Sep 15 09:29	0° \mathbb{P}			15524 Jun 01 16:05	0° \mathcal{O}	
morning max el	15521 Oct 22 12:38	29° \mathbb{P} 15'20	46°46'40	asc. node	15524 Jun 19 09:40	21° \mathcal{O} 06'38	
	15521 Oct 23 06:34	0° \mathcal{L}			15524 Jun 26 23:10	0° \mathbb{P}	
	15521 Nov 20 09:32	0° \mathbb{M}			15524 Jul 23 04:49	0° \mathcal{L}	
	15521 Dec 16 14:46	0° \mathcal{X}		evening max el	15524 Aug 14 21:45	24° \mathcal{L} 06'34	46°40'56
asc. node	15522 Jan 03 00:34	20° \mathcal{X} 29'49			15524 Aug 20 22:07	0° \mathbb{M}	
	15522 Jan 11 00:01	0° \mathcal{Z}		greatest brilliancy	15524 Sep 23 08:14	24° \mathbb{M} 22'04	-4.9m
	15522 Feb 04 22:01	0° \approx		retrograde	15524 Oct 04 03:06	26° \mathbb{M} 31'22	
	15522 Mar 01 13:24	0° \mathcal{H}		desc. node	15524 Oct 09 09:07	25° \mathbb{M} 57'57	
	15522 Mar 26 00:57	0° Υ		evening set	15524 Oct 18 20:33	22° \mathbb{M} 16'39	
	15522 Apr 19 09:55	0° \mathcal{B}		inferior conj	15524 Oct 24 24:00	18° \mathbb{M} 40'03	-3°55'33
morning set	15522 Apr 21 03:04	2° \mathcal{B} 06'55		minimum elong	15524 Oct 24 15:34	18° \mathbb{M} 52'56	3°52'29
desc. node	15522 Apr 24 19:45	6° \mathcal{B} 40'29		min. Earth dist.	15524 Oct 24 08:45	19° \mathbb{M} 03'21	0.27245 AU
	15522 May 13 16:24	0° \mathbb{I}		morning rise	15524 Oct 30 11:08	15° \mathbb{M} 26'56	
max. Earth dist.	15522 May 27 08:36	16° \mathbb{I} 57'43	1.72392 AU	direct	15524 Nov 14 20:27	10° \mathbb{M} 55'09	
				greatest brilliancy	15524 Nov 24 08:44	12° \mathbb{M} 34'50	-4.8m
superior conj	15522 May 30 03:47	20° \mathbb{I} 26'23	-1°12'56		15524 Dec 21 12:16	0° \mathcal{X}	
minimum elong	15522 May 29 17:24	19° \mathbb{I} 54'08	1°13'30	morning max el	15525 Jan 03 03:28	11° \mathcal{X} 35'39	46°04'26
	15522 Jun 06 20:15	0° \mathcal{E}			15525 Jan 21 04:02	0° \mathcal{Z}	
	15522 Jun 30 21:54	0° \mathcal{O}		asc. node	15525 Jan 30 10:57	10° \mathcal{Z} 03'25	
evening rise	15522 Jul 08 09:48	9° \mathcal{O} 21'33			15525 Feb 17 05:19	0° \approx	
	15522 Jul 24 22:31	0° \mathbb{P}			15525 Mar 14 23:09	0° \mathcal{H}	
asc. node	15522 Aug 15 10:11	26° \mathbb{P} 48'31			15525 Apr 09 01:27	0° Υ	
	15522 Aug 17 23:40	0° \mathcal{L}			15525 May 03 18:43	0° \mathcal{B}	
	15522 Sep 11 03:07	0° \mathbb{M}		desc. node	15525 May 22 09:01	22° \mathcal{B} 47'11	
	15522 Oct 05 11:19	0° \mathcal{X}			15525 May 28 05:36	0° \mathbb{I}	
	15522 Oct 30 04:43	0° \mathcal{Z}			15525 Jun 21 11:17	0° \mathcal{E}	
	15522 Nov 24 15:34	0° \approx		morning set	15525 Jul 03 07:07	14° \mathcal{E} 43'19	
desc. node	15522 Dec 05 04:07	12° \approx 00'20			15525 Jul 15 12:55	0° \mathcal{O}	
	15522 Dec 21 13:10	0° \mathcal{H}			15525 Aug 08 12:09	0° \mathbb{P}	
evening max el	15523 Jan 08 09:27	18° \mathcal{H} 14'24	46°05'32	max. Earth dist.	15525 Aug 10 19:00	2° \mathbb{P} 51'51	1.71564 AU
	15523 Jan 21 06:35	0° Υ					
greatest brilliancy	15523 Feb 16 10:38	16° Υ 47'30	-4.8m	superior conj	15525 Aug 12 00:19	4° \mathbb{P} 23'39	-1°06'55
retrograde	15523 Feb 26 12:49	18° Υ 38'21		minimum elong	15525 Aug 12 11:53	4° \mathbb{P} 59'55	1°07'00
evening set	15523 Mar 13 20:17	14° Υ 04'24			15525 Sep 01 10:36	0° \mathcal{L}	
inferior conj	15523 Mar 19 19:53	10° Υ 27'35	-2°03'08	asc. node	15525 Sep 12 00:15	13° \mathcal{L} 14'29	
minimum elong	15523 Mar 20 00:27	10° Υ 20'26	2°01'49	evening rise	15525 Sep 21 00:27	24° \mathcal{L} 31'06	
min. Earth dist.	15523 Mar 20 00:24	10° Υ 20'31	0.28465 AU		15525 Sep 25 09:35	0° \mathbb{M}	
morning rise	15523 Mar 26 04:35	6° Υ 38'43			15525 Oct 19 10:18	0° \mathcal{X}	
asc. node	15523 Mar 28 03:56	5° Υ 37'04			15525 Nov 12 14:35	0° \mathcal{Z}	

	15525 Dec 07 01:29	0°≈		desc. node	15528 Jun 18 21:13	9°Ⅱ29'27	
	15525 Dec 31 23:06	0°✕			15528 Jul 05 16:02	0°☾	
desc. node	15526 Jan 01 16:17	0°✕51'08			15528 Jul 29 23:00	0°Ω	
	15526 Jan 26 12:50	0°Υ			15528 Aug 23 01:18	0°♐	
	15526 Feb 22 04:41	0°♄		morning set	15528 Sep 15 13:42	29°♐23'27	
evening max el	15526 Mar 20 06:20	27°♄05'34 46°00'48			15528 Sep 16 01:23	0°♊	
	15526 Mar 23 06:58	0°Ⅱ		asc. node	15528 Oct 09 14:28	29°♊27'40	
asc. node	15526 Apr 24 13:42	24°Ⅱ27'44			15528 Oct 10 00:48	0°♌	
greatest brilliancy	15526 Apr 28 16:48	26°Ⅱ09'41 -4.8m					
retrograde	15526 May 08 13:09	27°Ⅱ57'56		superior conj	15528 Oct 24 22:39	18°♌39'06 0°36'27	
evening set	15526 May 24 22:08	22°Ⅱ46'45		minimum elong	15528 Oct 24 14:25	18°♌13'22 0°36'40	
inferior conj	15526 May 29 14:11	19°Ⅱ55'28 7°29'16		max. Earth dist.	15528 Oct 26 06:20	20°♌18'10 1.71826 AU	
minimum elong	15526 May 29 04:06	20°Ⅱ11'18 7°26'38			15528 Nov 03 00:31	0°♍	
min. Earth dist.	15526 May 29 14:25	19°Ⅱ55'07 0.28095 AU			15528 Nov 27 01:38	0°♎	
morning rise	15526 Jun 02 09:52	17°Ⅱ33'29		evening rise	15528 Dec 01 22:56	6°♎04'56	
direct	15526 Jun 19 15:47	11°Ⅱ47'16			15528 Dec 21 05:46	0°≈	
greatest brilliancy	15526 Jun 29 18:45	13°Ⅱ41'49 -4.8m			15529 Jan 14 14:54	0°✕	
	15526 Jul 24 18:52	0°☾		desc. node	15529 Jan 29 05:24	17°✕49'03	
morning max el	15526 Aug 08 22:42	14°☾13'33 46°50'53			15529 Feb 08 06:35	0°Υ	
desc. node	15526 Aug 14 16:12	20°☾04'38			15529 Mar 05 05:53	0°♄	
	15526 Aug 24 00:15	0°Ω			15529 Mar 30 14:41	0°Ⅱ	
	15526 Sep 19 14:08	0°♐			15529 Apr 25 15:19	0°☾	
	15526 Oct 14 23:30	0°♊		asc. node	15529 May 22 00:09	28°☾47'25	
	15526 Nov 08 20:28	0°♌			15529 May 23 04:05	0°Ω	
	15526 Dec 03 10:56	0°♍		evening max el	15529 May 31 11:39	8°Ω25'14 46°21'40	
asc. node	15526 Dec 05 14:54	2°♍39'05			15529 Jun 25 07:15	0°♐	
	15526 Dec 27 21:17	0°♎		greatest brilliancy	15529 Jul 10 17:11	8°♐22'34 -4.9m	
	15527 Jan 21 05:11	0°≈		retrograde	15529 Jul 20 06:10	10°♐04'47	
morning set	15527 Feb 08 06:57	22°≈19'06		evening set	15529 Aug 05 23:14	4°♐40'11	
	15527 Feb 14 12:14	0°✕		inferior conj	15529 Aug 09 21:26	2°♐17'59 7°16'42	
	15527 Mar 10 19:34	0°Υ		minimum elong	15529 Aug 10 08:13	2°♐01'24 7°14'06	
				min. Earth dist.	15529 Aug 10 14:04	1°♐52'26 0.27249 AU	
superior conj	15527 Mar 17 11:35	8°Υ13'34 0°23'38			15529 Aug 13 16:36	30°♐♊	
minimum elong	15527 Mar 17 16:47	8°Υ29'37 0°23'21		morning rise	15529 Aug 14 17:03	29°Ω24'40	
max. Earth dist.	15527 Mar 17 14:16	8°Υ21'52 1.73107 AU		direct	15529 Aug 30 18:00	24°Ω23'48	
desc. node	15527 Mar 27 07:41	20°Υ21'33		greatest brilliancy	15529 Sep 09 23:20	26°Ω22'10 -4.9m	
	15527 Apr 04 03:18	0°♄		desc. node	15529 Sep 11 01:34	26°Ω47'27	
evening rise	15527 Apr 24 14:32	25°♄15'27			15529 Sep 17 14:33	0°♐	
	15527 Apr 28 10:45	0°Ⅱ		morning max el	15529 Oct 20 03:15	26°♐55'46 46°47'37	
	15527 May 22 17:24	0°☾			15529 Oct 23 04:35	0°♊	
	15527 Jun 15 23:49	0°Ω			15529 Nov 20 01:25	0°♌	
	15527 Jul 10 07:44	0°♐			15529 Dec 16 04:15	0°♍	
asc. node	15527 Jul 17 22:20	9°♐20'48		asc. node	15530 Jan 02 02:26	19°♍58'04	
	15527 Aug 03 19:55	0°♊			15530 Jan 10 12:13	0°♎	
	15527 Aug 28 16:44	0°♌			15530 Feb 04 09:30	0°≈	
	15527 Sep 23 07:15	0°♍			15530 Mar 01 00:26	0°✕	
	15527 Oct 20 15:40	0°♎			15530 Mar 25 11:43	0°Υ	
evening max el	15527 Oct 26 15:08	6°♎03'59 46°30'19		morning set	15530 Apr 18 18:03	29°Υ52'12	
desc. node	15527 Nov 06 19:11	16°♎40'14			15530 Apr 18 20:35	0°♄	
	15527 Nov 23 18:05	0°≈		desc. node	15530 Apr 23 21:40	6°♄13'28	
greatest brilliancy	15527 Dec 05 05:04	5°≈56'02 -4.8m			15530 May 13 03:03	0°Ⅱ	
retrograde	15527 Dec 15 15:19	7°≈56'25		max. Earth dist.	15530 May 24 21:49	14°Ⅱ36'41 1.72424 AU	
evening set	15528 Jan 03 03:40	1°≈31'43					
	15528 Jan 05 15:12	30°♐♎		superior conj	15530 May 27 17:32	18°Ⅱ06'55 -1°10'50	
inferior conj	15528 Jan 06 01:13	29°♎44'25 -8°52'59		minimum elong	15530 May 27 06:54	17°Ⅱ33'52 1°11'22	
minimum elong	15528 Jan 06 03:45	29°♎40'29 8°52'05			15530 Jun 06 06:56	0°☾	
min. Earth dist.	15528 Jan 05 18:15	29°♎55'16 0.28563 AU			15530 Jun 30 08:38	0°Ω	
morning rise	15528 Jan 09 03:54	27°♎49'28		evening rise	15530 Jul 05 22:19	6°Ω57'13	
direct	15528 Jan 27 05:55	21°♎40'06			15530 Jul 24 09:21	0°♐	
greatest brilliancy	15528 Feb 06 09:45	23°♎32'32 -4.8m		asc. node	15530 Aug 14 11:56	26°♐19'45	
	15528 Feb 18 22:32	0°≈			15530 Aug 17 10:41	0°♊	
asc. node	15528 Feb 27 20:27	6°≈30'58			15530 Sep 10 14:26	0°♌	
morning max el	15528 Mar 16 07:27	22°≈06'33 45°44'10			15530 Oct 04 23:06	0°♍	
	15528 Mar 24 05:16	0°✕			15530 Oct 29 17:16	0°♎	
	15528 Apr 20 22:57	0°Υ			15530 Nov 24 05:34	0°≈	
	15528 May 16 22:11	0°♄		desc. node	15530 Dec 04 06:02	11°≈23'32	
	15528 Jun 11 01:12	0°Ⅱ			15530 Dec 21 06:35	0°✕	

evening max el	15531 Jan 06 01:02	16° X 02'20	46°06'09	max. Earth dist.	15533 Aug 08 02:03	0° M 09'26	1.71577 AU
	15531 Jan 21 13:15	0° Y					
greatest brilliancy	15531 Feb 14 02:38	14° Y 36'03	-4.8m	superior conj	15533 Aug 09 12:27	1° M 57'13	-1°09'21
retrograde	15531 Feb 24 03:52	16° Y 25'57		minimum elong	15533 Aug 09 23:52	2° M 32'58	1°09'29
evening set	15531 Mar 11 13:43	11° Y 49'45			15533 Aug 31 21:31	0° L	
inferior conj	15531 Mar 17 11:31	8° Y 15'12	-2°23'38	asc. node	15533 Sep 11 02:10	12° L 46'19	
minimum elong	15531 Mar 17 16:48	8° Y 06'54	2°22'06	evening rise	15533 Sep 18 13:20	22° L 07'02	
min. Earth dist.	15531 Mar 17 16:25	8° Y 07'31	0.28479 AU		15533 Sep 24 20:32	0° M	
morning rise	15531 Mar 23 19:50	4° Y 26'30			15533 Oct 18 21:19	0° X	
asc. node	15531 Mar 27 05:56	2° Y 43'54			15533 Nov 12 01:48	0° Z	
direct	15531 Apr 07 18:28	0° Y 05'08			15533 Dec 06 13:05	0° \approx	
greatest brilliancy	15531 Apr 18 10:27	2° Y 10'56	-4.8m		15533 Dec 31 11:25	0° X	
	15531 May 25 21:05	0° B		desc. node	15533 Dec 31 18:03	0° X 19'45	
morning max el	15531 May 27 05:55	1° B 20'23	46°09'49		15534 Jan 26 02:27	0° Y	
	15531 Jun 23 07:53	0° I			15534 Feb 21 21:01	0° B	
desc. node	15531 Jul 17 08:09	27° I 33'23		evening max el	15534 Mar 17 20:43	24° B 49'13	46°00'32
	15531 Jul 19 10:00	0° G			15534 Mar 23 07:27	0° I	
	15531 Aug 13 11:47	0° O		asc. node	15534 Apr 23 15:44	22° I 50'31	
	15531 Sep 07 01:15	0° M		greatest brilliancy	15534 Apr 26 06:23	23° I 51'47	-4.8m
	15531 Oct 01 08:38	0° L		retrograde	15534 May 06 03:54	25° I 41'15	
	15531 Oct 25 13:15	0° M		evening set	15534 May 22 09:08	20° I 34'43	
asc. node	15531 Nov 07 04:04	15° M 40'31		inferior conj	15534 May 27 05:01	17° I 38'07	7°16'16
	15531 Nov 18 16:32	0° X		minimum elong	15534 May 26 18:40	17° I 54'20	7°13'28
morning set	15531 Nov 28 04:31	11° X 49'00		min. Earth dist.	15534 May 27 04:44	17° I 38'34	0.28113 AU
	15531 Dec 12 19:22	0° Z		morning rise	15534 May 31 04:01	15° I 11'25	
				direct	15534 Jun 17 06:42	9° I 29'29	
superior conj	15532 Jan 04 17:42	28° Z 29'38	1°26'29	greatest brilliancy	15534 Jun 27 10:16	11° I 24'55	-4.8m
minimum elong	15532 Jan 04 19:23	28° Z 34'51	1°27'18		15534 Jul 25 00:47	0° G	
	15532 Jan 05 22:50	0° \approx		morning max el	15534 Aug 06 13:48	11° G 55'24	46°50'00
max. Earth dist.	15532 Jan 07 05:31	1° \approx 35'11	1.72675 AU	desc. node	15534 Aug 13 18:12	19° G 17'14	
	15532 Jan 30 04:21	0° X			15534 Aug 23 18:09	0° O	
evening rise	15532 Feb 11 03:36	14° X 45'38			15534 Sep 19 04:44	0° M	
	15532 Feb 23 12:54	0° Y			15534 Oct 14 12:33	0° L	
desc. node	15532 Feb 26 19:18	4° Y 00'41			15534 Nov 08 08:36	0° M	
	15532 Mar 19 00:28	0° B			15534 Dec 02 22:27	0° X	
	15532 Apr 12 14:29	0° I		asc. node	15534 Dec 04 16:43	2° X 09'28	
	15532 May 07 07:09	0° G			15534 Dec 27 08:24	0° Z	
	15532 Jun 01 04:47	0° O			15535 Jan 20 16:03	0° \approx	
asc. node	15532 Jun 18 11:28	20° O 31'44		morning set	15535 Feb 06 00:01	20° \approx 10'14	
	15532 Jun 26 13:19	0° M			15535 Feb 13 22:59	0° X	
	15532 Jul 22 21:55	0° L			15535 Mar 10 06:18	0° Y	
evening max el	15532 Aug 12 10:57	21° L 42'45	46°40'46				
	15532 Aug 21 00:12	0° M		superior conj	15535 Mar 15 03:36	6° Y 01'48	0°26'54
greatest brilliancy	15532 Sep 20 23:26	22° M 01'14	-4.9m	minimum elong	15535 Mar 15 09:28	6° Y 19'54	0°26'38
retrograde	15532 Oct 01 16:19	24° M 09'06		max. Earth dist.	15535 Mar 15 10:37	6° Y 23'24	1.73115 AU
desc. node	15532 Oct 08 11:06	23° M 13'23		desc. node	15535 Mar 26 09:37	19° Y 54'21	
evening set	15532 Oct 16 08:35	19° M 56'50			15535 Apr 03 14:05	0° B	
min. Earth dist.	15532 Oct 21 23:34	16° M 39'57	0.27203 AU	evening rise	15535 Apr 22 06:00	23° B 01'33	
inferior conj	15532 Oct 22 13:24	16° M 18'47	-3°34'14		15535 Apr 27 21:38	0° I	
minimum elong	15532 Oct 22 05:36	16° M 30'43	3°31'19		15535 May 22 04:29	0° G	
morning rise	15532 Oct 28 03:03	13° M 02'02			15535 Jun 15 11:11	0° O	
direct	15532 Nov 12 08:57	8° M 34'06			15535 Jul 09 19:31	0° M	
greatest brilliancy	15532 Nov 21 23:05	10° M 14'58	-4.8m	asc. node	15535 Jul 17 00:10	8° M 49'47	
	15532 Dec 21 17:46	0° X			15535 Aug 03 08:20	0° L	
morning max el	15532 Dec 31 16:17	9° X 14'33	46°05'47		15535 Aug 28 06:11	0° M	
	15533 Jan 20 21:33	0° Z			15535 Sep 22 22:42	0° X	
asc. node	15533 Jan 29 12:49	9° Z 24'21			15535 Oct 20 12:11	0° Z	
	15533 Feb 16 19:24	0° \approx		evening max el	15535 Oct 24 06:34	3° Z 47'51	46°31'15
	15533 Mar 14 11:43	0° X		desc. node	15535 Nov 05 21:09	15° Z 41'14	
	15533 Apr 08 13:13	0° Y			15535 Nov 25 01:50	0° \approx	
	15533 May 03 06:02	0° B		greatest brilliancy	15535 Dec 02 18:49	3° \approx 39'35	-4.8m
desc. node	15533 May 21 10:51	22° B 18'41		retrograde	15535 Dec 13 07:17	5° \approx 41'52	
	15533 May 27 16:41	0° I			15535 Dec 30 14:14	30° R Z	
	15533 Jun 20 22:13	0° G		evening set	15535 Dec 31 19:10	29° Z 16'42	
morning set	15533 Jun 30 19:10	12° G 17'14		inferior conj	15536 Jan 03 16:22	27° Z 30'01	-8°55'19
	15533 Jul 14 23:49	0° O		minimum elong	15536 Jan 03 18:03	27° Z 27'24	8°54'27
	15533 Aug 07 23:02	0° M		min. Earth dist.	15536 Jan 03 07:58	27° Z 43'04	0.28536 AU

morning rise	15536 Jan 06 17:04	25° ♁ 38'19		evening rise	15538 Jul 03 10:47	4° ♁ 32'19	
direct	15536 Jan 24 21:15	19° ♁ 26'20			15538 Jul 23 20:20	0° ♁	
greatest brilliancy	15536 Feb 03 23:08	21° ♁ 17'34	-4.8m	asc. node	15538 Aug 13 13:50	25° ♁ 50'55	
	15536 Feb 19 19:38	0° ♁			15538 Aug 16 21:51	0° ♁	
asc. node	15536 Feb 26 22:31	5° ♁ 27'47			15538 Sep 10 01:54	0° ♁	
morning max el	15536 Mar 13 23:23	19° ♁ 54'49	45°44'00		15538 Oct 04 11:02	0° ♁	
	15536 Mar 24 00:34	0° ♁			15538 Oct 29 05:59	0° ♁	
	15536 Apr 20 13:42	0° ♁			15538 Nov 23 19:51	0° ♁	
	15536 May 16 11:08	0° ♁		desc. node	15538 Dec 03 07:51	10° ♁ 45'53	
	15536 Jun 10 13:15	0° ♁			15538 Dec 21 00:32	0° ♁	
desc. node	15536 Jun 17 23:01	8° ♁ 58'49		evening max el	15539 Jan 03 15:42	13° ♁ 47'41	46°06'46
	15536 Jul 05 03:36	0° ♁			15539 Jan 21 22:38	0° ♁	
	15536 Jul 29 10:17	0° ♁		greatest brilliancy	15539 Feb 11 18:54	12° ♁ 24'43	-4.8m
	15536 Aug 22 12:24	0° ♁		retrograde	15539 Feb 21 18:43	14° ♁ 13'38	
morning set	15536 Sep 13 02:25	26° ♁ 58'49		evening set	15539 Mar 09 07:15	9° ♁ 34'50	
	15536 Sep 15 12:21	0° ♁		inferior conj	15539 Mar 15 03:10	6° ♁ 02'58	-2°43'59
asc. node	15536 Oct 08 16:17	28° ♁ 59'17		minimum elong	15539 Mar 15 09:08	5° ♁ 53'37	2°42'14
	15536 Oct 09 11:41	0° ♁		min. Earth dist.	15539 Mar 15 08:39	5° ♁ 54'21	0.28490 AU
				morning rise	15539 Mar 21 10:53	2° ♁ 14'46	
superior conj	15536 Oct 22 12:10	16° ♁ 17'16	0°33'04	asc. node	15539 Mar 26 07:54	29° ♁ 54'55	
minimum elong	15536 Oct 22 04:32	15° ♁ 53'24	0°33'16		15539 Mar 26 02:50	30° ♁	
max. Earth dist.	15536 Oct 23 20:58	17° ♁ 59'52	1.71804 AU	direct	15539 Apr 05 09:50	27° ♁ 52'58	
	15536 Nov 02 11:22	0° ♁		greatest brilliancy	15539 Apr 16 02:40	29° ♁ 59'02	-4.8m
	15536 Nov 26 12:30	0° ♁			15539 Apr 16 03:42	0° ♁	
evening rise	15536 Nov 29 14:12	3° ♁ 49'21		morning max el	15539 May 24 19:47	29° ♁ 02'47	46°08'25
	15536 Dec 20 16:43	0° ♁			15539 May 25 18:58	0° ♁	
	15537 Jan 14 02:01	0° ♁			15539 Jun 22 23:26	0° ♁	
desc. node	15537 Jan 28 07:18	17° ♁ 20'29		desc. node	15539 Jul 16 10:10	26° ♁ 59'43	
	15537 Feb 07 18:02	0° ♁			15539 Jul 18 23:20	0° ♁	
	15537 Mar 04 17:57	0° ♁			15539 Aug 13 00:03	0° ♁	
	15537 Mar 30 03:51	0° ♁			15539 Sep 06 12:55	0° ♁	
	15537 Apr 25 06:35	0° ♁			15539 Sep 30 19:55	0° ♁	
asc. node	15537 May 21 01:57	28° ♁ 00'23			15539 Oct 25 00:15	0° ♁	
	15537 May 23 00:27	0° ♁		asc. node	15539 Nov 06 05:50	15° ♁ 12'12	
evening max el	15537 May 29 02:05	6° ♁ 06'09	46°20'38		15539 Nov 18 03:20	0° ♁	
	15537 Jun 26 08:49	0° ♁		morning set	15539 Nov 25 19:06	9° ♁ 31'43	
greatest brilliancy	15537 Jul 08 06:33	5° ♁ 59'40	-4.8m		15539 Dec 12 06:00	0° ♁	
retrograde	15537 Jul 17 19:10	7° ♁ 41'11					
evening set	15537 Aug 03 15:56	2° ♁ 11'33		superior conj	15540 Jan 02 09:51	26° ♁ 18'01	1°26'42
inferior conj	15537 Aug 07 10:36	29° ♁ 54'06	7°30'42	minimum elong	15540 Jan 02 10:44	26° ♁ 20'44	1°27'32
minimum elong	15537 Aug 07 21:06	29° ♁ 37'55	7°28'15	max. Earth dist.	15540 Jan 04 19:55	29° ♁ 18'09	1.72646 AU
	15537 Aug 07 06:46	30° ♁			15540 Jan 05 09:25	0° ♁	
min. Earth dist.	15537 Aug 08 03:08	29° ♁ 28'37	0.27283 AU		15540 Jan 29 14:58	0° ♁	
morning rise	15537 Aug 12 02:08	27° ♁ 06'14		evening rise	15540 Feb 08 19:21	12° ♁ 33'31	
direct	15537 Aug 28 07:46	21° ♁ 59'32			15540 Feb 22 23:38	0° ♁	
greatest brilliancy	15537 Sep 07 12:14	23° ♁ 57'03	-4.9m	desc. node	15540 Feb 25 21:14	3° ♁ 33'39	
desc. node	15537 Sep 10 03:36	25° ♁ 01'38			15540 Mar 18 11:24	0° ♁	
	15537 Sep 19 01:42	0° ♁			15540 Apr 12 01:44	0° ♁	
morning max el	15537 Oct 17 16:49	24° ♁ 32'58	46°48'28		15540 May 06 18:52	0° ♁	
	15537 Oct 23 01:58	0° ♁			15540 May 31 17:21	0° ♁	
	15537 Nov 19 17:12	0° ♁		asc. node	15540 Jun 17 13:22	19° ♁ 57'37	
	15537 Dec 15 17:45	0° ♁			15540 Jun 26 03:24	0° ♁	
asc. node	15538 Jan 01 04:15	19° ♁ 25'50			15540 Jul 22 15:12	0° ♁	
	15538 Jan 10 00:31	0° ♁		evening max el	15540 Aug 09 23:33	19° ♁ 17'45	46°40'25
	15538 Feb 03 21:04	0° ♁			15540 Aug 21 03:48	0° ♁	
	15538 Feb 28 11:33	0° ♁		greatest brilliancy	15540 Sep 18 13:58	19° ♁ 39'02	-4.9m
	15538 Mar 24 22:35	0° ♁		retrograde	15540 Sep 29 05:24	21° ♁ 46'09	
morning set	15538 Apr 16 09:23	27° ♁ 38'24		desc. node	15540 Oct 07 13:03	20° ♁ 22'20	
	15538 Apr 18 07:18	0° ♁		evening set	15540 Oct 13 20:28	17° ♁ 35'39	
desc. node	15538 Apr 22 23:28	5° ♁ 45'58		min. Earth dist.	15540 Oct 19 13:59	14° ♁ 15'39	0.27168 AU
	15538 May 12 13:45	0° ♁		inferior conj	15540 Oct 20 02:28	13° ♁ 56'37	-3°12'05
max. Earth dist.	15538 May 22 10:28	12° ♁ 13'43	1.72462 AU	minimum elong	15540 Oct 19 19:21	14° ♁ 07'28	3°09'22
				morning rise	15540 Oct 25 18:34	10° ♁ 36'34	
superior conj	15538 May 25 07:30	15° ♁ 47'59	-1°08'38	direct	15540 Nov 09 21:10	6° ♁ 11'55	
minimum elong	15538 May 24 20:40	15° ♁ 14'20	1°09'07	greatest brilliancy	15540 Nov 19 13:15	7° ♁ 54'25	-4.8m
	15538 Jun 05 17:41	0° ♁			15540 Dec 21 21:20	0° ♁	
	15538 Jun 29 19:29	0° ♁		morning max el	15540 Dec 29 05:28	6° ♁ 54'30	46°07'18

	15541 Jan 20 14:32	0°♁			15543 Sep 22 13:48	0°♁	
asc. node	15541 Jan 28 14:54	8°♁46'41			15543 Oct 20 08:50	0°♁	
	15541 Feb 16 09:09	0°♁	evening max el		15543 Oct 21 22:16	1°♁33'43	46°31'55
	15541 Mar 13 24:00	0°♁	desc. node		15543 Nov 04 22:58	14°♁41'54	
	15541 Apr 08 00:43	0°♁			15543 Nov 27 00:17	0°♁	
	15541 May 02 17:06	0°♁	greatest brilliancy		15543 Nov 30 08:43	1°♁24'13	-4.8m
desc. node	15541 May 20 12:39	21°♁50'51	retrograde		15543 Dec 10 22:57	3°♁27'42	
	15541 May 27 03:28	0°♁			15543 Dec 24 04:03	30°♁♁	
	15541 Jun 20 08:51	0°♁	evening set		15543 Dec 29 10:03	27°♁02'59	
morning set	15541 Jun 28 07:33	9°♁53'12	inferior conj		15544 Jan 01 07:21	25°♁16'07	-8°56'44
	15541 Jul 14 10:23	0°♁	minimum elong		15544 Jan 01 08:12	25°♁14'49	8°55'53
max. Earth dist.	15541 Aug 05 12:41	27°♁39'17	min. Earth dist.		15543 Dec 31 21:33	25°♁31'21	0.28510 AU
			morning rise		15544 Jan 04 06:28	23°♁26'53	
superior conj	15541 Aug 07 00:46	29°♁32'18	direct		15544 Jan 22 12:42	17°♁13'13	
minimum elong	15541 Aug 07 11:55	0°♁07'13	greatest brilliancy		15544 Feb 01 12:09	19°♁02'41	-4.8m
	15541 Aug 07 09:36	0°♁			15544 Feb 20 10:52	0°♁	
	15541 Aug 31 08:08	0°♁	asc. node		15544 Feb 26 00:25	4°♁26'38	
asc. node	15541 Sep 10 04:01	12°♁18'48	morning max el		15544 Mar 11 14:35	17°♁42'07	45°43'52
evening rise	15541 Sep 16 02:10	19°♁43'41			15544 Mar 23 19:00	0°♁	
	15541 Sep 24 07:13	0°♁			15544 Apr 20 03:54	0°♁	
	15541 Oct 18 08:08	0°♁			15544 May 15 23:36	0°♁	
	15541 Nov 11 12:49	0°♁			15544 Jun 10 00:52	0°♁	
	15541 Dec 06 00:30	0°♁	desc. node		15544 Jun 17 00:55	8°♁29'47	
desc. node	15541 Dec 30 19:59	29°♁49'28			15544 Jul 04 14:45	0°♁	
	15541 Dec 30 23:32	0°♁			15544 Jul 28 21:09	0°♁	
	15542 Jan 25 15:55	0°♁			15544 Aug 21 23:05	0°♁	
	15542 Feb 21 13:23	0°♁	morning set		15544 Sep 10 15:28	24°♁36'32	
evening max el	15542 Mar 15 11:48	22°♁35'30			15544 Sep 14 22:53	0°♁	
	15542 Mar 23 08:53	0°♁	asc. node		15544 Oct 07 18:00	28°♁32'04	
asc. node	15542 Apr 22 17:37	21°♁10'20			15544 Oct 08 22:07	0°♁	
greatest brilliancy	15542 Apr 23 19:39	21°♁34'24					
retrograde	15542 May 03 18:57	23°♁25'14	superior conj		15544 Oct 20 02:02	13°♁58'02	0°29'38
evening set	15542 May 19 20:14	18°♁23'20	minimum elong		15544 Oct 19 19:04	13°♁36'13	0°29'51
inferior conj	15542 May 24 19:44	15°♁21'28	max. Earth dist.		15544 Oct 21 12:22	15°♁45'23	1.71778 AU
minimum elong	15542 May 24 09:13	15°♁37'57			15544 Nov 01 21:45	0°♁	
min. Earth dist.	15542 May 24 18:44	15°♁23'03			15544 Nov 25 22:54	0°♁	
morning rise	15542 May 28 22:04	12°♁50'05	evening rise		15544 Nov 27 05:44	1°♁35'57	
direct	15542 Jun 14 21:58	7°♁12'45			15544 Dec 20 03:14	0°♁	
greatest brilliancy	15542 Jun 25 01:04	9°♁08'16			15545 Jan 13 12:45	0°♁	
	15542 Jul 25 04:13	0°♁	desc. node		15545 Jan 27 09:10	16°♁52'51	
morning max el	15542 Aug 04 05:14	9°♁39'37			15545 Feb 07 05:11	0°♁	
desc. node	15542 Aug 12 20:12	18°♁32'02			15545 Mar 04 05:46	0°♁	
	15542 Aug 23 11:08	0°♁			15545 Mar 29 16:49	0°♁	
	15542 Sep 18 18:39	0°♁			15545 Apr 24 21:45	0°♁	
	15542 Oct 14 01:03	0°♁	asc. node		15545 May 20 03:53	27°♁13'55	
	15542 Nov 07 20:18	0°♁			15545 May 22 21:10	0°♁	
	15542 Dec 02 09:36	0°♁	evening max el		15545 May 26 15:27	3°♁45'17	46°19'37
asc. node	15542 Dec 03 18:34	1°♁41'03			15545 Jun 27 20:20	0°♁	
	15542 Dec 26 19:11	0°♁	greatest brilliancy		15545 Jul 05 20:28	3°♁38'17	-4.8m
	15543 Jan 20 02:36	0°♁	retrograde		15545 Jul 15 07:42	5°♁18'34	
morning set	15543 Feb 03 16:43	18°♁01'17			15545 Jul 31 21:34	30°♁♁	
	15543 Feb 13 09:25	0°♁	evening set		15545 Aug 01 08:35	29°♁43'53	
	15543 Mar 09 16:41	0°♁	inferior conj		15545 Aug 04 23:46	27°♁31'17	7°43'54
			minimum elong		15545 Aug 05 09:54	27°♁15'37	7°41'35
superior conj	15543 Mar 12 19:19	3°♁50'10	min. Earth dist.		15545 Aug 05 16:31	27°♁05'23	0.27315 AU
minimum elong	15543 Mar 13 01:48	4°♁10'11	morning rise		15545 Aug 09 11:03	24°♁49'01	
max. Earth dist.	15543 Mar 13 07:26	4°♁27'33	direct		15545 Aug 25 20:55	19°♁36'07	
desc. node	15543 Mar 25 11:19	19°♁27'34	greatest brilliancy		15545 Sep 05 01:40	21°♁33'25	-4.9m
	15543 Apr 03 00:31	0°♁	desc. node		15545 Sep 09 05:29	23°♁20'29	
evening rise	15543 Apr 19 21:16	20°♁48'06			15545 Sep 20 02:12	0°♁	
	15543 Apr 27 08:11	0°♁	morning max el		15545 Oct 15 05:34	22°♁09'06	46°49'35
	15543 May 21 15:14	0°♁			15545 Oct 22 22:09	0°♁	
	15543 Jun 14 22:13	0°♁			15545 Nov 19 08:16	0°♁	
	15543 Jul 09 06:56	0°♁			15545 Dec 15 06:42	0°♁	
asc. node	15543 Jul 16 02:06	8°♁20'20	asc. node		15545 Dec 31 06:17	18°♁55'44	
	15543 Aug 02 20:20	0°♁			15546 Jan 09 12:20	0°♁	
	15543 Aug 27 19:13	0°♁			15546 Feb 03 08:14	0°♁	

	15546 Feb 27 22:20	0° H		greatest brilliancy	15548 Sep 16 03:52	17° M 15'45	-4.9m
	15546 Mar 24 09:09	0° Y		retrograde	15548 Sep 26 18:53	19° M 22'51	
morning set	15546 Apr 14 00:32	25° Y 24'47		desc. node	15548 Oct 06 14:58	17° M 25'37	
	15546 Apr 17 17:47	0° B		evening set	15548 Oct 11 08:30	15° M 13'33	
desc. node	15546 Apr 22 01:15	5° B 19'10		min. Earth dist.	15548 Oct 17 04:00	11° M 51'05	0.27134 AU
	15546 May 12 00:14	0° II		inferior conj	15548 Oct 17 15:24	11° M 33'46	-2°49'27
max. Earth dist.	15546 May 19 23:29	9° II 52'46	1.72500 AU	minimum elong	15548 Oct 17 09:01	11° M 43'27	2°46'58
				morning rise	15548 Oct 23 09:52	8° M 10'52	
superior conj	15546 May 22 21:16	13° II 29'14	-1°06'17	direct	15548 Nov 07 09:43	3° M 49'02	
minimum elong	15546 May 22 10:17	12° II 55'10	1°06'44	greatest brilliancy	15548 Nov 17 02:52	5° M 32'49	-4.8m
	15546 Jun 05 04:12	0° E			15548 Dec 21 23:24	0° A	
	15546 Jun 29 06:06	0° O		morning max el	15548 Dec 26 19:40	4° A 36'42	46°08'58
evening rise	15546 Jun 30 23:07	2° O 07'54			15549 Jan 20 07:12	0° B	
	15546 Jul 23 07:06	0° M		asc. node	15549 Jan 27 16:44	8° B 08'36	
asc. node	15546 Aug 12 15:39	25° M 22'27			15549 Feb 15 22:47	0° \approx	
	15546 Aug 16 08:50	0° E			15549 Mar 13 12:13	0° H	
	15546 Sep 09 13:11	0° M			15549 Apr 07 12:13	0° Y	
	15546 Oct 03 22:46	0° A			15549 May 02 04:13	0° B	
	15546 Oct 28 18:29	0° B		desc. node	15549 May 19 14:35	21° B 23'09	
	15546 Nov 23 09:54	0° \approx			15549 May 26 14:22	0° II	
desc. node	15546 Dec 02 09:51	10° \approx 09'29			15549 Jun 19 19:40	0° E	
	15546 Dec 20 18:30	0° H		morning set	15549 Jun 25 19:46	7° E 28'09	
evening max el	15547 Jan 01 05:34	11° H 32'10	46°07'25		15549 Jul 13 21:10	0° O	
	15547 Jan 22 10:42	0° Y		max. Earth dist.	15549 Aug 03 00:19	25° O 11'33	1.71612 AU
greatest brilliancy	15547 Feb 09 10:56	10° Y 14'13	-4.8m				
retrograde	15547 Feb 19 09:45	12° Y 02'43		superior conj	15549 Aug 04 12:42	27° O 05'32	-1°13'48
evening set	15547 Mar 07 00:58	7° Y 20'39		minimum elong	15549 Aug 04 23:29	27° O 39'18	1°14'03
inferior conj	15547 Mar 12 18:57	3° Y 51'49	-3°03'59		15549 Aug 06 20:24	0° M	
minimum elong	15547 Mar 13 01:33	3° Y 41'27	3°02'01		15549 Aug 30 18:57	0° E	
min. Earth dist.	15547 Mar 13 01:02	3° Y 42'16	0.28509 AU	asc. node	15549 Sep 09 05:42	11° E 50'08	
morning rise	15547 Mar 19 01:55	0° Y 04'28		evening rise	15549 Sep 13 14:39	17° E 18'38	
	15547 Mar 19 05:10	30° R H			15549 Sep 23 18:07	0° M	
asc. node	15547 Mar 25 09:48	27° H 11'31			15549 Oct 17 19:09	0° A	
direct	15547 Apr 03 01:07	25° H 41'34			15549 Nov 11 00:04	0° B	
greatest brilliancy	15547 Apr 13 19:28	27° H 48'34	-4.8m		15549 Dec 05 12:10	0° \approx	
	15547 Apr 18 17:35	0° Y		desc. node	15549 Dec 29 21:53	29° \approx 18'20	
morning max el	15547 May 22 10:14	26° Y 47'00	46°07'00		15549 Dec 30 11:56	0° H	
	15547 May 25 15:54	0° B			15550 Jan 25 05:41	0° Y	
	15547 Jun 22 14:38	0° II			15550 Feb 21 06:11	0° B	
desc. node	15547 Jul 15 12:08	26° II 26'27		evening max el	15550 Mar 13 03:43	20° B 23'45	46°00'12
	15547 Jul 18 12:27	0° E			15550 Mar 23 11:51	0° II	
	15547 Aug 12 12:09	0° O		greatest brilliancy	15550 Apr 21 09:09	19° II 17'34	-4.8m
	15547 Sep 06 00:26	0° M		asc. node	15550 Apr 21 19:33	19° II 26'36	
	15547 Sep 30 07:04	0° E		retrograde	15550 May 01 10:10	21° II 09'21	
	15547 Oct 24 11:09	0° M		evening set	15550 May 17 07:45	16° II 12'07	
asc. node	15547 Nov 05 07:42	14° M 44'31		inferior conj	15550 May 22 10:41	13° II 05'00	6°48'08
	15547 Nov 17 14:01	0° A		minimum elong	15550 May 22 00:04	13° II 21'38	6°45'08
morning set	15547 Nov 23 09:46	7° A 14'55		min. Earth dist.	15550 May 22 08:52	13° II 07'51	0.28140 AU
	15547 Dec 11 16:32	0° B		morning rise	15550 May 26 16:19	10° II 28'47	
				direct	15550 Jun 12 13:41	4° II 56'19	
superior conj	15547 Dec 31 02:18	24° B 07'39	1°26'46	greatest brilliancy	15550 Jun 22 15:42	6° II 51'07	-4.8m
minimum elong	15547 Dec 31 02:22	24° B 07'52	1°27'37		15550 Jul 25 06:27	0° E	
max. Earth dist.	15548 Jan 02 10:24	27° B 01'47	1.72613 AU	morning max el	15550 Aug 01 20:41	7° E 22'55	46°48'00
	15548 Jan 04 19:51	0° \approx		desc. node	15550 Aug 11 22:02	17° E 45'58	
	15548 Jan 29 01:25	0° H			15550 Aug 23 04:13	0° O	
evening rise	15548 Feb 06 11:32	10° H 23'11			15550 Sep 18 08:52	0° M	
	15548 Feb 22 10:13	0° Y			15550 Oct 13 13:53	0° E	
desc. node	15548 Feb 24 22:58	3° Y 06'24			15550 Nov 07 08:18	0° M	
	15548 Mar 17 22:14	0° B			15550 Dec 01 21:04	0° A	
	15548 Apr 11 12:57	0° II		asc. node	15550 Dec 02 20:30	1° A 11'51	
	15548 May 06 06:40	0° E			15550 Dec 26 06:18	0° B	
	15548 May 31 06:03	0° O			15551 Jan 19 13:29	0° \approx	
asc. node	15548 Jun 16 15:19	19° O 23'13		morning set	15551 Feb 01 09:34	15° \approx 51'46	
	15548 Jun 25 17:43	0° M			15551 Feb 12 20:10	0° H	
	15548 Jul 22 09:00	0° E			15551 Mar 09 03:23	0° Y	
evening max el	15548 Aug 07 12:28	16° E 53'29	46°40'10				
	15548 Aug 21 09:24	0° M		superior conj	15551 Mar 10 11:24	1° Y 38'46	0°33'21

minimum elong	15551 Mar 10 18:28	2° Υ 00'32	0°33'05	morning rise	15553 Aug 06 20:18	22° Ω 31'57	
max. Earth dist.	15551 Mar 11 03:47	2° Υ 29'17	1.73113 AU	direct	15553 Aug 23 10:02	17° Ω 12'25	
desc. node	15551 Mar 24 13:08	19° Υ 00'10		greatest brilliancy	15553 Sep 02 15:47	19° Ω 10'11	-4.9m
	15551 Apr 02 11:13	0° \mathcal{B}		desc. node	15553 Sep 08 07:27	21° Ω 42'40	
evening rise	15551 Apr 17 12:55	18° \mathcal{B} 35'02			15553 Sep 20 20:39	0° \mathcal{M}	
	15551 Apr 26 19:01	0° Π		morning max el	15553 Oct 12 18:28	19° \mathcal{M} 44'15	46°50'23
	15551 May 21 02:16	0° \mathcal{C}			15553 Oct 22 18:13	0° \mathcal{A}	
	15551 Jun 14 09:35	0° Ω			15553 Nov 18 23:42	0° \mathcal{M}	
	15551 Jul 08 18:46	0° \mathcal{M}			15553 Dec 14 20:06	0° \mathcal{X}	
asc. node	15551 Jul 15 03:53	7° \mathcal{M} 49'03		asc. node	15553 Dec 30 08:06	18° \mathcal{X} 23'31	
	15551 Aug 02 08:51	0° \mathcal{A}			15554 Jan 09 00:38	0° \mathcal{B}	
	15551 Aug 27 08:54	0° \mathcal{M}			15554 Feb 02 19:50	0° \approx	
	15551 Sep 22 05:46	0° \mathcal{X}			15554 Feb 27 09:31	0° \mathcal{H}	
evening max el	15551 Oct 19 13:38	29° \mathcal{X} 16'58	46°32'39		15554 Mar 23 20:06	0° Υ	
	15551 Oct 20 06:57	0° \mathcal{B}		morning set	15554 Apr 11 15:42	23° Υ 10'03	
desc. node	15551 Nov 04 01:01	13° \mathcal{B} 39'59			15554 Apr 17 04:38	0° \mathcal{B}	
greatest brilliancy	15551 Nov 27 23:16	29° \mathcal{B} 07'52	-4.8m	desc. node	15554 Apr 21 03:07	4° \mathcal{B} 51'32	
	15551 Nov 30 14:19	0° \approx			15554 May 11 11:04	0° Π	
retrograde	15551 Dec 08 14:12	1° \approx 11'39		max. Earth dist.	15554 May 17 14:24	7° Π 36'38	1.72534 AU
	15551 Dec 16 07:01	30° \mathcal{R} \mathcal{B}					
evening set	15551 Dec 27 00:28	24° \mathcal{B} 48'23		superior conj	15554 May 20 11:16	11° Π 10'10	-1°03'50
inferior conj	15551 Dec 29 22:15	23° \mathcal{B} 00'37	-8°57'24	minimum elong	15554 May 20 00:13	10° Π 35'56	1°04'16
minimum elong	15551 Dec 29 22:13	23° \mathcal{B} 00'41	8°56'34		15554 Jun 04 15:04	0° \mathcal{C}	
min. Earth dist.	15551 Dec 29 11:16	23° \mathcal{B} 17'41	0.28476 AU	evening rise	15554 Jun 28 11:58	29° \mathcal{C} 44'19	
morning rise	15552 Jan 01 20:07	21° \mathcal{B} 13'12			15554 Jun 28 17:00	0° Ω	
direct	15552 Jan 20 03:48	14° \mathcal{B} 58'38			15554 Jul 22 18:07	0° \mathcal{M}	
greatest brilliancy	15552 Jan 30 01:07	16° \mathcal{B} 46'10	-4.8m	asc. node	15554 Aug 11 17:25	24° \mathcal{M} 53'06	
	15552 Feb 20 22:45	0° \approx			15554 Aug 15 20:04	0° \mathcal{A}	
asc. node	15552 Feb 25 02:20	3° \approx 25'43			15554 Sep 09 00:45	0° \mathcal{M}	
morning max el	15552 Mar 09 04:55	15° \approx 26'00	45°43'53		15554 Oct 03 10:51	0° \mathcal{X}	
	15552 Mar 23 13:22	0° \mathcal{H}			15554 Oct 28 07:27	0° \mathcal{B}	
	15552 Apr 19 18:17	0° Υ			15554 Nov 23 00:37	0° \approx	
	15552 May 15 12:20	0° \mathcal{B}		desc. node	15554 Dec 01 11:45	9° \approx 31'01	
	15552 Jun 09 12:45	0° Π			15554 Dec 20 13:32	0° \mathcal{H}	
desc. node	15552 Jun 16 02:50	7° Π 59'55		evening max el	15554 Dec 29 19:24	9° \mathcal{H} 15'05	46°08'11
	15552 Jul 04 02:12	0° \mathcal{C}			15555 Jan 23 03:59	0° Υ	
	15552 Jul 28 08:22	0° Ω		greatest brilliancy	15555 Feb 07 02:25	8° Υ 01'23	-4.8m
	15552 Aug 21 10:09	0° \mathcal{M}		retrograde	15555 Feb 17 01:05	9° Υ 50'08	
morning set	15552 Sep 08 04:13	22° \mathcal{M} 11'54		evening set	15555 Mar 04 18:38	5° Υ 04'27	
	15552 Sep 14 09:52	0° \mathcal{A}		inferior conj	15555 Mar 10 10:32	1° Υ 38'54	-3°23'40
asc. node	15552 Oct 06 19:55	28° \mathcal{A} 03'52		minimum elong	15555 Mar 10 17:44	1° Υ 27'35	3°21'32
	15552 Oct 08 09:02	0° \mathcal{M}		min. Earth dist.	15555 Mar 10 17:01	1° Υ 28'44	0.28526 AU
					15555 Mar 13 02:00	30° \mathcal{R} \mathcal{H}	
superior conj	15552 Oct 17 15:24	11° \mathcal{M} 35'32	0°26'07	morning rise	15555 Mar 16 16:37	27° \mathcal{H} 52'57	
minimum elong	15552 Oct 17 09:09	11° \mathcal{M} 16'01	0°26'20	asc. node	15555 Mar 24 11:49	24° \mathcal{H} 30'59	
max. Earth dist.	15552 Oct 19 00:01	13° \mathcal{M} 17'32	1.71754 AU	direct	15555 Mar 31 16:21	23° \mathcal{H} 28'24	
	15552 Nov 01 08:40	0° \mathcal{X}		greatest brilliancy	15555 Apr 11 11:57	25° \mathcal{H} 36'31	-4.8m
evening rise	15552 Nov 24 20:39	29° \mathcal{X} 19'00			15555 Apr 20 08:44	0° Υ	
	15552 Nov 25 09:50	0° \mathcal{B}		morning max el	15555 May 20 01:28	24° Υ 32'14	46°05'43
	15552 Dec 19 14:15	0° \approx			15555 May 25 12:29	0° \mathcal{B}	
	15553 Jan 12 23:59	0° \mathcal{H}			15555 Jun 22 05:54	0° Π	
desc. node	15553 Jan 26 10:55	16° \mathcal{H} 23'26		desc. node	15555 Jul 14 13:53	25° Π 52'03	
	15553 Feb 06 16:48	0° Υ			15555 Jul 18 01:41	0° \mathcal{C}	
	15553 Mar 03 18:05	0° \mathcal{B}			15555 Aug 12 00:22	0° Ω	
	15553 Mar 29 06:19	0° Π			15555 Sep 05 12:04	0° \mathcal{M}	
	15553 Apr 24 13:32	0° \mathcal{C}			15555 Sep 29 18:21	0° \mathcal{A}	
asc. node	15553 May 19 05:56	26° \mathcal{C} 26'09			15555 Oct 23 22:11	0° \mathcal{M}	
	15553 May 22 18:59	0° Ω		asc. node	15555 Nov 04 09:33	14° \mathcal{M} 16'20	
evening max el	15553 May 24 04:07	1° Ω 22'03	46°18'44		15555 Nov 17 00:53	0° \mathcal{X}	
	15553 Jun 30 03:30	0° \mathcal{M}		morning set	15555 Nov 21 00:23	4° \mathcal{X} 57'17	
greatest brilliancy	15553 Jul 03 10:38	1° \mathcal{M} 16'56	-4.8m		15555 Dec 11 03:17	0° \mathcal{B}	
retrograde	15553 Jul 12 20:14	2° \mathcal{M} 56'09					
	15553 Jul 24 23:19	30° \mathcal{R} Ω		superior conj	15555 Dec 28 18:24	21° \mathcal{B} 55'21	1°26'43
evening set	15553 Jul 30 01:19	27° Ω 16'16		minimum elong	15555 Dec 28 17:40	21° \mathcal{B} 53'04	1°27'34
inferior conj	15553 Aug 02 13:12	25° Ω 08'29	7°55'53	max. Earth dist.	15555 Dec 31 00:48	24° \mathcal{B} 44'15	1.72588 AU
minimum elong	15553 Aug 02 22:54	24° Ω 53'28	7°53'45		15556 Jan 04 06:33	0° \approx	
min. Earth dist.	15553 Aug 03 06:15	24° Ω 42'07	0.27353 AU		15556 Jan 28 12:10	0° \mathcal{H}	

evening rise	15556 Feb 04 03:16	8° H 10'37		15558 Sep 17 22:45	0° M	
	15556 Feb 21 21:06	0° Y		15558 Oct 13 02:26	0° L	
desc. node	15556 Feb 24 00:46	2° Y 38'31		15558 Nov 06 20:02	0° M	
	15556 Mar 17 09:21	0° B		15558 Dec 01 08:15	0° A	
	15556 Apr 11 00:25	0° II		15558 Dec 01 22:17	0° A 43'05	
	15556 May 05 18:42	0° E		15558 Dec 25 17:07	0° Z	
	15556 May 30 19:02	0° Q		15559 Jan 19 00:05	0° \approx	
asc. node	15556 Jun 15 17:07	18° Q 47'41		15559 Jan 30 02:32	13° \approx 43'26	
	15556 Jun 25 08:22	0° M		15559 Feb 12 06:39	0° H	
	15556 Jul 22 03:19	0° L				
evening max el	15556 Aug 05 02:31	14° L 32'05 46°40'03		superior conj	15559 Mar 08 03:32	29° H 28'10 0°36'28
	15556 Aug 21 17:16	0° M		minimum elong	15559 Mar 08 11:07	29° H 51'32 0°36'14
greatest brilliancy	15556 Sep 13 17:37	14° M 52'47 -4.9m			15559 Mar 08 13:51	0° Y
retrograde	15556 Sep 24 09:05	17° M 00'07		max. Earth dist.	15559 Mar 08 22:37	0° Y 26'59 1.73114 AU
desc. node	15556 Oct 05 16:58	14° M 24'49		desc. node	15559 Mar 23 15:02	18° Y 33'38
evening set	15556 Oct 08 21:01	12° M 51'51			15559 Apr 01 21:46	0° B
min. Earth dist.	15556 Oct 14 17:53	9° M 27'30 0.27100 AU		evening rise	15559 Apr 15 04:19	16° B 21'44
inferior conj	15556 Oct 15 04:29	9° M 11'24 -2°26'40			15559 Apr 26 05:42	0° II
minimum elong	15556 Oct 14 22:54	9° M 19'53 2°24'25			15559 May 20 13:10	0° E
morning rise	15556 Oct 21 01:11	5° M 45'59			15559 Jun 13 20:47	0° Q
direct	15556 Nov 04 22:55	1° M 26'53			15559 Jul 08 06:24	0° M
greatest brilliancy	15556 Nov 14 15:59	3° M 11'11 -4.8m		asc. node	15559 Jul 14 05:43	7° M 18'37
	15556 Dec 22 00:02	0° A			15559 Aug 01 21:10	0° L
morning max el	15556 Dec 24 10:26	2° A 20'23 46°10'20			15559 Aug 26 22:24	0° M
	15557 Jan 19 23:35	0° Z			15559 Sep 21 21:40	0° A
asc. node	15557 Jan 26 18:38	7° Z 30'57		evening max el	15559 Oct 17 04:22	26° A 59'24 46°33'22
	15557 Feb 15 12:23	0° \approx			15559 Oct 20 05:36	0° Z
	15557 Mar 13 00:30	0° H		desc. node	15559 Nov 03 02:56	12° Z 37'23
	15557 Apr 06 23:47	0° Y		greatest brilliancy	15559 Nov 25 14:32	26° Z 53'24 -4.8m
	15557 May 01 15:22	0° B		retrograde	15559 Dec 06 05:07	28° Z 56'55
desc. node	15557 May 18 16:23	20° B 54'56		evening set	15559 Dec 24 14:33	22° Z 35'55
	15557 May 26 01:18	0° II		min. Earth dist.	15559 Dec 27 01:27	21° Z 05'02 0.28440 AU
	15557 Jun 19 06:28	0° E		inferior conj	15559 Dec 27 13:16	20° Z 46'39 -8°57'16
morning set	15557 Jun 23 07:56	5° E 03'04		minimum elong	15559 Dec 27 12:20	20° Z 48'05 8°56'24
	15557 Jul 13 07:56	0° Q		morning rise	15559 Dec 30 10:16	19° Z 00'23
max. Earth dist.	15557 Jul 31 11:55	22° Q 43'49 1.71627 AU		direct	15560 Jan 17 18:26	12° Z 45'32
				greatest brilliancy	15560 Jan 27 14:35	14° Z 31'36 -4.8m
superior conj	15557 Aug 02 00:43	24° Q 39'03 -1°15'49			15560 Feb 21 06:51	0° \approx
minimum elong	15557 Aug 02 11:03	25° Q 11'27 1°16'08		asc. node	15560 Feb 24 04:22	2° \approx 27'53
	15557 Aug 06 07:10	0° M		morning max el	15560 Mar 06 18:32	13° \approx 09'22 45°43'54
	15557 Aug 30 05:45	0° L			15560 Mar 23 06:50	0° H
asc. node	15557 Sep 08 07:37	11° L 22'20			15560 Apr 19 08:10	0° Y
evening rise	15557 Sep 11 03:14	14° L 53'59			15560 May 15 00:42	0° B
	15557 Sep 23 04:56	0° M			15560 Jun 09 00:22	0° II
	15557 Oct 17 06:03	0° A		desc. node	15560 Jun 15 04:38	7° II 30'26
	15557 Nov 10 11:12	0° Z			15560 Jul 03 13:23	0° E
	15557 Dec 04 23:43	0° \approx			15560 Jul 27 19:18	0° Q
desc. node	15557 Dec 28 23:39	28° \approx 47'06			15560 Aug 20 20:54	0° M
	15557 Dec 30 00:17	0° H		morning set	15560 Sep 05 16:47	19° M 47'44
	15558 Jan 24 19:32	0° Y			15560 Sep 13 20:29	0° L
	15558 Feb 20 23:22	0° B		asc. node	15560 Oct 05 21:43	27° L 36'24
evening max el	15558 Mar 10 19:41	18° B 11'59 45°59'54			15560 Oct 07 19:36	0° M
	15558 Mar 23 16:42	0° II				
greatest brilliancy	15558 Apr 18 23:15	17° II 01'06 -4.8m		superior conj	15560 Oct 15 04:45	9° M 14'11 0°22'33
asc. node	15558 Apr 20 21:34	17° II 38'37		minimum elong	15560 Oct 14 23:16	8° M 57'03 0°22'45
retrograde	15558 Apr 29 00:55	18° II 52'51		max. Earth dist.	15560 Oct 16 09:50	10° M 45'10 1.71731 AU
evening set	15558 May 14 19:16	14° II 00'31			15560 Oct 31 19:12	0° A
inferior conj	15558 May 20 01:29	10° II 48'20 6°33'06		evening rise	15560 Nov 22 11:42	27° A 03'31
minimum elong	15558 May 19 14:50	11° II 05'04 6°30'00			15560 Nov 24 20:24	0° Z
min. Earth dist.	15558 May 19 23:13	10° II 51'54 0.28151 AU			15560 Dec 19 00:53	0° \approx
morning rise	15558 May 24 10:20	8° II 07'11			15561 Jan 12 10:49	0° H
direct	15558 Jun 10 05:02	2° II 39'49		desc. node	15561 Jan 25 12:48	15° H 55'40
greatest brilliancy	15558 Jun 20 06:20	4° II 33'52 -4.8m			15561 Feb 06 04:03	0° Y
	15558 Jul 25 07:12	0° E			15561 Mar 03 06:02	0° B
morning max el	15558 Jul 30 11:07	5° E 04'08 46°46'50			15561 Mar 28 19:31	0° II
desc. node	15558 Aug 11 00:03	17° E 01'29			15561 Apr 24 05:14	0° E
	15558 Aug 22 20:47	0° Q		asc. node	15561 May 18 07:43	25° E 37'43

evening max el	15561 May 21 16:25	28°☿58'39	46°17'42	asc. node	15563 Nov 03 11:19	13°♊48'38	
	15561 May 22 17:25	0°♊			15563 Nov 16 11:27	0°♊	
greatest brilliancy	15561 Jul 01 00:23	28°♊55'18	-4.8m	morning set	15563 Nov 18 14:45	2°♊39'40	
	15561 Jul 04 23:02	0°♊			15563 Dec 10 13:43	0°♊	
retrograde	15561 Jul 10 08:54	0°♊34'02					
	15561 Jul 15 15:50	30°♋♊		superior conj	15563 Dec 26 10:22	19°♋43'31	1°26'31
evening set	15561 Jul 27 17:45	24°♊48'45		minimum elong	15563 Dec 26 08:49	19°♋38'43	1°27'23
inferior conj	15561 Jul 31 02:27	22°♊45'47	8°07'05	max. Earth dist.	15563 Dec 28 17:25	22°♋34'33	1.72560 AU
minimum elong	15561 Jul 31 11:37	22°♊31'36	8°05'08		15564 Jan 03 16:57	0°♋	
min. Earth dist.	15561 Jul 31 19:44	22°♊19'03	0.27391 AU		15564 Jan 27 22:36	0°♋	
morning rise	15561 Aug 04 05:17	20°♊15'24		evening rise	15564 Feb 01 19:08	5°♋59'25	
direct	15561 Aug 20 22:53	14°♊48'44			15564 Feb 21 07:40	0°♋	
greatest brilliancy	15561 Aug 31 05:47	16°♊47'24	-4.9m	desc. node	15564 Feb 23 02:41	2°♋11'54	
desc. node	15561 Sep 07 09:28	20°♊09'02			15564 Mar 16 20:08	0°♋	
	15561 Sep 21 10:05	0°♊			15564 Apr 10 11:33	0°♊	
morning max el	15561 Oct 10 08:03	17°♊22'01	46°51'22		15564 May 05 06:25	0°♊	
	15561 Oct 22 13:18	0°♊			15564 May 30 07:43	0°♊	
	15561 Nov 18 14:28	0°♊		asc. node	15564 Jun 14 19:02	18°♊13'25	
	15561 Dec 14 08:57	0°♊			15564 Jun 24 22:51	0°♊	
asc. node	15561 Dec 29 09:57	17°♊52'49			15564 Jul 21 21:50	0°♊	
	15562 Jan 08 12:25	0°♊		evening max el	15564 Aug 02 17:18	12°♊13'11	46°39'34
	15562 Feb 02 06:58	0°♊			15564 Aug 22 03:51	0°♊	
	15562 Feb 26 20:15	0°♊		greatest brilliancy	15564 Sep 11 07:18	12°♊29'41	-4.9m
	15562 Mar 23 06:36	0°♋		retrograde	15564 Sep 21 22:59	14°♊36'38	
morning set	15562 Apr 09 07:20	20°♋58'05		desc. node	15564 Oct 04 18:54	11°♊18'52	
	15562 Apr 16 15:04	0°♋		evening set	15564 Oct 06 09:33	10°♊29'28	
desc. node	15562 Apr 20 04:55	4°♋24'56		inferior conj	15564 Oct 12 17:19	6°♊48'27	-2°03'18
	15562 May 10 21:29	0°♊		minimum elong	15564 Oct 12 12:34	6°♊55'39	2°01'19
max. Earth dist.	15562 May 15 08:03	5°♊30'14	1.72574 AU	min. Earth dist.	15564 Oct 12 07:35	7°♊03'13	0.27069 AU
				morning rise	15564 Oct 18 16:04	3°♊20'33	
superior conj	15562 May 18 01:26	8°♊52'54	-1°01'18		15564 Oct 26 17:13	30°♋♊	
minimum elong	15562 May 17 14:25	8°♊18'45	1°01'41	direct	15564 Nov 02 12:09	29°♊04'17	
	15562 Jun 04 01:33	0°♊			15564 Nov 09 12:15	0°♊	
evening rise	15562 Jun 26 00:51	27°♊21'51		greatest brilliancy	15564 Nov 12 04:40	0°♊48'31	-4.8m
	15562 Jun 28 03:36	0°♊			15564 Dec 21 23:25	0°♊	
	15562 Jul 22 04:53	0°♊		morning max el	15564 Dec 22 00:44	0°♊03'13	46°11'48
asc. node	15562 Aug 10 19:18	24°♊24'56			15565 Jan 19 15:28	0°♊	
	15562 Aug 15 07:04	0°♊		asc. node	15565 Jan 25 20:43	6°♊54'45	
	15562 Sep 08 12:03	0°♊			15565 Feb 15 01:37	0°♊	
	15562 Oct 02 22:38	0°♊			15565 Mar 12 12:29	0°♊	
	15562 Oct 27 20:08	0°♊			15565 Apr 06 11:05	0°♋	
	15562 Nov 22 15:05	0°♊			15565 May 01 02:17	0°♋	
desc. node	15562 Nov 30 13:34	8°♋53'18		desc. node	15565 May 17 18:11	20°♋27'26	
	15562 Dec 20 08:38	0°♋			15565 May 25 11:59	0°♊	
evening max el	15562 Dec 27 10:15	7°♋01'49	46°09'03		15565 Jun 18 17:02	0°♊	
	15563 Jan 24 02:27	0°♋		morning set	15565 Jun 20 20:39	2°♊40'30	
greatest brilliancy	15563 Feb 04 17:32	5°♋49'49	-4.8m		15565 Jul 12 18:28	0°♊	
retrograde	15563 Feb 14 17:06	7°♋39'21		max. Earth dist.	15565 Jul 28 23:10	20°♊15'43	1.71644 AU
evening set	15563 Mar 02 12:33	2°♋49'55					
	15563 Mar 07 05:35	30°♋♋		superior conj	15565 Jul 30 13:09	22°♊14'41	-1°17'40
inferior conj	15563 Mar 08 02:14	29°♋27'41	-3°43'01	minimum elong	15565 Jul 30 22:58	22°♊45'24	1°18'03
minimum elong	15563 Mar 08 10:01	29°♋15'30	3°40'44		15565 Aug 05 17:44	0°♊	
min. Earth dist.	15563 Mar 08 08:46	29°♋17'28	0.28542 AU		15565 Aug 29 16:22	0°♊	
morning rise	15563 Mar 14 07:17	25°♋43'35		asc. node	15565 Sep 07 09:26	10°♊54'40	
asc. node	15563 Mar 23 13:45	21°♋57'25		evening rise	15565 Sep 08 15:49	12°♊29'49	
direct	15563 Mar 29 08:05	21°♋17'04			15565 Sep 22 15:38	0°♊	
greatest brilliancy	15563 Apr 09 03:58	23°♋25'44	-4.8m		15565 Oct 16 16:55	0°♊	
	15563 Apr 21 10:57	0°♋			15565 Nov 09 22:19	0°♊	
morning max el	15563 May 17 17:40	22°♋21'29	46°04'25		15565 Dec 04 11:17	0°♊	
	15563 May 25 07:50	0°♋		desc. node	15565 Dec 28 01:36	28°♋16'26	
	15563 Jun 21 20:30	0°♊			15565 Dec 29 12:38	0°♋	
desc. node	15563 Jul 13 15:54	25°♊19'48			15566 Jan 24 09:26	0°♋	
	15563 Jul 17 14:27	0°♊			15566 Feb 20 16:48	0°♋	
	15563 Aug 11 12:14	0°♊		evening max el	15566 Mar 08 11:12	15°♋59'29	45°59'41
	15563 Sep 04 23:26	0°♊			15566 Mar 23 23:29	0°♊	
	15563 Sep 29 05:24	0°♊		greatest brilliancy	15566 Apr 16 14:07	14°♊46'13	-4.8m
	15563 Oct 23 08:58	0°♊		asc. node	15566 Apr 19 23:27	15°♊47'14	

retrograde	15566 Apr 26 15:15	16° Π 37'23		max. Earth dist.	15568 Oct 13 19:16	8° Π 11'08	1.71709 AU
evening set	15566 May 12 07:13	11° Π 49'39			15568 Oct 31 05:54	0° \mathcal{A}	
inferior conj	15566 May 17 16:31	8° Π 32'51	6°17'35	evening rise	15568 Nov 20 03:02	24° \mathcal{A} 48'28	
minimum elong	15566 May 17 05:54	8° Π 49'33	6°14'24		15568 Nov 24 07:07	0° \mathcal{Z}	
min. Earth dist.	15566 May 17 14:13	8° Π 36'28	0.28159 AU		15568 Dec 18 11:45	0° \approx	
morning rise	15566 May 22 04:30	5° Π 46'45			15569 Jan 11 21:56	0° \mathcal{H}	
direct	15566 Jun 07 20:12	0° Π 24'23		desc. node	15569 Jan 24 14:41	15° \mathcal{H} 26'59	
greatest brilliancy	15566 Jun 17 21:46	2° Π 18'17	-4.8m		15569 Feb 05 15:37	0° \mathcal{Y}	
	15566 Jul 25 06:34	0° \mathcal{E}			15569 Mar 02 18:21	0° \mathcal{B}	
morning max el	15566 Jul 28 00:51	2° \mathcal{E} 44'06	46°45'47		15569 Mar 28 09:08	0° Π	
desc. node	15566 Aug 10 02:01	16° \mathcal{E} 18'05			15569 Apr 23 21:29	0° \mathcal{E}	
	15566 Aug 22 12:52	0° \mathcal{O}		asc. node	15569 May 17 09:42	24° \mathcal{E} 48'20	
	15566 Sep 17 12:21	0° \mathcal{M}		evening max el	15569 May 19 05:16	26° \mathcal{E} 36'11	46°16'54
	15566 Oct 12 14:49	0° \mathcal{L}			15569 May 22 17:07	0° \mathcal{O}	
	15566 Nov 06 07:42	0° \mathcal{M}		greatest brilliancy	15569 Jun 28 13:39	26° \mathcal{O} 32'56	-4.8m
	15566 Nov 30 19:27	0° \mathcal{A}		retrograde	15569 Jul 07 22:14	28° \mathcal{O} 11'58	
asc. node	15566 Dec 01 00:10	0° \mathcal{A} 14'28		evening set	15569 Jul 25 10:15	22° \mathcal{O} 21'10	
	15566 Dec 25 04:00	0° \mathcal{Z}		inferior conj	15569 Jul 28 15:53	20° \mathcal{O} 22'53	8°17'23
	15567 Jan 18 10:45	0° \approx		minimum elong	15569 Jul 29 00:29	20° \mathcal{O} 09'35	8°15'35
morning set	15567 Jan 27 19:15	11° \approx 34'00		min. Earth dist.	15569 Jul 29 09:04	19° \mathcal{O} 56'19	0.27431 AU
	15567 Feb 11 17:12	0° \mathcal{H}		morning rise	15569 Aug 01 14:30	17° \mathcal{O} 58'46	
				direct	15569 Aug 18 12:21	12° \mathcal{O} 24'49	
superior conj	15567 Mar 05 19:38	27° \mathcal{H} 17'23	0°39'33	greatest brilliancy	15569 Aug 28 19:40	14° \mathcal{O} 24'10	-4.9m
minimum elong	15567 Mar 06 03:42	27° \mathcal{H} 42'14	0°39'19	desc. node	15569 Sep 06 11:21	18° \mathcal{O} 38'08	
max. Earth dist.	15567 Mar 06 16:04	28° \mathcal{H} 20'24	1.73109 AU		15569 Sep 21 20:19	0° \mathcal{M}	
	15567 Mar 08 00:22	0° \mathcal{Y}		morning max el	15569 Oct 07 22:48	15° \mathcal{M} 02'03	46°52'18
desc. node	15567 Mar 22 16:44	18° \mathcal{Y} 06'21			15569 Oct 22 08:06	0° \mathcal{L}	
	15567 Apr 01 08:20	0° \mathcal{B}			15569 Nov 18 05:17	0° \mathcal{M}	
evening rise	15567 Apr 12 19:50	14° \mathcal{B} 08'48			15569 Dec 13 21:58	0° \mathcal{A}	
	15567 Apr 25 16:25	0° Π		asc. node	15569 Dec 28 11:58	17° \mathcal{A} 21'59	
	15567 May 20 00:07	0° \mathcal{E}			15570 Jan 08 00:25	0° \mathcal{Z}	
	15567 Jun 13 08:03	0° \mathcal{O}			15570 Feb 01 18:22	0° \approx	
	15567 Jul 07 18:06	0° \mathcal{M}			15570 Feb 26 07:18	0° \mathcal{H}	
asc. node	15567 Jul 13 07:40	6° \mathcal{M} 48'22			15570 Mar 22 17:30	0° \mathcal{Y}	
	15567 Aug 01 09:33	0° \mathcal{L}		morning set	15570 Apr 06 22:53	18° \mathcal{Y} 44'43	
	15567 Aug 26 12:02	0° \mathcal{M}			15570 Apr 16 01:52	0° \mathcal{B}	
	15567 Sep 21 13:51	0° \mathcal{A}		desc. node	15570 Apr 19 06:43	3° \mathcal{B} 57'11	
evening max el	15567 Oct 14 18:13	24° \mathcal{A} 39'23	46°33'53		15570 May 10 08:16	0° Π	
	15567 Oct 20 05:20	0° \mathcal{Z}		max. Earth dist.	15570 May 13 02:11	3° Π 24'10	1.72607 AU
desc. node	15567 Nov 02 04:47	11° \mathcal{Z} 32'49					
greatest brilliancy	15567 Nov 23 05:50	24° \mathcal{Z} 38'17	-4.8m	superior conj	15570 May 15 15:24	6° Π 33'55	-0°58'39
retrograde	15567 Dec 03 19:42	26° \mathcal{Z} 41'36		minimum elong	15570 May 15 04:29	6° Π 00'03	0°59'00
evening set	15567 Dec 22 04:06	20° \mathcal{Z} 23'22			15570 Jun 03 12:22	0° \mathcal{E}	
min. Earth dist.	15567 Dec 24 15:58	18° \mathcal{Z} 51'06	0.28407 AU	evening rise	15570 Jun 23 13:43	24° \mathcal{E} 58'22	
inferior conj	15567 Dec 25 04:14	18° \mathcal{Z} 32'00	-8°56'12		15570 Jun 27 14:32	0° \mathcal{O}	
minimum elong	15567 Dec 25 02:26	18° \mathcal{Z} 34'49	8°55'18		15570 Jul 21 15:59	0° \mathcal{M}	
morning rise	15567 Dec 28 00:53	16° \mathcal{Z} 46'12		asc. node	15570 Aug 09 21:07	23° \mathcal{M} 55'24	
direct	15568 Jan 15 08:38	10° \mathcal{Z} 31'25			15570 Aug 14 18:25	0° \mathcal{L}	
greatest brilliancy	15568 Jan 25 04:49	12° \mathcal{Z} 16'58	-4.8m		15570 Sep 07 23:45	0° \mathcal{M}	
	15568 Feb 21 12:53	0° \approx			15570 Oct 02 10:52	0° \mathcal{A}	
asc. node	15568 Feb 23 06:16	1° \approx 30'18			15570 Oct 27 09:16	0° \mathcal{Z}	
morning max el	15568 Mar 04 08:08	10° \approx 51'48	45°44'05		15570 Nov 22 06:08	0° \approx	
	15568 Mar 23 00:09	0° \mathcal{H}		desc. node	15570 Nov 29 15:36	8° \approx 14'49	
	15568 Apr 18 22:05	0° \mathcal{Y}			15570 Dec 20 04:44	0° \mathcal{H}	
	15568 May 14 13:09	0° \mathcal{B}		evening max el	15570 Dec 25 01:50	4° \mathcal{H} 49'21	46°09'52
	15568 Jun 08 12:04	0° Π			15571 Jan 25 10:45	0° \mathcal{Y}	
desc. node	15568 Jun 14 06:34	7° Π 01'05		greatest brilliancy	15571 Feb 02 08:10	3° \mathcal{Y} 36'39	-4.8m
	15568 Jul 03 00:42	0° \mathcal{E}		retrograde	15571 Feb 12 09:06	5° \mathcal{Y} 27'02	
	15568 Jul 27 06:22	0° \mathcal{O}		evening set	15571 Feb 28 06:32	0° \mathcal{Y} 33'53	
	15568 Aug 20 07:48	0° \mathcal{M}			15571 Mar 01 06:02	30° \mathcal{R} \mathcal{H}	
morning set	15568 Sep 03 05:35	17° \mathcal{M} 23'42		inferior conj	15571 Mar 05 17:50	27° \mathcal{H} 14'56	-4°02'06
	15568 Sep 13 07:16	0° \mathcal{L}		minimum elong	15571 Mar 06 02:08	27° \mathcal{H} 01'56	3°59'40
asc. node	15568 Oct 04 23:27	27° \mathcal{L} 08'17		min. Earth dist.	15571 Mar 06 00:09	27° \mathcal{H} 05'03	0.28560 AU
	15568 Oct 07 06:19	0° \mathcal{M}		morning rise	15571 Mar 11 21:38	23° \mathcal{H} 32'53	
				asc. node	15571 Mar 22 15:40	19° \mathcal{H} 27'22	
superior conj	15568 Oct 12 18:23	6° \mathcal{M} 53'14	0°18'57	direct	15571 Mar 27 00:12	19° \mathcal{H} 04'19	
minimum elong	15568 Oct 12 13:42	6° \mathcal{M} 38'36	0°19'10	greatest brilliancy	15571 Apr 06 19:25	21° \mathcal{H} 12'46	-4.8m

	15571 Apr 22 06:47	0°Υ			15573 Nov 09 09:47	0°Ξ		
morning max el	15571 May 15 10:08	20°Υ09'58	46°03'03		15573 Dec 03 23:14	0°≈		
	15571 May 25 03:12	0°Ϡ		desc. node	15573 Dec 27 03:30	27°≈44'32		
	15571 Jun 21 11:24	0°Π			15573 Dec 29 01:24	0°Ϡ		
desc. node	15571 Jul 12 17:52	24°Π46'12			15574 Jan 23 23:48	0°Υ		
	15571 Jul 17 03:34	0°ϣ			15574 Feb 20 10:57	0°Ϡ		
	15571 Aug 11 00:27	0°Ω		evening max el	15574 Mar 06 01:49	13°Ϡ44'02	45°59'29	
	15571 Sep 04 11:08	0°ϯ			15574 Mar 24 09:17	0°Π		
	15571 Sep 28 16:46	0°⬮		greatest brilliancy	15574 Apr 14 05:05	12°Π30'46	-4.8m	
	15571 Oct 22 20:06	0°⋈		asc. node	15574 Apr 19 01:24	13°Π50'52		
asc. node	15571 Nov 02 13:13	13°⋈20'09		retrograde	15574 Apr 24 05:20	14°Π21'25		
	15571 Nov 15 22:24	0°Ϡ		evening set	15574 May 09 19:16	9°Π37'46		
morning set	15571 Nov 16 05:09	0°Ϡ21'00		inferior conj	15574 May 15 07:34	6°Π16'46	6°01'24	
	15571 Dec 10 00:32	0°Ξ		minimum elong	15574 May 14 21:03	6°Π33'19	5°58'10	
				min. Earth dist.	15574 May 15 05:29	6°Π20'03	0.28171 AU	
superior conj	15571 Dec 24 02:26	17°Ξ30'47	1°26'12	morning rise	15574 May 19 22:40	3°Π25'50		
minimum elong	15571 Dec 24 00:04	17°Ξ23'26	1°27'03		15574 May 26 20:41	30°Ϡ		
max. Earth dist.	15571 Dec 26 11:35	20°Ξ28'20	1.72529 AU	direct	15574 Jun 05 10:57	28°Ϡ08'10		
	15572 Jan 03 03:43	0°≈			15574 Jun 15 10:52	0°Π		
	15572 Jan 27 09:25	0°Ϡ		greatest brilliancy	15574 Jun 15 13:52	0°Π02'42	-4.8m	
evening rise	15572 Jan 30 11:09	3°Ϡ47'29			15574 Jul 25 05:21	0°ϣ		
	15572 Feb 20 18:37	0°Υ		morning max el	15574 Jul 25 14:12	0°ϣ22'06	46°44'34	
desc. node	15572 Feb 22 04:25	1°Υ43'40		desc. node	15574 Aug 09 03:53	15°ϣ33'54		
	15572 Mar 16 07:21	0°Ϡ			15574 Aug 22 05:03	0°Ω		
	15572 Apr 09 23:10	0°Π			15574 Sep 17 02:10	0°ϯ		
	15572 May 04 18:40	0°ϣ			15574 Oct 12 03:26	0°⬮		
	15572 May 29 21:00	0°Ω			15574 Nov 05 19:33	0°⋈		
asc. node	15572 Jun 13 20:59	17°Ω37'35		asc. node	15574 Nov 30 02:05	29°⋈45'28		
	15572 Jun 24 14:02	0°ϯ			15574 Nov 30 06:49	0°Ϡ		
	15572 Jul 21 17:22	0°⬮			15574 Dec 24 15:03	0°Ξ		
evening max el	15572 Jul 31 08:08	9°⬮53'12	46°39'13		15575 Jan 17 21:36	0°≈		
	15572 Aug 22 18:42	0°⋈		morning set	15575 Jan 25 11:51	9°≈23'35		
greatest brilliancy	15572 Sep 08 21:29	10°⋈06'12	-4.9m		15575 Feb 11 03:56	0°Ϡ		
retrograde	15572 Sep 19 12:30	12°⋈11'58						
evening set	15572 Oct 03 22:24	8°⋈05'50		superior conj	15575 Mar 03 11:50	25°Ϡ06'21	0°42'34	
desc. node	15572 Oct 03 20:50	8°⋈07'54		minimum elong	15575 Mar 03 20:20	25°Ϡ32'33	0°42'20	
inferior conj	15572 Oct 10 06:10	4°⋈24'29	-1°39'37	max. Earth dist.	15575 Mar 04 08:34	26°Ϡ10'18	1.73104 AU	
minimum elong	15572 Oct 10 02:19	4°⋈30'21	1°37'57		15575 Mar 07 11:03	0°Υ		
min. Earth dist.	15572 Oct 09 21:32	4°⋈37'38	0.27039 AU	desc. node	15575 Mar 21 18:35	17°Υ39'00		
morning rise	15572 Oct 16 06:44	0°⋈54'04			15575 Mar 31 19:04	0°Ϡ		
	15572 Oct 18 01:04	30°Ϡ		evening rise	15575 Apr 10 11:30	11°Ϡ55'57		
direct	15572 Oct 31 01:22	26°⬮40'42			15575 Apr 25 03:17	0°Π		
greatest brilliancy	15572 Nov 09 17:35	28°⬮24'48	-4.8m		15575 May 19 11:13	0°ϣ		
	15572 Nov 13 16:20	0°⋈			15575 Jun 12 19:27	0°Ω		
morning max el	15572 Dec 19 14:23	27°⋈43'09	46°13'15		15575 Jul 07 06:00	0°ϯ		
	15572 Dec 21 22:15	0°Ϡ		asc. node	15575 Jul 12 09:26	6°ϯ16'59		
	15573 Jan 19 07:29	0°Ξ			15575 Jul 31 22:14	0°⬮		
asc. node	15573 Jan 24 22:31	6°Ξ16'58			15575 Aug 26 02:02	0°⋈		
	15573 Feb 14 15:07	0°≈			15575 Sep 21 06:37	0°Ϡ		
	15573 Mar 12 00:46	0°Ϡ		evening max el	15575 Oct 12 07:37	22°Ϡ17'34	46°34'37	
	15573 Apr 05 22:42	0°Υ			15575 Oct 20 06:33	0°Ξ		
	15573 Apr 30 13:31	0°Ϡ		desc. node	15575 Nov 01 06:51	10°Ξ26'19		
desc. node	15573 May 16 20:07	19°Ϡ59'15		greatest brilliancy	15575 Nov 20 20:31	22°Ξ21'38	-4.8m	
	15573 May 24 23:02	0°Π		retrograde	15575 Dec 01 10:23	24°Ξ25'39		
morning set	15573 Jun 18 09:00	0°ϣ15'33		evening set	15575 Dec 19 17:01	18°Ξ10'34		
	15573 Jun 18 04:00	0°ϣ		inferior conj	15575 Dec 22 19:03	16°Ξ16'34	-8°54'14	
	15573 Jul 12 05:25	0°Ω		minimum elong	15575 Dec 22 16:22	16°Ξ20'44	8°53'16	
max. Earth dist.	15573 Jul 26 06:36	17°Ω34'30	1.71660 AU	min. Earth dist.	15575 Dec 22 06:13	16°Ξ36'30	0.28372 AU	
				morning rise	15575 Dec 25 15:51	14°Ξ30'40		
superior conj	15573 Jul 28 01:14	19°Ω47'59	-1°19'24	direct	15576 Jan 12 22:31	8°Ξ16'24		
minimum elong	15573 Jul 28 10:25	20°Ω16'42	1°19'49	greatest brilliancy	15576 Jan 22 19:06	10°Ξ02'01	-4.8m	
	15573 Aug 05 04:41	0°ϯ			15576 Feb 21 17:02	0°≈		
	15573 Aug 29 03:20	0°⬮		asc. node	15576 Feb 22 08:13	0°≈33'55		
evening rise	15573 Sep 06 03:57	10°⬮03'05		morning max el	15576 Mar 01 22:17	8°≈35'24	45°44'23	
asc. node	15573 Sep 06 11:09	10°⬮25'36			15576 Mar 22 17:07	0°Ϡ		
	15573 Sep 22 02:41	0°⋈			15576 Apr 18 11:53	0°Υ		
	15573 Oct 16 04:06	0°Ϡ			15576 May 14 01:32	0°Ϡ		

	15576 Jun 07 23:44	0°♄			15578 Dec 20 01:14	0°♄	
desc. node	15576 Jun 13 08:28	6°♄31'45		evening max el	15578 Dec 22 18:03	2°♄39'05	46°10'40
	15576 Jul 02 11:57	0°♄			15579 Jan 27 10:27	0°♄	
	15576 Jul 26 17:22	0°♄		greatest brilliancy	15579 Jan 30 23:11	1°♄24'51	-4.8m
	15576 Aug 19 18:40	0°♄		retrograde	15579 Feb 10 00:56	3°♄15'32	
morning set	15576 Aug 31 18:06	14°♄58'46			15579 Feb 22 20:47	30°♄	
	15576 Sep 12 18:04	0°♄		evening set	15579 Feb 26 00:41	28°♄18'54	
asc. node	15576 Oct 04 01:23	26°♄40'39		inferior conj	15579 Mar 03 09:28	25°♄03'16	-4°20'44
	15576 Oct 06 17:03	0°♄		minimum elong	15579 Mar 03 18:15	24°♄49'31	4°18'11
				min. Earth dist.	15579 Mar 03 15:28	24°♄53'51	0.28574 AU
superior conj	15576 Oct 10 07:30	4°♄30'33	0°15'16	morning rise	15579 Mar 09 11:47	21°♄23'24	
minimum elong	15576 Oct 10 03:40	4°♄18'34	0°15'31	asc. node	15579 Mar 21 17:41	17°♄03'27	
behind sun begin	15576 Oct 09 20:35	3°♄56'23		direct	15579 Mar 24 16:32	16°♄52'55	
behind sun end	15576 Oct 10 10:45	4°♄40'45		greatest brilliancy	15579 Apr 04 10:27	19°♄00'29	-4.8m
max. Earth dist.	15576 Oct 11 04:36	5°♄36'35	1.71692 AU		15579 Apr 22 20:53	0°♄	
	15576 Oct 30 16:37	0°♄		morning max el	15579 May 13 01:55	17°♄58'05	46°01'38
evening rise	15576 Nov 17 17:56	22°♄32'03			15579 May 24 21:33	0°♄	
	15576 Nov 23 17:51	0°♄			15579 Jun 21 01:41	0°♄	
	15576 Dec 17 22:34	0°♄		desc. node	15579 Jul 11 19:37	24°♄13'23	
	15577 Jan 11 09:00	0°♄			15579 Jul 16 16:10	0°♄	
desc. node	15577 Jan 23 16:26	14°♄58'07			15579 Aug 10 12:11	0°♄	
	15577 Feb 05 03:09	0°♄			15579 Sep 03 22:22	0°♄	
	15577 Mar 02 06:39	0°♄			15579 Sep 28 03:40	0°♄	
	15577 Mar 27 22:47	0°♄			15579 Oct 22 06:45	0°♄	
	15577 Apr 23 13:54	0°♄		asc. node	15579 Nov 01 15:02	12°♄52'55	
asc. node	15577 May 16 11:43	23°♄58'42		morning set	15579 Nov 13 19:45	28°♄04'20	
evening max el	15577 May 16 19:09	24°♄16'59	46°16'11		15579 Nov 15 08:53	0°♄	
	15577 May 22 17:45	0°♄			15579 Dec 09 10:55	0°♄	
greatest brilliancy	15577 Jun 26 02:14	24°♄10'52	-4.8m				
retrograde	15577 Jul 05 12:00	25°♄50'51		superior conj	15579 Dec 21 18:31	15°♄19'19	1°25'44
evening set	15577 Jul 23 02:39	19°♄54'49		minimum elong	15579 Dec 21 15:22	15°♄09'32	1°26'35
inferior conj	15577 Jul 26 05:22	18°♄00'51	8°26'37	max. Earth dist.	15579 Dec 24 05:35	18°♄22'53	1.72499 AU
minimum elong	15577 Jul 26 13:21	17°♄48'31	8°24'59		15580 Jan 02 14:04	0°♄	
min. Earth dist.	15577 Jul 26 21:58	17°♄35'13	0.27471 AU		15580 Jan 26 19:49	0°♄	
morning rise	15577 Jul 29 23:53	15°♄42'57		evening rise	15580 Jan 28 02:59	1°♄36'07	
direct	15577 Aug 16 02:29	10°♄02'04			15580 Feb 20 05:10	0°♄	
greatest brilliancy	15577 Aug 26 08:56	12°♄01'15	-4.9m	desc. node	15580 Feb 21 06:14	1°♄16'52	
desc. node	15577 Sep 05 13:21	17°♄11'26			15580 Mar 15 18:08	0°♄	
	15577 Sep 22 03:28	0°♄			15580 Apr 09 10:22	0°♄	
morning max el	15577 Oct 05 14:04	12°♄44'06	46°52'58		15580 May 04 06:31	0°♄	
	15577 Oct 22 02:14	0°♄			15580 May 29 09:56	0°♄	
	15577 Nov 17 19:47	0°♄		asc. node	15580 Jun 12 22:47	17°♄02'24	
	15577 Dec 13 10:44	0°♄			15580 Jun 24 04:58	0°♄	
asc. node	15577 Dec 27 13:47	16°♄51'04			15580 Jul 21 13:00	0°♄	
	15578 Jan 07 12:12	0°♄		evening max el	15580 Jul 28 22:24	7°♄33'03	46°38'44
	15578 Feb 01 05:33	0°♄			15580 Aug 23 13:45	0°♄	
	15578 Feb 25 18:07	0°♄		greatest brilliancy	15580 Sep 06 12:22	7°♄45'05	-4.9m
	15578 Mar 22 04:07	0°♄		retrograde	15580 Sep 17 01:33	9°♄48'59	
morning set	15578 Apr 04 14:30	16°♄32'27		evening set	15580 Oct 01 11:33	5°♄43'40	
	15578 Apr 15 12:25	0°♄		desc. node	15580 Oct 02 22:50	4°♄55'18	
desc. node	15578 Apr 18 08:36	3°♄30'27		inferior conj	15580 Oct 07 19:08	2°♄02'26	-1°15'51
	15578 May 09 18:49	0°♄		minimum elong	15580 Oct 07 16:11	2°♄06'56	1°14'31
max. Earth dist.	15578 May 10 19:39	1°♄16'57	1.72638 AU	min. Earth dist.	15580 Oct 07 11:55	2°♄13'26	0.27009 AU
					15580 Oct 11 04:41	30°♄	
superior conj	15578 May 13 05:29	4°♄16'06	-0°55'53	morning rise	15580 Oct 13 21:15	28°♄29'36	
minimum elong	15578 May 12 18:44	3°♄42'47	0°56'13	direct	15580 Oct 28 14:14	24°♄18'59	
	15578 Jun 02 22:56	0°♄		greatest brilliancy	15580 Nov 07 07:04	26°♄03'25	-4.8m
evening rise	15578 Jun 21 02:48	22°♄36'27			15580 Nov 15 19:23	0°♄	
	15578 Jun 27 01:11	0°♄		morning max el	15580 Dec 17 03:02	25°♄22'13	46°14'42
	15578 Jul 21 02:47	0°♄			15580 Dec 21 19:29	0°♄	
asc. node	15578 Aug 08 22:54	23°♄26'51			15581 Jan 18 22:40	0°♄	
	15578 Aug 14 05:27	0°♄		asc. node	15581 Jan 24 00:26	5°♄41'24	
	15578 Sep 07 11:07	0°♄			15581 Feb 14 04:01	0°♄	
	15578 Oct 01 22:47	0°♄			15581 Mar 11 12:32	0°♄	
	15578 Oct 26 22:11	0°♄			15581 Apr 05 09:50	0°♄	
	15578 Nov 21 21:06	0°♄			15581 Apr 30 00:18	0°♄	
desc. node	15578 Nov 28 17:28	7°♄36'16		desc. node	15581 May 15 21:54	19°♄32'00	

	15581 May 24 09:36	0°♄	retrograde	15583 Nov 29 01:33	22°♄10'16	
morning set	15581 Jun 15 21:19	27°♄52'01	evening set	15583 Dec 17 05:27	15°♄58'45	
	15581 Jun 17 14:30	0°♄	inferior conj	15583 Dec 20 09:48	14°♄01'35	-8°51'25
	15581 Jul 11 15:54	0°♄	minimum elong	15583 Dec 20 06:15	14°♄07'06	8°50'22
max. Earth dist.	15581 Jul 23 12:27	14°♄49'48 1.71683 AU	min. Earth dist.	15583 Dec 19 20:08	14°♄22'47	0.28332 AU
			morning rise	15583 Dec 23 07:09	12°♄15'05	
superior conj	15581 Jul 25 13:26	17°♄23'05 -1°20'57	direct	15584 Jan 10 12:33	6°♄01'52	
minimum elong	15581 Jul 25 21:55	17°♄49'38 1°21'27	greatest brilliancy	15584 Jan 20 09:00	7°♄47'27	-4.8m
	15581 Aug 04 15:12	0°♄	asc. node	15584 Feb 21 10:14	29°♄39'51	
	15581 Aug 28 13:54	0°♄		15584 Feb 21 19:05	0°♄	
evening rise	15581 Sep 03 16:06	7°♄37'42	morning max el	15584 Feb 28 13:11	6°♄21'49	45°44'48
asc. node	15581 Sep 05 13:04	9°♄58'26		15584 Mar 22 09:25	0°♄	
	15581 Sep 21 13:18	0°♄		15584 Apr 18 01:16	0°♄	
	15581 Oct 15 14:52	0°♄		15584 May 13 13:39	0°♄	
	15581 Nov 08 20:48	0°♄		15584 Jun 07 11:12	0°♄	
	15581 Dec 03 10:41	0°♄	desc. node	15584 Jun 12 10:15	6°♄02'31	
desc. node	15581 Dec 26 05:17	27°♄13'45		15584 Jul 01 23:03	0°♄	
	15581 Dec 28 13:43	0°♄		15584 Jul 26 04:14	0°♄	
	15582 Jan 23 13:49	0°♄		15584 Aug 19 05:23	0°♄	
	15582 Feb 20 05:05	0°♄	morning set	15584 Aug 29 06:34	12°♄34'05	
evening max el	15582 Mar 03 15:52	11°♄28'35 45°59'18		15584 Sep 12 04:43	0°♄	
	15582 Mar 24 21:50	0°♄	asc. node	15584 Oct 03 03:09	26°♄12'54	
greatest brilliancy	15582 Apr 11 20:01	10°♄16'31 -4.8m		15584 Oct 06 03:41	0°♄	
asc. node	15582 Apr 18 03:25	11°♄51'22				
retrograde	15582 Apr 21 19:42	12°♄07'06	superior conj	15584 Oct 07 20:28	2°♄07'40	0°11'34
evening set	15582 May 07 07:33	7°♄26'54	minimum elong	15584 Oct 07 17:32	1°♄58'27	0°11'48
inferior conj	15582 May 12 22:42	4°♄02'11 5°44'36	behind sun begin	15584 Oct 07 00:21	1°♄04'41	
minimum elong	15582 May 12 12:21	4°♄18'29 5°41'21	behind sun end	15584 Oct 08 10:42	2°♄52'14	
min. Earth dist.	15582 May 20 02:52	4°♄05'04 0.28184 AU	max. Earth dist.	15584 Oct 08 16:33	3°♄10'32	1.71678 AU
morning rise	15582 May 17 16:54	1°♄06'41		15584 Oct 30 03:14	0°♄	
	15582 May 19 16:14	30°♄	evening rise	15584 Nov 15 08:51	20°♄15'49	
direct	15582 Jun 03 01:37	25°♄53'16		15584 Nov 23 04:31	0°♄	
greatest brilliancy	15582 Jun 13 06:24	27°♄49'09 -4.8m		15584 Dec 17 09:21	0°♄	
	15582 Jun 18 06:35	0°♄		15585 Jan 10 20:02	0°♄	
morning max el	15582 Jul 23 03:54	28°♄02'17 46°43'21	desc. node	15585 Jan 22 18:21	14°♄29'55	
	15582 Jul 25 02:44	0°♄		15585 Feb 04 14:37	0°♄	
desc. node	15582 Aug 08 05:54	14°♄52'02		15585 Mar 01 18:54	0°♄	
	15582 Aug 21 20:32	0°♄		15585 Mar 27 12:27	0°♄	
	15582 Sep 16 15:28	0°♄		15585 Apr 23 06:33	0°♄	
	15582 Oct 11 15:35	0°♄	evening max el	15585 May 14 09:41	21°♄59'30	46°15'16
	15582 Nov 05 07:02	0°♄	asc. node	15585 May 15 13:30	23°♄07'34	
asc. node	15582 Nov 29 03:51	29°♄17'04		15585 May 22 19:46	0°♄	
	15582 Nov 29 17:49	0°♄	greatest brilliancy	15585 Jun 23 14:35	21°♄48'19	-4.8m
	15582 Dec 24 01:42	0°♄	retrograde	15585 Jul 03 01:43	23°♄29'05	
	15583 Jan 17 08:03	0°♄	evening set	15585 Jul 20 18:47	17°♄28'21	
morning set	15583 Jan 23 04:41	7°♄15'02	inferior conj	15585 Jul 23 18:46	15°♄38'17	8°34'55
	15583 Feb 10 14:15	0°♄	minimum elong	15585 Jul 24 02:03	15°♄27'00	8°33'27
			min. Earth dist.	15585 Jul 24 10:30	15°♄13'57	0.27510 AU
superior conj	15583 Mar 01 04:15	22°♄57'05 0°45'28	morning rise	15585 Jul 27 09:14	13°♄26'22	
minimum elong	15583 Mar 01 13:07	23°♄24'28 0°45'17	direct	15585 Aug 13 16:51	7°♄39'01	
max. Earth dist.	15583 Mar 02 02:20	24°♄05'12 1.73103 AU	greatest brilliancy	15585 Aug 23 21:40	9°♄37'12	-4.9m
	15583 Mar 06 21:23	0°♄	desc. node	15585 Sep 04 15:20	15°♄47'13	
desc. node	15583 Mar 20 20:28	17°♄12'49		15585 Sep 22 08:38	0°♄	
	15583 Mar 31 05:29	0°♄	morning max el	15585 Oct 03 04:59	10°♄24'57	46°53'31
evening rise	15583 Apr 08 03:17	9°♄44'30		15585 Oct 21 20:02	0°♄	
	15583 Apr 24 13:52	0°♄		15585 Nov 17 10:12	0°♄	
	15583 May 18 22:02	0°♄		15585 Dec 12 23:31	0°♄	
	15583 Jun 12 06:36	0°♄	asc. node	15585 Dec 26 15:38	16°♄20'04	
	15583 Jul 06 17:39	0°♄		15586 Jan 07 00:02	0°♄	
asc. node	15583 Jul 11 11:18	5°♄46'41		15586 Jan 31 16:48	0°♄	
	15583 Jul 31 10:42	0°♄		15586 Feb 25 05:01	0°♄	
	15583 Aug 25 15:56	0°♄		15586 Mar 21 14:49	0°♄	
	15583 Sep 20 23:28	0°♄	morning set	15586 Apr 02 06:29	14°♄21'03	
evening max el	15583 Oct 09 21:28	19°♄57'29 46°35'19		15586 Apr 14 23:02	0°♄	
	15583 Oct 20 08:56	0°♄	desc. node	15586 Apr 17 10:22	3°♄03'09	
desc. node	15583 Oct 31 08:45	9°♄18'15	max. Earth dist.	15586 May 08 12:37	29°♄07'58	1.72668 AU
greatest brilliancy	15583 Nov 18 10:38	20°♄04'48 -4.8m		15586 May 09 05:25	0°♄	

superior conj	15586 May 10 19:52	1° Π 59'04	-0°53'04	morning rise	15588 Oct 11 11:26	26° Ω 03'21	
minimum elong	15586 May 10 09:22	1° Π 26'35	0°53'23	direct	15588 Oct 26 02:28	21° Ω 54'55	
	15586 Jun 02 09:37	0° Θ		greatest brilliancy	15588 Nov 04 21:03	23° Ω 40'29	-4.8m
evening rise	15586 Jun 18 16:01	20° Θ 14'33			15588 Nov 17 06:16	0° \mathbb{M}	
	15586 Jun 26 12:00	0° Ω		morning max el	15588 Dec 14 15:14	22° \mathbb{M} 58'13	46°16'15
	15586 Jul 20 13:48	0° \mathbb{M}			15588 Dec 21 16:37	0° \mathcal{Z}	
asc. node	15586 Aug 08 00:48	22° \mathbb{M} 57'57			15589 Jan 18 14:11	0° \mathcal{Z}	
	15586 Aug 13 16:43	0° Ω		asc. node	15589 Jan 23 02:30	5° \mathcal{Z} 04'58	
	15586 Sep 06 22:45	0° \mathbb{M}			15589 Feb 13 17:19	0° \approx	
	15586 Oct 01 10:59	0° \mathcal{Z}			15589 Mar 11 00:42	0° \mathcal{H}	
	15586 Oct 26 11:27	0° \mathcal{Z}			15589 Apr 04 21:24	0° \mathcal{Y}	
	15586 Nov 21 12:34	0° \approx			15589 Apr 29 11:30	0° \mathcal{B}	
desc. node	15586 Nov 27 19:18	6° \approx 56'30		desc. node	15589 May 14 23:42	19° \mathcal{B} 03'24	
	15586 Dec 19 22:49	0° \mathcal{H}			15589 May 23 20:36	0° Π	
evening max el	15586 Dec 20 09:48	0° \mathcal{H} 26'46	46°11'24	morning set	15589 Jun 13 09:57	25° Π 28'08	
greatest brilliancy	15587 Jan 28 14:42	29° \mathcal{H} 12'40	-4.8m		15589 Jun 17 01:24	0° Θ	
	15587 Jan 31 03:43	0° \mathcal{Y}			15589 Jul 11 02:46	0° Ω	
retrograde	15587 Feb 07 16:18	1° \mathcal{Y} 02'54		max. Earth dist.	15589 Jul 20 20:48	12° Ω 11'50	1.71705 AU
	15587 Feb 14 22:11	30° \mathcal{R} \mathcal{H}					
evening set	15587 Feb 23 18:52	26° \mathcal{H} 02'50		superior conj	15589 Jul 23 02:01	14° Ω 58'20	-1°22'20
inferior conj	15587 Mar 01 01:01	22° \mathcal{H} 50'38	-4°39'00	minimum elong	15589 Jul 23 09:47	15° Ω 22'36	1°22'54
minimum elong	15587 Mar 01 10:13	22° \mathcal{H} 36'13	4°36'23		15589 Aug 04 02:04	0° \mathbb{M}	
min. Earth dist.	15587 Mar 01 06:54	22° \mathcal{H} 41'24	0.28583 AU		15589 Aug 28 00:49	0° Ω	
morning rise	15587 Mar 07 01:35	19° \mathcal{H} 13'04		evening rise	15589 Sep 01 04:30	5° Ω 12'00	
asc. node	15587 Mar 20 19:37	14° \mathcal{H} 43'28		asc. node	15589 Sep 04 14:52	9° Ω 29'46	
direct	15587 Mar 22 08:36	14° \mathcal{H} 40'38			15589 Sep 21 00:20	0° \mathbb{M}	
greatest brilliancy	15587 Apr 02 01:24	16° \mathcal{H} 47'08	-4.8m		15589 Oct 15 02:05	0° \mathcal{Z}	
	15587 Apr 23 07:38	0° \mathcal{Y}			15589 Nov 08 08:19	0° \mathcal{Z}	
morning max el	15587 May 10 16:43	15° \mathcal{Y} 43'03	46°00'23		15589 Dec 02 22:42	0° \approx	
	15587 May 24 15:40	0° \mathcal{B}		desc. node	15589 Dec 25 07:13	26° \approx 41'43	
	15587 Jun 20 16:00	0° Π			15589 Dec 28 02:39	0° \mathcal{H}	
desc. node	15587 Jul 10 21:38	23° Π 40'51			15590 Jan 23 04:36	0° \mathcal{Y}	
	15587 Jul 16 04:56	0° Θ			15590 Feb 20 00:21	0° \mathcal{B}	
	15587 Aug 10 00:11	0° Ω		evening max el	15590 Mar 01 05:48	9° \mathcal{B} 11'24	45°59'16
	15587 Sep 03 09:55	0° \mathbb{M}			15590 Mar 25 15:45	0° Π	
	15587 Sep 27 14:56	0° Ω		greatest brilliancy	15590 Apr 09 10:23	7° Π 59'57	-4.8m
	15587 Oct 21 17:47	0° \mathbb{M}		asc. node	15590 Apr 17 05:17	9° Π 45'24	
asc. node	15587 Oct 31 16:49	12° \mathbb{M} 24'18		retrograde	15590 Apr 19 10:24	9° Π 51'10	
morning set	15587 Nov 11 09:51	25° \mathbb{M} 44'56		evening set	15590 May 04 19:53	5° Π 13'54	
	15587 Nov 14 19:44	0° \mathcal{Z}		inferior conj	15590 May 10 13:42	1° Π 45'47	5°27'18
	15587 Dec 08 21:40	0° \mathcal{Z}		minimum elong	15590 May 10 03:33	2° Π 01'43	5°24'01
				min. Earth dist.	15590 May 10 11:57	1° Π 48'32	0.28196 AU
superior conj	15587 Dec 19 10:13	13° \mathcal{Z} 05'33	1°25'08		15590 May 13 09:34	30° \mathcal{R} \mathcal{B}	
minimum elong	15587 Dec 19 06:18	12° \mathcal{Z} 53'23	1°25'58	morning rise	15590 May 15 10:58	28° \mathcal{B} 46'01	
max. Earth dist.	15587 Dec 21 22:09	16° \mathcal{Z} 11'51	1.72467 AU	direct	15590 May 31 16:21	23° \mathcal{B} 36'30	
	15588 Jan 02 00:48	0° \approx		greatest brilliancy	15590 Jun 10 22:35	25° \mathcal{B} 33'43	-4.8m
evening rise	15588 Jan 25 18:33	29° \approx 22'44			15590 Jun 20 00:22	0° Π	
	15588 Jan 26 06:38	0° \mathcal{H}		morning max el	15590 Jul 20 18:28	25° Π 43'32	46°42'23
	15588 Feb 19 16:07	0° \mathcal{Y}			15590 Jul 24 23:49	0° Θ	
desc. node	15588 Feb 20 08:08	0° \mathcal{Y} 49'03		desc. node	15590 Aug 07 07:50	14° Θ 09'17	
	15588 Mar 15 05:20	0° \mathcal{B}			15590 Aug 21 12:08	0° Ω	
	15588 Apr 08 21:58	0° Π			15590 Sep 16 04:58	0° \mathbb{M}	
	15588 May 03 18:46	0° Θ			15590 Oct 11 04:00	0° Ω	
	15588 May 28 23:18	0° Ω			15590 Nov 04 18:48	0° \mathbb{M}	
asc. node	15588 Jun 12 00:44	16° Ω 26'32		asc. node	15590 Nov 28 05:45	28° \mathbb{M} 47'54	
	15588 Jun 23 20:26	0° \mathbb{M}			15590 Nov 29 05:11	0° \mathcal{Z}	
	15588 Jul 21 09:40	0° Ω			15590 Dec 23 12:47	0° \mathcal{Z}	
evening max el	15588 Jul 26 11:26	5° Ω 08'44	46°38'04		15591 Jan 16 18:56	0° \approx	
	15588 Aug 24 16:47	0° \mathbb{M}		morning set	15591 Jan 20 21:08	5° \approx 03'50	
greatest brilliancy	15588 Sep 04 03:16	5° \mathbb{M} 22'15	-4.9m		15591 Feb 10 01:02	0° \mathcal{H}	
retrograde	15588 Sep 14 14:01	7° \mathbb{M} 24'09					
evening set	15588 Sep 29 00:43	3° \mathbb{M} 19'01		superior conj	15591 Feb 26 20:16	20° \mathcal{H} 45'12	0°48'21
desc. node	15588 Oct 02 00:44	1° \mathbb{M} 37'48		minimum elong	15591 Feb 27 05:30	21° \mathcal{H} 13'39	0°48'12
	15588 Oct 04 17:47	30° \mathcal{R} Ω		max. Earth dist.	15591 Feb 27 21:06	22° \mathcal{H} 01'49	1.73099 AU
inferior conj	15588 Oct 05 07:57	29° Ω 38'24	-0°51'48		15591 Mar 06 08:08	0° \mathcal{Y}	
minimum elong	15588 Oct 05 05:56	29° Ω 41'29	0°50'46	desc. node	15591 Mar 19 22:09	16° \mathcal{Y} 44'42	
min. Earth dist.	15588 Oct 05 02:27	29° Ω 46'47	0.26988 AU		15591 Mar 30 16:20	0° \mathcal{B}	

evening rise	15591 Apr 05 18:50	7°♄31'06			15593 Oct 21 13:33	0°♎		
	15591 Apr 24 00:53	0°♈			15593 Nov 17 00:28	0°♎		
	15591 May 18 09:18	0°♊			15593 Dec 12 12:12	0°♈		
	15591 Jun 11 18:12	0°♋		asc. node	15593 Dec 25 17:38	15°♈49'41		
	15591 Jul 06 05:44	0°♌			15594 Jan 06 11:47	0°♉		
asc. node	15591 Jul 10 13:14	5°♌15'24			15594 Jan 31 04:01	0°♊		
	15591 Jul 30 23:35	0°♍			15594 Feb 24 15:56	0°♋		
	15591 Aug 25 06:15	0°♎			15594 Mar 21 01:34	0°♌		
	15591 Sep 20 16:54	0°♏		morning set	15594 Mar 30 22:25	12°♌09'21		
evening max el	15591 Oct 07 12:06	17°♏38'52	46°36'01		15594 Apr 14 09:43	0°♍		
	15591 Oct 20 13:12	0°♎		desc. node	15594 Apr 16 12:11	2°♍35'44		
desc. node	15591 Oct 30 10:36	8°♎07'36		max. Earth dist.	15594 May 06 03:19	26°♍51'51	1.72699 AU	
greatest brilliancy	15591 Nov 16 00:10	17°♎46'40	-4.8m					
retrograde	15591 Nov 26 17:06	19°♎54'03		superior conj	15594 May 08 10:09	29°♎41'34	-0°50'09	
evening set	15591 Dec 14 17:34	13°♎46'30		minimum elong	15594 May 07 23:59	29°♎10'06	0°50'26	
min. Earth dist.	15591 Dec 17 09:42	12°♎08'35	0.28297 AU		15594 May 08 16:06	0°♈		
inferior conj	15591 Dec 18 00:33	11°♎45'37	-8°47'44		15594 Jun 01 20:22	0°♊		
minimum elong	15591 Dec 17 20:10	11°♎52'24	8°46'35	evening rise	15594 Jun 16 05:04	17°♊52'00		
morning rise	15591 Dec 20 22:54	9°♎57'55			15594 Jun 25 22:52	0°♋		
direct	15592 Jan 08 03:15	3°♎46'25			15594 Jul 20 00:52	0°♌		
greatest brilliancy	15592 Jan 17 22:30	5°♎31'28	-4.8m	asc. node	15594 Aug 07 02:35	22°♌28'34		
asc. node	15592 Feb 20 12:07	28°♎45'25			15594 Aug 13 04:02	0°♍		
	15592 Feb 21 20:14	0°♎			15594 Sep 06 10:26	0°♎		
morning max el	15592 Feb 26 04:39	4°♎08'28	45°45'04		15594 Sep 30 23:15	0°♏		
	15592 Mar 22 01:51	0°♐			15594 Oct 26 00:46	0°♑		
	15592 Apr 17 14:56	0°♒			15594 Nov 21 04:09	0°♓		
	15592 May 13 02:03	0°♈		desc. node	15594 Nov 26 21:21	6°♓17'20		
	15592 Jun 06 22:57	0°♈		evening max el	15594 Dec 18 00:48	28°♓13'06	46°12'14	
desc. node	15592 Jun 11 12:11	5°♈32'56			15594 Dec 19 21:01	0°♐		
	15592 Jul 01 10:25	0°♊		greatest brilliancy	15595 Jan 26 06:51	27°♐02'16	-4.8m	
	15592 Jul 25 15:22	0°♋		retrograde	15595 Feb 05 07:33	28°♐51'43		
	15592 Aug 18 16:23	0°♌		evening set	15595 Feb 21 13:22	23°♐48'03		
morning set	15592 Aug 26 19:12	10°♌09'11		inferior conj	15595 Feb 26 16:52	20°♐39'28	-4°56'43	
	15592 Sep 11 15:36	0°♍		minimum elong	15595 Feb 27 02:25	20°♐24'28	4°54'02	
asc. node	15592 Oct 02 04:54	25°♍44'32		min. Earth dist.	15595 Feb 26 22:49	20°♐30'07	0.28596 AU	
				morning rise	15595 Mar 04 15:28	17°♐04'17		
superior conj	15592 Oct 05 09:40	29°♍44'54	0°07'52	asc. node	15595 Mar 19 21:32	12°♐29'41		
minimum elong	15592 Oct 05 07:38	29°♍38'32	0°08'06	direct	15595 Mar 20 00:26	12°♐29'40		
behind sun begin	15592 Oct 04 09:53	28°♍30'24		greatest brilliancy	15595 Mar 30 17:04	14°♐35'29	-4.8m	
behind sun end	15592 Oct 06 05:23	0°♎46'39			15595 Apr 23 15:14	0°♑		
	15592 Oct 05 14:29	0°♎		morning max el	15595 May 08 07:03	13°♑27'06	45°59'01	
max. Earth dist.	15592 Oct 06 06:33	0°♎50'17	1.71658 AU		15595 May 24 09:16	0°♒		
	15592 Oct 29 14:00	0°♏			15595 Jun 20 06:07	0°♓		
evening rise	15592 Nov 13 00:04	18°♏00'09		desc. node	15595 Jul 09 23:33	23°♓08'16		
	15592 Nov 22 15:18	0°♐			15595 Jul 15 17:34	0°♊		
	15592 Dec 16 20:17	0°♑			15595 Aug 09 12:02	0°♋		
	15593 Jan 10 07:16	0°♒			15595 Sep 02 21:20	0°♌		
desc. node	15593 Jan 21 20:11	14°♒00'55			15595 Sep 27 02:02	0°♍		
	15593 Feb 04 02:21	0°♓			15595 Oct 21 04:40	0°♎		
	15593 Mar 01 07:29	0°♈		asc. node	15595 Oct 30 18:42	11°♎56'28		
	15593 Mar 27 02:32	0°♈		morning set	15595 Nov 08 23:57	23°♎25'54		
	15593 Apr 22 23:52	0°♊			15595 Nov 14 06:27	0°♋		
evening max el	15593 May 12 00:16	19°♊41'25	46°14'20		15595 Dec 08 08:15	0°♌		
asc. node	15593 May 14 15:30	22°♊15'16						
	15593 May 22 23:41	0°♋		superior conj	15595 Dec 17 02:11	10°♋53'10	1°24'24	
greatest brilliancy	15593 Jun 21 03:21	19°♋25'45	-4.8m	minimum elong	15595 Dec 16 21:30	10°♋38'37	1°25'13	
retrograde	15593 Jun 30 15:09	21°♋06'34		max. Earth dist.	15595 Dec 19 12:36	13°♋54'47	1.72430 AU	
evening set	15593 Jul 18 10:43	15°♋01'49			15596 Jan 01 11:20	0°♌		
inferior conj	15593 Jul 21 08:10	13°♋15'13	8°42'26	evening rise	15596 Jan 23 10:30	27°♌11'17		
minimum elong	15593 Jul 21 14:42	13°♋05'06	8°41'06		15596 Jan 25 17:11	0°♍		
min. Earth dist.	15593 Jul 21 23:07	12°♋52'02	0.27546 AU	desc. node	15596 Feb 19 09:52	0°♎21'37		
morning rise	15593 Jul 24 18:36	11°♋09'03			15596 Feb 19 02:49	0°♏		
direct	15593 Aug 11 07:03	5°♋15'37			15596 Mar 14 16:18	0°♐		
greatest brilliancy	15593 Aug 21 10:27	7°♋12'33	-4.9m		15596 Apr 08 09:23	0°♑		
desc. node	15593 Sep 03 17:14	14°♋25'02			15596 May 03 06:54	0°♒		
	15593 Sep 22 12:11	0°♓			15596 May 28 12:37	0°♓		
morning max el	15593 Sep 30 19:08	8°♓03'23	46°54'11	asc. node	15596 Jun 11 02:40	15°♓50'48		

	15596 Jun 23 12:00	0°♎			15598 Nov 28 16:11	0°♊		
	15596 Jul 21 06:53	0°♊			15598 Dec 22 23:29	0°♊		
evening max el	15596 Jul 23 23:40	2°♊42'58	46°37'31		15599 Jan 16 05:25	0°♊		
	15596 Aug 26 06:52	0°♎		morning set	15599 Jan 18 13:37	2°♊53'52		
greatest brilliancy	15596 Sep 01 18:04	2°♎59'51	-4.9m		15599 Feb 09 11:25	0°♋		
retrograde	15596 Sep 12 02:39	5°♎00'14						
evening set	15596 Sep 26 14:06	0°♎54'32		superior conj	15599 Feb 24 12:32	18°♋35'12	0°51'09	
	15596 Sep 28 05:52	30°♋♊		minimum elong	15599 Feb 24 22:02	19°♋04'31	0°51'01	
desc. node	15596 Oct 01 02:41	28°♊19'00		max. Earth dist.	15599 Feb 25 17:12	20°♋03'39	1.73091 AU	
inferior conj	15596 Oct 02 20:46	27°♊15'05	-0°27'32		15599 Mar 05 18:31	0°♋		
minimum elong	15596 Oct 02 19:42	27°♊16'43	0°26'52	desc. node	15599 Mar 19 00:02	16°♋18'25		
min. Earth dist.	15596 Oct 02 17:01	27°♊20'48	0.26969 AU		15599 Mar 30 02:46	0°♋		
morning rise	15596 Oct 09 01:28	23°♊38'14		evening rise	15599 Apr 03 10:45	5°♋20'11		
direct	15596 Oct 23 14:27	19°♊31'18			15599 Apr 23 11:28	0°♌		
greatest brilliancy	15596 Nov 02 11:15	21°♊18'32	-4.8m		15599 May 17 20:05	0°♌		
	15596 Nov 18 06:46	0°♎			15599 Jun 11 05:21	0°♌		
morning max el	15596 Dec 12 04:11	20°♎36'47	46°17'56		15599 Jul 05 17:26	0°♎		
	15596 Dec 21 12:43	0°♊		asc. node	15599 Jul 09 15:00	4°♎44'50		
	15597 Jan 18 05:08	0°♊			15599 Jul 30 12:11	0°♊		
asc. node	15597 Jan 22 04:17	4°♊28'59			15599 Aug 24 20:26	0°♎		
	15597 Feb 13 06:09	0°♊			15599 Sep 20 10:30	0°♊		
	15597 Mar 10 12:27	0°♋		evening max el	15599 Oct 05 03:32	15°♊22'44	46°36'40	
	15597 Apr 04 08:32	0°♋			15599 Oct 20 19:16	0°♊		
	15597 Apr 28 22:18	0°♋		desc. node	15599 Oct 29 12:41	6°♊55'43		
desc. node	15597 May 14 01:38	18°♋36'22		greatest brilliancy	15599 Nov 13 13:44	15°♊28'53	-4.8m	
	15597 May 23 07:15	0°♌		retrograde	15599 Nov 24 08:37	17°♊37'46		
morning set	15597 Jun 10 22:35	23°♌05'19		evening set	15599 Dec 12 05:12	11°♊34'55		
	15597 Jun 16 12:01	0°♌		min. Earth dist.	15599 Dec 14 22:56	9°♊54'40	0.28254 AU	
	15597 Jul 10 13:23	0°♌		inferior conj	15599 Dec 15 15:04	9°♊29'44	-8°43'10	
max. Earth dist.	15597 Jul 18 06:43	9°♌39'29	1.71733 AU	minimum elong	15599 Dec 15 09:54	9°♊37'44	8°41'55	
				morning rise	15599 Dec 18 14:47	7°♊40'12		
superior conj	15597 Jul 20 14:21	12°♌33'31	-1°23'35	direct	15600 Jan 05 18:02	1°♊31'24		
minimum elong	15597 Jul 20 21:17	12°♌55'14	1°24'11	greatest brilliancy	15600 Jan 15 11:06	3°♊15'01	-4.8m	
	15597 Aug 03 12:42	0°♎		asc. node	15600 Feb 19 14:05	27°♊53'15		
	15597 Aug 27 11:29	0°♊			15600 Feb 21 19:45	0°♊		
evening rise	15597 Aug 29 16:30	2°♊45'55		morning max el	15600 Feb 23 19:53	1°♊55'38	45°45'26	
asc. node	15597 Sep 03 16:35	9°♊01'41			15600 Mar 21 17:34	0°♋		
	15597 Sep 20 11:06	0°♎			15600 Apr 17 04:04	0°♋		
	15597 Oct 14 13:01	0°♊			15600 May 12 13:59	0°♋		
	15597 Nov 07 19:33	0°♊			15600 Jun 06 10:13	0°♌		
	15597 Dec 02 10:27	0°♊		desc. node	15600 Jun 10 14:04	5°♌04'29		
desc. node	15597 Dec 24 09:06	26°♊10'25			15600 Jun 30 21:19	0°♌		
	15597 Dec 27 15:18	0°♋			15600 Jul 25 02:04	0°♌		
	15598 Jan 22 19:08	0°♋			15600 Aug 18 02:58	0°♎		
	15598 Feb 19 19:38	0°♋		morning set	15600 Aug 24 07:54	7°♎45'40		
evening max el	15598 Feb 26 20:43	6°♋58'14	45°59'25		15600 Sep 11 02:09	0°♊		
	15598 Mar 26 14:53	0°♌		asc. node	15600 Oct 01 06:50	25°♊17'36		
greatest brilliancy	15598 Apr 07 00:28	5°♌45'14	-4.8m					
asc. node	15598 Apr 16 07:16	7°♌36'52		superior conj	15600 Oct 02 22:32	27°♊21'54	0°04'05	
retrograde	15598 Apr 17 01:50	7°♌37'35		minimum elong	15600 Oct 02 21:26	27°♊18'28	0°04'22	
evening set	15598 May 02 08:43	3°♌02'55		behind sun begin	15600 Oct 01 21:18	26°♊02'54		
	15598 May 07 10:47	30°♋♊		behind sun end	15600 Oct 03 21:34	28°♊34'02		
inferior conj	15598 May 08 04:55	29°♋31'35	5°09'33	max. Earth dist.	15600 Oct 03 19:44	28°♊28'19	1.71643 AU	
minimum elong	15598 May 07 19:04	29°♋47'01	5°06'18		15600 Oct 05 01:02	0°♎		
min. Earth dist.	15598 May 08 02:55	29°♋34'43	0.28210 AU		15600 Oct 29 00:32	0°♊		
morning rise	15598 May 13 05:13	26°♋27'46		evening rise	15600 Nov 10 14:45	15°♊43'24		
direct	15598 May 29 07:48	21°♋22'05			15600 Nov 22 01:52	0°♊		
greatest brilliancy	15598 Jun 08 14:23	23°♋19'59	-4.8m		15600 Dec 16 06:59	0°♊		
	15598 Jun 21 04:04	0°♌			15601 Jan 09 18:15	0°♋		
morning max el	15598 Jul 18 10:06	23°♌28'54	46°41'03	desc. node	15601 Jan 20 21:58	13°♋32'30		
	15598 Jul 24 19:43	0°♌			15601 Feb 03 13:51	0°♋		
desc. node	15598 Aug 06 09:42	13°♌27'55			15601 Feb 28 19:50	0°♋		
	15598 Aug 21 03:11	0°♌			15601 Mar 26 16:26	0°♌		
	15598 Sep 15 18:04	0°♎			15601 Apr 22 17:08	0°♌		
	15598 Oct 10 16:05	0°♊		evening max el	15601 May 09 14:43	17°♌24'20	46°13'33	
	15598 Nov 04 06:14	0°♎		asc. node	15601 May 13 17:31	21°♌23'15		
asc. node	15598 Nov 27 07:39	28°♎19'49			15601 May 23 04:52	0°♌		

greatest brilliancy	15601 Jun 18 17:04	17°♌06'21	-4.8m
retrograde	15601 Jun 28 04:29	18°♌46'36	
evening set	15601 Jul 16 02:47	12°♌38'29	
inferior conj	15601 Jul 18 22:01	10°♌54'56	8°48'53
minimum elong	15601 Jul 19 03:45	10°♌46'00	8°47'40
min. Earth dist.	15601 Jul 19 12:24	10°♌32'35	0.27579 AU
morning rise	15601 Jul 22 04:40	8°♌54'04	
direct	15601 Aug 08 21:06	2°♌54'57	
greatest brilliancy	15601 Aug 18 23:57	4°♌50'56	-4.9m
desc. node	15601 Sep 02 19:13	13°♌07'30	
	15601 Sep 22 13:33	0°♏	
morning max el	15601 Sep 28 08:35	5°♏41'20	46°54'30
	15601 Oct 21 06:18	0°♏	
	15601 Nov 16 14:20	0°♐	
	15601 Dec 12 00:37	0°♑	
asc. node	15601 Dec 24 19:26	15°♑19'11	
	15602 Jan 05 23:21	0°♒	