superior conj	16101 Feb 23 14:04	18°♓54'26	0°56'34
minimum elong	16101 Feb 23 23:58	19°♓25'01	0°56'24
max. Earth dist.	16101 Feb 25 06:55	21°♓00'34	1.73038 AU
	16101 Mar 04 13:41	0°♈	
desc. node	16101 Mar 20 20:17	20°♈03'49	
	16101 Mar 28 21:55	0°♉	
evening rise	16101 Apr 02 11:22	5°♉36'55	
	16101 Apr 22 07:04	0°♊	
	16101 May 16 16:32	0°♋	
	16101 Jun 10 02:48	0°♌	
	16101 Jul 04 15:54	0°♍	
asc. node	16101 Jul 11 11:59	8°♍18'23	
	16101 Jul 29 11:35	0°♎	
	16101 Aug 23 20:36	0°♏	
	16101 Sep 19 11:12	0°♐	
evening max el	16101 Oct 03 23:18	15°♐10'00	46°38'12
	16101 Oct 19 20:34	0°♑	
desc. node	16101 Oct 31 09:09	8°♑52'11	
greatest brilliancy	16101 Nov 12 08:37	15°♑18'22	-4.8m
retrograde	16101 Nov 23 04:51	17°♑28'10	
evening set	16101 Dec 10 17:21	11°♑37'10	
min. Earth dist.	16101 Dec 13 15:37	9°♑50'23	0.28085 AU
inferior conj	16101 Dec 14 09:24	9°♑22'57	-8°32'26
minimum elong	16101 Dec 14 02:36	9°♑33'26	8°31'00
morning rise	16101 Dec 17 12:07	7°♑29'14	
direct	16102 Jan 04 11:42	1°♑27'39	
greatest brilliancy	16102 Jan 14 01:19	3°♑08'33	-4.8m
	16102 Feb 20 14:19	0°♒	
asc. node	16102 Feb 21 09:43	0°♒46'27	
morning max el	16102 Feb 22 14:16	1°♒55'18	45°47'41
	16102 Mar 21 12:08	0°♓	
	16102 Apr 16 22:57	0°♈	
	16102 May 12 09:25	0°♉	
	16102 Jun 06 06:28	0°♊	
desc. node	16102 Jun 13 09:26	8°♊40'58	
	16102 Jun 30 18:30	0°♋	
	16102 Jul 25 00:05	0°♌	
	16102 Aug 18 01:33	0°♍	
morning set	16102 Aug 23 19:09	7°♍10'03	
	16102 Sep 11 00:57	0°♎	
superior conj	16102 Oct 02 10:37	26°♎48'39	-0°04'10
minimum elong	16102 Oct 02 11:35	26°♎51'43	0°03'50
behind sun begin	16102 Oct 01 11:11	25°♎35'16	
behind sun end	16102 Oct 03 12:00	28°♎08'09	
max. Earth dist.	16102 Oct 02 22:16	27°♎25'11	1.71595 AU
asc. node	16102 Oct 04 02:56	28°♎54'56	
	16102 Oct 04 23:43	0°♏	
	16102 Oct 28 22:49	0°♐	
evening rise	16102 Nov 10 07:54	15°♐28'11	
	16102 Nov 21 23:30	0°♑	
	16102 Dec 16 03:43	0°♒	
	16103 Jan 09 13:58	0°♓	
desc. node	16103 Jan 23 18:49	17°♓15'14	
	16103 Feb 03 08:43	0°♈	
	16103 Feb 28 14:20	0°♉	
	16103 Mar 26 11:15	0°♊	
	16103 Apr 22 13:01	0°♋	
evening max el	16103 May 09 06:51	17°♋12'07	46°09'53
asc. node	16103 May 16 14:12	24°♋09'55	
	16103 May 23 03:21	0°♌	
greatest brilliancy	16103 Jun 18 08:08	16°♌48'21	-4.8m
retrograde	16103 Jun 27 18:31	18°♌27'50	
evening set	16103 Jul 15 21:28	12°♌13'49	
inferior conj	16103 Jul 18 13:59	10°♌34'01	8°57'59
minimum elong	16103 Jul 18 17:52	10°♌27'57	8°57'09
min. Earth dist.	16103 Jul 19 03:49	10°♌12'24	0.27725 AU
morning rise	16103 Jul 21 14:10	8°♌42'16	
direct	16103 Aug 08 13:45	2°♌31'12	
greatest brilliancy	16103 Aug 18 17:36	4°♌27'31	-4.9m
desc. node	16103 Sep 05 15:00	15°♌02'30	
	16103 Sep 22 16:26	0°♍	
morning max el	16103 Sep 28 00:39	5°♍15'36	46°55'43
	16103 Oct 21 06:56	0°♎	
	16103 Nov 16 13:22	0°♏	
	16103 Dec 11 22:22	0°♐	
asc. node	16103 Dec 27 14:51	18°♐50'44	
	16104 Jan 05 20:09	0°♑	
	16104 Jan 30 11:07	0°♒	
	16104 Feb 23 22:10	0°♓	
	16104 Mar 19 07:20	0°♈	
morning set	16104 Mar 27 15:47	10°♈17'26	
	16104 Apr 12 15:28	0°♉	
desc. node	16104 Apr 17 10:01	5°♉53'24	
max. Earth dist.	16104 May 02 23:29	25°♉06'46	1.72837 AU
superior conj	16104 May 04 22:01	27°♉30'35	-0°41'03
minimum elong	16104 May 04 13:10	27°♉03'15	0°41'13
	16104 May 06 22:20	0°♊	
	16104 May 31 03:30	0°♋	
evening rise	16104 Jun 12 12:08	15°♋20'39	
	16104 Jun 24 07:05	0°♌	
	16104 Jul 18 10:05	0°♍	
asc. node	16104 Aug 08 01:11	25°♍36'57	
	16104 Aug 11 14:06	0°♎	
	16104 Sep 04 21:11	0°♏	
	16104 Sep 29 10:34	0°♐	
	16104 Oct 24 12:37	0°♑	
	16104 Nov 19 17:06	0°♒	
desc. node	16104 Nov 27 20:02	8°♒52'00	
evening max el	16104 Dec 14 10:47	25°♒58'47	46°17'19
	16104 Dec 18 15:00	0°♓	
greatest brilliancy	16105 Jan 22 22:31	25°♓06'28	-4.8m
retrograde	16105 Feb 01 22:04	26°♓55'57	
evening set	16105 Feb 18 13:34	21°♓39'32	
inferior conj	16105 Feb 23 08:38	18°♓43'43	-5°47'27
minimum elong	16105 Feb 23 18:58	18°♓27'31	5°44'48
min. Earth dist.	16105 Feb 23 14:03	18°♓35'13	0.28592 AU
morning rise	16105 Mar 01 00:18	15°♓18'16	
direct	16105 Mar 16 14:39	10°♓34'55	
asc. node	16105 Mar 20 19:34	10°♓55'11	
greatest brilliancy	16105 Mar 27 08:10	12°♓40'28	-4.8m
	16105 Apr 22 13:00	0°♈	
morning max el	16105 May 04 18:48	11°♈20'12	45°53'57
	16105 May 22 21:13	0°♉	
	16105 Jun 18 16:12	0°♊	
desc. node	16105 Jul 10 20:45	26°♊04'50	
	16105 Jul 14 03:26	0°♋	
	16105 Aug 07 22:06	0°♌	
	16105 Sep 01 07:26	0°♍	
	16105 Sep 25 11:51	0°♎	
	16105 Oct 19 13:58	0°♏	
asc. node	16105 Oct 31 16:20	15°♏05'17	
morning set	16105 Nov 05 05:39	20°♏46'19	
	16105 Nov 12 15:07	0°♐	
	16105 Dec 06 16:12	0°♑	
superior conj	16105 Dec 13 15:01	8°♑39'57	1°21'29
minimum elong	16105 Dec 13 08:08	8°♑18'29	1°22'06
max. Earth dist.	16105 Dec 15 17:36	11°♑17'29	1.72259 AU

	16105 Dec 30 18:27	0°♒	
evening rise	16106 Jan 20 01:04	25°♒08'20	
	16106 Jan 23 23:29	0°♓	
	16106 Feb 17 08:36	0°♈	
desc. node	16106 Feb 20 08:21	3°♈39'43	
	16106 Mar 13 22:12	0°♉	
	16106 Apr 07 16:11	0°♊	
	16106 May 02 15:21	0°♋	
	16106 May 27 23:31	0°♌	
asc. node	16106 Jun 13 01:24	18°♌37'05	
	16106 Jun 23 02:52	0°♍	
evening max el	16106 Jul 21 02:44	29°♍50'19	46°33'25
	16106 Jul 21 06:38	0°♎	
	16106 Aug 29 19:57	0°♏	
greatest brilliancy	16106 Aug 29 23:42	0°♏03'27	-4.9m
retrograde	16106 Sep 09 04:49	2°♏01'01	
	16106 Sep 19 04:10	30°℞♎	
evening set	16106 Sep 23 17:58	27°♎51'24	
inferior conj	16106 Sep 29 21:18	24°♎17'09	0°49'32
minimum elong	16106 Sep 29 23:15	24°♎14'10	0°49'07
min. Earth dist.	16106 Sep 29 22:54	24°♎14'43	0.26928 AU
desc. node	16106 Oct 03 00:52	22°♎23'39	
morning rise	16106 Oct 06 04:33	20°♎37'22	
direct	16106 Oct 20 14:42	16°♎32'08	
greatest brilliancy	16106 Oct 30 15:06	18°♎23'37	-4.8m
	16106 Nov 19 05:32	0°♏	
morning max el	16106 Dec 09 10:15	17°♏58'47	46°25'37
	16106 Dec 21 06:47	0°♐	
	16107 Jan 17 16:39	0°♑	
asc. node	16107 Jan 24 01:39	7°♑16'12	
	16107 Feb 12 14:49	0°♒	
	16107 Mar 09 19:37	0°♓	
	16107 Apr 03 14:59	0°♈	
	16107 Apr 28 04:40	0°♉	
desc. node	16107 May 15 23:03	21°♉49'38	
	16107 May 22 14:06	0°♊	
morning set	16107 Jun 08 03:03	20°♊27'23	
	16107 Jun 15 19:39	0°♋	
	16107 Jul 09 21:51	0°♌	
max. Earth dist.	16107 Jul 15 05:24	6°♌38'09	1.71887 AU
superior conj	16107 Jul 17 15:46	9°♌40'28	-1°26'35
minimum elong	16107 Jul 17 19:52	9°♌53'17	1°27'10
	16107 Aug 02 21:51	0°♍	
evening rise	16107 Aug 26 15:25	29°♍42'13	
	16107 Aug 26 21:06	0°♎	
asc. node	16107 Sep 05 15:00	12°♎11'29	
	16107 Sep 19 20:57	0°♏	
	16107 Oct 13 22:50	0°♐	
	16107 Nov 07 04:59	0°♑	
	16107 Dec 01 19:18	0°♒	
desc. node	16107 Dec 26 07:47	29°♒12'59	
	16107 Dec 26 23:49	0°♓	
	16108 Jan 22 04:26	0°♈	
	16108 Feb 19 09:10	0°♉	
evening max el	16108 Feb 24 11:25	5°♉00'33	46°00'57
	16108 Mar 26 14:11	0°♊	
greatest brilliancy	16108 Apr 03 10:48	3°♊38'36	-4.8m
retrograde	16108 Apr 13 15:30	5°♊32'45	
asc. node	16108 Apr 17 05:36	5°♊17'12	
evening set	16108 Apr 28 16:52	1°♊04'53	
	16108 Apr 30 14:02	30°℞♉	
inferior conj	16108 May 04 18:53	27°♉24'36	4°13'10
minimum elong	16108 May 04 10:17	27°♉38'05	4°10'12
min. Earth dist.	16108 May 04 15:38	27°♉29'42	0.28287 AU
morning rise	16108 May 10 03:40	24°♉08'44	
direct	16108 May 25 23:29	19°♉14'50	
greatest brilliancy	16108 Jun 05 05:03	21°♉12'12	-4.8m
	16108 Jun 20 20:13	0°♊	
morning max el	16108 Jul 14 22:55	21°♊12'24	46°34'08
	16108 Jul 23 13:28	0°♋	
desc. node	16108 Aug 07 07:12	15°♋57'00	
	16108 Aug 19 17:21	0°♌	
	16108 Sep 14 06:41	0°♍	
	16108 Oct 09 03:29	0°♎	
	16108 Nov 02 16:28	0°♏	
	16108 Nov 27 01:17	0°♐	
asc. node	16108 Nov 28 04:57	1°♐25'22	
	16108 Dec 21 07:33	0°♑	
	16109 Jan 14 12:32	0°♒	
morning set	16109 Jan 15 06:53	0°♒56'52	
	16109 Feb 07 17:45	0°♓	
superior conj	16109 Feb 21 06:13	16°♓42'59	0°59'08
minimum elong	16109 Feb 21 16:13	17°♓13'50	0°59'00
max. Earth dist.	16109 Feb 23 02:11	18°♓58'45	1.73021 AU
	16109 Mar 04 00:24	0°♈	
desc. node	16109 Mar 19 22:12	19°♈36'39	
	16109 Mar 28 08:42	0°♉	
evening rise	16109 Mar 31 03:05	3°♉24'19	
	16109 Apr 21 17:59	0°♊	
	16109 May 16 03:41	0°♋	
	16109 Jun 09 14:19	0°♌	
	16109 Jul 04 04:01	0°♍	
asc. node	16109 Jul 10 13:48	7°♍46'34	
	16109 Jul 29 00:39	0°♎	
	16109 Aug 23 11:23	0°♏	
	16109 Sep 19 05:45	0°♐	
evening max el	16109 Oct 01 14:08	12°♐50'40	46°38'29
	16109 Oct 20 06:05	0°♑	
desc. node	16109 Oct 30 11:04	7°♑30'59	
greatest brilliancy	16109 Nov 09 23:14	12°♑59'32	-4.8m
retrograde	16109 Nov 20 19:16	15°♑08'55	
evening set	16109 Dec 08 03:55	9°♑24'24	
min. Earth dist.	16109 Dec 11 05:17	7°♑32'56	0.28036 AU
inferior conj	16109 Dec 11 23:34	7°♑04'41	-8°25'07
minimum elong	16109 Dec 11 16:06	7°♑16'15	8°23'32
morning rise	16109 Dec 15 04:33	5°♑07'29	
	16109 Dec 26 14:29	30°℞♐	
direct	16110 Jan 02 01:41	29°♐10'21	
	16110 Jan 08 17:13	0°♑	
greatest brilliancy	16110 Jan 11 14:10	0°♑49'59	-4.8m
morning max el	16110 Feb 20 03:31	29°♑36'04	45°48'16
asc. node	16110 Feb 20 11:48	29°♑56'08	
	16110 Feb 20 13:24	0°♒	
	16110 Mar 21 04:04	0°♓	
	16110 Apr 16 12:25	0°♈	
	16110 May 11 21:43	0°♉	
	16110 Jun 05 18:06	0°♊	
desc. node	16110 Jun 12 11:15	8°♊11'19	
	16110 Jun 30 05:45	0°♋	
	16110 Jul 24 11:09	0°♌	
	16110 Aug 17 12:31	0°♍	
morning set	16110 Aug 21 07:42	4°♍45'00	
	16110 Sep 10 11:53	0°♎	
superior conj	16110 Sep 29 23:18	24°♎23'56	-0°07'57
minimum elong	16110 Sep 30 01:14	24°♎29'59	0°07'37
behind sun begin	16110 Sep 29 02:55	23°♎20'06	
behind sun end	16110 Sep 30 23:33	25°♎39'52	
max. Earth dist.	16110 Sep 30 06:47	24°♎47'22	1.71586 AU
asc. node	16110 Oct 03 04:48	28°♎26'37	
	16110 Oct 04 10:37	0°♏	
	16110 Oct 28 09:44	0°♐	

evening rise	16110 Nov 07 22:12	13°♐08'49	
	16110 Nov 21 10:28	0°♑	
	16110 Dec 15 14:50	0°♒	
	16111 Jan 09 01:23	0°♓	
desc. node	16111 Jan 22 20:42	16°♓45'42	
	16111 Feb 02 20:38	0°♈	
	16111 Feb 28 03:09	0°♉	
	16111 Mar 26 01:44	0°♊	
	16111 Apr 22 07:12	0°♋	
evening max el	16111 May 06 19:51	14°♋50'31	46°09'15
asc. node	16111 May 15 16:04	23°♋12'48	
	16111 May 23 11:40	0°♌	
greatest brilliancy	16111 Jun 15 22:07	14°♌28'27	-4.8m
retrograde	16111 Jun 25 07:46	16°♌07'46	
evening set	16111 Jul 13 12:21	9°♌51'50	
inferior conj	16111 Jul 16 04:02	8°♌13'22	9°01'19
minimum elong	16111 Jul 16 07:02	8°♌08'41	9°00'34
min. Earth dist.	16111 Jul 16 17:33	7°♌52'15	0.27759 AU
morning rise	16111 Jul 19 01:35	6°♌25'34	
direct	16111 Aug 06 03:22	0°♌09'46	
greatest brilliancy	16111 Aug 16 08:13	2°♌06'40	-4.9m
desc. node	16111 Sep 04 17:00	13°♌50'55	
	16111 Sep 22 16:45	0°♍	
morning max el	16111 Sep 25 14:12	2°♍52'31	46°55'55
	16111 Oct 20 23:40	0°♎	
	16111 Nov 16 03:26	0°♏	
	16111 Dec 11 11:05	0°♐	
asc. node	16111 Dec 26 16:43	18°♐19'33	
	16112 Jan 05 08:03	0°♑	
	16112 Jan 29 22:31	0°♒	
	16112 Feb 23 09:15	0°♓	
	16112 Mar 18 18:13	0°♈	
morning set	16112 Mar 25 07:47	8°♈05'23	
	16112 Apr 12 02:16	0°♉	
desc. node	16112 Apr 16 11:44	5°♉25'17	
max. Earth dist.	16112 Apr 30 16:55	22°♉58'49	1.72865 AU
superior conj	16112 May 02 12:34	25°♉13'46	-0°37'50
minimum elong	16112 May 02 04:16	24°♉48'05	0°38'01
	16112 May 06 09:10	0°♊	
	16112 May 30 14:25	0°♋	
evening rise	16112 Jun 10 01:54	13°♋00'22	
	16112 Jun 23 18:07	0°♌	
	16112 Jul 17 21:16	0°♍	
asc. node	16112 Aug 07 03:07	25°♍07'40	
	16112 Aug 11 01:32	0°♎	
	16112 Sep 04 09:01	0°♏	
	16112 Sep 28 23:05	0°♐	
	16112 Oct 24 02:22	0°♑	
	16112 Nov 19 09:30	0°♒	
desc. node	16112 Nov 26 21:49	8°♒09'14	
evening max el	16112 Dec 12 00:58	23°♒41'40	46°18'11
	16112 Dec 18 15:39	0°♓	
greatest brilliancy	16113 Jan 20 13:32	22°♓52'54	-4.8m
retrograde	16113 Jan 30 13:42	24°♓43'11	
evening set	16113 Feb 16 07:58	19°♓22'00	
inferior conj	16113 Feb 21 00:09	16°♓30'41	-6°03'15
minimum elong	16113 Feb 21 10:38	16°♓14'17	6°00'37
min. Earth dist.	16113 Feb 21 05:26	16°♓22'25	0.28602 AU
morning rise	16113 Feb 26 13:14	13°♓09'12	
direct	16113 Mar 14 05:52	8°♓21'49	
asc. node	16113 Mar 19 21:28	8°♓58'07	
greatest brilliancy	16113 Mar 24 23:48	10°♓27'50	-4.8m
	16113 Apr 22 17:01	0°♈	
morning max el	16113 May 02 10:31	9°♈07'11	45°52'59
	16113 May 22 14:18	0°♉	
	16113 Jun 18 06:12	0°♊	

desc. node	16113 Jul 09 22:37	25°♊32'15	
	16113 Jul 13 16:05	0°♋	
	16113 Aug 07 10:01	0°♌	
	16113 Aug 31 18:54	0°♍	
	16113 Sep 24 23:01	0°♎	
	16113 Oct 19 00:54	0°♏	
asc. node	16113 Oct 30 18:03	14°♏36'43	
morning set	16113 Nov 02 19:36	18°♏26'14	
	16113 Nov 12 01:55	0°♐	
	16113 Dec 06 02:56	0°♑	
superior conj	16113 Dec 11 06:35	6°♑25'29	1°20'11
minimum elong	16113 Dec 10 23:04	6°♑02'04	1°20'47
max. Earth dist.	16113 Dec 13 07:49	8°♑58'53	1.72234 AU
	16113 Dec 30 05:10	0°♒	
evening rise	16114 Jan 17 16:48	22°♒55'19	
	16114 Jan 23 10:16	0°♓	
	16114 Feb 16 19:33	0°♈	
desc. node	16114 Feb 19 10:13	3°♈11'51	
	16114 Mar 13 09:27	0°♉	
	16114 Apr 07 03:55	0°♊	
	16114 May 02 03:50	0°♋	
	16114 May 27 13:18	0°♌	
asc. node	16114 Jun 12 03:17	17°♌59'18	
	16114 Jun 22 19:14	0°♍	
evening max el	16114 Jul 18 17:02	27°♍29'41	46°32'49
	16114 Jul 21 06:07	0°♎	
greatest brilliancy	16114 Aug 27 13:15	27°♎39'07	-4.9m
retrograde	16114 Sep 06 18:27	29°♎36'16	
evening set	16114 Sep 21 08:12	25°♎24'52	
inferior conj	16114 Sep 27 09:57	21°♎52'31	1°13'52
minimum elong	16114 Sep 27 12:51	21°♎48'06	1°13'07
min. Earth dist.	16114 Sep 27 12:33	21°♎48'33	0.26921 AU
desc. node	16114 Oct 02 02:42	19°♎05'34	
morning rise	16114 Oct 03 17:34	18°♎12'29	
direct	16114 Oct 18 03:52	14°♎07'25	
greatest brilliancy	16114 Oct 28 03:51	15°♎59'04	-4.9m
	16114 Nov 19 18:15	0°♏	
morning max el	16114 Dec 07 00:52	15°♏40'47	46°27'10
	16114 Dec 21 01:43	0°♐	
	16115 Jan 17 07:20	0°♑	
asc. node	16115 Jan 23 03:40	6°♑41'27	
	16115 Feb 12 03:38	0°♒	
	16115 Mar 09 07:28	0°♓	
	16115 Apr 03 02:18	0°♈	
	16115 Apr 27 15:41	0°♉	
desc. node	16115 May 15 00:48	21°♉21'34	
	16115 May 22 00:57	0°♊	
morning set	16115 Jun 05 16:05	18°♊05'39	
	16115 Jun 15 06:25	0°♋	
	16115 Jul 09 08:37	0°♌	
max. Earth dist.	16115 Jul 12 17:03	4°♌11'03	1.71916 AU
superior conj	16115 Jul 15 04:14	7°♌15'49	-1°27'10
minimum elong	16115 Jul 15 07:21	7°♌25'33	1°27'47
	16115 Aug 02 08:39	0°♍	
evening rise	16115 Aug 24 03:17	27°♍15'09	
	16115 Aug 26 07:59	0°♎	
asc. node	16115 Sep 04 16:49	11°♎43'03	
	16115 Sep 19 07:57	0°♏	
	16115 Oct 13 09:58	0°♐	
	16115 Nov 06 16:23	0°♑	
	16115 Dec 01 07:14	0°♒	
desc. node	16115 Dec 25 09:45	28°♒40'57	
	16115 Dec 26 12:46	0°♓	
	16116 Jan 21 19:30	0°♈	
	16116 Feb 19 05:55	0°♉	

evening max el	16116 Feb 22 03:32	2°♉49'55	46°01'00
	16116 Mar 28 14:10	0°♊	
greatest brilliancy	16116 Apr 01 02:05	1°♊25'10	-4.8m
retrograde	16116 Apr 11 06:27	3°♊18'40	
asc. node	16116 Apr 16 07:28	2°♊48'02	
	16116 Apr 24 03:54	30°℞♉	
evening set	16116 Apr 26 06:46	28°♉53'09	
inferior conj	16116 May 02 10:15	25°♉10'32	3°53'44
minimum elong	16116 May 02 02:11	25°♉23'14	3°50'54
min. Earth dist.	16116 May 02 07:10	25°♉15'22	0.28294 AU
morning rise	16116 May 07 21:33	21°♉50'49	
direct	16116 May 23 15:13	17°♉01'00	
greatest brilliancy	16116 Jun 02 20:43	18°♉58'05	-4.8m
	16116 Jun 21 11:23	0°♊	
morning max el	16116 Jul 12 13:13	18°♊54'30	46°32'34
	16116 Jul 23 08:19	0°♋	
desc. node	16116 Aug 06 09:11	15°♋17'26	
	16116 Aug 19 08:04	0°♌	
	16116 Sep 13 19:42	0°♍	
	16116 Oct 08 15:35	0°♎	
	16116 Nov 02 04:00	0°♏	
	16116 Nov 26 12:23	0°♐	
asc. node	16116 Nov 27 06:50	0°♐56'56	
	16116 Dec 20 18:20	0°♑	
morning set	16117 Jan 12 23:21	28°♑46'25	
	16117 Jan 13 23:06	0°♒	
	16117 Feb 07 04:13	0°♓	
superior conj	16117 Feb 18 22:49	14°♓33'40	1°01'34
minimum elong	16117 Feb 19 08:50	15°♓04'37	1°01'29
max. Earth dist.	16117 Feb 20 21:00	16°♓56'20	1.73004 AU
	16117 Mar 03 10:52	0°♈	
desc. node	16117 Mar 18 23:57	19°♈09'39	
	16117 Mar 27 19:16	0°♉	
evening rise	16117 Mar 28 19:04	1°♉13'12	
	16117 Apr 21 04:44	0°♊	
	16117 May 15 14:41	0°♋	
	16117 Jun 09 01:43	0°♌	
	16117 Jul 03 16:02	0°♍	
asc. node	16117 Jul 09 15:45	7°♍15'36	
	16117 Jul 28 13:38	0°♎	
	16117 Aug 23 02:07	0°♏	
	16117 Sep 19 00:33	0°♐	
evening max el	16117 Sep 29 04:06	10°♐29'40	46°38'42
	16117 Oct 20 18:32	0°♑	
desc. node	16117 Oct 29 12:57	6°♑07'41	
greatest brilliancy	16117 Nov 07 14:19	10°♑41'44	-4.8m
retrograde	16117 Nov 18 09:21	12°♑50'29	
evening set	16117 Dec 05 14:21	7°♑12'34	
min. Earth dist.	16117 Dec 08 19:25	5°♑15'44	0.27984 AU
inferior conj	16117 Dec 09 13:47	4°♑47'21	-8°16'57
minimum elong	16117 Dec 09 05:39	4°♑59'57	8°15'13
morning rise	16117 Dec 12 21:11	2°♑46'26	
	16117 Dec 18 00:14	30°℞♐	
direct	16117 Dec 30 15:08	26°♐53'48	
greatest brilliancy	16118 Jan 09 03:43	28°♐33'02	-4.8m
	16118 Jan 12 21:05	0°♑	
morning max el	16118 Feb 17 16:29	27°♑17'08	45°49'07
asc. node	16118 Feb 19 13:40	29°♑07'18	
	16118 Feb 20 11:04	0°♒	
	16118 Mar 20 19:19	0°♓	
	16118 Apr 16 01:22	0°♈	
	16118 May 11 09:34	0°♉	
	16118 Jun 05 05:24	0°♊	
desc. node	16118 Jun 11 13:10	7°♊42'58	
	16118 Jun 29 16:44	0°♋	
	16118 Jul 23 21:57	0°♌	
	16118 Aug 16 23:13	0°♍	
morning set	16118 Aug 18 20:01	2°♍20'01	
	16118 Sep 09 22:30	0°♎	
superior conj	16118 Sep 27 11:49	21°♎59'41	-0°11'44
minimum elong	16118 Sep 27 14:43	22°♎08'44	0°11'23
behind sun begin	16118 Sep 26 20:40	21°♎12'13	
behind sun end	16118 Sep 28 08:45	23°♎05'14	
max. Earth dist.	16118 Sep 27 14:39	22°♎08'32	1.71578 AU
asc. node	16118 Oct 02 06:29	27°♎58'46	
	16118 Oct 03 21:12	0°♏	
	16118 Oct 27 20:20	0°♐	
evening rise	16118 Nov 05 12:28	10°♐50'19	
	16118 Nov 20 21:08	0°♑	
	16118 Dec 15 01:39	0°♒	
	16119 Jan 08 12:28	0°♓	
desc. node	16119 Jan 21 22:36	16°♓17'16	
	16119 Feb 02 08:12	0°♈	
	16119 Feb 27 15:35	0°♉	
	16119 Mar 25 15:52	0°♊	
	16119 Apr 22 01:19	0°♋	
evening max el	16119 May 04 08:57	12°♋30'41	46°08'30
asc. node	16119 May 14 17:58	22°♋15'43	
	16119 May 23 22:20	0°♌	
greatest brilliancy	16119 Jun 13 11:21	12°♌08'48	-4.8m
retrograde	16119 Jun 22 21:23	13°♌48'48	
evening set	16119 Jul 11 02:39	7°♌31'25	
inferior conj	16119 Jul 13 18:03	5°♌53'30	9°03'35
minimum elong	16119 Jul 13 20:07	5°♌50'16	9°02'54
min. Earth dist.	16119 Jul 14 07:00	5°♌33'16	0.27799 AU
morning rise	16119 Jul 16 13:28	4°♌09'01	
	16119 Jul 24 09:38	30°℞♋	
direct	16119 Aug 03 17:15	27°♋49'00	
greatest brilliancy	16119 Aug 13 22:45	29°♋46'36	-4.9m
	16119 Aug 14 13:01	0°♌	
desc. node	16119 Sep 03 18:51	12°♌41'42	
	16119 Sep 22 15:39	0°♍	
morning max el	16119 Sep 23 04:42	0°♍32'41	46°56'08
	16119 Oct 20 15:46	0°♎	
	16119 Nov 15 17:00	0°♏	
	16119 Dec 10 23:19	0°♐	
asc. node	16119 Dec 25 18:39	17°♐49'53	
	16120 Jan 04 19:31	0°♑	
	16120 Jan 29 09:29	0°♒	
	16120 Feb 22 19:54	0°♓	
	16120 Mar 18 04:41	0°♈	
morning set	16120 Mar 23 00:16	5°♈56'05	
	16120 Apr 11 12:38	0°♉	
desc. node	16120 Apr 15 13:33	4°♉58'57	
max. Earth dist.	16120 Apr 28 12:52	21°♉00'06	1.72890 AU
superior conj	16120 Apr 30 03:36	22°♉59'49	-0°34'37
minimum elong	16120 Apr 29 19:53	22°♉35'57	0°34'48
	16120 May 05 19:32	0°♊	
	16120 May 30 00:52	0°♋	
evening rise	16120 Jun 07 16:09	10°♋43'02	
	16120 Jun 23 04:44	0°♌	
	16120 Jul 17 08:06	0°♍	
asc. node	16120 Aug 06 04:53	24°♍38'50	
	16120 Aug 10 12:40	0°♎	
	16120 Sep 03 20:35	0°♏	
	16120 Sep 28 11:22	0°♐	
	16120 Oct 23 15:56	0°♑	
	16120 Nov 19 01:52	0°♒	
desc. node	16120 Nov 25 23:50	7°♒27'31	
evening max el	16120 Dec 09 16:00	21°♒27'40	46°19'07
	16120 Dec 18 17:11	0°♓	

greatest brilliancy	16121 Jan 18	04:01	20°♓39'52	-4.8m	
retrograde	16121 Jan 28	05:41	22°♓31'21		
evening set	16121 Feb 14	02:24	17°♓05'26		
inferior conj	16121 Feb 18	15:37	14°♓18'34	-6°18'33	
minimum elong	16121 Feb 19	02:10	14°♓02'05	6°16'00	
min. Earth dist.	16121 Feb 18	20:23	14°♓11'07	0.28608 AU	
morning rise	16121 Feb 24	01:56	11°♓01'25		
direct	16121 Mar 11	21:30	6°♓09'49		
asc. node	16121 Mar 18	23:21	7°♓06'24		
greatest brilliancy	16121 Mar 22	14:46	8°♓15'39	-4.8m	
	16121 Apr 22	18:49	0°♈		
morning max el	16121 Apr 30	02:55	6°♈57'17	45°52'12	
	16121 May 22	06:31	0°♉		
	16121 Jun 17	19:35	0°♊		
desc. node	16121 Jul 09	00:36	25°♊01'31		
	16121 Jul 13	04:12	0°♋		
	16121 Aug 06	21:30	0°♌		
	16121 Aug 31	06:00	0°♍		
	16121 Sep 24	09:52	0°♎		
	16121 Oct 18	11:35	0°♏		
asc. node	16121 Oct 29	19:59	14°♏09'38		
morning set	16121 Oct 31	09:08	16°♏05'34		
	16121 Nov 11	12:28	0°♐		
	16121 Dec 05	13:24	0°♑		
superior conj	16121 Dec 08	21:40	4°♑10'17	1°18'44	
minimum elong	16121 Dec 08	13:34	3°♑45'03	1°19'19	
max. Earth dist.	16121 Dec 10	23:41	6°♑46'14	1.72205 AU	
	16121 Dec 29	15:36	0°♒		
evening rise	16122 Jan 15	08:18	20°♒42'25		
	16122 Jan 22	20:45	0°♓		
	16122 Feb 16	06:13	0°♈		
desc. node	16122 Feb 18	11:58	2°♈44'33		
	16122 Mar 12	20:25	0°♉		
	16122 Apr 06	15:21	0°♊		
	16122 May 01	16:00	0°♋		
	16122 May 27	02:46	0°♌		
asc. node	16122 Jun 11	05:18	17°♌22'57		
	16122 Jun 22	11:24	0°♍		
evening max el	16122 Jul 16	07:46	25°♍11'33	46°32'03	
	16122 Jul 21	06:08	0°♎		
greatest brilliancy	16122 Aug 25	02:58	25°♎16'20	-4.9m	
retrograde	16122 Sep 04	07:39	27°♎12'29		
evening set	16122 Sep 18	22:43	22°♎59'16		
inferior conj	16122 Sep 24	22:39	19°♎28'54	1°38'00	
minimum elong	16122 Sep 25	02:29	19°♎23'05	1°36'57	
min. Earth dist.	16122 Sep 25	02:20	19°♎23'19	0.26923 AU	
morning rise	16122 Oct 01	06:21	15°♎48'38		
desc. node	16122 Oct 01	04:40	15°♎50'52		
direct	16122 Oct 15	17:17	11°♎43'40		
greatest brilliancy	16122 Oct 25	16:47	13°♎35'12	-4.9m	
	16122 Nov 20	03:27	0°♏		
morning max el	16122 Dec 04	14:51	13°♏21'31	46°28'33	
	16122 Dec 20	20:00	0°♐		
	16123 Jan 16	21:39	0°♑		
asc. node	16123 Jan 22	05:34	6°♑07'06		
	16123 Feb 11	16:10	0°♒		
	16123 Mar 08	19:04	0°♓		
	16123 Apr 02	13:21	0°♈		
	16123 Apr 27	02:27	0°♉		
desc. node	16123 May 14	02:44	20°♉54'45		
	16123 May 21	11:33	0°♊		
morning set	16123 Jun 03	05:26	15°♊45'44		
	16123 Jun 14	16:56	0°♋		
	16123 Jul 08	19:05	0°♌		
max. Earth dist.	16123 Jul 10	03:14	1°♌40'16	1.71940 AU	
superior conj	16123 Jul 12	17:14	4°♌53'49	-1°27'34	
minimum elong	16123 Jul 12	19:23	5°♌00'30	1°28'13	
	16123 Aug 01	19:09	0°♍		
evening rise	16123 Aug 21	15:32	24°♍50'08		
	16123 Aug 25	18:35	0°♎		
asc. node	16123 Sep 03	18:35	11°♎15'20		
	16123 Sep 18	18:41	0°♏		
	16123 Oct 12	20:56	0°♐		
	16123 Nov 06	03:42	0°♑		
	16123 Nov 30	19:08	0°♒		
desc. node	16123 Dec 24	11:37	28°♒08'36		
	16123 Dec 26	01:46	0°♓		
	16124 Jan 21	10:46	0°♈		
	16124 Feb 19	03:26	0°♉		
evening max el	16124 Feb 19	18:41	0°♉36'57	46°01'11	
greatest brilliancy	16124 Mar 29	17:41	29°♉12'08	-4.8m	
	16124 Apr 01	06:21	0°♊		
retrograde	16124 Apr 08	20:53	1°♊04'44		
asc. node	16124 Apr 15	09:29	0°♊13'34		
	16124 Apr 16	04:58	30°℞♉		
evening set	16124 Apr 23	20:45	26°♉41'08		
inferior conj	16124 Apr 30	01:33	22°♉56'39	3°34'02	
minimum elong	16124 Apr 29	18:02	23°♉08'29	3°31'19	
min. Earth dist.	16124 Apr 29	22:59	23°♉00'42	0.28300 AU	
morning rise	16124 May 05	15:13	19°♉33'14		
direct	16124 May 21	06:25	14°♉47'10		
greatest brilliancy	16124 May 31	12:53	16°♉44'40	-4.8m	
	16124 Jun 21	22:30	0°♊		
morning max el	16124 Jul 10	02:49	16°♊35'13	46°31'14	
	16124 Jul 23	02:31	0°♋		
desc. node	16124 Aug 05	10:59	14°♋38'09		
	16124 Aug 18	22:25	0°♌		
	16124 Sep 13	08:25	0°♍		
	16124 Oct 08	03:26	0°♎		
	16124 Nov 01	15:19	0°♏		
	16124 Nov 25	23:21	0°♐		
asc. node	16124 Nov 26	08:43	0°♐28'56		
	16124 Dec 20	05:03	0°♑		
morning set	16125 Jan 10	15:24	26°♑34'33		
	16125 Jan 13	09:40	0°♒		
	16125 Feb 06	14:43	0°♓		
superior conj	16125 Feb 16	15:02	12°♓23'05	1°03'56	
minimum elong	16125 Feb 17	01:02	12°♓54'00	1°03'53	
max. Earth dist.	16125 Feb 18	13:16	14°♓45'54	1.72986 AU	
	16125 Mar 02	21:23	0°♈		
desc. node	16125 Mar 18	01:44	18°♈42'39		
evening rise	16125 Mar 26	10:40	29°♈00'55		
	16125 Mar 27	05:52	0°♉		
	16125 Apr 20	15:30	0°♊		
	16125 May 15	01:44	0°♋		
	16125 Jun 08	13:11	0°♌		
	16125 Jul 03	04:06	0°♍		
asc. node	16125 Jul 08	17:31	6°♍43'55		
	16125 Jul 28	02:41	0°♎		
	16125 Aug 22	16:58	0°♏		
	16125 Sep 18	19:44	0°♐		
evening max el	16125 Sep 26	17:24	8°♐07'26	46°39'01	
	16125 Oct 21	10:59	0°♑		
desc. node	16125 Oct 28	14:56	4°♑42'13		
greatest brilliancy	16125 Nov 05	05:04	8°♑23'52	-4.8m	
retrograde	16125 Nov 15	23:26	10°♑32'39		
evening set	16125 Dec 03	00:45	5°♑00'58		
min. Earth dist.	16125 Dec 06	09:43	2°♑58'41	0.27940 AU	
inferior conj	16125 Dec 07	04:06	2°♑30'19	-8°07'56	
minimum elong	16125 Dec 06	19:21	2°♑43'50	8°06'00	
morning rise	16125 Dec 10	14:10	0°♑25'28		

	16125 Dec 11 07:33	30°℞♐	
direct	16125 Dec 28 04:29	24°♐37'11	
greatest brilliancy	16126 Jan 06 17:57	26°♐16'48	-4.8m
	16126 Jan 15 00:31	0°♑	
morning max el	16126 Feb 15 05:54	24°♑58'47	45°49'51
asc. node	16126 Feb 18 15:32	28°♑18'51	
	16126 Feb 20 08:07	0°♒	
	16126 Mar 20 10:34	0°♓	
	16126 Apr 15 14:26	0°♈	
	16126 May 10 21:34	0°♉	
	16126 Jun 04 16:49	0°♊	
desc. node	16126 Jun 10 15:02	7°♊14'02	
	16126 Jun 29 03:49	0°♋	
	16126 Jul 23 08:52	0°♌	
morning set	16126 Aug 16 08:19	29°♌54'35	
	16126 Aug 16 10:03	0°♍	
	16126 Sep 09 09:16	0°♎	
superior conj	16126 Sep 25 00:31	19°♎35'35	-0°15'29
minimum elong	16126 Sep 25 04:21	19°♎47'35	0°15'08
behind sun begin	16126 Sep 24 19:14	19°♎19'02	
behind sun end	16126 Sep 25 13:28	20°♎16'09	
max. Earth dist.	16126 Sep 24 23:20	19°♎31'53	1.71569 AU
asc. node	16126 Oct 01 08:24	27°♎31'15	
	16126 Oct 03 07:54	0°♏	
	16126 Oct 27 07:01	0°♐	
evening rise	16126 Nov 03 03:04	8°♐32'35	
	16126 Nov 20 07:54	0°♑	
	16126 Dec 14 12:35	0°♒	
	16127 Jan 07 23:44	0°♓	
desc. node	16127 Jan 21 00:20	15°♓47'44	
	16127 Feb 01 20:02	0°♈	
	16127 Feb 27 04:24	0°♉	
	16127 Mar 25 06:33	0°♊	
	16127 Apr 21 20:20	0°♋	
evening max el	16127 May 01 22:49	10°♋11'51	46°07'55
asc. node	16127 May 13 19:58	21°♋16'30	
	16127 May 24 13:21	0°♌	
greatest brilliancy	16127 Jun 10 23:59	9°♌47'42	-4.8m
retrograde	16127 Jun 20 11:28	11°♌28'58	
evening set	16127 Jul 08 16:29	5°♌10'46	
inferior conj	16127 Jul 11 08:01	3°♌32'42	9°05'04
minimum elong	16127 Jul 11 09:10	3°♌30'55	9°04'23
min. Earth dist.	16127 Jul 11 20:01	3°♌14'00	0.27835 AU
morning rise	16127 Jul 14 01:46	1°♌50'55	
	16127 Jul 17 05:20	30°℞♋	
direct	16127 Aug 01 07:41	25°♋27'30	
greatest brilliancy	16127 Aug 11 12:42	27°♋25'11	-4.9m
	16127 Aug 17 06:32	0°♌	
desc. node	16127 Sep 02 20:51	11°♌33'54	
morning max el	16127 Sep 20 19:57	28°♌14'05	46°56'18
	16127 Sep 22 13:55	0°♍	
	16127 Oct 20 07:50	0°♎	
	16127 Nov 15 06:39	0°♏	
	16127 Dec 10 11:43	0°♐	
asc. node	16127 Dec 24 20:29	17°♐19'23	
	16128 Jan 04 07:09	0°♑	
	16128 Jan 28 20:40	0°♒	
	16128 Feb 22 06:49	0°♓	
	16128 Mar 17 15:27	0°♈	
morning set	16128 Mar 20 16:43	3°♈45'43	
	16128 Apr 10 23:22	0°♉	
desc. node	16128 Apr 14 15:29	4°♉31'47	
max. Earth dist.	16128 Apr 26 08:12	18°♉58'19	1.72914 AU
superior conj	16128 Apr 27 18:21	20°♉43'47	-0°31'19
minimum elong	16128 Apr 27 11:16	20°♉21'55	0°31'29
	16128 May 05 06:18	0°♊	
	16128 May 29 11:44	0°♋	
evening rise	16128 Jun 05 06:04	8°♋23'31	
	16128 Jun 22 15:43	0°♌	
	16128 Jul 16 19:18	0°♍	
asc. node	16128 Aug 05 06:41	24°♍09'01	
	16128 Aug 10 00:10	0°♎	
	16128 Sep 03 08:34	0°♏	
	16128 Sep 28 00:06	0°♐	
	16128 Oct 23 06:00	0°♑	
	16128 Nov 18 18:53	0°♒	
desc. node	16128 Nov 25 01:45	6°♒44'08	
evening max el	16128 Dec 07 07:49	19°♒14'47	46°20'07
	16128 Dec 18 20:31	0°♓	
greatest brilliancy	16129 Jan 15 18:30	18°♓26'27	-4.8m
retrograde	16129 Jan 25 21:44	20°♓18'58	
evening set	16129 Feb 11 21:00	14°♓48'31	
inferior conj	16129 Feb 16 07:12	12°♓05'59	-6°33'15
minimum elong	16129 Feb 16 17:45	11°♓49'30	6°30'44
min. Earth dist.	16129 Feb 16 11:10	11°♓59'47	0.28614 AU
morning rise	16129 Feb 21 14:35	8°♓53'15	
direct	16129 Mar 09 13:40	3°♓57'32	
asc. node	16129 Mar 18 01:23	5°♓18'17	
greatest brilliancy	16129 Mar 20 05:17	6°♓02'16	-4.8m
	16129 Apr 22 19:44	0°♈	
morning max el	16129 Apr 27 19:08	4°♈45'49	45°51'07
	16129 May 21 22:57	0°♉	
	16129 Jun 17 09:21	0°♊	
desc. node	16129 Jul 08 02:24	24°♊28'51	
	16129 Jul 12 16:46	0°♋	
	16129 Aug 06 09:23	0°♌	
	16129 Aug 30 17:28	0°♍	
	16129 Sep 23 21:05	0°♎	
	16129 Oct 17 22:38	0°♏	
morning set	16129 Oct 28 22:39	13°♏43'44	
asc. node	16129 Oct 28 21:48	13°♏41'05	
	16129 Nov 10 23:24	0°♐	
	16129 Dec 05 00:14	0°♑	
superior conj	16129 Dec 06 12:51	1°♑54'13	1°17'11
minimum elong	16129 Dec 06 04:13	1°♑27'18	1°17'42
max. Earth dist.	16129 Dec 08 16:16	4°♑34'33	1.72172 AU
	16129 Dec 29 02:24	0°♒	
evening rise	16130 Jan 13 00:01	18°♒29'02	
	16130 Jan 22 07:35	0°♓	
	16130 Feb 15 17:13	0°♈	
desc. node	16130 Feb 17 13:50	2°♈16'32	
	16130 Mar 12 07:45	0°♉	
	16130 Apr 06 03:11	0°♊	
	16130 May 01 04:40	0°♋	
	16130 May 26 16:53	0°♌	
asc. node	16130 Jun 10 07:03	16°♌43'55	
	16130 Jun 22 04:29	0°♍	
evening max el	16130 Jul 13 21:53	22°♍50'09	46°31'16
	16130 Jul 21 08:10	0°♎	
greatest brilliancy	16130 Aug 22 17:15	22°♎52'34	-4.9m
retrograde	16130 Sep 01 20:20	24°♎46'58	
evening set	16130 Sep 16 13:23	20°♎31'50	
inferior conj	16130 Sep 22 11:20	17°♎03'46	2°02'01
minimum elong	16130 Sep 22 16:02	16°♎56'35	2°00'39
min. Earth dist.	16130 Sep 22 16:18	16°♎56'11	0.26923 AU
morning rise	16130 Sep 28 18:47	13°♎23'24	
desc. node	16130 Sep 30 06:40	12°♎37'42	
direct	16130 Oct 13 06:14	9°♎18'25	
greatest brilliancy	16130 Oct 23 06:01	11°♎10'05	-4.9m
	16130 Nov 20 10:38	0°♏	
morning max el	16130 Dec 02 03:48	10°♏58'20	46°29'59

	16130 Dec 20 14:13	0°♐	
	16131 Jan 16 12:09	0°♑	
asc. node	16131 Jan 21 07:22	5°♑31'38	
	16131 Feb 11 04:57	0°♒	
	16131 Mar 08 06:56	0°♓	
	16131 Apr 02 00:42	0°♈	
	16131 Apr 26 13:31	0°♉	
desc. node	16131 May 13 04:32	20°♉26'34	
	16131 May 20 22:29	0°♊	
morning set	16131 May 31 18:48	13°♊24'48	
	16131 Jun 14 03:49	0°♋	
max. Earth dist.	16131 Jul 07 10:56	29°♋00'33	1.71975 AU
	16131 Jul 08 05:59	0°♌	
superior conj	16131 Jul 10 06:01	2°♌29'51	-1°27'49
minimum elong	16131 Jul 10 07:10	2°♌33'24	1°28'29
	16131 Aug 01 06:07	0°♍	
evening rise	16131 Aug 19 03:13	22°♍22'01	
	16131 Aug 25 05:38	0°♎	
asc. node	16131 Sep 02 20:28	10°♎46'37	
	16131 Sep 18 05:52	0°♏	
	16131 Oct 12 08:18	0°♐	
	16131 Nov 05 15:24	0°♑	
	16131 Nov 30 07:27	0°♒	
desc. node	16131 Dec 23 13:24	27°♒34'49	
	16131 Dec 25 15:13	0°♓	
	16132 Jan 21 02:37	0°♈	
evening max el	16132 Feb 17 09:10	28°♈21'43	46°01'29
	16132 Feb 19 02:05	0°♉	
greatest brilliancy	16132 Mar 27 09:28	26°♉59'08	-4.8m
retrograde	16132 Apr 06 11:38	28°♉51'10	
asc. node	16132 Apr 14 11:23	27°♉34'29	
evening set	16132 Apr 21 11:08	24°♉28'52	
inferior conj	16132 Apr 27 17:06	20°♉43'02	3°14'07
minimum elong	16132 Apr 27 10:12	20°♉53'55	3°11'34
min. Earth dist.	16132 Apr 27 15:07	20°♉46'09	0.28308 AU
morning rise	16132 May 03 09:03	17°♉16'13	
direct	16132 May 18 21:29	12°♉33'28	
greatest brilliancy	16132 May 29 05:42	14°♉32'01	-4.8m
	16132 Jun 22 06:48	0°♊	
morning max el	16132 Jul 07 16:32	14°♊15'34	46°29'40
	16132 Jul 22 20:33	0°♋	
desc. node	16132 Aug 04 12:58	13°♋58'54	
	16132 Aug 18 12:57	0°♌	
	16132 Sep 12 21:27	0°♍	
	16132 Oct 07 15:39	0°♎	
	16132 Nov 01 02:58	0°♏	
asc. node	16132 Nov 25 10:29	29°♏59'39	
	16132 Nov 25 10:36	0°♐	
	16132 Dec 19 16:01	0°♑	
morning set	16133 Jan 08 07:21	24°♑21'35	
	16133 Jan 12 20:28	0°♒	
	16133 Feb 06 01:27	0°♓	
superior conj	16133 Feb 14 07:27	10°♓12'25	1°06'12
minimum elong	16133 Feb 14 17:23	10°♓43'06	1°06'11
max. Earth dist.	16133 Feb 16 05:02	12°♓33'16	1.72967 AU
	16133 Mar 02 08:07	0°♈	
desc. node	16133 Mar 17 03:40	18°♈15'34	
evening rise	16133 Mar 24 02:37	26°♈49'13	
	16133 Mar 26 16:39	0°♉	
	16133 Apr 20 02:26	0°♊	
	16133 May 14 12:55	0°♋	
	16133 Jun 08 00:47	0°♌	
	16133 Jul 02 16:22	0°♍	
asc. node	16133 Jul 07 19:23	6°♍11'55	
	16133 Jul 27 16:02	0°♎	
	16133 Aug 22 08:20	0°♏	
	16133 Sep 18 15:56	0°♐	
evening max el	16133 Sep 24 06:43	5°♐44'06	46°39'15
	16133 Oct 22 10:09	0°♑	
desc. node	16133 Oct 27 16:50	3°♑12'12	
greatest brilliancy	16133 Nov 02 19:08	6°♑03'33	-4.8m
retrograde	16133 Nov 13 13:44	8°♑13'11	
evening set	16133 Nov 30 10:47	2°♑47'34	
min. Earth dist.	16133 Dec 03 23:32	0°♑40'09	0.27891 AU
inferior conj	16133 Dec 04 18:07	0°♑11'34	-7°57'57
minimum elong	16133 Dec 04 08:49	0°♑25'52	7°55'49
	16133 Dec 05 01:37	30°℞♐	
morning rise	16133 Dec 08 07:04	28°♐02'42	
direct	16133 Dec 25 17:36	22°♐18'51	
greatest brilliancy	16134 Jan 04 07:44	23°♐59'02	-4.8m
	16134 Jan 16 10:55	0°♑	
morning max el	16134 Feb 12 19:55	22°♑41'29	45°50'48
asc. node	16134 Feb 17 17:37	27°♑31'18	
	16134 Feb 20 04:36	0°♒	
	16134 Mar 20 01:39	0°♓	
	16134 Apr 15 03:26	0°♈	
	16134 May 10 09:32	0°♉	
	16134 Jun 04 04:11	0°♊	
desc. node	16134 Jun 09 16:50	6°♊45'02	
	16134 Jun 28 14:53	0°♋	
	16134 Jul 22 19:45	0°♌	
morning set	16134 Aug 13 20:50	27°♌29'53	
	16134 Aug 15 20:51	0°♍	
	16134 Sep 08 20:01	0°♎	
superior conj	16134 Sep 22 13:02	17°♎10'42	-0°19'15
minimum elong	16134 Sep 22 17:47	17°♎25'35	0°18'51
max. Earth dist.	16134 Sep 22 09:55	17°♎00'56	1.71570 AU
asc. node	16134 Sep 30 10:15	27°♎03'21	
	16134 Oct 02 18:39	0°♏	
	16134 Oct 26 17:48	0°♐	
evening rise	16134 Oct 31 17:17	6°♐13'23	
	16134 Nov 19 18:45	0°♑	
	16134 Dec 13 23:36	0°♒	
	16135 Jan 07 11:03	0°♓	
desc. node	16135 Jan 20 02:15	15°♓18'36	
	16135 Feb 01 07:53	0°♈	
	16135 Feb 26 17:15	0°♉	
	16135 Mar 24 21:20	0°♊	
	16135 Apr 21 15:46	0°♋	
evening max el	16135 Apr 29 13:48	7°♋56'26	46°07'27
asc. node	16135 May 12 21:49	20°♋16'13	
	16135 May 25 09:06	0°♌	
greatest brilliancy	16135 Jun 08 12:34	7°♌27'49	-4.8m
retrograde	16135 Jun 18 02:01	9°♌10'29	
evening set	16135 Jul 06 06:06	2°♌52'26	
inferior conj	16135 Jul 08 22:15	1°♌13'21	9°05'35
minimum elong	16135 Jul 08 22:30	1°♌12'57	9°04'54
min. Earth dist.	16135 Jul 09 08:56	0°♌56'43	0.27867 AU
	16135 Jul 10 21:29	30°℞♋	
morning rise	16135 Jul 11 14:51	29°♋33'22	
direct	16135 Jul 29 22:44	23°♋07'51	
greatest brilliancy	16135 Aug 09 02:09	25°♋04'36	-4.9m
	16135 Aug 18 22:04	0°♌	
desc. node	16135 Sep 01 22:49	10°♌28'54	
morning max el	16135 Sep 18 11:23	25°♌56'56	46°56'10
	16135 Sep 22 11:00	0°♍	
	16135 Oct 19 23:24	0°♎	
	16135 Nov 14 20:02	0°♏	
	16135 Dec 09 23:57	0°♐	
asc. node	16135 Dec 23 22:22	16°♐49'20	
	16136 Jan 03 18:41	0°♑	

	16136 Jan 28 07:44	0°♒	
	16136 Feb 21 17:34	0°♓	
	16136 Mar 17 02:01	0°♈	
morning set	16136 Mar 18 09:07	1°♈35'51	
	16136 Apr 10 09:52	0°♉	
desc. node	16136 Apr 13 17:11	4°♉04'39	
max. Earth dist.	16136 Apr 24 03:21	16°♉56'43	1.72934 AU
superior conj	16136 Apr 25 09:10	18°♉28'47	-0°27'58
minimum elong	16136 Apr 25 02:45	18°♉09'01	0°28'09
	16136 May 04 16:50	0°♊	
	16136 May 28 22:21	0°♋	
evening rise	16136 Jun 02 20:12	6°♋05'28	
	16136 Jun 22 02:28	0°♌	
	16136 Jul 16 06:14	0°♍	
asc. node	16136 Aug 04 08:37	23°♍40'28	
	16136 Aug 09 11:23	0°♎	
	16136 Sep 02 20:15	0°♏	
	16136 Sep 27 12:33	0°♐	
	16136 Oct 22 19:53	0°♑	
	16136 Nov 18 11:59	0°♒	
desc. node	16136 Nov 24 03:32	6°♒00'30	
evening max el	16136 Dec 04 23:41	17°♒02'24	46°20'49
	16136 Dec 19 01:30	0°♓	
greatest brilliancy	16137 Jan 13 09:23	16°♓13'35	-4.8m
retrograde	16137 Jan 23 13:18	18°♓06'20	
evening set	16137 Feb 09 15:29	12°♓31'39	
inferior conj	16137 Feb 13 22:35	9°♓53'26	-6°47'27
minimum elong	16137 Feb 14 09:06	9°♓37'01	6°45'01
min. Earth dist.	16137 Feb 14 01:52	9°♓48'18	0.28616 AU
morning rise	16137 Feb 19 02:49	6°♓45'13	
direct	16137 Mar 07 05:41	1°♓45'31	
asc. node	16137 Mar 17 03:17	3°♓34'12	
greatest brilliancy	16137 Mar 17 19:26	3°♓48'45	-4.8m
	16137 Apr 22 19:08	0°♈	
morning max el	16137 Apr 25 10:17	2°♈32'37	45°50'13
	16137 May 21 14:42	0°♉	
	16137 Jun 16 22:36	0°♊	
desc. node	16137 Jul 07 04:19	23°♊57'58	
	16137 Jul 12 04:50	0°♋	
	16137 Aug 05 20:49	0°♌	
	16137 Aug 30 04:30	0°♍	
	16137 Sep 23 07:51	0°♎	
	16137 Oct 17 09:14	0°♏	
morning set	16137 Oct 26 12:30	11°♏24'20	
asc. node	16137 Oct 27 23:32	13°♏13'39	
	16137 Nov 10 09:52	0°♐	
superior conj	16137 Dec 04 04:11	29°♐39'52	1°15'29
minimum elong	16137 Dec 03 19:04	29°♐11'29	1°15'59
	16137 Dec 04 10:38	0°♑	
max. Earth dist.	16137 Dec 06 08:22	2°♑22'37	1.72144 AU
	16137 Dec 28 12:48	0°♒	
evening rise	16138 Jan 10 15:37	16°♒16'22	
	16138 Jan 21 18:05	0°♓	
	16138 Feb 15 03:54	0°♈	
desc. node	16138 Feb 16 15:41	1°♈49'28	
	16138 Mar 11 18:45	0°♉	
	16138 Apr 05 14:41	0°♊	
	16138 Apr 30 17:00	0°♋	
	16138 May 26 06:42	0°♌	
asc. node	16138 Jun 09 08:58	16°♌06'17	
	16138 Jun 21 21:27	0°♍	
evening max el	16138 Jul 11 11:01	20°♍27'42	46°30'26
	16138 Jul 21 11:07	0°♎	
greatest brilliancy	16138 Aug 20 08:06	20°♎30'58	-4.9m
retrograde	16138 Aug 30 08:42	22°♎23'14	
evening set	16138 Sep 14 04:17	18°♎05'45	
inferior conj	16138 Sep 20 00:07	14°♎40'28	2°25'46
minimum elong	16138 Sep 20 05:41	14°♎31'58	2°24'06
min. Earth dist.	16138 Sep 20 06:40	14°♎30'27	0.26926 AU
morning rise	16138 Sep 26 07:02	11°♎00'14	
desc. node	16138 Sep 29 08:32	9°♎30'28	
direct	16138 Oct 10 18:42	6°♎54'47	
greatest brilliancy	16138 Oct 20 19:49	8°♎47'15	-4.9m
	16138 Nov 20 14:57	0°♏	
morning max el	16138 Nov 29 16:04	8°♏34'56	46°31'30
	16138 Dec 20 07:25	0°♐	
	16139 Jan 16 01:58	0°♑	
asc. node	16139 Jan 20 09:25	4°♑58'33	
	16139 Feb 10 17:13	0°♒	
	16139 Mar 07 18:21	0°♓	
	16139 Apr 01 11:40	0°♈	
	16139 Apr 26 00:12	0°♉	
desc. node	16139 May 12 06:20	19°♉59'36	
	16139 May 20 09:01	0°♊	
morning set	16139 May 29 08:01	11°♊04'39	
	16139 Jun 13 14:16	0°♋	
max. Earth dist.	16139 Jul 04 20:42	26°♋28'41	1.72009 AU
superior conj	16139 Jul 07 18:47	0°♌07'19	-1°27'55
minimum elong	16139 Jul 07 18:54	0°♌07'39	1°28'35
	16139 Jul 07 16:27	0°♌	
	16139 Jul 31 16:39	0°♍	
evening rise	16139 Aug 16 15:00	19°♍55'38	
	16139 Aug 24 16:16	0°♎	
asc. node	16139 Sep 01 22:15	10°♎18'54	
	16139 Sep 17 16:37	0°♏	
	16139 Oct 11 19:15	0°♐	
	16139 Nov 05 02:40	0°♑	
	16139 Nov 29 19:19	0°♒	
desc. node	16139 Dec 22 15:23	27°♒02'56	
	16139 Dec 25 04:16	0°♓	
	16140 Jan 20 18:13	0°♈	
evening max el	16140 Feb 14 23:06	26°♈06'25	46°01'40
	16140 Feb 19 01:16	0°♉	
greatest brilliancy	16140 Mar 25 00:46	24°♉46'13	-4.8m
retrograde	16140 Apr 04 02:30	26°♉38'16	
asc. node	16140 Apr 13 13:16	24°♉50'58	
evening set	16140 Apr 19 01:31	22°♉16'39	
inferior conj	16140 Apr 25 08:28	18°♉29'53	2°53'39
minimum elong	16140 Apr 25 02:12	18°♉39'44	2°51'18
min. Earth dist.	16140 Apr 25 07:04	18°♉32'06	0.28319 AU
morning rise	16140 May 01 02:38	15°♉00'00	
direct	16140 May 16 12:24	10°♉20'03	
greatest brilliancy	16140 May 26 22:33	12°♉20'09	-4.8m
	16140 Jun 22 12:19	0°♊	
morning max el	16140 Jul 05 06:49	11°♊58'25	46°28'16
	16140 Jul 22 13:47	0°♋	
desc. node	16140 Aug 03 14:58	13°♋21'12	
	16140 Aug 18 02:54	0°♌	
	16140 Sep 12 09:58	0°♍	
	16140 Oct 07 03:23	0°♎	
	16140 Oct 31 14:11	0°♏	
asc. node	16140 Nov 24 12:23	29°♏31'58	
	16140 Nov 24 21:27	0°♐	
	16140 Dec 19 02:36	0°♑	
morning set	16141 Jan 05 23:23	22°♑10'02	
	16141 Jan 12 06:53	0°♒	
	16141 Feb 05 11:47	0°♓	
superior conj	16141 Feb 11 23:58	8°♓03'10	1°08'21
minimum elong	16141 Feb 12 09:45	8°♓33'26	1°08'23
max. Earth dist.	16141 Feb 13 22:16	10°♓26'18	1.72951 AU

	16141 Mar 01 18:28	0°♈	
desc. node	16141 Mar 16 05:23	17°♈48'49	
evening rise	16141 Mar 21 18:37	24°♈38'42	
	16141 Mar 26 03:07	0°♉	
	16141 Apr 19 13:05	0°♊	
	16141 May 13 23:53	0°♋	
	16141 Jun 07 12:12	0°♌	
	16141 Jul 02 04:26	0°♍	
asc. node	16141 Jul 06 21:19	5°♍40'48	
	16141 Jul 27 05:12	0°♎	
	16141 Aug 21 23:35	0°♏	
	16141 Sep 18 12:27	0°♐	
evening max el	16141 Sep 21 20:33	3°♐23'04	46°39'33
	16141 Oct 23 17:52	0°♑	
desc. node	16141 Oct 26 18:43	1°♑39'47	
greatest brilliancy	16141 Oct 31 08:37	3°♑43'15	-4.8m
retrograde	16141 Nov 11 04:25	5°♑54'15	
evening set	16141 Nov 27 20:41	0°♑34'31	
	16141 Nov 28 20:20	30°℞♐	
min. Earth dist.	16141 Dec 01 12:57	28°♐22'21	0.27841 AU
inferior conj	16141 Dec 02 07:59	27°♐53'09	-7°46'59
minimum elong	16141 Dec 01 22:12	28°♐08'09	7°44'42
morning rise	16141 Dec 05 23:59	25°♐40'11	
direct	16141 Dec 23 07:07	20°♐00'55	
greatest brilliancy	16142 Jan 01 20:53	21°♐41'12	-4.8m
	16142 Jan 17 10:57	0°♑	
morning max el	16142 Feb 10 10:36	20°♑26'42	45°51'50
asc. node	16142 Feb 16 19:27	26°♑44'49	
	16142 Feb 20 00:04	0°♒	
	16142 Mar 19 16:13	0°♓	
	16142 Apr 14 16:04	0°♈	
	16142 May 09 21:12	0°♉	
	16142 Jun 03 15:22	0°♊	
desc. node	16142 Jun 08 18:45	6°♊16'55	
	16142 Jun 28 01:48	0°♋	
	16142 Jul 22 06:31	0°♌	
morning set	16142 Aug 11 09:03	25°♌04'41	
	16142 Aug 15 07:31	0°♍	
	16142 Sep 08 06:38	0°♎	
superior conj	16142 Sep 20 01:15	14°♎45'21	-0°22'59
minimum elong	16142 Sep 20 06:53	15°♎03'02	0°22'35
max. Earth dist.	16142 Sep 19 22:33	14°♎36'55	1.71566 AU
asc. node	16142 Sep 29 11:56	26°♎35'29	
	16142 Oct 02 05:14	0°♏	
	16142 Oct 26 04:25	0°♐	
evening rise	16142 Oct 29 07:24	3°♐54'19	
	16142 Nov 19 05:29	0°♑	
	16142 Dec 13 10:30	0°♒	
	16143 Jan 06 22:15	0°♓	
desc. node	16143 Jan 19 04:06	14°♓49'37	
	16143 Jan 31 19:40	0°♈	
	16143 Feb 26 06:03	0°♉	
	16143 Mar 24 12:10	0°♊	
	16143 Apr 21 11:43	0°♋	
evening max el	16143 Apr 27 04:57	5°♋41'39	46°06'45
asc. node	16143 May 11 23:44	19°♋14'38	
	16143 May 26 12:21	0°♌	
greatest brilliancy	16143 Jun 06 01:14	5°♌07'50	-4.8m
retrograde	16143 Jun 15 16:10	6°♌51'13	
evening set	16143 Jul 03 19:00	0°♌34'29	
	16143 Jul 04 17:29	30°℞♋	
inferior conj	16143 Jul 06 12:18	28°♋53'23	9°05'07
minimum elong	16143 Jul 06 11:39	28°♋54'25	9°04'26
min. Earth dist.	16143 Jul 06 21:43	28°♋38'41	0.27899 AU
morning rise	16143 Jul 09 04:15	27°♋14'16	
direct	16143 Jul 27 13:36	20°♋47'41	
greatest brilliancy	16143 Aug 06 15:23	22°♋43'03	-4.9m
	16143 Aug 20 01:50	0°♌	
desc. node	16143 Sep 01 00:39	9°♌24'44	
morning max el	16143 Sep 16 02:06	23°♌37'35	46°56'01
	16143 Sep 22 07:30	0°♍	
	16143 Oct 19 14:48	0°♎	
	16143 Nov 14 09:21	0°♏	
	16143 Dec 09 12:08	0°♐	
asc. node	16143 Dec 23 00:17	16°♐19'33	
	16144 Jan 03 06:11	0°♑	
	16144 Jan 27 18:47	0°♒	
	16144 Feb 21 04:19	0°♓	
morning set	16144 Mar 16 01:44	29°♓26'29	
	16144 Mar 16 12:37	0°♈	
	16144 Apr 09 20:25	0°♉	
desc. node	16144 Apr 12 19:01	3°♉37'47	
max. Earth dist.	16144 Apr 21 21:23	14°♉51'38	1.72951 AU
superior conj	16144 Apr 23 00:16	16°♉14'37	-0°24'35
minimum elong	16144 Apr 22 18:35	15°♉57'03	0°24'48
	16144 May 04 03:25	0°♊	
	16144 May 28 09:02	0°♋	
evening rise	16144 May 31 10:31	3°♋47'49	
	16144 Jun 21 13:19	0°♌	
	16144 Jul 15 17:19	0°♍	
asc. node	16144 Aug 03 10:22	23°♍10'44	
	16144 Aug 08 22:49	0°♎	
	16144 Sep 02 08:12	0°♏	
	16144 Sep 27 01:19	0°♐	
	16144 Oct 22 10:07	0°♑	
	16144 Nov 18 05:40	0°♒	
desc. node	16144 Nov 23 05:33	5°♒16'20	
evening max el	16144 Dec 02 14:46	14°♒47'28	46°21'39
	16144 Dec 19 08:55	0°♓	
greatest brilliancy	16145 Jan 11 00:52	14°♓00'59	-4.8m
retrograde	16145 Jan 21 04:29	15°♓53'17	
evening set	16145 Feb 07 10:02	10°♓14'27	
inferior conj	16145 Feb 11 14:02	7°♓40'34	-7°00'59
minimum elong	16145 Feb 12 00:24	7°♓24'20	6°58'40
min. Earth dist.	16145 Feb 11 16:50	7°♓36'11	0.28615 AU
morning rise	16145 Feb 16 14:54	4°♓36'56	
	16145 Feb 28 03:31	30°℞♒	
direct	16145 Mar 04 21:16	29°♒33'08	
	16145 Mar 09 17:22	0°♓	
greatest brilliancy	16145 Mar 15 09:49	1°♓34'57	-4.8m
asc. node	16145 Mar 16 05:10	1°♓53'21	
	16145 Apr 22 17:43	0°♈	
morning max el	16145 Apr 23 00:43	0°♈17'02	45°49'28
	16145 May 21 06:22	0°♉	
	16145 Jun 16 11:54	0°♊	
desc. node	16145 Jul 06 06:15	23°♊26'42	
	16145 Jul 11 17:02	0°♋	
	16145 Aug 05 08:25	0°♌	
	16145 Aug 29 15:47	0°♍	
	16145 Sep 22 18:55	0°♎	
	16145 Oct 16 20:09	0°♏	
morning set	16145 Oct 24 01:54	9°♏02'23	
asc. node	16145 Oct 27 01:28	12°♏45'48	
	16145 Nov 09 20:40	0°♐	
superior conj	16145 Dec 01 19:07	27°♐23'22	1°13'39
minimum elong	16145 Dec 01 09:37	26°♐53'43	1°14'07
	16145 Dec 03 21:20	0°♑	
max. Earth dist.	16145 Dec 03 21:54	0°♑01'44	1.72109 AU
	16145 Dec 27 23:29	0°♒	
evening rise	16146 Jan 08 07:00	14°♒02'05	
	16146 Jan 21 04:52	0°♓	

	16146 Feb 14	14:54	0°♈		
desc. node	16146 Feb 15	17:26	1°♈21'07		
	16146 Mar 11	06:05	0°♉		
	16146 Apr 05	02:33	0°♊		
	16146 Apr 30	05:43	0°♋		
	16146 May 25	20:57	0°♌		
asc. node	16146 Jun 08	10:58	15°♌27'47		
	16146 Jun 21	15:05	0°♍		
evening max el	16146 Jul 08	23:11	18°♍02'10	46°29'34	
	16146 Jul 21	16:15	0°♎		
greatest brilliancy	16146 Aug 17	22:44	18°♎08'06	-4.9m	
retrograde	16146 Aug 27	20:54	19°♎58'37		
evening set	16146 Sep 11	19:16	15°♎38'04		
inferior conj	16146 Sep 17	12:52	12°♎15'59	2°49'06	
minimum elong	16146 Sep 17	19:15	12°♎06'14	2°47'11	
min. Earth dist.	16146 Sep 17	21:05	12°♎03'25	0.26938 AU	
morning rise	16146 Sep 23	19:03	8°♎36'18		
desc. node	16146 Sep 28	10:27	6°♎26'27		
direct	16146 Oct 08	06:52	4°♎29'32		
greatest brilliancy	16146 Oct 18	10:00	6°♎23'27	-4.9m	
	16146 Nov 20	18:11	0°♏		
morning max el	16146 Nov 27	04:52	6°♏11'10	46°33'02	
	16146 Dec 20	00:46	0°♐		
	16147 Jan 15	16:06	0°♑		
asc. node	16147 Jan 19	11:15	4°♑23'48		
	16147 Feb 10	05:48	0°♒		
	16147 Mar 07	06:06	0°♓		
	16147 Mar 31	22:56	0°♈		
	16147 Apr 25	11:13	0°♉		
desc. node	16147 May 11	08:13	19°♉31'50		
	16147 May 19	19:53	0°♊		
morning set	16147 May 26	21:29	8°♊44'10		
	16147 Jun 13	01:05	0°♋		
max. Earth dist.	16147 Jul 02	09:07	24°♋04'03	1.72042 AU	
superior conj	16147 Jul 05	07:54	27°♋44'45	-1°27'50	
minimum elong	16147 Jul 05	07:00	27°♋41'59	1°28'31	
	16147 Jul 07	03:16	0°♌		
	16147 Jul 31	03:30	0°♍		
evening rise	16147 Aug 14	03:10	17°♍29'32		
greatest brilliancy	16147 Aug 14	21:34	18°♍27'01	-3.9m	
	16147 Aug 24	03:13	0°♎		
asc. node	16147 Sep 01	00:02	9°♎50'06		
	16147 Sep 17	03:43	0°♏		
	16147 Oct 11	06:34	0°♐		
	16147 Nov 04	14:23	0°♑		
	16147 Nov 29	07:43	0°♒		
desc. node	16147 Dec 21	17:12	26°♒28'59		
	16147 Dec 24	17:56	0°♓		
	16148 Jan 20	10:36	0°♈		
evening max el	16148 Feb 12	13:36	23°♈51'22	46°02'08	
	16148 Feb 19	02:08	0°♉		
greatest brilliancy	16148 Mar 22	15:37	22°♉31'54	-4.8m	
retrograde	16148 Apr 01	17:55	24°♉24'38		
asc. node	16148 Apr 12	15:16	22°♉02'07		
evening set	16148 Apr 16	16:12	20°♉03'18		
inferior conj	16148 Apr 22	23:54	16°♉15'46	2°33'05	
minimum elong	16148 Apr 22	18:19	16°♉24'32	2°30'56	
min. Earth dist.	16148 Apr 22	22:45	16°♉17'34	0.28330 AU	
morning rise	16148 Apr 28	20:11	12°♉43'15		
direct	16148 May 14	03:46	8°♉05'40		
greatest brilliancy	16148 May 24	15:01	10°♉07'01	-4.8m	
	16148 Jun 22	16:22	0°♊		
morning max el	16148 Jul 02	22:18	9°♊43'17	46°26'55	
	16148 Jul 22	07:02	0°♋		
desc. node	16148 Aug 02	16:42	12°♋42'05		
	16148 Aug 17	17:05	0°♌		
	16148 Sep 11	22:45	0°♍		
	16148 Oct 06	15:23	0°♎		
	16148 Oct 31	01:42	0°♏		
asc. node	16148 Nov 23	14:15	29°♏03'10		
	16148 Nov 24	08:37	0°♐		
	16148 Dec 18	13:32	0°♑		
morning set	16149 Jan 03	15:14	19°♑56'35		
	16149 Jan 11	17:41	0°♒		
	16149 Feb 04	22:32	0°♓		
superior conj	16149 Feb 09	16:14	5°♓51'48	1°10'24	
minimum elong	16149 Feb 10	01:50	6°♓21'30	1°10'29	
max. Earth dist.	16149 Feb 11	16:14	8°♓20'16	1.72933 AU	
	16149 Mar 01	05:13	0°♈		
desc. node	16149 Mar 15	07:11	17°♈21'08		
evening rise	16149 Mar 19	10:25	22°♈26'26		
	16149 Mar 25	13:57	0°♉		
	16149 Apr 19	00:07	0°♊		
	16149 May 13	11:14	0°♋		
	16149 Jun 07	00:01	0°♌		
	16149 Jul 01	16:57	0°♍		
asc. node	16149 Jul 05	23:05	5°♍07'56		
	16149 Jul 26	18:50	0°♎		
	16149 Aug 21	15:25	0°♏		
	16149 Sep 18	10:00	0°♐		
evening max el	16149 Sep 19	11:28	1°♐04'06	46°39'53	
desc. node	16149 Oct 25	20:42	0°♑03'45		
	16149 Oct 25	17:31	0°♑		
greatest brilliancy	16149 Oct 28	22:03	1°♑22'31	-4.8m	
retrograde	16149 Nov 08	19:32	3°♑34'51		
	16149 Nov 22	05:49	30°℞♐		
evening set	16149 Nov 25	06:50	28°♐21'03		
min. Earth dist.	16149 Nov 29	02:17	26°♐04'25	0.27792 AU	
inferior conj	16149 Nov 29	21:59	25°♐34'14	-7°35'21	
minimum elong	16149 Nov 29	11:48	25°♐49'50	7°32'52	
morning rise	16149 Dec 03	17:07	23°♐17'03		
direct	16149 Dec 20	21:16	17°♐42'43		
greatest brilliancy	16149 Dec 30	09:38	19°♐22'19	-4.8m	
	16150 Jan 18	04:58	0°♑		
morning max el	16150 Feb 08	01:39	18°♑11'52	45°52'40	
asc. node	16150 Feb 15	21:20	25°♑58'14		
	16150 Feb 19	19:21	0°♒		
	16150 Mar 19	06:58	0°♓		
	16150 Apr 14	04:58	0°♈		
	16150 May 09	09:10	0°♉		
	16150 Jun 03	02:48	0°♊		
desc. node	16150 Jun 07	20:36	5°♊47'45		
	16150 Jun 27	12:58	0°♋		
	16150 Jul 21	17:33	0°♌		
morning set	16150 Aug 08	21:23	22°♌39'06		
	16150 Aug 14	18:28	0°♍		
	16150 Sep 07	17:31	0°♎		
superior conj	16150 Sep 17	13:38	12°♎19'39	-0°26'39	
minimum elong	16150 Sep 17	20:08	12°♎40'02	0°26'16	
max. Earth dist.	16150 Sep 17	10:57	12°♎11'17	1.71560 AU	
asc. node	16150 Sep 28	13:52	26°♎07'30		
	16150 Oct 01	16:06	0°♏		
	16150 Oct 25	15:17	0°♐		
evening rise	16150 Oct 26	21:40	1°♐34'58		
	16150 Nov 18	16:25	0°♑		
	16150 Dec 12	21:36	0°♒		
	16151 Jan 06	09:42	0°♓		
desc. node	16151 Jan 18	05:52	14°♓19'36		
	16151 Jan 31	07:44	0°♈		
	16151 Feb 25	19:14	0°♉		
	16151 Mar 24	03:33	0°♊		

	16151 Apr 21 08:40	0°♋	
evening max el	16151 Apr 24 20:01	3°♋26'01	46°06'07
asc. node	16151 May 11 01:43	18°♋11'07	
	16151 May 28 03:58	0°♌	
greatest brilliancy	16151 Jun 03 14:45	2°♌48'33	-4.8m
retrograde	16151 Jun 13 06:04	4°♌31'51	
	16151 Jun 28 09:44	30°℞♋	
evening set	16151 Jul 01 07:38	28°♋17'31	
inferior conj	16151 Jul 04 02:35	26°♋33'37	9°03'45
minimum elong	16151 Jul 04 01:00	26°♋36'06	9°03'02
min. Earth dist.	16151 Jul 04 11:01	26°♋20'24	0.27928 AU
morning rise	16151 Jul 06 18:20	24°♋54'31	
direct	16151 Jul 25 04:18	18°♋27'43	
greatest brilliancy	16151 Aug 04 05:12	20°♋21'59	-4.9m
	16151 Aug 20 22:12	0°♌	
desc. node	16151 Aug 31 02:40	8°♌22'14	
morning max el	16151 Sep 13 16:03	21°♌15'49	46°55'45
	16151 Sep 22 03:31	0°♍	
	16151 Oct 19 06:09	0°♎	
	16151 Nov 13 22:42	0°♏	
	16151 Dec 09 00:23	0°♐	
asc. node	16151 Dec 22 02:06	15°♐49'12	
	16152 Jan 02 17:44	0°♑	
	16152 Jan 27 05:53	0°♒	
	16152 Feb 20 15:09	0°♓	
morning set	16152 Mar 13 18:28	27°♓17'06	
	16152 Mar 15 23:19	0°♈	
	16152 Apr 09 07:05	0°♉	
desc. node	16152 Apr 11 20:56	3°♉10'47	
max. Earth dist.	16152 Apr 19 13:30	12°♉40'15	1.72970 AU
superior conj	16152 Apr 20 15:26	14°♉00'19	-0°21'12
minimum elong	16152 Apr 20 10:30	13°♉45'04	0°21'24
	16152 May 03 14:08	0°♊	
	16152 May 27 19:50	0°♋	
evening rise	16152 May 29 00:48	1°♋29'47	
	16152 Jun 21 00:15	0°♌	
	16152 Jul 15 04:29	0°♍	
asc. node	16152 Aug 02 12:12	22°♍41'02	
	16152 Aug 08 10:21	0°♎	
	16152 Sep 01 20:16	0°♏	
	16152 Sep 26 14:13	0°♐	
	16152 Oct 22 00:35	0°♑	
	16152 Nov 17 23:51	0°♒	
desc. node	16152 Nov 22 07:27	4°♒31'09	
evening max el	16152 Nov 30 05:07	12°♒30'27	46°22'30
	16152 Dec 19 19:04	0°♓	
greatest brilliancy	16153 Jan 08 16:51	11°♓49'03	-4.8m
retrograde	16153 Jan 18 19:31	13°♓40'43	
evening set	16153 Feb 05 04:38	7°♓57'44	
inferior conj	16153 Feb 09 05:36	5°♓28'18	-7°13'49
minimum elong	16153 Feb 09 15:46	5°♓12'23	7°11'37
min. Earth dist.	16153 Feb 09 08:09	5°♓24'19	0.28612 AU
morning rise	16153 Feb 14 03:00	2°♓29'24	
	16153 Feb 18 22:36	30°℞♒	
direct	16153 Mar 02 12:24	27°♒21'13	
greatest brilliancy	16153 Mar 13 00:45	29°♒22'12	-4.8m
	16153 Mar 14 15:26	0°♓	
asc. node	16153 Mar 15 07:12	0°♓16'41	
morning max el	16153 Apr 20 14:47	28°♓00'41	45°48'40
	16153 Apr 22 15:21	0°♈	
	16153 May 20 21:47	0°♉	
	16153 Jun 16 01:07	0°♊	
desc. node	16153 Jul 05 08:02	22°♊55'06	
	16153 Jul 11 05:12	0°♋	
	16153 Aug 04 19:59	0°♌	
	16153 Aug 29 03:00	0°♍	
	16153 Sep 22 05:55	0°♎	
	16153 Oct 16 07:00	0°♏	
morning set	16153 Oct 21 15:06	6°♏40'00	
asc. node	16153 Oct 26 03:16	12°♏17'46	
	16153 Nov 09 07:24	0°♐	
superior conj	16153 Nov 29 10:00	25°♐06'47	1°11'41
minimum elong	16153 Nov 29 00:08	24°♐36'00	1°12'07
max. Earth dist.	16153 Dec 01 08:42	27°♐32'30	1.72078 AU
	16153 Dec 03 08:00	0°♑	
	16153 Dec 27 10:08	0°♒	
evening rise	16154 Jan 05 22:27	11°♒48'11	
	16154 Jan 20 15:35	0°♓	
	16154 Feb 14 01:47	0°♈	
desc. node	16154 Feb 14 19:18	0°♈53'33	
	16154 Mar 10 17:18	0°♉	
	16154 Apr 04 14:18	0°♊	
	16154 Apr 29 18:22	0°♋	
	16154 May 25 11:17	0°♌	
asc. node	16154 Jun 07 12:44	14°♌48'30	
	16154 Jun 21 09:05	0°♍	
evening max el	16154 Jul 06 11:20	15°♍36'56	46°28'48
	16154 Jul 21 23:28	0°♎	
greatest brilliancy	16154 Aug 15 13:03	15°♎45'10	-4.9m
retrograde	16154 Aug 25 09:31	17°♎34'38	
evening set	16154 Sep 09 10:24	13°♎10'26	
inferior conj	16154 Sep 15 01:38	9°♎51'54	3°12'05
minimum elong	16154 Sep 15 08:47	9°♎41'00	3°09'57
min. Earth dist.	16154 Sep 15 11:19	9°♎37'07	0.26952 AU
morning rise	16154 Sep 21 06:54	6°♎13'23	
desc. node	16154 Sep 27 12:28	3°♎28'03	
direct	16154 Oct 05 19:10	2°♎04'37	
greatest brilliancy	16154 Oct 16 00:04	4°♎00'10	-4.9m
	16154 Nov 20 19:38	0°♏	
morning max el	16154 Nov 24 18:37	3°♏50'20	46°34'30
	16154 Dec 19 17:30	0°♐	
	16155 Jan 15 05:51	0°♑	
asc. node	16155 Jan 18 13:06	3°♑49'57	
	16155 Feb 09 18:06	0°♒	
	16155 Mar 06 17:36	0°♓	
	16155 Mar 31 09:58	0°♈	
	16155 Apr 24 21:59	0°♉	
desc. node	16155 May 10 10:01	19°♉04'34	
	16155 May 19 06:30	0°♊	
morning set	16155 May 24 11:11	6°♊25'17	
	16155 Jun 12 11:40	0°♋	
max. Earth dist.	16155 Jun 29 23:28	21°♋46'04	1.72079 AU
superior conj	16155 Jul 02 20:55	25°♋22'35	-1°27'36
minimum elong	16155 Jul 02 19:03	25°♋16'45	1°28'17
	16155 Jul 06 13:52	0°♌	
	16155 Jul 30 14:11	0°♍	
evening rise	16155 Aug 11 15:05	15°♍03'13	
greatest brilliancy	16155 Aug 14 07:09	18°♍23'29	-3.9m
	16155 Aug 23 13:59	0°♎	
asc. node	16155 Aug 31 01:55	9°♎22'14	
	16155 Sep 16 14:37	0°♏	
	16155 Oct 10 17:42	0°♐	
	16155 Nov 04 01:55	0°♑	
	16155 Nov 28 19:57	0°♒	
desc. node	16155 Dec 20 19:01	25°♒55'33	
	16155 Dec 24 07:29	0°♓	
	16156 Jan 20 03:02	0°♈	
evening max el	16156 Feb 10 05:06	21°♈39'33	46°02'38
	16156 Feb 19 04:01	0°♉	
greatest brilliancy	16156 Mar 20 06:12	20°♉18'18	-4.8m
retrograde	16156 Mar 30 09:45	22°♉11'51	

asc. node	16156 Apr 11 17:11	19°♉10'10	
evening set	16156 Apr 14 07:06	17°♉50'47	
inferior conj	16156 Apr 20 15:18	14°♉02'35	2°12'19
minimum elong	16156 Apr 20 10:25	14°♉10'14	2°10'22
min. Earth dist.	16156 Apr 20 14:10	14°♉04'20	0.28338 AU
morning rise	16156 Apr 26 13:34	10°♉27'42	
direct	16156 May 11 19:31	5°♉52'32	
greatest brilliancy	16156 May 22 06:48	7°♉54'19	-4.8m
	16156 Jun 22 18:17	0°♊	
morning max el	16156 Jun 30 14:19	7°♊30'43	46°25'24
	16156 Jul 21 23:33	0°♋	
desc. node	16156 Aug 01 18:45	12°♋05'13	
	16156 Aug 17 06:48	0°♌	
	16156 Sep 11 11:12	0°♍	
	16156 Oct 06 03:06	0°♎	
	16156 Oct 30 12:55	0°♏	
asc. node	16156 Nov 22 16:02	28°♏35'02	
	16156 Nov 23 19:29	0°♐	
	16156 Dec 18 00:10	0°♑	
morning set	16157 Jan 01 06:54	17°♑43'33	
	16157 Jan 11 04:11	0°♒	
	16157 Feb 04 08:58	0°♓	
superior conj	16157 Feb 07 08:25	3°♓41'06	1°12'22
minimum elong	16157 Feb 07 17:46	4°♓10'03	1°12'30
max. Earth dist.	16157 Feb 09 11:37	6°♓19'31	1.72915 AU
	16157 Feb 28 15:40	0°♈	
desc. node	16157 Mar 14 09:05	16°♈54'42	
evening rise	16157 Mar 17 02:14	20°♈15'07	
	16157 Mar 25 00:29	0°♉	
	16157 Apr 18 10:50	0°♊	
	16157 May 12 22:14	0°♋	
	16157 Jun 06 11:28	0°♌	
	16157 Jul 01 05:06	0°♍	
asc. node	16157 Jul 05 00:59	4°♍36'35	
	16157 Jul 26 08:12	0°♎	
	16157 Aug 21 07:10	0°♏	
evening max el	16157 Sep 17 02:55	28°♏47'06	46°40'00
	16157 Sep 18 08:08	0°♐	
desc. node	16157 Oct 24 22:37	28°♐24'21	
greatest brilliancy	16157 Oct 26 11:46	29°♐02'17	-4.8m
	16157 Oct 29 07:14	0°♑	
retrograde	16157 Nov 06 10:20	1°♑15'05	
	16157 Nov 14 06:24	30°℞♐	
evening set	16157 Nov 22 16:49	26°♐07'32	
min. Earth dist.	16157 Nov 26 15:33	23°♐46'07	0.27740 AU
inferior conj	16157 Nov 27 11:43	23°♐15'14	-7°22'47
minimum elong	16157 Nov 27 01:13	23°♐31'18	7°20'08
morning rise	16157 Dec 01 10:03	20°♐53'33	
direct	16157 Dec 18 11:15	15°♐24'39	
greatest brilliancy	16157 Dec 27 21:54	17°♐03'04	-4.8m
	16158 Jan 18 18:02	0°♑	
morning max el	16158 Feb 05 15:57	15°♑56'04	45°53'32
asc. node	16158 Feb 14 23:25	25°♑13'49	
	16158 Feb 19 13:43	0°♒	
	16158 Mar 18 21:11	0°♓	
	16158 Apr 13 17:25	0°♈	
	16158 May 08 20:43	0°♉	
	16158 Jun 02 13:52	0°♊	
desc. node	16158 Jun 06 22:24	5°♊19'38	
	16158 Jun 26 23:45	0°♋	
	16158 Jul 21 04:10	0°♌	
morning set	16158 Aug 06 09:59	20°♌15'38	
	16158 Aug 14 05:00	0°♍	
	16158 Sep 07 04:00	0°♎	
superior conj	16158 Sep 15 02:04	9°♎55'20	-0°30'17
minimum elong	16158 Sep 15 09:22	10°♎18'13	0°29'53
max. Earth dist.	16158 Sep 14 22:38	9°♎44'33	1.71558 AU
asc. node	16158 Sep 27 15:40	25°♎40'16	
	16158 Oct 01 02:36	0°♏	
evening rise	16158 Oct 24 11:39	29°♏15'36	
	16158 Oct 25 01:51	0°♐	
	16158 Nov 18 03:04	0°♑	
	16158 Dec 12 08:26	0°♒	
	16159 Jan 05 20:52	0°♓	
desc. node	16159 Jan 17 07:47	13°♓50'53	
	16159 Jan 30 19:33	0°♈	
	16159 Feb 25 08:13	0°♉	
	16159 Mar 23 18:51	0°♊	
	16159 Apr 21 06:03	0°♋	
evening max el	16159 Apr 22 10:25	1°♋09'32	46°05'29
asc. node	16159 May 10 03:34	17°♋06'34	
	16159 May 30 18:56	0°♌	
greatest brilliancy	16159 Jun 01 04:50	0°♌30'53	-4.8m
retrograde	16159 Jun 10 19:33	2°♌13'44	
	16159 Jun 21 07:51	30°℞♋	
evening set	16159 Jun 28 19:53	26°♋02'31	
inferior conj	16159 Jul 01 16:55	24°♋15'17	9°01'35
minimum elong	16159 Jul 01 14:26	24°♋19'11	9°00'48
min. Earth dist.	16159 Jul 02 00:46	24°♋02'59	0.27952 AU
morning rise	16159 Jul 04 08:56	22°♋35'33	
direct	16159 Jul 22 18:31	16°♋09'06	
greatest brilliancy	16159 Aug 01 19:35	18°♋02'59	-4.9m
	16159 Aug 21 12:39	0°♌	
desc. node	16159 Aug 30 04:37	7°♌22'31	
morning max el	16159 Sep 11 05:15	18°♌53'30	46°55'33
	16159 Sep 21 22:25	0°♍	
	16159 Oct 18 20:50	0°♎	
	16159 Nov 13 11:35	0°♏	
	16159 Dec 08 12:16	0°♐	
asc. node	16159 Dec 21 03:59	15°♐19'59	
	16160 Jan 02 05:00	0°♑	
	16160 Jan 26 16:43	0°♒	
	16160 Feb 20 01:43	0°♓	
morning set	16160 Mar 11 10:55	25°♓07'40	
	16160 Mar 15 09:45	0°♈	
	16160 Apr 08 17:30	0°♉	
desc. node	16160 Apr 10 22:37	2°♉43'52	
max. Earth dist.	16160 Apr 17 05:30	10°♉29'22	1.72990 AU
superior conj	16160 Apr 18 06:28	11°♉46'26	-0°17'46
minimum elong	16160 Apr 18 02:17	11°♉33'33	0°17'58
	16160 May 03 00:36	0°♊	
evening rise	16160 May 26 15:06	29°♊12'37	
	16160 May 27 06:24	0°♋	
	16160 Jun 20 10:58	0°♌	
	16160 Jul 14 15:25	0°♍	
asc. node	16160 Aug 01 14:07	22°♍12'25	
	16160 Aug 07 21:37	0°♎	
	16160 Sep 01 08:02	0°♏	
	16160 Sep 26 02:51	0°♐	
	16160 Oct 21 14:52	0°♑	
	16160 Nov 17 18:09	0°♒	
desc. node	16160 Nov 21 09:16	3°♒45'58	
evening max el	16160 Nov 27 18:50	10°♒12'35	46°23'12
	16160 Dec 20 08:28	0°♓	
greatest brilliancy	16161 Jan 06 08:32	9°♓36'58	-4.8m
retrograde	16161 Jan 16 10:25	11°♓28'29	
evening set	16161 Feb 02 23:04	5°♓41'01	
inferior conj	16161 Feb 06 21:05	3°♓16'12	-7°26'01
minimum elong	16161 Feb 07 06:59	3°♓00'42	7°23'56
min. Earth dist.	16161 Feb 06 23:31	3°♓12'23	0.28613 AU
morning rise	16161 Feb 11 14:56	0°♓22'20	

	16161 Feb 12 06:30	30°℞♒	
direct	16161 Feb 28 03:12	25°♒09'11	
greatest brilliancy	16161 Mar 10 16:06	27°♒10'09	-4.8m
asc. node	16161 Mar 14 09:04	28°♒43'27	
	16161 Mar 16 22:00	0°♓	
morning max el	16161 Apr 18 05:08	25°♓45'23	45°48'01
	16161 Apr 22 12:02	0°♈	
	16161 May 20 12:49	0°♉	
	16161 Jun 15 14:04	0°♊	
desc. node	16161 Jul 04 09:59	22°♊24'32	
	16161 Jul 10 17:08	0°♋	
	16161 Aug 04 07:22	0°♌	
	16161 Aug 28 14:02	0°♍	
	16161 Sep 21 16:44	0°♎	
	16161 Oct 15 17:38	0°♏	
morning set	16161 Oct 19 04:40	4°♏19'20	
asc. node	16161 Oct 25 05:00	11°♏50'12	
	16161 Nov 08 17:55	0°♐	
superior conj	16161 Nov 27 01:12	22°♐51'52	1°09'37
minimum elong	16161 Nov 26 15:01	22°♐20'06	1°10'01
max. Earth dist.	16161 Nov 28 20:05	25°♐05'40	1.72051 AU
	16161 Dec 02 18:26	0°♑	
	16161 Dec 26 20:36	0°♒	
evening rise	16162 Jan 03 14:12	9°♒35'47	
	16162 Jan 20 02:10	0°♓	
desc. node	16162 Feb 13 21:10	0°♈26'12	
	16162 Feb 13 12:36	0°♈	
	16162 Mar 10 04:28	0°♉	
	16162 Apr 04 02:02	0°♊	
	16162 Apr 29 07:04	0°♋	
	16162 May 25 01:45	0°♌	
asc. node	16162 Jun 06 14:40	14°♌09'25	
	16162 Jun 21 03:32	0°♍	
evening max el	16162 Jul 04 00:15	13°♍13'49	46°28'04
	16162 Jul 22 09:25	0°♎	
greatest brilliancy	16162 Aug 13 02:49	13°♎21'44	-4.9m
retrograde	16162 Aug 22 22:38	15°♎10'47	
evening set	16162 Sep 07 01:43	10°♎42'35	
inferior conj	16162 Sep 12 14:23	7°♎27'44	3°34'49
minimum elong	16162 Sep 12 22:15	7°♎15'45	3°32'28
min. Earth dist.	16162 Sep 13 01:15	7°♎11'11	0.26967 AU
morning rise	16162 Sep 18 18:29	3°♎50'57	
desc. node	16162 Sep 26 14:20	0°♎35'20	
	16162 Sep 29 06:11	30°℞♍	
direct	16162 Oct 03 08:01	29°♍39'43	
	16162 Oct 07 11:56	0°♎	
greatest brilliancy	16162 Oct 13 13:38	1°♎36'28	-4.9m
	16162 Nov 20 19:42	0°♏	
morning max el	16162 Nov 22 09:17	1°♏32'03	46°36'07
	16162 Dec 19 09:47	0°♐	
	16163 Jan 14 19:21	0°♑	
asc. node	16163 Jan 17 15:07	3°♑17'07	
	16163 Feb 09 06:16	0°♒	
	16163 Mar 06 05:03	0°♓	
	16163 Mar 30 21:01	0°♈	
	16163 Apr 24 08:47	0°♉	
desc. node	16163 May 09 11:51	18°♉37'12	
	16163 May 18 17:11	0°♊	
morning set	16163 May 22 00:53	4°♊06'15	
	16163 Jun 11 22:18	0°♋	
max. Earth dist.	16163 Jun 27 14:36	19°♋30'25	1.72113 AU
superior conj	16163 Jun 30 09:46	22°♋59'45	-1°27'12
minimum elong	16163 Jun 30 06:55	22°♋50'52	1°27'53
	16163 Jul 06 00:33	0°♌	
	16163 Jul 30 00:57	0°♍	

evening rise	16163 Aug 09 02:56	12°♍36'27	
greatest brilliancy	16163 Aug 14 16:03	19°♍32'28	-3.9m
	16163 Aug 23 00:52	0°♎	
asc. node	16163 Aug 30 03:42	8°♎53'39	
	16163 Sep 16 01:40	0°♏	
	16163 Oct 10 04:58	0°♐	
	16163 Nov 03 13:34	0°♑	
	16163 Nov 28 08:17	0°♒	
desc. node	16163 Dec 19 21:01	25°♒22'26	
	16163 Dec 23 21:10	0°♓	
	16164 Jan 19 19:48	0°♈	
evening max el	16164 Feb 07 21:23	19°♈29'39	46°03'01
	16164 Feb 19 07:30	0°♉	
greatest brilliancy	16164 Mar 17 20:55	18°♉04'48	-4.8m
retrograde	16164 Mar 28 01:30	19°♉58'44	
asc. node	16164 Apr 10 19:03	16°♉14'21	
evening set	16164 Apr 11 22:19	15°♉37'59	
inferior conj	16164 Apr 18 06:46	11°♉49'09	1°51'15
minimum elong	16164 Apr 18 02:38	11°♉55'38	1°49'34
min. Earth dist.	16164 Apr 18 05:39	11°♉50'53	0.28349 AU
morning rise	16164 Apr 24 06:52	8°♉11'55	
direct	16164 May 09 11:41	3°♉39'13	
greatest brilliancy	16164 May 19 22:26	5°♉40'51	-4.8m
	16164 Jun 22 19:09	0°♊	
morning max el	16164 Jun 28 06:08	5°♊17'07	46°23'47
	16164 Jul 21 16:01	0°♋	
desc. node	16164 Jul 31 20:42	11°♋27'44	
	16164 Aug 16 20:38	0°♌	
	16164 Sep 10 23:48	0°♍	
	16164 Oct 05 15:00	0°♎	
	16164 Oct 30 00:20	0°♏	
asc. node	16164 Nov 21 17:56	28°♏06'31	
	16164 Nov 23 06:34	0°♐	
	16164 Dec 17 11:01	0°♑	
morning set	16164 Dec 29 22:50	15°♑30'40	
	16165 Jan 10 14:52	0°♒	
	16165 Feb 03 19:35	0°♓	
superior conj	16165 Feb 05 01:00	1°♓31'04	1°14'12
minimum elong	16165 Feb 05 10:02	1°♓59'00	1°14'22
max. Earth dist.	16165 Feb 07 08:13	4°♓21'54	1.72891 AU
	16165 Feb 28 02:18	0°♈	
desc. node	16165 Mar 13 10:49	16°♈27'07	
evening rise	16165 Mar 14 18:22	18°♈04'09	
	16165 Mar 24 11:14	0°♉	
	16165 Apr 17 21:49	0°♊	
	16165 May 12 09:34	0°♋	
	16165 Jun 05 23:17	0°♌	
	16165 Jun 30 17:40	0°♍	
asc. node	16165 Jul 04 02:53	4°♍04'05	
	16165 Jul 25 22:03	0°♎	
	16165 Aug 20 23:36	0°♏	
evening max el	16165 Sep 14 17:59	26°♏27'56	46°40'02
	16165 Sep 18 07:41	0°♐	
greatest brilliancy	16165 Oct 24 02:07	26°♐41'28	-4.8m
desc. node	16165 Oct 24 00:30	26°♐39'55	
retrograde	16165 Nov 04 00:36	28°♐53'45	
evening set	16165 Nov 20 02:50	23°♐52'37	
min. Earth dist.	16165 Nov 24 05:14	21°♐25'50	0.27685 AU
inferior conj	16165 Nov 25 01:22	20°♐54'57	-7°09'20
minimum elong	16165 Nov 24 14:39	21°♐11'24	7°06'33
morning rise	16165 Nov 29 02:54	18°♐28'32	
direct	16165 Dec 16 00:55	13°♐05'16	
greatest brilliancy	16165 Dec 25 10:37	14°♐42'48	-4.8m
	16166 Jan 19 04:10	0°♑	
morning max el	16166 Feb 03 05:25	13°♑37'10	45°54'38
asc. node	16166 Feb 14 01:13	24°♑28'26	

	16166 Feb 19 07:58	0°♒	
	16166 Mar 18 11:30	0°♓	
	16166 Apr 13 06:04	0°♈	
	16166 May 08 08:32	0°♉	
	16166 Jun 02 01:15	0°♊	
desc. node	16166 Jun 06 00:21	4°♊50'56	
	16166 Jun 26 10:54	0°♋	
	16166 Jul 20 15:12	0°♌	
morning set	16166 Aug 03 22:12	17°♌49'39	
	16166 Aug 13 15:57	0°♍	
	16166 Sep 06 14:55	0°♎	
superior conj	16166 Sep 12 14:13	7°♎28'50	-0°33'53
minimum elong	16166 Sep 12 22:16	7°♎54'03	0°33'28
max. Earth dist.	16166 Sep 12 07:33	7°♎07'57	1.71555 AU
asc. node	16166 Sep 26 17:24	25°♎11'25	
	16166 Sep 30 13:31	0°♏	
evening rise	16166 Oct 22 01:21	26°♏54'06	
	16166 Oct 24 12:49	0°♐	
	16166 Nov 17 14:09	0°♑	
	16166 Dec 11 19:43	0°♒	
	16167 Jan 05 08:30	0°♓	
desc. node	16167 Jan 16 09:39	13°♓20'43	
	16167 Jan 30 07:49	0°♈	
	16167 Feb 24 21:40	0°♉	
	16167 Mar 23 10:42	0°♊	
evening max el	16167 Apr 19 23:59	28°♊50'20	46°04'52
	16167 Apr 21 04:38	0°♋	
asc. node	16167 May 09 05:31	15°♋59'47	
greatest brilliancy	16167 May 29 18:56	28°♋12'31	-4.8m
retrograde	16167 Jun 08 09:01	29°♋55'14	
evening set	16167 Jun 26 07:46	23°♋47'28	
inferior conj	16167 Jun 29 07:26	21°♋56'17	8°58'21
minimum elong	16167 Jun 29 04:04	22°♋01'33	8°57'29
min. Earth dist.	16167 Jun 29 14:51	21°♋44'38	0.27982 AU
morning rise	16167 Jul 02 00:17	20°♋15'10	
direct	16167 Jul 20 08:41	13°♋49'30	
greatest brilliancy	16167 Jul 30 10:52	15°♋43'57	-4.9m
	16167 Aug 22 00:01	0°♌	
desc. node	16167 Aug 29 06:28	6°♌22'31	
morning max el	16167 Sep 08 18:39	16°♌30'03	46°55'14
	16167 Sep 21 17:25	0°♍	
	16167 Oct 18 11:53	0°♎	
	16167 Nov 13 00:52	0°♏	
	16167 Dec 08 00:33	0°♐	
asc. node	16167 Dec 20 05:55	14°♐49'39	
	16168 Jan 01 16:38	0°♑	
	16168 Jan 26 03:57	0°♒	
	16168 Feb 19 12:41	0°♓	
morning set	16168 Mar 09 03:36	22°♓57'38	
	16168 Mar 14 20:35	0°♈	
	16168 Apr 08 04:17	0°♉	
desc. node	16168 Apr 10 00:30	2°♉16'25	
max. Earth dist.	16168 Apr 14 22:55	8°♉21'47	1.73005 AU
superior conj	16168 Apr 15 21:54	9°♉32'45	-0°14'19
minimum elong	16168 Apr 15 18:30	9°♉22'15	0°14'33
behind sun begin	16168 Apr 15 08:33	8°♉51'32	
behind sun end	16168 Apr 16 04:27	9°♉52'58	
	16168 May 02 11:24	0°♊	
evening rise	16168 May 24 05:54	26°♊56'11	
	16168 May 26 17:17	0°♋	
	16168 Jun 19 22:01	0°♌	
	16168 Jul 14 02:45	0°♍	
asc. node	16168 Jul 31 15:52	21°♍41'58	
	16168 Aug 07 09:21	0°♎	
	16168 Aug 31 20:21	0°♏	
	16168 Sep 25 16:05	0°♐	
	16168 Oct 21 05:53	0°♑	
	16168 Nov 17 13:34	0°♒	
desc. node	16168 Nov 20 11:18	2°♒59'11	
evening max el	16168 Nov 25 08:24	7°♒52'48	46°24'06
	16168 Dec 21 03:28	0°♓	
greatest brilliancy	16169 Jan 03 23:28	7°♓22'30	-4.8m
retrograde	16169 Jan 14 01:37	9°♓14'47	
evening set	16169 Jan 31 17:21	3°♓22'35	
inferior conj	16169 Feb 04 12:26	1°♓02'26	-7°37'34
minimum elong	16169 Feb 04 22:00	0°♓47'28	7°35'37
min. Earth dist.	16169 Feb 04 14:31	0°♓59'09	0.28611 AU
	16169 Feb 06 04:29	30°℞♒	
morning rise	16169 Feb 09 02:41	28°♒14'00	
direct	16169 Feb 25 17:56	22°♒55'27	
greatest brilliancy	16169 Mar 08 07:17	24°♒56'42	-4.8m
asc. node	16169 Mar 13 11:00	27°♒12'14	
	16169 Mar 18 09:55	0°♓	
morning max el	16169 Apr 15 20:24	23°♓31'19	45°47'37
	16169 Apr 22 08:25	0°♈	
	16169 May 20 03:55	0°♉	
	16169 Jun 15 03:09	0°♊	
desc. node	16169 Jul 03 11:54	21°♊53'21	
	16169 Jul 10 05:14	0°♋	
	16169 Aug 03 18:56	0°♌	
	16169 Aug 28 01:19	0°♍	
	16169 Sep 21 03:51	0°♎	
	16169 Oct 15 04:38	0°♏	
morning set	16169 Oct 16 17:49	1°♏56'10	
asc. node	16169 Oct 24 06:57	11°♏22'03	
	16169 Nov 08 04:48	0°♐	
superior conj	16169 Nov 24 15:47	20°♐33'46	1°07'23
minimum elong	16169 Nov 24 05:23	20°♐01'16	1°07'46
max. Earth dist.	16169 Nov 26 07:59	22°♐39'14	1.72025 AU
	16169 Dec 02 05:15	0°♑	
	16169 Dec 26 07:25	0°♒	
evening rise	16170 Jan 01 05:33	7°♒21'00	
	16170 Jan 19 13:05	0°♓	
desc. node	16170 Feb 12 22:55	29°♓57'30	
	16170 Feb 12 23:44	0°♈	
	16170 Mar 09 15:57	0°♉	
	16170 Apr 03 14:06	0°♊	
	16170 Apr 28 20:05	0°♋	
	16170 May 24 16:34	0°♌	
asc. node	16170 Jun 05 16:39	13°♌29'49	
	16170 Jun 20 22:34	0°♍	
evening max el	16170 Jul 01 14:04	10°♍53'01	46°27'24
	16170 Jul 22 22:52	0°♎	
greatest brilliancy	16170 Aug 10 15:56	10°♎57'47	-4.9m
retrograde	16170 Aug 20 12:04	12°♎46'52	
evening set	16170 Sep 04 17:17	8°♎14'36	
inferior conj	16170 Sep 10 03:12	5°♎03'20	3°56'57
minimum elong	16170 Sep 10 11:43	4°♎50'21	3°54'24
min. Earth dist.	16170 Sep 10 14:47	4°♎45'41	0.26990 AU
morning rise	16170 Sep 16 05:55	1°♎28'37	
	16170 Sep 19 05:03	30°℞♍	
desc. node	16170 Sep 25 16:17	27°♍48'08	
direct	16170 Sep 30 21:30	27°♍14'43	
greatest brilliancy	16170 Oct 11 02:46	29°♍11'48	-4.9m
	16170 Oct 13 03:38	0°♎	
morning max el	16170 Nov 20 00:21	29°♎13'56	46°37'22
	16170 Nov 20 19:00	0°♏	
	16170 Dec 19 02:06	0°♐	
	16171 Jan 14 09:03	0°♑	
asc. node	16171 Jan 16 16:57	2°♑43'00	
	16171 Feb 08 18:39	0°♒	

	16171 Mar 05 16:40	0°♓	
	16171 Mar 30 08:12	0°♈	
	16171 Apr 23 19:42	0°♉	
desc. node	16171 May 08 13:43	18°♉09'34	
	16171 May 18 03:58	0°♊	
morning set	16171 May 19 14:40	1°♊47'11	
	16171 Jun 11 09:02	0°♋	
max. Earth dist.	16171 Jun 25 04:15	17°♋09'59	1.72141 AU
superior conj	16171 Jun 27 22:54	20°♋37'37	-1°26'39
minimum elong	16171 Jun 27 19:06	20°♋25'47	1°27'19
	16171 Jul 05 11:17	0°♌	
	16171 Jul 29 11:43	0°♍	
evening rise	16171 Aug 06 15:07	10°♍10'47	
greatest brilliancy	16171 Aug 17 01:18	23°♍12'36	-3.9m
	16171 Aug 22 11:44	0°♎	
asc. node	16171 Aug 29 05:29	8°♎25'09	
	16171 Sep 15 12:40	0°♏	
	16171 Oct 09 16:15	0°♐	
	16171 Nov 03 01:18	0°♑	
	16171 Nov 27 20:48	0°♒	
desc. node	16171 Dec 18 22:50	24°♒48'13	
	16171 Dec 23 11:08	0°♓	
	16172 Jan 19 13:06	0°♈	
evening max el	16172 Feb 05 13:38	17°♈19'09	46°03'26
	16172 Feb 19 13:06	0°♉	
greatest brilliancy	16172 Mar 15 12:02	15°♉51'21	-4.8m
retrograde	16172 Mar 25 16:44	17°♉44'57	
evening set	16172 Apr 09 13:38	13°♉24'33	
asc. node	16172 Apr 09 21:04	13°♉14'18	
inferior conj	16172 Apr 15 22:06	9°♉35'19	1°30'01
minimum elong	16172 Apr 15 18:44	9°♉40'36	1°28'35
min. Earth dist.	16172 Apr 15 21:09	9°♉36'48	0.28356 AU
morning rise	16172 Apr 21 23:49	5°♉55'47	
direct	16172 May 07 03:39	1°♉25'39	
greatest brilliancy	16172 May 17 13:52	3°♉26'52	-4.8m
	16172 Jun 22 18:49	0°♊	
morning max el	16172 Jun 25 21:05	3°♊01'28	46°22'15
	16172 Jul 21 08:07	0°♋	
desc. node	16172 Jul 30 22:27	10°♋50'18	
	16172 Aug 16 10:12	0°♌	
	16172 Sep 10 12:09	0°♍	
	16172 Oct 05 02:38	0°♎	
	16172 Oct 29 11:31	0°♏	
asc. node	16172 Nov 20 19:46	27°♏38'27	
	16172 Nov 22 17:27	0°♐	
	16172 Dec 16 21:43	0°♑	
morning set	16172 Dec 27 14:32	13°♑17'26	
	16173 Jan 10 01:27	0°♒	
superior conj	16173 Feb 02 17:16	29°♒20'14	1°15'56
minimum elong	16173 Feb 03 01:54	29°♒46'59	1°16'09
	16173 Feb 03 06:07	0°♓	
max. Earth dist.	16173 Feb 05 02:39	2°♓17'50	1.72868 AU
	16173 Feb 27 12:50	0°♈	
evening rise	16173 Mar 12 09:58	15°♈51'50	
desc. node	16173 Mar 12 12:38	16°♈00'01	
	16173 Mar 23 21:54	0°♉	
	16173 Apr 17 08:41	0°♊	
	16173 May 11 20:47	0°♋	
	16173 Jun 05 10:59	0°♌	
	16173 Jun 30 06:07	0°♍	
asc. node	16173 Jul 03 04:39	3°♍31'37	
	16173 Jul 25 11:49	0°♎	
	16173 Aug 20 16:01	0°♏	
evening max el	16173 Sep 12 08:22	24°♏08'04	46°40'08
	16173 Sep 18 07:54	0°♐	
greatest brilliancy	16173 Oct 21 16:58	24°♐22'39	-4.9m
desc. node	16173 Oct 23 02:29	24°♐53'05	
retrograde	16173 Nov 01 14:23	26°♐34'03	
evening set	16173 Nov 17 13:08	21°♐39'06	
min. Earth dist.	16173 Nov 21 19:24	19°♐06'50	0.27633 AU
inferior conj	16173 Nov 22 15:13	18°♐36'23	-6°55'12
minimum elong	16173 Nov 22 04:19	18°♐53'09	6°52'16
morning rise	16173 Nov 26 19:55	16°♐05'13	
direct	16173 Dec 13 14:21	10°♐47'28	
greatest brilliancy	16173 Dec 23 00:10	12°♐24'47	-4.8m
	16174 Jan 19 11:01	0°♑	
morning max el	16174 Jan 31 18:11	11°♑17'24	45°55'33
asc. node	16174 Feb 13 03:08	23°♑44'54	
	16174 Feb 19 01:26	0°♒	
	16174 Mar 18 01:24	0°♓	
	16174 Apr 12 18:25	0°♈	
	16174 May 07 20:04	0°♉	
	16174 Jun 01 12:21	0°♊	
desc. node	16174 Jun 05 02:09	4°♊22'39	
	16174 Jun 25 21:45	0°♋	
	16174 Jul 20 01:54	0°♌	
morning set	16174 Aug 01 10:17	15°♌24'14	
	16174 Aug 13 02:34	0°♍	
	16174 Sep 06 01:30	0°♎	
max. Earth dist.	16174 Sep 09 14:07	4°♎25'03	1.71552 AU
superior conj	16174 Sep 10 02:30	5°♎03'51	-0°37'24
minimum elong	16174 Sep 10 11:15	5°♎31'15	0°37'00
asc. node	16174 Sep 25 19:19	24°♎44'18	
	16174 Sep 30 00:05	0°♏	
evening rise	16174 Oct 19 15:13	24°♏34'20	
	16174 Oct 23 23:24	0°♐	
	16174 Nov 17 00:47	0°♑	
	16174 Dec 11 06:32	0°♒	
	16175 Jan 04 19:43	0°♓	
desc. node	16175 Jan 15 11:24	12°♓51'29	
	16175 Jan 29 19:45	0°♈	
	16175 Feb 24 10:53	0°♉	
	16175 Mar 23 02:32	0°♊	
evening max el	16175 Apr 17 13:14	26°♊31'15	46°04'20
	16175 Apr 21 03:55	0°♋	
asc. node	16175 May 08 07:29	14°♋51'54	
greatest brilliancy	16175 May 27 08:32	25°♋54'16	-4.8m
retrograde	16175 Jun 05 22:45	27°♋37'34	
evening set	16175 Jun 23 19:06	21°♋33'37	
inferior conj	16175 Jun 26 21:48	19°♋37'57	8°54'09
minimum elong	16175 Jun 26 17:35	19°♋44'34	8°53'12
min. Earth dist.	16175 Jun 27 04:38	19°♋27'14	0.28011 AU
morning rise	16175 Jun 29 15:58	17°♋54'53	
direct	16175 Jul 17 22:43	11°♋30'32	
greatest brilliancy	16175 Jul 28 01:59	13°♋25'50	-4.9m
	16175 Aug 22 07:55	0°♌	
desc. node	16175 Aug 28 08:29	5°♌25'25	
morning max el	16175 Sep 06 08:32	14°♌09'06	46°54'57
	16175 Sep 21 11:27	0°♍	
	16175 Oct 18 02:18	0°♎	
	16175 Nov 12 13:36	0°♏	
	16175 Dec 07 12:19	0°♐	
asc. node	16175 Dec 19 07:41	14°♐20'24	
	16176 Jan 01 03:45	0°♑	
	16176 Jan 25 14:39	0°♒	
	16176 Feb 18 23:09	0°♓	
morning set	16176 Mar 06 20:21	20°♓49'10	
	16176 Mar 14 06:57	0°♈	
	16176 Apr 07 14:40	0°♉	
desc. node	16176 Apr 09 02:22	1°♉50'11	
max. Earth dist.	16176 Apr 12 17:25	6°♉18'46	1.73026 AU

superior conj	16176 Apr 13 13:09	7°♉19'40	-0°10'51
minimum elong	16176 Apr 13 10:33	7°♉11'39	0°11'06
behind sun begin	16176 Apr 12 17:12	6°♉18'05	
behind sun end	16176 Apr 14 03:55	8°♉05'12	
	16176 May 01 21:50	0°♊	
evening rise	16176 May 21 20:28	24°♊40'06	
	16176 May 26 03:49	0°♋	
	16176 Jun 19 08:44	0°♌	
	16176 Jul 13 13:44	0°♍	
asc. node	16176 Jul 30 17:42	21°♍12'56	
	16176 Aug 06 20:43	0°♎	
	16176 Aug 31 08:18	0°♏	
	16176 Sep 25 04:59	0°♐	
	16176 Oct 20 20:37	0°♑	
	16176 Nov 17 09:00	0°♒	
desc. node	16176 Nov 19 13:09	2°♒12'40	
evening max el	16176 Nov 22 22:50	5°♒36'41	46°25'09
	16176 Dec 22 04:14	0°♓	
greatest brilliancy	16177 Jan 01 13:52	5°♓09'18	-4.8m
retrograde	16177 Jan 11 17:29	7°♓03'04	
evening set	16177 Jan 29 11:39	1°♓06'11	
	16177 Jan 31 07:11	30°℞♒	
inferior conj	16177 Feb 02 03:53	28°♒50'33	-7°48'18
minimum elong	16177 Feb 02 13:05	28°♒36'12	7°46'30
min. Earth dist.	16177 Feb 02 05:11	28°♒48'30	0.28607 AU
morning rise	16177 Feb 06 14:32	26°♒07'43	
direct	16177 Feb 23 09:13	20°♒43'44	
greatest brilliancy	16177 Mar 05 22:05	22°♒44'50	-4.8m
asc. node	16177 Mar 12 13:00	25°♒46'09	
	16177 Mar 19 10:09	0°♓	
morning max el	16177 Apr 13 12:19	21°♓20'31	45°46'59
	16177 Apr 22 03:34	0°♈	
	16177 May 19 18:23	0°♉	
	16177 Jun 14 15:48	0°♊	
desc. node	16177 Jul 02 13:41	21°♊22'46	
	16177 Jul 09 16:59	0°♋	
	16177 Aug 03 06:11	0°♌	
	16177 Aug 27 12:16	0°♍	
	16177 Sep 20 14:35	0°♎	
morning set	16177 Oct 14 06:54	29°♎34'01	
	16177 Oct 14 15:13	0°♏	
asc. node	16177 Oct 23 08:43	10°♏54'37	
	16177 Nov 07 15:17	0°♐	
superior conj	16177 Nov 22 06:20	18°♐16'40	1°05'04
minimum elong	16177 Nov 21 19:46	17°♐43'39	1°05'24
max. Earth dist.	16177 Nov 23 21:53	20°♐20'10	1.71998 AU
	16177 Dec 01 15:41	0°♑	
	16177 Dec 25 17:51	0°♒	
evening rise	16177 Dec 29 21:04	5°♒07'55	
	16178 Jan 18 23:37	0°♓	
desc. node	16178 Feb 12 00:47	29°♓30'29	
	16178 Feb 12 10:27	0°♈	
	16178 Mar 09 03:01	0°♉	
	16178 Apr 03 01:47	0°♊	
	16178 Apr 28 08:50	0°♋	
	16178 May 24 07:18	0°♌	
asc. node	16178 Jun 04 18:24	12°♌49'49	
	16178 Jun 20 17:59	0°♍	
evening max el	16178 Jun 29 04:27	8°♍34'03	46°26'30
	16178 Jul 23 16:49	0°♎	
greatest brilliancy	16178 Aug 08 05:07	8°♎34'11	-4.9m
retrograde	16178 Aug 18 01:17	10°♎22'48	
evening set	16178 Sep 02 08:53	5°♎46'40	
inferior conj	16178 Sep 07 15:51	2°♎39'03	4°18'39
minimum elong	16178 Sep 08 00:57	2°♎25'09	4°15'59
min. Earth dist.	16178 Sep 08 04:04	2°♎20'25	0.27010 AU
	16178 Sep 12 02:23	30°℞♍	
morning rise	16178 Sep 13 16:53	29°♍06'34	
desc. node	16178 Sep 24 18:15	25°♍06'49	
direct	16178 Sep 28 11:01	24°♍50'04	
greatest brilliancy	16178 Oct 08 15:24	26°♍46'50	-4.9m
	16178 Oct 15 14:26	0°♎	
morning max el	16178 Nov 17 14:37	26°♎54'35	46°38'39
	16178 Nov 20 17:01	0°♏	
	16178 Dec 18 17:47	0°♐	
	16179 Jan 13 22:17	0°♑	
asc. node	16179 Jan 15 18:49	2°♑10'09	
	16179 Feb 08 06:38	0°♒	
	16179 Mar 05 03:56	0°♓	
	16179 Mar 29 19:02	0°♈	
	16179 Apr 23 06:18	0°♉	
desc. node	16179 May 07 15:30	17°♉42'36	
morning set	16179 May 17 04:51	29°♉30'22	
	16179 May 17 14:27	0°♊	
	16179 Jun 10 19:31	0°♋	
max. Earth dist.	16179 Jun 22 16:14	14°♋45'09	1.72178 AU
superior conj	16179 Jun 25 12:10	18°♋16'39	-1°25'56
minimum elong	16179 Jun 25 07:29	18°♋02'04	1°26'36
	16179 Jul 04 21:50	0°♌	
	16179 Jul 28 22:22	0°♍	
evening rise	16179 Aug 04 03:01	7°♍44'34	
	16179 Aug 21 22:29	0°♎	
asc. node	16179 Aug 28 07:22	7°♎57'18	
	16179 Sep 14 23:36	0°♏	
	16179 Oct 09 03:27	0°♐	
	16179 Nov 02 12:56	0°♑	
	16179 Nov 27 09:13	0°♒	
desc. node	16179 Dec 18 00:39	24°♒14'20	
	16179 Dec 23 01:04	0°♓	
	16180 Jan 19 06:34	0°♈	
evening max el	16180 Feb 03 05:23	15°♈08'01	46°03'54
	16180 Feb 19 20:36	0°♉	
greatest brilliancy	16180 Mar 13 04:00	13°♉39'59	-4.8m
retrograde	16180 Mar 23 07:49	15°♉32'40	
evening set	16180 Apr 07 05:23	11°♉12'23	
asc. node	16180 Apr 08 22:57	10°♉13'21	
inferior conj	16180 Apr 13 13:43	7°♉23'07	1°08'55
minimum elong	16180 Apr 13 11:08	7°♉27'10	1°07'43
min. Earth dist.	16180 Apr 13 13:12	7°♉23'55	0.28361 AU
morning rise	16180 Apr 19 16:51	3°♉41'20	
	16180 Apr 28 15:06	30°℞♈	
direct	16180 May 04 19:28	29°♈13'43	
	16180 May 11 03:51	0°♉	
greatest brilliancy	16180 May 15 05:50	1°♉14'44	-4.8m
	16180 Jun 22 17:08	0°♊	
morning max el	16180 Jun 23 11:08	0°♊44'21	46°20'37
	16180 Jul 20 23:45	0°♋	
desc. node	16180 Jul 30 00:29	10°♋14'26	
	16180 Aug 15 23:34	0°♌	
	16180 Sep 10 00:26	0°♍	
	16180 Oct 04 14:17	0°♎	
	16180 Oct 28 22:45	0°♏	
asc. node	16180 Nov 19 21:34	27°♏10'06	
	16180 Nov 22 04:22	0°♐	
	16180 Dec 16 08:25	0°♑	
morning set	16180 Dec 25 05:57	11°♑03'18	
	16181 Jan 09 12:01	0°♒	
superior conj	16181 Jan 31 09:33	27°♒09'34	1°17'33
minimum elong	16181 Jan 31 17:46	27°♒35'01	1°17'49
	16181 Feb 02 16:37	0°♓	
max. Earth dist.	16181 Feb 02 19:36	0°♓09'14	1.72841 AU

	16181 Feb 26 23:22	0°♈	
evening rise	16181 Mar 10 01:44	13°♈40'04	
desc. node	16181 Mar 11 14:31	15°♈33'14	
	16181 Mar 23 08:33	0°♉	
	16181 Apr 16 19:34	0°♊	
	16181 May 11 07:58	0°♋	
	16181 Jun 04 22:39	0°♌	
	16181 Jun 29 18:36	0°♍	
asc. node	16181 Jul 02 06:34	2°♍59'35	
	16181 Jul 25 01:44	0°♎	
	16181 Aug 20 08:55	0°♏	
evening max el	16181 Sep 09 21:40	21°♏44'43	46°39'56
	16181 Sep 18 09:45	0°♐	
greatest brilliancy	16181 Oct 19 07:46	22°♐02'12	-4.9m
desc. node	16181 Oct 22 04:21	23°♐00'27	
retrograde	16181 Oct 30 03:46	24°♐12'47	
evening set	16181 Nov 14 23:12	19°♐23'34	
min. Earth dist.	16181 Nov 19 09:35	16°♐45'41	0.27582 AU
inferior conj	16181 Nov 20 04:47	16°♐16'13	-6°40'10
minimum elong	16181 Nov 19 17:46	16°♐33'08	6°37'06
morning rise	16181 Nov 24 12:43	13°♐40'21	
direct	16181 Dec 11 03:03	8°♐27'51	
greatest brilliancy	16181 Dec 20 14:01	10°♐05'43	-4.8m
	16182 Jan 19 16:04	0°♑	
morning max el	16182 Jan 29 06:41	8°♑56'11	45°56'44
asc. node	16182 Feb 12 05:12	23°♑01'49	
	16182 Feb 18 18:41	0°♒	
	16182 Mar 17 15:17	0°♓	
	16182 Apr 12 06:48	0°♈	
	16182 May 07 07:41	0°♉	
	16182 May 31 23:32	0°♊	
desc. node	16182 Jun 04 03:57	3°♊54'04	
	16182 Jun 25 08:41	0°♋	
	16182 Jul 19 12:41	0°♌	
morning set	16182 Jul 29 22:49	12°♌59'55	
	16182 Aug 12 13:17	0°♍	
	16182 Sep 05 12:13	0°♎	
max. Earth dist.	16182 Sep 06 22:00	1°♎45'49	1.71559 AU
superior conj	16182 Sep 07 15:00	2°♎39'06	-0°40'49
minimum elong	16182 Sep 08 00:23	3°♎08'30	0°40'26
asc. node	16182 Sep 24 21:06	24°♎16'14	
	16182 Sep 29 10:51	0°♏	
evening rise	16182 Oct 17 04:59	22°♏13'29	
	16182 Oct 23 10:14	0°♐	
	16182 Nov 16 11:44	0°♑	
	16182 Dec 10 17:42	0°♒	
	16183 Jan 04 07:17	0°♓	
desc. node	16183 Jan 14 13:19	12°♓21'45	
	16183 Jan 29 08:02	0°♈	
	16183 Feb 24 00:30	0°♉	
	16183 Mar 22 18:56	0°♊	
evening max el	16183 Apr 15 03:07	24°♊13'12	46°03'58
	16183 Apr 21 04:36	0°♋	
asc. node	16183 May 07 09:20	13°♋41'22	
greatest brilliancy	16183 May 24 21:47	23°♋35'25	-4.8m
retrograde	16183 Jun 03 13:16	25°♋19'59	
evening set	16183 Jun 21 06:21	19°♋20'03	
inferior conj	16183 Jun 24 12:21	17°♋19'33	8°49'11
minimum elong	16183 Jun 24 07:18	17°♋27'27	8°48'07
min. Earth dist.	16183 Jun 24 18:15	17°♋10'18	0.28036 AU
morning rise	16183 Jun 27 08:10	15°♋34'05	
direct	16183 Jul 15 13:17	9°♋11'36	
greatest brilliancy	16183 Jul 25 16:41	11°♋07'17	-4.9m
	16183 Aug 22 13:36	0°♌	
desc. node	16183 Aug 27 10:24	4°♌29'02	
morning max el	16183 Sep 03 23:28	11°♌50'31	46°54'39
	16183 Sep 21 05:13	0°♍	
	16183 Oct 17 16:44	0°♎	
	16183 Nov 12 02:31	0°♏	
	16183 Dec 07 00:21	0°♐	
asc. node	16183 Dec 18 09:36	13°♐50'29	
	16183 Dec 31 15:13	0°♑	
	16184 Jan 25 01:44	0°♒	
	16184 Feb 18 10:01	0°♓	
morning set	16184 Mar 04 12:57	18°♓39'07	
	16184 Mar 13 17:42	0°♈	
	16184 Apr 07 01:22	0°♉	
desc. node	16184 Apr 08 04:03	1°♉22'19	
max. Earth dist.	16184 Apr 10 13:46	4°♉20'21	1.73041 AU
superior conj	16184 Apr 11 04:21	5°♉05'23	-0°07'22
minimum elong	16184 Apr 11 02:34	4°♉59'51	0°07'37
behind sun begin	16184 Apr 10 05:25	3°♉54'36	
behind sun end	16184 Apr 11 23:42	6°♉05'07	
	16184 May 01 08:35	0°♊	
evening rise	16184 May 19 11:13	22°♊23'43	
	16184 May 25 14:41	0°♋	
	16184 Jun 18 19:47	0°♌	
	16184 Jul 13 01:03	0°♍	
asc. node	16184 Jul 29 19:38	20°♍43'14	
	16184 Aug 06 08:24	0°♎	
	16184 Aug 30 20:33	0°♏	
	16184 Sep 24 18:14	0°♐	
	16184 Oct 20 11:52	0°♑	
	16184 Nov 17 05:30	0°♒	
desc. node	16184 Nov 18 14:59	1°♒24'15	
evening max el	16184 Nov 20 14:05	3°♒21'22	46°25'54
	16184 Dec 23 16:39	0°♓	
greatest brilliancy	16184 Dec 30 03:47	2°♓53'53	-4.8m
retrograde	16185 Jan 09 09:22	4°♓49'13	
	16185 Jan 25 04:12	30°℞♒	
evening set	16185 Jan 27 05:44	28°♒47'52	
inferior conj	16185 Jan 30 19:08	26°♒36'33	-7°58'27
minimum elong	16185 Jan 31 03:54	26°♒22'55	7°56'47
min. Earth dist.	16185 Jan 30 19:21	26°♒36'13	0.28604 AU
morning rise	16185 Feb 04 02:08	23°♒59'25	
direct	16185 Feb 21 00:51	18°♒30'04	
greatest brilliancy	16185 Mar 03 12:10	20°♒30'17	-4.8m
asc. node	16185 Mar 11 14:52	24°♒20'58	
	16185 Mar 20 04:45	0°♓	
morning max el	16185 Apr 11 04:21	19°♓08'31	45°46'27
	16185 Apr 21 22:44	0°♈	
	16185 May 19 09:07	0°♉	
	16185 Jun 14 04:44	0°♊	
desc. node	16185 Jul 01 15:38	20°♊51'44	
	16185 Jul 09 05:01	0°♋	
	16185 Aug 02 17:45	0°♌	
	16185 Aug 26 23:32	0°♍	
	16185 Sep 20 01:40	0°♎	
morning set	16185 Oct 11 20:22	27°♎12'01	
	16185 Oct 14 02:08	0°♏	
asc. node	16185 Oct 22 10:29	10°♏26'08	
	16185 Nov 07 02:05	0°♐	
superior conj	16185 Nov 19 21:05	15°♐59'07	1°02'38
minimum elong	16185 Nov 19 10:25	15°♐25'48	1°02'55
max. Earth dist.	16185 Nov 21 13:59	18°♐06'53	1.71973 AU
	16185 Dec 01 02:26	0°♑	
	16185 Dec 25 04:40	0°♒	
evening rise	16185 Dec 27 12:42	2°♒53'56	
	16186 Jan 18 10:33	0°♓	
desc. node	16186 Feb 11 02:38	29°♓02'04	
	16186 Feb 11 21:38	0°♈	

	16186 Mar 08 14:35	0°♉	
	16186 Apr 02 13:59	0°♊	
	16186 Apr 27 22:08	0°♋	
	16186 May 23 22:42	0°♌	
asc. node	16186 Jun 03 20:22	12°♌08'51	
	16186 Jun 20 14:28	0°♍	
evening max el	16186 Jun 26 18:41	6°♍13'43	46°25'37
	16186 Jul 24 17:50	0°♎	
greatest brilliancy	16186 Aug 05 18:56	6°♎10'37	-4.9m
retrograde	16186 Aug 15 14:11	7°♎58'00	
evening set	16186 Aug 31 00:46	3°♎18'03	
inferior conj	16186 Sep 05 04:39	0°♎14'12	4°39'53
minimum elong	16186 Sep 05 14:16	29°♍59'30	4°37'06
min. Earth dist.	16186 Sep 05 17:36	29°♍54'24	0.27030 AU
	16186 Sep 05 13:56	30°℞♍	
morning rise	16186 Sep 11 03:39	26°♍44'06	
desc. node	16186 Sep 23 20:08	22°♍30'41	
direct	16186 Sep 26 00:27	22°♍24'56	
greatest brilliancy	16186 Oct 06 04:19	24°♍21'17	-4.9m
	16186 Oct 17 04:29	0°♎	
morning max el	16186 Nov 15 04:03	24°♎32'11	46°39'59
	16186 Nov 20 14:31	0°♏	
	16186 Dec 18 09:30	0°♐	
	16187 Jan 13 11:42	0°♑	
asc. node	16187 Jan 14 20:49	1°♑37'02	
	16187 Feb 07 18:52	0°♒	
	16187 Mar 04 15:32	0°♓	
	16187 Mar 29 06:15	0°♈	
	16187 Apr 22 17:17	0°♉	
desc. node	16187 May 06 17:20	17°♉14'33	
morning set	16187 May 14 18:50	27°♉11'40	
	16187 May 17 01:20	0°♊	
	16187 Jun 10 06:23	0°♋	
max. Earth dist.	16187 Jun 20 02:56	12°♋15'20	1.72211 AU
superior conj	16187 Jun 23 01:20	15°♋54'24	-1°25'04
minimum elong	16187 Jun 22 19:47	15°♋37'08	1°25'43
	16187 Jul 04 08:43	0°♌	
	16187 Jul 28 09:20	0°♍	
evening rise	16187 Aug 01 14:52	5°♍17'15	
	16187 Aug 21 09:34	0°♎	
asc. node	16187 Aug 27 09:08	7°♎28'05	
	16187 Sep 14 10:51	0°♏	
	16187 Oct 08 14:59	0°♐	
	16187 Nov 02 00:55	0°♑	
	16187 Nov 26 21:59	0°♒	
desc. node	16187 Dec 17 02:39	23°♒40'04	
	16187 Dec 22 15:25	0°♓	
	16188 Jan 19 00:45	0°♈	
evening max el	16188 Jan 31 20:00	12°♈53'14	46°04'13
	16188 Feb 20 07:29	0°♉	
greatest brilliancy	16188 Mar 10 20:03	11°♉27'26	-4.8m
retrograde	16188 Mar 20 22:28	13°♉19'03	
evening set	16188 Apr 04 21:08	8°♉58'23	
asc. node	16188 Apr 08 00:51	7°♉08'22	
inferior conj	16188 Apr 11 05:12	5°♉09'31	0°47'31
minimum elong	16188 Apr 11 03:25	5°♉12'19	0°46'36
min. Earth dist.	16188 Apr 11 05:27	5°♉09'08	0.28371 AU
morning rise	16188 Apr 17 09:35	1°♉25'41	
	16188 Apr 20 04:08	30°℞♈	
direct	16188 May 02 10:42	27°♈00'06	
greatest brilliancy	16188 May 12 22:21	29°♈01'45	-4.8m
	16188 May 15 07:51	0°♉	
morning max el	16188 Jun 21 00:40	28°♉24'40	46°19'08
	16188 Jun 22 15:05	0°♊	
	16188 Jul 20 15:31	0°♋	
desc. node	16188 Jul 29 02:24	9°♋37'28	
	16188 Aug 15 13:07	0°♌	
	16188 Sep 09 12:53	0°♍	
	16188 Oct 04 02:05	0°♎	
	16188 Oct 28 10:08	0°♏	
asc. node	16188 Nov 18 23:27	26°♏41'25	
	16188 Nov 21 15:29	0°♐	
	16188 Dec 15 19:19	0°♑	
morning set	16188 Dec 22 21:25	8°♑48'36	
	16189 Jan 08 22:46	0°♒	
superior conj	16189 Jan 29 02:05	24°♒59'05	1°19'02
minimum elong	16189 Jan 29 09:49	25°♒23'04	1°19'20
max. Earth dist.	16189 Jan 31 11:10	27°♒55'50	1.72814 AU
	16189 Feb 02 03:17	0°♓	
	16189 Feb 26 10:04	0°♈	
evening rise	16189 Mar 07 17:43	11°♈28'28	
desc. node	16189 Mar 10 16:15	15°♈05'24	
	16189 Mar 22 19:24	0°♉	
	16189 Apr 16 06:40	0°♊	
	16189 May 10 19:25	0°♋	
	16189 Jun 04 10:38	0°♌	
	16189 Jun 29 07:25	0°♍	
asc. node	16189 Jul 01 08:28	2°♍26'40	
	16189 Jul 24 16:02	0°♎	
	16189 Aug 20 02:21	0°♏	
evening max el	16189 Sep 07 10:20	19°♏19'29	46°39'59
	16189 Sep 18 13:17	0°♐	
greatest brilliancy	16189 Oct 16 22:12	19°♐40'59	-4.9m
desc. node	16189 Oct 21 06:16	21°♐03'08	
retrograde	16189 Oct 27 17:27	21°♐51'26	
evening set	16189 Nov 12 09:25	17°♐07'14	
min. Earth dist.	16189 Nov 16 23:45	14°♐24'12	0.27534 AU
inferior conj	16189 Nov 17 18:22	13°♐55'41	-6°24'17
minimum elong	16189 Nov 17 07:20	14°♐12'36	6°21'06
morning rise	16189 Nov 22 05:35	11°♐15'14	
direct	16189 Dec 08 15:38	6°♐07'37	
greatest brilliancy	16189 Dec 18 04:01	7°♐46'31	-4.8m
	16190 Jan 19 19:23	0°♑	
morning max el	16190 Jan 26 20:00	6°♑36'38	45°58'03
asc. node	16190 Feb 11 06:59	22°♑18'22	
	16190 Feb 18 11:37	0°♒	
	16190 Mar 17 05:04	0°♓	
	16190 Apr 11 19:09	0°♈	
	16190 May 06 19:19	0°♉	
	16190 May 31 10:47	0°♊	
desc. node	16190 Jun 03 05:54	3°♊25'41	
	16190 Jun 24 19:42	0°♋	
	16190 Jul 18 23:35	0°♌	
morning set	16190 Jul 27 10:55	10°♌33'56	
	16190 Aug 12 00:06	0°♍	
max. Earth dist.	16190 Sep 04 07:19	29°♍10'51	1.71563 AU
	16190 Sep 04 23:01	0°♎	
superior conj	16190 Sep 05 03:05	0°♎12'46	-0°44'13
minimum elong	16190 Sep 05 13:03	0°♎43'58	0°43'50
asc. node	16190 Sep 23 22:50	23°♎47'52	
	16190 Sep 28 21:39	0°♏	
evening rise	16190 Oct 14 18:31	19°♏51'57	
	16190 Oct 22 21:04	0°♐	
	16190 Nov 15 22:41	0°♑	
	16190 Dec 10 04:52	0°♒	
	16191 Jan 03 18:53	0°♓	
desc. node	16191 Jan 13 15:10	11°♓51'48	
	16191 Jan 28 20:22	0°♈	
	16191 Feb 23 14:12	0°♉	
	16191 Mar 22 11:32	0°♊	
evening max el	16191 Apr 12 17:45	21°♊57'29	46°03'34

	16191 Apr 21 06:30	0°♋	
asc. node	16191 May 06 11:17	12°♋29'12	
greatest brilliancy	16191 May 22 10:28	21°♋16'14	-4.8m
retrograde	16191 Jun 01 04:00	23°♋02'20	
evening set	16191 Jun 18 17:16	17°♋06'50	
inferior conj	16191 Jun 22 02:47	15°♋01'02	8°43'19
minimum elong	16191 Jun 21 21:00	15°♋10'07	8°42'06
min. Earth dist.	16191 Jun 22 07:32	14°♋53'37	0.28063 AU
morning rise	16191 Jun 25 00:37	13°♋12'37	
direct	16191 Jul 13 04:18	6°♋52'43	
greatest brilliancy	16191 Jul 23 06:51	8°♋48'05	-4.9m
	16191 Aug 22 17:27	0°♌	
desc. node	16191 Aug 26 12:16	3°♌33'30	
morning max el	16191 Sep 01 14:59	9°♌33'23	46°54'10
	16191 Sep 20 22:39	0°♍	
	16191 Oct 17 07:01	0°♎	
	16191 Nov 11 15:17	0°♏	
	16191 Dec 06 12:12	0°♐	
asc. node	16191 Dec 17 11:31	13°♐21'06	
	16191 Dec 31 02:29	0°♑	
	16192 Jan 24 12:38	0°♒	
	16192 Feb 17 20:42	0°♓	
morning set	16192 Mar 02 05:44	16°♓30'09	
	16192 Mar 13 04:16	0°♈	
	16192 Apr 06 11:54	0°♉	
desc. node	16192 Apr 07 05:57	0°♉55'41	
superior conj	16192 Apr 08 19:47	2°♉52'26	-0°03'52
minimum elong	16192 Apr 08 18:49	2°♉49'25	0°04'09
behind sun begin	16192 Apr 07 19:43	1°♉38'08	
behind sun end	16192 Apr 09 17:55	4°♉00'42	
max. Earth dist.	16192 Apr 08 10:25	2°♉23'28	1.73051 AU
	16192 Apr 30 19:08	0°♊	
evening rise	16192 May 17 02:12	20°♊08'42	
	16192 May 25 01:20	0°♋	
	16192 Jun 18 06:38	0°♌	
	16192 Jul 12 12:12	0°♍	
asc. node	16192 Jul 28 21:22	20°♍13'29	
	16192 Aug 05 19:59	0°♎	
	16192 Aug 30 08:44	0°♏	
	16192 Sep 24 07:28	0°♐	
	16192 Oct 20 03:12	0°♑	
	16192 Nov 17 02:31	0°♒	
desc. node	16192 Nov 17 17:02	0°♒36'05	
evening max el	16192 Nov 18 05:43	1°♒07'30	46°26'49
	16192 Dec 26 00:47	0°♓	
greatest brilliancy	16192 Dec 27 18:03	0°♓39'41	-4.8m
retrograde	16193 Jan 07 01:10	2°♓35'57	
	16193 Jan 18 10:58	30°♑℞	
evening set	16193 Jan 24 23:46	26°♒30'35	
inferior conj	16193 Jan 28 10:22	24°♒23'19	-8°07'55
minimum elong	16193 Jan 28 18:39	24°♒10'26	8°06'23
min. Earth dist.	16193 Jan 28 09:22	24°♒24'54	0.28595 AU
morning rise	16193 Feb 01 13:39	21°♒51'47	
direct	16193 Feb 18 16:37	16°♒17'26	
greatest brilliancy	16193 Mar 01 01:39	18°♒15'54	-4.8m
asc. node	16193 Mar 10 16:49	22°♒59'32	
	16193 Mar 20 18:05	0°♓	
morning max el	16193 Apr 08 20:00	16°♓56'35	45°45'58
	16193 Apr 21 16:59	0°♈	
	16193 May 18 23:17	0°♉	
	16193 Jun 13 17:14	0°♊	
desc. node	16193 Jun 30 17:31	20°♊21'38	
	16193 Jul 08 16:41	0°♋	
	16193 Aug 02 04:57	0°♌	
	16193 Aug 26 10:29	0°♍	
	16193 Sep 19 12:26	0°♎	
morning set	16193 Oct 09 09:28	24°♎49'43	
	16193 Oct 13 12:47	0°♏	
asc. node	16193 Oct 21 12:25	9°♏58'59	
	16193 Nov 06 12:37	0°♐	
superior conj	16193 Nov 17 11:21	13°♐40'54	1°00'02
minimum elong	16193 Nov 17 00:41	13°♐07'33	1°00'19
max. Earth dist.	16193 Nov 19 04:50	15°♐50'27	1.71943 AU
	16193 Nov 30 12:56	0°♑	
	16193 Dec 24 15:10	0°♒	
evening rise	16193 Dec 25 03:57	0°♒39'42	
	16194 Jan 17 21:10	0°♓	
desc. node	16194 Feb 10 04:23	28°♓34'23	
	16194 Feb 11 08:27	0°♈	
	16194 Mar 08 01:49	0°♉	
	16194 Apr 02 01:53	0°♊	
	16194 Apr 27 11:09	0°♋	
	16194 May 23 13:52	0°♌	
asc. node	16194 Jun 02 22:20	11°♌28'44	
	16194 Jun 20 11:05	0°♍	
evening max el	16194 Jun 24 08:13	3°♍53'05	46°24'44
	16194 Jul 26 03:51	0°♎	
greatest brilliancy	16194 Aug 03 09:17	3°♎49'25	-4.9m
retrograde	16194 Aug 13 02:44	5°♎35'04	
evening set	16194 Aug 28 16:53	0°♎51'06	
	16194 Aug 30 04:29	30°♋℞	
inferior conj	16194 Sep 02 17:39	27°♍51'17	5°00'23
minimum elong	16194 Sep 03 03:41	27°♍35'52	4°57'32
min. Earth dist.	16194 Sep 03 07:33	27°♍29'57	0.27055 AU
morning rise	16194 Sep 08 14:20	24°♍23'42	
desc. node	16194 Sep 22 22:06	20°♍01'58	
direct	16194 Sep 23 13:23	20°♍01'29	
greatest brilliancy	16194 Oct 03 17:52	21°♍57'53	-4.9m
	16194 Oct 18 06:33	0°♎	
morning max el	16194 Nov 12 16:56	22°♎09'15	46°41'10
	16194 Nov 20 10:52	0°♏	
	16194 Dec 18 00:39	0°♐	
	16195 Jan 13 00:41	0°♑	
asc. node	16195 Jan 13 22:37	1°♑04'25	
	16195 Feb 07 06:43	0°♒	
	16195 Mar 04 02:42	0°♓	
	16195 Mar 28 17:00	0°♈	
	16195 Apr 22 03:50	0°♉	
desc. node	16195 May 05 19:13	16°♉47'57	
morning set	16195 May 12 08:58	24°♉54'45	
	16195 May 16 11:48	0°♊	
	16195 Jun 09 16:49	0°♋	
max. Earth dist.	16195 Jun 17 13:38	9°♋46'50	1.72245 AU
superior conj	16195 Jun 20 14:47	13°♋34'23	-1°24'04
minimum elong	16195 Jun 20 08:24	13°♋14'33	1°24'41
	16195 Jul 03 19:11	0°♌	
	16195 Jul 27 19:51	0°♍	
evening rise	16195 Jul 30 03:01	2°♍52'20	
	16195 Aug 20 20:11	0°♎	
asc. node	16195 Aug 26 10:56	7°♎00'26	
	16195 Sep 13 21:40	0°♏	
	16195 Oct 08 02:06	0°♐	
	16195 Nov 01 12:32	0°♑	
	16195 Nov 26 10:27	0°♒	
desc. node	16195 Dec 16 04:27	23°♒06'00	
	16195 Dec 22 05:33	0°♓	
	16196 Jan 18 19:00	0°♈	
evening max el	16196 Jan 29 10:08	10°♈38'23	46°04'45
	16196 Feb 20 21:25	0°♉	
greatest brilliancy	16196 Mar 08 12:05	9°♉16'12	-4.8m
retrograde	16196 Mar 18 13:24	11°♉07'15	

evening set	16196 Apr 02 13:08	6°♉45'34	
asc. node	16196 Apr 07 02:51	4°♉03'23	
inferior conj	16196 Apr 08 20:49	2°♉57'37	0°26'08
minimum elong	16196 Apr 08 19:50	2°♉59'09	0°25'30
min. Earth dist.	16196 Apr 08 21:50	2°♉56'01	0.28381 AU
	16196 Apr 13 16:34	30°℞♈	
morning rise	16196 Apr 15 02:19	29°♈12'06	
direct	16196 Apr 30 01:43	24°♈48'01	
greatest brilliancy	16196 May 10 15:14	26°♈50'52	-4.8m
	16196 May 17 09:51	0°♉	
morning max el	16196 Jun 18 14:56	26°♉08'12	46°17'41
	16196 Jun 22 11:40	0°♊	
	16196 Jul 20 06:35	0°♋	
desc. node	16196 Jul 28 04:11	9°♋01'42	
	16196 Aug 15 02:06	0°♌	
	16196 Sep 09 00:50	0°♍	
	16196 Oct 03 13:25	0°♎	
	16196 Oct 27 21:04	0°♏	
asc. node	16196 Nov 18 01:17	26°♏13'57	
	16196 Nov 21 02:09	0°♐	
	16196 Dec 15 05:48	0°♑	
morning set	16196 Dec 20 12:52	6°♑34'58	
	16197 Jan 08 09:08	0°♒	
superior conj	16197 Jan 26 18:31	22°♒49'18	1°20'24
minimum elong	16197 Jan 27 01:43	23°♒11'39	1°20'45
max. Earth dist.	16197 Jan 29 01:37	25°♒39'58	1.72790 AU
	16197 Feb 01 13:37	0°♓	
	16197 Feb 25 20:27	0°♈	
evening rise	16197 Mar 05 09:33	9°♈17'31	
desc. node	16197 Mar 09 18:06	14°♈39'01	
	16197 Mar 22 05:55	0°♉	
	16197 Apr 15 17:24	0°♊	
	16197 May 10 06:31	0°♋	
	16197 Jun 03 22:17	0°♌	
	16197 Jun 28 19:58	0°♍	
asc. node	16197 Jun 30 10:14	1°♍54'12	
	16197 Jul 24 06:09	0°♎	
	16197 Aug 19 19:48	0°♏	
evening max el	16197 Sep 04 23:47	16°♏57'26	46°40'05
	16197 Sep 18 18:08	0°♐	
greatest brilliancy	16197 Oct 14 12:11	17°♐20'27	-4.9m
desc. node	16197 Oct 20 08:16	19°♐02'30	
retrograde	16197 Oct 25 07:41	19°♐31'31	
evening set	16197 Nov 09 19:52	14°♐51'52	
min. Earth dist.	16197 Nov 14 13:40	12°♐04'22	0.27487 AU
inferior conj	16197 Nov 15 07:59	11°♐36'24	-6°07'39
minimum elong	16197 Nov 14 20:59	11°♐53'12	6°04'24
morning rise	16197 Nov 19 22:28	8°♐51'40	
direct	16197 Dec 06 04:37	3°♐48'38	
greatest brilliancy	16197 Dec 15 17:38	5°♐28'16	-4.8m
	16198 Jan 19 20:40	0°♑	
morning max el	16198 Jan 24 10:19	4°♑20'40	45°59'17
asc. node	16198 Feb 10 08:56	21°♑36'52	
	16198 Feb 18 03:52	0°♒	
	16198 Mar 16 18:26	0°♓	
	16198 Apr 11 07:13	0°♈	
	16198 May 06 06:40	0°♉	
	16198 May 30 21:44	0°♊	
desc. node	16198 Jun 02 07:43	2°♊57'44	
	16198 Jun 24 06:26	0°♋	
	16198 Jul 18 10:12	0°♌	
morning set	16198 Jul 24 23:04	8°♌08'55	
	16198 Aug 11 10:42	0°♍	
max. Earth dist.	16198 Sep 01 18:44	26°♍43'01	1.71570 AU
superior conj	16198 Sep 02 15:09	27°♍47'01	-0°47'31
minimum elong	16198 Sep 03 01:37	28°♍19'48	0°47'10
	16198 Sep 04 09:36	0°♎	
asc. node	16198 Sep 23 00:46	23°♎20'42	
	16198 Sep 28 08:15	0°♏	
evening rise	16198 Oct 12 08:07	17°♏31'11	
	16198 Oct 22 07:42	0°♐	
	16198 Nov 15 09:24	0°♑	
	16198 Dec 09 15:49	0°♒	
	16199 Jan 03 06:16	0°♓	
desc. node	16199 Jan 12 16:58	11°♓22'21	
	16199 Jan 28 08:33	0°♈	
	16199 Feb 23 03:50	0°♉	
	16199 Mar 22 04:19	0°♊	
evening max el	16199 Apr 10 09:28	19°♊44'53	46°03'11
	16199 Apr 21 09:47	0°♋	
asc. node	16199 May 05 13:14	11°♋15'14	
greatest brilliancy	16199 May 19 23:27	18°♋58'04	-4.8m
retrograde	16199 May 29 18:50	20°♋45'18	
evening set	16199 Jun 16 04:11	14°♋54'52	
inferior conj	16199 Jun 19 17:23	12°♋43'20	8°36'33
minimum elong	16199 Jun 19 10:52	12°♋53'31	8°35'13
min. Earth dist.	16199 Jun 19 20:51	12°♋37'53	0.28084 AU
morning rise	16199 Jun 22 17:30	10°♋51'24	
direct	16199 Jul 10 19:40	4°♋34'57	
greatest brilliancy	16199 Jul 20 20:42	6°♋29'15	-4.8m
	16199 Aug 22 19:28	0°♌	
desc. node	16199 Aug 25 14:19	2°♌40'03	
morning max el	16199 Aug 30 06:20	7°♌16'24	46°53'27
	16199 Sep 20 15:34	0°♍	
	16199 Oct 16 21:03	0°♎	
	16199 Nov 11 03:54	0°♏	
	16199 Dec 05 23:57	0°♐	
asc. node	16199 Dec 16 13:17	12°♐51'28	
	16199 Dec 30 13:40	0°♑	
	16200 Jan 23 23:27	0°♒	
	16200 Feb 17 07:18	0°♓	
morning set	16200 Feb 28 22:44	14°♓22'03	
	16200 Mar 13 14:47	0°♈	
	16200 Apr 06 22:25	0°♉	
superior conj	16200 Apr 07 11:19	0°♉39'47	-0°00'22
minimum elong	16200 Apr 07 11:10	0°♉39'19	0°00'40
behind sun begin	16200 Apr 06 11:32	29°♈26'26	
behind sun end	16200 Apr 08 10:48	1°♉52'13	
desc. node	16200 Apr 07 07:46	0°♉28'49	
max. Earth dist.	16200 Apr 07 06:15	0°♉24'06	1.73063 AU
	16200 May 01 05:43	0°♊	
evening rise	16200 May 15 17:05	17°♊53'16	
	16200 May 25 12:04	0°♋	
	16200 Jun 18 17:34	0°♌	
	16200 Jul 12 23:25	0°♍	
asc. node	16200 Jul 28 23:14	19°♍43'52	
	16200 Aug 06 07:38	0°♎	
	16200 Aug 30 21:04	0°♏	
	16200 Sep 24 20:55	0°♐	
	16200 Oct 20 18:56	0°♑	
evening max el	16200 Nov 16 21:17	28°♑52'48	46°27'37
desc. node	16200 Nov 17 18:53	29°♑46'04	
	16200 Nov 18 00:34	0°♒	
greatest brilliancy	16200 Dec 26 09:01	28°♒25'45	-4.8m
	16201 Jan 01 07:14	0°♓	
retrograde	16201 Jan 05 16:39	0°♓22'05	
	16201 Jan 09 23:39	30°℞♒	
evening set	16201 Jan 23 17:41	24°♒13'15	
inferior conj	16201 Jan 27 01:36	22°♒09'48	-8°16'36
minimum elong	16201 Jan 27 09:19	21°♒57'46	8°15'12
min. Earth dist.	16201 Jan 26 23:37	22°♒12'54	0.28580 AU

morning rise	16201 Jan 31 01:07	19°♒43'42	
direct	16201 Feb 17 08:07	14°♒04'39	
greatest brilliancy	16201 Feb 27 15:03	16°♒01'08	-4.8m
asc. node	16201 Mar 10 18:48	21°♒40'29	
	16201 Mar 22 04:00	0°♓	
morning max el	16201 Apr 07 10:42	14°♓42'00	45°45'28
	16201 Apr 22 10:54	0°♈	
	16201 May 19 13:28	0°♉	
	16201 Jun 14 05:52	0°♊	
desc. node	16201 Jun 30 19:19	19°♊50'38	
	16201 Jul 09 04:31	0°♋	
	16201 Aug 02 16:21	0°♌	
	16201 Aug 26 21:38	0°♍	
	16201 Sep 19 23:24	0°♎	
morning set	16201 Oct 07 22:29	22°♎26'30	
	16201 Oct 13 23:37	0°♏	
asc. node	16201 Oct 21 14:11	9°♏30'39	
	16201 Nov 06 23:23	0°♐	
superior conj	16201 Nov 16 01:36	11°♐21'49	0°57'21
minimum elong	16201 Nov 15 15:00	10°♐48'43	0°57'37
max. Earth dist.	16201 Nov 17 17:51	13°♐27'36	1.71917 AU
	16201 Nov 30 23:42	0°♑	
evening rise	16201 Dec 23 19:12	28°♑24'28	
	16201 Dec 25 01:58	0°♒	
	16202 Jan 18 08:04	0°♓	
desc. node	16202 Feb 10 06:17	28°♓06'20	
	16202 Feb 11 19:34	0°♈	
	16202 Mar 08 13:20	0°♉	
	16202 Apr 02 14:05	0°♊	
	16202 Apr 28 00:34	0°♋	
	16202 May 24 05:39	0°♌	
asc. node	16202 Jun 03 00:06	10°♌46'28	
	16202 Jun 21 08:59	0°♍	
evening max el	16202 Jun 22 20:50	1°♍28'59	46°23'44
	16202 Jul 29 09:04	0°♎	
greatest brilliancy	16202 Aug 01 23:55	1°♎26'57	-4.9m
retrograde	16202 Aug 11 14:57	3°♎10'44	
	16202 Aug 24 06:32	30°℞♍	
evening set	16202 Aug 27 08:59	28°♍22'16	
inferior conj	16202 Sep 01 06:34	25°♍26'55	5°20'14
minimum elong	16202 Sep 01 16:59	25°♍10'55	5°17'21
min. Earth dist.	16202 Sep 01 21:41	25°♍03'42	0.27082 AU
morning rise	16202 Sep 07 00:42	22°♍02'15	
direct	16202 Sep 22 01:53	17°♍36'17	
desc. node	16202 Sep 23 00:04	17°♍37'18	
greatest brilliancy	16202 Oct 02 07:52	19°♍33'36	-4.9m
	16202 Oct 20 02:19	0°♎	
morning max el	16202 Nov 11 05:35	19°♎44'24	46°42'24
	16202 Nov 21 07:01	0°♏	
	16202 Dec 18 15:59	0°♐	
	16203 Jan 13 13:58	0°♑	
asc. node	16203 Jan 14 00:31	0°♑31'02	
	16203 Feb 07 18:54	0°♒	
	16203 Mar 04 14:14	0°♓	
	16203 Mar 29 04:08	0°♈	
	16203 Apr 22 14:45	0°♉	
desc. node	16203 May 05 20:59	16°♉19'55	
morning set	16203 May 10 23:20	22°♉37'25	
	16203 May 16 22:37	0°♊	
	16203 Jun 10 03:38	0°♋	
max. Earth dist.	16203 Jun 16 02:56	7°♋25'20	1.72285 AU
superior conj	16203 Jun 19 04:18	11°♋13'26	-1°22'54
minimum elong	16203 Jun 18 21:10	10°♋51'15	1°23'30
	16203 Jul 04 06:04	0°♌	
	16203 Jul 28 06:49	0°♍	

evening rise	16203 Jul 28 15:06	0°♍25'51	
	16203 Aug 21 07:17	0°♎	
asc. node	16203 Aug 26 12:50	6°♎31'34	
	16203 Sep 14 08:59	0°♏	
	16203 Oct 08 13:43	0°♐	
	16203 Nov 02 00:39	0°♑	
	16203 Nov 26 23:27	0°♒	
desc. node	16203 Dec 16 06:18	22°♒30'23	
	16203 Dec 22 20:22	0°♓	
	16204 Jan 19 14:21	0°♈	
evening max el	16204 Jan 28 00:16	8°♈22'06	46°05'21
	16204 Feb 22 17:13	0°♉	
greatest brilliancy	16204 Mar 07 03:36	7°♉02'50	-4.8m
retrograde	16204 Mar 17 04:39	8°♉53'59	
evening set	16204 Apr 01 05:13	4°♉30'50	
asc. node	16204 Apr 07 04:44	0°♉56'02	
inferior conj	16204 Apr 07 12:19	0°♉44'07	0°04'44
minimum elong	16204 Apr 07 12:09	0°♉44'22	0°04'22
transit middle	16204 Apr 07 12:09	0°♉44'22	0°04'22
transit begin	16204 Apr 07 08:15	0°♉50'30	
transit end	16204 Apr 07 16:03	0°♉38'15	
min. Earth dist.	16204 Apr 07 13:57	0°♉41'32	0.28391 AU
	16204 Apr 08 16:26	30°℞♈	
morning rise	16204 Apr 13 18:49	26°♈57'24	
direct	16204 Apr 28 16:47	22°♈34'17	
greatest brilliancy	16204 May 09 07:53	24°♈38'31	-4.8m
	16204 May 19 19:29	0°♉	
morning max el	16204 Jun 17 06:00	23°♉52'43	46°16'18
	16204 Jun 23 08:01	0°♊	
	16204 Jul 20 21:50	0°♋	
desc. node	16204 Jul 28 06:14	8°♋25'43	
	16204 Aug 15 15:25	0°♌	
	16204 Sep 09 13:11	0°♍	
	16204 Oct 04 01:13	0°♎	
	16204 Oct 28 08:30	0°♏	
asc. node	16204 Nov 18 03:04	25°♏44'45	
	16204 Nov 21 13:18	0°♐	
	16204 Dec 15 16:45	0°♑	
morning set	16204 Dec 19 03:53	4°♑18'30	
	16205 Jan 08 19:57	0°♒	
superior conj	16205 Jan 25 10:38	20°♒37'04	1°21'39
minimum elong	16205 Jan 25 17:17	20°♒57'41	1°22'04
max. Earth dist.	16205 Jan 27 17:39	23°♒27'33	1.72768 AU
	16205 Feb 02 00:24	0°♓	
	16205 Feb 26 07:18	0°♈	
evening rise	16205 Mar 04 01:17	7°♈04'46	
desc. node	16205 Mar 09 19:58	14°♈11'13	
	16205 Mar 22 16:55	0°♉	
	16205 Apr 16 04:38	0°♊	
	16205 May 10 18:05	0°♋	
	16205 Jun 04 10:23	0°♌	
	16205 Jun 29 08:59	0°♍	
asc. node	16205 Jun 30 12:10	1°♍21'01	
	16205 Jul 24 20:50	0°♎	
	16205 Aug 20 14:11	0°♏	
evening max el	16205 Sep 03 14:00	14°♏35'57	46°39'57
	16205 Sep 20 01:57	0°♐	
greatest brilliancy	16205 Oct 13 01:32	14°♐57'02	-4.9m
desc. node	16205 Oct 20 10:07	16°♐54'27	
retrograde	16205 Oct 23 22:00	17°♐08'56	
evening set	16205 Nov 08 06:10	12°♐33'40	
min. Earth dist.	16205 Nov 13 03:07	9°♐42'01	0.27441 AU
inferior conj	16205 Nov 13 21:15	9°♐14'22	-5°50'11
minimum elong	16205 Nov 13 10:23	9°♐30'55	5°46'51
morning rise	16205 Nov 18 15:02	6°♐25'25	
direct	16205 Dec 04 17:49	1°♐27'02	

greatest brilliancy	16205 Dec 14 06:30	3°♐06'53	-4.8m
	16206 Jan 20 21:21	0°♑	
morning max el	16206 Jan 23 01:01	2°♑04'03	46°00'32
asc. node	16206 Feb 10 10:58	20°♑54'37	
	16206 Feb 18 20:19	0°♒	
	16206 Mar 17 08:08	0°♓	
	16206 Apr 11 19:37	0°♈	
	16206 May 06 18:24	0°♉	
	16206 May 31 09:03	0°♊	
desc. node	16206 Jun 02 09:31	2°♊28'36	
	16206 Jun 24 17:30	0°♋	
	16206 Jul 18 21:08	0°♌	
morning set	16206 Jul 23 11:35	5°♌44'13	
	16206 Aug 11 21:33	0°♍	
max. Earth dist.	16206 Aug 31 08:22	24°♍21'21	1.71577 AU
superior conj	16206 Sep 01 03:30	25°♍21'16	-0°50'42
minimum elong	16206 Sep 01 14:23	25°♍55'22	0°50'23
	16206 Sep 04 20:28	0°♎	
asc. node	16206 Sep 23 02:32	22°♎52'11	
	16206 Sep 28 19:09	0°♏	
evening rise	16206 Oct 10 21:44	15°♏09'32	
	16206 Oct 22 18:39	0°♐	
	16206 Nov 15 20:30	0°♑	
	16206 Dec 10 03:10	0°♒	
	16207 Jan 03 18:05	0°♓	
desc. node	16207 Jan 12 18:52	10°♓52'00	
	16207 Jan 28 21:10	0°♈	
	16207 Feb 23 17:59	0°♉	
	16207 Mar 22 21:52	0°♊	
evening max el	16207 Apr 09 01:12	17°♊31'19	46°02'47
	16207 Apr 22 15:24	0°♋	
asc. node	16207 May 05 15:05	9°♋57'41	
greatest brilliancy	16207 May 18 12:57	16°♋39'35	-4.8m
retrograde	16207 May 28 09:18	18°♋27'08	
evening set	16207 Jun 14 14:58	12°♋42'21	
inferior conj	16207 Jun 18 07:56	10°♋24'50	8°29'03
minimum elong	16207 Jun 18 00:45	10°♋36'07	8°27'33
min. Earth dist.	16207 Jun 18 10:26	10°♋20'56	0.28100 AU
morning rise	16207 Jun 21 10:30	8°♋29'01	
direct	16207 Jul 09 10:48	2°♋16'31	
greatest brilliancy	16207 Jul 19 10:42	4°♋09'43	-4.8m
	16207 Aug 23 20:22	0°♌	
desc. node	16207 Aug 25 16:11	1°♌46'40	
morning max el	16207 Aug 28 20:53	4°♌57'00	46°52'53
	16207 Sep 21 08:17	0°♍	
	16207 Oct 17 11:02	0°♎	
	16207 Nov 11 16:32	0°♏	
	16207 Dec 06 11:48	0°♐	
asc. node	16207 Dec 16 15:12	12°♐21'49	
	16207 Dec 31 01:01	0°♑	
	16208 Jan 24 10:28	0°♒	
	16208 Feb 17 18:07	0°♓	
morning set	16208 Feb 27 15:27	12°♓12'25	
	16208 Mar 13 01:29	0°♈	
superior conj	16208 Apr 05 02:40	28°♈26'12	0°03'10
minimum elong	16208 Apr 05 03:19	28°♈28'12	0°02'52
behind sun begin	16208 Apr 04 03:56	27°♈16'04	
behind sun end	16208 Apr 06 02:42	29°♈40'20	
max. Earth dist.	16208 Apr 05 00:36	28°♈19'49	1.73070 AU
desc. node	16208 Apr 06 09:29	0°♉01'14	
	16208 Apr 06 09:05	0°♉	
	16208 Apr 30 16:27	0°♊	
evening rise	16208 May 13 07:50	15°♊37'04	
	16208 May 24 22:56	0°♋	
	16208 Jun 18 04:39	0°♌	
	16208 Jul 12 10:48	0°♍	
asc. node	16208 Jul 28 01:08	19°♍14'03	
	16208 Aug 05 19:24	0°♎	
	16208 Aug 30 09:27	0°♏	
	16208 Sep 24 10:26	0°♐	
	16208 Oct 20 10:50	0°♑	
evening max el	16208 Nov 14 12:07	26°♑36'23	46°28'15
desc. node	16208 Nov 16 20:43	28°♑55'22	
	16208 Nov 17 23:25	0°♒	
greatest brilliancy	16208 Dec 24 00:23	26°♒12'15	-4.8m
retrograde	16209 Jan 03 07:35	28°♒08'13	
evening set	16209 Jan 21 11:25	21°♒56'15	
inferior conj	16209 Jan 24 16:53	19°♒56'23	-8°24'31
minimum elong	16209 Jan 24 23:58	19°♒45'19	8°23'16
min. Earth dist.	16209 Jan 24 14:14	20°♒00'32	0.28568 AU
morning rise	16209 Jan 28 12:40	17°♒35'36	
direct	16209 Feb 14 23:12	11°♒51'49	
greatest brilliancy	16209 Feb 25 05:07	13°♒46'53	-4.8m
asc. node	16209 Mar 09 20:39	20°♒23'27	
	16209 Mar 22 11:14	0°♓	
morning max el	16209 Apr 05 00:46	12°♓25'39	45°45'02
	16209 Apr 22 04:24	0°♈	
	16209 May 19 03:29	0°♉	
	16209 Jun 13 18:22	0°♊	
desc. node	16209 Jun 29 21:16	19°♊20'20	
	16209 Jul 08 16:16	0°♋	
	16209 Aug 02 03:41	0°♌	
	16209 Aug 26 08:42	0°♍	
	16209 Sep 19 10:15	0°♎	
morning set	16209 Oct 05 11:44	20°♎04'19	
	16209 Oct 13 10:19	0°♏	
asc. node	16209 Oct 20 15:57	9°♏02'50	
	16209 Nov 06 09:58	0°♐	
superior conj	16209 Nov 13 16:11	9°♐04'26	0°54'36
minimum elong	16209 Nov 13 05:43	8°♐31'45	0°54'49
max. Earth dist.	16209 Nov 15 05:51	11°♐02'07	1.71887 AU
	16209 Nov 30 10:14	0°♑	
evening rise	16209 Dec 21 10:48	26°♑10'58	
	16209 Dec 24 12:33	0°♒	
	16210 Jan 17 18:46	0°♓	
desc. node	16210 Feb 09 08:06	27°♓38'33	
	16210 Feb 11 06:32	0°♈	
	16210 Mar 08 00:44	0°♉	
	16210 Apr 02 02:13	0°♊	
	16210 Apr 27 13:57	0°♋	
	16210 May 23 21:31	0°♌	
asc. node	16210 Jun 02 02:04	10°♌04'47	
evening max el	16210 Jun 20 08:55	29°♌04'14	46°22'49
	16210 Jun 21 07:35	0°♍	
greatest brilliancy	16210 Jul 30 14:09	29°♍04'35	-4.9m
	16210 Aug 02 17:40	0°♎	
retrograde	16210 Aug 09 03:15	0°♎47'14	
	16210 Aug 15 08:58	30°℞♍	
evening set	16210 Aug 25 01:06	25°♍53'42	
inferior conj	16210 Aug 29 19:28	23°♍03'05	5°39'28
minimum elong	16210 Aug 30 06:09	22°♍46'41	5°36'35
min. Earth dist.	16210 Aug 30 11:45	22°♍38'06	0.27112 AU
morning rise	16210 Sep 04 10:51	19°♍41'57	
direct	16210 Sep 19 14:23	15°♍11'24	
desc. node	16210 Sep 22 01:55	15°♍18'41	
greatest brilliancy	16210 Sep 29 22:02	17°♍10'10	-4.9m
	16210 Oct 20 16:46	0°♎	
morning max el	16210 Nov 08 19:03	17°♎22'19	46°43'52
	16210 Nov 21 02:14	0°♏	
	16210 Dec 18 06:44	0°♐	
asc. node	16211 Jan 13 02:29	29°♐59'12	

	16211 Jan 13 02:46	0°♉	
	16211 Feb 07 06:38	0°♒	
	16211 Mar 04 01:22	0°♓	
	16211 Mar 28 14:56	0°♈	
	16211 Apr 22 01:21	0°♉	
desc. node	16211 May 04 22:50	15°♉53'02	
morning set	16211 May 08 13:41	20°♉20'57	
	16211 May 16 09:09	0°♊	
	16211 Jun 09 14:10	0°♋	
max. Earth dist.	16211 Jun 13 18:10	5°♋10'41	1.72323 AU
superior conj	16211 Jun 16 17:40	8°♋53'01	-1°21'35
minimum elong	16211 Jun 16 09:50	8°♋28'39	1°22'10
	16211 Jul 03 16:38	0°♌	
evening rise	16211 Jul 26 03:10	28°♌00'27	
	16211 Jul 27 17:28	0°♍	
	16211 Aug 20 18:06	0°♎	
asc. node	16211 Aug 25 14:34	6°♎03'11	
	16211 Sep 13 20:01	0°♏	
	16211 Oct 08 01:04	0°♐	
	16211 Nov 01 12:28	0°♑	
	16211 Nov 26 12:08	0°♒	
desc. node	16211 Dec 15 08:18	21°♒56'21	
	16211 Dec 22 10:53	0°♓	
	16212 Jan 19 09:40	0°♈	
evening max el	16212 Jan 25 15:15	6°♈09'37	46°06'02
	16212 Feb 23 19:07	0°♉	
greatest brilliancy	16212 Mar 04 18:34	4°♉50'46	-4.8m
retrograde	16212 Mar 14 20:27	6°♉42'41	
evening set	16212 Mar 29 21:39	2°♉17'48	
	16212 Apr 02 19:39	30°℞♈	
inferior conj	16212 Apr 05 03:58	28°♈32'20	-0°16'35
minimum elong	16212 Apr 05 04:37	28°♈31'20	0°16'40
min. Earth dist.	16212 Apr 05 05:54	28°♈29'18	0.28406 AU
asc. node	16212 Apr 06 06:38	27°♈50'35	
morning rise	16212 Apr 11 11:21	24°♈44'48	
direct	16212 Apr 26 08:36	20°♈22'19	
greatest brilliancy	16212 May 07 00:25	22°♈27'35	-4.8m
	16212 May 20 18:36	0°♉	
morning max el	16212 Jun 14 22:06	21°♉40'58	46°14'47
	16212 Jun 23 03:19	0°♊	
	16212 Jul 20 12:30	0°♋	
desc. node	16212 Jul 27 08:06	7°♋50'33	
	16212 Aug 15 04:16	0°♌	
	16212 Sep 09 01:06	0°♍	
	16212 Oct 03 12:35	0°♎	
	16212 Oct 27 19:31	0°♏	
asc. node	16212 Nov 17 04:58	25°♏17'10	
	16212 Nov 21 00:04	0°♐	
	16212 Dec 15 03:17	0°♑	
morning set	16212 Dec 16 19:03	2°♑03'38	
	16213 Jan 08 06:21	0°♒	
superior conj	16213 Jan 23 03:01	18°♒26'56	1°22'47
minimum elong	16213 Jan 23 09:04	18°♒45'42	1°23'13
max. Earth dist.	16213 Jan 25 11:47	21°♒22'56	1.72739 AU
	16213 Feb 01 10:44	0°♓	
	16213 Feb 25 17:41	0°♈	
evening rise	16213 Mar 01 17:22	4°♈54'37	
desc. node	16213 Mar 08 21:40	13°♈44'28	
	16213 Mar 22 03:26	0°♉	
	16213 Apr 15 15:24	0°♊	
	16213 May 10 05:15	0°♋	
	16213 Jun 03 22:09	0°♌	
	16213 Jun 28 21:44	0°♍	
asc. node	16213 Jun 29 14:03	0°♍48'33	
	16213 Jul 24 11:21	0°♎	
	16213 Aug 20 08:38	0°♏	
evening max el	16213 Sep 01 04:57	12°♏17'29	46°39'52
	16213 Sep 20 12:02	0°♐	
greatest brilliancy	16213 Oct 10 14:59	12°♐34'55	-4.9m
desc. node	16213 Oct 19 12:03	14°♐42'23	
retrograde	16213 Oct 21 12:22	14°♐47'13	
evening set	16213 Nov 05 16:42	10°♐16'20	
min. Earth dist.	16213 Nov 10 16:31	7°♐20'38	0.27393 AU
inferior conj	16213 Nov 11 10:27	6°♐53'19	-5°32'01
minimum elong	16213 Nov 10 23:50	7°♐09'30	5°28'40
morning rise	16213 Nov 16 07:28	4°♐00'07	
	16213 Nov 25 15:27	30°℞♏	
direct	16213 Dec 02 07:20	29°♏06'36	
	16213 Dec 09 04:22	0°♐	
greatest brilliancy	16213 Dec 11 19:04	0°♐46'06	-4.8m
morning max el	16214 Jan 20 15:32	29°♐48'15	46°01'52
	16214 Jan 20 20:23	0°♑	
asc. node	16214 Feb 09 12:45	20°♑13'32	
	16214 Feb 18 11:59	0°♒	
	16214 Mar 16 21:12	0°♓	
	16214 Apr 11 07:27	0°♈	
	16214 May 06 05:35	0°♉	
	16214 May 30 19:53	0°♊	
desc. node	16214 Jun 01 11:27	2°♊01'21	
	16214 Jun 24 04:09	0°♋	
	16214 Jul 18 07:42	0°♌	
morning set	16214 Jul 20 23:55	3°♌20'08	
	16214 Aug 11 08:06	0°♍	
max. Earth dist.	16214 Aug 28 19:28	21°♍52'42	1.71583 AU
superior conj	16214 Aug 29 15:32	22°♍55'33	-0°53'49
minimum elong	16214 Aug 30 02:44	23°♍30'41	0°53'31
	16214 Sep 04 07:01	0°♎	
asc. node	16214 Sep 22 04:17	22°♎24'40	
	16214 Sep 28 05:42	0°♏	
evening rise	16214 Oct 08 10:55	12°♏47'30	
	16214 Oct 22 05:17	0°♐	
	16214 Nov 15 07:15	0°♑	
	16214 Dec 09 14:12	0°♒	
	16215 Jan 03 05:35	0°♓	
desc. node	16215 Jan 11 20:42	10°♓22'22	
	16215 Jan 28 09:29	0°♈	
	16215 Feb 23 07:51	0°♉	
	16215 Mar 22 15:17	0°♊	
evening max el	16215 Apr 06 16:23	15°♊17'55	46°02'25
	16215 Apr 22 22:32	0°♋	
asc. node	16215 May 04 17:04	8°♋39'37	
greatest brilliancy	16215 May 16 03:04	14°♋23'40	-4.8m
retrograde	16215 May 25 23:22	16°♋11'03	
evening set	16215 Jun 12 01:54	10°♋32'02	
inferior conj	16215 Jun 15 22:45	8°♋08'30	8°20'47
minimum elong	16215 Jun 15 14:56	8°♋20'46	8°19'07
min. Earth dist.	16215 Jun 16 00:33	8°♋05'38	0.28120 AU
morning rise	16215 Jun 19 03:55	6°♋08'26	
direct	16215 Jul 07 01:49	0°♋00'04	
greatest brilliancy	16215 Jul 17 01:33	1°♋52'45	-4.8m
	16215 Aug 23 19:44	0°♌	
desc. node	16215 Aug 24 18:03	0°♌55'10	
morning max el	16215 Aug 26 10:36	2°♌36'20	46°52'01
	16215 Sep 21 00:27	0°♍	
	16215 Oct 17 00:42	0°♎	
	16215 Nov 11 04:54	0°♏	
	16215 Dec 05 23:22	0°♐	
asc. node	16215 Dec 15 17:06	11°♐52'57	
	16215 Dec 30 12:04	0°♑	
	16216 Jan 23 21:11	0°♒	
	16216 Feb 17 04:39	0°♓	

morning set	16216 Feb 25 08:10	10°♓03'33	
	16216 Mar 12 11:55	0°♈	
superior conj	16216 Apr 02 18:20	26°♈14'25	0°06'38
minimum elong	16216 Apr 02 19:48	26°♈18'56	0°06'18
behind sun begin	16216 Apr 01 21:51	25°♈11'15	
behind sun end	16216 Apr 03 17:44	27°♈26'36	
max. Earth dist.	16216 Apr 02 17:10	26°♈10'49	1.73074 AU
desc. node	16216 Apr 05 11:23	29°♈35'02	
	16216 Apr 05 19:29	0°♉	
	16216 Apr 30 02:53	0°♊	
evening rise	16216 May 10 23:01	13°♊23'15	
	16216 May 24 09:29	0°♋	
	16216 Jun 17 15:26	0°♌	
	16216 Jul 11 21:54	0°♍	
asc. node	16216 Jul 27 02:53	18°♍44'30	
	16216 Aug 05 06:58	0°♎	
	16216 Aug 29 21:45	0°♏	
	16216 Sep 23 23:59	0°♐	
	16216 Oct 20 02:58	0°♑	
evening max el	16216 Nov 12 01:54	24°♑17'17	46°28'58
desc. node	16216 Nov 15 22:45	28°♑04'13	
	16216 Nov 17 23:20	0°♒	
greatest brilliancy	16216 Dec 21 15:44	23°♒58'30	-4.8m
retrograde	16216 Dec 31 22:09	25°♒54'15	
evening set	16217 Jan 19 04:50	19°♒39'12	
inferior conj	16217 Jan 22 08:02	17°♒42'51	-8°31'45
minimum elong	16217 Jan 22 14:27	17°♒32'50	8°30'37
min. Earth dist.	16217 Jan 22 04:56	17°♒47'41	0.28553 AU
morning rise	16217 Jan 26 00:09	15°♒27'21	
direct	16217 Feb 12 13:42	9°♒38'38	
greatest brilliancy	16217 Feb 22 19:35	11°♒33'08	-4.8m
asc. node	16217 Mar 08 22:37	19°♒08'59	
	16217 Mar 22 16:08	0°♓	
morning max el	16217 Apr 02 14:40	10°♓09'07	45°44'50
	16217 Apr 21 21:23	0°♈	
	16217 May 18 17:11	0°♉	
	16217 Jun 13 06:38	0°♊	
desc. node	16217 Jun 28 23:08	18°♊50'24	
	16217 Jul 08 03:48	0°♋	
	16217 Aug 01 14:48	0°♌	
	16217 Aug 25 19:35	0°♍	
	16217 Sep 18 21:00	0°♎	
morning set	16217 Oct 03 00:43	17°♎41'25	
	16217 Oct 12 20:58	0°♏	
asc. node	16217 Oct 19 17:53	8°♏35'37	
	16217 Nov 05 20:35	0°♐	
superior conj	16217 Nov 11 06:15	6°♐45'19	0°51'42
minimum elong	16217 Nov 10 20:00	6°♐13'16	0°51'54
max. Earth dist.	16217 Nov 12 15:16	8°♐28'30	1.71863 AU
	16217 Nov 29 20:50	0°♑	
evening rise	16217 Dec 19 01:53	23°♑55'44	
	16217 Dec 23 23:10	0°♒	
	16218 Jan 17 05:31	0°♓	
desc. node	16218 Feb 08 09:51	27°♓10'23	
	16218 Feb 10 17:33	0°♈	
	16218 Mar 07 12:13	0°♉	
	16218 Apr 01 14:27	0°♊	
	16218 Apr 27 03:29	0°♋	
	16218 May 23 13:38	0°♌	
asc. node	16218 Jun 01 04:02	9°♌22'38	
evening max el	16218 Jun 17 21:31	26°♌41'15	46°22'09
	16218 Jun 21 07:02	0°♍	
greatest brilliancy	16218 Jul 28 03:50	26°♍42'38	-4.9m
retrograde	16218 Aug 06 16:19	28°♍25'08	
evening set	16218 Aug 22 17:33	23°♍26'08	
inferior conj	16218 Aug 27 08:38	20°♍40'18	5°57'53
minimum elong	16218 Aug 27 19:32	20°♍23'35	5°55'00
min. Earth dist.	16218 Aug 28 01:36	20°♍14'17	0.27146 AU
morning rise	16218 Sep 01 21:09	17°♍23'13	
direct	16218 Sep 17 03:34	12°♍47'36	
desc. node	16218 Sep 21 03:53	13°♍06'33	
greatest brilliancy	16218 Sep 27 12:01	14°♍47'28	-4.9m
	16218 Oct 21 03:20	0°♎	
morning max el	16218 Nov 06 09:36	15°♎02'55	46°44'57
	16218 Nov 20 20:57	0°♏	
	16218 Dec 17 21:27	0°♐	
asc. node	16219 Jan 12 04:17	29°♐26'22	
	16219 Jan 12 15:39	0°♑	
	16219 Feb 06 18:32	0°♒	
	16219 Mar 03 12:39	0°♓	
	16219 Mar 28 01:52	0°♈	
	16219 Apr 21 12:07	0°♉	
desc. node	16219 May 04 00:41	15°♉25'42	
morning set	16219 May 06 04:01	18°♉04'05	
	16219 May 15 19:51	0°♊	
	16219 Jun 09 00:52	0°♋	
max. Earth dist.	16219 Jun 11 10:00	2°♋57'31	1.72357 AU
superior conj	16219 Jun 14 07:07	6°♋32'19	-1°20'08
minimum elong	16219 Jun 13 22:37	6°♋05'55	1°20'40
	16219 Jul 03 03:20	0°♌	
evening rise	16219 Jul 23 15:33	25°♌35'40	
	16219 Jul 27 04:15	0°♍	
	16219 Aug 20 05:00	0°♎	
asc. node	16219 Aug 24 16:24	5°♎34'51	
	16219 Sep 13 07:07	0°♏	
	16219 Oct 07 12:30	0°♐	
	16219 Nov 01 00:27	0°♑	
	16219 Nov 26 01:08	0°♒	
desc. node	16219 Dec 14 10:04	21°♒20'31	
	16219 Dec 22 01:55	0°♓	
	16220 Jan 19 06:04	0°♈	
evening max el	16220 Jan 23 06:58	3°♈57'48	46°06'39
	16220 Feb 25 09:26	0°♉	
greatest brilliancy	16220 Mar 02 09:10	2°♉36'54	-4.8m
retrograde	16220 Mar 12 12:15	4°♉29'33	
evening set	16220 Mar 27 14:03	0°♉03'00	
	16220 Mar 27 16:14	30°℞♈	
inferior conj	16220 Apr 02 19:22	26°♈18'49	-0°38'05
minimum elong	16220 Apr 02 20:49	26°♈16'32	0°37'52
min. Earth dist.	16220 Apr 02 21:21	26°♈15'42	0.28419 AU
asc. node	16220 Apr 05 08:37	24°♈43'33	
morning rise	16220 Apr 09 03:27	22°♈30'43	
direct	16220 Apr 24 00:34	18°♈08'52	
greatest brilliancy	16220 May 04 16:04	20°♈14'20	-4.8m
	16220 May 21 12:09	0°♉	
morning max el	16220 Jun 12 14:10	19°♉28'20	46°13'17
	16220 Jun 22 22:25	0°♊	
	16220 Jul 20 03:16	0°♋	
desc. node	16220 Jul 26 09:54	7°♋14'33	
	16220 Aug 14 17:16	0°♌	
	16220 Sep 08 13:11	0°♍	
	16220 Oct 03 00:08	0°♎	
	16220 Oct 27 06:42	0°♏	
asc. node	16220 Nov 16 06:47	24°♏48'51	
	16220 Nov 20 10:59	0°♐	
morning set	16220 Dec 14 10:19	29°♐48'26	
	16220 Dec 14 14:02	0°♑	
	16221 Jan 07 17:01	0°♒	
superior conj	16221 Jan 20 19:16	16°♒15'24	1°23'47
minimum elong	16221 Jan 21 00:39	16°♒32'06	1°24'15

max. Earth dist.	16221 Jan 23 06:41	19°♒19'39	1.72716 AU
	16221 Jan 31 21:24	0°♓	
	16221 Feb 25 04:26	0°♈	
evening rise	16221 Feb 27 09:06	2°♈42'10	
desc. node	16221 Mar 07 23:32	13°♈17'02	
	16221 Mar 21 14:21	0°♉	
	16221 Apr 15 02:34	0°♊	
	16221 May 09 16:49	0°♋	
	16221 Jun 03 10:21	0°♌	
	16221 Jun 28 10:57	0°♍	
asc. node	16221 Jun 28 15:48	0°♍14'26	
	16221 Jul 24 02:26	0°♎	
	16221 Aug 20 03:56	0°♏	
evening max el	16221 Aug 29 20:17	9°♏59'05	46°39'49
	16221 Sep 21 01:59	0°♐	
greatest brilliancy	16221 Oct 08 05:07	10°♐13'15	-4.9m
desc. node	16221 Oct 18 14:02	12°♐24'48	
retrograde	16221 Oct 19 02:34	12°♐25'08	
evening set	16221 Nov 03 03:43	7°♐58'39	
inferior conj	16221 Nov 08 23:52	4°♐32'09	-5°13'16
minimum elong	16221 Nov 08 13:33	4°♐47'52	5°09'56
min. Earth dist.	16221 Nov 08 06:18	4°♐58'56	0.27343 AU
morning rise	16221 Nov 13 23:57	1°♐34'42	
	16221 Nov 17 00:39	30°℞♏	
direct	16221 Nov 29 21:02	26°♏46'13	
greatest brilliancy	16221 Dec 09 07:50	28°♏25'07	-4.8m
	16221 Dec 13 08:12	0°♐	
morning max el	16222 Jan 18 05:14	27°♐29'42	46°02'59
	16222 Jan 20 18:42	0°♑	
asc. node	16222 Feb 08 14:43	19°♑32'33	
	16222 Feb 18 03:43	0°♒	
	16222 Mar 16 10:35	0°♓	
	16222 Apr 10 19:42	0°♈	
	16222 May 05 17:12	0°♉	
	16222 May 30 07:08	0°♊	
desc. node	16222 May 31 13:15	1°♊32'25	
	16222 Jun 23 15:12	0°♋	
	16222 Jul 17 18:39	0°♌	
morning set	16222 Jul 18 12:02	0°♌54'11	
	16222 Aug 10 19:02	0°♍	
max. Earth dist.	16222 Aug 26 03:53	19°♍14'34	1.71589 AU
superior conj	16222 Aug 27 03:33	20°♍28'40	-0°56'50
minimum elong	16222 Aug 27 15:00	21°♍04'31	0°56'34
	16222 Sep 03 17:56	0°♎	
asc. node	16222 Sep 21 06:13	21°♎56'29	
	16222 Sep 27 16:39	0°♏	
evening rise	16222 Oct 06 00:05	10°♏24'12	
	16222 Oct 21 16:15	0°♐	
	16222 Nov 14 18:21	0°♑	
	16222 Dec 09 01:34	0°♒	
	16223 Jan 02 17:26	0°♓	
desc. node	16223 Jan 10 22:31	9°♓51'39	
	16223 Jan 27 22:13	0°♈	
	16223 Feb 22 22:18	0°♉	
	16223 Mar 22 09:42	0°♊	
evening max el	16223 Apr 04 06:41	13°♊00'46	46°01'54
	16223 Apr 23 09:20	0°♋	
asc. node	16223 May 03 18:59	7°♋16'59	
greatest brilliancy	16223 May 13 17:27	12°♋06'07	-4.8m
retrograde	16223 May 23 13:04	13°♋53'12	
evening set	16223 Jun 09 12:36	8°♋19'57	
inferior conj	16223 Jun 13 13:27	5°♋50'25	8°11'34
minimum elong	16223 Jun 13 05:04	6°♋03'36	8°09'45
min. Earth dist.	16223 Jun 13 14:55	5°♋48'06	0.28137 AU
morning rise	16223 Jun 16 21:26	3°♋45'53	
	16223 Jun 24 00:15	30°℞♊	
direct	16223 Jul 04 16:17	27°♊41'46	
greatest brilliancy	16223 Jul 14 16:52	29°♊34'44	-4.8m
	16223 Jul 15 19:39	0°♋	
desc. node	16223 Aug 23 20:07	0°♌03'42	
	16223 Aug 23 18:38	0°♌	
morning max el	16223 Aug 23 23:36	0°♌12'26	46°51'15
	16223 Sep 20 16:46	0°♍	
	16223 Oct 16 14:36	0°♎	
	16223 Nov 10 17:33	0°♏	
	16223 Dec 05 11:14	0°♐	
asc. node	16223 Dec 14 18:53	11°♐22'43	
	16223 Dec 29 23:25	0°♑	
	16224 Jan 23 08:13	0°♒	
	16224 Feb 16 15:29	0°♓	
morning set	16224 Feb 23 01:11	7°♓54'36	
	16224 Mar 11 22:40	0°♈	
superior conj	16224 Mar 31 10:12	24°♈02'12	0°10'04
minimum elong	16224 Mar 31 12:26	24°♈09'07	0°09'43
behind sun begin	16224 Mar 30 17:28	23°♈10'38	
behind sun end	16224 Apr 01 07:24	25°♈07'36	
max. Earth dist.	16224 Mar 31 09:49	24°♈01'02	1.73085 AU
desc. node	16224 Apr 04 13:16	29°♈07'39	
	16224 Apr 05 06:14	0°♉	
	16224 Apr 29 13:44	0°♊	
evening rise	16224 May 08 14:11	11°♊08'06	
	16224 May 23 20:30	0°♋	
	16224 Jun 17 02:40	0°♌	
	16224 Jul 11 09:27	0°♍	
asc. node	16224 Jul 26 04:45	18°♍13'58	
	16224 Aug 04 18:58	0°♎	
	16224 Aug 29 10:29	0°♏	
	16224 Sep 23 14:03	0°♐	
	16224 Oct 19 19:48	0°♑	
evening max el	16224 Nov 09 15:22	21°♑56'23	46°29'47
desc. node	16224 Nov 15 00:36	27°♑10'38	
	16224 Nov 18 00:52	0°♒	
greatest brilliancy	16224 Dec 19 06:51	21°♒43'44	-4.8m
retrograde	16224 Dec 29 13:08	23°♒40'03	
evening set	16225 Jan 16 22:05	17°♒22'03	
inferior conj	16225 Jan 19 23:19	15°♒28'57	-8°38'04
minimum elong	16225 Jan 20 05:01	15°♒20'02	8°37'03
min. Earth dist.	16225 Jan 19 19:41	15°♒34'35	0.28535 AU
morning rise	16225 Jan 23 12:00	13°♒18'40	
direct	16225 Feb 10 04:12	7°♒25'01	
greatest brilliancy	16225 Feb 20 10:25	9°♒19'31	-4.8m
asc. node	16225 Mar 08 00:36	17°♒56'20	
	16225 Mar 22 19:24	0°♓	
morning max el	16225 Mar 31 05:05	7°♓53'21	45°44'41
	16225 Apr 21 14:14	0°♈	
	16225 May 18 07:02	0°♉	
	16225 Jun 12 19:10	0°♊	
desc. node	16225 Jun 28 00:57	18°♊19'21	
	16225 Jul 07 15:40	0°♋	
	16225 Aug 01 02:17	0°♌	
	16225 Aug 25 06:49	0°♍	
	16225 Sep 18 08:03	0°♎	
morning set	16225 Sep 30 13:27	15°♎16'48	
	16225 Oct 12 07:53	0°♏	
asc. node	16225 Oct 18 19:38	8°♏07'00	
	16225 Nov 05 07:26	0°♐	
superior conj	16225 Nov 08 20:12	4°♐24'59	0°48'42
minimum elong	16225 Nov 08 10:13	3°♐53'47	0°48'54
max. Earth dist.	16225 Nov 10 01:35	5°♐56'52	1.71841 AU
	16225 Nov 29 07:40	0°♑	
evening rise	16225 Dec 16 17:09	21°♑40'20	

	16225 Dec 23 10:03	0°♒	
	16226 Jan 16 16:30	0°♓	
desc. node	16226 Feb 07 11:47	26°♓42'09	
	16226 Feb 10 04:46	0°♈	
	16226 Mar 06 23:53	0°♉	
	16226 Apr 01 02:54	0°♊	
	16226 Apr 26 17:17	0°♋	
	16226 May 23 06:17	0°♌	
asc. node	16226 May 31 05:47	8°♌38'42	
evening max el	16226 Jun 15 10:50	24°♌19'18	46°21'14
	16226 Jun 21 08:03	0°♍	
greatest brilliancy	16226 Jul 25 16:48	24°♍18'32	-4.9m
retrograde	16226 Aug 04 05:39	26°♍01'15	
evening set	16226 Aug 20 09:51	20°♍56'43	
inferior conj	16226 Aug 24 21:33	18°♍15'41	6°15'40
minimum elong	16226 Aug 25 08:35	17°♍58'46	6°12'51
min. Earth dist.	16226 Aug 25 14:51	17°♍49'10	0.27183 AU
morning rise	16226 Aug 30 06:59	15°♍03'06	
direct	16226 Sep 14 17:02	10°♍22'11	
desc. node	16226 Sep 20 05:51	10°♍58'02	
greatest brilliancy	16226 Sep 25 01:13	12°♍22'26	-4.9m
	16226 Oct 21 11:33	0°♎	
morning max el	16226 Nov 04 00:27	12°♎43'29	46°46'07
	16226 Nov 20 15:26	0°♏	
	16226 Dec 17 12:07	0°♐	
asc. node	16227 Jan 11 06:12	28°♐53'48	
	16227 Jan 12 04:34	0°♑	
	16227 Feb 06 06:26	0°♒	
	16227 Mar 02 23:58	0°♓	
	16227 Mar 27 12:49	0°♈	
	16227 Apr 20 22:53	0°♉	
desc. node	16227 May 03 02:27	14°♉58'09	
morning set	16227 May 03 19:00	15°♉49'10	
	16227 May 15 06:32	0°♊	
	16227 Jun 08 11:33	0°♋	
max. Earth dist.	16227 Jun 09 02:49	0°♋47'24	1.72393 AU
superior conj	16227 Jun 11 20:53	4°♋12'40	-1°18'33
minimum elong	16227 Jun 11 11:49	3°♋44'30	1°19'04
	16227 Jul 02 14:05	0°♌	
evening rise	16227 Jul 21 03:58	23°♌10'43	
	16227 Jul 26 15:07	0°♍	
	16227 Aug 19 16:02	0°♎	
asc. node	16227 Aug 23 18:18	5°♎06'15	
	16227 Sep 12 18:24	0°♏	
	16227 Oct 07 00:06	0°♐	
	16227 Oct 31 12:36	0°♑	
	16227 Nov 25 14:17	0°♒	
desc. node	16227 Dec 13 11:57	20°♒44'42	
	16227 Dec 21 17:11	0°♓	
	16228 Jan 19 03:09	0°♈	
evening max el	16228 Jan 20 23:10	1°♈47'12	46°07'20
	16228 Feb 27 21:59	0°♉	
greatest brilliancy	16228 Feb 29 00:21	0°♉24'21	-4.8m
retrograde	16228 Mar 10 04:06	2°♉17'03	
	16228 Mar 20 20:13	30°♓R	
evening set	16228 Mar 25 06:52	27°♈49'01	
inferior conj	16228 Mar 31 10:56	24°♈06'11	-0°59'23
minimum elong	16228 Mar 31 13:11	24°♈02'39	0°58'54
min. Earth dist.	16228 Mar 31 12:56	24°♈03'03	0.28426 AU
asc. node	16228 Apr 04 10:31	21°♈39'05	
morning rise	16228 Apr 06 19:29	20°♈17'38	
direct	16228 Apr 21 16:48	15°♈56'34	
greatest brilliancy	16228 May 02 07:26	18°♈01'32	-4.8m
	16228 May 22 00:48	0°♉	
morning max el	16228 Jun 10 05:42	17°♉15'09	46°11'48
	16228 Jun 22 16:44	0°♊	
	16228 Jul 19 17:39	0°♋	
desc. node	16228 Jul 25 11:58	6°♋40'09	
	16228 Aug 14 06:02	0°♌	
	16228 Sep 08 01:09	0°♍	
	16228 Oct 02 11:37	0°♎	
	16228 Oct 26 17:51	0°♏	
asc. node	16228 Nov 15 08:35	24°♏20'29	
	16228 Nov 19 21:52	0°♐	
morning set	16228 Dec 12 01:13	27°♐32'15	
	16228 Dec 14 00:43	0°♑	
	16229 Jan 07 03:34	0°♒	
superior conj	16229 Jan 18 11:23	14°♒03'48	1°24'39
minimum elong	16229 Jan 18 16:04	14°♒18'20	1°25'10
max. Earth dist.	16229 Jan 21 01:41	17°♒17'02	1.72686 AU
	16229 Jan 31 07:56	0°♓	
	16229 Feb 24 15:02	0°♈	
evening rise	16229 Feb 25 00:51	0°♈30'14	
desc. node	16229 Mar 07 01:24	12°♈50'05	
	16229 Mar 21 01:06	0°♉	
	16229 Apr 14 13:33	0°♊	
	16229 May 09 04:10	0°♋	
	16229 Jun 02 22:18	0°♌	
asc. node	16229 Jun 27 17:46	29°♌41'43	
	16229 Jun 27 23:57	0°♍	
	16229 Jul 23 17:24	0°♎	
	16229 Aug 19 23:34	0°♏	
evening max el	16229 Aug 27 10:40	7°♏38'46	46°39'22
	16229 Sep 21 20:36	0°♐	
greatest brilliancy	16229 Oct 05 19:38	7°♐51'49	-4.9m
retrograde	16229 Oct 16 15:57	10°♐02'23	
desc. node	16229 Oct 17 15:54	10°♐01'11	
evening set	16229 Oct 31 14:39	5°♐40'10	
min. Earth dist.	16229 Nov 05 20:19	2°♐35'58	0.27298 AU
inferior conj	16229 Nov 06 13:00	2°♐10'29	-4°53'42
minimum elong	16229 Nov 06 03:05	2°♐25'38	4°50'24
	16229 Nov 10 03:57	30°♑R	
morning rise	16229 Nov 11 16:05	29°♏08'40	
direct	16229 Nov 27 10:04	24°♏25'12	
greatest brilliancy	16229 Dec 06 21:02	26°♏04'02	-4.8m
	16229 Dec 15 12:18	0°♐	
morning max el	16230 Jan 15 17:47	25°♐08'26	46°04'20
	16230 Jan 20 16:03	0°♑	
asc. node	16230 Feb 07 16:44	18°♑52'37	
	16230 Feb 17 19:00	0°♒	
	16230 Mar 15 23:34	0°♓	
	16230 Apr 10 07:34	0°♈	
	16230 May 05 04:27	0°♉	
	16230 May 29 18:01	0°♊	
desc. node	16230 May 30 15:04	1°♊04'34	
	16230 Jun 23 01:53	0°♋	
morning set	16230 Jul 16 00:36	28°♋30'49	
	16230 Jul 17 05:13	0°♌	
	16230 Aug 10 05:33	0°♍	
max. Earth dist.	16230 Aug 23 11:21	16°♍34'44	1.71600 AU
superior conj	16230 Aug 24 16:04	18°♍04'38	-0°59'42
minimum elong	16230 Aug 25 03:39	18°♍40'55	0°59'29
	16230 Sep 03 04:28	0°♎	
asc. node	16230 Sep 20 07:58	21°♎28'57	
	16230 Sep 27 03:13	0°♏	
evening rise	16230 Oct 03 13:22	8°♏02'25	
	16230 Oct 21 02:55	0°♐	
	16230 Nov 14 05:11	0°♑	
	16230 Dec 08 12:41	0°♒	
	16231 Jan 02 05:03	0°♓	
desc. node	16231 Jan 10 00:27	9°♓22'01	

	16231 Jan 27 10:44	0°♈	
	16231 Feb 22 12:34	0°♉	
	16231 Mar 22 04:08	0°♊	
evening max el	16231 Apr 01 20:18	10°♊43'18	46°01'38
	16231 Apr 23 23:02	0°♋	
asc. node	16231 May 02 20:51	5°♋53'06	
greatest brilliancy	16231 May 11 07:53	9°♋50'17	-4.8m
retrograde	16231 May 21 03:14	11°♋37'32	
evening set	16231 Jun 06 23:28	6°♋09'42	
inferior conj	16231 Jun 11 04:20	3°♋34'21	8°01'36
minimum elong	16231 Jun 10 19:27	3°♋48'21	7°59'37
min. Earth dist.	16231 Jun 11 05:30	3°♋32'32	0.28153 AU
morning rise	16231 Jun 14 15:16	1°♋25'20	
	16231 Jun 17 01:32	30°℞♊	
direct	16231 Jul 02 06:39	25°♊25'21	
greatest brilliancy	16231 Jul 12 08:39	27°♊19'10	-4.8m
	16231 Jul 18 08:26	0°♋	
morning max el	16231 Aug 21 13:13	27°♋51'53	46°50'36
desc. node	16231 Aug 22 21:58	29°♋14'21	
	16231 Aug 23 15:58	0°♌	
	16231 Sep 20 08:13	0°♍	
	16231 Oct 16 03:49	0°♎	
	16231 Nov 10 05:37	0°♏	
	16231 Dec 04 22:37	0°♐	
asc. node	16231 Dec 13 20:48	10°♐54'17	
	16231 Dec 29 10:22	0°♑	
	16232 Jan 22 18:53	0°♒	
	16232 Feb 16 01:57	0°♓	
morning set	16232 Feb 20 17:50	5°♓45'31	
	16232 Mar 11 09:02	0°♈	
superior conj	16232 Mar 29 01:46	21°♈50'17	0°13'30
minimum elong	16232 Mar 29 04:47	21°♈59'36	0°13'09
behind sun begin	16232 Mar 28 15:14	21°♈17'50	
behind sun end	16232 Mar 29 18:20	22°♈41'22	
max. Earth dist.	16232 Mar 29 03:31	21°♈55'41	1.73091 AU
desc. node	16232 Apr 03 14:56	28°♈40'55	
	16232 Apr 04 16:35	0°♉	
	16232 Apr 29 00:09	0°♊	
evening rise	16232 May 06 05:18	8°♊54'18	
	16232 May 23 07:05	0°♋	
	16232 Jun 16 13:29	0°♌	
	16232 Jul 10 20:34	0°♍	
asc. node	16232 Jul 25 06:38	17°♍44'49	
	16232 Aug 04 06:32	0°♎	
	16232 Aug 28 22:48	0°♏	
	16232 Sep 23 03:43	0°♐	
	16232 Oct 19 12:24	0°♑	
evening max el	16232 Nov 07 05:03	19°♑37'29	46°30'28
desc. node	16232 Nov 14 02:29	26°♑17'34	
	16232 Nov 18 03:15	0°♒	
greatest brilliancy	16232 Dec 16 21:01	19°♒28'51	-4.8m
retrograde	16232 Dec 27 04:25	21°♒26'35	
evening set	16233 Jan 14 14:50	15°♒05'48	
inferior conj	16233 Jan 17 14:22	13°♒15'29	-8°43'32
minimum elong	16233 Jan 17 19:19	13°♒07'47	8°42'38
min. Earth dist.	16233 Jan 17 09:54	13°♒22'28	0.28522 AU
morning rise	16233 Jan 20 23:52	11°♒10'16	
direct	16233 Feb 07 18:46	5°♒11'46	
greatest brilliancy	16233 Feb 18 00:51	7°♒06'13	-4.8m
asc. node	16233 Mar 07 02:27	16°♒46'13	
	16233 Mar 22 20:46	0°♓	
morning max el	16233 Mar 28 20:16	5°♓40'19	45°44'36
	16233 Apr 21 06:23	0°♈	
	16233 May 17 20:21	0°♉	
	16233 Jun 12 07:12	0°♊	
desc. node	16233 Jun 27 02:55	17°♊50'13	

	16233 Jul 07 03:02	0°♋	
	16233 Jul 31 13:18	0°♌	
	16233 Aug 24 17:34	0°♍	
	16233 Sep 17 18:38	0°♎	
morning set	16233 Sep 28 02:27	12°♎54'24	
	16233 Oct 11 18:22	0°♏	
asc. node	16233 Oct 17 21:25	7°♏39'53	
	16233 Nov 04 17:51	0°♐	
superior conj	16233 Nov 06 10:20	2°♐06'37	0°45'38
minimum elong	16233 Nov 06 00:42	1°♐36'29	0°45'48
max. Earth dist.	16233 Nov 07 14:23	3°♐34'18	1.71819 AU
	16233 Nov 28 18:03	0°♑	
evening rise	16233 Dec 14 08:42	19°♑27'07	
	16233 Dec 22 20:28	0°♒	
	16234 Jan 16 03:05	0°♓	
desc. node	16234 Feb 06 13:36	26°♓14'38	
	16234 Feb 09 15:40	0°♈	
	16234 Mar 06 11:17	0°♉	
	16234 Mar 31 15:06	0°♊	
	16234 Apr 26 06:55	0°♋	
	16234 May 22 22:54	0°♌	
asc. node	16234 May 30 07:48	7°♌55'50	
evening max el	16234 Jun 13 00:58	22°♌00'37	46°20'28
	16234 Jun 21 09:58	0°♍	
greatest brilliancy	16234 Jul 23 05:37	21°♍55'48	-4.8m
retrograde	16234 Aug 01 19:09	23°♍38'43	
evening set	16234 Aug 18 02:21	18°♍28'48	
inferior conj	16234 Aug 22 10:33	15°♍52'27	6°32'40
minimum elong	16234 Aug 22 21:37	15°♍35'27	6°29'56
min. Earth dist.	16234 Aug 23 03:48	15°♍25'58	0.27218 AU
morning rise	16234 Aug 27 16:39	12°♍44'32	
direct	16234 Sep 12 06:56	7°♍58'21	
desc. node	16234 Sep 19 07:44	8°♍55'49	
greatest brilliancy	16234 Sep 22 13:54	9°♍58'01	-4.9m
	16234 Oct 21 16:55	0°♎	
morning max el	16234 Nov 01 15:21	10°♎25'19	46°47'12
	16234 Nov 20 09:04	0°♏	
	16234 Dec 17 02:14	0°♐	
asc. node	16235 Jan 10 08:09	28°♐22'32	
	16235 Jan 11 17:01	0°♑	
	16235 Feb 05 17:58	0°♒	
	16235 Mar 02 10:58	0°♓	
	16235 Mar 26 23:32	0°♈	
	16235 Apr 20 09:28	0°♉	
morning set	16235 May 01 09:44	13°♉34'09	
desc. node	16235 May 02 04:20	14°♉31'29	
	16235 May 14 17:03	0°♊	
max. Earth dist.	16235 Jun 06 17:30	28°♊31'21	1.72425 AU
	16235 Jun 07 22:03	0°♋	
superior conj	16235 Jun 09 10:23	1°♋52'48	-1°16'49
minimum elong	16235 Jun 09 00:50	1°♋23'09	1°17'18
	16235 Jul 02 00:38	0°♌	
evening rise	16235 Jul 18 16:09	20°♌45'47	
	16235 Jul 26 01:46	0°♍	
	16235 Aug 19 02:52	0°♎	
asc. node	16235 Aug 22 20:01	4°♎37'47	
	16235 Sep 12 05:28	0°♏	
	16235 Oct 06 11:32	0°♐	
	16235 Oct 31 00:36	0°♑	
	16235 Nov 25 03:19	0°♒	
desc. node	16235 Dec 12 13:57	20°♒09'31	
	16235 Dec 21 08:27	0°♓	
evening max el	16236 Jan 18 15:02	29°♓36'26	46°07'56
	16236 Jan 19 00:47	0°♈	
greatest brilliancy	16236 Feb 26 15:58	28°♈12'51	-4.8m

	16236 Mar 05	18:08	0°♉		
retrograde	16236 Mar 07	19:23	0°♉04'53		
	16236 Mar 09	20:05	30°℞♈		
evening set	16236 Mar 22	23:47	25°♈35'17		
inferior conj	16236 Mar 29	02:28	21°♈54'00	-1°20'29	
minimum elong	16236 Mar 29	05:30	21°♈49'14	1°19'45	
min. Earth dist.	16236 Mar 29	04:42	21°♈50'30	0.28437 AU	
asc. node	16236 Apr 03	12:24	18°♈36'48		
morning rise	16236 Apr 04	11:16	18°♈04'58		
direct	16236 Apr 19	08:54	13°♈44'38		
greatest brilliancy	16236 Apr 29	22:57	15°♈48'59	-4.8m	
	16236 May 22	10:05	0°♉		
morning max el	16236 Jun 07	20:24	14°♉59'48	46°10'13	
	16236 Jun 22	10:36	0°♊		
	16236 Jul 19	07:52	0°♋		
desc. node	16236 Jul 24	13:48	6°♋05'19		
	16236 Aug 13	18:42	0°♌		
	16236 Sep 07	13:00	0°♍		
	16236 Oct 01	22:59	0°♎		
	16236 Oct 26	04:54	0°♏		
asc. node	16236 Nov 14	10:29	23°♏52'42		
	16236 Nov 19	08:41	0°♐		
morning set	16236 Dec 09	16:05	25°♐16'03		
	16236 Dec 13	11:21	0°♑		
	16237 Jan 06	14:06	0°♒		
superior conj	16237 Jan 16	03:38	11°♒52'40	1°25'24	
minimum elong	16237 Jan 16	07:37	12°♒04'59	1°25'56	
max. Earth dist.	16237 Jan 18	18:45	15°♒08'27	1.72653 AU	
	16237 Jan 30	18:27	0°♓		
evening rise	16237 Feb 22	16:40	28°♓18'34		
	16237 Feb 24	01:37	0°♈		
desc. node	16237 Mar 06	03:07	12°♈22'43		
	16237 Mar 20	11:50	0°♉		
	16237 Apr 14	00:34	0°♊		
	16237 May 08	15:37	0°♋		
	16237 Jun 02	10:27	0°♌		
asc. node	16237 Jun 26	19:37	29°♌07'56		
	16237 Jun 27	13:14	0°♍		
	16237 Jul 23	08:46	0°♎		
	16237 Aug 19	20:01	0°♏		
evening max el	16237 Aug 24	23:56	5°♏15'14	46°39'05	
	16237 Sep 22	22:11	0°♐		
greatest brilliancy	16237 Oct 03	10:31	5°♐30'21	-4.9m	
retrograde	16237 Oct 14	04:56	7°♐39'21		
desc. node	16237 Oct 16	17:49	7°♐31'36		
evening set	16237 Oct 29	01:44	3°♐20'46		
min. Earth dist.	16237 Nov 03	10:37	0°♐12'11	0.27254 AU	
	16237 Nov 03	18:36	30°℞♏		
inferior conj	16237 Nov 04	02:08	29°♏48'28	-4°33'38	
minimum elong	16237 Nov 03	16:40	0°♐02'57	4°30'23	
morning rise	16237 Nov 09	08:04	26°♏42'27		
direct	16237 Nov 24	22:33	22°♏03'34		
greatest brilliancy	16237 Dec 04	10:47	23°♏43'03	-4.8m	
	16237 Dec 16	22:51	0°♐		
morning max el	16238 Jan 13	05:58	22°♐45'43	46°05'46	
	16238 Jan 20	12:46	0°♑		
asc. node	16238 Feb 06	18:30	18°♑12'07		
	16238 Feb 17	10:12	0°♒		
	16238 Mar 15	12:36	0°♓		
	16238 Apr 09	19:31	0°♈		
	16238 May 04	15:48	0°♉		
	16238 May 29	05:04	0°♊		
desc. node	16238 May 29	17:00	0°♊36'38		
	16238 Jun 22	12:46	0°♋		
morning set	16238 Jul 13	12:45	26°♋05'21		
	16238 Jul 16	16:03	0°♌		
	16238 Aug 09	16:23	0°♍		
max. Earth dist.	16238 Aug 20	17:31	13°♍49'57	1.71613 AU	
superior conj	16238 Aug 22	04:07	15°♍38'16	-1°02'29	
minimum elong	16238 Aug 22	15:47	16°♍14'47	1°02'18	
	16238 Sep 02	15:17	0°♎		
asc. node	16238 Sep 19	09:44	21°♎00'36		
	16238 Sep 26	14:03	0°♏		
evening rise	16238 Oct 01	02:11	5°♏38'20		
	16238 Oct 20	13:50	0°♐		
	16238 Nov 13	16:17	0°♑		
	16238 Dec 08	00:05	0°♒		
	16239 Jan 01	16:59	0°♓		
desc. node	16239 Jan 09	02:14	8°♓51'00		
	16239 Jan 26	23:36	0°♈		
	16239 Feb 22	03:17	0°♉		
	16239 Mar 21	23:25	0°♊		
evening max el	16239 Mar 30	10:03	8°♊25'36	46°01'29	
	16239 Apr 24	18:00	0°♋		
asc. node	16239 May 01	22:49	4°♋25'47		
greatest brilliancy	16239 May 08	21:44	7°♋33'05	-4.8m	
retrograde	16239 May 18	17:46	9°♋21'13		
evening set	16239 Jun 04	10:18	3°♋58'25		
inferior conj	16239 Jun 08	19:12	1°♋17'23	7°50'54	
minimum elong	16239 Jun 08	09:50	1°♋32'06	7°48'44	
min. Earth dist.	16239 Jun 08	19:50	1°♋16'24	0.28172 AU	
	16239 Jun 10	20:36	30°℞♊		
morning rise	16239 Jun 12	09:13	29°♊03'50		
direct	16239 Jun 29	21:12	23°♊07'55		
greatest brilliancy	16239 Jul 10	00:13	25°♊02'36	-4.8m	
	16239 Jul 19	23:02	0°♋		
morning max el	16239 Aug 19	03:45	25°♋32'25	46°49'45	
desc. node	16239 Aug 21	23:51	28°♋24'38		
	16239 Aug 23	13:02	0°♌		
	16239 Sep 19	23:55	0°♍		
	16239 Oct 15	17:25	0°♎		
	16239 Nov 09	18:05	0°♏		
	16239 Dec 04	10:22	0°♐		
asc. node	16239 Dec 12	22:41	10°♐24'41		
	16239 Dec 28	21:40	0°♑		
	16240 Jan 22	05:53	0°♒		
	16240 Feb 15	12:46	0°♓		
morning set	16240 Feb 18	10:29	3°♓35'19		
	16240 Mar 10	19:46	0°♈		
superior conj	16240 Mar 26	17:27	19°♈37'32	0°16'54	
minimum elong	16240 Mar 26	21:14	19°♈49'11	0°16'33	
max. Earth dist.	16240 Mar 26	22:39	19°♈53'33	1.73095 AU	
desc. node	16240 Apr 02	16:51	28°♈13'43		
	16240 Apr 04	03:19	0°♉		
	16240 Apr 28	10:58	0°♊		
evening rise	16240 May 03	20:40	6°♊40'12		
	16240 May 22	18:02	0°♋		
	16240 Jun 16	00:40	0°♌		
	16240 Jul 10	08:05	0°♍		
asc. node	16240 Jul 24	08:24	17°♍13'55		
	16240 Aug 03	18:36	0°♎		
	16240 Aug 28	11:42	0°♏		
	16240 Sep 22	18:06	0°♐		
	16240 Oct 19	05:58	0°♑		
evening max el	16240 Nov 04	19:35	17°♑19'06	46°31'21	
desc. node	16240 Nov 13	04:30	25°♑22'04		
	16240 Nov 18	08:04	0°♒		
greatest brilliancy	16240 Dec 14	10:47	17°♒11'56	-4.8m	
retrograde	16240 Dec 24	20:10	19°♒11'25		
evening set	16241 Jan 12	07:16	12°♒48'17		
inferior conj	16241 Jan 15	05:21	11°♒00'22	-8°48'21	

minimum elong	16241 Jan 15 09:31	10°♒53'53	8°47'31
min. Earth dist.	16241 Jan 14 23:38	11°♒09'15	0.28502 AU
morning rise	16241 Jan 18 11:52	8°♒59'56	
direct	16241 Feb 05 09:41	2°♒57'02	
greatest brilliancy	16241 Feb 15 14:30	4°♒50'44	-4.8m
asc. node	16241 Mar 06 04:26	15°♒37'05	
	16241 Mar 22 21:21	0°♓	
morning max el	16241 Mar 26 12:03	3°♓27'38	45°44'31
	16241 Apr 20 22:41	0°♈	
	16241 May 17 09:58	0°♉	
	16241 Jun 11 19:36	0°♊	
desc. node	16241 Jun 26 04:44	17°♊19'32	
	16241 Jul 06 14:46	0°♋	
	16241 Jul 31 00:39	0°♌	
	16241 Aug 24 04:42	0°♍	
	16241 Sep 17 05:39	0°♎	
morning set	16241 Sep 25 15:25	10°♎30'33	
	16241 Oct 11 05:18	0°♏	
asc. node	16241 Oct 16 23:21	7°♏11'48	
superior conj	16241 Nov 04 00:06	29°♏45'28	0°42'27
minimum elong	16241 Nov 03 14:53	29°♏16'38	0°42'36
	16241 Nov 04 04:45	0°♐	
max. Earth dist.	16241 Nov 05 03:54	1°♐12'24	1.71799 AU
	16241 Nov 28 04:56	0°♑	
evening rise	16241 Dec 11 23:50	17°♑11'05	
	16241 Dec 22 07:22	0°♒	
	16242 Jan 15 14:07	0°♓	
desc. node	16242 Feb 05 15:20	25°♓45'31	
	16242 Feb 09 03:00	0°♈	
	16242 Mar 05 23:09	0°♉	
	16242 Mar 31 03:48	0°♊	
	16242 Apr 25 21:07	0°♋	
	16242 May 22 16:17	0°♌	
asc. node	16242 May 29 09:43	7°♌11'03	
evening max el	16242 Jun 10 15:36	19°♌42'09	46°19'42
	16242 Jun 21 13:53	0°♍	
greatest brilliancy	16242 Jul 20 18:57	19°♍33'15	-4.8m
retrograde	16242 Jul 30 08:34	21°♍15'41	
evening set	16242 Aug 15 19:05	16°♍00'44	
inferior conj	16242 Aug 19 23:45	13°♍28'58	6°48'49
minimum elong	16242 Aug 20 10:47	13°♍12'01	6°46'11
min. Earth dist.	16242 Aug 20 16:57	13°♍02'31	0.27252 AU
morning rise	16242 Aug 25 02:18	10°♍25'47	
direct	16242 Sep 09 20:56	5°♍34'27	
desc. node	16242 Sep 18 09:41	6°♍58'01	
greatest brilliancy	16242 Sep 20 02:40	7°♍33'07	-4.9m
	16242 Oct 21 20:48	0°♎	
morning max el	16242 Oct 30 05:38	8°♎04'32	46°48'02
	16242 Nov 20 02:43	0°♏	
	16242 Dec 16 16:38	0°♐	
asc. node	16243 Jan 09 09:56	27°♐49'33	
	16243 Jan 11 05:50	0°♑	
	16243 Feb 05 05:53	0°♒	
	16243 Mar 01 22:19	0°♓	
	16243 Mar 26 10:35	0°♈	
	16243 Apr 19 20:21	0°♉	
morning set	16243 Apr 29 00:32	11°♉18'26	
desc. node	16243 May 01 06:08	14°♉03'42	
	16243 May 14 03:52	0°♊	
max. Earth dist.	16243 Jun 04 06:19	26°♊08'37	1.72458 AU
superior conj	16243 Jun 07 00:05	29°♊32'43	-1°14'58
minimum elong	16243 Jun 06 14:07	29°♊01'46	1°15'24
	16243 Jun 07 08:52	0°♋	
	16243 Jul 01 11:30	0°♌	
evening rise	16243 Jul 16 04:35	18°♌20'42	
	16243 Jul 25 12:44	0°♍	
	16243 Aug 18 13:59	0°♎	
asc. node	16243 Aug 21 21:52	4°♎08'52	
	16243 Sep 11 16:48	0°♏	
	16243 Oct 05 23:13	0°♐	
	16243 Oct 30 12:53	0°♑	
	16243 Nov 24 16:46	0°♒	
desc. node	16243 Dec 11 15:42	19°♒32'28	
	16243 Dec 21 00:20	0°♓	
evening max el	16244 Jan 16 06:17	27°♓23'01	46°08'29
	16244 Jan 18 23:46	0°♈	
greatest brilliancy	16244 Feb 24 08:15	26°♈01'06	-4.8m
retrograde	16244 Mar 05 10:23	27°♈51'59	
evening set	16244 Mar 20 16:54	23°♈20'34	
inferior conj	16244 Mar 26 18:06	19°♈41'13	-1°41'30
minimum elong	16244 Mar 26 21:54	19°♈35'15	1°40'30
min. Earth dist.	16244 Mar 26 20:52	19°♈36'53	0.28445 AU
morning rise	16244 Apr 02 02:53	15°♈51'53	
asc. node	16244 Apr 02 14:24	15°♈36'20	
direct	16244 Apr 17 00:26	11°♈32'05	
greatest brilliancy	16244 Apr 27 14:53	13°♈36'15	-4.8m
	16244 May 22 17:01	0°♉	
morning max el	16244 Jun 05 10:27	12°♉42'16	46°08'43
	16244 Jun 22 04:15	0°♊	
	16244 Jul 18 22:06	0°♋	
desc. node	16244 Jul 23 15:36	5°♋30'03	
	16244 Aug 13 07:28	0°♌	
	16244 Sep 07 00:59	0°♍	
	16244 Oct 01 10:29	0°♎	
	16244 Oct 25 16:03	0°♏	
asc. node	16244 Nov 13 12:16	23°♏24'18	
	16244 Nov 18 19:34	0°♐	
morning set	16244 Dec 07 07:06	22°♐59'57	
	16244 Dec 12 22:05	0°♑	
	16245 Jan 06 00:46	0°♒	
superior conj	16245 Jan 13 19:59	9°♒41'24	1°26'01
minimum elong	16245 Jan 13 23:11	9°♒51'22	1°26'34
max. Earth dist.	16245 Jan 16 09:50	12°♒53'19	1.72624 AU
	16245 Jan 30 05:07	0°♓	
evening rise	16245 Feb 20 08:24	26°♓06'08	
	16245 Feb 23 12:21	0°♈	
desc. node	16245 Mar 05 05:00	11°♈55'20	
	16245 Mar 19 22:44	0°♉	
	16245 Apr 13 11:44	0°♊	
	16245 May 08 03:13	0°♋	
	16245 Jun 01 22:46	0°♌	
asc. node	16245 Jun 25 21:25	28°♌33'33	
	16245 Jun 27 02:43	0°♍	
	16245 Jul 23 00:29	0°♎	
	16245 Aug 19 17:15	0°♏	
evening max el	16245 Aug 22 12:47	2°♏50'29	46°38'49
	16245 Sep 24 10:23	0°♐	
greatest brilliancy	16245 Oct 01 01:27	3°♐08'51	-4.9m
retrograde	16245 Oct 11 18:08	5°♐16'44	
desc. node	16245 Oct 15 19:48	4°♐56'41	
evening set	16245 Oct 26 13:08	1°♐01'08	
	16245 Oct 28 09:02	30°℞♏	
min. Earth dist.	16245 Nov 01 01:09	27°♏48'32	0.27212 AU
inferior conj	16245 Nov 01 15:22	27°♏26'49	-4°12'58
minimum elong	16245 Nov 01 06:25	27°♏40'29	4°09'50
morning rise	16245 Nov 07 00:05	24°♏16'53	
direct	16245 Nov 22 10:45	19°♏42'06	
greatest brilliancy	16245 Dec 02 00:51	21°♏22'50	-4.8m
	16245 Dec 17 23:15	0°♐	
morning max el	16246 Jan 10 18:51	20°♐24'55	46°07'14
	16246 Jan 20 08:41	0°♑	

asc. node	16246 Feb 05	20:29	17°♋32'54	
	16246 Feb 17	01:06	0°♒	
	16246 Mar 15	01:31	0°♓	
	16246 Apr 09	07:25	0°♈	
	16246 May 04	03:08	0°♉	
desc. node	16246 May 28	18:46	0°♊08'19	
	16246 May 28	16:04	0°♊	
	16246 Jun 21	23:35	0°♋	
morning set	16246 Jul 11	00:57	23°♋40'21	
	16246 Jul 16	02:48	0°♌	
	16246 Aug 09	03:07	0°♍	
max. Earth dist.	16246 Aug 18	02:47	11°♍15'03	1.71631 AU
superior conj	16246 Aug 19	16:15	13°♍12'22	-1°05'09
minimum elong	16246 Aug 20	03:54	13°♍48'51	1°05'00
	16246 Sep 02	02:03	0°♎	
asc. node	16246 Sep 18	11:39	20°♎32'52	
	16246 Sep 26	00:51	0°♏	
evening rise	16246 Sep 28	15:06	3°♏14'49	
	16246 Oct 20	00:41	0°♐	
	16246 Nov 13	03:17	0°♑	
	16246 Dec 07	11:22	0°♒	
	16247 Jan 01	04:46	0°♓	
desc. node	16247 Jan 08	04:05	8°♓20'39	
	16247 Jan 26	12:23	0°♈	
	16247 Feb 21	18:03	0°♉	
	16247 Mar 21	19:09	0°♊	
evening max el	16247 Mar 28	00:52	6°♊10'59	46°01'16
	16247 Apr 25	19:45	0°♋	
asc. node	16247 May 01	00:44	2°♋55'42	
greatest brilliancy	16247 May 06	11:11	5°♋15'51	-4.8m
retrograde	16247 May 16	08:47	7°♋05'21	
evening set	16247 Jun 01	21:15	1°♋47'30	
	16247 Jun 04	20:16	30°℞♊	
inferior conj	16247 Jun 06	10:05	29°♊00'52	7°39'22
minimum elong	16247 Jun 06	00:21	29°♊16'08	7°37'02
min. Earth dist.	16247 Jun 06	09:57	29°♊01'03	0.28189 AU
morning rise	16247 Jun 10	03:18	26°♊42'43	
direct	16247 Jun 27	12:17	20°♊51'07	
greatest brilliancy	16247 Jul 07	15:20	22°♊46'12	-4.8m
	16247 Jul 21	01:36	0°♋	
morning max el	16247 Aug 16	19:12	23°♋16'06	46°48'49
desc. node	16247 Aug 21	01:53	27°♋36'49	
	16247 Aug 23	09:09	0°♌	
	16247 Sep 19	15:08	0°♍	
	16247 Oct 15	06:39	0°♎	
	16247 Nov 09	06:15	0°♏	
	16247 Dec 03	21:53	0°♐	
asc. node	16247 Dec 12	00:27	9°♐55'22	
	16247 Dec 28	08:43	0°♑	
	16248 Jan 21	16:37	0°♒	
	16248 Feb 14	23:18	0°♓	
morning set	16248 Feb 16	03:27	1°♓26'56	
	16248 Mar 10	06:12	0°♈	
superior conj	16248 Mar 24	09:21	17°♈26'16	0°20'17
minimum elong	16248 Mar 24	13:52	17°♈40'10	0°19'54
max. Earth dist.	16248 Mar 24	19:57	17°♈58'57	1.73101 AU
desc. node	16248 Apr 01	18:41	27°♈47'08	
	16248 Apr 03	13:47	0°♉	
	16248 Apr 27	21:32	0°♊	
evening rise	16248 May 01	12:08	4°♊27'11	
	16248 May 22	04:47	0°♋	
	16248 Jun 15	11:38	0°♌	
	16248 Jul 09	19:23	0°♍	
asc. node	16248 Jul 23	10:17	16°♍44'10	
	16248 Aug 03	06:25	0°♎	
	16248 Aug 28	00:23	0°♏	
	16248 Sep 22	08:19	0°♐	
	16248 Oct 18	23:37	0°♑	
evening max el	16248 Nov 02	11:04	15°♑03'51	46°32'05
desc. node	16248 Nov 12	06:18	24°♑25'47	
	16248 Nov 18	14:37	0°♒	
greatest brilliancy	16248 Dec 12	00:35	14°♒55'48	-4.8m
retrograde	16248 Dec 22	11:54	16°♒56'43	
evening set	16249 Jan 09	23:19	10°♒32'02	
inferior conj	16249 Jan 12	20:15	8°♒45'53	-8°52'19
minimum elong	16249 Jan 12	23:37	8°♒40'38	8°51'34
min. Earth dist.	16249 Jan 12	13:10	8°♒56'52	0.28477 AU
morning rise	16249 Jan 16	00:02	6°♒49'43	
direct	16249 Feb 03	00:52	0°♒43'14	
greatest brilliancy	16249 Feb 13	03:26	2°♒35'22	-4.8m
asc. node	16249 Mar 05	06:23	14°♒30'52	
	16249 Mar 22	20:19	0°♓	
morning max el	16249 Mar 24	03:40	1°♓15'46	45°44'29
	16249 Apr 20	14:15	0°♈	
	16249 May 16	23:05	0°♉	
	16249 Jun 11	07:35	0°♊	
desc. node	16249 Jun 25	06:33	16°♊49'54	
	16249 Jul 06	02:11	0°♋	
	16249 Jul 30	11:42	0°♌	
	16249 Aug 23	15:31	0°♍	
	16249 Sep 16	16:19	0°♎	
morning set	16249 Sep 23	04:14	8°♎07'17	
	16249 Oct 10	15:53	0°♏	
asc. node	16249 Oct 16	01:04	6°♏44'11	
superior conj	16249 Nov 01	13:38	27°♏24'44	0°39'10
minimum elong	16249 Nov 01	04:55	26°♏57'27	0°39'20
max. Earth dist.	16249 Nov 02	18:27	28°♏54'50	1.71780 AU
	16249 Nov 03	15:17	0°♐	
	16249 Nov 27	15:27	0°♑	
evening rise	16249 Dec 09	14:53	14°♑55'42	
	16249 Dec 21	17:57	0°♒	
	16250 Jan 15	00:52	0°♓	
desc. node	16250 Feb 04	17:16	25°♓17'57	
	16250 Feb 08	14:02	0°♈	
	16250 Mar 05	10:40	0°♉	
	16250 Mar 30	16:10	0°♊	
	16250 Apr 25	11:03	0°♋	
	16250 May 22	09:39	0°♌	
asc. node	16250 May 28	11:30	6°♌26'22	
evening max el	16250 Jun 08	05:39	17°♌23'14	46°18'40
	16250 Jun 21	19:21	0°♍	
greatest brilliancy	16250 Jul 18	08:45	17°♍11'48	-4.8m
retrograde	16250 Jul 27	21:18	18°♍53'02	
evening set	16250 Aug 13	11:44	13°♍33'08	
inferior conj	16250 Aug 17	12:53	11°♍06'06	7°04'17
minimum elong	16250 Aug 17	23:46	10°♍49'18	7°01'46
min. Earth dist.	16250 Aug 18	06:21	10°♍39'09	0.27288 AU
morning rise	16250 Aug 22	11:37	8°♍07'46	
direct	16250 Sep 07	10:23	3°♍11'03	
desc. node	16250 Sep 17	11:38	5°♍05'19	
greatest brilliancy	16250 Sep 17	15:54	5°♍09'13	-4.9m
	16250 Oct 21	22:45	0°♎	
morning max el	16250 Oct 27	18:51	5°♎41'48	46°48'55
	16250 Nov 19	19:36	0°♏	
	16250 Dec 16	06:29	0°♐	
asc. node	16251 Jan 08	11:53	27°♐18'27	
	16251 Jan 10	18:11	0°♑	
	16251 Feb 04	17:22	0°♒	
	16251 Mar 01	09:18	0°♓	
	16251 Mar 25	21:15	0°♈	
	16251 Apr 19	06:51	0°♉	

morning set	16251 Apr 26 15:39	9°♉04'48	
desc. node	16251 Apr 30 07:55	13°♉36'57	
	16251 May 13 14:18	0°♊	
max. Earth dist.	16251 Jun 01 19:15	23°♊47'30	1.72492 AU
superior conj	16251 Jun 04 14:06	27°♊14'54	-1°13'00
minimum elong	16251 Jun 04 03:46	26°♊42'51	1°13'24
	16251 Jun 06 19:18	0°♋	
	16251 Jun 30 22:00	0°♌	
evening rise	16251 Jul 13 17:09	15°♌57'09	
	16251 Jul 24 23:22	0°♍	
	16251 Aug 18 00:49	0°♎	
asc. node	16251 Aug 20 23:45	3°♎40'54	
	16251 Sep 11 03:53	0°♏	
	16251 Oct 05 10:39	0°♐	
	16251 Oct 30 00:57	0°♑	
	16251 Nov 24 06:01	0°♒	
desc. node	16251 Dec 10 17:36	18°♒56'29	
	16251 Dec 20 16:10	0°♓	
evening max el	16252 Jan 13 20:32	25°♓07'57	46°09'05
	16252 Jan 18 23:27	0°♈	
greatest brilliancy	16252 Feb 22 00:34	23°♈50'05	-4.8m
retrograde	16252 Mar 03 01:11	25°♈39'56	
evening set	16252 Mar 18 10:02	21°♈06'11	
inferior conj	16252 Mar 24 09:39	17°♈29'16	-2°02'25
minimum elong	16252 Mar 24 14:12	17°♈22'07	2°01'11
min. Earth dist.	16252 Mar 24 13:13	17°♈23'40	0.28455 AU
morning rise	16252 Mar 30 18:14	13°♈39'52	
asc. node	16252 Apr 01 16:17	12°♈39'47	
direct	16252 Apr 14 15:27	9°♈20'05	
greatest brilliancy	16252 Apr 25 07:16	11°♈24'52	-4.8m
	16252 May 22 21:21	0°♉	
morning max el	16252 Jun 03 00:27	10°♉25'38	46°07'28
	16252 Jun 21 21:06	0°♊	
	16252 Jul 18 11:48	0°♋	
desc. node	16252 Jul 22 17:40	4°♋56'57	
	16252 Aug 12 19:48	0°♌	
	16252 Sep 06 12:37	0°♍	
	16252 Sep 30 21:42	0°♎	
	16252 Oct 25 02:58	0°♏	
asc. node	16252 Nov 12 14:06	22°♏56'38	
	16252 Nov 18 06:15	0°♐	
morning set	16252 Dec 04 21:38	20°♐42'58	
	16252 Dec 12 08:35	0°♑	
	16253 Jan 05 11:11	0°♒	
superior conj	16253 Jan 11 12:01	7°♒29'56	1°26'29
minimum elong	16253 Jan 11 14:27	7°♒37'28	1°27'05
max. Earth dist.	16253 Jan 13 23:44	10°♒35'17	1.72594 AU
	16253 Jan 29 15:32	0°♓	
evening rise	16253 Feb 18 00:03	23°♓54'12	
	16253 Feb 22 22:52	0°♈	
desc. node	16253 Mar 04 06:49	11°♈28'30	
	16253 Mar 19 09:25	0°♉	
	16253 Apr 12 22:42	0°♊	
	16253 May 07 14:38	0°♋	
	16253 Jun 01 10:52	0°♌	
asc. node	16253 Jun 24 23:23	28°♌00'28	
	16253 Jun 26 15:59	0°♍	
	16253 Jul 22 16:04	0°♎	
	16253 Aug 19 14:56	0°♏	
evening max el	16253 Aug 20 01:33	0°♏26'35	46°38'28
	16253 Sep 26 17:53	0°♐	
greatest brilliancy	16253 Sep 28 15:41	0°♐46'55	-4.9m
retrograde	16253 Oct 09 07:29	2°♐54'26	
desc. node	16253 Oct 14 21:39	2°♐16'23	
	16253 Oct 21 09:28	30°℞♏	
evening set	16253 Oct 24 00:35	28°♏41'03	
min. Earth dist.	16253 Oct 29 15:25	25°♏25'00	0.27177 AU
inferior conj	16253 Oct 30 04:28	25°♏05'07	-3°51'35
minimum elong	16253 Oct 29 20:06	25°♏17'52	3°48'35
morning rise	16253 Nov 04 15:56	21°♏51'36	
direct	16253 Nov 19 23:04	17°♏20'19	
greatest brilliancy	16253 Nov 29 14:51	19°♏02'32	-4.8m
	16253 Dec 18 17:09	0°♐	
morning max el	16254 Jan 08 08:39	18°♐06'33	46°08'44
	16254 Jan 20 03:55	0°♑	
asc. node	16254 Feb 04 22:29	16°♑54'27	
	16254 Feb 16 15:42	0°♒	
	16254 Mar 14 14:11	0°♓	
	16254 Apr 08 19:07	0°♈	
	16254 May 03 14:18	0°♉	
desc. node	16254 May 27 20:36	29°♉40'35	
	16254 May 28 02:55	0°♊	
	16254 Jun 21 10:17	0°♋	
morning set	16254 Jul 08 13:25	21°♋16'37	
	16254 Jul 15 13:25	0°♌	
	16254 Aug 08 13:41	0°♍	
max. Earth dist.	16254 Aug 15 15:05	8°♍50'13	1.71645 AU
superior conj	16254 Aug 17 04:40	10°♍47'53	-1°07'39
minimum elong	16254 Aug 17 16:12	11°♍24'01	1°07'34
	16254 Sep 01 12:36	0°♎	
asc. node	16254 Sep 17 13:23	20°♎05'08	
	16254 Sep 25 11:26	0°♏	
evening rise	16254 Sep 26 04:15	0°♏52'37	
	16254 Oct 19 11:24	0°♐	
	16254 Nov 12 14:12	0°♑	
	16254 Dec 06 22:37	0°♒	
	16254 Dec 31 16:35	0°♓	
desc. node	16255 Jan 07 05:59	7°♓50'24	
	16255 Jan 26 01:14	0°♈	
	16255 Feb 21 09:00	0°♉	
	16255 Mar 21 15:32	0°♊	
evening max el	16255 Mar 25 16:22	3°♊58'11	46°01'07
	16255 Apr 27 08:30	0°♋	
asc. node	16255 Apr 30 02:36	1°♋22'22	
greatest brilliancy	16255 May 04 00:23	2°♋58'25	-4.8m
retrograde	16255 May 13 23:53	4°♋49'14	
	16255 May 29 15:49	30°℞♊	
evening set	16255 May 30 08:13	29°♊36'25	
inferior conj	16255 Jun 04 00:51	26°♊44'06	7°27'03
minimum elong	16255 Jun 03 14:49	26°♊59'51	7°24'36
min. Earth dist.	16255 Jun 03 23:51	26°♊45'41	0.28203 AU
morning rise	16255 Jun 07 21:19	24°♊21'14	
direct	16255 Jun 25 03:43	18°♊34'16	
greatest brilliancy	16255 Jul 05 05:56	20°♊29'02	-4.8m
	16255 Jul 21 21:00	0°♋	
morning max el	16255 Aug 14 10:58	21°♋00'45	46°47'59
desc. node	16255 Aug 20 03:44	26°♋49'22	
	16255 Aug 23 04:37	0°♌	
	16255 Sep 19 06:04	0°♍	
	16255 Oct 14 19:42	0°♎	
	16255 Nov 08 18:16	0°♏	
	16255 Dec 03 09:17	0°♐	
asc. node	16255 Dec 11 02:23	9°♐26'50	
	16255 Dec 27 19:44	0°♑	
	16256 Jan 21 03:22	0°♒	
morning set	16256 Feb 13 20:15	29°♒17'50	
	16256 Feb 14 09:54	0°♓	
	16256 Mar 09 16:43	0°♈	
superior conj	16256 Mar 22 01:05	15°♈14'12	0°23'38
minimum elong	16256 Mar 22 06:16	15°♈30'14	0°23'15

max. Earth dist.	16256 Mar 22 17:00	16°♈03'19	1.73101 AU
desc. node	16256 Mar 31 20:22	27°♈19'51	
	16256 Apr 03 00:19	0°♉	
	16256 Apr 27 08:11	0°♊	
evening rise	16256 Apr 29 03:26	2°♊13'23	
	16256 May 21 15:37	0°♋	
	16256 Jun 14 22:43	0°♌	
	16256 Jul 09 06:50	0°♍	
asc. node	16256 Jul 22 12:09	16°♍13'56	
	16256 Aug 02 18:24	0°♎	
	16256 Aug 27 13:13	0°♏	
	16256 Sep 21 22:44	0°♐	
	16256 Oct 18 17:39	0°♑	
evening max el	16256 Oct 31 02:56	12°♑49'34	46°32'47
desc. node	16256 Nov 11 08:13	23°♑28'47	
	16256 Nov 18 23:37	0°♒	
greatest brilliancy	16256 Dec 09 14:50	12°♒40'29	-4.8m
retrograde	16256 Dec 20 03:29	14°♒42'11	
evening set	16257 Jan 07 15:09	8°♒16'46	
inferior conj	16257 Jan 10 11:18	6°♒31'39	-8°55'24
minimum elong	16257 Jan 10 13:51	6°♒27'42	8°54'43
min. Earth dist.	16257 Jan 10 02:56	6°♒44'39	0.28453 AU
morning rise	16257 Jan 13 12:41	4°♒39'05	
	16257 Jan 22 23:58	30°℞♑	
direct	16257 Jan 31 16:20	28°♑29'45	
	16257 Feb 09 16:47	0°♒	
greatest brilliancy	16257 Feb 10 16:27	0°♒19'53	-4.8m
asc. node	16257 Mar 04 08:15	13°♒25'56	
morning max el	16257 Mar 21 18:52	29°♒02'20	45°44'21
	16257 Mar 22 18:31	0°♓	
	16257 Apr 20 05:48	0°♈	
	16257 May 16 12:19	0°♉	
	16257 Jun 10 19:44	0°♊	
desc. node	16257 Jun 24 08:32	16°♊20'17	
	16257 Jul 05 13:44	0°♋	
	16257 Jul 29 22:55	0°♌	
	16257 Aug 23 02:33	0°♍	
	16257 Sep 16 03:13	0°♎	
morning set	16257 Sep 20 17:06	5°♎43'30	
	16257 Oct 10 02:41	0°♏	
asc. node	16257 Oct 15 02:53	6°♏16'09	
superior conj	16257 Oct 30 03:25	25°♏04'06	0°35'51
minimum elong	16257 Oct 29 19:16	24°♏38'36	0°36'00
max. Earth dist.	16257 Oct 31 08:12	26°♏34'09	1.71753 AU
	16257 Nov 03 02:00	0°♐	
	16257 Nov 27 02:08	0°♑	
evening rise	16257 Dec 07 06:15	12°♑40'46	
	16257 Dec 21 04:41	0°♒	
	16258 Jan 14 11:47	0°♓	
desc. node	16258 Feb 03 19:05	24°♓49'28	
	16258 Feb 08 01:17	0°♈	
	16258 Mar 04 22:29	0°♉	
	16258 Mar 30 04:54	0°♊	
	16258 Apr 25 01:26	0°♋	
	16258 May 22 03:47	0°♌	
asc. node	16258 May 27 13:31	5°♌40'49	
evening max el	16258 Jun 05 18:51	15°♌01'22	46°17'42
	16258 Jun 22 03:34	0°♍	
greatest brilliancy	16258 Jul 15 22:56	14°♍50'07	-4.8m
retrograde	16258 Jul 25 09:41	16°♍29'59	
evening set	16258 Aug 11 04:28	11°♍04'56	
inferior conj	16258 Aug 15 02:10	8°♍42'46	7°18'45
minimum elong	16258 Aug 15 12:49	8°♍26'17	7°16'23
min. Earth dist.	16258 Aug 15 20:06	8°♍15'02	0.27326 AU
morning rise	16258 Aug 19 20:58	5°♍49'30	
direct	16258 Sep 04 23:30	0°♍46'54	
greatest brilliancy	16258 Sep 15 05:51	2°♍45'20	-4.9m
desc. node	16258 Sep 16 13:32	3°♍16'08	
	16258 Oct 21 23:46	0°♎	
morning max el	16258 Oct 25 07:49	3°♎17'17	46°49'55
	16258 Nov 19 12:29	0°♏	
	16258 Dec 15 20:28	0°♐	
asc. node	16259 Jan 07 13:48	26°♐46'36	
	16259 Jan 10 06:42	0°♑	
	16259 Feb 04 05:03	0°♒	
	16259 Feb 28 20:30	0°♓	
	16259 Mar 25 08:13	0°♈	
	16259 Apr 18 17:41	0°♉	
morning set	16259 Apr 24 06:51	6°♉50'22	
desc. node	16259 Apr 29 09:49	13°♉09'31	
	16259 May 13 01:05	0°♊	
max. Earth dist.	16259 May 30 08:35	21°♊26'33	1.72528 AU
superior conj	16259 Jun 02 04:05	24°♊55'53	-1°10'53
minimum elong	16259 Jun 01 17:29	24°♊22'59	1°11'16
	16259 Jun 06 06:06	0°♋	
	16259 Jun 30 08:52	0°♌	
evening rise	16259 Jul 11 05:40	13°♌32'31	
	16259 Jul 24 10:22	0°♍	
	16259 Aug 17 12:01	0°♎	
asc. node	16259 Aug 20 01:29	3°♎11'20	
	16259 Sep 10 15:21	0°♏	
	16259 Oct 04 22:32	0°♐	
	16259 Oct 29 13:30	0°♑	
	16259 Nov 23 19:47	0°♒	
desc. node	16259 Dec 09 19:36	18°♒19'29	
	16259 Dec 20 08:38	0°♓	
evening max el	16260 Jan 11 10:33	22°♓51'37	46°09'53
	16260 Jan 19 00:38	0°♈	
greatest brilliancy	16260 Feb 19 16:29	21°♈38'18	-4.8m
retrograde	16260 Feb 29 16:20	23°♈28'01	
evening set	16260 Mar 16 03:29	18°♈51'20	
inferior conj	16260 Mar 22 01:26	15°♈17'10	-2°22'52
minimum elong	16260 Mar 22 06:41	15°♈08'54	2°21'24
min. Earth dist.	16260 Mar 22 05:38	15°♈10'33	0.28468 AU
morning rise	16260 Mar 28 09:41	11°♈28'10	
asc. node	16260 Mar 31 18:11	9°♈47'06	
direct	16260 Apr 12 06:44	7°♈07'43	
greatest brilliancy	16260 Apr 23 00:09	9°♈13'42	-4.8m
	16260 May 23 00:21	0°♉	
morning max el	16260 May 31 15:22	8°♉10'14	46°06'05
	16260 Jun 21 14:03	0°♊	
	16260 Jul 18 01:49	0°♋	
desc. node	16260 Jul 21 19:29	4°♋22'02	
	16260 Aug 12 08:31	0°♌	
	16260 Sep 06 00:37	0°♍	
	16260 Sep 30 09:16	0°♎	
	16260 Oct 24 14:14	0°♏	
asc. node	16260 Nov 11 15:59	22°♏28'01	
	16260 Nov 17 17:17	0°♐	
morning set	16260 Dec 02 12:04	18°♐24'21	
	16260 Dec 11 19:29	0°♑	
	16261 Jan 04 21:59	0°♒	
superior conj	16261 Jan 09 04:10	5°♒17'30	1°26'49
minimum elong	16261 Jan 09 05:49	5°♒22'37	1°27'26
max. Earth dist.	16261 Jan 11 13:35	8°♒15'47	1.72562 AU
	16261 Jan 29 02:19	0°♓	
evening rise	16261 Feb 15 15:59	21°♓42'09	
	16261 Feb 22 09:42	0°♈	
desc. node	16261 Mar 03 08:34	11°♈00'26	
	16261 Mar 18 20:24	0°♉	
	16261 Apr 12 09:59	0°♊	

	16261 May 07 02:25	0°♋	
	16261 May 31 23:25	0°♌	
asc. node	16261 Jun 24 01:13	27°♌25'31	
	16261 Jun 26 05:50	0°♍	
	16261 Jul 22 08:27	0°♎	
evening max el	16261 Aug 17 15:07	28°♎03'20	46°38'13
	16261 Aug 19 14:07	0°♏	
greatest brilliancy	16261 Sep 26 05:16	28°♏22'42	-4.9m
	16261 Oct 01 18:49	0°♐	
retrograde	16261 Oct 06 21:10	0°♐30'30	
	16261 Oct 11 21:00	30°℞♏	
desc. node	16261 Oct 13 23:36	29°♏28'50	
evening set	16261 Oct 21 12:10	26°♏18'57	
min. Earth dist.	16261 Oct 27 05:15	23°♏00'03	0.27143 AU
inferior conj	16261 Oct 27 17:24	22°♏41'36	-3°29'44
minimum elong	16261 Oct 27 09:41	22°♏53'20	3°26'53
morning rise	16261 Nov 02 07:31	19°♏24'52	
direct	16261 Nov 17 11:54	14°♏56'49	
greatest brilliancy	16261 Nov 27 04:16	16°♏40'06	-4.8m
	16261 Dec 19 07:05	0°♐	
morning max el	16262 Jan 05 23:10	15°♐48'43	46°10'16
	16262 Jan 19 23:02	0°♑	
asc. node	16262 Feb 04 00:14	16°♑14'42	
	16262 Feb 16 06:28	0°♒	
	16262 Mar 14 03:05	0°♓	
	16262 Apr 08 07:03	0°♈	
	16262 May 03 01:41	0°♉	
desc. node	16262 May 26 22:32	29°♉12'27	
	16262 May 27 14:00	0°♊	
	16262 Jun 20 21:14	0°♋	
morning set	16262 Jul 06 01:55	18°♋52'11	
	16262 Jul 15 00:20	0°♌	
	16262 Aug 08 00:36	0°♍	
max. Earth dist.	16262 Aug 13 03:22	6°♍24'13	1.71663 AU
superior conj	16262 Aug 14 16:46	8°♍21'19	-1°10'03
minimum elong	16262 Aug 15 04:07	8°♍56'50	1°10'02
	16262 Aug 31 23:31	0°♎	
asc. node	16262 Sep 16 15:12	19°♎36'28	
evening rise	16262 Sep 23 16:55	28°♎27'42	
	16262 Sep 24 22:25	0°♏	
	16262 Oct 18 22:29	0°♐	
	16262 Nov 12 01:29	0°♑	
	16262 Dec 06 10:13	0°♒	
	16262 Dec 31 04:46	0°♓	
desc. node	16263 Jan 06 07:48	7°♓18'51	
	16263 Jan 25 14:30	0°♈	
	16263 Feb 21 00:28	0°♉	
	16263 Mar 21 12:52	0°♊	
evening max el	16263 Mar 23 08:34	1°♊46'40	46°01'06
asc. node	16263 Apr 29 04:37	29°♊45'59	
	16263 Apr 29 18:06	0°♋	
greatest brilliancy	16263 May 01 14:07	0°♋41'54	-4.8m
retrograde	16263 May 11 15:04	2°♋33'29	
	16263 May 22 20:50	30°℞♊	
evening set	16263 May 27 19:40	27°♊25'52	
inferior conj	16263 Jun 01 15:55	24°♊27'59	7°14'14
minimum elong	16263 Jun 01 05:39	24°♊44'07	7°11'38
min. Earth dist.	16263 Jun 01 14:02	24°♊30'57	0.28214 AU
morning rise	16263 Jun 05 15:34	22°♊00'19	
direct	16263 Jun 22 19:32	16°♊18'20	
greatest brilliancy	16263 Jul 02 20:34	18°♊12'15	-4.8m
	16263 Jul 22 11:22	0°♋	
morning max el	16263 Aug 12 02:07	18°♋43'37	46°46'44
desc. node	16263 Aug 19 05:38	26°♋02'29	
	16263 Aug 22 23:41	0°♌	
	16263 Sep 18 21:02	0°♍	
	16263 Oct 14 08:55	0°♎	
	16263 Nov 08 06:32	0°♏	
	16263 Dec 02 20:56	0°♐	
asc. node	16263 Dec 10 04:15	8°♐57'19	
	16263 Dec 27 06:58	0°♑	
	16264 Jan 20 14:18	0°♒	
morning set	16264 Feb 11 12:54	27°♒07'42	
	16264 Feb 13 20:40	0°♓	
	16264 Mar 09 03:25	0°♈	
superior conj	16264 Mar 19 16:54	13°♈01'59	0°26'56
minimum elong	16264 Mar 19 22:46	13°♈20'02	0°26'34
max. Earth dist.	16264 Mar 20 12:21	14°♈01'57	1.73096 AU
desc. node	16264 Mar 30 22:19	26°♈52'48	
	16264 Apr 02 11:02	0°♉	
evening rise	16264 Apr 26 18:54	29°♉59'49	
	16264 Apr 26 18:58	0°♊	
	16264 May 21 02:31	0°♋	
	16264 Jun 14 09:51	0°♌	
	16264 Jul 08 18:20	0°♍	
asc. node	16264 Jul 21 13:56	15°♍43'16	
	16264 Aug 02 06:29	0°♎	
	16264 Aug 27 02:17	0°♏	
	16264 Sep 21 13:31	0°♐	
	16264 Oct 18 12:28	0°♑	
evening max el	16264 Oct 28 18:02	10°♑32'17	46°33'19
desc. node	16264 Nov 10 10:14	22°♑29'40	
	16264 Nov 19 12:26	0°♒	
greatest brilliancy	16264 Dec 07 05:30	10°♒24'10	-4.8m
retrograde	16264 Dec 17 18:19	12°♒25'50	
evening set	16265 Jan 05 06:16	6°♒00'38	
min. Earth dist.	16265 Jan 07 16:44	4°♒30'27	0.28423 AU
inferior conj	16265 Jan 08 02:03	4°♒15'58	-8°57'45
minimum elong	16265 Jan 08 03:42	4°♒13'23	8°57'06
morning rise	16265 Jan 11 01:17	2°♒26'29	
	16265 Jan 15 09:26	30°℞♑	
direct	16265 Jan 29 07:05	26°♑14'55	
greatest brilliancy	16265 Feb 08 05:33	28°♑03'21	-4.8m
	16265 Feb 12 21:42	0°♒	
asc. node	16265 Mar 03 10:14	12°♒22'21	
morning max el	16265 Mar 19 08:49	26°♒45'26	45°44'22
	16265 Mar 22 16:00	0°♓	
	16265 Apr 19 21:10	0°♈	
	16265 May 16 01:27	0°♉	
	16265 Jun 10 07:47	0°♊	
desc. node	16265 Jun 23 10:20	15°♊50'21	
	16265 Jul 05 01:10	0°♋	
	16265 Jul 29 10:00	0°♌	
	16265 Aug 22 13:25	0°♍	
	16265 Sep 15 13:59	0°♎	
morning set	16265 Sep 18 06:03	3°♎20'20	
	16265 Oct 09 13:24	0°♏	
asc. node	16265 Oct 14 04:48	5°♏48'41	
superior conj	16265 Oct 27 16:59	22°♏43'02	0°32'26
minimum elong	16265 Oct 27 09:28	22°♏19'30	0°32'35
max. Earth dist.	16265 Oct 28 19:17	24°♏05'17	1.71734 AU
	16265 Nov 02 12:41	0°♐	
	16265 Nov 26 12:49	0°♑	
evening rise	16265 Dec 04 21:08	10°♑24'21	
	16265 Dec 20 15:26	0°♒	
	16266 Jan 13 22:41	0°♓	
desc. node	16266 Feb 02 20:51	24°♓20'50	
	16266 Feb 07 12:32	0°♈	
	16266 Mar 04 10:16	0°♉	
	16266 Mar 29 17:38	0°♊	
	16266 Apr 24 15:54	0°♋	

	16266 May 21 22:12	0°♌	
asc. node	16266 May 26 15:25	4°♌54'47	
evening max el	16266 Jun 03 07:23	12°♌38'30	46°16'57
	16266 Jun 22 14:19	0°♍	
greatest brilliancy	16266 Jul 13 13:12	12°♍29'44	-4.8m
retrograde	16266 Jul 22 22:21	14°♍08'43	
evening set	16266 Aug 08 21:19	8°♍38'17	
inferior conj	16266 Aug 12 15:40	6°♍21'06	7°32'16
minimum elong	16266 Aug 13 02:01	6°♍05'05	7°30'03
min. Earth dist.	16266 Aug 13 10:02	5°♍52'41	0.27363 AU
morning rise	16266 Aug 17 06:27	3°♍33'20	
	16266 Aug 24 16:17	30°℞♌	
direct	16266 Sep 02 12:37	28°♌24'18	
	16266 Sep 11 17:21	0°♍	
greatest brilliancy	16266 Sep 12 20:12	0°♍23'37	-4.9m
desc. node	16266 Sep 15 15:30	1°♍32'45	
	16266 Oct 21 23:07	0°♎	
morning max el	16266 Oct 22 21:01	0°♎54'27	46°50'42
	16266 Nov 19 04:43	0°♏	
	16266 Dec 15 10:05	0°♐	
asc. node	16267 Jan 06 15:34	26°♐14'57	
	16267 Jan 09 18:59	0°♑	
	16267 Feb 03 16:33	0°♒	
	16267 Feb 28 07:32	0°♓	
	16267 Mar 24 18:57	0°♈	
	16267 Apr 18 04:16	0°♉	
morning set	16267 Apr 21 21:47	4°♉35'51	
desc. node	16267 Apr 28 11:36	12°♉42'32	
	16267 May 12 11:36	0°♊	
max. Earth dist.	16267 May 27 23:48	19°♊12'16	1.72564 AU
superior conj	16267 May 30 17:54	22°♊37'12	-1°08'40
minimum elong	16267 May 30 07:05	22°♊03'41	1°09'01
	16267 Jun 05 16:38	0°♋	
	16267 Jun 29 19:29	0°♌	
evening rise	16267 Jul 08 18:20	11°♌09'16	
	16267 Jul 23 21:05	0°♍	
	16267 Aug 16 22:53	0°♎	
asc. node	16267 Aug 19 03:20	2°♎43'15	
	16267 Sep 10 02:26	0°♏	
	16267 Oct 04 10:00	0°♐	
	16267 Oct 29 01:40	0°♑	
	16267 Nov 23 09:18	0°♒	
desc. node	16267 Dec 08 21:20	17°♒42'26	
	16267 Dec 20 01:06	0°♓	
evening max el	16268 Jan 09 00:47	20°♓36'28	46°10'32
	16268 Jan 19 03:00	0°♈	
greatest brilliancy	16268 Feb 17 07:38	19°♈25'48	-4.8m
retrograde	16268 Feb 27 07:45	21°♈16'04	
evening set	16268 Mar 13 20:48	16°♈36'08	
inferior conj	16268 Mar 19 16:54	13°♈04'52	-2°43'17
minimum elong	16268 Mar 19 22:51	12°♈55'33	2°41'37
min. Earth dist.	16268 Mar 19 21:29	12°♈57'41	0.28482 AU
morning rise	16268 Mar 26 00:42	9°♈16'50	
asc. node	16268 Mar 30 20:11	6°♈58'11	
direct	16268 Apr 09 22:02	4°♈55'15	
greatest brilliancy	16268 Apr 20 16:30	7°♈02'23	-4.8m
	16268 May 23 01:31	0°♉	
morning max el	16268 May 29 06:51	5°♉57'13	46°04'48
	16268 Jun 21 06:17	0°♊	
	16268 Jul 17 15:18	0°♋	
desc. node	16268 Jul 20 21:19	3°♋48'32	
	16268 Aug 11 20:45	0°♌	
	16268 Sep 05 12:10	0°♍	
	16268 Sep 29 20:22	0°♎	
	16268 Oct 24 01:00	0°♏	
asc. node	16268 Nov 10 17:46	22°♏00'39	
	16268 Nov 17 03:50	0°♐	
morning set	16268 Nov 30 02:49	16°♐08'11	
	16268 Dec 11 05:53	0°♑	
	16269 Jan 04 08:20	0°♒	
superior conj	16269 Jan 06 20:22	3°♒06'33	1°27'02
minimum elong	16269 Jan 06 21:12	3°♒09'10	1°27'39
max. Earth dist.	16269 Jan 09 05:29	6°♒04'00	1.72539 AU
	16269 Jan 28 12:42	0°♓	
evening rise	16269 Feb 13 07:47	19°♓30'51	
	16269 Feb 21 20:10	0°♈	
desc. node	16269 Mar 02 10:27	10°♈33'53	
	16269 Mar 18 07:03	0°♉	
	16269 Apr 11 20:57	0°♊	
	16269 May 06 13:52	0°♋	
	16269 May 31 11:40	0°♌	
asc. node	16269 Jun 23 03:01	26°♌51'26	
	16269 Jun 25 19:24	0°♍	
	16269 Jul 22 00:40	0°♎	
evening max el	16269 Aug 15 05:36	25°♎43'49	46°37'58
	16269 Aug 19 13:49	0°♏	
greatest brilliancy	16269 Sep 23 18:43	25°♏59'56	-4.9m
retrograde	16269 Oct 04 11:13	28°♏08'02	
desc. node	16269 Oct 13 01:36	26°♏37'33	
evening set	16269 Oct 19 00:07	23°♏58'18	
inferior conj	16269 Oct 25 06:21	20°♏19'36	-3°07'27
minimum elong	16269 Oct 24 23:21	20°♏30'14	3°04'48
min. Earth dist.	16269 Oct 24 18:53	20°♏37'00	0.27107 AU
morning rise	16269 Oct 30 22:59	16°♏59'53	
direct	16269 Nov 15 01:10	12°♏35'11	
greatest brilliancy	16269 Nov 24 17:05	14°♏18'40	-4.8m
	16269 Dec 19 16:37	0°♐	
morning max el	16270 Jan 03 13:43	13°♐32'47	46°11'42
	16270 Jan 19 17:00	0°♑	
asc. node	16270 Feb 03 02:15	15°♑37'41	
	16270 Feb 15 20:31	0°♒	
	16270 Mar 13 15:27	0°♓	
	16270 Apr 07 18:32	0°♈	
	16270 May 02 12:41	0°♉	
desc. node	16270 May 26 00:18	28°♉44'53	
	16270 May 27 00:44	0°♊	
	16270 Jun 20 07:50	0°♋	
morning set	16270 Jul 03 14:12	16°♋28'20	
	16270 Jul 14 10:52	0°♌	
	16270 Aug 07 11:07	0°♍	
max. Earth dist.	16270 Aug 10 14:53	3°♍57'04	1.71679 AU
superior conj	16270 Aug 12 04:46	5°♍55'39	-1°12'20
minimum elong	16270 Aug 12 15:49	6°♍30'15	1°12'22
	16270 Aug 31 10:03	0°♎	
asc. node	16270 Sep 15 17:05	19°♎09'13	
evening rise	16270 Sep 21 05:31	26°♎03'46	
	16270 Sep 24 09:01	0°♏	
	16270 Oct 18 09:11	0°♐	
	16270 Nov 11 12:21	0°♑	
	16270 Dec 05 21:23	0°♒	
	16270 Dec 30 16:30	0°♓	
desc. node	16271 Jan 05 09:39	6°♓48'48	
	16271 Jan 25 03:21	0°♈	
	16271 Feb 20 15:42	0°♉	
evening max el	16271 Mar 21 00:21	29°♉35'06	46°00'47
	16271 Mar 21 10:38	0°♊	
asc. node	16271 Apr 28 06:29	28°♊06'21	
greatest brilliancy	16271 Apr 29 04:20	28°♊26'25	-4.8m
	16271 May 05 07:16	0°♋	
retrograde	16271 May 09 05:36	0°♋17'54	
	16271 May 13 01:58	30°℞♊	

evening set	16271 May 25 07:04	25°♊15'34	
inferior conj	16271 May 30 06:50	22°♊12'14	7°00'40
minimum elong	16271 May 29 20:23	22°♊28'40	6°57'55
min. Earth dist.	16271 May 30 04:26	22°♊16'00	0.28225 AU
morning rise	16271 Jun 03 09:41	19°♊39'35	
direct	16271 Jun 20 10:54	14°♊02'45	
greatest brilliancy	16271 Jun 30 11:25	15°♊56'00	-4.8m
	16271 Jul 22 21:46	0°♋	
morning max el	16271 Aug 09 16:06	16°♋24'16	46°45'35
desc. node	16271 Aug 18 07:40	25°♋17'26	
	16271 Aug 22 17:56	0°♌	
	16271 Sep 18 11:29	0°♍	
	16271 Oct 13 21:42	0°♎	
	16271 Nov 07 18:24	0°♏	
	16271 Dec 02 08:13	0°♐	
asc. node	16271 Dec 09 06:01	8°♐28'36	
	16271 Dec 26 17:49	0°♑	
	16272 Jan 20 00:52	0°♒	
morning set	16272 Feb 09 05:51	24°♒59'36	
	16272 Feb 13 07:03	0°♓	
	16272 Mar 08 13:45	0°♈	
superior conj	16272 Mar 17 09:03	10°♈51'50	0°30'10
minimum elong	16272 Mar 17 15:31	11°♈11'47	0°29'48
max. Earth dist.	16272 Mar 18 06:53	11°♈59'13	1.73094 AU
desc. node	16272 Mar 30 00:06	26°♈26'21	
	16272 Apr 01 21:24	0°♉	
evening rise	16272 Apr 24 10:25	27°♉47'18	
	16272 Apr 26 05:28	0°♊	
	16272 May 20 13:13	0°♋	
	16272 Jun 13 20:49	0°♌	
	16272 Jul 08 05:42	0°♍	
asc. node	16272 Jul 20 15:49	15°♍13'22	
	16272 Aug 01 18:28	0°♎	
	16272 Aug 26 15:14	0°♏	
	16272 Sep 21 04:17	0°♐	
	16272 Oct 18 07:33	0°♑	
evening max el	16272 Oct 26 08:12	8°♑13'13	46°33'53
desc. node	16272 Nov 09 12:02	21°♑29'27	
	16272 Nov 20 05:12	0°♒	
greatest brilliancy	16272 Dec 04 20:39	8°♒09'05	-4.8m
retrograde	16272 Dec 15 08:47	10°♒10'28	
evening set	16273 Jan 02 21:04	3°♒46'06	
inferior conj	16273 Jan 05 16:54	2°♒01'20	-8°59'18
minimum elong	16273 Jan 05 17:40	2°♒00'08	8°58'40
min. Earth dist.	16273 Jan 05 06:57	2°♒16'49	0.28390 AU
morning rise	16273 Jan 08 14:24	0°♒14'21	
	16273 Jan 08 23:58	30°℞♑	
direct	16273 Jan 26 21:26	24°♑00'59	
greatest brilliancy	16273 Feb 05 19:17	25°♑48'27	-4.8m
	16273 Feb 14 17:36	0°♒	
asc. node	16273 Mar 02 12:11	11°♒21'15	
morning max el	16273 Mar 16 22:09	24°♒27'50	45°44'33
	16273 Mar 22 12:22	0°♓	
	16273 Apr 19 12:00	0°♈	
	16273 May 15 14:15	0°♉	
	16273 Jun 09 19:37	0°♊	
desc. node	16273 Jun 22 12:10	15°♊20'56	
	16273 Jul 04 12:30	0°♋	
	16273 Jul 28 21:02	0°♌	
	16273 Aug 22 00:16	0°♍	
	16273 Sep 15 00:43	0°♎	
morning set	16273 Sep 15 18:37	0°♎55'57	
	16273 Oct 09 00:04	0°♏	
asc. node	16273 Oct 13 06:31	5°♏20'43	
superior conj	16273 Oct 25 06:21	20°♏21'29	0°28'56
minimum elong	16273 Oct 24 23:30	20°♏00'04	0°29'06
max. Earth dist.	16273 Oct 26 04:27	21°♏30'37	1.71714 AU
	16273 Nov 01 23:17	0°♐	
	16273 Nov 25 23:25	0°♑	
evening rise	16273 Dec 02 12:04	8°♑08'13	
	16273 Dec 20 02:07	0°♒	
	16274 Jan 13 09:33	0°♓	
desc. node	16274 Feb 01 22:46	23°♓52'53	
	16274 Feb 06 23:43	0°♈	
	16274 Mar 03 22:01	0°♉	
	16274 Mar 29 06:19	0°♊	
	16274 Apr 24 06:26	0°♋	
	16274 May 21 17:06	0°♌	
asc. node	16274 May 25 17:13	4°♌07'55	
evening max el	16274 May 31 19:39	10°♌15'08	46°16'00
	16274 Jun 23 05:00	0°♍	
greatest brilliancy	16274 Jul 11 02:43	10°♍07'57	-4.8m
retrograde	16274 Jul 20 11:12	11°♍46'48	
evening set	16274 Aug 06 13:55	6°♍10'36	
inferior conj	16274 Aug 10 04:59	3°♍58'21	7°45'00
minimum elong	16274 Aug 10 14:57	3°♍42'56	7°42'56
min. Earth dist.	16274 Aug 10 23:35	3°♍29'35	0.27408 AU
morning rise	16274 Aug 14 15:43	1°♍16'29	
	16274 Aug 16 22:30	30°℞♌	
direct	16274 Aug 31 01:49	26°♌00'28	
greatest brilliancy	16274 Sep 10 10:21	28°♌00'44	-4.9m
desc. node	16274 Sep 14 17:25	29°♌52'14	
	16274 Sep 14 23:41	0°♍	
morning max el	16274 Oct 20 10:56	28°♍32'35	46°51'37
	16274 Oct 21 21:48	0°♎	
	16274 Nov 18 20:52	0°♏	
	16274 Dec 14 23:42	0°♐	
asc. node	16275 Jan 05 17:33	25°♐43'45	
	16275 Jan 09 07:17	0°♑	
	16275 Feb 03 04:05	0°♒	
	16275 Feb 27 18:38	0°♓	
	16275 Mar 24 05:46	0°♈	
	16275 Apr 17 14:56	0°♉	
morning set	16275 Apr 19 13:17	2°♉22'51	
desc. node	16275 Apr 27 13:23	12°♉15'12	
	16275 May 11 22:12	0°♊	
max. Earth dist.	16275 May 25 18:07	17°♊07'23	1.72598 AU
superior conj	16275 May 28 08:09	20°♊19'40	-1°06'21
minimum elong	16275 May 27 21:12	19°♊45'43	1°06'39
	16275 Jun 05 03:15	0°♋	
	16275 Jun 29 06:12	0°♌	
evening rise	16275 Jul 06 07:24	8°♌46'55	
	16275 Jul 23 07:59	0°♍	
	16275 Aug 16 09:59	0°♎	
asc. node	16275 Aug 18 05:13	2°♎14'28	
	16275 Sep 09 13:50	0°♏	
	16275 Oct 03 21:50	0°♐	
	16275 Oct 28 14:14	0°♑	
	16275 Nov 22 23:15	0°♒	
desc. node	16275 Dec 07 23:16	17°♒04'50	
	16275 Dec 19 18:12	0°♓	
evening max el	16276 Jan 06 15:47	18°♓22'35	46°11'25
	16276 Jan 19 07:19	0°♈	
greatest brilliancy	16276 Feb 14 22:31	17°♈12'45	-4.8m
retrograde	16276 Feb 24 23:46	19°♈03'50	
evening set	16276 Mar 11 14:25	14°♈20'35	
inferior conj	16276 Mar 17 08:29	10°♈52'14	-3°03'29
minimum elong	16276 Mar 17 15:06	10°♈41'53	3°01'37
min. Earth dist.	16276 Mar 17 13:05	10°♈45'02	0.28493 AU
morning rise	16276 Mar 23 15:38	7°♈05'32	
asc. node	16276 Mar 29 22:04	4°♈13'50	

direct	16276 Apr 07 13:53	2°♈42'36	
greatest brilliancy	16276 Apr 18 08:22	4°♈50'13	-4.8m
	16276 May 23 01:37	0°♉	
morning max el	16276 May 26 23:02	3°♉45'35	46°03'35
	16276 Jun 20 22:23	0°♊	
	16276 Jul 17 04:50	0°♋	
desc. node	16276 Jul 19 23:20	3°♋15'14	
	16276 Aug 11 09:08	0°♌	
	16276 Sep 04 23:57	0°♍	
	16276 Sep 29 07:46	0°♎	
	16276 Oct 23 12:08	0°♏	
asc. node	16276 Nov 09 19:35	21°♏32'02	
	16276 Nov 16 14:47	0°♐	
morning set	16276 Nov 27 17:06	13°♐49'17	
	16276 Dec 10 16:41	0°♑	
	16277 Jan 03 19:04	0°♒	
superior conj	16277 Jan 04 12:09	0°♒53'06	1°27'06
minimum elong	16277 Jan 04 12:09	0°♒53'08	1°27'44
max. Earth dist.	16277 Jan 06 22:41	3°♒55'03	1.72508 AU
	16277 Jan 27 23:25	0°♓	
evening rise	16277 Feb 10 23:25	17°♓17'53	
	16277 Feb 21 06:58	0°♈	
desc. node	16277 Mar 01 12:16	10°♈06'01	
	16277 Mar 17 18:03	0°♉	
	16277 Apr 11 08:17	0°♊	
	16277 May 06 01:42	0°♋	
	16277 May 31 00:16	0°♌	
asc. node	16277 Jun 22 05:00	26°♌16'59	
	16277 Jun 25 09:22	0°♍	
	16277 Jul 21 17:29	0°♎	
evening max el	16277 Aug 12 20:20	23°♎24'07	46°37'27
	16277 Aug 19 15:05	0°♏	
greatest brilliancy	16277 Sep 21 08:21	23°♏36'10	-4.9m
retrograde	16277 Oct 02 00:58	25°♏43'46	
desc. node	16277 Oct 12 03:24	23°♏39'28	
evening set	16277 Oct 16 12:13	21°♏35'50	
inferior conj	16277 Oct 22 19:10	17°♏55'52	-2°44'34
minimum elong	16277 Oct 22 12:57	18°♏05'19	2°42'10
min. Earth dist.	16277 Oct 22 08:32	18°♏12'02	0.27078 AU
morning rise	16277 Oct 28 14:09	14°♏33'07	
direct	16277 Nov 12 14:31	10°♏11'48	
greatest brilliancy	16277 Nov 22 05:50	11°♏55'07	-4.8m
	16277 Dec 20 00:17	0°♐	
morning max el	16278 Jan 01 03:35	11°♐13'21	46°13'07
	16278 Jan 19 11:07	0°♑	
asc. node	16278 Feb 02 04:12	14°♑59'14	
	16278 Feb 15 10:55	0°♒	
	16278 Mar 13 04:11	0°♓	
	16278 Apr 07 06:22	0°♈	
	16278 May 02 00:01	0°♉	
desc. node	16278 May 25 02:07	28°♉16'21	
	16278 May 26 11:49	0°♊	
	16278 Jun 19 18:47	0°♋	
morning set	16278 Jul 01 02:52	14°♋04'40	
	16278 Jul 13 21:44	0°♌	
	16278 Aug 06 21:56	0°♍	
max. Earth dist.	16278 Aug 08 00:49	1°♍24'04	1.71693 AU
superior conj	16278 Aug 09 17:19	3°♍30'47	-1°14'27
minimum elong	16278 Aug 10 03:58	4°♍04'07	1°14'31
	16278 Aug 30 20:54	0°♎	
asc. node	16278 Sep 14 18:49	18°♎40'33	
evening rise	16278 Sep 18 18:24	23°♎39'43	
	16278 Sep 23 19:56	0°♏	
	16278 Oct 17 20:15	0°♐	
	16278 Nov 10 23:37	0°♑	
	16278 Dec 05 09:01	0°♒	
	16278 Dec 30 04:48	0°♓	
desc. node	16279 Jan 04 11:33	6°♓17'19	
	16279 Jan 24 16:52	0°♈	
	16279 Feb 20 07:44	0°♉	
evening max el	16279 Mar 18 15:14	27°♉20'05	46°00'39
	16279 Mar 21 09:53	0°♊	
greatest brilliancy	16279 Apr 26 19:15	26°♊10'45	-4.8m
asc. node	16279 Apr 27 08:22	26°♊22'04	
retrograde	16279 May 06 19:52	28°♊01'40	
evening set	16279 May 22 18:44	23°♊04'19	
inferior conj	16279 May 27 21:54	19°♊55'55	6°46'26
minimum elong	16279 May 27 11:21	20°♊12'32	6°43'36
min. Earth dist.	16279 May 27 19:22	19°♊59'54	0.28233 AU
morning rise	16279 Jun 01 03:54	17°♊18'18	
direct	16279 Jun 18 01:54	11°♊46'28	
greatest brilliancy	16279 Jun 28 02:58	13°♊39'43	-4.8m
	16279 Jul 23 05:45	0°♋	
morning max el	16279 Aug 07 05:30	14°♋02'28	46°44'32
desc. node	16279 Aug 17 09:28	24°♋31'27	
	16279 Aug 22 12:05	0°♌	
	16279 Sep 18 02:03	0°♍	
	16279 Oct 13 10:41	0°♎	
	16279 Nov 07 06:31	0°♏	
	16279 Dec 01 19:47	0°♐	
asc. node	16279 Dec 08 07:58	7°♐59'28	
	16279 Dec 26 05:01	0°♑	
	16280 Jan 19 11:49	0°♒	
morning set	16280 Feb 06 22:28	22°♒49'03	
	16280 Feb 12 17:51	0°♓	
	16280 Mar 08 00:30	0°♈	
superior conj	16280 Mar 15 00:56	8°♈39'42	0°33'23
minimum elong	16280 Mar 15 07:59	9°♈01'25	0°33'00
max. Earth dist.	16280 Mar 15 23:13	9°♈48'24	1.73089 AU
desc. node	16280 Mar 29 01:49	25°♈58'23	
	16280 Apr 01 08:11	0°♉	
evening rise	16280 Apr 22 01:46	25°♉33'12	
	16280 Apr 25 16:21	0°♊	
	16280 May 20 00:17	0°♋	
	16280 Jun 13 08:09	0°♌	
	16280 Jul 07 17:26	0°♍	
asc. node	16280 Jul 19 17:40	14°♍42'22	
	16280 Aug 01 06:49	0°♎	
	16280 Aug 26 04:34	0°♏	
	16280 Sep 20 19:29	0°♐	
	16280 Oct 18 03:25	0°♑	
evening max el	16280 Oct 23 21:33	5°♑51'28	46°34'27
desc. node	16280 Nov 08 13:58	20°♑27'35	
	16280 Nov 21 04:16	0°♒	
greatest brilliancy	16280 Dec 02 11:36	5°♒53'07	-4.8m
retrograde	16280 Dec 12 23:21	7°♒54'45	
evening set	16280 Dec 31 11:21	1°♒31'44	
	16281 Jan 02 22:54	30°℞♑	
inferior conj	16281 Jan 03 07:49	29°♑46'08	-8°59'48
minimum elong	16281 Jan 03 07:42	29°♑46'19	8°59'11
min. Earth dist.	16281 Jan 02 21:19	0°♒02'28	0.28362 AU
morning rise	16281 Jan 06 04:08	28°♑00'57	
direct	16281 Jan 24 11:34	21°♑46'12	
greatest brilliancy	16281 Feb 03 09:36	23°♑33'24	-4.8m
	16281 Feb 15 23:56	0°♒	
asc. node	16281 Mar 01 14:02	10°♒20'28	
morning max el	16281 Mar 14 11:54	22°♒10'03	45°44'44
	16281 Mar 22 08:29	0°♓	
	16281 Apr 19 03:03	0°♈	
	16281 May 15 03:20	0°♉	
	16281 Jun 09 07:42	0°♊	

desc. node	16281 Jun 21 14:08	14°♊51'11	
	16281 Jul 04 00:02	0°♋	
	16281 Jul 28 08:15	0°♌	
	16281 Aug 21 11:20	0°♍	
morning set	16281 Sep 13 07:15	28°♍31'07	
	16281 Sep 14 11:40	0°♎	
	16281 Oct 08 10:55	0°♏	
asc. node	16281 Oct 12 08:21	4°♏52'30	
superior conj	16281 Oct 22 19:52	17°♏59'48	0°25'24
minimum elong	16281 Oct 22 13:45	17°♏40'39	0°25'35
max. Earth dist.	16281 Oct 23 13:19	18°♏54'26	1.71694 AU
	16281 Nov 01 10:04	0°♐	
	16281 Nov 25 10:11	0°♑	
evening rise	16281 Nov 30 03:15	5°♑52'27	
	16281 Dec 19 12:57	0°♒	
	16282 Jan 12 20:36	0°♓	
desc. node	16282 Feb 01 00:34	23°♓24'00	
	16282 Feb 06 11:09	0°♈	
	16282 Mar 03 10:02	0°♉	
	16282 Mar 28 19:23	0°♊	
	16282 Apr 23 21:28	0°♋	
	16282 May 21 12:51	0°♌	
asc. node	16282 May 24 19:15	3°♌20'10	
evening max el	16282 May 29 08:40	7°♌53'10	46°15'17
	16282 Jun 24 01:08	0°♍	
greatest brilliancy	16282 Jul 08 15:39	7°♍45'16	-4.8m
retrograde	16282 Jul 18 00:45	9°♍24'41	
evening set	16282 Aug 04 06:32	3°♍42'42	
inferior conj	16282 Aug 07 18:20	1°♍35'17	7°56'48
minimum elong	16282 Aug 08 03:53	1°♍20'32	7°54'55
min. Earth dist.	16282 Aug 08 12:43	1°♍06'54	0.27451 AU
	16282 Aug 10 08:22	30°℞♌	
morning rise	16282 Aug 12 00:59	28°♌59'30	
direct	16282 Aug 28 15:27	23°♌36'28	
greatest brilliancy	16282 Sep 07 23:52	25°♌37'03	-4.9m
desc. node	16282 Sep 13 19:19	28°♌15'13	
	16282 Sep 16 21:09	0°♍	
morning max el	16282 Oct 18 01:54	26°♍13'11	46°52'27
	16282 Oct 21 19:39	0°♎	
	16282 Nov 18 12:47	0°♏	
	16282 Dec 14 13:14	0°♐	
asc. node	16283 Jan 04 19:26	25°♐12'17	
	16283 Jan 08 19:32	0°♑	
	16283 Feb 02 15:37	0°♒	
	16283 Feb 27 05:43	0°♓	
	16283 Mar 23 16:37	0°♈	
morning set	16283 Apr 17 04:44	0°♉09'30	
	16283 Apr 17 01:39	0°♉	
desc. node	16283 Apr 26 15:16	11°♉47'57	
	16283 May 11 08:54	0°♊	
max. Earth dist.	16283 May 23 12:05	15°♊01'05	1.72631 AU
superior conj	16283 May 25 22:07	18°♊00'54	-1°03'53
minimum elong	16283 May 25 11:07	17°♊26'47	1°04'10
	16283 Jun 04 13:58	0°♋	
	16283 Jun 28 17:00	0°♌	
evening rise	16283 Jul 03 20:11	6°♌23'32	
	16283 Jul 22 18:55	0°♍	
	16283 Aug 15 21:07	0°♎	
asc. node	16283 Aug 17 06:56	1°♎45'09	
	16283 Sep 09 01:15	0°♏	
	16283 Oct 03 09:42	0°♐	
	16283 Oct 28 02:52	0°♑	
	16283 Nov 22 13:19	0°♒	
desc. node	16283 Dec 07 01:15	16°♒27'10	
	16283 Dec 19 11:35	0°♓	
evening max el	16284 Jan 04 07:36	16°♓10'59	46°12'19
	16284 Jan 19 13:30	0°♈	
greatest brilliancy	16284 Feb 12 13:19	15°♈00'08	-4.8m
retrograde	16284 Feb 22 15:48	16°♈51'51	
evening set	16284 Mar 09 08:11	12°♈05'25	
inferior conj	16284 Mar 15 00:03	8°♈39'57	-3°23'17
minimum elong	16284 Mar 15 07:17	8°♈28'38	3°21'14
min. Earth dist.	16284 Mar 15 04:24	8°♈33'08	0.28505 AU
morning rise	16284 Mar 21 06:22	4°♈54'45	
asc. node	16284 Mar 28 23:58	1°♈34'33	
direct	16284 Apr 05 06:05	0°♈30'31	
greatest brilliancy	16284 Apr 15 23:34	2°♈37'36	-4.8m
	16284 May 23 00:34	0°♉	
morning max el	16284 May 24 15:07	1°♉33'54	46°02'10
	16284 Jun 20 14:12	0°♊	
	16284 Jul 16 18:16	0°♋	
desc. node	16284 Jul 19 01:09	2°♋41'25	
	16284 Aug 10 21:27	0°♌	
	16284 Sep 04 11:37	0°♍	
	16284 Sep 28 19:02	0°♎	
	16284 Oct 22 23:06	0°♏	
asc. node	16284 Nov 08 21:28	21°♏04'11	
	16284 Nov 16 01:33	0°♐	
morning set	16284 Nov 25 07:21	11°♐30'48	
	16284 Dec 10 03:20	0°♑	
superior conj	16285 Jan 02 04:00	28°♑40'18	1°27'02
minimum elong	16285 Jan 02 03:11	28°♑37'47	1°27'41
	16285 Jan 03 05:38	0°♒	
max. Earth dist.	16285 Jan 04 16:12	1°♒47'27	1.72476 AU
	16285 Jan 27 09:58	0°♓	
evening rise	16285 Feb 08 15:10	15°♓05'47	
	16285 Feb 20 17:35	0°♈	
desc. node	16285 Feb 28 14:00	9°♈38'36	
	16285 Mar 17 04:52	0°♉	
	16285 Apr 10 19:26	0°♊	
	16285 May 05 13:24	0°♋	
	16285 May 30 12:48	0°♌	
asc. node	16285 Jun 21 06:50	25°♌42'08	
	16285 Jun 24 23:23	0°♍	
	16285 Jul 21 10:33	0°♎	
evening max el	16285 Aug 10 10:52	21°♎04'06	46°36'58
	16285 Aug 19 17:40	0°♏	
greatest brilliancy	16285 Sep 18 22:42	21°♏13'39	-4.9m
retrograde	16285 Sep 29 14:15	23°♏19'47	
desc. node	16285 Oct 11 05:23	20°♏36'43	
evening set	16285 Oct 14 00:35	19°♏13'37	
inferior conj	16285 Oct 20 08:00	15°♏32'45	-2°21'25
minimum elong	16285 Oct 20 02:36	15°♏40'59	2°19'16
min. Earth dist.	16285 Oct 19 22:29	15°♏47'14	0.27045 AU
morning rise	16285 Oct 26 05:05	12°♏06'59	
direct	16285 Nov 10 03:31	7°♏49'09	
greatest brilliancy	16285 Nov 19 18:48	9°♏32'22	-4.8m
	16285 Dec 20 05:18	0°♐	
morning max el	16285 Dec 29 16:31	8°♐52'22	46°14'31
	16286 Jan 19 04:29	0°♑	
asc. node	16286 Feb 01 05:59	14°♑21'38	
	16286 Feb 15 00:50	0°♒	
	16286 Mar 12 16:30	0°♓	
	16286 Apr 06 17:51	0°♈	
	16286 May 01 11:02	0°♉	
desc. node	16286 May 24 04:03	27°♉49'09	
	16286 May 25 22:35	0°♊	
	16286 Jun 19 05:26	0°♋	
morning set	16286 Jun 28 15:27	11°♋41'37	
	16286 Jul 13 08:20	0°♌	
max. Earth dist.	16286 Aug 05 07:51	28°♌42'47	1.71714 AU

	16286 Aug 06 08:33	0°♍	
superior conj	16286 Aug 07 05:36	1°♍05'50	-1°16'25
minimum elong	16286 Aug 07 15:46	1°♍37'40	1°16'34
	16286 Aug 30 07:32	0°♎	
asc. node	16286 Sep 13 20:39	18°♎12'50	
evening rise	16286 Sep 16 06:41	21°♎14'28	
	16286 Sep 23 06:38	0°♏	
	16286 Oct 17 07:04	0°♐	
	16286 Nov 10 10:37	0°♑	
	16286 Dec 04 20:23	0°♒	
	16286 Dec 29 16:49	0°♓	
desc. node	16287 Jan 03 13:20	5°♓46'25	
	16287 Jan 24 06:08	0°♈	
	16287 Feb 19 23:40	0°♉	
evening max el	16287 Mar 16 05:34	25°♉04'53	46°00'36
	16287 Mar 21 09:43	0°♊	
greatest brilliancy	16287 Apr 24 10:22	23°♊56'44	-4.8m
asc. node	16287 Apr 26 10:23	24°♊35'26	
retrograde	16287 May 04 10:13	25°♊47'18	
evening set	16287 May 20 06:36	20°♊54'24	
inferior conj	16287 May 25 13:05	17°♊41'23	6°31'36
minimum elong	16287 May 25 02:30	17°♊58'05	6°28'39
min. Earth dist.	16287 May 25 10:38	17°♊45'15	0.28242 AU
morning rise	16287 May 29 22:14	14°♊58'56	
direct	16287 Jun 15 16:36	9°♊31'46	
greatest brilliancy	16287 Jun 25 19:05	11°♊25'45	-4.8m
	16287 Jul 23 10:50	0°♋	
morning max el	16287 Aug 04 18:51	11°♋41'44	46°43'19
desc. node	16287 Aug 16 11:25	23°♋47'38	
	16287 Aug 22 05:24	0°♌	
	16287 Sep 17 16:09	0°♍	
	16287 Oct 12 23:20	0°♎	
	16287 Nov 06 18:20	0°♏	
	16287 Dec 01 07:01	0°♐	
asc. node	16287 Dec 07 09:49	7°♐31'00	
	16287 Dec 25 15:51	0°♑	
	16288 Jan 18 22:22	0°♒	
morning set	16288 Feb 04 15:00	20°♒39'24	
	16288 Feb 12 04:16	0°♓	
	16288 Mar 07 10:53	0°♈	
superior conj	16288 Mar 12 17:00	6°♈29'10	0°36'31
minimum elong	16288 Mar 13 00:35	6°♈52'34	0°36'10
max. Earth dist.	16288 Mar 13 15:32	7°♈38'43	1.73085 AU
desc. node	16288 Mar 28 03:45	25°♈32'17	
	16288 Mar 31 18:36	0°♉	
evening rise	16288 Apr 19 17:26	23°♉21'16	
	16288 Apr 25 02:51	0°♊	
	16288 May 19 10:56	0°♋	
	16288 Jun 12 19:04	0°♌	
	16288 Jul 07 04:47	0°♍	
asc. node	16288 Jul 18 19:27	14°♍12'22	
	16288 Jul 31 18:49	0°♎	
	16288 Aug 25 17:38	0°♏	
	16288 Sep 20 10:35	0°♐	
	16288 Oct 17 23:40	0°♑	
evening max el	16288 Oct 21 10:53	3°♑30'21	46°35'04
desc. node	16288 Nov 07 15:59	19°♑24'51	
	16288 Nov 22 12:07	0°♒	
greatest brilliancy	16288 Nov 30 02:06	3°♒36'56	-4.8m
retrograde	16288 Dec 10 14:15	5°♒39'29	
	16288 Dec 27 21:05	30°℞♑	
evening set	16288 Dec 29 01:00	29°♑18'20	
inferior conj	16288 Dec 31 22:34	27°♑31'17	-8°59'29
minimum elong	16288 Dec 31 21:32	27°♑32'54	8°58'50
min. Earth dist.	16288 Dec 31 11:21	27°♑48'42	0.28329 AU
morning rise	16289 Jan 03 18:11	25°♑47'22	
direct	16289 Jan 22 01:27	19°♑31'47	
greatest brilliancy	16289 Jan 31 23:41	21°♑18'58	-4.8m
	16289 Feb 16 21:15	0°♒	
asc. node	16289 Feb 28 16:03	9°♒22'30	
morning max el	16289 Mar 12 02:18	19°♒55'03	45°45'02
	16289 Mar 22 03:32	0°♓	
	16289 Apr 18 17:27	0°♈	
	16289 May 14 15:53	0°♉	
	16289 Jun 08 19:20	0°♊	
desc. node	16289 Jun 20 15:55	14°♊22'04	
	16289 Jul 03 11:08	0°♋	
	16289 Jul 27 19:04	0°♌	
	16289 Aug 20 21:58	0°♍	
morning set	16289 Sep 10 20:05	26°♍08'07	
	16289 Sep 13 22:13	0°♎	
	16289 Oct 07 21:25	0°♏	
asc. node	16289 Oct 11 10:15	4°♏25'36	
superior conj	16289 Oct 20 09:12	15°♏38'31	0°21'49
minimum elong	16289 Oct 20 03:52	15°♏21'48	0°21'59
max. Earth dist.	16289 Oct 20 23:39	16°♏23'44	1.71682 AU
	16289 Oct 31 20:33	0°♐	
	16289 Nov 24 20:41	0°♑	
evening rise	16289 Nov 27 18:11	3°♑36'42	
	16289 Dec 18 23:32	0°♒	
	16290 Jan 12 07:23	0°♓	
desc. node	16290 Jan 31 02:21	22°♓55'58	
	16290 Feb 05 22:16	0°♈	
	16290 Mar 02 21:46	0°♉	
	16290 Mar 28 08:11	0°♊	
	16290 Apr 23 12:19	0°♋	
	16290 May 21 08:49	0°♌	
asc. node	16290 May 23 21:07	2°♌32'19	
evening max el	16290 May 26 22:57	5°♌35'35	46°14'36
	16290 Jun 25 03:51	0°♍	
greatest brilliancy	16290 Jul 06 04:29	5°♍24'12	-4.8m
retrograde	16290 Jul 15 14:46	7°♍04'19	
evening set	16290 Aug 01 23:14	1°♍16'57	
	16290 Aug 04 02:06	30°℞♌	
inferior conj	16290 Aug 05 07:54	29°♌14'04	8°07'37
minimum elong	16290 Aug 05 16:56	29°♌00'06	8°05'54
min. Earth dist.	16290 Aug 06 01:41	28°♌46'35	0.27490 AU
morning rise	16290 Aug 09 10:27	26°♌44'20	
direct	16290 Aug 26 05:44	21°♌14'36	
greatest brilliancy	16290 Sep 05 12:56	23°♌14'36	-4.9m
desc. node	16290 Sep 12 21:17	26°♌43'24	
	16290 Sep 18 03:08	0°♍	
morning max el	16290 Oct 15 17:17	23°♍56'12	46°53'04
	16290 Oct 21 16:13	0°♎	
	16290 Nov 18 04:04	0°♏	
	16290 Dec 14 02:21	0°♐	
asc. node	16291 Jan 03 21:13	24°♐41'20	
	16291 Jan 08 07:30	0°♑	
	16291 Feb 02 02:54	0°♒	
	16291 Feb 26 16:35	0°♓	
	16291 Mar 23 03:13	0°♈	
morning set	16291 Apr 14 20:19	27°♈57'24	
	16291 Apr 16 12:07	0°♉	
desc. node	16291 Apr 25 17:04	11°♉21'15	
	16291 May 10 19:19	0°♊	
max. Earth dist.	16291 May 21 05:38	12°♊54'22	1.72662 AU
superior conj	16291 May 23 12:15	15°♊43'31	-1°01'21
minimum elong	16291 May 23 01:17	15°♊09'33	1°01'36
	16291 Jun 04 00:27	0°♋	
	16291 Jun 28 03:36	0°♌	

evening rise	16291 Jul 01 09:14	4°♌01'42	
	16291 Jul 22 05:38	0°♍	
	16291 Aug 15 08:01	0°♎	
asc. node	16291 Aug 16 08:49	1°♎17'07	
	16291 Sep 08 12:25	0°♏	
	16291 Oct 02 21:20	0°♐	
	16291 Oct 27 15:18	0°♑	
	16291 Nov 22 03:17	0°♒	
desc. node	16291 Dec 06 03:01	15°♒49'10	
	16291 Dec 19 05:11	0°♓	
evening max el	16292 Jan 01 23:47	14°♓00'32	46°13'00
	16292 Jan 19 22:01	0°♈	
greatest brilliancy	16292 Feb 10 04:45	12°♈48'28	-4.8m
retrograde	16292 Feb 20 07:32	14°♈39'57	
evening set	16292 Mar 07 02:07	9°♈50'31	
inferior conj	16292 Mar 12 15:38	6°♈28'01	-3°42'44
minimum elong	16292 Mar 12 23:27	6°♈15'47	3°40'33
min. Earth dist.	16292 Mar 12 19:52	6°♈21'23	0.28514 AU
morning rise	16292 Mar 18 20:50	2°♈44'23	
	16292 Mar 24 18:47	30°℞♓	
asc. node	16292 Mar 28 01:58	29°♓00'19	
direct	16292 Apr 02 22:16	28°♓18'56	
	16292 Apr 12 10:35	0°♈	
greatest brilliancy	16292 Apr 13 14:30	0°♈24'58	-4.8m
morning max el	16292 May 22 06:33	29°♈21'03	46°00'47
	16292 May 22 22:25	0°♉	
	16292 Jun 20 05:37	0°♊	
	16292 Jul 16 07:27	0°♋	
desc. node	16292 Jul 18 03:01	2°♋08'27	
	16292 Aug 10 09:34	0°♌	
	16292 Sep 03 23:09	0°♍	
	16292 Sep 28 06:09	0°♎	
	16292 Oct 22 09:57	0°♏	
asc. node	16292 Nov 07 23:16	20°♏36'23	
	16292 Nov 15 12:12	0°♐	
morning set	16292 Nov 22 21:56	9°♐13'45	
	16292 Dec 09 13:52	0°♑	
superior conj	16292 Dec 30 20:08	26°♑28'36	1°26'50
minimum elong	16292 Dec 30 18:30	26°♑23'34	1°27'29
max. Earth dist.	16293 Jan 02 09:42	29°♑40'04	1.72446 AU
	16293 Jan 02 16:07	0°♒	
	16293 Jan 26 20:28	0°♓	
evening rise	16293 Feb 06 07:00	12°♓53'57	
	16293 Feb 20 04:12	0°♈	
desc. node	16293 Feb 27 15:56	9°♈11'46	
	16293 Mar 16 15:42	0°♉	
	16293 Apr 10 06:37	0°♊	
	16293 May 05 01:07	0°♋	
	16293 May 30 01:24	0°♌	
asc. node	16293 Jun 20 08:39	25°♌07'05	
	16293 Jun 24 13:32	0°♍	
	16293 Jul 21 04:01	0°♎	
evening max el	16293 Aug 08 00:38	18°♎42'06	46°36'22
	16293 Aug 19 21:58	0°♏	
greatest brilliancy	16293 Sep 16 13:43	18°♏51'46	-4.9m
retrograde	16293 Sep 27 03:06	20°♏55'50	
desc. node	16293 Oct 10 07:22	17°♏29'25	
evening set	16293 Oct 11 13:14	16°♏50'59	
inferior conj	16293 Oct 17 20:54	13°♏09'44	-1°58'01
minimum elong	16293 Oct 17 16:21	13°♏16'40	1°56'08
min. Earth dist.	16293 Oct 17 12:56	13°♏21'53	0.27015 AU
morning rise	16293 Oct 23 19:53	9°♏41'03	
direct	16293 Nov 07 15:59	5°♏26'21	
greatest brilliancy	16293 Nov 17 08:24	7°♏10'08	-4.8m
	16293 Dec 20 08:32	0°♐	
morning max el	16293 Dec 27 04:56	6°♐29'54	46°16'06
	16294 Jan 18 21:28	0°♑	
asc. node	16294 Jan 31 08:00	13°♑44'54	
	16294 Feb 14 14:38	0°♒	
	16294 Mar 12 04:51	0°♓	
	16294 Apr 06 05:25	0°♈	
	16294 Apr 30 22:11	0°♉	
desc. node	16294 May 23 05:50	27°♉20'59	
	16294 May 25 09:30	0°♊	
	16294 Jun 18 16:13	0°♋	
morning set	16294 Jun 26 03:58	9°♋17'55	
	16294 Jul 12 19:04	0°♌	
max. Earth dist.	16294 Aug 02 15:30	26°♌03'01	1.71738 AU
superior conj	16294 Aug 04 17:55	28°♌40'40	-1°18'15
minimum elong	16294 Aug 05 03:33	29°♌10'48	1°18'27
	16294 Aug 05 19:17	0°♍	
	16294 Aug 29 18:20	0°♎	
asc. node	16294 Sep 12 22:32	17°♎44'46	
evening rise	16294 Sep 13 18:59	18°♎48'46	
	16294 Sep 22 17:32	0°♏	
	16294 Oct 16 18:06	0°♐	
	16294 Nov 09 21:51	0°♑	
	16294 Dec 04 07:58	0°♒	
	16294 Dec 29 05:05	0°♓	
desc. node	16295 Jan 02 15:14	5°♓15'13	
	16295 Jan 23 19:43	0°♈	
	16295 Feb 19 16:06	0°♉	
evening max el	16295 Mar 13 19:37	22°♉48'29	46°00'31
	16295 Mar 21 11:07	0°♊	
greatest brilliancy	16295 Apr 22 01:07	21°♊41'25	-4.8m
asc. node	16295 Apr 25 12:14	22°♊43'37	
retrograde	16295 May 02 00:49	23°♊32'14	
evening set	16295 May 17 18:36	18°♊43'11	
inferior conj	16295 May 23 04:17	15°♊25'58	6°16'09
minimum elong	16295 May 22 17:42	15°♊42'38	6°13'07
min. Earth dist.	16295 May 23 01:53	15°♊29'44	0.28254 AU
morning rise	16295 May 27 16:35	12°♊38'53	
direct	16295 Jun 13 07:14	7°♊16'01	
greatest brilliancy	16295 Jun 23 11:27	9°♊11'14	-4.8m
	16295 Jul 23 14:27	0°♋	
morning max el	16295 Aug 02 09:04	9°♋22'26	46°42'11
desc. node	16295 Aug 15 13:27	23°♋03'45	
	16295 Aug 21 22:39	0°♌	
	16295 Sep 17 06:22	0°♍	
	16295 Oct 12 12:10	0°♎	
	16295 Nov 06 06:22	0°♏	
	16295 Nov 30 18:32	0°♐	
asc. node	16295 Dec 06 11:35	7°♐01'20	
	16295 Dec 25 02:59	0°♑	
	16296 Jan 18 09:15	0°♒	
morning set	16296 Feb 02 07:41	18°♒29'06	
	16296 Feb 11 15:00	0°♓	
	16296 Mar 06 21:34	0°♈	
superior conj	16296 Mar 10 09:13	4°♈18'11	0°39'35
minimum elong	16296 Mar 10 17:18	4°♈43'07	0°39'15
max. Earth dist.	16296 Mar 11 10:08	5°♈35'02	1.73081 AU
desc. node	16296 Mar 27 05:33	25°♈04'50	
	16296 Mar 31 05:20	0°♉	
evening rise	16296 Apr 17 09:15	21°♉08'53	
	16296 Apr 24 13:42	0°♊	
	16296 May 18 21:59	0°♋	
	16296 Jun 12 06:26	0°♌	
	16296 Jul 06 16:35	0°♍	
asc. node	16296 Jul 17 21:21	13°♍41'22	
	16296 Jul 31 07:17	0°♎	
	16296 Aug 25 07:14	0°♏	

	16296 Sep 20 02:22	0°♐	
	16296 Oct 17 21:09	0°♑	
evening max el	16296 Oct 19 00:54	1°♑09'39	46°35'38
desc. node	16296 Nov 06 17:46	18°♑18'33	
	16296 Nov 24 13:14	0°♒	
greatest brilliancy	16296 Nov 27 15:48	1°♒18'07	-4.8m
retrograde	16296 Dec 08 05:24	3°♒22'14	
	16296 Dec 21 06:48	30°℞♑	
evening set	16296 Dec 26 13:59	27°♑03'27	
min. Earth dist.	16296 Dec 29 00:55	25°♑33'11	0.28296 AU
inferior conj	16296 Dec 29 13:06	25°♑14'20	-8°58'20
minimum elong	16296 Dec 29 11:10	25°♑17'20	8°57'37
morning rise	16297 Jan 01 08:27	23°♑31'03	
direct	16297 Jan 19 15:29	17°♑15'13	
greatest brilliancy	16297 Jan 29 13:08	19°♑02'07	-4.8m
	16297 Feb 17 13:45	0°♒	
asc. node	16297 Feb 27 17:58	8°♒24'13	
morning max el	16297 Mar 09 17:28	17°♒40'38	45°45'33
	16297 Mar 21 22:32	0°♓	
	16297 Apr 18 08:06	0°♈	
	16297 May 14 04:46	0°♉	
	16297 Jun 08 07:20	0°♊	
desc. node	16297 Jun 19 17:48	13°♊52'03	
	16297 Jul 02 22:40	0°♋	
	16297 Jul 27 06:20	0°♌	
	16297 Aug 20 09:05	0°♍	
morning set	16297 Sep 08 08:39	23°♍42'49	
	16297 Sep 13 09:14	0°♎	
	16297 Oct 07 08:21	0°♏	
asc. node	16297 Oct 10 11:59	3°♏56'48	
superior conj	16297 Oct 17 22:13	13°♏14'50	0°18'09
minimum elong	16297 Oct 17 17:42	13°♏00'41	0°18'20
max. Earth dist.	16297 Oct 18 12:36	13°♏59'52	1.71669 AU
	16297 Oct 31 07:26	0°♐	
	16297 Nov 24 07:36	0°♑	
evening rise	16297 Nov 25 09:02	1°♑19'19	
	16297 Dec 18 10:35	0°♒	
	16298 Jan 11 18:38	0°♓	
desc. node	16298 Jan 30 04:17	22°♓26'57	
	16298 Feb 05 09:53	0°♈	
	16298 Mar 02 10:00	0°♉	
	16298 Mar 27 21:30	0°♊	
	16298 Apr 23 03:50	0°♋	
	16298 May 21 05:57	0°♌	
asc. node	16298 May 22 22:57	1°♌42'19	
evening max el	16298 May 24 13:47	3°♌18'14	46°13'47
	16298 Jun 26 19:23	0°♍	
greatest brilliancy	16298 Jul 03 17:12	3°♍01'40	-4.8m
retrograde	16298 Jul 13 04:24	4°♍42'07	
	16298 Jul 28 15:22	30°℞♌	
evening set	16298 Jul 30 15:47	28°♌49'46	
inferior conj	16298 Aug 02 21:23	26°♌51'08	8°17'39
minimum elong	16298 Aug 03 05:50	26°♌38'03	8°16'06
min. Earth dist.	16298 Aug 03 14:28	26°♌24'42	0.27531 AU
morning rise	16298 Aug 06 19:46	24°♌27'23	
direct	16298 Aug 23 20:12	18°♌51'10	
greatest brilliancy	16298 Sep 03 01:48	20°♌50'03	-4.9m
desc. node	16298 Sep 11 23:13	25°♌12'56	
	16298 Sep 19 01:42	0°♍	
morning max el	16298 Oct 13 08:07	21°♍36'11	46°53'35
	16298 Oct 21 12:44	0°♎	
	16298 Nov 17 19:37	0°♏	
	16298 Dec 13 15:48	0°♐	
asc. node	16299 Jan 02 23:13	24°♐09'51	
	16299 Jan 07 19:50	0°♑	
	16299 Feb 01 14:34	0°♒	
	16299 Feb 26 03:50	0°♓	
	16299 Mar 22 14:13	0°♈	
morning set	16299 Apr 12 12:03	25°♈44'31	
	16299 Apr 15 22:58	0°♉	
desc. node	16299 Apr 24 18:51	10°♉53'18	
	16299 May 10 06:08	0°♊	
max. Earth dist.	16299 May 18 21:51	10°♊42'31	1.72688 AU
superior conj	16299 May 21 02:36	13°♊25'49	-0°58'43
minimum elong	16299 May 20 15:45	12°♊52'13	0°58'56
	16299 Jun 03 11:17	0°♋	
	16299 Jun 27 14:31	0°♌	
evening rise	16299 Jun 28 22:27	1°♌39'23	
	16299 Jul 21 16:43	0°♍	
	16299 Aug 14 19:18	0°♎	
asc. node	16299 Aug 15 10:41	0°♎47'45	
	16299 Sep 08 00:02	0°♏	
	16299 Oct 02 09:27	0°♐	
	16299 Oct 27 04:16	0°♑	
	16299 Nov 21 17:52	0°♒	
desc. node	16299 Dec 05 04:58	15°♒10'03	
	16299 Dec 18 23:42	0°♓	
evening max el	16299 Dec 30 15:13	11°♓46'57	46°13'42
	16300 Jan 20 10:19	0°♈	
greatest brilliancy	16300 Feb 07 20:33	10°♈35'54	-4.8m
retrograde	16300 Feb 17 22:37	12°♈26'31	
evening set	16300 Mar 05 20:01	7°♈34'00	
inferior conj	16300 Mar 11 07:06	4°♈14'42	-4°02'01
minimum elong	16300 Mar 11 15:26	4°♈01'38	3°59'42
min. Earth dist.	16300 Mar 11 11:31	4°♈07'46	0.28522 AU
morning rise	16300 Mar 17 10:54	0°♈32'43	
	16300 Mar 18 11:16	30°℞♓	
asc. node	16300 Mar 28 03:51	26°♓29'26	
direct	16300 Apr 01 13:59	26°♓05'55	
greatest brilliancy	16300 Apr 12 05:40	28°♓11'10	-4.8m
	16300 Apr 16 10:03	0°♈	
morning max el	16300 May 20 21:05	27°♈04'57	45°59'37
	16300 May 23 19:49	0°♉	
	16300 Jun 20 21:04	0°♊	
	16300 Jul 16 20:45	0°♋	
desc. node	16300 Jul 18 05:02	1°♋35'23	
	16300 Aug 10 21:50	0°♌	
	16300 Sep 04 10:50	0°♍	
	16300 Sep 28 17:30	0°♎	
	16300 Oct 22 21:03	0°♏	
asc. node	16300 Nov 08 01:05	20°♏07'49	
	16300 Nov 15 23:08	0°♐	
morning set	16300 Nov 21 12:03	6°♐54'15	
	16300 Dec 10 00:40	0°♑	
superior conj	16300 Dec 29 11:50	24°♑14'47	1°26'30
minimum elong	16300 Dec 29 09:23	24°♑07'11	1°27'08
max. Earth dist.	16301 Jan 01 00:58	27°♑24'55	1.72411 AU
	16301 Jan 03 02:50	0°♒	
	16301 Jan 27 07:12	0°♓	
evening rise	16301 Feb 04 22:26	10°♓40'15	
	16301 Feb 20 15:03	0°♈	
desc. node	16301 Feb 27 17:42	8°♈43'46	
	16301 Mar 17 02:47	0°♉	
	16301 Apr 10 18:04	0°♊	
	16301 May 05 13:06	0°♋	
	16301 May 30 14:14	0°♌	
asc. node	16301 Jun 20 10:38	24°♌31'59	
	16301 Jun 25 03:57	0°♍	
	16301 Jul 21 21:56	0°♎	
evening max el	16301 Aug 06 13:22	16°♎17'33	46°35'48
	16301 Aug 21 04:18	0°♏	

greatest brilliancy	16301 Sep 15 04:39	16°♏29'38	-4.9m
retrograde	16301 Sep 25 15:42	18°♏31'53	
evening set	16301 Oct 10 02:02	14°♏27'35	
desc. node	16301 Oct 10 09:11	14°♏18'03	
inferior conj	16301 Oct 16 09:49	10°♏46'31	-1°34'16
minimum elong	16301 Oct 16 06:09	10°♏52'06	1°32'41
min. Earth dist.	16301 Oct 16 03:37	10°♏55'58	0.26995 AU
morning rise	16301 Oct 22 10:31	7°♏15'10	
direct	16301 Nov 06 04:07	3°♏02'57	
greatest brilliancy	16301 Nov 15 22:42	4°♏48'11	-4.8m
	16301 Dec 21 10:25	0°♐	
morning max el	16301 Dec 25 17:32	4°♐07'12	46°17'38
	16302 Jan 19 14:17	0°♑	
asc. node	16302 Jan 31 09:55	13°♑07'43	
	16302 Feb 15 04:25	0°♒	
	16302 Mar 12 17:12	0°♓	
	16302 Apr 06 17:00	0°♈	
	16302 May 01 09:21	0°♉	
desc. node	16302 May 23 07:39	26°♉52'53	
	16302 May 25 20:26	0°♊	
	16302 Jun 19 03:01	0°♋	
morning set	16302 Jun 24 16:28	6°♋54'07	
	16302 Jul 13 05:48	0°♌	
max. Earth dist.	16302 Aug 01 00:43	23°♌28'17	1.71759 AU
superior conj	16302 Aug 03 06:26	26°♌16'15	-1°19'56
minimum elong	16302 Aug 03 15:27	26°♌44'28	1°20'10
	16302 Aug 06 05:58	0°♍	
	16302 Aug 30 05:03	0°♎	
evening rise	16302 Sep 12 07:34	16°♎24'21	
asc. node	16302 Sep 13 00:14	17°♎16'30	
	16302 Sep 23 04:19	0°♏	
	16302 Oct 17 05:00	0°♐	
	16302 Nov 10 08:59	0°♑	
	16302 Dec 04 19:30	0°♒	
	16302 Dec 29 17:22	0°♓	
desc. node	16303 Jan 02 17:07	4°♓43'59	
	16303 Jan 24 09:23	0°♈	
	16303 Feb 20 08:49	0°♉	
evening max el	16303 Mar 12 10:00	20°♉33'10	46°00'36
	16303 Mar 22 13:54	0°♊	
greatest brilliancy	16303 Apr 20 15:15	19°♊25'38	-4.8m
asc. node	16303 Apr 25 14:08	20°♊47'41	
retrograde	16303 Apr 30 15:48	21°♊17'26	
evening set	16303 May 16 06:42	16°♊31'47	
inferior conj	16303 May 21 19:22	13°♊10'38	6°00'02
minimum elong	16303 May 21 08:53	13°♊27'07	5°56'57
min. Earth dist.	16303 May 21 16:49	13°♊14'39	0.28265 AU
morning rise	16303 May 26 10:52	10°♊19'08	
direct	16303 Jun 11 22:14	5°♊00'21	
greatest brilliancy	16303 Jun 22 03:29	6°♊56'43	-4.8m
	16303 Jul 24 16:19	0°♋	
morning max el	16303 Aug 01 00:18	7°♋06'11	46°41'06
desc. node	16303 Aug 15 15:14	22°♋20'17	
	16303 Aug 22 15:21	0°♌	
	16303 Sep 17 20:13	0°♍	
	16303 Oct 13 00:39	0°♎	
	16303 Nov 06 18:03	0°♏	
	16303 Dec 01 05:42	0°♐	
asc. node	16303 Dec 06 13:32	6°♐33'13	
	16303 Dec 25 13:48	0°♑	
	16304 Jan 18 19:51	0°♒	
morning set	16304 Feb 01 00:18	16°♒19'23	
	16304 Feb 12 01:29	0°♓	
	16304 Mar 07 08:01	0°♈	
superior conj	16304 Mar 09 01:15	2°♈07'16	0°42'37
minimum elong	16304 Mar 09 09:47	2°♈33'35	0°42'17
max. Earth dist.	16304 Mar 10 05:39	3°♈34'54	1.73076 AU
desc. node	16304 Mar 27 07:15	24°♈37'49	
	16304 Mar 31 15:49	0°♉	
evening rise	16304 Apr 16 00:50	18°♉56'37	
	16304 Apr 25 00:18	0°♊	
	16304 May 19 08:47	0°♋	
	16304 Jun 12 17:32	0°♌	
	16304 Jul 07 04:09	0°♍	
asc. node	16304 Jul 17 23:13	13°♍10'59	
	16304 Jul 31 19:33	0°♎	
	16304 Aug 25 20:38	0°♏	
	16304 Sep 20 17:59	0°♐	
evening max el	16304 Oct 17 16:01	28°♐53'06	46°36'19
	16304 Oct 18 18:54	0°♑	
desc. node	16304 Nov 06 19:44	17°♑12'28	
greatest brilliancy	16304 Nov 26 05:16	29°♑00'53	-4.8m
	16304 Nov 29 04:59	0°♒	
retrograde	16304 Dec 06 21:01	1°♒06'53	
	16304 Dec 14 06:57	30°℞♑	
evening set	16304 Dec 25 02:44	24°♑51'09	
min. Earth dist.	16304 Dec 27 14:21	23°♑20'03	0.28261 AU
inferior conj	16304 Dec 28 03:47	22°♑59'17	-8°56'16
minimum elong	16304 Dec 28 01:00	23°♑03'36	8°55'30
morning rise	16304 Dec 30 23:23	21°♑15'53	
direct	16305 Jan 18 06:14	15°♑00'48	
greatest brilliancy	16305 Jan 28 02:12	16°♑46'40	-4.8m
	16305 Feb 19 01:15	0°♒	
asc. node	16305 Feb 27 19:49	7°♒28'31	
morning max el	16305 Mar 08 09:13	15°♒29'05	45°45'49
	16305 Mar 22 16:33	0°♓	
	16305 Apr 18 22:11	0°♈	
	16305 May 14 17:11	0°♉	
	16305 Jun 08 18:54	0°♊	
desc. node	16305 Jun 19 19:44	13°♊23'26	
	16305 Jul 03 09:46	0°♋	
	16305 Jul 27 17:11	0°♌	
	16305 Aug 20 19:48	0°♍	
morning set	16305 Sep 06 21:11	21°♍18'43	
	16305 Sep 13 19:51	0°♎	
	16305 Oct 07 18:53	0°♏	
asc. node	16305 Oct 10 13:49	3°♏29'34	
superior conj	16305 Oct 16 11:15	10°♏52'27	0°14'26
minimum elong	16305 Oct 16 07:36	10°♏41'01	0°14'39
behind sun begin	16305 Oct 15 20:57	10°♏07'40	
behind sun end	16305 Oct 16 18:15	11°♏14'22	
max. Earth dist.	16305 Oct 17 02:28	11°♏40'06	1.71651 AU
	16305 Oct 31 17:54	0°♐	
evening rise	16305 Nov 24 00:04	29°♐03'52	
	16305 Nov 24 18:04	0°♑	
	16305 Dec 18 21:07	0°♒	
	16306 Jan 12 05:23	0°♓	
desc. node	16306 Jan 30 06:04	21°♓59'02	
	16306 Feb 05 21:01	0°♈	
	16306 Mar 02 21:48	0°♉	
	16306 Mar 28 10:29	0°♊	
	16306 Apr 23 19:09	0°♋	
	16306 May 22 03:26	0°♌	
evening max el	16306 May 23 04:30	1°♌01'45	46°12'56
asc. node	16306 May 23 00:59	0°♌53'06	
	16306 Jun 30 09:33	0°♍	
greatest brilliancy	16306 Jul 02 06:25	0°♍41'10	-4.8m
retrograde	16306 Jul 11 17:40	2°♍21'18	
	16306 Jul 22 12:30	30°℞♌	
evening set	16306 Jul 29 08:15	26°♌24'28	
inferior conj	16306 Aug 01 10:57	24°♌29'48	8°26'43

minimum elong	16306 Aug 01 18:46	24°♌17'41	8°25'20
min. Earth dist.	16306 Aug 02 03:28	24°♌04'10	0.27571 AU
morning rise	16306 Aug 05 05:11	22°♌11'49	
direct	16306 Aug 22 10:24	16°♌29'24	
greatest brilliancy	16306 Sep 01 14:58	18°♌27'13	-4.9m
desc. node	16306 Sep 12 01:07	23°♌46'48	
	16306 Sep 20 17:47	0°♍	
morning max el	16306 Oct 11 22:06	19°♍15'15	46°54'02
	16306 Oct 22 08:06	0°♎	
	16306 Nov 18 10:30	0°♏	
	16306 Dec 14 04:41	0°♐	
asc. node	16307 Jan 03 01:03	23°♐39'25	
	16307 Jan 08 07:37	0°♑	
	16307 Feb 02 01:41	0°♒	
	16307 Feb 26 14:32	0°♓	
	16307 Mar 23 00:42	0°♈	
morning set	16307 Apr 11 03:57	23°♈33'38	
	16307 Apr 16 09:21	0°♉	
desc. node	16307 Apr 24 20:44	10°♉27'07	
	16307 May 10 16:30	0°♊	
max. Earth dist.	16307 May 17 11:43	8°♊24'45	1.72720 AU
superior conj	16307 May 19 16:59	11°♊09'35	-0°55'58
minimum elong	16307 May 19 06:18	10°♊36'32	0°56'11
	16307 Jun 03 21:44	0°♋	
evening rise	16307 Jun 27 11:31	29°♋17'52	
	16307 Jun 28 01:04	0°♌	
	16307 Jul 22 03:24	0°♍	
	16307 Aug 15 06:13	0°♎	
asc. node	16307 Aug 15 12:24	0°♎19'12	
	16307 Sep 08 11:17	0°♏	
	16307 Oct 02 21:14	0°♐	
	16307 Oct 27 16:55	0°♑	
	16307 Nov 22 08:12	0°♒	
desc. node	16307 Dec 05 06:55	14°♒31'46	
	16307 Dec 19 18:10	0°♓	
evening max el	16307 Dec 29 06:03	9°♓33'13	46°14'33
	16308 Jan 22 01:49	0°♈	
greatest brilliancy	16308 Feb 06 12:50	8°♈25'47	-4.8m
retrograde	16308 Feb 16 13:37	10°♈15'31	
evening set	16308 Mar 03 14:14	5°♈19'38	
inferior conj	16308 Mar 08 22:51	2°♈03'53	-4°20'41
minimum elong	16308 Mar 09 07:39	1°♈50'03	4°18'15
min. Earth dist.	16308 Mar 09 03:37	1°♈56'23	0.28529 AU
	16308 Mar 12 06:45	30°♓℞	
morning rise	16308 Mar 15 01:04	28°♓23'44	
asc. node	16308 Mar 27 05:45	24°♓05'56	
direct	16308 Mar 30 05:27	23°♓55'17	
greatest brilliancy	16308 Apr 09 21:32	26°♓00'19	-4.8m
	16308 Apr 18 03:09	0°♈	
morning max el	16308 May 18 11:16	24°♈49'28	45°58'19
	16308 May 23 15:54	0°♉	
	16308 Jun 20 11:53	0°♊	
	16308 Jul 16 09:37	0°♋	
desc. node	16308 Jul 17 06:48	1°♋02'41	
	16308 Aug 10 09:45	0°♌	
	16308 Sep 03 22:12	0°♍	
	16308 Sep 28 04:30	0°♎	
	16308 Oct 22 07:49	0°♏	
asc. node	16308 Nov 07 02:58	19°♏40'30	
	16308 Nov 15 09:44	0°♐	
morning set	16308 Nov 19 01:59	4°♐35'06	
	16308 Dec 09 11:10	0°♑	
superior conj	16308 Dec 27 03:34	22°♑02'00	1°26'01
minimum elong	16308 Dec 27 00:19	21°♑51'51	1°26'39
max. Earth dist.	16308 Dec 29 13:54	25°♑03'26	1.72377 AU
	16309 Jan 02 13:16	0°♒	
	16309 Jan 26 17:37	0°♓	
evening rise	16309 Feb 02 14:05	8°♓28'08	
	16309 Feb 20 01:33	0°♈	
desc. node	16309 Feb 26 19:28	8°♈16'49	
	16309 Mar 16 13:30	0°♉	
	16309 Apr 10 05:09	0°♊	
	16309 May 05 00:46	0°♋	
	16309 May 30 02:52	0°♌	
asc. node	16309 Jun 19 12:27	23°♌56'46	
	16309 Jun 24 18:19	0°♍	
	16309 Jul 21 16:09	0°♎	
evening max el	16309 Aug 04 01:49	13°♎52'39	46°35'11
	16309 Aug 21 13:03	0°♏	
greatest brilliancy	16309 Sep 12 19:05	14°♏06'54	-4.9m
retrograde	16309 Sep 23 04:20	16°♏08'04	
evening set	16309 Oct 07 14:54	12°♏03'35	
desc. node	16309 Oct 09 11:10	11°♏02'52	
inferior conj	16309 Oct 13 22:33	8°♏23'13	-1°10'12
minimum elong	16309 Oct 13 19:49	8°♏27'23	1°08'56
min. Earth dist.	16309 Oct 13 18:03	8°♏30'04	0.26976 AU
morning rise	16309 Oct 20 00:51	4°♏49'40	
direct	16309 Nov 03 16:11	0°♏39'16	
greatest brilliancy	16309 Nov 13 12:52	2°♏26'19	-4.8m
	16309 Dec 21 10:47	0°♐	
morning max el	16309 Dec 23 06:46	1°♐46'28	46°19'16
	16310 Jan 19 06:33	0°♑	
asc. node	16310 Jan 30 11:43	12°♑31'06	
	16310 Feb 14 17:52	0°♒	
	16310 Mar 12 05:17	0°♓	
	16310 Apr 06 04:20	0°♈	
	16310 Apr 30 20:16	0°♉	
desc. node	16310 May 22 09:34	26°♉25'52	
	16310 May 25 07:07	0°♊	
	16310 Jun 18 13:36	0°♋	
morning set	16310 Jun 22 05:17	4°♋32'04	
	16310 Jul 12 16:21	0°♌	
max. Earth dist.	16310 Jul 29 12:13	21°♌01'02	1.71789 AU
superior conj	16310 Jul 31 18:56	23°♌52'06	-1°21'27
minimum elong	16310 Aug 01 03:15	24°♌18'08	1°21'45
	16310 Aug 05 16:34	0°♍	
	16310 Aug 29 15:44	0°♎	
evening rise	16310 Sep 09 19:50	13°♎59'03	
asc. node	16310 Sep 12 02:07	16°♎48'51	
	16310 Sep 22 15:05	0°♏	
	16310 Oct 16 15:54	0°♐	
	16310 Nov 09 20:07	0°♑	
	16310 Dec 04 07:04	0°♒	
	16310 Dec 29 05:41	0°♓	
desc. node	16311 Jan 01 18:54	4°♓12'21	
	16311 Jan 23 23:11	0°♈	
	16311 Feb 20 01:51	0°♉	
evening max el	16311 Mar 10 01:26	18°♉20'44	46°00'51
	16311 Mar 22 18:17	0°♊	
greatest brilliancy	16311 Apr 18 05:07	17°♊10'20	-4.8m
asc. node	16311 Apr 24 16:09	18°♊48'01	
retrograde	16311 Apr 28 07:19	19°♊03'28	
evening set	16311 May 13 19:12	14°♊21'06	
inferior conj	16311 May 19 10:37	10°♊56'07	5°43'24
minimum elong	16311 May 19 00:17	11°♊12'19	5°40'18
min. Earth dist.	16311 May 19 07:33	11°♊00'55	0.28273 AU
morning rise	16311 May 24 05:13	8°♊00'23	
direct	16311 Jun 09 13:56	2°♊45'48	
greatest brilliancy	16311 Jun 19 18:59	4°♊42'31	-4.8m
	16311 Jul 24 16:40	0°♋	
morning max el	16311 Jul 29 15:59	4°♋51'40	46°39'44

desc. node	16311 Aug 14 17:11	21°♋37'59	
	16311 Aug 22 07:41	0°♌	
	16311 Sep 17 09:59	0°♍	
	16311 Oct 12 13:12	0°♎	
	16311 Nov 06 05:53	0°♏	
	16311 Nov 30 17:01	0°♐	
asc. node	16311 Dec 05 15:22	6°♐04'16	
	16311 Dec 25 00:45	0°♑	
	16312 Jan 18 06:35	0°♒	
morning set	16312 Jan 29 16:37	14°♒08'17	
	16312 Feb 11 12:06	0°♓	
superior conj	16312 Mar 06 17:09	29°♓55'32	0°45'36
minimum elong	16312 Mar 07 02:05	0°♈23'03	0°45'16
	16312 Mar 06 18:36	0°♈	
max. Earth dist.	16312 Mar 08 02:00	1°♈36'54	1.73067 AU
desc. node	16312 Mar 26 09:11	24°♈11'06	
	16312 Mar 31 02:27	0°♉	
evening rise	16312 Apr 13 16:29	16°♉44'07	
	16312 Apr 24 11:02	0°♊	
	16312 May 18 19:42	0°♋	
	16312 Jun 12 04:45	0°♌	
	16312 Jul 06 15:50	0°♍	
asc. node	16312 Jul 17 01:00	12°♍40'07	
	16312 Jul 31 07:57	0°♎	
	16312 Aug 25 10:16	0°♏	
	16312 Sep 20 10:06	0°♐	
evening max el	16312 Oct 15 07:35	26°♐36'35	46°36'43
	16312 Oct 18 17:59	0°♑	
desc. node	16312 Nov 05 21:42	16°♑03'06	
greatest brilliancy	16312 Nov 23 18:48	26°♑42'03	-4.8m
retrograde	16312 Dec 04 12:15	28°♑49'13	
evening set	16312 Dec 22 14:45	22°♑37'33	
min. Earth dist.	16312 Dec 25 03:30	21°♑04'46	0.28221 AU
inferior conj	16312 Dec 25 18:09	20°♑42'07	-8°53'17
minimum elong	16312 Dec 25 14:30	20°♑47'46	8°52'26
morning rise	16312 Dec 28 14:25	18°♑57'51	
direct	16313 Jan 15 21:00	12°♑44'29	
greatest brilliancy	16313 Jan 25 14:39	14°♑28'48	-4.8m
	16313 Feb 19 10:13	0°♒	
asc. node	16313 Feb 26 21:50	6°♒33'11	
morning max el	16313 Mar 06 00:05	13°♒14'18	45°46'09
	16313 Mar 22 10:29	0°♓	
	16313 Apr 18 12:23	0°♈	
	16313 May 14 05:48	0°♉	
	16313 Jun 08 06:41	0°♊	
desc. node	16313 Jun 18 21:29	12°♊53'32	
	16313 Jul 02 21:05	0°♋	
	16313 Jul 27 04:14	0°♌	
	16313 Aug 20 06:41	0°♍	
morning set	16313 Sep 04 10:06	18°♍55'16	
	16313 Sep 13 06:39	0°♎	
	16313 Oct 07 05:38	0°♏	
asc. node	16313 Oct 09 15:42	3°♏01'49	
superior conj	16313 Oct 14 00:23	8°♏29'32	0°10'43
minimum elong	16313 Oct 13 21:38	8°♏20'56	0°10'57
behind sun begin	16313 Oct 13 03:07	7°♏22'57	
behind sun end	16313 Oct 14 16:09	9°♏18'55	
max. Earth dist.	16313 Oct 14 16:08	9°♏18'53	1.71640 AU
	16313 Oct 31 04:40	0°♐	
evening rise	16313 Nov 21 14:50	26°♐46'27	
	16313 Nov 24 04:53	0°♑	
	16313 Dec 18 08:04	0°♒	
	16314 Jan 11 16:34	0°♓	
desc. node	16314 Jan 29 07:51	21°♓29'45	
	16314 Feb 05 08:35	0°♈	
	16314 Mar 02 10:04	0°♉	
	16314 Mar 28 00:01	0°♊	
	16314 Apr 23 11:11	0°♋	
evening max el	16314 May 20 18:23	28°♋42'08	46°12'08
asc. node	16314 May 22 02:49	0°♌01'20	
	16314 May 22 02:16	0°♌	
greatest brilliancy	16314 Jun 29 20:21	28°♌20'42	-4.8m
retrograde	16314 Jul 09 06:40	0°♍00'01	
	16314 Jul 09 03:58	0°♍	
	16314 Jul 09 09:22	30°℞♌	
evening set	16314 Jul 27 00:38	23°♌59'09	
inferior conj	16314 Jul 30 00:43	22°♌08'13	8°34'49
minimum elong	16314 Jul 30 07:49	21°♌57'10	8°33'35
min. Earth dist.	16314 Jul 30 16:55	21°♌42'59	0.27605 AU
morning rise	16314 Aug 02 14:52	19°♌55'54	
direct	16314 Aug 20 00:12	14°♌07'19	
greatest brilliancy	16314 Aug 30 04:44	16°♌04'39	-4.9m
desc. node	16314 Sep 11 03:05	22°♌23'05	
	16314 Sep 21 05:58	0°♍	
morning max el	16314 Oct 09 11:07	16°♍51'10	46°54'29
	16314 Oct 22 03:08	0°♎	
	16314 Nov 18 01:25	0°♏	
	16314 Dec 13 17:49	0°♐	
asc. node	16315 Jan 02 02:51	23°♐07'50	
	16315 Jan 07 19:45	0°♑	
	16315 Feb 01 13:13	0°♒	
	16315 Feb 26 01:42	0°♓	
	16315 Mar 22 11:37	0°♈	
morning set	16315 Apr 08 19:35	21°♈20'34	
	16315 Apr 15 20:09	0°♉	
desc. node	16315 Apr 23 22:31	9°♉59'17	
	16315 May 10 03:18	0°♊	
max. Earth dist.	16315 May 15 01:43	6°♊06'10	1.72750 AU
superior conj	16315 May 17 07:16	8°♊51'50	-0°53'08
minimum elong	16315 May 16 20:50	8°♊19'34	0°53'20
	16315 Jun 03 08:35	0°♋	
evening rise	16315 Jun 25 00:42	26°♋55'29	
	16315 Jun 27 12:01	0°♌	
	16315 Jul 21 14:30	0°♍	
asc. node	16315 Aug 14 14:18	29°♍50'03	
	16315 Aug 14 17:31	0°♎	
	16315 Sep 07 22:54	0°♏	
	16315 Oct 02 09:21	0°♐	
	16315 Oct 27 05:57	0°♑	
	16315 Nov 21 23:02	0°♒	
desc. node	16315 Dec 04 08:40	13°♒51'30	
	16315 Dec 19 13:37	0°♓	
evening max el	16315 Dec 26 19:53	7°♓15'39	46°15'09
	16316 Jan 22 23:53	0°♈	
greatest brilliancy	16316 Feb 04 04:49	6°♈13'25	-4.8m
retrograde	16316 Feb 14 04:27	8°♈02'39	
evening set	16316 Mar 01 08:21	3°♈02'53	
	16316 Mar 06 08:42	30°℞♓	
inferior conj	16316 Mar 06 14:25	29°♓51'00	-4°38'58
minimum elong	16316 Mar 06 23:39	29°♓36'31	4°36'28
min. Earth dist.	16316 Mar 06 19:40	29°♓42'47	0.28541 AU
morning rise	16316 Mar 12 14:53	26°♓13'07	
asc. node	16316 Mar 26 07:45	21°♓45'07	
direct	16316 Mar 27 20:29	21°♓42'20	
greatest brilliancy	16316 Apr 07 13:46	23°♓47'59	-4.8m
	16316 Apr 19 08:21	0°♈	
morning max el	16316 May 16 01:32	22°♈32'33	45°57'12
	16316 May 23 11:57	0°♉	
	16316 Jun 20 02:59	0°♊	
	16316 Jul 15 22:50	0°♋	
desc. node	16316 Jul 16 08:42	0°♋29'18	

	16316 Aug 09 22:00	0°♌	
	16316 Sep 03 09:54	0°♍	
	16316 Sep 27 15:50	0°♎	
	16316 Oct 21 18:54	0°♏	
asc. node	16316 Nov 06 04:45	19°♏11'53	
	16316 Nov 14 20:38	0°♐	
morning set	16316 Nov 16 16:12	2°♐15'51	
	16316 Dec 08 21:56	0°♑	
superior conj	16316 Dec 24 19:34	19°♑49'02	1°25'24
minimum elong	16316 Dec 24 15:32	19°♑36'29	1°26'02
max. Earth dist.	16316 Dec 27 03:13	22°♑42'15	1.72348 AU
	16317 Jan 01 23:59	0°♒	
	16317 Jan 26 04:23	0°♓	
evening rise	16317 Jan 31 05:55	6°♓15'30	
	16317 Feb 19 12:28	0°♈	
desc. node	16317 Feb 25 21:23	7°♈49'07	
	16317 Mar 16 00:41	0°♉	
	16317 Apr 09 16:43	0°♊	
	16317 May 04 12:55	0°♋	
	16317 May 29 16:00	0°♌	
asc. node	16317 Jun 18 14:17	23°♌20'08	
	16317 Jun 24 09:18	0°♍	
	16317 Jul 21 11:20	0°♎	
evening max el	16317 Aug 01 14:36	11°♎27'38	46°34'40
	16317 Aug 22 01:29	0°♏	
greatest brilliancy	16317 Sep 10 08:59	11°♏42'32	-4.9m
retrograde	16317 Sep 20 17:29	13°♏43'23	
evening set	16317 Oct 05 04:01	9°♏38'15	
desc. node	16317 Oct 08 13:08	7°♏44'14	
inferior conj	16317 Oct 11 11:17	5°♏58'46	-0°45'59
minimum elong	16317 Oct 11 09:29	6°♏01'30	0°45'03
min. Earth dist.	16317 Oct 11 08:09	6°♏03'32	0.26958 AU
morning rise	16317 Oct 17 15:02	2°♏23'35	
	16317 Oct 22 20:22	30°℞♎	
direct	16317 Nov 01 04:39	28°♎14'31	
	16317 Nov 10 22:59	0°♏	
greatest brilliancy	16317 Nov 11 02:33	0°♏03'05	-4.8m
morning max el	16317 Dec 20 20:54	29°♏27'19	46°20'59
	16317 Dec 21 10:16	0°♐	
	16318 Jan 18 22:43	0°♑	
asc. node	16318 Jan 29 13:44	11°♑54'45	
	16318 Feb 14 07:24	0°♒	
	16318 Mar 11 17:33	0°♓	
	16318 Apr 05 15:57	0°♈	
	16318 Apr 30 07:31	0°♉	
desc. node	16318 May 21 11:20	25°♉57'16	
	16318 May 24 18:10	0°♊	
	16318 Jun 18 00:31	0°♋	
morning set	16318 Jun 19 17:57	2°♋08'29	
	16318 Jul 12 03:13	0°♌	
max. Earth dist.	16318 Jul 27 01:19	18°♌37'54	1.71815 AU
superior conj	16318 Jul 29 07:12	21°♌26'20	-1°22'49
minimum elong	16318 Jul 29 14:47	21°♌50'02	1°23'10
	16318 Aug 05 03:28	0°♍	
	16318 Aug 29 02:41	0°♎	
evening rise	16318 Sep 07 08:00	11°♎32'38	
asc. node	16318 Sep 11 03:58	16°♎20'18	
	16318 Sep 22 02:08	0°♏	
	16318 Oct 16 03:04	0°♐	
	16318 Nov 09 07:30	0°♑	
	16318 Dec 03 18:51	0°♒	
	16318 Dec 28 18:15	0°♓	
desc. node	16318 Dec 31 20:49	3°♓40'31	
	16319 Jan 23 13:15	0°♈	
	16319 Feb 19 19:25	0°♉	
evening max el	16319 Mar 07 17:25	16°♉09'14	46°00'52
	16319 Mar 23 01:03	0°♊	
greatest brilliancy	16319 Apr 15 18:59	14°♊54'18	-4.8m
asc. node	16319 Apr 23 17:59	16°♊42'36	
retrograde	16319 Apr 25 22:46	16°♊48'18	
evening set	16319 May 11 07:49	12°♊09'19	
inferior conj	16319 May 17 01:44	8°♊40'29	5°26'11
minimum elong	16319 May 16 15:39	8°♊56'20	5°23'04
min. Earth dist.	16319 May 16 22:09	8°♊46'08	0.28284 AU
morning rise	16319 May 21 23:24	5°♊40'31	
direct	16319 Jun 07 05:47	0°♊30'19	
greatest brilliancy	16319 Jun 17 10:04	2°♊26'41	-4.8m
	16319 Jul 24 16:18	0°♋	
morning max el	16319 Jul 27 07:30	2°♋35'51	46°38'22
desc. node	16319 Aug 13 19:11	20°♋55'29	
	16319 Aug 22 00:00	0°♌	
	16319 Sep 16 23:49	0°♍	
	16319 Oct 12 01:50	0°♎	
	16319 Nov 05 17:46	0°♏	
	16319 Nov 30 04:25	0°♐	
asc. node	16319 Dec 04 17:08	5°♐34'49	
	16319 Dec 24 11:48	0°♑	
	16320 Jan 17 17:23	0°♒	
morning set	16320 Jan 27 09:17	11°♒58'06	
	16320 Feb 10 22:45	0°♓	
superior conj	16320 Mar 04 09:32	27°♓45'07	0°48'27
minimum elong	16320 Mar 04 18:47	28°♓13'41	0°48'10
max. Earth dist.	16320 Mar 05 23:11	29°♓41'23	1.73054 AU
	16320 Mar 06 05:13	0°♈	
desc. node	16320 Mar 25 10:59	23°♈43'51	
	16320 Mar 30 13:06	0°♉	
evening rise	16320 Apr 11 08:26	14°♉32'27	
	16320 Apr 23 21:49	0°♊	
	16320 May 18 06:43	0°♋	
	16320 Jun 11 16:07	0°♌	
	16320 Jul 06 03:42	0°♍	
asc. node	16320 Jul 16 02:55	12°♍09'04	
	16320 Jul 30 20:33	0°♎	
	16320 Aug 25 00:09	0°♏	
	16320 Sep 20 02:36	0°♐	
evening max el	16320 Oct 12 22:56	24°♐19'16	46°37'09
	16320 Oct 18 18:12	0°♑	
desc. node	16320 Nov 04 23:31	14°♑51'27	
greatest brilliancy	16320 Nov 21 09:02	24°♑24'04	-4.8m
retrograde	16320 Dec 02 03:12	26°♑31'33	
evening set	16320 Dec 20 02:33	20°♑24'44	
min. Earth dist.	16320 Dec 22 16:58	18°♑49'22	0.28177 AU
inferior conj	16320 Dec 23 08:36	18°♑25'12	-8°49'34
minimum elong	16320 Dec 23 04:06	18°♑32'10	8°48'37
morning rise	16320 Dec 26 05:50	16°♑39'26	
direct	16321 Jan 13 11:38	10°♑28'34	
greatest brilliancy	16321 Jan 23 03:19	12°♑11'13	-4.8m
	16321 Feb 19 16:31	0°♒	
asc. node	16321 Feb 25 23:45	5°♒39'02	
morning max el	16321 Mar 03 14:09	10°♒57'50	45°46'40
	16321 Mar 22 03:50	0°♓	
	16321 Apr 18 02:17	0°♈	
	16321 May 13 18:11	0°♉	
	16321 Jun 07 18:19	0°♊	
desc. node	16321 Jun 17 23:23	12°♊24'26	
	16321 Jul 02 08:19	0°♋	
	16321 Jul 26 15:15	0°♌	
	16321 Aug 19 17:35	0°♍	
morning set	16321 Sep 01 22:37	16°♍30'29	
	16321 Sep 12 17:27	0°♎	
	16321 Oct 06 16:21	0°♏	

asc. node	16321 Oct 08	17:26	2°♏33'39		
superior conj	16321 Oct 11	13:09	6°♏05'42	0°06'58	
minimum elong	16321 Oct 11	11:20	6°♏00'01	0°07'12	
behind sun begin	16321 Oct 10	12:50	4°♏49'32		
behind sun end	16321 Oct 12	09:51	7°♏10'30		
max. Earth dist.	16321 Oct 12	03:07	6°♏49'25	1.71624 AU	
	16321 Oct 30	15:21	0°♐		
evening rise	16321 Nov 19	05:22	24°♐28'36		
	16321 Nov 23	15:37	0°♑		
	16321 Dec 17	18:55	0°♒		
	16322 Jan 11	03:37	0°♓		
desc. node	16322 Jan 28	09:48	21°♓01'23		
	16322 Feb 04	20:02	0°♈		
	16322 Mar 01	22:12	0°♉		
	16322 Mar 27	13:23	0°♊		
	16322 Apr 23	03:10	0°♋		
evening max el	16322 May 18	07:22	26°♋21'15	46°11'15	
asc. node	16322 May 21	04:42	29°♋09'35		
	16322 May 22	01:45	0°♌		
greatest brilliancy	16322 Jun 27	10:20	26°♌01'08	-4.8m	
retrograde	16322 Jul 06	19:30	27°♌39'48		
evening set	16322 Jul 24	16:46	21°♌35'00		
inferior conj	16322 Jul 27	14:33	19°♌47'28	8°41'52	
minimum elong	16322 Jul 27	20:52	19°♌37'37	8°40'48	
min. Earth dist.	16322 Jul 28	06:35	19°♌22'27	0.27647 AU	
morning rise	16322 Jul 31	00:50	17°♌40'41		
direct	16322 Aug 17	13:46	11°♌45'43		
greatest brilliancy	16322 Aug 27	19:11	13°♌43'24	-4.9m	
desc. node	16322 Sep 10	05:00	21°♌02'17		
	16322 Sep 21	14:53	0°♍		
morning max el	16322 Oct 07	00:06	14°♍27'06	46°54'54	
	16322 Oct 21	21:35	0°♎		
	16322 Nov 17	16:03	0°♏		
	16322 Dec 13	06:40	0°♐		
asc. node	16323 Jan 01	04:51	22°♐37'36		
	16323 Jan 07	07:36	0°♑		
	16323 Feb 01	00:27	0°♒		
	16323 Feb 25	12:33	0°♓		
	16323 Mar 21	22:13	0°♈		
morning set	16323 Apr 06	11:37	19°♈09'37		
	16323 Apr 15	06:38	0°♉		
desc. node	16323 Apr 23	00:19	9°♉32'31		
	16323 May 09	13:45	0°♊		
max. Earth dist.	16323 May 12	18:10	3°♊56'16	1.72778 AU	
superior conj	16323 May 14	22:03	6°♊36'45	-0°50'15	
minimum elong	16323 May 14	11:55	6°♊05'25	0°50'25	
	16323 Jun 02	19:05	0°♋		
evening rise	16323 Jun 22	14:26	24°♋36'08		
	16323 Jun 26	22:37	0°♌		
	16323 Jul 21	01:16	0°♍		
asc. node	16323 Aug 13	16:10	29°♍21'37		
	16323 Aug 14	04:32	0°♎		
	16323 Sep 07	10:18	0°♏		
	16323 Oct 01	21:20	0°♐		
	16323 Oct 26	18:52	0°♑		
	16323 Nov 21	13:50	0°♒		
desc. node	16323 Dec 03	10:40	13°♒12'07		
	16323 Dec 19	09:23	0°♓		
evening max el	16323 Dec 24	09:29	4°♓58'20	46°16'03	
	16324 Jan 24	05:47	0°♈		
greatest brilliancy	16324 Feb 01	20:20	4°♈01'33	-4.8m	
retrograde	16324 Feb 11	19:45	5°♈51'05		
evening set	16324 Feb 28	02:33	0°♈47'01		
	16324 Feb 29	10:40	30°℞♓		
inferior conj	16324 Mar 04	06:01	27°♓39'14	-4°56'51	
minimum elong	16324 Mar 04	15:37	27°♓24'12	4°54'18	
min. Earth dist.	16324 Mar 04	11:30	27°♓30'38	0.28550 AU	
morning rise	16324 Mar 10	04:34	24°♓04'09		
direct	16324 Mar 25	11:37	19°♓30'25		
asc. node	16324 Mar 25	09:38	19°♓30'26		
greatest brilliancy	16324 Apr 05	06:00	21°♓36'59	-4.8m	
	16324 Apr 20	04:48	0°♈		
morning max el	16324 May 13	16:42	20°♈19'12	45°56'17	
	16324 May 23	06:54	0°♉		
	16324 Jun 19	17:24	0°♊		
desc. node	16324 Jul 15	10:42	29°♊57'46		
	16324 Jul 15	11:27	0°♋		
	16324 Aug 09	09:44	0°♌		
	16324 Sep 02	21:08	0°♍		
	16324 Sep 27	02:46	0°♎		
	16324 Oct 21	05:39	0°♏		
asc. node	16324 Nov 05	06:35	18°♏44'27		
morning set	16324 Nov 14	05:59	29°♏56'06		
	16324 Nov 14	07:14	0°♐		
	16324 Dec 08	08:25	0°♑		
superior conj	16324 Dec 22	11:04	17°♑35'23	1°24'38	
minimum elong	16324 Dec 22	06:15	17°♑20'25	1°25'15	
max. Earth dist.	16324 Dec 24	16:09	20°♑20'39	1.72317 AU	
	16325 Jan 01	10:23	0°♒		
	16325 Jan 25	14:48	0°♓		
evening rise	16325 Jan 28	21:28	4°♓03'03		
	16325 Feb 18	23:02	0°♈		
desc. node	16325 Feb 24	23:10	7°♈22'05		
	16325 Mar 15	11:29	0°♉		
	16325 Apr 09	03:54	0°♊		
	16325 May 04	00:42	0°♋		
	16325 May 29	04:46	0°♌		
asc. node	16325 Jun 17	16:17	22°♌45'14		
	16325 Jun 23	23:56	0°♍		
	16325 Jul 21	06:23	0°♎		
evening max el	16325 Jul 30	04:18	9°♎06'54	46°34'11	
	16325 Aug 22	17:04	0°♏		
greatest brilliancy	16325 Sep 07	22:29	9°♏19'45	-4.9m	
retrograde	16325 Sep 18	07:10	11°♏20'37		
evening set	16325 Oct 02	17:31	7°♏14'35		
desc. node	16325 Oct 07	14:58	4°♏26'09		
inferior conj	16325 Oct 09	00:07	3°♏35'59	-0°21'44	
minimum elong	16325 Oct 08	23:16	3°♏37'16	0°21'08	
min. Earth dist.	16325 Oct 08	22:01	3°♏39'10	0.26949 AU	
morning rise	16325 Oct 15	05:09	29°♎59'29		
	16325 Oct 15	04:45	30°℞♎		
direct	16325 Oct 29	17:51	25°♎51'30		
greatest brilliancy	16325 Nov 08	15:51	27°♎40'48	-4.8m	
	16325 Nov 14	01:53	0°♏		
morning max el	16325 Dec 18	11:39	27°♏10'36	46°22'26	
	16325 Dec 21	08:23	0°♐		
	16326 Jan 18	14:18	0°♑		
asc. node	16326 Jan 28	15:38	11°♑19'10		
	16326 Feb 13	20:31	0°♒		
	16326 Mar 11	05:26	0°♓		
	16326 Apr 05	03:10	0°♈		
	16326 Apr 29	18:21	0°♉		
desc. node	16326 May 20	13:11	25°♉30'18		
	16326 May 24	04:47	0°♊		
morning set	16326 Jun 17	06:52	29°♊47'08		
	16326 Jun 17	11:01	0°♋		
	16326 Jul 11	13:41	0°♌		
max. Earth dist.	16326 Jul 24	14:09	16°♌15'19	1.71836 AU	
superior conj	16326 Jul 26	19:50	19°♌03'05	-1°24'02	
minimum elong	16326 Jul 27	02:37	19°♌24'16	1°24'25	

	16326 Aug 04 13:55	0°♍	
	16326 Aug 28 13:11	0°♎	
evening rise	16326 Sep 04 20:30	9°♎08'40	
asc. node	16326 Sep 10 05:42	15°♎52'48	
	16326 Sep 21 12:42	0°♏	
	16326 Oct 15 13:48	0°♐	
	16326 Nov 08 18:30	0°♑	
	16326 Dec 03 06:21	0°♒	
	16326 Dec 28 06:35	0°♓	
desc. node	16326 Dec 30 22:42	3°♓09'20	
	16327 Jan 23 03:12	0°♈	
	16327 Feb 19 13:05	0°♉	
evening max el	16327 Mar 05 09:34	13°♉59'01	46°01'01
	16327 Mar 23 09:55	0°♊	
greatest brilliancy	16327 Apr 13 09:37	12°♊40'21	-4.8m
asc. node	16327 Apr 22 19:54	14°♊33'39	
retrograde	16327 Apr 23 14:02	14°♊34'19	
evening set	16327 May 08 20:48	9°♊58'45	
inferior conj	16327 May 14 16:58	6°♊26'22	5°08'37
minimum elong	16327 May 14 07:11	6°♊41'45	5°05'30
min. Earth dist.	16327 May 14 13:05	6°♊32'28	0.28288 AU
morning rise	16327 May 19 17:33	3°♊22'05	
	16327 May 26 16:34	30°℞♉	
direct	16327 Jun 04 21:36	28°♉16'29	
	16327 Jun 14 11:25	0°♊	
greatest brilliancy	16327 Jun 15 01:10	0°♊12'11	-4.8m
	16327 Jul 24 14:25	0°♋	
morning max el	16327 Jul 24 22:20	0°♋19'41	46°36'58
desc. node	16327 Aug 12 21:00	20°♋14'13	
	16327 Aug 21 15:36	0°♌	
	16327 Sep 16 13:07	0°♍	
	16327 Oct 11 13:57	0°♎	
	16327 Nov 05 05:12	0°♏	
	16327 Nov 29 15:23	0°♐	
asc. node	16327 Dec 03 19:06	5°♐07'16	
	16327 Dec 23 22:28	0°♑	
	16328 Jan 17 03:52	0°♒	
morning set	16328 Jan 25 01:47	9°♒48'13	
	16328 Feb 10 09:10	0°♓	
superior conj	16328 Mar 02 01:40	25°♓34'40	0°51'16
minimum elong	16328 Mar 02 11:11	26°♓04'04	0°51'00
max. Earth dist.	16328 Mar 03 17:51	27°♓38'44	1.73041 AU
	16328 Mar 05 15:37	0°♈	
desc. node	16328 Mar 24 12:43	23°♈17'10	
	16328 Mar 29 23:32	0°♉	
evening rise	16328 Apr 08 23:59	12°♉20'14	
	16328 Apr 23 08:23	0°♊	
	16328 May 17 17:30	0°♋	
	16328 Jun 11 03:15	0°♌	
	16328 Jul 05 15:20	0°♍	
asc. node	16328 Jul 15 04:44	11°♍38'28	
	16328 Jul 30 08:58	0°♎	
	16328 Aug 24 13:53	0°♏	
	16328 Sep 19 19:06	0°♐	
evening max el	16328 Oct 10 13:29	22°♐00'46	46°37'33
	16328 Oct 18 19:15	0°♑	
desc. node	16328 Nov 04 01:31	13°♑39'04	
greatest brilliancy	16328 Nov 18 23:51	22°♑07'39	-4.8m
retrograde	16328 Nov 29 17:42	24°♑14'50	
evening set	16328 Dec 17 14:05	18°♑13'26	
inferior conj	16328 Dec 20 23:05	16°♑09'21	-8°44'57
minimum elong	16328 Dec 20 17:47	16°♑17'34	8°43'52
min. Earth dist.	16328 Dec 20 06:51	16°♑34'29	0.28134 AU
morning rise	16328 Dec 23 21:40	14°♑21'25	
direct	16329 Jan 11 01:51	8°♑13'33	
greatest brilliancy	16329 Jan 20 16:32	9°♑54'58	-4.8m
	16329 Feb 19 20:31	0°♒	
asc. node	16329 Feb 25 01:37	4°♒46'25	
morning max el	16329 Mar 01 03:25	8°♒39'47	45°47'05
	16329 Mar 21 20:42	0°♓	
	16329 Apr 17 15:57	0°♈	
	16329 May 13 06:26	0°♉	
	16329 Jun 07 05:49	0°♊	
desc. node	16329 Jun 17 01:21	11°♊55'55	
	16329 Jul 01 19:25	0°♋	
	16329 Jul 26 02:08	0°♌	
	16329 Aug 19 04:20	0°♍	
morning set	16329 Aug 30 11:01	14°♍05'46	
	16329 Sep 12 04:06	0°♎	
	16329 Oct 06 02:58	0°♏	
asc. node	16329 Oct 07 19:17	2°♏06'14	
superior conj	16329 Oct 09 02:02	3°♏42'32	0°03'11
minimum elong	16329 Oct 09 01:09	3°♏39'46	0°03'27
behind sun begin	16329 Oct 08 00:42	2°♏23'12	
behind sun end	16329 Oct 10 01:36	4°♏56'21	
max. Earth dist.	16329 Oct 09 11:15	4°♏11'24	1.71609 AU
	16329 Oct 30 01:57	0°♐	
evening rise	16329 Nov 16 20:04	22°♐11'30	
	16329 Nov 23 02:14	0°♑	
	16329 Dec 17 05:38	0°♒	
	16330 Jan 10 14:34	0°♓	
desc. node	16330 Jan 27 11:35	20°♓32'43	
	16330 Feb 04 07:25	0°♈	
	16330 Mar 01 10:22	0°♉	
	16330 Mar 27 02:57	0°♊	
	16330 Apr 22 19:34	0°♋	
evening max el	16330 May 15 19:58	23°♋59'13	46°10'32
asc. node	16330 May 20 06:42	28°♋16'46	
	16330 May 22 02:35	0°♌	
greatest brilliancy	16330 Jun 25 00:06	23°♌41'03	-4.8m
retrograde	16330 Jul 04 08:41	25°♌19'38	
evening set	16330 Jul 22 08:37	19°♌11'01	
inferior conj	16330 Jul 25 04:23	17°♌26'34	8°48'04
minimum elong	16330 Jul 25 09:54	17°♌17'58	8°47'06
min. Earth dist.	16330 Jul 25 20:10	17°♌01'59	0.27687 AU
morning rise	16330 Jul 28 11:04	15°♌25'11	
direct	16330 Aug 15 03:13	9°♌23'55	
greatest brilliancy	16330 Aug 25 09:38	11°♌22'16	-4.9m
desc. node	16330 Sep 09 06:56	19°♌43'59	
	16330 Sep 21 21:19	0°♍	
morning max el	16330 Oct 04 13:50	12°♍04'54	46°55'16
	16330 Oct 21 15:36	0°♎	
	16330 Nov 17 06:32	0°♏	
	16330 Dec 12 19:29	0°♐	
asc. node	16330 Dec 31 06:40	22°♐06'44	
	16331 Jan 06 19:29	0°♑	
	16331 Jan 31 11:43	0°♒	
	16331 Feb 24 23:26	0°♓	
	16331 Mar 21 08:55	0°♈	
morning set	16331 Apr 04 03:39	16°♈58'18	
	16331 Apr 14 17:17	0°♉	
desc. node	16331 Apr 22 02:13	9°♉05'37	
	16331 May 09 00:25	0°♊	
max. Earth dist.	16331 May 10 11:52	1°♊49'36	1.72810 AU
superior conj	16331 May 12 12:34	4°♊20'12	-0°47'16
minimum elong	16331 May 12 02:47	3°♊49'59	0°47'25
	16331 Jun 02 05:48	0°♋	
evening rise	16331 Jun 20 03:53	22°♋15'12	
	16331 Jun 26 09:27	0°♌	
	16331 Jul 20 12:15	0°♍	
asc. node	16331 Aug 12 17:52	28°♍52'06	

	16331 Aug 13 15:46	0°♎	
	16331 Sep 06 21:56	0°♏	
	16331 Oct 01 09:33	0°♐	
	16331 Oct 26 08:05	0°♑	
	16331 Nov 21 05:05	0°♒	
desc. node	16331 Dec 02 12:35	12°♒31'26	
	16331 Dec 19 06:05	0°♓	
evening max el	16331 Dec 21 23:54	2°♓42'22	46°17'01
	16332 Jan 26 02:23	0°♈	
greatest brilliancy	16332 Jan 30 11:14	1°♈48'28	-4.8m
retrograde	16332 Feb 09 11:38	3°♈38'56	
	16332 Feb 23 02:58	30°℞♓	
evening set	16332 Feb 25 20:49	28°♓30'23	
inferior conj	16332 Mar 01 21:34	25°♓26'44	-5°14'18
minimum elong	16332 Mar 02 07:29	25°♓11'13	5°11'41
min. Earth dist.	16332 Mar 02 02:54	25°♓18'25	0.28560 AU
morning rise	16332 Mar 07 18:05	21°♓54'55	
direct	16332 Mar 23 03:05	17°♓17'54	
asc. node	16332 Mar 24 11:33	17°♓20'03	
greatest brilliancy	16332 Apr 02 21:36	19°♓24'50	-4.8m
	16332 Apr 20 20:11	0°♈	
morning max el	16332 May 11 08:39	18°♈07'05	45°55'13
	16332 May 23 01:38	0°♉	
	16332 Jun 19 08:01	0°♊	
desc. node	16332 Jul 14 12:28	29°♊24'33	
	16332 Jul 15 00:23	0°♋	
	16332 Aug 08 21:49	0°♌	
	16332 Sep 02 08:42	0°♍	
	16332 Sep 26 14:02	0°♎	
	16332 Oct 20 16:42	0°♏	
asc. node	16332 Nov 04 08:28	18°♏16'15	
morning set	16332 Nov 11 19:43	27°♏35'15	
	16332 Nov 13 18:07	0°♐	
	16332 Dec 07 19:12	0°♑	
superior conj	16332 Dec 20 02:32	15°♑20'33	1°23'44
minimum elong	16332 Dec 19 20:58	15°♑03'13	1°24'20
max. Earth dist.	16332 Dec 22 06:45	18°♑03'11	1.72289 AU
	16332 Dec 31 21:08	0°♒	
	16333 Jan 25 01:36	0°♓	
evening rise	16333 Jan 26 13:07	1°♓49'48	
	16333 Feb 18 09:57	0°♈	
desc. node	16333 Feb 24 00:56	6°♈53'59	
	16333 Mar 14 22:38	0°♉	
	16333 Apr 08 15:27	0°♊	
	16333 May 03 12:53	0°♋	
	16333 May 28 18:03	0°♌	
asc. node	16333 Jun 16 18:04	22°♌08'02	
	16333 Jun 23 15:18	0°♍	
	16333 Jul 21 02:43	0°♎	
evening max el	16333 Jul 27 18:46	6°♎46'23	46°33'34
	16333 Aug 23 15:24	0°♏	
greatest brilliancy	16333 Sep 05 11:58	6°♏54'56	-4.9m
retrograde	16333 Sep 15 20:44	8°♏55'18	
evening set	16333 Sep 30 07:04	4°♏48'30	
inferior conj	16333 Oct 06 12:42	1°♏10'54	0°02'48
minimum elong	16333 Oct 06 12:49	1°♏10'43	0°03'03
transit middle	16333 Oct 06 12:49	1°♏10'43	0°03'03
transit begin	16333 Oct 06 08:48	1°♏16'48	
transit end	16333 Oct 06 16:50	1°♏04'37	
min. Earth dist.	16333 Oct 06 11:33	1°♏12'37	0.26937 AU
desc. node	16333 Oct 06 16:58	1°♏04'25	
	16333 Oct 08 11:38	30°℞♎	
morning rise	16333 Oct 12 18:46	27°♎33'13	
direct	16333 Oct 27 07:00	23°♎26'27	
greatest brilliancy	16333 Nov 06 04:26	25°♎15'42	-4.8m
	16333 Nov 15 23:06	0°♏	
morning max el	16333 Dec 16 01:54	24°♏51'19	46°23'54
	16333 Dec 21 06:08	0°♐	
	16334 Jan 18 06:02	0°♑	
asc. node	16334 Jan 27 17:27	10°♑42'29	
	16334 Feb 13 09:55	0°♒	
	16334 Mar 10 17:40	0°♓	
	16334 Apr 04 14:45	0°♈	
	16334 Apr 29 05:33	0°♉	
desc. node	16334 May 19 15:04	25°♉02'14	
	16334 May 23 15:46	0°♊	
morning set	16334 Jun 14 19:54	27°♊24'58	
	16334 Jun 16 21:54	0°♋	
	16334 Jul 11 00:34	0°♌	
max. Earth dist.	16334 Jul 22 01:17	13°♌46'02	1.71864 AU
superior conj	16334 Jul 24 08:21	16°♌38'04	-1°25'05
minimum elong	16334 Jul 24 14:15	16°♌56'29	1°25'31
	16334 Aug 04 00:52	0°♍	
	16334 Aug 28 00:12	0°♎	
evening rise	16334 Sep 02 08:29	6°♎41'27	
asc. node	16334 Sep 09 07:34	15°♎24'08	
	16334 Sep 20 23:49	0°♏	
	16334 Oct 15 01:03	0°♐	
	16334 Nov 08 06:01	0°♑	
	16334 Dec 02 18:20	0°♒	
	16334 Dec 27 19:26	0°♓	
desc. node	16334 Dec 30 00:29	2°♓36'23	
	16335 Jan 22 17:45	0°♈	
	16335 Feb 19 07:43	0°♉	
evening max el	16335 Mar 03 01:22	11°♉46'38	46°01'09
	16335 Mar 23 22:40	0°♊	
greatest brilliancy	16335 Apr 11 00:56	10°♊26'04	-4.8m
retrograde	16335 Apr 21 04:49	12°♊19'21	
asc. node	16335 Apr 21 21:55	12°♊18'45	
evening set	16335 May 06 10:02	7°♊47'01	
inferior conj	16335 May 12 08:18	4°♊11'28	4°50'31
minimum elong	16335 May 11 22:52	4°♊26'19	4°47'27
min. Earth dist.	16335 May 12 04:30	4°♊17'26	0.28292 AU
morning rise	16335 May 17 11:39	1°♊02'53	
	16335 May 19 09:04	30°℞♉	
direct	16335 Jun 02 13:06	26°♉01'50	
greatest brilliancy	16335 Jun 12 16:43	27°♉57'13	-4.8m
	16335 Jun 17 10:28	0°♊	
morning max el	16335 Jul 22 12:12	28°♊00'02	46°35'29
	16335 Jul 24 12:06	0°♋	
desc. node	16335 Aug 11 22:57	19°♋32'39	
	16335 Aug 21 07:23	0°♌	
	16335 Sep 16 02:46	0°♍	
	16335 Oct 11 02:32	0°♎	
	16335 Nov 04 17:06	0°♏	
	16335 Nov 29 02:49	0°♐	
asc. node	16335 Dec 02 20:54	4°♐37'43	
	16335 Dec 23 09:34	0°♑	
	16336 Jan 16 14:46	0°♒	
morning set	16336 Jan 22 18:05	7°♒36'29	
	16336 Feb 09 19:57	0°♓	
superior conj	16336 Feb 28 17:52	23°♓23'18	0°54'00
minimum elong	16336 Feb 29 03:36	23°♓53'21	0°53'45
max. Earth dist.	16336 Mar 01 11:16	25°♓31'08	1.73027 AU
	16336 Mar 05 02:22	0°♈	
desc. node	16336 Mar 23 14:39	22°♈49'51	
	16336 Mar 29 10:21	0°♉	
evening rise	16336 Apr 06 15:41	10°♉07'21	
	16336 Apr 22 19:20	0°♊	
	16336 May 17 04:41	0°♋	
	16336 Jun 10 14:45	0°♌	

	16336 Jul 05	03:20	0°♍		
asc. node	16336 Jul 14	06:33	11°♍06'45		
	16336 Jul 29	21:46	0°♎		
	16336 Aug 24	04:08	0°♏		
	16336 Sep 19	12:25	0°♐		
evening max el	16336 Oct 08	03:07	19°♐38'25	46°37'45	
	16336 Oct 18	22:26	0°♑		
desc. node	16336 Nov 03	03:26	12°♑22'38		
greatest brilliancy	16336 Nov 16	14:52	19°♑49'22	-4.8m	
retrograde	16336 Nov 27	07:47	21°♑56'06		
evening set	16336 Dec 15	01:04	16°♑00'32		
min. Earth dist.	16336 Dec 17	20:56	14°♑17'03	0.28088 AU	
inferior conj	16336 Dec 18	13:24	13°♑51'35	-8°39'19	
minimum elong	16336 Dec 18	07:18	14°♑01'01	8°38'07	
morning rise	16336 Dec 21	13:42	12°♑01'01		
direct	16337 Jan 08	15:21	5°♑56'28		
greatest brilliancy	16337 Jan 18	06:12	7°♑37'33	-4.8m	
	16337 Feb 19	23:19	0°♒		
asc. node	16337 Feb 24	03:37	3°♒53'59		
morning max el	16337 Feb 26	16:20	6°♒19'44	45°47'45	
	16337 Mar 21	13:31	0°♓		
	16337 Apr 17	05:45	0°♈		
	16337 May 12	18:52	0°♉		
	16337 Jun 06	17:32	0°♊		
desc. node	16337 Jun 16	03:03	11°♊25'56		
	16337 Jul 01	06:44	0°♋		
	16337 Jul 25	13:13	0°♌		
	16337 Aug 18	15:16	0°♍		
morning set	16337 Aug 27	23:45	11°♍41'26		
	16337 Sep 11	14:56	0°♎		
	16337 Oct 05	13:45	0°♏		
superior conj	16337 Oct 06	15:06	1°♏19'22	-0°00'38	
minimum elong	16337 Oct 06	15:09	1°♏19'32	0°00'19	
behind sun begin	16337 Oct 05	14:19	0°♏01'46		
behind sun end	16337 Oct 07	15:59	2°♏37'17		
asc. node	16337 Oct 06	21:10	1°♏38'24		
max. Earth dist.	16337 Oct 06	19:21	1°♏32'41	1.71602 AU	
	16337 Oct 29	12:46	0°♐		
evening rise	16337 Nov 14	10:44	19°♐53'39		
	16337 Nov 22	13:07	0°♑		
	16337 Dec 16	16:38	0°♒		
	16338 Jan 10	01:48	0°♓		
desc. node	16338 Jan 26	13:23	20°♓03'21		
	16338 Feb 03	19:05	0°♈		
	16338 Feb 28	22:48	0°♉		
	16338 Mar 26	16:49	0°♊		
	16338 Apr 22	12:27	0°♋		
evening max el	16338 May 13	09:12	21°♋38'32	46°09'54	
asc. node	16338 May 19	08:32	27°♋22'06		
	16338 May 22	04:56	0°♌		
greatest brilliancy	16338 Jun 22	13:27	21°♌20'28	-4.8m	
retrograde	16338 Jul 01	22:30	22°♌59'41		
evening set	16338 Jul 20	00:11	16°♌47'38		
inferior conj	16338 Jul 22	18:20	15°♌05'44	8°53'12	
minimum elong	16338 Jul 22	23:02	14°♌58'25	8°52'22	
min. Earth dist.	16338 Jul 23	09:36	14°♌41'59	0.27726 AU	
morning rise	16338 Jul 25	21:45	13°♌09'23		
direct	16338 Aug 12	17:06	7°♌02'14		
greatest brilliancy	16338 Aug 22	23:49	9°♌01'04	-4.9m	
desc. node	16338 Sep 08	08:52	18°♌28'09		
	16338 Sep 22	01:40	0°♍		
morning max el	16338 Oct 02	04:37	9°♍45'26	46°55'41	
	16338 Oct 21	09:09	0°♎		
	16338 Nov 16	20:50	0°♏		
	16338 Dec 12	08:15	0°♐		
asc. node	16338 Dec 30	08:29	21°♐35'51		
	16339 Jan 06	07:21	0°♑		
	16339 Jan 30	23:02	0°♒		
	16339 Feb 24	10:23	0°♓		
	16339 Mar 20	19:39	0°♈		
morning set	16339 Apr 01	19:42	14°♈46'57		
	16339 Apr 14	03:55	0°♉		
desc. node	16339 Apr 21	03:58	8°♉38'18		
	16339 May 08	11:03	0°♊		
max. Earth dist.	16339 May 08	07:32	29°♉49'10	1.72838 AU	
superior conj	16339 May 10	03:03	2°♊03'41	-0°44'11	
minimum elong	16339 May 09	17:42	1°♊34'48	0°44'21	
	16339 Jun 01	16:30	0°♋		
evening rise	16339 Jun 17	17:33	19°♋55'07		
	16339 Jun 25	20:15	0°♌		
	16339 Jul 19	23:14	0°♍		
asc. node	16339 Aug 11	19:48	28°♍23'17		
	16339 Aug 13	03:00	0°♎		
	16339 Sep 06	09:31	0°♏		
	16339 Sep 30	21:42	0°♐		
	16339 Oct 25	21:15	0°♑		
	16339 Nov 20	20:22	0°♒		
desc. node	16339 Dec 01	14:21	11°♒50'20		
	16339 Dec 19	03:20	0°♓		
evening max el	16339 Dec 19	15:15	0°♓29'10	46°17'49	
greatest brilliancy	16340 Jan 28	01:52	29°♓35'25	-4.8m	
	16340 Jan 29	07:21	0°♈		
retrograde	16340 Feb 07	03:43	1°♈26'51		
	16340 Feb 15	15:18	30°℞♓		
evening set	16340 Feb 23	15:10	26°♓13'56		
inferior conj	16340 Feb 28	13:06	23°♓14'24	-5°31'13	
minimum elong	16340 Feb 28	23:18	22°♓58'28	5°28'36	
min. Earth dist.	16340 Feb 28	18:00	23°♓06'43	0.28570 AU	
morning rise	16340 Mar 05	07:24	19°♓46'04		
direct	16340 Mar 20	18:56	15°♓05'43		
asc. node	16340 Mar 23	13:32	15°♓14'43		
greatest brilliancy	16340 Mar 31	12:39	17°♓12'17	-4.8m	
	16340 Apr 21	07:26	0°♈		
morning max el	16340 May 09	01:00	15°♈56'30	45°54'10	
	16340 May 22	19:43	0°♉		
	16340 Jun 18	22:15	0°♊		
desc. node	16340 Jul 13	14:23	28°♊52'36		
	16340 Jul 14	13:01	0°♋		
	16340 Aug 08	09:37	0°♌		
	16340 Sep 01	20:02	0°♍		
	16340 Sep 26	01:04	0°♎		
	16340 Oct 20	03:31	0°♏		
asc. node	16340 Nov 03	10:13	17°♏48'26		
morning set	16340 Nov 09	09:44	25°♏16'03		
	16340 Nov 13	04:45	0°♐		
	16340 Dec 07	05:42	0°♑		
superior conj	16340 Dec 17	18:12	13°♑07'09	1°22'42	
minimum elong	16340 Dec 17	11:56	12°♑47'38	1°23'17	
max. Earth dist.	16340 Dec 19	23:50	15°♑54'15	1.72259 AU	
	16340 Dec 31	07:35	0°♒		
evening rise	16341 Jan 24	04:57	29°♒37'53		
	16341 Jan 24	12:06	0°♓		
	16341 Feb 17	20:37	0°♈		
desc. node	16341 Feb 23	02:52	6°♈27'05		
	16341 Mar 14	09:33	0°♉		
	16341 Apr 08	02:46	0°♊		
	16341 May 03	00:52	0°♋		
	16341 May 28	07:10	0°♌		
asc. node	16341 Jun 15	19:56	21°♌31'39		
	16341 Jun 23	06:35	0°♍		
	16341 Jul 20	23:23	0°♎		

evening max el	16341 Jul 25 09:19	4°♎27'03	46°32'51
	16341 Aug 24 21:39	0°♏	
greatest brilliancy	16341 Sep 03 02:00	4°♏31'48	-4.9m
retrograde	16341 Sep 13 09:55	6°♏30'47	
evening set	16341 Sep 27 20:54	2°♏23'12	
	16341 Oct 02 00:59	30°℞♎	
inferior conj	16341 Oct 04 01:18	28°♎46'49	0°27'20
minimum elong	16341 Oct 04 02:24	28°♎45'09	0°27'13
min. Earth dist.	16341 Oct 04 01:24	28°♎46'40	0.26927 AU
desc. node	16341 Oct 05 18:55	27°♎43'48	
morning rise	16341 Oct 10 08:07	25°♎07'58	
direct	16341 Oct 24 20:04	21°♎02'26	
greatest brilliancy	16341 Nov 03 17:16	22°♎51'35	-4.8m
	16341 Nov 17 05:27	0°♏	
morning max el	16341 Dec 13 15:27	22°♏31'18	46°25'28
	16341 Dec 21 02:39	0°♐	
	16342 Jan 17 21:06	0°♑	
asc. node	16342 Jan 26 19:28	10°♑07'55	
	16342 Feb 12 22:47	0°♒	
	16342 Mar 10 05:26	0°♓	
	16342 Apr 04 01:55	0°♈	
	16342 Apr 28 16:23	0°♉	
desc. node	16342 May 18 16:50	24°♉34'52	
	16342 May 23 02:24	0°♊	
morning set	16342 Jun 12 08:55	25°♊03'49	
	16342 Jun 16 08:27	0°♋	
	16342 Jul 10 11:05	0°♌	
max. Earth dist.	16342 Jul 19 10:26	11°♌11'56	1.71891 AU
superior conj	16342 Jul 21 20:56	14°♌14'34	-1°25'58
minimum elong	16342 Jul 22 01:54	14°♌30'06	1°26'27
	16342 Aug 03 11:24	0°♍	
	16342 Aug 27 10:49	0°♎	
evening rise	16342 Aug 30 20:27	4°♎15'25	
asc. node	16342 Sep 08 09:24	14°♎56'30	
	16342 Sep 20 10:33	0°♏	
	16342 Oct 14 11:57	0°♐	
	16342 Nov 07 17:12	0°♑	
	16342 Dec 02 05:59	0°♒	
	16342 Dec 27 07:57	0°♓	
desc. node	16342 Dec 29 02:25	2°♓04'58	
	16343 Jan 22 08:01	0°♈	
	16343 Feb 19 02:17	0°♉	
evening max el	16343 Feb 28 16:16	9°♉33'28	46°01'13
	16343 Mar 24 14:57	0°♊	
greatest brilliancy	16343 Apr 08 16:31	8°♊13'24	-4.8m
retrograde	16343 Apr 18 19:18	10°♊05'54	
asc. node	16343 Apr 20 23:44	10°♊00'13	
evening set	16343 May 03 23:26	5°♊36'15	
inferior conj	16343 May 09 23:40	1°♊58'01	4°31'58
minimum elong	16343 May 09 14:38	2°♊12'15	4°28'59
min. Earth dist.	16343 May 09 20:19	2°♊03'19	0.28299 AU
	16343 May 13 03:20	30°℞♉	
morning rise	16343 May 15 05:43	28°♉45'15	
direct	16343 May 31 04:10	23°♉48'23	
greatest brilliancy	16343 Jun 10 09:03	25°♉44'19	-4.8m
	16343 Jun 19 04:01	0°♊	
morning max el	16343 Jul 20 01:46	25°♊40'38	46°34'04
	16343 Jul 24 08:37	0°♋	
desc. node	16343 Aug 11 00:56	18°♋52'45	
	16343 Aug 20 22:33	0°♌	
	16343 Sep 15 15:53	0°♍	
	16343 Oct 10 14:37	0°♎	
	16343 Nov 04 04:33	0°♏	
	16343 Nov 28 13:50	0°♐	
asc. node	16343 Dec 01 22:42	4°♐09'27	
	16343 Dec 22 20:17	0°♑	
	16344 Jan 16 01:17	0°♒	
morning set	16344 Jan 20 10:21	5°♒25'39	
	16344 Feb 09 06:21	0°♓	
superior conj	16344 Feb 26 10:14	21°♓13'44	0°56'38
minimum elong	16344 Feb 26 20:08	21°♓44'17	0°56'25
max. Earth dist.	16344 Feb 28 03:55	23°♓22'28	1.73010 AU
	16344 Mar 04 12:43	0°♈	
desc. node	16344 Mar 22 16:24	22°♈23'19	
	16344 Mar 28 20:44	0°♉	
evening rise	16344 Apr 04 07:35	7°♉56'29	
	16344 Apr 22 05:52	0°♊	
	16344 May 16 15:29	0°♋	
	16344 Jun 10 01:56	0°♌	
	16344 Jul 04 15:02	0°♍	
asc. node	16344 Jul 13 08:28	10°♍36'11	
	16344 Jul 29 10:19	0°♎	
	16344 Aug 23 18:11	0°♏	
	16344 Sep 19 05:42	0°♐	
evening max el	16344 Oct 05 16:13	17°♐15'52	46°38'05
	16344 Oct 19 02:51	0°♑	
desc. node	16344 Nov 02 05:15	11°♑04'46	
greatest brilliancy	16344 Nov 14 05:22	17°♑31'22	-4.8m
retrograde	16344 Nov 24 21:57	19°♑38'25	
evening set	16344 Dec 12 11:42	13°♑48'38	
min. Earth dist.	16344 Dec 15 10:55	12°♑00'25	0.28044 AU
inferior conj	16344 Dec 16 03:37	11°♑34'36	-8°32'49
minimum elong	16344 Dec 15 20:45	11°♑45'14	8°31'28
morning rise	16344 Dec 19 05:58	9°♑41'05	
direct	16345 Jan 06 04:33	3°♑39'55	
greatest brilliancy	16345 Jan 15 20:06	5°♑21'16	-4.8m
	16345 Feb 20 00:13	0°♒	
asc. node	16345 Feb 23 05:32	3°♒03'25	
morning max el	16345 Feb 24 06:00	4°♒02'30	45°48'35
	16345 Mar 21 05:36	0°♓	
	16345 Apr 16 19:01	0°♈	
	16345 May 12 06:50	0°♉	
	16345 Jun 06 04:50	0°♊	
desc. node	16345 Jun 15 04:59	10°♊57'49	
	16345 Jun 30 17:41	0°♋	
	16345 Jul 24 23:59	0°♌	
	16345 Aug 18 01:55	0°♍	
morning set	16345 Aug 25 12:05	9°♍16'41	
	16345 Sep 11 01:31	0°♎	
superior conj	16345 Oct 04 03:39	28°♎55'21	-0°04'28
minimum elong	16345 Oct 04 04:41	28°♎58'37	0°04'09
behind sun begin	16345 Oct 03 04:23	27°♎42'28	
behind sun end	16345 Oct 05 05:00	0°♏14'46	
max. Earth dist.	16345 Oct 04 04:40	28°♎58'35	1.71595 AU
	16345 Oct 05 00:17	0°♏	
asc. node	16345 Oct 05 22:52	1°♏10'44	
	16345 Oct 28 23:18	0°♐	
evening rise	16345 Nov 12 01:06	17°♐35'45	
	16345 Nov 21 23:42	0°♑	
	16345 Dec 16 03:21	0°♒	
	16346 Jan 09 12:46	0°♓	
desc. node	16346 Jan 25 15:17	19°♓35'01	
	16346 Feb 03 06:32	0°♈	
	16346 Feb 28 11:03	0°♉	
	16346 Mar 26 06:32	0°♊	
	16346 Apr 22 05:20	0°♋	
evening max el	16346 May 10 23:17	19°♋21'09	46°09'19
asc. node	16346 May 18 10:26	26°♋27'30	
	16346 May 22 08:29	0°♌	
greatest brilliancy	16346 Jun 20 01:57	19°♌00'01	-4.8m
retrograde	16346 Jun 29 12:34	20°♌40'29	

evening set	16346 Jul 17 15:18	14°♌25'31	
inferior conj	16346 Jul 20 08:13	12°♌45'31	8°57'22
minimum elong	16346 Jul 20 12:03	12°♌39'33	8°56'38
min. Earth dist.	16346 Jul 20 22:31	12°♌23'16	0.27767 AU
morning rise	16346 Jul 23 08:42	10°♌53'41	
direct	16346 Aug 10 07:35	4°♌41'17	
greatest brilliancy	16346 Aug 20 13:28	6°♌39'53	-4.9m
desc. node	16346 Sep 07 10:47	17°♌15'02	
	16346 Sep 22 04:11	0°♍	
morning max el	16346 Sep 29 20:07	7°♍28'12	46°55'52
	16346 Oct 21 02:14	0°♎	
	16346 Nov 16 10:52	0°♏	
	16346 Dec 11 20:47	0°♐	
asc. node	16346 Dec 29 10:29	21°♐06'11	
	16347 Jan 05 19:00	0°♑	
	16347 Jan 30 10:08	0°♒	
	16347 Feb 23 21:08	0°♓	
	16347 Mar 20 06:14	0°♈	
morning set	16347 Mar 30 11:50	12°♈36'22	
	16347 Apr 13 14:25	0°♉	
desc. node	16347 Apr 20 05:45	8°♉11'30	
max. Earth dist.	16347 May 06 03:01	27°♉48'35	1.72859 AU
superior conj	16347 May 07 17:44	29°♉48'16	-0°41'04
minimum elong	16347 May 07 08:53	29°♉20'55	0°41'13
	16347 May 07 21:32	0°♊	
	16347 Jun 01 03:01	0°♋	
evening rise	16347 Jun 15 07:30	17°♋36'32	
	16347 Jun 25 06:52	0°♌	
	16347 Jul 19 10:03	0°♍	
asc. node	16347 Aug 10 21:38	27°♍54'34	
	16347 Aug 12 14:07	0°♎	
	16347 Sep 05 21:03	0°♏	
	16347 Sep 30 09:52	0°♐	
	16347 Oct 25 10:30	0°♑	
	16347 Nov 20 11:55	0°♒	
desc. node	16347 Nov 30 16:21	11°♒09'23	
evening max el	16347 Dec 17 07:08	28°♒17'09	46°18'44
	16347 Dec 19 01:28	0°♓	
greatest brilliancy	16348 Jan 25 16:32	27°♓22'20	-4.8m
retrograde	16348 Feb 04 19:28	29°♓14'19	
evening set	16348 Feb 21 09:31	23°♓57'10	
inferior conj	16348 Feb 26 04:29	21°♓01'42	-5°47'42
minimum elong	16348 Feb 26 14:53	20°♓45'28	5°45'06
min. Earth dist.	16348 Feb 26 08:51	20°♓54'53	0.28576 AU
morning rise	16348 Mar 02 20:19	17°♓37'00	
direct	16348 Mar 18 10:58	12°♓53'18	
asc. node	16348 Mar 22 15:24	13°♓13'38	
greatest brilliancy	16348 Mar 29 03:05	14°♓58'46	-4.8m
	16348 Apr 21 15:42	0°♈	
morning max el	16348 May 06 16:58	13°♈44'54	45°53'11
	16348 May 22 13:21	0°♉	
	16348 Jun 18 12:17	0°♊	
desc. node	16348 Jul 12 16:21	28°♊21'05	
	16348 Jul 14 01:30	0°♋	
	16348 Aug 07 21:19	0°♌	
	16348 Sep 01 07:18	0°♍	
	16348 Sep 25 12:04	0°♎	
	16348 Oct 19 14:20	0°♏	
asc. node	16348 Nov 02 12:04	17°♏20'43	
morning set	16348 Nov 06 23:29	22°♏55'47	
	16348 Nov 12 15:27	0°♐	
	16348 Dec 06 16:18	0°♑	
superior conj	16348 Dec 15 09:27	10°♑52'02	1°21'32
minimum elong	16348 Dec 15 02:31	10°♑30'27	1°22'05
max. Earth dist.	16348 Dec 17 16:09	13°♑42'33	1.72228 AU
	16348 Dec 30 18:09	0°♒	
evening rise	16349 Jan 21 20:20	27°♒24'12	
	16349 Jan 23 22:43	0°♓	
	16349 Feb 17 07:23	0°♈	
desc. node	16349 Feb 22 04:36	5°♈59'15	
	16349 Mar 13 20:37	0°♉	
	16349 Apr 07 14:16	0°♊	
	16349 May 02 13:03	0°♋	
	16349 May 27 20:31	0°♌	
asc. node	16349 Jun 14 21:56	20°♌55'03	
	16349 Jun 22 22:13	0°♍	
	16349 Jul 20 20:50	0°♎	
evening max el	16349 Jul 22 23:22	2°♎06'25	46°32'11
	16349 Aug 26 17:48	0°♏	
greatest brilliancy	16349 Aug 31 16:38	2°♏09'45	-4.9m
retrograde	16349 Sep 10 22:38	4°♏06'48	
evening set	16349 Sep 25 11:08	29°♎58'11	
	16349 Sep 25 09:46	30°℞♎	
inferior conj	16349 Oct 01 14:09	26°♎23'22	0°51'32
minimum elong	16349 Oct 01 16:12	26°♎20'16	0°51'07
min. Earth dist.	16349 Oct 01 15:43	26°♎20'59	0.26920 AU
desc. node	16349 Oct 04 20:43	24°♎25'11	
morning rise	16349 Oct 07 21:25	22°♎43'26	
direct	16349 Oct 22 08:58	18°♎38'53	
greatest brilliancy	16349 Nov 01 06:53	20°♎28'25	-4.9m
	16349 Nov 18 03:23	0°♏	
morning max el	16349 Dec 11 04:17	20°♏08'54	46°26'50
	16349 Dec 20 22:41	0°♐	
	16350 Jan 17 12:10	0°♑	
asc. node	16350 Jan 25 21:19	9°♑32'26	
	16350 Feb 12 11:48	0°♒	
	16350 Mar 09 17:24	0°♓	
	16350 Apr 03 13:17	0°♈	
	16350 Apr 28 03:24	0°♉	
desc. node	16350 May 17 18:41	24°♉07'09	
	16350 May 22 13:14	0°♊	
morning set	16350 Jun 09 21:50	22°♊41'45	
	16350 Jun 15 19:13	0°♋	
	16350 Jul 09 21:50	0°♌	
max. Earth dist.	16350 Jul 16 17:58	8°♌32'02	1.71917 AU
superior conj	16350 Jul 19 09:41	11°♌50'56	-1°26'42
minimum elong	16350 Jul 19 13:43	12°♌03'34	1°27'13
	16350 Aug 02 22:11	0°♍	
	16350 Aug 26 21:38	0°♎	
evening rise	16350 Aug 28 08:36	1°♎49'24	
asc. node	16350 Sep 07 11:08	14°♎27'59	
	16350 Sep 19 21:26	0°♏	
	16350 Oct 13 23:00	0°♐	
	16350 Nov 07 04:33	0°♑	
	16350 Dec 01 17:53	0°♒	
	16350 Dec 26 20:49	0°♓	
desc. node	16350 Dec 28 04:17	1°♓32'25	
	16351 Jan 21 22:46	0°♈	
	16351 Feb 18 21:49	0°♉	
evening max el	16351 Feb 26 06:29	7°♉17'38	46°01'22
	16351 Mar 25 13:49	0°♊	
greatest brilliancy	16351 Apr 06 07:56	5°♊59'27	-4.8m
retrograde	16351 Apr 16 09:51	7°♊51'36	
asc. node	16351 Apr 20 01:40	7°♊35'34	
evening set	16351 May 01 12:59	3°♊23'59	
	16351 May 07 04:35	30°℞♉	
inferior conj	16351 May 07 15:01	29°♉43'34	4°13'03
minimum elong	16351 May 07 06:26	29°♉57'05	4°10'08
min. Earth dist.	16351 May 07 12:11	29°♉48'02	0.28308 AU
morning rise	16351 May 12 23:41	26°♉26'55	
direct	16351 May 28 18:59	21°♉33'42	

greatest brilliancy	16351 Jun 08 01:50	23°♉30'58	-4.8m
	16351 Jun 20 09:03	0°♊	
morning max el	16351 Jul 17 15:37	23°♊21'00	46°32'42
	16351 Jul 24 04:51	0°♋	
desc. node	16351 Aug 10 02:44	18°♋11'47	
	16351 Aug 20 13:50	0°♌	
	16351 Sep 15 05:13	0°♍	
	16351 Oct 10 02:55	0°♎	
	16351 Nov 03 16:12	0°♏	
	16351 Nov 28 01:03	0°♐	
asc. node	16351 Dec 01 00:39	3°♐41'00	
	16351 Dec 22 07:13	0°♑	
	16352 Jan 15 12:03	0°♒	
morning set	16352 Jan 18 02:40	3°♒14'08	
	16352 Feb 08 17:02	0°♓	
superior conj	16352 Feb 24 02:36	19°♓03'04	0°59'10
minimum elong	16352 Feb 24 12:37	19°♓33'59	0°59'00
max. Earth dist.	16352 Feb 25 20:13	21°♓11'36	1.72998 AU
	16352 Mar 03 23:23	0°♈	
desc. node	16352 Mar 21 18:11	21°♈55'43	
	16352 Mar 28 07:29	0°♉	
evening rise	16352 Apr 01 23:23	5°♉44'14	
	16352 Apr 21 16:47	0°♊	
	16352 May 16 02:40	0°♋	
	16352 Jun 09 13:29	0°♌	
	16352 Jul 04 03:10	0°♍	
asc. node	16352 Jul 12 10:17	10°♍04'09	
	16352 Jul 28 23:20	0°♎	
	16352 Aug 23 08:47	0°♏	
	16352 Sep 18 23:47	0°♐	
evening max el	16352 Oct 03 05:55	14°♐53'59	46°38'37
	16352 Oct 19 09:43	0°♑	
desc. node	16352 Nov 01 07:16	9°♑44'14	
greatest brilliancy	16352 Nov 11 19:27	15°♑12'22	-4.8m
retrograde	16352 Nov 22 12:47	17°♑20'36	
evening set	16352 Dec 09 22:22	11°♑36'29	
min. Earth dist.	16352 Dec 13 00:49	9°♑43'53	0.27998 AU
inferior conj	16352 Dec 13 18:02	9°♑17'21	-8°25'32
minimum elong	16352 Dec 13 10:26	9°♑29'03	8°24'00
morning rise	16352 Dec 16 22:41	7°♑20'38	
direct	16353 Jan 03 18:08	1°♑23'05	
greatest brilliancy	16353 Jan 13 09:54	3°♑04'39	-4.8m
	16353 Feb 20 00:09	0°♒	
morning max el	16353 Feb 21 20:42	1°♒47'05	45°49'17
asc. node	16353 Feb 22 07:24	2°♒13'03	
	16353 Mar 20 21:43	0°♓	
	16353 Apr 16 08:32	0°♈	
	16353 May 11 19:09	0°♉	
	16353 Jun 05 16:31	0°♊	
desc. node	16353 Jun 14 06:55	10°♊28'35	
	16353 Jun 30 05:01	0°♋	
	16353 Jul 24 11:06	0°♌	
	16353 Aug 17 12:55	0°♍	
morning set	16353 Aug 23 00:23	6°♍50'44	
	16353 Sep 10 12:27	0°♎	
superior conj	16353 Oct 01 16:10	26°♎29'59	-0°08'16
minimum elong	16353 Oct 01 18:11	26°♎36'19	0°07'56
behind sun begin	16353 Sep 30 20:07	25°♎27'10	
behind sun end	16353 Oct 02 16:15	27°♎45'27	
max. Earth dist.	16353 Oct 01 15:55	26°♎29'13	1.71588 AU
	16353 Oct 04 11:12	0°♏	
asc. node	16353 Oct 05 00:45	0°♏42'25	
	16353 Oct 28 10:13	0°♐	
evening rise	16353 Nov 09 15:37	15°♐17'08	
	16353 Nov 21 10:38	0°♑	
	16353 Dec 15 14:23	0°♒	
	16354 Jan 09 00:04	0°♓	
desc. node	16354 Jan 24 17:06	19°♓05'26	
	16354 Feb 02 18:18	0°♈	
	16354 Feb 27 23:42	0°♉	
	16354 Mar 25 20:46	0°♊	
	16354 Apr 21 23:03	0°♋	
evening max el	16354 May 08 14:19	17°♋04'56	46°08'38
asc. node	16354 May 17 12:27	25°♋30'44	
	16354 May 22 14:32	0°♌	
greatest brilliancy	16354 Jun 17 14:27	16°♌38'38	-4.8m
retrograde	16354 Jun 27 02:47	18°♌20'11	
evening set	16354 Jul 15 06:07	12°♌03'15	
inferior conj	16354 Jul 17 22:12	10°♌24'23	9°00'40
minimum elong	16354 Jul 18 01:09	10°♌19'47	8°59'59
min. Earth dist.	16354 Jul 18 11:17	10°♌04'00	0.27805 AU
morning rise	16354 Jul 20 20:06	8°♌36'27	
direct	16354 Aug 07 22:30	2°♌19'46	
greatest brilliancy	16354 Aug 18 02:44	4°♌17'20	-4.9m
desc. node	16354 Sep 06 12:43	16°♌03'07	
	16354 Sep 22 05:42	0°♍	
morning max el	16354 Sep 27 11:26	5°♍09'36	46°55'53
	16354 Oct 20 19:20	0°♎	
	16354 Nov 16 01:07	0°♏	
	16354 Dec 11 09:35	0°♐	
asc. node	16354 Dec 28 12:16	20°♐34'54	
	16355 Jan 05 06:56	0°♑	
	16355 Jan 29 21:29	0°♒	
	16355 Feb 23 08:09	0°♓	
	16355 Mar 19 17:03	0°♈	
morning set	16355 Mar 28 04:26	10°♈26'26	
	16355 Apr 13 01:10	0°♉	
desc. node	16355 Apr 19 07:42	7°♉44'20	
max. Earth dist.	16355 May 03 21:20	25°♉43'35	1.72884 AU
superior conj	16355 May 05 08:40	27°♉32'47	-0°37'54
minimum elong	16355 May 05 00:23	27°♉07'09	0°38'02
	16355 May 07 08:18	0°♊	
	16355 May 31 13:52	0°♋	
evening rise	16355 Jun 12 21:26	15°♋16'52	
	16355 Jun 24 17:51	0°♌	
	16355 Jul 18 21:13	0°♍	
asc. node	16355 Aug 09 23:23	27°♍24'32	
	16355 Aug 12 01:35	0°♎	
	16355 Sep 05 08:56	0°♏	
	16355 Sep 29 22:24	0°♐	
	16355 Oct 25 00:12	0°♑	
	16355 Nov 20 04:05	0°♒	
desc. node	16355 Nov 29 18:16	10°♒26'48	
evening max el	16355 Dec 14 23:07	26°♒04'20	46°19'36
	16355 Dec 19 00:56	0°♓	
greatest brilliancy	16356 Jan 23 07:55	25°♓09'37	-4.8m
retrograde	16356 Feb 02 11:03	27°♓01'28	
evening set	16356 Feb 19 04:05	21°♓40'22	
inferior conj	16356 Feb 23 20:04	18°♓49'00	-6°03'39
minimum elong	16356 Feb 24 06:35	18°♓32'33	6°01'04
min. Earth dist.	16356 Feb 23 23:59	18°♓42'52	0.28577 AU
morning rise	16356 Feb 29 09:11	15°♓28'02	
direct	16356 Mar 16 03:00	10°♓41'08	
asc. node	16356 Mar 21 17:20	11°♓17'05	
greatest brilliancy	16356 Mar 26 17:33	12°♓45'09	-4.8m
	16356 Apr 21 21:37	0°♈	
morning max el	16356 May 04 08:05	11°♈30'57	45°52'09
	16356 May 22 06:43	0°♉	
	16356 Jun 18 02:21	0°♊	
desc. node	16356 Jul 11 18:07	27°♊48'27	
	16356 Jul 13 14:10	0°♋	

	16356 Aug 07 09:15	0°♌	
	16356 Aug 31 18:49	0°♍	
	16356 Sep 24 23:18	0°♎	
	16356 Oct 19 01:22	0°♏	
asc. node	16356 Nov 01 13:57	16°♏52'32	
morning set	16356 Nov 04 13:02	20°♏34'18	
	16356 Nov 12 02:19	0°♐	
	16356 Dec 06 03:04	0°♑	
superior conj	16356 Dec 13 00:38	8°♑36'13	1°20'13
minimum elong	16356 Dec 12 17:05	8°♑12'39	1°20'44
max. Earth dist.	16356 Dec 15 07:18	11°♑26'37	1.72196 AU
	16356 Dec 30 04:55	0°♒	
evening rise	16357 Jan 19 11:48	25°♒10'08	
	16357 Jan 23 09:32	0°♓	
	16357 Feb 16 18:19	0°♈	
desc. node	16357 Feb 21 06:26	5°♈31'15	
	16357 Mar 13 07:46	0°♉	
	16357 Apr 07 01:50	0°♊	
	16357 May 02 01:20	0°♋	
	16357 May 27 10:03	0°♌	
asc. node	16357 Jun 13 23:43	20°♌17'22	
	16357 Jun 22 14:13	0°♍	
evening max el	16357 Jul 20 12:25	29°♍42'42	46°31'17
	16357 Jul 20 19:23	0°♎	
greatest brilliancy	16357 Aug 29 07:26	29°♎46'50	-4.9m
	16357 Aug 29 22:21	0°♏	
retrograde	16357 Sep 08 10:52	1°♏41'47	
	16357 Sep 17 15:12	30°℞♎	
evening set	16357 Sep 23 01:22	27°♎31'35	
inferior conj	16357 Sep 29 02:52	23°♎58'53	1°15'52
minimum elong	16357 Sep 29 05:50	23°♎54'21	1°15'07
min. Earth dist.	16357 Sep 29 06:11	23°♎53'49	0.26919 AU
desc. node	16357 Oct 03 22:45	21°♎06'44	
morning rise	16357 Oct 05 10:20	20°♎18'09	
direct	16357 Oct 19 21:12	16°♎14'03	
greatest brilliancy	16357 Oct 29 20:54	18°♎04'45	-4.9m
	16357 Nov 18 20:00	0°♏	
morning max el	16357 Dec 08 16:36	17°♏44'35	46°28'19
	16357 Dec 20 18:14	0°♐	
	16358 Jan 17 03:07	0°♑	
asc. node	16358 Jan 24 23:11	8°♑57'03	
	16358 Feb 12 00:47	0°♒	
	16358 Mar 09 05:21	0°♓	
	16358 Apr 03 00:38	0°♈	
	16358 Apr 27 14:22	0°♉	
desc. node	16358 May 16 20:35	23°♉39'44	
	16358 May 22 00:00	0°♊	
morning set	16358 Jun 07 11:13	20°♊21'21	
	16358 Jun 15 05:53	0°♋	
	16358 Jul 09 08:31	0°♌	
max. Earth dist.	16358 Jul 14 04:04	6°♌00'28	1.71952 AU
superior conj	16358 Jul 16 22:40	9°♌28'18	-1°27'16
minimum elong	16358 Jul 17 01:45	9°♌37'54	1°27'48
	16358 Aug 02 08:55	0°♍	
evening rise	16358 Aug 25 20:38	29°♍23'04	
	16358 Aug 26 08:27	0°♎	
asc. node	16358 Sep 06 13:03	13°♎59'57	
	16358 Sep 19 08:22	0°♏	
	16358 Oct 13 10:08	0°♐	
	16358 Nov 06 15:59	0°♑	
	16358 Dec 01 05:51	0°♒	
	16358 Dec 26 09:46	0°♓	
desc. node	16358 Dec 27 06:06	0°♓59'35	
	16359 Jan 21 13:43	0°♈	
	16359 Feb 18 17:53	0°♉	
evening max el	16359 Feb 23 20:45	5°♉02'11	46°01'41
	16359 Mar 26 21:23	0°♊	
greatest brilliancy	16359 Apr 03 22:59	3°♊45'36	-4.8m
retrograde	16359 Apr 14 00:56	5°♊38'12	
asc. node	16359 Apr 19 03:42	5°♊06'38	
evening set	16359 Apr 29 02:48	1°♊12'06	
	16359 May 01 05:06	30°℞♉	
inferior conj	16359 May 05 06:26	27°♉29'55	3°53'44
minimum elong	16359 May 04 22:22	27°♉42'36	3°50'56
min. Earth dist.	16359 May 05 03:55	27°♉33'52	0.28313 AU
morning rise	16359 May 10 17:41	24°♉09'47	
direct	16359 May 26 10:01	19°♉19'52	
greatest brilliancy	16359 Jun 05 18:28	21°♉18'35	-4.8m
	16359 Jun 21 05:33	0°♊	
morning max el	16359 Jul 15 06:17	21°♊04'28	46°31'23
	16359 Jul 24 00:06	0°♋	
desc. node	16359 Aug 09 04:44	17°♋32'47	
	16359 Aug 20 04:36	0°♌	
	16359 Sep 14 18:13	0°♍	
	16359 Oct 09 14:58	0°♎	
	16359 Nov 03 03:41	0°♏	
	16359 Nov 27 12:08	0°♐	
asc. node	16359 Nov 30 02:27	3°♐12'24	
	16359 Dec 21 18:02	0°♑	
	16360 Jan 14 22:41	0°♒	
morning set	16360 Jan 15 18:35	1°♒01'45	
	16360 Feb 08 03:33	0°♓	
superior conj	16360 Feb 21 18:43	16°♓52'05	1°01'39
minimum elong	16360 Feb 22 04:46	17°♓23'10	1°01'30
max. Earth dist.	16360 Feb 23 13:47	19°♓05'11	1.72984 AU
	16360 Mar 03 09:53	0°♈	
desc. node	16360 Mar 20 20:06	21°♈29'07	
	16360 Mar 27 18:04	0°♉	
evening rise	16360 Mar 30 15:08	3°♉32'29	
	16360 Apr 21 03:31	0°♊	
	16360 May 15 13:37	0°♋	
	16360 Jun 09 00:46	0°♌	
	16360 Jul 03 14:58	0°♍	
asc. node	16360 Jul 11 12:07	9°♍33'10	
	16360 Jul 28 12:03	0°♎	
	16360 Aug 22 23:11	0°♏	
	16360 Sep 18 17:59	0°♐	
evening max el	16360 Sep 30 20:17	12°♐34'30	46°38'49
	16360 Oct 19 18:59	0°♑	
desc. node	16360 Oct 31 09:12	8°♑21'05	
greatest brilliancy	16360 Nov 09 08:42	12°♑52'14	-4.8m
retrograde	16360 Nov 20 03:38	15°♑02'07	
evening set	16360 Dec 07 08:29	9°♑23'51	
min. Earth dist.	16360 Dec 10 14:06	7°♑26'52	0.27955 AU
inferior conj	16360 Dec 11 08:02	6°♑59'19	-8°17'07
minimum elong	16360 Dec 10 23:48	7°♑11'58	8°15'24
morning rise	16360 Dec 14 15:20	4°♑59'00	
	16360 Dec 25 14:24	30°℞♐	
direct	16361 Jan 01 08:01	29°♐05'33	
	16361 Jan 08 07:20	0°♑	
greatest brilliancy	16361 Jan 10 22:58	0°♑46'57	-4.8m
morning max el	16361 Feb 19 11:36	29°♑32'39	45°50'05
	16361 Feb 19 22:52	0°♒	
asc. node	16361 Feb 21 09:25	1°♒24'24	
	16361 Mar 20 13:19	0°♓	
	16361 Apr 15 21:39	0°♈	
	16361 May 11 07:06	0°♉	
	16361 Jun 05 03:50	0°♊	
desc. node	16361 Jun 13 08:38	9°♊59'45	
	16361 Jun 29 15:58	0°♋	
	16361 Jul 23 21:49	0°♌	

	16361 Aug 16 23:29	0°♍	
morning set	16361 Aug 20 13:08	4°♍27'34	
	16361 Sep 09 22:56	0°♎	
superior conj	16361 Sep 29 04:58	24°♎06'54	-0°12'03
minimum elong	16361 Sep 29 07:56	24°♎16'13	0°11'40
behind sun begin	16361 Sep 28 14:20	23°♎21'03	
behind sun end	16361 Sep 30 01:32	25°♎11'22	
max. Earth dist.	16361 Sep 29 05:52	24°♎09'43	1.71584 AU
	16361 Oct 03 21:41	0°♏	
asc. node	16361 Oct 04 02:36	0°♏15'24	
	16361 Oct 27 20:43	0°♐	
evening rise	16361 Nov 07 06:14	13°♐00'03	
	16361 Nov 20 21:13	0°♑	
	16361 Dec 15 01:06	0°♒	
	16362 Jan 08 11:04	0°♓	
desc. node	16362 Jan 23 18:54	18°♓36'45	
	16362 Feb 02 05:49	0°♈	
	16362 Feb 27 12:07	0°♉	
	16362 Mar 25 10:50	0°♊	
	16362 Apr 21 16:48	0°♋	
evening max el	16362 May 06 05:25	14°♋49'58	46°07'59
asc. node	16362 May 16 14:16	24°♋33'24	
	16362 May 22 22:27	0°♌	
greatest brilliancy	16362 Jun 15 03:25	14°♌19'05	-4.8m
retrograde	16362 Jun 24 16:46	16°♌01'02	
evening set	16362 Jul 12 20:36	9°♌43'06	
inferior conj	16362 Jul 15 12:12	8°♌04'40	9°03'07
minimum elong	16362 Jul 15 14:16	8°♌01'28	9°02'30
min. Earth dist.	16362 Jul 16 00:12	7°♌45'58	0.27835 AU
morning rise	16362 Jul 18 07:53	6°♌19'56	
	16362 Aug 05 06:09	30°℞♋	
direct	16362 Aug 05 13:18	29°♋59'54	
	16362 Aug 05 20:28	0°♌	
greatest brilliancy	16362 Aug 15 15:57	1°♌56'08	-4.9m
desc. node	16362 Sep 05 14:40	14°♌54'50	
	16362 Sep 22 05:20	0°♍	
morning max el	16362 Sep 25 01:50	2°♍50'16	46°55'58
	16362 Oct 20 11:30	0°♎	
	16362 Nov 15 14:39	0°♏	
	16362 Dec 10 21:48	0°♐	
asc. node	16362 Dec 27 14:07	20°♐05'21	
	16363 Jan 04 18:21	0°♑	
	16363 Jan 29 08:25	0°♒	
	16363 Feb 22 18:47	0°♓	
	16363 Mar 19 03:31	0°♈	
morning set	16363 Mar 25 20:39	8°♈16'23	
	16363 Apr 12 11:34	0°♉	
desc. node	16363 Apr 18 09:25	7°♉17'37	
max. Earth dist.	16363 May 01 13:43	23°♉33'53	1.72905 AU
superior conj	16363 May 02 23:17	25°♉17'32	-0°34'38
minimum elong	16363 May 02 15:35	24°♉53'45	0°34'47
	16363 May 06 18:42	0°♊	
	16363 May 31 00:20	0°♋	
evening rise	16363 Jun 10 11:10	12°♋57'47	
	16363 Jun 24 04:27	0°♌	
	16363 Jul 18 08:02	0°♍	
asc. node	16363 Aug 09 01:18	26°♍56'15	
	16363 Aug 11 12:40	0°♎	
	16363 Sep 04 20:24	0°♏	
	16363 Sep 29 10:30	0°♐	
	16363 Oct 24 13:29	0°♑	
	16363 Nov 19 19:56	0°♒	
desc. node	16363 Nov 28 20:03	9°♒45'00	
evening max el	16363 Dec 12 14:02	23°♒50'16	46°20'14
	16363 Dec 19 00:53	0°♓	
greatest brilliancy	16364 Jan 20 23:37	22°♓58'16	-4.8m
retrograde	16364 Jan 31 02:02	24°♓49'27	
evening set	16364 Feb 16 22:36	19°♓24'17	
inferior conj	16364 Feb 21 11:33	16°♓37'09	-6°19'01
minimum elong	16364 Feb 21 22:08	16°♓20'35	6°16'29
min. Earth dist.	16364 Feb 21 15:19	16°♓31'14	0.28582 AU
morning rise	16364 Feb 26 21:46	13°♓20'00	
direct	16364 Mar 13 18:32	8°♓29'37	
asc. node	16364 Mar 20 19:19	9°♓25'31	
greatest brilliancy	16364 Mar 24 08:29	10°♓32'40	-4.8m
	16364 Apr 22 01:15	0°♈	
morning max el	16364 May 01 22:14	9°♈15'18	45°51'11
	16364 May 21 23:26	0°♉	
	16364 Jun 17 15:58	0°♊	
desc. node	16364 Jul 10 20:04	27°♊17'30	
	16364 Jul 13 02:24	0°♋	
	16364 Aug 06 20:46	0°♌	
	16364 Aug 31 05:56	0°♍	
	16364 Sep 24 10:09	0°♎	
	16364 Oct 18 12:00	0°♏	
asc. node	16364 Oct 31 15:42	16°♏25'05	
morning set	16364 Nov 02 02:48	18°♏14'39	
	16364 Nov 11 12:47	0°♐	
	16364 Dec 05 13:26	0°♑	
superior conj	16364 Dec 10 16:11	6°♑22'48	1°18'47
minimum elong	16364 Dec 10 08:03	5°♑57'26	1°19'17
max. Earth dist.	16364 Dec 12 21:29	9°♑08'56	1.72162 AU
	16364 Dec 29 15:15	0°♒	
evening rise	16365 Jan 17 03:34	22°♒58'14	
	16365 Jan 22 19:57	0°♓	
	16365 Feb 16 04:55	0°♈	
desc. node	16365 Feb 20 08:21	5°♈04'33	
	16365 Mar 12 18:40	0°♉	
	16365 Apr 06 13:13	0°♊	
	16365 May 01 13:28	0°♋	
	16365 May 26 23:30	0°♌	
asc. node	16365 Jun 13 01:36	19°♌40'17	
	16365 Jun 22 06:17	0°♍	
evening max el	16365 Jul 18 00:27	27°♍17'15	46°30'31
	16365 Jul 20 18:39	0°♎	
greatest brilliancy	16365 Aug 26 22:04	27°♎24'26	-4.9m
retrograde	16365 Sep 05 23:10	29°♎17'46	
evening set	16365 Sep 20 15:45	25°♎05'13	
inferior conj	16365 Sep 26 15:34	21°♎35'06	1°40'06
minimum elong	16365 Sep 26 19:27	21°♎29'10	1°39'01
min. Earth dist.	16365 Sep 26 20:40	21°♎27'19	0.26921 AU
morning rise	16365 Oct 02 23:02	17°♎54'04	
desc. node	16365 Oct 03 00:41	17°♎51'53	
direct	16365 Oct 17 09:16	13°♎49'37	
greatest brilliancy	16365 Oct 27 11:08	15°♎42'04	-4.9m
	16365 Nov 19 08:03	0°♏	
morning max el	16365 Dec 06 05:31	15°♏22'27	46°30'02
	16365 Dec 20 12:53	0°♐	
	16366 Jan 16 17:32	0°♑	
asc. node	16366 Jan 24 01:10	8°♑23'18	
	16366 Feb 11 13:21	0°♒	
	16366 Mar 08 16:58	0°♓	
	16366 Apr 02 11:43	0°♈	
	16366 Apr 27 01:10	0°♉	
desc. node	16366 May 15 22:20	23°♉12'16	
	16366 May 21 10:39	0°♊	
morning set	16366 Jun 05 00:18	18°♊00'18	
	16366 Jun 14 16:29	0°♋	
	16366 Jul 08 19:07	0°♌	
max. Earth dist.	16366 Jul 11 15:57	3°♌34'43	1.71985 AU

superior conj	16366 Jul 14 11:17	7°♌04'49	-1°27'40
minimum elong	16366 Jul 14 13:21	7°♌11'16	1°28'14
	16366 Aug 01 19:33	0°♍	
evening rise	16366 Aug 23 08:28	26°♍56'31	
greatest brilliancy	16366 Aug 23 06:23	26°♍50'01	-3.9m
	16366 Aug 25 19:09	0°♎	
asc. node	16366 Sep 05 14:51	13°♎31'54	
	16366 Sep 18 19:12	0°♏	
	16366 Oct 12 21:10	0°♐	
	16366 Nov 06 03:22	0°♑	
	16366 Nov 30 17:45	0°♒	
	16366 Dec 25 22:38	0°♓	
desc. node	16366 Dec 26 08:02	0°♓27'29	
	16367 Jan 21 04:38	0°♈	
	16367 Feb 18 14:24	0°♉	
evening max el	16367 Feb 21 11:31	2°♉48'45	46°02'02
	16367 Mar 28 20:01	0°♊	
greatest brilliancy	16367 Apr 01 13:26	1°♊31'40	-4.8m
retrograde	16367 Apr 11 16:27	3°♊25'14	
asc. node	16367 Apr 18 05:29	2°♊33'14	
	16367 Apr 24 19:23	30°℞♉	
evening set	16367 Apr 26 16:51	29°♉00'16	
inferior conj	16367 May 02 21:50	25°♉16'21	3°33'58
minimum elong	16367 May 02 14:19	25°♉28'09	3°31'19
min. Earth dist.	16367 May 02 19:21	25°♉20'16	0.28326 AU
morning rise	16367 May 08 11:35	21°♉53'03	
direct	16367 May 24 01:35	17°♉06'05	
greatest brilliancy	16367 Jun 03 10:47	19°♉05'50	-4.8m
	16367 Jun 21 20:47	0°♊	
morning max el	16367 Jul 12 21:55	18°♊50'07	46°29'55
	16367 Jul 23 18:58	0°♋	
desc. node	16367 Aug 08 06:40	16°♋53'40	
	16367 Aug 19 19:19	0°♌	
	16367 Sep 14 07:12	0°♍	
	16367 Oct 09 03:02	0°♎	
	16367 Nov 02 15:10	0°♏	
	16367 Nov 26 23:15	0°♐	
asc. node	16367 Nov 29 04:15	2°♐43'48	
	16367 Dec 21 04:53	0°♑	
morning set	16368 Jan 13 10:42	28°♑49'49	
	16368 Jan 14 09:20	0°♒	
	16368 Feb 07 14:05	0°♓	
superior conj	16368 Feb 19 11:09	14°♓41'59	1°04'01
minimum elong	16368 Feb 19 21:11	15°♓13'01	1°03'54
max. Earth dist.	16368 Feb 21 09:22	17°♓04'50	1.72965 AU
	16368 Mar 02 20:23	0°♈	
desc. node	16368 Mar 19 21:50	21°♈01'57	
	16368 Mar 27 04:39	0°♉	
evening rise	16368 Mar 28 07:14	1°♉21'46	
	16368 Apr 20 14:17	0°♊	
	16368 May 15 00:40	0°♋	
	16368 Jun 08 12:15	0°♌	
	16368 Jul 03 03:03	0°♍	
asc. node	16368 Jul 10 14:02	9°♍01'34	
	16368 Jul 28 01:08	0°♎	
	16368 Aug 22 14:04	0°♏	
	16368 Sep 18 12:59	0°♐	
evening max el	16368 Sep 28 11:19	10°♐15'57	46°39'09
	16368 Oct 20 07:56	0°♑	
desc. node	16368 Oct 30 10:59	6°♑54'14	
greatest brilliancy	16368 Nov 06 21:54	10°♑31'24	-4.8m
retrograde	16368 Nov 17 18:38	12°♑42'40	
evening set	16368 Dec 04 18:30	7°♑10'34	
min. Earth dist.	16368 Dec 08 03:07	5°♑09'17	0.27906 AU
inferior conj	16368 Dec 08 21:57	4°♑40'23	-8°07'54
minimum elong	16368 Dec 08 13:08	4°♑53'56	8°06'02
morning rise	16368 Dec 12 08:02	2°♑36'15	
	16368 Dec 17 03:27	30°℞♐	
direct	16368 Dec 29 22:13	26°♐47'25	
greatest brilliancy	16369 Jan 08 11:23	28°♐27'48	-4.8m
	16369 Jan 12 09:21	0°♑	
morning max el	16369 Feb 17 02:30	27°♑17'45	45°50'57
	16369 Feb 19 20:51	0°♒	
asc. node	16369 Feb 20 11:18	0°♒35'45	
	16369 Mar 20 04:49	0°♓	
	16369 Apr 15 10:48	0°♈	
	16369 May 10 19:08	0°♉	
	16369 Jun 04 15:18	0°♊	
desc. node	16369 Jun 12 10:34	9°♊31'06	
	16369 Jun 29 03:08	0°♋	
	16369 Jul 23 08:49	0°♌	
	16369 Aug 16 10:24	0°♍	
morning set	16369 Aug 18 01:31	2°♍02'13	
	16369 Sep 09 09:49	0°♎	
superior conj	16369 Sep 26 17:15	21°♎41'01	-0°15'50
minimum elong	16369 Sep 26 21:10	21°♎53'17	0°15'27
behind sun begin	16369 Sep 26 13:31	21°♎29'19	
behind sun end	16369 Sep 27 04:49	22°♎17'15	
max. Earth dist.	16369 Sep 26 18:15	21°♎44'08	1.71576 AU
asc. node	16369 Oct 03 04:20	29°♎46'51	
	16369 Oct 03 08:32	0°♏	
	16369 Oct 27 07:34	0°♐	
evening rise	16369 Nov 04 20:23	10°♐40'21	
	16369 Nov 20 08:06	0°♑	
	16369 Dec 14 12:09	0°♒	
	16370 Jan 07 22:25	0°♓	
desc. node	16370 Jan 22 20:49	18°♓07'22	
	16370 Feb 01 17:42	0°♈	
	16370 Feb 27 00:54	0°♉	
	16370 Mar 25 01:19	0°♊	
	16370 Apr 21 11:13	0°♋	
evening max el	16370 May 03 20:05	12°♋33'24	46°07'20
asc. node	16370 May 15 16:11	23°♋34'32	
	16370 May 23 09:34	0°♌	
greatest brilliancy	16370 Jun 12 16:59	11°♌59'55	-4.8m
retrograde	16370 Jun 22 06:24	13°♌41'40	
evening set	16370 Jul 10 10:41	7°♌23'46	
inferior conj	16370 Jul 13 02:26	5°♌44'50	9°04'28
minimum elong	16370 Jul 13 03:35	5°♌43'02	9°03'53
min. Earth dist.	16370 Jul 13 13:32	5°♌27'28	0.27870 AU
morning rise	16370 Jul 15 20:26	4°♌02'22	
	16370 Jul 23 10:12	30°℞♋	
direct	16370 Aug 03 03:50	27°♋39'42	
greatest brilliancy	16370 Aug 13 05:51	29°♋34'56	-4.9m
	16370 Aug 14 08:06	0°♌	
desc. node	16370 Sep 04 16:34	13°♌47'10	
	16370 Sep 22 04:30	0°♍	
morning max el	16370 Sep 22 15:30	0°♍27'34	46°55'48
	16370 Oct 20 03:57	0°♎	
	16370 Nov 15 04:36	0°♏	
	16370 Dec 10 10:26	0°♐	
asc. node	16370 Dec 26 16:07	19°♐34'58	
	16371 Jan 04 06:10	0°♑	
	16371 Jan 28 19:44	0°♒	
	16371 Feb 22 05:48	0°♓	
	16371 Mar 18 14:22	0°♈	
morning set	16371 Mar 23 13:03	6°♈05'44	
	16371 Apr 11 22:21	0°♉	
desc. node	16371 Apr 17 11:14	6°♉49'59	
max. Earth dist.	16371 Apr 29 05:19	21°♉20'37	1.72923 AU
superior conj	16371 Apr 30 14:21	23°♉02'38	-0°31'21

minimum elong	16371 Apr 30 07:17	22°♉40'49	0°31'31
	16371 May 06 05:28	0°♊	
	16371 May 30 11:08	0°♋	
evening rise	16371 Jun 08 01:25	10°♋39'25	
	16371 Jun 23 15:24	0°♌	
	16371 Jul 17 19:12	0°♍	
asc. node	16371 Aug 08 03:07	26°♍26'28	
	16371 Aug 11 00:09	0°♎	
	16371 Sep 04 08:22	0°♏	
	16371 Sep 28 23:11	0°♐	
	16371 Oct 24 03:28	0°♑	
	16371 Nov 19 12:44	0°♒	
desc. node	16371 Nov 27 22:04	9°♒01'30	
evening max el	16371 Dec 10 04:00	21°♒32'02	46°21'04
	16371 Dec 19 02:52	0°♓	
greatest brilliancy	16372 Jan 18 15:34	20°♓45'33	-4.8m
retrograde	16372 Jan 28 16:52	22°♓36'08	
evening set	16372 Feb 14 17:07	17°♓06'40	
inferior conj	16372 Feb 19 03:03	14°♓24'02	-6°33'46
minimum elong	16372 Feb 19 13:38	14°♓07'28	6°31'19
min. Earth dist.	16372 Feb 19 06:50	14°♓18'07	0.28583 AU
morning rise	16372 Feb 24 10:12	11°♓11'01	
direct	16372 Mar 11 09:34	6°♓16'42	
asc. node	16372 Mar 19 21:11	7°♓36'45	
greatest brilliancy	16372 Mar 21 23:50	8°♓19'28	-4.8m
	16372 Apr 22 03:44	0°♈	
morning max el	16372 Apr 29 12:16	6°♈58'08	45°50'26
	16372 May 21 16:11	0°♉	
	16372 Jun 17 05:47	0°♊	
desc. node	16372 Jul 09 21:59	26°♊45'36	
	16372 Jul 12 14:54	0°♋	
	16372 Aug 06 08:35	0°♌	
	16372 Aug 30 17:21	0°♍	
	16372 Sep 23 21:21	0°♎	
	16372 Oct 17 23:02	0°♏	
morning set	16372 Oct 30 16:18	15°♏52'44	
asc. node	16372 Oct 30 17:34	15°♏56'39	
	16372 Nov 10 23:42	0°♐	
	16372 Dec 05 00:17	0°♑	
superior conj	16372 Dec 08 07:18	4°♑06'28	1°17'12
minimum elong	16372 Dec 07 22:39	3°♑39'28	1°17'40
max. Earth dist.	16372 Dec 10 08:12	6°♑38'56	1.72132 AU
	16372 Dec 29 02:05	0°♒	
evening rise	16373 Jan 14 18:53	20°♒43'30	
	16373 Jan 22 06:50	0°♓	
	16373 Feb 15 15:57	0°♈	
desc. node	16373 Feb 19 10:04	4°♈35'54	
	16373 Mar 12 05:59	0°♉	
	16373 Apr 06 01:00	0°♊	
	16373 May 01 02:02	0°♋	
	16373 May 26 13:26	0°♌	
asc. node	16373 Jun 12 03:35	19°♌02'16	
	16373 Jun 21 22:58	0°♍	
evening max el	16373 Jul 15 12:46	24°♍52'00	46°29'54
	16373 Jul 20 19:19	0°♎	
greatest brilliancy	16373 Aug 24 12:15	25°♎01'13	-4.9m
retrograde	16373 Sep 03 12:02	26°♎53'50	
evening set	16373 Sep 18 06:29	22°♎38'21	
inferior conj	16373 Sep 24 04:25	19°♎11'03	2°03'50
minimum elong	16373 Sep 24 09:12	19°♎03'46	2°02'28
min. Earth dist.	16373 Sep 24 10:58	19°♎01'05	0.26930 AU
morning rise	16373 Sep 30 11:44	15°♎30'18	
desc. node	16373 Oct 02 02:30	14°♎40'45	
direct	16373 Oct 14 21:50	11°♎24'49	
greatest brilliancy	16373 Oct 25 01:12	13°♎18'52	-4.9m
	16373 Nov 19 17:16	0°♏	
morning max el	16373 Dec 03 19:28	13°♏01'55	46°31'30
	16373 Dec 20 07:27	0°♐	
	16374 Jan 16 08:12	0°♑	
asc. node	16374 Jan 23 03:00	7°♑48'01	
	16374 Feb 11 02:16	0°♒	
	16374 Mar 08 04:55	0°♓	
	16374 Apr 01 23:06	0°♈	
	16374 Apr 26 12:14	0°♉	
desc. node	16374 May 15 00:12	22°♉44'22	
	16374 May 20 21:32	0°♊	
morning set	16374 Jun 02 13:34	15°♊39'11	
	16374 Jun 14 03:19	0°♋	
	16374 Jul 08 05:56	0°♌	
max. Earth dist.	16374 Jul 09 06:02	1°♌15'09	1.72016 AU
superior conj	16374 Jul 12 00:09	4°♌41'24	-1°27'54
minimum elong	16374 Jul 12 01:13	4°♌44'45	1°28'30
	16374 Aug 01 06:24	0°♍	
evening rise	16374 Aug 20 20:40	24°♍30'32	
greatest brilliancy	16374 Aug 22 15:35	26°♍44'44	-3.9m
	16374 Aug 25 06:03	0°♎	
asc. node	16374 Sep 04 16:35	13°♎03'05	
	16374 Sep 18 06:13	0°♏	
	16374 Oct 12 08:22	0°♐	
	16374 Nov 05 14:54	0°♑	
	16374 Nov 30 05:53	0°♒	
desc. node	16374 Dec 25 09:52	29°♒54'12	
	16374 Dec 25 11:52	0°♓	
	16375 Jan 20 20:08	0°♈	
	16375 Feb 18 12:06	0°♉	
evening max el	16375 Feb 19 03:12	0°♉36'35	46°02'26
greatest brilliancy	16375 Mar 30 03:50	29°♉16'46	-4.8m
	16375 Apr 01 09:23	0°♊	
retrograde	16375 Apr 09 08:14	1°♊11'09	
	16375 Apr 16 23:38	30°℞♉	
asc. node	16375 Apr 17 07:27	29°♉53'50	
evening set	16375 Apr 24 07:04	26°♉47'24	
inferior conj	16375 Apr 30 13:09	23°♉01'52	3°13'57
minimum elong	16375 Apr 30 06:14	23°♉12'43	3°11'26
min. Earth dist.	16375 Apr 30 10:30	23°♉06'02	0.28333 AU
morning rise	16375 May 06 05:17	19°♉35'34	
direct	16375 May 21 17:25	14°♉51'43	
greatest brilliancy	16375 Jun 01 02:20	16°♉51'38	-4.8m
	16375 Jun 22 08:18	0°♊	
morning max el	16375 Jul 10 13:43	16°♊35'59	46°28'25
	16375 Jul 23 13:27	0°♋	
desc. node	16375 Aug 07 08:28	16°♋14'14	
	16375 Aug 19 09:56	0°♌	
	16375 Sep 13 20:10	0°♍	
	16375 Oct 08 15:06	0°♎	
	16375 Nov 02 02:40	0°♏	
	16375 Nov 26 10:22	0°♐	
asc. node	16375 Nov 28 06:12	2°♐15'31	
	16375 Dec 20 15:45	0°♑	
morning set	16376 Jan 11 02:49	26°♑37'40	
	16376 Jan 13 20:02	0°♒	
	16376 Feb 07 00:42	0°♓	
superior conj	16376 Feb 17 03:24	12°♓30'55	1°06'17
minimum elong	16376 Feb 17 13:22	13°♓01'44	1°06'13
max. Earth dist.	16376 Feb 19 05:04	15°♓04'30	1.72950 AU
	16376 Mar 02 07:02	0°♈	
desc. node	16376 Mar 18 23:37	20°♈34'29	
evening rise	16376 Mar 25 22:57	29°♈09'27	
	16376 Mar 26 15:23	0°♉	
	16376 Apr 20 01:11	0°♊	
	16376 May 14 11:49	0°♋	

	16376 Jun 07 23:47	0°♌	
	16376 Jul 02 15:13	0°♍	
asc. node	16376 Jul 09 15:50	8°♍29'35	
	16376 Jul 27 14:19	0°♎	
	16376 Aug 22 05:09	0°♏	
	16376 Sep 18 08:30	0°♐	
evening max el	16376 Sep 26 02:45	7°♐58'33	46°39'26
	16376 Oct 21 01:06	0°♑	
desc. node	16376 Oct 29 13:02	5°♑25'11	
greatest brilliancy	16376 Nov 04 11:52	8°♑11'55	-4.8m
retrograde	16376 Nov 15 09:36	10°♑23'35	
evening set	16376 Dec 02 04:40	4°♑58'04	
min. Earth dist.	16376 Dec 05 16:27	2°♑52'05	0.27854 AU
inferior conj	16376 Dec 06 11:58	2°♑22'06	-7°57'57
minimum elong	16376 Dec 06 02:37	2°♑36'28	7°55'53
morning rise	16376 Dec 10 00:55	0°♑13'50	
	16376 Dec 10 10:24	30°℞♐	
direct	16376 Dec 27 12:29	24°♐30'10	
greatest brilliancy	16377 Jan 05 23:44	26°♐09'07	-4.8m
	16377 Jan 14 12:05	0°♑	
morning max el	16377 Feb 14 16:39	25°♑01'25	45°51'39
asc. node	16377 Feb 19 13:11	29°♑48'25	
	16377 Feb 19 17:49	0°♒	
	16377 Mar 19 19:59	0°♓	
	16377 Apr 14 23:49	0°♈	
	16377 May 10 07:07	0°♉	
	16377 Jun 04 02:43	0°♊	
desc. node	16377 Jun 11 12:28	9°♊02'26	
	16377 Jun 28 14:12	0°♋	
	16377 Jul 22 19:41	0°♌	
morning set	16377 Aug 15 13:51	29°♌37'11	
	16377 Aug 15 21:09	0°♍	
	16377 Sep 08 20:32	0°♎	
superior conj	16377 Sep 24 05:36	19°♎15'50	-0°19'36
minimum elong	16377 Sep 24 10:26	19°♎30'59	0°19'12
max. Earth dist.	16377 Sep 24 04:42	19°♎13'01	1.71570 AU
asc. node	16377 Oct 02 06:12	29°♎19'10	
	16377 Oct 02 19:14	0°♏	
	16377 Oct 26 18:16	0°♐	
evening rise	16377 Nov 02 10:32	8°♐21'04	
	16377 Nov 19 18:51	0°♑	
	16377 Dec 13 23:01	0°♒	
	16378 Jan 07 09:35	0°♓	
desc. node	16378 Jan 21 22:36	17°♓38'12	
	16378 Feb 01 05:24	0°♈	
	16378 Feb 26 13:34	0°♉	
	16378 Mar 24 15:49	0°♊	
	16378 Apr 21 06:04	0°♋	
evening max el	16378 May 01 09:55	10°♋14'55	46°06'34
asc. node	16378 May 14 18:10	22°♋34'31	
	16378 May 24 00:29	0°♌	
greatest brilliancy	16378 Jun 10 07:04	9°♌41'19	-4.8m
retrograde	16378 Jun 19 19:41	11°♌22'31	
evening set	16378 Jul 08 00:10	5°♌05'28	
inferior conj	16378 Jul 10 16:37	3°♌25'21	9°04'56
minimum elong	16378 Jul 10 16:49	3°♌25'03	9°04'21
min. Earth dist.	16378 Jul 11 03:10	3°♌08'48	0.27901 AU
morning rise	16378 Jul 13 09:23	1°♌44'32	
	16378 Jul 16 08:10	30°℞♋	
direct	16378 Jul 31 17:46	25°♋19'46	
greatest brilliancy	16378 Aug 10 20:14	27°♋14'50	-4.9m
	16378 Aug 16 22:12	0°♌	
desc. node	16378 Sep 03 18:30	12°♌42'01	
morning max el	16378 Sep 20 04:28	28°♌03'50	46°55'41
	16378 Sep 22 02:26	0°♍	
	16378 Oct 19 19:48	0°♎	
	16378 Nov 14 18:07	0°♏	
	16378 Dec 09 22:41	0°♐	
asc. node	16378 Dec 25 17:52	19°♐04'44	
	16379 Jan 03 17:39	0°♑	
	16379 Jan 28 06:43	0°♒	
	16379 Feb 21 16:28	0°♓	
	16379 Mar 18 00:53	0°♈	
morning set	16379 Mar 21 05:36	3°♈56'26	
	16379 Apr 11 08:48	0°♉	
desc. node	16379 Apr 16 13:08	6°♉23'33	
max. Earth dist.	16379 Apr 26 21:25	19°♉09'52	1.72948 AU
superior conj	16379 Apr 28 05:26	20°♉48'41	-0°28'02
minimum elong	16379 Apr 27 23:02	20°♉28'57	0°28'11
	16379 May 05 15:57	0°♊	
	16379 May 29 21:43	0°♋	
evening rise	16379 Jun 05 15:33	8°♋21'27	
	16379 Jun 23 02:08	0°♌	
	16379 Jul 17 06:08	0°♍	
asc. node	16379 Aug 07 04:52	25°♍57'14	
	16379 Aug 10 11:23	0°♎	
	16379 Sep 03 20:02	0°♏	
	16379 Sep 28 11:36	0°♐	
	16379 Oct 23 17:13	0°♑	
	16379 Nov 19 05:29	0°♒	
desc. node	16379 Nov 26 23:56	8°♒18'10	
evening max el	16379 Dec 07 17:31	19°♒13'39	46°21'56
	16379 Dec 19 05:55	0°♓	
greatest brilliancy	16380 Jan 16 07:14	18°♓33'31	-4.8m
retrograde	16380 Jan 26 07:57	20°♓24'07	
evening set	16380 Feb 12 11:36	14°♓50'03	
inferior conj	16380 Feb 16 18:33	12°♓12'05	-6°47'54
minimum elong	16380 Feb 17 05:03	11°♓55'38	6°45'33
min. Earth dist.	16380 Feb 16 22:16	12°♓06'15	0.28585 AU
morning rise	16380 Feb 21 22:30	9°♓03'37	
direct	16380 Mar 09 00:21	4°♓04'48	
asc. node	16380 Mar 18 23:08	5°♓53'16	
greatest brilliancy	16380 Mar 19 15:19	6°♓07'48	-4.8m
	16380 Apr 22 04:16	0°♈	
morning max el	16380 Apr 27 02:52	4°♈43'40	45°49'42
	16380 May 21 08:10	0°♉	
	16380 Jun 16 19:06	0°♊	
desc. node	16380 Jul 08 23:45	26°♊14'16	
	16380 Jul 12 03:02	0°♋	
	16380 Aug 05 20:05	0°♌	
	16380 Aug 30 04:29	0°♍	
	16380 Sep 23 08:13	0°♎	
	16380 Oct 17 09:42	0°♏	
morning set	16380 Oct 28 05:35	13°♏31'11	
asc. node	16380 Oct 29 19:25	15°♏29'22	
	16380 Nov 10 10:14	0°♐	
	16380 Dec 04 10:44	0°♑	
superior conj	16380 Dec 05 22:16	1°♑50'51	1°15'30
minimum elong	16380 Dec 05 13:07	1°♑22'19	1°15'55
max. Earth dist.	16380 Dec 07 19:17	4°♑11'16	1.72104 AU
	16380 Dec 28 12:33	0°♒	
evening rise	16381 Jan 12 10:20	18°♒30'17	
	16381 Jan 21 17:21	0°♓	
	16381 Feb 15 02:37	0°♈	
desc. node	16381 Feb 18 11:53	4°♈08'44	
	16381 Mar 11 16:55	0°♉	
	16381 Apr 05 12:25	0°♊	
	16381 Apr 30 14:16	0°♋	
	16381 May 26 03:07	0°♌	
asc. node	16381 Jun 11 05:22	18°♌24'24	
	16381 Jun 21 15:38	0°♍	

evening max el	16381 Jul 13	01:51	22°♍29'32	46°29'07	
	16381 Jul 20	21:02	0°♎		
greatest brilliancy	16381 Aug 22	01:44	22°♎37'27	-4.9m	
retrograde	16381 Sep 01	01:14	24°♎29'48		
evening set	16381 Sep 15	21:10	20°♎11'10		
inferior conj	16381 Sep 21	17:00	16°♎46'48	2°27'36	
minimum elong	16381 Sep 21	22:39	16°♎38'13	2°25'56	
min. Earth dist.	16381 Sep 22	00:43	16°♎35'04	0.26939 AU	
morning rise	16381 Sep 27	23:56	13°♎06'50		
desc. node	16381 Oct 01	04:32	11°♎33'12		
direct	16381 Oct 12	10:37	8°♎59'59		
greatest brilliancy	16381 Oct 22	14:29	10°♎55'01	-4.9m	
	16381 Nov 19	23:37	0°♏		
morning max el	16381 Dec 01	10:06	10°♏43'56	46°33'01	
	16381 Dec 20	01:10	0°♐		
	16382 Jan 15	22:17	0°♑		
asc. node	16382 Jan 22	04:53	7°♑14'16		
	16382 Feb 10	14:41	0°♒		
	16382 Mar 07	16:26	0°♓		
	16382 Apr 01	10:05	0°♈		
	16382 Apr 25	22:54	0°♉		
desc. node	16382 May 14	02:03	22°♉17'33		
	16382 May 20	08:03	0°♊		
morning set	16382 May 31	03:15	13°♊20'39		
	16382 Jun 13	13:46	0°♋		
max. Earth dist.	16382 Jul 06	21:10	29°♋00'01	1.72050 AU	
	16382 Jul 07	16:25	0°♌		
superior conj	16382 Jul 09	13:10	2°♌19'36	-1°27'59	
minimum elong	16382 Jul 09	13:15	2°♌19'52	1°28'35	
	16382 Jul 31	16:56	0°♍		
evening rise	16382 Aug 18	08:45	22°♍05'05		
greatest brilliancy	16382 Aug 22	13:57	27°♍21'27	-3.9m	
	16382 Aug 24	16:41	0°♎		
asc. node	16382 Sep 03	18:30	12°♎35'40		
	16382 Sep 17	16:59	0°♏		
	16382 Oct 11	19:22	0°♐		
	16382 Nov 05	02:14	0°♑		
	16382 Nov 29	17:48	0°♒		
desc. node	16382 Dec 24	11:41	29°♒21'35		
	16382 Dec 25	00:52	0°♓		
	16383 Jan 20	11:30	0°♈		
evening max el	16383 Feb 16	19:36	28°♈27'13	46°02'49	
	16383 Feb 18	10:14	0°♉		
greatest brilliancy	16383 Mar 27	18:41	27°♉03'44	-4.8m	
retrograde	16383 Apr 06	23:56	28°♉58'16		
asc. node	16383 Apr 16	09:27	27°♉11'02		
evening set	16383 Apr 21	21:39	24°♉35'49		
inferior conj	16383 Apr 28	04:34	20°♉48'48	2°53'40	
minimum elong	16383 Apr 27	22:18	20°♉58'38	2°51'20	
min. Earth dist.	16383 Apr 28	01:50	20°♉53'06	0.28337 AU	
morning rise	16383 May 03	22:55	17°♉19'31		
direct	16383 May 19	09:27	12°♉38'55		
greatest brilliancy	16383 May 29	17:35	14°♉38'20	-4.8m	
	16383 Jun 22	16:12	0°♊		
morning max el	16383 Jul 08	05:12	14°♊22'19	46°26'55	
	16383 Jul 23	07:03	0°♋		
desc. node	16383 Aug 06	10:27	15°♋36'48		
	16383 Aug 19	00:01	0°♌		
	16383 Sep 13	08:45	0°♍		
	16383 Oct 08	02:53	0°♎		
	16383 Nov 01	13:58	0°♏		
	16383 Nov 25	21:19	0°♐		
asc. node	16383 Nov 27	07:59	1°♐47'14		
	16383 Dec 20	02:25	0°♑		
morning set	16384 Jan 08	18:40	24°♑25'23		
	16384 Jan 13	06:31	0°♒		
	16384 Feb 06	11:05	0°♓		
superior conj	16384 Feb 14	19:36	10°♓20'26	1°08'27	
minimum elong	16384 Feb 15	05:25	10°♓50'49	1°08'26	
max. Earth dist.	16384 Feb 17	00:57	13°♓05'25	1.72929 AU	
	16384 Mar 01	17:25	0°♈		
desc. node	16384 Mar 18	01:32	20°♈08'10		
evening rise	16384 Mar 23	14:44	26°♈58'02		
	16384 Mar 26	01:53	0°♉		
	16384 Apr 19	11:52	0°♊		
	16384 May 13	22:46	0°♋		
	16384 Jun 07	11:07	0°♌		
	16384 Jul 02	03:10	0°♍		
asc. node	16384 Jul 08	17:41	7°♍58'23		
	16384 Jul 27	03:20	0°♎		
	16384 Aug 21	20:11	0°♏		
	16384 Sep 18	04:23	0°♐		
evening max el	16384 Sep 23	17:41	5°♐40'17	46°39'25	
	16384 Oct 22	00:17	0°♑		
desc. node	16384 Oct 28	14:55	3°♑52'42		
greatest brilliancy	16384 Nov 02	02:22	5°♑52'54	-4.8m	
retrograde	16384 Nov 12	23:52	8°♑04'02		
evening set	16384 Nov 29	14:42	2°♑45'19		
min. Earth dist.	16384 Dec 03	06:11	0°♑33'52	0.27803 AU	
inferior conj	16384 Dec 04	01:52	0°♑03'36	-7°47'03	
minimum elong	16384 Dec 03	16:04	0°♑18'40	7°44'48	
	16384 Dec 04	04:12	30°℞♐		
morning rise	16384 Dec 07	17:48	27°♐50'49		
direct	16384 Dec 25	02:17	22°♐12'35		
greatest brilliancy	16385 Jan 03	12:36	23°♐50'32	-4.8m	
	16385 Jan 15	21:40	0°♑		
morning max el	16385 Feb 12	05:52	22°♑42'46	45°52'32	
asc. node	16385 Feb 18	15:11	29°♑02'15		
	16385 Feb 19	14:00	0°♒		
	16385 Mar 19	10:50	0°♓		
	16385 Apr 14	12:37	0°♈		
	16385 May 09	18:54	0°♉		
	16385 Jun 03	13:58	0°♊		
desc. node	16385 Jun 10	14:11	8°♊33'39		
	16385 Jun 28	01:08	0°♋		
	16385 Jul 22	06:25	0°♌		
morning set	16385 Aug 13	02:31	27°♌13'34		
	16385 Aug 15	07:47	0°♍		
	16385 Sep 08	07:07	0°♎		
superior conj	16385 Sep 21	18:21	16°♎52'18	-0°23'17	
minimum elong	16385 Sep 22	00:03	17°♎10'11	0°22'52	
max. Earth dist.	16385 Sep 21	13:59	16°♎38'40	1.71565 AU	
asc. node	16385 Oct 01	08:03	28°♎51'49		
	16385 Oct 02	05:49	0°♏		
	16385 Oct 26	04:52	0°♐		
evening rise	16385 Oct 31	00:49	6°♐02'30		
	16385 Nov 19	05:32	0°♑		
	16385 Dec 13	09:54	0°♒		
	16386 Jan 06	20:47	0°♓		
desc. node	16386 Jan 21	00:26	17°♓09'07		
	16386 Jan 31	17:11	0°♈		
	16386 Feb 26	02:20	0°♉		
	16386 Mar 24	06:31	0°♊		
	16386 Apr 21	01:26	0°♋		
evening max el	16386 Apr 28	23:10	7°♋55'16	46°05'58	
asc. node	16386 May 13	19:59	21°♋32'48		
	16386 May 24	20:29	0°♌		
greatest brilliancy	16386 Jun 07	21:10	7°♌23'05	-4.8m	
retrograde	16386 Jun 17	09:06	9°♌04'07		
evening set	16386 Jul 05	13:18	2°♌48'18		
inferior conj	16386 Jul 08	06:57	1°♌06'24	9°04'31	

minimum elong	16386 Jul 08	06:13	1°♌07'33	9°03'54	
min. Earth dist.	16386 Jul 08	17:07	0°♌50'27	0.27932 AU	
	16386 Jul 10	01:24	30°♋		
morning rise	16386 Jul 10	23:02	29°♋26'32		
direct	16386 Jul 29	07:40	23°♋00'06		
greatest brilliancy	16386 Aug 08	11:14	24°♋55'46	-4.9m	
	16386 Aug 18	12:53	0°♌		
desc. node	16386 Sep 02	20:27	11°♌38'41		
morning max el	16386 Sep 17	17:59	25°♌41'33	46°55'44	
	16386 Sep 21	23:31	0°♍		
	16386 Oct 19	11:22	0°♎		
	16386 Nov 14	07:29	0°♏		
	16386 Dec 09	10:53	0°♐		
asc. node	16386 Dec 24	19:45	18°♐34'55		
	16387 Jan 03	05:09	0°♑		
	16387 Jan 27	17:46	0°♒		
	16387 Feb 21	03:16	0°♓		
	16387 Mar 17	11:32	0°♈		
morning set	16387 Mar 18	22:04	1°♈46'27		
	16387 Apr 10	19:23	0°♉		
desc. node	16387 Apr 15	14:53	5°♉56'18		
max. Earth dist.	16387 Apr 24	15:13	17°♉03'56	1.72969 AU	
superior conj	16387 Apr 25	20:28	18°♉34'15	-0°24'39	
minimum elong	16387 Apr 25	14:47	18°♉16'41	0°24'49	
	16387 May 05	02:33	0°♊		
	16387 May 29	08:25	0°♋		
evening rise	16387 Jun 03	05:52	6°♋03'50		
	16387 Jun 22	12:59	0°♌		
	16387 Jul 16	17:15	0°♍		
asc. node	16387 Aug 06	06:49	25°♍28'07		
	16387 Aug 09	22:49	0°♎		
	16387 Sep 03	07:55	0°♏		
	16387 Sep 28	00:13	0°♐		
	16387 Oct 23	07:14	0°♑		
	16387 Nov 18	22:42	0°♒		
desc. node	16387 Nov 26	01:46	7°♒33'48		
evening max el	16387 Dec 05	07:24	16°♒55'54	46°22'47	
	16387 Dec 19	10:55	0°♓		
greatest brilliancy	16388 Jan 13	22:15	16°♓20'20	-4.8m	
retrograde	16388 Jan 23	23:30	18°♓11'44		
evening set	16388 Feb 10	06:08	12°♓32'44		
inferior conj	16388 Feb 14	10:04	9°♓59'30	-7°01'26	
minimum elong	16388 Feb 14	20:27	9°♓43'16	6°59'09	
min. Earth dist.	16388 Feb 14	13:32	9°♓54'06	0.28590 AU	
morning rise	16388 Feb 19	10:47	6°♓55'56		
direct	16388 Mar 06	15:26	1°♓52'10		
greatest brilliancy	16388 Mar 17	06:49	3°♓55'30	-4.8m	
asc. node	16388 Mar 18	01:06	4°♓12'53		
	16388 Apr 22	03:58	0°♈		
morning max el	16388 Apr 24	18:30	2°♈30'55	45°49'03	
	16388 May 21	00:10	0°♉		
	16388 Jun 16	08:35	0°♊		
desc. node	16388 Jul 08	01:45	25°♊43'00		
	16388 Jul 11	15:20	0°♋		
	16388 Aug 05	07:47	0°♌		
	16388 Aug 29	15:51	0°♍		
	16388 Sep 22	19:20	0°♎		
	16388 Oct 16	20:38	0°♏		
morning set	16388 Oct 25	19:02	11°♏09'17		
asc. node	16388 Oct 28	21:11	15°♏00'54		
	16388 Nov 09	21:02	0°♐		
superior conj	16388 Dec 03	13:26	29°♐34'58	1°13'39	
minimum elong	16388 Dec 03	03:50	29°♐05'03	1°14'03	
	16388 Dec 03	21:27	0°♑		
max. Earth dist.	16388 Dec 05	08:36	1°♑49'41	1.72075 AU	
	16388 Dec 27	23:15	0°♒		
evening rise	16389 Jan 10	02:07	16°♒17'21		
	16389 Jan 21	04:08	0°♓		
	16389 Feb 14	13:34	0°♈		
desc. node	16389 Feb 17	13:50	3°♈41'03		
	16389 Mar 11	04:13	0°♉		
	16389 Apr 05	00:15	0°♊		
	16389 Apr 30	02:57	0°♋		
	16389 May 25	17:18	0°♌		
asc. node	16389 Jun 10	07:17	17°♌45'34		
	16389 Jun 21	09:00	0°♍		
evening max el	16389 Jul 10	15:53	20°♍08'45	46°28'24	
	16389 Jul 21	00:40	0°♎		
greatest brilliancy	16389 Aug 19	15:03	20°♎12'59	-4.9m	
retrograde	16389 Aug 29	14:42	22°♎05'01		
evening set	16389 Sep 13	12:11	17°♎43'11		
inferior conj	16389 Sep 19	05:41	14°♎21'44	2°51'04	
minimum elong	16389 Sep 19	12:08	14°♎11'55	2°49'08	
min. Earth dist.	16389 Sep 19	14:18	14°♎08'38	0.26953 AU	
morning rise	16389 Sep 25	11:58	10°♎42'47		
desc. node	16389 Sep 30	06:27	8°♎29'45		
direct	16389 Oct 09	23:57	6°♎34'26		
greatest brilliancy	16389 Oct 20	03:27	8°♎29'43	-4.9m	
	16389 Nov 20	04:25	0°♏		
morning max el	16389 Nov 29	01:02	8°♏25'31	46°34'30	
	16389 Dec 19	18:52	0°♐		
	16390 Jan 15	12:34	0°♑		
asc. node	16390 Jan 21	06:53	6°♑40'02		
	16390 Feb 10	03:22	0°♒		
	16390 Mar 07	04:15	0°♓		
	16390 Mar 31	21:24	0°♈		
	16390 Apr 25	09:57	0°♉		
desc. node	16390 May 13	03:50	21°♉49'17		
	16390 May 19	18:58	0°♊		
morning set	16390 May 28	16:54	11°♊00'44		
	16390 Jun 13	00:39	0°♋		
max. Earth dist.	16390 Jul 04	10:06	26°♋36'48	1.72079 AU	
superior conj	16390 Jul 07	02:04	29°♋56'12	-1°27'54	
minimum elong	16390 Jul 07	01:08	29°♋53'18	1°28'30	
	16390 Jul 07	03:17	0°♌		
	16390 Jul 31	03:51	0°♍		
evening rise	16390 Aug 15	20:39	19°♍37'53		
greatest brilliancy	16390 Aug 22	13:51	28°♍01'48	-3.9m	
	16390 Aug 24	03:41	0°♎		
asc. node	16390 Sep 02	20:17	12°♎06'39		
	16390 Sep 17	04:10	0°♏		
	16390 Oct 11	06:48	0°♐		
	16390 Nov 04	14:02	0°♑		
	16390 Nov 29	06:12	0°♒		
desc. node	16390 Dec 23	13:39	28°♒47'59		
	16390 Dec 24	14:26	0°♓		
	16391 Jan 20	03:34	0°♈		
evening max el	16391 Feb 14	11:46	26°♈16'12	46°03'12	
	16391 Feb 18	09:49	0°♉		
greatest brilliancy	16391 Mar 25	09:59	24°♉50'15	-4.8m	
retrograde	16391 Apr 04	15:06	26°♉44'15		
asc. node	16391 Apr 15	11:14	24°♉22'44		
evening set	16391 Apr 19	12:28	22°♉23'00		
inferior conj	16391 Apr 25	20:00	18°♉34'46	2°33'06	
minimum elong	16391 Apr 25	14:26	18°♉43'33	2°30'58	
min. Earth dist.	16391 Apr 25	17:29	18°♉38'45	0.28342 AU	
morning rise	16391 May 01	16:23	15°♉02'26		
direct	16391 May 17	01:22	10°♉25'09		
greatest brilliancy	16391 May 27	09:11	12°♉24'09	-4.8m	
	16391 Jun 22	22:20	0°♊		
morning max el	16391 Jul 05	19:56	12°♊05'23	46°25'18	

	16391 Jul 23	00:46	0°♋		
desc. node	16391 Aug 05	12:24	14°♋58'09		
	16391 Aug 18	14:25	0°♌		
	16391 Sep 12	21:41	0°♍		
	16391 Oct 07	15:00	0°♎		
	16391 Nov 01	01:35	0°♏		
	16391 Nov 25	08:36	0°♐		
asc. node	16391 Nov 26	09:48	1°♐18'01		
	16391 Dec 19	13:28	0°♑		
morning set	16392 Jan 06	10:27	22°♑11'34		
	16392 Jan 12	17:23	0°♒		
	16392 Feb 05	21:52	0°♓		
superior conj	16392 Feb 12	11:56	8°♓09'10	1°10'31	
minimum elong	16392 Feb 12	21:33	8°♓38'53	1°10'32	
max. Earth dist.	16392 Feb 14	19:13	11°♓00'10	1.72903 AU	
	16392 Mar 01	04:12	0°♈		
desc. node	16392 Mar 17	03:17	19°♈40'13		
evening rise	16392 Mar 21	06:35	24°♈45'47		
	16392 Mar 25	12:45	0°♉		
	16392 Apr 18	22:55	0°♊		
	16392 May 13	10:06	0°♋		
	16392 Jun 06	22:53	0°♌		
	16392 Jul 01	15:37	0°♍		
asc. node	16392 Jul 07	19:36	7°♍26'01		
	16392 Jul 26	16:55	0°♎		
	16392 Aug 21	11:54	0°♏		
	16392 Sep 18	01:28	0°♐		
evening max el	16392 Sep 21	07:37	3°♐18'07	46°39'29	
	16392 Oct 23	09:39	0°♑		
desc. node	16392 Oct 27	16:46	2°♑15'27		
greatest brilliancy	16392 Oct 30	17:10	3°♑32'48	-4.8m	
retrograde	16392 Nov 10	13:33	5°♑43'06		
evening set	16392 Nov 27	00:37	0°♑31'02		
	16392 Nov 27	21:55	30°℞♐		
min. Earth dist.	16392 Nov 30	20:12	28°♐13'42	0.27752 AU	
inferior conj	16392 Dec 01	15:40	27°♐43'44	-7°35'12	
minimum elong	16392 Dec 01	05:29	27°♐59'26	7°32'48	
morning rise	16392 Dec 05	10:41	25°♐26'18		
direct	16392 Dec 22	15:28	19°♐53'25		
greatest brilliancy	16393 Jan 01	02:02	21°♐31'09	-4.8m	
	16393 Jan 16	22:15	0°♑		
morning max el	16393 Feb 09	18:37	20°♑21'42	45°53'32	
asc. node	16393 Feb 17	17:04	28°♑15'22		
	16393 Feb 19	09:59	0°♒		
	16393 Mar 19	01:50	0°♓		
	16393 Apr 14	01:38	0°♈		
	16393 May 09	06:57	0°♉		
	16393 Jun 03	01:27	0°♊		
desc. node	16393 Jun 09	16:09	8°♊04'51		
	16393 Jun 27	12:19	0°♋		
	16393 Jul 21	17:26	0°♌		
morning set	16393 Aug 10	14:48	24°♌47'48		
	16393 Aug 14	18:44	0°♍		
	16393 Sep 07	18:02	0°♎		
superior conj	16393 Sep 19	06:39	14°♎26'24	-0°26'59	
minimum elong	16393 Sep 19	13:12	14°♎46'55	0°26'33	
max. Earth dist.	16393 Sep 18	21:00	13°♎56'12	1.71564 AU	
asc. node	16393 Sep 30	09:47	28°♎23'07		
	16393 Oct 01	16:43	0°♏		
	16393 Oct 25	15:46	0°♐		
evening rise	16393 Oct 28	14:40	3°♐41'38		
	16393 Nov 18	16:30	0°♑		
	16393 Dec 12	21:03	0°♒		
	16394 Jan 06	08:18	0°♓		
desc. node	16394 Jan 20	02:21	16°♓39'24		
	16394 Jan 31	05:17	0°♈		
	16394 Feb 25	15:28	0°♉		
	16394 Mar 23	21:39	0°♊		
	16394 Apr 20	21:37	0°♋		
evening max el	16394 Apr 26	12:30	5°♋35'29	46°05'32	
asc. node	16394 May 12	21:57	20°♋29'29		
	16394 May 26	00:13	0°♌		
greatest brilliancy	16394 Jun 05	10:39	5°♌04'00	-4.8m	
retrograde	16394 Jun 14	23:01	6°♌45'50		
evening set	16394 Jul 03	01:57	0°♌31'44		
	16394 Jul 03	22:41	30°℞♋		
inferior conj	16394 Jul 05	21:21	28°♋47'19	9°03'04	
minimum elong	16394 Jul 05	19:43	28°♋49'52	9°02'25	
min. Earth dist.	16394 Jul 06	06:51	28°♋32'26	0.27965 AU	
morning rise	16394 Jul 08	13:22	27°♋07'38		
direct	16394 Jul 26	21:48	20°♋40'17		
greatest brilliancy	16394 Aug 06	02:09	22°♋36'39	-4.9m	
	16394 Aug 19	16:00	0°♌		
desc. node	16394 Sep 01	22:20	10°♌36'24		
morning max el	16394 Sep 15	08:27	23°♌21'12	46°55'31	
	16394 Sep 21	20:06	0°♍		
	16394 Oct 19	02:55	0°♎		
	16394 Nov 13	20:57	0°♏		
	16394 Dec 08	23:12	0°♐		
asc. node	16394 Dec 23	21:44	18°♐04'56		
	16395 Jan 02	16:45	0°♑		
	16395 Jan 27	04:56	0°♒		
	16395 Feb 20	14:10	0°♓		
morning set	16395 Mar 16	14:27	29°♓35'51		
	16395 Mar 16	22:17	0°♈		
	16395 Apr 10	06:04	0°♉		
desc. node	16395 Apr 14	16:42	5°♉28'55		
max. Earth dist.	16395 Apr 22	10:07	15°♉01'09	1.72987 AU	
superior conj	16395 Apr 23	11:29	16°♉19'27	-0°21'14	
minimum elong	16395 Apr 23	06:32	16°♉04'09	0°21'25	
	16395 May 04	13:14	0°♊		
	16395 May 28	19:09	0°♋		
evening rise	16395 May 31	20:22	3°♋46'43		
	16395 Jun 21	23:52	0°♌		
	16395 Jul 16	04:20	0°♍		
asc. node	16395 Aug 05	08:37	24°♍58'40		
	16395 Aug 09	10:14	0°♎		
	16395 Sep 02	19:50	0°♏		
	16395 Sep 27	12:57	0°♐		
	16395 Oct 22	21:30	0°♑		
	16395 Nov 18	16:27	0°♒		
desc. node	16395 Nov 25	03:47	6°♒48'56		
evening max el	16395 Dec 02	22:07	14°♒39'54	46°23'42	
	16395 Dec 19	18:19	0°♓		
greatest brilliancy	16396 Jan 11	12:29	14°♓05'50	-4.8m	
retrograde	16396 Jan 21	15:17	15°♓58'38		
evening set	16396 Feb 08	00:26	10°♓14'46		
inferior conj	16396 Feb 12	01:22	7°♓46'11	-7°14'17	
minimum elong	16396 Feb 12	11:34	7°♓30'16	7°12'08	
min. Earth dist.	16396 Feb 12	04:09	7°♓41'51	0.28592 AU	
morning rise	16396 Feb 16	22:43	4°♓47'51		
	16396 Feb 29	02:30	30°℞♒		
direct	16396 Mar 04	06:44	29°♒39'00		
	16396 Mar 08	13:17	0°♓		
greatest brilliancy	16396 Mar 14	21:30	1°♓42'07	-4.8m	
asc. node	16396 Mar 17	02:58	2°♓35'41		
	16396 Apr 22	02:36	0°♈		
morning max el	16396 Apr 22	10:40	0°♈19'38	45°48'22	
	16396 May 20	15:50	0°♉		
	16396 Jun 15	21:50	0°♊		
desc. node	16396 Jul 07	03:37	25°♊11'51		

	16396 Jul 11 03:27	0°♋	
	16396 Aug 04 19:17	0°♌	
	16396 Aug 29 02:58	0°♍	
	16396 Sep 22 06:13	0°♎	
	16396 Oct 16 07:21	0°♏	
morning set	16396 Oct 23 08:28	8°♏48'00	
asc. node	16396 Oct 27 23:02	14°♏33'20	
	16396 Nov 09 07:39	0°♐	
superior conj	16396 Dec 01 04:15	27°♐18'24	1°11'40
minimum elong	16396 Nov 30 18:19	26°♐47'22	1°12'03
max. Earth dist.	16396 Dec 02 23:06	29°♐32'09	1.72050 AU
	16396 Dec 03 08:01	0°♑	
	16396 Dec 27 09:49	0°♒	
evening rise	16397 Jan 07 17:31	14°♒03'33	
	16397 Jan 20 14:45	0°♓	
	16397 Feb 14 00:21	0°♈	
desc. node	16397 Feb 16 15:31	3°♈13'09	
	16397 Mar 10 15:20	0°♉	
	16397 Apr 04 11:55	0°♊	
	16397 Apr 29 15:31	0°♋	
	16397 May 25 07:26	0°♌	
asc. node	16397 Jun 09 09:14	17°♌07'07	
	16397 Jun 21 02:31	0°♍	
evening max el	16397 Jul 08 06:37	17°♍50'34	46°27'45
	16397 Jul 21 05:43	0°♎	
greatest brilliancy	16397 Aug 17 04:41	17°♎50'21	-4.9m
retrograde	16397 Aug 27 04:01	19°♎41'37	
evening set	16397 Sep 11 03:32	15°♎16'46	
inferior conj	16397 Sep 16 18:31	11°♎58'19	3°13'59
minimum elong	16397 Sep 17 01:44	11°♎47'19	3°11'50
min. Earth dist.	16397 Sep 17 03:56	11°♎43'58	0.26964 AU
morning rise	16397 Sep 22 23:50	8°♎20'31	
desc. node	16397 Sep 29 08:17	5°♎33'09	
direct	16397 Oct 07 13:33	4°♎10'48	
greatest brilliancy	16397 Oct 17 16:18	6°♎05'47	-4.9m
	16397 Nov 20 06:53	0°♏	
morning max el	16397 Nov 26 15:14	6°♏06'34	46°35'44
	16397 Dec 19 11:46	0°♐	
	16398 Jan 15 02:22	0°♑	
asc. node	16398 Jan 20 08:40	6°♑06'22	
	16398 Feb 09 15:41	0°♒	
	16398 Mar 06 15:43	0°♓	
	16398 Mar 31 08:22	0°♈	
	16398 Apr 24 20:38	0°♉	
desc. node	16398 May 12 05:43	21°♉22'23	
	16398 May 19 05:32	0°♊	
morning set	16398 May 26 06:24	8°♊41'32	
	16398 Jun 12 11:11	0°♋	
max. Earth dist.	16398 Jul 01 20:20	24°♋06'23	1.72111 AU
superior conj	16398 Jul 04 14:57	27°♋33'55	-1°27'40
minimum elong	16398 Jul 04 13:02	27°♋27'55	1°28'16
	16398 Jul 06 13:50	0°♌	
	16398 Jul 30 14:25	0°♍	
evening rise	16398 Aug 13 08:31	17°♍11'44	
	16398 Aug 23 14:20	0°♎	
greatest brilliancy	16398 Aug 26 19:15	4°♎00'19	-3.9m
asc. node	16398 Sep 01 22:02	11°♎38'44	
	16398 Sep 16 14:56	0°♏	
	16398 Oct 10 17:46	0°♐	
	16398 Nov 04 01:21	0°♑	
	16398 Nov 28 18:09	0°♒	
desc. node	16398 Dec 22 15:29	28°♒15'13	
	16398 Dec 24 03:37	0°♓	
	16399 Jan 19 19:28	0°♈	
evening max el	16399 Feb 12 03:19	24°♈04'44	46°03'28
	16399 Feb 18 10:04	0°♉	
greatest brilliancy	16399 Mar 23 01:51	22°♉38'27	-4.8m
retrograde	16399 Apr 02 05:50	24°♉31'28	
asc. node	16399 Apr 14 13:13	21°♉31'03	
evening set	16399 Apr 17 03:28	20°♉11'06	
inferior conj	16399 Apr 23 11:30	16°♉22'07	2°12'20
minimum elong	16399 Apr 23 06:38	16°♉29'47	2°10'26
min. Earth dist.	16399 Apr 23 09:30	16°♉25'16	0.28349 AU
morning rise	16399 Apr 29 09:44	12°♉46'52	
direct	16399 May 14 16:54	8°♉12'40	
greatest brilliancy	16399 May 25 01:23	10°♉11'51	-4.8m
	16399 Jun 23 01:55	0°♊	
morning max el	16399 Jul 03 09:41	9°♊47'17	46°23'40
	16399 Jul 22 17:37	0°♋	
desc. node	16399 Aug 04 14:13	14°♋20'43	
	16399 Aug 18 04:13	0°♌	
	16399 Sep 12 10:05	0°♍	
	16399 Oct 07 02:38	0°♎	
	16399 Oct 31 12:43	0°♏	
	16399 Nov 24 19:22	0°♐	
asc. node	16399 Nov 25 11:44	0°♐50'43	
	16399 Dec 18 23:58	0°♑	
morning set	16400 Jan 04 02:29	20°♑00'08	
	16400 Jan 12 03:43	0°♒	
	16400 Feb 05 08:09	0°♓	
superior conj	16400 Feb 10 04:31	6°♓00'10	1°12'27
minimum elong	16400 Feb 10 13:52	6°♓29'04	1°12'32
max. Earth dist.	16400 Feb 12 11:57	8°♓51'38	1.72882 AU
	16400 Feb 29 14:32	0°♈	
desc. node	16400 Mar 16 05:06	19°♈13'51	
evening rise	16400 Mar 18 22:28	22°♈34'58	
	16400 Mar 24 23:11	0°♉	
	16400 Apr 18 09:31	0°♊	
	16400 May 12 21:00	0°♋	
	16400 Jun 06 10:14	0°♌	
	16400 Jul 01 03:42	0°♍	
asc. node	16400 Jul 06 21:24	6°♍54'28	
	16400 Jul 26 06:12	0°♎	
	16400 Aug 21 03:27	0°♏	
	16400 Sep 17 22:49	0°♐	
evening max el	16400 Sep 18 20:55	0°♐55'35	46°39'34
	16400 Oct 25 10:28	0°♑	
desc. node	16400 Oct 26 18:48	0°♑36'14	
greatest brilliancy	16400 Oct 28 08:02	1°♑14'06	-4.8m
retrograde	16400 Nov 08 03:19	3°♑23'57	
	16400 Nov 21 06:31	30°℞♐	
evening set	16400 Nov 24 10:38	28°♐18'08	
min. Earth dist.	16400 Nov 28 10:27	25°♐55'00	0.27699 AU
inferior conj	16400 Nov 29 05:33	25°♐25'39	-7°22'38
minimum elong	16400 Nov 28 19:01	25°♐41'52	7°20'03
morning rise	16400 Dec 03 03:41	23°♐03'39	
direct	16400 Dec 20 04:20	17°♐35'52	
greatest brilliancy	16400 Dec 29 16:01	19°♐14'09	-4.8m
	16401 Jan 17 15:24	0°♑	
morning max el	16401 Feb 07 07:34	18°♑02'50	45°54'38
asc. node	16401 Feb 16 18:58	27°♑30'58	
	16401 Feb 19 04:41	0°♒	
	16401 Mar 18 16:05	0°♓	
	16401 Apr 13 14:06	0°♈	
	16401 May 08 18:31	0°♉	
	16401 Jun 02 12:31	0°♊	
desc. node	16401 Jun 08 18:02	7°♊36'58	
	16401 Jun 26 23:05	0°♋	
	16401 Jul 21 04:04	0°♌	
morning set	16401 Aug 08 02:56	22°♌22'46	
	16401 Aug 14 05:17	0°♍	

	16401 Sep 07 04:34	0°♎	
max. Earth dist.	16401 Sep 16 04:53	11°♎17'33	1.71567 AU
superior conj	16401 Sep 16 18:52	12°♎01'22	-0°30'37
minimum elong	16401 Sep 17 02:14	12°♎24'25	0°30'12
asc. node	16401 Sep 29 11:40	27°♎56'01	
	16401 Oct 01 03:15	0°♏	
	16401 Oct 25 02:20	0°♐	
evening rise	16401 Oct 26 04:33	1°♐21'56	
	16401 Nov 18 03:08	0°♑	
	16401 Dec 12 07:50	0°♒	
	16402 Jan 05 19:24	0°♓	
desc. node	16402 Jan 19 04:07	16°♓10'33	
	16402 Jan 30 16:57	0°♈	
	16402 Feb 25 04:12	0°♉	
	16402 Mar 23 12:33	0°♊	
	16402 Apr 20 18:04	0°♋	
evening max el	16402 Apr 24 02:33	3°♋18'40	46°05'00
asc. node	16402 May 11 23:54	19°♋25'19	
	16402 May 27 15:34	0°♌	
greatest brilliancy	16402 Jun 02 23:33	2°♌45'10	-4.8m
retrograde	16402 Jun 12 13:24	4°♌28'21	
	16402 Jun 27 15:01	30°℞♋	
evening set	16402 Jun 30 14:04	28°♋16'38	
inferior conj	16402 Jul 03 11:43	26°♋28'54	9°00'37
minimum elong	16402 Jul 03 09:11	26°♋32'52	8°59'55
min. Earth dist.	16402 Jul 03 20:12	26°♋15'37	0.27997 AU
morning rise	16402 Jul 06 04:12	24°♋48'39	
direct	16402 Jul 24 12:27	18°♋21'17	
greatest brilliancy	16402 Aug 03 16:36	20°♋17'53	-4.9m
	16402 Aug 20 11:24	0°♌	
desc. node	16402 Sep 01 00:17	9°♌36'27	
morning max el	16402 Sep 12 23:35	21°♌03'30	46°55'13
	16402 Sep 21 15:42	0°♍	
	16402 Oct 18 17:57	0°♎	
	16402 Nov 13 10:02	0°♏	
	16402 Dec 08 11:12	0°♐	
asc. node	16402 Dec 22 23:28	17°♐35'00	
	16403 Jan 02 04:05	0°♑	
	16403 Jan 26 15:49	0°♒	
	16403 Feb 20 00:46	0°♓	
morning set	16403 Mar 14 07:17	27°♓27'34	
	16403 Mar 16 08:43	0°♈	
	16403 Apr 09 16:27	0°♉	
desc. node	16403 Apr 13 18:36	5°♉02'44	
max. Earth dist.	16403 Apr 20 06:53	13°♉04'58	1.73006 AU
superior conj	16403 Apr 21 02:48	14°♉06'26	-0°17'49
minimum elong	16403 Apr 20 22:36	13°♉53'30	0°18'01
	16403 May 03 23:39	0°♊	
	16403 May 28 05:42	0°♋	
evening rise	16403 May 29 11:01	1°♋30'47	
	16403 Jun 21 10:36	0°♌	
	16403 Jul 15 15:20	0°♍	
asc. node	16403 Aug 04 10:22	24°♍29'20	
	16403 Aug 08 21:33	0°♎	
	16403 Sep 02 07:40	0°♏	
	16403 Sep 27 01:40	0°♐	
	16403 Oct 22 11:50	0°♑	
	16403 Nov 18 10:32	0°♒	
desc. node	16403 Nov 24 05:38	6°♒03'15	
evening max el	16403 Nov 30 13:40	12°♒26'08	46°24'37
	16403 Dec 20 04:20	0°♓	
greatest brilliancy	16404 Jan 09 02:42	11°♓51'45	-4.8m
retrograde	16404 Jan 19 07:14	13°♓45'48	
evening set	16404 Feb 05 18:49	7°♓57'19	
inferior conj	16404 Feb 09 16:41	5°♓33'17	-7°26'33
minimum elong	16404 Feb 10 02:38	5°♓17'47	7°24'32
min. Earth dist.	16404 Feb 09 18:30	5°♓30'27	0.28587 AU
morning rise	16404 Feb 14 10:32	2°♓40'19	
	16404 Feb 19 14:56	30°℞♒	
direct	16404 Mar 01 22:29	27°♒26'31	
greatest brilliancy	16404 Mar 12 11:31	29°♒28'33	-4.8m
	16404 Mar 13 20:00	0°♓	
asc. node	16404 Mar 16 04:56	1°♓02'31	
morning max el	16404 Apr 20 02:46	28°♓08'57	45°47'46
	16404 Apr 22 00:03	0°♈	
	16404 May 20 07:02	0°♉	
	16404 Jun 15 10:51	0°♊	
desc. node	16404 Jul 06 05:24	24°♊40'43	
	16404 Jul 10 15:28	0°♋	
	16404 Aug 04 06:46	0°♌	
	16404 Aug 28 14:08	0°♍	
	16404 Sep 21 17:10	0°♎	
	16404 Oct 15 18:08	0°♏	
morning set	16404 Oct 20 21:40	6°♏25'44	
asc. node	16404 Oct 27 00:54	14°♏05'37	
	16404 Nov 08 18:19	0°♐	
superior conj	16404 Nov 28 18:50	25°♐00'50	1°09'34
minimum elong	16404 Nov 28 08:36	24°♐28'55	1°09'54
max. Earth dist.	16404 Nov 30 15:07	27°♐19'08	1.72023 AU
	16404 Dec 02 18:39	0°♑	
	16404 Dec 26 20:27	0°♒	
evening rise	16405 Jan 05 08:52	11°♒49'15	
	16405 Jan 20 01:28	0°♓	
	16405 Feb 13 11:15	0°♈	
desc. node	16405 Feb 15 17:23	2°♈45'28	
	16405 Mar 10 02:33	0°♉	
	16405 Apr 03 23:40	0°♊	
	16405 Apr 29 04:10	0°♋	
	16405 May 24 21:44	0°♌	
asc. node	16405 Jun 08 11:02	16°♌27'42	
	16405 Jun 20 20:31	0°♍	
evening max el	16405 Jul 05 20:45	15°♍30'28	46°26'44
	16405 Jul 21 13:17	0°♎	
greatest brilliancy	16405 Aug 14 18:39	15°♎27'07	-4.9m
retrograde	16405 Aug 24 16:37	17°♎16'51	
evening set	16405 Sep 08 18:53	12°♎48'53	
inferior conj	16405 Sep 14 07:12	9°♎33'37	3°36'36
minimum elong	16405 Sep 14 15:06	9°♎21'32	3°34'16
min. Earth dist.	16405 Sep 14 17:41	9°♎17'36	0.26981 AU
morning rise	16405 Sep 20 11:14	5°♎57'04	
desc. node	16405 Sep 28 10:19	2°♎40'00	
direct	16405 Oct 05 02:42	1°♎45'46	
greatest brilliancy	16405 Oct 15 05:26	3°♎40'39	-4.9m
	16405 Nov 20 08:24	0°♏	
morning max el	16405 Nov 24 04:18	3°♏43'35	46°37'04
	16405 Dec 19 04:39	0°♐	
	16406 Jan 14 16:17	0°♑	
asc. node	16406 Jan 19 10:35	5°♑32'27	
	16406 Feb 09 04:08	0°♒	
	16406 Mar 06 03:21	0°♓	
	16406 Mar 30 19:32	0°♈	
	16406 Apr 24 07:32	0°♉	
desc. node	16406 May 11 07:32	20°♉54'47	
	16406 May 18 16:18	0°♊	
morning set	16406 May 23 20:25	6°♊23'22	
	16406 Jun 11 21:52	0°♋	
max. Earth dist.	16406 Jun 29 06:41	21°♋35'53	1.72144 AU
superior conj	16406 Jul 02 04:22	25°♋12'53	-1°27'16
minimum elong	16406 Jul 02 01:30	25°♋03'57	1°27'52
	16406 Jul 06 00:32	0°♌	

	16406 Jul 30 01:12	0°♍	
evening rise	16406 Aug 10 20:39	14°♍45'40	
	16406 Aug 23 01:14	0°♎	
asc. node	16406 Aug 31 23:58	11°♎10'31	
	16406 Sep 16 02:02	0°♏	
	16406 Oct 10 05:07	0°♐	
	16406 Nov 03 13:06	0°♑	
	16406 Nov 28 06:35	0°♒	
desc. node	16406 Dec 21 17:17	27°♒40'57	
	16406 Dec 23 17:21	0°♓	
	16407 Jan 19 12:07	0°♈	
evening max el	16407 Feb 09 17:48	21°♈49'30	46°03'51
	16407 Feb 18 12:10	0°♉	
greatest brilliancy	16407 Mar 20 17:52	20°♉25'40	-4.8m
retrograde	16407 Mar 30 20:30	22°♉17'49	
asc. node	16407 Apr 13 15:12	18°♉34'17	
evening set	16407 Apr 14 18:38	17°♉57'45	
inferior conj	16407 Apr 21 02:59	14°♉08'31	1°51'25
minimum elong	16407 Apr 20 22:51	14°♉15'01	1°49'44
min. Earth dist.	16407 Apr 21 01:44	14°♉10'30	0.28353 AU
morning rise	16407 Apr 27 02:56	10°♉30'37	
direct	16407 May 12 07:56	5°♉59'04	
greatest brilliancy	16407 May 22 18:01	7°♉59'11	-4.8m
	16407 Jun 23 04:14	0°♊	
morning max el	16407 Jun 30 23:18	7°♊28'04	46°22'18
	16407 Jul 22 10:22	0°♋	
desc. node	16407 Aug 03 16:11	13°♋43'21	
	16407 Aug 17 18:07	0°♌	
	16407 Sep 11 22:42	0°♍	
	16407 Oct 06 14:34	0°♎	
	16407 Oct 31 00:14	0°♏	
	16407 Nov 24 06:34	0°♐	
asc. node	16407 Nov 24 13:29	0°♐21'26	
	16407 Dec 18 10:56	0°♑	
morning set	16408 Jan 01 17:53	17°♑45'10	
	16408 Jan 11 14:32	0°♒	
	16408 Feb 04 18:53	0°♓	
superior conj	16408 Feb 07 20:39	3°♓48'20	1°14'19
minimum elong	16408 Feb 08 05:41	4°♓16'18	1°14'25
max. Earth dist.	16408 Feb 10 03:17	6°♓37'23	1.72858 AU
	16408 Feb 29 01:18	0°♈	
desc. node	16408 Mar 15 06:58	18°♈46'21	
evening rise	16408 Mar 16 14:05	20°♈22'04	
	16408 Mar 24 10:04	0°♉	
	16408 Apr 17 20:36	0°♊	
	16408 May 12 08:21	0°♋	
	16408 Jun 05 22:02	0°♌	
	16408 Jun 30 16:12	0°♍	
asc. node	16408 Jul 05 23:15	6°♍21'54	
	16408 Jul 25 19:54	0°♎	
	16408 Aug 20 19:34	0°♏	
evening max el	16408 Sep 16 09:54	28°♏31'20	46°39'31
	16408 Sep 17 21:26	0°♐	
desc. node	16408 Oct 25 20:38	28°♐51'19	
greatest brilliancy	16408 Oct 25 22:04	28°♐52'42	-4.8m
	16408 Oct 29 07:21	0°♑	
retrograde	16408 Nov 05 17:08	1°♑02'59	
	16408 Nov 12 22:13	30°℞♐	
evening set	16408 Nov 21 20:29	26°♐02'50	
min. Earth dist.	16408 Nov 26 00:23	23°♐34'19	0.27654 AU
inferior conj	16408 Nov 26 19:14	23°♐05'25	-7°09'05
minimum elong	16408 Nov 26 08:26	23°♐21'59	7°06'19
morning rise	16408 Nov 30 20:39	20°♐38'51	
direct	16408 Dec 17 17:09	15°♐15'53	
greatest brilliancy	16408 Dec 27 05:57	16°♐55'04	-4.8m
	16409 Jan 18 05:01	0°♑	

morning max el	16409 Feb 04 21:11	15°♑43'43	45°55'47
asc. node	16409 Feb 15 20:57	26°♑45'39	
	16409 Feb 18 23:32	0°♒	
	16409 Mar 18 06:44	0°♓	
	16409 Apr 13 02:59	0°♈	
	16409 May 08 06:29	0°♉	
	16409 Jun 01 23:59	0°♊	
desc. node	16409 Jun 07 19:44	7°♊07'16	
	16409 Jun 26 10:16	0°♋	
	16409 Jul 20 15:04	0°♌	
morning set	16409 Aug 05 15:24	19°♌57'39	
	16409 Aug 13 16:13	0°♍	
	16409 Sep 06 15:26	0°♎	
max. Earth dist.	16409 Sep 13 16:05	8°♎48'19	1.71568 AU
superior conj	16409 Sep 14 07:27	9°♎36'27	-0°34'10
minimum elong	16409 Sep 14 15:34	10°♎01'53	0°33'45
asc. node	16409 Sep 28 13:29	27°♎27'45	
	16409 Sep 30 14:06	0°♏	
evening rise	16409 Oct 23 18:44	29°♏02'16	
	16409 Oct 24 13:12	0°♐	
	16409 Nov 17 14:07	0°♑	
	16409 Dec 11 19:03	0°♒	
	16410 Jan 05 06:59	0°♓	
desc. node	16410 Jan 18 05:58	15°♓40'23	
	16410 Jan 30 05:11	0°♈	
	16410 Feb 24 17:35	0°♉	
	16410 Mar 23 04:13	0°♊	
	16410 Apr 20 15:53	0°♋	
evening max el	16410 Apr 21 17:22	1°♋02'24	46°04'37
asc. node	16410 May 11 01:42	18°♋17'40	
	16410 May 30 08:49	0°♌	
greatest brilliancy	16410 May 31 12:06	0°♌24'44	-4.8m
retrograde	16410 Jun 10 03:59	2°♌09'25	
	16410 Jun 20 11:00	30°℞♋	
evening set	16410 Jun 28 01:48	26°♋00'46	
inferior conj	16410 Jul 01 02:00	24°♋09'07	8°57'26
minimum elong	16410 Jun 30 22:36	24°♋14'25	8°56'39
min. Earth dist.	16410 Jul 01 09:11	23°♋57'54	0.28024 AU
morning rise	16410 Jul 03 19:21	22°♋27'39	
direct	16410 Jul 22 03:30	16°♋01'11	
greatest brilliancy	16410 Aug 01 06:22	17°♋57'09	-4.9m
	16410 Aug 21 02:19	0°♌	
desc. node	16410 Aug 31 02:13	8°♌36'47	
morning max el	16410 Sep 10 15:02	18°♌45'43	46°55'01
	16410 Sep 21 11:05	0°♍	
	16410 Oct 18 09:02	0°♎	
	16410 Nov 12 23:15	0°♏	
	16410 Dec 07 23:23	0°♐	
asc. node	16410 Dec 22 01:21	17°♐04'50	
	16411 Jan 01 15:38	0°♑	
	16411 Jan 26 03:00	0°♒	
	16411 Feb 19 11:43	0°♓	
morning set	16411 Mar 11 23:52	25°♓17'21	
	16411 Mar 15 19:32	0°♈	
	16411 Apr 09 03:13	0°♉	
desc. node	16411 Apr 12 20:19	4°♉34'50	
max. Earth dist.	16411 Apr 18 02:47	11°♉04'59	1.73020 AU
superior conj	16411 Apr 18 17:48	11°♉51'20	-0°14'21
minimum elong	16411 Apr 18 14:24	11°♉40'50	0°14'33
behind sun begin	16411 Apr 18 04:26	11°♉10'04	
behind sun end	16411 Apr 19 00:22	12°♉11'36	
	16411 May 03 10:26	0°♊	
evening rise	16411 May 27 01:26	29°♊13'02	
	16411 May 27 16:36	0°♋	
	16411 Jun 20 21:41	0°♌	

	16411 Jul 15	02:39	0°♍		
asc. node	16411 Aug 03	12:19	23°♍59'37		
	16411 Aug 08	09:13	0°♎		
	16411 Sep 01	19:50	0°♏		
	16411 Sep 26	14:41	0°♐		
	16411 Oct 22	02:30	0°♑		
	16411 Nov 18	05:12	0°♒		
desc. node	16411 Nov 23	07:28	5°♒16'29		
evening max el	16411 Nov 28	05:26	10°♒12'29	46°25'25	
	16411 Dec 20	18:02	0°♓		
greatest brilliancy	16412 Jan 06	17:12	9°♓37'43	-4.8m	
retrograde	16412 Jan 16	22:56	11°♓32'26		
evening set	16412 Feb 03	13:13	5°♓39'39		
inferior conj	16412 Feb 07	08:03	3°♓19'56	-7°38'09	
minimum elong	16412 Feb 07	17:41	3°♓04'55	7°36'15	
min. Earth dist.	16412 Feb 07	08:53	3°♓18'39	0.28585 AU	
morning rise	16412 Feb 11	22:17	0°♓32'16		
	16412 Feb 12	20:55	30°℞♒		
direct	16412 Feb 28	14:30	25°♒13'41		
greatest brilliancy	16412 Mar 10	01:25	27°♒14'05	-4.8m	
asc. node	16412 Mar 15	06:52	29°♒31'47		
	16412 Mar 16	04:39	0°♓		
morning max el	16412 Apr 17	18:12	25°♓55'38	45°47'02	
	16412 Apr 21	21:05	0°♈		
	16412 May 19	22:21	0°♉		
	16412 Jun 15	00:04	0°♊		
desc. node	16412 Jul 05	07:23	24°♊09'32		
	16412 Jul 10	03:39	0°♋		
	16412 Aug 03	18:25	0°♌		
	16412 Aug 28	01:26	0°♍		
	16412 Sep 21	04:14	0°♎		
	16412 Oct 15	05:02	0°♏		
morning set	16412 Oct 18	11:00	4°♏03'29		
asc. node	16412 Oct 26	02:39	13°♏37'10		
	16412 Nov 08	05:06	0°♐		
superior conj	16412 Nov 26	09:39	22°♐43'47	1°07'21	
minimum elong	16412 Nov 25	23:12	22°♐11'10	1°07'39	
max. Earth dist.	16412 Nov 28	06:41	25°♐04'25	1.71990 AU	
	16412 Dec 02	05:21	0°♑		
	16412 Dec 26	07:08	0°♒		
evening rise	16413 Jan 03	00:28	9°♒35'36		
	16413 Jan 19	12:13	0°♓		
	16413 Feb 12	22:12	0°♈		
desc. node	16413 Feb 14	19:17	2°♈17'45		
	16413 Mar 09	13:53	0°♉		
	16413 Apr 03	11:36	0°♊		
	16413 Apr 28	17:04	0°♋		
	16413 May 24	12:24	0°♌		
asc. node	16413 Jun 07	12:57	15°♌47'40		
	16413 Jun 20	15:09	0°♍		
evening max el	16413 Jul 03	09:47	13°♍07'16	46°25'49	
	16413 Jul 21	23:49	0°♎		
greatest brilliancy	16413 Aug 12	09:07	13°♎04'18	-4.9m	
retrograde	16413 Aug 22	04:51	14°♎52'04		
evening set	16413 Sep 06	10:24	10°♎20'40		
inferior conj	16413 Sep 11	19:56	7°♎08'59	3°58'49	
minimum elong	16413 Sep 12	04:29	6°♎55'54	3°56'18	
min. Earth dist.	16413 Sep 12	07:44	6°♎50'55	0.26998 AU	
morning rise	16413 Sep 17	22:24	3°♎33'57		
	16413 Sep 26	22:22	30°℞♍		
desc. node	16413 Sep 27	12:12	29°♍52'26		
direct	16413 Oct 02	15:17	29°♍20'36		
	16413 Oct 08	11:27	0°♎		
greatest brilliancy	16413 Oct 12	19:06	1°♎16'03	-4.9m	
	16413 Nov 20	08:38	0°♏		
morning max el	16413 Nov 21	16:44	1°♏18'53	46°38'30	
	16413 Dec 18	21:09	0°♐		
	16414 Jan 14	05:58	0°♑		
asc. node	16414 Jan 18	12:32	4°♑59'06		
	16414 Feb 08	16:24	0°♒		
	16414 Mar 05	14:50	0°♓		
	16414 Mar 30	06:35	0°♈		
	16414 Apr 23	18:21	0°♉		
desc. node	16414 May 10	09:19	20°♉27'09		
	16414 May 18	03:02	0°♊		
morning set	16414 May 21	10:14	4°♊04'39		
	16414 Jun 11	08:34	0°♋		
max. Earth dist.	16414 Jun 26	16:52	19°♋04'50	1.72181 AU	
superior conj	16414 Jun 29	17:30	22°♋50'59	-1°26'42	
minimum elong	16414 Jun 29	13:42	22°♋39'07	1°27'18	
	16414 Jul 05	11:14	0°♌		
	16414 Jul 29	11:57	0°♍		
evening rise	16414 Aug 08	08:27	12°♍18'46		
	16414 Aug 22	12:06	0°♎		
asc. node	16414 Aug 31	01:43	10°♎41'56		
	16414 Sep 15	13:04	0°♏		
	16414 Oct 09	16:24	0°♐		
	16414 Nov 03	00:45	0°♑		
	16414 Nov 27	18:56	0°♒		
desc. node	16414 Dec 20	19:15	27°♒07'26		
	16414 Dec 23	07:02	0°♓		
	16415 Jan 19	04:50	0°♈		
evening max el	16415 Feb 07	07:47	19°♈33'59	46°04'23	
	16415 Feb 18	15:24	0°♉		
greatest brilliancy	16415 Mar 18	09:37	18°♉13'47	-4.8m	
retrograde	16415 Mar 28	11:34	20°♉05'45		
evening set	16415 Apr 12	10:06	15°♉45'20		
asc. node	16415 Apr 12	16:59	15°♉35'53		
inferior conj	16415 Apr 18	18:38	11°♉56'15	1°30'23	
minimum elong	16415 Apr 18	15:16	12°♉01'33	1°28'57	
min. Earth dist.	16415 Apr 18	18:02	11°♉57'12	0.28364 AU	
morning rise	16415 Apr 24	20:12	8°♉16'05		
direct	16415 May 09	23:04	3°♉46'35		
greatest brilliancy	16415 May 20	11:03	5°♉48'06	-4.8m	
	16415 Jun 23	04:55	0°♊		
morning max el	16415 Jun 28	13:43	5°♊11'22	46°20'46	
	16415 Jul 22	02:42	0°♋		
desc. node	16415 Aug 02	18:06	13°♋06'24		
	16415 Aug 17	07:47	0°♌		
	16415 Sep 11	11:09	0°♍		
	16415 Oct 06	02:18	0°♎		
	16415 Oct 30	11:30	0°♏		
asc. node	16415 Nov 23	15:21	29°♏53'18		
	16415 Nov 23	17:30	0°♐		
	16415 Dec 17	21:38	0°♑		
morning set	16415 Dec 30	09:19	15°♑31'01		
	16416 Jan 11	01:04	0°♒		
	16416 Feb 04	05:22	0°♓		
superior conj	16416 Feb 05	13:03	1°♓38'08	1°16'03	
minimum elong	16416 Feb 05	21:43	2°♓04'58	1°16'11	
max. Earth dist.	16416 Feb 07	18:47	4°♓24'29	1.72832 AU	
	16416 Feb 28	11:46	0°♈		
evening rise	16416 Mar 14	06:08	18°♈11'29		
desc. node	16416 Mar 14	08:43	18°♈19'25		
	16416 Mar 23	20:37	0°♉		
	16416 Apr 17	07:20	0°♊		
	16416 May 11	19:24	0°♋		
	16416 Jun 05	09:35	0°♌		
	16416 Jun 30	04:33	0°♍		
asc. node	16416 Jul 05	01:10	5°♍50'03		
	16416 Jul 25	09:34	0°♎		

	16416 Aug 20 11:48	0°♏		
evening max el	16416 Sep 13 23:29	26°♏09'14	46°39'39	
	16416 Sep 17 20:49	0°♐		
greatest brilliancy	16416 Oct 23 11:38	26°♐31'22	-4.9m	
desc. node	16416 Oct 24 22:30	27°♐03'02		
retrograde	16416 Nov 03 07:29	28°♐42'42		
evening set	16416 Nov 19 06:26	23°♐47'52		
min. Earth dist.	16416 Nov 23 13:56	21°♐14'35	0.27605 AU	
inferior conj	16416 Nov 24 08:50	20°♐45'42	-6°54'42	
minimum elong	16416 Nov 23 21:51	21°♐02'29	6°51'48	
morning rise	16416 Nov 28 13:35	18°♐14'44		
direct	16416 Dec 15 06:18	12°♐56'33		
greatest brilliancy	16416 Dec 24 19:14	14°♐36'12	-4.8m	
	16417 Jan 18 14:39	0°♑		
morning max el	16417 Feb 02 11:41	13°♑27'57	45°57'00	
asc. node	16417 Feb 14 22:50	26°♑01'50		
	16417 Feb 18 17:28	0°♒		
	16417 Mar 17 20:47	0°♓		
	16417 Apr 12 15:21	0°♈		
	16417 May 07 17:59	0°♉		
	16417 Jun 01 10:59	0°♊		
desc. node	16417 Jun 06 21:44	6°♊39'52		
	16417 Jun 25 21:01	0°♋		
	16417 Jul 20 01:43	0°♌		
morning set	16417 Aug 03 03:50	17°♌33'28		
	16417 Aug 13 02:49	0°♍		
	16417 Sep 06 02:02	0°♎		
max. Earth dist.	16417 Sep 11 03:48	6°♎21'27	1.71574 AU	
superior conj	16417 Sep 11 19:36	7°♎10'57	-0°37'43	
minimum elong	16417 Sep 12 04:25	7°♎38'35	0°37'16	
asc. node	16417 Sep 27 15:15	27°♎00'08		
	16417 Sep 30 00:41	0°♏		
evening rise	16417 Oct 21 08:24	26°♏41'47		
	16417 Oct 23 23:48	0°♐		
	16417 Nov 17 00:49	0°♑		
	16417 Dec 11 05:57	0°♒		
	16418 Jan 04 18:15	0°♓		
desc. node	16418 Jan 17 07:53	15°♓11'25		
	16418 Jan 29 17:05	0°♈		
	16418 Feb 24 06:39	0°♉		
	16418 Mar 22 19:39	0°♊		
evening max el	16418 Apr 19 09:00	28°♊49'49	46°04'17	
	16418 Apr 20 13:55	0°♋		
asc. node	16418 May 10 03:43	17°♋10'24		
greatest brilliancy	16418 May 29 01:07	28°♋07'10	-4.8m	
retrograde	16418 Jun 07 18:47	29°♋52'52		
evening set	16418 Jun 25 13:33	23°♋48'07		
inferior conj	16418 Jun 28 16:37	21°♋51'52	8°53'22	
minimum elong	16418 Jun 28 12:24	21°♋58'27	8°52'29	
min. Earth dist.	16418 Jun 28 22:25	21°♋42'47	0.28050 AU	
morning rise	16418 Jul 01 11:12	20°♋08'24		
direct	16418 Jul 19 18:54	13°♋43'53		
greatest brilliancy	16418 Jul 29 20:03	15°♋38'29	-4.9m	
	16418 Aug 21 12:39	0°♌		
desc. node	16418 Aug 30 04:07	7°♌39'51		
morning max el	16418 Sep 08 06:14	16°♌28'42	46°54'22	
	16418 Sep 21 05:30	0°♍		
	16418 Oct 17 23:36	0°♎		
	16418 Nov 12 12:06	0°♏		
	16418 Dec 07 11:14	0°♐		
asc. node	16418 Dec 21 03:20	16°♐35'55		
	16419 Jan 01 02:52	0°♑		
	16419 Jan 25 13:48	0°♒		
	16419 Feb 18 22:16	0°♓		
morning set	16419 Mar 09 16:32	23°♓08'37		
	16419 Mar 15 05:57	0°♈		
	16419 Apr 08 13:34	0°♉		
desc. node	16419 Apr 11 22:09	4°♉08'30		
superior conj	16419 Apr 16 09:07	9°♉38'28	-0°10'52	
minimum elong	16419 Apr 16 06:31	9°♉30'26	0°11'06	
behind sun begin	16419 Apr 15 13:11	8°♉36'56		
behind sun end	16419 Apr 16 23:51	10°♉23'56		
max. Earth dist.	16419 Apr 15 21:23	9°♉02'15	1.73030 AU	
	16419 May 02 20:50	0°♊		
evening rise	16419 May 24 16:15	26°♊57'54		
	16419 May 27 03:05	0°♋		
	16419 Jun 20 08:19	0°♌		
	16419 Jul 14 13:31	0°♍		
asc. node	16419 Aug 02 14:07	23°♍30'48		
	16419 Aug 07 20:26	0°♎		
	16419 Sep 01 07:39	0°♏		
	16419 Sep 26 03:28	0°♐		
	16419 Oct 21 17:05	0°♑		
	16419 Nov 18 00:12	0°♒		
desc. node	16419 Nov 22 09:29	4°♒29'57		
evening max el	16419 Nov 25 20:45	7°♒58'04	46°26'08	
	16419 Dec 21 12:15	0°♓		
greatest brilliancy	16420 Jan 04 08:20	7°♓24'41	-4.8m	
retrograde	16420 Jan 14 14:08	9°♓19'13		
evening set	16420 Feb 01 07:29	3°♓22'28		
inferior conj	16420 Feb 04 23:18	1°♓07'02	-7°49'05	
minimum elong	16420 Feb 05 08:33	0°♓52'36	7°47'19	
min. Earth dist.	16420 Feb 04 23:22	1°♓06'56	0.28577 AU	
	16420 Feb 06 18:26	30°℞♒		
morning rise	16420 Feb 09 09:47	28°♒24'41		
direct	16420 Feb 26 05:59	23°♒01'27		
greatest brilliancy	16420 Mar 07 15:14	25°♒00'07	-4.8m	
asc. node	16420 Mar 14 08:45	28°♒04'39		
	16420 Mar 17 16:24	0°♓		
morning max el	16420 Apr 15 08:38	23°♓40'50	45°46'28	
	16420 Apr 21 17:00	0°♈		
	16420 May 19 13:03	0°♉		
	16420 Jun 14 12:47	0°♊		
desc. node	16420 Jul 04 09:14	23°♊39'19		
	16420 Jul 09 15:25	0°♋		
	16420 Aug 03 05:37	0°♌		
	16420 Aug 27 12:19	0°♍		
	16420 Sep 20 14:54	0°♎		
	16420 Oct 14 15:35	0°♏		
morning set	16420 Oct 16 00:24	1°♏42'29		
asc. node	16420 Oct 25 04:31	13°♏10'11		
	16420 Nov 07 15:36	0°♐		
superior conj	16420 Nov 24 00:17	20°♐26'57	1°05'00	
minimum elong	16420 Nov 23 13:41	19°♐53'52	1°05'17	
max. Earth dist.	16420 Nov 25 19:19	22°♐41'21	1.71964 AU	
	16420 Dec 01 15:49	0°♑		
	16420 Dec 25 17:36	0°♒		
evening rise	16420 Dec 31 15:42	7°♒21'20		
	16421 Jan 18 22:46	0°♓		
	16421 Feb 12 08:58	0°♈		
desc. node	16421 Feb 13 21:00	1°♈50'04		
	16421 Mar 09 01:01	0°♉		
	16421 Apr 02 23:20	0°♊		
	16421 Apr 28 05:47	0°♋		
	16421 May 24 02:56	0°♌		
asc. node	16421 Jun 06 14:55	15°♌08'16		
	16421 Jun 20 09:55	0°♍		
evening max el	16421 Jun 30 22:21	10°♍44'03	46°25'03	
	16421 Jul 22 13:15	0°♎		
greatest brilliancy	16421 Aug 09 23:59	10°♎43'38	-4.9m	
retrograde	16421 Aug 19 17:20	12°♎29'41		

evening set	16421 Sep 04	02:20	7°♎54'16		
inferior conj	16421 Sep 09	09:02	4°♎46'36	4°20'17	
minimum elong	16421 Sep 09	18:10	4°♎32'37	4°17'37	
min. Earth dist.	16421 Sep 09	22:12	4°♎26'26	0.27018 AU	
morning rise	16421 Sep 15	09:43	1°♎13'29		
	16421 Sep 17	19:24	30°℞♍		
desc. node	16421 Sep 26	14:04	27°♍12'51		
direct	16421 Sep 30	03:51	26°♍57'25		
greatest brilliancy	16421 Oct 10	09:22	28°♍54'00	-4.9m	
	16421 Oct 13	02:36	0°♎		
morning max el	16421 Nov 19	05:37	28°♎56'16	46°39'45	
	16421 Nov 20	07:20	0°♏		
	16421 Dec 18	13:04	0°♐		
	16422 Jan 13	19:21	0°♑		
asc. node	16422 Jan 17	14:21	4°♑25'57		
	16422 Feb 08	04:30	0°♒		
	16422 Mar 05	02:12	0°♓		
	16422 Mar 29	17:31	0°♈		
	16422 Apr 23	05:03	0°♉		
desc. node	16422 May 09	11:13	20°♉00'20		
	16422 May 17	13:36	0°♊		
morning set	16422 May 19	00:04	1°♊46'26		
	16422 Jun 10	19:07	0°♋		
max. Earth dist.	16422 Jun 24	05:56	16°♋43'19	1.72218 AU	
superior conj	16422 Jun 27	06:44	20°♋29'53	-1°25'59	
minimum elong	16422 Jun 27	02:01	20°♋15'10	1°26'34	
	16422 Jul 04	21:47	0°♌		
	16422 Jul 28	22:35	0°♍		
evening rise	16422 Aug 05	20:31	9°♍53'15		
	16422 Aug 21	22:50	0°♎		
asc. node	16422 Aug 30	03:30	10°♎13'54		
	16422 Sep 14	23:57	0°♏		
	16422 Oct 09	03:31	0°♐		
	16422 Nov 02	12:17	0°♑		
	16422 Nov 27	07:13	0°♒		
desc. node	16422 Dec 19	21:05	26°♒33'34		
	16422 Dec 22	20:48	0°♓		
	16423 Jan 18	21:57	0°♈		
evening max el	16423 Feb 04	22:09	17°♈19'11	46°04'50	
	16423 Feb 18	20:42	0°♉		
greatest brilliancy	16423 Mar 16	00:47	16°♉00'36	-4.8m	
retrograde	16423 Mar 26	02:56	17°♉52'58		
evening set	16423 Apr 10	01:34	13°♉31'49		
asc. node	16423 Apr 11	19:00	12°♉33'14		
inferior conj	16423 Apr 16	10:05	9°♉43'08	1°09'02	
minimum elong	16423 Apr 16	07:29	9°♉47'12	1°07'53	
min. Earth dist.	16423 Apr 16	09:57	9°♉43'20	0.28374 AU	
morning rise	16423 Apr 22	13:10	6°♉01'09		
direct	16423 May 07	14:17	1°♉33'16		
greatest brilliancy	16423 May 18	03:38	3°♉36'08	-4.8m	
	16423 Jun 23	04:29	0°♊		
morning max el	16423 Jun 26	04:54	2°♊56'34	46°19'20	
	16423 Jul 21	18:43	0°♋		
desc. node	16423 Aug 01	19:56	12°♋29'31		
	16423 Aug 16	21:19	0°♌		
	16423 Sep 10	23:30	0°♍		
	16423 Oct 05	13:59	0°♎		
	16423 Oct 29	22:44	0°♏		
asc. node	16423 Nov 22	17:16	29°♏25'27		
	16423 Nov 23	04:25	0°♐		
	16423 Dec 17	08:18	0°♑		
morning set	16423 Dec 28	00:59	13°♑17'31		
	16424 Jan 10	11:37	0°♒		
superior conj	16424 Feb 03	05:30	29°♒27'48	1°17'39	
minimum elong	16424 Feb 03	13:44	29°♒53'20	1°17'51	
	16424 Feb 03	15:53	0°♓		
max. Earth dist.	16424 Feb 05	11:52	2°♓16'11	1.72814 AU	
	16424 Feb 27	22:22	0°♈		
evening rise	16424 Mar 11	22:02	16°♈00'01		
desc. node	16424 Mar 13	10:34	17°♈52'22		
	16424 Mar 23	07:20	0°♉		
	16424 Apr 16	18:15	0°♊		
	16424 May 11	06:39	0°♋		
	16424 Jun 04	21:20	0°♌		
	16424 Jun 29	17:06	0°♍		
asc. node	16424 Jul 04	02:58	5°♍17'16		
	16424 Jul 24	23:29	0°♎		
	16424 Aug 20	04:29	0°♏		
evening max el	16424 Sep 11	14:03	23°♏49'13	46°39'45	
	16424 Sep 17	21:31	0°♐		
greatest brilliancy	16424 Oct 21	01:05	24°♐09'28	-4.9m	
desc. node	16424 Oct 24	00:34	25°♐10'13		
retrograde	16424 Oct 31	22:12	26°♐21'48		
evening set	16424 Nov 16	16:30	21°♐32'13		
min. Earth dist.	16424 Nov 21	03:16	18°♐54'30	0.27555 AU	
inferior conj	16424 Nov 21	22:22	18°♐25'21	-6°39'29	
minimum elong	16424 Nov 21	11:18	18°♐42'16	6°36'28	
morning rise	16424 Nov 26	06:29	15°♐49'59		
direct	16424 Dec 12	19:54	10°♐36'49		
greatest brilliancy	16424 Dec 22	07:53	12°♐16'11	-4.8m	
	16425 Jan 18	21:44	0°♑		
morning max el	16425 Jan 31	02:24	11°♑12'22	45°58'09	
asc. node	16425 Feb 14	00:43	25°♑18'14		
	16425 Feb 18	11:07	0°♒		
	16425 Mar 17	10:53	0°♓		
	16425 Apr 12	03:55	0°♈		
	16425 May 07	05:45	0°♉		
	16425 May 31	22:19	0°♊		
desc. node	16425 Jun 05	23:34	6°♊11'02		
	16425 Jun 25	08:04	0°♋		
	16425 Jul 19	12:38	0°♌		
morning set	16425 Jul 31	16:03	15°♌07'57		
	16425 Aug 12	13:40	0°♍		
	16425 Sep 05	12:51	0°♎		
max. Earth dist.	16425 Sep 08	16:24	3°♎56'39	1.71578 AU	
superior conj	16425 Sep 09	07:37	4°♎44'19	-0°41'10	
minimum elong	16425 Sep 09	17:04	5°♎13'55	0°40'45	
asc. node	16425 Sep 26	17:08	26°♎32'07		
	16425 Sep 29	11:31	0°♏		
evening rise	16425 Oct 18	22:02	24°♏20'15		
	16425 Oct 23	10:42	0°♐		
	16425 Nov 16	11:49	0°♑		
	16425 Dec 10	17:09	0°♒		
	16426 Jan 04	05:49	0°♓		
desc. node	16426 Jan 16	09:39	14°♓41'10		
	16426 Jan 29	05:19	0°♈		
	16426 Feb 23	20:07	0°♉		
	16426 Mar 22	11:45	0°♊		
evening max el	16426 Apr 17	00:22	26°♊35'14	46°03'41	
	16426 Apr 20	13:31	0°♋		
asc. node	16426 May 09	05:37	15°♋59'18		
greatest brilliancy	16426 May 26	14:40	25°♋48'19	-4.8m	
retrograde	16426 Jun 05	08:58	27°♋34'04		
evening set	16426 Jun 23	00:46	21°♋34'09		
inferior conj	16426 Jun 26	07:03	19°♋32'44	8°48'20	
minimum elong	16426 Jun 26	02:02	19°♋40'36	8°47'21	
min. Earth dist.	16426 Jun 26	11:52	19°♋25'09	0.28072 AU	
morning rise	16426 Jun 29	03:15	17°♋46'34		
direct	16426 Jul 17	09:48	11°♋24'43		
greatest brilliancy	16426 Jul 27	09:58	13°♋18'12	-4.9m	
	16426 Aug 21	20:51	0°♌		

desc. node	16426 Aug 29 06:03	6°♌42'47	
morning max el	16426 Sep 05 20:17	14°♌07'28	46°53'49
	16426 Sep 20 23:53	0°♍	
	16426 Oct 17 14:22	0°♎	
	16426 Nov 12 01:11	0°♏	
	16426 Dec 06 23:24	0°♐	
asc. node	16426 Dec 20 05:03	16°♐05'09	
	16426 Dec 31 14:26	0°♑	
	16427 Jan 25 00:59	0°♒	
	16427 Feb 18 09:11	0°♓	
morning set	16427 Mar 07 09:26	20°♓59'25	
	16427 Mar 14 16:43	0°♈	
	16427 Apr 08 00:18	0°♉	
desc. node	16427 Apr 11 00:04	3°♉41'16	
max. Earth dist.	16427 Apr 13 15:07	6°♉55'45	1.73042 AU
superior conj	16427 Apr 14 00:37	7°♉25'04	-0°07'24
minimum elong	16427 Apr 13 22:50	7°♉19'32	0°07'39
behind sun begin	16427 Apr 13 01:44	6°♉14'28	
behind sun end	16427 Apr 14 19:55	8°♉24'35	
	16427 May 02 07:38	0°♊	
evening rise	16427 May 22 07:00	24°♊41'16	
	16427 May 26 14:02	0°♋	
	16427 Jun 19 19:27	0°♌	
	16427 Jul 14 00:54	0°♍	
asc. node	16427 Aug 01 15:53	23°♍00'16	
	16427 Aug 07 08:12	0°♎	
	16427 Aug 31 20:00	0°♏	
	16427 Sep 25 16:48	0°♐	
	16427 Oct 21 08:20	0°♑	
	16427 Nov 17 20:16	0°♒	
desc. node	16427 Nov 21 11:19	3°♒40'52	
evening max el	16427 Nov 23 11:05	5°♒39'46	46°26'50
	16427 Dec 22 14:00	0°♓	
greatest brilliancy	16428 Jan 01 23:59	5°♓10'47	-4.8m
retrograde	16428 Jan 12 04:59	7°♓04'43	
evening set	16428 Jan 30 01:37	1°♓04'09	
	16428 Jan 31 19:34	30°℞♒	
inferior conj	16428 Feb 02 14:34	28°♒52'58	-7°59'15
minimum elong	16428 Feb 02 23:21	28°♒39'13	7°57'39
min. Earth dist.	16428 Feb 02 14:10	28°♒53'34	0.28566 AU
morning rise	16428 Feb 06 21:12	26°♒15'58	
direct	16428 Feb 23 20:50	20°♒47'51	
greatest brilliancy	16428 Mar 05 05:28	22°♒45'22	-4.8m
asc. node	16428 Mar 13 10:43	26°♒39'16	
	16428 Mar 18 18:11	0°♓	
morning max el	16428 Apr 12 22:31	21°♓23'26	45°46'03
	16428 Apr 21 12:44	0°♈	
	16428 May 19 03:58	0°♉	
	16428 Jun 14 01:51	0°♊	
desc. node	16428 Jul 03 11:02	23°♊07'38	
	16428 Jul 09 03:35	0°♋	
	16428 Aug 02 17:18	0°♌	
	16428 Aug 26 23:41	0°♍	
	16428 Sep 20 02:04	0°♎	
morning set	16428 Oct 13 13:24	29°♎18'43	
	16428 Oct 14 02:37	0°♏	
asc. node	16428 Oct 24 06:22	12°♏41'43	
	16428 Nov 07 02:31	0°♐	
superior conj	16428 Nov 21 14:43	18°♐08'12	1°02'32
minimum elong	16428 Nov 21 04:03	17°♐34'53	1°02'47
max. Earth dist.	16428 Nov 23 06:19	20°♐11'52	1.71936 AU
	16428 Dec 01 02:40	0°♑	
	16428 Dec 25 04:28	0°♒	
evening rise	16428 Dec 29 06:59	5°♒05'57	
	16429 Jan 18 09:44	0°♓	
	16429 Feb 11 20:09	0°♈	
desc. node	16429 Feb 12 22:53	1°♈21'36	
	16429 Mar 08 12:34	0°♉	
	16429 Apr 02 11:29	0°♊	
	16429 Apr 27 18:57	0°♋	
	16429 May 23 18:02	0°♌	
asc. node	16429 Jun 05 16:42	14°♌26'46	
	16429 Jun 20 05:44	0°♍	
evening max el	16429 Jun 28 10:22	8°♍18'16	46°24'07
	16429 Jul 23 08:21	0°♎	
greatest brilliancy	16429 Aug 07 14:09	8°♎20'08	-4.9m
retrograde	16429 Aug 17 05:46	10°♎05'07	
evening set	16429 Sep 01 18:05	5°♎25'03	
inferior conj	16429 Sep 06 21:51	2°♎21'42	4°41'18
minimum elong	16429 Sep 07 07:29	2°♎06'57	4°38'34
min. Earth dist.	16429 Sep 07 12:18	1°♎59'34	0.27046 AU
	16429 Sep 10 19:47	30°℞♍	
morning rise	16429 Sep 12 20:32	28°♍51'08	
desc. node	16429 Sep 25 16:06	24°♍36'22	
direct	16429 Sep 27 16:16	24°♍31'30	
greatest brilliancy	16429 Oct 07 23:28	26°♍29'36	-4.9m
	16429 Oct 15 10:23	0°♎	
morning max el	16429 Nov 16 19:17	26°♎33'53	46°41'11
	16429 Nov 20 05:45	0°♏	
	16429 Dec 18 05:10	0°♐	
	16430 Jan 13 08:58	0°♑	
asc. node	16430 Jan 16 16:16	3°♑52'18	
	16430 Feb 07 16:51	0°♒	
	16430 Mar 04 13:50	0°♓	
	16430 Mar 29 04:44	0°♈	
	16430 Apr 22 16:03	0°♉	
desc. node	16430 May 08 13:01	19°♉32'24	
morning set	16430 May 16 14:17	29°♉28'35	
	16430 May 17 00:27	0°♊	
	16430 Jun 10 05:54	0°♋	
max. Earth dist.	16430 Jun 21 21:44	14°♋29'31	1.72254 AU
superior conj	16430 Jun 24 20:12	18°♋08'45	-1°25'07
minimum elong	16430 Jun 24 14:37	17°♋51'23	1°25'42
	16430 Jul 04 08:36	0°♌	
	16430 Jul 28 09:29	0°♍	
evening rise	16430 Aug 03 08:45	7°♍27'25	
	16430 Aug 21 09:54	0°♎	
asc. node	16430 Aug 29 05:26	9°♎45'20	
	16430 Sep 14 11:12	0°♏	
	16430 Oct 08 15:02	0°♐	
	16430 Nov 02 00:13	0°♑	
	16430 Nov 26 19:55	0°♒	
desc. node	16430 Dec 18 22:55	25°♒58'32	
	16430 Dec 22 11:01	0°♓	
	16431 Jan 18 15:43	0°♈	
evening max el	16431 Feb 02 13:20	15°♈05'53	46°05'28
	16431 Feb 19 04:31	0°♉	
greatest brilliancy	16431 Mar 13 15:35	13°♉46'43	-4.8m
retrograde	16431 Mar 23 18:46	15°♉39'50	
evening set	16431 Apr 07 17:18	11°♉17'49	
asc. node	16431 Apr 10 20:57	9°♉28'16	
inferior conj	16431 Apr 14 01:33	7°♉29'35	0°47'42
minimum elong	16431 Apr 13 23:45	7°♉32'24	0°46'48
min. Earth dist.	16431 Apr 14 01:36	7°♉29'30	0.28383 AU
morning rise	16431 Apr 20 06:02	3°♉46'08	
	16431 Apr 29 12:08	30°℞♈	
direct	16431 May 05 06:00	29°♈19'41	
	16431 May 11 04:05	0°♉	
greatest brilliancy	16431 May 15 19:42	1°♉23'17	-4.8m
	16431 Jun 23 03:09	0°♊	
morning max el	16431 Jun 23 21:01	0°♊43'54	46°17'57

	16431 Jul 21 10:33	0°♋	
desc. node	16431 Jul 31 21:54	11°♋53'07	
	16431 Aug 16 10:48	0°♌	
	16431 Sep 10 11:53	0°♍	
	16431 Oct 05 01:46	0°♎	
	16431 Oct 29 10:06	0°♏	
asc. node	16431 Nov 21 19:00	28°♏56'30	
	16431 Nov 22 15:29	0°♐	
	16431 Dec 16 19:09	0°♑	
morning set	16431 Dec 25 16:17	11°♑02'21	
	16432 Jan 09 22:19	0°♒	
superior conj	16432 Jan 31 21:39	27°♒16'12	1°19'09
minimum elong	16432 Feb 01 05:26	27°♒40'18	1°19'24
	16432 Feb 03 02:31	0°♓	
max. Earth dist.	16432 Feb 03 06:35	0°♓12'35	1.72789 AU
	16432 Feb 27 09:01	0°♈	
evening rise	16432 Mar 09 13:50	13°♈48'04	
desc. node	16432 Mar 12 12:25	17°♈25'13	
	16432 Mar 22 18:06	0°♉	
	16432 Apr 16 05:14	0°♊	
	16432 May 10 17:58	0°♋	
	16432 Jun 04 09:09	0°♌	
	16432 Jun 29 05:42	0°♍	
asc. node	16432 Jul 03 04:50	4°♍44'38	
	16432 Jul 24 13:30	0°♎	
	16432 Aug 19 21:24	0°♏	
evening max el	16432 Sep 09 05:16	21°♏31'07	46°39'39
	16432 Sep 17 23:26	0°♐	
greatest brilliancy	16432 Oct 18 14:37	21°♐47'40	-4.9m
desc. node	16432 Oct 23 02:22	23°♐12'37	
retrograde	16432 Oct 29 12:44	24°♐00'23	
evening set	16432 Nov 14 02:41	19°♐16'10	
min. Earth dist.	16432 Nov 18 16:38	16°♐33'52	0.27507 AU
inferior conj	16432 Nov 19 11:48	16°♐04'38	-6°23'31
minimum elong	16432 Nov 19 00:43	16°♐21'32	6°20'23
morning rise	16432 Nov 23 23:14	13°♐24'44	
direct	16432 Dec 10 09:40	8°♐16'50	
greatest brilliancy	16432 Dec 19 20:20	9°♐55'26	-4.8m
	16433 Jan 19 02:44	0°♑	
morning max el	16433 Jan 28 16:46	8°♑55'44	45°59'18
asc. node	16433 Feb 13 02:42	24°♑35'23	
	16433 Feb 18 04:24	0°♒	
	16433 Mar 17 00:47	0°♓	
	16433 Apr 11 16:17	0°♈	
	16433 May 06 17:19	0°♉	
	16433 May 31 09:26	0°♊	
desc. node	16433 Jun 05 01:18	5°♊42'24	
	16433 Jun 24 18:58	0°♋	
	16433 Jul 18 23:24	0°♌	
morning set	16433 Jul 29 04:31	12°♌43'45	
	16433 Aug 12 00:21	0°♍	
	16433 Sep 04 23:29	0°♎	
max. Earth dist.	16433 Sep 06 04:02	1°♎29'25	1.71579 AU
superior conj	16433 Sep 06 20:01	2°♎19'28	-0°44'31
minimum elong	16433 Sep 07 06:02	2°♎50'49	0°44'07
asc. node	16433 Sep 25 18:55	26°♎04'30	
	16433 Sep 28 22:08	0°♏	
evening rise	16433 Oct 16 11:52	22°♏00'04	
	16433 Oct 22 21:21	0°♐	
	16433 Nov 15 22:36	0°♑	
	16433 Dec 10 04:10	0°♒	
	16434 Jan 03 17:13	0°♓	
desc. node	16434 Jan 15 11:32	14°♓11'40	
	16434 Jan 28 17:25	0°♈	
	16434 Feb 23 09:30	0°♉	
	16434 Mar 22 03:53	0°♊	
evening max el	16434 Apr 14 15:10	24°♊20'10	46°03'14
	16434 Apr 20 13:53	0°♋	
asc. node	16434 May 08 07:26	14°♋47'04	
greatest brilliancy	16434 May 24 04:50	23°♋31'31	-4.8m
retrograde	16434 Jun 02 22:46	25°♋16'56	
evening set	16434 Jun 20 11:58	19°♋22'11	
inferior conj	16434 Jun 23 21:43	17°♋15'21	8°42'32
minimum elong	16434 Jun 23 15:55	17°♋24'28	8°41'25
min. Earth dist.	16434 Jun 24 01:53	17°♋08'47	0.28094 AU
morning rise	16434 Jun 26 19:49	15°♋26'03	
direct	16434 Jul 15 00:28	9°♋07'08	
greatest brilliancy	16434 Jul 25 00:46	11°♋00'13	-4.8m
	16434 Aug 22 02:12	0°♌	
desc. node	16434 Aug 28 08:00	5°♌47'58	
morning max el	16434 Sep 03 09:50	11°♌45'57	46°53'17
	16434 Sep 20 17:27	0°♍	
	16434 Oct 17 04:33	0°♎	
	16434 Nov 11 13:48	0°♏	
	16434 Dec 06 11:07	0°♐	
asc. node	16434 Dec 19 06:58	15°♐36'17	
	16434 Dec 31 01:35	0°♑	
	16435 Jan 24 11:47	0°♒	
	16435 Feb 17 19:45	0°♓	
morning set	16435 Mar 05 02:12	18°♓50'43	
	16435 Mar 14 03:09	0°♈	
	16435 Apr 07 10:43	0°♉	
desc. node	16435 Apr 10 01:47	3°♉14'29	
superior conj	16435 Apr 11 16:03	5°♉12'33	-0°03'55
minimum elong	16435 Apr 11 15:04	5°♉09'29	0°04'11
behind sun begin	16435 Apr 10 16:01	3°♉58'23	
behind sun end	16435 Apr 12 14:07	6°♉20'36	
max. Earth dist.	16435 Apr 11 07:31	4°♉46'12	1.73052 AU
	16435 May 01 18:04	0°♊	
evening rise	16435 May 19 21:45	22°♊25'54	
	16435 May 26 00:35	0°♋	
	16435 Jun 19 06:12	0°♌	
	16435 Jul 13 11:55	0°♍	
asc. node	16435 Jul 31 17:50	22°♍31'23	
	16435 Aug 06 19:38	0°♎	
	16435 Aug 31 08:02	0°♏	
	16435 Sep 25 05:51	0°♐	
	16435 Oct 20 23:20	0°♑	
	16435 Nov 17 16:23	0°♒	
desc. node	16435 Nov 20 13:12	2°♒52'37	
evening max el	16435 Nov 21 00:45	3°♒21'16	46°27'37
	16435 Dec 24 01:13	0°♓	
greatest brilliancy	16435 Dec 30 15:33	2°♓58'23	-4.8m
retrograde	16436 Jan 09 19:49	4°♓52'11	
	16436 Jan 25 18:18	30°℞♒	
evening set	16436 Jan 27 19:43	28°♒47'42	
inferior conj	16436 Jan 31 05:56	26°♒40'44	-8°08'41
minimum elong	16436 Jan 31 14:12	26°♒27'49	8°07'13
min. Earth dist.	16436 Jan 31 05:14	26°♒41'50	0.28558 AU
morning rise	16436 Feb 04 08:47	24°♒09'14	
direct	16436 Feb 21 11:31	18°♒35'50	
greatest brilliancy	16436 Mar 02 20:25	20°♒33'03	-4.8m
asc. node	16436 Mar 12 12:39	25°♒18'07	
	16436 Mar 19 12:15	0°♓	
morning max el	16436 Apr 10 12:45	19°♓08'09	45°45'40
	16436 Apr 21 07:24	0°♈	
	16436 May 18 18:15	0°♉	
	16436 Jun 13 14:23	0°♊	
desc. node	16436 Jul 02 13:01	22°♊38'01	
	16436 Jul 08 15:15	0°♋	
	16436 Aug 02 04:28	0°♌	

	16436 Aug 26 10:34	0°♍	
	16436 Sep 19 12:46	0°♎	
morning set	16436 Oct 11 02:22	26°♎56'07	
	16436 Oct 13 13:12	0°♏	
asc. node	16436 Oct 23 08:06	12°♏14'13	
	16436 Nov 06 13:00	0°♐	
superior conj	16436 Nov 19 05:11	15°♐50'52	0°59'58
minimum elong	16436 Nov 18 18:30	15°♐17'29	1°00'10
max. Earth dist.	16436 Nov 20 15:56	17°♐39'26	1.71907 AU
	16436 Nov 30 13:05	0°♑	
	16436 Dec 24 14:52	0°♒	
evening rise	16436 Dec 26 22:26	2°♒52'35	
	16437 Jan 17 20:13	0°♓	
	16437 Feb 11 06:53	0°♈	
desc. node	16437 Feb 12 00:46	0°♈54'38	
	16437 Mar 07 23:41	0°♉	
	16437 Apr 01 23:14	0°♊	
	16437 Apr 27 07:47	0°♋	
	16437 May 23 08:56	0°♌	
asc. node	16437 Jun 04 18:38	13°♌46'29	
	16437 Jun 20 01:41	0°♍	
evening max el	16437 Jun 25 23:03	5°♍55'40	46°23'23
	16437 Jul 24 09:28	0°♎	
greatest brilliancy	16437 Aug 05 03:42	5°♎57'34	-4.9m
retrograde	16437 Aug 14 18:45	7°♎42'17	
evening set	16437 Aug 30 09:59	2°♎57'13	
inferior conj	16437 Sep 04 10:43	29°♍58'15	5°01'42
minimum elong	16437 Sep 04 20:47	29°♍42'50	4°58'54
	16437 Sep 04 09:34	30°℞♍	
min. Earth dist.	16437 Sep 05 02:03	29°♍34'46	0.27078 AU
morning rise	16437 Sep 10 07:12	26°♍30'46	
desc. node	16437 Sep 24 17:57	22°♍07'18	
direct	16437 Sep 25 05:16	22°♍07'02	
greatest brilliancy	16437 Oct 05 13:12	24°♍06'18	-4.9m
	16437 Oct 16 21:51	0°♎	
morning max el	16437 Nov 14 09:58	24°♎15'15	46°42'29
	16437 Nov 20 02:50	0°♏	
	16437 Dec 17 20:34	0°♐	
	16438 Jan 12 22:02	0°♑	
asc. node	16438 Jan 15 18:12	3°♑20'04	
	16438 Feb 07 04:42	0°♒	
	16438 Mar 04 00:59	0°♓	
	16438 Mar 28 15:30	0°♈	
	16438 Apr 22 02:36	0°♉	
desc. node	16438 May 07 14:48	19°♉05'37	
morning set	16438 May 14 04:33	27°♉12'09	
	16438 May 16 10:55	0°♊	
	16438 Jun 09 16:21	0°♋	
max. Earth dist.	16438 Jun 19 13:28	12°♋16'36	1.72289 AU
superior conj	16438 Jun 22 09:30	15°♋48'12	-1°24'06
minimum elong	16438 Jun 22 03:07	15°♋28'20	1°24'39
	16438 Jul 03 19:04	0°♌	
	16438 Jul 27 20:02	0°♍	
evening rise	16438 Jul 31 20:50	5°♍02'15	
	16438 Aug 20 20:34	0°♎	
asc. node	16438 Aug 28 07:09	9°♎17'15	
	16438 Sep 13 22:04	0°♏	
	16438 Oct 08 02:11	0°♐	
	16438 Nov 01 11:51	0°♑	
	16438 Nov 26 08:22	0°♒	
desc. node	16438 Dec 18 00:52	25°♒24'38	
	16438 Dec 22 01:03	0°♓	
	16439 Jan 18 09:32	0°♈	
evening max el	16439 Jan 31 05:23	12°♈55'48	46°06'09
	16439 Feb 19 14:36	0°♉	
greatest brilliancy	16439 Mar 11 06:22	11°♉34'12	-4.8m
retrograde	16439 Mar 21 10:40	13°♉27'51	
evening set	16439 Apr 05 09:19	9°♉05'03	
asc. node	16439 Apr 09 22:43	6°♉23'25	
inferior conj	16439 Apr 11 17:03	5°♉17'19	0°26'21
minimum elong	16439 Apr 11 16:04	5°♉18'52	0°25'43
min. Earth dist.	16439 Apr 11 17:07	5°♉17'12	0.28392 AU
morning rise	16439 Apr 17 22:45	1°♉32'30	
	16439 Apr 20 23:18	30°℞♈	
direct	16439 May 02 22:06	27°♈07'34	
greatest brilliancy	16439 May 13 11:17	29°♈11'05	-4.8m
	16439 May 15 12:02	0°♉	
morning max el	16439 Jun 21 13:04	28°♉32'08	46°16'20
	16439 Jun 23 00:33	0°♊	
	16439 Jul 21 01:52	0°♋	
desc. node	16439 Jul 30 23:48	11°♋17'26	
	16439 Aug 15 23:58	0°♌	
	16439 Sep 10 00:00	0°♍	
	16439 Oct 04 13:16	0°♎	
	16439 Oct 28 21:11	0°♏	
asc. node	16439 Nov 20 20:52	28°♏28'48	
	16439 Nov 22 02:16	0°♐	
	16439 Dec 16 05:45	0°♑	
morning set	16439 Dec 23 07:25	8°♑47'23	
	16440 Jan 09 08:49	0°♒	
superior conj	16440 Jan 29 13:46	25°♒04'59	1°20'32
minimum elong	16440 Jan 29 21:01	25°♒27'27	1°20'49
max. Earth dist.	16440 Feb 01 01:35	28°♒10'21	1.72761 AU
	16440 Feb 02 12:58	0°♓	
	16440 Feb 26 19:29	0°♈	
evening rise	16440 Mar 07 05:36	11°♈36'34	
desc. node	16440 Mar 11 14:09	16°♈58'10	
	16440 Mar 22 04:40	0°♉	
	16440 Apr 15 16:00	0°♊	
	16440 May 10 05:05	0°♋	
	16440 Jun 03 20:50	0°♌	
	16440 Jun 28 18:16	0°♍	
asc. node	16440 Jul 02 06:44	4°♍12'18	
	16440 Jul 24 03:34	0°♎	
	16440 Aug 19 14:38	0°♏	
evening max el	16440 Sep 06 20:21	19°♏12'39	46°39'31
	16440 Sep 18 02:54	0°♐	
greatest brilliancy	16440 Oct 16 04:42	19°♐26'24	-4.9m
desc. node	16440 Oct 22 04:15	21°♐10'14	
retrograde	16440 Oct 27 02:43	21°♐38'31	
evening set	16440 Nov 11 12:57	16°♐59'43	
min. Earth dist.	16440 Nov 16 06:14	14°♐12'35	0.27456 AU
inferior conj	16440 Nov 17 01:06	13°♐43'45	-6°06'47
minimum elong	16440 Nov 16 14:07	14°♐00'33	6°03'34
morning rise	16440 Nov 21 15:48	10°♐59'09	
direct	16440 Dec 07 23:06	5°♐56'45	
greatest brilliancy	16440 Dec 17 08:59	7°♐34'40	-4.8m
	16441 Jan 19 05:51	0°♑	
morning max el	16441 Jan 26 06:10	6°♑36'50	46°00'25
asc. node	16441 Feb 12 04:34	23°♑52'58	
	16441 Feb 17 21:14	0°♒	
	16441 Mar 16 14:28	0°♓	
	16441 Apr 11 04:32	0°♈	
	16441 May 06 04:47	0°♉	
	16441 May 30 20:28	0°♊	
desc. node	16441 Jun 04 03:16	5°♊14'48	
	16441 Jun 24 05:46	0°♋	
	16441 Jul 18 10:07	0°♌	
morning set	16441 Jul 26 16:55	10°♌19'25	
	16441 Aug 11 11:02	0°♍	
max. Earth dist.	16441 Sep 03 12:25	28°♍51'52	1.71585 AU

superior conj	16441 Sep 04 08:12	29°♍53'51	-0°47'49
minimum elong	16441 Sep 04 18:41	0°♎26'40	0°47'25
	16441 Sep 04 10:10	0°♎	
asc. node	16441 Sep 24 20:41	25°♎36'33	
	16441 Sep 28 08:49	0°♏	
evening rise	16441 Oct 14 01:10	19°♏37'53	
	16441 Oct 22 08:07	0°♐	
	16441 Nov 15 09:28	0°♑	
	16441 Dec 09 15:16	0°♒	
	16442 Jan 03 04:44	0°♓	
desc. node	16442 Jan 14 13:23	13°♓41'44	
	16442 Jan 28 05:40	0°♈	
	16442 Feb 22 23:09	0°♉	
	16442 Mar 21 20:28	0°♊	
evening max el	16442 Apr 12 05:10	22°♊02'48	46°02'53
	16442 Apr 20 15:43	0°♋	
asc. node	16442 May 07 09:27	13°♋32'50	
greatest brilliancy	16442 May 21 19:11	21°♋14'46	-4.8m
retrograde	16442 May 31 12:30	23°♋00'02	
evening set	16442 Jun 17 23:02	17°♋10'29	
inferior conj	16442 Jun 21 12:26	14°♋58'07	8°35'55
minimum elong	16442 Jun 21 05:55	15°♋08'23	8°34'38
min. Earth dist.	16442 Jun 21 16:11	14°♋52'14	0.28114 AU
morning rise	16442 Jun 24 12:42	13°♋05'21	
direct	16442 Jul 12 14:49	6°♋49'33	
greatest brilliancy	16442 Jul 22 16:05	8°♋43'02	-4.8m
	16442 Aug 22 05:45	0°♌	
desc. node	16442 Aug 27 09:51	4°♌53'54	
morning max el	16442 Aug 31 23:05	9°♌23'27	46°52'37
	16442 Sep 20 10:44	0°♍	
	16442 Oct 16 18:47	0°♎	
	16442 Nov 11 02:35	0°♏	
	16442 Dec 05 23:02	0°♐	
asc. node	16442 Dec 18 08:55	15°♐06'50	
	16442 Dec 30 12:57	0°♑	
	16443 Jan 23 22:46	0°♒	
	16443 Feb 17 06:30	0°♓	
morning set	16443 Mar 02 18:42	16°♓40'32	
	16443 Mar 13 13:48	0°♈	
	16443 Apr 06 21:21	0°♉	
superior conj	16443 Apr 09 07:24	2°♉59'01	-0°00'24
minimum elong	16443 Apr 09 07:14	2°♉58'31	0°00'41
behind sun begin	16443 Apr 08 07:37	1°♉45'41	
behind sun end	16443 Apr 10 06:51	4°♉11'21	
max. Earth dist.	16443 Apr 08 23:57	2°♉36'03	1.73063 AU
desc. node	16443 Apr 09 03:35	2°♉47'13	
	16443 May 01 04:47	0°♊	
evening rise	16443 May 17 12:38	20°♊10'16	
	16443 May 25 11:24	0°♋	
	16443 Jun 18 17:10	0°♌	
	16443 Jul 12 23:08	0°♍	
asc. node	16443 Jul 30 19:36	22°♍01'21	
	16443 Aug 06 07:16	0°♎	
	16443 Aug 30 20:20	0°♏	
	16443 Sep 24 19:14	0°♐	
	16443 Oct 20 14:52	0°♑	
	16443 Nov 17 13:41	0°♒	
evening max el	16443 Nov 18 14:18	1°♒01'11	46°28'22
desc. node	16443 Nov 19 15:11	2°♒02'35	
	16443 Dec 26 09:26	0°♓	
greatest brilliancy	16443 Dec 28 06:25	0°♓43'32	-4.8m
retrograde	16444 Jan 07 10:47	2°♓38'01	
	16444 Jan 18 23:48	30°♑℞	
evening set	16444 Jan 25 13:28	26°♒29'30	
inferior conj	16444 Jan 28 21:07	24°♒26'40	-8°17'23
minimum elong	16444 Jan 29 04:50	24°♒14'39	8°16'03
min. Earth dist.	16444 Jan 28 19:57	24°♒28'30	0.28548 AU
morning rise	16444 Feb 01 20:14	22°♒00'50	
direct	16444 Feb 19 01:59	16°♒21'55	
greatest brilliancy	16444 Feb 29 11:15	18°♒19'14	-4.8m
asc. node	16444 Mar 11 14:31	23°♒58'04	
	16444 Mar 20 02:13	0°♓	
morning max el	16444 Apr 08 03:32	16°♓53'05	45°45'21
	16444 Apr 21 01:59	0°♈	
	16444 May 18 08:45	0°♉	
	16444 Jun 13 03:12	0°♊	
desc. node	16444 Jul 01 14:50	22°♊06'57	
	16444 Jul 08 03:12	0°♋	
	16444 Aug 01 15:55	0°♌	
	16444 Aug 25 21:42	0°♍	
	16444 Sep 18 23:44	0°♎	
morning set	16444 Oct 08 15:37	24°♎33'34	
	16444 Oct 13 00:03	0°♏	
asc. node	16444 Oct 22 10:00	11°♏46'23	
	16444 Nov 05 23:47	0°♐	
superior conj	16444 Nov 16 19:37	13°♐32'23	0°57'17
minimum elong	16444 Nov 16 08:59	12°♐59'09	0°57'28
max. Earth dist.	16444 Nov 18 03:15	15°♐11'13	1.71888 AU
	16444 Nov 29 23:50	0°♑	
	16444 Dec 24 01:39	0°♒	
evening rise	16444 Dec 24 13:46	0°♒37'40	
	16445 Jan 17 07:08	0°♓	
	16445 Feb 10 18:02	0°♈	
desc. node	16445 Feb 11 02:27	0°♈25'42	
	16445 Mar 07 11:15	0°♉	
	16445 Apr 01 11:28	0°♊	
	16445 Apr 26 21:09	0°♋	
	16445 May 23 00:31	0°♌	
asc. node	16445 Jun 03 20:34	13°♌04'23	
	16445 Jun 19 22:52	0°♍	
evening max el	16445 Jun 23 12:51	3°♍34'44	46°22'40
	16445 Jul 25 21:52	0°♎	
greatest brilliancy	16445 Aug 02 16:50	3°♎33'46	-4.9m
retrograde	16445 Aug 12 08:15	5°♎18'38	
evening set	16445 Aug 28 02:08	0°♎28'37	
	16445 Aug 28 22:15	30°℞♍	
inferior conj	16445 Sep 01 23:39	27°♍34'01	5°21'33
minimum elong	16445 Sep 02 10:05	27°♍18'03	5°18'42
min. Earth dist.	16445 Sep 02 15:29	27°♍09'48	0.27105 AU
morning rise	16445 Sep 07 17:44	24°♍10'02	
direct	16445 Sep 22 18:50	19°♍42'09	
desc. node	16445 Sep 23 19:49	19°♍43'28	
greatest brilliancy	16445 Oct 03 02:18	21°♍41'38	-4.9m
	16445 Oct 17 23:19	0°♎	
morning max el	16445 Nov 12 01:02	21°♎56'56	46°43'42
	16445 Nov 19 23:26	0°♏	
	16445 Dec 17 12:00	0°♐	
	16446 Jan 12 11:21	0°♑	
asc. node	16446 Jan 14 20:00	2°♑46'37	
	16446 Feb 06 16:53	0°♒	
	16446 Mar 03 12:32	0°♓	
	16446 Mar 28 02:40	0°♈	
	16446 Apr 21 13:33	0°♉	
desc. node	16446 May 06 16:42	18°♉37'58	
morning set	16446 May 11 18:49	24°♉54'34	
	16446 May 15 21:46	0°♊	
	16446 Jun 09 03:10	0°♋	
max. Earth dist.	16446 Jun 17 04:32	10°♋00'28	1.72323 AU
superior conj	16446 Jun 19 22:46	13°♋26'23	-1°22'56
minimum elong	16446 Jun 19 15:37	13°♋04'08	1°23'27
	16446 Jul 03 05:57	0°♌	

	16446 Jul 27 07:00	0°♍	
evening rise	16446 Jul 29 08:57	2°♍35'57	
	16446 Aug 20 07:40	0°♎	
asc. node	16446 Aug 27 08:58	8°♎48'09	
	16446 Sep 13 09:19	0°♏	
	16446 Oct 07 13:41	0°♐	
	16446 Oct 31 23:47	0°♑	
	16446 Nov 25 21:09	0°♒	
desc. node	16446 Dec 17 02:41	24°♒49'17	
	16446 Dec 21 15:34	0°♓	
	16447 Jan 18 04:12	0°♈	
evening max el	16447 Jan 28 21:51	10°♈45'37	46°06'37
	16447 Feb 20 04:56	0°♉	
greatest brilliancy	16447 Mar 08 21:38	9°♉21'05	-4.8m
retrograde	16447 Mar 19 02:14	11°♉14'32	
evening set	16447 Apr 03 01:35	6°♉51'02	
inferior conj	16447 Apr 09 08:36	3°♉03'56	0°04'53
minimum elong	16447 Apr 09 08:25	3°♉04'12	0°04'32
transit middle	16447 Apr 09 08:25	3°♉04'12	0°04'32
transit begin	16447 Apr 09 04:32	3°♉10'18	
transit end	16447 Apr 09 12:19	2°♉58'06	
asc. node	16447 Apr 09 00:46	3°♉16'13	
min. Earth dist.	16447 Apr 09 08:48	3°♉03'37	0.28400 AU
	16447 Apr 14 09:16	30°℞♈	
morning rise	16447 Apr 15 15:17	29°♈17'48	
direct	16447 Apr 30 14:20	24°♈54'28	
greatest brilliancy	16447 May 11 02:47	26°♈57'30	-4.8m
	16447 May 17 16:33	0°♉	
morning max el	16447 Jun 19 04:18	26°♉17'13	46°14'42
	16447 Jun 22 21:37	0°♊	
	16447 Jul 20 17:20	0°♋	
desc. node	16447 Jul 30 01:38	10°♋40'49	
	16447 Aug 15 13:23	0°♌	
	16447 Sep 09 12:25	0°♍	
	16447 Oct 04 01:05	0°♎	
	16447 Oct 28 08:35	0°♏	
asc. node	16447 Nov 19 22:46	28°♏00'19	
	16447 Nov 21 13:20	0°♐	
	16447 Dec 15 16:35	0°♑	
morning set	16447 Dec 20 22:55	6°♑32'47	
	16448 Jan 08 19:32	0°♒	
superior conj	16448 Jan 27 06:15	22°♒54'10	1°21'47
minimum elong	16448 Jan 27 12:55	23°♒14'49	1°22'06
max. Earth dist.	16448 Jan 29 20:49	26°♒08'05	1.72735 AU
	16448 Feb 01 23:40	0°♓	
	16448 Feb 26 06:14	0°♈	
evening rise	16448 Mar 04 21:32	9°♈24'39	
desc. node	16448 Mar 10 16:01	16°♈30'39	
	16448 Mar 21 15:33	0°♉	
	16448 Apr 15 03:07	0°♊	
	16448 May 09 16:35	0°♋	
	16448 Jun 03 08:53	0°♌	
	16448 Jun 28 07:13	0°♍	
asc. node	16448 Jul 01 08:32	3°♍38'35	
	16448 Jul 23 18:07	0°♎	
	16448 Aug 19 08:37	0°♏	
evening max el	16448 Sep 04 10:42	16°♏51'17	46°39'17
	16448 Sep 18 08:40	0°♐	
greatest brilliancy	16448 Oct 13 19:30	17°♐05'01	-4.9m
desc. node	16448 Oct 21 06:18	19°♐02'15	
retrograde	16448 Oct 24 16:10	19°♐15'51	
evening set	16448 Nov 08 23:28	14°♐42'17	
min. Earth dist.	16448 Nov 13 20:22	11°♐50'02	0.27403 AU
inferior conj	16448 Nov 14 14:29	11°♐22'19	-5°49'17
minimum elong	16448 Nov 14 03:39	11°♐38'54	5°46'02
morning rise	16448 Nov 19 08:20	8°♐33'04	
direct	16448 Dec 05 12:08	3°♐36'04	
greatest brilliancy	16448 Dec 14 22:19	5°♐13'58	-4.8m
	16449 Jan 19 07:36	0°♑	
morning max el	16449 Jan 23 18:42	4°♑15'18	46°01'44
asc. node	16449 Feb 11 06:28	23°♑10'55	
	16449 Feb 17 13:51	0°♒	
	16449 Mar 16 04:09	0°♓	
	16449 Apr 10 16:53	0°♈	
	16449 May 05 16:25	0°♉	
	16449 May 30 07:44	0°♊	
desc. node	16449 Jun 03 05:06	4°♊46'01	
	16449 Jun 23 16:49	0°♋	
	16449 Jul 17 21:03	0°♌	
morning set	16449 Jul 24 05:11	7°♌54'02	
	16449 Aug 10 21:54	0°♍	
max. Earth dist.	16449 Aug 31 19:14	26°♍08'57	1.71594 AU
superior conj	16449 Sep 01 20:21	27°♍27'38	-0°51'01
minimum elong	16449 Sep 02 07:14	28°♍01'41	0°50'38
	16449 Sep 03 21:01	0°♎	
asc. node	16449 Sep 23 22:35	25°♎08'25	
	16449 Sep 27 19:42	0°♏	
evening rise	16449 Oct 11 14:25	17°♏14'59	
	16449 Oct 21 19:04	0°♐	
	16449 Nov 14 20:33	0°♑	
	16449 Dec 09 02:33	0°♒	
	16450 Jan 02 16:23	0°♓	
desc. node	16450 Jan 13 15:11	13°♓11'18	
	16450 Jan 27 18:04	0°♈	
	16450 Feb 22 12:58	0°♉	
	16450 Mar 21 13:26	0°♊	
evening max el	16450 Apr 09 18:42	19°♊44'18	46°02'26
	16450 Apr 20 19:12	0°♋	
asc. node	16450 May 06 11:21	12°♋15'53	
greatest brilliancy	16450 May 19 09:14	18°♋57'21	-4.8m
retrograde	16450 May 29 02:34	20°♋43'06	
evening set	16450 Jun 15 09:55	14°♋58'39	
inferior conj	16450 Jun 19 03:13	12°♋40'38	8°28'17
minimum elong	16450 Jun 18 20:02	12°♋51'57	8°26'51
min. Earth dist.	16450 Jun 19 06:31	12°♋35'26	0.28138 AU
morning rise	16450 Jun 22 06:01	10°♋44'03	
direct	16450 Jul 10 05:11	4°♋31'33	
greatest brilliancy	16450 Jul 20 07:47	6°♋26'00	-4.8m
	16450 Aug 22 07:53	0°♌	
desc. node	16450 Aug 26 11:50	4°♌00'47	
morning max el	16450 Aug 29 12:55	7°♌02'03	46°52'00
	16450 Sep 20 03:47	0°♍	
	16450 Oct 16 08:56	0°♎	
	16450 Nov 10 15:19	0°♏	
	16450 Dec 05 10:58	0°♐	
asc. node	16450 Dec 17 10:38	14°♐36'37	
	16450 Dec 30 00:20	0°♑	
	16451 Jan 23 09:46	0°♒	
	16451 Feb 16 17:15	0°♓	
morning set	16451 Feb 28 11:36	14°♓31'38	
	16451 Mar 13 00:24	0°♈	
	16451 Apr 06 07:56	0°♉	
superior conj	16451 Apr 06 23:11	0°♉47'05	0°03'07
minimum elong	16451 Apr 06 23:50	0°♉49'06	0°02'48
behind sun begin	16451 Apr 06 00:26	29°♈36'53	
behind sun end	16451 Apr 07 23:14	2°♉01'17	
max. Earth dist.	16451 Apr 06 18:51	0°♉33'40	1.73073 AU
desc. node	16451 Apr 08 05:30	2°♉20'35	
	16451 Apr 30 15:25	0°♊	
evening rise	16451 May 15 03:57	17°♊56'16	
	16451 May 24 22:10	0°♋	

	16451 Jun 18	04:08	0°♌		
	16451 Jul 12	10:24	0°♍		
asc. node	16451 Jul 29	21:24	21°♍31'17		
	16451 Aug 05	18:58	0°♎		
	16451 Aug 30	08:42	0°♏		
	16451 Sep 24	08:44	0°♐		
	16451 Oct 20	06:38	0°♑		
evening max el	16451 Nov 16	04:18	28°♑42'21	46°29'11	
	16451 Nov 17	11:46	0°♒		
desc. node	16451 Nov 18	17:02	1°♒11'29		
greatest brilliancy	16451 Dec 25	20:39	28°♒28'04	-4.8m	
	16451 Dec 31	12:58	0°♓		
retrograde	16452 Jan 05	02:17	0°♓23'59		
	16452 Jan 09	13:26	30°℞♒		
evening set	16452 Jan 23	07:02	24°♒11'31		
inferior conj	16452 Jan 26	12:15	22°♒12'39	-8°25'16	
minimum elong	16452 Jan 26	19:20	22°♒01'36	8°24'05	
min. Earth dist.	16452 Jan 26	10:17	22°♒15'42	0.28536 AU	
morning rise	16452 Jan 30	07:42	19°♒52'32		
direct	16452 Feb 16	16:44	14°♒08'07		
greatest brilliancy	16452 Feb 27	01:40	16°♒05'21	-4.8m	
asc. node	16452 Mar 10	16:30	22°♒41'09		
	16452 Mar 20	12:21	0°♓		
morning max el	16452 Apr 05	19:07	14°♓40'38	45°45'15	
	16452 Apr 20	19:52	0°♈		
	16452 May 17	22:50	0°♉		
	16452 Jun 12	15:43	0°♊		
desc. node	16452 Jun 30	16:39	21°♊36'38		
	16452 Jul 07	14:55	0°♋		
	16452 Aug 01	03:12	0°♌		
	16452 Aug 25	08:44	0°♍		
	16452 Sep 18	10:36	0°♎		
morning set	16452 Oct 06	04:30	22°♎10'09		
	16452 Oct 12	10:48	0°♏		
asc. node	16452 Oct 21	11:50	11°♏18'42		
	16452 Nov 05	10:26	0°♐		
superior conj	16452 Nov 14	09:38	11°♐12'54	0°54'28	
minimum elong	16452 Nov 13	23:08	10°♐40'06	0°54'38	
max. Earth dist.	16452 Nov 15	16:36	12°♐49'45	1.71866 AU	
	16452 Nov 29	10:26	0°♑		
evening rise	16452 Dec 22	04:59	28°♑22'48		
	16452 Dec 23	12:16	0°♒		
	16453 Jan 16	17:53	0°♓		
desc. node	16453 Feb 10	04:22	29°♓58'02		
	16453 Feb 10	05:01	0°♈		
	16453 Mar 06	22:38	0°♉		
	16453 Mar 31	23:29	0°♊		
	16453 Apr 26	10:18	0°♋		
	16453 May 22	15:57	0°♌		
asc. node	16453 Jun 02	22:23	12°♌22'40		
	16453 Jun 19	20:22	0°♍		
evening max el	16453 Jun 21	03:12	1°♍16'21	46°21'48	
	16453 Jul 28	05:19	0°♎		
greatest brilliancy	16453 Jul 31	05:48	1°♎10'55	-4.9m	
retrograde	16453 Aug 09	21:39	2°♎55'42		
	16453 Aug 21	22:57	30°℞♍		
evening set	16453 Aug 25	18:26	28°♍00'50		
inferior conj	16453 Aug 30	12:37	25°♍10'32	5°40'39	
minimum elong	16453 Aug 30	23:21	24°♍54'06	5°37'48	
min. Earth dist.	16453 Aug 31	04:41	24°♍45'56	0.27140 AU	
morning rise	16453 Sep 05	04:01	21°♍50'11		
direct	16453 Sep 20	08:46	17°♍18'09		
desc. node	16453 Sep 22	21:52	17°♍25'55		
greatest brilliancy	16453 Sep 30	15:09	19°♍17'10	-4.9m	
	16453 Oct 18	17:50	0°♎		
morning max el	16453 Nov 09	15:42	19°♎38'02	46°44'44	
	16453 Nov 19	19:13	0°♏		
	16453 Dec 17	03:01	0°♐		
	16454 Jan 12	00:18	0°♑		
asc. node	16454 Jan 13	21:57	2°♑14'31		
	16454 Feb 06	04:44	0°♒		
	16454 Mar 02	23:46	0°♓		
	16454 Mar 27	13:32	0°♈		
	16454 Apr 21	00:11	0°♉		
desc. node	16454 May 05	18:29	18°♉10'59		
morning set	16454 May 09	09:27	22°♉39'10		
	16454 May 15	08:16	0°♊		
	16454 Jun 08	13:38	0°♋		
max. Earth dist.	16454 Jun 14	18:29	7°♋42'11	1.72352 AU	
superior conj	16454 Jun 17	12:30	11°♋07'19	-1°21'37	
minimum elong	16454 Jun 17	04:39	10°♋42'56	1°22'08	
	16454 Jul 02	16:26	0°♌		
evening rise	16454 Jul 26	21:25	0°♍11'58		
	16454 Jul 26	17:35	0°♍		
	16454 Aug 19	18:23	0°♎		
asc. node	16454 Aug 26	10:54	8°♎20'35		
	16454 Sep 12	20:15	0°♏		
	16454 Oct 07	00:56	0°♐		
	16454 Oct 31	11:33	0°♑		
	16454 Nov 25	09:50	0°♒		
desc. node	16454 Dec 16	04:32	24°♒14'27		
	16454 Dec 21	06:01	0°♓		
	16455 Jan 17	23:07	0°♈		
evening max el	16455 Jan 26	13:29	8°♈34'04	46°07'08	
	16455 Feb 20	23:47	0°♉		
greatest brilliancy	16455 Mar 06	13:22	7°♉09'13	-4.8m	
retrograde	16455 Mar 16	17:16	9°♉01'48		
evening set	16455 Mar 31	17:54	4°♉37'28		
inferior conj	16455 Apr 07	00:02	0°♉51'17	-0°16'37	
minimum elong	16455 Apr 07	00:40	0°♉50'17	0°16'41	
min. Earth dist.	16455 Apr 07	00:39	0°♉50'19	0.28405 AU	
asc. node	16455 Apr 08	02:42	0°♉09'28		
	16455 Apr 08	08:45	30°℞♈		
morning rise	16455 Apr 13	07:28	27°♈03'54		
direct	16455 Apr 28	06:07	22°♈42'07		
greatest brilliancy	16455 May 08	18:26	24°♈44'49	-4.8m	
	16455 May 19	02:17	0°♉		
morning max el	16455 Jun 16	18:37	24°♉01'07	46°13'20	
	16455 Jun 22	17:32	0°♊		
	16455 Jul 20	08:07	0°♋		
desc. node	16455 Jul 29	03:36	10°♋06'18		
	16455 Aug 15	02:13	0°♌		
	16455 Sep 09	00:17	0°♍		
	16455 Oct 03	12:24	0°♎		
	16455 Oct 27	19:32	0°♏		
asc. node	16455 Nov 19	00:30	27°♏32'24		
	16455 Nov 21	00:03	0°♐		
	16455 Dec 15	03:08	0°♑		
morning set	16455 Dec 18	13:57	4°♑17'34		
	16456 Jan 08	05:58	0°♒		
superior conj	16456 Jan 24	22:22	20°♒43'06	1°22'55	
minimum elong	16456 Jan 25	04:24	21°♒01'48	1°23'17	
max. Earth dist.	16456 Jan 27	13:40	23°♒59'21	1.72705 AU	
	16456 Feb 01	10:03	0°♓		
	16456 Feb 25	16:39	0°♈		
evening rise	16456 Mar 02	13:06	7°♈12'36		
desc. node	16456 Mar 09	17:52	16°♈04'06		
	16456 Mar 21	02:06	0°♉		
	16456 Apr 14	13:55	0°♊		
	16456 May 09	03:45	0°♋		
	16456 Jun 02	20:37	0°♌		

	16456 Jun 27 19:50	0°♍	
asc. node	16456 Jun 30 10:25	3°♍06'15	
	16456 Jul 23 08:20	0°♎	
	16456 Aug 19 02:25	0°♏	
evening max el	16456 Sep 01 23:59	14°♏28'59	46°39'03
	16456 Sep 18 15:55	0°♐	
greatest brilliancy	16456 Oct 11 10:19	14°♐45'13	-4.9m
desc. node	16456 Oct 20 08:06	16°♐50'44	
retrograde	16456 Oct 22 05:22	16°♐54'56	
evening set	16456 Nov 06 10:11	12°♐25'52	
min. Earth dist.	16456 Nov 11 10:45	9°♐28'39	0.27361 AU
inferior conj	16456 Nov 12 03:56	9°♐02'22	-5°31'07
minimum elong	16456 Nov 11 17:19	9°♐18'36	5°27'50
morning rise	16456 Nov 17 00:54	6°♐08'34	
direct	16456 Dec 03 00:51	1°♐16'28	
greatest brilliancy	16456 Dec 12 12:23	2°♐55'07	-4.8m
	16457 Jan 19 07:42	0°♑	
morning max el	16457 Jan 21 07:10	1°♑54'17	46°02'59
asc. node	16457 Feb 10 08:27	22°♑30'20	
	16457 Feb 17 05:53	0°♒	
	16457 Mar 15 17:27	0°♓	
	16457 Apr 10 04:52	0°♈	
	16457 May 05 03:43	0°♉	
	16457 May 29 18:38	0°♊	
desc. node	16457 Jun 02 06:51	4°♊18'05	
	16457 Jun 23 03:32	0°♋	
	16457 Jul 17 07:38	0°♌	
morning set	16457 Jul 21 17:26	5°♌29'38	
	16457 Aug 10 08:25	0°♍	
max. Earth dist.	16457 Aug 29 02:44	23°♍29'23	1.71600 AU
superior conj	16457 Aug 30 08:45	25°♍03'22	-0°54'05
minimum elong	16457 Aug 30 19:58	25°♍38'28	0°53'45
	16457 Sep 03 07:29	0°♎	
asc. node	16457 Sep 23 00:21	24°♎41'09	
	16457 Sep 27 06:10	0°♏	
evening rise	16457 Oct 09 03:58	14°♏54'25	
	16457 Oct 21 05:36	0°♐	
	16457 Nov 14 07:14	0°♑	
	16457 Dec 08 13:29	0°♒	
	16458 Jan 02 03:47	0°♓	
desc. node	16458 Jan 12 17:04	12°♓41'51	
	16458 Jan 27 06:17	0°♈	
	16458 Feb 22 02:43	0°♉	
	16458 Mar 21 06:34	0°♊	
evening max el	16458 Apr 07 08:29	17°♊27'08	46°02'11
	16458 Apr 21 00:18	0°♋	
asc. node	16458 May 05 13:10	10°♋56'58	
greatest brilliancy	16458 May 16 22:39	16°♋39'50	-4.8m
retrograde	16458 May 26 17:04	18°♋26'46	
evening set	16458 Jun 12 20:36	12°♋47'18	
inferior conj	16458 Jun 16 17:53	10°♋23'32	8°19'51
minimum elong	16458 Jun 16 10:03	10°♋35'50	8°18'16
min. Earth dist.	16458 Jun 16 20:25	10°♋19'34	0.28159 AU
morning rise	16458 Jun 19 23:22	8°♋23'01	
direct	16458 Jul 07 19:46	2°♋13'59	
greatest brilliancy	16458 Jul 17 22:55	4°♋09'06	-4.8m
	16458 Aug 22 08:22	0°♌	
desc. node	16458 Aug 25 13:46	3°♌09'23	
morning max el	16458 Aug 27 03:43	4°♌43'57	46°51'27
	16458 Sep 19 20:10	0°♍	
	16458 Oct 15 22:36	0°♎	
	16458 Nov 10 03:39	0°♏	
	16458 Dec 04 22:29	0°♐	
asc. node	16458 Dec 16 12:34	14°♐08'14	
	16458 Dec 29 11:21	0°♑	
	16459 Jan 22 20:28	0°♒	
	16459 Feb 16 03:45	0°♓	
morning set	16459 Feb 26 04:23	12°♓22'50	
	16459 Mar 12 10:50	0°♈	
superior conj	16459 Apr 04 14:39	28°♈34'31	0°06'35
minimum elong	16459 Apr 04 16:06	28°♈39'00	0°06'16
behind sun begin	16459 Apr 03 18:07	27°♈31'11	
behind sun end	16459 Apr 05 14:05	29°♈46'48	
max. Earth dist.	16459 Apr 04 14:26	28°♈33'51	1.73083 AU
	16459 Apr 05 18:22	0°♉	
desc. node	16459 Apr 07 07:14	1°♉53'42	
	16459 Apr 30 01:56	0°♊	
evening rise	16459 May 12 18:56	15°♊41'39	
	16459 May 24 08:48	0°♋	
	16459 Jun 17 14:59	0°♌	
	16459 Jul 11 21:34	0°♍	
asc. node	16459 Jul 28 23:20	21°♍01'57	
	16459 Aug 05 06:35	0°♎	
	16459 Aug 29 21:00	0°♏	
	16459 Sep 23 22:10	0°♐	
	16459 Oct 19 22:25	0°♑	
evening max el	16459 Nov 13 19:15	26°♑26'40	46°30'06
	16459 Nov 17 10:27	0°♒	
desc. node	16459 Nov 17 18:55	0°♒20'23	
greatest brilliancy	16459 Dec 23 10:24	26°♒13'06	-4.8m
retrograde	16460 Jan 02 18:09	28°♒10'51	
evening set	16460 Jan 21 00:27	21°♒54'48	
inferior conj	16460 Jan 24 03:26	19°♒59'24	-8°32'22
minimum elong	16460 Jan 24 09:52	19°♒49'24	8°31'19
min. Earth dist.	16460 Jan 24 00:12	20°♒04'26	0.28524 AU
morning rise	16460 Jan 27 19:22	17°♒44'50	
direct	16460 Feb 14 08:09	11°♒55'13	
greatest brilliancy	16460 Feb 24 15:33	13°♒51'34	-4.8m
asc. node	16460 Mar 09 18:25	21°♒27'02	
	16460 Mar 20 19:30	0°♓	
morning max el	16460 Apr 03 11:06	12°♓29'28	45°44'55
	16460 Apr 20 13:17	0°♈	
	16460 May 17 12:48	0°♉	
	16460 Jun 12 04:11	0°♊	
desc. node	16460 Jun 29 18:39	21°♊06'53	
	16460 Jul 07 02:36	0°♋	
	16460 Jul 31 14:27	0°♌	
	16460 Aug 24 19:44	0°♍	
	16460 Sep 17 21:27	0°♎	
morning set	16460 Oct 03 17:21	19°♎46'39	
	16460 Oct 11 21:32	0°♏	
asc. node	16460 Oct 20 13:34	10°♏50'41	
	16460 Nov 04 21:05	0°♐	
superior conj	16460 Nov 11 23:40	8°♐53'29	0°51'34
minimum elong	16460 Nov 11 13:23	8°♐21'21	0°51'42
max. Earth dist.	16460 Nov 13 06:59	10°♐31'24	1.71840 AU
	16460 Nov 28 21:01	0°♑	
evening rise	16460 Dec 19 20:25	26°♑08'40	
	16460 Dec 22 22:52	0°♒	
	16461 Jan 16 04:36	0°♓	
desc. node	16461 Feb 09 06:15	29°♓30'18	
	16461 Feb 09 15:59	0°♈	
	16461 Mar 06 10:02	0°♉	
	16461 Mar 31 11:37	0°♊	
	16461 Apr 25 23:42	0°♋	
	16461 May 22 07:53	0°♌	
asc. node	16461 Jun 02 00:19	11°♌40'07	
evening max el	16461 Jun 18 17:32	28°♌57'15	46°20'56
	16461 Jun 19 19:05	0°♍	
greatest brilliancy	16461 Jul 28 19:17	28°♍48'05	-4.9m
	16461 Aug 02 04:31	0°♎	

retrograde	16461 Aug 07 10:39	0°♎32'00	
	16461 Aug 12 13:32	30°℞♍	
evening set	16461 Aug 23 10:48	25°♍32'28	
inferior conj	16461 Aug 28 01:34	22°♍46'30	5°59'05
minimum elong	16461 Aug 28 12:29	22°♍29'45	5°56'16
min. Earth dist.	16461 Aug 28 17:56	22°♍21'23	0.27171 AU
morning rise	16461 Sep 02 13:59	19°♍29'56	
direct	16461 Sep 17 22:27	14°♍53'41	
desc. node	16461 Sep 21 23:43	15°♍13'07	
greatest brilliancy	16461 Sep 28 04:00	16°♍52'00	-4.9m
	16461 Oct 19 07:52	0°♎	
morning max el	16461 Nov 07 05:27	17°♎16'13	46°45'47
	16461 Nov 19 14:34	0°♏	
	16461 Dec 16 17:58	0°♐	
	16462 Jan 11 13:17	0°♑	
asc. node	16462 Jan 12 23:51	1°♑42'05	
	16462 Feb 05 16:40	0°♒	
	16462 Mar 02 11:04	0°♓	
	16462 Mar 27 00:30	0°♈	
	16462 Apr 20 10:58	0°♉	
desc. node	16462 May 04 20:18	17°♉43'33	
morning set	16462 May 07 00:10	20°♉23'28	
	16462 May 14 18:59	0°♊	
	16462 Jun 08 00:21	0°♋	
max. Earth dist.	16462 Jun 12 06:15	5°♋16'19	1.72389 AU
superior conj	16462 Jun 15 02:06	8°♋47'01	-1°20'10
minimum elong	16462 Jun 14 17:38	8°♋20'44	1°20'38
	16462 Jul 02 03:13	0°♌	
evening rise	16462 Jul 24 09:28	27°♌45'46	
	16462 Jul 26 04:29	0°♍	
	16462 Aug 19 05:26	0°♎	
asc. node	16462 Aug 25 12:37	7°♎51'21	
	16462 Sep 12 07:29	0°♏	
	16462 Oct 06 12:30	0°♐	
	16462 Oct 30 23:40	0°♑	
	16462 Nov 24 22:53	0°♒	
desc. node	16462 Dec 15 06:30	23°♒38'56	
	16462 Dec 20 20:56	0°♓	
	16463 Jan 17 18:51	0°♈	
evening max el	16463 Jan 24 04:25	6°♈20'09	46°07'47
	16463 Feb 22 01:46	0°♉	
greatest brilliancy	16463 Mar 04 05:43	4°♉57'57	-4.8m
retrograde	16463 Mar 14 08:15	6°♉49'25	
evening set	16463 Mar 29 10:36	2°♉23'50	
	16463 Apr 02 12:00	30°℞♈	
inferior conj	16463 Apr 04 15:45	28°♈39'00	-0°37'47
minimum elong	16463 Apr 04 17:11	28°♈36'44	0°37'35
min. Earth dist.	16463 Apr 04 17:00	28°♈37'02	0.28412 AU
asc. node	16463 Apr 07 04:29	27°♈04'11	
morning rise	16463 Apr 10 23:44	24°♈50'31	
direct	16463 Apr 25 21:37	20°♈29'58	
greatest brilliancy	16463 May 06 10:45	22°♈32'51	-4.8m
	16463 May 20 02:18	0°♉	
morning max el	16463 Jun 14 08:24	21°♉42'56	46°11'44
	16463 Jun 22 13:08	0°♊	
	16463 Jul 19 23:06	0°♋	
desc. node	16463 Jul 28 05:30	9°♋30'33	
	16463 Aug 14 15:25	0°♌	
	16463 Sep 08 12:35	0°♍	
	16463 Oct 03 00:08	0°♎	
	16463 Oct 27 06:53	0°♏	
asc. node	16463 Nov 18 02:24	27°♏03'50	
	16463 Nov 20 11:07	0°♐	
	16463 Dec 14 14:02	0°♑	
morning set	16463 Dec 16 04:49	2°♑00'43	
	16464 Jan 07 16:46	0°♒	
superior conj	16464 Jan 22 14:37	18°♒31'21	1°23'55
minimum elong	16464 Jan 22 20:00	18°♒48'04	1°24'19
max. Earth dist.	16464 Jan 25 04:17	21°♒42'35	1.72673 AU
	16464 Jan 31 20:48	0°♓	
	16464 Feb 25 03:25	0°♈	
evening rise	16464 Feb 29 04:56	5°♈00'20	
desc. node	16464 Mar 08 19:36	15°♈36'06	
	16464 Mar 20 12:59	0°♉	
	16464 Apr 14 01:03	0°♊	
	16464 May 08 15:16	0°♋	
	16464 Jun 02 08:45	0°♌	
	16464 Jun 27 08:57	0°♍	
asc. node	16464 Jun 29 12:19	2°♍32'33	
	16464 Jul 22 23:15	0°♎	
	16464 Aug 18 21:23	0°♏	
evening max el	16464 Aug 30 12:34	12°♏03'00	46°38'46
	16464 Sep 19 03:00	0°♐	
greatest brilliancy	16464 Oct 09 00:48	12°♐22'34	-4.9m
desc. node	16464 Oct 19 10:01	14°♐31'30	
retrograde	16464 Oct 19 18:36	14°♐31'39	
evening set	16464 Nov 03 20:47	10°♐06'27	
min. Earth dist.	16464 Nov 09 00:57	7°♐04'39	0.27316 AU
inferior conj	16464 Nov 09 17:07	6°♐39'58	-5°12'13
minimum elong	16464 Nov 09 06:48	6°♐55'43	5°08'55
morning rise	16464 Nov 14 17:10	3°♐41'52	
	16464 Nov 23 02:48	30°℞♏	
direct	16464 Nov 30 13:02	28°♏54'15	
	16464 Dec 08 05:41	0°♐	
greatest brilliancy	16464 Dec 10 02:19	0°♐34'09	-4.8m
morning max el	16465 Jan 18 20:06	29°♐32'52	46°04'26
	16465 Jan 19 07:16	0°♑	
asc. node	16465 Feb 09 10:18	21°♑48'41	
	16465 Feb 16 22:04	0°♒	
	16465 Mar 15 07:01	0°♓	
	16465 Apr 09 17:10	0°♈	
	16465 May 04 15:19	0°♉	
	16465 May 29 05:51	0°♊	
desc. node	16465 Jun 01 08:50	3°♊49'52	
	16465 Jun 22 14:33	0°♋	
	16465 Jul 16 18:34	0°♌	
morning set	16465 Jul 19 05:52	3°♌04'43	
	16465 Aug 09 19:20	0°♍	
max. Earth dist.	16465 Aug 26 12:07	20°♍54'12	1.71617 AU
superior conj	16465 Aug 27 20:58	22°♍37'05	-0°57'05
minimum elong	16465 Aug 28 08:25	23°♍12'58	0°56'47
	16465 Sep 02 18:25	0°♎	
asc. node	16465 Sep 22 02:09	24°♎12'22	
	16465 Sep 26 17:09	0°♏	
evening rise	16465 Oct 06 17:04	12°♏30'47	
	16465 Oct 20 16:40	0°♐	
	16465 Nov 13 18:25	0°♑	
	16465 Dec 08 00:54	0°♒	
	16466 Jan 01 15:40	0°♓	
desc. node	16466 Jan 11 18:56	12°♓10'58	
	16466 Jan 26 19:00	0°♈	
	16466 Feb 21 17:03	0°♉	
	16466 Mar 21 00:31	0°♊	
evening max el	16466 Apr 04 23:26	15°♊12'01	46°02'07
	16466 Apr 21 08:01	0°♋	
asc. node	16466 May 04 15:12	9°♋35'24	
greatest brilliancy	16466 May 14 11:57	14°♋22'00	-4.8m
retrograde	16466 May 24 08:17	16°♋10'26	
evening set	16466 Jun 10 07:34	10°♋36'04	
inferior conj	16466 Jun 14 08:48	8°♋06'29	8°10'44
minimum elong	16466 Jun 14 00:24	8°♋19'39	8°08'59
min. Earth dist.	16466 Jun 14 10:15	8°♋04'12	0.28177 AU

morning rise	16466 Jun 17 17:09	6°♋01'48	
	16466 Jul 03 19:38	30°℞♊	
direct	16466 Jul 05 11:02	29°♊56'42	
	16466 Jul 07 02:47	0°♋	
greatest brilliancy	16466 Jul 15 13:37	1°♋51'42	-4.8m
	16466 Aug 22 07:57	0°♌	
desc. node	16466 Aug 24 15:37	2°♌18'10	
morning max el	16466 Aug 24 19:18	2°♌27'22	46°50'34
	16466 Sep 19 12:36	0°♍	
	16466 Oct 15 12:33	0°♎	
	16466 Nov 09 16:23	0°♏	
	16466 Dec 04 10:28	0°♐	
asc. node	16466 Dec 15 14:29	13°♐38'19	
	16466 Dec 28 22:49	0°♑	
	16467 Jan 22 07:33	0°♒	
	16467 Feb 15 14:37	0°♓	
morning set	16467 Feb 23 21:03	10°♓12'41	
	16467 Mar 11 21:36	0°♈	
superior conj	16467 Apr 02 06:10	26°♈21'06	0°10'03
minimum elong	16467 Apr 02 08:25	26°♈28'03	0°09'43
behind sun begin	16467 Apr 01 13:26	25°♈29'30	
behind sun end	16467 Apr 03 03:23	27°♈26'36	
max. Earth dist.	16467 Apr 02 11:09	26°♈36'31	1.73088 AU
	16467 Apr 05 05:08	0°♉	
desc. node	16467 Apr 06 09:04	1°♉26'09	
	16467 Apr 29 12:45	0°♊	
evening rise	16467 May 10 10:09	13°♊26'54	
	16467 May 23 19:44	0°♋	
	16467 Jun 17 02:05	0°♌	
	16467 Jul 11 08:57	0°♍	
asc. node	16467 Jul 28 01:07	20°♍31'29	
	16467 Aug 04 18:26	0°♎	
	16467 Aug 29 09:35	0°♏	
	16467 Sep 23 12:01	0°♐	
	16467 Oct 19 14:53	0°♑	
evening max el	16467 Nov 11 10:50	24°♑11'07	46°30'45
desc. node	16467 Nov 16 20:54	29°♑27'09	
	16467 Nov 17 10:46	0°♒	
greatest brilliancy	16467 Dec 21 00:17	23°♒56'27	-4.8m
retrograde	16467 Dec 31 09:49	25°♒55'24	
evening set	16468 Jan 18 17:28	19°♒36'23	
inferior conj	16468 Jan 21 18:21	17°♒44'08	-8°38'49
minimum elong	16468 Jan 22 00:05	17°♒35'14	8°37'52
min. Earth dist.	16468 Jan 21 13:46	17°♒51'15	0.28506 AU
morning rise	16468 Jan 25 06:49	15°♒34'54	
direct	16468 Feb 11 23:31	9°♒40'40	
greatest brilliancy	16468 Feb 22 04:31	11°♒35'16	-4.8m
asc. node	16468 Mar 08 20:17	20°♒13'51	
	16468 Mar 21 00:52	0°♓	
morning max el	16468 Apr 01 02:34	10°♓16'12	45°44'42
	16468 Apr 20 06:35	0°♈	
	16468 May 17 02:47	0°♉	
	16468 Jun 11 16:43	0°♊	
desc. node	16468 Jun 28 20:25	20°♊36'07	
	16468 Jul 06 14:22	0°♋	
	16468 Jul 31 01:46	0°♌	
	16468 Aug 24 06:48	0°♍	
	16468 Sep 17 08:21	0°♎	
morning set	16468 Oct 01 06:38	17°♎24'21	
	16468 Oct 11 08:20	0°♏	
asc. node	16468 Oct 19 15:28	10°♏22'56	
	16468 Nov 04 07:48	0°♐	
superior conj	16468 Nov 09 13:47	6°♐33'56	0°48'34
minimum elong	16468 Nov 09 03:47	6°♐02'42	0°48'42
max. Earth dist.	16468 Nov 10 21:44	8°♐13'51	1.71821 AU
	16468 Nov 28 07:45	0°♑	
evening rise	16468 Dec 17 11:38	23°♑53'12	
	16468 Dec 22 09:38	0°♒	
	16469 Jan 15 15:31	0°♓	
desc. node	16469 Feb 08 07:57	29°♓01'27	
	16469 Feb 09 03:09	0°♈	
	16469 Mar 05 21:38	0°♉	
	16469 Mar 30 23:57	0°♊	
	16469 Apr 25 13:19	0°♋	
	16469 May 22 00:08	0°♌	
asc. node	16469 Jun 01 02:14	10°♌56'57	
evening max el	16469 Jun 16 07:21	26°♌36'53	46°20'03
	16469 Jun 19 18:50	0°♍	
greatest brilliancy	16469 Jul 26 09:32	26°♍26'35	-4.8m
retrograde	16469 Aug 04 23:24	28°♍09'00	
evening set	16469 Aug 21 03:24	23°♍04'51	
inferior conj	16469 Aug 25 14:45	20°♍23'24	6°16'45
minimum elong	16469 Aug 26 01:45	20°♍06'27	6°14'00
min. Earth dist.	16469 Aug 26 07:39	19°♍57'23	0.27201 AU
morning rise	16469 Aug 30 23:54	17°♍10'48	
direct	16469 Sep 15 11:41	12°♍30'05	
desc. node	16469 Sep 21 01:36	13°♍06'21	
greatest brilliancy	16469 Sep 25 17:24	14°♍28'05	-4.9m
	16469 Oct 19 18:05	0°♎	
morning max el	16469 Nov 04 18:27	14°♎52'53	46°46'47
	16469 Nov 19 09:12	0°♏	
	16469 Dec 16 08:37	0°♐	
	16470 Jan 11 02:08	0°♑	
asc. node	16470 Jan 12 01:38	1°♑09'30	
	16470 Feb 05 04:33	0°♒	
	16470 Mar 01 22:23	0°♓	
	16470 Mar 26 11:27	0°♈	
	16470 Apr 19 21:42	0°♉	
desc. node	16470 May 03 22:11	17°♉16'25	
morning set	16470 May 04 14:41	18°♉07'19	
	16470 May 14 05:37	0°♊	
	16470 Jun 07 10:58	0°♋	
max. Earth dist.	16470 Jun 09 18:25	2°♋52'05	1.72425 AU
superior conj	16470 Jun 12 15:40	6°♋27'06	-1°18'35
minimum elong	16470 Jun 12 06:38	5°♋59'03	1°19'01
	16470 Jul 01 13:54	0°♌	
evening rise	16470 Jul 21 21:42	25°♌20'34	
	16470 Jul 25 15:15	0°♍	
	16470 Aug 18 16:20	0°♎	
asc. node	16470 Aug 24 14:25	7°♎22'52	
	16470 Sep 11 18:34	0°♏	
	16470 Oct 05 23:53	0°♐	
	16470 Oct 30 11:34	0°♑	
	16470 Nov 24 11:45	0°♒	
desc. node	16470 Dec 14 08:18	23°♒03'26	
	16470 Dec 20 11:49	0°♓	
	16471 Jan 17 15:03	0°♈	
evening max el	16471 Jan 21 18:32	4°♈04'34	46°08'15
	16471 Feb 23 14:50	0°♉	
greatest brilliancy	16471 Mar 01 21:53	2°♉46'14	-4.8m
retrograde	16471 Mar 11 23:04	4°♉36'53	
evening set	16471 Mar 27 03:13	0°♉09'30	
	16471 Mar 27 10:04	30°℞♈	
inferior conj	16471 Apr 02 07:16	26°♈26'30	-0°59'08
minimum elong	16471 Apr 02 09:31	26°♈22'58	0°58'40
min. Earth dist.	16471 Apr 02 09:20	26°♈23'14	0.28422 AU
asc. node	16471 Apr 06 06:31	23°♈59'16	
morning rise	16471 Apr 08 15:40	22°♈37'15	
direct	16471 Apr 23 12:34	18°♈17'23	
greatest brilliancy	16471 May 04 03:23	20°♈21'15	-4.8m
	16471 May 20 19:51	0°♉	

morning max el	16471 Jun 11 22:24	19°♉25'41	46°10'22
	16471 Jun 22 08:00	0°♊	
	16471 Jul 19 13:39	0°♋	
desc. node	16471 Jul 27 07:19	8°♋55'38	
	16471 Aug 14 04:15	0°♌	
	16471 Sep 08 00:31	0°♍	
	16471 Oct 02 11:31	0°♎	
	16471 Oct 26 17:54	0°♏	
asc. node	16471 Nov 17 04:16	26°♏36'10	
	16471 Nov 19 21:52	0°♐	
morning set	16471 Dec 13 19:51	29°♐45'17	
	16471 Dec 14 00:35	0°♑	
	16472 Jan 07 03:12	0°♒	
superior conj	16472 Jan 20 07:00	16°♒20'58	1°24'47
minimum elong	16472 Jan 20 11:41	16°♒35'30	1°25'13
max. Earth dist.	16472 Jan 22 18:29	19°♒25'30	1.72647 AU
	16472 Jan 31 07:13	0°♓	
	16472 Feb 24 13:54	0°♈	
evening rise	16472 Feb 26 20:46	2°♈48'59	
desc. node	16472 Mar 07 21:28	15°♈09'22	
	16472 Mar 19 23:37	0°♉	
	16472 Apr 13 11:57	0°♊	
	16472 May 08 02:35	0°♋	
	16472 Jun 01 20:40	0°♌	
	16472 Jun 26 21:51	0°♍	
asc. node	16472 Jun 28 14:06	1°♍59'16	
	16472 Jul 22 14:01	0°♎	
	16472 Aug 18 16:27	0°♏	
evening max el	16472 Aug 28 01:30	9°♏39'09	46°38'34
	16472 Sep 19 17:13	0°♐	
greatest brilliancy	16472 Oct 06 14:48	10°♐00'23	-4.9m
retrograde	16472 Oct 17 08:14	12°♐09'33	
desc. node	16472 Oct 18 12:03	12°♐07'56	
evening set	16472 Nov 01 07:35	7°♐47'38	
min. Earth dist.	16472 Nov 06 14:55	4°♐41'52	0.27274 AU
inferior conj	16472 Nov 07 06:15	4°♐18'31	-4°52'32
minimum elong	16472 Nov 06 20:19	4°♐33'39	4°49'16
morning rise	16472 Nov 12 09:23	1°♐16'27	
	16472 Nov 14 19:17	30°℞♏	
direct	16472 Nov 28 01:29	26°♏32'56	
greatest brilliancy	16472 Dec 07 15:56	28°♏13'59	-4.8m
	16472 Dec 12 01:46	0°♐	
morning max el	16473 Jan 16 10:00	27°♐15'11	46°05'58
	16473 Jan 19 05:17	0°♑	
asc. node	16473 Feb 08 12:12	21°♑09'00	
	16473 Feb 16 13:28	0°♒	
	16473 Mar 14 20:01	0°♓	
	16473 Apr 09 05:00	0°♈	
	16473 May 04 02:33	0°♉	
	16473 May 28 16:46	0°♊	
desc. node	16473 May 31 10:36	3°♊21'57	
	16473 Jun 22 01:16	0°♋	
	16473 Jul 16 05:10	0°♌	
morning set	16473 Jul 16 18:06	0°♌40'15	
	16473 Aug 09 05:52	0°♍	
max. Earth dist.	16473 Aug 24 00:24	18°♍29'21	1.71631 AU
superior conj	16473 Aug 25 09:00	20°♍11'27	-0°59'59
minimum elong	16473 Aug 25 20:37	20°♍47'49	0°59'42
	16473 Sep 02 04:57	0°♎	
asc. node	16473 Sep 21 04:01	23°♎45'07	
	16473 Sep 26 03:44	0°♏	
evening rise	16473 Oct 04 06:09	10°♏08'26	
	16473 Oct 20 03:20	0°♐	
	16473 Nov 13 05:13	0°♑	
	16473 Dec 07 11:57	0°♒	
	16474 Jan 01 03:10	0°♓	
desc. node	16474 Jan 10 20:42	11°♓41'03	
	16474 Jan 26 07:21	0°♈	
	16474 Feb 21 07:04	0°♉	
	16474 Mar 20 18:25	0°♊	
evening max el	16474 Apr 02 15:02	12°♊59'47	46°01'50
	16474 Apr 21 18:05	0°♋	
asc. node	16474 May 03 17:03	8°♋11'35	
greatest brilliancy	16474 May 12 01:01	12°♋04'40	-4.8m
retrograde	16474 May 21 23:16	13°♋54'18	
evening set	16474 Jun 07 18:20	8°♋25'18	
inferior conj	16474 Jun 11 23:30	5°♋49'42	8°00'45
minimum elong	16474 Jun 11 14:37	6°♋03'38	7°58'50
min. Earth dist.	16474 Jun 11 23:53	5°♋49'06	0.28195 AU
morning rise	16474 Jun 15 10:50	3°♋40'33	
	16474 Jun 22 09:58	30°℞♊	
direct	16474 Jul 03 02:29	27°♊39'53	
greatest brilliancy	16474 Jul 13 03:52	29°♊34'10	-4.8m
	16474 Jul 14 07:07	0°♋	
	16474 Aug 22 06:14	0°♌	
morning max el	16474 Aug 22 10:45	0°♌11'18	46°49'42
desc. node	16474 Aug 23 17:35	1°♌28'52	
	16474 Sep 19 04:23	0°♍	
	16474 Oct 15 02:00	0°♎	
	16474 Nov 09 04:37	0°♏	
	16474 Dec 03 21:58	0°♐	
asc. node	16474 Dec 14 16:12	13°♐09'10	
	16474 Dec 28 09:49	0°♑	
	16475 Jan 21 18:14	0°♒	
	16475 Feb 15 01:05	0°♓	
morning set	16475 Feb 21 13:55	8°♓04'22	
	16475 Mar 11 07:58	0°♈	
superior conj	16475 Mar 30 21:54	24°♈09'40	0°13'29
minimum elong	16475 Mar 31 00:55	24°♈18'59	0°13'08
behind sun begin	16475 Mar 30 11:20	23°♈37'04	
behind sun end	16475 Mar 31 14:30	25°♈00'54	
max. Earth dist.	16475 Mar 31 08:02	24°♈40'56	1.73090 AU
	16475 Apr 04 15:29	0°♉	
desc. node	16475 Apr 05 10:56	0°♉59'59	
	16475 Apr 28 23:10	0°♊	
evening rise	16475 May 08 01:27	11°♊13'37	
	16475 May 23 06:18	0°♋	
	16475 Jun 16 12:53	0°♌	
	16475 Jul 10 20:07	0°♍	
asc. node	16475 Jul 27 02:55	20°♍01'51	
	16475 Aug 04 06:04	0°♎	
	16475 Aug 28 21:57	0°♏	
	16475 Sep 23 01:41	0°♐	
	16475 Oct 19 07:17	0°♑	
evening max el	16475 Nov 09 02:16	21°♑56'10	46°31'27
desc. node	16475 Nov 15 22:42	28°♑33'35	
	16475 Nov 17 11:51	0°♒	
greatest brilliancy	16475 Dec 18 14:47	21°♒41'38	-4.8m
retrograde	16475 Dec 29 01:10	23°♒40'54	
evening set	16476 Jan 16 10:17	17°♒19'37	
inferior conj	16476 Jan 19 09:17	15°♒30'01	-8°44'29
minimum elong	16476 Jan 19 14:17	15°♒22'15	8°43'38
min. Earth dist.	16476 Jan 19 03:35	15°♒38'54	0.28484 AU
morning rise	16476 Jan 22 18:26	13°♒25'41	
direct	16476 Feb 09 14:46	7°♒27'20	
greatest brilliancy	16476 Feb 19 17:30	9°♒19'55	-4.8m
asc. node	16476 Mar 07 22:17	19°♒04'07	
	16476 Mar 21 03:54	0°♓	
morning max el	16476 Mar 29 17:18	8°♓02'13	45°44'34
	16476 Apr 19 23:07	0°♈	
	16476 May 16 16:16	0°♉	

	16476 Jun 11 04:51	0°♊	
desc. node	16476 Jun 27 22:15	20°♊06'32	
	16476 Jul 06 01:48	0°♋	
	16476 Jul 30 12:50	0°♌	
	16476 Aug 23 17:40	0°♍	
	16476 Sep 16 19:04	0°♎	
morning set	16476 Sep 28 19:28	15°♎01'10	
	16476 Oct 10 18:56	0°♏	
asc. node	16476 Oct 18 17:17	9°♏55'30	
	16476 Nov 03 18:19	0°♐	
superior conj	16476 Nov 07 03:30	4°♐13'55	0°45'27
minimum elong	16476 Nov 06 17:53	3°♐43'50	0°45'35
max. Earth dist.	16476 Nov 08 10:45	5°♐51'38	1.71794 AU
	16476 Nov 27 18:13	0°♑	
evening rise	16476 Dec 15 02:39	21°♑37'52	
	16476 Dec 21 20:10	0°♒	
	16477 Jan 15 02:12	0°♓	
desc. node	16477 Feb 07 09:51	28°♓33'55	
	16477 Feb 08 14:07	0°♈	
	16477 Mar 05 09:02	0°♉	
	16477 Mar 30 12:05	0°♊	
	16477 Apr 25 02:48	0°♋	
	16477 May 21 16:25	0°♌	
asc. node	16477 May 31 04:03	10°♌13'44	
evening max el	16477 Jun 13 20:04	24°♌14'33	46°19'03
	16477 Jun 19 19:28	0°♍	
greatest brilliancy	16477 Jul 23 23:52	24°♍05'30	-4.8m
retrograde	16477 Aug 02 11:40	25°♍46'21	
evening set	16477 Aug 18 19:56	20°♍37'07	
inferior conj	16477 Aug 23 03:51	18°♍00'30	6°33'40
minimum elong	16477 Aug 23 14:53	17°♍43'28	6°30'59
min. Earth dist.	16477 Aug 23 21:35	17°♍33'08	0.27239 AU
morning rise	16477 Aug 28 09:34	14°♍52'07	
direct	16477 Sep 13 00:30	10°♍06'13	
desc. node	16477 Sep 20 03:37	11°♍04'35	
greatest brilliancy	16477 Sep 23 07:26	12°♍04'50	-4.9m
	16477 Oct 20 01:34	0°♎	
morning max el	16477 Nov 02 07:16	12°♎28'49	46°47'51
	16477 Nov 19 03:22	0°♏	
	16477 Dec 15 23:01	0°♐	
	16478 Jan 10 14:48	0°♑	
asc. node	16478 Jan 11 03:36	0°♑37'58	
	16478 Feb 04 16:15	0°♒	
	16478 Mar 01 09:31	0°♓	
	16478 Mar 25 22:15	0°♈	
	16478 Apr 19 08:19	0°♉	
morning set	16478 May 02 05:30	15°♉52'23	
desc. node	16478 May 02 23:56	16°♉49'15	
	16478 May 13 16:08	0°♊	
	16478 Jun 06 21:29	0°♋	
max. Earth dist.	16478 Jun 07 08:20	0°♋33'40	1.72459 AU
superior conj	16478 Jun 10 05:38	4°♋08'47	-1°16'52
minimum elong	16478 Jun 09 20:05	3°♋39'08	1°17'16
	16478 Jul 01 00:28	0°♌	
evening rise	16478 Jul 19 10:20	22°♌57'05	
	16478 Jul 25 01:56	0°♍	
	16478 Aug 18 03:10	0°♎	
asc. node	16478 Aug 23 16:21	6°♎54'55	
	16478 Sep 11 05:39	0°♏	
	16478 Oct 05 11:20	0°♐	
	16478 Oct 29 23:36	0°♑	
	16478 Nov 24 00:48	0°♒	
desc. node	16478 Dec 13 10:10	22°♒27'39	
	16478 Dec 20 02:58	0°♓	
	16479 Jan 17 11:57	0°♈	
evening max el	16479 Jan 19 08:29	1°♈48'42	46°09'00
	16479 Feb 26 00:58	0°♉	
greatest brilliancy	16479 Feb 27 13:39	0°♉34'22	-4.8m
retrograde	16479 Mar 09 14:18	2°♉24'58	
	16479 Mar 20 15:03	30°℞♈	
evening set	16479 Mar 24 20:06	27°♈55'11	
inferior conj	16479 Mar 30 22:54	24°♈14'19	-1°20'19
minimum elong	16479 Mar 31 01:56	24°♈09'33	1°19'34
min. Earth dist.	16479 Mar 31 01:38	24°♈10'02	0.28433 AU
asc. node	16479 Apr 05 08:26	20°♈57'08	
morning rise	16479 Apr 06 07:33	20°♈24'47	
direct	16479 Apr 21 03:41	16°♈04'56	
greatest brilliancy	16479 May 01 20:10	18°♈10'08	-4.8m
	16479 May 21 08:48	0°♉	
morning max el	16479 Jun 09 13:34	17°♉11'26	46°09'06
	16479 Jun 22 02:20	0°♊	
	16479 Jul 19 04:01	0°♋	
desc. node	16479 Jul 26 09:17	8°♋21'22	
	16479 Aug 13 16:59	0°♌	
	16479 Sep 07 12:24	0°♍	
	16479 Oct 01 22:55	0°♎	
	16479 Oct 26 04:58	0°♏	
asc. node	16479 Nov 16 06:00	26°♏07'42	
	16479 Nov 19 08:44	0°♐	
morning set	16479 Dec 11 10:34	27°♐28'15	
	16479 Dec 13 11:18	0°♑	
	16480 Jan 06 13:49	0°♒	
superior conj	16480 Jan 17 23:03	14°♒08'59	1°25'31
minimum elong	16480 Jan 18 03:00	14°♒21'15	1°25'59
max. Earth dist.	16480 Jan 20 09:05	17°♒09'07	1.72618 AU
	16480 Jan 30 17:47	0°♓	
	16480 Feb 24 00:30	0°♈	
evening rise	16480 Feb 24 12:27	0°♈36'47	
desc. node	16480 Mar 06 23:18	14°♈42'08	
	16480 Mar 19 10:24	0°♉	
	16480 Apr 12 23:01	0°♊	
	16480 May 07 14:04	0°♋	
	16480 Jun 01 08:46	0°♌	
	16480 Jun 26 11:00	0°♍	
asc. node	16480 Jun 27 16:01	1°♍25'47	
	16480 Jul 22 05:06	0°♎	
	16480 Aug 18 12:12	0°♏	
evening max el	16480 Aug 25 15:30	7°♏17'59	46°38'24
	16480 Sep 20 12:25	0°♐	
greatest brilliancy	16480 Oct 04 04:18	7°♐37'37	-4.9m
retrograde	16480 Oct 14 22:22	9°♐47'22	
desc. node	16480 Oct 17 13:49	9°♐38'50	
evening set	16480 Oct 29 18:44	5°♐28'21	
min. Earth dist.	16480 Nov 04 04:40	2°♐19'11	0.27237 AU
inferior conj	16480 Nov 04 19:26	1°♐56'44	-4°32'17
minimum elong	16480 Nov 04 09:58	2°♐11'09	4°29'06
	16480 Nov 08 01:10	30°℞♏	
morning rise	16480 Nov 10 01:35	28°♏50'57	
direct	16480 Nov 25 14:39	24°♏11'20	
greatest brilliancy	16480 Dec 05 05:11	25°♏52'58	-4.8m
	16480 Dec 14 03:40	0°♐	
morning max el	16481 Jan 14 00:51	24°♐59'04	46°07'20
	16481 Jan 19 02:45	0°♑	
asc. node	16481 Feb 07 14:10	20°♑29'04	
	16481 Feb 16 04:57	0°♒	
	16481 Mar 14 09:11	0°♓	
	16481 Apr 08 17:03	0°♈	
	16481 May 03 13:59	0°♉	
	16481 May 28 03:52	0°♊	
desc. node	16481 May 30 12:22	2°♊53'24	
	16481 Jun 21 12:12	0°♋	

morning set	16481 Jul	14	06:32	28°♋15'46	
	16481 Jul	15	16:00	0°♌	
	16481 Aug	08	16:40	0°♍	
max. Earth dist.	16481 Aug	21	13:21	16°♍05'49	1.71641 AU
superior conj	16481 Aug	22	21:18	17°♍45'49	-1°02'44
minimum elong	16481 Aug	23	08:58	18°♍22'23	1°02'30
	16481 Sep	01	15:44	0°♎	
asc. node	16481 Sep	20	05:48	23°♎16'49	
	16481 Sep	25	14:33	0°♏	
evening rise	16481 Oct	01	19:28	7°♏46'05	
	16481 Oct	19	14:13	0°♐	
	16481 Nov	12	16:15	0°♑	
	16481 Dec	06	23:16	0°♒	
	16481 Dec	31	15:00	0°♓	
desc. node	16482 Jan	09	22:37	11°♓10'32	
	16482 Jan	25	20:08	0°♈	
	16482 Feb	20	21:39	0°♉	
	16482 Mar	20	13:13	0°♊	
evening max el	16482 Mar	31	07:07	10°♊47'45	46°01'39
	16482 Apr	22	08:14	0°♋	
asc. node	16482 May	02	18:54	6°♋44'08	
greatest brilliancy	16482 May	09	14:42	9°♋47'27	-4.8m
retrograde	16482 May	19	14:07	11°♋37'35	
evening set	16482 Jun	05	05:20	6°♋14'15	
inferior conj	16482 Jun	09	14:23	3°♋32'36	7°50'01
minimum elong	16482 Jun	09	05:04	3°♋47'14	7°47'57
min. Earth dist.	16482 Jun	09	13:50	3°♋33'27	0.28209 AU
morning rise	16482 Jun	13	04:45	1°♋18'44	
	16482 Jun	15	10:48	30°℞♊	
direct	16482 Jun	30	18:01	25°♊22'53	
greatest brilliancy	16482 Jul	10	18:15	27°♊16'09	-4.8m
	16482 Jul	16	20:22	0°♋	
morning max el	16482 Aug	20	01:44	27°♋53'14	46°48'43
	16482 Aug	22	04:00	0°♌	
desc. node	16482 Aug	22	19:31	0°♌39'28	
	16482 Sep	18	20:15	0°♍	
	16482 Oct	14	15:38	0°♎	
	16482 Nov	08	17:05	0°♏	
	16482 Dec	03	09:43	0°♐	
asc. node	16482 Dec	13	18:10	12°♐39'56	
	16482 Dec	27	21:05	0°♑	
	16483 Jan	21	05:11	0°♒	
	16483 Feb	14	11:53	0°♓	
morning set	16483 Feb	19	06:50	5°♓55'08	
	16483 Mar	10	18:42	0°♈	
superior conj	16483 Mar	28	13:40	21°♈57'10	0°16'54
minimum elong	16483 Mar	28	17:26	22°♈08'48	0°16'32
max. Earth dist.	16483 Mar	29	02:59	22°♈38'16	1.73090 AU
	16483 Apr	04	02:14	0°♉	
desc. node	16483 Apr	04	12:40	0°♉32'12	
	16483 Apr	28	09:58	0°♊	
evening rise	16483 May	05	16:40	8°♊58'57	
	16483 May	22	17:14	0°♋	
	16483 Jun	16	00:04	0°♌	
	16483 Jul	10	07:38	0°♍	
asc. node	16483 Jul	26	04:52	19°♍31'31	
	16483 Aug	03	18:07	0°♎	
	16483 Aug	28	10:47	0°♏	
	16483 Sep	22	15:52	0°♐	
	16483 Oct	19	00:24	0°♑	
evening max el	16483 Nov	06	17:18	19°♑39'01	46°32'08
desc. node	16483 Nov	15	00:38	27°♑38'16	
	16483 Nov	17	14:48	0°♒	
greatest brilliancy	16483 Dec	16	05:55	19°♒26'47	-4.8m
retrograde	16483 Dec	26	16:09	21°♒25'50	

evening set	16484 Jan	14	02:54	15°♒02'59	
min. Earth dist.	16484 Jan	16	17:52	13°♒25'44	0.28461 AU
inferior conj	16484 Jan	17	00:24	13°♒15'33	-8°49'13
minimum elong	16484 Jan	17	04:36	13°♒09'01	8°48'29
morning rise	16484 Jan	20	06:26	11°♒15'40	
direct	16484 Feb	07	05:44	5°♒13'34	
greatest brilliancy	16484 Feb	17	07:05	7°♒04'32	-4.8m
asc. node	16484 Mar	07	00:10	17°♒55'20	
	16484 Mar	21	05:48	0°♓	
morning max el	16484 Mar	27	07:23	5°♓45'28	45°44'23
	16484 Apr	19	15:44	0°♈	
	16484 May	16	06:03	0°♉	
	16484 Jun	10	17:20	0°♊	
desc. node	16484 Jun	27	00:15	19°♊36'17	
	16484 Jul	05	13:36	0°♋	
	16484 Jul	30	00:15	0°♌	
	16484 Aug	23	04:51	0°♍	
	16484 Sep	16	06:07	0°♎	
morning set	16484 Sep	26	08:13	12°♎36'38	
	16484 Oct	10	05:53	0°♏	
asc. node	16484 Oct	17	19:02	9°♏26'46	
	16484 Nov	03	05:12	0°♐	
superior conj	16484 Nov	04	17:17	1°♐52'51	0°42'16
minimum elong	16484 Nov	04	08:07	1°♐24'09	0°42'23
max. Earth dist.	16484 Nov	05	20:58	3°♐19'25	1.71770 AU
	16484 Nov	27	05:05	0°♑	
evening rise	16484 Dec	12	17:48	19°♑21'45	
	16484 Dec	21	07:04	0°♒	
	16485 Jan	14	13:13	0°♓	
desc. node	16485 Feb	06	11:44	28°♓05'22	
	16485 Feb	08	01:24	0°♈	
	16485 Mar	04	20:47	0°♉	
	16485 Mar	30	00:39	0°♊	
	16485 Apr	24	16:50	0°♋	
	16485 May	21	09:30	0°♌	
asc. node	16485 May	30	06:01	9°♌29'05	
evening max el	16485 Jun	11	08:28	21°♌50'24	46°18'12
	16485 Jun	19	21:59	0°♍	
greatest brilliancy	16485 Jul	21	14:07	21°♍43'33	-4.8m
retrograde	16485 Jul	31	00:12	23°♍23'26	
evening set	16485 Aug	16	12:36	18°♍08'45	
inferior conj	16485 Aug	20	17:09	15°♍37'08	6°49'37
minimum elong	16485 Aug	21	04:07	15°♍20'12	6°47'03
min. Earth dist.	16485 Aug	21	11:37	15°♍08'38	0.27278 AU
morning rise	16485 Aug	25	19:18	12°♍33'31	
direct	16485 Sep	10	13:26	7°♍41'48	
desc. node	16485 Sep	19	05:27	9°♍06'59	
greatest brilliancy	16485 Sep	20	21:48	9°♍41'36	-4.9m
	16485 Oct	20	07:07	0°♎	
morning max el	16485 Oct	30	20:44	10°♎05'34	46°48'49
	16485 Nov	18	21:23	0°♏	
	16485 Dec	15	13:34	0°♐	
asc. node	16486 Jan	10	05:29	0°♑05'20	
	16486 Jan	10	03:41	0°♑	
	16486 Feb	04	04:12	0°♒	
	16486 Feb	28	20:54	0°♓	
	16486 Mar	25	09:18	0°♈	
	16486 Apr	18	19:10	0°♉	
morning set	16486 Apr	29	20:30	13°♉37'13	
desc. node	16486 May	02	01:47	16°♉21'32	
	16486 May	13	02:56	0°♊	
max. Earth dist.	16486 Jun	04	23:58	28°♊19'40	1.72498 AU
	16486 Jun	06	08:18	0°♋	
superior conj	16486 Jun	07	19:30	1°♋49'13	-1°15'01
minimum elong	16486 Jun	07	09:31	1°♋18'16	1°15'23

	16486 Jun 30 11:22	0°♌	
evening rise	16486 Jul 16 22:48	20°♌32'11	
	16486 Jul 24 12:55	0°♍	
	16486 Aug 17 14:18	0°♎	
asc. node	16486 Aug 22 18:04	6°♎25'26	
	16486 Sep 10 17:00	0°♏	
	16486 Oct 04 23:03	0°♐	
	16486 Oct 29 11:56	0°♑	
	16486 Nov 23 14:14	0°♒	
desc. node	16486 Dec 12 12:08	21°♒51'06	
	16486 Dec 19 18:38	0°♓	
evening max el	16487 Jan 16 23:09	29°♓33'47	46°09'49
	16487 Jan 17 09:59	0°♈	
greatest brilliancy	16487 Feb 25 04:47	28°♈21'11	-4.8m
	16487 Mar 03 23:24	0°♉	
retrograde	16487 Mar 07 05:59	0°♉12'27	
	16487 Mar 10 11:19	30°℞♈	
evening set	16487 Mar 22 13:05	25°♈40'04	
inferior conj	16487 Mar 28 14:28	22°♈01'28	-1°41'15
minimum elong	16487 Mar 28 18:16	21°♈55'31	1°40'17
min. Earth dist.	16487 Mar 28 17:32	21°♈56'39	0.28443 AU
morning rise	16487 Apr 03 23:15	18°♈12'09	
asc. node	16487 Apr 04 10:14	17°♈57'14	
direct	16487 Apr 18 19:12	13°♈51'58	
greatest brilliancy	16487 Apr 29 12:28	15°♈58'12	-4.8m
	16487 May 21 18:31	0°♉	
morning max el	16487 Jun 07 05:22	14°♉58'29	46°07'43
	16487 Jun 21 20:24	0°♊	
	16487 Jul 18 18:26	0°♋	
desc. node	16487 Jul 25 11:10	7°♋46'25	
	16487 Aug 13 05:52	0°♌	
	16487 Sep 07 00:28	0°♍	
	16487 Oct 01 10:28	0°♎	
	16487 Oct 25 16:11	0°♏	
asc. node	16487 Nov 15 07:55	25°♏39'26	
	16487 Nov 18 19:42	0°♐	
morning set	16487 Dec 09 01:05	25°♐10'21	
	16487 Dec 12 22:07	0°♑	
	16488 Jan 06 00:32	0°♒	
superior conj	16488 Jan 15 15:01	11°♒56'19	1°26'08
minimum elong	16488 Jan 15 18:14	12°♒06'17	1°26'38
max. Earth dist.	16488 Jan 18 01:19	14°♒57'20	1.72591 AU
	16488 Jan 30 04:28	0°♓	
evening rise	16488 Feb 22 04:12	28°♓24'22	
	16488 Feb 23 11:15	0°♈	
desc. node	16488 Mar 06 01:02	14°♈14'19	
	16488 Mar 18 21:17	0°♉	
	16488 Apr 12 10:09	0°♊	
	16488 May 07 01:36	0°♋	
	16488 May 31 20:57	0°♌	
	16488 Jun 26 00:18	0°♍	
asc. node	16488 Jun 26 17:55	0°♍51'58	
	16488 Jul 21 20:32	0°♎	
	16488 Aug 18 08:47	0°♏	
evening max el	16488 Aug 23 06:18	4°♏58'19	46°38'06
	16488 Sep 21 15:08	0°♐	
greatest brilliancy	16488 Oct 01 17:42	5°♐13'58	-4.9m
retrograde	16488 Oct 12 12:28	7°♐23'55	
desc. node	16488 Oct 16 15:46	7°♐02'57	
evening set	16488 Oct 27 05:56	3°♐07'54	
	16488 Nov 01 15:12	30°℞♏	
inferior conj	16488 Nov 02 08:24	29°♏33'52	-4°11'26
minimum elong	16488 Nov 01 23:27	29°♏47'28	4°08'19
min. Earth dist.	16488 Nov 01 18:08	29°♏55'32	0.27197 AU
morning rise	16488 Nov 07 17:26	26°♏24'27	
direct	16488 Nov 23 03:57	21°♏48'57	
greatest brilliancy	16488 Dec 02 17:49	23°♏30'32	-4.8m
	16488 Dec 15 13:09	0°♐	
morning max el	16489 Jan 11 15:17	22°♐41'51	46°08'40
	16489 Jan 18 23:27	0°♑	
asc. node	16489 Feb 06 16:02	19°♑49'19	
	16489 Feb 15 20:09	0°♒	
	16489 Mar 13 22:13	0°♓	
	16489 Apr 08 04:59	0°♈	
	16489 May 03 01:20	0°♉	
	16489 May 27 14:52	0°♊	
desc. node	16489 May 29 14:22	2°♊25'48	
	16489 Jun 20 23:00	0°♋	
morning set	16489 Jul 11 19:08	25°♋52'19	
	16489 Jul 15 02:42	0°♌	
	16489 Aug 08 03:20	0°♍	
max. Earth dist.	16489 Aug 19 00:51	13°♍38'04	1.71656 AU
superior conj	16489 Aug 20 09:31	15°♍20'20	-1°05'23
minimum elong	16489 Aug 20 21:10	15°♍56'48	1°05'12
	16489 Sep 01 02:27	0°♎	
asc. node	16489 Sep 19 07:36	22°♎48'49	
	16489 Sep 25 01:19	0°♏	
evening rise	16489 Sep 29 08:20	5°♏22'28	
	16489 Oct 19 01:03	0°♐	
	16489 Nov 12 03:13	0°♑	
	16489 Dec 06 10:31	0°♒	
	16489 Dec 31 02:48	0°♓	
desc. node	16490 Jan 09 00:28	10°♓40'05	
	16490 Jan 25 08:53	0°♈	
	16490 Feb 20 12:16	0°♉	
	16490 Mar 20 08:23	0°♊	
evening max el	16490 Mar 28 22:43	8°♊34'58	46°01'27
	16490 Apr 23 02:54	0°♋	
asc. node	16490 May 01 20:57	5°♋14'31	
greatest brilliancy	16490 May 07 05:06	7°♋31'46	-4.8m
retrograde	16490 May 17 04:32	9°♋21'42	
evening set	16490 Jun 02 16:29	4°♋04'09	
inferior conj	16490 Jun 07 05:20	1°♋16'39	7°38'40
minimum elong	16490 Jun 06 19:39	1°♋31'55	7°36'26
min. Earth dist.	16490 Jun 07 04:13	1°♋18'24	0.28217 AU
	16490 Jun 09 06:12	30°℞♊	
morning rise	16490 Jun 10 22:45	28°♊57'57	
direct	16490 Jun 28 09:12	23°♊07'05	
greatest brilliancy	16490 Jul 08 09:08	24°♊59'46	-4.8m
	16490 Jul 18 10:06	0°♋	
morning max el	16490 Aug 17 15:34	25°♋33'21	46°47'40
desc. node	16490 Aug 21 21:23	29°♋51'46	
	16490 Aug 22 00:35	0°♌	
	16490 Sep 18 11:33	0°♍	
	16490 Oct 14 04:54	0°♎	
	16490 Nov 08 05:17	0°♏	
	16490 Dec 02 21:14	0°♐	
asc. node	16490 Dec 12 20:03	12°♐11'06	
	16490 Dec 27 08:07	0°♑	
	16491 Jan 20 15:54	0°♒	
	16491 Feb 13 22:25	0°♓	
morning set	16491 Feb 16 23:29	3°♓45'47	
	16491 Mar 10 05:10	0°♈	
superior conj	16491 Mar 26 05:21	19°♈45'20	0°20'17
minimum elong	16491 Mar 26 09:51	19°♈59'12	0°19'55
max. Earth dist.	16491 Mar 26 20:18	20°♈31'24	1.73090 AU
desc. node	16491 Apr 03 14:31	0°♉05'37	
	16491 Apr 03 12:42	0°♉	
	16491 Apr 27 20:31	0°♊	
evening rise	16491 May 03 07:53	6°♊45'09	
	16491 May 22 03:55	0°♋	

	16491 Jun 15	10:57	0°♌			
	16491 Jul 09	18:50	0°♍			
asc. node	16491 Jul 25	06:37	19°♍01'44			
	16491 Aug 03	05:48	0°♎			
	16491 Aug 27	23:15	0°♏			
	16491 Sep 22	05:47	0°♐			
	16491 Oct 18	17:30	0°♑			
evening max el	16491 Nov 04	07:18	17°♑20'04	46°32'36		
desc. node	16491 Nov 14	02:37	26°♑42'37			
	16491 Nov 17	19:08	0°♒			
greatest brilliancy	16491 Dec 13	21:07	17°♒12'10	-4.8m		
retrograde	16491 Dec 24	06:36	19°♒10'59			
evening set	16492 Jan 11	18:57	12°♒47'02			
inferior conj	16492 Jan 14	15:20	11°♒01'19	-8°53'11		
minimum elong	16492 Jan 14	18:40	10°♒56'07	8°52'31		
min. Earth dist.	16492 Jan 14	08:15	11°♒12'21	0.28438 AU		
morning rise	16492 Jan 17	18:31	9°♒05'35			
direct	16492 Feb 04	20:02	2°♒59'53			
greatest brilliancy	16492 Feb 14	21:08	4°♒50'05	-4.8m		
asc. node	16492 Mar 06	02:04	16°♒49'05			
	16492 Mar 21	06:01	0°♓			
morning max el	16492 Mar 24	20:56	3°♓28'17	45°44'23		
	16492 Apr 19	07:40	0°♈			
	16492 May 15	19:18	0°♉			
	16492 Jun 10	05:21	0°♊			
desc. node	16492 Jun 26	02:01	19°♊06'35			
	16492 Jul 05	00:58	0°♋			
	16492 Jul 29	11:14	0°♌			
	16492 Aug 22	15:36	0°♍			
	16492 Sep 15	16:43	0°♎			
morning set	16492 Sep 23	21:16	10°♎14'23			
	16492 Oct 09	16:21	0°♏			
asc. node	16492 Oct 16	20:56	8°♏59'58			
superior conj	16492 Nov 02	07:16	29°♏33'53	0°39'01		
minimum elong	16492 Nov 01	22:35	29°♏06'43	0°39'07		
	16492 Nov 02	15:37	0°♐			
max. Earth dist.	16492 Nov 03	06:52	0°♐47'43	1.71751 AU		
	16492 Nov 26	15:29	0°♑			
evening rise	16492 Dec 10	09:02	17°♑07'16			
	16492 Dec 20	17:33	0°♒			
	16493 Jan 13	23:51	0°♓			
desc. node	16493 Feb 05	13:26	27°♓37'25			
	16493 Feb 07	12:18	0°♈			
	16493 Mar 04	08:11	0°♉			
	16493 Mar 29	12:53	0°♊			
	16493 Apr 24	06:35	0°♋			
	16493 May 21	02:29	0°♌			
asc. node	16493 May 29	07:55	8°♌44'50			
evening max el	16493 Jun 08	21:00	19°♌27'53	46°17'24		
	16493 Jun 20	01:37	0°♍			
greatest brilliancy	16493 Jul 19	03:44	19°♍22'12	-4.8m		
retrograde	16493 Jul 28	13:13	21°♍01'59			
evening set	16493 Aug 14	05:15	15°♍41'29			
inferior conj	16493 Aug 18	06:24	13°♍14'56	7°04'51		
minimum elong	16493 Aug 18	17:14	12°♍58'14	7°02'25		
min. Earth dist.	16493 Aug 19	01:17	12°♍45'50	0.27315 AU		
morning rise	16493 Aug 23	04:53	10°♍16'38			
direct	16493 Sep 08	02:38	5°♍18'35			
desc. node	16493 Sep 18	07:24	7°♍15'21			
greatest brilliancy	16493 Sep 18	11:48	7°♍19'23	-4.9m		
	16493 Oct 20	10:09	0°♎			
morning max el	16493 Oct 28	11:05	7°♎46'06	46°49'55		
	16493 Nov 18	14:23	0°♏			
	16493 Dec 15	03:22	0°♐			
asc. node	16494 Jan 09	07:17	29°♐34'09			
	16494 Jan 09	15:58	0°♑			
	16494 Feb 03	15:39	0°♒			
	16494 Feb 28	07:51	0°♓			
	16494 Mar 24	19:55	0°♈			
	16494 Apr 18	05:38	0°♉			
morning set	16494 Apr 27	11:28	11°♉23'16			
desc. node	16494 May 01	03:40	15°♉55'11			
	16494 May 12	13:19	0°♊			
max. Earth dist.	16494 Jun 02	17:24	26°♊12'35	1.72533 AU		
superior conj	16494 Jun 05	09:14	29°♊30'34	-1°13'02		
minimum elong	16494 Jun 04	22:54	28°♊58'32	1°13'22		
	16494 Jun 05	18:43	0°♋			
	16494 Jun 29	21:51	0°♌			
evening rise	16494 Jul 14	11:20	18°♌08'47			
	16494 Jul 23	23:31	0°♍			
	16494 Aug 17	01:04	0°♎			
asc. node	16494 Aug 21	19:54	5°♎57'29			
	16494 Sep 10	04:00	0°♏			
	16494 Oct 04	10:24	0°♐			
	16494 Oct 28	23:52	0°♑			
	16494 Nov 23	03:14	0°♒			
desc. node	16494 Dec 11	13:57	21°♒15'23			
	16494 Dec 19	09:59	0°♓			
evening max el	16495 Jan 14	14:42	27°♓22'32	46°10'31		
	16495 Jan 17	08:18	0°♈			
greatest brilliancy	16495 Feb 22	19:32	26°♈09'00	-4.8m		
retrograde	16495 Mar 04	21:58	28°♈01'06			
evening set	16495 Mar 20	06:18	23°♈26'06			
inferior conj	16495 Mar 26	06:03	19°♈49'44	-2°02'07		
minimum elong	16495 Mar 26	10:36	19°♈42'37	2°00'53		
min. Earth dist.	16495 Mar 26	09:10	19°♈44'52	0.28456 AU		
morning rise	16495 Apr 01	14:48	16°♈00'55			
asc. node	16495 Apr 03	12:18	15°♈01'28			
direct	16495 Apr 16	11:16	11°♈40'16			
greatest brilliancy	16495 Apr 27	04:20	13°♈46'50	-4.8m		
	16495 May 22	01:05	0°♉			
morning max el	16495 Jun 04	21:37	12°♉47'41	46°06'17		
	16495 Jun 21	13:41	0°♊			
	16495 Jul 18	08:20	0°♋			
desc. node	16495 Jul 24	13:01	7°♋12'38			
	16495 Aug 12	18:19	0°♌			
	16495 Sep 06	12:10	0°♍			
	16495 Sep 30	21:41	0°♎			
	16495 Oct 25	03:05	0°♏			
asc. node	16495 Nov 14	09:46	25°♏11'52			
	16495 Nov 18	06:22	0°♐			
morning set	16495 Dec 06	15:56	22°♐54'26			
	16495 Dec 12	08:36	0°♑			
	16496 Jan 05	10:53	0°♒			
superior conj	16496 Jan 13	07:20	9°♒45'43	1°26'37		
minimum elong	16496 Jan 13	09:46	9°♒53'17	1°27'07		
max. Earth dist.	16496 Jan 15	20:04	12°♒54'22	1.72562 AU		
	16496 Jan 29	14:48	0°♓			
evening rise	16496 Feb 19	20:14	26°♓13'50			
	16496 Feb 22	21:40	0°♈			
desc. node	16496 Mar 05	02:56	13°♈47'56			
	16496 Mar 18	07:54	0°♉			
	16496 Apr 11	21:04	0°♊			
	16496 May 06	12:57	0°♋			
	16496 May 31	08:59	0°♌			
asc. node	16496 Jun 25	19:42	0°♍18'16			
	16496 Jun 25	13:30	0°♍			
	16496 Jul 21	11:59	0°♎			
	16496 Aug 18	05:55	0°♏			
evening max el	16496 Aug 20	21:14	2°♏39'35	46°37'40		
	16496 Sep 23	04:57	0°♐			

greatest brilliancy	16496 Sep 29 07:31	2°♐51'11	-4.9m
retrograde	16496 Oct 10 02:10	5°♐00'30	
desc. node	16496 Oct 15 17:48	4°♐21'27	
evening set	16496 Oct 24 17:22	0°♐47'27	
	16496 Oct 26 03:45	30°℞♏	
inferior conj	16496 Oct 30 21:16	27°♏11'14	-3°49'57
minimum elong	16496 Oct 30 12:57	27°♏23'53	3°47'00
min. Earth dist.	16496 Oct 30 07:48	27°♏31'43	0.27157 AU
morning rise	16496 Nov 05 09:03	23°♏58'06	
direct	16496 Nov 20 17:14	19°♏26'49	
greatest brilliancy	16496 Nov 30 06:29	21°♏08'08	-4.8m
	16496 Dec 16 12:53	0°♐	
morning max el	16497 Jan 09 04:52	20°♐22'59	46°10'12
	16497 Jan 18 19:15	0°♑	
asc. node	16497 Feb 05 17:56	19°♑10'42	
	16497 Feb 15 10:53	0°♒	
	16497 Mar 13 10:56	0°♓	
	16497 Apr 07 16:42	0°♈	
	16497 May 02 12:31	0°♉	
	16497 May 27 01:46	0°♊	
desc. node	16497 May 28 16:08	1°♊57'47	
	16497 Jun 20 09:44	0°♋	
morning set	16497 Jul 09 07:35	23°♋28'30	
	16497 Jul 14 13:21	0°♌	
	16497 Aug 07 13:58	0°♍	
max. Earth dist.	16497 Aug 16 09:54	11°♍02'52	1.71671 AU
superior conj	16497 Aug 17 21:39	12°♍54'46	-1°07'55
minimum elong	16497 Aug 18 09:10	13°♍30'48	1°07'46
	16497 Aug 31 13:06	0°♎	
asc. node	16497 Sep 18 09:29	22°♎21'11	
	16497 Sep 24 12:03	0°♏	
evening rise	16497 Sep 26 21:02	2°♏58'22	
	16497 Oct 18 11:53	0°♐	
	16497 Nov 11 14:14	0°♑	
	16497 Dec 05 21:49	0°♒	
	16497 Dec 30 14:37	0°♓	
desc. node	16498 Jan 08 02:16	10°♓09'28	
	16498 Jan 24 21:40	0°♈	
	16498 Feb 20 02:59	0°♉	
	16498 Mar 20 04:00	0°♊	
evening max el	16498 Mar 26 13:24	6°♊20'16	46°01'13
	16498 Apr 24 04:16	0°♋	
asc. node	16498 Apr 30 22:46	3°♋41'38	
greatest brilliancy	16498 May 04 19:51	5°♋16'44	-4.8m
retrograde	16498 May 14 18:39	7°♋06'18	
evening set	16498 May 31 03:49	1°♋54'09	
	16498 Jun 03 06:56	30°℞♊	
inferior conj	16498 Jun 04 20:26	29°♊01'02	7°26'34
minimum elong	16498 Jun 04 10:26	29°♊16'48	7°24'11
min. Earth dist.	16498 Jun 04 19:05	29°♊03'10	0.28231 AU
morning rise	16498 Jun 08 16:58	26°♊37'25	
direct	16498 Jun 26 00:10	20°♊51'21	
greatest brilliancy	16498 Jul 06 00:53	22°♊44'15	-4.8m
	16498 Jul 19 12:35	0°♋	
morning max el	16498 Aug 15 04:48	23°♋11'25	46°46'35
desc. node	16498 Aug 20 23:21	29°♋04'31	
	16498 Aug 21 20:42	0°♌	
	16498 Sep 18 02:48	0°♍	
	16498 Oct 13 18:12	0°♎	
	16498 Nov 07 17:33	0°♏	
	16498 Dec 02 08:50	0°♐	
asc. node	16498 Dec 11 21:46	11°♐41'18	
	16498 Dec 26 19:17	0°♑	
	16499 Jan 20 02:47	0°♒	
	16499 Feb 13 09:07	0°♓	
morning set	16499 Feb 14 16:14	1°♓36'12	
	16499 Mar 09 15:46	0°♈	
superior conj	16499 Mar 23 21:24	17°♈34'12	0°23'36
minimum elong	16499 Mar 24 02:35	17°♈50'12	0°23'13
max. Earth dist.	16499 Mar 24 13:02	18°♈22'26	1.73086 AU
desc. node	16499 Apr 02 16:23	29°♈38'45	
	16499 Apr 02 23:17	0°♉	
	16499 Apr 27 07:10	0°♊	
evening rise	16499 Apr 30 23:29	4°♊32'16	
	16499 May 21 14:44	0°♋	
	16499 Jun 14 22:02	0°♌	
	16499 Jul 09 06:19	0°♍	
asc. node	16499 Jul 24 08:27	18°♍31'18	
	16499 Aug 02 17:50	0°♎	
	16499 Aug 27 12:09	0°♏	
	16499 Sep 21 20:13	0°♐	
	16499 Oct 18 11:24	0°♑	
evening max el	16499 Nov 01 20:25	14°♑57'46	46°33'11
desc. node	16499 Nov 13 04:25	25°♑44'13	
	16499 Nov 18 02:04	0°♒	
greatest brilliancy	16499 Dec 11 11:54	14°♒55'46	-4.8m
retrograde	16499 Dec 21 21:05	16°♒54'58	
evening set	16500 Jan 09 10:29	10°♒30'09	
inferior conj	16500 Jan 12 06:08	8°♒45'44	-8°56'22
minimum elong	16500 Jan 12 08:37	8°♒41'52	8°55'45
min. Earth dist.	16500 Jan 11 22:33	8°♒57'31	0.28412 AU
morning rise	16500 Jan 15 06:51	6°♒53'48	
direct	16500 Feb 02 10:02	0°♒44'38	
greatest brilliancy	16500 Feb 12 11:30	2°♒34'49	-4.8m
asc. node	16500 Mar 06 04:03	15°♒43'42	
	16500 Mar 22 05:29	0°♓	
morning max el	16500 Mar 23 10:53	1°♓11'05	45°44'40
	16500 Apr 19 23:36	0°♈	
	16500 May 16 08:42	0°♉	
	16500 Jun 10 17:33	0°♊	
desc. node	16500 Jun 26 03:52	18°♊36'27	
	16500 Jul 05 12:33	0°♋	
	16500 Jul 29 22:30	0°♌	
	16500 Aug 23 02:42	0°♍	
	16500 Sep 16 03:42	0°♎	
morning set	16500 Sep 22 09:56	7°♎49'37	
	16500 Oct 10 03:15	0°♏	
asc. node	16500 Oct 16 22:45	8°♏31'35	
superior conj	16500 Oct 31 20:44	27°♏11'58	0°35'39
minimum elong	16500 Oct 31 12:36	26°♏46'32	0°35'46
max. Earth dist.	16500 Nov 01 16:19	28°♏13'14	1.71734 AU
	16500 Nov 03 02:27	0°♐	
	16500 Nov 27 02:19	0°♑	
evening rise	16500 Dec 08 23:57	14°♑50'29	
	16500 Dec 21 04:27	0°♒	
	16501 Jan 14 10:56	0°♓	
desc. node	16501 Feb 05 15:22	27°♓08'49	
	16501 Feb 07 23:41	0°♈	
	16501 Mar 04 20:03	0°♉	
	16501 Mar 30 01:36	0°♊	
	16501 Apr 24 20:52	0°♋	
	16501 May 21 20:13	0°♌	
asc. node	16501 May 29 09:45	7°♌58'54	
evening max el	16501 Jun 07 10:17	17°♌06'39	46°16'43
	16501 Jun 21 07:33	0°♍	
greatest brilliancy	16501 Jul 17 16:39	16°♍59'32	-4.8m
retrograde	16501 Jul 27 02:50	18°♍39'53	
evening set	16501 Aug 12 22:00	13°♍13'28	
inferior conj	16501 Aug 16 19:45	10°♍51'49	7°19'12
minimum elong	16501 Aug 17 06:22	10°♍35'27	7°16'53
min. Earth dist.	16501 Aug 17 14:32	10°♍22'53	0.27360 AU

morning rise	16501 Aug 21 14:27	7°♍59'04	
direct	16501 Sep 06 16:31	2°♍54'32	
greatest brilliancy	16501 Sep 17 01:21	4°♍55'35	-4.9m
desc. node	16501 Sep 18 09:23	5°♍26'55	
	16501 Oct 21 12:20	0°♎	
morning max el	16501 Oct 27 02:12	5°♎26'56	46°50'42
	16501 Nov 19 07:39	0°♏	
	16501 Dec 15 17:38	0°♐	
asc. node	16502 Jan 09 09:15	29°♐01'55	
	16502 Jan 10 04:45	0°♑	
	16502 Feb 04 03:34	0°♒	
	16502 Feb 28 19:14	0°♓	
	16502 Mar 25 07:00	0°♈	
	16502 Apr 18 16:32	0°♉	
morning set	16502 Apr 26 02:35	9°♉08'21	
desc. node	16502 May 01 05:24	15°♉27'01	
	16502 May 13 00:09	0°♊	
max. Earth dist.	16502 Jun 01 10:55	24°♊04'29	1.72561 AU
superior conj	16502 Jun 03 23:13	27°♊11'28	-1°10'56
minimum elong	16502 Jun 03 12:36	26°♊38'32	1°11'13
	16502 Jun 06 05:33	0°♋	
	16502 Jun 30 08:43	0°♌	
evening rise	16502 Jul 13 00:16	15°♌45'31	
	16502 Jul 24 10:29	0°♍	
	16502 Aug 17 12:12	0°♎	
asc. node	16502 Aug 21 21:49	5°♎28'39	
	16502 Sep 10 15:25	0°♏	
	16502 Oct 04 22:15	0°♐	
	16502 Oct 29 12:23	0°♑	
	16502 Nov 23 16:56	0°♒	
desc. node	16502 Dec 11 15:48	20°♒37'40	
	16502 Dec 20 02:15	0°♓	
evening max el	16503 Jan 13 06:34	25°♓10'16	46°11'17
	16503 Jan 18 08:26	0°♈	
greatest brilliancy	16503 Feb 21 10:23	23°♈55'07	-4.8m
retrograde	16503 Mar 03 13:44	25°♈47'32	
evening set	16503 Mar 18 23:32	21°♈10'03	
inferior conj	16503 Mar 24 21:27	17°♈35'58	-2°22'55
minimum elong	16503 Mar 25 02:43	17°♈27'42	2°21'27
min. Earth dist.	16503 Mar 25 00:28	17°♈31'14	0.28465 AU
morning rise	16503 Mar 31 05:55	13°♈47'46	
asc. node	16503 Apr 03 14:10	12°♈07'19	
direct	16503 Apr 15 03:21	9°♈26'45	
greatest brilliancy	16503 Apr 25 19:30	11°♈32'49	-4.8m
	16503 May 23 06:12	0°♉	
morning max el	16503 Jun 03 13:25	10°♉34'25	46°04'57
	16503 Jun 22 07:04	0°♊	
	16503 Jul 18 22:29	0°♋	
desc. node	16503 Jul 24 14:58	6°♋38'09	
	16503 Aug 13 07:02	0°♌	
	16503 Sep 07 00:06	0°♍	
	16503 Oct 01 09:10	0°♎	
	16503 Oct 25 14:18	0°♏	
asc. node	16503 Nov 14 11:30	24°♏42'54	
	16503 Nov 18 17:24	0°♐	
morning set	16503 Dec 05 06:29	20°♐36'18	
	16503 Dec 12 19:29	0°♑	
	16504 Jan 05 21:41	0°♒	
superior conj	16504 Jan 11 23:09	7°♒32'11	1°26'57
minimum elong	16504 Jan 12 00:47	7°♒37'14	1°27'29
max. Earth dist.	16504 Jan 14 13:57	10°♒47'16	1.72531 AU
	16504 Jan 30 01:35	0°♓	
evening rise	16504 Feb 18 11:40	24°♓00'01	
	16504 Feb 23 08:31	0°♈	
desc. node	16504 Mar 05 04:44	13°♈19'54	
	16504 Mar 18 18:56	0°♉	
	16504 Apr 12 08:24	0°♊	
	16504 May 07 00:44	0°♋	
	16504 May 31 21:28	0°♌	
asc. node	16504 Jun 25 21:36	29°♌43'40	
	16504 Jun 26 03:10	0°♍	
	16504 Jul 22 04:00	0°♎	
	16504 Aug 19 04:05	0°♏	
evening max el	16504 Aug 19 11:40	0°♏18'58	46°37'18
	16504 Sep 26 16:46	0°♐	
greatest brilliancy	16504 Sep 27 21:59	0°♐29'05	-4.9m
retrograde	16504 Oct 08 15:30	2°♐37'03	
desc. node	16504 Oct 15 19:32	1°♐34'31	
	16504 Oct 20 01:35	30°℞♏	
evening set	16504 Oct 23 05:15	28°♏26'44	
inferior conj	16504 Oct 29 10:21	24°♏48'40	-3°28'06
minimum elong	16504 Oct 29 02:42	25°♏00'20	3°25'19
min. Earth dist.	16504 Oct 28 21:54	25°♏07'38	0.27121 AU
morning rise	16504 Nov 04 00:39	21°♏31'52	
direct	16504 Nov 19 06:23	17°♏04'45	
greatest brilliancy	16504 Nov 28 19:45	18°♏46'02	-4.8m
	16504 Dec 18 06:35	0°♐	
morning max el	16505 Jan 07 17:39	18°♐01'15	46°11'28
	16505 Jan 19 14:45	0°♑	
asc. node	16505 Feb 05 19:53	18°♑31'37	
	16505 Feb 16 01:47	0°♒	
	16505 Mar 13 23:54	0°♓	
	16505 Apr 08 04:41	0°♈	
	16505 May 02 23:58	0°♉	
	16505 May 27 12:53	0°♊	
desc. node	16505 May 28 17:54	1°♊29'07	
	16505 Jun 20 20:41	0°♋	
morning set	16505 Jul 07 19:51	21°♋03'34	
	16505 Jul 15 00:13	0°♌	
	16505 Aug 08 00:48	0°♍	
max. Earth dist.	16505 Aug 14 16:22	8°♍19'05	1.71684 AU
superior conj	16505 Aug 16 09:58	10°♍29'12	-1°10'18
minimum elong	16505 Aug 16 21:15	11°♍04'31	1°10'12
	16505 Aug 31 23:56	0°♎	
asc. node	16505 Sep 18 11:13	21°♎52'43	
	16505 Sep 24 22:54	0°♏	
evening rise	16505 Sep 25 09:54	0°♏34'25	
	16505 Oct 18 22:48	0°♐	
	16505 Nov 12 01:18	0°♑	
	16505 Dec 06 09:13	0°♒	
	16505 Dec 31 02:36	0°♓	
desc. node	16506 Jan 08 04:10	9°♓38'39	
	16506 Jan 25 10:44	0°♈	
	16506 Feb 20 18:09	0°♉	
	16506 Mar 21 00:35	0°♊	
evening max el	16506 Mar 25 03:16	4°♊02'47	46°01'03
	16506 Apr 26 17:02	0°♋	
asc. node	16506 May 01 00:38	2°♋04'29	
greatest brilliancy	16506 May 03 10:31	3°♋00'40	-4.8m
retrograde	16506 May 13 08:50	4°♋50'13	
	16506 May 29 03:15	30°℞♊	
evening set	16506 May 29 15:03	29°♊43'02	
inferior conj	16506 Jun 03 11:25	26°♊44'39	7°13'39
minimum elong	16506 Jun 03 01:10	27°♊00'48	7°11'07
min. Earth dist.	16506 Jun 03 09:56	26°♊46'58	0.28243 AU
morning rise	16506 Jun 07 11:07	24°♊16'11	
direct	16506 Jun 24 14:38	18°♊34'43	
greatest brilliancy	16506 Jul 04 16:49	20°♊28'29	-4.8m
	16506 Jul 21 08:08	0°♋	
morning max el	16506 Aug 13 18:14	20°♋49'43	46°45'36
desc. node	16506 Aug 21 01:16	28°♋17'36	

	16506 Aug 22 16:17	0°♌	
	16506 Sep 18 17:54	0°♍	
	16506 Oct 14 07:25	0°♎	
	16506 Nov 08 05:43	0°♏	
	16506 Dec 02 20:20	0°♐	
asc. node	16506 Dec 11 23:44	11°♐12'36	
	16506 Dec 27 06:21	0°♑	
	16507 Jan 20 13:34	0°♒	
morning set	16507 Feb 13 08:59	29°♒26'42	
	16507 Feb 13 19:45	0°♓	
	16507 Mar 10 02:22	0°♈	
superior conj	16507 Mar 22 13:17	15°♈22'32	0°26'55
minimum elong	16507 Mar 22 19:08	15°♈40'34	0°26'31
max. Earth dist.	16507 Mar 23 05:42	16°♈13'10	1.73089 AU
desc. node	16507 Apr 02 18:06	29°♈11'20	
	16507 Apr 03 09:53	0°♉	
	16507 Apr 27 17:51	0°♊	
evening rise	16507 Apr 29 14:49	2°♊18'35	
	16507 May 22 01:35	0°♋	
	16507 Jun 15 09:09	0°♌	
	16507 Jul 09 17:48	0°♍	
asc. node	16507 Jul 24 10:23	18°♍01'09	
	16507 Aug 03 05:52	0°♎	
	16507 Aug 28 01:03	0°♏	
	16507 Sep 22 10:43	0°♐	
	16507 Oct 19 05:33	0°♑	
evening max el	16507 Oct 31 10:00	12°♑37'14	46°33'58
desc. node	16507 Nov 13 06:22	24°♑45'32	
	16507 Nov 19 11:13	0°♒	
greatest brilliancy	16507 Dec 10 02:12	12°♒39'52	-4.8m
retrograde	16507 Dec 20 12:16	14°♒40'24	
evening set	16508 Jan 08 01:43	8°♒15'12	
inferior conj	16508 Jan 10 21:06	6°♒31'26	-8°58'33
minimum elong	16508 Jan 10 22:44	6°♒28'54	8°57'59
min. Earth dist.	16508 Jan 10 12:39	6°♒44'33	0.28386 AU
morning rise	16508 Jan 13 19:50	4°♒42'44	
	16508 Jan 23 08:54	30°℞♑	
direct	16508 Feb 01 00:20	28°♑30'41	
	16508 Feb 10 00:48	0°♒	
greatest brilliancy	16508 Feb 11 01:43	0°♒20'48	-4.8m
asc. node	16508 Mar 05 05:56	14°♒40'46	
morning max el	16508 Mar 21 01:44	28°♒56'56	45°44'45
	16508 Mar 22 03:37	0°♓	
	16508 Apr 19 15:04	0°♈	
	16508 May 15 21:50	0°♉	
	16508 Jun 10 05:35	0°♊	
desc. node	16508 Jun 25 05:50	18°♊07'04	
	16508 Jul 04 23:59	0°♋	
	16508 Jul 29 09:36	0°♌	
	16508 Aug 22 13:36	0°♍	
	16508 Sep 15 14:27	0°♎	
morning set	16508 Sep 19 22:31	5°♎25'17	
	16508 Oct 09 13:55	0°♏	
asc. node	16508 Oct 16 00:29	8°♏03'42	
superior conj	16508 Oct 29 10:09	24°♏50'32	0°32'13
minimum elong	16508 Oct 29 02:39	24°♏27'03	0°32'20
max. Earth dist.	16508 Oct 30 03:13	25°♏43'55	1.71716 AU
	16508 Nov 02 13:03	0°♐	
	16508 Nov 26 12:55	0°♑	
evening rise	16508 Dec 06 15:04	12°♑35'07	
	16508 Dec 20 15:05	0°♒	
	16509 Jan 13 21:41	0°♓	
desc. node	16509 Feb 04 17:11	26°♓40'57	
	16509 Feb 07 10:43	0°♈	
	16509 Mar 04 07:37	0°♉	
	16509 Mar 29 14:06	0°♊	
	16509 Apr 24 11:04	0°♋	
	16509 May 21 14:10	0°♌	
asc. node	16509 May 28 11:43	7°♌13'04	
evening max el	16509 Jun 05 00:31	14°♌48'19	46°15'54
	16509 Jun 21 15:42	0°♍	
greatest brilliancy	16509 Jul 15 05:17	14°♍37'01	-4.8m
retrograde	16509 Jul 24 16:29	16°♍17'52	
evening set	16509 Aug 10 14:38	10°♍45'51	
inferior conj	16509 Aug 14 08:57	8°♍29'00	7°32'43
minimum elong	16509 Aug 14 19:18	8°♍13'03	7°30'34
min. Earth dist.	16509 Aug 15 03:20	8°♍00'40	0.27402 AU
morning rise	16509 Aug 18 23:44	5°♍41'55	
direct	16509 Sep 04 06:36	0°♍31'05	
greatest brilliancy	16509 Sep 14 14:06	2°♍31'27	-4.9m
desc. node	16509 Sep 17 11:12	3°♍42'54	
	16509 Oct 21 12:48	0°♎	
morning max el	16509 Oct 24 17:11	3°♎08'25	46°51'27
	16509 Nov 19 00:12	0°♏	
	16509 Dec 15 07:22	0°♐	
asc. node	16510 Jan 08 11:06	28°♐30'34	
	16510 Jan 09 17:03	0°♑	
	16510 Feb 03 15:02	0°♒	
	16510 Feb 28 06:11	0°♓	
	16510 Mar 24 17:37	0°♈	
	16510 Apr 18 03:00	0°♉	
morning set	16510 Apr 23 18:04	6°♉55'58	
desc. node	16510 Apr 30 07:15	15°♉00'29	
	16510 May 12 10:36	0°♊	
max. Earth dist.	16510 May 30 03:24	21°♊54'20	1.72596 AU
superior conj	16510 Jun 01 13:17	24°♊53'44	-1°08'42
minimum elong	16510 Jun 01 02:28	24°♊20'14	1°08'59
	16510 Jun 05 16:02	0°♋	
	16510 Jun 29 19:17	0°♌	
evening rise	16510 Jul 10 12:58	13°♌22'26	
	16510 Jul 23 21:10	0°♍	
	16510 Aug 16 23:04	0°♎	
asc. node	16510 Aug 20 23:31	5°♎00'02	
	16510 Sep 10 02:33	0°♏	
	16510 Oct 04 09:47	0°♐	
	16510 Oct 29 00:34	0°♑	
	16510 Nov 23 06:20	0°♒	
desc. node	16510 Dec 10 17:46	20°♒01'09	
	16510 Dec 19 18:21	0°♓	
evening max el	16511 Jan 10 22:38	22°♓59'47	46°12'05
	16511 Jan 18 09:08	0°♈	
greatest brilliancy	16511 Feb 19 02:04	21°♈44'07	-4.8m
retrograde	16511 Mar 01 05:22	23°♈36'03	
evening set	16511 Mar 16 17:09	18°♈56'13	
inferior conj	16511 Mar 22 13:06	15°♈24'32	-2°43'16
minimum elong	16511 Mar 22 19:04	15°♈15'11	2°41'36
min. Earth dist.	16511 Mar 22 16:09	15°♈19'44	0.28471 AU
morning rise	16511 Mar 28 21:02	11°♈37'01	
asc. node	16511 Apr 02 16:00	9°♈19'42	
direct	16511 Apr 12 19:33	7°♈15'44	
greatest brilliancy	16511 Apr 23 10:42	9°♈20'55	-4.8m
	16511 May 23 08:44	0°♉	
morning max el	16511 Jun 01 04:23	8°♉20'49	46°03'29
	16511 Jun 21 23:32	0°♊	
	16511 Jul 18 12:04	0°♋	
desc. node	16511 Jul 23 16:49	6°♋04'47	
	16511 Aug 12 19:19	0°♌	
	16511 Sep 06 11:42	0°♍	
	16511 Sep 30 20:21	0°♎	
	16511 Oct 25 01:10	0°♏	
asc. node	16511 Nov 13 13:25	24°♏15'39	

	16511 Nov 18 04:03	0°♐	
morning set	16511 Dec 02 20:50	18°♐18'43	
	16511 Dec 12 05:58	0°♑	
	16512 Jan 05 08:05	0°♒	
superior conj	16512 Jan 09 15:02	5°♒20'05	1°27'09
minimum elong	16512 Jan 09 15:51	5°♒22'36	1°27'43
max. Earth dist.	16512 Jan 12 06:38	8°♒37'42	1.72498 AU
	16512 Jan 29 11:58	0°♓	
evening rise	16512 Feb 16 03:17	21°♓47'59	
	16512 Feb 22 18:59	0°♈	
desc. node	16512 Mar 04 06:29	12°♈53'01	
	16512 Mar 18 05:34	0°♉	
	16512 Apr 11 19:18	0°♊	
	16512 May 06 12:04	0°♋	
	16512 May 31 09:32	0°♌	
asc. node	16512 Jun 24 23:31	29°♌10'06	
	16512 Jun 25 16:32	0°♍	
	16512 Jul 21 19:57	0°♎	
evening max el	16512 Aug 17 01:03	27°♎56'22	46°36'39
	16512 Aug 19 02:56	0°♏	
greatest brilliancy	16512 Sep 25 12:53	28°♏07'27	-4.9m
	16512 Oct 02 18:48	0°♐	
retrograde	16512 Oct 06 04:15	0°♐13'30	
	16512 Oct 09 12:31	30°℞♏	
desc. node	16512 Oct 14 21:31	28°♏41'33	
evening set	16512 Oct 20 17:05	26°♏05'29	
inferior conj	16512 Oct 26 23:13	22°♏26'08	-3°05'41
minimum elong	16512 Oct 26 16:17	22°♏36'42	3°03'06
min. Earth dist.	16512 Oct 26 12:16	22°♏42'51	0.27086 AU
morning rise	16512 Nov 01 15:54	19°♏05'47	
direct	16512 Nov 16 18:42	14°♏42'28	
greatest brilliancy	16512 Nov 26 09:27	16°♏24'30	-4.8m
	16512 Dec 18 19:31	0°♐	
morning max el	16513 Jan 05 05:42	15°♐38'22	46°12'59
	16513 Jan 19 09:20	0°♑	
asc. node	16513 Feb 04 21:45	17°♑53'40	
	16513 Feb 15 16:06	0°♒	
	16513 Mar 13 12:24	0°♓	
	16513 Apr 07 16:15	0°♈	
	16513 May 02 10:59	0°♉	
	16513 May 26 23:36	0°♊	
desc. node	16513 May 27 19:52	1°♊02'16	
	16513 Jun 20 07:13	0°♋	
morning set	16513 Jul 05 08:36	18°♋41'16	
	16513 Jul 14 10:42	0°♌	
	16513 Aug 07 11:18	0°♍	
max. Earth dist.	16513 Aug 12 00:08	5°♍40'24	1.71708 AU
superior conj	16513 Aug 13 22:31	8°♍05'29	-1°12'32
minimum elong	16513 Aug 14 09:30	8°♍39'51	1°12'30
	16513 Aug 31 10:29	0°♎	
asc. node	16513 Sep 17 13:04	21°♎25'21	
evening rise	16513 Sep 22 22:34	28°♎10'37	
	16513 Sep 24 09:32	0°♏	
	16513 Oct 18 09:32	0°♐	
	16513 Nov 11 12:12	0°♑	
	16513 Dec 05 20:27	0°♒	
	16513 Dec 30 14:26	0°♓	
desc. node	16514 Jan 07 06:00	9°♓08'11	
	16514 Jan 24 23:38	0°♈	
	16514 Feb 20 09:15	0°♉	
	16514 Mar 20 21:32	0°♊	
evening max el	16514 Mar 22 17:15	1°♊46'43	46°01'04
	16514 Apr 29 01:13	0°♋	
asc. node	16514 Apr 30 02:42	0°♋25'17	
greatest brilliancy	16514 May 01 01:04	0°♋45'50	-4.8m
retrograde	16514 May 10 23:40	2°♋35'58	
	16514 May 22 08:50	30°℞♊	
evening set	16514 May 27 02:37	27°♊33'17	
inferior conj	16514 Jun 01 02:36	24°♊29'58	7°00'06
minimum elong	16514 May 31 16:09	24°♊46'25	6°57'27
min. Earth dist.	16514 Jun 01 00:53	24°♊32'41	0.28254 AU
morning rise	16514 Jun 05 05:31	21°♊56'50	
direct	16514 Jun 22 05:19	16°♊19'45	
greatest brilliancy	16514 Jul 02 08:51	18°♊14'33	-4.8m
	16514 Jul 21 21:57	0°♋	
morning max el	16514 Aug 11 08:41	18°♋31'52	46°44'35
desc. node	16514 Aug 20 03:07	27°♋32'22	
	16514 Aug 22 10:54	0°♌	
	16514 Sep 18 08:28	0°♍	
	16514 Oct 13 20:18	0°♎	
	16514 Nov 07 17:41	0°♏	
	16514 Dec 02 07:42	0°♐	
asc. node	16514 Dec 11 01:36	10°♐43'52	
	16514 Dec 26 17:18	0°♑	
	16515 Jan 20 00:15	0°♒	
morning set	16515 Feb 11 01:30	27°♒16'47	
	16515 Feb 13 06:16	0°♓	
	16515 Mar 09 12:48	0°♈	
superior conj	16515 Mar 20 05:06	13°♈11'05	0°30'10
minimum elong	16515 Mar 20 11:35	13°♈31'04	0°29'47
max. Earth dist.	16515 Mar 21 00:25	14°♈10'41	1.73087 AU
desc. node	16515 Apr 01 19:58	28°♈44'53	
	16515 Apr 02 20:20	0°♉	
evening rise	16515 Apr 27 06:22	0°♊06'04	
	16515 Apr 27 04:24	0°♊	
	16515 May 21 12:17	0°♋	
	16515 Jun 14 20:06	0°♌	
	16515 Jul 09 05:07	0°♍	
asc. node	16515 Jul 23 12:08	17°♍31'05	
	16515 Aug 02 17:43	0°♎	
	16515 Aug 27 13:49	0°♏	
	16515 Sep 22 01:13	0°♐	
	16515 Oct 19 00:06	0°♑	
evening max el	16515 Oct 29 00:17	10°♑18'35	46°34'28
desc. node	16515 Nov 12 08:19	23°♑45'17	
	16515 Nov 19 23:47	0°♒	
greatest brilliancy	16515 Dec 07 15:49	10°♒22'27	-4.8m
retrograde	16515 Dec 18 03:41	12°♒24'42	
evening set	16516 Jan 05 16:11	5°♒59'45	
inferior conj	16516 Jan 08 11:47	4°♒15'53	-8°59'53
minimum elong	16516 Jan 08 12:30	4°♒14'45	8°59'20
min. Earth dist.	16516 Jan 08 02:11	4°♒30'44	0.28360 AU
morning rise	16516 Jan 11 08:56	2°♒29'51	
	16516 Jan 15 19:13	30°℞♑	
direct	16516 Jan 29 14:46	26°♑15'33	
greatest brilliancy	16516 Feb 08 15:08	28°♑05'05	-4.8m
	16516 Feb 13 06:04	0°♒	
asc. node	16516 Mar 04 07:49	13°♒38'54	
morning max el	16516 Mar 18 17:09	26°♒43'54	45°45'01
	16516 Mar 22 00:59	0°♓	
	16516 Apr 19 06:19	0°♈	
	16516 May 15 10:51	0°♉	
	16516 Jun 09 17:31	0°♊	
desc. node	16516 Jun 24 07:35	17°♊37'12	
	16516 Jul 04 11:22	0°♋	
	16516 Jul 28 20:40	0°♌	
	16516 Aug 22 00:27	0°♍	
	16516 Sep 15 01:09	0°♎	
morning set	16516 Sep 17 11:33	3°♎02'32	
	16516 Oct 09 00:31	0°♏	
asc. node	16516 Oct 15 02:24	7°♏36'31	

superior conj	16516 Oct 26 23:46	22°♏29'45	0°28'44
minimum elong	16516 Oct 26 16:57	22°♏08'24	0°28'51
max. Earth dist.	16516 Oct 27 17:19	23°♏24'41	1.71703 AU
	16516 Nov 01 23:38	0°♐	
	16516 Nov 25 23:32	0°♑	
evening rise	16516 Dec 04 06:15	10°♑19'47	
	16516 Dec 20 01:48	0°♒	
	16517 Jan 13 08:35	0°♓	
desc. node	16517 Feb 03 18:55	26°♓12'14	
	16517 Feb 06 21:56	0°♈	
	16517 Mar 03 19:24	0°♉	
	16517 Mar 29 02:50	0°♊	
	16517 Apr 24 01:34	0°♋	
	16517 May 21 08:42	0°♌	
asc. node	16517 May 27 13:35	6°♌25'59	
evening max el	16517 Jun 02 15:15	12°♌31'01	46°15'07
	16517 Jun 22 02:54	0°♍	
greatest brilliancy	16517 Jul 12 18:26	12°♍15'18	-4.8m
retrograde	16517 Jul 22 06:05	13°♍56'02	
evening set	16517 Aug 08 07:28	8°♍18'49	
inferior conj	16517 Aug 11 22:23	6°♍06'34	7°45'22
minimum elong	16517 Aug 12 08:20	5°♍51'10	7°43'24
min. Earth dist.	16517 Aug 12 16:18	5°♍38'52	0.27438 AU
morning rise	16517 Aug 16 09:04	3°♍25'10	
	16517 Aug 23 07:43	30°℞♌	
direct	16517 Sep 01 20:50	28°♌08'14	
	16517 Sep 11 18:45	0°♍	
greatest brilliancy	16517 Sep 12 02:52	0°♍07'25	-4.9m
desc. node	16517 Sep 16 13:10	2°♍03'00	
	16517 Oct 21 12:10	0°♎	
morning max el	16517 Oct 22 07:45	0°♎48'47	46°52'11
	16517 Nov 18 16:28	0°♏	
	16517 Dec 14 21:02	0°♐	
asc. node	16518 Jan 07 12:55	27°♐58'53	
	16518 Jan 09 05:25	0°♑	
	16518 Feb 03 02:39	0°♒	
	16518 Feb 27 17:20	0°♓	
	16518 Mar 24 04:31	0°♈	
	16518 Apr 17 13:46	0°♉	
morning set	16518 Apr 21 09:24	4°♉42'16	
desc. node	16518 Apr 29 09:08	14°♉33'17	
	16518 May 11 21:18	0°♊	
max. Earth dist.	16518 May 27 18:14	19°♊38'26	1.72625 AU
superior conj	16518 May 30 03:15	22°♊35'06	-1°06'22
minimum elong	16518 May 29 16:21	22°♊01'17	1°06'37
	16518 Jun 05 02:45	0°♋	
	16518 Jun 29 06:05	0°♌	
evening rise	16518 Jul 08 01:42	10°♌58'44	
	16518 Jul 23 08:06	0°♍	
	16518 Aug 16 10:11	0°♎	
asc. node	16518 Aug 20 01:23	4°♎31'10	
	16518 Sep 09 13:57	0°♏	
	16518 Oct 03 21:35	0°♐	
	16518 Oct 28 13:01	0°♑	
	16518 Nov 22 20:04	0°♒	
desc. node	16518 Dec 09 19:35	19°♒23'17	
	16518 Dec 19 11:00	0°♓	
evening max el	16519 Jan 08 13:55	20°♓46'25	46°12'37
	16519 Jan 18 11:37	0°♈	
greatest brilliancy	16519 Feb 16 18:07	19°♈32'12	-4.8m
retrograde	16519 Feb 26 20:22	21°♈23'05	
evening set	16519 Mar 14 10:46	16°♈40'41	
inferior conj	16519 Mar 20 04:38	13°♈11'41	-3°03'25
minimum elong	16519 Mar 20 11:15	13°♈01'18	3°01'34
min. Earth dist.	16519 Mar 20 08:05	13°♈06'17	0.28481 AU
morning rise	16519 Mar 26 11:48	9°♈24'56	
asc. node	16519 Apr 01 18:03	6°♈34'24	
direct	16519 Apr 10 11:10	5°♈03'07	
greatest brilliancy	16519 Apr 21 02:17	7°♈07'48	-4.8m
	16519 May 23 10:25	0°♉	
morning max el	16519 May 29 18:37	6°♉03'54	46°02'10
	16519 Jun 21 16:10	0°♊	
	16519 Jul 18 01:54	0°♋	
desc. node	16519 Jul 22 18:42	5°♋30'35	
	16519 Aug 12 07:53	0°♌	
	16519 Sep 05 23:35	0°♍	
	16519 Sep 30 07:49	0°♎	
	16519 Oct 24 12:22	0°♏	
asc. node	16519 Nov 12 15:15	23°♏47'05	
	16519 Nov 17 15:01	0°♐	
morning set	16519 Nov 30 11:21	16°♐00'34	
	16519 Dec 11 16:46	0°♑	
	16520 Jan 04 18:47	0°♒	
superior conj	16520 Jan 07 07:13	3°♒07'56	1°27'14
minimum elong	16520 Jan 07 07:13	3°♒07'56	1°27'47
max. Earth dist.	16520 Jan 09 22:02	6°♒23'11	1.72464 AU
	16520 Jan 28 22:40	0°♓	
evening rise	16520 Feb 13 19:08	19°♓35'35	
	16520 Feb 22 05:48	0°♈	
desc. node	16520 Mar 03 08:24	12°♈25'32	
	16520 Mar 17 16:36	0°♉	
	16520 Apr 11 06:39	0°♊	
	16520 May 05 23:54	0°♋	
	16520 May 30 22:09	0°♌	
asc. node	16520 Jun 24 01:17	28°♌34'35	
	16520 Jun 25 06:31	0°♍	
	16520 Jul 21 12:39	0°♎	
evening max el	16520 Aug 14 13:38	25°♎30'39	46°36'10
	16520 Aug 19 03:20	0°♏	
greatest brilliancy	16520 Sep 23 03:44	25°♏44'35	-4.9m
retrograde	16520 Oct 03 16:58	27°♏49'04	
desc. node	16520 Oct 13 23:31	25°♏42'09	
evening set	16520 Oct 18 05:09	23°♏42'32	
min. Earth dist.	16520 Oct 24 02:47	20°♏16'42	0.27056 AU
inferior conj	16520 Oct 24 12:08	20°♏02'28	-2°42'53
minimum elong	16520 Oct 24 05:58	20°♏11'52	2°40'31
morning rise	16520 Oct 30 07:03	16°♏38'51	
direct	16520 Nov 14 06:41	12°♏18'43	
greatest brilliancy	16520 Nov 23 23:34	14°♏02'13	-4.8m
	16520 Dec 19 05:37	0°♐	
morning max el	16521 Jan 02 18:22	13°♐15'43	46°14'39
	16521 Jan 19 03:50	0°♑	
asc. node	16521 Feb 03 23:40	17°♑15'08	
	16521 Feb 15 06:36	0°♒	
	16521 Mar 13 01:11	0°♓	
	16521 Apr 07 04:09	0°♈	
	16521 May 01 22:25	0°♉	
	16521 May 26 10:46	0°♊	
desc. node	16521 May 26 21:38	0°♊33'22	
	16521 Jun 19 18:14	0°♋	
morning set	16521 Jul 02 20:58	16°♋16'22	
	16521 Jul 13 21:39	0°♌	
	16521 Aug 06 22:14	0°♍	
max. Earth dist.	16521 Aug 09 09:54	3°♍06'38	1.71729 AU
superior conj	16521 Aug 11 10:43	5°♍39'17	-1°14'38
minimum elong	16521 Aug 11 21:19	6°♍12'29	1°14'40
	16521 Aug 30 21:27	0°♎	
asc. node	16521 Sep 16 14:55	20°♎56'49	
evening rise	16521 Sep 20 11:01	25°♎44'58	
	16521 Sep 23 20:32	0°♏	
	16521 Oct 17 20:39	0°♐	

	16521 Nov 10 23:32	0°♌	
	16521 Dec 05 08:07	0°♒	
	16521 Dec 30 02:42	0°♓	
desc. node	16522 Jan 06 07:49	8°♓36'22	
	16522 Jan 24 13:01	0°♈	
	16522 Feb 20 00:57	0°♉	
evening max el	16522 Mar 20 07:51	29°♉31'17	46°01'04
	16522 Mar 20 19:43	0°♊	
greatest brilliancy	16522 Apr 28 14:48	28°♊28'50	-4.8m
asc. node	16522 Apr 29 04:30	28°♊40'42	
	16522 May 04 10:53	0°♋	
retrograde	16522 May 08 14:43	0°♋20'13	
	16522 May 12 16:32	30°℞♊	
evening set	16522 May 24 14:10	25°♊21'41	
inferior conj	16522 May 29 17:38	22°♊13'35	6°45'53
minimum elong	16522 May 29 07:04	22°♊30'11	6°43'06
min. Earth dist.	16522 May 29 15:26	22°♊17'03	0.28269 AU
morning rise	16522 Jun 02 23:48	19°♊35'52	
direct	16522 Jun 19 20:27	14°♊03'03	
greatest brilliancy	16522 Jun 30 00:29	15°♊58'36	-4.8m
	16522 Jul 22 08:56	0°♋	
morning max el	16522 Aug 09 00:05	16°♋14'57	46°43'28
desc. node	16522 Aug 19 05:07	26°♋46'32	
	16522 Aug 22 05:37	0°♌	
	16522 Sep 17 23:21	0°♍	
	16522 Oct 13 09:31	0°♎	
	16522 Nov 07 05:56	0°♏	
	16522 Dec 01 19:22	0°♐	
asc. node	16522 Dec 10 03:20	10°♐13'51	
	16522 Dec 26 04:33	0°♑	
	16523 Jan 19 11:15	0°♒	
morning set	16523 Feb 08 18:09	25°♒06'14	
	16523 Feb 12 17:07	0°♓	
	16523 Mar 08 23:33	0°♈	
superior conj	16523 Mar 17 21:08	10°♈59'17	0°33'23
minimum elong	16523 Mar 18 04:12	11°♈21'06	0°32'59
max. Earth dist.	16523 Mar 18 20:53	12°♈12'32	1.73082 AU
desc. node	16523 Mar 31 21:50	28°♈17'32	
	16523 Apr 02 07:05	0°♉	
evening rise	16523 Apr 24 22:07	27°♉53'21	
	16523 Apr 26 15:14	0°♊	
	16523 May 20 23:19	0°♋	
	16523 Jun 14 07:25	0°♌	
	16523 Jul 08 16:50	0°♍	
asc. node	16523 Jul 22 14:00	17°♍00'01	
	16523 Aug 02 06:02	0°♎	
	16523 Aug 27 03:07	0°♏	
	16523 Sep 21 16:20	0°♐	
	16523 Oct 18 19:35	0°♑	
evening max el	16523 Oct 26 15:26	8°♑01'03	46°35'10
desc. node	16523 Nov 11 10:08	22°♑42'22	
	16523 Nov 20 17:13	0°♒	
greatest brilliancy	16523 Dec 05 05:18	8°♒04'05	-4.8m
retrograde	16523 Dec 15 19:14	10°♒07'57	
evening set	16524 Jan 03 06:15	3°♒44'01	
min. Earth dist.	16524 Jan 05 15:28	2°♒16'18	0.28329 AU
inferior conj	16524 Jan 06 02:24	1°♒59'23	-9°00'30
minimum elong	16524 Jan 06 02:15	1°♒59'38	8°59'56
morning rise	16524 Jan 08 22:22	0°♒15'20	
	16524 Jan 09 08:36	30°℞♑	
direct	16524 Jan 27 05:37	23°♑59'41	
greatest brilliancy	16524 Feb 06 03:56	25°♑47'53	-4.8m
	16524 Feb 15 03:06	0°♒	
asc. node	16524 Mar 03 09:50	12°♒38'07	
morning max el	16524 Mar 16 08:43	24°♒30'44	45°45'18
	16524 Mar 21 21:49	0°♓	

	16524 Apr 18 21:31	0°♈	
	16524 May 14 23:56	0°♉	
	16524 Jun 09 05:35	0°♊	
desc. node	16524 Jun 23 09:28	17°♊07'20	
	16524 Jul 03 22:53	0°♋	
	16524 Jul 28 07:54	0°♌	
	16524 Aug 21 11:31	0°♍	
	16524 Sep 14 12:06	0°♎	
morning set	16524 Sep 15 00:11	0°♎37'46	
	16524 Oct 08 11:24	0°♏	
asc. node	16524 Oct 14 04:11	7°♏08'08	
superior conj	16524 Oct 24 12:51	20°♏06'29	0°25'09
minimum elong	16524 Oct 24 06:46	19°♏47'27	0°25'17
max. Earth dist.	16524 Oct 25 06:59	21°♏03'17	1.71685 AU
	16524 Nov 01 10:28	0°♐	
	16524 Nov 25 10:21	0°♑	
evening rise	16524 Dec 01 21:03	8°♑02'37	
	16524 Dec 19 12:40	0°♒	
	16525 Jan 12 19:37	0°♓	
desc. node	16525 Feb 02 20:53	25°♓43'48	
	16525 Feb 06 09:18	0°♈	
	16525 Mar 03 07:20	0°♉	
	16525 Mar 28 15:45	0°♊	
	16525 Apr 23 16:18	0°♋	
	16525 May 21 03:45	0°♌	
asc. node	16525 May 26 15:28	5°♌38'10	
evening max el	16525 May 31 05:39	10°♌13'00	46°14'18
	16525 Jun 22 17:54	0°♍	
greatest brilliancy	16525 Jul 10 08:03	9°♍54'28	-4.8m
retrograde	16525 Jul 19 19:15	11°♍34'26	
evening set	16525 Aug 06 00:17	5°♍52'22	
inferior conj	16525 Aug 09 11:56	3°♍44'34	7°57'06
minimum elong	16525 Aug 09 21:26	3°♍29'50	7°55'18
min. Earth dist.	16525 Aug 10 05:37	3°♍17'08	0.27479 AU
morning rise	16525 Aug 13 18:25	1°♍08'46	
	16525 Aug 15 19:15	30°℞♌	
direct	16525 Aug 30 10:51	25°♌45'41	
greatest brilliancy	16525 Sep 09 16:17	27°♌44'03	-4.9m
	16525 Sep 14 18:48	0°♍	
desc. node	16525 Sep 15 15:09	0°♍26'40	
morning max el	16525 Oct 19 21:29	28°♍26'33	46°52'42
	16525 Oct 21 10:42	0°♎	
	16525 Nov 18 08:36	0°♏	
	16525 Dec 14 10:42	0°♐	
asc. node	16526 Jan 06 14:53	27°♐27'38	
	16526 Jan 08 17:47	0°♑	
	16526 Feb 02 14:13	0°♒	
	16526 Feb 27 04:25	0°♓	
	16526 Mar 23 15:19	0°♈	
	16526 Apr 17 00:26	0°♉	
morning set	16526 Apr 19 00:53	2°♉29'17	
desc. node	16526 Apr 28 10:52	14°♉05'49	
	16526 May 11 07:56	0°♊	
max. Earth dist.	16526 May 25 07:41	17°♊18'37	1.72653 AU
superior conj	16526 May 27 17:35	20°♊17'57	-1°03'57
minimum elong	16526 May 27 06:38	19°♊44'00	1°04'09
	16526 Jun 04 13:22	0°♋	
	16526 Jun 28 16:44	0°♌	
evening rise	16526 Jul 05 14:48	8°♌36'45	
	16526 Jul 22 18:52	0°♍	
	16526 Aug 15 21:09	0°♎	
asc. node	16526 Aug 19 03:18	4°♎02'54	
	16526 Sep 09 01:14	0°♏	
	16526 Oct 03 09:19	0°♐	
	16526 Oct 28 01:29	0°♑	

	16526 Nov 22 09:54	0°♒	
desc. node	16526 Dec 08 21:28	18°♒45'20	
	16526 Dec 19 03:56	0°♓	
evening max el	16527 Jan 06 04:19	18°♓31'05	46°13'22
	16527 Jan 18 15:38	0°♈	
greatest brilliancy	16527 Feb 14 10:29	17°♈21'07	-4.8m
retrograde	16527 Feb 24 11:16	19°♈10'59	
evening set	16527 Mar 12 04:31	14°♈25'36	
inferior conj	16527 Mar 17 20:16	10°♈59'44	-3°23'16
minimum elong	16527 Mar 18 03:29	10°♈48'23	3°21'15
min. Earth dist.	16527 Mar 18 00:18	10°♈53'24	0.28489 AU
morning rise	16527 Mar 24 02:26	7°♈14'01	
asc. node	16527 Mar 31 19:54	3°♈54'45	
direct	16527 Apr 08 02:20	2°♈51'14	
greatest brilliancy	16527 Apr 18 18:23	4°♈56'08	-4.8m
	16527 May 23 10:28	0°♉	
morning max el	16527 May 27 08:47	3°♉47'37	46°00'57
	16527 Jun 21 08:10	0°♊	
	16527 Jul 17 15:18	0°♋	
desc. node	16527 Jul 21 20:38	4°♋57'34	
	16527 Aug 11 20:03	0°♌	
	16527 Sep 05 11:05	0°♍	
	16527 Sep 29 18:56	0°♎	
	16527 Oct 23 23:13	0°♏	
asc. node	16527 Nov 11 16:59	23°♏19'11	
	16527 Nov 17 01:41	0°♐	
morning set	16527 Nov 28 01:38	13°♐42'30	
	16527 Dec 11 03:18	0°♑	
	16528 Jan 04 05:15	0°♒	
superior conj	16528 Jan 04 23:07	0°♒55'35	1°27'10
minimum elong	16528 Jan 04 22:17	0°♒52'58	1°27'43
max. Earth dist.	16528 Jan 07 10:43	4°♒00'54	1.72433 AU
	16528 Jan 28 09:08	0°♓	
evening rise	16528 Feb 11 10:40	17°♓23'04	
	16528 Feb 21 16:21	0°♈	
desc. node	16528 Mar 02 10:11	11°♈58'32	
	16528 Mar 17 03:19	0°♉	
	16528 Apr 10 17:40	0°♊	
	16528 May 05 11:26	0°♋	
	16528 May 30 10:29	0°♌	
asc. node	16528 Jun 23 03:13	28°♌00'25	
	16528 Jun 24 20:15	0°♍	
	16528 Jul 21 05:14	0°♎	
evening max el	16528 Aug 12 02:19	23°♎06'45	46°35'48
	16528 Aug 19 04:23	0°♏	
greatest brilliancy	16528 Sep 20 18:09	23°♏22'54	-4.9m
retrograde	16528 Oct 01 06:07	25°♏26'43	
desc. node	16528 Oct 13 01:17	22°♏40'10	
evening set	16528 Oct 15 17:35	21°♏20'56	
min. Earth dist.	16528 Oct 21 17:16	17°♏52'37	0.27032 AU
inferior conj	16528 Oct 22 01:09	17°♏40'37	-2°19'46
minimum elong	16528 Oct 21 19:48	17°♏48'46	2°17'40
morning rise	16528 Oct 27 22:13	14°♏14'12	
direct	16528 Nov 11 18:57	9°♏56'35	
greatest brilliancy	16528 Nov 21 13:44	11°♏41'43	-4.8m
	16528 Dec 19 12:18	0°♐	
morning max el	16528 Dec 31 08:09	10°♐57'06	46°16'10
	16529 Jan 18 21:25	0°♑	
asc. node	16529 Feb 03 01:36	16°♑38'09	
	16529 Feb 14 20:34	0°♒	
	16529 Mar 12 13:32	0°♓	
	16529 Apr 06 15:38	0°♈	
	16529 May 01 09:24	0°♉	
desc. node	16529 May 25 23:27	0°♊06'09	
	16529 May 25 21:27	0°♊	
	16529 Jun 19 04:47	0°♋	
morning set	16529 Jun 30 09:27	13°♋53'16	
	16529 Jul 13 08:09	0°♌	
	16529 Aug 06 08:44	0°♍	
max. Earth dist.	16529 Aug 06 21:36	0°♍40'13	1.71751 AU
superior conj	16529 Aug 08 23:03	3°♍14'53	-1°16'37
minimum elong	16529 Aug 09 09:12	3°♍46'38	1°16'41
	16529 Aug 30 07:58	0°♎	
asc. node	16529 Sep 15 16:40	20°♎29'19	
evening rise	16529 Sep 17 23:42	23°♎21'30	
	16529 Sep 23 07:06	0°♏	
	16529 Oct 17 07:18	0°♐	
	16529 Nov 10 10:22	0°♑	
	16529 Dec 04 19:19	0°♒	
	16529 Dec 29 14:33	0°♓	
desc. node	16530 Jan 05 09:45	8°♓06'12	
	16530 Jan 24 02:02	0°♈	
	16530 Feb 19 16:27	0°♉	
evening max el	16530 Mar 17 23:34	27°♉19'55	46°01'10
	16530 Mar 20 18:19	0°♊	
greatest brilliancy	16530 Apr 26 04:28	26°♊13'27	-4.8m
asc. node	16530 Apr 28 06:23	26°♊53'52	
retrograde	16530 May 06 06:12	28°♊06'08	
evening set	16530 May 22 02:05	23°♊11'46	
inferior conj	16530 May 27 08:48	19°♊58'58	6°31'03
minimum elong	16530 May 26 22:12	20°♊15'35	6°28'10
min. Earth dist.	16530 May 27 05:53	20°♊03'32	0.28279 AU
morning rise	16530 May 31 18:13	17°♊16'42	
direct	16530 Jun 17 12:09	11°♊48'26	
greatest brilliancy	16530 Jun 27 15:39	13°♊43'58	-4.8m
	16530 Jul 22 16:14	0°♋	
morning max el	16530 Aug 06 16:00	14°♋01'09	46°42'12
desc. node	16530 Aug 18 07:01	26°♋02'42	
	16530 Aug 21 23:17	0°♌	
	16530 Sep 17 13:32	0°♍	
	16530 Oct 12 22:08	0°♎	
	16530 Nov 06 17:40	0°♏	
	16530 Dec 01 06:30	0°♐	
asc. node	16530 Dec 09 05:19	9°♐46'07	
	16530 Dec 25 15:18	0°♑	
	16531 Jan 18 21:45	0°♒	
morning set	16531 Feb 06 10:58	22°♒57'39	
	16531 Feb 12 03:28	0°♓	
	16531 Mar 08 09:52	0°♈	
superior conj	16531 Mar 15 13:11	8°♈48'48	0°36'32
minimum elong	16531 Mar 15 20:47	9°♈12'16	0°36'09
max. Earth dist.	16531 Mar 16 17:52	10°♈17'19	1.73078 AU
desc. node	16531 Mar 30 23:34	27°♈51'02	
	16531 Apr 01 17:25	0°♉	
evening rise	16531 Apr 22 13:43	25°♉41'24	
	16531 Apr 26 01:40	0°♊	
	16531 May 20 09:56	0°♋	
	16531 Jun 13 18:19	0°♌	
	16531 Jul 08 04:08	0°♍	
asc. node	16531 Jul 21 15:54	16°♍30'20	
	16531 Aug 01 17:58	0°♎	
	16531 Aug 26 16:05	0°♏	
	16531 Sep 21 07:15	0°♐	
	16531 Oct 18 15:13	0°♑	
evening max el	16531 Oct 24 07:15	5°♑46'15	46°35'44
desc. node	16531 Nov 10 12:06	21°♑39'22	
	16531 Nov 21 16:04	0°♒	
greatest brilliancy	16531 Dec 02 19:12	5°♒47'28	-4.8m
retrograde	16531 Dec 13 10:37	7°♒52'16	
evening set	16531 Dec 31 19:53	1°♒30'26	
min. Earth dist.	16532 Jan 03 04:50	0°♒03'05	0.28292 AU

	16532 Jan 03 06:49	30°℞♑	
inferior conj	16532 Jan 03 17:01	29°♑44'13	-9°00'13
minimum elong	16532 Jan 03 15:59	29°♑45'49	8°59'38
morning rise	16532 Jan 06 12:14	28°♑01'19	
direct	16532 Jan 24 20:35	21°♑45'25	
greatest brilliancy	16532 Feb 03 16:25	23°♑31'43	-4.8m
	16532 Feb 16 08:44	0°♒	
asc. node	16532 Mar 02 11:41	11°♒39'48	
morning max el	16532 Mar 13 23:39	22°♒17'20	45°45'30
	16532 Mar 21 17:25	0°♓	
	16532 Apr 18 12:05	0°♈	
	16532 May 14 12:34	0°♉	
	16532 Jun 08 17:17	0°♊	
desc. node	16532 Jun 22 11:26	16°♊38'45	
	16532 Jul 03 10:04	0°♋	
	16532 Jul 27 18:47	0°♌	
	16532 Aug 20 22:12	0°♍	
morning set	16532 Sep 12 12:50	28°♍14'10	
	16532 Sep 13 22:41	0°♎	
	16532 Oct 07 21:56	0°♏	
asc. node	16532 Oct 13 05:57	6°♏40'43	
superior conj	16532 Oct 22 01:56	17°♏44'16	0°21'31
minimum elong	16532 Oct 21 20:40	17°♏27'44	0°21'41
max. Earth dist.	16532 Oct 22 19:42	18°♏39'52	1.71670 AU
	16532 Oct 31 20:59	0°♐	
	16532 Nov 24 20:53	0°♑	
evening rise	16532 Nov 29 11:52	5°♑46'14	
	16532 Dec 18 23:16	0°♒	
	16533 Jan 12 06:22	0°♓	
desc. node	16533 Feb 01 22:41	25°♓15'46	
	16533 Feb 05 20:23	0°♈	
	16533 Mar 02 19:01	0°♉	
	16533 Mar 28 04:28	0°♊	
	16533 Apr 23 06:59	0°♋	
	16533 May 20 23:10	0°♌	
asc. node	16533 May 25 17:24	4°♌50'11	
evening max el	16533 May 28 19:18	7°♌53'33	46°13'24
	16533 Jun 23 13:57	0°♍	
greatest brilliancy	16533 Jul 07 22:06	7°♍34'27	-4.8m
retrograde	16533 Jul 17 07:54	9°♍13'21	
evening set	16533 Aug 03 17:01	3°♍26'28	
inferior conj	16533 Aug 07 01:31	1°♍23'09	8°07'55
minimum elong	16533 Aug 07 10:29	1°♍09'13	8°06'17
min. Earth dist.	16533 Aug 07 19:14	0°♍55'38	0.27519 AU
	16533 Aug 09 07:17	30°℞♌	
morning rise	16533 Aug 11 03:47	28°♌53'05	
direct	16533 Aug 28 00:21	23°♌23'36	
greatest brilliancy	16533 Sep 07 06:13	25°♌21'52	-4.9m
desc. node	16533 Sep 14 16:57	28°♌54'00	
	16533 Sep 16 13:32	0°♍	
morning max el	16533 Oct 17 10:24	26°♍02'44	46°53'12
	16533 Oct 21 08:08	0°♎	
	16533 Nov 18 00:17	0°♏	
	16533 Dec 14 00:05	0°♐	
asc. node	16534 Jan 05 16:43	26°♐56'28	
	16534 Jan 08 05:56	0°♑	
	16534 Feb 02 01:37	0°♒	
	16534 Feb 26 15:21	0°♓	
	16534 Mar 23 01:59	0°♈	
	16534 Apr 16 10:58	0°♉	
morning set	16534 Apr 16 16:31	0°♉17'06	
desc. node	16534 Apr 27 12:44	13°♉39'12	
	16534 May 10 18:26	0°♊	
max. Earth dist.	16534 May 22 22:02	15°♊01'55	1.72687 AU
superior conj	16534 May 25 07:56	18°♊01'11	-1°01'24
minimum elong	16534 May 24 21:00	17°♊27'19	1°01'35
	16534 Jun 03 23:55	0°♋	
	16534 Jun 28 03:23	0°♌	
evening rise	16534 Jul 03 03:49	6°♌14'37	
	16534 Jul 22 05:40	0°♍	
	16534 Aug 15 08:10	0°♎	
asc. node	16534 Aug 18 04:58	3°♎33'50	
	16534 Sep 08 12:33	0°♏	
	16534 Oct 02 21:04	0°♐	
	16534 Oct 27 14:01	0°♑	
	16534 Nov 21 23:53	0°♒	
desc. node	16534 Dec 07 23:25	18°♒07'06	
	16534 Dec 18 21:17	0°♓	
evening max el	16535 Jan 03 18:11	16°♓14'12	46°14'07
	16535 Jan 18 21:46	0°♈	
greatest brilliancy	16535 Feb 12 02:28	15°♈09'17	-4.8m
retrograde	16535 Feb 22 02:12	16°♈58'46	
evening set	16535 Mar 09 22:18	12°♈09'51	
inferior conj	16535 Mar 15 11:49	8°♈47'31	-3°42'49
minimum elong	16535 Mar 15 19:38	8°♈35'16	3°40'38
min. Earth dist.	16535 Mar 15 16:29	8°♈40'12	0.28497 AU
morning rise	16535 Mar 21 16:50	5°♈03'16	
asc. node	16535 Mar 30 21:46	1°♈19'36	
direct	16535 Apr 05 17:18	0°♈38'54	
greatest brilliancy	16535 Apr 16 10:45	2°♈44'42	-4.8m
	16535 May 23 09:27	0°♉	
morning max el	16535 May 24 23:17	1°♉32'04	45°59'50
	16535 Jun 20 23:57	0°♊	
	16535 Jul 17 04:40	0°♋	
desc. node	16535 Jul 20 22:29	4°♋24'16	
	16535 Aug 11 08:19	0°♌	
	16535 Sep 04 22:45	0°♍	
	16535 Sep 29 06:14	0°♎	
	16535 Oct 23 10:15	0°♏	
asc. node	16535 Nov 10 18:56	22°♏51'27	
	16535 Nov 16 12:31	0°♐	
morning set	16535 Nov 25 15:38	11°♐22'56	
	16535 Dec 10 13:59	0°♑	
superior conj	16536 Jan 02 14:50	28°♑42'05	1°26'57
minimum elong	16536 Jan 02 13:10	28°♑36'53	1°27'31
	16536 Jan 03 15:53	0°♒	
max. Earth dist.	16536 Jan 04 23:31	1°♒38'24	1.72404 AU
	16536 Jan 27 19:48	0°♓	
evening rise	16536 Feb 09 02:13	15°♓09'56	
	16536 Feb 21 03:07	0°♈	
desc. node	16536 Mar 01 11:56	11°♈30'41	
	16536 Mar 16 14:16	0°♉	
	16536 Apr 10 04:56	0°♊	
	16536 May 04 23:11	0°♋	
	16536 May 29 23:05	0°♌	
asc. node	16536 Jun 22 05:06	27°♌25'15	
	16536 Jun 24 10:20	0°♍	
	16536 Jul 20 22:28	0°♎	
evening max el	16536 Aug 09 15:30	20°♎43'11	46°35'15
	16536 Aug 19 07:22	0°♏	
greatest brilliancy	16536 Sep 18 07:48	20°♏58'35	-4.9m
retrograde	16536 Sep 28 19:25	23°♏02'18	
desc. node	16536 Oct 12 03:17	19°♏31'10	
evening set	16536 Oct 13 05:57	18°♏56'52	
inferior conj	16536 Oct 19 13:51	15°♏16'29	-1°56'06
minimum elong	16536 Oct 19 09:21	15°♏23'19	1°54'16
min. Earth dist.	16536 Oct 19 07:12	15°♏26'35	0.27010 AU
morning rise	16536 Oct 25 12:57	11°♏47'42	
direct	16536 Nov 09 07:34	7°♏32'15	
greatest brilliancy	16536 Nov 19 03:15	9°♏18'43	-4.8m
	16536 Dec 19 17:27	0°♐	

morning max el	16536 Dec 28 22:24	8°♐38'25	46°17'44
	16537 Jan 18 14:59	0°♑	
asc. node	16537 Feb 02 03:28	16°♑00'20	
	16537 Feb 14 10:43	0°♒	
	16537 Mar 12 02:08	0°♓	
	16537 Apr 06 03:25	0°♈	
	16537 Apr 30 20:41	0°♉	
desc. node	16537 May 25 01:23	29°♉38'15	
	16537 May 25 08:28	0°♊	
	16537 Jun 18 15:38	0°♋	
morning set	16537 Jun 27 22:16	11°♋30'22	
	16537 Jul 12 18:56	0°♌	
max. Earth dist.	16537 Aug 04 11:09	28°♌18'43	1.71775 AU
	16537 Aug 05 19:33	0°♍	
superior conj	16537 Aug 06 11:33	0°♍50'03	-1°18'26
minimum elong	16537 Aug 06 21:09	1°♍20'04	1°18'33
	16537 Aug 29 18:50	0°♎	
asc. node	16537 Sep 14 18:31	20°♎00'58	
evening rise	16537 Sep 15 12:17	20°♎56'35	
	16537 Sep 22 18:02	0°♏	
	16537 Oct 16 18:22	0°♐	
	16537 Nov 09 21:39	0°♑	
	16537 Dec 04 06:59	0°♒	
	16537 Dec 29 02:52	0°♓	
desc. node	16538 Jan 04 11:32	7°♓34'10	
	16538 Jan 23 15:37	0°♈	
	16538 Feb 19 08:43	0°♉	
evening max el	16538 Mar 15 15:41	25°♉08'10	46°01'13
	16538 Mar 20 18:35	0°♊	
greatest brilliancy	16538 Apr 23 18:23	23°♊56'58	-4.8m
asc. node	16538 Apr 27 08:26	25°♊01'32	
retrograde	16538 May 03 21:30	25°♊50'21	
evening set	16538 May 19 14:06	21°♊00'17	
inferior conj	16538 May 24 23:51	17°♊42'51	6°15'31
minimum elong	16538 May 24 13:18	17°♊59'26	6°12'35
min. Earth dist.	16538 May 24 20:18	17°♊48'25	0.28284 AU
morning rise	16538 May 29 12:26	14°♊56'00	
direct	16538 Jun 15 03:54	9°♊32'34	
greatest brilliancy	16538 Jun 25 06:24	11°♊27'29	-4.8m
	16538 Jul 22 21:48	0°♋	
morning max el	16538 Aug 04 07:15	11°♋44'42	46°40'59
desc. node	16538 Aug 17 08:51	25°♋18'16	
	16538 Aug 21 16:55	0°♌	
	16538 Sep 17 03:55	0°♍	
	16538 Oct 12 11:02	0°♎	
	16538 Nov 06 05:45	0°♏	
	16538 Nov 30 18:04	0°♐	
asc. node	16538 Dec 08 07:08	9°♐16'33	
	16538 Dec 25 02:31	0°♑	
	16539 Jan 18 08:43	0°♒	
morning set	16539 Feb 04 03:26	20°♒46'37	
	16539 Feb 11 14:16	0°♓	
	16539 Mar 07 20:36	0°♈	
superior conj	16539 Mar 13 05:00	6°♈36'20	0°39'39
minimum elong	16539 Mar 13 13:05	7°♈01'17	0°39'16
max. Earth dist.	16539 Mar 14 14:12	8°♈18'48	1.73070 AU
desc. node	16539 Mar 30 01:24	27°♈23'31	
	16539 Apr 01 04:11	0°♉	
evening rise	16539 Apr 20 05:10	23°♉27'35	
	16539 Apr 25 12:34	0°♊	
	16539 May 19 21:03	0°♋	
	16539 Jun 13 05:42	0°♌	
	16539 Jul 07 15:54	0°♍	
asc. node	16539 Jul 20 17:39	15°♍58'51	
	16539 Aug 01 06:20	0°♎	
	16539 Aug 26 05:30	0°♏	
	16539 Sep 20 22:44	0°♐	
	16539 Oct 18 11:55	0°♑	
evening max el	16539 Oct 21 22:29	3°♑28'47	46°36'04
desc. node	16539 Nov 09 14:01	20°♑33'26	
	16539 Nov 23 01:03	0°♒	
greatest brilliancy	16539 Nov 30 09:37	3°♒29'54	-4.8m
retrograde	16539 Dec 11 01:26	5°♒34'47	
	16539 Dec 28 03:30	30°℞♑	
evening set	16539 Dec 29 08:56	29°♑16'05	
inferior conj	16540 Jan 01 07:35	27°♑27'28	-8°58'59
minimum elong	16540 Jan 01 05:39	27°♑30'27	8°58'23
min. Earth dist.	16539 Dec 31 18:28	27°♑47'46	0.28256 AU
morning rise	16540 Jan 04 02:32	25°♑44'53	
direct	16540 Jan 22 11:14	19°♑29'32	
greatest brilliancy	16540 Feb 01 05:19	21°♑14'11	-4.8m
	16540 Feb 17 06:54	0°♒	
asc. node	16540 Mar 01 13:35	10°♒41'23	
morning max el	16540 Mar 11 13:37	20°♒00'00	45°45'46
	16540 Mar 21 12:59	0°♓	
	16540 Apr 18 02:56	0°♈	
	16540 May 14 01:32	0°♉	
	16540 Jun 08 05:20	0°♊	
desc. node	16540 Jun 21 13:09	16°♊08'16	
	16540 Jul 02 21:38	0°♋	
	16540 Jul 27 06:03	0°♌	
	16540 Aug 20 09:16	0°♍	
morning set	16540 Sep 10 01:44	25°♍50'16	
	16540 Sep 13 09:37	0°♎	
	16540 Oct 07 08:46	0°♏	
asc. node	16540 Oct 12 07:51	6°♏12'49	
superior conj	16540 Oct 19 15:24	15°♏22'18	0°17'54
minimum elong	16540 Oct 19 10:57	15°♏08'23	0°18'04
max. Earth dist.	16540 Oct 20 07:25	16°♏12'28	1.71652 AU
	16540 Oct 31 07:48	0°♐	
	16540 Nov 24 07:43	0°♑	
evening rise	16540 Nov 27 02:56	3°♑29'43	
	16540 Dec 18 10:10	0°♒	
	16541 Jan 11 17:28	0°♓	
desc. node	16541 Feb 01 00:25	24°♓46'22	
	16541 Feb 05 07:52	0°♈	
	16541 Mar 02 07:08	0°♉	
	16541 Mar 27 17:40	0°♊	
	16541 Apr 22 22:16	0°♋	
	16541 May 20 19:39	0°♌	
asc. node	16541 May 24 19:17	4°♌00'07	
evening max el	16541 May 26 07:56	5°♌30'35	46°12'32
	16541 Jun 24 18:14	0°♍	
greatest brilliancy	16541 Jul 05 12:10	5°♍13'27	-4.8m
retrograde	16541 Jul 14 20:34	6°♍51'38	
evening set	16541 Aug 01 09:34	0°♍59'49	
	16541 Aug 03 00:59	30°℞♌	
inferior conj	16541 Aug 04 15:08	29°♌00'54	8°17'45
minimum elong	16541 Aug 04 23:30	28°♌47'53	8°16'18
min. Earth dist.	16541 Aug 05 08:59	28°♌33'10	0.27559 AU
morning rise	16541 Aug 08 13:15	26°♌36'45	
direct	16541 Aug 25 13:38	21°♌00'25	
greatest brilliancy	16541 Sep 04 20:38	22°♌59'23	-4.9m
desc. node	16541 Sep 13 18:56	27°♌23'53	
	16541 Sep 17 19:25	0°♍	
morning max el	16541 Oct 14 23:34	23°♍38'40	46°53'57
	16541 Oct 21 05:06	0°♎	
	16541 Nov 17 15:55	0°♏	
	16541 Dec 13 13:31	0°♐	
asc. node	16542 Jan 04 18:32	26°♐24'54	
	16542 Jan 07 18:11	0°♑	

	16542 Feb 01 13:10	0°♒	
	16542 Feb 26 02:30	0°♓	
	16542 Mar 22 12:53	0°♈	
morning set	16542 Apr 14 08:08	28°♈04'02	
	16542 Apr 15 21:46	0°♉	
desc. node	16542 Apr 26 14:36	13°♉11'49	
	16542 May 10 05:11	0°♊	
max. Earth dist.	16542 May 20 14:03	12°♊49'41	1.72720 AU
superior conj	16542 May 22 22:12	15°♊43'29	-0°58'45
minimum elong	16542 May 22 11:22	15°♊09'56	0°58'55
	16542 Jun 03 10:41	0°♋	
	16542 Jun 27 14:15	0°♌	
evening rise	16542 Jun 30 16:55	3°♌52'12	
	16542 Jul 21 16:41	0°♍	
	16542 Aug 14 19:25	0°♎	
asc. node	16542 Aug 17 06:53	3°♎04'43	
	16542 Sep 08 00:05	0°♏	
	16542 Oct 02 09:03	0°♐	
	16542 Oct 27 02:44	0°♑	
	16542 Nov 21 14:06	0°♒	
desc. node	16542 Dec 07 01:14	17°♒28'07	
	16542 Dec 18 15:04	0°♓	
evening max el	16543 Jan 01 08:14	13°♓57'53	46°14'56
	16543 Jan 19 06:17	0°♈	
greatest brilliancy	16543 Feb 09 17:49	12°♈56'59	-4.8m
retrograde	16543 Feb 19 17:41	14°♈47'00	
evening set	16543 Mar 07 16:19	9°♈54'09	
inferior conj	16543 Mar 13 03:31	6°♈35'26	-4°01'50
minimum elong	16543 Mar 13 11:52	6°♈22'23	3°59'33
min. Earth dist.	16543 Mar 13 08:28	6°♈27'42	0.28510 AU
morning rise	16543 Mar 19 07:16	2°♈53'11	
	16543 Mar 25 13:51	30°♓℞	
asc. node	16543 Mar 29 23:48	28°♓49'40	
direct	16543 Apr 03 08:43	28°♓26'38	
	16543 Apr 12 12:59	0°♈	
greatest brilliancy	16543 Apr 14 03:13	0°♈33'29	-4.8m
morning max el	16543 May 22 14:51	29°♈18'54	45°58'40
	16543 May 23 07:36	0°♉	
	16543 Jun 20 15:35	0°♊	
	16543 Jul 16 18:01	0°♋	
desc. node	16543 Jul 20 00:21	3°♋50'54	
	16543 Aug 10 20:35	0°♌	
	16543 Sep 04 10:26	0°♍	
	16543 Sep 28 17:34	0°♎	
	16543 Oct 22 21:19	0°♏	
asc. node	16543 Nov 09 20:43	22°♏23'05	
	16543 Nov 15 23:22	0°♐	
morning set	16543 Nov 23 05:44	9°♐03'34	
	16543 Dec 10 00:41	0°♑	
superior conj	16543 Dec 31 06:46	26°♑29'16	1°26'36
minimum elong	16543 Dec 31 04:17	26°♑21'34	1°27'10
max. Earth dist.	16544 Jan 02 14:18	29°♑22'05	1.72372 AU
	16544 Jan 03 02:29	0°♒	
	16544 Jan 27 06:24	0°♓	
evening rise	16544 Feb 06 18:08	12°♓58'13	
	16544 Feb 20 13:48	0°♈	
desc. node	16544 Feb 29 13:52	11°♈03'36	
	16544 Mar 16 01:10	0°♉	
	16544 Apr 09 16:10	0°♊	
	16544 May 04 10:59	0°♋	
	16544 May 29 11:46	0°♌	
asc. node	16544 Jun 21 06:54	26°♌49'35	
	16544 Jun 24 00:36	0°♍	
	16544 Jul 20 16:04	0°♎	
evening max el	16544 Aug 07 05:31	18°♎21'58	46°34'46
	16544 Aug 19 12:03	0°♏	
greatest brilliancy	16544 Sep 15 21:03	18°♏34'08	-4.9m
retrograde	16544 Sep 26 09:02	20°♏37'58	
evening set	16544 Oct 10 18:36	16°♏32'47	
desc. node	16544 Oct 11 05:14	16°♏18'35	
inferior conj	16544 Oct 17 02:30	12°♏52'21	-1°32'13
minimum elong	16544 Oct 16 22:55	12°♏57'48	1°30'41
min. Earth dist.	16544 Oct 16 20:49	13°♏00'59	0.26990 AU
morning rise	16544 Oct 23 03:28	9°♏21'28	
direct	16544 Nov 06 20:40	5°♏08'07	
greatest brilliancy	16544 Nov 16 16:13	6°♏55'08	-4.8m
	16544 Dec 19 20:39	0°♐	
morning max el	16544 Dec 26 13:00	6°♐20'53	46°19'22
	16545 Jan 18 08:00	0°♑	
asc. node	16545 Feb 01 05:22	15°♑23'28	
	16545 Feb 14 00:31	0°♒	
	16545 Mar 11 14:26	0°♓	
	16545 Apr 05 14:54	0°♈	
	16545 Apr 30 07:44	0°♉	
desc. node	16545 May 24 03:07	29°♉10'20	
	16545 May 24 19:17	0°♊	
	16545 Jun 18 02:21	0°♋	
morning set	16545 Jun 25 11:02	9°♋07'51	
	16545 Jul 12 05:37	0°♌	
max. Earth dist.	16545 Aug 01 23:09	25°♌52'48	1.71797 AU
superior conj	16545 Aug 03 23:52	28°♌25'04	-1°20'06
minimum elong	16545 Aug 04 08:50	28°♌53'08	1°20'17
	16545 Aug 05 06:13	0°♍	
	16545 Aug 29 05:32	0°♎	
evening rise	16545 Sep 13 00:35	18°♎31'16	
asc. node	16545 Sep 13 20:22	19°♎33'10	
	16545 Sep 22 04:48	0°♏	
	16545 Oct 16 05:16	0°♐	
	16545 Nov 09 08:48	0°♑	
	16545 Dec 03 18:31	0°♒	
	16545 Dec 28 15:04	0°♓	
desc. node	16546 Jan 03 13:23	7°♓02'49	
	16546 Jan 23 05:03	0°♈	
	16546 Feb 19 00:54	0°♉	
evening max el	16546 Mar 13 07:46	22°♉57'34	46°01'17
	16546 Mar 20 19:33	0°♊	
greatest brilliancy	16546 Apr 21 08:54	21°♊42'47	-4.8m
asc. node	16546 Apr 26 10:13	23°♊06'24	
retrograde	16546 May 01 12:33	23°♊36'12	
evening set	16546 May 17 02:33	18°♊50'23	
inferior conj	16546 May 22 15:07	15°♊28'32	5°59'37
minimum elong	16546 May 22 04:40	15°♊44'59	5°56'36
min. Earth dist.	16546 May 22 11:10	15°♊34'46	0.28292 AU
morning rise	16546 May 27 06:47	12°♊37'00	
direct	16546 Jun 12 19:44	7°♊18'30	
greatest brilliancy	16546 Jun 22 21:37	9°♊12'45	-4.8m
	16546 Jul 23 01:07	0°♋	
morning max el	16546 Aug 01 21:45	9°♋27'05	46°39'32
desc. node	16546 Aug 16 10:51	24°♋35'29	
	16546 Aug 21 09:57	0°♌	
	16546 Sep 16 17:56	0°♍	
	16546 Oct 11 23:39	0°♎	
	16546 Nov 05 17:31	0°♏	
	16546 Nov 30 05:18	0°♐	
asc. node	16546 Dec 07 08:54	8°♐47'45	
	16546 Dec 24 13:24	0°♑	
	16547 Jan 17 19:22	0°♒	
morning set	16547 Feb 01 19:58	18°♒36'37	
	16547 Feb 11 00:46	0°♓	
	16547 Mar 07 07:01	0°♈	

superior conj	16547 Mar 10 21:12	4°♈26'01	0°42'40
minimum elong	16547 Mar 11 05:43	4°♈52'20	0°42'18
max. Earth dist.	16547 Mar 12 08:48	6°♈15'54	1.73055 AU
desc. node	16547 Mar 29 03:16	26°♈57'09	
	16547 Mar 31 14:37	0°♉	
evening rise	16547 Apr 17 20:59	21°♉16'08	
	16547 Apr 24 23:06	0°♊	
	16547 May 19 07:46	0°♋	
	16547 Jun 12 16:42	0°♌	
	16547 Jul 07 03:21	0°♍	
asc. node	16547 Jul 19 19:33	15°♍28'41	
	16547 Jul 31 18:28	0°♎	
	16547 Aug 25 18:47	0°♏	
	16547 Sep 20 14:12	0°♐	
	16547 Oct 18 09:06	0°♑	
evening max el	16547 Oct 19 12:39	1°♑09'13	46°36'27
desc. node	16547 Nov 08 15:51	19°♑26'19	
	16547 Nov 25 02:06	0°♒	
greatest brilliancy	16547 Nov 28 00:27	1°♒13'19	-4.8m
retrograde	16547 Dec 08 15:41	3°♒17'53	
	16547 Dec 21 13:58	30°℞♑	
evening set	16547 Dec 26 21:29	27°♑03'00	
inferior conj	16547 Dec 29 22:04	25°♑11'24	-8°57'00
minimum elong	16547 Dec 29 19:14	25°♑15'48	8°56'19
min. Earth dist.	16547 Dec 29 08:22	25°♑32'38	0.28217 AU
morning rise	16548 Jan 01 17:08	23°♑28'31	
direct	16548 Jan 20 01:18	17°♑14'13	
greatest brilliancy	16548 Jan 29 18:45	18°♑57'54	-4.8m
	16548 Feb 17 22:50	0°♒	
asc. node	16548 Feb 29 15:36	9°♒45'31	
morning max el	16548 Mar 09 02:47	17°♒41'35	45°46'14
	16548 Mar 21 07:35	0°♓	
	16548 Apr 17 17:11	0°♈	
	16548 May 13 14:00	0°♉	
	16548 Jun 07 16:54	0°♊	
desc. node	16548 Jun 20 15:04	15°♊39'50	
	16548 Jul 02 08:43	0°♋	
	16548 Jul 26 16:52	0°♌	
	16548 Aug 19 19:56	0°♍	
morning set	16548 Sep 07 14:20	23°♍26'22	
	16548 Sep 12 20:13	0°♎	
	16548 Oct 06 19:20	0°♏	
asc. node	16548 Oct 11 09:39	5°♏45'24	
superior conj	16548 Oct 17 04:21	12°♏59'38	0°14'11
minimum elong	16548 Oct 17 00:47	12°♏48'27	0°14'22
behind sun begin	16548 Oct 16 13:13	12°♏12'16	
behind sun end	16548 Oct 17 12:20	13°♏24'38	
max. Earth dist.	16548 Oct 17 15:24	13°♏34'14	1.71638 AU
	16548 Oct 30 18:20	0°♐	
	16548 Nov 23 18:15	0°♑	
evening rise	16548 Nov 24 17:27	1°♑12'23	
	16548 Dec 17 20:47	0°♒	
	16549 Jan 11 04:18	0°♓	
desc. node	16549 Jan 31 02:23	24°♓18'31	
	16549 Feb 04 19:05	0°♈	
	16549 Mar 01 18:59	0°♉	
	16549 Mar 27 06:37	0°♊	
	16549 Apr 22 13:21	0°♋	
	16549 May 20 16:15	0°♌	
asc. node	16549 May 23 21:10	3°♌10'44	
evening max el	16549 May 23 20:27	3°♌08'58	46°11'55
	16549 Jun 26 09:35	0°♍	
greatest brilliancy	16549 Jul 03 01:51	2°♍54'03	-4.8m
retrograde	16549 Jul 12 09:52	4°♍32'20	
	16549 Jul 27 15:39	30°℞♌	
evening set	16549 Jul 30 02:07	28°♌35'33	

inferior conj	16549 Aug 02 04:59	26°♌40'45	8°26'35
minimum elong	16549 Aug 02 12:41	26°♌28'46	8°25'17
min. Earth dist.	16549 Aug 02 22:39	26°♌13'18	0.27603 AU
morning rise	16549 Aug 05 23:04	24°♌22'36	
direct	16549 Aug 23 03:16	18°♌39'17	
greatest brilliancy	16549 Sep 02 11:07	20°♌39'01	-4.9m
desc. node	16549 Sep 12 20:53	25°♌58'32	
	16549 Sep 18 16:15	0°♍	
morning max el	16549 Oct 12 13:36	21°♍17'57	46°54'23
	16549 Oct 21 00:58	0°♎	
	16549 Nov 17 07:01	0°♏	
	16549 Dec 13 02:35	0°♐	
asc. node	16550 Jan 03 20:32	25°♐54'46	
	16550 Jan 07 06:07	0°♑	
	16550 Feb 01 00:24	0°♒	
	16550 Feb 25 13:19	0°♓	
	16550 Mar 21 23:29	0°♈	
morning set	16550 Apr 11 23:44	25°♈51'55	
	16550 Apr 15 08:14	0°♉	
desc. node	16550 Apr 25 16:19	12°♉44'56	
	16550 May 09 15:37	0°♊	
max. Earth dist.	16550 May 18 07:43	10°♊43'32	1.72748 AU
superior conj	16550 May 20 12:35	13°♊27'06	-0°56'01
minimum elong	16550 May 20 01:54	12°♊54'03	0°56'09
	16550 Jun 02 21:08	0°♋	
	16550 Jun 27 00:45	0°♌	
evening rise	16550 Jun 28 06:23	1°♌32'09	
	16550 Jul 21 03:20	0°♍	
	16550 Aug 14 06:16	0°♎	
asc. node	16550 Aug 16 08:45	2°♎36'46	
	16550 Sep 07 11:16	0°♏	
	16550 Oct 01 20:44	0°♐	
	16550 Oct 26 15:16	0°♑	
	16550 Nov 21 04:16	0°♒	
desc. node	16550 Dec 06 03:07	16°♒49'25	
	16550 Dec 18 09:09	0°♓	
evening max el	16550 Dec 29 22:50	11°♓43'14	46°15'48
	16551 Jan 19 17:49	0°♈	
greatest brilliancy	16551 Feb 07 08:32	10°♈44'01	-4.8m
retrograde	16551 Feb 17 09:29	12°♈34'58	
evening set	16551 Mar 05 10:11	7°♈38'03	
inferior conj	16551 Mar 10 18:56	4°♈23'01	-4°20'41
minimum elong	16551 Mar 11 03:45	4°♈09'14	4°18'17
min. Earth dist.	16551 Mar 10 23:48	4°♈15'25	0.28521 AU
morning rise	16551 Mar 16 21:13	0°♈43'14	
	16551 Mar 18 05:27	30°℞♓	
asc. node	16551 Mar 29 01:38	26°♓24'37	
direct	16551 Apr 01 00:15	26°♓14'11	
greatest brilliancy	16551 Apr 11 18:50	28°♓21'30	-4.8m
	16551 Apr 15 14:43	0°♈	
morning max el	16551 May 20 06:53	27°♈07'33	45°57'36
	16551 May 23 04:41	0°♉	
	16551 Jun 20 06:43	0°♊	
	16551 Jul 16 07:00	0°♋	
desc. node	16551 Jul 19 02:17	3°♋18'45	
	16551 Aug 10 08:31	0°♌	
	16551 Sep 03 21:47	0°♍	
	16551 Sep 28 04:33	0°♎	
	16551 Oct 22 08:04	0°♏	
asc. node	16551 Nov 08 22:29	21°♏55'33	
	16551 Nov 15 09:56	0°♐	
morning set	16551 Nov 20 19:52	6°♐45'03	
	16551 Dec 09 11:09	0°♑	
superior conj	16551 Dec 28 22:24	24°♑16'01	1°26'07
minimum elong	16551 Dec 28 19:07	24°♑05'46	1°26'40

max. Earth dist.	16551 Dec 31 05:57	27°♑08'57	1.72346 AU
	16552 Jan 02 12:55	0°♒	
	16552 Jan 26 16:53	0°♓	
evening rise	16552 Feb 04 09:39	10°♓45'32	
	16552 Feb 20 00:23	0°♈	
desc. node	16552 Feb 28 15:38	10°♈36'21	
	16552 Mar 15 11:57	0°♉	
	16552 Apr 09 03:19	0°♊	
	16552 May 03 22:42	0°♋	
	16552 May 29 00:24	0°♌	
asc. node	16552 Jun 20 08:50	26°♌14'32	
	16552 Jun 23 14:52	0°♍	
	16552 Jul 20 09:52	0°♎	
evening max el	16552 Aug 04 20:18	16°♎03'23	46°34'22
	16552 Aug 19 18:25	0°♏	
greatest brilliancy	16552 Sep 13 10:49	16°♏11'37	-4.9m
retrograde	16552 Sep 23 22:52	18°♏14'56	
evening set	16552 Oct 08 07:49	14°♏10'03	
desc. node	16552 Oct 10 07:02	13°♏04'57	
inferior conj	16552 Oct 14 15:24	10°♏29'41	-1°08'17
minimum elong	16552 Oct 14 12:44	10°♏33'44	1°07'04
min. Earth dist.	16552 Oct 14 10:35	10°♏37'00	0.26969 AU
morning rise	16552 Oct 20 17:59	6°♏56'47	
direct	16552 Nov 04 10:07	2°♏45'40	
greatest brilliancy	16552 Nov 14 05:01	4°♏32'31	-4.8m
	16552 Dec 19 22:00	0°♐	
morning max el	16552 Dec 24 03:09	4°♐02'57	46°20'40
	16553 Jan 18 00:31	0°♑	
asc. node	16553 Jan 31 07:18	14°♑47'20	
	16553 Feb 13 14:08	0°♒	
	16553 Mar 11 02:40	0°♓	
	16553 Apr 05 02:23	0°♈	
	16553 Apr 29 18:47	0°♉	
desc. node	16553 May 23 04:59	28°♉42'52	
	16553 May 24 06:04	0°♊	
	16553 Jun 17 13:02	0°♋	
morning set	16553 Jun 22 23:41	6°♋45'04	
	16553 Jul 11 16:16	0°♌	
max. Earth dist.	16553 Jul 30 08:48	23°♌19'40	1.71818 AU
superior conj	16553 Aug 01 12:14	26°♌00'21	-1°21'38
minimum elong	16553 Aug 01 20:30	26°♌26'14	1°21'51
	16553 Aug 04 16:53	0°♍	
	16553 Aug 28 16:13	0°♎	
evening rise	16553 Sep 10 12:55	16°♎06'04	
asc. node	16553 Sep 12 22:06	19°♎05'01	
	16553 Sep 21 15:32	0°♏	
	16553 Oct 15 16:08	0°♐	
	16553 Nov 08 19:53	0°♑	
	16553 Dec 03 06:00	0°♒	
	16553 Dec 28 03:15	0°♓	
desc. node	16554 Jan 02 15:20	6°♓31'43	
	16554 Jan 22 18:38	0°♈	
	16554 Feb 18 17:33	0°♉	
evening max el	16554 Mar 10 23:07	20°♉44'32	46°01'12
	16554 Mar 20 22:15	0°♊	
greatest brilliancy	16554 Apr 19 00:02	19°♊28'24	-4.8m
asc. node	16554 Apr 25 12:08	21°♊05'59	
retrograde	16554 Apr 29 03:02	21°♊21'09	
evening set	16554 May 14 15:01	16°♊39'22	
inferior conj	16554 May 20 06:18	13°♊13'29	5°43'03
minimum elong	16554 May 19 20:01	13°♊29'42	5°40'00
min. Earth dist.	16554 May 20 02:21	13°♊19'43	0.28297 AU
morning rise	16554 May 25 00:57	10°♊17'17	
direct	16554 Jun 10 10:57	5°♊03'37	
greatest brilliancy	16554 Jun 20 13:12	6°♊57'44	-4.8m
	16554 Jul 23 03:05	0°♋	
morning max el	16554 Jul 30 11:13	7°♋06'27	46°38'10
desc. node	16554 Aug 15 12:45	23°♋52'41	
	16554 Aug 21 02:46	0°♌	
	16554 Sep 16 07:55	0°♍	
	16554 Oct 11 12:16	0°♎	
	16554 Nov 05 05:21	0°♏	
	16554 Nov 29 16:37	0°♐	
asc. node	16554 Dec 06 10:53	8°♐19'25	
	16554 Dec 24 00:21	0°♑	
	16555 Jan 17 06:05	0°♒	
morning set	16555 Jan 30 12:41	16°♒26'53	
	16555 Feb 10 11:21	0°♓	
	16555 Mar 06 17:34	0°♈	
superior conj	16555 Mar 08 13:30	2°♈15'35	0°45'37
minimum elong	16555 Mar 08 22:25	2°♈43'05	0°45'15
max. Earth dist.	16555 Mar 10 01:45	4°♈07'28	1.73047 AU
desc. node	16555 Mar 28 05:01	26°♈29'45	
	16555 Mar 31 01:15	0°♉	
evening rise	16555 Apr 15 12:38	19°♉03'30	
	16555 Apr 24 09:53	0°♊	
	16555 May 18 18:45	0°♋	
	16555 Jun 12 03:59	0°♌	
	16555 Jul 06 15:05	0°♍	
asc. node	16555 Jul 18 21:26	14°♍57'40	
	16555 Jul 31 06:55	0°♎	
	16555 Aug 25 08:27	0°♏	
	16555 Sep 20 06:12	0°♐	
evening max el	16555 Oct 17 02:09	28°♐47'07	46°36'55
	16555 Oct 18 07:23	0°♑	
desc. node	16555 Nov 07 17:50	18°♑17'06	
greatest brilliancy	16555 Nov 25 15:28	28°♑56'19	-4.8m
	16555 Nov 28 22:17	0°♒	
retrograde	16555 Dec 06 06:01	1°♒00'51	
	16555 Dec 13 08:49	30°℞♑	
evening set	16555 Dec 24 09:43	24°♑50'10	
min. Earth dist.	16555 Dec 26 22:32	23°♑17'02	0.28175 AU
inferior conj	16555 Dec 27 12:40	22°♑55'09	-8°54'06
minimum elong	16555 Dec 27 08:58	23°♑00'53	8°53'20
morning rise	16555 Dec 30 08:20	21°♑11'21	
direct	16556 Jan 17 15:04	14°♑58'35	
greatest brilliancy	16556 Jan 27 08:38	16°♑41'57	-4.8m
	16556 Feb 18 10:45	0°♒	
asc. node	16556 Feb 28 17:26	8°♒50'08	
morning max el	16556 Mar 06 16:02	15°♒22'54	45°46'43
	16556 Mar 21 01:51	0°♓	
	16556 Apr 17 07:30	0°♈	
	16556 May 13 02:43	0°♉	
	16556 Jun 07 04:49	0°♊	
desc. node	16556 Jun 19 17:00	15°♊10'21	
	16556 Jul 01 20:11	0°♋	
	16556 Jul 26 04:03	0°♌	
	16556 Aug 19 06:57	0°♍	
morning set	16556 Sep 05 02:41	21°♍00'41	
	16556 Sep 12 07:08	0°♎	
	16556 Oct 06 06:13	0°♏	
asc. node	16556 Oct 10 11:25	5°♏16'55	
superior conj	16556 Oct 14 17:12	10°♏35'36	0°10'26
minimum elong	16556 Oct 14 14:32	10°♏27'13	0°10'39
behind sun begin	16556 Oct 13 19:35	9°♏27'54	
behind sun end	16556 Oct 15 09:28	11°♏26'33	
max. Earth dist.	16556 Oct 14 23:13	10°♏54'25	1.71628 AU
	16556 Oct 30 05:12	0°♐	
evening rise	16556 Nov 22 08:05	28°♐54'20	
	16556 Nov 23 05:08	0°♑	
	16556 Dec 17 07:45	0°♒	

	16557 Jan 10 15:27	0°♓	
desc. node	16557 Jan 30 04:11	23°♓49'20	
	16557 Feb 04 06:36	0°♈	
	16557 Mar 01 07:10	0°♉	
	16557 Mar 26 19:58	0°♊	
	16557 Apr 22 05:03	0°♋	
	16557 May 20 14:12	0°♌	
evening max el	16557 May 21 09:41	0°♌47'54	46°11'07
asc. node	16557 May 22 23:07	2°♌19'12	
	16557 Jun 29 03:16	0°♍	
greatest brilliancy	16557 Jun 30 14:52	0°♍32'07	-4.8m
retrograde	16557 Jul 09 23:36	2°♍11'07	
	16557 Jul 20 08:50	30°℞♌	
evening set	16557 Jul 27 18:20	26°♌09'29	
inferior conj	16557 Jul 30 18:39	24°♌18'34	8°34'34
minimum elong	16557 Jul 31 01:41	24°♌07'40	8°33'25
min. Earth dist.	16557 Jul 31 11:50	23°♌51'55	0.27647 AU
morning rise	16557 Aug 03 08:51	22°♌06'20	
direct	16557 Aug 20 17:08	16°♌16'13	
greatest brilliancy	16557 Aug 31 00:56	18°♌16'14	-4.9m
desc. node	16557 Sep 11 22:43	24°♌34'12	
	16557 Sep 19 08:29	0°♍	
morning max el	16557 Oct 10 04:26	18°♍57'52	46°54'51
	16557 Oct 20 20:45	0°♎	
	16557 Nov 16 22:20	0°♏	
	16557 Dec 12 15:56	0°♐	
asc. node	16558 Jan 02 22:20	25°♐23'01	
	16558 Jan 06 18:22	0°♑	
	16558 Jan 31 11:59	0°♒	
	16558 Feb 25 00:29	0°♓	
	16558 Mar 21 10:24	0°♈	
morning set	16558 Apr 09 15:53	23°♈40'33	
	16558 Apr 14 19:02	0°♉	
desc. node	16558 Apr 24 18:14	12°♉17'38	
	16558 May 09 02:23	0°♊	
max. Earth dist.	16558 May 16 03:36	8°♊43'11	1.72779 AU
superior conj	16558 May 18 03:13	11°♊10'29	-0°53'12
minimum elong	16558 May 17 16:46	10°♊38'09	0°53'20
	16558 Jun 02 07:57	0°♋	
evening rise	16558 Jun 25 19:56	29°♋11'02	
	16558 Jun 26 11:42	0°♌	
	16558 Jul 20 14:27	0°♍	
	16558 Aug 13 17:38	0°♎	
asc. node	16558 Aug 15 10:28	2°♎06'43	
	16558 Sep 06 22:58	0°♏	
	16558 Oct 01 08:55	0°♐	
	16558 Oct 26 04:21	0°♑	
	16558 Nov 20 19:05	0°♒	
desc. node	16558 Dec 05 05:05	16°♒09'16	
	16558 Dec 18 04:11	0°♓	
evening max el	16558 Dec 27 14:27	9°♓29'55	46°16'44
	16559 Jan 20 09:58	0°♈	
greatest brilliancy	16559 Feb 04 23:21	8°♈30'25	-4.8m
retrograde	16559 Feb 15 01:37	10°♈22'08	
evening set	16559 Mar 03 04:22	5°♈21'21	
inferior conj	16559 Mar 08 10:28	2°♈09'59	-4°39'08
minimum elong	16559 Mar 08 19:44	1°♈55'31	4°36'38
min. Earth dist.	16559 Mar 08 14:58	2°♈02'56	0.28527 AU
	16559 Mar 11 22:50	30°℞♓	
morning rise	16559 Mar 14 11:06	28°♓32'53	
asc. node	16559 Mar 28 03:31	24°♓04'14	
direct	16559 Mar 29 16:16	24°♓01'25	
greatest brilliancy	16559 Apr 09 09:48	26°♓08'13	-4.8m
	16559 Apr 17 10:06	0°♈	
morning max el	16559 May 17 23:03	24°♈55'54	45°56'30
	16559 May 23 01:17	0°♉	
	16559 Jun 19 21:55	0°♊	
	16559 Jul 15 20:13	0°♋	
desc. node	16559 Jul 18 04:08	2°♋45'27	
	16559 Aug 09 20:47	0°♌	
	16559 Sep 03 09:33	0°♍	
	16559 Sep 27 15:59	0°♎	
	16559 Oct 21 19:15	0°♏	
asc. node	16559 Nov 08 00:26	21°♏27'15	
	16559 Nov 14 20:55	0°♐	
morning set	16559 Nov 18 09:42	4°♐24'20	
	16559 Dec 08 22:00	0°♑	
superior conj	16559 Dec 26 13:52	22°♑00'59	1°25'29
minimum elong	16559 Dec 26 09:46	21°♑48'14	1°26'02
max. Earth dist.	16559 Dec 28 22:49	24°♑58'19	1.72315 AU
	16560 Jan 01 23:44	0°♒	
	16560 Jan 26 03:43	0°♓	
evening rise	16560 Feb 02 01:12	8°♓31'45	
	16560 Feb 19 11:20	0°♈	
desc. node	16560 Feb 27 17:25	10°♈08'07	
	16560 Mar 14 23:05	0°♉	
	16560 Apr 08 14:47	0°♊	
	16560 May 03 10:42	0°♋	
	16560 May 28 13:22	0°♌	
asc. node	16560 Jun 19 10:44	25°♌38'24	
	16560 Jun 23 05:34	0°♍	
	16560 Jul 20 04:29	0°♎	
evening max el	16560 Aug 02 10:44	13°♎42'48	46°33'32
	16560 Aug 20 04:00	0°♏	
greatest brilliancy	16560 Sep 11 00:58	13°♏47'42	-4.9m
retrograde	16560 Sep 21 11:55	15°♏49'28	
evening set	16560 Oct 05 20:58	11°♏44'51	
desc. node	16560 Oct 09 09:03	9°♏45'52	
inferior conj	16560 Oct 12 04:01	8°♏04'49	-0°43'54
minimum elong	16560 Oct 12 02:18	8°♏07'26	0°43'01
min. Earth dist.	16560 Oct 12 00:29	8°♏10'12	0.26954 AU
morning rise	16560 Oct 18 07:59	4°♏29'52	
direct	16560 Nov 01 23:06	0°♏20'59	
greatest brilliancy	16560 Nov 11 17:59	2°♏07'48	-4.8m
	16560 Dec 19 22:41	0°♐	
morning max el	16560 Dec 21 16:10	1°♐40'40	46°22'10
	16561 Jan 17 17:07	0°♑	
asc. node	16561 Jan 30 09:09	14°♑10'18	
	16561 Feb 13 03:55	0°♒	
	16561 Mar 10 15:05	0°♓	
	16561 Apr 04 14:03	0°♈	
	16561 Apr 29 05:59	0°♉	
desc. node	16561 May 22 06:54	28°♉15'02	
	16561 May 23 17:01	0°♊	
	16561 Jun 16 23:51	0°♋	
morning set	16561 Jun 20 12:48	4°♋23'24	
	16561 Jul 11 03:03	0°♌	
max. Earth dist.	16561 Jul 27 17:59	20°♌44'46	1.71843 AU
superior conj	16561 Jul 30 01:04	23°♌36'49	-1°22'59
minimum elong	16561 Jul 30 08:34	24°♌00'16	1°23'15
	16561 Aug 04 03:40	0°♍	
	16561 Aug 28 03:03	0°♎	
evening rise	16561 Sep 08 01:17	13°♎40'29	
asc. node	16561 Sep 11 23:59	18°♎36'45	
	16561 Sep 21 02:29	0°♏	
	16561 Oct 15 03:15	0°♐	
	16561 Nov 08 07:15	0°♑	
	16561 Dec 02 17:46	0°♒	
	16561 Dec 27 15:46	0°♓	
desc. node	16562 Jan 01 17:07	5°♓59'22	
	16562 Jan 22 08:34	0°♈	

	16562 Feb 18 10:43	0°♉	
evening max el	16562 Mar 08 13:39	18°♉29'15	46°01'19
	16562 Mar 21 02:45	0°♊	
greatest brilliancy	16562 Apr 16 15:38	17°♊14'35	-4.8m
asc. node	16562 Apr 24 14:10	19°♊01'17	
retrograde	16562 Apr 26 17:34	19°♊06'39	
evening set	16562 May 12 03:50	14°♊28'20	
inferior conj	16562 May 17 21:40	10°♊59'00	5°25'59
minimum elong	16562 May 17 11:36	11°♊14'52	5°22'56
min. Earth dist.	16562 May 17 18:01	11°♊04'44	0.28300 AU
morning rise	16562 May 22 19:15	7°♊58'17	
direct	16562 Jun 08 01:50	2°♊49'07	
greatest brilliancy	16562 Jun 18 05:30	4°♊43'57	-4.8m
	16562 Jul 23 03:35	0°♋	
morning max el	16562 Jul 28 00:39	4°♋46'02	46°36'57
desc. node	16562 Aug 14 14:35	23°♋10'34	
	16562 Aug 20 19:09	0°♌	
	16562 Sep 15 21:39	0°♍	
	16562 Oct 11 00:46	0°♎	
	16562 Nov 04 17:09	0°♏	
	16562 Nov 29 03:58	0°♐	
asc. node	16562 Dec 05 12:41	7°♐50'21	
	16562 Dec 23 11:23	0°♑	
	16563 Jan 16 16:52	0°♒	
morning set	16563 Jan 28 04:55	14°♒15'21	
	16563 Feb 09 21:59	0°♓	
superior conj	16563 Mar 06 05:31	0°♈04'15	0°48'31
minimum elong	16563 Mar 06 14:46	0°♈32'47	0°48'10
	16563 Mar 06 04:09	0°♈	
max. Earth dist.	16563 Mar 07 17:49	1°♈56'17	1.73034 AU
desc. node	16563 Mar 27 06:52	26°♈02'47	
	16563 Mar 30 11:52	0°♉	
evening rise	16563 Apr 13 04:14	16°♉50'55	
	16563 Apr 23 20:37	0°♊	
	16563 May 18 05:41	0°♋	
	16563 Jun 11 15:13	0°♌	
	16563 Jul 06 02:44	0°♍	
asc. node	16563 Jul 17 23:11	14°♍26'36	
	16563 Jul 30 19:17	0°♎	
	16563 Aug 24 22:02	0°♏	
	16563 Sep 19 22:15	0°♐	
evening max el	16563 Oct 14 15:12	26°♐24'29	46°37'11
	16563 Oct 18 06:24	0°♑	
desc. node	16563 Nov 06 19:44	17°♑06'04	
greatest brilliancy	16563 Nov 23 05:47	26°♑38'22	-4.8m
retrograde	16563 Dec 03 20:28	28°♑43'34	
evening set	16563 Dec 21 21:15	22°♑37'27	
min. Earth dist.	16563 Dec 24 12:29	21°♑00'56	0.28139 AU
inferior conj	16563 Dec 25 03:03	20°♑38'24	-8°50'07
minimum elong	16563 Dec 24 22:29	20°♑45'28	8°49'15
morning rise	16563 Dec 27 23:50	18°♑53'04	
direct	16564 Jan 15 04:31	12°♑42'12	
greatest brilliancy	16564 Jan 24 22:36	14°♑25'46	-4.8m
	16564 Feb 18 19:34	0°♒	
asc. node	16564 Feb 27 19:21	7°♒56'06	
morning max el	16564 Mar 04 06:00	13°♒05'58	45°47'22
	16564 Mar 20 19:38	0°♓	
	16564 Apr 16 21:34	0°♈	
	16564 May 12 15:10	0°♉	
	16564 Jun 06 16:27	0°♊	
desc. node	16564 Jun 18 18:44	14°♊41'02	
	16564 Jul 01 07:21	0°♋	
	16564 Jul 25 14:56	0°♌	
	16564 Aug 18 17:41	0°♍	
morning set	16564 Sep 02 15:26	18°♍37'08	
	16564 Sep 11 17:46	0°♎	
	16564 Oct 05 16:47	0°♏	
asc. node	16564 Oct 09 13:19	4°♏49'51	
superior conj	16564 Oct 12 06:26	8°♏13'45	0°06'42
minimum elong	16564 Oct 12 04:40	8°♏08'15	0°06'57
behind sun begin	16564 Oct 11 05:57	6°♏57'04	
behind sun end	16564 Oct 13 03:24	9°♏19'25	
max. Earth dist.	16564 Oct 12 09:59	8°♏24'52	1.71618 AU
	16564 Oct 29 15:44	0°♐	
evening rise	16564 Nov 19 23:05	26°♐38'29	
	16564 Nov 22 15:41	0°♑	
	16564 Dec 16 18:25	0°♒	
	16565 Jan 10 02:22	0°♓	
desc. node	16565 Jan 29 05:57	23°♓20'38	
	16565 Feb 03 17:56	0°♈	
	16565 Feb 28 19:11	0°♉	
	16565 Mar 26 09:11	0°♊	
	16565 Apr 21 20:44	0°♋	
evening max el	16565 May 18 23:51	28°♋30'15	46°10'32
	16565 May 20 12:40	0°♌	
asc. node	16565 May 22 00:58	1°♌27'29	
greatest brilliancy	16565 Jun 28 03:30	28°♌11'16	-4.8m
retrograde	16565 Jul 07 13:42	29°♌51'15	
evening set	16565 Jul 25 10:25	23°♌45'15	
inferior conj	16565 Jul 28 08:25	21°♌57'45	8°41'35
minimum elong	16565 Jul 28 14:42	21°♌47'59	8°40'35
min. Earth dist.	16565 Jul 29 00:43	21°♌32'26	0.27688 AU
morning rise	16565 Jul 31 18:52	19°♌51'10	
direct	16565 Aug 18 07:32	13°♌54'44	
greatest brilliancy	16565 Aug 28 14:15	15°♌54'15	-4.9m
desc. node	16565 Sep 11 00:43	23°♌14'15	
	16565 Sep 19 20:01	0°♍	
morning max el	16565 Oct 07 19:58	16°♍40'57	46°55'18
	16565 Oct 20 15:28	0°♎	
	16565 Nov 16 12:57	0°♏	
	16565 Dec 12 04:42	0°♐	
asc. node	16566 Jan 02 00:10	24°♐52'50	
	16566 Jan 06 06:06	0°♑	
	16566 Jan 30 23:07	0°♒	
	16566 Feb 24 11:16	0°♓	
	16566 Mar 20 20:59	0°♈	
morning set	16566 Apr 07 07:46	21°♈29'19	
	16566 Apr 14 05:30	0°♉	
desc. node	16566 Apr 23 20:04	11°♉51'03	
	16566 May 08 12:48	0°♊	
max. Earth dist.	16566 May 13 22:17	6°♊40'10	1.72804 AU
superior conj	16566 May 15 17:30	8°♊53'52	-0°50'16
minimum elong	16566 May 15 07:22	8°♊22'32	0°50'24
	16566 Jun 01 18:24	0°♋	
evening rise	16566 Jun 23 09:17	26°♋50'32	
	16566 Jun 25 22:15	0°♌	
	16566 Jul 20 01:12	0°♍	
	16566 Aug 13 04:37	0°♎	
asc. node	16566 Aug 14 12:22	1°♎38'28	
	16566 Sep 06 10:16	0°♏	
	16566 Sep 30 20:44	0°♐	
	16566 Oct 25 17:02	0°♑	
	16566 Nov 20 09:32	0°♒	
desc. node	16566 Dec 04 06:54	15°♒29'56	
	16566 Dec 17 23:09	0°♓	
evening max el	16566 Dec 25 06:25	7°♓18'56	46°17'32
	16567 Jan 21 06:49	0°♈	
greatest brilliancy	16567 Feb 02 14:19	6°♈18'29	-4.8m
retrograde	16567 Feb 12 17:22	8°♈10'22	
evening set	16567 Feb 28 22:36	3°♈05'50	
inferior conj	16567 Mar 06 01:57	29°♓58'06	-4°57'04

minimum elong	16567 Mar 06 11:35	29°♓43'01	4°54'31
	16567 Mar 06 00:44	30℞♓	
min. Earth dist.	16567 Mar 06 06:05	29°♓51'37	0.28536 AU
morning rise	16567 Mar 12 00:41	26°♓23'45	
direct	16567 Mar 27 08:23	21°♓49'52	
asc. node	16567 Mar 27 05:34	21°♓49'53	
greatest brilliancy	16567 Apr 07 00:26	23°♓55'29	-4.8m
	16567 Apr 18 15:01	0°♈	
morning max el	16567 May 15 14:45	22°♈44'03	45°55'19
	16567 May 22 20:51	0°♉	
	16567 Jun 19 12:34	0°♊	
	16567 Jul 15 08:57	0°♋	
desc. node	16567 Jul 17 06:01	2°♋13'34	
	16567 Aug 09 08:36	0°♌	
	16567 Sep 02 20:50	0°♍	
	16567 Sep 27 02:56	0°♎	
	16567 Oct 21 05:58	0°♏	
asc. node	16567 Nov 07 02:11	20°♏59'39	
	16567 Nov 14 07:28	0°♐	
morning set	16567 Nov 15 23:37	2°♐05'12	
	16567 Dec 08 08:26	0°♑	
superior conj	16567 Dec 24 05:30	19°♑47'51	1°24'43
minimum elong	16567 Dec 24 00:39	19°♑32'44	1°25'15
max. Earth dist.	16567 Dec 26 15:36	22°♑48'49	1.72280 AU
	16568 Jan 01 10:06	0°♒	
	16568 Jan 25 14:05	0°♓	
evening rise	16568 Jan 30 16:53	6°♓19'47	
	16568 Feb 18 21:48	0°♈	
desc. node	16568 Feb 26 19:19	9°♈41'37	
	16568 Mar 14 09:48	0°♉	
	16568 Apr 08 01:53	0°♊	
	16568 May 02 22:27	0°♋	
	16568 May 28 02:06	0°♌	
asc. node	16568 Jun 18 12:31	25°♌02'41	
	16568 Jun 22 20:08	0°♍	
	16568 Jul 19 23:13	0°♎	
evening max el	16568 Jul 31 00:21	11°♎21'16	46°32'52
	16568 Aug 20 16:17	0°♏	
greatest brilliancy	16568 Sep 08 15:38	11°♏25'39	-4.9m
retrograde	16568 Sep 19 00:27	13°♏25'19	
evening set	16568 Oct 03 10:22	9°♏20'33	
desc. node	16568 Oct 08 10:58	6°♏26'34	
inferior conj	16568 Oct 09 16:42	5°♏41'20	-0°19'32
minimum elong	16568 Oct 09 15:56	5°♏42'30	0°18'59
min. Earth dist.	16568 Oct 09 14:45	5°♏44'18	0.26940 AU
morning rise	16568 Oct 15 21:45	2°♏04'27	
	16568 Oct 20 08:20	30℞♎	
direct	16568 Oct 30 11:33	27°♎57'28	
greatest brilliancy	16568 Nov 09 07:31	29°♎44'51	-4.8m
	16568 Nov 10 00:20	0°♏	
morning max el	16568 Dec 19 04:40	29°♏18'06	46°23'43
	16568 Dec 19 21:46	0°♐	
	16569 Jan 17 08:59	0°♑	
asc. node	16569 Jan 29 11:04	13°♑34'57	
	16569 Feb 12 17:09	0°♒	
	16569 Mar 10 03:01	0°♓	
	16569 Apr 04 01:16	0°♈	
	16569 Apr 28 16:49	0°♉	
desc. node	16569 May 21 08:37	27°♉47'33	
	16569 May 23 03:40	0°♊	
	16569 Jun 16 10:25	0°♋	
morning set	16569 Jun 18 01:34	2°♋01'23	
	16569 Jul 10 13:36	0°♌	
max. Earth dist.	16569 Jul 25 01:39	18°♌05'56	1.71870 AU
superior conj	16569 Jul 27 13:32	21°♌12'57	-1°24'10
minimum elong	16569 Jul 27 20:13	21°♌33'50	1°24'30
	16569 Aug 03 14:13	0°♍	
	16569 Aug 27 13:38	0°♎	
evening rise	16569 Sep 05 13:16	11°♎14'34	
asc. node	16569 Sep 11 01:49	18°♎09'10	
	16569 Sep 20 13:10	0°♏	
	16569 Oct 14 14:05	0°♐	
	16569 Nov 07 18:21	0°♑	
	16569 Dec 02 05:17	0°♒	
	16569 Dec 27 04:02	0°♓	
desc. node	16569 Dec 31 18:57	5°♓27'55	
	16570 Jan 21 22:20	0°♈	
	16570 Feb 18 03:55	0°♉	
evening max el	16570 Mar 06 03:46	16°♉14'00	46°01'31
	16570 Mar 21 08:52	0°♊	
greatest brilliancy	16570 Apr 14 06:45	15°♊01'09	-4.8m
asc. node	16570 Apr 23 15:56	16°♊52'41	
retrograde	16570 Apr 24 08:15	16°♊53'14	
evening set	16570 May 09 16:45	12°♊17'41	
inferior conj	16570 May 15 13:01	8°♊45'19	5°08'24
minimum elong	16570 May 15 03:14	9°♊00'44	5°05'22
min. Earth dist.	16570 May 15 09:40	8°♊50'36	0.28310 AU
morning rise	16570 May 20 13:30	5°♊40'22	
direct	16570 Jun 05 16:37	0°♊35'09	
greatest brilliancy	16570 Jun 15 22:07	2°♊31'15	-4.8m
	16570 Jul 23 02:49	0°♋	
morning max el	16570 Jul 25 14:48	2°♋27'45	46°35'35
desc. node	16570 Aug 13 16:35	22°♋29'36	
	16570 Aug 20 11:10	0°♌	
	16570 Sep 15 11:12	0°♍	
	16570 Oct 10 13:06	0°♎	
	16570 Nov 04 04:46	0°♏	
	16570 Nov 28 15:07	0°♐	
asc. node	16570 Dec 04 14:28	7°♐21'48	
	16570 Dec 22 22:13	0°♑	
	16571 Jan 16 03:28	0°♒	
morning set	16571 Jan 25 21:09	12°♒04'11	
	16571 Feb 09 08:28	0°♓	
superior conj	16571 Mar 03 21:42	27°♓53'45	0°51'19
minimum elong	16571 Mar 04 07:14	28°♓23'11	0°51'00
max. Earth dist.	16571 Mar 05 10:44	29°♓48'05	1.73021 AU
	16571 Mar 05 14:36	0°♈	
desc. node	16571 Mar 26 08:42	25°♈36'06	
	16571 Mar 29 22:21	0°♉	
evening rise	16571 Apr 10 20:04	14°♉39'34	
	16571 Apr 23 07:14	0°♊	
	16571 May 17 16:31	0°♋	
	16571 Jun 11 02:22	0°♌	
	16571 Jul 05 14:24	0°♍	
asc. node	16571 Jul 17 01:06	13°♍55'58	
	16571 Jul 30 07:44	0°♎	
	16571 Aug 24 11:49	0°♏	
	16571 Sep 19 14:41	0°♐	
evening max el	16571 Oct 12 04:58	24°♐03'27	46°37'42
	16571 Oct 18 06:37	0°♑	
desc. node	16571 Nov 05 21:33	15°♑52'35	
greatest brilliancy	16571 Nov 20 19:30	24°♑19'25	-4.8m
retrograde	16571 Dec 01 11:20	26°♑26'02	
evening set	16571 Dec 19 08:24	20°♑24'44	
min. Earth dist.	16571 Dec 22 01:59	18°♑44'59	0.28099 AU
inferior conj	16571 Dec 22 17:20	18°♑21'18	-8°45'21
minimum elong	16571 Dec 22 11:56	18°♑29'40	8°44'21
morning rise	16571 Dec 25 15:36	16°♑34'02	
direct	16572 Jan 12 18:11	10°♑25'31	
greatest brilliancy	16572 Jan 22 12:02	12°♑09'02	-4.8m
	16572 Feb 19 01:49	0°♒	

asc. node	16572 Feb 26 21:21	7°♒03'28	
morning max el	16572 Mar 01 20:53	10°♒51'21	45°48'02
	16572 Mar 20 12:58	0°♓	
	16572 Apr 16 11:26	0°♈	
	16572 May 12 03:33	0°♉	
	16572 Jun 06 04:03	0°♊	
desc. node	16572 Jun 17 20:38	14°♊12'17	
	16572 Jun 30 18:31	0°♋	
	16572 Jul 25 01:52	0°♌	
	16572 Aug 18 04:29	0°♍	
morning set	16572 Aug 31 03:59	16°♍12'36	
	16572 Sep 11 04:31	0°♎	
	16572 Oct 05 03:31	0°♏	
asc. node	16572 Oct 08 15:05	4°♏21'46	
superior conj	16572 Oct 09 19:07	5°♏49'35	0°02'55
minimum elong	16572 Oct 09 18:19	5°♏47'03	0°03'10
behind sun begin	16572 Oct 08 17:45	4°♏30'06	
behind sun end	16572 Oct 10 18:53	7°♏04'01	
max. Earth dist.	16572 Oct 09 21:44	5°♏57'48	1.71611 AU
	16572 Oct 29 02:26	0°♐	
evening rise	16572 Nov 17 13:36	24°♐20'31	
	16572 Nov 22 02:24	0°♑	
	16572 Dec 16 05:14	0°♒	
	16573 Jan 09 13:25	0°♓	
desc. node	16573 Jan 28 07:53	22°♓52'05	
	16573 Feb 03 05:25	0°♈	
	16573 Feb 28 07:23	0°♉	
	16573 Mar 25 22:40	0°♊	
	16573 Apr 21 12:49	0°♋	
evening max el	16573 May 16 14:58	26°♋14'45	46°09'57
	16573 May 20 12:16	0°♌	
asc. node	16573 May 21 02:52	0°♌34'38	
greatest brilliancy	16573 Jun 25 16:14	25°♌50'43	-4.8m
retrograde	16573 Jul 05 03:47	27°♌31'26	
evening set	16573 Jul 23 02:19	21°♌21'49	
inferior conj	16573 Jul 25 22:20	19°♌37'06	8°47'36
minimum elong	16573 Jul 26 03:49	19°♌28'34	8°46'45
min. Earth dist.	16573 Jul 26 13:34	19°♌13'25	0.27727 AU
morning rise	16573 Jul 29 05:14	17°♌35'45	
direct	16573 Aug 15 22:24	11°♌33'39	
greatest brilliancy	16573 Aug 26 03:22	13°♌31'57	-4.9m
desc. node	16573 Sep 10 02:37	21°♌56'25	
	16573 Sep 20 04:40	0°♍	
morning max el	16573 Oct 05 11:09	14°♍22'37	46°55'25
	16573 Oct 20 09:58	0°♎	
	16573 Nov 16 03:42	0°♏	
	16573 Dec 11 17:43	0°♐	
asc. node	16574 Jan 01 02:08	24°♐22'11	
	16574 Jan 05 18:07	0°♑	
	16574 Jan 30 10:31	0°♒	
	16574 Feb 23 22:16	0°♓	
	16574 Mar 20 07:46	0°♈	
morning set	16574 Apr 04 23:47	19°♈17'49	
	16574 Apr 13 16:12	0°♉	
desc. node	16574 Apr 22 21:46	11°♉23'21	
	16574 May 07 23:29	0°♊	
max. Earth dist.	16574 May 11 15:17	4°♊31'18	1.72827 AU
superior conj	16574 May 13 08:05	6°♊37'25	-0°47'17
minimum elong	16574 May 12 22:20	6°♊07'17	0°47'24
	16574 Jun 01 05:08	0°♋	
evening rise	16574 Jun 20 22:58	24°♋30'19	
	16574 Jun 25 09:05	0°♌	
	16574 Jul 19 12:11	0°♍	
	16574 Aug 12 15:50	0°♎	
asc. node	16574 Aug 13 14:14	1°♎09'27	
	16574 Sep 05 21:50	0°♏	
	16574 Sep 30 08:52	0°♐	
	16574 Oct 25 06:10	0°♑	
	16574 Nov 20 00:37	0°♒	
desc. node	16574 Dec 03 08:47	14°♒49'07	
	16574 Dec 17 19:15	0°♓	
evening max el	16574 Dec 22 22:10	5°♓05'56	46°18'19
	16575 Jan 22 12:42	0°♈	
greatest brilliancy	16575 Jan 31 06:01	4°♈06'06	-4.8m
retrograde	16575 Feb 10 08:43	5°♈57'23	
evening set	16575 Feb 26 16:57	0°♈49'14	
	16575 Feb 28 02:20	30°℞♓	
inferior conj	16575 Mar 03 17:29	27°♓45'17	-5°14'31
minimum elong	16575 Mar 04 03:26	27°♓29'42	5°11'57
min. Earth dist.	16575 Mar 03 21:30	27°♓39'01	0.28539 AU
morning rise	16575 Mar 09 14:03	24°♓13'45	
direct	16575 Mar 25 00:15	19°♓37'29	
asc. node	16575 Mar 26 07:22	19°♓39'28	
greatest brilliancy	16575 Apr 04 15:13	21°♓41'55	-4.8m
	16575 Apr 19 12:19	0°♈	
morning max el	16575 May 13 05:34	20°♈29'08	45°54'10
	16575 May 22 16:10	0°♉	
	16575 Jun 19 03:20	0°♊	
	16575 Jul 14 21:55	0°♋	
desc. node	16575 Jul 16 07:55	1°♋40'55	
	16575 Aug 08 20:41	0°♌	
	16575 Sep 02 08:24	0°♍	
	16575 Sep 26 14:11	0°♎	
	16575 Oct 20 16:58	0°♏	
asc. node	16575 Nov 06 03:59	20°♏31'14	
morning set	16575 Nov 13 13:39	29°♏45'27	
	16575 Nov 13 18:19	0°♐	
	16575 Dec 07 19:12	0°♑	
superior conj	16575 Dec 21 21:05	17°♑33'23	1°23'49
minimum elong	16575 Dec 21 15:30	17°♑16'00	1°24'20
max. Earth dist.	16575 Dec 24 06:20	20°♑31'45	1.72249 AU
	16575 Dec 31 20:51	0°♒	
	16576 Jan 25 00:52	0°♓	
evening rise	16576 Jan 28 08:20	4°♓05'48	
	16576 Feb 18 08:42	0°♈	
desc. node	16576 Feb 25 21:05	9°♈13'23	
	16576 Mar 13 20:55	0°♉	
	16576 Apr 07 13:25	0°♊	
	16576 May 02 10:37	0°♋	
	16576 May 27 15:19	0°♌	
asc. node	16576 Jun 17 14:28	24°♌26'04	
	16576 Jun 22 11:17	0°♍	
	16576 Jul 19 18:54	0°♎	
evening max el	16576 Jul 28 13:18	8°♎57'03	46°32'11
	16576 Aug 21 09:18	0°♏	
greatest brilliancy	16576 Sep 06 06:43	9°♏03'20	-4.9m
retrograde	16576 Sep 16 12:59	11°♏00'58	
evening set	16576 Oct 01 00:08	6°♏55'27	
inferior conj	16576 Oct 07 05:36	3°♏17'38	0°04'42
minimum elong	16576 Oct 07 05:47	3°♏17'20	0°04'56
transit middle	16576 Oct 07 05:47	3°♏17'20	0°04'56
transit begin	16576 Oct 07 01:54	3°♏23'16	
transit end	16576 Oct 07 09:41	3°♏11'24	
min. Earth dist.	16576 Oct 07 05:29	3°♏17'48	0.26928 AU
desc. node	16576 Oct 07 12:45	3°♏06'43	
	16576 Oct 12 20:00	30°℞♎	
morning rise	16576 Oct 13 11:31	29°♎39'08	
direct	16576 Oct 27 23:44	25°♎33'27	
greatest brilliancy	16576 Nov 06 21:45	27°♎22'11	-4.8m
	16576 Nov 12 22:02	0°♏	
morning max el	16576 Dec 16 17:14	26°♏54'48	46°25'14

	16576 Dec 19 20:10	0°♐	
	16577 Jan 17 00:55	0°♑	
asc. node	16577 Jan 28 13:00	12°♑58'51	
	16577 Feb 12 06:39	0°♒	
	16577 Mar 09 15:18	0°♓	
	16577 Apr 03 12:51	0°♈	
	16577 Apr 28 04:00	0°♉	
desc. node	16577 May 20 10:31	27°♉19'32	
	16577 May 22 14:38	0°♊	
morning set	16577 Jun 15 14:26	29°♊38'41	
	16577 Jun 15 21:18	0°♋	
	16577 Jul 10 00:28	0°♌	
max. Earth dist.	16577 Jul 22 11:16	15°♌32'07	1.71902 AU
superior conj	16577 Jul 25 02:10	18°♌48'33	-1°25'13
minimum elong	16577 Jul 25 08:00	19°♌06'46	1°25'35
	16577 Aug 03 01:06	0°♍	
	16577 Aug 27 00:35	0°♎	
evening rise	16577 Sep 03 01:26	8°♎48'08	
asc. node	16577 Sep 10 03:33	17°♎40'13	
	16577 Sep 20 00:12	0°♏	
	16577 Oct 14 01:15	0°♐	
	16577 Nov 07 05:45	0°♑	
	16577 Dec 01 17:07	0°♒	
	16577 Dec 26 16:41	0°♓	
desc. node	16577 Dec 30 20:54	4°♓55'46	
	16578 Jan 21 12:36	0°♈	
	16578 Feb 17 21:57	0°♉	
evening max el	16578 Mar 03 18:17	13°♉58'41	46°01'42
	16578 Mar 21 18:06	0°♊	
greatest brilliancy	16578 Apr 11 21:27	12°♊46'07	-4.8m
retrograde	16578 Apr 21 23:25	14°♊38'56	
asc. node	16578 Apr 22 17:53	14°♊38'13	
evening set	16578 May 07 05:55	10°♊05'42	
inferior conj	16578 May 13 04:23	6°♊30'37	4°50'23
minimum elong	16578 May 12 18:56	6°♊45'29	4°47'21
min. Earth dist.	16578 May 13 01:07	6°♊35'45	0.28318 AU
morning rise	16578 May 18 07:44	3°♊21'45	
	16578 May 25 07:06	30°℞♉	
direct	16578 Jun 03 07:43	28°♉20'13	
	16578 Jun 12 18:28	0°♊	
greatest brilliancy	16578 Jun 13 14:33	0°♊17'37	-4.8m
morning max el	16578 Jul 23 05:50	0°♋11'02	46°34'12
	16578 Jul 23 01:23	0°♋	
desc. node	16578 Aug 12 18:28	21°♋48'00	
	16578 Aug 20 03:10	0°♌	
	16578 Sep 15 00:54	0°♍	
	16578 Oct 10 01:39	0°♎	
	16578 Nov 03 16:39	0°♏	
	16578 Nov 28 02:31	0°♐	
asc. node	16578 Dec 03 16:26	6°♐53'01	
	16578 Dec 22 09:16	0°♑	
	16579 Jan 15 14:17	0°♒	
morning set	16579 Jan 23 13:36	9°♒53'01	
	16579 Feb 08 19:09	0°♓	
superior conj	16579 Mar 01 14:03	25°♓42'57	0°54'02
minimum elong	16579 Mar 01 23:49	26°♓13'07	0°53'45
max. Earth dist.	16579 Mar 03 05:45	27°♓45'34	1.73012 AU
	16579 Mar 05 01:17	0°♈	
desc. node	16579 Mar 25 10:27	25°♈08'25	
	16579 Mar 29 09:07	0°♉	
evening rise	16579 Apr 08 12:00	12°♉27'38	
	16579 Apr 22 18:08	0°♊	
	16579 May 17 03:37	0°♋	
	16579 Jun 10 13:47	0°♌	
	16579 Jul 05 02:19	0°♍	
asc. node	16579 Jul 16 02:58	13°♍24'29	
	16579 Jul 29 20:28	0°♎	
	16579 Aug 24 01:57	0°♏	
	16579 Sep 19 07:41	0°♐	
evening max el	16579 Oct 09 19:48	21°♐44'23	46°38'06
	16579 Oct 18 08:24	0°♑	
desc. node	16579 Nov 04 23:33	14°♑36'29	
greatest brilliancy	16579 Nov 18 08:50	21°♑59'18	-4.8m
retrograde	16579 Nov 29 02:32	24°♑07'38	
evening set	16579 Dec 16 19:15	18°♑11'35	
min. Earth dist.	16579 Dec 19 15:13	16°♑28'31	0.28055 AU
inferior conj	16579 Dec 20 07:34	16°♑03'23	-8°39'42
minimum elong	16579 Dec 20 01:22	16°♑12'55	8°38'33
morning rise	16579 Dec 23 07:40	14°♑13'39	
direct	16580 Jan 10 08:20	8°♑08'14	
greatest brilliancy	16580 Jan 20 00:49	9°♑51'04	-4.8m
	16580 Feb 19 06:11	0°♒	
asc. node	16580 Feb 25 23:10	6°♒11'08	
morning max el	16580 Feb 28 12:11	8°♒37'34	45°48'44
	16580 Mar 20 06:03	0°♓	
	16580 Apr 16 01:19	0°♈	
	16580 May 11 16:02	0°♉	
	16580 Jun 05 15:48	0°♊	
desc. node	16580 Jun 16 22:34	13°♊43'03	
	16580 Jun 30 05:50	0°♋	
	16580 Jul 24 12:56	0°♌	
	16580 Aug 17 15:25	0°♍	
morning set	16580 Aug 28 16:29	13°♍47'38	
	16580 Sep 10 15:23	0°♎	
	16580 Oct 04 14:20	0°♏	
superior conj	16580 Oct 07 07:40	3°♏24'39	-0°00'57
minimum elong	16580 Oct 07 07:50	3°♏25'11	0°00'40
behind sun begin	16580 Oct 06 06:58	2°♏07'15	
behind sun end	16580 Oct 08 08:43	4°♏43'07	
max. Earth dist.	16580 Oct 07 11:37	3°♏37'01	1.71605 AU
asc. node	16580 Oct 07 16:54	3°♏53'34	
	16580 Oct 28 13:15	0°♐	
evening rise	16580 Nov 15 04:04	22°♐01'59	
	16580 Nov 21 13:15	0°♑	
	16580 Dec 15 16:12	0°♒	
	16581 Jan 09 00:37	0°♓	
desc. node	16581 Jan 27 09:40	22°♓22'47	
	16581 Feb 02 17:01	0°♈	
	16581 Feb 27 19:42	0°♉	
	16581 Mar 25 12:18	0°♊	
	16581 Apr 21 05:15	0°♋	
evening max el	16581 May 14 06:01	23°♋58'48	46°09'09
asc. node	16581 May 20 04:50	29°♋40'32	
	16581 May 20 13:11	0°♌	
greatest brilliancy	16581 Jun 23 05:21	23°♌30'12	-4.8m
retrograde	16581 Jul 02 17:27	25°♌10'59	
evening set	16581 Jul 20 17:56	18°♌58'33	
inferior conj	16581 Jul 23 12:14	17°♌16'08	8°52'49
minimum elong	16581 Jul 23 16:53	17°♌08'52	8°52'04
min. Earth dist.	16581 Jul 24 02:34	16°♌53'47	0.27764 AU
morning rise	16581 Jul 26 15:46	15°♌19'34	
direct	16581 Aug 13 13:00	9°♌12'23	
greatest brilliancy	16581 Aug 23 16:40	11°♌09'27	-4.9m
desc. node	16581 Sep 09 04:28	20°♌40'37	
	16581 Sep 20 10:58	0°♍	
morning max el	16581 Oct 03 01:20	12°♍01'36	46°55'30
	16581 Oct 20 04:00	0°♎	
	16581 Nov 15 18:14	0°♏	
	16581 Dec 11 06:34	0°♐	
asc. node	16581 Dec 31 03:56	23°♐51'13	
	16582 Jan 05 06:02	0°♑	

	16582 Jan 29 21:51	0°♒	
	16582 Feb 23 09:14	0°♓	
	16582 Mar 19 18:30	0°♈	
morning set	16582 Apr 02 16:04	17°♈07'24	
	16582 Apr 13 02:48	0°♉	
desc. node	16582 Apr 21 23:41	10°♉56'34	
	16582 May 07 10:04	0°♊	
max. Earth dist.	16582 May 09 07:19	2°♊19'49	1.72851 AU
superior conj	16582 May 10 22:55	4°♊22'12	-0°44'15
minimum elong	16582 May 10 13:36	3°♊53'25	0°44'21
	16582 May 31 15:46	0°♋	
evening rise	16582 Jun 18 12:45	22°♋10'38	
	16582 Jun 24 19:51	0°♌	
	16582 Jul 18 23:08	0°♍	
	16582 Aug 12 03:02	0°♎	
asc. node	16582 Aug 12 15:57	0°♎40'00	
	16582 Sep 05 09:23	0°♏	
	16582 Sep 29 21:00	0°♐	
	16582 Oct 24 19:18	0°♑	
	16582 Nov 19 15:48	0°♒	
desc. node	16582 Dec 02 10:44	14°♒08'22	
	16582 Dec 17 15:53	0°♓	
evening max el	16582 Dec 20 12:55	2°♓50'43	46°19'01
	16583 Jan 24 08:22	0°♈	
greatest brilliancy	16583 Jan 28 22:00	1°♈54'09	-4.8m
retrograde	16583 Feb 07 23:33	3°♈44'34	
	16583 Feb 21 19:45	30°℞♓	
evening set	16583 Feb 24 11:16	28°♓32'37	
inferior conj	16583 Mar 01 08:56	25°♓32'44	-5°31'38
minimum elong	16583 Mar 01 19:08	25°♓16'45	5°29'03
min. Earth dist.	16583 Mar 01 13:06	25°♓26'12	0.28542 AU
morning rise	16583 Mar 07 03:06	22°♓04'15	
direct	16583 Mar 22 15:31	17°♓25'14	
asc. node	16583 Mar 25 09:18	17°♓33'58	
greatest brilliancy	16583 Apr 02 06:25	19°♓29'06	-4.8m
	16583 Apr 20 03:48	0°♈	
morning max el	16583 May 10 19:38	18°♈12'53	45°53'15
	16583 May 22 10:41	0°♉	
	16583 Jun 18 17:40	0°♊	
	16583 Jul 14 10:35	0°♋	
desc. node	16583 Jul 15 09:46	1°♋08'57	
	16583 Aug 08 08:31	0°♌	
	16583 Sep 01 19:47	0°♍	
	16583 Sep 26 01:15	0°♎	
	16583 Oct 20 03:48	0°♏	
asc. node	16583 Nov 05 05:55	20°♏03'49	
morning set	16583 Nov 11 03:14	27°♏24'46	
	16583 Nov 13 04:59	0°♐	
	16583 Dec 07 05:46	0°♑	
superior conj	16583 Dec 19 12:23	15°♑18'47	1°22'47
minimum elong	16583 Dec 19 06:05	14°♑59'08	1°23'16
max. Earth dist.	16583 Dec 21 19:20	18°♑10'00	1.72217 AU
	16583 Dec 31 07:22	0°♒	
	16584 Jan 24 11:25	0°♓	
evening rise	16584 Jan 25 23:43	1°♓52'16	
	16584 Feb 17 19:22	0°♈	
desc. node	16584 Feb 24 22:52	8°♈45'58	
	16584 Mar 13 07:50	0°♉	
	16584 Apr 07 00:43	0°♊	
	16584 May 01 22:32	0°♋	
	16584 May 27 04:17	0°♌	
asc. node	16584 Jun 16 16:21	23°♌50'03	
	16584 Jun 22 02:16	0°♍	
	16584 Jul 19 14:50	0°♎	
evening max el	16584 Jul 26 01:32	6°♎32'06	46°31'24
	16584 Aug 22 07:53	0°♏	
greatest brilliancy	16584 Sep 03 21:11	6°♏40'44	-4.9m
retrograde	16584 Sep 14 01:23	8°♏37'02	
evening set	16584 Sep 28 13:55	4°♏29'59	
inferior conj	16584 Oct 04 18:19	0°♏54'01	0°29'12
minimum elong	16584 Oct 04 19:28	0°♏52'15	0°29'05
min. Earth dist.	16584 Oct 04 20:00	0°♏51'27	0.26925 AU
	16584 Oct 06 05:51	30°℞♎	
desc. node	16584 Oct 06 14:48	29°♎46'28	
morning rise	16584 Oct 11 00:58	27°♎14'21	
direct	16584 Oct 25 11:51	23°♎09'12	
greatest brilliancy	16584 Nov 04 12:05	24°♎59'53	-4.8m
	16584 Nov 14 16:11	0°♏	
morning max el	16584 Dec 14 06:21	24°♏33'18	46°26'51
	16584 Dec 19 17:29	0°♐	
	16585 Jan 16 16:19	0°♑	
asc. node	16585 Jan 27 14:51	12°♑23'41	
	16585 Feb 11 19:43	0°♒	
	16585 Mar 09 03:11	0°♓	
	16585 Apr 03 00:05	0°♈	
	16585 Apr 27 14:51	0°♉	
desc. node	16585 May 19 12:24	26°♉52'29	
	16585 May 22 01:17	0°♊	
morning set	16585 Jun 13 03:35	27°♊18'03	
	16585 Jun 15 07:50	0°♋	
	16585 Jul 09 10:56	0°♌	
max. Earth dist.	16585 Jul 20 00:12	13°♌09'59	1.71931 AU
superior conj	16585 Jul 22 15:05	16°♌26'16	-1°26'06
minimum elong	16585 Jul 22 20:01	16°♌41'40	1°26'29
	16585 Aug 02 11:35	0°♍	
	16585 Aug 26 11:07	0°♎	
evening rise	16585 Aug 31 13:47	6°♎23'37	
asc. node	16585 Sep 09 05:26	17°♎12'54	
	16585 Sep 19 10:52	0°♏	
	16585 Oct 13 12:07	0°♐	
	16585 Nov 06 16:53	0°♑	
	16585 Dec 01 04:42	0°♒	
	16585 Dec 26 05:07	0°♓	
desc. node	16585 Dec 29 22:41	4°♓23'56	
	16586 Jan 21 02:43	0°♈	
	16586 Feb 17 16:04	0°♉	
evening max el	16586 Mar 01 09:21	11°♉45'50	46°02'00
	16586 Mar 22 06:05	0°♊	
greatest brilliancy	16586 Apr 09 11:36	10°♊31'30	-4.8m
retrograde	16586 Apr 19 14:53	12°♊25'25	
asc. node	16586 Apr 21 19:54	12°♊19'32	
evening set	16586 May 04 19:11	7°♊54'19	
inferior conj	16586 May 10 19:37	4°♊16'37	4°31'46
minimum elong	16586 May 10 10:35	4°♊30'49	4°28'48
min. Earth dist.	16586 May 10 16:12	4°♊21'59	0.28325 AU
morning rise	16586 May 16 01:48	1°♊04'05	
	16586 May 18 00:10	30°℞♉	
direct	16586 May 31 23:16	26°♉06'07	
greatest brilliancy	16586 Jun 11 06:26	28°♉04'19	-4.8m
	16586 Jun 15 18:14	0°♊	
morning max el	16586 Jul 20 21:30	27°♊57'15	46°32'58
	16586 Jul 22 22:36	0°♋	
desc. node	16586 Aug 11 20:19	21°♋08'04	
	16586 Aug 19 18:27	0°♌	
	16586 Sep 14 14:00	0°♍	
	16586 Oct 09 13:41	0°♎	
	16586 Nov 03 04:03	0°♏	
	16586 Nov 27 13:31	0°♐	
asc. node	16586 Dec 02 18:12	6°♐24'47	
	16586 Dec 21 19:58	0°♑	
	16587 Jan 15 00:47	0°♒	

morning set	16587 Jan 21 05:46	7°♒41'54	
	16587 Feb 08 05:32	0°♓	
superior conj	16587 Feb 27 06:07	23°♓32'18	0°56'42
minimum elong	16587 Feb 27 16:03	24°♓02'59	0°56'26
max. Earth dist.	16587 Mar 01 01:48	25°♓47'18	1.72998 AU
	16587 Mar 04 11:38	0°♈	
desc. node	16587 Mar 24 12:20	24°♈42'11	
	16587 Mar 28 19:32	0°♉	
evening rise	16587 Apr 06 03:43	10°♉16'13	
	16587 Apr 22 04:41	0°♊	
	16587 May 16 14:24	0°♋	
	16587 Jun 10 00:54	0°♌	
	16587 Jul 04 13:57	0°♍	
asc. node	16587 Jul 15 04:44	12°♍53'43	
	16587 Jul 29 08:54	0°♎	
	16587 Aug 23 15:46	0°♏	
	16587 Sep 19 00:29	0°♐	
evening max el	16587 Oct 07 11:13	19°♐28'15	46°38'25
	16587 Oct 18 10:59	0°♑	
desc. node	16587 Nov 04 01:27	13°♑19'16	
greatest brilliancy	16587 Nov 15 22:14	19°♑40'42	-4.8m
retrograde	16587 Nov 26 17:43	21°♑50'20	
evening set	16587 Dec 14 05:56	16°♑00'02	
min. Earth dist.	16587 Dec 17 04:27	14°♑13'15	0.28012 AU
inferior conj	16587 Dec 17 21:48	13°♑46'34	-8°33'06
minimum elong	16587 Dec 17 14:53	13°♑57'13	8°31'48
morning rise	16587 Dec 21 00:02	11°♑53'49	
direct	16588 Jan 07 22:56	5°♑52'12	
greatest brilliancy	16588 Jan 17 13:25	7°♑33'46	-4.8m
	16588 Feb 19 08:27	0°♒	
asc. node	16588 Feb 25 01:07	5°♒20'55	
morning max el	16588 Feb 26 03:10	6°♒23'49	45°49'20
	16588 Mar 19 22:29	0°♓	
	16588 Apr 15 14:46	0°♈	
	16588 May 11 04:07	0°♉	
	16588 Jun 05 03:10	0°♊	
desc. node	16588 Jun 16 00:18	13°♊14'15	
	16588 Jun 29 16:49	0°♋	
	16588 Jul 23 23:42	0°♌	
	16588 Aug 17 02:03	0°♍	
morning set	16588 Aug 26 05:07	11°♍24'03	
	16588 Sep 10 01:56	0°♎	
	16588 Oct 04 00:49	0°♏	
superior conj	16588 Oct 04 20:30	1°♏01'38	-0°04'47
minimum elong	16588 Oct 04 21:38	1°♏05'12	0°04'27
behind sun begin	16588 Oct 03 21:25	29°♎49'21	
behind sun end	16588 Oct 05 21:50	2°♏21'02	
max. Earth dist.	16588 Oct 05 00:57	1°♏15'37	1.71592 AU
asc. node	16588 Oct 06 18:47	3°♏26'39	
	16588 Oct 27 23:42	0°♐	
evening rise	16588 Nov 12 18:48	19°♐45'22	
	16588 Nov 20 23:44	0°♑	
	16588 Dec 15 02:50	0°♒	
	16589 Jan 08 11:31	0°♓	
desc. node	16589 Jan 26 11:29	21°♓54'22	
	16589 Feb 02 04:22	0°♈	
	16589 Feb 27 07:50	0°♉	
	16589 Mar 25 01:50	0°♊	
	16589 Apr 20 21:46	0°♋	
evening max el	16589 May 11 20:12	21°♋41'25	46°08'24
asc. node	16589 May 19 06:40	28°♋45'44	
	16589 May 20 15:11	0°♌	
greatest brilliancy	16589 Jun 20 19:04	21°♌11'14	-4.8m
retrograde	16589 Jun 30 06:42	22°♌51'30	
evening set	16589 Jul 18 09:13	16°♌36'54	
inferior conj	16589 Jul 21 02:14	14°♌56'12	8°57'04
minimum elong	16589 Jul 21 06:01	14°♌50'16	8°56'24
min. Earth dist.	16589 Jul 21 15:58	14°♌34'44	0.27800 AU
morning rise	16589 Jul 24 02:45	13°♌03'54	
direct	16589 Aug 11 03:11	6°♌51'58	
greatest brilliancy	16589 Aug 21 06:38	8°♌48'24	-4.9m
desc. node	16589 Sep 08 06:30	19°♌27'58	
	16589 Sep 20 15:00	0°♍	
morning max el	16589 Sep 30 14:41	9°♍38'57	46°55'42
	16589 Oct 19 21:23	0°♎	
	16589 Nov 15 08:20	0°♏	
	16589 Dec 10 19:05	0°♐	
asc. node	16589 Dec 30 05:47	23°♐21'16	
	16590 Jan 04 17:38	0°♑	
	16590 Jan 29 08:54	0°♒	
	16590 Feb 22 19:59	0°♓	
	16590 Mar 19 05:04	0°♈	
morning set	16590 Mar 31 08:21	14°♈57'18	
	16590 Apr 12 13:17	0°♉	
desc. node	16590 Apr 21 01:32	10°♉29'56	
	16590 May 06 20:32	0°♊	
max. Earth dist.	16590 May 06 21:59	0°♊04'30	1.72876 AU
superior conj	16590 May 08 13:43	2°♊07'13	-0°41'07
minimum elong	16590 May 08 04:53	1°♊39'57	0°41'14
	16590 May 31 02:18	0°♋	
evening rise	16590 Jun 16 02:28	19°♋51'14	
	16590 Jun 24 06:32	0°♌	
	16590 Jul 18 10:01	0°♍	
asc. node	16590 Aug 11 17:52	0°♎11'25	
	16590 Aug 11 14:11	0°♎	
	16590 Sep 04 20:55	0°♏	
	16590 Sep 29 09:08	0°♐	
	16590 Oct 24 08:29	0°♑	
	16590 Nov 19 07:05	0°♒	
desc. node	16590 Dec 01 12:34	13°♒27'10	
	16590 Dec 17 13:04	0°♓	
evening max el	16590 Dec 18 02:50	0°♓33'48	46°19'51
greatest brilliancy	16591 Jan 26 14:00	29°♓42'57	-4.8m
	16591 Jan 27 10:10	0°♈	
retrograde	16591 Feb 05 14:29	1°♈32'55	
	16591 Feb 14 10:32	30°℞♓	
evening set	16591 Feb 22 05:48	26°♓16'43	
inferior conj	16591 Feb 27 00:36	23°♓21'10	-5°48'02
minimum elong	16591 Feb 27 11:00	23°♓04'52	5°45'27
min. Earth dist.	16591 Feb 27 05:00	23°♓14'17	0.28548 AU
morning rise	16591 Mar 04 16:14	19°♓56'00	
direct	16591 Mar 20 06:40	15°♓13'42	
asc. node	16591 Mar 24 11:19	15°♓33'52	
greatest brilliancy	16591 Mar 30 22:20	17°♓17'43	-4.8m
	16591 Apr 20 15:08	0°♈	
morning max el	16591 May 08 10:00	15°♈57'18	45°52'18
	16591 May 22 04:45	0°♉	
	16591 Jun 18 07:54	0°♊	
	16591 Jul 13 23:14	0°♋	
desc. node	16591 Jul 14 11:40	0°♋37'02	
	16591 Aug 07 20:23	0°♌	
	16591 Sep 01 07:11	0°♍	
	16591 Sep 25 12:21	0°♎	
	16591 Oct 19 14:43	0°♏	
asc. node	16591 Nov 04 07:40	19°♏35'30	
morning set	16591 Nov 08 16:46	25°♏03'31	
	16591 Nov 12 15:45	0°♐	
	16591 Dec 06 16:26	0°♑	
superior conj	16591 Dec 17 03:51	13°♑04'14	1°21'35
minimum elong	16591 Dec 16 20:52	12°♑42'28	1°22'04

max. Earth dist.	16591 Dec 19 06:54	15°♉43'24	1.72182 AU
	16591 Dec 30 17:58	0°♒	
evening rise	16592 Jan 23 15:25	29°♒39'32	
	16592 Jan 23 22:02	0°♓	
	16592 Feb 17 06:06	0°♈	
desc. node	16592 Feb 24 00:49	8°♈18'50	
	16592 Mar 12 18:50	0°♉	
	16592 Apr 06 12:09	0°♊	
	16592 May 01 10:40	0°♋	
	16592 May 26 17:34	0°♌	
asc. node	16592 Jun 15 18:09	23°♌12'49	
	16592 Jun 21 17:44	0°♍	
	16592 Jul 19 11:44	0°♎	
evening max el	16592 Jul 23 14:04	4°♎07'20	46°30'45
	16592 Aug 23 15:49	0°♏	
greatest brilliancy	16592 Sep 01 11:03	4°♏16'46	-4.9m
retrograde	16592 Sep 11 14:14	6°♏12'36	
evening set	16592 Sep 26 03:54	2°♏03'25	
	16592 Sep 29 18:59	30°℞♎	
inferior conj	16592 Oct 02 06:59	28°♎29'29	0°53'37
minimum elong	16592 Oct 02 09:06	28°♎26'15	0°53'09
min. Earth dist.	16592 Oct 02 10:07	28°♎24'43	0.26926 AU
desc. node	16592 Oct 05 16:43	26°♎26'43	
morning rise	16592 Oct 08 14:12	24°♎49'16	
direct	16592 Oct 23 00:23	20°♎44'01	
greatest brilliancy	16592 Nov 02 01:58	22°♎36'17	-4.9m
	16592 Nov 15 21:43	0°♏	
morning max el	16592 Dec 11 20:30	22°♏13'29	46°28'28
	16592 Dec 19 14:22	0°♐	
	16593 Jan 16 07:45	0°♑	
asc. node	16593 Jan 26 16:47	11°♑48'10	
	16593 Feb 11 08:55	0°♒	
	16593 Mar 08 15:14	0°♓	
	16593 Apr 02 11:29	0°♈	
	16593 Apr 27 01:54	0°♉	
desc. node	16593 May 18 14:08	26°♉24'19	
	16593 May 21 12:10	0°♊	
morning set	16593 Jun 10 16:49	24°♊56'51	
	16593 Jun 14 18:39	0°♋	
	16593 Jul 08 21:45	0°♌	
max. Earth dist.	16593 Jul 17 13:48	10°♌48'48	1.71963 AU
superior conj	16593 Jul 20 03:45	14°♌02'10	-1°26'49
minimum elong	16593 Jul 20 07:44	14°♌14'35	1°27'15
	16593 Aug 01 22:25	0°♍	
	16593 Aug 25 22:02	0°♎	
evening rise	16593 Aug 29 01:49	3°♎56'59	
greatest brilliancy	16593 Aug 29 15:42	4°♎40'23	-3.9m
asc. node	16593 Sep 08 07:16	16°♎44'18	
	16593 Sep 18 21:54	0°♏	
	16593 Oct 12 23:20	0°♐	
	16593 Nov 06 04:23	0°♑	
	16593 Nov 30 16:43	0°♒	
	16593 Dec 25 18:01	0°♓	
desc. node	16593 Dec 29 00:34	3°♓51'04	
	16594 Jan 20 17:23	0°♈	
	16594 Feb 17 11:03	0°♉	
evening max el	16594 Feb 27 01:23	9°♉34'35	46°02'27
	16594 Mar 22 22:35	0°♊	
greatest brilliancy	16594 Apr 07 01:53	8°♊16'50	-4.8m
retrograde	16594 Apr 17 06:43	10°♊11'41	
asc. node	16594 Apr 20 21:40	9°♊55'46	
evening set	16594 May 02 08:57	5°♊42'43	
inferior conj	16594 May 08 11:03	2°♊02'27	4°12'53
minimum elong	16594 May 08 02:28	2°♊15'56	4°10'01
min. Earth dist.	16594 May 08 07:14	2°♊08'27	0.28331 AU
	16594 May 11 17:59	30°℞♉	
morning rise	16594 May 13 19:56	28°♉46'23	
direct	16594 May 29 15:21	23°♉52'10	
greatest brilliancy	16594 Jun 08 21:52	25°♉50'11	-4.8m
	16594 Jun 17 12:47	0°♊	
morning max el	16594 Jul 18 13:19	25°♊42'57	46°31'22
	16594 Jul 22 19:27	0°♋	
desc. node	16594 Aug 10 22:19	20°♋27'46	
	16594 Aug 19 09:56	0°♌	
	16594 Sep 14 03:29	0°♍	
	16594 Oct 09 02:09	0°♎	
	16594 Nov 02 15:54	0°♏	
	16594 Nov 27 00:55	0°♐	
asc. node	16594 Dec 01 20:01	5°♐55'23	
	16594 Dec 21 07:04	0°♑	
	16595 Jan 14 11:41	0°♒	
morning set	16595 Jan 18 21:48	5°♒29'03	
	16595 Feb 07 16:20	0°♓	
superior conj	16595 Feb 24 22:14	21°♓20'26	0°59'16
minimum elong	16595 Feb 25 08:16	21°♓51'26	0°59'02
max. Earth dist.	16595 Feb 26 21:45	23°♓47'17	1.72978 AU
	16595 Mar 03 22:25	0°♈	
desc. node	16595 Mar 23 14:09	24°♈14'30	
	16595 Mar 28 06:21	0°♉	
evening rise	16595 Apr 03 19:33	8°♉03'51	
	16595 Apr 21 15:37	0°♊	
	16595 May 16 01:32	0°♋	
	16595 Jun 09 12:24	0°♌	
	16595 Jul 04 02:01	0°♍	
asc. node	16595 Jul 14 06:40	12°♍22'07	
	16595 Jul 28 21:52	0°♎	
	16595 Aug 23 06:18	0°♏	
	16595 Sep 18 18:20	0°♐	
evening max el	16595 Oct 05 02:29	17°♐09'43	46°38'36
	16595 Oct 18 16:15	0°♑	
desc. node	16595 Nov 03 03:17	11°♑57'13	
greatest brilliancy	16595 Nov 13 12:03	17°♑20'15	-4.8m
retrograde	16595 Nov 24 08:21	19°♑30'12	
evening set	16595 Dec 11 16:10	13°♑46'20	
min. Earth dist.	16595 Dec 14 17:36	11°♑55'09	0.27964 AU
inferior conj	16595 Dec 15 11:45	11°♑27'15	-8°25'36
minimum elong	16595 Dec 15 04:07	11°♑38'59	8°24'09
morning rise	16595 Dec 18 16:20	9°♑31'00	
direct	16596 Jan 05 13:10	3°♑33'52	
greatest brilliancy	16596 Jan 15 01:45	5°♑13'57	-4.8m
	16596 Feb 19 10:00	0°♒	
morning max el	16596 Feb 23 16:59	4°♒05'35	45°50'02
asc. node	16596 Feb 24 03:07	4°♒30'09	
	16596 Mar 19 15:07	0°♓	
	16596 Apr 15 04:33	0°♈	
	16596 May 10 16:34	0°♉	
	16596 Jun 04 14:53	0°♊	
desc. node	16596 Jun 15 02:13	12°♊44'59	
	16596 Jun 29 04:07	0°♋	
	16596 Jul 23 10:47	0°♌	
	16596 Aug 16 13:02	0°♍	
morning set	16596 Aug 23 17:46	8°♍59'24	
	16596 Sep 09 12:53	0°♎	
superior conj	16596 Oct 02 09:06	28°♎36'35	-0°08'35
minimum elong	16596 Oct 02 11:12	28°♎43'09	0°08'14
behind sun begin	16596 Oct 01 13:25	27°♎34'54	
behind sun end	16596 Oct 03 08:59	29°♎51'24	
max. Earth dist.	16596 Oct 02 11:01	28°♎42'36	1.71587 AU
	16596 Oct 03 11:44	0°♏	
asc. node	16596 Oct 05 20:32	2°♏57'55	
	16596 Oct 27 10:37	0°♐	

evening rise	16596 Nov 10 09:01	17°♐25'33	
	16596 Nov 20 10:43	0°♑	
	16596 Dec 14 13:56	0°♒	
	16597 Jan 07 22:53	0°♓	
desc. node	16597 Jan 25 13:25	21°♓24'56	
	16597 Feb 01 16:13	0°♈	
	16597 Feb 26 20:29	0°♉	
	16597 Mar 24 15:58	0°♊	
	16597 Apr 20 15:05	0°♋	
evening max el	16597 May 09 09:42	19°♋21'23	46°07'51
asc. node	16597 May 18 08:36	27°♋49'00	
	16597 May 20 19:11	0°♌	
greatest brilliancy	16597 Jun 18 09:16	18°♌52'23	-4.8m
retrograde	16597 Jun 27 19:59	20°♌32'10	
evening set	16597 Jul 16 00:16	14°♌16'02	
inferior conj	16597 Jul 18 16:30	12°♌36'26	9°00'15
minimum elong	16597 Jul 18 19:24	12°♌31'54	8°59'40
min. Earth dist.	16597 Jul 19 05:45	12°♌15'41	0.27834 AU
morning rise	16597 Jul 21 14:26	10°♌47'51	
direct	16597 Aug 08 17:09	4°♌31'37	
greatest brilliancy	16597 Aug 18 21:11	6°♌28'05	-4.9m
desc. node	16597 Sep 07 08:22	18°♌16'47	
	16597 Sep 20 17:34	0°♍	
morning max el	16597 Sep 28 03:41	7°♍14'46	46°55'39
	16597 Oct 19 14:40	0°♎	
	16597 Nov 14 22:38	0°♏	
	16597 Dec 10 07:55	0°♐	
asc. node	16597 Dec 29 07:45	22°♐50'27	
	16598 Jan 04 05:37	0°♑	
	16598 Jan 28 20:21	0°♒	
	16598 Feb 22 07:04	0°♓	
	16598 Mar 18 15:57	0°♈	
morning set	16598 Mar 29 00:21	12°♈45'17	
	16598 Apr 12 00:04	0°♉	
desc. node	16598 Apr 20 03:14	10°♉01'53	
max. Earth dist.	16598 May 04 13:34	27°♉51'03	1.72899 AU
superior conj	16598 May 06 04:23	29°♉50'59	-0°37'56
minimum elong	16598 May 05 20:06	29°♉25'23	0°38'02
	16598 May 06 07:18	0°♊	
	16598 May 30 13:08	0°♋	
evening rise	16598 Jun 13 16:21	17°♋31'37	
	16598 Jun 23 17:28	0°♌	
	16598 Jul 17 21:05	0°♍	
asc. node	16598 Aug 10 19:43	29°♍42'08	
	16598 Aug 11 01:29	0°♎	
	16598 Sep 04 08:37	0°♏	
	16598 Sep 28 21:28	0°♐	
	16598 Oct 23 21:58	0°♑	
	16598 Nov 18 22:55	0°♒	
desc. node	16598 Nov 30 14:28	12°♒44'45	
evening max el	16598 Dec 15 16:16	28°♒14'37	46°20'35
	16598 Dec 17 11:32	0°♓	
greatest brilliancy	16599 Jan 24 05:25	27°♓29'31	-4.8m
retrograde	16599 Feb 03 05:31	29°♓19'41	
evening set	16599 Feb 20 00:05	23°♓58'54	
inferior conj	16599 Feb 24 16:00	21°♓07'53	-6°03'55
minimum elong	16599 Feb 25 02:32	20°♓51'25	6°01'23
min. Earth dist.	16599 Feb 24 20:29	21°♓00'52	0.28555 AU
morning rise	16599 Mar 02 04:57	17°♓46'37	
direct	16599 Mar 17 21:29	13°♓00'24	
asc. node	16599 Mar 23 13:07	13°♓36'38	
greatest brilliancy	16599 Mar 28 14:07	15°♓05'04	-4.8m
	16599 Apr 20 23:50	0°♈	
morning max el	16599 May 06 00:43	13°♈41'56	45°51'28
	16599 May 21 22:36	0°♉	
	16599 Jun 17 22:08	0°♊	
	16599 Jul 13 11:56	0°♋	
desc. node	16599 Jul 13 13:33	0°♋04'50	
	16599 Aug 07 08:16	0°♌	
	16599 Aug 31 18:35	0°♍	
	16599 Sep 24 23:25	0°♎	
	16599 Oct 19 01:34	0°♏	
asc. node	16599 Nov 03 09:28	19°♏07'29	
morning set	16599 Nov 06 06:34	22°♏43'11	
	16599 Nov 12 02:29	0°♐	
	16599 Dec 06 03:05	0°♑	
superior conj	16599 Dec 14 19:16	10°♑49'31	1°20'17
minimum elong	16599 Dec 14 11:40	10°♑25'49	1°20'43
max. Earth dist.	16599 Dec 16 19:03	13°♑18'30	1.72158 AU
	16599 Dec 30 04:36	0°♒	
evening rise	16600 Jan 21 06:55	27°♒26'00	
	16600 Jan 23 08:42	0°♓	
	16600 Feb 16 16:55	0°♈	
desc. node	16600 Feb 23 02:32	7°♈50'46	
	16600 Mar 13 05:55	0°♉	
	16600 Apr 06 23:42	0°♊	
	16600 May 01 22:54	0°♋	
	16600 May 27 06:58	0°♌	
asc. node	16600 Jun 15 20:06	22°♌35'43	
	16600 Jun 22 09:26	0°♍	
	16600 Jul 20 09:21	0°♎	
evening max el	16600 Jul 22 03:30	1°♎45'10	46°30'13
	16600 Aug 26 14:50	0°♏	
greatest brilliancy	16600 Aug 31 00:37	1°♏53'05	-4.9m
retrograde	16600 Sep 10 03:47	3°♏48'47	
	16600 Sep 24 00:58	30°℞♎	
evening set	16600 Sep 24 18:11	29°♎37'24	
inferior conj	16600 Sep 30 19:43	26°♎05'33	1°17'49
minimum elong	16600 Sep 30 22:46	26°♎00'55	1°17'02
min. Earth dist.	16600 Sep 30 23:55	25°♎59'10	0.26926 AU
desc. node	16600 Oct 05 18:30	23°♎09'55	
morning rise	16600 Oct 07 03:17	22°♎25'14	
direct	16600 Oct 21 13:25	18°♎19'45	
greatest brilliancy	16600 Oct 31 15:10	20°♎12'47	-4.9m
	16600 Nov 17 18:44	0°♏	
morning max el	16600 Dec 10 11:09	19°♏55'47	46°29'58
	16600 Dec 20 10:13	0°♐	
	16601 Jan 16 22:42	0°♑	
asc. node	16601 Jan 26 18:40	11°♑13'25	
	16601 Feb 11 21:50	0°♒	
	16601 Mar 09 03:05	0°♓	
	16601 Apr 02 22:45	0°♈	
	16601 Apr 27 12:51	0°♉	
desc. node	16601 May 18 16:02	25°♉56'58	
	16601 May 21 22:55	0°♊	
morning set	16601 Jun 09 05:51	22°♊35'35	
	16601 Jun 15 05:19	0°♋	
	16601 Jul 09 08:23	0°♌	
max. Earth dist.	16601 Jul 16 03:17	8°♌27'53	1.71993 AU
superior conj	16601 Jul 18 16:16	11°♌38'10	-1°27'22
minimum elong	16601 Jul 18 19:18	11°♌47'35	1°27'51
	16601 Aug 02 09:05	0°♍	
	16601 Aug 26 08:46	0°♎	
evening rise	16601 Aug 27 13:48	1°♎30'46	
greatest brilliancy	16601 Aug 30 06:49	4°♎54'06	-3.9m
asc. node	16601 Sep 08 09:00	16°♎16'03	
	16601 Sep 19 08:44	0°♏	
	16601 Oct 13 10:18	0°♐	
	16601 Nov 06 15:36	0°♑	
	16601 Dec 01 04:24	0°♒	
	16601 Dec 26 06:37	0°♓	

desc. node	16601 Dec 29 02:29	3°♓19'18