superior conj	5100 May 16	00:28	26°♉36'36	-1°04'42
minimum elong	5100 May 16	11:17	27°♉10'17	1°04'21
	5100 May 18	17:49	0°♊	
max. Earth dist.	5100 May 19	18:06	1°♊15'33	1.72220 AU
	5100 Jun 11	22:10	0°♋	
asc. node	5100 Jun 15	06:17	4°♋07'42	
evening rise	5100 Jun 23	18:19	14°♋37'32	
	5100 Jul 06	05:59	0°♌	
	5100 Jul 30	17:23	0°♍	
	5100 Aug 24	09:12	0°♎	
	5100 Sep 18	07:24	0°♏	
desc. node	5100 Oct 04	21:17	19°♏42'34	
	5100 Oct 13	14:55	0°♐	
	5100 Nov 08	12:49	0°♑	
	5100 Dec 05	14:21	0°♒	
evening max el	5100 Dec 19	19:07	14°♒42'56	46°52'50
	5101 Jan 05	04:36	0°♓	
asc. node	5101 Jan 25	23:05	14°♓11'15	
greatest brilliancy	5101 Jan 29	03:46	15°♓30'24	-4.9m
retrograde	5101 Feb 08	05:59	17°♓26'07	
evening set	5101 Feb 24	05:13	12°♓24'03	
min. Earth dist.	5101 Feb 28	05:37	9°♓59'49	0.26833 AU
inferior conj	5101 Feb 28	19:44	9°♓38'11	7°30'32
minimum elong	5101 Feb 28	09:26	9°♓53'58	7°28'39
morning rise	5101 Mar 04	13:53	7°♓22'22	
direct	5101 Mar 21	08:14	1°♓55'55	
greatest brilliancy	5101 Mar 30	15:17	3°♓34'53	-4.9m
	5101 May 06	03:43	0°♈	
morning max el	5101 May 10	12:10	4°♈15'26	46°38'46
desc. node	5101 May 17	14:08	11°♈26'25	
	5101 Jun 03	21:55	0°♉	
	5101 Jun 30	10:34	0°♊	
	5101 Jul 26	03:14	0°♋	
	5101 Aug 20	09:06	0°♌	
asc. node	5101 Sep 07	15:47	21°♌59'17	
	5101 Sep 14	06:38	0°♍	
	5101 Oct 08	20:43	0°♎	
	5101 Nov 02	04:40	0°♏	
morning set	5101 Nov 05	14:55	4°♏14'44	
	5101 Nov 26	08:18	0°♐	
max. Earth dist.	5101 Dec 10	18:29	17°♐59'21	1.71909 AU
superior conj	5101 Dec 13	12:57	21°♐26'53	0°34'34
minimum elong	5101 Dec 13	20:37	21°♐50'49	0°34'14
	5101 Dec 20	09:13	0°♑	
desc. node	5101 Dec 28	06:59	9°♑53'32	
	5102 Jan 13	08:21	0°♒	
evening rise	5102 Jan 22	12:34	11°♒30'08	
	5102 Feb 06	06:30	0°♓	
	5102 Mar 02	05:00	0°♈	
	5102 Mar 26	06:19	0°♉	
	5102 Apr 19	13:50	0°♊	
asc. node	5102 Apr 20	08:31	0°♊57'12	
	5102 May 14	07:55	0°♋	
	5102 Jun 08	19:23	0°♌	
	5102 Jul 05	15:11	0°♍	
evening max el	5102 Jul 25	19:40	20°♍39'36	45°33'05
	5102 Aug 04	23:23	0°♎	
desc. node	5102 Aug 09	23:43	4°♎13'52	
greatest brilliancy	5102 Sep 02	09:34	18°♎37'56	-4.7m
retrograde	5102 Sep 12	11:35	20°♎27'25	
evening set	5102 Sep 30	13:31	14°♎22'10	
inferior conj	5102 Oct 03	22:31	12°♎16'44	-8°36'24
minimum elong	5102 Oct 03	21:17	12°♎18'40	8°36'23
min. Earth dist.	5102 Oct 04	06:49	12°♎03'42	0.28985 AU
morning rise	5102 Oct 07	04:58	10°♎14'58	
direct	5102 Oct 25	12:25	3°♎59'13	
greatest brilliancy	5102 Nov 05	07:02	6°♎06'16	-4.8m
asc. node	5102 Dec 01	01:21	23°♎11'03	
	5102 Dec 08	12:42	0°♏	
morning max el	5102 Dec 14	08:01	5°♏39'00	46°21'29
	5103 Jan 06	05:47	0°♐	
	5103 Feb 01	05:24	0°♑	
	5103 Feb 26	04:17	0°♒	
desc. node	5103 Mar 22	16:27	0°♓01'40	
	5103 Mar 22	15:54	0°♓	
	5103 Apr 15	22:24	0°♈	
	5103 May 10	03:19	0°♉	
	5103 Jun 03	08:48	0°♊	
morning set	5103 Jun 19	01:50	19°♊24'44	
	5103 Jun 27	15:49	0°♋	
asc. node	5103 Jul 13	18:10	19°♋50'30	
	5103 Jul 22	00:08	0°♌	
superior conj	5103 Jul 26	13:03	5°♌35'09	0°30'03
minimum elong	5103 Jul 26	07:01	5°♌16'35	0°29'45
max. Earth dist.	5103 Jul 27	07:36	6°♌32'13	1.73367 AU
	5103 Aug 15	09:09	0°♍	
evening rise	5103 Aug 31	19:06	20°♍11'19	
	5103 Sep 08	18:37	0°♎	
	5103 Oct 03	05:08	0°♏	
	5103 Oct 27	17:35	0°♐	
desc. node	5103 Nov 02	09:12	6°♐53'43	
	5103 Nov 21	08:43	0°♑	
	5103 Dec 16	03:32	0°♒	
	5104 Jan 10	05:21	0°♓	
	5104 Feb 05	00:18	0°♈	
asc. node	5104 Feb 23	10:49	20°♈19'27	
evening max el	5104 Mar 02	08:19	28°♈32'01	47°04'30
	5104 Mar 03	19:09	0°♉	
greatest brilliancy	5104 Apr 11	18:08	29°♉44'43	-4.9m
	5104 Apr 12	11:07	0°♊	
retrograde	5104 Apr 21	24:00	1°♊43'40	
	5104 May 01	04:50	30°℞♉	
evening set	5104 May 08	21:16	26°♉11'55	
inferior conj	5104 May 13	00:22	23°♉39'45	6°57'53
minimum elong	5104 May 13	10:41	23°♉23'37	6°55'50
min. Earth dist.	5104 May 12	21:49	23°♉43'44	0.27779 AU
morning rise	5104 May 18	00:22	20°♉37'43	
direct	5104 Jun 02	22:16	15°♉42'58	
greatest brilliancy	5104 Jun 12	14:47	17°♉26'28	-4.8m
desc. node	5104 Jun 14	01:59	17°♉58'30	
	5104 Jul 03	17:48	0°♊	
morning max el	5104 Jul 22	00:43	16°♊09'11	45°54'13
	5104 Aug 04	20:18	0°♋	
	5104 Sep 01	12:16	0°♌	
	5104 Sep 27	15:41	0°♍	
asc. node	5104 Oct 05	03:42	8°♍48'54	
	5104 Oct 22	22:16	0°♎	
	5104 Nov 16	14:52	0°♏	
	5104 Dec 10	22:14	0°♐	
	5105 Jan 03	23:57	0°♑	
morning set	5105 Jan 16	20:42	16°♑06'23	
desc. node	5105 Jan 24	18:44	26°♑02'26	
	5105 Jan 27	22:25	0°♒	
	5105 Feb 20	19:09	0°♓	
superior conj	5105 Feb 27	01:01	7°♓51'26	-1°09'35
minimum elong	5105 Feb 26	13:22	7°♓14'48	1°09'13
max. Earth dist.	5105 Feb 27	06:00	8°♓07'07	1.71135 AU

Command: swevents -p3 -doall -mpdf -eswe -b1.1.5100 -n366732 -s0.5 -roundmin

	5105 Mar 16 15:31	0°♈	
evening rise	5105 Apr 08 21:20	29°♈10'08	
	5105 Apr 09 13:16	0°♉	
	5105 May 03 14:27	0°♊	
asc. node	5105 May 17 20:30	17°♊39'11	
	5105 May 27 20:57	0°♋	
	5105 Jun 21 10:30	0°♌	
	5105 Jul 16 09:35	0°♍	
	5105 Aug 10 23:11	0°♎	
desc. node	5105 Sep 06 11:24	29°♎51'47	
	5105 Sep 06 14:25	0°♏	
evening max el	5105 Oct 05 10:26	29°♏49'38	45°54'11
	5105 Oct 05 14:46	0°♐	
greatest brilliancy	5105 Nov 14 05:44	28°♐27'57	-4.8m
	5105 Nov 21 22:15	0°♑	
retrograde	5105 Nov 23 12:08	0°♑02'55	
	5105 Nov 25 01:44	30°℞♐	
evening set	5105 Dec 08 17:56	25°♐33'52	
inferior conj	5105 Dec 14 08:10	22°♐16'13	-3°31'01
minimum elong	5105 Dec 14 15:39	22°♐04'45	3°28'50
min. Earth dist.	5105 Dec 15 03:27	21°♐46'41	0.27294 AU
morning rise	5105 Dec 20 12:34	18°♐37'32	
asc. node	5105 Dec 28 13:13	15°♐15'20	
direct	5106 Jan 04 04:55	14°♐20'29	
greatest brilliancy	5106 Jan 15 05:49	16°♐37'38	-4.9m
	5106 Feb 05 02:00	0°♑	
morning max el	5106 Feb 23 20:54	17°♑31'36	46°57'49
	5106 Mar 07 18:18	0°♒	
	5106 Apr 03 10:10	0°♓	
desc. node	5106 Apr 19 04:23	18°♓29'34	
	5106 Apr 28 20:31	0°♈	
	5106 May 23 18:47	0°♉	
	5106 Jun 17 12:08	0°♊	
	5106 Jul 12 03:33	0°♋	
	5106 Aug 05 17:29	0°♌	
asc. node	5106 Aug 10 05:55	5°♌31'34	
morning set	5106 Aug 26 18:30	25°♌46'11	
	5106 Aug 30 05:12	0°♍	
	5106 Sep 23 14:10	0°♎	
max. Earth dist.	5106 Sep 30 03:56	8°♎06'49	1.73166 AU
superior conj	5106 Oct 02 05:33	10°♎40'01	1°25'06
minimum elong	5106 Oct 02 04:04	10°♎35'26	1°25'06
	5106 Oct 17 20:50	0°♏	
evening rise	5106 Nov 08 03:52	26°♏22'12	
	5106 Nov 11 02:10	0°♐	
desc. node	5106 Nov 29 21:09	23°♐17'32	
	5106 Dec 05 06:58	0°♑	
	5106 Dec 29 11:32	0°♒	
	5107 Jan 22 16:35	0°♓	
	5107 Feb 16 00:29	0°♈	
	5107 Mar 12 16:29	0°♉	
asc. node	5107 Mar 22 22:36	12°♉14'53	
	5107 Apr 07 02:27	0°♊	
	5107 May 04 04:08	0°♋	
evening max el	5107 May 13 20:44	9°♋54'18	46°13'51
	5107 Jun 05 16:26	0°♌	
greatest brilliancy	5107 Jun 21 07:52	9°♌03'17	-4.8m
retrograde	5107 Jul 02 11:51	11°♌19'55	
desc. node	5107 Jul 12 13:48	9°♌16'57	
evening set	5107 Jul 17 13:08	6°♌53'35	
inferior conj	5107 Jul 23 21:39	3°♌04'33	-2°40'50
minimum elong	5107 Jul 23 15:56	3°♌13'31	2°39'12
min. Earth dist.	5107 Jul 23 10:52	3°♌21'25	0.28731 AU
	5107 Jul 28 23:12	30°℞♋	
morning rise	5107 Jul 29 19:13	29°♋31'45	
direct	5107 Aug 14 08:20	24°♋53'12	
greatest brilliancy	5107 Aug 24 08:10	26°♋41'32	-4.7m
	5107 Aug 31 18:25	0°♌	
morning max el	5107 Oct 02 02:29	24°♌38'06	45°44'17
	5107 Oct 07 14:25	0°♍	
asc. node	5107 Nov 02 15:39	27°♍37'16	
	5107 Nov 04 18:49	0°♎	
	5107 Nov 30 18:46	0°♏	
	5107 Dec 25 17:57	0°♐	
	5108 Jan 19 04:03	0°♑	
	5108 Feb 12 07:11	0°♒	
desc. node	5108 Feb 22 06:34	12°♒27'49	
	5108 Mar 07 06:46	0°♓	
	5108 Mar 31 04:59	0°♈	
morning set	5108 Apr 03 16:52	4°♈22'51	
	5108 Apr 24 03:48	0°♉	
superior conj	5108 May 13 13:45	24°♉14'04	-1°07'08
minimum elong	5108 May 14 00:30	24°♉47'35	1°06'47
max. Earth dist.	5108 May 17 09:48	29°♉00'40	1.72168 AU
	5108 May 18 04:52	0°♊	
	5108 Jun 11 09:10	0°♋	
asc. node	5108 Jun 14 08:21	3°♋40'06	
evening rise	5108 Jun 21 10:13	12°♋24'37	
	5108 Jul 05 17:00	0°♌	
	5108 Jul 30 04:33	0°♍	
	5108 Aug 23 20:44	0°♎	
	5108 Sep 17 19:35	0°♏	
desc. node	5108 Oct 03 23:18	19°♏10'41	
	5108 Oct 13 04:13	0°♐	
	5108 Nov 08 04:03	0°♑	
	5108 Dec 05 09:48	0°♒	
evening max el	5108 Dec 17 09:32	12°♒20'40	46°51'07
	5109 Jan 05 16:15	0°♓	
asc. node	5109 Jan 25 01:02	12°♓23'34	
greatest brilliancy	5109 Jan 26 16:52	13°♓02'19	-4.9m
retrograde	5109 Feb 05 18:41	14°♓57'09	
evening set	5109 Feb 21 13:44	10°♓01'52	
inferior conj	5109 Feb 26 08:15	7°♓10'04	7°16'28
minimum elong	5109 Feb 25 21:41	7°♓26'19	7°14'24
min. Earth dist.	5109 Feb 25 18:27	7°♓31'16	0.26804 AU
morning rise	5109 Mar 02 05:52	4°♓49'05	
	5109 Mar 13 19:05	30°℞♒	
direct	5109 Mar 18 20:47	29°♒28'26	
	5109 Mar 24 01:03	0°♓	
greatest brilliancy	5109 Mar 28 04:11	1°♓07'25	-4.9m
	5109 May 06 04:26	0°♈	
morning max el	5109 May 08 00:37	1°♈49'08	46°40'07
desc. node	5109 May 16 16:19	10°♈38'33	
	5109 Jun 03 14:51	0°♉	
	5109 Jun 30 00:43	0°♊	
	5109 Jul 25 15:57	0°♋	
	5109 Aug 19 20:59	0°♌	
asc. node	5109 Sep 06 17:50	21°♌30'46	
	5109 Sep 13 18:00	0°♍	
	5109 Oct 08 07:49	0°♎	
	5109 Nov 01 15:40	0°♏	
morning set	5109 Nov 03 07:17	2°♏02'40	
	5109 Nov 25 19:19	0°♐	
max. Earth dist.	5109 Dec 08 05:18	15°♐28'53	1.71958 AU
superior conj	5109 Dec 11 02:45	19°♐05'36	0°37'52
minimum elong	5109 Dec 11 10:57	19°♐31'11	0°37'31
	5109 Dec 19 20:18	0°♑	
desc. node	5109 Dec 27 08:59	9°♑24'55	
	5110 Jan 12 19:33	0°♒	
evening rise	5110 Jan 20 00:06	9°♒00'36	
	5110 Feb 05 17:49	0°♓	

	5110 Mar 01 16:28	0°♈	
	5110 Mar 25 18:00	0°♉	
asc. node	5110 Apr 19 10:38	0°♊26'47	
	5110 Apr 19 01:52	0°♊	
	5110 May 13 20:38	0°♋	
	5110 Jun 08 09:27	0°♌	
	5110 Jul 05 08:24	0°♍	
evening max el	5110 Jul 23 10:12	18°♍25'00	45°33'30
	5110 Aug 05 04:11	0°♎	
desc. node	5110 Aug 09 01:42	3°♎11'58	
greatest brilliancy	5110 Aug 31 00:35	16°♎26'54	-4.7m
retrograde	5110 Sep 10 02:49	18°♎17'04	
evening set	5110 Sep 28 03:58	12°♎13'43	
inferior conj	5110 Oct 01 14:36	10°♎05'55	-8°34'36
minimum elong	5110 Oct 01 12:35	10°♎09'05	8°34'32
min. Earth dist.	5110 Oct 01 22:10	9°♎54'02	0.29013 AU
morning rise	5110 Oct 04 21:03	8°♎04'00	
direct	5110 Oct 23 04:05	1°♎48'02	
greatest brilliancy	5110 Nov 02 22:57	3°♎54'38	-4.8m
asc. node	5110 Nov 30 03:23	22°♎12'37	
	5110 Dec 08 12:38	0°♏	
morning max el	5110 Dec 11 22:06	3°♏19'51	46°19'51
	5111 Jan 05 22:15	0°♐	
	5111 Jan 31 19:25	0°♑	
	5111 Feb 25 17:09	0°♒	
desc. node	5111 Mar 21 18:32	29°♒30'28	
	5111 Mar 22 04:06	0°♓	
	5111 Apr 15 10:10	0°♈	
	5111 May 09 14:44	0°♉	
	5111 Jun 02 19:57	0°♊	
morning set	5111 Jun 16 17:38	17°♊11'18	
	5111 Jun 27 02:46	0°♋	
asc. node	5111 Jul 12 20:03	19°♋22'45	
	5111 Jul 21 11:01	0°♌	
superior conj	5111 Jul 24 06:19	3°♌27'10	0°26'58
minimum elong	5111 Jul 24 00:49	3°♌10'13	0°26'42
max. Earth dist.	5111 Jul 25 01:28	4°♌26'05	1.73348 AU
	5111 Aug 14 20:01	0°♍	
evening rise	5111 Aug 29 13:27	18°♍06'37	
	5111 Sep 08 05:35	0°♎	
	5111 Oct 02 16:18	0°♏	
	5111 Oct 27 05:06	0°♐	
desc. node	5111 Nov 01 11:19	6°♐24'45	
	5111 Nov 20 20:46	0°♑	
	5111 Dec 15 16:24	0°♒	
	5112 Jan 09 19:31	0°♓	
	5112 Feb 04 16:57	0°♈	
asc. node	5112 Feb 22 12:49	19°♈31'26	
evening max el	5112 Feb 28 21:24	26°♈06'26	47°05'24
	5112 Mar 03 18:39	0°♉	
greatest brilliancy	5112 Apr 09 09:42	27°♉24'52	-4.9m
retrograde	5112 Apr 19 14:31	29°♉23'23	
evening set	5112 May 06 14:53	23°♉46'52	
inferior conj	5112 May 10 14:42	21°♉19'52	7°11'55
minimum elong	5112 May 11 00:51	21°♉04'01	7°10'01
min. Earth dist.	5112 May 10 12:12	21°♉23'45	0.27750 AU
morning rise	5112 May 15 11:02	18°♉23'14	
direct	5112 May 31 11:32	13°♉23'21	
greatest brilliancy	5112 Jun 10 04:36	15°♉07'21	-4.8m
desc. node	5112 Jun 13 03:56	16°♉16'10	
	5112 Jul 04 04:30	0°♊	
morning max el	5112 Jul 19 15:26	13°♊53'31	45°55'28
	5112 Aug 04 14:47	0°♋	
	5112 Sep 01 02:45	0°♌	
	5112 Sep 27 04:27	0°♍	
asc. node	5112 Oct 04 05:47	8°♍18'17	
	5112 Oct 22 10:09	0°♎	
	5112 Nov 16 02:16	0°♏	
	5112 Dec 10 09:23	0°♐	
	5113 Jan 03 11:00	0°♑	
morning set	5113 Jan 14 08:36	13°♑38'40	
desc. node	5113 Jan 23 20:42	25°♑33'59	
	5113 Jan 27 09:27	0°♒	
	5113 Feb 20 06:11	0°♓	
superior conj	5113 Feb 24 11:23	5°♓18'20	-1°07'06
minimum elong	5113 Feb 23 23:29	4°♓40'55	1°06'42
max. Earth dist.	5113 Feb 24 12:55	5°♓23'11	1.71139 AU
	5113 Mar 16 02:34	0°♈	
evening rise	5113 Apr 06 08:08	26°♈39'03	
	5113 Apr 09 00:20	0°♉	
	5113 May 03 01:35	0°♊	
asc. node	5113 May 16 22:30	17°♊10'43	
	5113 May 27 08:15	0°♋	
	5113 Jun 20 22:08	0°♌	
	5113 Jul 15 21:50	0°♍	
	5113 Aug 10 12:40	0°♎	
desc. node	5113 Sep 05 13:28	29°♎13'37	
	5113 Sep 06 06:33	0°♏	
evening max el	5113 Oct 03 01:10	27°♏34'30	45°52'37
	5113 Oct 05 14:35	0°♐	
greatest brilliancy	5113 Nov 11 18:35	26°♐07'14	-4.8m
retrograde	5113 Nov 21 01:54	27°♐42'29	
evening set	5113 Dec 06 09:57	23°♐09'34	
inferior conj	5113 Dec 11 21:45	19°♐54'57	-3°51'44
minimum elong	5113 Dec 12 05:49	19°♐42'35	3°49'25
min. Earth dist.	5113 Dec 12 17:31	19°♐24'41	0.27353 AU
morning rise	5113 Dec 18 00:59	16°♐17'58	
asc. node	5113 Dec 27 15:06	12°♐31'46	
direct	5114 Jan 01 19:43	11°♐58'23	
greatest brilliancy	5114 Jan 12 20:24	14°♐15'47	-4.9m
	5114 Feb 05 11:18	0°♑	
morning max el	5114 Feb 21 12:17	15°♑12'20	46°57'18
	5114 Mar 07 12:58	0°♒	
	5114 Apr 03 01:04	0°♓	
desc. node	5114 Apr 18 06:30	17°♓55'07	
	5114 Apr 28 09:43	0°♈	
	5114 May 23 07:01	0°♉	
	5114 Jun 16 23:45	0°♊	
	5114 Jul 11 14:44	0°♋	
	5114 Aug 05 04:22	0°♌	
asc. node	5114 Aug 09 07:59	5°♌04'45	
morning set	5114 Aug 24 12:05	23°♌40'03	
	5114 Aug 29 15:53	0°♍	
	5114 Sep 23 00:47	0°♎	
max. Earth dist.	5114 Sep 28 00:30	6°♎09'17	1.73193 AU
superior conj	5114 Sep 29 23:15	8°♎33'36	1°24'47
minimum elong	5114 Sep 29 21:04	8°♎26'52	1°24'46
	5114 Oct 17 07:30	0°♏	
evening rise	5114 Nov 05 19:39	24°♏08'54	
	5114 Nov 10 13:00	0°♐	
desc. node	5114 Nov 28 23:06	22°♐49'26	
	5114 Dec 04 18:02	0°♑	
	5114 Dec 28 22:52	0°♒	
	5115 Jan 22 04:15	0°♓	
	5115 Feb 15 12:38	0°♈	
	5115 Mar 12 05:30	0°♉	
asc. node	5115 Mar 22 00:43	11°♉41'02	
	5115 Apr 06 17:11	0°♊	
	5115 May 03 23:09	0°♋	
evening max el	5115 May 11 13:15	7°♋42'46	46°15'45
	5115 Jun 06 10:31	0°♌	

greatest brilliancy	5115 Jun 19 00:28	6°♌52'58	-4.8m
retrograde	5115 Jun 30 04:29	9°♌09'08	
desc. node	5115 Jul 11 15:48	6°♌30'49	
evening set	5115 Jul 15 04:45	4°♌44'04	
min. Earth dist.	5115 Jul 21 02:52	1°♌11'05	0.28695 AU
inferior conj	5115 Jul 21 13:41	0°♌54'09	-2°21'22
minimum elong	5115 Jul 21 08:35	1°♌02'07	2°19'55
	5115 Jul 23 00:22	30℞♋	
morning rise	5115 Jul 27 12:59	27°♋18'57	
direct	5115 Aug 12 00:31	22°♋43'34	
greatest brilliancy	5115 Aug 21 22:51	24°♋30'44	-4.7m
	5115 Sep 02 03:50	0°♌	
morning max el	5115 Sep 29 18:01	22°♌27'39	45°43'40
	5115 Oct 07 10:13	0°♍	
asc. node	5115 Nov 01 17:41	27°♍01'12	
	5115 Nov 04 09:31	0°♎	
	5115 Nov 30 07:36	0°♏	
	5115 Dec 25 05:55	0°♐	
	5116 Jan 18 15:33	0°♑	
	5116 Feb 11 18:24	0°♒	
desc. node	5116 Feb 21 08:38	11°♒59'30	
	5116 Mar 06 17:46	0°♓	
	5116 Mar 30 15:50	0°♈	
morning set	5116 Apr 01 04:04	1°♈53'35	
	5116 Apr 23 14:31	0°♉	
superior conj	5116 May 11 03:13	21°♉53'17	-1°09'25
minimum elong	5116 May 11 13:50	22°♉26'20	1°09'06
max. Earth dist.	5116 May 15 02:33	26°♉50'14	1.72116 AU
	5116 May 17 15:31	0°♊	
	5116 Jun 10 19:48	0°♋	
asc. node	5116 Jun 13 10:16	3°♋13'08	
evening rise	5116 Jun 19 02:04	10°♋12'35	
	5116 Jul 05 03:41	0°♌	
	5116 Jul 29 15:25	0°♍	
	5116 Aug 23 07:58	0°♎	
	5116 Sep 17 07:28	0°♏	
desc. node	5116 Oct 03 01:24	18°♏40'01	
	5116 Oct 12 17:13	0°♐	
	5116 Nov 07 19:05	0°♑	
	5116 Dec 05 05:21	0°♒	
evening max el	5116 Dec 14 23:02	9°♒57'22	46°49'15
	5117 Jan 06 07:06	0°♓	
asc. node	5117 Jan 24 03:06	10°♓32'51	
greatest brilliancy	5117 Jan 24 06:30	10°♓35'57	-4.9m
retrograde	5117 Feb 03 06:54	12°♓29'23	
evening set	5117 Feb 18 22:20	7°♓40'35	
inferior conj	5117 Feb 23 20:47	4°♓43'16	7°01'24
minimum elong	5117 Feb 23 10:01	4°♓59'50	6°59'11
min. Earth dist.	5117 Feb 23 07:47	5°♓03'15	0.26776 AU
morning rise	5117 Feb 27 21:52	2°♓17'01	
	5117 Mar 04 05:18	30℞♒	
direct	5117 Mar 16 08:47	27°♒01'55	
greatest brilliancy	5117 Mar 25 17:51	28°♒41'50	-4.9m
	5117 Mar 29 01:22	0°♓	
morning max el	5117 May 05 12:35	29°♓22'47	46°41'41
	5117 May 06 03:31	0°♈	
desc. node	5117 May 15 18:12	9°♈52'04	
	5117 Jun 03 06:59	0°♉	
	5117 Jun 29 14:14	0°♊	
	5117 Jul 25 04:08	0°♋	
	5117 Aug 19 08:23	0°♌	
asc. node	5117 Sep 05 19:53	21°♌03'30	
	5117 Sep 13 04:57	0°♍	
	5117 Oct 07 18:31	0°♎	
morning set	5117 Oct 31 23:39	29°♎51'54	
	5117 Nov 01 02:16	0°♏	
	5117 Nov 25 05:55	0°♐	
max. Earth dist.	5117 Dec 05 18:26	13°♐07'01	1.72007 AU
superior conj	5117 Dec 08 16:40	16°♐46'08	0°41'05
minimum elong	5117 Dec 09 01:20	17°♐13'09	0°40'43
	5117 Dec 19 06:57	0°♑	
desc. node	5117 Dec 26 10:55	8°♑57'30	
	5118 Jan 12 06:19	0°♒	
evening rise	5118 Jan 17 11:52	6°♒33'10	
	5118 Feb 05 04:44	0°♓	
	5118 Mar 01 03:34	0°♈	
	5118 Mar 25 05:19	0°♉	
asc. node	5118 Apr 18 12:37	29°♉57'10	
	5118 Apr 18 13:32	0°♊	
	5118 May 13 08:58	0°♋	
	5118 Jun 07 23:08	0°♌	
	5118 Jul 05 01:25	0°♍	
evening max el	5118 Jul 21 00:40	16°♍11'47	45°33'59
	5118 Aug 05 10:22	0°♎	
desc. node	5118 Aug 08 03:45	2°♎10'10	
greatest brilliancy	5118 Aug 28 15:06	14°♎16'47	-4.7m
retrograde	5118 Sep 07 18:30	16°♎08'29	
evening set	5118 Sep 25 18:12	10°♎07'12	
inferior conj	5118 Sep 29 06:47	7°♎56'39	-8°31'57
minimum elong	5118 Sep 29 04:00	8°♎01'00	8°31'51
min. Earth dist.	5118 Sep 29 13:30	7°♎46'06	0.29042 AU
morning rise	5118 Oct 02 13:39	5°♎54'11	
	5118 Oct 16 13:32	30℞♍	
direct	5118 Oct 20 19:56	29°♍38'19	
	5118 Oct 25 04:38	0°♎	
greatest brilliancy	5118 Oct 31 15:15	1°♎44'59	-4.8m
asc. node	5118 Nov 29 05:17	21°♎16'25	
	5118 Dec 08 11:01	0°♏	
morning max el	5118 Dec 09 13:10	1°♏04'37	46°18'17
	5119 Jan 05 13:58	0°♐	
	5119 Jan 31 08:52	0°♑	
	5119 Feb 25 05:31	0°♒	
desc. node	5119 Mar 20 20:31	29°♒00'21	
	5119 Mar 21 15:51	0°♓	
	5119 Apr 14 21:31	0°♈	
	5119 May 09 01:46	0°♉	
	5119 Jun 02 06:44	0°♊	
morning set	5119 Jun 14 09:29	14°♊59'02	
	5119 Jun 26 13:21	0°♋	
asc. node	5119 Jul 11 22:08	18°♋56'48	
	5119 Jul 20 21:29	0°♌	
superior conj	5119 Jul 21 23:42	1°♌20'44	0°23'51
minimum elong	5119 Jul 21 18:45	1°♌05'31	0°23'37
max. Earth dist.	5119 Jul 22 20:36	2°♌25'05	1.73327 AU
	5119 Aug 14 06:29	0°♍	
evening rise	5119 Aug 27 08:02	16°♍03'57	
	5119 Sep 07 16:10	0°♎	
	5119 Oct 02 03:07	0°♏	
	5119 Oct 26 16:18	0°♐	
desc. node	5119 Oct 31 13:13	5°♐56'04	
	5119 Nov 20 08:33	0°♑	
	5119 Dec 15 05:01	0°♒	
	5120 Jan 09 09:29	0°♓	
	5120 Feb 04 09:34	0°♈	
asc. node	5120 Feb 21 14:54	18°♈43'54	
evening max el	5120 Feb 26 11:16	23°♈43'49	47°06'13
	5120 Mar 03 18:52	0°♉	
greatest brilliancy	5120 Apr 07 00:27	25°♉04'35	-4.9m
retrograde	5120 Apr 17 05:17	27°♉03'23	
evening set	5120 May 04 08:17	21°♉21'56	
inferior conj	5120 May 08 04:49	19°♉00'04	7°25'14

minimum elong	5120 May 08 14:44	18°♉44'37	7°23'29
min. Earth dist.	5120 May 08 02:04	19°♉04'21	0.27722 AU
morning rise	5120 May 12 21:24	16°♉09'12	
direct	5120 May 29 01:09	11°♉03'50	
greatest brilliancy	5120 Jun 07 17:48	12°♉47'55	-4.8m
desc. node	5120 Jun 12 05:54	14°♉38'03	
	5120 Jul 04 12:04	0°♊	
morning max el	5120 Jul 17 06:56	11°♊40'30	45°56'53
	5120 Aug 04 08:29	0°♋	
	5120 Aug 31 16:44	0°♌	
	5120 Sep 26 16:48	0°♍	
asc. node	5120 Oct 03 07:46	7°♍48'31	
	5120 Oct 21 21:41	0°♎	
	5120 Nov 15 13:23	0°♏	
	5120 Dec 09 20:18	0°♐	
	5121 Jan 02 21:51	0°♑	
morning set	5121 Jan 11 20:32	11°♑11'44	
desc. node	5121 Jan 22 22:49	25°♑06'37	
	5121 Jan 26 20:17	0°♒	
	5121 Feb 19 17:01	0°♓	
superior conj	5121 Feb 21 21:33	2°♓45'16	-1°04'27
minimum elong	5121 Feb 21 09:32	2°♓07'29	1°04'03
max. Earth dist.	5121 Feb 21 22:11	2°♓47'16	1.71140 AU
	5121 Mar 15 13:23	0°♈	
evening rise	5121 Apr 03 18:49	24°♈08'12	
	5121 Apr 08 11:12	0°♉	
	5121 May 02 12:32	0°♊	
asc. node	5121 May 16 00:26	16°♊42'35	
	5121 May 26 19:24	0°♋	
	5121 Jun 20 09:38	0°♌	
	5121 Jul 15 09:58	0°♍	
	5121 Aug 10 02:04	0°♎	
desc. node	5121 Sep 04 15:32	28°♎35'43	
	5121 Sep 05 22:44	0°♏	
evening max el	5121 Sep 30 16:20	25°♏21'12	45°51'01
	5121 Oct 05 15:17	0°♐	
greatest brilliancy	5121 Nov 09 07:30	23°♐47'29	-4.8m
retrograde	5121 Nov 18 15:17	25°♐22'34	
evening set	5121 Dec 04 02:09	20°♐45'54	
inferior conj	5121 Dec 09 11:23	17°♐34'18	-4°11'52
minimum elong	5121 Dec 09 19:58	17°♐21'06	4°09'28
min. Earth dist.	5121 Dec 10 07:33	17°♐03'21	0.27417 AU
morning rise	5121 Dec 15 13:10	13°♐59'03	
asc. node	5121 Dec 26 17:13	9°♐54'02	
direct	5121 Dec 30 10:39	9°♐36'56	
greatest brilliancy	5122 Jan 10 10:52	11°♐54'01	-4.9m
	5122 Feb 05 18:01	0°♑	
morning max el	5122 Feb 19 03:03	12°♑51'29	46°56'37
	5122 Mar 07 07:12	0°♒	
	5122 Apr 02 15:47	0°♓	
desc. node	5122 Apr 17 08:27	17°♓20'24	
	5122 Apr 27 22:48	0°♈	
	5122 May 22 19:09	0°♉	
	5122 Jun 16 11:17	0°♊	
	5122 Jul 11 01:52	0°♋	
	5122 Aug 04 15:14	0°♌	
asc. node	5122 Aug 08 10:02	4°♌37'54	
morning set	5122 Aug 22 05:40	21°♌33'55	
	5122 Aug 29 02:34	0°♍	
	5122 Sep 22 11:24	0°♎	
max. Earth dist.	5122 Sep 25 19:32	4°♎07'10	1.73215 AU
superior conj	5122 Sep 27 17:08	6°♎27'52	1°24'20
minimum elong	5122 Sep 27 14:17	6°♎19'05	1°24'20
	5122 Oct 16 18:10	0°♏	
evening rise	5122 Nov 03 11:40	21°♏56'31	
	5122 Nov 09 23:49	0°♐	
desc. node	5122 Nov 28 01:07	22°♐21'39	
	5122 Dec 04 05:06	0°♑	
	5122 Dec 28 10:15	0°♒	
	5123 Jan 21 16:01	0°♓	
	5123 Feb 15 00:59	0°♈	
	5123 Mar 11 18:47	0°♉	
asc. node	5123 Mar 21 02:39	11°♉05'57	
	5123 Apr 06 08:17	0°♊	
	5123 May 03 18:55	0°♋	
evening max el	5123 May 09 05:00	5°♋28'42	46°17'44
	5123 Jun 07 11:37	0°♌	
greatest brilliancy	5123 Jun 16 17:28	4°♌42'23	-4.8m
retrograde	5123 Jun 27 20:26	6°♌57'28	
desc. node	5123 Jul 10 17:55	3°♌39'30	
evening set	5123 Jul 12 20:26	2°♌33'28	
	5123 Jul 17 04:19	30°℞♋	
inferior conj	5123 Jul 19 05:35	28°♋42'59	-2°01'40
minimum elong	5123 Jul 19 01:10	28°♋49'55	2°00'23
min. Earth dist.	5123 Jul 18 19:06	28°♋59'26	0.28658 AU
morning rise	5123 Jul 25 06:28	25°♋05'20	
direct	5123 Aug 09 16:15	20°♋33'04	
greatest brilliancy	5123 Aug 19 13:55	22°♋19'28	-4.7m
	5123 Sep 03 03:59	0°♌	
morning max el	5123 Sep 27 08:42	20°♌14'35	45°43'14
	5123 Oct 07 05:36	0°♍	
asc. node	5123 Oct 31 19:34	26°♍24'38	
	5123 Nov 04 00:11	0°♎	
	5123 Nov 29 20:28	0°♏	
	5123 Dec 24 17:56	0°♐	
	5124 Jan 18 03:09	0°♑	
	5124 Feb 11 05:45	0°♒	
desc. node	5124 Feb 20 10:39	11°♒30'30	
	5124 Mar 06 04:58	0°♓	
morning set	5124 Mar 29 14:42	29°♓21'43	
	5124 Mar 30 02:55	0°♈	
	5124 Apr 23 01:31	0°♉	
superior conj	5124 May 08 16:09	19°♉29'52	-1°11'36
minimum elong	5124 May 09 02:32	20°♉02'13	1°11'20
max. Earth dist.	5124 May 12 17:07	24°♉32'03	1.72060 AU
	5124 May 17 02:27	0°♊	
	5124 Jun 10 06:42	0°♋	
asc. node	5124 Jun 12 12:20	2°♋45'49	
evening rise	5124 Jun 16 17:20	7°♋57'48	
	5124 Jul 04 14:39	0°♌	
	5124 Jul 29 02:35	0°♍	
	5124 Aug 22 19:32	0°♎	
	5124 Sep 16 19:42	0°♏	
desc. node	5124 Oct 02 03:18	18°♏07'51	
	5124 Oct 12 06:35	0°♐	
	5124 Nov 07 10:34	0°♑	
	5124 Dec 05 01:43	0°♒	
evening max el	5124 Dec 12 11:41	7°♒31'35	46°47'28
	5125 Jan 07 03:15	0°♓	
greatest brilliancy	5125 Jan 21 20:06	8°♓09'05	-4.9m
asc. node	5125 Jan 23 05:07	8°♓37'06	
retrograde	5125 Jan 31 18:54	10°♓01'25	
evening set	5125 Feb 16 07:05	5°♓18'22	
inferior conj	5125 Feb 21 09:22	2°♓16'01	6°45'31
minimum elong	5125 Feb 20 22:28	2°♓32'47	6°43'09
min. Earth dist.	5125 Feb 20 21:19	2°♓34'32	0.26757 AU
	5125 Feb 25 03:22	30°℞♒	
morning rise	5125 Feb 25 13:57	29°♒44'38	
direct	5125 Mar 13 20:44	24°♒34'32	
greatest brilliancy	5125 Mar 23 08:07	26°♒16'11	-4.9m
	5125 Mar 31 10:12	0°♓	

morning max el	5125 May 03 00:51	26°♓55'50	46°43'05
	5125 May 06 02:05	0°♈	
desc. node	5125 May 14 20:14	9°♈05'24	
	5125 Jun 02 23:16	0°♉	
	5125 Jun 29 04:04	0°♊	
	5125 Jul 24 16:40	0°♋	
	5125 Aug 18 20:07	0°♌	
asc. node	5125 Sep 04 21:49	20°♌34'51	
	5125 Sep 12 16:14	0°♍	
	5125 Oct 07 05:33	0°♎	
morning set	5125 Oct 29 15:58	27°♎39'56	
	5125 Oct 31 13:13	0°♏	
	5125 Nov 24 16:51	0°♐	
max. Earth dist.	5125 Dec 03 09:18	10°♐49'32	1.72052 AU
superior conj	5125 Dec 06 06:49	14°♐26'20	0°44'12
minimum elong	5125 Dec 06 15:53	14°♐54'36	0°43'50
	5125 Dec 18 17:57	0°♑	
desc. node	5125 Dec 25 13:03	8°♑29'42	
	5126 Jan 11 17:24	0°♒	
evening rise	5126 Jan 15 00:02	4°♒06'13	
	5126 Feb 04 15:56	0°♓	
	5126 Feb 28 14:57	0°♈	
	5126 Mar 24 16:57	0°♉	
asc. node	5126 Apr 17 14:32	29°♉26'16	
	5126 Apr 18 01:35	0°♊	
	5126 May 12 21:46	0°♋	
	5126 Jun 07 13:27	0°♌	
	5126 Jul 04 19:23	0°♍	
evening max el	5126 Jul 18 15:32	13°♍58'03	45°34'40
	5126 Aug 05 19:52	0°♎	
desc. node	5126 Aug 07 05:46	1°♎05'08	
greatest brilliancy	5126 Aug 26 04:55	12°♎04'23	-4.7m
retrograde	5126 Sep 05 10:34	13°♎58'16	
evening set	5126 Sep 23 08:00	7°♎59'18	
inferior conj	5126 Sep 26 22:48	5°♎45'36	-8°28'35
minimum elong	5126 Sep 26 19:16	5°♎51'07	8°28'24
min. Earth dist.	5126 Sep 27 04:20	5°♎36'55	0.29068 AU
morning rise	5126 Sep 30 06:24	3°♎42'12	
	5126 Oct 07 04:14	30°℞♍	
direct	5126 Oct 18 12:02	27°♍26'51	
greatest brilliancy	5126 Oct 29 07:03	29°♍33'25	-4.8m
	5126 Oct 30 10:21	0°♎	
asc. node	5126 Nov 28 07:26	20°♎20'37	
morning max el	5126 Dec 07 05:01	28°♎50'12	46°16'46
	5126 Dec 08 09:04	0°♏	
	5127 Jan 05 05:51	0°♐	
	5127 Jan 30 22:34	0°♑	
	5127 Feb 24 18:09	0°♒	
desc. node	5127 Mar 19 22:29	28°♒29'17	
	5127 Mar 21 03:52	0°♓	
	5127 Apr 14 09:07	0°♈	
	5127 May 08 13:04	0°♉	
	5127 Jun 01 17:49	0°♊	
morning set	5127 Jun 12 01:09	12°♊44'57	
	5127 Jun 26 00:18	0°♋	
asc. node	5127 Jul 11 00:11	18°♋29'29	
superior conj	5127 Jul 19 16:41	29°♋11'45	0°20'40
minimum elong	5127 Jul 19 12:20	28°♋58'23	0°20'26
	5127 Jul 20 08:21	0°♌	
max. Earth dist.	5127 Jul 20 16:29	0°♌25'02	1.73308 AU
	5127 Aug 13 17:22	0°♍	
evening rise	5127 Aug 25 02:16	13°♍58'59	
	5127 Sep 07 03:10	0°♎	
	5127 Oct 01 14:21	0°♏	
	5127 Oct 26 03:57	0°♐	
desc. node	5127 Oct 30 15:15	5°♐26'31	
	5127 Nov 19 20:48	0°♑	
	5127 Dec 14 18:08	0°♒	
	5128 Jan 09 00:01	0°♓	
	5128 Feb 04 02:52	0°♈	
asc. node	5128 Feb 20 16:52	17°♈54'23	
evening max el	5128 Feb 24 02:14	21°♈23'14	47°07'10
	5128 Mar 03 20:38	0°♉	
greatest brilliancy	5128 Apr 04 14:50	22°♉43'36	-4.9m
retrograde	5128 Apr 14 20:34	24°♉43'05	
evening set	5128 May 02 01:50	18°♉56'52	
inferior conj	5128 May 05 19:06	16°♉39'57	7°37'48
minimum elong	5128 May 06 04:43	16°♉25'01	7°36'12
min. Earth dist.	5128 May 05 15:40	16°♉45'18	0.27693 AU
morning rise	5128 May 10 07:49	13°♉55'01	
direct	5128 May 26 15:24	8°♉44'16	
greatest brilliancy	5128 Jun 05 06:34	10°♉27'38	-4.8m
desc. node	5128 Jun 11 08:03	13°♉03'24	
	5128 Jul 04 17:38	0°♊	
morning max el	5128 Jul 14 22:52	9°♊27'43	45°58'02
	5128 Aug 04 02:08	0°♋	
	5128 Aug 31 06:58	0°♌	
	5128 Sep 26 05:29	0°♍	
asc. node	5128 Oct 02 09:44	7°♍17'35	
	5128 Oct 21 09:33	0°♎	
	5128 Nov 15 00:50	0°♏	
	5128 Dec 09 07:32	0°♐	
	5129 Jan 02 09:00	0°♑	
morning set	5129 Jan 09 08:31	8°♑44'04	
desc. node	5129 Jan 22 00:47	24°♑37'45	
	5129 Jan 26 07:26	0°♒	
superior conj	5129 Feb 19 07:47	0°♓11'26	-1°01'41
minimum elong	5129 Feb 18 19:47	29°♒33'39	1°01'15
	5129 Feb 19 04:09	0°♓	
max. Earth dist.	5129 Feb 19 06:04	0°♓06'01	1.71139 AU
	5129 Mar 15 00:30	0°♈	
evening rise	5129 Apr 01 05:37	21°♈36'48	
	5129 Apr 07 22:18	0°♉	
	5129 May 01 23:43	0°♊	
asc. node	5129 May 15 02:32	16°♊14'24	
	5129 May 26 06:45	0°♋	
	5129 Jun 19 21:20	0°♌	
	5129 Jul 14 22:23	0°♍	
	5129 Aug 09 15:51	0°♎	
desc. node	5129 Sep 03 17:27	27°♎56'10	
	5129 Sep 05 15:33	0°♏	
evening max el	5129 Sep 28 07:14	23°♏06'22	45°49'23
	5129 Oct 05 17:45	0°♐	
greatest brilliancy	5129 Nov 06 21:03	21°♐27'56	-4.8m
retrograde	5129 Nov 16 04:17	23°♐02'14	
evening set	5129 Dec 01 18:32	18°♐21'50	
inferior conj	5129 Dec 07 01:09	15°♐13'26	-4°31'17
minimum elong	5129 Dec 07 10:11	14°♐59'31	4°28'51
min. Earth dist.	5129 Dec 07 21:53	14°♐41'32	0.27480 AU
morning rise	5129 Dec 13 01:12	11°♐40'01	
asc. node	5129 Dec 25 19:14	7°♐21'27	
direct	5129 Dec 28 01:19	7°♐15'15	
greatest brilliancy	5130 Jan 08 01:41	9°♐32'09	-4.9m
	5130 Feb 05 22:57	0°♑	
morning max el	5130 Feb 16 16:54	10°♑27'35	46°55'52
	5130 Mar 07 01:14	0°♒	
	5130 Apr 02 06:33	0°♓	
desc. node	5130 Apr 16 10:26	16°♓45'24	
	5130 Apr 27 11:59	0°♈	
	5130 May 22 07:24	0°♉	
	5130 Jun 15 22:55	0°♊	

	5130 Jul 10 13:05	0°♋	
	5130 Aug 04 02:10	0°♌	
asc. node	5130 Aug 07 11:56	4°♌10'20	
morning set	5130 Aug 19 23:28	19°♌28'11	
	5130 Aug 28 13:21	0°♍	
	5130 Sep 21 22:09	0°♎	
max. Earth dist.	5130 Sep 23 13:00	1°♎59'47	1.73243 AU
superior conj	5130 Sep 25 11:11	4°♎22'15	1°23'47
minimum elong	5130 Sep 25 07:43	4°♎11'32	1°23'45
	5130 Oct 16 04:59	0°♏	
evening rise	5130 Nov 01 03:45	19°♏43'50	
	5130 Nov 09 10:49	0°♐	
desc. node	5130 Nov 27 03:12	21°♐53'35	
	5130 Dec 03 16:20	0°♑	
	5130 Dec 27 21:47	0°♒	
	5131 Jan 21 03:58	0°♓	
	5131 Feb 14 13:31	0°♈	
	5131 Mar 11 08:18	0°♉	
asc. node	5131 Mar 20 04:38	10°♉30'28	
	5131 Apr 05 23:42	0°♊	
	5131 May 03 15:23	0°♋	
evening max el	5131 May 06 20:07	3°♋12'44	46°19'49
	5131 Jun 08 23:00	0°♌	
greatest brilliancy	5131 Jun 14 10:56	2°♌32'32	-4.8m
retrograde	5131 Jun 25 12:15	4°♌46'32	
desc. node	5131 Jul 09 19:50	0°♌45'42	
evening set	5131 Jul 10 12:29	0°♌23'12	
	5131 Jul 11 05:08	30°℞♋	
inferior conj	5131 Jul 16 21:45	26°♋32'39	-1°41'56
minimum elong	5131 Jul 16 18:01	26°♋38'31	1°40'50
min. Earth dist.	5131 Jul 16 11:48	26°♋48'16	0.28620 AU
morning rise	5131 Jul 23 00:03	22°♋52'44	
direct	5131 Aug 07 07:43	18°♋23'20	
greatest brilliancy	5131 Aug 17 05:42	20°♋09'36	-4.7m
	5131 Sep 03 21:28	0°♌	
morning max el	5131 Sep 24 23:05	18°♌01'05	45°42'46
	5131 Oct 07 00:20	0°♍	
asc. node	5131 Oct 30 21:42	25°♍49'02	
	5131 Nov 03 14:39	0°♎	
	5131 Nov 29 09:17	0°♏	
	5131 Dec 24 05:59	0°♐	
	5132 Jan 17 14:46	0°♑	
	5132 Feb 10 17:06	0°♒	
desc. node	5132 Feb 19 12:37	11°♒01'16	
	5132 Mar 05 16:08	0°♓	
morning set	5132 Mar 27 01:08	26°♓49'09	
	5132 Mar 29 13:58	0°♈	
	5132 Apr 22 12:30	0°♉	
superior conj	5132 May 06 05:02	17°♉06'20	-1°13'41
minimum elong	5132 May 06 15:06	17°♉37'44	1°13'25
max. Earth dist.	5132 May 10 04:56	22°♉05'18	1.72005 AU
	5132 May 16 13:21	0°♊	
	5132 Jun 09 17:33	0°♋	
asc. node	5132 Jun 11 14:23	2°♋18'35	
evening rise	5132 Jun 14 08:34	5°♋43'04	
	5132 Jul 04 01:32	0°♌	
	5132 Jul 28 13:39	0°♍	
	5132 Aug 22 06:59	0°♎	
	5132 Sep 16 07:51	0°♏	
desc. node	5132 Oct 01 05:22	17°♏36'26	
	5132 Oct 11 19:57	0°♐	
	5132 Nov 07 02:12	0°♑	
	5132 Dec 04 22:46	0°♒	
evening max el	5132 Dec 10 00:13	5°♒05'42	46°45'34
	5133 Jan 08 06:49	0°♓	
greatest brilliancy	5133 Jan 19 09:13	5°♓41'23	-4.9m
asc. node	5133 Jan 22 07:03	6°♓36'12	
retrograde	5133 Jan 29 07:04	7°♓33'22	
evening set	5133 Feb 13 15:50	2°♓55'26	
inferior conj	5133 Feb 18 21:49	29°♒48'28	6°28'45
minimum elong	5133 Feb 18 10:52	0°♓05'14	6°26'14
min. Earth dist.	5133 Feb 18 10:35	0°♓05'41	0.26739 AU
	5133 Feb 18 14:17	30°℞♒	
morning rise	5133 Feb 23 05:58	27°♒12'10	
direct	5133 Mar 11 08:41	22°♒06'48	
greatest brilliancy	5133 Mar 20 22:08	23°♒50'18	-4.9m
	5133 Apr 01 22:55	0°♓	
morning max el	5133 Apr 30 13:48	24°♓30'53	46°44'31
	5133 May 05 23:41	0°♈	
desc. node	5133 May 13 22:23	8°♈20'07	
	5133 Jun 02 15:08	0°♉	
	5133 Jun 28 17:36	0°♊	
	5133 Jul 24 04:55	0°♋	
	5133 Aug 18 07:37	0°♌	
asc. node	5133 Sep 03 23:51	20°♌07'12	
	5133 Sep 12 03:16	0°♍	
	5133 Oct 06 16:20	0°♎	
morning set	5133 Oct 27 08:47	25°♎30'21	
	5133 Oct 30 23:54	0°♏	
	5133 Nov 24 03:34	0°♐	
max. Earth dist.	5133 Dec 01 02:16	8°♐39'17	1.72102 AU
superior conj	5133 Dec 03 21:16	12°♐08'10	0°47'13
minimum elong	5133 Dec 04 06:40	12°♐37'28	0°46'51
	5133 Dec 18 04:45	0°♑	
desc. node	5133 Dec 24 15:02	8°♑02'00	
	5134 Jan 11 04:20	0°♒	
evening rise	5134 Jan 12 12:13	1°♒39'50	
	5134 Feb 04 03:02	0°♓	
	5134 Feb 28 02:13	0°♈	
	5134 Mar 24 04:27	0°♉	
asc. node	5134 Apr 16 16:40	28°♉56'27	
	5134 Apr 17 13:30	0°♊	
	5134 May 12 10:27	0°♋	
	5134 Jun 07 03:43	0°♌	
	5134 Jul 04 13:31	0°♍	
evening max el	5134 Jul 16 07:27	11°♍47'45	45°35'29
desc. node	5134 Aug 06 07:46	29°♍59'20	
	5134 Aug 06 08:07	0°♎	
greatest brilliancy	5134 Aug 23 18:43	9°♎53'20	-4.7m
retrograde	5134 Sep 03 03:11	11°♎49'32	
evening set	5134 Sep 20 21:50	5°♎53'25	
inferior conj	5134 Sep 24 15:00	3°♎36'09	-8°24'36
minimum elong	5134 Sep 24 10:46	3°♎42'47	8°24'20
min. Earth dist.	5134 Sep 24 19:01	3°♎29'53	0.29086 AU
morning rise	5134 Sep 27 23:36	1°♎31'27	
	5134 Sep 30 14:12	30°℞♍	
direct	5134 Oct 16 04:44	25°♍17'21	
greatest brilliancy	5134 Oct 26 22:18	27°♍22'59	-4.8m
	5134 Nov 01 17:24	0°♎	
asc. node	5134 Nov 27 09:24	19°♎26'57	
morning max el	5134 Dec 04 21:17	26°♎38'24	46°15'08
	5134 Dec 08 05:47	0°♏	
	5135 Jan 04 21:06	0°♐	
	5135 Jan 30 11:52	0°♑	
	5135 Feb 24 06:29	0°♒	
desc. node	5135 Mar 19 00:34	27°♒59'13	
	5135 Mar 20 15:39	0°♓	
	5135 Apr 13 20:31	0°♈	
	5135 May 08 00:10	0°♉	
	5135 Jun 01 04:40	0°♊	
morning set	5135 Jun 09 16:31	10°♊30'44	

	5135 Jun 25 10:58	0°♋	
asc. node	5135 Jul 10 02:05	18°♋02'37	
superior conj	5135 Jul 17 09:30	27°♋03'05	0°17'26
minimum elong	5135 Jul 17 05:48	26°♋51'40	0°17'14
max. Earth dist.	5135 Jul 18 13:51	28°♋30'25	1.73285 AU
	5135 Jul 19 18:57	0°♌	
	5135 Aug 13 03:58	0°♍	
evening rise	5135 Aug 22 20:38	11°♍55'16	
	5135 Sep 06 13:52	0°♎	
	5135 Oct 01 01:16	0°♏	
	5135 Oct 25 15:14	0°♐	
desc. node	5135 Oct 29 17:23	4°♐58'25	
	5135 Nov 19 08:40	0°♑	
	5135 Dec 14 06:55	0°♒	
	5136 Jan 08 14:17	0°♓	
	5136 Feb 03 20:11	0°♈	
asc. node	5136 Feb 19 18:51	17°♈04'48	
evening max el	5136 Feb 21 17:36	19°♈04'15	47°07'38
	5136 Mar 03 23:38	0°♉	
greatest brilliancy	5136 Apr 02 05:11	20°♉22'28	-4.9m
retrograde	5136 Apr 12 11:27	22°♉22'01	
evening set	5136 Apr 29 19:07	16°♉31'26	
inferior conj	5136 May 03 09:06	14°♉19'18	7°49'44
minimum elong	5136 May 03 18:19	14°♉04'58	7°48'18
min. Earth dist.	5136 May 03 04:57	14°♉25'45	0.27663 AU
morning rise	5136 May 07 17:47	11°♉40'20	
direct	5136 May 24 05:36	6°♉24'23	
greatest brilliancy	5136 Jun 02 18:52	8°♉06'34	-4.8m
desc. node	5136 Jun 10 09:58	11°♉31'44	
	5136 Jul 04 21:10	0°♊	
morning max el	5136 Jul 12 13:50	7°♊13'05	45°59'16
	5136 Aug 03 19:08	0°♋	
	5136 Aug 30 20:44	0°♌	
	5136 Sep 25 17:45	0°♍	
asc. node	5136 Oct 01 11:48	6°♍48'01	
	5136 Oct 20 21:02	0°♎	
	5136 Nov 14 11:53	0°♏	
	5136 Dec 08 18:22	0°♐	
	5137 Jan 01 19:45	0°♑	
morning set	5137 Jan 06 21:09	6°♑19'47	
desc. node	5137 Jan 21 02:46	24°♑10'20	
	5137 Jan 25 18:10	0°♒	
superior conj	5137 Feb 16 18:25	27°♒40'06	-0°58'49
minimum elong	5137 Feb 16 06:30	27°♒02'39	0°58'22
max. Earth dist.	5137 Feb 16 12:36	27°♒21'48	1.71146 AU
	5137 Feb 18 14:54	0°♓	
	5137 Mar 14 11:17	0°♈	
evening rise	5137 Mar 29 16:16	19°♈05'46	
	5137 Apr 07 09:08	0°♉	
	5137 May 01 10:40	0°♊	
asc. node	5137 May 14 04:30	15°♊46'26	
	5137 May 25 17:54	0°♋	
	5137 Jun 19 08:52	0°♌	
	5137 Jul 14 10:37	0°♍	
	5137 Aug 09 05:31	0°♎	
desc. node	5137 Sep 02 19:33	27°♎17'25	
	5137 Sep 05 08:26	0°♏	
evening max el	5137 Sep 25 21:13	20°♏50'11	45°47'50
	5137 Oct 05 21:25	0°♐	
greatest brilliancy	5137 Nov 04 11:15	19°♐10'20	-4.8m
retrograde	5137 Nov 13 17:04	20°♐43'31	
evening set	5137 Nov 29 11:07	15°♐59'09	
inferior conj	5137 Dec 04 15:04	12°♐54'16	-4°50'13
minimum elong	5137 Dec 05 00:29	12°♐39'46	4°47'45
min. Earth dist.	5137 Dec 05 12:37	12°♐21'03	0.27539 AU
morning rise	5137 Dec 10 13:10	9°♐22'59	
asc. node	5137 Dec 24 21:08	4°♐55'53	
direct	5137 Dec 25 15:35	4°♐55'11	
greatest brilliancy	5138 Jan 05 17:01	7°♐12'31	-4.9m
	5138 Feb 06 01:31	0°♑	
morning max el	5138 Feb 14 05:53	8°♑02'56	46°55'13
	5138 Mar 06 18:21	0°♒	
	5138 Apr 01 20:41	0°♓	
desc. node	5138 Apr 15 12:33	16°♓12'09	
	5138 Apr 27 00:41	0°♈	
	5138 May 21 19:18	0°♉	
	5138 Jun 15 10:17	0°♊	
	5138 Jul 10 00:05	0°♋	
	5138 Aug 03 12:53	0°♌	
asc. node	5138 Aug 06 14:01	3°♌43'57	
morning set	5138 Aug 17 16:50	17°♌21'43	
	5138 Aug 27 23:54	0°♍	
	5138 Sep 21 08:39	0°♎	
max. Earth dist.	5138 Sep 21 06:16	29°♍52'38	1.73269 AU
superior conj	5138 Sep 23 05:00	2°♎16'42	1°23'06
minimum elong	5138 Sep 23 00:53	2°♎04'02	1°23'03
	5138 Oct 15 15:35	0°♏	
evening rise	5138 Oct 29 19:49	17°♏31'59	
	5138 Nov 08 21:36	0°♐	
desc. node	5138 Nov 26 05:08	21°♐25'46	
	5138 Dec 03 03:20	0°♑	
	5138 Dec 27 09:04	0°♒	
	5139 Jan 20 15:37	0°♓	
	5139 Feb 14 01:44	0°♈	
	5139 Mar 10 21:31	0°♉	
asc. node	5139 Mar 19 06:45	9°♉56'17	
	5139 Apr 05 14:57	0°♊	
	5139 May 03 12:13	0°♋	
evening max el	5139 May 04 10:12	0°♋54'50	46°21'40
	5139 Jun 11 05:50	0°♌	
greatest brilliancy	5139 Jun 12 03:58	0°♌22'06	-4.8m
retrograde	5139 Jun 23 03:55	2°♌35'27	
	5139 Jul 04 13:53	30°℞♋	
evening set	5139 Jul 08 04:26	28°♋12'09	
desc. node	5139 Jul 08 21:52	27°♋47'53	
min. Earth dist.	5139 Jul 14 04:25	24°♋36'27	0.28589 AU
inferior conj	5139 Jul 14 13:40	24°♋21'57	-1°21'42
minimum elong	5139 Jul 14 10:39	24°♋26'40	1°20'49
morning rise	5139 Jul 20 17:18	20°♋40'01	
direct	5139 Aug 04 22:43	16°♋12'57	
greatest brilliancy	5139 Aug 14 21:50	17°♋59'51	-4.7m
	5139 Sep 04 10:30	0°♌	
morning max el	5139 Sep 22 13:38	15°♌48'04	45°42'29
	5139 Oct 06 18:31	0°♍	
asc. node	5139 Oct 29 23:43	25°♍13'44	
	5139 Nov 03 04:51	0°♎	
	5139 Nov 28 21:53	0°♏	
	5139 Dec 23 17:49	0°♐	
	5140 Jan 17 02:11	0°♑	
	5140 Feb 10 04:15	0°♒	
desc. node	5140 Feb 18 14:42	10°♒33'05	
	5140 Mar 05 03:06	0°♓	
morning set	5140 Mar 24 11:49	24°♓18'01	
	5140 Mar 29 00:48	0°♈	
	5140 Apr 21 23:14	0°♉	
superior conj	5140 May 03 18:12	14°♉44'21	-1°15'36
minimum elong	5140 May 04 03:52	15°♉14'32	1°15'22
max. Earth dist.	5140 May 07 16:04	19°♉37'09	1.71953 AU
	5140 May 16 00:00	0°♊	
	5140 Jun 09 04:13	0°♋	

asc. node	5140 Jun 10 16:18	1°♋51'32	
evening rise	5140 Jun 11 23:56	3°♋29'17	
	5140 Jul 03 12:18	0°♌	
	5140 Jul 28 00:39	0°♍	
	5140 Aug 21 18:25	0°♎	
	5140 Sep 15 20:01	0°♏	
desc. node	5140 Sep 30 07:26	17°♏04'59	
	5140 Oct 11 09:23	0°♐	
	5140 Nov 06 18:03	0°♑	
	5140 Dec 04 20:32	0°♒	
evening max el	5140 Dec 07 13:11	2°♒41'23	46°43'47
	5141 Jan 09 21:54	0°♓	
greatest brilliancy	5141 Jan 16 21:48	3°♓13'25	-4.9m
asc. node	5141 Jan 21 09:09	4°♓30'37	
retrograde	5141 Jan 26 19:51	5°♓05'42	
evening set	5141 Feb 11 00:48	0°♓32'21	
	5141 Feb 11 23:51	30°℞♒	
inferior conj	5141 Feb 16 10:14	27°♒21'00	6°11'06
minimum elong	5141 Feb 15 23:21	27°♒37'39	6°08'30
min. Earth dist.	5141 Feb 15 23:33	27°♒37'20	0.26721 AU
morning rise	5141 Feb 20 21:57	24°♒40'00	
direct	5141 Mar 08 21:04	19°♒39'13	
greatest brilliancy	5141 Mar 18 11:37	21°♒24'06	-4.9m
	5141 Apr 03 00:43	0°♓	
morning max el	5141 Apr 28 03:42	22°♓08'43	46°46'03
	5141 May 05 20:20	0°♈	
desc. node	5141 May 13 00:17	7°♈35'15	
	5141 Jun 02 06:34	0°♉	
	5141 Jun 28 06:51	0°♊	
	5141 Jul 23 17:01	0°♋	
	5141 Aug 17 19:03	0°♌	
asc. node	5141 Sep 03 01:55	19°♌39'37	
	5141 Sep 11 14:19	0°♍	
	5141 Oct 06 03:11	0°♎	
morning set	5141 Oct 25 01:25	23°♎20'01	
	5141 Oct 30 10:40	0°♏	
	5141 Nov 23 14:20	0°♐	
max. Earth dist.	5141 Nov 28 18:38	6°♐27'04	1.72147 AU
superior conj	5141 Dec 01 11:32	9°♐49'18	0°50'10
minimum elong	5141 Dec 01 21:11	10°♐19'25	0°49'47
	5141 Dec 17 15:36	0°♑	
desc. node	5141 Dec 23 16:59	7°♑34'06	
evening rise	5142 Jan 10 00:18	29°♑12'59	
	5142 Jan 10 15:19	0°♒	
	5142 Feb 03 14:11	0°♓	
	5142 Feb 27 13:33	0°♈	
	5142 Mar 23 16:02	0°♉	
asc. node	5142 Apr 15 18:37	28°♉25'55	
	5142 Apr 17 01:29	0°♊	
	5142 May 11 23:13	0°♋	
	5142 Jun 06 18:07	0°♌	
	5142 Jul 04 08:07	0°♍	
evening max el	5142 Jul 13 23:51	9°♍38'37	45°36'11
desc. node	5142 Aug 05 09:50	28°♍51'40	
	5142 Aug 07 00:45	0°♎	
greatest brilliancy	5142 Aug 21 08:44	7°♎42'16	-4.7m
retrograde	5142 Aug 31 19:36	9°♎40'09	
evening set	5142 Sep 18 11:26	3°♎47'27	
inferior conj	5142 Sep 22 07:09	1°♎26'08	-8°19'48
minimum elong	5142 Sep 22 02:15	1°♎33'48	8°19'27
min. Earth dist.	5142 Sep 22 09:35	1°♎22'20	0.29106 AU
	5142 Sep 24 14:29	30°℞♍	
morning rise	5142 Sep 25 17:01	29°♍19'32	
direct	5142 Oct 13 21:40	23°♍07'23	
greatest brilliancy	5142 Oct 24 13:02	25°♍11'15	-4.8m
	5142 Nov 03 05:13	0°♎	
asc. node	5142 Nov 26 11:21	18°♎33'24	
morning max el	5142 Dec 02 13:19	24°♎25'21	46°13'26
	5142 Dec 08 02:07	0°♏	
	5143 Jan 04 12:24	0°♐	
	5143 Jan 30 01:15	0°♑	
	5143 Feb 23 18:56	0°♒	
desc. node	5143 Mar 18 02:35	27°♒28'33	
	5143 Mar 20 03:33	0°♓	
	5143 Apr 13 08:02	0°♈	
	5143 May 07 11:23	0°♉	
	5143 May 31 15:39	0°♊	
morning set	5143 Jun 07 08:05	8°♊16'34	
	5143 Jun 24 21:48	0°♋	
asc. node	5143 Jul 09 04:11	17°♋35'58	
superior conj	5143 Jul 15 02:33	24°♋54'38	0°14'12
minimum elong	5143 Jul 14 23:30	24°♋45'14	0°14'02
behind sun begin	5143 Jul 14 12:30	24°♋11'20	
behind sun end	5143 Jul 15 10:30	25°♋19'07	
max. Earth dist.	5143 Jul 16 12:32	26°♋39'19	1.73257 AU
	5143 Jul 19 05:41	0°♌	
	5143 Aug 12 14:43	0°♍	
evening rise	5143 Aug 20 15:12	9°♍51'44	
	5143 Sep 06 00:44	0°♎	
	5143 Sep 30 12:25	0°♏	
	5143 Oct 25 02:50	0°♐	
desc. node	5143 Oct 28 19:16	4°♐28'40	
	5143 Nov 18 20:55	0°♑	
	5143 Dec 13 20:07	0°♒	
	5144 Jan 08 05:04	0°♓	
	5144 Feb 03 14:13	0°♈	
asc. node	5144 Feb 18 20:57	16°♈13'42	
evening max el	5144 Feb 19 08:34	16°♈43'15	47°08'09
	5144 Mar 04 04:44	0°♉	
greatest brilliancy	5144 Mar 30 20:00	18°♉01'05	-4.9m
retrograde	5144 Apr 10 01:55	19°♉59'58	
evening set	5144 Apr 27 12:22	14°♉05'20	
inferior conj	5144 Apr 30 23:06	11°♉57'52	8°00'54
minimum elong	5144 May 01 07:52	11°♉44'13	7°59'37
min. Earth dist.	5144 Apr 30 18:24	12°♉05'11	0.27629 AU
morning rise	5144 May 05 03:38	9°♉24'49	
direct	5144 May 21 19:41	4°♉03'46	
greatest brilliancy	5144 May 31 07:21	5°♉44'43	-4.8m
desc. node	5144 Jun 09 12:00	10°♉02'34	
	5144 Jul 04 23:26	0°♊	
morning max el	5144 Jul 10 03:59	4°♊55'33	46°00'38
	5144 Aug 03 12:02	0°♋	
	5144 Aug 30 10:35	0°♌	
	5144 Sep 25 06:11	0°♍	
asc. node	5144 Sep 30 13:48	6°♍17'41	
	5144 Oct 20 08:44	0°♎	
	5144 Nov 13 23:13	0°♏	
	5144 Dec 08 05:33	0°♐	
	5145 Jan 01 06:54	0°♑	
morning set	5145 Jan 04 09:29	3°♑53'20	
desc. node	5145 Jan 20 04:54	23°♑42'05	
	5145 Jan 25 05:18	0°♒	
max. Earth dist.	5145 Feb 13 15:31	24°♒25'02	1.71152 AU
superior conj	5145 Feb 14 04:40	25°♒06'26	-0°55'47
minimum elong	5145 Feb 13 16:58	24°♒29'36	0°55'20
	5145 Feb 18 02:02	0°♓	
	5145 Mar 13 22:25	0°♈	
evening rise	5145 Mar 27 02:34	16°♈32'31	
	5145 Apr 06 20:20	0°♉	
	5145 Apr 30 21:58	0°♊	
asc. node	5145 May 13 06:28	15°♊17'25	

	5145 May 25 05:24	0°♋	
	5145 Jun 18 20:45	0°♌	
	5145 Jul 13 23:14	0°♍	
	5145 Aug 08 19:36	0°♎	
desc. node	5145 Sep 01 21:37	26°♎37'28	
	5145 Sep 05 01:56	0°♏	
evening max el	5145 Sep 23 10:25	18°♏31'37	45°46'21
	5145 Oct 06 03:16	0°♐	
greatest brilliancy	5145 Nov 02 01:25	16°♐52'18	-4.8m
retrograde	5145 Nov 11 05:57	18°♐24'43	
evening set	5145 Nov 27 03:52	13°♐35'48	
inferior conj	5145 Dec 02 05:09	10°♐34'41	-5°08'23
minimum elong	5145 Dec 02 14:52	10°♐19'41	5°05'54
min. Earth dist.	5145 Dec 03 03:34	10°♐00'06	0.27609 AU
morning rise	5145 Dec 08 01:09	7°♐05'52	
direct	5145 Dec 23 05:43	2°♐34'19	
asc. node	5145 Dec 23 23:16	2°♐34'58	
greatest brilliancy	5146 Jan 03 09:00	4°♐52'50	-4.9m
	5146 Feb 06 03:16	0°♑	
morning max el	5146 Feb 11 19:16	5°♑37'42	46°54'25
	5146 Mar 06 11:41	0°♒	
	5146 Apr 01 11:10	0°♓	
desc. node	5146 Apr 14 14:29	15°♓37'04	
	5146 Apr 26 13:46	0°♈	
	5146 May 21 07:33	0°♉	
	5146 Jun 14 21:59	0°♊	
	5146 Jul 09 11:23	0°♋	
	5146 Aug 02 23:55	0°♌	
asc. node	5146 Aug 05 16:04	3°♌16'27	
morning set	5146 Aug 15 10:27	15°♌14'55	
	5146 Aug 27 10:46	0°♍	
max. Earth dist.	5146 Sep 19 01:18	27°♍49'57	1.73292 AU
superior conj	5146 Sep 20 23:13	0°♎11'32	1°22'18
minimum elong	5146 Sep 20 18:31	29°♍57'00	1°22'15
	5146 Sep 20 19:29	0°♎	
	5146 Oct 15 02:29	0°♏	
evening rise	5146 Oct 27 12:28	15°♏21'09	
	5146 Nov 08 08:39	0°♐	
desc. node	5146 Nov 25 07:11	20°♐57'25	
	5146 Dec 02 14:38	0°♑	
	5146 Dec 26 20:43	0°♒	
	5147 Jan 20 03:44	0°♓	
	5147 Feb 13 14:31	0°♈	
	5147 Mar 10 11:22	0°♉	
asc. node	5147 Mar 18 08:41	9°♉19'44	
	5147 Apr 05 07:00	0°♊	
evening max el	5147 May 02 00:09	28°♊35'12	46°23'50
	5147 May 03 10:25	0°♋	
greatest brilliancy	5147 Jun 09 20:32	28°♋09'49	-4.8m
	5147 Jun 16 08:40	0°♌	
retrograde	5147 Jun 20 20:01	0°♌23'17	
	5147 Jun 25 05:23	30°℞♋	
evening set	5147 Jul 05 20:30	25°♋59'31	
desc. node	5147 Jul 07 23:58	24°♋46'08	
inferior conj	5147 Jul 12 05:34	22°♋10'00	-1°01'20
minimum elong	5147 Jul 12 03:17	22°♋13'34	1°00'40
min. Earth dist.	5147 Jul 11 20:49	22°♋23'41	0.28554 AU
morning rise	5147 Jul 18 10:26	18°♋26'32	
direct	5147 Aug 02 13:41	14°♋01'15	
greatest brilliancy	5147 Aug 12 13:50	15°♋49'01	-4.7m
	5147 Sep 04 20:35	0°♌	
morning max el	5147 Sep 20 05:06	13°♌36'26	45°42'23
	5147 Oct 06 12:34	0°♍	
asc. node	5147 Oct 29 01:37	24°♍37'37	
	5147 Nov 02 19:08	0°♎	
	5147 Nov 28 10:38	0°♏	

	5147 Dec 23 05:50	0°♐	
	5148 Jan 16 13:47	0°♑	
	5148 Feb 09 15:40	0°♒	
desc. node	5148 Feb 17 16:42	10°♒03'46	
	5148 Mar 04 14:23	0°♓	
morning set	5148 Mar 21 22:01	21°♓44'07	
	5148 Mar 28 12:01	0°♈	
	5148 Apr 21 10:21	0°♉	
superior conj	5148 May 01 06:41	12°♉18'55	-1°17'24
minimum elong	5148 May 01 15:54	12°♉47'41	1°17'12
max. Earth dist.	5148 May 05 01:14	17°♉01'34	1.71901 AU
	5148 May 15 11:03	0°♊	
	5148 Jun 08 15:14	0°♋	
evening rise	5148 Jun 09 14:44	1°♋12'41	
asc. node	5148 Jun 09 18:24	1°♋23'58	
	5148 Jul 02 23:23	0°♌	
	5148 Jul 27 11:57	0°♍	
	5148 Aug 21 06:09	0°♎	
	5148 Sep 15 08:29	0°♏	
desc. node	5148 Sep 29 09:21	16°♏32'16	
	5148 Oct 10 23:07	0°♐	
	5148 Nov 06 10:18	0°♑	
	5148 Dec 04 19:14	0°♒	
evening max el	5148 Dec 05 03:11	0°♒19'40	46°42'02
	5149 Jan 12 11:37	0°♓	
greatest brilliancy	5149 Jan 14 10:00	0°♓45'13	-4.9m
asc. node	5149 Jan 20 11:08	2°♓19'46	
retrograde	5149 Jan 24 09:05	2°♓38'04	
	5149 Feb 04 17:50	30°℞♒	
evening set	5149 Feb 08 10:09	28°♒09'05	
inferior conj	5149 Feb 13 22:45	24°♒53'28	5°52'42
minimum elong	5149 Feb 13 12:00	25°♒09'51	5°50'03
min. Earth dist.	5149 Feb 13 12:23	25°♒09'17	0.26710 AU
morning rise	5149 Feb 18 13:58	22°♒07'49	
direct	5149 Mar 06 10:08	17°♒11'40	
greatest brilliancy	5149 Mar 16 00:46	18°♒57'10	-4.9m
	5149 Apr 03 19:56	0°♓	
morning max el	5149 Apr 25 18:04	19°♓46'55	46°47'12
	5149 May 05 16:39	0°♈	
desc. node	5149 May 12 02:18	6°♈50'22	
	5149 Jun 01 22:07	0°♉	
	5149 Jun 27 20:20	0°♊	
	5149 Jul 23 05:20	0°♋	
	5149 Aug 17 06:40	0°♌	
asc. node	5149 Sep 02 03:51	19°♌11'09	
	5149 Sep 11 01:30	0°♍	
	5149 Oct 05 14:09	0°♎	
morning set	5149 Oct 22 18:11	21°♎09'55	
	5149 Oct 29 21:32	0°♏	
	5149 Nov 23 01:12	0°♐	
max. Earth dist.	5149 Nov 26 09:29	4°♐09'56	1.72188 AU
superior conj	5149 Nov 29 02:15	7°♐31'39	0°53'00
minimum elong	5149 Nov 29 12:05	8°♐02'17	0°52'37
	5149 Dec 17 02:31	0°♑	
desc. node	5149 Dec 22 19:07	7°♑06'33	
evening rise	5150 Jan 07 12:49	26°♑47'26	
	5150 Jan 10 02:21	0°♒	
	5150 Feb 03 01:22	0°♓	
	5150 Feb 27 00:55	0°♈	
	5150 Mar 23 03:41	0°♉	
asc. node	5150 Apr 14 20:35	27°♉55'03	
	5150 Apr 16 13:36	0°♊	
	5150 May 11 12:13	0°♋	
	5150 Jun 06 08:54	0°♌	
	5150 Jul 04 03:28	0°♍	

evening max el	5150 Jul 11 16:19	7°♍28'56	45°37'01
desc. node	5150 Aug 04 11:49	27°♍41'28	
	5150 Aug 07 23:36	0°♎	
greatest brilliancy	5150 Aug 18 23:35	5°♎31'48	-4.7m
retrograde	5150 Aug 29 11:43	7°♎30'28	
evening set	5150 Sep 16 00:56	1°♎41'47	
	5150 Sep 18 19:20	30°℞♍	
inferior conj	5150 Sep 19 23:20	29°♍16'10	-8°14'22
minimum elong	5150 Sep 19 17:47	29°♍24'52	8°13'55
min. Earth dist.	5150 Sep 20 00:25	29°♍14'28	0.29117 AU
morning rise	5150 Sep 23 10:37	27°♍07'16	
direct	5150 Oct 11 14:28	20°♍57'40	
greatest brilliancy	5150 Oct 22 03:36	22°♍59'27	-4.8m
	5150 Nov 04 06:23	0°♎	
asc. node	5150 Nov 25 13:29	17°♎41'30	
morning max el	5150 Nov 30 04:34	22°♎10'42	46°11'46
	5150 Dec 07 21:44	0°♏	
	5151 Jan 04 03:23	0°♐	
	5151 Jan 29 14:27	0°♑	
	5151 Feb 23 07:14	0°♒	
desc. node	5151 Mar 17 04:32	26°♒58'09	
	5151 Mar 19 15:18	0°♓	
	5151 Apr 12 19:23	0°♈	
	5151 May 06 22:28	0°♉	
	5151 May 31 02:33	0°♊	
morning set	5151 Jun 04 23:27	6°♊01'59	
	5151 Jun 24 08:34	0°♋	
asc. node	5151 Jul 08 06:14	17°♋09'12	
superior conj	5151 Jul 12 19:14	22°♋45'07	0°10'54
minimum elong	5151 Jul 12 16:53	22°♋37'51	0°10'46
behind sun begin	5151 Jul 11 23:37	21°♋44'38	
behind sun end	5151 Jul 13 10:09	23°♋31'04	
max. Earth dist.	5151 Jul 14 09:37	24°♋43'24	1.73229 AU
	5151 Jul 18 16:24	0°♌	
	5151 Aug 12 01:26	0°♍	
evening rise	5151 Aug 18 09:20	7°♍46'57	
	5151 Sep 05 11:33	0°♎	
	5151 Sep 29 23:29	0°♏	
	5151 Oct 24 14:21	0°♐	
desc. node	5151 Oct 27 21:19	3°♐59'45	
	5151 Nov 18 09:05	0°♑	
	5151 Dec 13 09:16	0°♒	
	5152 Jan 07 19:51	0°♓	
	5152 Feb 03 08:28	0°♈	
evening max el	5152 Feb 16 22:44	14°♈20'44	47°08'34
asc. node	5152 Feb 17 22:55	15°♈21'58	
	5152 Mar 04 11:38	0°♉	
greatest brilliancy	5152 Mar 28 11:24	15°♉41'06	-4.9m
retrograde	5152 Apr 07 16:00	17°♉38'46	
evening set	5152 Apr 25 05:32	11°♉40'25	
inferior conj	5152 Apr 28 13:11	9°♉37'26	8°11'07
minimum elong	5152 Apr 28 21:25	9°♉24'37	8°10'02
min. Earth dist.	5152 Apr 28 08:11	9°♉45'15	0.27596 AU
morning rise	5152 May 02 13:32	7°♉10'18	
direct	5152 May 19 09:16	1°♉44'05	
greatest brilliancy	5152 May 28 20:20	3°♉24'13	-4.8m
desc. node	5152 Jun 08 14:06	8°♉37'19	
	5152 Jul 05 00:03	0°♊	
morning max el	5152 Jul 07 17:24	2°♊36'42	46°01'55
	5152 Aug 03 04:24	0°♋	
	5152 Aug 30 00:09	0°♌	
	5152 Sep 24 18:24	0°♍	
asc. node	5152 Sep 29 15:46	5°♍47'48	
	5152 Oct 19 20:12	0°♎	
	5152 Nov 13 10:18	0°♏	
	5152 Dec 07 16:28	0°♐	
	5152 Dec 31 17:45	0°♑	
morning set	5153 Jan 01 21:57	1°♑28'12	
desc. node	5153 Jan 19 06:49	23°♑14'08	
	5153 Jan 24 16:09	0°♒	
max. Earth dist.	5153 Feb 10 17:58	21°♒27'46	1.71163 AU
superior conj	5153 Feb 11 15:08	22°♒34'20	-0°52'40
minimum elong	5153 Feb 11 03:43	21°♒58'26	0°52'12
	5153 Feb 17 12:53	0°♓	
	5153 Mar 13 09:16	0°♈	
evening rise	5153 Mar 24 13:05	14°♈00'49	
	5153 Apr 06 07:13	0°♉	
	5153 Apr 30 08:56	0°♊	
asc. node	5153 May 12 08:35	14°♊49'54	
	5153 May 24 16:34	0°♋	
	5153 Jun 18 08:19	0°♌	
	5153 Jul 13 11:35	0°♍	
	5153 Aug 08 09:33	0°♎	
desc. node	5153 Aug 31 23:31	25°♎57'17	
	5153 Sep 04 19:36	0°♏	
evening max el	5153 Sep 20 23:26	16°♏13'24	45°44'59
	5153 Oct 06 11:10	0°♐	
greatest brilliancy	5153 Oct 30 15:16	14°♐34'44	-4.8m
retrograde	5153 Nov 08 19:16	16°♐07'01	
evening set	5153 Nov 24 20:38	11°♐13'12	
inferior conj	5153 Nov 29 19:14	8°♐16'05	-5°25'49
minimum elong	5153 Nov 30 05:12	8°♐00'42	5°23'23
min. Earth dist.	5153 Nov 30 18:21	7°♐40'25	0.27677 AU
morning rise	5153 Dec 05 12:59	4°♐50'16	
direct	5153 Dec 20 19:50	0°♐14'24	
asc. node	5153 Dec 23 01:14	0°♐20'17	
greatest brilliancy	5154 Jan 01 00:56	2°♐34'23	-4.9m
	5154 Feb 06 03:17	0°♑	
morning max el	5154 Feb 09 09:30	3°♑15'54	46°53'37
	5154 Mar 06 04:14	0°♒	
	5154 Apr 01 01:07	0°♓	
desc. node	5154 Apr 13 16:30	15°♓03'34	
	5154 Apr 26 02:24	0°♈	
	5154 May 20 19:22	0°♉	
	5154 Jun 14 09:16	0°♊	
	5154 Jul 08 22:17	0°♋	
	5154 Aug 02 10:33	0°♌	
asc. node	5154 Aug 04 17:59	2°♌49'47	
morning set	5154 Aug 13 04:00	13°♌09'07	
	5154 Aug 26 21:16	0°♍	
max. Earth dist.	5154 Sep 16 21:46	25°♍52'41	1.73319 AU
superior conj	5154 Sep 18 17:15	28°♍06'45	1°21'23
minimum elong	5154 Sep 18 11:58	27°♍50'29	1°21'19
	5154 Sep 20 05:59	0°♎	
	5154 Oct 14 13:04	0°♏	
evening rise	5154 Oct 25 04:55	13°♏10'44	
	5154 Nov 07 19:25	0°♐	
desc. node	5154 Nov 24 09:15	20°♐30'03	
	5154 Dec 02 01:38	0°♑	
	5154 Dec 26 08:03	0°♒	
	5155 Jan 19 15:31	0°♓	
	5155 Feb 13 02:58	0°♈	
	5155 Mar 10 00:57	0°♉	
asc. node	5155 Mar 17 10:40	8°♉44'17	
	5155 Apr 04 22:52	0°♊	
evening max el	5155 Apr 29 14:59	26°♊18'52	46°26'00
	5155 May 03 09:02	0°♋	
greatest brilliancy	5155 Jun 07 12:37	25°♋58'01	-4.8m
retrograde	5155 Jun 18 12:34	28°♋12'08	
evening set	5155 Jul 03 12:43	23°♋47'40	
desc. node	5155 Jul 07 01:53	21°♋43'38	

inferior conj	5155 Jul 09	21:22	19°♋58'58	-0°40'52	
minimum elong	5155 Jul 09	19:51	20°♋01'21	0°40'24	
min. Earth dist.	5155 Jul 09	12:49	20°♋12'20	0.28520 AU	
morning rise	5155 Jul 16	03:24	16°♋14'21		
direct	5155 Jul 31	04:55	11°♋50'35		
greatest brilliancy	5155 Aug 10	05:11	13°♋38'45	-4.7m	
	5155 Sep 05	03:20	0°♌		
morning max el	5155 Sep 17	21:18	11°♌27'55	45°42'11	
	5155 Oct 06	05:45	0°♍		
asc. node	5155 Oct 28	03:46	24°♍03'30		
	5155 Nov 02	08:55	0°♎		
	5155 Nov 27	23:01	0°♏		
	5155 Dec 22	17:31	0°♐		
	5156 Jan 16	01:05	0°♑		
	5156 Feb 09	02:43	0°♒		
desc. node	5156 Feb 16	18:40	9°♒35'24		
	5156 Mar 04	01:18	0°♓		
morning set	5156 Mar 19	08:08	19°♓11'10		
	5156 Mar 27	22:49	0°♈		
	5156 Apr 20	21:05	0°♉		
superior conj	5156 Apr 28	19:02	9°♉54'04	-1°19'04	
minimum elong	5156 Apr 29	03:43	10°♉21'11	1°18'54	
max. Earth dist.	5156 May 02	11:46	14°♉31'15	1.71854 AU	
	5156 May 14	21:44	0°♊		
evening rise	5156 Jun 07	05:28	28°♊56'50		
	5156 Jun 08	01:54	0°♋		
asc. node	5156 Jun 08	20:24	0°♋57'10		
	5156 Jul 02	10:08	0°♌		
	5156 Jul 26	22:55	0°♍		
	5156 Aug 20	17:32	0°♎		
	5156 Sep 14	20:38	0°♏		
desc. node	5156 Sep 28	11:26	16°♏00'53		
	5156 Oct 10	12:40	0°♐		
	5156 Nov 06	02:35	0°♑		
evening max el	5156 Dec 02	17:53	28°♑00'17	46°40'03	
	5156 Dec 04	18:45	0°♒		
greatest brilliancy	5157 Jan 11	22:13	28°♒17'13	-4.9m	
	5157 Jan 19	00:26	0°♓		
asc. node	5157 Jan 19	13:06	0°♓03'18		
retrograde	5157 Jan 21	22:01	0°♓10'03		
	5157 Jan 24	18:35	30°℞♒		
evening set	5157 Feb 05	19:31	25°♒45'35		
inferior conj	5157 Feb 11	11:00	22°♒25'48	5°33'33	
minimum elong	5157 Feb 11	00:30	22°♒41'50	5°30'51	
min. Earth dist.	5157 Feb 11	01:05	22°♒40'57	0.26695 AU	
morning rise	5157 Feb 16	05:39	19°♒35'30		
direct	5157 Mar 03	23:06	14°♒44'19		
greatest brilliancy	5157 Mar 13	13:31	16°♒29'55	-4.9m	
	5157 Apr 04	10:01	0°♓		
morning max el	5157 Apr 23	07:48	17°♓24'15	46°48'20	
	5157 May 05	12:01	0°♈		
desc. node	5157 May 11	04:27	6°♈07'20		
	5157 Jun 01	13:06	0°♉		
	5157 Jun 27	09:22	0°♊		
	5157 Jul 22	17:18	0°♋		
	5157 Aug 16	17:58	0°♌		
asc. node	5157 Sep 01	05:54	18°♌43'56		
	5157 Sep 10	12:24	0°♍		
	5157 Oct 05	00:49	0°♎		
morning set	5157 Oct 20	11:10	19°♎01'20		
	5157 Oct 29	08:08	0°♏		
	5157 Nov 22	11:49	0°♐		
max. Earth dist.	5157 Nov 23	22:53	1°♐49'06	1.72235 AU	
superior conj	5157 Nov 26	17:08	5°♐15'20	0°55'42	
minimum elong	5157 Nov 27	03:05	5°♐46'19	0°55'21	
	5157 Dec 16	13:16	0°♑		
desc. node	5157 Dec 21	21:04	6°♑38'59		
evening rise	5158 Jan 05	01:10	24°♑21'50		
	5158 Jan 09	13:16	0°♒		
	5158 Feb 02	12:27	0°♓		
	5158 Feb 26	12:11	0°♈		
	5158 Mar 22	15:12	0°♉		
asc. node	5158 Apr 13	22:42	27°♉25'04		
	5158 Apr 16	01:36	0°♊		
	5158 May 11	01:06	0°♋		
	5158 Jun 05	23:40	0°♌		
	5158 Jul 03	23:10	0°♍		
evening max el	5158 Jul 09	08:19	5°♍18'37	45°37'50	
desc. node	5158 Aug 03	13:50	26°♍29'53		
	5158 Aug 09	07:04	0°♎		
greatest brilliancy	5158 Aug 16	15:05	3°♎22'38	-4.7m	
retrograde	5158 Aug 27	03:28	5°♎21'33		
	5158 Sep 12	22:56	30°℞♍		
evening set	5158 Sep 13	14:22	29°♍37'13		
inferior conj	5158 Sep 17	15:37	27°♍07'06	-8°08'16	
minimum elong	5158 Sep 17	09:27	27°♍16'48	8°07'42	
min. Earth dist.	5158 Sep 17	15:44	27°♍06'55	0.29124 AU	
morning rise	5158 Sep 21	04:30	24°♍55'32		
direct	5158 Oct 09	06:52	18°♍48'50		
greatest brilliancy	5158 Oct 19	18:37	20°♍48'53	-4.8m	
	5158 Nov 05	00:28	0°♎		
asc. node	5158 Nov 24	15:27	16°♎50'44		
morning max el	5158 Nov 27	18:56	19°♎54'32	46°10'09	
	5158 Dec 07	16:35	0°♏		
	5159 Jan 03	18:02	0°♐		
	5159 Jan 29	03:28	0°♑		
	5159 Feb 22	19:26	0°♒		
desc. node	5159 Mar 16	06:37	26°♒28'14		
	5159 Mar 19	03:00	0°♓		
	5159 Apr 12	06:44	0°♈		
	5159 May 06	09:32	0°♉		
	5159 May 30	13:24	0°♊		
morning set	5159 Jun 02	14:30	3°♊46'28		
	5159 Jun 23	19:17	0°♋		
asc. node	5159 Jul 07	08:07	16°♋42'11		
superior conj	5159 Jul 10	11:48	20°♋35'28	0°07'36	
minimum elong	5159 Jul 10	10:09	20°♋30'23	0°07'29	
behind sun begin	5159 Jul 09	13:26	19°♋26'32		
behind sun end	5159 Jul 11	06:52	21°♋34'14		
max. Earth dist.	5159 Jul 12	05:33	22°♋44'08	1.73197 AU	
	5159 Jul 18	03:02	0°♌		
	5159 Aug 11	12:06	0°♍		
evening rise	5159 Aug 16	03:30	5°♍42'24		
	5159 Sep 04	22:21	0°♎		
	5159 Sep 29	10:33	0°♏		
	5159 Oct 24	01:51	0°♐		
desc. node	5159 Oct 26	23:25	3°♐31'02		
	5159 Nov 17	21:16	0°♑		
	5159 Dec 12	22:28	0°♒		
	5160 Jan 07	10:47	0°♓		
	5160 Feb 03	03:14	0°♈		
evening max el	5160 Feb 14	11:53	11°♈55'13	47°08'42	
asc. node	5160 Feb 17	00:55	14°♈28'57		
	5160 Mar 04	21:26	0°♉		
greatest brilliancy	5160 Mar 26	02:54	13°♉19'59	-4.9m	
retrograde	5160 Apr 05	05:37	15°♉16'13		
evening set	5160 Apr 22	22:18	9°♉14'13		
inferior conj	5160 Apr 26	03:01	7°♉15'41	8°20'38	
minimum elong	5160 Apr 26	10:38	7°♉03'48	8°19'43	
min. Earth dist.	5160 Apr 25	22:01	7°♉23'30	0.27563 AU	
morning rise	5160 Apr 29	23:10	4°♉54'34		

	5160 May 11 08:58	30°℞♈	
direct	5160 May 16 22:04	29°♈22'49	
	5160 May 22 14:47	0°♉	
greatest brilliancy	5160 May 26 09:40	1°♉02'58	-4.8m
desc. node	5160 Jun 07 16:01	7°♉13'41	
	5160 Jul 04 23:44	0°♊	
morning max el	5160 Jul 05 06:32	0°♊16'27	46°03'25
	5160 Aug 02 20:35	0°♋	
	5160 Aug 29 13:39	0°♌	
	5160 Sep 24 06:36	0°♍	
asc. node	5160 Sep 28 17:50	5°♍18'06	
	5160 Oct 19 07:43	0°♎	
	5160 Nov 12 21:27	0°♏	
	5160 Dec 07 03:27	0°♐	
morning set	5160 Dec 30 10:57	29°♐04'31	
	5160 Dec 31 04:41	0°♑	
desc. node	5161 Jan 18 08:49	22°♑46'13	
	5161 Jan 24 03:04	0°♒	
max. Earth dist.	5161 Feb 07 23:57	18°♒41'20	1.71181 AU
superior conj	5161 Feb 09 01:55	20°♒02'57	-0°49'27
minimum elong	5161 Feb 08 14:52	19°♒28'15	0°48'59
	5161 Feb 16 23:48	0°♓	
	5161 Mar 12 20:15	0°♈	
evening rise	5161 Mar 21 23:41	11°♈28'54	
	5161 Apr 05 18:17	0°♉	
	5161 Apr 29 20:08	0°♊	
asc. node	5161 May 11 10:32	14°♊21'09	
	5161 May 24 03:58	0°♋	
	5161 Jun 17 20:07	0°♌	
	5161 Jul 13 00:13	0°♍	
	5161 Aug 07 23:52	0°♎	
desc. node	5161 Aug 31 01:37	25°♎16'38	
	5161 Sep 04 13:55	0°♏	
evening max el	5161 Sep 18 13:04	13°♏56'23	45°43'46
	5161 Oct 06 22:11	0°♐	
greatest brilliancy	5161 Oct 28 04:36	12°♐16'30	-4.8m
retrograde	5161 Nov 06 09:08	13°♐49'19	
evening set	5161 Nov 22 13:33	8°♐50'22	
inferior conj	5161 Nov 27 09:23	5°♐57'16	-5°42'38
minimum elong	5161 Nov 27 19:32	5°♐41'38	5°40'15
min. Earth dist.	5161 Nov 28 08:53	5°♐21'04	0.27746 AU
morning rise	5161 Dec 03 00:46	2°♐34'54	
	5161 Dec 08 07:33	30°℞♏	
direct	5161 Dec 18 10:38	27°♏54'20	
asc. node	5161 Dec 22 03:10	28°♏10'27	
	5161 Dec 29 00:37	0°♐	
greatest brilliancy	5161 Dec 29 16:34	0°♐15'28	-4.9m
	5162 Feb 06 02:23	0°♑	
morning max el	5162 Feb 07 00:46	0°♑56'30	46°52'53
	5162 Mar 05 20:37	0°♒	
	5162 Mar 31 15:04	0°♓	
desc. node	5162 Apr 12 18:35	14°♓29'59	
	5162 Apr 25 15:08	0°♈	
	5162 May 20 07:24	0°♉	
	5162 Jun 13 20:49	0°♊	
	5162 Jul 08 09:28	0°♋	
	5162 Aug 01 21:28	0°♌	
asc. node	5162 Aug 03 20:04	2°♌22'47	
morning set	5162 Aug 10 21:23	11°♌01'54	
	5162 Aug 26 08:03	0°♍	
max. Earth dist.	5162 Sep 14 19:46	23°♍59'24	1.73340 AU
superior conj	5162 Sep 16 11:10	26°♍00'51	1°20'22
minimum elong	5162 Sep 16 05:21	25°♍42'55	1°20'16
	5162 Sep 19 16:44	0°♎	
	5162 Oct 13 23:55	0°♏	
evening rise	5162 Oct 22 21:31	11°♏00'01	
	5162 Nov 07 06:27	0°♐	
desc. node	5162 Nov 23 11:10	20°♐01'22	
	5162 Dec 01 12:57	0°♑	
	5162 Dec 25 19:41	0°♒	
	5163 Jan 19 03:36	0°♓	
	5163 Feb 12 15:43	0°♈	
	5163 Mar 09 14:51	0°♉	
asc. node	5163 Mar 16 12:47	8°♉08'18	
	5163 Apr 04 15:14	0°♊	
evening max el	5163 Apr 27 06:44	24°♊04'09	46°28'02
	5163 May 03 08:58	0°♋	
greatest brilliancy	5163 Jun 05 04:35	23°♋45'10	-4.8m
retrograde	5163 Jun 16 05:18	25°♋59'48	
evening set	5163 Jul 01 05:08	21°♋34'36	
desc. node	5163 Jul 06 03:55	18°♋38'35	
min. Earth dist.	5163 Jul 07 04:40	18°♋00'00	0.28487 AU
inferior conj	5163 Jul 07 13:10	17°♋46'44	-0°20'09
minimum elong	5163 Jul 07 12:25	17°♋47'55	0°19'56
morning rise	5163 Jul 13 20:12	14°♋01'10	
direct	5163 Jul 28 20:40	9°♋38'48	
greatest brilliancy	5163 Aug 07 20:08	11°♋26'48	-4.7m
	5163 Sep 05 08:28	0°♌	
morning max el	5163 Sep 15 13:55	9°♌19'20	45°42'00
	5163 Oct 05 22:58	0°♍	
asc. node	5163 Oct 27 05:44	23°♍28'10	
	5163 Nov 01 22:54	0°♎	
	5163 Nov 27 11:38	0°♏	
	5163 Dec 22 05:27	0°♐	
	5164 Jan 15 12:40	0°♑	
	5164 Feb 08 14:05	0°♒	
desc. node	5164 Feb 15 20:45	9°♒06'31	
	5164 Mar 03 12:32	0°♓	
morning set	5164 Mar 16 18:34	16°♓38'14	
	5164 Mar 27 09:56	0°♈	
	5164 Apr 20 08:06	0°♉	
superior conj	5164 Apr 26 07:37	7°♉28'59	-1°20'35
minimum elong	5164 Apr 26 15:40	7°♉54'10	1°20'26
max. Earth dist.	5164 Apr 30 01:05	12°♉08'37	1.71805 AU
	5164 May 14 08:41	0°♊	
evening rise	5164 Jun 04 20:22	26°♊40'33	
asc. node	5164 Jun 07 22:21	0°♋29'19	
	5164 Jun 07 12:51	0°♋	
	5164 Jul 01 21:12	0°♌	
	5164 Jul 26 10:15	0°♍	
	5164 Aug 20 05:19	0°♎	
	5164 Sep 14 09:13	0°♏	
desc. node	5164 Sep 27 13:29	15°♏28'10	
	5164 Oct 10 02:42	0°♐	
	5164 Nov 05 19:32	0°♑	
evening max el	5164 Nov 30 08:32	25°♑40'03	46°38'01
	5164 Dec 04 19:46	0°♒	
greatest brilliancy	5165 Jan 09 11:04	25°♒49'22	-4.9m
asc. node	5165 Jan 18 15:11	27°♒40'31	
retrograde	5165 Jan 19 10:37	27°♒41'19	
evening set	5165 Feb 03 05:16	23°♒21'15	
inferior conj	5165 Feb 08 23:22	19°♒57'37	5°13'46
minimum elong	5165 Feb 08 13:13	20°♒13'09	5°11'03
min. Earth dist.	5165 Feb 08 14:18	20°♒11'29	0.26683 AU
morning rise	5165 Feb 13 21:19	17°♒02'31	
direct	5165 Mar 01 11:57	12°♒16'21	
greatest brilliancy	5165 Mar 11 02:54	14°♒02'19	-4.9m
	5165 Apr 04 20:56	0°♓	
morning max el	5165 Apr 20 20:51	14°♓58'50	46°49'33
	5165 May 05 07:11	0°♈	
desc. node	5165 May 10 06:19	5°♈23'12	

	5165 Jun 01 04:10	0°♉	
	5165 Jun 26 22:34	0°♊	
	5165 Jul 22 05:28	0°♋	
	5165 Aug 16 05:31	0°♌	
asc. node	5165 Aug 31 07:57	18°♌15'53	
	5165 Sep 09 23:35	0°♍	
	5165 Oct 04 11:49	0°♎	
morning set	5165 Oct 18 04:07	16°♎51'45	
	5165 Oct 28 19:03	0°♏	
max. Earth dist.	5165 Nov 21 11:16	29°♏24'18	1.72281 AU
	5165 Nov 21 22:45	0°♐	
superior conj	5165 Nov 24 08:11	2°♐58'43	0°58'19
minimum elong	5165 Nov 24 18:11	3°♐29'50	0°57'58
	5165 Dec 16 00:18	0°♑	
desc. node	5165 Dec 20 23:03	6°♑10'43	
evening rise	5166 Jan 02 13:39	21°♑55'58	
	5166 Jan 09 00:27	0°♒	
	5166 Feb 01 23:48	0°♓	
	5166 Feb 25 23:45	0°♈	
	5166 Mar 22 03:04	0°♉	
asc. node	5166 Apr 13 00:37	26°♉53'27	
	5166 Apr 15 13:57	0°♊	
	5166 May 10 14:23	0°♋	
	5166 Jun 05 14:52	0°♌	
	5166 Jul 03 19:45	0°♍	
evening max el	5166 Jul 06 23:31	3°♍05'41	45°38'43
desc. node	5166 Aug 02 15:53	25°♍15'46	
	5166 Aug 11 06:34	0°♎	
greatest brilliancy	5166 Aug 14 06:43	1°♎13'07	-4.7m
retrograde	5166 Aug 24 19:06	3°♎12'25	
	5166 Sep 06 15:10	30°℞♍	
evening set	5166 Sep 11 03:49	27°♍32'22	
inferior conj	5166 Sep 15 08:02	24°♍57'48	-8°01'31
minimum elong	5166 Sep 15 01:17	25°♍08'25	8°00'48
min. Earth dist.	5166 Sep 15 07:30	24°♍58'38	0.29133 AU
morning rise	5166 Sep 18 22:43	22°♍43'18	
direct	5166 Oct 06 22:55	16°♍39'31	
greatest brilliancy	5166 Oct 17 10:33	18°♍38'44	-4.8m
	5166 Nov 05 14:16	0°♎	
asc. node	5166 Nov 23 17:23	15°♎59'56	
morning max el	5166 Nov 25 09:11	17°♎37'16	46°08'35
	5166 Dec 07 11:15	0°♏	
	5167 Jan 03 08:48	0°♐	
	5167 Jan 28 16:39	0°♑	
	5167 Feb 22 07:48	0°♒	
desc. node	5167 Mar 15 08:39	25°♒57'35	
	5167 Mar 18 14:53	0°♓	
	5167 Apr 11 18:16	0°♈	
	5167 May 05 20:48	0°♉	
	5167 May 30 00:28	0°♊	
morning set	5167 May 31 05:26	1°♊29'47	
	5167 Jun 23 06:12	0°♋	
asc. node	5167 Jul 06 10:14	16°♋15'18	
superior conj	5167 Jul 08 04:29	18°♋25'34	0°04'16
minimum elong	5167 Jul 08 03:33	18°♋22'39	0°04'12
behind sun begin	5167 Jul 07 04:57	17°♋12'59	
behind sun end	5167 Jul 09 02:09	19°♋32'19	
max. Earth dist.	5167 Jul 10 00:06	20°♋39'59	1.73161 AU
	5167 Jul 17 13:52	0°♌	
	5167 Aug 10 22:55	0°♍	
evening rise	5167 Aug 13 21:53	3°♍38'04	
	5167 Sep 04 09:19	0°♎	
	5167 Sep 28 21:49	0°♏	
	5167 Oct 23 13:36	0°♐	
desc. node	5167 Oct 26 01:19	3°♐01'00	
	5167 Nov 17 09:43	0°♑	
	5167 Dec 12 11:58	0°♒	
	5168 Jan 07 02:07	0°♓	
	5168 Feb 02 22:42	0°♈	
evening max el	5168 Feb 12 00:41	9°♈28'25	47°08'57
asc. node	5168 Feb 16 02:59	13°♈34'42	
	5168 Mar 05 10:48	0°♉	
greatest brilliancy	5168 Mar 23 17:58	10°♉57'55	-4.9m
retrograde	5168 Apr 02 19:21	12°♉53'30	
evening set	5168 Apr 20 14:53	6°♉47'42	
inferior conj	5168 Apr 23 16:53	4°♉53'30	8°29'13
minimum elong	5168 Apr 23 23:51	4°♉42'39	8°28'28
min. Earth dist.	5168 Apr 23 11:48	5°♉01'25	0.27534 AU
morning rise	5168 Apr 27 08:58	2°♉38'27	
	5168 May 02 06:09	30°℞♈	
direct	5168 May 14 10:49	27°♈00'50	
greatest brilliancy	5168 May 23 23:12	28°♈41'29	-4.8m
	5168 May 27 07:57	0°♉	
desc. node	5168 Jun 06 18:05	5°♉52'34	
morning max el	5168 Jul 02 20:33	27°♉57'49	46°05'01
	5168 Jul 04 22:35	0°♊	
	5168 Aug 02 12:36	0°♋	
	5168 Aug 29 03:07	0°♌	
	5168 Sep 23 18:48	0°♍	
asc. node	5168 Sep 27 19:49	4°♍48'07	
	5168 Oct 18 19:15	0°♎	
	5168 Nov 12 08:39	0°♏	
	5168 Dec 06 14:32	0°♐	
morning set	5168 Dec 27 23:58	26°♐40'36	
	5168 Dec 30 15:44	0°♑	
desc. node	5169 Jan 17 10:58	22°♑18'22	
	5169 Jan 23 14:06	0°♒	
max. Earth dist.	5169 Feb 05 07:56	16°♒00'51	1.71198 AU
superior conj	5169 Feb 06 12:24	17°♒30'19	-0°46'07
minimum elong	5169 Feb 06 01:49	16°♒57'04	0°45'39
	5169 Feb 16 10:51	0°♓	
	5169 Mar 12 07:19	0°♈	
evening rise	5169 Mar 19 10:04	8°♈56'10	
	5169 Apr 05 05:25	0°♉	
	5169 Apr 29 07:23	0°♊	
asc. node	5169 May 10 12:30	13°♊52'17	
	5169 May 23 15:27	0°♋	
	5169 Jun 17 08:03	0°♌	
	5169 Jul 12 13:00	0°♍	
	5169 Aug 07 14:23	0°♎	
desc. node	5169 Aug 30 03:40	24°♎35'25	
	5169 Sep 04 08:41	0°♏	
evening max el	5169 Sep 16 03:39	11°♏41'59	45°42'40
	5169 Oct 07 12:47	0°♐	
greatest brilliancy	5169 Oct 25 17:18	9°♐58'22	-4.8m
retrograde	5169 Nov 03 23:23	11°♐32'13	
evening set	5169 Nov 20 06:39	6°♐28'14	
inferior conj	5169 Nov 24 23:38	3°♐38'59	-5°58'47
minimum elong	5169 Nov 25 09:54	3°♐23'11	5°56'26
min. Earth dist.	5169 Nov 25 23:03	3°♐02'57	0.27818 AU
morning rise	5169 Nov 30 12:30	0°♐20'20	
	5169 Dec 01 03:11	30°℞♏	
direct	5169 Dec 16 02:03	25°♏35'04	
asc. node	5169 Dec 21 05:18	26°♏06'06	
greatest brilliancy	5169 Dec 27 07:41	27°♏56'26	-4.9m
	5169 Dec 31 18:45	0°♐	
morning max el	5170 Feb 04 16:39	28°♐38'45	46°51'51
	5170 Feb 06 00:35	0°♑	
	5170 Mar 05 12:47	0°♒	
	5170 Mar 31 04:56	0°♓	
desc. node	5170 Apr 11 20:32	13°♓56'04	

	5170 Apr 25 03:49	0°♈	
	5170 May 19 19:20	0°♉	
	5170 Jun 13 08:14	0°♊	
	5170 Jul 07 20:32	0°♋	
	5170 Aug 01 08:17	0°♌	
asc. node	5170 Aug 02 22:05	1°♌55'50	
morning set	5170 Aug 08 14:47	8°♌54'59	
	5170 Aug 25 18:44	0°♍	
max. Earth dist.	5170 Sep 12 17:37	22°♍05'57	1.73355 AU
superior conj	5170 Sep 14 05:13	23°♍55'38	1°19'14
minimum elong	5170 Sep 13 22:53	23°♍36'07	1°19'07
	5170 Sep 19 03:24	0°♎	
	5170 Oct 13 10:39	0°♏	
evening rise	5170 Oct 20 14:23	8°♏50'32	
	5170 Nov 06 17:21	0°♐	
desc. node	5170 Nov 22 13:15	19°♐33'39	
	5170 Dec 01 00:05	0°♑	
	5170 Dec 25 07:12	0°♒	
	5171 Jan 18 15:37	0°♓	
	5171 Feb 12 04:28	0°♈	
	5171 Mar 09 04:50	0°♉	
asc. node	5171 Mar 15 14:42	7°♉31'35	
	5171 Apr 04 07:51	0°♊	
evening max el	5171 Apr 24 22:59	21°♊50'41	46°30'08
	5171 May 03 10:02	0°♋	
greatest brilliancy	5171 Jun 02 20:43	21°♋32'34	-4.8m
retrograde	5171 Jun 13 21:44	23°♋47'05	
evening set	5171 Jun 28 21:36	19°♋21'16	
inferior conj	5171 Jul 05 04:47	15°♋34'17	0°00'45
minimum elong	5171 Jul 05 04:48	15°♋34'14	0°00'43
transit middle	5171 Jul 05 04:48	15°♋34'14	0°00'43
transit begin	5171 Jul 05 00:45	15°♋40'34	
transit end	5171 Jul 05 08:51	15°♋27'54	
min. Earth dist.	5171 Jul 04 20:19	15°♋47'30	0.28451 AU
desc. node	5171 Jul 05 06:01	15°♋32'21	
morning rise	5171 Jul 11 12:37	11°♋47'50	
direct	5171 Jul 26 12:30	7°♋27'01	
greatest brilliancy	5171 Aug 05 10:34	9°♋14'14	-4.7m
	5171 Sep 05 11:38	0°♌	
morning max el	5171 Sep 13 05:56	7°♌09'48	45°41'53
	5171 Oct 05 15:38	0°♍	
asc. node	5171 Oct 26 07:39	22°♍53'33	
	5171 Nov 01 12:31	0°♎	
	5171 Nov 26 23:56	0°♏	
	5171 Dec 21 17:04	0°♐	
	5172 Jan 14 23:56	0°♑	
	5172 Feb 08 01:10	0°♒	
desc. node	5172 Feb 14 22:45	8°♒38'12	
	5172 Mar 02 23:30	0°♓	
morning set	5172 Mar 14 04:44	14°♓05'11	
	5172 Mar 26 20:50	0°♈	
	5172 Apr 19 18:55	0°♉	
superior conj	5172 Apr 23 19:40	5°♉02'44	-1°21'58
minimum elong	5172 Apr 24 03:00	5°♉25'40	1°21'51
max. Earth dist.	5172 Apr 27 14:14	9°♉45'57	1.71756 AU
	5172 May 13 19:26	0°♊	
evening rise	5172 Jun 02 10:34	24°♊22'41	
	5172 Jun 06 23:37	0°♋	
asc. node	5172 Jun 07 00:26	0°♋02'31	
	5172 Jul 01 08:04	0°♌	
	5172 Jul 25 21:21	0°♍	
	5172 Aug 19 16:54	0°♎	
	5172 Sep 13 21:38	0°♏	
desc. node	5172 Sep 26 15:24	14°♏55'40	
	5172 Oct 09 16:36	0°♐	
	5172 Nov 05 12:29	0°♑	
evening max el	5172 Nov 27 22:35	23°♑19'30	46°36'03
	5172 Dec 04 21:38	0°♒	
greatest brilliancy	5173 Jan 07 00:31	23°♒23'51	-4.9m
retrograde	5173 Jan 16 22:47	25°♒14'23	
asc. node	5173 Jan 17 17:10	25°♒13'41	
evening set	5173 Jan 31 15:26	20°♒58'22	
inferior conj	5173 Feb 06 11:57	17°♒31'25	4°53'24
minimum elong	5173 Feb 06 02:11	17°♒46'21	4°50'44
min. Earth dist.	5173 Feb 06 04:02	17°♒43'32	0.26673 AU
morning rise	5173 Feb 11 13:02	14°♒31'37	
direct	5173 Feb 27 00:30	9°♒50'12	
greatest brilliancy	5173 Mar 08 17:04	11°♒37'12	-4.9m
	5173 Apr 05 04:24	0°♓	
morning max el	5173 Apr 18 09:02	12°♓32'12	46°50'30
	5173 May 05 01:27	0°♈	
desc. node	5173 May 09 08:25	4°♈41'12	
	5173 May 31 18:44	0°♉	
	5173 Jun 26 11:25	0°♊	
	5173 Jul 21 17:20	0°♋	
	5173 Aug 15 16:46	0°♌	
asc. node	5173 Aug 30 09:53	17°♌48'26	
	5173 Sep 09 10:27	0°♍	
	5173 Oct 03 22:29	0°♎	
morning set	5173 Oct 15 20:55	14°♎42'36	
	5173 Oct 28 05:38	0°♏	
max. Earth dist.	5173 Nov 19 00:28	27°♏02'58	1.72327 AU
	5173 Nov 21 09:23	0°♐	
superior conj	5173 Nov 21 23:21	0°♐43'27	1°00'50
minimum elong	5173 Nov 22 09:20	1°♐14'30	1°00'29
	5173 Dec 15 11:01	0°♑	
desc. node	5173 Dec 20 01:10	5°♑43'48	
evening rise	5173 Dec 31 02:23	19°♑32'02	
	5174 Jan 08 11:17	0°♒	
	5174 Feb 01 10:46	0°♓	
	5174 Feb 25 10:54	0°♈	
	5174 Mar 21 14:31	0°♉	
asc. node	5174 Apr 12 02:38	26°♉23'14	
	5174 Apr 15 01:57	0°♊	
	5174 May 10 03:23	0°♋	
	5174 Jun 05 05:59	0°♌	
	5174 Jul 03 16:46	0°♍	
evening max el	5174 Jul 04 14:07	0°♍51'55	45°39'39
desc. node	5174 Aug 01 17:54	23°♍59'59	
greatest brilliancy	5174 Aug 11 22:00	29°♍03'40	-4.7m
	5174 Aug 14 20:33	0°♎	
retrograde	5174 Aug 22 10:47	1°♎04'01	
	5174 Aug 29 19:20	30°℞♍	
evening set	5174 Sep 08 16:59	25°♍28'06	
inferior conj	5174 Sep 13 00:22	22°♍49'05	-7°53'55
minimum elong	5174 Sep 12 17:04	23°♍00'33	7°53'05
min. Earth dist.	5174 Sep 12 23:13	22°♍50'53	0.29140 AU
morning rise	5174 Sep 16 17:04	20°♍31'31	
direct	5174 Oct 04 14:42	14°♍30'40	
greatest brilliancy	5174 Oct 15 02:50	16°♍29'53	-4.7m
	5174 Nov 06 00:06	0°♎	
asc. node	5174 Nov 22 19:34	15°♎11'30	
morning max el	5174 Nov 22 23:40	15°♎21'33	46°07'06
	5174 Dec 07 05:08	0°♏	
	5175 Jan 02 23:04	0°♐	
	5175 Jan 28 05:25	0°♑	
	5175 Feb 21 19:46	0°♒	
desc. node	5175 Mar 14 10:35	25°♒27'58	
	5175 Mar 18 02:20	0°♓	
	5175 Apr 11 05:21	0°♈	
	5175 May 05 07:38	0°♉	

morning set	5175 May 28 20:27	29°♉14'27	
	5175 May 29 11:08	0°♊	
	5175 Jun 22 16:46	0°♋	
superior conj	5175 Jul 05 21:05	16°♋16'20	0°00'54
minimum elong	5175 Jul 05 20:54	16°♋15'46	0°00'53
behind sun begin	5175 Jul 04 21:40	15°♋04'06	
behind sun end	5175 Jul 06 20:08	17°♋27'25	
asc. node	5175 Jul 05 12:15	15°♋49'06	
max. Earth dist.	5175 Jul 07 17:29	18°♋33'15	1.73131 AU
	5175 Jul 17 00:23	0°♌	
	5175 Aug 10 09:27	0°♍	
evening rise	5175 Aug 11 16:07	1°♍34'13	
	5175 Sep 03 19:59	0°♎	
	5175 Sep 28 08:48	0°♏	
	5175 Oct 23 01:04	0°♐	
desc. node	5175 Oct 25 03:24	2°♐32'24	
	5175 Nov 16 21:55	0°♑	
	5175 Dec 12 01:17	0°♒	
	5176 Jan 06 17:23	0°♓	
	5176 Feb 02 18:24	0°♈	
evening max el	5176 Feb 09 14:08	7°♈04'17	47°09'17
asc. node	5176 Feb 15 04:58	12°♈40'06	
	5176 Mar 06 04:01	0°♉	
greatest brilliancy	5176 Mar 21 08:31	8°♉36'29	-4.9m
retrograde	5176 Mar 31 09:39	10°♉32'19	
evening set	5176 Apr 18 07:19	4°♉22'51	
inferior conj	5176 Apr 21 06:51	2°♉32'41	8°36'49
minimum elong	5176 Apr 21 13:06	2°♉22'57	8°36'13
min. Earth dist.	5176 Apr 21 01:20	2°♉41'16	0.27501 AU
morning rise	5176 Apr 24 19:02	0°♉23'41	
	5176 Apr 25 11:05	30°℞♈	
direct	5176 May 12 00:03	24°♈40'18	
greatest brilliancy	5176 May 21 12:23	26°♈21'15	-4.8m
	5176 May 29 13:45	0°♉	
desc. node	5176 Jun 05 20:11	4°♉35'38	
morning max el	5176 Jun 30 11:27	25°♉42'36	46°06'31
	5176 Jul 04 19:58	0°♊	
	5176 Aug 02 03:58	0°♋	
	5176 Aug 28 16:10	0°♌	
	5176 Sep 23 06:41	0°♍	
asc. node	5176 Sep 26 21:48	4°♍18'58	
	5176 Oct 18 06:31	0°♎	
	5176 Nov 11 19:37	0°♏	
	5176 Dec 06 01:21	0°♐	
morning set	5176 Dec 25 13:02	24°♐17'47	
	5176 Dec 30 02:31	0°♑	
desc. node	5177 Jan 16 12:52	21°♑50'32	
	5177 Jan 23 00:53	0°♒	
max. Earth dist.	5177 Feb 02 17:14	13°♒25'09	1.71217 AU
superior conj	5177 Feb 03 22:50	14°♒58'12	-0°42'40
minimum elong	5177 Feb 03 12:49	14°♒26'43	0°42'13
	5177 Feb 15 21:40	0°♓	
	5177 Mar 11 18:11	0°♈	
evening rise	5177 Mar 16 20:32	6°♈24'13	
	5177 Apr 04 16:20	0°♉	
	5177 Apr 28 18:23	0°♊	
asc. node	5177 May 09 14:38	13°♊24'41	
	5177 May 23 02:40	0°♋	
	5177 Jun 16 19:42	0°♌	
	5177 Jul 12 01:34	0°♍	
	5177 Aug 07 04:49	0°♎	
desc. node	5177 Aug 29 05:35	23°♎54'00	
	5177 Sep 04 03:45	0°♏	
evening max el	5177 Sep 13 19:01	9°♏30'03	45°41'27
	5177 Oct 08 08:08	0°♐	
greatest brilliancy	5177 Oct 23 06:10	7°♐41'10	-4.8m
retrograde	5177 Nov 01 13:41	9°♐15'40	
evening set	5177 Nov 17 23:53	4°♐07'00	
inferior conj	5177 Nov 22 13:59	1°♐21'28	-6°14'07
minimum elong	5177 Nov 23 00:17	1°♐05'35	6°11'52
min. Earth dist.	5177 Nov 23 13:05	0°♐45'53	0.27887 AU
	5177 Nov 24 19:02	30°℞♏	
morning rise	5177 Nov 28 00:09	28°♏06'34	
direct	5177 Dec 13 17:43	23°♏16'46	
asc. node	5177 Dec 20 07:16	24°♏07'02	
greatest brilliancy	5177 Dec 24 22:21	25°♏37'28	-4.9m
	5178 Jan 02 10:57	0°♐	
morning max el	5178 Feb 02 08:04	26°♐20'24	46°50'40
	5178 Feb 05 21:47	0°♑	
	5178 Mar 05 04:32	0°♒	
	5178 Mar 30 18:34	0°♓	
desc. node	5178 Apr 10 22:34	13°♓22'56	
	5178 Apr 24 16:19	0°♈	
	5178 May 19 07:08	0°♉	
	5178 Jun 12 19:31	0°♊	
	5178 Jul 07 07:26	0°♋	
	5178 Jul 31 18:57	0°♌	
asc. node	5178 Aug 02 00:01	1°♌29'06	
morning set	5178 Aug 06 08:35	6°♌49'44	
	5178 Aug 25 05:18	0°♍	
max. Earth dist.	5178 Sep 10 14:56	20°♍11'12	1.73373 AU
superior conj	5178 Sep 11 23:31	21°♍51'36	1°17'59
minimum elong	5178 Sep 11 16:44	21°♍30'41	1°17'52
	5178 Sep 18 13:58	0°♎	
	5178 Oct 12 21:20	0°♏	
evening rise	5178 Oct 18 07:22	6°♏41'34	
	5178 Nov 06 04:13	0°♐	
desc. node	5178 Nov 21 15:19	19°♐05'51	
	5178 Nov 30 11:15	0°♑	
	5178 Dec 24 18:44	0°♒	
	5179 Jan 18 03:41	0°♓	
	5179 Feb 11 17:18	0°♈	
	5179 Mar 08 18:58	0°♉	
asc. node	5179 Mar 14 16:43	6°♉54'51	
	5179 Apr 04 00:50	0°♊	
evening max el	5179 Apr 22 15:08	19°♊36'36	46°32'09
	5179 May 03 12:33	0°♋	
greatest brilliancy	5179 May 31 13:36	19°♋20'46	-4.8m
retrograde	5179 Jun 11 13:54	21°♋34'17	
evening set	5179 Jun 26 14:20	17°♋07'56	
inferior conj	5179 Jul 02 20:28	13°♋22'02	0°21'34
minimum elong	5179 Jul 02 21:17	13°♋20'47	0°21'18
min. Earth dist.	5179 Jul 02 12:16	13°♋34'53	0.28410 AU
desc. node	5179 Jul 04 07:55	12°♋26'46	
morning rise	5179 Jul 09 04:54	9°♋34'45	
direct	5179 Jul 24 04:12	5°♋15'36	
greatest brilliancy	5179 Aug 03 01:05	7°♋01'52	-4.7m
	5179 Sep 05 13:12	0°♌	
morning max el	5179 Sep 10 21:05	4°♌58'20	45°41'49
	5179 Oct 05 07:57	0°♍	
asc. node	5179 Oct 25 09:49	22°♍19'50	
	5179 Nov 01 02:03	0°♎	
	5179 Nov 26 12:15	0°♏	
	5179 Dec 21 04:48	0°♐	
	5180 Jan 14 11:21	0°♑	
	5180 Feb 07 12:24	0°♒	
desc. node	5180 Feb 14 00:44	8°♒09'23	
	5180 Mar 02 10:38	0°♓	
morning set	5180 Mar 11 14:40	11°♓30'56	
	5180 Mar 26 07:52	0°♈	
	5180 Apr 19 05:53	0°♉	

superior conj	5180 Apr 21 07:35	2°♉35'33	-1°23'11
minimum elong	5180 Apr 21 14:09	2°♉56'05	1°23'07
max. Earth dist.	5180 Apr 25 02:45	7°♉20'42	1.71708 AU
	5180 May 13 06:22	0°♊	
evening rise	5180 May 31 00:39	22°♊03'42	
asc. node	5180 Jun 06 02:27	29°♊34'53	
	5180 Jun 06 10:34	0°♋	
	5180 Jun 30 19:07	0°♌	
	5180 Jul 25 08:38	0°♍	
	5180 Aug 19 04:38	0°♎	
	5180 Sep 13 10:13	0°♏	
desc. node	5180 Sep 25 17:30	14°♏23'15	
	5180 Oct 09 06:47	0°♐	
	5180 Nov 05 06:00	0°♑	
evening max el	5180 Nov 25 11:37	20°♑55'48	46°33'49
	5180 Dec 05 01:24	0°♒	
greatest brilliancy	5181 Jan 04 14:09	20°♒57'18	-4.9m
retrograde	5181 Jan 14 10:27	22°♒46'20	
asc. node	5181 Jan 16 19:08	22°♒39'35	
evening set	5181 Jan 29 01:40	18°♒33'39	
min. Earth dist.	5181 Feb 03 17:58	15°♒13'49	0.26671 AU
inferior conj	5181 Feb 04 00:25	15°♒03'56	4°32'21
minimum elong	5181 Feb 03 15:08	15°♒18'10	4°29'43
morning rise	5181 Feb 09 04:34	11°♒59'38	
direct	5181 Feb 24 12:37	7°♒22'26	
greatest brilliancy	5181 Mar 06 07:42	9°♒11'16	-4.9m
	5181 Apr 05 10:09	0°♓	
morning max el	5181 Apr 15 20:55	10°♓03'30	46°51'33
	5181 May 04 19:39	0°♈	
desc. node	5181 May 08 10:32	3°♈58'48	
	5181 May 31 09:27	0°♉	
	5181 Jun 26 00:28	0°♊	
	5181 Jul 21 05:26	0°♋	
	5181 Aug 15 04:16	0°♌	
asc. node	5181 Aug 29 11:57	17°♌20'36	
	5181 Sep 08 21:35	0°♍	
	5181 Oct 03 09:23	0°♎	
morning set	5181 Oct 13 14:08	12°♎34'06	
	5181 Oct 27 16:28	0°♏	
max. Earth dist.	5181 Nov 16 17:07	24°♏51'42	1.72376 AU
superior conj	5181 Nov 19 14:57	28°♏28'51	1°03'12
minimum elong	5181 Nov 20 00:51	28°♏59'39	1°02'53
	5181 Nov 20 20:15	0°♐	
	5181 Dec 14 22:01	0°♑	
desc. node	5181 Dec 19 03:07	5°♑15'27	
evening rise	5181 Dec 28 15:24	17°♑08'04	
	5182 Jan 07 22:28	0°♒	
	5182 Jan 31 22:09	0°♓	
	5182 Feb 24 22:30	0°♈	
	5182 Mar 21 02:28	0°♉	
asc. node	5182 Apr 11 04:44	25°♉51'50	
	5182 Apr 14 14:28	0°♊	
	5182 May 09 16:56	0°♋	
	5182 Jun 04 21:46	0°♌	
evening max el	5182 Jul 02 04:49	28°♌37'16	45°40'49
	5182 Jul 03 15:06	0°♍	
desc. node	5182 Jul 31 19:53	22°♍40'49	
greatest brilliancy	5182 Aug 09 12:53	26°♍52'44	-4.7m
retrograde	5182 Aug 20 03:06	28°♍54'53	
evening set	5182 Sep 06 06:10	23°♍22'57	
inferior conj	5182 Sep 10 16:44	20°♍39'30	-7°45'43
minimum elong	5182 Sep 10 08:55	20°♍51'45	7°44'45
min. Earth dist.	5182 Sep 10 14:42	20°♍42'40	0.29141 AU
morning rise	5182 Sep 14 11:36	18°♍18'53	
direct	5182 Oct 02 06:40	12°♍21'01	
greatest brilliancy	5182 Oct 12 19:00	14°♍20'22	-4.7m
	5182 Nov 06 07:33	0°♎	
morning max el	5182 Nov 20 14:59	13°♎07'28	46°05'46
asc. node	5182 Nov 21 21:29	14°♎22'39	
	5182 Dec 06 22:50	0°♏	
	5183 Jan 02 13:25	0°♐	
	5183 Jan 27 18:25	0°♑	
	5183 Feb 21 08:03	0°♒	
desc. node	5183 Mar 13 12:41	24°♒57'37	
	5183 Mar 17 14:10	0°♓	
	5183 Apr 10 16:54	0°♈	
	5183 May 04 18:57	0°♉	
morning set	5183 May 26 10:51	26°♉55'37	
	5183 May 28 22:16	0°♊	
	5183 Jun 22 03:46	0°♋	
superior conj	5183 Jul 03 13:14	14°♋04'24	-0°02'32
minimum elong	5183 Jul 03 13:47	14°♋06'06	0°02'31
behind sun begin	5183 Jul 02 14:38	12°♋54'37	
behind sun end	5183 Jul 04 12:57	15°♋17'33	
asc. node	5183 Jul 04 14:10	15°♋21'17	
max. Earth dist.	5183 Jul 05 11:15	16°♋26'19	1.73098 AU
	5183 Jul 16 11:18	0°♌	
evening rise	5183 Aug 09 10:12	29°♌28'38	
	5183 Aug 09 20:24	0°♍	
	5183 Sep 03 07:06	0°♎	
	5183 Sep 27 20:13	0°♏	
	5183 Oct 22 12:56	0°♐	
desc. node	5183 Oct 24 05:27	2°♐02'34	
	5183 Nov 16 10:29	0°♑	
	5183 Dec 11 14:59	0°♒	
	5184 Jan 06 09:10	0°♓	
	5184 Feb 02 15:10	0°♈	
evening max el	5184 Feb 07 04:11	4°♈40'37	47°09'15
asc. node	5184 Feb 14 06:58	11°♈43'09	
	5184 Mar 07 04:27	0°♉	
greatest brilliancy	5184 Mar 18 22:02	6°♉11'40	-4.9m
retrograde	5184 Mar 28 23:59	8°♉08'20	
evening set	5184 Apr 15 23:04	1°♉55'31	
inferior conj	5184 Apr 18 20:23	0°♉08'52	8°43'33
minimum elong	5184 Apr 19 01:53	0°♉00'21	8°43'06
min. Earth dist.	5184 Apr 18 14:06	0°♉18'38	0.27474 AU
	5184 Apr 19 02:07	30°℞♈	
morning rise	5184 Apr 22 04:50	28°♈05'46	
direct	5184 May 09 13:29	22°♈16'53	
greatest brilliancy	5184 May 19 00:47	23°♈57'33	-4.8m
	5184 May 31 02:10	0°♉	
desc. node	5184 Jun 04 22:05	3°♉18'35	
morning max el	5184 Jun 28 02:30	23°♉25'51	46°08'04
	5184 Jul 04 17:19	0°♊	
	5184 Aug 01 19:38	0°♋	
	5184 Aug 28 05:33	0°♌	
	5184 Sep 22 18:56	0°♍	
asc. node	5184 Sep 25 23:53	3°♍48'59	
	5184 Oct 17 18:09	0°♎	
	5184 Nov 11 06:55	0°♏	
	5184 Dec 05 12:30	0°♐	
morning set	5184 Dec 23 02:42	21°♐55'58	
	5184 Dec 29 13:34	0°♑	
desc. node	5185 Jan 15 14:54	21°♑22'14	
	5185 Jan 22 11:56	0°♒	
max. Earth dist.	5185 Jan 31 03:44	10°♒52'34	1.71236 AU
superior conj	5185 Feb 01 09:48	12°♒27'02	-0°39'11
minimum elong	5185 Feb 01 00:26	11°♒57'35	0°38'46
	5185 Feb 15 08:44	0°♓	
	5185 Mar 11 05:20	0°♈	
evening rise	5185 Mar 14 07:15	3°♈52'12	

	5185 Apr 04 03:34	0°♉	
	5185 Apr 28 05:46	0°♊	
asc. node	5185 May 08 16:33	12°♊55'08	
	5185 May 22 14:18	0°♋	
	5185 Jun 16 07:51	0°♌	
	5185 Jul 11 14:39	0°♍	
	5185 Aug 06 19:53	0°♎	
desc. node	5185 Aug 28 07:42	23°♎11'20	
	5185 Sep 03 23:54	0°♏	
evening max el	5185 Sep 11 10:14	7°♏16'36	45°40'21
	5185 Oct 09 11:18	0°♐	
greatest brilliancy	5185 Oct 20 19:34	5°♐23'43	-4.8m
retrograde	5185 Oct 30 03:34	6°♐58'10	
evening set	5185 Nov 15 17:10	1°♐45'03	
	5185 Nov 18 15:31	30℞♏	
inferior conj	5185 Nov 20 04:21	29°♏03'15	-6°28'50
minimum elong	5185 Nov 20 14:36	28°♏47'24	6°26'43
min. Earth dist.	5185 Nov 21 03:11	28°♏27'57	0.27951 AU
morning rise	5185 Nov 25 11:34	25°♏52'09	
direct	5185 Dec 11 09:10	20°♏57'54	
asc. node	5185 Dec 19 09:14	22°♏11'39	
greatest brilliancy	5185 Dec 22 12:53	23°♏17'35	-4.8m
	5186 Jan 03 15:13	0°♐	
morning max el	5186 Jan 30 22:36	23°♐59'15	46°49'39
	5186 Feb 05 18:28	0°♑	
	5186 Mar 04 20:11	0°♒	
	5186 Mar 30 08:12	0°♓	
desc. node	5186 Apr 10 00:38	12°♓49'45	
	5186 Apr 24 04:54	0°♈	
	5186 May 18 19:04	0°♉	
	5186 Jun 12 07:01	0°♊	
	5186 Jul 06 18:36	0°♋	
	5186 Jul 31 05:54	0°♌	
asc. node	5186 Aug 01 02:07	1°♌01'59	
morning set	5186 Aug 04 01:52	4°♌42'03	
	5186 Aug 24 16:08	0°♍	
max. Earth dist.	5186 Sep 08 10:17	18°♍09'41	1.73386 AU
superior conj	5186 Sep 09 17:24	19°♍45'31	1°16'38
minimum elong	5186 Sep 09 10:11	19°♍23'20	1°16'29
	5186 Sep 18 00:47	0°♎	
	5186 Oct 12 08:14	0°♏	
evening rise	5186 Oct 16 00:05	4°♏31'10	
	5186 Nov 05 15:19	0°♐	
desc. node	5186 Nov 20 17:13	18°♐36'56	
	5186 Nov 29 22:38	0°♑	
	5186 Dec 24 06:30	0°♒	
	5187 Jan 17 15:56	0°♓	
	5187 Feb 11 06:16	0°♈	
	5187 Mar 08 09:16	0°♉	
asc. node	5187 Mar 13 18:50	6°♉18'05	
	5187 Apr 03 18:08	0°♊	
evening max el	5187 Apr 20 06:08	17°♊19'34	46°33'59
	5187 May 03 16:43	0°♋	
greatest brilliancy	5187 May 29 06:47	17°♋08'53	-4.8m
retrograde	5187 Jun 09 05:25	19°♋20'54	
evening set	5187 Jun 24 07:07	14°♋53'44	
min. Earth dist.	5187 Jun 30 04:28	11°♋21'14	0.28376 AU
inferior conj	5187 Jun 30 12:07	11°♋09'16	0°42'29
minimum elong	5187 Jun 30 13:42	11°♋06'47	0°41'59
desc. node	5187 Jul 03 09:58	9°♋21'00	
morning rise	5187 Jul 06 20:54	7°♋21'08	
direct	5187 Jul 21 19:28	3°♋03'26	
greatest brilliancy	5187 Jul 31 16:11	4°♋49'19	-4.7m
	5187 Sep 05 13:45	0°♌	
morning max el	5187 Sep 08 11:23	2°♌44'06	45°41'46
	5187 Oct 05 00:10	0°♍	
asc. node	5187 Oct 24 11:46	21°♍45'23	
	5187 Oct 31 15:36	0°♎	
	5187 Nov 26 00:35	0°♏	
	5187 Dec 20 16:31	0°♐	
	5188 Jan 13 22:44	0°♑	
	5188 Feb 06 23:37	0°♒	
desc. node	5188 Feb 13 02:48	7°♒40'51	
	5188 Mar 01 21:43	0°♓	
morning set	5188 Mar 09 00:45	8°♓57'09	
	5188 Mar 25 18:50	0°♈	
superior conj	5188 Apr 18 19:48	0°♉09'35	-1°24'15
minimum elong	5188 Apr 19 01:32	0°♉27'31	1°24'11
	5188 Apr 18 16:44	0°♉	
max. Earth dist.	5188 Apr 22 13:57	4°♉51'43	1.71656 AU
	5188 May 12 17:10	0°♊	
evening rise	5188 May 28 14:51	19°♊45'26	
asc. node	5188 Jun 05 04:23	29°♊07'23	
	5188 Jun 05 21:24	0°♋	
	5188 Jun 30 06:05	0°♌	
	5188 Jul 24 19:53	0°♍	
	5188 Aug 18 16:23	0°♎	
	5188 Sep 12 22:53	0°♏	
desc. node	5188 Sep 24 19:31	13°♏50'22	
	5188 Oct 08 21:07	0°♐	
	5188 Nov 04 23:55	0°♑	
evening max el	5188 Nov 22 23:46	18°♑30'14	46°31'46
	5188 Dec 05 06:58	0°♒	
greatest brilliancy	5189 Jan 02 03:31	18°♒30'39	-4.9m
retrograde	5189 Jan 11 22:18	20°♒18'43	
asc. node	5189 Jan 15 21:14	19°♒59'40	
evening set	5189 Jan 26 12:02	16°♒08'33	
inferior conj	5189 Feb 01 12:48	12°♒36'37	4°10'45
minimum elong	5189 Feb 01 04:03	12°♒50'00	4°08'12
min. Earth dist.	5189 Feb 01 07:49	12°♒44'15	0.26671 AU
morning rise	5189 Feb 06 19:55	9°♒28'10	
direct	5189 Feb 22 00:33	4°♒54'35	
greatest brilliancy	5189 Mar 03 22:23	6°♒45'43	-4.9m
	5189 Apr 05 13:49	0°♓	
morning max el	5189 Apr 13 09:30	7°♓37'03	46°52'46
	5189 May 04 13:11	0°♈	
desc. node	5189 May 07 12:23	3°♈16'52	
	5189 May 30 23:44	0°♉	
	5189 Jun 25 13:10	0°♊	
	5189 Jul 20 17:13	0°♋	
	5189 Aug 14 15:31	0°♌	
asc. node	5189 Aug 28 13:58	16°♌53'19	
	5189 Sep 08 08:29	0°♍	
	5189 Oct 02 20:07	0°♎	
morning set	5189 Oct 11 07:07	10°♎25'19	
	5189 Oct 27 03:08	0°♏	
max. Earth dist.	5189 Nov 14 10:46	22°♏44'02	1.72423 AU
superior conj	5189 Nov 17 06:16	26°♏13'55	1°05'29
minimum elong	5189 Nov 17 16:03	26°♏44'18	1°05'11
	5189 Nov 20 06:58	0°♐	
	5189 Dec 14 08:51	0°♑	
desc. node	5189 Dec 18 05:08	4°♑47'53	
evening rise	5189 Dec 26 04:14	14°♑44'17	
	5190 Jan 07 09:27	0°♒	
	5190 Jan 31 09:18	0°♓	
	5190 Feb 24 09:53	0°♈	
	5190 Mar 20 14:11	0°♉	
asc. node	5190 Apr 10 06:39	25°♉20'38	
	5190 Apr 14 02:45	0°♊	
	5190 May 09 06:15	0°♋	
	5190 Jun 04 13:23	0°♌	

evening max el	5190 Jun 29 20:10	26°♌25'31	45°42'05	
	5190 Jul 03 13:48	0°♍		
desc. node	5190 Jul 30 21:57	21°♍20'38		
greatest brilliancy	5190 Aug 07 03:16	24°♍42'36	-4.7m	
retrograde	5190 Aug 17 19:56	26°♍46'57		
evening set	5190 Sep 03 19:22	21°♍18'59		
inferior conj	5190 Sep 08 09:06	18°♍30'58	-7°36'53	
minimum elong	5190 Sep 08 00:52	18°♍43'54	7°35'46	
min. Earth dist.	5190 Sep 08 05:54	18°♍35'59	0.29146 AU	
morning rise	5190 Sep 12 06:19	16°♍07'06		
direct	5190 Sep 29 23:04	10°♍12'27		
greatest brilliancy	5190 Oct 10 10:44	12°♍11'25	-4.7m	
	5190 Nov 06 12:26	0°♎		
morning max el	5190 Nov 18 07:11	10°♎56'25	46°04'17	
asc. node	5190 Nov 20 23:27	13°♎35'22		
	5190 Dec 06 15:56	0°♏		
	5191 Jan 02 03:26	0°♐		
	5191 Jan 27 07:05	0°♑		
	5191 Feb 20 19:59	0°♒		
desc. node	5191 Mar 12 14:41	24°♒28'01		
	5191 Mar 17 01:39	0°♓		
	5191 Apr 10 04:04	0°♈		
	5191 May 04 05:54	0°♉		
morning set	5191 May 24 01:17	24°♉37'57		
	5191 May 28 09:02	0°♊		
	5191 Jun 21 14:22	0°♋		
superior conj	5191 Jul 01 05:30	11°♋53'52	-0°05'55	
minimum elong	5191 Jul 01 06:49	11°♋57'55	0°05'52	
behind sun begin	5191 Jun 30 08:47	10°♋49'53		
behind sun end	5191 Jul 02 04:51	13°♋05'55		
max. Earth dist.	5191 Jul 03 06:37	14°♋25'25	1.73062 AU	
asc. node	5191 Jul 03 16:18	14°♋55'17		
	5191 Jul 15 21:49	0°♌		
evening rise	5191 Aug 07 04:31	27°♌25'05		
	5191 Aug 09 06:57	0°♍		
	5191 Sep 02 17:48	0°♎		
	5191 Sep 27 07:15	0°♏		
	5191 Oct 22 00:30	0°♐		
desc. node	5191 Oct 23 07:22	1°♐33'16		
	5191 Nov 15 22:50	0°♑		
	5191 Dec 11 04:34	0°♒		
	5192 Jan 06 00:57	0°♓		
	5192 Feb 02 12:20	0°♈		
evening max el	5192 Feb 04 19:01	2°♈19'44	47°09'17	
asc. node	5192 Feb 13 09:03	10°♈46'05		
	5192 Mar 08 13:59	0°♉		
greatest brilliancy	5192 Mar 16 11:22	3°♉47'41	-4.9m	
retrograde	5192 Mar 26 14:30	5°♉45'06		
	5192 Apr 12 18:18	30°℞♈		
evening set	5192 Apr 13 14:34	29°♈29'33		
inferior conj	5192 Apr 16 09:54	27°♈45'57	8°49'31	
minimum elong	5192 Apr 16 14:35	27°♈38'40	8°49'10	
min. Earth dist.	5192 Apr 16 02:33	27°♈57'20	0.27441 AU	
morning rise	5192 Apr 19 14:45	25°♈48'23		
direct	5192 May 07 03:12	19°♈54'41		
greatest brilliancy	5192 May 16 12:35	21°♈34'13	-4.8m	
	5192 Jun 01 03:20	0°♉		
desc. node	5192 Jun 04 00:10	2°♉05'25		
morning max el	5192 Jun 25 17:29	21°♉10'07	46°09'38	
	5192 Jul 04 13:26	0°♊		
	5192 Aug 01 10:36	0°♋		
	5192 Aug 27 18:23	0°♌		
	5192 Sep 22 06:39	0°♍		
asc. node	5192 Sep 25 01:50	3°♍20'08		
	5192 Oct 17 05:18	0°♎		
	5192 Nov 10 17:47	0°♏		
	5192 Dec 04 23:16	0°♐		
morning set	5192 Dec 20 16:18	19°♐35'00		
	5192 Dec 29 00:20	0°♑		
desc. node	5193 Jan 14 17:02	20°♑55'07		
	5193 Jan 21 22:43	0°♒		
max. Earth dist.	5193 Jan 28 10:43	8°♒09'47	1.71256 AU	
superior conj	5193 Jan 29 20:29	9°♒55'50	-0°35'36	
minimum elong	5193 Jan 29 11:50	9°♒28'41	0°35'11	
	5193 Feb 14 19:34	0°♓		
	5193 Mar 10 16:12	0°♈		
evening rise	5193 Mar 11 17:31	1°♈19'34		
	5193 Apr 03 14:30	0°♉		
	5193 Apr 27 16:48	0°♊		
asc. node	5193 May 07 18:33	12°♊26'58		
	5193 May 22 01:36	0°♋		
	5193 Jun 15 19:39	0°♌		
	5193 Jul 11 03:26	0°♍		
	5193 Aug 06 10:42	0°♎		
desc. node	5193 Aug 27 09:43	22°♎29'25		
	5193 Sep 03 20:06	0°♏		
evening max el	5193 Sep 09 01:04	5°♏03'48	45°39'19	
	5193 Oct 11 00:32	0°♐		
greatest brilliancy	5193 Oct 18 09:40	3°♐09'08	-4.8m	
retrograde	5193 Oct 27 17:14	4°♐43'07		
	5193 Nov 12 10:29	30°℞♏		
evening set	5193 Nov 13 10:40	29°♏25'36		
inferior conj	5193 Nov 17 19:02	26°♏47'30	-6°42'40	
minimum elong	5193 Nov 18 05:09	26°♏31'49	6°40'40	
min. Earth dist.	5193 Nov 18 17:47	26°♏12'16	0.28019 AU	
morning rise	5193 Nov 22 23:11	23°♏40'15		
direct	5193 Dec 09 00:28	18°♏41'21		
asc. node	5193 Dec 18 11:20	20°♏22'35		
greatest brilliancy	5193 Dec 20 04:01	21°♏00'16	-4.8m	
	5194 Jan 04 11:04	0°♐		
morning max el	5194 Jan 28 12:30	21°♐37'26	46°48'19	
	5194 Feb 05 14:10	0°♑		
	5194 Mar 04 11:24	0°♒		
	5194 Mar 29 21:33	0°♓		
desc. node	5194 Apr 09 02:34	12°♓16'49		
	5194 Apr 23 17:14	0°♈		
	5194 May 18 06:43	0°♉		
	5194 Jun 11 18:11	0°♊		
	5194 Jul 06 05:26	0°♋		
	5194 Jul 30 16:31	0°♌		
asc. node	5194 Jul 31 04:06	0°♌35'32		
morning set	5194 Aug 01 19:13	2°♌35'32		
	5194 Aug 24 02:38	0°♍		
max. Earth dist.	5194 Sep 06 04:34	16°♍05'58	1.73397 AU	
superior conj	5194 Sep 07 11:36	17°♍41'29	1°15'11	
minimum elong	5194 Sep 07 04:00	17°♍18'05	1°15'00	
	5194 Sep 17 11:17	0°♎		
	5194 Oct 11 18:49	0°♏		
evening rise	5194 Oct 13 17:16	2°♏23'22		
	5194 Nov 05 02:04	0°♐		
desc. node	5194 Nov 19 19:19	18°♐09'39		
	5194 Nov 29 09:41	0°♑		
	5194 Dec 23 17:58	0°♒		
	5195 Jan 17 03:58	0°♓		
	5195 Feb 10 19:08	0°♈		
	5195 Mar 07 23:36	0°♉		
asc. node	5195 Mar 12 20:43	5°♉40'40		
	5195 Apr 03 11:45	0°♊		
evening max el	5195 Apr 17 20:15	15°♊00'17	46°35'58	
	5195 May 03 22:48	0°♋		
greatest brilliancy	5195 May 27 00:09	14°♋57'12	-4.8m	

retrograde	5195 Jun 06 20:45	17°♋07'48		
evening set	5195 Jun 21 23:58	12°♋39'19		
inferior conj	5195 Jun 28 03:42	8°♋56'45	1°03'27	
minimum elong	5195 Jun 28 06:03	8°♋53'03	1°02'43	
min. Earth dist.	5195 Jun 27 20:49	9°♋07'31	0.28338 AU	
desc. node	5195 Jul 02 12:03	6°♋16'51		
morning rise	5195 Jul 04 12:41	5°♋08'05		
direct	5195 Jul 19 10:12	0°♋51'25		
greatest brilliancy	5195 Jul 29 07:37	2°♋37'33	-4.7m	
	5195 Sep 05 12:54	0°♌		
morning max el	5195 Sep 06 01:37	0°♌30'16	45°41'56	
	5195 Oct 04 15:50	0°♍		
asc. node	5195 Oct 23 13:42	21°♍11'51		
	5195 Oct 31 04:45	0°♎		
	5195 Nov 25 12:36	0°♏		
	5195 Dec 20 03:57	0°♐		
	5196 Jan 13 09:53	0°♑		
	5196 Feb 06 10:38	0°♒		
desc. node	5196 Feb 12 04:47	7°♒12'43		
	5196 Mar 01 08:39	0°♓		
morning set	5196 Mar 06 10:43	6°♓23'24		
	5196 Mar 25 05:42	0°♈		
superior conj	5196 Apr 16 07:35	27°♈42'17	-1°25'09	
minimum elong	5196 Apr 16 12:23	27°♈57'21	1°25'07	
	5196 Apr 18 03:34	0°♉		
max. Earth dist.	5196 Apr 19 20:41	2°♉08'42	1.71610 AU	
	5196 May 12 03:58	0°♊		
evening rise	5196 May 26 04:24	17°♊25'09		
asc. node	5196 Jun 04 06:29	28°♊40'25		
	5196 Jun 05 08:13	0°♋		
	5196 Jun 29 17:01	0°♌		
	5196 Jul 24 07:05	0°♍		
	5196 Aug 18 04:06	0°♎		
	5196 Sep 12 11:32	0°♏		
desc. node	5196 Sep 23 21:27	13°♏17'22		
	5196 Oct 08 11:32	0°♐		
	5196 Nov 04 18:07	0°♑		
evening max el	5196 Nov 20 12:34	16°♑07'11	46°29'52	
	5196 Dec 05 14:27	0°♒		
greatest brilliancy	5196 Dec 30 16:36	16°♒04'54	-4.9m	
retrograde	5197 Jan 09 10:55	17°♒52'44		
asc. node	5197 Jan 14 23:11	17°♒15'31		
evening set	5197 Jan 23 22:56	13°♒44'26		
inferior conj	5197 Jan 30 01:26	10°♒10'37	3°48'44	
minimum elong	5197 Jan 29 17:17	10°♒23'03	3°46'19	
min. Earth dist.	5197 Jan 29 21:37	10°♒16'28	0.26676 AU	
morning rise	5197 Feb 04 11:27	6°♒58'28		
direct	5197 Feb 19 13:08	2°♒28'02		
greatest brilliancy	5197 Mar 01 12:53	4°♒21'06	-4.9m	
	5197 Apr 05 15:44	0°♓		
morning max el	5197 Apr 10 23:17	5°♓13'52	46°53'39	
	5197 May 04 06:20	0°♈		
desc. node	5197 May 06 14:30	2°♈36'11		
	5197 May 30 13:56	0°♉		
	5197 Jun 25 01:54	0°♊		
	5197 Jul 20 05:05	0°♋		
	5197 Aug 14 02:48	0°♌		
asc. node	5197 Aug 27 15:55	16°♌25'39		
	5197 Sep 07 19:25	0°♍		
	5197 Oct 02 06:51	0°♎		
morning set	5197 Oct 09 00:11	8°♎16'51		
	5197 Oct 26 13:50	0°♏		
max. Earth dist.	5197 Nov 12 05:07	20°♏38'30	1.72467 AU	
superior conj	5197 Nov 14 21:53	23°♏59'48	1°07'39	
minimum elong	5197 Nov 15 07:28	24°♏29'34	1°07'22	
	5197 Nov 19 17:44	0°♐		
	5197 Dec 13 19:44	0°♑		
desc. node	5197 Dec 17 07:14	4°♑20'27		
evening rise	5197 Dec 23 17:31	12°♑21'52		
	5198 Jan 06 20:27	0°♒		
	5198 Jan 30 20:28	0°♓		
	5198 Feb 23 21:17	0°♈		
	5198 Mar 20 01:57	0°♉		
asc. node	5198 Apr 09 08:40	24°♉49'32		
	5198 Apr 13 15:08	0°♊		
	5198 May 08 19:48	0°♋		
	5198 Jun 04 05:29	0°♌		
evening max el	5198 Jun 27 12:29	24°♌15'16	45°43'19	
	5198 Jul 03 13:56	0°♍		
desc. node	5198 Jul 29 23:56	19°♍56'51		
greatest brilliancy	5198 Aug 04 17:49	22°♍31'43	-4.7m	
retrograde	5198 Aug 15 12:49	24°♍37'53		
evening set	5198 Sep 01 08:33	19°♍14'11		
inferior conj	5198 Sep 06 01:24	16°♍21'31	-7°27'22	
minimum elong	5198 Sep 05 16:47	16°♍35'01	7°26'06	
min. Earth dist.	5198 Sep 05 20:54	16°♍28'33	0.29142 AU	
morning rise	5198 Sep 10 01:02	13°♍54'12		
direct	5198 Sep 27 15:45	8°♍03'13		
greatest brilliancy	5198 Oct 08 01:41	10°♍00'59	-4.7m	
	5198 Nov 06 15:46	0°♎		
morning max el	5198 Nov 15 23:28	8°♎45'18	46°02'48	
asc. node	5198 Nov 20 01:38	12°♎48'58		
	5198 Dec 06 08:51	0°♏		
	5199 Jan 01 17:27	0°♐		
	5199 Jan 26 19:49	0°♑		
	5199 Feb 20 08:01	0°♒		
desc. node	5199 Mar 11 16:39	23°♒57'56		
	5199 Mar 16 13:14	0°♓		
	5199 Apr 09 15:21	0°♈		
	5199 May 03 16:58	0°♉		
morning set	5199 May 21 15:49	22°♉20'00		
	5199 May 27 19:57	0°♊		
	5199 Jun 21 01:11	0°♋		
superior conj	5199 Jun 28 21:35	9°♋41'57	-0°09'18	
minimum elong	5199 Jun 28 23:39	9°♋48'22	0°09'12	
behind sun begin	5199 Jun 28 04:12	8°♋48'18		
behind sun end	5199 Jun 29 19:06	10°♋48'25		
max. Earth dist.	5199 Jul 01 02:55	12°♋26'38	1.73030 AU	
asc. node	5199 Jul 02 18:17	14°♋28'05		
	5199 Jul 15 08:36	0°♌		
evening rise	5199 Aug 04 22:33	25°♌19'44		
	5199 Aug 08 17:47	0°♍		
	5199 Sep 02 04:49	0°♎		
	5199 Sep 26 18:36	0°♏		
	5199 Oct 21 12:22	0°♐		
desc. node	5199 Oct 22 09:27	1°♐03'38		
	5199 Nov 15 11:30	0°♑		
	5199 Dec 10 18:30	0°♒		
	5200 Jan 05 17:15	0°♓		
	5200 Feb 02 10:35	0°♈		
evening max el	5200 Feb 02 10:13	29°♓59'04	47°09'11	
asc. node	5200 Feb 12 11:00	9°♈46'53		
	5200 Mar 10 17:02	0°♉		
greatest brilliancy	5200 Mar 14 01:19	1°♉23'59	-4.9m	
retrograde	5200 Mar 24 04:55	3°♉21'18		
	5200 Apr 06 00:37	30°℞♈		
evening set	5200 Apr 11 05:52	27°♈04'00		
inferior conj	5200 Apr 13 23:31	25°♈22'47	8°54'27	
minimum elong	5200 Apr 14 03:23	25°♈16'47	8°54'13	
min. Earth dist.	5200 Apr 13 15:17	25°♈35'35	0.27404 AU	
morning rise	5200 Apr 17 01:05	23°♈30'08		

direct	5200 May 04 16:59	17°♈32'26	
greatest brilliancy	5200 May 14 00:31	19°♈10'34	-4.8m
	5200 Jun 01 22:01	0°♉	
desc. node	5200 Jun 03 02:14	0°♉54'04	
morning max el	5200 Jun 23 07:41	18°♉51'51	46°11'02
	5200 Jul 04 09:08	0°♊	
	5200 Aug 01 01:38	0°♋	
	5200 Aug 27 07:27	0°♌	
	5200 Sep 21 18:43	0°♍	
asc. node	5200 Sep 24 03:50	2°♍50'20	
	5200 Oct 16 16:49	0°♎	
	5200 Nov 10 05:01	0°♏	
	5200 Dec 04 10:21	0°♐	
morning set	5200 Dec 18 05:57	17°♐13'17	
	5200 Dec 28 11:22	0°♑	
desc. node	5201 Jan 13 18:55	20°♑26'22	
	5201 Jan 21 09:47	0°♒	
max. Earth dist.	5201 Jan 25 16:00	5°♒20'53	1.71279 AU
superior conj	5201 Jan 27 07:20	7°♒24'22	-0°31'58
minimum elong	5201 Jan 26 23:28	6°♒59'40	0°31'35
	5201 Feb 14 06:41	0°♓	
evening rise	5201 Mar 09 03:53	28°♓46'13	
	5201 Mar 10 03:22	0°♈	
	5201 Apr 03 01:44	0°♉	
	5201 Apr 27 04:10	0°♊	
asc. node	5201 May 06 20:39	11°♊58'06	
	5201 May 21 13:13	0°♋	
	5201 Jun 15 07:48	0°♌	
	5201 Jul 10 16:39	0°♍	
	5201 Aug 06 02:08	0°♎	
desc. node	5201 Aug 26 11:39	21°♎45'24	
	5201 Sep 03 17:36	0°♏	
evening max el	5201 Sep 06 15:02	2°♏47'30	45°38'10
	5201 Oct 13 12:51	0°♐	
greatest brilliancy	5201 Oct 16 00:05	0°♐53'19	-4.8m
retrograde	5201 Oct 25 06:41	2°♐26'41	
	5201 Nov 05 11:06	30°℞♏	
evening set	5201 Nov 11 04:05	27°♏04'34	
inferior conj	5201 Nov 15 09:41	24°♏30'25	-6°55'48
minimum elong	5201 Nov 15 19:37	24°♏14'59	6°53'56
min. Earth dist.	5201 Nov 16 08:40	23°♏54'44	0.28085 AU
morning rise	5201 Nov 20 10:40	21°♏27'13	
direct	5201 Dec 06 15:10	16°♏23'17	
asc. node	5201 Dec 17 13:17	18°♏36'03	
greatest brilliancy	5201 Dec 17 19:38	18°♏42'17	-4.8m
	5202 Jan 05 02:25	0°♐	
morning max el	5202 Jan 26 01:57	19°♐13'20	46°47'08
	5202 Feb 05 09:43	0°♑	
	5202 Mar 04 02:45	0°♒	
	5202 Mar 29 11:07	0°♓	
desc. node	5202 Apr 08 04:38	11°♓43'33	
	5202 Apr 23 05:48	0°♈	
	5202 May 17 18:39	0°♉	
	5202 Jun 11 05:39	0°♊	
	5202 Jul 05 16:34	0°♋	
asc. node	5202 Jul 30 06:03	0°♌07'58	
	5202 Jul 30 03:27	0°♌	
morning set	5202 Jul 30 12:43	0°♌28'27	
	5202 Aug 23 13:29	0°♍	
max. Earth dist.	5202 Sep 03 23:15	14°♍02'25	1.73413 AU
superior conj	5202 Sep 05 05:54	15°♍36'45	1°13'37
minimum elong	5202 Sep 04 21:57	15°♍12'16	1°13'25
	5202 Sep 16 22:08	0°♎	
evening rise	5202 Oct 11 10:31	0°♏14'36	
	5202 Oct 11 05:47	0°♏	
	5202 Nov 04 13:15	0°♐	
desc. node	5202 Nov 18 21:21	17°♐40'51	
	5202 Nov 28 21:11	0°♑	
	5202 Dec 23 05:53	0°♒	
	5203 Jan 16 16:25	0°♓	
	5203 Feb 10 08:26	0°♈	
	5203 Mar 07 14:25	0°♉	
asc. node	5203 Mar 11 22:46	5°♉02'31	
	5203 Apr 03 06:09	0°♊	
evening max el	5203 Apr 15 09:56	12°♊38'53	46°37'56
	5203 May 04 07:49	0°♋	
greatest brilliancy	5203 May 24 17:14	12°♋44'00	-4.8m
retrograde	5203 Jun 04 12:21	14°♋53'48	
evening set	5203 Jun 19 16:56	10°♋23'26	
inferior conj	5203 Jun 25 19:16	6°♋43'10	1°24'22
minimum elong	5203 Jun 25 22:24	6°♋38'16	1°23'24
min. Earth dist.	5203 Jun 25 13:10	6°♋52'44	0.28303 AU
desc. node	5203 Jul 01 13:59	3°♋14'05	
morning rise	5203 Jul 02 04:18	2°♋54'23	
	5203 Jul 08 17:33	30°℞♊	
direct	5203 Jul 17 00:38	28°♊38'10	
	5203 Jul 25 16:20	0°♋	
greatest brilliancy	5203 Jul 26 23:12	0°♋25'01	-4.7m
morning max el	5203 Sep 03 16:35	28°♋17'19	45°42'12
	5203 Sep 05 11:24	0°♌	
	5203 Oct 04 07:34	0°♍	
asc. node	5203 Oct 22 15:52	20°♍38'17	
	5203 Oct 30 18:09	0°♎	
	5203 Nov 25 00:56	0°♏	
	5203 Dec 19 15:45	0°♐	
	5204 Jan 12 21:25	0°♑	
	5204 Feb 05 22:00	0°♒	
desc. node	5204 Feb 11 06:48	6°♒43'31	
	5204 Feb 29 19:53	0°♓	
morning set	5204 Mar 03 20:29	3°♓48'03	
	5204 Mar 24 16:51	0°♈	
superior conj	5204 Apr 13 19:11	25°♈13'36	-1°25'53
minimum elong	5204 Apr 13 23:03	25°♈25'42	1°25'52
max. Earth dist.	5204 Apr 17 02:42	29°♈22'39	1.71567 AU
	5204 Apr 17 14:38	0°♉	
	5204 May 11 15:01	0°♊	
evening rise	5204 May 23 17:57	15°♊04'01	
asc. node	5204 Jun 03 08:28	28°♊12'13	
	5204 Jun 04 19:19	0°♋	
	5204 Jun 29 04:14	0°♌	
	5204 Jul 23 18:33	0°♍	
	5204 Aug 17 16:06	0°♎	
	5204 Sep 12 00:30	0°♏	
desc. node	5204 Sep 22 23:35	12°♏44'11	
	5204 Oct 08 02:22	0°♐	
	5204 Nov 04 13:07	0°♑	
evening max el	5204 Nov 18 02:09	13°♑45'18	46°27'46
	5204 Dec 06 01:16	0°♒	
greatest brilliancy	5204 Dec 28 04:58	13°♒36'55	-4.9m
retrograde	5205 Jan 06 23:43	15°♒24'54	
asc. node	5205 Jan 14 01:11	14°♒23'35	
evening set	5205 Jan 21 09:50	11°♒18'13	
inferior conj	5205 Jan 27 13:47	7°♒42'42	3°26'01
minimum elong	5205 Jan 27 06:18	7°♒54'04	3°23'46
min. Earth dist.	5205 Jan 27 10:57	7°♒47'00	0.26684 AU
morning rise	5205 Feb 02 02:36	4°♒27'04	
	5205 Feb 16 13:45	30°℞♑	
direct	5205 Feb 17 02:00	29°♑59'41	
	5205 Feb 17 14:17	0°♒	
greatest brilliancy	5205 Feb 27 02:44	1°♒54'09	-4.9m
	5205 Apr 05 16:45	0°♓	

morning max el	5205 Apr 08 13:43	2°♓51'25	46°54'36
	5205 May 03 23:23	0°♈	
desc. node	5205 May 05 16:35	1°♈55'12	
	5205 May 30 04:10	0°♉	
	5205 Jun 24 14:43	0°♊	
	5205 Jul 19 17:03	0°♋	
	5205 Aug 13 14:13	0°♌	
asc. node	5205 Aug 26 17:59	15°♌57'55	
	5205 Sep 07 06:29	0°♍	
	5205 Oct 01 17:43	0°♎	
morning set	5205 Oct 06 17:35	6°♎09'05	
	5205 Oct 26 00:39	0°♏	
max. Earth dist.	5205 Nov 09 23:03	18°♏31'26	1.72510 AU
superior conj	5205 Nov 12 13:49	21°♏46'23	1°09'41
minimum elong	5205 Nov 12 23:07	22°♏15'17	1°09'26
	5205 Nov 19 04:36	0°♐	
	5205 Dec 13 06:44	0°♑	
desc. node	5205 Dec 16 09:10	3°♑52'07	
evening rise	5205 Dec 21 06:53	9°♑59'15	
	5206 Jan 06 07:37	0°♒	
	5206 Jan 30 07:50	0°♓	
	5206 Feb 23 08:55	0°♈	
	5206 Mar 19 13:57	0°♉	
asc. node	5206 Apr 08 10:46	24°♉18'05	
	5206 Apr 13 03:45	0°♊	
	5206 May 08 09:35	0°♋	
	5206 Jun 03 21:56	0°♌	
evening max el	5206 Jun 25 05:17	22°♌06'01	45°44'38
	5206 Jul 03 15:20	0°♍	
desc. node	5206 Jul 29 01:58	18°♍30'21	
greatest brilliancy	5206 Aug 02 08:54	20°♍21'27	-4.7m
retrograde	5206 Aug 13 05:29	22°♍28'41	
evening set	5206 Aug 29 21:49	17°♍09'34	
inferior conj	5206 Sep 03 17:44	14°♍12'08	-7°17'11
minimum elong	5206 Sep 03 08:46	14°♍26'10	7°15'49
min. Earth dist.	5206 Sep 03 12:03	14°♍21'02	0.29134 AU
morning rise	5206 Sep 07 19:50	11°♍41'09	
direct	5206 Sep 25 08:36	5°♍54'16	
greatest brilliancy	5206 Oct 05 16:16	7°♍50'13	-4.7m
	5206 Nov 06 17:30	0°♎	
morning max el	5206 Nov 13 15:20	6°♎33'31	46°01'23
asc. node	5206 Nov 19 03:31	12°♎02'46	
	5206 Dec 06 01:22	0°♏	
	5207 Jan 01 07:16	0°♐	
	5207 Jan 26 08:27	0°♑	
	5207 Feb 19 20:01	0°♒	
desc. node	5207 Mar 10 18:45	23°♒28'12	
	5207 Mar 16 00:50	0°♓	
	5207 Apr 09 02:41	0°♈	
	5207 May 03 04:05	0°♉	
morning set	5207 May 19 05:53	20°♉00'33	
	5207 May 27 06:52	0°♊	
	5207 Jun 20 11:58	0°♋	
superior conj	5207 Jun 26 13:22	7°♋29'16	-0°12'41
minimum elong	5207 Jun 26 16:12	7°♋38'01	0°12'34
behind sun begin	5207 Jun 26 01:28	6°♋52'31	
behind sun end	5207 Jun 27 06:56	8°♋23'31	
max. Earth dist.	5207 Jun 29 00:01	10°♋30'22	1.72990 AU
asc. node	5207 Jul 01 20:13	14°♋00'54	
	5207 Jul 14 19:19	0°♌	
evening rise	5207 Aug 02 16:31	23°♌14'21	
	5207 Aug 08 04:33	0°♍	
	5207 Sep 01 15:47	0°♎	
	5207 Sep 26 05:52	0°♏	
desc. node	5207 Oct 21 11:31	0°♐34'15	
	5207 Oct 21 00:09	0°♐	
	5207 Nov 15 00:04	0°♑	
	5207 Dec 10 08:22	0°♒	
	5208 Jan 05 09:37	0°♓	
evening max el	5208 Jan 31 00:43	27°♓37'00	47°08'45
	5208 Feb 02 09:34	0°♈	
asc. node	5208 Feb 11 13:02	8°♈46'51	
greatest brilliancy	5208 Mar 11 15:39	29°♈00'34	-4.9m
	5208 Mar 14 18:44	0°♉	
retrograde	5208 Mar 21 18:36	0°♉56'58	
	5208 Mar 28 13:06	30°℞♈	
evening set	5208 Apr 08 20:32	24°♈38'51	
min. Earth dist.	5208 Apr 11 04:15	23°♈12'53	0.27370 AU
inferior conj	5208 Apr 11 13:00	22°♈59'17	8°58'23
minimum elong	5208 Apr 11 15:58	22°♈54'40	8°58'16
morning rise	5208 Apr 14 11:34	21°♈10'57	
direct	5208 May 02 06:15	15°♈09'44	
greatest brilliancy	5208 May 11 12:58	16°♈46'59	-4.8m
desc. node	5208 Jun 02 04:09	29°♈44'21	
	5208 Jun 02 11:59	0°♉	
morning max el	5208 Jun 20 20:57	16°♉31'07	46°12'36
	5208 Jul 04 04:12	0°♊	
	5208 Jul 31 16:18	0°♋	
	5208 Aug 26 20:13	0°♌	
	5208 Sep 21 06:30	0°♍	
asc. node	5208 Sep 23 05:55	2°♍21'34	
	5208 Oct 16 04:03	0°♎	
	5208 Nov 09 15:59	0°♏	
	5208 Dec 03 21:11	0°♐	
morning set	5208 Dec 15 20:03	14°♐53'47	
	5208 Dec 27 22:09	0°♑	
desc. node	5209 Jan 12 20:59	19°♑59'01	
	5209 Jan 20 20:33	0°♒	
max. Earth dist.	5209 Jan 22 21:50	2°♒34'41	1.71305 AU
superior conj	5209 Jan 24 18:42	4°♒55'32	-0°28'18
minimum elong	5209 Jan 24 11:40	4°♒33'26	0°27'57
	5209 Feb 13 17:30	0°♓	
evening rise	5209 Mar 06 14:34	26°♓14'50	
	5209 Mar 09 14:16	0°♈	
	5209 Apr 02 12:43	0°♉	
	5209 Apr 26 15:18	0°♊	
asc. node	5209 May 05 22:35	11°♊29'25	
	5209 May 21 00:39	0°♋	
	5209 Jun 14 19:48	0°♌	
	5209 Jul 10 05:42	0°♍	
	5209 Aug 05 17:29	0°♎	
desc. node	5209 Aug 25 13:47	21°♎02'18	
	5209 Sep 03 15:29	0°♏	
evening max el	5209 Sep 04 04:31	0°♏31'11	45°37'16
greatest brilliancy	5209 Oct 13 14:18	28°♏38'47	-4.8m
	5209 Oct 19 13:51	0°♐	
retrograde	5209 Oct 22 20:28	0°♐12'12	
	5209 Oct 26 01:53	30°℞♏	
evening set	5209 Nov 08 21:34	24°♏45'11	
inferior conj	5209 Nov 13 00:31	22°♏15'02	-7°08'03
minimum elong	5209 Nov 13 10:12	22°♏00'00	7°06'21
min. Earth dist.	5209 Nov 13 23:42	21°♏39'02	0.28152 AU
morning rise	5209 Nov 17 22:18	19°♏16'14	
direct	5209 Dec 04 05:58	14°♏06'43	
greatest brilliancy	5209 Dec 15 11:51	16°♏26'35	-4.8m
asc. node	5209 Dec 16 15:17	16°♏54'54	
	5210 Jan 05 13:19	0°♐	
morning max el	5210 Jan 23 16:08	16°♐52'25	46°46'05
	5210 Feb 05 04:16	0°♑	
	5210 Mar 03 17:27	0°♒	
	5210 Mar 29 00:09	0°♓	

desc. node	5210 Apr 07 06:41	11°♓11'39	
	5210 Apr 22 17:54	0°♈	
	5210 May 17 06:09	0°♉	
	5210 Jun 10 16:44	0°♊	
	5210 Jul 05 03:22	0°♋	
morning set	5210 Jul 28 05:59	28°♋21'34	
asc. node	5210 Jul 29 08:10	29°♋41'56	
	5210 Jul 29 14:03	0°♌	
	5210 Aug 22 23:58	0°♍	
max. Earth dist.	5210 Sep 01 18:52	12°♍02'50	1.73425 AU
superior conj	5210 Sep 03 00:00	13°♍32'31	1°11'57
minimum elong	5210 Sep 02 15:45	13°♍07'08	1°11'44
	5210 Sep 16 08:37	0°♎	
evening rise	5210 Oct 09 03:50	28°♎07'19	
	5210 Oct 10 16:22	0°♏	
	5210 Nov 04 00:03	0°♐	
desc. node	5210 Nov 17 23:17	17°♐12'55	
	5210 Nov 28 08:18	0°♑	
	5210 Dec 22 17:26	0°♒	
	5211 Jan 16 04:32	0°♓	
	5211 Feb 09 21:23	0°♈	
	5211 Mar 07 04:56	0°♉	
asc. node	5211 Mar 11 00:53	4°♉25'40	
	5211 Apr 03 00:27	0°♊	
evening max el	5211 Apr 13 00:02	10°♊20'00	46°39'55
	5211 May 04 19:11	0°♋	
greatest brilliancy	5211 May 22 09:38	10°♋31'21	-4.8m
retrograde	5211 Jun 02 04:17	12°♋41'10	
evening set	5211 Jun 17 10:01	8°♋08'27	
inferior conj	5211 Jun 23 10:49	4°♋30'44	1°45'08
minimum elong	5211 Jun 23 14:42	4°♋24'40	1°43'58
min. Earth dist.	5211 Jun 23 05:16	4°♋39'25	0.28273 AU
morning rise	5211 Jun 29 19:47	0°♋42'16	
desc. node	5211 Jun 30 16:02	0°♋15'18	
	5211 Jul 01 03:55	30°℞♊	
direct	5211 Jul 14 15:18	26°♊25'55	
greatest brilliancy	5211 Jul 24 14:42	28°♊13'34	-4.7m
	5211 Jul 28 23:33	0°♋	
morning max el	5211 Sep 01 08:32	26°♋07'51	45°42'29
	5211 Sep 05 08:37	0°♌	
	5211 Oct 03 22:39	0°♍	
asc. node	5211 Oct 21 17:48	20°♍05'23	
	5211 Oct 30 07:01	0°♎	
	5211 Nov 24 12:46	0°♏	
	5211 Dec 19 03:05	0°♐	
	5212 Jan 12 08:29	0°♑	
	5212 Feb 05 08:56	0°♒	
desc. node	5212 Feb 10 08:52	6°♒15'47	
	5212 Feb 29 06:44	0°♓	
morning set	5212 Mar 01 06:24	1°♓14'23	
	5212 Mar 24 03:35	0°♈	
superior conj	5212 Apr 11 06:53	22°♈46'19	-1°26'27
minimum elong	5212 Apr 11 09:46	22°♈55'23	1°26'27
max. Earth dist.	5212 Apr 14 10:12	26°♈42'22	1.71524 AU
	5212 Apr 17 01:17	0°♉	
	5212 May 11 01:39	0°♊	
evening rise	5212 May 21 07:39	12°♊44'40	
asc. node	5212 Jun 02 10:26	27°♊45'23	
	5212 Jun 04 05:59	0°♋	
	5212 Jun 28 15:02	0°♌	
	5212 Jul 23 05:38	0°♍	
	5212 Aug 17 03:45	0°♎	
	5212 Sep 11 13:11	0°♏	
desc. node	5212 Sep 22 01:34	12°♏11'28	
	5212 Oct 07 17:01	0°♐	
	5212 Nov 04 08:12	0°♑	
evening max el	5212 Nov 15 16:40	11°♑27'12	46°25'46
	5212 Dec 06 14:58	0°♒	
greatest brilliancy	5212 Dec 25 17:19	11°♒10'42	-4.9m
retrograde	5213 Jan 04 12:40	12°♒58'41	
asc. node	5213 Jan 13 03:16	11°♒27'43	
evening set	5213 Jan 18 21:12	8°♒53'34	
inferior conj	5213 Jan 25 02:15	5°♒16'22	3°03'06
minimum elong	5213 Jan 24 19:30	5°♒26'38	3°01'02
min. Earth dist.	5213 Jan 25 00:17	5°♒19'21	0.26695 AU
morning rise	5213 Jan 30 17:40	1°♒57'23	
	5213 Feb 03 16:50	30°℞♑	
direct	5213 Feb 14 15:27	27°♑33'06	
greatest brilliancy	5213 Feb 24 16:25	29°♑28'18	-4.9m
	5213 Feb 26 01:13	0°♒	
	5213 Apr 05 16:10	0°♓	
morning max el	5213 Apr 06 04:14	0°♓30'14	46°55'23
	5213 May 03 15:45	0°♈	
desc. node	5213 May 04 18:27	1°♈15'02	
	5213 May 29 17:54	0°♉	
	5213 Jun 24 03:05	0°♊	
	5213 Jul 19 04:36	0°♋	
	5213 Aug 13 01:15	0°♌	
asc. node	5213 Aug 25 20:01	15°♌31'06	
	5213 Sep 06 17:11	0°♍	
	5213 Oct 01 04:17	0°♎	
morning set	5213 Oct 04 10:58	4°♎02'15	
	5213 Oct 25 11:12	0°♏	
max. Earth dist.	5213 Nov 07 14:37	16°♏17'54	1.72552 AU
superior conj	5213 Nov 10 05:47	19°♏34'02	1°11'36
minimum elong	5213 Nov 10 14:46	20°♏01'54	1°11'23
	5213 Nov 18 15:13	0°♐	
	5213 Dec 12 17:28	0°♑	
desc. node	5213 Dec 15 11:12	3°♑24'55	
evening rise	5213 Dec 18 20:11	7°♑37'25	
	5214 Jan 05 18:31	0°♒	
	5214 Jan 29 18:56	0°♓	
	5214 Feb 22 20:19	0°♈	
	5214 Mar 19 01:46	0°♉	
asc. node	5214 Apr 07 12:40	23°♉46'36	
	5214 Apr 12 16:12	0°♊	
	5214 May 07 23:16	0°♋	
	5214 Jun 03 14:26	0°♌	
evening max el	5214 Jun 22 21:53	19°♌56'55	45°45'59
	5214 Jul 03 17:47	0°♍	
desc. node	5214 Jul 28 04:01	17°♍02'00	
greatest brilliancy	5214 Jul 31 00:40	18°♍12'57	-4.7m
retrograde	5214 Aug 10 21:50	20°♍20'32	
evening set	5214 Aug 27 11:16	15°♍06'06	
inferior conj	5214 Sep 01 10:12	12°♍03'58	-7°06'33
minimum elong	5214 Sep 01 00:57	12°♍18'30	7°05'02
min. Earth dist.	5214 Sep 01 03:38	12°♍14'16	0.29124 AU
morning rise	5214 Sep 05 14:44	9°♍29'10	
direct	5214 Sep 23 01:23	3°♍46'34	
greatest brilliancy	5214 Oct 03 07:16	5°♍40'46	-4.7m
	5214 Nov 06 17:42	0°♎	
morning max el	5214 Nov 11 06:30	4°♎20'33	45°59'53
asc. node	5214 Nov 18 05:33	11°♎18'06	
	5214 Dec 05 17:27	0°♏	
	5214 Dec 31 20:51	0°♐	
	5215 Jan 25 20:53	0°♑	
	5215 Feb 19 07:49	0°♒	
desc. node	5215 Mar 09 20:45	22°♒58'42	
	5215 Mar 15 12:15	0°♓	
	5215 Apr 08 13:51	0°♈	
	5215 May 02 15:04	0°♉	

morning set	5215 May 16 19:49	17♉40'50	
	5215 May 26 17:42	0♊	
	5215 Jun 19 22:40	0♋	
superior conj	5215 Jun 24 05:08	5♋16'39	-0°16'05
minimum elong	5215 Jun 24 08:43	5♋27'44	0°15'55
behind sun begin	5215 Jun 24 06:56	5♋22'12	
behind sun end	5215 Jun 24 10:30	5♋33'15	
max. Earth dist.	5215 Jun 26 19:59	8♋30'48	1.72946 AU
asc. node	5215 Jun 30 22:21	13♋34'30	
	5215 Jul 14 05:58	0♌	
evening rise	5215 Jul 31 10:27	21♌09'07	
	5215 Aug 07 15:15	0♍	
	5215 Sep 01 02:39	0♎	
	5215 Sep 25 17:05	0♏	
	5215 Oct 20 11:55	0♐	
desc. node	5215 Oct 20 13:25	0♐04'31	
	5215 Nov 14 12:43	0♑	
	5215 Dec 09 22:26	0♒	
	5216 Jan 05 02:23	0♓	
evening max el	5216 Jan 28 14:15	25♓12'12	47°08'19
	5216 Feb 02 09:42	0♈	
asc. node	5216 Feb 10 15:06	7♈45'17	
greatest brilliancy	5216 Mar 09 06:15	26♈37'02	-4.9m
retrograde	5216 Mar 19 07:45	28♈32'16	
evening set	5216 Apr 06 10:37	22♈13'59	
min. Earth dist.	5216 Apr 08 17:26	20♈49'24	0.27337 AU
inferior conj	5216 Apr 09 02:25	20♈35'26	9°01'26
minimum elong	5216 Apr 09 04:26	20♈32'16	9°01'22
morning rise	5216 Apr 11 22:23	18♈50'50	
direct	5216 Apr 29 18:52	12♈46'25	
greatest brilliancy	5216 May 09 01:58	14♈23'33	-4.8m
desc. node	5216 Jun 01 06:16	28♈36'41	
	5216 Jun 02 22:32	0♉	
morning max el	5216 Jun 18 09:45	14♉08'43	46°14'12
	5216 Jul 03 22:52	0♊	
	5216 Jul 31 06:55	0♋	
	5216 Aug 26 09:00	0♌	
	5216 Sep 20 18:19	0♍	
asc. node	5216 Sep 22 07:51	1♍52'13	
	5216 Oct 15 15:21	0♎	
	5216 Nov 09 03:00	0♏	
	5216 Dec 03 08:06	0♐	
morning set	5216 Dec 13 10:06	12♐33'47	
	5216 Dec 27 09:04	0♑	
desc. node	5217 Jan 11 23:05	19♑31'12	
max. Earth dist.	5217 Jan 20 04:17	29♑49'49	1.71336 AU
	5217 Jan 20 07:31	0♒	
superior conj	5217 Jan 22 05:50	2♒25'21	-0°24'34
minimum elong	5217 Jan 21 23:40	2♒05'59	0°24'15
	5217 Feb 13 04:32	0♓	
evening rise	5217 Mar 04 00:55	23♓41'47	
	5217 Mar 09 01:21	0♈	
	5217 Apr 01 23:53	0♉	
	5217 Apr 26 02:38	0♊	
asc. node	5217 May 05 00:36	11♊00'22	
	5217 May 20 12:19	0♋	
	5217 Jun 14 08:04	0♌	
	5217 Jul 09 19:07	0♍	
	5217 Aug 05 09:21	0♎	
desc. node	5217 Aug 24 15:47	20♎17'36	
evening max el	5217 Sep 01 18:11	28♎14'50	45°36'36
	5217 Sep 03 14:33	0♏	
greatest brilliancy	5217 Oct 11 03:51	26♏23'19	-4.7m
retrograde	5217 Oct 20 10:47	27♏57'43	
evening set	5217 Nov 06 15:02	22♏25'38	
inferior conj	5217 Nov 10 15:24	19♏59'24	-7°19'31
minimum elong	5217 Nov 11 00:46	19♏44'52	7°17'58
min. Earth dist.	5217 Nov 11 14:24	19♏23'44	0.28219 AU
morning rise	5217 Nov 15 10:00	17♏05'18	
direct	5217 Dec 01 21:09	11♏49'56	
greatest brilliancy	5217 Dec 13 03:51	14♏10'37	-4.8m
asc. node	5217 Dec 15 17:23	15♏17'14	
	5218 Jan 05 21:32	0♐	
morning max el	5218 Jan 21 07:11	14♐33'08	46°44'47
	5218 Feb 04 22:40	0♑	
	5218 Mar 03 08:20	0♒	
	5218 Mar 28 13:27	0♓	
desc. node	5218 Apr 06 08:36	10♓38'21	
	5218 Apr 22 06:18	0♈	
	5218 May 16 17:57	0♉	
	5218 Jun 10 04:07	0♊	
	5218 Jul 04 14:28	0♋	
morning set	5218 Jul 25 23:00	26♋12'50	
asc. node	5218 Jul 28 10:07	29♋14'23	
	5218 Jul 29 00:59	0♌	
	5218 Aug 22 10:49	0♍	
max. Earth dist.	5218 Aug 30 15:32	10♍05'21	1.73436 AU
superior conj	5218 Aug 31 17:59	11♍26'47	1°10'11
minimum elong	5218 Aug 31 09:28	11♍00'34	1°09'56
	5218 Sep 15 19:27	0♎	
evening rise	5218 Oct 06 21:15	25♎59'24	
	5218 Oct 10 03:17	0♏	
	5218 Nov 03 11:11	0♐	
desc. node	5218 Nov 17 01:22	16♐44'36	
	5218 Nov 27 19:45	0♑	
	5218 Dec 22 05:19	0♒	
	5219 Jan 15 17:02	0♓	
	5219 Feb 09 10:49	0♈	
	5219 Mar 06 20:07	0♉	
asc. node	5219 Mar 10 02:45	3♉46'23	
	5219 Apr 02 19:51	0♊	
evening max el	5219 Apr 10 14:58	8♊01'35	46°41'54
	5219 May 05 11:35	0♋	
greatest brilliancy	5219 May 20 01:20	8♋15'52	-4.8m
retrograde	5219 May 30 20:20	10♋26'09	
evening set	5219 Jun 15 03:01	5♋50'57	
inferior conj	5219 Jun 21 02:05	2♋15'51	2°06'02
minimum elong	5219 Jun 21 06:42	2♋08'39	2°04'38
min. Earth dist.	5219 Jun 20 20:45	2♋24'10	0.28241 AU
	5219 Jun 24 18:30	30°℞♊	
morning rise	5219 Jun 27 10:49	28♊28'07	
desc. node	5219 Jun 29 18:06	27♊17'19	
direct	5219 Jul 12 06:15	24♊11'22	
greatest brilliancy	5219 Jul 22 05:22	25♊59'19	-4.7m
	5219 Jul 30 21:58	0♋	
morning max el	5219 Aug 30 00:52	23♋57'54	45°42'46
	5219 Sep 05 05:37	0♌	
	5219 Oct 03 13:59	0♍	
asc. node	5219 Oct 20 19:45	19♍31'29	
	5219 Oct 29 20:13	0♎	
	5219 Nov 24 00:57	0♏	
	5219 Dec 18 14:45	0♐	
	5220 Jan 11 19:54	0♑	
	5220 Feb 04 20:12	0♒	
desc. node	5220 Feb 09 10:50	5♒46'43	
morning set	5220 Feb 27 16:31	28♒40'16	
	5220 Feb 28 17:54	0♓	
	5220 Mar 23 14:42	0♈	
superior conj	5220 Apr 08 18:16	20♈16'38	-1°26'52
minimum elong	5220 Apr 08 20:07	20♈22'26	1°26'51

max. Earth dist.	5220 Apr 11 19:23	24°♈05'55	1.71488 AU
	5220 Apr 16 12:23	0°♉	
	5220 May 10 12:45	0°♊	
evening rise	5220 May 18 20:48	10°♊22'03	
asc. node	5220 Jun 01 12:32	27°♊17'27	
	5220 Jun 03 17:07	0°♋	
	5220 Jun 28 02:17	0°♌	
	5220 Jul 22 17:13	0°♍	
	5220 Aug 16 15:55	0°♎	
	5220 Sep 11 02:28	0°♏	
desc. node	5220 Sep 21 03:30	11°♏37'02	
	5220 Oct 07 08:22	0°♐	
	5220 Nov 04 04:24	0°♑	
evening max el	5220 Nov 13 07:37	9°♑09'02	46°23'47
	5220 Dec 07 09:55	0°♒	
greatest brilliancy	5220 Dec 23 06:06	8°♒44'21	-4.9m
retrograde	5221 Jan 02 01:27	10°♒31'42	
asc. node	5221 Jan 12 05:14	8°♒26'01	
evening set	5221 Jan 16 09:00	6°♒28'12	
inferior conj	5221 Jan 22 14:49	2°♒49'35	2°39'57
minimum elong	5221 Jan 22 08:52	2°♒58'40	2°38'05
min. Earth dist.	5221 Jan 22 13:51	2°♒51'04	0.26703 AU
	5221 Jan 27 08:59	30°℞♑	
morning rise	5221 Jan 28 08:38	29°♑27'18	
direct	5221 Feb 12 04:56	25°♑06'16	
greatest brilliancy	5221 Feb 22 06:08	27°♑01'50	-4.9m
	5221 Feb 28 17:00	0°♒	
morning max el	5221 Apr 03 17:46	28°♒05'47	46°55'57
	5221 Apr 05 14:55	0°♓	
	5221 May 03 08:10	0°♈	
desc. node	5221 May 03 20:35	0°♈35'04	
	5221 May 29 07:54	0°♉	
	5221 Jun 23 15:50	0°♊	
	5221 Jul 18 16:34	0°♋	
	5221 Aug 12 12:41	0°♌	
asc. node	5221 Aug 24 21:58	15°♌02'47	
	5221 Sep 06 04:18	0°♍	
	5221 Sep 30 15:14	0°♎	
morning set	5221 Oct 02 04:05	1°♎53'28	
	5221 Oct 24 22:07	0°♏	
max. Earth dist.	5221 Nov 05 04:42	13°♏58'42	1.72595 AU
superior conj	5221 Nov 07 21:44	17°♏20'31	1°13'25
minimum elong	5221 Nov 08 06:20	17°♏47'13	1°13'12
	5221 Nov 18 02:13	0°♐	
	5221 Dec 12 04:35	0°♑	
desc. node	5221 Dec 14 13:17	2°♑56'41	
evening rise	5221 Dec 16 09:32	5°♑14'38	
	5222 Jan 05 05:46	0°♒	
	5222 Jan 29 06:23	0°♓	
	5222 Feb 22 08:00	0°♈	
	5222 Mar 18 13:50	0°♉	
asc. node	5222 Apr 06 14:43	23°♉14'49	
	5222 Apr 12 04:57	0°♊	
	5222 May 07 13:21	0°♋	
	5222 Jun 03 07:37	0°♌	
evening max el	5222 Jun 20 13:41	17°♌44'40	45°47'13
	5222 Jul 03 22:30	0°♍	
desc. node	5222 Jul 27 05:59	15°♍29'00	
greatest brilliancy	5222 Jul 28 16:50	16°♍03'24	-4.7m
retrograde	5222 Aug 08 13:41	18°♍10'56	
evening set	5222 Aug 25 00:40	13°♍01'06	
inferior conj	5222 Aug 30 02:35	9°♍54'30	-6°55'13
minimum elong	5222 Aug 29 17:07	10°♍09'24	6°53'34
min. Earth dist.	5222 Aug 29 19:32	10°♍05'36	0.29112 AU
morning rise	5222 Sep 03 09:39	7°♍15'41	
direct	5222 Sep 20 17:35	1°♍37'29	
greatest brilliancy	5222 Sep 30 22:49	3°♍30'38	-4.7m
	5222 Nov 06 17:14	0°♎	
morning max el	5222 Nov 08 20:37	2°♎04'05	45°58'27
asc. node	5222 Nov 17 07:41	10°♎33'26	
	5222 Dec 05 09:36	0°♏	
	5222 Dec 31 10:35	0°♐	
	5223 Jan 25 09:30	0°♑	
	5223 Feb 18 19:49	0°♒	
desc. node	5223 Mar 08 22:42	22°♒28'22	
	5223 Mar 14 23:52	0°♓	
	5223 Apr 08 01:10	0°♈	
	5223 May 02 02:10	0°♉	
morning set	5223 May 14 09:58	15°♉21'22	
	5223 May 26 04:38	0°♊	
	5223 Jun 19 09:30	0°♋	
superior conj	5223 Jun 21 21:02	3°♋04'04	-0°19'26
minimum elong	5223 Jun 22 01:21	3°♋17'24	0°19'14
max. Earth dist.	5223 Jun 24 15:00	6°♋27'52	1.72905 AU
asc. node	5223 Jun 30 00:19	13°♋07'10	
	5223 Jul 13 16:46	0°♌	
evening rise	5223 Jul 29 04:19	19°♌03'06	
	5223 Aug 07 02:08	0°♍	
	5223 Aug 31 13:44	0°♎	
	5223 Sep 25 04:31	0°♏	
desc. node	5223 Oct 19 15:31	29°♏34'42	
	5223 Oct 19 23:56	0°♐	
	5223 Nov 14 01:37	0°♑	
	5223 Dec 09 12:51	0°♒	
	5224 Jan 04 19:42	0°♓	
evening max el	5224 Jan 26 03:01	22°♓44'58	47°07'50
	5224 Feb 02 11:16	0°♈	
asc. node	5224 Feb 09 17:03	6°♈41'21	
greatest brilliancy	5224 Mar 06 20:53	24°♈12'59	-4.9m
retrograde	5224 Mar 16 20:56	26°♈07'21	
evening set	5224 Apr 04 00:13	19°♈49'33	
inferior conj	5224 Apr 06 15:50	18°♈11'24	9°03'28
minimum elong	5224 Apr 06 16:56	18°♈09'42	9°03'27
min. Earth dist.	5224 Apr 06 06:46	18°♈25'29	0.27300 AU
morning rise	5224 Apr 09 09:44	16°♈29'57	
direct	5224 Apr 27 07:14	10°♈22'46	
greatest brilliancy	5224 May 06 15:17	12°♈00'29	-4.8m
desc. node	5224 May 31 08:17	27°♈30'49	
	5224 Jun 03 06:10	0°♉	
morning max el	5224 Jun 15 22:45	11°♉46'51	46°15'57
	5224 Jul 03 16:57	0°♊	
	5224 Jul 30 21:17	0°♋	
	5224 Aug 25 21:42	0°♌	
	5224 Sep 20 06:08	0°♍	
asc. node	5224 Sep 21 09:53	1°♍23'02	
	5224 Oct 15 02:40	0°♎	
	5224 Nov 08 14:04	0°♏	
	5224 Dec 02 19:02	0°♐	
morning set	5224 Dec 11 00:13	10°♐14'01	
	5224 Dec 26 19:59	0°♑	
desc. node	5225 Jan 11 00:59	19°♑02'48	
max. Earth dist.	5225 Jan 17 14:00	27°♑15'16	1.71371 AU
superior conj	5225 Jan 19 16:57	29°♑55'10	-0°20'47
minimum elong	5225 Jan 19 11:41	29°♑38'39	0°20'30
	5225 Jan 19 18:30	0°♒	
	5225 Feb 12 15:34	0°♓	
evening rise	5225 Mar 01 11:24	21°♓09'09	
	5225 Mar 08 12:27	0°♈	
	5225 Apr 01 11:03	0°♉	
	5225 Apr 25 13:56	0°♊	
asc. node	5225 May 04 02:42	10°♊31'47	

	5225 May 19 23:55	0°♋	
	5225 Jun 13 20:14	0°♌	
	5225 Jul 09 08:27	0°♍	
	5225 Aug 05 01:17	0°♎	
desc. node	5225 Aug 23 17:43	19°♎32'31	
evening max el	5225 Aug 30 08:39	26°♎00'53	45°35'51
	5225 Sep 03 14:31	0°♏	
greatest brilliancy	5225 Oct 08 16:54	24°♏07'51	-4.7m
retrograde	5225 Oct 18 01:40	25°♏43'42	
evening set	5225 Nov 04 08:31	20°♏06'41	
inferior conj	5225 Nov 08 06:21	17°♏44'09	-7°30'14
minimum elong	5225 Nov 08 15:21	17°♏30'11	7°28'50
min. Earth dist.	5225 Nov 09 04:47	17°♏09'24	0.28288 AU
morning rise	5225 Nov 12 21:46	14°♏54'53	
direct	5225 Nov 29 12:55	9°♏33'44	
greatest brilliancy	5225 Dec 10 19:27	11°♏54'40	-4.8m
asc. node	5225 Dec 14 19:18	13°♏43'07	
	5226 Jan 06 03:17	0°♐	
morning max el	5226 Jan 18 22:56	12°♐16'07	46°43'27
	5226 Feb 04 16:30	0°♑	
	5226 Mar 02 22:54	0°♒	
	5226 Mar 28 02:32	0°♓	
desc. node	5226 Apr 05 10:42	10°♓06'08	
	5226 Apr 21 18:31	0°♈	
	5226 May 16 05:34	0°♉	
	5226 Jun 09 15:19	0°♊	
	5226 Jul 04 01:22	0°♋	
morning set	5226 Jul 23 16:24	24°♋06'02	
asc. node	5226 Jul 27 12:06	28°♋47'39	
	5226 Jul 28 11:39	0°♌	
	5226 Aug 21 21:22	0°♍	
max. Earth dist.	5226 Aug 28 14:17	8°♍15'07	1.73445 AU
superior conj	5226 Aug 29 12:16	9°♍22'48	1°08'20
minimum elong	5226 Aug 29 03:32	8°♍55'55	1°08'04
	5226 Sep 15 06:01	0°♎	
evening rise	5226 Oct 04 14:58	23°♎53'09	
	5226 Oct 09 14:00	0°♏	
	5226 Nov 02 22:08	0°♐	
desc. node	5226 Nov 16 03:24	16°♐16'36	
	5226 Nov 27 07:03	0°♑	
	5226 Dec 21 17:04	0°♒	
	5227 Jan 15 05:23	0°♓	
	5227 Feb 09 00:08	0°♈	
	5227 Mar 06 11:17	0°♉	
asc. node	5227 Mar 09 04:49	3°♉08'01	
	5227 Apr 02 15:34	0°♊	
evening max el	5227 Apr 08 06:40	5°♊45'42	46°43'48
	5227 May 06 09:15	0°♋	
greatest brilliancy	5227 May 17 17:07	6°♋01'14	-4.8m
retrograde	5227 May 28 12:36	8°♋11'42	
evening set	5227 Jun 12 20:14	3°♋34'10	
inferior conj	5227 Jun 18 17:21	0°♋01'40	2°26'50
minimum elong	5227 Jun 18 22:41	29°♊53'21	2°25'13
min. Earth dist.	5227 Jun 18 12:03	0°♋09'56	0.28205 AU
	5227 Jun 18 18:25	30°℞♊	
morning rise	5227 Jun 25 01:39	26°♊14'57	
desc. node	5227 Jun 28 20:02	24°♊24'16	
direct	5227 Jul 09 21:36	21°♊57'50	
greatest brilliancy	5227 Jul 19 19:30	23°♊45'20	-4.7m
	5227 Aug 01 04:43	0°♋	
morning max el	5227 Aug 27 17:05	21°♋48'56	45°43'10
	5227 Sep 05 01:27	0°♌	
	5227 Oct 03 04:39	0°♍	
asc. node	5227 Oct 19 21:54	18°♍59'31	
	5227 Oct 29 08:55	0°♎	
	5227 Nov 23 12:45	0°♏	

	5227 Dec 18 02:07	0°♐	
	5228 Jan 11 07:03	0°♑	
	5228 Feb 04 07:13	0°♒	
desc. node	5228 Feb 08 12:51	5°♒18'36	
morning set	5228 Feb 25 02:27	26°♒06'27	
	5228 Feb 28 04:48	0°♓	
	5228 Mar 23 01:32	0°♈	
superior conj	5228 Apr 06 05:23	17°♈47'01	-1°27'05
minimum elong	5228 Apr 06 06:09	17°♈49'27	1°27'06
max. Earth dist.	5228 Apr 09 06:48	21°♈37'20	1.71450 AU
	5228 Apr 15 23:10	0°♉	
	5228 May 09 23:32	0°♊	
evening rise	5228 May 16 09:45	7°♊59'42	
asc. node	5228 May 31 14:29	26°♊50'04	
	5228 Jun 03 03:57	0°♋	
	5228 Jun 27 13:15	0°♌	
	5228 Jul 22 04:27	0°♍	
	5228 Aug 16 03:45	0°♎	
	5228 Sep 10 15:23	0°♏	
desc. node	5228 Sep 20 05:38	11°♏04'22	
	5228 Oct 06 23:27	0°♐	
	5228 Nov 04 00:44	0°♑	
evening max el	5228 Nov 10 21:51	6°♑50'25	46°21'31
	5228 Dec 08 10:56	0°♒	
greatest brilliancy	5228 Dec 20 19:17	6°♒19'27	-4.9m
retrograde	5228 Dec 30 13:34	8°♒05'25	
asc. node	5229 Jan 11 07:13	5°♒19'43	
evening set	5229 Jan 13 20:56	4°♒03'14	
inferior conj	5229 Jan 20 03:21	0°♒23'35	2°16'17
minimum elong	5229 Jan 19 22:13	0°♒31'25	2°14'41
min. Earth dist.	5229 Jan 20 03:44	0°♒22'59	0.26719 AU
	5229 Jan 20 18:47	30°℞♑	
morning rise	5229 Jan 25 23:20	26°♑57'58	
direct	5229 Feb 09 17:54	22°♑39'59	
greatest brilliancy	5229 Feb 19 20:24	24°♑36'23	-4.9m
	5229 Mar 02 08:35	0°♒	
morning max el	5229 Apr 01 06:17	25°♒39'10	46°56'33
	5229 Apr 05 12:33	0°♓	
desc. node	5229 May 02 22:38	29°♓56'01	
	5229 May 03 00:02	0°♈	
	5229 May 28 21:27	0°♉	
	5229 Jun 23 04:09	0°♊	
	5229 Jul 18 04:06	0°♋	
	5229 Aug 11 23:43	0°♌	
asc. node	5229 Aug 24 00:01	14°♌35'58	
	5229 Sep 05 15:01	0°♍	
morning set	5229 Sep 29 21:36	29°♍47'08	
	5229 Sep 30 01:47	0°♎	
	5229 Oct 24 08:38	0°♏	
max. Earth dist.	5229 Nov 02 19:57	11°♏44'33	1.72638 AU
superior conj	5229 Nov 05 14:17	15°♏10'18	1°15'05
minimum elong	5229 Nov 05 22:27	15°♏35'39	1°14'53
	5229 Nov 17 12:47	0°♐	
	5229 Dec 11 15:17	0°♑	
evening rise	5229 Dec 13 23:24	2°♑54'49	
desc. node	5229 Dec 13 15:13	2°♑29'18	
	5230 Jan 04 16:40	0°♒	
	5230 Jan 28 17:31	0°♓	
	5230 Feb 21 19:27	0°♈	
	5230 Mar 18 01:42	0°♉	
asc. node	5230 Apr 05 16:47	22°♉43'40	
	5230 Apr 11 17:31	0°♊	
	5230 May 07 03:18	0°♋	
	5230 Jun 03 00:52	0°♌	
evening max el	5230 Jun 18 04:29	15°♌30'41	45°48'38

	5230 Jul 04	04:53	0°♍		
desc. node	5230 Jul 26	08:01	13°♍53'44		
greatest brilliancy	5230 Jul 26	09:02	13°♍54'42	-4.7m	
retrograde	5230 Aug 06	05:31	16°♍02'29		
evening set	5230 Aug 22	14:07	10°♍56'52		
inferior conj	5230 Aug 27	18:59	7°♍46'07	-6°43'13	
minimum elong	5230 Aug 27	09:20	8°♍01'18	6°41'27	
min. Earth dist.	5230 Aug 27	11:39	7°♍57'41	0.29097 AU	
morning rise	5230 Sep 01	04:37	5°♍03'23		
	5230 Sep 13	06:50	30°℞♌		
direct	5230 Sep 18	09:22	29°♌29'20		
	5230 Sep 23	14:57	0°♍		
greatest brilliancy	5230 Sep 28	14:53	1°♍22'13	-4.7m	
morning max el	5230 Nov 06	10:46	29°♍49'02	45°57'19	
	5230 Nov 06	15:17	0°♎		
asc. node	5230 Nov 16	09:33	9°♎49'55		
	5230 Dec 05	01:00	0°♏		
	5230 Dec 30	23:46	0°♐		
	5231 Jan 24	21:40	0°♑		
	5231 Feb 18	07:26	0°♒		
desc. node	5231 Mar 08	00:48	21°♒59'31		
	5231 Mar 14	11:10	0°♓		
	5231 Apr 07	12:15	0°♈		
	5231 May 01	13:04	0°♉		
morning set	5231 May 11	23:22	13°♉00'03		
	5231 May 25	15:22	0°♊		
	5231 Jun 18	20:07	0°♋		
superior conj	5231 Jun 19	12:24	0°♋50'23	-0°22'48	
minimum elong	5231 Jun 19	17:26	1°♋05'57	0°22'35	
max. Earth dist.	5231 Jun 22	07:50	4°♋18'49	1.72859 AU	
asc. node	5231 Jun 29	02:15	12°♋40'24		
	5231 Jul 13	03:21	0°♌		
evening rise	5231 Jul 26	21:52	16°♌56'53		
	5231 Aug 06	12:48	0°♍		
	5231 Aug 31	00:35	0°♎		
	5231 Sep 24	15:44	0°♏		
desc. node	5231 Oct 18	17:33	29°♏05'27		
	5231 Oct 19	11:42	0°♐		
	5231 Nov 13	14:17	0°♑		
	5231 Dec 09	03:02	0°♒		
	5232 Jan 04	12:56	0°♓		
evening max el	5232 Jan 23	15:42	20°♓18'47	47°07'15	
	5232 Feb 02	13:46	0°♈		
asc. node	5232 Feb 08	19:06	5°♈37'06		
greatest brilliancy	5232 Mar 04	10:44	21°♈48'43	-4.9m	
retrograde	5232 Mar 14	10:14	23°♈43'12		
evening set	5232 Apr 01	13:04	17°♈26'19		
inferior conj	5232 Apr 04	05:11	15°♈47'40	9°04'18	
minimum elong	5232 Apr 04	05:19	15°♈47'27	9°04'18	
min. Earth dist.	5232 Apr 03	19:46	16°♈02'16	0.27272 AU	
morning rise	5232 Apr 06	21:39	14°♈08'34		
direct	5232 Apr 24	19:49	7°♈59'11		
greatest brilliancy	5232 May 04	04:28	9°♈37'33	-4.8m	
desc. node	5232 May 30	10:13	26°♈26'37		
	5232 Jun 03	11:29	0°♉		
morning max el	5232 Jun 13	12:33	9°♉27'00	46°17'38	
	5232 Jul 03	10:33	0°♊		
	5232 Jul 30	11:24	0°♋		
	5232 Aug 25	10:12	0°♌		
	5232 Sep 19	17:45	0°♍		
asc. node	5232 Sep 20	11:56	0°♍54'28		
	5232 Oct 14	13:48	0°♎		
	5232 Nov 08	00:56	0°♏		
	5232 Dec 02	05:48	0°♐		
morning set	5232 Dec 08	14:45	7°♐56'12		
	5232 Dec 26	06:43	0°♑		
desc. node	5233 Jan 10	03:03	18°♑35'33		
max. Earth dist.	5233 Jan 15	02:32	24°♑50'15	1.71399 AU	
superior conj	5233 Jan 17	04:34	27°♑27'15	-0°16'59	
minimum elong	5233 Jan 17	00:15	27°♑13'40	0°16'46	
	5233 Jan 19	05:15	0°♒		
	5233 Feb 12	02:23	0°♓		
evening rise	5233 Feb 26	22:24	18°♓38'52		
	5233 Mar 07	23:19	0°♈		
	5233 Mar 31	22:02	0°♉		
	5233 Apr 25	01:08	0°♊		
asc. node	5233 May 03	04:36	10°♊02'53		
	5233 May 19	11:28	0°♋		
	5233 Jun 13	08:27	0°♌		
	5233 Jul 08	21:54	0°♍		
	5233 Aug 04	17:32	0°♎		
desc. node	5233 Aug 22	19:52	18°♎47'10		
evening max el	5233 Aug 27	23:48	23°♎48'38	45°35'17	
	5233 Sep 03	15:44	0°♏		
greatest brilliancy	5233 Oct 06	05:41	21°♏52'18	-4.7m	
retrograde	5233 Oct 15	16:39	23°♏29'32		
evening set	5233 Nov 02	01:52	17°♏47'57		
inferior conj	5233 Nov 05	21:12	15°♏28'51	-7°40'14	
minimum elong	5233 Nov 06	05:48	15°♏15'31	7°39'00	
min. Earth dist.	5233 Nov 06	18:43	14°♏55'32	0.28352 AU	
morning rise	5233 Nov 10	09:23	12°♏44'23		
direct	5233 Nov 27	04:54	7°♏17'43		
greatest brilliancy	5233 Dec 08	10:13	9°♏37'51	-4.8m	
asc. node	5233 Dec 13	21:20	12°♏12'22		
	5234 Jan 06	07:05	0°♐		
morning max el	5234 Jan 16	14:51	9°♐59'51	46°42'12	
	5234 Feb 04	09:52	0°♑		
	5234 Mar 02	13:11	0°♒		
	5234 Mar 27	15:22	0°♓		
desc. node	5234 Apr 04	12:43	9°♓34'14		
	5234 Apr 21	06:31	0°♈		
	5234 May 15	17:02	0°♉		
	5234 Jun 09	02:27	0°♊		
	5234 Jul 03	12:15	0°♋		
morning set	5234 Jul 21	09:29	21°♋58'05		
asc. node	5234 Jul 26	14:12	28°♋21'07		
	5234 Jul 27	22:23	0°♌		
	5234 Aug 21	08:01	0°♍		
max. Earth dist.	5234 Aug 26	12:18	6°♍22'26	1.73450 AU	
superior conj	5234 Aug 27	06:07	7°♍17'16	1°06'21	
minimum elong	5234 Aug 26	21:14	6°♍49'55	1°06'04	
	5234 Sep 14	16:40	0°♎		
evening rise	5234 Oct 02	08:22	21°♎45'40		
	5234 Oct 09	00:46	0°♏		
	5234 Nov 02	09:10	0°♐		
desc. node	5234 Nov 15	05:19	15°♐48'03		
	5234 Nov 26	18:27	0°♑		
	5234 Dec 21	04:55	0°♒		
	5235 Jan 14	17:51	0°♓		
	5235 Feb 08	13:34	0°♈		
	5235 Mar 06	02:37	0°♉		
asc. node	5235 Mar 08	06:55	2°♉29'28		
	5235 Apr 02	11:49	0°♊		
evening max el	5235 Apr 05	22:32	3°♊30'24	46°45'41	
	5235 May 07	15:06	0°♋		
greatest brilliancy	5235 May 15	09:18	3°♋47'23	-4.8m	
retrograde	5235 May 26	04:41	5°♋57'18		
evening set	5235 Jun 10	13:42	1°♋17'28		
	5235 Jun 12	18:51	30°℞♊		
inferior conj	5235 Jun 16	08:42	27°♊47'35	2°47'16	
minimum elong	5235 Jun 16	14:43	27°♊38'12	2°45'30	

min. Earth dist.	5235 Jun 16 03:25	27°♊55'49	0.28173 AU
morning rise	5235 Jun 22 16:20	24°♊01'54	
desc. node	5235 Jun 27 22:06	21°♊35'25	
direct	5235 Jul 07 13:10	19°♊44'27	
greatest brilliancy	5235 Jul 17 09:36	21°♊31'01	-4.7m
	5235 Aug 02 03:00	0°♋	
morning max el	5235 Aug 25 08:39	19°♋37'44	45°43'23
	5235 Sep 04 20:54	0°♌	
	5235 Oct 02 19:22	0°♍	
asc. node	5235 Oct 18 23:48	18°♍26'16	
	5235 Oct 28 21:46	0°♎	
	5235 Nov 23 00:43	0°♏	
	5235 Dec 17 13:38	0°♐	
	5236 Jan 10 18:20	0°♑	
	5236 Feb 03 18:22	0°♒	
desc. node	5236 Feb 07 14:54	4°♒50'05	
morning set	5236 Feb 22 12:25	23°♒32'14	
	5236 Feb 27 15:52	0°♓	
	5236 Mar 22 12:31	0°♈	
superior conj	5236 Apr 03 16:40	15°♈17'24	-1°27'08
minimum elong	5236 Apr 03 16:22	15°♈16'30	1°27'09
max. Earth dist.	5236 Apr 06 17:29	19°♈05'55	1.71407 AU
	5236 Apr 15 10:06	0°♉	
	5236 May 09 10:26	0°♊	
evening rise	5236 May 13 22:49	5°♊37'12	
asc. node	5236 May 30 16:29	26°♊22'28	
	5236 Jun 02 14:53	0°♋	
	5236 Jun 27 00:21	0°♌	
	5236 Jul 21 15:55	0°♍	
	5236 Aug 15 15:53	0°♎	
	5236 Sep 10 04:43	0°♏	
desc. node	5236 Sep 19 07:37	10°♏30'03	
	5236 Oct 06 15:07	0°♐	
	5236 Nov 03 22:11	0°♑	
evening max el	5236 Nov 08 11:07	4°♑28'34	46°19'22
	5236 Dec 09 22:40	0°♒	
greatest brilliancy	5236 Dec 18 09:02	3°♒54'26	-4.9m
retrograde	5236 Dec 28 01:19	5°♒38'39	
asc. node	5237 Jan 10 09:18	2°♒07'59	
evening set	5237 Jan 11 09:08	1°♒37'12	
	5237 Jan 14 06:29	30°℞♑	
inferior conj	5237 Jan 17 15:56	27°♑57'06	1°52'33
minimum elong	5237 Jan 17 11:40	28°♑03'38	1°51'12
min. Earth dist.	5237 Jan 17 18:00	27°♑53'56	0.26737 AU
morning rise	5237 Jan 23 13:54	24°♑28'21	
direct	5237 Feb 07 06:27	20°♑12'56	
greatest brilliancy	5237 Feb 17 11:16	22°♑10'57	-4.9m
	5237 Mar 03 12:38	0°♒	
morning max el	5237 Mar 29 18:20	23°♒10'27	46°57'12
	5237 Apr 05 09:43	0°♓	
desc. node	5237 May 02 00:31	29°♓16'06	
	5237 May 02 15:55	0°♈	
	5237 May 28 11:07	0°♉	
	5237 Jun 22 16:36	0°♊	
	5237 Jul 17 15:49	0°♋	
	5237 Aug 11 10:57	0°♌	
asc. node	5237 Aug 23 02:03	14°♌08'18	
	5237 Sep 05 01:59	0°♍	
morning set	5237 Sep 27 15:01	27°♍39'30	
	5237 Sep 29 12:39	0°♎	
	5237 Oct 23 19:31	0°♏	
max. Earth dist.	5237 Oct 31 11:53	9°♏31'22	1.72684 AU
superior conj	5237 Nov 03 06:42	12°♏58'34	1°16'37
minimum elong	5237 Nov 03 14:24	13°♏22'28	1°16'28
	5237 Nov 16 23:44	0°♐	
	5237 Dec 11 02:21	0°♑	
evening rise	5237 Dec 11 13:05	0°♑33'26	
desc. node	5237 Dec 12 17:17	2°♑01'13	
	5238 Jan 04 03:55	0°♒	
	5238 Jan 28 05:00	0°♓	
	5238 Feb 21 07:15	0°♈	
	5238 Mar 17 13:57	0°♉	
asc. node	5238 Apr 04 18:41	22°♉10'55	
	5238 Apr 11 06:30	0°♊	
	5238 May 06 17:43	0°♋	
	5238 Jun 02 18:49	0°♌	
evening max el	5238 Jun 15 19:00	13°♌15'15	45°50'14
	5238 Jul 04 14:05	0°♍	
greatest brilliancy	5238 Jul 24 00:56	11°♍45'10	-4.7m
desc. node	5238 Jul 25 10:05	12°♍14'42	
retrograde	5238 Aug 03 21:52	13°♍53'59	
evening set	5238 Aug 20 03:47	8°♍52'04	
inferior conj	5238 Aug 25 11:33	5°♍37'27	-6°30'43
minimum elong	5238 Aug 25 01:46	5°♍52'50	6°28'51
min. Earth dist.	5238 Aug 25 03:48	5°♍49'37	0.29084 AU
morning rise	5238 Aug 29 23:46	2°♍50'57	
	5238 Sep 04 09:59	30°℞♌	
direct	5238 Sep 16 01:13	27°♌20'45	
greatest brilliancy	5238 Sep 26 07:19	29°♌13'49	-4.7m
	5238 Sep 28 07:45	0°♍	
morning max el	5238 Nov 04 01:45	27°♍35'04	45°56'01
	5238 Nov 06 12:54	0°♎	
asc. node	5238 Nov 15 11:37	9°♎06'18	
	5238 Dec 04 16:38	0°♏	
	5238 Dec 30 13:19	0°♐	
	5239 Jan 24 10:13	0°♑	
	5239 Feb 17 19:26	0°♒	
desc. node	5239 Mar 07 02:49	21°♒29'12	
	5239 Mar 13 22:50	0°♓	
	5239 Apr 06 23:40	0°♈	
	5239 May 01 00:17	0°♉	
morning set	5239 May 09 12:38	10°♉37'06	
	5239 May 25 02:25	0°♊	
superior conj	5239 Jun 17 03:51	28°♊35'51	-0°26'08
minimum elong	5239 Jun 17 09:36	28°♊53'37	0°25'53
	5239 Jun 18 07:04	0°♋	
max. Earth dist.	5239 Jun 19 23:32	2°♋05'08	1.72812 AU
asc. node	5239 Jun 28 04:24	12°♋13'18	
	5239 Jul 12 14:16	0°♌	
evening rise	5239 Jul 24 15:40	14°♌50'29	
	5239 Aug 05 23:46	0°♍	
	5239 Aug 30 11:45	0°♎	
	5239 Sep 24 03:15	0°♏	
desc. node	5239 Oct 17 19:29	28°♏34'52	
	5239 Oct 18 23:51	0°♐	
	5239 Nov 13 03:26	0°♑	
	5239 Dec 08 17:52	0°♒	
	5240 Jan 04 07:08	0°♓	
evening max el	5240 Jan 21 05:08	17°♓53'03	47°06'42
	5240 Feb 02 18:39	0°♈	
asc. node	5240 Feb 07 21:09	4°♈29'29	
greatest brilliancy	5240 Mar 01 23:55	19°♈22'02	-4.9m
retrograde	5240 Mar 12 00:02	21°♈17'18	
evening set	5240 Mar 30 01:13	15°♈02'01	
inferior conj	5240 Apr 01 18:22	13°♈22'03	9°04'15
minimum elong	5240 Apr 01 17:31	13°♈23'21	9°04'14
min. Earth dist.	5240 Apr 01 08:12	13°♈37'45	0.27239 AU
morning rise	5240 Apr 04 09:55	11°♈44'36	
direct	5240 Apr 22 08:39	5°♈33'56	
greatest brilliancy	5240 May 01 16:51	7°♈12'22	-4.9m
desc. node	5240 May 29 12:22	25°♈23'22	

	5240 Jun 03 15:24	0°♉	
morning max el	5240 Jun 11 03:07	7°♉07'58	46°19'21
	5240 Jul 03 04:07	0°♊	
	5240 Jul 30 01:40	0°♋	
	5240 Aug 24 22:54	0°♌	
	5240 Sep 19 05:35	0°♍	
asc. node	5240 Sep 19 13:53	0°♍24'52	
	5240 Oct 14 01:09	0°♎	
	5240 Nov 07 12:03	0°♏	
	5240 Dec 01 16:50	0°♐	
morning set	5240 Dec 06 05:33	5°♐38'22	
	5240 Dec 25 17:47	0°♑	
desc. node	5241 Jan 09 05:09	18°♑07'24	
max. Earth dist.	5241 Jan 12 14:09	22°♑21'16	1.71435 AU
superior conj	5241 Jan 14 16:03	24°♑57'46	-0°13'10
minimum elong	5241 Jan 14 12:42	24°♑47'14	0°12'59
behind sun begin	5241 Jan 13 21:04	23°♑58'13	
behind sun end	5241 Jan 15 04:19	25°♑36'17	
	5241 Jan 18 16:23	0°♒	
	5241 Feb 11 13:35	0°♓	
evening rise	5241 Feb 24 08:56	16°♓05'54	
	5241 Mar 07 10:35	0°♈	
	5241 Mar 31 09:23	0°♉	
	5241 Apr 24 12:41	0°♊	
asc. node	5241 May 02 06:39	9°♊33'25	
	5241 May 18 23:23	0°♋	
	5241 Jun 12 21:00	0°♌	
	5241 Jul 08 11:45	0°♍	
	5241 Aug 04 10:19	0°♎	
desc. node	5241 Aug 21 21:51	18°♎00'10	
evening max el	5241 Aug 25 15:42	21°♎37'47	45°34'49
	5241 Sep 03 18:31	0°♏	
greatest brilliancy	5241 Oct 03 19:09	19°♏37'54	-4.7m
retrograde	5241 Oct 13 07:45	21°♏15'56	
evening set	5241 Oct 30 19:27	15°♏30'22	
inferior conj	5241 Nov 03 12:26	13°♏14'24	-7°49'19
minimum elong	5241 Nov 03 20:32	13°♏01'48	7°48'15
min. Earth dist.	5241 Nov 04 08:53	12°♏42'39	0.28412 AU
morning rise	5241 Nov 07 21:21	10°♏34'29	
direct	5241 Nov 24 21:13	5°♏02'46	
greatest brilliancy	5241 Dec 06 00:44	7°♏21'11	-4.8m
asc. node	5241 Dec 12 23:25	10°♏44'58	
	5242 Jan 06 09:23	0°♐	
morning max el	5242 Jan 14 06:22	7°♐42'23	46°40'35
	5242 Feb 04 03:05	0°♑	
	5242 Mar 02 03:37	0°♒	
	5242 Mar 27 04:27	0°♓	
desc. node	5242 Apr 03 14:40	9°♓01'12	
	5242 Apr 20 18:48	0°♈	
	5242 May 15 04:47	0°♉	
	5242 Jun 08 13:48	0°♊	
	5242 Jul 02 23:20	0°♋	
morning set	5242 Jul 19 02:33	19°♋49'33	
asc. node	5242 Jul 25 16:10	27°♋53'41	
	5242 Jul 27 09:16	0°♌	
	5242 Aug 20 18:48	0°♍	
max. Earth dist.	5242 Aug 24 09:38	4°♍27'08	1.73451 AU
superior conj	5242 Aug 25 00:10	5°♍11'51	1°04'18
minimum elong	5242 Aug 24 15:10	4°♍44'09	1°04'00
	5242 Sep 14 03:28	0°♎	
evening rise	5242 Sep 30 02:07	19°♎38'57	
	5242 Oct 08 11:41	0°♏	
	5242 Nov 01 20:18	0°♐	
desc. node	5242 Nov 14 07:27	15°♐19'56	
	5242 Nov 26 05:55	0°♑	
	5242 Dec 20 16:50	0°♒	
	5243 Jan 14 06:27	0°♓	
	5243 Feb 08 03:17	0°♈	
	5243 Mar 05 18:26	0°♉	
asc. node	5243 Mar 07 08:47	1°♉49'09	
	5243 Apr 02 09:10	0°♊	
evening max el	5243 Apr 03 13:54	1°♊12'36	46°47'20
	5243 May 09 12:15	0°♋	
greatest brilliancy	5243 May 13 02:02	1°♋32'42	-4.8m
retrograde	5243 May 23 20:08	3°♋41'10	
	5243 Jun 06 10:08	30°℞♊	
evening set	5243 Jun 08 07:05	28°♊59'07	
inferior conj	5243 Jun 13 23:49	25°♊32'07	3°07'40
minimum elong	5243 Jun 14 06:28	25°♊21'43	3°05'44
min. Earth dist.	5243 Jun 13 18:51	25°♊39'53	0.28136 AU
morning rise	5243 Jun 20 06:30	21°♊47'33	
desc. node	5243 Jun 27 00:09	18°♊49'27	
direct	5243 Jul 05 04:07	17°♊29'48	
greatest brilliancy	5243 Jul 14 23:39	19°♊15'30	-4.7m
	5243 Aug 02 19:49	0°♋	
morning max el	5243 Aug 22 23:11	17°♋23'36	45°43'50
	5243 Sep 04 15:53	0°♌	
	5243 Oct 02 09:55	0°♍	
asc. node	5243 Oct 18 01:49	17°♍53'30	
	5243 Oct 28 10:32	0°♎	
	5243 Nov 22 12:36	0°♏	
	5243 Dec 17 01:05	0°♐	
	5244 Jan 10 05:32	0°♑	
	5244 Feb 03 05:25	0°♒	
desc. node	5244 Feb 06 16:53	4°♒21'39	
morning set	5244 Feb 19 22:43	20°♒59'15	
	5244 Feb 27 02:51	0°♓	
	5244 Mar 21 23:28	0°♈	
superior conj	5244 Apr 01 03:52	12°♈47'33	-1°27'01
minimum elong	5244 Apr 01 02:30	12°♈43'15	1°27'01
max. Earth dist.	5244 Apr 04 00:50	16°♈24'01	1.71374 AU
	5244 Apr 14 21:04	0°♉	
	5244 May 08 21:24	0°♊	
evening rise	5244 May 11 11:19	3°♊12'42	
asc. node	5244 May 29 18:34	25°♊54'59	
	5244 Jun 02 01:53	0°♋	
	5244 Jun 26 11:30	0°♌	
	5244 Jul 21 03:24	0°♍	
	5244 Aug 15 04:02	0°♎	
	5244 Sep 09 18:04	0°♏	
desc. node	5244 Sep 18 09:34	9°♏55'45	
	5244 Oct 06 06:54	0°♐	
	5244 Nov 03 20:13	0°♑	
evening max el	5244 Nov 05 23:57	2°♑06'26	46°17'21
	5244 Dec 12 03:59	0°♒	
greatest brilliancy	5244 Dec 15 23:05	1°♒31'01	-4.8m
retrograde	5244 Dec 25 13:23	3°♒13'50	
	5245 Jan 07 08:16	30°℞♑	
evening set	5245 Jan 08 21:50	29°♑12'23	
asc. node	5245 Jan 09 11:16	28°♑54'26	
inferior conj	5245 Jan 15 04:49	25°♑32'23	1°28'51
minimum elong	5245 Jan 15 01:26	25°♑37'35	1°27'45
min. Earth dist.	5245 Jan 15 08:37	25°♑26'34	0.26758 AU
morning rise	5245 Jan 21 04:35	22°♑00'58	
direct	5245 Feb 04 19:00	17°♑47'28	
greatest brilliancy	5245 Feb 15 02:37	19°♑47'40	-4.9m
	5245 Mar 04 08:31	0°♒	
morning max el	5245 Mar 27 07:00	20°♒44'13	46°57'42
	5245 Apr 05 05:50	0°♓	
desc. node	5245 May 01 02:41	28°♓38'02	
	5245 May 02 07:18	0°♈	

	5245 May 28 00:31	0°♉	
	5245 Jun 22 04:54	0°♊	
	5245 Jul 17 03:24	0°♋	
	5245 Aug 10 22:04	0°♌	
asc. node	5245 Aug 22 04:00	13°♌40'52	
	5245 Sep 04 12:48	0°♍	
morning set	5245 Sep 25 08:15	25°♍31'59	
	5245 Sep 28 23:19	0°♎	
	5245 Oct 23 06:09	0°♏	
max. Earth dist.	5245 Oct 29 06:08	7°♏26'08	1.72728 AU
superior conj	5245 Oct 31 23:08	10°♏47'40	1°18'03
minimum elong	5245 Nov 01 06:21	11°♏10'01	1°17'55
	5245 Nov 16 10:26	0°♐	
evening rise	5245 Dec 09 03:04	28°♐13'48	
	5245 Dec 10 13:11	0°♑	
desc. node	5245 Dec 11 19:20	1°♑33'50	
	5246 Jan 03 14:55	0°♒	
	5246 Jan 27 16:13	0°♓	
	5246 Feb 20 18:45	0°♈	
	5246 Mar 17 01:52	0°♉	
asc. node	5246 Apr 03 20:46	21°♉39'39	
	5246 Apr 10 19:12	0°♊	
	5246 May 06 07:59	0°♋	
	5246 Jun 02 12:58	0°♌	
evening max el	5246 Jun 13 10:01	11°♌01'36	45°51'44
	5246 Jul 05 02:24	0°♍	
greatest brilliancy	5246 Jul 21 16:14	9°♍34'57	-4.7m
desc. node	5246 Jul 24 12:03	10°♍31'57	
retrograde	5246 Aug 01 14:31	11°♍45'20	
evening set	5246 Aug 17 17:18	6°♍46'56	
inferior conj	5246 Aug 23 03:53	3°♍28'37	-6°17'33
minimum elong	5246 Aug 22 18:01	3°♍44'05	6°15'34
min. Earth dist.	5246 Aug 22 19:35	3°♍41'37	0.29070 AU
morning rise	5246 Aug 27 18:47	0°♍38'27	
	5246 Aug 28 21:31	30°℞♌	
direct	5246 Sep 13 17:02	25°♌12'04	
greatest brilliancy	5246 Sep 23 23:18	27°♌05'20	-4.7m
	5246 Sep 30 13:20	0°♍	
morning max el	5246 Nov 01 17:28	25°♍23'50	45°54'53
	5246 Nov 06 09:26	0°♎	
asc. node	5246 Nov 14 13:45	8°♎24'21	
	5246 Dec 04 07:40	0°♏	
	5246 Dec 30 02:22	0°♐	
	5247 Jan 23 22:19	0°♑	
	5247 Feb 17 07:01	0°♒	
desc. node	5247 Mar 06 04:45	20°♒59'56	
	5247 Mar 13 10:04	0°♓	
	5247 Apr 06 10:39	0°♈	
	5247 Apr 30 11:04	0°♉	
morning set	5247 May 07 02:07	8°♉16'02	
	5247 May 24 13:03	0°♊	
superior conj	5247 Jun 14 19:18	26°♊22'29	-0°29'26
minimum elong	5247 Jun 15 01:44	26°♊42'22	0°29'08
max. Earth dist.	5247 Jun 17 16:06	29°♊55'18	1.72773 AU
	5247 Jun 17 17:37	0°♋	
asc. node	5247 Jun 27 06:20	11°♋46'45	
	5247 Jul 12 00:50	0°♌	
evening rise	5247 Jul 22 09:20	12°♌44'44	
	5247 Aug 05 10:25	0°♍	
	5247 Aug 29 22:37	0°♎	
	5247 Sep 23 14:29	0°♏	
desc. node	5247 Oct 16 21:35	28°♏05'43	
	5247 Oct 18 11:42	0°♐	
	5247 Nov 12 16:19	0°♑	
	5247 Dec 08 08:28	0°♒	
	5248 Jan 04 01:18	0°♓	
evening max el	5248 Jan 18 19:33	15°♓31'14	47°06'04
	5248 Feb 03 01:00	0°♈	
asc. node	5248 Feb 06 23:06	3°♈21'02	
greatest brilliancy	5248 Feb 28 12:49	16°♈56'17	-4.9m
retrograde	5248 Mar 09 14:14	18°♈52'24	
evening set	5248 Mar 27 12:49	12°♈39'41	
inferior conj	5248 Mar 30 07:29	10°♈57'31	9°03'12
minimum elong	5248 Mar 30 05:42	11°♈00'16	9°03'09
min. Earth dist.	5248 Mar 29 20:25	11°♈14'36	0.27204 AU
morning rise	5248 Apr 01 22:41	9°♈20'48	
direct	5248 Apr 19 21:51	3°♈10'00	
greatest brilliancy	5248 Apr 29 04:42	4°♈47'46	-4.9m
desc. node	5248 May 28 14:21	24°♈22'42	
	5248 Jun 03 17:08	0°♉	
morning max el	5248 Jun 08 17:50	4°♉50'43	46°21'02
	5248 Jul 02 20:47	0°♊	
	5248 Jul 29 15:21	0°♋	
	5248 Aug 24 11:09	0°♌	
asc. node	5248 Sep 18 15:55	29°♌56'34	
	5248 Sep 18 17:03	0°♍	
	5248 Oct 13 12:11	0°♎	
	5248 Nov 06 22:49	0°♏	
	5248 Dec 01 03:31	0°♐	
morning set	5248 Dec 03 20:15	3°♐21'27	
	5248 Dec 25 04:28	0°♑	
desc. node	5249 Jan 08 07:02	17°♑39'45	
max. Earth dist.	5249 Jan 10 00:32	19°♑49'46	1.71467 AU
superior conj	5249 Jan 12 03:33	22°♑29'43	-0°09'20
minimum elong	5249 Jan 12 01:11	22°♑22'17	0°09'11
behind sun begin	5249 Jan 11 03:51	21°♑15'24	
behind sun end	5249 Jan 12 22:31	23°♑29'10	
	5249 Jan 18 03:07	0°♒	
	5249 Feb 11 00:23	0°♓	
evening rise	5249 Feb 21 19:32	13°♓34'19	
	5249 Mar 06 21:28	0°♈	
	5249 Mar 30 20:23	0°♉	
	5249 Apr 23 23:52	0°♊	
asc. node	5249 May 01 08:44	9°♊05'12	
	5249 May 18 10:54	0°♋	
	5249 Jun 12 09:11	0°♌	
	5249 Jul 08 01:17	0°♍	
	5249 Aug 04 03:00	0°♎	
desc. node	5249 Aug 20 23:48	17°♎13'21	
evening max el	5249 Aug 23 07:15	19°♎26'59	45°34'08
	5249 Sep 03 22:36	0°♏	
greatest brilliancy	5249 Oct 01 09:06	17°♏24'39	-4.7m
retrograde	5249 Oct 10 22:07	19°♏02'46	
evening set	5249 Oct 28 12:47	13°♏13'38	
inferior conj	5249 Nov 01 03:34	11°♏00'35	-7°57'45
minimum elong	5249 Nov 01 11:08	10°♏48'48	7°56'50
min. Earth dist.	5249 Nov 01 23:17	10°♏29'53	0.28470 AU
morning rise	5249 Nov 05 09:13	8°♏25'06	
direct	5249 Nov 22 13:09	2°♏48'27	
greatest brilliancy	5249 Dec 03 15:28	5°♏05'19	-4.8m
asc. node	5249 Dec 12 01:21	9°♏20'39	
	5250 Jan 06 10:02	0°♐	
morning max el	5250 Jan 11 20:53	5°♐23'10	46°39'03
	5250 Feb 03 19:39	0°♑	
	5250 Mar 01 17:32	0°♒	
	5250 Mar 26 17:05	0°♓	
desc. node	5250 Apr 02 16:46	8°♓29'52	
	5250 Apr 20 06:40	0°♈	
	5250 May 14 16:10	0°♉	
	5250 Jun 08 00:49	0°♊	
	5250 Jul 02 10:05	0°♋	

morning set	5250 Jul 16 19:44	17°♋42'18	
asc. node	5250 Jul 24 18:08	27°♋27'18	
	5250 Jul 26 19:49	0°♌	
	5250 Aug 20 05:16	0°♍	
superior conj	5250 Aug 22 18:17	3°♍07'43	1°02'10
minimum elong	5250 Aug 22 09:13	2°♍39'50	1°01'50
max. Earth dist.	5250 Aug 22 06:07	2°♍30'19	1.73451 AU
	5250 Sep 13 13:57	0°♎	
evening rise	5250 Sep 27 19:54	17°♎33'10	
	5250 Oct 07 22:20	0°♏	
	5250 Nov 01 07:14	0°♐	
desc. node	5250 Nov 13 09:27	14°♐52'02	
	5250 Nov 25 17:13	0°♑	
	5250 Dec 20 04:37	0°♒	
	5251 Jan 13 18:55	0°♓	
	5251 Feb 07 16:53	0°♈	
	5251 Mar 05 10:15	0°♉	
asc. node	5251 Mar 06 10:53	1°♉09'49	
evening max el	5251 Apr 01 04:09	28°♉52'38	46°48'57
	5251 Apr 02 07:00	0°♊	
greatest brilliancy	5251 May 10 19:10	29°♊18'55	-4.8m
	5251 May 12 18:22	0°♋	
retrograde	5251 May 21 11:06	1°♋25'33	
	5251 May 29 20:13	30°℞♊	
evening set	5251 Jun 06 00:31	26°♊40'56	
inferior conj	5251 Jun 11 14:54	23°♊17'11	3°27'57
minimum elong	5251 Jun 11 22:10	23°♊05'49	3°25'51
min. Earth dist.	5251 Jun 11 10:35	23°♊23'58	0.28101 AU
morning rise	5251 Jun 17 20:23	19°♊33'54	
desc. node	5251 Jun 26 02:05	16°♊08'41	
direct	5251 Jul 02 18:30	15°♊15'28	
greatest brilliancy	5251 Jul 12 14:10	17°♊00'55	-4.8m
	5251 Aug 03 08:04	0°♋	
morning max el	5251 Aug 20 13:16	15°♋08'56	45°44'26
	5251 Sep 04 10:05	0°♌	
	5251 Oct 02 00:03	0°♍	
asc. node	5251 Oct 17 03:56	17°♍21'51	
	5251 Oct 27 23:00	0°♎	
	5251 Nov 22 00:18	0°♏	
	5251 Dec 16 12:24	0°♐	
	5252 Jan 09 16:39	0°♑	
	5252 Feb 02 16:25	0°♒	
desc. node	5252 Feb 05 18:55	3°♒53'32	
greatest brilliancy	5252 Feb 07 11:48	6°♒01'46	-3.9m
morning set	5252 Feb 17 08:38	18°♒25'14	
	5252 Feb 26 13:46	0°♓	
	5252 Mar 21 10:20	0°♈	
superior conj	5252 Mar 29 14:47	10°♈17'09	-1°26'42
minimum elong	5252 Mar 29 12:19	10°♈09'23	1°26'42
max. Earth dist.	5252 Apr 01 05:33	13°♈34'11	1.71338 AU
	5252 Apr 14 07:54	0°♉	
	5252 May 08 08:14	0°♊	
evening rise	5252 May 08 23:38	0°♊47'58	
asc. node	5252 May 28 20:31	25°♊27'21	
	5252 Jun 01 12:47	0°♋	
	5252 Jun 25 22:34	0°♌	
	5252 Jul 20 14:51	0°♍	
	5252 Aug 14 16:08	0°♎	
	5252 Sep 09 07:26	0°♏	
desc. node	5252 Sep 17 11:42	9°♏22'02	
	5252 Oct 05 22:51	0°♐	
evening max el	5252 Nov 03 12:26	29°♐43'48	46°15'15
	5252 Nov 03 19:07	0°♑	
greatest brilliancy	5252 Dec 13 12:24	29°♑06'25	-4.8m
	5252 Dec 16 13:30	0°♒	
retrograde	5252 Dec 23 01:33	0°♒48'30	
	5252 Dec 29 09:23	30°℞♑	
evening set	5253 Jan 06 10:29	26°♑46'18	
asc. node	5253 Jan 08 13:15	25°♑36'24	
inferior conj	5253 Jan 12 17:28	23°♑06'46	1°04'43
minimum elong	5253 Jan 12 14:58	23°♑10'34	1°03'56
min. Earth dist.	5253 Jan 12 22:54	22°♑58'27	0.26788 AU
morning rise	5253 Jan 18 18:55	19°♑33'06	
direct	5253 Feb 02 07:35	15°♑20'48	
greatest brilliancy	5253 Feb 12 17:49	17°♑23'26	-4.9m
	5253 Mar 04 23:41	0°♒	
morning max el	5253 Mar 24 20:38	18°♒19'48	46°58'16
	5253 Apr 05 01:33	0°♓	
desc. node	5253 Apr 30 04:41	27°♓59'32	
	5253 May 01 22:36	0°♈	
	5253 May 27 13:52	0°♉	
	5253 Jun 21 17:09	0°♊	
	5253 Jul 16 14:58	0°♋	
	5253 Aug 10 09:11	0°♌	
asc. node	5253 Aug 21 06:05	13°♌13'41	
	5253 Sep 03 23:39	0°♍	
morning set	5253 Sep 23 01:42	23°♍24'57	
	5253 Sep 28 10:02	0°♎	
	5253 Oct 22 16:51	0°♏	
max. Earth dist.	5253 Oct 27 01:53	5°♏25'21	1.72769 AU
superior conj	5253 Oct 29 15:51	8°♏37'26	1°19'21
minimum elong	5253 Oct 29 22:31	8°♏58'06	1°19'14
	5253 Nov 15 21:12	0°♐	
evening rise	5253 Dec 06 17:19	25°♐54'52	
	5253 Dec 10 00:06	0°♑	
desc. node	5253 Dec 10 21:16	1°♑05'52	
	5254 Jan 03 02:04	0°♒	
	5254 Jan 27 03:38	0°♓	
	5254 Feb 20 06:29	0°♈	
	5254 Mar 16 14:05	0°♉	
asc. node	5254 Apr 02 22:48	21°♉07'21	
	5254 Apr 10 08:13	0°♊	
	5254 May 05 22:39	0°♋	
	5254 Jun 02 07:48	0°♌	
evening max el	5254 Jun 11 01:49	8°♌49'26	45°53'29
	5254 Jul 05 19:14	0°♍	
greatest brilliancy	5254 Jul 19 07:13	7°♍24'03	-4.7m
desc. node	5254 Jul 23 14:04	8°♍45'06	
retrograde	5254 Jul 30 07:29	9°♍36'13	
evening set	5254 Aug 15 07:00	4°♍41'12	
inferior conj	5254 Aug 20 20:12	1°♍19'14	-6°03'47
minimum elong	5254 Aug 20 10:20	1°♍34'40	6°01'44
min. Earth dist.	5254 Aug 20 11:08	1°♍33'27	0.29051 AU
	5254 Aug 22 23:01	30°℞♌	
morning rise	5254 Aug 25 13:48	28°♌25'26	
direct	5254 Sep 11 09:18	23°♌02'55	
greatest brilliancy	5254 Sep 21 14:44	24°♌55'46	-4.7m
	5254 Oct 02 00:21	0°♍	
morning max el	5254 Oct 30 10:00	23°♍14'20	45°53'49
	5254 Nov 06 05:30	0°♎	
asc. node	5254 Nov 13 15:36	7°♎41'40	
	5254 Dec 03 22:40	0°♏	
	5254 Dec 29 15:29	0°♐	
	5255 Jan 23 10:34	0°♑	
	5255 Feb 16 18:47	0°♒	
desc. node	5255 Mar 05 06:52	20°♒30'32	
	5255 Mar 12 21:34	0°♓	
	5255 Apr 05 21:56	0°♈	
	5255 Apr 29 22:10	0°♉	
morning set	5255 May 04 15:06	5°♉52'18	
	5255 May 24 00:01	0°♊	

superior conj	5255 Jun 12 10:17	24°♊06'32	-0°32'43
minimum elong	5255 Jun 12 17:21	24°♊28'27	0°32'24
max. Earth dist.	5255 Jun 15 09:40	27°♊47'34	1.72727 AU
	5255 Jun 17 04:29	0°♋	
asc. node	5255 Jun 26 08:18	11°♋19'22	
	5255 Jul 11 11:40	0°♌	
evening rise	5255 Jul 20 02:45	10°♌37'21	
	5255 Aug 04 21:21	0°♍	
	5255 Aug 29 09:46	0°♎	
	5255 Sep 23 02:03	0°♏	
desc. node	5255 Oct 15 23:34	27°♏35'14	
	5255 Oct 17 23:55	0°♐	
	5255 Nov 12 05:34	0°♑	
	5255 Dec 07 23:31	0°♒	
	5256 Jan 03 20:12	0°♓	
evening max el	5256 Jan 16 10:36	13°♓10'21	47°05'14
	5256 Feb 03 10:10	0°♈	
asc. node	5256 Feb 06 01:09	2°♈10'03	
greatest brilliancy	5256 Feb 26 01:38	14°♈29'35	-4.9m
retrograde	5256 Mar 07 04:07	16°♈26'08	
evening set	5256 Mar 24 23:50	10°♈17'02	
inferior conj	5256 Mar 27 20:32	8°♈31'44	9°01'04
minimum elong	5256 Mar 27 17:50	8°♈35'54	9°00'58
min. Earth dist.	5256 Mar 27 08:38	8°♈50'07	0.27172 AU
morning rise	5256 Mar 30 11:57	6°♈54'44	
direct	5256 Apr 17 11:16	0°♈44'54	
greatest brilliancy	5256 Apr 26 16:33	2°♈21'40	-4.9m
desc. node	5256 May 27 16:18	23°♈22'00	
	5256 Jun 03 18:08	0°♉	
morning max el	5256 Jun 06 08:08	2°♉30'56	46°22'37
	5256 Jul 02 13:37	0°♊	
	5256 Jul 29 05:20	0°♋	
	5256 Aug 23 23:42	0°♌	
asc. node	5256 Sep 17 17:59	29°♌27'30	
	5256 Sep 18 04:48	0°♍	
	5256 Oct 12 23:29	0°♎	
	5256 Nov 06 09:54	0°♏	
	5256 Nov 30 14:31	0°♐	
morning set	5256 Dec 01 11:11	1°♐04'19	
	5256 Dec 24 15:29	0°♑	
desc. node	5257 Jan 07 09:07	17°♑11'46	
max. Earth dist.	5257 Jan 07 08:25	17°♑09'32	1.71498 AU
superior conj	5257 Jan 09 15:34	20°♑02'22	-0°05'31
minimum elong	5257 Jan 09 14:10	19°♑57'57	0°05'26
behind sun begin	5257 Jan 08 13:57	18°♑42'04	
behind sun end	5257 Jan 10 14:23	21°♑13'52	
	5257 Jan 17 14:10	0°♒	
	5257 Feb 10 11:29	0°♓	
evening rise	5257 Feb 19 06:31	11°♓03'02	
	5257 Mar 06 08:37	0°♈	
	5257 Mar 30 07:41	0°♉	
	5257 Apr 23 11:24	0°♊	
asc. node	5257 Apr 30 10:37	8°♊35'18	
	5257 May 17 22:50	0°♋	
	5257 Jun 11 21:50	0°♌	
	5257 Jul 07 15:22	0°♍	
	5257 Aug 03 20:30	0°♎	
desc. node	5257 Aug 20 01:56	16°♎25'00	
evening max el	5257 Aug 20 22:08	17°♎13'27	45°33'41
	5257 Sep 04 05:12	0°♏	
greatest brilliancy	5257 Sep 28 23:33	15°♏11'16	-4.7m
retrograde	5257 Oct 08 12:18	16°♏49'19	
evening set	5257 Oct 26 06:08	10°♏56'43	
inferior conj	5257 Oct 29 18:55	8°♏46'28	-8°05'20
minimum elong	5257 Oct 30 01:53	8°♏35'35	8°04'34
min. Earth dist.	5257 Oct 30 14:08	8°♏16'29	0.28528 AU
morning rise	5257 Nov 02 21:23	6°♏15'18	
direct	5257 Nov 20 04:46	0°♏33'40	
greatest brilliancy	5257 Dec 01 06:56	2°♏49'42	-4.8m
asc. node	5257 Dec 11 03:24	7°♏58'22	
	5258 Jan 06 09:56	0°♐	
morning max el	5258 Jan 09 10:54	3°♐01'46	46°37'35
	5258 Feb 03 12:15	0°♑	
	5258 Mar 01 07:37	0°♒	
	5258 Mar 26 05:55	0°♓	
desc. node	5258 Apr 01 18:45	7°♓57'28	
	5258 Apr 19 18:46	0°♈	
	5258 May 14 03:47	0°♉	
	5258 Jun 07 12:08	0°♊	
	5258 Jul 01 21:09	0°♋	
morning set	5258 Jul 14 12:44	15°♋33'25	
asc. node	5258 Jul 23 20:14	27°♋00'15	
	5258 Jul 26 06:43	0°♌	
	5258 Aug 19 16:04	0°♍	
max. Earth dist.	5258 Aug 20 00:52	0°♍27'03	1.73450 AU
superior conj	5258 Aug 20 12:15	1°♍02'04	0°59'55
minimum elong	5258 Aug 20 03:11	0°♍34'10	0°59'36
	5258 Sep 13 00:48	0°♎	
evening rise	5258 Sep 25 13:37	15°♎26'17	
	5258 Oct 07 09:20	0°♏	
	5258 Oct 31 18:30	0°♐	
desc. node	5258 Nov 12 11:22	14°♐22'52	
	5258 Nov 25 04:51	0°♑	
	5258 Dec 19 16:46	0°♒	
	5259 Jan 13 07:47	0°♓	
	5259 Feb 07 06:55	0°♈	
	5259 Mar 05 02:37	0°♉	
asc. node	5259 Mar 05 12:57	0°♉29'08	
evening max el	5259 Mar 29 17:49	26°♉30'26	46°50'40
	5259 Apr 02 05:59	0°♊	
greatest brilliancy	5259 May 08 12:14	27°♊04'37	-4.8m
retrograde	5259 May 19 02:08	29°♊09'53	
evening set	5259 Jun 03 18:11	24°♊22'11	
inferior conj	5259 Jun 09 06:10	21°♊02'05	3°47'42
minimum elong	5259 Jun 09 14:00	20°♊49'49	3°45'28
min. Earth dist.	5259 Jun 09 02:36	21°♊07'40	0.28069 AU
morning rise	5259 Jun 15 10:16	17°♊20'25	
desc. node	5259 Jun 25 04:09	13°♊32'45	
direct	5259 Jun 30 08:42	13°♊00'41	
greatest brilliancy	5259 Jul 10 05:21	14°♊46'38	-4.8m
	5259 Aug 03 17:23	0°♋	
morning max el	5259 Aug 18 03:50	12°♋54'30	45°45'02
	5259 Sep 04 04:09	0°♌	
	5259 Oct 01 14:20	0°♍	
asc. node	5259 Oct 16 05:50	16°♍48'49	
	5259 Oct 27 11:42	0°♎	
	5259 Nov 21 12:13	0°♏	
	5259 Dec 15 23:55	0°♐	
	5260 Jan 09 03:57	0°♑	
	5260 Feb 02 03:37	0°♒	
desc. node	5260 Feb 04 20:58	3°♒24'52	
greatest brilliancy	5260 Feb 09 21:07	9°♒41'48	-3.9m
morning set	5260 Feb 14 18:39	15°♒50'50	
	5260 Feb 26 00:54	0°♓	
	5260 Mar 20 21:26	0°♈	
superior conj	5260 Mar 27 01:46	7°♈46'08	-1°26'13
minimum elong	5260 Mar 26 22:14	7°♈35'00	1°26'12
max. Earth dist.	5260 Mar 29 08:28	10°♈37'54	1.71305 AU
	5260 Apr 13 18:57	0°♉	
evening rise	5260 May 06 12:04	28°♉22'56	
	5260 May 07 19:15	0°♊	

asc. node	5260 May 27 22:31	24°♊59'26	
	5260 May 31 23:50	0°♋	
	5260 Jun 25 09:48	0°♌	
	5260 Jul 20 02:28	0°♍	
	5260 Aug 14 04:30	0°♎	
	5260 Sep 08 21:08	0°♏	
desc. node	5260 Sep 16 13:38	8°♏46'50	
	5260 Oct 05 15:18	0°♐	
evening max el	5260 Nov 01 01:46	27°♐23'01	46°13'19
	5260 Nov 03 19:17	0°♑	
greatest brilliancy	5260 Dec 11 01:16	26°♑41'21	-4.8m
retrograde	5260 Dec 20 14:20	28°♑23'22	
evening set	5261 Jan 03 23:32	24°♑20'04	
asc. node	5261 Jan 07 15:20	22°♑16'09	
inferior conj	5261 Jan 10 06:13	20°♑41'09	0°40'38
minimum elong	5261 Jan 10 04:39	20°♑43'32	0°40'09
min. Earth dist.	5261 Jan 10 12:57	20°♑30'54	0.26821 AU
morning rise	5261 Jan 16 09:12	17°♑05'42	
direct	5261 Jan 30 20:58	12°♑54'15	
greatest brilliancy	5261 Feb 10 08:41	14°♑58'50	-4.9m
	5261 Mar 05 11:07	0°♒	
morning max el	5261 Mar 22 11:13	15°♒57'35	46°58'38
	5261 Apr 04 20:50	0°♓	
desc. node	5261 Apr 29 06:35	27°♓20'38	
	5261 May 01 13:49	0°♈	
	5261 May 27 03:13	0°♉	
	5261 Jun 21 05:25	0°♊	
	5261 Jul 16 02:33	0°♋	
	5261 Aug 09 20:20	0°♌	
asc. node	5261 Aug 20 08:04	12°♌46'11	
	5261 Sep 03 10:32	0°♍	
morning set	5261 Sep 20 19:18	21°♍18'14	
	5261 Sep 27 20:49	0°♎	
	5261 Oct 22 03:37	0°♏	
max. Earth dist.	5261 Oct 24 21:12	3°♏23'06	1.72809 AU
superior conj	5261 Oct 27 08:38	6°♏27'12	1°20'31
minimum elong	5261 Oct 27 14:42	6°♏46'02	1°20'26
	5261 Nov 15 08:03	0°♐	
evening rise	5261 Dec 04 07:34	23°♐35'46	
	5261 Dec 09 11:06	0°♑	
desc. node	5261 Dec 09 23:21	0°♑38'05	
	5262 Jan 02 13:15	0°♒	
	5262 Jan 26 15:06	0°♓	
	5262 Feb 19 18:17	0°♈	
	5262 Mar 16 02:22	0°♉	
asc. node	5262 Apr 02 00:42	20°♉34'21	
	5262 Apr 09 21:22	0°♊	
	5262 May 05 13:33	0°♋	
	5262 Jun 02 03:11	0°♌	
evening max el	5262 Jun 08 18:28	6°♌39'15	45°55'16
	5262 Jul 06 18:00	0°♍	
greatest brilliancy	5262 Jul 16 22:32	5°♍13'47	-4.7m
desc. node	5262 Jul 22 16:08	6°♍54'39	
retrograde	5262 Jul 28 00:31	7°♍27'15	
evening set	5262 Aug 12 20:55	2°♍35'47	
	5262 Aug 17 04:42	30°℞♌	
min. Earth dist.	5262 Aug 18 02:36	29°♌25'47	0.29029 AU
inferior conj	5262 Aug 18 12:34	29°♌10'11	-5°49'33
minimum elong	5262 Aug 18 02:45	29°♌25'33	5°47'26
morning rise	5262 Aug 23 08:49	26°♌12'46	
direct	5262 Sep 09 01:59	20°♌54'22	
greatest brilliancy	5262 Sep 19 05:40	22°♌46'06	-4.7m
	5262 Oct 03 00:52	0°♍	
morning max el	5262 Oct 28 02:21	21°♍04'48	45°52'35
	5262 Nov 06 00:51	0°♎	
asc. node	5262 Nov 12 17:40	7°♎00'15	
	5262 Dec 03 13:25	0°♏	
	5262 Dec 29 04:30	0°♐	
	5263 Jan 22 22:44	0°♑	
	5263 Feb 16 06:30	0°♒	
desc. node	5263 Mar 04 08:51	20°♒00'55	
	5263 Mar 12 08:58	0°♓	
	5263 Apr 05 09:07	0°♈	
	5263 Apr 29 09:09	0°♉	
morning set	5263 May 02 03:50	3°♉28'04	
	5263 May 23 10:53	0°♊	
superior conj	5263 Jun 10 01:02	21°♊50'05	-0°35'58
minimum elong	5263 Jun 10 08:44	22°♊13'56	0°35'39
max. Earth dist.	5263 Jun 13 04:13	25°♊42'57	1.72681 AU
	5263 Jun 16 15:16	0°♋	
asc. node	5263 Jun 25 10:26	10°♋52'41	
	5263 Jul 10 22:26	0°♌	
evening rise	5263 Jul 17 20:04	8°♌29'51	
	5263 Aug 04 08:11	0°♍	
	5263 Aug 28 20:47	0°♎	
	5263 Sep 22 13:27	0°♏	
desc. node	5263 Oct 15 01:32	27°♏05'04	
	5263 Oct 17 12:01	0°♐	
	5263 Nov 11 18:47	0°♑	
	5263 Dec 07 14:41	0°♒	
	5264 Jan 03 15:34	0°♓	
evening max el	5264 Jan 14 01:25	10°♓48'57	47°04'15
	5264 Feb 03 22:26	0°♈	
asc. node	5264 Feb 05 03:11	0°♈57'01	
greatest brilliancy	5264 Feb 23 14:58	12°♈03'31	-4.9m
retrograde	5264 Mar 04 17:30	13°♈59'39	
evening set	5264 Mar 22 10:17	7°♈55'20	
inferior conj	5264 Mar 25 09:31	6°♈06'06	8°57'55
minimum elong	5264 Mar 25 05:53	6°♈11'43	8°57'44
min. Earth dist.	5264 Mar 24 21:03	6°♈25'21	0.27135 AU
morning rise	5264 Mar 28 01:37	4°♈27'58	
	5264 Apr 05 23:25	30°℞♓	
direct	5264 Apr 15 00:19	28°♓20'06	
greatest brilliancy	5264 Apr 24 04:45	29°♓56'07	-4.9m
	5264 Apr 24 09:21	0°♈	
desc. node	5264 May 26 18:26	22°♈23'41	
	5264 Jun 03 17:43	0°♉	
morning max el	5264 Jun 03 21:22	0°♉08'58	46°24'08
	5264 Jul 02 05:55	0°♊	
	5264 Jul 28 18:57	0°♋	
	5264 Aug 23 11:58	0°♌	
asc. node	5264 Sep 16 19:53	28°♌58'41	
	5264 Sep 17 16:17	0°♍	
	5264 Oct 12 10:31	0°♎	
	5264 Nov 05 20:43	0°♏	
morning set	5264 Nov 29 02:21	28°♏48'41	
	5264 Nov 30 01:16	0°♐	
	5264 Dec 24 02:16	0°♑	
max. Earth dist.	5265 Jan 04 15:13	14°♑26'41	1.71539 AU
desc. node	5265 Jan 06 11:12	16°♑44'24	
superior conj	5265 Jan 07 03:40	17°♑36'00	-0°01'41
minimum elong	5265 Jan 07 03:13	17°♑34'36	0°01'39
behind sun begin	5265 Jan 06 01:58	16°♑15'29	
behind sun end	5265 Jan 08 04:29	18°♑53'45	
	5265 Jan 17 01:02	0°♒	
	5265 Feb 09 22:24	0°♓	
evening rise	5265 Feb 16 17:11	8°♓31'19	
	5265 Mar 05 19:37	0°♈	
	5265 Mar 29 18:49	0°♉	
	5265 Apr 22 22:45	0°♊	
asc. node	5265 Apr 29 12:41	8°♊06'32	

	5265 May 17 10:35	0°♋	
	5265 Jun 11 10:19	0°♌	
	5265 Jul 07 05:22	0°♍	
	5265 Aug 03 14:08	0°♎	
evening max el	5265 Aug 18 12:15	14°♎58'49	45°33'19
desc. node	5265 Aug 19 03:54	15°♎36'11	
	5265 Sep 04 13:53	0°♏	
greatest brilliancy	5265 Sep 26 14:05	12°♏59'01	-4.7m
retrograde	5265 Oct 06 02:40	14°♏37'21	
evening set	5265 Oct 23 23:17	8°♏41'29	
inferior conj	5265 Oct 27 10:21	6°♏33'49	-8°12'00
minimum elong	5265 Oct 27 16:41	6°♏23'54	8°11'23
min. Earth dist.	5265 Oct 28 05:10	6°♏04'25	0.28582 AU
morning rise	5265 Oct 31 09:47	4°♏06'55	
	5265 Nov 08 17:34	30°℞♎	
direct	5265 Nov 17 20:05	28°♎20'16	
	5265 Nov 27 07:08	0°♏	
greatest brilliancy	5265 Nov 28 22:52	0°♏36'12	-4.8m
asc. node	5265 Dec 10 05:27	6°♏39'55	
	5266 Jan 06 08:20	0°♐	
morning max el	5266 Jan 07 00:47	0°♐41'16	46°36'04
	5266 Feb 03 04:12	0°♑	
	5266 Feb 28 21:18	0°♒	
	5266 Mar 25 18:28	0°♓	
desc. node	5266 Mar 31 20:42	7°♓25'43	
	5266 Apr 19 06:37	0°♈	
	5266 May 13 15:10	0°♉	
	5266 Jun 06 23:09	0°♊	
	5266 Jul 01 07:55	0°♋	
morning set	5266 Jul 12 05:27	13°♋24'24	
asc. node	5266 Jul 22 22:10	26°♋33'37	
	5266 Jul 25 17:19	0°♌	
superior conj	5266 Aug 18 06:07	28°♌57'00	0°57'35
minimum elong	5266 Aug 17 21:05	28°♌29'12	0°57'15
max. Earth dist.	5266 Aug 17 19:21	28°♌23'50	1.73450 AU
	5266 Aug 19 02:36	0°♍	
	5266 Sep 12 11:22	0°♎	
evening rise	5266 Sep 23 07:29	13°♎20'47	
	5266 Oct 06 20:03	0°♏	
	5266 Oct 31 05:27	0°♐	
desc. node	5266 Nov 11 13:31	13°♐55'24	
	5266 Nov 24 16:09	0°♑	
	5266 Dec 19 04:34	0°♒	
	5267 Jan 12 20:21	0°♓	
	5267 Feb 06 20:45	0°♈	
asc. node	5267 Mar 04 14:50	29°♈48'19	
	5267 Mar 04 18:59	0°♉	
evening max el	5267 Mar 27 07:20	24°♉08'23	46°52'15
	5267 Apr 02 05:48	0°♊	
greatest brilliancy	5267 May 06 04:35	24°♊49'19	-4.8m
retrograde	5267 May 16 17:12	26°♊54'02	
evening set	5267 Jun 01 11:40	22°♊02'45	
inferior conj	5267 Jun 06 21:09	18°♊46'37	4°07'14
minimum elong	5267 Jun 07 05:31	18°♊33'33	4°04'56
min. Earth dist.	5267 Jun 06 18:12	18°♊51'15	0.28039 AU
morning rise	5267 Jun 12 23:43	15°♊07'08	
desc. node	5267 Jun 24 06:12	11°♊01'37	
direct	5267 Jun 27 22:36	10°♊45'27	
greatest brilliancy	5267 Jul 07 20:17	12°♊32'13	-4.8m
	5267 Aug 03 23:52	0°♋	
morning max el	5267 Aug 15 18:53	10°♋41'55	45°45'44
	5267 Sep 03 21:29	0°♌	
	5267 Oct 01 04:10	0°♍	
asc. node	5267 Oct 15 07:51	16°♍17'14	
	5267 Oct 27 00:01	0°♎	
	5267 Nov 20 23:47	0°♏	

	5267 Dec 15 11:05	0°♐	
	5268 Jan 08 14:54	0°♑	
	5268 Feb 01 14:26	0°♒	
desc. node	5268 Feb 03 22:56	2°♒57'09	
greatest brilliancy	5268 Feb 09 16:08	10°♒07'34	-3.9m
morning set	5268 Feb 12 05:09	13°♒19'07	
	5268 Feb 25 11:40	0°♓	
	5268 Mar 20 08:11	0°♈	
superior conj	5268 Mar 24 12:44	5°♈16'02	-1°25'33
minimum elong	5268 Mar 24 08:09	5°♈01'39	1°25'31
max. Earth dist.	5268 Mar 26 13:47	7°♈50'11	1.71283 AU
	5268 Apr 13 05:41	0°♉	
evening rise	5268 May 04 00:13	25°♉57'47	
	5268 May 07 06:00	0°♊	
asc. node	5268 May 27 00:36	24°♊32'26	
	5268 May 31 10:40	0°♋	
	5268 Jun 24 20:50	0°♌	
	5268 Jul 19 13:54	0°♍	
	5268 Aug 13 16:40	0°♎	
	5268 Sep 08 10:42	0°♏	
desc. node	5268 Sep 15 15:38	8°♏12'18	
	5268 Oct 05 07:48	0°♐	
evening max el	5268 Oct 29 16:02	25°♐05'25	46°11'25
	5268 Nov 03 20:21	0°♑	
greatest brilliancy	5268 Dec 08 13:46	24°♑17'02	-4.8m
retrograde	5268 Dec 18 03:25	25°♑59'14	
evening set	5269 Jan 01 12:54	21°♑54'53	
asc. node	5269 Jan 06 17:17	18°♑55'39	
inferior conj	5269 Jan 07 18:59	18°♑16'35	0°16'36
minimum elong	5269 Jan 07 18:20	18°♑17'33	0°16'25
transit middle	5269 Jan 07 18:20	18°♑17'33	0°16'25
transit begin	5269 Jan 07 17:37	18°♑18'39	
transit end	5269 Jan 07 19:03	18°♑16'28	
min. Earth dist.	5269 Jan 08 02:41	18°♑04'51	0.26852 AU
morning rise	5269 Jan 13 23:17	14°♑39'41	
direct	5269 Jan 28 10:47	10°♑29'08	
greatest brilliancy	5269 Feb 07 22:52	12°♑34'41	-4.9m
	5269 Mar 05 19:02	0°♒	
morning max el	5269 Mar 20 01:59	13°♒37'05	46°58'56
	5269 Apr 04 15:09	0°♓	
desc. node	5269 Apr 28 08:45	26°♓44'03	
	5269 May 01 04:27	0°♈	
	5269 May 26 16:09	0°♉	
	5269 Jun 20 17:23	0°♊	
	5269 Jul 15 13:53	0°♋	
	5269 Aug 09 07:16	0°♌	
asc. node	5269 Aug 19 10:02	12°♌19'14	
	5269 Sep 02 21:14	0°♍	
morning set	5269 Sep 18 12:42	19°♍11'40	
	5269 Sep 27 07:23	0°♎	
	5269 Oct 21 14:11	0°♏	
max. Earth dist.	5269 Oct 22 15:35	1°♏18'38	1.72848 AU
superior conj	5269 Oct 25 01:21	4°♏17'29	1°21'34
minimum elong	5269 Oct 25 06:49	4°♏34'25	1°21'31
	5269 Nov 14 18:43	0°♐	
evening rise	5269 Dec 01 21:49	21°♐17'16	
	5269 Dec 08 21:56	0°♑	
desc. node	5269 Dec 09 01:23	0°♑10'45	
	5270 Jan 02 00:17	0°♒	
	5270 Jan 26 02:22	0°♓	
	5270 Feb 19 05:51	0°♈	
	5270 Mar 15 14:24	0°♉	
asc. node	5270 Apr 01 02:49	20°♉02'48	
	5270 Apr 09 10:17	0°♊	
	5270 May 05 04:20	0°♋	

	5270 Jun 01 22:54	0°♌	
evening max el	5270 Jun 06 11:18	4°♌30'05	45°56'50
	5270 Jul 08 01:33	0°♍	
greatest brilliancy	5270 Jul 14 14:25	3°♍04'29	-4.7m
desc. node	5270 Jul 21 18:06	5°♍00'20	
retrograde	5270 Jul 25 17:11	5°♍18'20	
evening set	5270 Aug 10 10:59	0°♍30'33	
	5270 Aug 11 08:16	30°℞♌	
inferior conj	5270 Aug 16 04:54	27°♌01'22	-5°34'47
minimum elong	5270 Aug 15 19:13	27°♌16'34	5°32'37
min. Earth dist.	5270 Aug 15 18:18	27°♌18'00	0.29006 AU
morning rise	5270 Aug 21 03:44	24°♌00'12	
direct	5270 Sep 06 18:46	18°♌46'10	
greatest brilliancy	5270 Sep 16 20:34	20°♌36'28	-4.7m
	5270 Oct 03 18:44	0°♍	
morning max el	5270 Oct 25 17:49	18°♍53'26	45°51'23
	5270 Nov 05 19:33	0°♎	
asc. node	5270 Nov 11 19:48	6°♎19'46	
	5270 Dec 03 03:53	0°♏	
	5270 Dec 28 17:19	0°♐	
	5271 Jan 22 10:46	0°♑	
	5271 Feb 15 18:04	0°♒	
desc. node	5271 Mar 03 10:49	19°♒31'42	
	5271 Mar 11 20:14	0°♓	
	5271 Apr 04 20:08	0°♈	
	5271 Apr 28 19:59	0°♉	
morning set	5271 Apr 29 16:52	1°♉05'11	
	5271 May 22 21:34	0°♊	
superior conj	5271 Jun 07 16:06	19°♊35'01	-0°39'09
minimum elong	5271 Jun 08 00:22	20°♊00'38	0°38'48
max. Earth dist.	5271 Jun 11 00:19	23°♊43'35	1.72634 AU
	5271 Jun 16 01:54	0°♋	
asc. node	5271 Jun 24 12:22	10°♋25'55	
	5271 Jul 10 09:05	0°♌	
evening rise	5271 Jul 15 13:31	6°♌23'03	
	5271 Aug 03 18:56	0°♍	
	5271 Aug 28 07:46	0°♎	
	5271 Sep 22 00:53	0°♏	
desc. node	5271 Oct 14 03:39	26°♏35'18	
	5271 Oct 17 00:09	0°♐	
	5271 Nov 11 08:06	0°♑	
	5271 Dec 07 06:03	0°♒	
	5272 Jan 03 11:30	0°♓	
evening max el	5272 Jan 11 15:17	8°♓25'06	47°03'08
asc. node	5272 Feb 04 05:09	29°♓41'37	
	5272 Feb 04 14:52	0°♈	
greatest brilliancy	5272 Feb 21 04:55	9°♈37'59	-4.9m
retrograde	5272 Mar 02 06:23	11°♈33'05	
evening set	5272 Mar 19 20:20	5°♈34'16	
inferior conj	5272 Mar 22 22:31	3°♈40'31	8°53'51
minimum elong	5272 Mar 22 17:58	3°♈47'33	8°53'33
min. Earth dist.	5272 Mar 22 09:56	3°♈59'59	0.27096 AU
morning rise	5272 Mar 25 15:45	2°♈00'34	
	5272 Mar 29 04:06	30°℞♓	
direct	5272 Apr 12 12:52	25°♓55'11	
greatest brilliancy	5272 Apr 21 17:37	27°♓31'08	-4.9m
	5272 Apr 27 14:37	0°♈	
desc. node	5272 May 25 20:26	21°♈26'27	
morning max el	5272 Jun 01 09:43	27°♈44'42	46°25'53
	5272 Jun 03 16:15	0°♉	
	5272 Jul 01 21:51	0°♊	
	5272 Jul 28 08:24	0°♋	
	5272 Aug 23 00:09	0°♌	
asc. node	5272 Sep 15 21:58	28°♌30'23	
	5272 Sep 17 03:46	0°♍	
	5272 Oct 11 21:36	0°♎	
	5272 Nov 05 07:37	0°♏	
morning set	5272 Nov 26 17:31	26°♏32'46	
	5272 Nov 29 12:07	0°♐	
	5272 Dec 23 13:09	0°♑	
max. Earth dist.	5273 Jan 02 00:31	11°♑51'24	1.71580 AU
superior conj	5273 Jan 04 15:47	15°♑09'31	0°02'10
minimum elong	5273 Jan 04 16:19	15°♑11'11	0°02'10
behind sun begin	5273 Jan 03 15:11	13°♑52'29	
behind sun end	5273 Jan 05 17:27	16°♑29'53	
desc. node	5273 Jan 05 13:06	16°♑16'17	
	5273 Jan 16 11:58	0°♒	
	5273 Feb 09 09:26	0°♓	
evening rise	5273 Feb 14 03:57	5°♓59'39	
	5273 Mar 05 06:46	0°♈	
	5273 Mar 29 06:07	0°♉	
	5273 Apr 22 10:16	0°♊	
asc. node	5273 Apr 28 14:45	7°♊37'14	
	5273 May 16 22:28	0°♋	
	5273 Jun 10 22:57	0°♌	
	5273 Jul 06 19:34	0°♍	
	5273 Aug 03 08:15	0°♎	
evening max el	5273 Aug 16 02:02	12°♎43'18	45°32'59
desc. node	5273 Aug 18 05:54	14°♎46'25	
	5273 Sep 05 01:49	0°♏	
greatest brilliancy	5273 Sep 24 04:09	10°♏46'07	-4.7m
retrograde	5273 Oct 03 17:26	12°♏25'29	
evening set	5273 Oct 21 16:18	6°♏26'16	
inferior conj	5273 Oct 25 01:53	4°♏20'56	-8°17'53
minimum elong	5273 Oct 25 07:33	4°♏12'06	8°17'24
min. Earth dist.	5273 Oct 25 20:10	3°♏52'25	0.28640 AU
morning rise	5273 Oct 28 22:31	1°♏58'16	
	5273 Nov 01 10:13	30°℞♎	
direct	5273 Nov 15 11:36	26°♎06'27	
greatest brilliancy	5273 Nov 26 15:14	28°♎22'53	-4.8m
	5273 Nov 30 07:14	0°♏	
asc. node	5273 Dec 09 07:23	5°♏23'01	
morning max el	5274 Jan 04 15:25	28°♏22'02	46°34'35
	5274 Jan 06 06:11	0°♐	
	5274 Feb 02 20:10	0°♑	
	5274 Feb 28 11:05	0°♒	
	5274 Mar 25 07:09	0°♓	
desc. node	5274 Mar 30 22:50	6°♓54'03	
	5274 Apr 18 18:39	0°♈	
	5274 May 13 02:46	0°♉	
	5274 Jun 06 10:25	0°♊	
	5274 Jun 30 18:54	0°♋	
morning set	5274 Jul 09 22:21	11°♋15'12	
asc. node	5274 Jul 22 00:11	26°♋06'31	
	5274 Jul 25 04:07	0°♌	
max. Earth dist.	5274 Aug 15 15:29	26°♌25'09	1.73447 AU
superior conj	5274 Aug 16 00:16	26°♌52'10	0°55'12
minimum elong	5274 Aug 15 15:18	26°♌24'35	0°54'51
	5274 Aug 18 13:19	0°♍	
	5274 Sep 11 22:08	0°♎	
evening rise	5274 Sep 21 01:45	11°♎15'59	
	5274 Oct 06 06:59	0°♏	
	5274 Oct 30 16:41	0°♐	
desc. node	5274 Nov 10 15:30	13°♐26'31	
	5274 Nov 24 03:47	0°♑	
	5274 Dec 18 16:45	0°♒	
	5275 Jan 12 09:20	0°♓	
	5275 Feb 06 11:04	0°♈	
asc. node	5275 Mar 03 16:57	29°♈06'42	
	5275 Mar 04 12:02	0°♉	
evening max el	5275 Mar 24 21:16	21°♉46'21	46°53'52

	5275 Apr 02 07:14	0°♊	
greatest brilliancy	5275 May 03 20:16	22°♊32'02	-4.8m
retrograde	5275 May 14 08:39	24°♊36'54	
evening set	5275 May 30 05:12	19°♊41'42	
inferior conj	5275 Jun 04 12:02	16°♊29'40	4°26'35
minimum elong	5275 Jun 04 20:53	16°♊15'52	4°24'11
min. Earth dist.	5275 Jun 04 09:21	16°♊33'52	0.28009 AU
morning rise	5275 Jun 10 12:54	12°♊52'51	
desc. node	5275 Jun 23 08:10	8°♊34'28	
direct	5275 Jun 25 12:53	8°♊28'42	
greatest brilliancy	5275 Jul 05 10:44	10°♊16'03	-4.8m
	5275 Aug 04 04:45	0°♋	
morning max el	5275 Aug 13 10:44	8°♋30'18	45°46'39
	5275 Sep 03 14:46	0°♌	
	5275 Sep 30 18:08	0°♍	
asc. node	5275 Oct 14 09:58	15°♍45'19	
	5275 Oct 26 12:32	0°♎	
	5275 Nov 20 11:36	0°♏	
	5275 Dec 14 22:33	0°♐	
	5276 Jan 08 02:12	0°♑	
	5276 Feb 01 01:40	0°♒	
desc. node	5276 Feb 03 00:59	2°♒28'23	
greatest brilliancy	5276 Feb 09 14:40	10°♒43'08	-3.9m
morning set	5276 Feb 09 15:27	10°♒45'34	
	5276 Feb 24 22:51	0°♓	
	5276 Mar 19 19:20	0°♈	
superior conj	5276 Mar 21 23:16	2°♈43'16	-1°24'43
minimum elong	5276 Mar 21 17:40	2°♈25'39	1°24'39
max. Earth dist.	5276 Mar 23 21:23	5°♈08'13	1.71259 AU
	5276 Apr 12 16:48	0°♉	
evening rise	5276 May 01 12:07	23°♉30'38	
	5276 May 06 17:08	0°♊	
asc. node	5276 May 26 02:32	24°♊03'46	
	5276 May 30 21:54	0°♋	
	5276 Jun 24 08:16	0°♌	
	5276 Jul 19 01:45	0°♍	
	5276 Aug 13 05:15	0°♎	
	5276 Sep 08 00:42	0°♏	
desc. node	5276 Sep 14 17:47	7°♏37'07	
	5276 Oct 05 00:53	0°♐	
evening max el	5276 Oct 27 06:47	22°♐48'32	46°09'27
	5276 Nov 03 23:05	0°♑	
greatest brilliancy	5276 Dec 06 02:25	21°♑52'37	-4.8m
retrograde	5276 Dec 15 16:29	23°♑34'30	
evening set	5276 Dec 30 02:39	19°♑29'06	
inferior conj	5277 Jan 05 07:53	15°♑51'26	-0°07'21
minimum elong	5277 Jan 05 08:10	15°♑51'00	0°07'15
transit middle	5277 Jan 05 08:10	15°♑51'00	0°07'15
transit begin	5277 Jan 05 04:30	15°♑56'36	
transit end	5277 Jan 05 11:50	15°♑45'24	
min. Earth dist.	5277 Jan 05 16:29	15°♑38'19	0.26890 AU
asc. node	5277 Jan 05 19:18	15°♑34'02	
morning rise	5277 Jan 11 13:15	12°♑13'07	
direct	5277 Jan 26 00:53	8°♑03'29	
greatest brilliancy	5277 Feb 05 13:04	10°♑09'22	-4.9m
	5277 Mar 06 01:16	0°♒	
morning max el	5277 Mar 17 16:20	11°♒14'02	46°58'59
	5277 Apr 04 09:36	0°♓	
desc. node	5277 Apr 27 10:44	26°♓05'42	
	5277 Apr 30 19:24	0°♈	
	5277 May 26 05:26	0°♉	
	5277 Jun 20 05:42	0°♊	
	5277 Jul 15 01:35	0°♋	
	5277 Aug 08 18:34	0°♌	
asc. node	5277 Aug 18 12:07	11°♌51'30	
	5277 Sep 02 08:17	0°♍	
morning set	5277 Sep 16 06:20	17°♍04'46	
	5277 Sep 26 18:18	0°♎	
max. Earth dist.	5277 Oct 20 08:52	29°♎09'52	1.72880 AU
	5277 Oct 21 01:04	0°♏	
superior conj	5277 Oct 22 18:31	2°♏08'21	1°22'30
minimum elong	5277 Oct 22 23:21	2°♏23'19	1°22'27
	5277 Nov 14 05:39	0°♐	
evening rise	5277 Nov 29 12:32	18°♐59'25	
desc. node	5277 Dec 08 03:19	29°♐42'17	
	5277 Dec 08 09:01	0°♑	
	5278 Jan 01 11:37	0°♒	
	5278 Jan 25 13:59	0°♓	
	5278 Feb 18 17:50	0°♈	
	5278 Mar 15 02:57	0°♉	
asc. node	5278 Mar 31 04:49	19°♉29'20	
	5278 Apr 08 23:48	0°♊	
	5278 May 04 19:51	0°♋	
	5278 Jun 01 19:50	0°♌	
evening max el	5278 Jun 04 03:17	2°♌17'14	45°58'31
	5278 Jul 10 02:19	0°♍	
greatest brilliancy	5278 Jul 12 06:53	0°♍54'20	-4.7m
desc. node	5278 Jul 20 20:08	3°♍00'18	
retrograde	5278 Jul 23 09:21	3°♍07'48	
	5278 Aug 04 23:37	30°℞♌	
evening set	5278 Aug 08 01:04	28°♌23'38	
inferior conj	5278 Aug 13 21:08	24°♌51'08	-5°19'30
minimum elong	5278 Aug 13 11:37	25°♌06'05	5°17'17
min. Earth dist.	5278 Aug 13 10:13	25°♌08'16	0.28978 AU
morning rise	5278 Aug 18 22:28	21°♌46'08	
direct	5278 Sep 04 11:00	16°♌36'36	
greatest brilliancy	5278 Sep 14 11:40	18°♌25'40	-4.7m
	5278 Oct 04 08:34	0°♍	
morning max el	5278 Oct 23 08:25	16°♍39'01	45°50'26
	5278 Nov 05 14:04	0°♎	
asc. node	5278 Nov 10 21:39	5°♎38'16	
	5278 Dec 02 18:24	0°♏	
	5278 Dec 28 06:14	0°♐	
	5279 Jan 21 22:54	0°♑	
	5279 Feb 15 05:48	0°♒	
desc. node	5279 Mar 02 12:55	19°♒02'19	
	5279 Mar 11 07:42	0°♓	
	5279 Apr 04 07:25	0°♈	
morning set	5279 Apr 27 05:19	28°♈39'24	
	5279 Apr 28 07:08	0°♉	
	5279 May 22 08:36	0°♊	
superior conj	5279 Jun 05 06:34	17°♊17'01	-0°42'19
minimum elong	5279 Jun 05 15:21	17°♊44'15	0°41'56
max. Earth dist.	5279 Jun 08 18:28	21°♊37'05	1.72583 AU
	5279 Jun 15 12:51	0°♋	
asc. node	5279 Jun 23 14:21	9°♋58'16	
	5279 Jul 09 20:02	0°♌	
evening rise	5279 Jul 13 06:21	4°♌13'27	
	5279 Aug 03 05:57	0°♍	
	5279 Aug 27 19:02	0°♎	
	5279 Sep 21 12:36	0°♏	
desc. node	5279 Oct 13 05:36	26°♏04'19	
	5279 Oct 16 12:36	0°♐	
	5279 Nov 10 21:41	0°♑	
	5279 Dec 06 21:44	0°♒	
	5280 Jan 03 08:05	0°♓	
evening max el	5280 Jan 09 04:07	5°♓58'43	47°02'03
asc. node	5280 Feb 03 07:12	28°♓24'08	
	5280 Feb 05 12:53	0°♈	
greatest brilliancy	5280 Feb 18 18:51	7°♈12'26	-4.9m
retrograde	5280 Feb 28 19:00	9°♈06'40	

evening set	5280 Mar 17 06:00	3°♈13'40	
inferior conj	5280 Mar 20 11:35	1°♈14'54	8°48'38
minimum elong	5280 Mar 20 06:10	1°♈23'17	8°48'11
min. Earth dist.	5280 Mar 19 23:02	1°♈34'19	0.27066 AU
	5280 Mar 22 12:15	30℞♓	
morning rise	5280 Mar 23 06:28	29°♓32'25	
direct	5280 Apr 10 01:07	23°♓29'53	
greatest brilliancy	5280 Apr 19 07:04	25°♓06'29	-4.9m
	5280 Apr 29 11:54	0°♈	
desc. node	5280 May 24 22:22	20°♈29'48	
morning max el	5280 May 29 22:02	25°♈19'30	46°27'27
	5280 Jun 03 14:11	0°♉	
	5280 Jul 01 13:49	0°♊	
	5280 Jul 27 21:59	0°♋	
	5280 Aug 22 12:29	0°♌	
asc. node	5280 Sep 14 24:00	28°♌01'33	
	5280 Sep 16 15:22	0°♍	
	5280 Oct 11 08:47	0°♎	
	5280 Nov 04 18:36	0°♏	
morning set	5280 Nov 24 08:41	24°♏16'43	
	5280 Nov 28 23:03	0°♐	
	5280 Dec 23 00:05	0°♑	
max. Earth dist.	5280 Dec 30 12:16	9°♑23'42	1.71618 AU
superior conj	5281 Jan 02 04:10	12°♑43'45	0°05'58
minimum elong	5281 Jan 02 05:39	12°♑48'25	0°05'55
behind sun begin	5281 Jan 01 05:55	11°♑34'05	
behind sun end	5281 Jan 03 05:24	14°♑02'45	
desc. node	5281 Jan 04 15:12	15°♑48'36	
	5281 Jan 15 22:55	0°♒	
	5281 Feb 08 20:25	0°♓	
evening rise	5281 Feb 11 15:11	3°♓29'39	
	5281 Mar 04 17:51	0°♈	
	5281 Mar 28 17:20	0°♉	
	5281 Apr 21 21:45	0°♊	
asc. node	5281 Apr 27 16:39	7°♊07'32	
	5281 May 16 10:24	0°♋	
	5281 Jun 10 11:42	0°♌	
	5281 Jul 06 10:02	0°♍	
	5281 Aug 03 02:59	0°♎	
evening max el	5281 Aug 13 16:12	10°♎28'27	45°32'51
desc. node	5281 Aug 17 08:00	13°♎55'42	
	5281 Sep 05 18:05	0°♏	
greatest brilliancy	5281 Sep 21 17:32	8°♏32'10	-4.7m
retrograde	5281 Oct 01 08:42	10°♏13'16	
evening set	5281 Oct 19 08:58	4°♏10'57	
inferior conj	5281 Oct 22 17:16	2°♏07'37	-8°23'06
minimum elong	5281 Oct 22 22:15	1°♏59'52	8°22'42
min. Earth dist.	5281 Oct 23 10:38	1°♏40'34	0.28694 AU
morning rise	5281 Oct 26 11:17	29°♎49'04	
	5281 Oct 26 04:00	30℞♎	
direct	5281 Nov 13 03:18	23°♎52'22	
greatest brilliancy	5281 Nov 24 06:56	26°♎08'55	-4.8m
	5281 Dec 02 01:59	0°♏	
asc. node	5281 Dec 08 09:27	4°♏08'37	
morning max el	5282 Jan 02 06:56	26°♏05'22	46°33'10
	5282 Jan 06 03:10	0°♐	
	5282 Feb 02 11:45	0°♑	
	5282 Feb 28 00:35	0°♒	
	5282 Mar 24 19:33	0°♓	
desc. node	5282 Mar 30 00:47	6°♓22'33	
	5282 Apr 18 06:25	0°♈	
	5282 May 12 14:06	0°♉	
	5282 Jun 05 21:27	0°♊	
	5282 Jun 30 05:42	0°♋	
morning set	5282 Jul 07 15:04	9°♋05'49	
asc. node	5282 Jul 21 02:17	25°♋40'09	
	5282 Jul 24 14:47	0°♌	
superior conj	5282 Aug 13 18:00	24°♌46'21	0°52'42
minimum elong	5282 Aug 13 09:09	24°♌19'08	0°52'20
max. Earth dist.	5282 Aug 13 12:07	24°♌28'15	1.73447 AU
	5282 Aug 17 23:57	0°♍	
	5282 Sep 11 08:49	0°♎	
evening rise	5282 Sep 18 19:37	9°♎10'22	
	5282 Oct 05 17:49	0°♏	
	5282 Oct 30 03:46	0°♐	
desc. node	5282 Nov 09 17:26	12°♐57'53	
	5282 Nov 23 15:17	0°♑	
	5282 Dec 18 04:49	0°♒	
	5283 Jan 11 22:13	0°♓	
	5283 Feb 06 01:19	0°♈	
asc. node	5283 Mar 02 18:59	28°♈25'18	
	5283 Mar 04 05:06	0°♉	
evening max el	5283 Mar 22 12:15	19°♉28'01	46°55'35
	5283 Apr 02 09:34	0°♊	
greatest brilliancy	5283 May 01 11:35	20°♊15'43	-4.8m
retrograde	5283 May 12 00:32	22°♊21'05	
evening set	5283 May 27 22:57	17°♊21'56	
inferior conj	5283 Jun 02 02:59	14°♊13'57	4°45'25
minimum elong	5283 Jun 02 12:16	13°♊59'30	4°42'57
min. Earth dist.	5283 Jun 02 00:09	14°♊18'22	0.27980 AU
morning rise	5283 Jun 08 01:58	10°♊40'10	
desc. node	5283 Jun 22 10:13	6°♊14'05	
direct	5283 Jun 23 03:48	6°♊13'27	
greatest brilliancy	5283 Jul 03 00:36	8°♊00'33	-4.8m
	5283 Aug 04 07:24	0°♋	
morning max el	5283 Aug 11 02:55	6°♋20'27	45°47'17
	5283 Sep 03 07:23	0°♌	
	5283 Sep 30 07:44	0°♍	
asc. node	5283 Oct 13 11:51	15°♍13'33	
	5283 Oct 26 00:47	0°♎	
	5283 Nov 19 23:09	0°♏	
	5283 Dec 14 09:44	0°♐	
	5284 Jan 07 13:11	0°♑	
	5284 Jan 31 12:34	0°♒	
desc. node	5284 Feb 02 03:01	2°♒00'35	
morning set	5284 Feb 07 01:47	8°♒13'13	
	5284 Feb 24 09:43	0°♓	
superior conj	5284 Mar 19 09:49	0°♈11'32	-1°23'41
minimum elong	5284 Mar 19 03:14	29°♓50'49	1°23'36
	5284 Mar 19 06:09	0°♈	
max. Earth dist.	5284 Mar 21 05:50	2°♈29'54	1.71233 AU
	5284 Apr 12 03:35	0°♉	
evening rise	5284 Apr 29 00:05	21°♉04'46	
	5284 May 06 03:53	0°♊	
asc. node	5284 May 25 04:35	23°♊36'42	
	5284 May 30 08:42	0°♋	
	5284 Jun 23 19:17	0°♌	
	5284 Jul 18 13:12	0°♍	
	5284 Aug 12 17:31	0°♎	
	5284 Sep 07 14:30	0°♏	
desc. node	5284 Sep 13 19:41	7°♏01'54	
	5284 Oct 04 18:03	0°♐	
evening max el	5284 Oct 24 21:25	20°♐32'08	46°07'25
	5284 Nov 04 03:10	0°♑	
greatest brilliancy	5284 Dec 03 15:39	19°♑29'42	-4.8m
retrograde	5284 Dec 13 05:03	21°♑10'26	
evening set	5284 Dec 27 16:34	17°♑03'57	
inferior conj	5285 Jan 02 20:44	13°♑27'16	-0°31'18
minimum elong	5285 Jan 02 21:56	13°♑25'25	0°30'54
min. Earth dist.	5285 Jan 03 06:29	13°♑12'20	0.26927 AU
asc. node	5285 Jan 04 21:21	12°♑13'13	

morning rise	5285 Jan 09	02:52	9°♑47'33		
direct	5285 Jan 23	14:32	5°♑38'49		
greatest brilliancy	5285 Feb 03	03:20	7°♑45'04	-4.9m	
	5285 Mar 06	05:05	0°♒		
morning max el	5285 Mar 15	05:37	8°♒49'22	46°59'01	
	5285 Apr 04	03:10	0°♓		
desc. node	5285 Apr 26	12:39	25°♓28'47		
	5285 Apr 30	09:45	0°♈		
	5285 May 25	18:12	0°♉		
	5285 Jun 19	17:31	0°♊		
	5285 Jul 14	12:48	0°♋		
	5285 Aug 08	05:23	0°♌		
asc. node	5285 Aug 17	14:06	11°♌24'59		
	5285 Sep 01	18:52	0°♍		
morning set	5285 Sep 13	24:00	14°♍59'17		
	5285 Sep 26	04:47	0°♎		
max. Earth dist.	5285 Oct 18	00:45	26°♎58'02	1.72921 AU	
superior conj	5285 Oct 20	11:39	0°♏00'15	1°23'18	
minimum elong	5285 Oct 20	15:48	0°♏13'07	1°23'15	
	5285 Oct 20	11:34	0°♏		
	5285 Nov 13	16:16	0°♐		
evening rise	5285 Nov 27	02:59	16°♐41'50		
desc. node	5285 Dec 07	05:25	29°♐15'12		
	5285 Dec 07	19:49	0°♑		
	5285 Dec 31	22:39	0°♒		
	5286 Jan 25	01:17	0°♓		
	5286 Feb 18	05:29	0°♈		
	5286 Mar 14	15:10	0°♉		
asc. node	5286 Mar 30	06:43	18°♉56'36		
	5286 Apr 08	13:01	0°♊		
	5286 May 04	11:08	0°♋		
	5286 Jun 01	16:58	0°♌		
evening max el	5286 Jun 01	18:35	0°♌03'59	46°00'20	
greatest brilliancy	5286 Jul 09	23:56	28°♌46'29	-4.7m	
	5286 Jul 13	18:31	0°♍		
desc. node	5286 Jul 19	22:11	0°♍57'54		
retrograde	5286 Jul 21	01:26	0°♍59'24		
	5286 Jul 28	02:43	30°℞♌		
evening set	5286 Aug 05	15:30	26°♌18'27		
min. Earth dist.	5286 Aug 11	02:40	23°♌00'15	0.28948 AU	
inferior conj	5286 Aug 11	13:34	22°♌43'06	-5°03'46	
minimum elong	5286 Aug 11	04:17	22°♌57'43	5°01'33	
morning rise	5286 Aug 16	17:21	19°♌34'20		
direct	5286 Sep 02	02:54	14°♌29'04		
greatest brilliancy	5286 Sep 12	03:26	16°♌17'32	-4.7m	
	5286 Oct 04	18:01	0°♍		
morning max el	5286 Oct 20	22:33	14°♍24'59	45°49'21	
	5286 Nov 05	07:38	0°♎		
asc. node	5286 Nov 09	23:45	4°♎59'12		
	5286 Dec 02	08:23	0°♏		
	5286 Dec 27	18:48	0°♐		
	5287 Jan 21	10:46	0°♑		
	5287 Feb 14	17:15	0°♒		
desc. node	5287 Mar 01	14:54	18°♒33'25		
	5287 Mar 10	18:52	0°♓		
	5287 Apr 03	18:22	0°♈		
morning set	5287 Apr 24	17:31	26°♈13'51		
	5287 Apr 27	17:55	0°♉		
	5287 May 21	19:17	0°♊		
superior conj	5287 Jun 02	21:05	15°♊00'13	-0°45'24	
minimum elong	5287 Jun 03	06:20	15°♊28'55	0°45'01	
max. Earth dist.	5287 Jun 06	10:38	19°♊25'32	1.72530 AU	
	5287 Jun 14	23:28	0°♋		
asc. node	5287 Jun 22	16:28	9°♋32'06		
	5287 Jul 09	06:37	0°♌		
evening rise	5287 Jul 10	23:19	2°♌05'16		
	5287 Aug 02	16:37	0°♍		
	5287 Aug 27	05:56	0°♎		
	5287 Sep 20	23:57	0°♏		
desc. node	5287 Oct 12	07:35	25°♏34'26		
	5287 Oct 16	00:43	0°♐		
	5287 Nov 10	11:06	0°♑		
	5287 Dec 06	13:27	0°♒		
	5288 Jan 03	05:16	0°♓		
evening max el	5288 Jan 06	16:28	3°♓31'28	47°00'47	
asc. node	5288 Feb 02	09:13	27°♓04'07		
	5288 Feb 06	19:18	0°♈		
greatest brilliancy	5288 Feb 16	08:28	4°♈46'11	-4.9m	
retrograde	5288 Feb 26	07:39	6°♈40'02		
evening set	5288 Mar 14	15:01	0°♈53'05		
	5288 Mar 16	02:14	30°℞♓		
min. Earth dist.	5288 Mar 17	11:54	29°♓08'16	0.27034 AU	
inferior conj	5288 Mar 18	00:24	28°♓48'57	8°42'16	
minimum elong	5288 Mar 17	18:09	28°♓58'37	8°41'41	
morning rise	5288 Mar 20	21:22	27°♓03'27		
direct	5288 Apr 07	13:01	21°♓04'06		
greatest brilliancy	5288 Apr 16	20:19	22°♓41'43	-4.9m	
	5288 Apr 30	18:38	0°♈		
desc. node	5288 May 24	00:32	19°♈35'26		
morning max el	5288 May 27	10:54	22°♈56'12	46°29'12	
	5288 Jun 03	11:03	0°♉		
	5288 Jul 01	05:14	0°♊		
	5288 Jul 27	11:09	0°♋		
	5288 Aug 22	00:28	0°♌		
asc. node	5288 Sep 14	01:55	27°♌33'18		
	5288 Sep 16	02:39	0°♍		
	5288 Oct 10	19:40	0°♎		
	5288 Nov 04	05:19	0°♏		
morning set	5288 Nov 22	00:20	22°♏02'59		
	5288 Nov 28	09:44	0°♐		
	5288 Dec 22	10:48	0°♑		
max. Earth dist.	5288 Dec 28	02:23	7°♑04'01	1.71664 AU	
superior conj	5288 Dec 30	16:41	10°♑19'01	0°09'43	
minimum elong	5288 Dec 30	19:06	10°♑26'35	0°09'37	
behind sun begin	5288 Dec 29	22:35	9°♑22'20		
behind sun end	5288 Dec 31	15:37	11°♑30'50		
desc. node	5289 Jan 03	17:15	15°♑21'18		
	5289 Jan 15	09:44	0°♒		
	5289 Feb 08	07:20	0°♓		
evening rise	5289 Feb 09	02:15	0°♓59'23		
	5289 Mar 04	04:53	0°♈		
	5289 Mar 28	04:32	0°♉		
	5289 Apr 21	09:11	0°♊		
asc. node	5289 Apr 26	18:43	6°♊38'31		
	5289 May 15	22:16	0°♋		
	5289 Jun 10	00:25	0°♌		
	5289 Jul 06	00:32	0°♍		
	5289 Aug 02	22:02	0°♎		
evening max el	5289 Aug 11	07:34	8°♎17'10	45°32'54	
desc. node	5289 Aug 16	09:57	13°♎04'18		
	5289 Sep 06	15:29	0°♏		
greatest brilliancy	5289 Sep 19	06:53	6°♏19'32	-4.7m	
retrograde	5289 Sep 29	00:38	8°♏02'32		
evening set	5289 Oct 17	01:39	1°♏57'43		
inferior conj	5289 Oct 20	08:57	29°♎55'50	-8°27'23	
minimum elong	5289 Oct 20	13:14	29°♎49'11	8°27'07	
	5289 Oct 20	06:17	30°℞♎		
min. Earth dist.	5289 Oct 21	01:01	29°♎30'49	0.28744 AU	
morning rise	5289 Oct 24	00:36	27°♎40'58		
direct	5289 Nov 10	19:40	21°♎40'03		
greatest brilliancy	5289 Nov 21	22:07	23°♎55'48	-4.8m	

	5289 Dec 03 06:32	0°♏		
asc. node	5289 Dec 07 11:30	2°♏57'25		
morning max el	5289 Dec 30 23:11	23°♏51'30	46°31'32	
	5290 Jan 05 23:12	0°♐		
	5290 Feb 02 02:58	0°♑		
	5290 Feb 27 13:57	0°♒		
	5290 Mar 24 07:58	0°♓		
desc. node	5290 Mar 29 02:45	5°♓51'00		
	5290 Apr 17 18:15	0°♈		
	5290 May 12 01:31	0°♉		
	5290 Jun 05 08:32	0°♊		
	5290 Jun 29 16:32	0°♋		
morning set	5290 Jul 05 07:34	6°♋55'41		
asc. node	5290 Jul 20 04:11	25°♋13'08		
	5290 Jul 24 01:27	0°♌		
superior conj	5290 Aug 11 11:39	22°♌40'15	0°50'07	
minimum elong	5290 Aug 11 03:00	22°♌13'36	0°49'46	
max. Earth dist.	5290 Aug 11 10:22	22°♌36'16	1.73441 AU	
	5290 Aug 17 10:34	0°♍		
	5290 Sep 10 19:30	0°♎		
evening rise	5290 Sep 16 13:43	7°♎05'24		
	5290 Oct 05 04:40	0°♏		
	5290 Oct 29 14:53	0°♐		
desc. node	5290 Nov 08 19:33	12°♐29'51		
	5290 Nov 23 02:46	0°♑		
	5290 Dec 17 16:54	0°♒		
	5291 Jan 11 11:11	0°♓		
	5291 Feb 05 15:45	0°♈		
asc. node	5291 Mar 01 20:52	27°♈42'32		
	5291 Mar 03 22:42	0°♉		
evening max el	5291 Mar 20 03:50	17°♉10'22	46°56'55	
	5291 Apr 02 13:58	0°♊		
greatest brilliancy	5291 Apr 29 02:57	17°♊57'57	-4.9m	
retrograde	5291 May 09 16:11	20°♊03'09		
evening set	5291 May 25 16:33	15°♊00'15		
inferior conj	5291 May 30 17:37	11°♊56'18	5°03'58	
minimum elong	5291 May 31 03:17	11°♊41'16	5°01'29	
min. Earth dist.	5291 May 30 14:34	12°♊01'04	0.27948 AU	
morning rise	5291 Jun 05 14:28	8°♊25'47		
direct	5291 Jun 20 18:35	3°♊56'32		
desc. node	5291 Jun 21 12:14	3°♊57'11		
greatest brilliancy	5291 Jun 30 13:42	5°♊42'38	-4.8m	
	5291 Aug 04 08:57	0°♋		
morning max el	5291 Aug 08 18:32	4°♋08'25	45°48'04	
	5291 Sep 02 23:54	0°♌		
	5291 Sep 29 21:20	0°♍		
asc. node	5291 Oct 12 13:54	14°♍42'03		
	5291 Oct 25 13:05	0°♎		
	5291 Nov 19 10:47	0°♏		
	5291 Dec 13 21:00	0°♐		
	5292 Jan 07 00:17	0°♑		
	5292 Jan 30 23:34	0°♒		
desc. node	5292 Feb 01 04:58	1°♒32'12		
morning set	5292 Feb 04 12:46	5°♒42'33		
	5292 Feb 23 20:41	0°♓		
superior conj	5292 Mar 16 20:36	27°♓40'03	-1°22'29	
minimum elong	5292 Mar 16 13:07	27°♓16'32	1°22'23	
max. Earth dist.	5292 Mar 18 14:43	29°♓52'27	1.71214 AU	
	5292 Mar 18 17:07	0°♈		
	5292 Apr 11 14:33	0°♉		
evening rise	5292 Apr 26 11:48	18°♉37'12		
	5292 May 05 14:54	0°♊		
asc. node	5292 May 24 06:38	23°♊08'41		
	5292 May 29 19:50	0°♋		
	5292 Jun 23 06:39	0°♌		
	5292 Jul 18 01:00	0°♍		
	5292 Aug 12 06:08	0°♎		
	5292 Sep 07 04:44	0°♏		
desc. node	5292 Sep 12 21:41	6°♏25'58		
	5292 Oct 04 11:53	0°♐		
evening max el	5292 Oct 22 11:28	18°♐13'46	46°05'25	
	5292 Nov 04 09:30	0°♑		
greatest brilliancy	5292 Dec 01 05:39	17°♑07'30	-4.8m	
retrograde	5292 Dec 10 17:17	18°♑46'34		
evening set	5292 Dec 25 06:52	14°♑38'38		
inferior conj	5292 Dec 31 09:50	11°♑03'24	-0°54'56	
minimum elong	5292 Dec 31 11:56	11°♑00'10	0°54'14	
min. Earth dist.	5292 Dec 31 21:04	10°♑46'10	0.26965 AU	
asc. node	5293 Jan 03 23:18	8°♑54'10		
morning rise	5293 Jan 06 16:28	7°♑22'26		
direct	5293 Jan 21 03:53	3°♑14'15		
greatest brilliancy	5293 Jan 31 18:17	5°♑21'27	-4.9m	
	5293 Mar 06 07:27	0°♒		
morning max el	5293 Mar 12 18:21	6°♒22'46	46°59'05	
	5293 Apr 03 20:32	0°♓		
desc. node	5293 Apr 25 14:49	24°♓52'16		
	5293 Apr 30 00:09	0°♈		
	5293 May 25 07:09	0°♉		
	5293 Jun 19 05:37	0°♊		
	5293 Jul 14 00:21	0°♋		
	5293 Aug 07 16:34	0°♌		
asc. node	5293 Aug 16 16:04	10°♌57'10		
	5293 Sep 01 05:49	0°♍		
morning set	5293 Sep 11 17:25	12°♍51'59		
	5293 Sep 25 15:37	0°♎		
max. Earth dist.	5293 Oct 15 17:19	24°♎47'21	1.72958 AU	
superior conj	5293 Oct 18 04:48	27°♎51'19	1°23'57	
minimum elong	5293 Oct 18 08:16	28°♎02'04	1°23'57	
	5293 Oct 19 22:23	0°♏		
	5293 Nov 13 03:12	0°♐		
evening rise	5293 Nov 24 17:43	14°♐24'17		
desc. node	5293 Dec 06 07:24	28°♐46'51		
	5293 Dec 07 06:57	0°♑		
	5293 Dec 31 10:00	0°♒		
	5294 Jan 24 12:53	0°♓		
	5294 Feb 17 17:26	0°♈		
	5294 Mar 14 03:41	0°♉		
asc. node	5294 Mar 29 08:51	18°♉23'41		
	5294 Apr 08 02:36	0°♊		
	5294 May 04 02:58	0°♋		
evening max el	5294 May 30 09:11	27°♋47'51	46°01'58	
	5294 Jun 01 15:22	0°♌		
greatest brilliancy	5294 Jul 07 16:36	26°♌36'28	-4.7m	
retrograde	5294 Jul 18 17:22	28°♌49'20		
desc. node	5294 Jul 19 00:08	28°♌49'15		
evening set	5294 Aug 03 05:51	24°♌11'03		
inferior conj	5294 Aug 09 05:53	20°♌33'16	-4°47'29	
minimum elong	5294 Aug 08 20:51	20°♌47'28	4°45'16	
min. Earth dist.	5294 Aug 08 19:11	20°♌50'06	0.28922 AU	
morning rise	5294 Aug 14 12:05	17°♌20'54		
direct	5294 Aug 30 18:22	12°♌19'31		
greatest brilliancy	5294 Sep 09 19:41	14°♌08'12	-4.7m	
	5294 Oct 05 01:31	0°♍		
morning max el	5294 Oct 18 13:03	12°♍10'31	45°48'30	
	5294 Nov 05 01:16	0°♎		
asc. node	5294 Nov 09 01:50	4°♎19'15		
	5294 Dec 01 22:37	0°♏		
	5294 Dec 27 07:37	0°♐		
	5295 Jan 20 22:53	0°♑		
	5295 Feb 14 04:59	0°♒		
desc. node	5295 Feb 28 16:51	18°♒03'31		

	5295 Mar 10 06:19	0°♓	
	5295 Apr 03 05:36	0°♈	
morning set	5295 Apr 22 05:49	23°♈47'30	
	5295 Apr 27 05:00	0°♉	
	5295 May 21 06:15	0°♊	
superior conj	5295 May 31 11:43	12°♊42'48	-0°48'24
minimum elong	5295 May 31 21:23	13°♊12'50	0°48'01
max. Earth dist.	5295 Jun 04 01:25	17°♊08'42	1.72479 AU
	5295 Jun 14 10:23	0°♋	
asc. node	5295 Jun 21 18:23	9°♋04'20	
evening rise	5295 Jul 08 16:16	29°♋56'05	
	5295 Jul 08 17:33	0°♌	
	5295 Aug 02 03:40	0°♍	
	5295 Aug 26 17:16	0°♎	
	5295 Sep 20 11:46	0°♏	
desc. node	5295 Oct 11 09:41	25°♏03'33	
	5295 Oct 15 13:20	0°♐	
	5295 Nov 10 01:00	0°♑	
	5295 Dec 06 05:47	0°♒	
	5296 Jan 03 03:37	0°♓	
evening max el	5296 Jan 04 05:22	1°♓04'53	46°59'36
asc. node	5296 Feb 01 11:10	25°♓40'27	
	5296 Feb 08 16:29	0°♈	
greatest brilliancy	5296 Feb 13 21:31	2°♈18'19	-4.9m
retrograde	5296 Feb 23 20:47	4°♈12'31	
	5296 Mar 09 09:25	30°℞♓	
evening set	5296 Mar 11 23:46	28°♓31'37	
min. Earth dist.	5296 Mar 15 00:29	26°♓41'25	0.27003 AU
inferior conj	5296 Mar 15 13:11	26°♓21'51	8°34'55
minimum elong	5296 Mar 15 06:07	26°♓32'44	8°34'10
morning rise	5296 Mar 18 12:34	24°♓33'00	
direct	5296 Apr 05 01:18	18°♓37'09	
greatest brilliancy	5296 Apr 14 09:12	20°♓15'35	-4.9m
	5296 May 01 17:19	0°♈	
desc. node	5296 May 23 02:28	18°♈40'53	
morning max el	5296 May 25 00:49	20°♈34'35	46°31'01
	5296 Jun 03 07:32	0°♉	
	5296 Jun 30 20:41	0°♊	
	5296 Jul 27 00:29	0°♋	
	5296 Aug 21 12:40	0°♌	
asc. node	5296 Sep 13 03:59	27°♌04'35	
	5296 Sep 15 14:13	0°♍	
	5296 Oct 10 06:54	0°♎	
	5296 Nov 03 16:23	0°♏	
morning set	5296 Nov 19 15:54	19°♏48'02	
	5296 Nov 27 20:45	0°♐	
	5296 Dec 21 21:50	0°♑	
max. Earth dist.	5296 Dec 25 16:43	4°♑44'09	1.71703 AU
superior conj	5296 Dec 28 05:10	7°♑53'16	0°13'27
minimum elong	5296 Dec 28 08:28	8°♑03'37	0°13'18
behind sun begin	5296 Dec 27 17:58	7°♑18'14	
behind sun end	5296 Dec 28 22:58	8°♑49'00	
desc. node	5297 Jan 02 19:09	14°♑52'41	
	5297 Jan 14 20:48	0°♒	
evening rise	5297 Feb 06 13:21	28°♒28'28	
	5297 Feb 07 18:31	0°♓	
	5297 Mar 03 16:12	0°♈	
	5297 Mar 27 16:01	0°♉	
	5297 Apr 20 20:54	0°♊	
asc. node	5297 Apr 25 20:45	6°♊08'29	
	5297 May 15 10:25	0°♋	
	5297 Jun 09 13:28	0°♌	
	5297 Jul 05 15:26	0°♍	
	5297 Aug 02 17:57	0°♎	
evening max el	5297 Aug 08 23:33	6°♎06'43	45°32'51

desc. node	5297 Aug 15 11:58	12°♎11'21	
	5297 Sep 07 21:50	0°♏	
greatest brilliancy	5297 Sep 16 20:07	4°♏05'55	-4.7m
retrograde	5297 Sep 26 16:13	5°♏50'28	
	5297 Oct 14 07:08	30°℞♎	
evening set	5297 Oct 14 17:57	29°♎43'51	
inferior conj	5297 Oct 18 00:31	27°♎42'53	-8°30'56
minimum elong	5297 Oct 18 04:02	27°♎37'23	8°30'46
min. Earth dist.	5297 Oct 18 15:09	27°♎20'03	0.28793 AU
morning rise	5297 Oct 21 13:58	25°♎31'15	
direct	5297 Nov 08 12:13	19°♎26'42	
greatest brilliancy	5297 Nov 19 12:47	21°♎40'52	-4.8m
	5297 Dec 04 03:50	0°♏	
asc. node	5297 Dec 06 13:25	1°♏46'50	
morning max el	5297 Dec 28 15:13	21°♏36'13	46°29'55
	5298 Jan 05 19:01	0°♐	
	5298 Feb 01 18:16	0°♑	
	5298 Feb 27 03:25	0°♒	
	5298 Mar 23 20:30	0°♓	
desc. node	5298 Mar 28 04:53	5°♓19'38	
	5298 Apr 17 06:11	0°♈	
	5298 May 11 13:03	0°♉	
	5298 Jun 04 19:45	0°♊	
	5298 Jun 29 03:31	0°♋	
morning set	5298 Jul 03 00:11	4°♋45'21	
asc. node	5298 Jul 19 06:13	24°♋45'58	
	5298 Jul 23 12:17	0°♌	
superior conj	5298 Aug 09 05:26	20°♌34'05	0°47'29
minimum elong	5298 Aug 08 21:00	20°♌08'09	0°47'07
max. Earth dist.	5298 Aug 09 09:11	20°♌45'39	1.73431 AU
	5298 Aug 16 21:20	0°♍	
	5298 Sep 10 06:19	0°♎	
evening rise	5298 Sep 14 07:59	5°♎00'32	
	5298 Oct 04 15:39	0°♏	
	5298 Oct 29 02:11	0°♐	
desc. node	5298 Nov 07 21:33	12°♐00'49	
	5298 Nov 22 14:30	0°♑	
	5298 Dec 17 05:14	0°♒	
	5299 Jan 11 00:26	0°♓	
	5299 Feb 05 06:32	0°♈	
asc. node	5299 Feb 28 23:00	26°♈59'39	
	5299 Mar 03 16:49	0°♉	
evening max el	5299 Mar 17 19:13	14°♉51'51	46°58'18
	5299 Apr 02 20:27	0°♊	
greatest brilliancy	5299 Apr 26 18:52	15°♊40'42	-4.9m
retrograde	5299 May 07 07:32	17°♊44'51	
evening set	5299 May 23 10:18	12°♊38'24	
inferior conj	5299 May 28 08:19	9°♊38'33	5°22'07
minimum elong	5299 May 28 18:16	9°♊23'02	5°19'37
min. Earth dist.	5299 May 28 05:11	9°♊43'25	0.27915 AU
morning rise	5299 Jun 03 02:43	6°♊11'18	
direct	5299 Jun 18 09:15	1°♊39'33	
desc. node	5299 Jun 20 14:13	1°♊45'15	
greatest brilliancy	5299 Jun 28 02:58	3°♊24'31	-4.8m
	5299 Aug 04 09:18	0°♋	
morning max el	5299 Aug 06 09:28	1°♋54'33	45°48'55
	5299 Sep 02 16:07	0°♌	
	5299 Sep 29 10:50	0°♍	
asc. node	5299 Oct 11 15:59	14°♍10'50	
	5299 Oct 25 01:19	0°♎	
	5299 Nov 18 22:23	0°♏	
	5299 Dec 13 08:18	0°♐	
	5300 Jan 06 11:26	0°♑	
	5300 Jan 30 10:39	0°♒	
desc. node	5300 Jan 31 07:03	1°♒03'58	
morning set	5300 Feb 01 23:25	3°♒10'36	

	5300 Feb 23 07:44	0°♓	
superior conj	5300 Mar 15 07:00	25°♓07'16	-1°21'07
minimum elong	5300 Mar 14 22:41	24°♓41'07	1°20'58
max. Earth dist.	5300 Mar 16 20:30	27°♓05'09	1.71191 AU
	5300 Mar 19 04:07	0°♈	
	5300 Apr 12 01:31	0°♉	
evening rise	5300 Apr 24 23:08	16°♉08'26	
	5300 May 06 01:53	0°♊	
asc. node	5300 May 24 08:33	22°♊40'25	
	5300 May 30 06:56	0°♋	
	5300 Jun 23 18:00	0°♌	
	5300 Jul 18 12:47	0°♍	
	5300 Aug 12 18:45	0°♎	
	5300 Sep 07 19:01	0°♏	
desc. node	5300 Sep 12 23:50	5°♏50'32	
	5300 Oct 05 05:58	0°♐	
evening max el	5300 Oct 21 00:32	15°♐53'38	46°03'25
	5300 Nov 05 18:01	0°♑	
greatest brilliancy	5300 Nov 29 19:41	14°♑45'53	-4.8m
retrograde	5300 Dec 09 05:15	16°♑23'25	
evening set	5300 Dec 23 21:17	12°♑13'22	
inferior conj	5300 Dec 29 22:57	8°♑40'03	-1°18'18
minimum elong	5300 Dec 30 01:56	8°♑35'28	1°17'21
min. Earth dist.	5300 Dec 30 11:53	8°♑20'12	0.27012 AU
asc. node	5301 Jan 04 01:19	5°♑37'24	
morning rise	5301 Jan 05 05:53	4°♑58'10	
direct	5301 Jan 19 17:00	0°♑49'49	
greatest brilliancy	5301 Jan 30 09:57	2°♑58'54	-4.9m
	5301 Mar 07 08:29	0°♒	
morning max el	5301 Mar 11 07:08	3°♒56'08	46°59'04
	5301 Apr 04 13:34	0°♓	
desc. node	5301 Apr 25 16:46	24°♓15'33	
	5301 Apr 30 14:21	0°♈	
	5301 May 25 19:55	0°♉	
	5301 Jun 19 17:31	0°♊	
	5301 Jul 14 11:41	0°♋	
	5301 Aug 08 03:32	0°♌	
asc. node	5301 Aug 16 18:09	10°♌30'22	
	5301 Sep 01 16:33	0°♍	
morning set	5301 Sep 10 10:58	10°♍45'35	
	5301 Sep 26 02:14	0°♎	
max. Earth dist.	5301 Oct 14 11:11	22°♎41'21	1.72994 AU
superior conj	5301 Oct 16 22:15	25°♎44'01	1°24'30
minimum elong	5301 Oct 17 01:03	25°♎52'40	1°24'30
	5301 Oct 20 09:00	0°♏	
	5301 Nov 13 13:55	0°♐	
evening rise	5301 Nov 23 08:52	12°♐08'54	
desc. node	5301 Dec 06 09:22	28°♐19'09	
	5301 Dec 07 17:50	0°♑	
	5301 Dec 31 21:08	0°♒	
	5302 Jan 25 00:19	0°♓	
	5302 Feb 18 05:16	0°♈	
	5302 Mar 14 16:08	0°♉	
asc. node	5302 Mar 29 10:50	17°♉50'34	
	5302 Apr 08 16:09	0°♊	
	5302 May 04 18:53	0°♋	
evening max el	5302 May 28 23:42	25°♋32'03	46°03'56
	5302 Jun 02 14:28	0°♌	
greatest brilliancy	5302 Jul 06 08:45	24°♌26'35	-4.8m
retrograde	5302 Jul 17 09:44	26°♌40'14	
desc. node	5302 Jul 19 02:11	26°♌36'51	
evening set	5302 Aug 01 20:21	22°♌04'05	
inferior conj	5302 Aug 07 22:11	18°♌24'12	-4°30'47
minimum elong	5302 Aug 07 13:28	18°♌37'52	4°28'35
min. Earth dist.	5302 Aug 07 11:32	18°♌40'55	0.28895 AU
morning rise	5302 Aug 13 06:47	15°♌08'32	
direct	5302 Aug 29 09:47	10°♌10'38	
greatest brilliancy	5302 Sep 08 11:57	11°♌59'53	-4.7m
	5302 Oct 06 06:22	0°♍	
morning max el	5302 Oct 17 04:35	9°♍59'34	45°47'47
	5302 Nov 05 18:10	0°♎	
asc. node	5302 Nov 09 03:41	3°♎40'10	
	5302 Dec 02 12:21	0°♏	
	5302 Dec 27 20:01	0°♐	
	5303 Jan 21 10:38	0°♑	
	5303 Feb 14 16:20	0°♒	
desc. node	5303 Feb 28 18:59	17°♒35'14	
	5303 Mar 10 17:26	0°♓	
	5303 Apr 03 16:33	0°♈	
morning set	5303 Apr 20 17:39	21°♈20'22	
	5303 Apr 27 15:50	0°♉	
	5303 May 21 16:59	0°♊	
superior conj	5303 May 30 01:48	10°♊24'22	-0°51'22
minimum elong	5303 May 30 11:51	10°♊55'36	0°50'58
max. Earth dist.	5303 Jun 02 14:13	14°♊46'26	1.72427 AU
	5303 Jun 14 21:02	0°♋	
asc. node	5303 Jun 21 20:24	8°♋37'39	
evening rise	5303 Jul 07 08:50	27°♋46'35	
	5303 Jul 09 04:11	0°♌	
	5303 Aug 02 14:24	0°♍	
	5303 Aug 27 04:17	0°♎	
	5303 Sep 20 23:17	0°♏	
desc. node	5303 Oct 11 11:39	24°♏33'14	
	5303 Oct 16 01:39	0°♐	
	5303 Nov 10 14:39	0°♑	
	5303 Dec 06 21:57	0°♒	
evening max el	5304 Jan 02 19:26	28°♒42'53	46°58'27
	5304 Jan 04 02:19	0°♓	
asc. node	5304 Feb 01 13:15	24°♓15'54	
greatest brilliancy	5304 Feb 12 10:01	29°♓51'35	-4.9m
	5304 Feb 12 19:22	0°♈	
retrograde	5304 Feb 22 10:27	1°♈46'43	
	5304 Mar 02 16:48	30°ᴿ♓	
evening set	5304 Mar 10 08:31	26°♓11'57	
min. Earth dist.	5304 Mar 13 12:52	24°♓16'36	0.26975 AU
inferior conj	5304 Mar 14 02:03	23°♓56'20	8°26'36
minimum elong	5304 Mar 13 18:17	24°♓08'17	8°25'39
morning rise	5304 Mar 17 04:11	22°♓03'41	
direct	5304 Apr 03 14:15	16°♓11'56	
greatest brilliancy	5304 Apr 12 21:45	17°♓50'30	-4.9m
	5304 May 03 09:32	0°♈	
desc. node	5304 May 23 04:28	17°♈48'40	
morning max el	5304 May 23 15:34	18°♈16'03	46°32'33
	5304 Jun 04 03:02	0°♉	
	5304 Jul 01 11:37	0°♊	
	5304 Jul 27 13:25	0°♋	
	5304 Aug 22 00:29	0°♌	
asc. node	5304 Sep 13 06:01	26°♌36'52	
	5304 Sep 16 01:24	0°♍	
	5304 Oct 10 17:44	0°♎	
	5304 Nov 04 03:04	0°♏	
morning set	5304 Nov 18 07:40	17°♏34'59	
	5304 Nov 28 07:23	0°♐	
	5304 Dec 22 08:29	0°♑	
max. Earth dist.	5304 Dec 24 04:55	2°♑18'50	1.71741 AU
superior conj	5304 Dec 26 18:02	5°♑29'56	0°17'07
minimum elong	5304 Dec 26 22:11	5°♑42'57	0°16'57
desc. node	5305 Jan 02 21:16	14°♑25'47	
	5305 Jan 15 07:31	0°♒	
evening rise	5305 Feb 05 00:49	25°♒59'56	

	5305 Feb 08 05:18	0°♓	
	5305 Mar 04 03:06	0°♈	
	5305 Mar 28 03:05	0°♉	
	5305 Apr 21 08:14	0°♊	
asc. node	5305 Apr 25 22:41	5°♊39'21	
	5305 May 15 22:15	0°♋	
	5305 Jun 10 02:15	0°♌	
	5305 Jul 06 06:14	0°♍	
	5305 Aug 03 14:10	0°♎	
evening max el	5305 Aug 07 15:53	3°♎57'56	45°32'54
desc. node	5305 Aug 15 14:05	11°♎18'37	
	5305 Sep 10 17:29	0°♏	
greatest brilliancy	5305 Sep 15 10:04	1°♏54'25	-4.7m
retrograde	5305 Sep 25 07:36	3°♏39'52	
	5305 Oct 09 01:02	30°℞♎	
evening set	5305 Oct 13 10:10	27°♎32'11	
inferior conj	5305 Oct 16 16:15	25°♎31'38	-8°33'49
minimum elong	5305 Oct 16 19:01	25°♎27'20	8°33'42
min. Earth dist.	5305 Oct 17 05:34	25°♎10'51	0.28835 AU
morning rise	5305 Oct 20 03:45	23°♎22'46	
direct	5305 Nov 07 04:52	17°♎15'14	
greatest brilliancy	5305 Nov 18 03:23	19°♎27'25	-4.8m
	5305 Dec 05 18:58	0°♏	
asc. node	5305 Dec 06 15:31	0°♏39'52	
morning max el	5305 Dec 27 06:37	19°♏20'39	46°28'11
	5306 Jan 06 13:49	0°♐	
	5306 Feb 02 08:59	0°♑	
	5306 Feb 27 16:26	0°♒	
	5306 Mar 24 08:36	0°♓	
desc. node	5306 Mar 28 06:49	4°♓48'47	
	5306 Apr 17 17:43	0°♈	
	5306 May 12 00:10	0°♉	
	5306 Jun 05 06:34	0°♊	
	5306 Jun 29 14:08	0°♋	
morning set	5306 Jul 01 16:52	2°♋36'14	
asc. node	5306 Jul 19 08:18	24°♋19'59	
	5306 Jul 23 22:48	0°♌	
superior conj	5306 Aug 07 23:08	18°♌28'35	0°44'46
minimum elong	5306 Aug 07 14:59	18°♌03'31	0°44'24
max. Earth dist.	5306 Aug 08 06:38	18°♌51'41	1.73420 AU
	5306 Aug 17 07:49	0°♍	
	5306 Sep 10 16:52	0°♎	
evening rise	5306 Sep 13 02:06	2°♎56'05	
	5306 Oct 05 02:22	0°♏	
	5306 Oct 29 13:11	0°♐	
desc. node	5306 Nov 07 23:30	11°♐32'34	
	5306 Nov 23 01:58	0°♑	
	5306 Dec 17 17:21	0°♒	
	5307 Jan 11 13:30	0°♓	
	5307 Feb 05 21:12	0°♈	
asc. node	5307 Mar 01 01:01	26°♈16'48	
	5307 Mar 04 11:04	0°♉	
evening max el	5307 Mar 16 10:05	12°♉32'41	46°59'36
	5307 Apr 04 04:56	0°♊	
greatest brilliancy	5307 Apr 25 11:21	13°♊25'04	-4.9m
retrograde	5307 May 05 22:21	15°♊27'40	
evening set	5307 May 22 04:13	10°♊17'37	
inferior conj	5307 May 26 23:07	7°♊22'06	5°39'42
minimum elong	5307 May 27 09:18	7°♊06'11	5°37'13
min. Earth dist.	5307 May 26 20:12	7°♊26'38	0.27881 AU
morning rise	5307 Jun 01 14:51	3°♊58'14	
	5307 Jun 11 11:52	30°℞♉	
direct	5307 Jun 16 23:39	29°♉23'48	
desc. node	5307 Jun 20 16:16	29°♉39'33	
	5307 Jun 22 14:53	0°♊	
greatest brilliancy	5307 Jun 26 16:46	1°♊08'02	-4.8m
morning max el	5307 Aug 04 23:41	29°♊39'38	45°49'44
	5307 Aug 05 08:10	0°♋	
	5307 Sep 03 07:49	0°♌	
	5307 Sep 30 00:01	0°♍	
asc. node	5307 Oct 11 17:51	13°♍39'39	
	5307 Oct 25 13:20	0°♎	
	5307 Nov 19 09:47	0°♏	
	5307 Dec 13 19:22	0°♐	
	5308 Jan 06 22:22	0°♑	
	5308 Jan 30 21:32	0°♒	
morning set	5308 Jan 31 10:06	0°♒39'24	
desc. node	5308 Jan 31 09:03	0°♒36'08	
	5308 Feb 23 18:37	0°♓	
superior conj	5308 Mar 12 17:27	22°♓35'04	-1°19'35
minimum elong	5308 Mar 12 08:20	22°♓06'26	1°19'23
max. Earth dist.	5308 Mar 13 22:57	24°♓07'51	1.71174 AU
	5308 Mar 18 14:58	0°♈	
	5308 Apr 11 12:21	0°♉	
evening rise	5308 Apr 22 10:27	13°♉39'56	
	5308 May 05 12:44	0°♊	
asc. node	5308 May 23 10:37	22°♊13'00	
	5308 May 29 17:53	0°♋	
	5308 Jun 23 05:11	0°♌	
	5308 Jul 18 00:26	0°♍	
	5308 Aug 12 07:19	0°♎	
	5308 Sep 07 09:21	0°♏	
desc. node	5308 Sep 12 01:43	5°♏14'22	
	5308 Oct 05 00:28	0°♐	
evening max el	5308 Oct 18 13:21	13°♐33'13	46°01'32
	5308 Nov 06 05:28	0°♑	
greatest brilliancy	5308 Nov 27 09:33	12°♑24'34	-4.8m
retrograde	5308 Dec 06 17:38	14°♑01'16	
evening set	5308 Dec 21 12:01	9°♑48'25	
inferior conj	5308 Dec 27 12:13	6°♑17'23	-1°41'25
minimum elong	5308 Dec 27 16:03	6°♑11'30	1°40'11
min. Earth dist.	5308 Dec 28 02:42	5°♑55'11	0.27062 AU
morning rise	5309 Jan 02 19:17	2°♑35'09	
asc. node	5309 Jan 03 03:23	2°♑24'21	
	5309 Jan 08 12:18	30°℞♐	
direct	5309 Jan 17 06:17	28°♐25'56	
	5309 Jan 26 08:21	0°♑	
greatest brilliancy	5309 Jan 28 01:50	0°♑37'20	-4.9m
	5309 Mar 07 08:13	0°♒	
morning max el	5309 Mar 08 20:37	1°♒31'35	46°58'57
	5309 Apr 04 06:11	0°♓	
desc. node	5309 Apr 24 18:43	23°♓39'08	
	5309 Apr 30 04:22	0°♈	
	5309 May 25 08:35	0°♉	
	5309 Jun 19 05:23	0°♊	
	5309 Jul 13 23:01	0°♋	
	5309 Aug 07 14:30	0°♌	
asc. node	5309 Aug 15 20:07	10°♌03'14	
	5309 Sep 01 03:17	0°♍	
morning set	5309 Sep 08 04:38	8°♍39'34	
	5309 Sep 25 12:53	0°♎	
max. Earth dist.	5309 Oct 12 06:50	20°♎40'41	1.73033 AU
superior conj	5309 Oct 14 15:45	23°♎36'38	1°24'56
minimum elong	5309 Oct 14 17:50	23°♎43'06	1°24'55
	5309 Oct 19 19:41	0°♏	
	5309 Nov 13 00:44	0°♐	
evening rise	5309 Nov 21 00:01	9°♐53'15	
desc. node	5309 Dec 05 11:28	27°♐51'31	
	5309 Dec 07 04:51	0°♑	
	5309 Dec 31 08:22	0°♒	
	5310 Jan 24 11:51	0°♓	

	5310 Feb 17 17:13	0°♈		
	5310 Mar 14 04:46	0°♉		
asc. node	5310 Mar 28 12:45	17°♉16'44		
	5310 Apr 08 06:00	0°♊		
	5310 May 04 11:18	0°♋		
evening max el	5310 May 26 14:55	23°♋17'22	46°05'56	
	5310 Jun 02 14:55	0°♌		
greatest brilliancy	5310 Jul 04 00:23	22°♌15'23	-4.8m	
retrograde	5310 Jul 15 02:30	24°♌30'22		
desc. node	5310 Jul 18 04:14	24°♌19'01		
evening set	5310 Jul 30 10:57	19°♌56'07		
min. Earth dist.	5310 Aug 05 03:32	16°♌31'18	0.28865 AU	
inferior conj	5310 Aug 05 14:23	16°♌14'19	-4°13'33	
minimum elong	5310 Aug 05 06:02	16°♌27'22	4°11'23	
morning rise	5310 Aug 11 01:21	12°♌55'37		
direct	5310 Aug 27 01:28	8°♌01'02		
greatest brilliancy	5310 Sep 06 03:43	9°♌50'35	-4.7m	
	5310 Oct 06 09:36	0°♍		
morning max el	5310 Oct 14 20:42	7°♍49'46	45°47'01	
	5310 Nov 05 10:54	0°♎		
asc. node	5310 Nov 08 05:49	3°♎01'43		
	5310 Dec 02 02:10	0°♏		
	5310 Dec 27 08:37	0°♐		
	5311 Jan 20 22:36	0°♑		
	5311 Feb 14 03:57	0°♒		
desc. node	5311 Feb 27 20:56	17°♒05'34		
	5311 Mar 10 04:47	0°♓		
	5311 Apr 03 03:44	0°♈		
morning set	5311 Apr 18 05:16	18°♈51'48		
	5311 Apr 27 02:53	0°♉		
	5311 May 21 03:57	0°♊		
superior conj	5311 May 27 15:43	8°♊04'28	-0°54'15	
minimum elong	5311 May 28 02:05	8°♊36'40	0°53'52	
max. Earth dist.	5311 May 31 04:16	12°♊27'07	1.72379 AU	
	5311 Jun 14 07:57	0°♋		
asc. node	5311 Jun 20 22:30	8°♋10'23		
evening rise	5311 Jul 05 01:22	25°♋35'58		
	5311 Jul 08 15:07	0°♌		
	5311 Aug 02 01:27	0°♍		
	5311 Aug 26 15:36	0°♎		
	5311 Sep 20 11:06	0°♏		
desc. node	5311 Oct 10 13:38	24°♏02'10		
	5311 Oct 15 14:18	0°♐		
	5311 Nov 10 04:45	0°♑		
	5311 Dec 06 14:49	0°♒		
evening max el	5311 Dec 31 10:09	26°♒21'13	46°57'02	
	5312 Jan 04 02:36	0°♓		
asc. node	5312 Jan 31 15:14	22°♓46'27		
greatest brilliancy	5312 Feb 09 22:14	27°♓22'44	-4.9m	
retrograde	5312 Feb 19 23:55	29°♓18'31		
evening set	5312 Mar 07 16:52	23°♓50'25		
min. Earth dist.	5312 Mar 11 00:59	21°♓49'36	0.26945 AU	
inferior conj	5312 Mar 11 14:39	21°♓28'36	8°17'08	
minimum elong	5312 Mar 11 06:14	21°♓41'32	8°16'00	
morning rise	5312 Mar 14 19:46	19°♓31'41		
direct	5312 Apr 01 03:19	13°♓44'46		
greatest brilliancy	5312 Apr 10 09:50	15°♓22'57	-4.9m	
	5312 May 03 22:18	0°♈		
morning max el	5312 May 21 05:41	15°♈54'39	46°34'03	
desc. node	5312 May 22 06:36	16°♈56'32		
	5312 Jun 03 22:24	0°♉		
	5312 Jul 01 02:45	0°♊		
	5312 Jul 27 02:38	0°♋		
	5312 Aug 21 12:39	0°♌		
asc. node	5312 Sep 12 07:57	26°♌07'41		
	5312 Sep 15 12:56	0°♍		
	5312 Oct 10 04:55	0°♎		
	5312 Nov 03 14:05	0°♏		
morning set	5312 Nov 15 23:41	15°♏21'43		
	5312 Nov 27 18:21	0°♐		
max. Earth dist.	5312 Dec 21 15:57	29°♐48'56	1.71784 AU	
	5312 Dec 21 19:30	0°♑		
superior conj	5312 Dec 24 07:06	3°♑06'16	0°20'45	
minimum elong	5312 Dec 24 12:04	3°♑21'47	0°20'31	
desc. node	5313 Jan 01 23:18	13°♑57'30		
	5313 Jan 14 18:38	0°♒		
evening rise	5313 Feb 02 12:07	23°♒29'31		
	5313 Feb 07 16:33	0°♓		
	5313 Mar 03 14:29	0°♈		
	5313 Mar 27 14:37	0°♉		
	5313 Apr 20 20:03	0°♊		
asc. node	5313 Apr 25 00:45	5°♊09'14		
	5313 May 15 10:35	0°♋		
	5313 Jun 09 15:36	0°♌		
	5313 Jul 05 21:44	0°♍		
	5313 Aug 03 11:40	0°♎		
evening max el	5313 Aug 05 07:28	1°♎45'52	45°32'57	
desc. node	5313 Aug 14 16:00	10°♎22'54		
greatest brilliancy	5313 Sep 13 00:38	29°♎42'15	-4.7m	
	5313 Sep 13 22:19	0°♏		
retrograde	5313 Sep 22 22:35	1°♏28'01		
	5313 Oct 01 13:51	30°℞♎		
evening set	5313 Oct 11 02:03	25°♎19'53		
inferior conj	5313 Oct 14 08:00	23°♎19'19	-8°35'55	
minimum elong	5313 Oct 14 09:59	23°♎16'12	8°35'51	
min. Earth dist.	5313 Oct 14 20:17	23°♎00'05	0.28872 AU	
morning rise	5313 Oct 17 17:47	21°♎12'43		
direct	5313 Nov 04 21:04	15°♎02'44		
greatest brilliancy	5313 Nov 15 18:18	17°♎13'15	-4.8m	
asc. node	5313 Dec 05 17:32	29°♎33'30		
	5313 Dec 06 06:41	0°♏		
morning max el	5313 Dec 24 20:51	17°♏01'16	46°26'33	
	5314 Jan 06 08:28	0°♐		
	5314 Feb 01 23:51	0°♑		
	5314 Feb 27 05:45	0°♒		
	5314 Mar 23 21:05	0°♓		
desc. node	5314 Mar 27 08:48	4°♓16'56		
	5314 Apr 17 05:41	0°♈		
	5314 May 11 11:45	0°♉		
	5314 Jun 04 17:51	0°♊		
morning set	5314 Jun 29 09:06	0°♋24'21		
	5314 Jun 29 01:12	0°♋		
asc. node	5314 Jul 18 10:13	23°♋52'10		
	5314 Jul 23 09:43	0°♌		
superior conj	5314 Aug 05 16:33	16°♌20'59	0°41'57	
minimum elong	5314 Aug 05 08:44	15°♌56'56	0°41'37	
max. Earth dist.	5314 Aug 06 02:50	16°♌52'36	1.73407 AU	
	5314 Aug 16 18:43	0°♍		
	5314 Sep 10 03:50	0°♎		
evening rise	5314 Sep 10 20:07	0°♎50'03		
	5314 Oct 04 13:30	0°♏		
	5314 Oct 29 00:36	0°♐		
desc. node	5314 Nov 07 01:36	11°♐03'38		
	5314 Nov 22 13:50	0°♑		
	5314 Dec 17 05:50	0°♒		
	5315 Jan 11 02:57	0°♓		
	5315 Feb 05 12:23	0°♈		
asc. node	5315 Feb 28 02:54	25°♈31'55		
	5315 Mar 04 06:12	0°♉		
evening max el	5315 Mar 13 23:45	10°♉09'06	47°00'37	
	5315 Apr 04 17:17	0°♊		

greatest brilliancy	5315 Apr 23 03:46	11°♊07'15	-4.9m
retrograde	5315 May 03 12:37	13°♊08'14	
evening set	5315 May 19 21:55	7°♊54'15	
inferior conj	5315 May 24 13:40	5°♊03'22	5°56'48
minimum elong	5315 May 25 00:02	4°♊47'10	5°54'22
min. Earth dist.	5315 May 24 11:14	5°♊07'10	0.27852 AU
morning rise	5315 May 30 02:31	1°♊43'15	
	5315 Jun 02 10:37	30°℞♉	
direct	5315 Jun 14 13:20	27°♉05'33	
desc. node	5315 Jun 19 18:17	27°♉36'27	
greatest brilliancy	5315 Jun 24 06:56	28°♉49'52	-4.8m
	5315 Jun 27 07:21	0°♊	
morning max el	5315 Aug 02 13:26	27°♊21'57	45°50'44
	5315 Aug 05 06:42	0°♋	
	5315 Sep 02 23:41	0°♌	
	5315 Sep 29 13:29	0°♍	
asc. node	5315 Oct 10 19:57	13°♍08'12	
	5315 Oct 25 01:38	0°♎	
	5315 Nov 18 21:28	0°♏	
	5315 Dec 13 06:44	0°♐	
	5316 Jan 06 09:34	0°♑	
morning set	5316 Jan 28 21:16	28°♑08'56	
desc. node	5316 Jan 30 11:01	0°♒07'24	
	5316 Jan 30 08:40	0°♒	
	5316 Feb 23 05:41	0°♓	
superior conj	5316 Mar 10 04:12	20°♓03'14	-1°17'52
minimum elong	5316 Mar 09 18:24	19°♓32'24	1°17'39
max. Earth dist.	5316 Mar 11 02:04	21°♓12'01	1.71162 AU
	5316 Mar 18 02:00	0°♈	
	5316 Apr 10 23:24	0°♉	
evening rise	5316 Apr 19 21:51	11°♉10'58	
	5316 May 04 23:51	0°♊	
asc. node	5316 May 22 12:40	21°♊44'43	
	5316 May 29 05:08	0°♋	
	5316 Jun 22 16:41	0°♌	
	5316 Jul 17 12:26	0°♍	
	5316 Aug 11 20:14	0°♎	
	5316 Sep 07 00:11	0°♏	
desc. node	5316 Sep 11 03:46	4°♏37'30	
	5316 Oct 04 19:50	0°♐	
evening max el	5316 Oct 16 02:18	11°♐12'31	45°59'45
	5316 Nov 06 21:16	0°♑	
greatest brilliancy	5316 Nov 24 22:46	10°♑01'52	-4.8m
retrograde	5316 Dec 04 06:31	11°♑38'28	
evening set	5316 Dec 19 02:51	7°♑22'26	
inferior conj	5316 Dec 25 01:22	3°♑53'51	-2°04'23
minimum elong	5316 Dec 25 06:02	3°♑46'43	2°02'54
min. Earth dist.	5316 Dec 25 17:06	3°♑29'47	0.27112 AU
morning rise	5316 Dec 31 08:24	0°♑11'50	
	5316 Dec 31 17:16	30°℞♐	
asc. node	5317 Jan 02 05:21	29°♐14'05	
direct	5317 Jan 14 19:52	26°♐01'14	
greatest brilliancy	5317 Jan 25 17:11	28°♐14'38	-4.9m
	5317 Jan 29 15:37	0°♑	
morning max el	5317 Mar 06 11:02	29°♑09'11	46°59'01
	5317 Mar 07 07:04	0°♒	
	5317 Apr 03 22:32	0°♓	
desc. node	5317 Apr 23 20:53	23°♓03'33	
	5317 Apr 29 18:16	0°♈	
	5317 May 24 21:14	0°♉	
	5317 Jun 18 17:17	0°♊	
	5317 Jul 13 10:26	0°♋	
	5317 Aug 07 01:35	0°♌	
asc. node	5317 Aug 14 22:07	9°♌35'45	
	5317 Aug 31 14:08	0°♍	
morning set	5317 Sep 05 22:05	6°♍32'32	
	5317 Sep 24 23:37	0°♎	
max. Earth dist.	5317 Oct 10 03:35	18°♎43'13	1.73068 AU
superior conj	5317 Oct 12 09:00	21°♎28'20	1°25'13
minimum elong	5317 Oct 12 10:23	21°♎32'34	1°25'14
	5317 Oct 19 06:27	0°♏	
	5317 Nov 12 11:38	0°♐	
evening rise	5317 Nov 18 15:06	7°♐37'14	
desc. node	5317 Dec 04 13:27	27°♐23'13	
	5317 Dec 06 15:57	0°♑	
	5317 Dec 30 19:43	0°♒	
	5318 Jan 23 23:29	0°♓	
	5318 Feb 17 05:15	0°♈	
	5318 Mar 13 17:26	0°♉	
asc. node	5318 Mar 27 14:53	16°♉43'40	
	5318 Apr 07 19:51	0°♊	
	5318 May 04 03:49	0°♋	
evening max el	5318 May 24 06:57	21°♋05'11	46°07'52
	5318 Jun 02 16:27	0°♌	
greatest brilliancy	5318 Jul 01 15:51	20°♌04'22	-4.8m
retrograde	5318 Jul 12 19:29	22°♌20'40	
desc. node	5318 Jul 17 06:10	21°♌56'48	
evening set	5318 Jul 28 01:48	17°♌48'17	
inferior conj	5318 Aug 03 06:36	14°♌04'34	-3°55'53
minimum elong	5318 Aug 02 22:41	14°♌16'57	3°53'48
min. Earth dist.	5318 Aug 02 19:18	14°♌22'13	0.28836 AU
morning rise	5318 Aug 08 19:54	10°♌42'59	
direct	5318 Aug 24 17:47	5°♌51'44	
greatest brilliancy	5318 Sep 03 19:05	7°♌40'59	-4.7m
	5318 Oct 06 11:16	0°♍	
morning max el	5318 Oct 12 13:10	5°♍41'03	45°46'11
	5318 Nov 05 03:16	0°♎	
asc. node	5318 Nov 07 07:52	2°♎23'35	
	5318 Dec 01 15:48	0°♏	
	5318 Dec 26 21:04	0°♐	
	5319 Jan 20 10:26	0°♑	
	5319 Feb 13 15:25	0°♒	
desc. node	5319 Feb 26 22:54	16°♒36'20	
	5319 Mar 09 16:00	0°♓	
	5319 Apr 02 14:46	0°♈	
morning set	5319 Apr 15 17:03	16°♈24'11	
	5319 Apr 26 13:46	0°♉	
	5319 May 20 14:42	0°♊	
superior conj	5319 May 25 05:51	5°♊45'50	-0°57'02
minimum elong	5319 May 25 16:27	6°♊18'48	0°56'39
max. Earth dist.	5319 May 28 21:03	10°♊16'53	1.72327 AU
	5319 Jun 13 18:37	0°♋	
asc. node	5319 Jun 20 00:25	7°♋43'19	
evening rise	5319 Jul 02 18:05	23°♋26'46	
	5319 Jul 08 01:47	0°♌	
	5319 Aug 01 12:17	0°♍	
	5319 Aug 26 02:44	0°♎	
	5319 Sep 19 22:46	0°♏	
desc. node	5319 Oct 09 15:43	23°♏31'49	
	5319 Oct 15 02:50	0°♐	
	5319 Nov 09 18:47	0°♑	
	5319 Dec 06 07:48	0°♒	
evening max el	5319 Dec 29 00:51	24°♒00'13	46°55'29
	5320 Jan 04 03:50	0°♓	
asc. node	5320 Jan 30 17:12	21°♓14'19	
greatest brilliancy	5320 Feb 07 10:47	24°♓54'52	-4.9m
retrograde	5320 Feb 17 12:57	26°♓50'34	
evening set	5320 Mar 05 01:08	21°♓29'33	
min. Earth dist.	5320 Mar 08 13:17	19°♓22'42	0.26913 AU
inferior conj	5320 Mar 09 03:11	19°♓01'20	8°06'42
minimum elong	5320 Mar 08 18:10	19°♓15'12	8°05'24

morning rise	5320 Mar 12 11:24	16°♓59'50	
direct	5320 Mar 29 16:19	11°♓18'10	
greatest brilliancy	5320 Apr 07 22:06	12°♓55'56	-4.9m
	5320 May 04 07:29	0°♈	
morning max el	5320 May 18 18:52	13°♈31'38	46°35'42
desc. node	5320 May 21 08:31	16°♈05'37	
	5320 Jun 03 16:54	0°♉	
	5320 Jun 30 17:17	0°♊	
	5320 Jul 26 15:20	0°♋	
	5320 Aug 21 00:22	0°♌	
asc. node	5320 Sep 11 10:02	25°♌40'09	
	5320 Sep 15 00:05	0°♍	
	5320 Oct 09 15:46	0°♎	
	5320 Nov 03 00:48	0°♏	
morning set	5320 Nov 13 15:41	13°♏09'20	
	5320 Nov 27 05:02	0°♐	
max. Earth dist.	5320 Dec 19 01:47	27°♐16'13	1.71828 AU
	5320 Dec 21 06:13	0°♑	
superior conj	5320 Dec 21 20:15	0°♑43'50	0°24'20
minimum elong	5320 Dec 22 01:57	1°♑01'41	0°24'04
desc. node	5321 Jan 01 01:13	13°♑29'48	
	5321 Jan 14 05:26	0°♒	
evening rise	5321 Jan 30 23:22	21°♒00'02	
	5321 Feb 07 03:28	0°♓	
	5321 Mar 03 01:33	0°♈	
	5321 Mar 27 01:52	0°♉	
	5321 Apr 20 07:35	0°♊	
asc. node	5321 Apr 24 02:46	4°♊39'51	
	5321 May 14 22:37	0°♋	
	5321 Jun 09 04:37	0°♌	
	5321 Jul 05 12:57	0°♍	
evening max el	5321 Aug 02 22:16	29°♍33'30	45°33'06
	5321 Aug 03 09:19	0°♎	
desc. node	5321 Aug 13 18:02	9°♎27'59	
greatest brilliancy	5321 Sep 10 15:34	27°♎32'22	-4.7m
retrograde	5321 Sep 20 13:35	29°♎18'29	
evening set	5321 Oct 08 17:48	23°♎10'19	
inferior conj	5321 Oct 12 00:01	21°♎09'13	-8°37'06
minimum elong	5321 Oct 12 01:12	21°♎07'22	8°37'05
min. Earth dist.	5321 Oct 12 11:29	20°♎51'15	0.28911 AU
morning rise	5321 Oct 15 08:29	19°♎04'25	
direct	5321 Nov 02 13:04	12°♎52'15	
greatest brilliancy	5321 Nov 13 10:09	15°♎01'55	-4.8m
asc. node	5321 Dec 04 19:27	28°♎29'55	
	5321 Dec 06 14:45	0°♏	
morning max el	5321 Dec 22 10:47	14°♏42'11	46°24'50
	5322 Jan 06 02:18	0°♐	
	5322 Feb 01 14:13	0°♑	
	5322 Feb 26 18:37	0°♒	
	5322 Mar 23 09:09	0°♓	
desc. node	5322 Mar 26 10:56	3°♓46'39	
	5322 Apr 16 17:14	0°♈	
	5322 May 10 22:55	0°♉	
	5322 Jun 04 04:44	0°♊	
morning set	5322 Jun 27 01:22	28°♊13'40	
	5322 Jun 28 11:52	0°♋	
asc. node	5322 Jul 17 12:15	23°♋25'54	
	5322 Jul 22 20:15	0°♌	
superior conj	5322 Aug 03 10:14	14°♌15'31	0°39'07
minimum elong	5322 Aug 03 02:48	13°♌52'38	0°38'46
max. Earth dist.	5322 Aug 03 21:44	14°♌50'54	1.73388 AU
	5322 Aug 16 05:11	0°♍	
evening rise	5322 Sep 08 14:31	28°♍46'44	
	5322 Sep 09 14:21	0°♎	
	5322 Oct 04 00:11	0°♏	
	5322 Oct 28 11:38	0°♐	
desc. node	5322 Nov 06 03:35	10°♐35'30	
	5322 Nov 22 01:21	0°♑	
	5322 Dec 16 18:04	0°♒	
	5323 Jan 10 16:12	0°♓	
	5323 Feb 05 03:27	0°♈	
asc. node	5323 Feb 27 05:03	24°♈48'06	
	5323 Mar 04 01:32	0°♉	
evening max el	5323 Mar 11 12:37	7°♉44'22	47°01'44
	5323 Apr 05 09:15	0°♊	
greatest brilliancy	5323 Apr 20 19:52	8°♊49'50	-4.9m
retrograde	5323 May 01 02:58	10°♊49'50	
evening set	5323 May 17 15:34	5°♊31'27	
inferior conj	5323 May 22 04:10	2°♊45'28	6°13'20
minimum elong	5323 May 22 14:37	2°♊29'07	6°10'59
min. Earth dist.	5323 May 22 02:10	2°♊48'36	0.27822 AU
	5323 May 26 16:40	30°℞♉	
morning rise	5323 May 27 13:57	29°♉29'33	
direct	5323 Jun 12 02:44	24°♉47'54	
desc. node	5323 Jun 18 20:16	25°♉38'54	
greatest brilliancy	5323 Jun 21 21:19	26°♉32'51	-4.8m
	5323 Jun 29 13:21	0°♊	
morning max el	5323 Jul 31 03:43	25°♊06'34	45°51'57
	5323 Aug 05 03:55	0°♋	
	5323 Sep 02 14:52	0°♌	
	5323 Sep 29 02:22	0°♍	
asc. node	5323 Oct 09 21:58	12°♍37'59	
	5323 Oct 24 13:24	0°♎	
	5323 Nov 18 08:41	0°♏	
	5323 Dec 12 17:41	0°♐	
	5324 Jan 05 20:25	0°♑	
morning set	5324 Jan 26 08:22	25°♑39'15	
desc. node	5324 Jan 29 13:05	29°♑39'53	
	5324 Jan 29 19:30	0°♒	
	5324 Feb 22 16:30	0°♓	
superior conj	5324 Mar 07 14:30	17°♓30'41	-1°15'59
minimum elong	5324 Mar 07 04:05	16°♓57'56	1°15'44
max. Earth dist.	5324 Mar 08 05:22	18°♓17'29	1.71155 AU
	5324 Mar 17 12:48	0°♈	
	5324 Apr 10 10:11	0°♉	
evening rise	5324 Apr 17 08:49	8°♉41'27	
	5324 May 04 10:42	0°♊	
asc. node	5324 May 21 14:34	21°♊16'55	
	5324 May 28 16:07	0°♋	
	5324 Jun 22 03:55	0°♌	
	5324 Jul 17 00:10	0°♍	
	5324 Aug 11 08:55	0°♎	
	5324 Sep 06 14:48	0°♏	
desc. node	5324 Sep 10 05:52	4°♏01'43	
	5324 Oct 04 15:13	0°♐	
evening max el	5324 Oct 13 16:08	8°♐55'41	45°58'08
	5324 Nov 07 17:27	0°♑	
greatest brilliancy	5324 Nov 22 11:32	7°♑40'49	-4.8m
retrograde	5324 Dec 01 19:59	9°♑17'46	
evening set	5324 Dec 16 18:05	4°♑58'23	
inferior conj	5324 Dec 22 14:44	1°♑32'12	-2°26'43
minimum elong	5324 Dec 22 20:11	1°♑23'52	2°25'02
min. Earth dist.	5324 Dec 23 07:15	1°♑06'58	0.27170 AU
	5324 Dec 25 03:23	30°℞♐	
morning rise	5324 Dec 28 21:32	27°♐50'44	
asc. node	5325 Jan 01 07:20	26°♐10'05	
direct	5325 Jan 12 10:17	23°♐38'32	
greatest brilliancy	5325 Jan 23 08:10	25°♐53'03	-4.9m
	5325 Jan 31 12:26	0°♑	
morning max el	5325 Mar 04 02:13	26°♑49'29	46°58'38
	5325 Mar 07 04:45	0°♒	

	5325 Apr 03 14:28	0°♓	
desc. node	5325 Apr 22 22:47	22°♓27'44	
	5325 Apr 29 07:56	0°♈	
	5325 May 24 09:41	0°♉	
	5325 Jun 18 04:59	0°♊	
	5325 Jul 12 21:38	0°♋	
	5325 Aug 06 12:25	0°♌	
asc. node	5325 Aug 14 00:10	9°♌09'05	
	5325 Aug 31 00:46	0°♍	
morning set	5325 Sep 03 15:35	4°♍26'20	
	5325 Sep 24 10:09	0°♎	
max. Earth dist.	5325 Oct 08 00:04	16°♎45'34	1.73095 AU
superior conj	5325 Oct 10 02:34	19°♎21'38	1°25'23
minimum elong	5325 Oct 10 03:14	19°♎23'41	1°25'24
	5325 Oct 18 17:01	0°♏	
	5325 Nov 11 22:18	0°♐	
evening rise	5325 Nov 16 06:38	5°♐23'28	
desc. node	5325 Dec 03 15:24	26°♐55'47	
	5325 Dec 06 02:47	0°♑	
	5325 Dec 30 06:48	0°♒	
	5326 Jan 23 10:54	0°♓	
	5326 Feb 16 17:09	0°♈	
	5326 Mar 13 06:05	0°♉	
asc. node	5326 Mar 26 16:50	16°♉10'01	
	5326 Apr 07 09:48	0°♊	
	5326 May 03 20:41	0°♋	
evening max el	5326 May 21 23:19	18°♋53'34	46°09'52
	5326 Jun 02 19:32	0°♌	
greatest brilliancy	5326 Jun 29 07:44	17°♌53'31	-4.8m
retrograde	5326 Jul 10 12:15	20°♌10'13	
desc. node	5326 Jul 16 08:13	19°♌29'02	
evening set	5326 Jul 25 16:41	15°♌39'51	
inferior conj	5326 Jul 31 22:36	11°♌54'15	-3°37'51
minimum elong	5326 Jul 31 15:10	12°♌05'53	3°35'50
min. Earth dist.	5326 Jul 31 10:54	12°♌12'33	0.28803 AU
morning rise	5326 Aug 06 14:07	8°♌29'47	
direct	5326 Aug 22 10:08	3°♌42'04	
greatest brilliancy	5326 Sep 01 09:46	5°♌30'19	-4.7m
	5326 Oct 06 11:38	0°♍	
morning max el	5326 Oct 10 05:08	3°♍31'19	45°45'28
	5326 Nov 04 19:17	0°♎	
asc. node	5326 Nov 06 09:43	1°♎45'28	
	5326 Dec 01 05:12	0°♏	
	5326 Dec 26 09:19	0°♐	
	5327 Jan 19 22:05	0°♑	
	5327 Feb 13 02:43	0°♒	
desc. node	5327 Feb 26 01:01	16°♒07'56	
	5327 Mar 09 03:06	0°♓	
	5327 Apr 02 01:45	0°♈	
morning set	5327 Apr 13 04:31	13°♈55'37	
	5327 Apr 26 00:40	0°♉	
	5327 May 20 01:31	0°♊	
superior conj	5327 May 22 19:22	3°♊24'57	-0°59'46
minimum elong	5327 May 23 06:09	3°♊58'28	0°59'24
max. Earth dist.	5327 May 26 13:52	8°♊06'24	1.72277 AU
	5327 Jun 13 05:23	0°♋	
asc. node	5327 Jun 19 02:26	7°♋16'14	
evening rise	5327 Jun 30 10:05	21°♋14'55	
	5327 Jul 07 12:35	0°♌	
	5327 Jul 31 23:13	0°♍	
	5327 Aug 25 13:59	0°♎	
	5327 Sep 19 10:34	0°♏	
desc. node	5327 Oct 08 17:39	23°♏00'41	
	5327 Oct 14 15:32	0°♐	
	5327 Nov 09 09:01	0°♑	
	5327 Dec 06 01:09	0°♒	
evening max el	5327 Dec 26 15:03	21°♒38'12	46°54'01
	5328 Jan 04 06:21	0°♓	
asc. node	5328 Jan 29 19:17	19°♓39'32	
greatest brilliancy	5328 Feb 05 00:04	22°♓28'36	-4.9m
retrograde	5328 Feb 15 01:46	24°♓23'32	
evening set	5328 Mar 02 09:42	19°♓09'38	
min. Earth dist.	5328 Mar 06 02:09	16°♓56'23	0.26882 AU
inferior conj	5328 Mar 06 15:58	16°♓35'07	7°55'30
minimum elong	5328 Mar 06 06:26	16°♓49'48	7°53'58
morning rise	5328 Mar 10 03:22	14°♓28'46	
direct	5328 Mar 27 05:00	8°♓52'33	
greatest brilliancy	5328 Apr 05 11:07	10°♓30'15	-4.9m
	5328 May 04 14:05	0°♈	
morning max el	5328 May 16 07:17	11°♈06'20	46°37'03
desc. node	5328 May 20 10:32	15°♈15'45	
	5328 Jun 03 11:03	0°♉	
	5328 Jun 30 07:50	0°♊	
	5328 Jul 26 04:12	0°♋	
	5328 Aug 20 12:16	0°♌	
asc. node	5328 Sep 10 12:02	25°♌11'44	
	5328 Sep 14 11:26	0°♍	
	5328 Oct 09 02:48	0°♎	
	5328 Nov 02 11:41	0°♏	
morning set	5328 Nov 11 07:34	10°♏56'03	
	5328 Nov 26 15:53	0°♐	
max. Earth dist.	5328 Dec 16 12:06	24°♐44'35	1.71871 AU
superior conj	5328 Dec 19 09:36	28°♐21'35	0°27'50
minimum elong	5328 Dec 19 16:01	28°♐41'38	0°27'33
	5328 Dec 20 17:06	0°♑	
desc. node	5328 Dec 31 03:19	13°♑02'11	
	5329 Jan 13 16:24	0°♒	
evening rise	5329 Jan 28 10:58	18°♒31'15	
	5329 Feb 06 14:32	0°♓	
	5329 Mar 02 12:43	0°♈	
	5329 Mar 26 13:13	0°♉	
	5329 Apr 19 19:14	0°♊	
asc. node	5329 Apr 23 04:42	4°♊09'49	
	5329 May 14 10:52	0°♋	
	5329 Jun 08 18:00	0°♌	
	5329 Jul 05 04:47	0°♍	
evening max el	5329 Jul 31 12:24	27°♍18'17	45°33'18
	5329 Aug 03 08:24	0°♎	
desc. node	5329 Aug 12 20:08	8°♎30'39	
greatest brilliancy	5329 Sep 08 06:13	25°♎20'41	-4.7m
retrograde	5329 Sep 18 04:40	27°♎07'39	
evening set	5329 Oct 06 09:01	20°♎59'43	
inferior conj	5329 Oct 09 15:53	18°♎57'44	-8°37'35
minimum elong	5329 Oct 09 16:15	18°♎57'09	8°37'35
min. Earth dist.	5329 Oct 10 02:35	18°♎40'58	0.28948 AU
morning rise	5329 Oct 12 23:20	16°♎54'23	
direct	5329 Oct 31 04:35	10°♎40'14	
greatest brilliancy	5329 Nov 11 02:09	12°♎49'42	-4.8m
asc. node	5329 Dec 03 21:34	27°♎27'15	
	5329 Dec 06 20:54	0°♏	
morning max el	5329 Dec 20 00:59	12°♏23'00	46°23'16
	5330 Jan 05 20:03	0°♐	
	5330 Feb 01 04:42	0°♑	
	5330 Feb 26 07:40	0°♒	
	5330 Mar 22 21:23	0°♓	
desc. node	5330 Mar 25 12:50	3°♓15'06	
	5330 Apr 16 04:57	0°♈	
	5330 May 10 10:15	0°♉	
	5330 Jun 03 15:48	0°♊	
morning set	5330 Jun 24 17:38	26°♊02'08	
	5330 Jun 27 22:45	0°♋	

asc. node	5330 Jul 16 14:19	22°♋58'58	
	5330 Jul 22 07:03	0°♌	
superior conj	5330 Aug 01 03:44	12°♌08'31	0°36'12
minimum elong	5330 Jul 31 20:42	11°♌46'53	0°35'52
max. Earth dist.	5330 Aug 01 15:47	12°♌45'36	1.73376 AU
	5330 Aug 15 15:59	0°♍	
evening rise	5330 Sep 06 08:42	26°♍41'39	
	5330 Sep 09 01:13	0°♎	
	5330 Oct 03 11:16	0°♏	
	5330 Oct 27 23:02	0°♐	
desc. node	5330 Nov 05 05:32	10°♐06'10	
	5330 Nov 21 13:16	0°♑	
	5330 Dec 16 06:42	0°♒	
	5331 Jan 10 05:55	0°♓	
	5331 Feb 04 19:04	0°♈	
asc. node	5331 Feb 26 07:02	24°♈02'17	
	5331 Mar 03 21:47	0°♉	
evening max el	5331 Mar 09 02:00	5°♉20'06	47°02'59
	5331 Apr 06 07:14	0°♊	
greatest brilliancy	5331 Apr 18 11:29	6°♊31'13	-4.9m
retrograde	5331 Apr 28 17:51	8°♊31'07	
evening set	5331 May 15 09:23	3°♊08'00	
inferior conj	5331 May 19 18:46	0°♊27'03	6°29'16
minimum elong	5331 May 20 05:16	0°♊10'40	6°26'59
min. Earth dist.	5331 May 19 16:49	0°♊30'05	0.27793 AU
	5331 May 20 12:07	30°℞♉	
morning rise	5331 May 25 01:24	27°♉15'51	
direct	5331 Jun 09 16:28	22°♉29'44	
desc. node	5331 Jun 17 22:20	23°♉45'32	
greatest brilliancy	5331 Jun 19 11:21	24°♉15'09	-4.8m
	5331 Jul 01 00:46	0°♊	
morning max el	5331 Jul 28 18:51	22°♊52'32	45°53'02
	5331 Aug 05 00:39	0°♋	
	5331 Sep 02 06:10	0°♌	
	5331 Sep 28 15:33	0°♍	
asc. node	5331 Oct 08 23:52	12°♍06'18	
	5331 Oct 24 01:33	0°♎	
	5331 Nov 17 20:17	0°♏	
	5331 Dec 12 05:01	0°♐	
	5332 Jan 05 07:38	0°♑	
morning set	5332 Jan 23 19:33	23°♑08'51	
desc. node	5332 Jan 28 15:07	29°♑11'12	
	5332 Jan 29 06:40	0°♒	
	5332 Feb 22 03:38	0°♓	
superior conj	5332 Mar 05 00:44	14°♓56'49	-1°13'56
minimum elong	5332 Mar 04 13:47	14°♓22'23	1°13'38
max. Earth dist.	5332 Mar 05 11:38	15°♓31'09	1.71149 AU
	5332 Mar 16 23:55	0°♈	
	5332 Apr 09 21:19	0°♉	
evening rise	5332 Apr 14 19:53	6°♉11'06	
	5332 May 03 21:52	0°♊	
asc. node	5332 May 20 16:38	20°♊48'37	
	5332 May 28 03:23	0°♋	
	5332 Jun 21 15:27	0°♌	
	5332 Jul 16 12:13	0°♍	
	5332 Aug 10 22:01	0°♎	
	5332 Sep 06 06:02	0°♏	
desc. node	5332 Sep 09 07:46	3°♏23'48	
	5332 Oct 04 11:49	0°♐	
evening max el	5332 Oct 11 06:54	6°♐39'45	45°56'21
	5332 Nov 08 22:14	0°♑	
greatest brilliancy	5332 Nov 20 00:14	5°♑18'18	-4.8m
retrograde	5332 Nov 29 09:26	6°♑55'18	
evening set	5332 Dec 14 09:25	2°♑32'48	
	5332 Dec 18 18:35	30°℞♐	

inferior conj	5332 Dec 20 04:01	29°♐08'59	-2°48'49
minimum elong	5332 Dec 20 10:11	28°♐59'32	2°46'57
min. Earth dist.	5332 Dec 20 21:07	28°♐42'48	0.27226 AU
morning rise	5332 Dec 26 10:18	25°♐28'18	
asc. node	5332 Dec 31 09:24	23°♐08'54	
direct	5333 Jan 10 00:49	21°♐14'35	
greatest brilliancy	5333 Jan 20 22:28	23°♐29'15	-4.9m
	5333 Feb 01 19:39	0°♑	
morning max el	5333 Mar 01 17:09	24°♑28'05	46°58'14
	5333 Mar 07 02:05	0°♒	
	5333 Apr 03 06:29	0°♓	
desc. node	5333 Apr 22 00:48	21°♓51'32	
	5333 Apr 28 21:47	0°♈	
	5333 May 23 22:23	0°♉	
	5333 Jun 17 16:57	0°♊	
	5333 Jul 12 09:05	0°♋	
	5333 Aug 05 23:31	0°♌	
asc. node	5333 Aug 13 02:09	8°♌41'27	
	5333 Aug 30 11:38	0°♍	
morning set	5333 Sep 01 09:25	2°♍20'27	
	5333 Sep 23 20:58	0°♎	
max. Earth dist.	5333 Oct 05 19:58	14°♎45'19	1.73128 AU
superior conj	5333 Oct 07 20:19	17°♎14'40	1°25'27
minimum elong	5333 Oct 07 20:17	17°♎14'33	1°25'27
	5333 Oct 18 03:54	0°♏	
	5333 Nov 11 09:20	0°♐	
evening rise	5333 Nov 13 22:10	3°♐08'30	
desc. node	5333 Dec 02 17:32	26°♐27'36	
	5333 Dec 05 14:02	0°♑	
	5333 Dec 29 18:17	0°♒	
	5334 Jan 22 22:43	0°♓	
	5334 Feb 16 05:26	0°♈	
	5334 Mar 12 19:06	0°♉	
asc. node	5334 Mar 25 18:46	15°♉35'18	
	5334 Apr 07 00:11	0°♊	
	5334 May 03 14:12	0°♋	
evening max el	5334 May 19 15:47	16°♋41'20	46°11'51
	5334 Jun 03 00:42	0°♌	
greatest brilliancy	5334 Jun 27 00:34	15°♌43'18	-4.8m
retrograde	5334 Jul 08 04:54	17°♌59'28	
desc. node	5334 Jul 15 10:17	16°♌56'23	
evening set	5334 Jul 23 07:58	13°♌31'09	
min. Earth dist.	5334 Jul 29 02:59	10°♌02'26	0.28765 AU
inferior conj	5334 Jul 29 14:48	9°♌43'54	-3°19'29
minimum elong	5334 Jul 29 07:54	9°♌54'44	3°17'35
morning rise	5334 Aug 04 08:22	6°♌16'32	
direct	5334 Aug 20 02:27	1°♌32'34	
greatest brilliancy	5334 Aug 30 00:36	3°♌19'34	-4.7m
	5334 Oct 06 11:00	0°♍	
morning max el	5334 Oct 07 20:18	1°♍19'21	45°44'44
	5334 Nov 04 11:11	0°♎	
asc. node	5334 Nov 05 11:52	1°♎08'02	
	5334 Nov 30 18:44	0°♏	
	5334 Dec 25 21:47	0°♐	
	5335 Jan 19 10:01	0°♑	
	5335 Feb 12 14:19	0°♒	
desc. node	5335 Feb 25 02:58	15°♒38'09	
	5335 Mar 08 14:30	0°♓	
	5335 Apr 01 12:59	0°♈	
morning set	5335 Apr 10 15:44	11°♈25'30	
	5335 Apr 25 11:45	0°♉	
	5335 May 19 12:30	0°♊	
superior conj	5335 May 20 08:51	1°♊03'20	-1°02'24
minimum elong	5335 May 20 19:42	1°♊37'06	1°02'02
max. Earth dist.	5335 May 24 06:54	5°♊55'57	1.72223 AU

	5335 Jun 12 16:19	0°♋	
asc. node	5335 Jun 18 04:32	6°♋48'54	
evening rise	5335 Jun 28 02:07	19°♋02'31	
	5335 Jul 06 23:33	0°♌	
	5335 Jul 31 10:19	0°♍	
	5335 Aug 25 01:23	0°♎	
	5335 Sep 18 22:29	0°♏	
desc. node	5335 Oct 07 19:42	22°♏29'33	
	5335 Oct 14 04:23	0°♐	
	5335 Nov 08 23:32	0°♑	
	5335 Dec 05 19:04	0°♒	
evening max el	5335 Dec 24 04:11	19°♒12'50	46°52'11
	5336 Jan 04 10:54	0°♓	
asc. node	5336 Jan 28 21:15	17°♓59'35	
greatest brilliancy	5336 Feb 02 13:42	20°♓01'16	-4.9m
retrograde	5336 Feb 12 13:58	21°♓54'54	
evening set	5336 Feb 28 18:00	16°♓48'04	
min. Earth dist.	5336 Mar 03 15:19	14°♓27'47	0.26854 AU
inferior conj	5336 Mar 04 04:32	14°♓07'27	7°43'07
minimum elong	5336 Mar 03 18:33	14°♓22'49	7°41'24
morning rise	5336 Mar 07 19:17	11°♓55'59	
direct	5336 Mar 24 16:54	6°♓25'09	
greatest brilliancy	5336 Apr 03 00:40	8°♓03'46	-4.9m
	5336 May 04 18:57	0°♈	
morning max el	5336 May 13 19:02	8°♈38'36	46°38'38
desc. node	5336 May 19 12:40	14°♈26'23	
	5336 Jun 03 04:55	0°♉	
	5336 Jun 29 22:17	0°♊	
	5336 Jul 25 17:01	0°♋	
	5336 Aug 20 00:09	0°♌	
asc. node	5336 Sep 09 13:58	24°♌43'06	
	5336 Sep 13 22:45	0°♍	
	5336 Oct 08 13:48	0°♎	
	5336 Nov 01 22:31	0°♏	
morning set	5336 Nov 08 23:59	8°♏44'37	
	5336 Nov 26 02:41	0°♐	
max. Earth dist.	5336 Dec 14 01:57	22°♐24'08	1.71921 AU
superior conj	5336 Dec 16 23:24	26°♐00'55	0°31'15
minimum elong	5336 Dec 17 06:28	26°♐23'00	0°30'56
	5336 Dec 20 03:58	0°♑	
desc. node	5336 Dec 30 05:21	12°♑34'22	
	5337 Jan 13 03:23	0°♒	
evening rise	5337 Jan 25 22:43	16°♒02'59	
	5337 Feb 06 01:39	0°♓	
	5337 Mar 01 24:00	0°♈	
	5337 Mar 26 00:41	0°♉	
	5337 Apr 19 07:01	0°♊	
asc. node	5337 Apr 22 06:47	3°♊40'00	
	5337 May 13 23:14	0°♋	
	5337 Jun 08 07:31	0°♌	
	5337 Jul 04 20:49	0°♍	
evening max el	5337 Jul 29 02:47	25°♍03'59	45°33'44
	5337 Aug 03 08:26	0°♎	
desc. node	5337 Aug 11 22:03	7°♎31'58	
greatest brilliancy	5337 Sep 05 20:36	23°♎09'25	-4.7m
retrograde	5337 Sep 15 20:26	24°♎57'59	
evening set	5337 Oct 04 00:07	18°♎50'34	
inferior conj	5337 Oct 07 07:57	16°♎47'17	-8°37'20
minimum elong	5337 Oct 07 07:32	16°♎47'57	8°37'19
min. Earth dist.	5337 Oct 07 17:43	16°♎32'00	0.28981 AU
morning rise	5337 Oct 10 14:48	14°♎44'59	
direct	5337 Oct 28 20:24	8°♎29'18	
greatest brilliancy	5337 Nov 08 18:13	10°♎38'49	-4.8m
asc. node	5337 Dec 02 23:33	26°♎26'39	
	5337 Dec 07 00:42	0°♏	
morning max el	5337 Dec 17 16:16	10°♏07'29	46°21'46

	5338 Jan 05 13:07	0°♐	
	5338 Jan 31 18:49	0°♑	
	5338 Feb 25 20:29	0°♒	
	5338 Mar 22 09:29	0°♓	
desc. node	5338 Mar 24 14:51	2°♓44'14	
	5338 Apr 15 16:35	0°♈	
	5338 May 09 21:32	0°♉	
	5338 Jun 03 02:48	0°♊	
morning set	5338 Jun 22 09:30	23°♊49'31	
	5338 Jun 27 09:33	0°♋	
asc. node	5338 Jul 15 16:14	22°♋31'55	
	5338 Jul 21 17:44	0°♌	
superior conj	5338 Jul 29 21:01	10°♌01'15	0°33'12
minimum elong	5338 Jul 29 14:26	9°♌40'59	0°32'54
max. Earth dist.	5338 Jul 30 11:09	10°♌44'43	1.73360 AU
	5338 Aug 15 02:38	0°♍	
evening rise	5338 Sep 04 03:01	24°♍37'33	
	5338 Sep 08 11:56	0°♎	
	5338 Oct 02 22:09	0°♏	
	5338 Oct 27 10:15	0°♐	
desc. node	5338 Nov 04 07:40	9°♐38'05	
	5338 Nov 21 00:58	0°♑	
	5338 Dec 15 19:05	0°♒	
	5339 Jan 09 19:23	0°♓	
	5339 Feb 04 10:35	0°♈	
asc. node	5339 Feb 25 08:57	23°♈16'23	
	5339 Mar 03 18:26	0°♉	
evening max el	5339 Mar 06 16:10	2°♉58'31	47°03'52
	5339 Apr 07 13:33	0°♊	
greatest brilliancy	5339 Apr 16 02:18	4°♊11'33	-4.9m
retrograde	5339 Apr 26 08:58	6°♊11'50	
evening set	5339 May 13 02:58	0°♊43'49	
	5339 May 14 08:21	30°℞♉	
inferior conj	5339 May 17 09:04	28°♉07'54	6°44'39
minimum elong	5339 May 17 19:33	27°♉51'35	6°42'28
min. Earth dist.	5339 May 17 06:54	28°♉11'16	0.27768 AU
morning rise	5339 May 22 12:23	25°♉01'49	
direct	5339 Jun 07 06:26	20°♉10'54	
greatest brilliancy	5339 Jun 17 00:39	21°♉56'16	-4.8m
desc. node	5339 Jun 17 00:20	21°♉55'59	
	5339 Jul 02 01:57	0°♊	
morning max el	5339 Jul 26 10:35	20°♊40'09	45°54'14
	5339 Aug 04 20:36	0°♋	
	5339 Sep 01 21:02	0°♌	
	5339 Sep 28 04:21	0°♍	
asc. node	5339 Oct 08 01:59	11°♍36'10	
	5339 Oct 23 13:20	0°♎	
	5339 Nov 17 07:33	0°♏	
	5339 Dec 11 16:01	0°♐	
	5340 Jan 04 18:30	0°♑	
morning set	5340 Jan 21 07:25	20°♑41'44	
desc. node	5340 Jan 27 17:04	28°♑43'30	
	5340 Jan 28 17:27	0°♒	
	5340 Feb 21 14:23	0°♓	
superior conj	5340 Mar 02 11:22	12°♓25'25	-1°11'45
minimum elong	5340 Mar 01 23:59	11°♓49'38	1°11'25
max. Earth dist.	5340 Mar 02 21:22	12°♓56'54	1.71146 AU
	5340 Mar 16 10:40	0°♈	
	5340 Apr 09 08:06	0°♉	
evening rise	5340 Apr 12 07:07	3°♉42'19	
	5340 May 03 08:44	0°♊	
asc. node	5340 May 19 18:41	20°♊21'06	
	5340 May 27 14:25	0°♋	
	5340 Jun 21 02:45	0°♌	
	5340 Jul 16 00:04	0°♍	

	5340 Aug 10 10:56	0°♎	
	5340 Sep 05 21:10	0°♏	
desc. node	5340 Sep 08 09:50	2°♏47'00	
	5340 Oct 04 08:41	0°♐	
evening max el	5340 Oct 08 21:59	4°♐25'55	45°54'42
	5340 Nov 10 14:25	0°♑	
greatest brilliancy	5340 Nov 17 13:32	2°♑58'20	-4.8m
retrograde	5340 Nov 26 22:45	4°♑34'42	
evening set	5340 Dec 12 01:10	0°♑09'11	
	5340 Dec 12 07:51	30°℞♐	
inferior conj	5340 Dec 17 17:32	26°♐47'53	-3°10'31
minimum elong	5340 Dec 18 00:23	26°♐37'22	3°08'27
min. Earth dist.	5340 Dec 18 11:19	26°♐20'36	0.27279 AU
morning rise	5340 Dec 23 23:00	23°♐07'59	
asc. node	5340 Dec 30 11:21	20°♐14'49	
direct	5341 Jan 07 15:24	18°♐52'49	
greatest brilliancy	5341 Jan 18 12:54	21°♐07'17	-4.9m
	5341 Feb 02 17:23	0°♑	
morning max el	5341 Feb 27 07:37	22°♑07'02	46°57'50
	5341 Mar 06 22:07	0°♒	
	5341 Apr 02 21:43	0°♓	
desc. node	5341 Apr 21 02:55	21°♓17'22	
	5341 Apr 28 11:01	0°♈	
	5341 May 23 10:34	0°♉	
	5341 Jun 17 04:29	0°♊	
	5341 Jul 11 20:09	0°♋	
	5341 Aug 05 10:16	0°♌	
asc. node	5341 Aug 12 04:08	8°♌14'47	
	5341 Aug 29 22:12	0°♍	
morning set	5341 Aug 30 02:56	0°♍14'32	
	5341 Sep 23 07:28	0°♎	
max. Earth dist.	5341 Oct 03 13:59	12°♎40'23	1.73154 AU
superior conj	5341 Oct 05 13:52	15°♎08'13	1°25'22
minimum elong	5341 Oct 05 13:07	15°♎05'53	1°25'22
	5341 Oct 17 14:25	0°♏	
	5341 Nov 10 19:59	0°♐	
evening rise	5341 Nov 11 13:36	0°♐54'36	
desc. node	5341 Dec 01 19:29	26°♐00'08	
	5341 Dec 05 00:52	0°♑	
	5341 Dec 29 05:24	0°♒	
	5342 Jan 22 10:10	0°♓	
	5342 Feb 15 17:22	0°♈	
	5342 Mar 12 07:46	0°♉	
asc. node	5342 Mar 24 20:55	15°♉02'21	
	5342 Apr 06 14:15	0°♊	
	5342 May 03 07:34	0°♋	
evening max el	5342 May 17 07:24	14°♋28'07	46°13'38
	5342 Jun 03 07:28	0°♌	
greatest brilliancy	5342 Jun 24 17:37	13°♌34'06	-4.8m
retrograde	5342 Jul 05 20:51	15°♌49'14	
desc. node	5342 Jul 14 12:12	14°♌19'27	
evening set	5342 Jul 20 23:13	11°♌22'42	
inferior conj	5342 Jul 27 06:52	7°♌34'10	-3°00'39
minimum elong	5342 Jul 27 00:32	7°♌44'08	2°58'53
min. Earth dist.	5342 Jul 26 19:20	7°♌52'16	0.28731 AU
morning rise	5342 Aug 02 02:21	4°♌03'49	
	5342 Aug 12 04:34	30°℞♋	
direct	5342 Aug 17 18:12	29°♋23'28	
	5342 Aug 23 11:24	0°♌	
greatest brilliancy	5342 Aug 27 15:55	1°♌09'43	-4.7m
morning max el	5342 Oct 05 10:47	29°♌06'19	45°44'07
	5342 Oct 06 09:08	0°♍	
	5342 Nov 04 02:34	0°♎	
asc. node	5342 Nov 04 13:53	0°♎31'19	
	5342 Nov 30 07:50	0°♏	
	5342 Dec 25 09:51	0°♐	

	5343 Jan 18 21:31	0°♑	
	5343 Feb 12 01:30	0°♒	
desc. node	5343 Feb 24 04:57	15°♒09'38	
	5343 Mar 08 01:30	0°♓	
	5343 Mar 31 23:50	0°♈	
morning set	5343 Apr 08 02:57	8°♈56'27	
	5343 Apr 24 22:28	0°♉	
superior conj	5343 May 17 22:31	28°♉43'26	-1°04'54
minimum elong	5343 May 18 09:22	29°♉17'12	1°04'33
	5343 May 18 23:07	0°♊	
max. Earth dist.	5343 May 21 22:26	3°♊41'58	1.72167 AU
	5343 Jun 12 02:53	0°♋	
asc. node	5343 Jun 17 06:26	6°♋22'10	
evening rise	5343 Jun 25 18:11	16°♋51'21	
	5343 Jul 06 10:09	0°♌	
	5343 Jul 30 21:06	0°♍	
	5343 Aug 24 12:31	0°♎	
	5343 Sep 18 10:12	0°♏	
desc. node	5343 Oct 06 21:45	21°♏59'02	
	5343 Oct 13 17:04	0°♐	
	5343 Nov 08 13:57	0°♑	
	5343 Dec 05 13:07	0°♒	
evening max el	5343 Dec 21 16:40	16°♒46'52	46°50'33
	5344 Jan 04 17:01	0°♓	
asc. node	5344 Jan 27 23:14	16°♓16'47	
greatest brilliancy	5344 Jan 31 03:18	17°♓34'50	-4.9m
retrograde	5344 Feb 10 02:07	19°♓27'33	
evening set	5344 Feb 26 02:20	14°♓27'10	
min. Earth dist.	5344 Mar 01 04:36	12°♓00'05	0.26829 AU
inferior conj	5344 Mar 01 17:08	11°♓40'48	7°29'46
minimum elong	5344 Mar 01 06:47	11°♓56'43	7°27'52
morning rise	5344 Mar 05 11:20	9°♓24'18	
direct	5344 Mar 22 04:42	3°♓58'27	
greatest brilliancy	5344 Mar 31 14:35	5°♓38'36	-4.9m
	5344 May 04 21:42	0°♈	
morning max el	5344 May 11 07:32	6°♈13'22	46°40'16
desc. node	5344 May 18 14:35	13°♈38'05	
	5344 Jun 02 22:05	0°♉	
	5344 Jun 29 12:17	0°♊	
	5344 Jul 25 05:28	0°♋	
	5344 Aug 19 11:44	0°♌	
asc. node	5344 Sep 08 16:04	24°♌15'46	
	5344 Sep 13 09:51	0°♍	
	5344 Oct 08 00:38	0°♎	
	5344 Nov 01 09:14	0°♏	
morning set	5344 Nov 06 16:09	6°♏32'49	
	5344 Nov 25 13:23	0°♐	
max. Earth dist.	5344 Dec 11 16:50	20°♐07'16	1.71967 AU
superior conj	5344 Dec 14 12:57	23°♐39'51	0°34'38
minimum elong	5344 Dec 14 20:37	24°♐03'46	0°34'17
	5344 Dec 19 14:42	0°♑	
desc. node	5344 Dec 29 07:17	12°♑06'44	
	5345 Jan 12 14:13	0°♒	
evening rise	5345 Jan 23 10:22	13°♒34'59	
	5345 Feb 05 12:37	0°♓	
	5345 Mar 01 11:07	0°♈	
	5345 Mar 25 12:00	0°♉	
	5345 Apr 18 18:42	0°♊	
asc. node	5345 Apr 21 08:47	3°♊10'12	
	5345 May 13 11:32	0°♋	
	5345 Jun 07 20:59	0°♌	
	5345 Jul 04 12:58	0°♍	
evening max el	5345 Jul 26 17:54	22°♍52'03	45°34'15
	5345 Aug 03 09:27	0°♎	
desc. node	5345 Aug 11 00:07	6°♎32'40	

greatest brilliancy	5345 Sep 03 10:08	20°♎57'41	-4.7m
retrograde	5345 Sep 13 12:31	22°♎48'31	
evening set	5345 Oct 01 14:47	16°♎42'02	
inferior conj	5345 Oct 04 23:56	14°♎36'53	-8°36'12
minimum elong	5345 Oct 04 22:44	14°♎38'45	8°36'11
min. Earth dist.	5345 Oct 05 08:24	14°♎23'38	0.29016 AU
morning rise	5345 Oct 08 06:34	12°♎35'05	
direct	5345 Oct 26 12:41	6°♎18'26	
greatest brilliancy	5345 Nov 06 09:52	8°♎27'35	-4.8m
asc. node	5345 Dec 02 01:31	25°♎27'13	
	5345 Dec 07 02:58	0°♏	
morning max el	5345 Dec 15 08:24	7°♏54'08	46°20'08
	5346 Jan 05 05:57	0°♐	
	5346 Jan 31 08:52	0°♑	
	5346 Feb 25 09:15	0°♒	
	5346 Mar 21 21:31	0°♓	
desc. node	5346 Mar 23 16:59	2°♓13'54	
	5346 Apr 15 04:08	0°♈	
	5346 May 09 08:45	0°♉	
	5346 Jun 02 13:47	0°♊	
morning set	5346 Jun 20 01:22	21°♊36'47	
	5346 Jun 26 20:22	0°♋	
asc. node	5346 Jul 14 18:17	22°♋05'15	
	5346 Jul 21 04:25	0°♌	
superior conj	5346 Jul 27 14:19	7°♌53'53	0°30'10
minimum elong	5346 Jul 27 08:13	7°♌35'08	0°29'52
max. Earth dist.	5346 Jul 28 07:54	8°♌48'02	1.73341 AU
	5346 Aug 14 13:16	0°♍	
evening rise	5346 Sep 01 21:27	22°♍33'49	
	5346 Sep 07 22:38	0°♎	
	5346 Oct 02 09:05	0°♏	
	5346 Oct 26 21:34	0°♐	
desc. node	5346 Nov 03 09:37	9°♐09'06	
	5346 Nov 20 12:49	0°♑	
	5346 Dec 15 07:43	0°♒	
	5347 Jan 09 09:11	0°♓	
	5347 Feb 04 02:34	0°♈	
asc. node	5347 Feb 24 11:06	22°♈29'48	
	5347 Mar 03 16:02	0°♉	
evening max el	5347 Mar 04 07:13	0°♉38'33	47°04'54
	5347 Apr 09 10:38	0°♊	
greatest brilliancy	5347 Apr 13 16:51	1°♊51'05	-4.9m
retrograde	5347 Apr 24 00:14	3°♊51'41	
	5347 May 07 20:24	30°℞♉	
evening set	5347 May 10 20:32	28°♉18'56	
inferior conj	5347 May 14 23:16	25°♉47'57	6°59'23
minimum elong	5347 May 15 09:40	25°♉31'47	6°57'20
min. Earth dist.	5347 May 14 20:35	25°♉52'07	0.27739 AU
morning rise	5347 May 19 23:05	22°♉47'09	
direct	5347 Jun 04 20:41	17°♉51'30	
greatest brilliancy	5347 Jun 14 13:20	19°♉36'02	-4.8m
desc. node	5347 Jun 16 02:20	20°♉09'58	
	5347 Jul 02 20:42	0°♊	
morning max el	5347 Jul 24 02:20	18°♊27'22	45°55'25
	5347 Aug 04 16:06	0°♋	
	5347 Sep 01 11:51	0°♌	
	5347 Sep 27 17:13	0°♍	
asc. node	5347 Oct 07 03:59	11°♍05'26	
	5347 Oct 23 01:13	0°♎	
	5347 Nov 16 18:56	0°♏	
	5347 Dec 11 03:11	0°♐	
	5348 Jan 04 05:36	0°♑	
morning set	5348 Jan 18 19:00	18°♑13'02	
desc. node	5348 Jan 26 19:09	28°♑15'17	
	5348 Jan 28 04:32	0°♒	
	5348 Feb 21 01:26	0°♓	
superior conj	5348 Feb 28 21:29	9°♓51'24	-1°09'23
minimum elong	5348 Feb 28 09:48	9°♓14'41	1°09'02
max. Earth dist.	5348 Feb 29 04:54	10°♓14'45	1.71142 AU
	5348 Mar 15 21:43	0°♈	
	5348 Apr 08 19:11	0°♉	
evening rise	5348 Apr 09 17:45	1°♉10'42	
	5348 May 02 19:52	0°♊	
asc. node	5348 May 18 20:36	19°♊52'25	
	5348 May 27 01:41	0°♋	
	5348 Jun 20 14:19	0°♌	
	5348 Jul 15 12:14	0°♍	
	5348 Aug 10 00:14	0°♎	
	5348 Sep 05 12:48	0°♏	
desc. node	5348 Sep 07 11:56	2°♏09'09	
	5348 Oct 04 06:36	0°♐	
evening max el	5348 Oct 06 12:37	2°♐10'20	45°53'03
	5348 Nov 13 07:49	0°♑	
greatest brilliancy	5348 Nov 15 03:18	0°♑38'30	-4.8m
retrograde	5348 Nov 24 11:26	2°♑13'45	
	5348 Dec 05 02:01	30°℞♐	
evening set	5348 Dec 09 17:05	27°♐45'01	
inferior conj	5348 Dec 15 07:09	24°♐26'32	-3°31'34
minimum elong	5348 Dec 15 14:38	24°♐15'01	3°29'22
min. Earth dist.	5348 Dec 16 01:51	23°♐57'47	0.27338 AU
morning rise	5348 Dec 21 11:33	20°♐47'29	
asc. node	5348 Dec 29 13:23	17°♐25'18	
direct	5349 Jan 05 05:45	16°♐30'36	
greatest brilliancy	5349 Jan 16 03:54	18°♐45'17	-4.9m
	5349 Feb 03 09:57	0°♑	
morning max el	5349 Feb 24 21:08	19°♑42'16	46°57'11
	5349 Mar 06 18:01	0°♒	
	5349 Apr 02 13:13	0°♓	
desc. node	5349 Apr 20 04:49	20°♓41'20	
	5349 Apr 28 00:38	0°♈	
	5349 May 22 23:07	0°♉	
	5349 Jun 16 16:20	0°♊	
	5349 Jul 11 07:32	0°♋	
	5349 Aug 04 21:20	0°♌	
asc. node	5349 Aug 11 06:12	7°♌47'23	
morning set	5349 Aug 27 20:28	28°♌07'38	
	5349 Aug 29 09:06	0°♍	
	5349 Sep 22 18:18	0°♎	
max. Earth dist.	5349 Oct 01 06:46	10°♎30'38	1.73180 AU
superior conj	5349 Oct 03 07:41	13°♎01'37	1°25'10
minimum elong	5349 Oct 03 06:14	12°♎57'08	1°25'11
	5349 Oct 17 01:17	0°♏	
evening rise	5349 Nov 09 05:26	28°♏40'56	
	5349 Nov 10 06:58	0°♐	
desc. node	5349 Nov 30 21:27	25°♐31'44	
	5349 Dec 04 12:03	0°♑	
	5349 Dec 28 16:51	0°♒	
	5350 Jan 21 22:01	0°♓	
	5350 Feb 15 05:44	0°♈	
	5350 Mar 11 20:58	0°♉	
asc. node	5350 Mar 23 22:50	14°♉27'03	
	5350 Apr 06 04:58	0°♊	
	5350 May 03 01:57	0°♋	
evening max el	5350 May 14 22:09	12°♋11'02	46°15'37
	5350 Jun 03 17:40	0°♌	
greatest brilliancy	5350 Jun 22 10:52	11°♌23'30	-4.8m
retrograde	5350 Jul 03 12:35	13°♌37'43	
desc. node	5350 Jul 13 14:16	11°♌36'23	
evening set	5350 Jul 18 14:37	9°♌12'28	
inferior conj	5350 Jul 24 22:57	5°♌23'11	-2°41'37
minimum elong	5350 Jul 24 17:12	5°♌32'13	2°39'59
min. Earth dist.	5350 Jul 24 11:58	5°♌40'26	0.28695 AU

morning rise	5350 Jul 30 20:14	1°♌50'02	
	5350 Aug 03 10:45	30°℞♋	
direct	5350 Aug 15 09:27	27°♋12'58	
greatest brilliancy	5350 Aug 25 07:46	28°♋59'15	-4.7m
	5350 Aug 27 23:32	0°♌	
morning max el	5350 Oct 03 01:10	26°♌51'59	45°43'37
	5350 Oct 06 06:50	0°♍	
asc. node	5350 Nov 03 15:46	29°♍53'32	
	5350 Nov 03 18:06	0°♎	
	5350 Nov 29 21:11	0°♏	
	5350 Dec 24 22:11	0°♐	
	5351 Jan 18 09:19	0°♑	
	5351 Feb 11 13:00	0°♒	
desc. node	5351 Feb 23 07:03	14°♒40'32	
	5351 Mar 07 12:49	0°♓	
	5351 Mar 31 11:02	0°♈	
morning set	5351 Apr 05 13:57	6°♈25'25	
	5351 Apr 24 09:35	0°♉	
superior conj	5351 May 15 11:50	26°♉21'00	-1°07'19
minimum elong	5351 May 15 22:37	26°♉54'35	1°07'00
	5351 May 18 10:09	0°♊	
max. Earth dist.	5351 May 19 10:26	1°♊15'38	1.72113 AU
	5351 Jun 11 13:52	0°♋	
asc. node	5351 Jun 16 08:29	5°♋54'31	
evening rise	5351 Jun 23 09:45	14°♋37'19	
	5351 Jul 05 21:11	0°♌	
	5351 Jul 30 08:17	0°♍	
	5351 Aug 24 00:02	0°♎	
	5351 Sep 17 22:19	0°♏	
desc. node	5351 Oct 05 23:41	21°♏26'55	
	5351 Oct 13 06:13	0°♐	
	5351 Nov 08 04:55	0°♑	
	5351 Dec 05 08:00	0°♒	
evening max el	5351 Dec 19 05:26	14°♒20'57	46°48'58
	5352 Jan 05 01:56	0°♓	
asc. node	5352 Jan 27 01:20	14°♓29'27	
greatest brilliancy	5352 Jan 28 16:26	15°♓07'20	-4.9m
retrograde	5352 Feb 07 14:45	17°♓00'01	
evening set	5352 Feb 23 10:51	12°♓05'28	
min. Earth dist.	5352 Feb 27 17:44	9°♓32'12	0.26807 AU
inferior conj	5352 Feb 28 05:49	9°♓13'40	7°15'35
minimum elong	5352 Feb 27 19:09	9°♓30'01	7°13'30
morning rise	5352 Mar 03 03:32	6°♓52'16	
direct	5352 Mar 19 16:52	1°♓31'12	
greatest brilliancy	5352 Mar 29 04:20	3°♓12'52	-4.9m
	5352 May 04 23:19	0°♈	
morning max el	5352 May 08 21:02	3°♈49'51	46°41'44
desc. node	5352 May 17 16:37	12°♈50'01	
	5352 Jun 02 15:13	0°♉	
	5352 Jun 29 02:30	0°♊	
	5352 Jul 24 18:13	0°♋	
	5352 Aug 18 23:39	0°♌	
asc. node	5352 Sep 07 18:03	23°♌47'03	
	5352 Sep 12 21:14	0°♍	
	5352 Oct 07 11:42	0°♎	
	5352 Oct 31 20:10	0°♏	
morning set	5352 Nov 04 08:25	4°♏20'40	
	5352 Nov 25 00:19	0°♐	
max. Earth dist.	5352 Dec 09 08:30	17°♐52'08	1.72012 AU
superior conj	5352 Dec 12 02:43	21°♐18'42	0°37'55
minimum elong	5352 Dec 12 10:55	21°♐44'16	0°37'34
	5352 Dec 19 01:42	0°♑	
desc. node	5352 Dec 28 09:23	11°♑38'48	
	5353 Jan 12 01:20	0°♒	
evening rise	5353 Jan 20 22:20	11°♒07'10	
	5353 Feb 04 23:50	0°♓	
	5353 Feb 28 22:27	0°♈	
	5353 Mar 24 23:32	0°♉	
	5353 Apr 18 06:34	0°♊	
asc. node	5353 Apr 20 10:44	2°♊39'41	
	5353 May 13 00:04	0°♋	
	5353 Jun 07 10:48	0°♌	
	5353 Jul 04 05:42	0°♍	
evening max el	5353 Jul 24 10:00	20°♍41'42	45°34'49
	5353 Aug 03 12:16	0°♎	
desc. node	5353 Aug 10 02:11	5°♎31'03	
greatest brilliancy	5353 Aug 31 23:43	18°♎45'27	-4.7m
retrograde	5353 Sep 11 04:53	20°♎38'26	
evening set	5353 Sep 29 05:15	14°♎33'37	
inferior conj	5353 Oct 02 15:59	12°♎26'02	-8°34'23
minimum elong	5353 Oct 02 14:01	12°♎29'07	8°34'20
min. Earth dist.	5353 Oct 02 22:52	12°♎15'17	0.29044 AU
morning rise	5353 Oct 05 22:41	10°♎24'15	
direct	5353 Oct 24 05:23	4°♎07'28	
greatest brilliancy	5353 Nov 04 00:53	6°♎15'23	-4.8m
asc. node	5353 Dec 01 03:36	24°♎29'02	
	5353 Dec 07 04:01	0°♏	
morning max el	5353 Dec 13 00:47	5°♏41'17	46°18'24
	5354 Jan 04 22:35	0°♐	
	5354 Jan 30 22:54	0°♑	
	5354 Feb 24 22:04	0°♒	
	5354 Mar 21 09:38	0°♓	
desc. node	5354 Mar 22 18:51	1°♓42'22	
	5354 Apr 14 15:45	0°♈	
	5354 May 08 20:02	0°♉	
	5354 Jun 02 00:48	0°♊	
morning set	5354 Jun 17 17:23	19°♊24'21	
	5354 Jun 26 07:13	0°♋	
asc. node	5354 Jul 13 20:21	21°♋38'28	
	5354 Jul 20 15:11	0°♌	
superior conj	5354 Jul 25 07:34	5°♌46'06	0°27'05
minimum elong	5354 Jul 25 02:00	5°♌29'00	0°26'48
max. Earth dist.	5354 Jul 26 06:03	6°♌55'22	1.73324 AU
	5354 Aug 14 00:01	0°♍	
evening rise	5354 Aug 30 15:48	20°♍29'30	
	5354 Sep 07 09:28	0°♎	
	5354 Oct 01 20:07	0°♏	
	5354 Oct 26 08:58	0°♐	
desc. node	5354 Nov 02 11:35	8°♐40'00	
	5354 Nov 20 00:46	0°♑	
	5354 Dec 14 20:26	0°♒	
	5355 Jan 08 23:09	0°♓	
	5355 Feb 03 18:53	0°♈	
asc. node	5355 Feb 23 13:03	21°♈41'47	
evening max el	5355 Mar 01 22:51	28°♈19'53	47°05'43
	5355 Mar 03 14:33	0°♉	
greatest brilliancy	5355 Apr 11 07:46	29°♉31'00	-4.9m
	5355 Apr 12 16:55	0°♊	
retrograde	5355 Apr 21 15:19	1°♊31'18	
	5355 Apr 30 05:06	30°℞♉	
evening set	5355 May 08 14:09	25°♉54'14	
inferior conj	5355 May 12 13:29	23°♉28'05	7°13'28
minimum elong	5355 May 12 23:42	23°♉12'12	7°11'34
min. Earth dist.	5355 May 12 10:17	23°♉33'05	0.27705 AU
morning rise	5355 May 17 09:34	20°♉32'40	
direct	5355 Jun 02 11:02	15°♉32'28	
greatest brilliancy	5355 Jun 12 01:48	17°♉15'42	-4.8m
desc. node	5355 Jun 15 04:21	18°♉28'07	
	5355 Jul 03 10:30	0°♊	
morning max el	5355 Jul 21 17:23	16°♊13'08	45°56'34
	5355 Aug 04 10:54	0°♋	

	5355 Sep 01 02:22	0°♌	
	5355 Sep 27 05:56	0°♍	
asc. node	5355 Oct 06 05:53	10°♍34'35	
	5355 Oct 22 13:01	0°♎	
	5355 Nov 16 06:16	0°♏	
	5355 Dec 10 14:17	0°♐	
	5356 Jan 03 16:35	0°♑	
morning set	5356 Jan 16 06:49	15°♑45'24	
desc. node	5356 Jan 25 21:09	27°♑47'14	
	5356 Jan 27 15:28	0°♒	
	5356 Feb 20 12:23	0°♓	
superior conj	5356 Feb 26 07:44	7°♓18'14	-1°06'53
minimum elong	5356 Feb 25 19:53	6°♓40'56	1°06'29
max. Earth dist.	5356 Feb 26 10:21	7°♓26'28	1.71142 AU
	5356 Mar 15 08:41	0°♈	
evening rise	5356 Apr 07 04:23	28°♈39'11	
	5356 Apr 08 06:11	0°♉	
	5356 May 02 06:55	0°♊	
asc. node	5356 May 17 22:41	19°♊24'35	
	5356 May 26 12:51	0°♋	
	5356 Jun 20 01:46	0°♌	
	5356 Jul 15 00:16	0°♍	
	5356 Aug 09 13:26	0°♎	
	5356 Sep 05 04:30	0°♏	
desc. node	5356 Sep 06 13:48	1°♏30'48	
evening max el	5356 Oct 04 02:29	29°♏53'22	45°51'19
	5356 Oct 04 05:16	0°♐	
greatest brilliancy	5356 Nov 12 17:29	28°♐19'44	-4.8m
retrograde	5356 Nov 21 23:55	29°♐53'46	
evening set	5356 Dec 07 09:11	25°♐21'27	
inferior conj	5356 Dec 12 20:54	22°♐06'07	-3°52'02
minimum elong	5356 Dec 13 04:57	21°♐53'43	3°49'44
min. Earth dist.	5356 Dec 13 16:42	21°♐35'37	0.27399 AU
morning rise	5356 Dec 18 23:59	18°♐28'17	
asc. node	5356 Dec 28 15:25	14°♐41'57	
direct	5357 Jan 02 19:45	14°♐09'11	
greatest brilliancy	5357 Jan 13 19:31	16°♐24'51	-4.9m
	5357 Feb 03 22:01	0°♑	
morning max el	5357 Feb 22 10:02	17°♑16'38	46°56'32
	5357 Mar 06 13:05	0°♒	
	5357 Apr 02 04:16	0°♓	
desc. node	5357 Apr 19 06:50	20°♓06'34	
	5357 Apr 27 13:54	0°♈	
	5357 May 22 11:24	0°♉	
	5357 Jun 16 03:58	0°♊	
	5357 Jul 10 18:41	0°♋	
	5357 Aug 04 08:08	0°♌	
asc. node	5357 Aug 10 08:09	7°♌20'29	
morning set	5357 Aug 25 14:09	26°♌01'59	
	5357 Aug 28 19:42	0°♍	
	5357 Sep 22 04:51	0°♎	
max. Earth dist.	5357 Sep 29 00:40	8°♎25'15	1.73210 AU
superior conj	5357 Oct 01 01:41	10°♎56'29	1°24'51
minimum elong	5357 Sep 30 23:33	10°♎49'55	1°24'51
	5357 Oct 16 11:54	0°♏	
evening rise	5357 Nov 06 21:25	26°♏28'37	
	5357 Nov 09 17:43	0°♐	
desc. node	5357 Nov 29 23:34	25°♐04'27	
	5357 Dec 03 23:01	0°♑	
	5357 Dec 28 04:06	0°♒	
	5358 Jan 21 09:38	0°♓	
	5358 Feb 14 17:53	0°♈	
	5358 Mar 11 09:56	0°♉	
asc. node	5358 Mar 23 00:48	13°♉52'31	
	5358 Apr 05 19:34	0°♊	
	5358 May 02 20:29	0°♋	
evening max el	5358 May 12 12:21	9°♋53'19	46°17'35
	5358 Jun 04 06:58	0°♌	
greatest brilliancy	5358 Jun 20 03:41	9°♌12'56	-4.8m
retrograde	5358 Jul 01 04:24	11°♌26'56	
desc. node	5358 Jul 12 16:18	8°♌49'31	
evening set	5358 Jul 16 06:04	7°♌02'25	
min. Earth dist.	5358 Jul 22 04:33	3°♌29'07	0.28659 AU
inferior conj	5358 Jul 22 14:56	3°♌12'49	-2°22'12
minimum elong	5358 Jul 22 09:49	3°♌20'50	2°20'43
	5358 Jul 27 21:45	30°℞♋	
morning rise	5358 Jul 28 13:57	29°♋37'12	
direct	5358 Aug 13 00:27	25°♋02'56	
greatest brilliancy	5358 Aug 22 23:55	26°♋49'58	-4.7m
	5358 Aug 30 04:08	0°♌	
morning max el	5358 Sep 30 15:56	24°♌39'42	45°43'17
	5358 Oct 06 03:21	0°♍	
asc. node	5358 Nov 02 17:54	29°♍17'51	
	5358 Nov 03 09:00	0°♎	
	5358 Nov 29 10:05	0°♏	
	5358 Dec 24 10:09	0°♐	
	5359 Jan 17 20:49	0°♑	
	5359 Feb 11 00:14	0°♒	
desc. node	5359 Feb 22 09:00	14°♒11'47	
	5359 Mar 06 23:52	0°♓	
	5359 Mar 30 21:57	0°♈	
morning set	5359 Apr 03 00:33	3°♈54'02	
	5359 Apr 23 20:22	0°♉	
superior conj	5359 May 13 00:50	23°♉58'34	-1°09'37
minimum elong	5359 May 13 11:28	24°♉31'43	1°09'19
max. Earth dist.	5359 May 16 21:08	28°♉46'11	1.72062 AU
	5359 May 17 20:51	0°♊	
	5359 Jun 11 00:33	0°♋	
asc. node	5359 Jun 15 10:32	5°♋27'50	
evening rise	5359 Jun 21 01:08	12°♋23'38	
	5359 Jul 05 07:55	0°♌	
	5359 Jul 29 19:12	0°♍	
	5359 Aug 23 11:15	0°♎	
	5359 Sep 17 10:07	0°♏	
desc. node	5359 Oct 05 01:44	20°♏56'09	
	5359 Oct 12 19:03	0°♐	
	5359 Nov 07 19:42	0°♑	
	5359 Dec 05 03:02	0°♒	
evening max el	5359 Dec 16 18:43	11°♒57'30	46°47'12
	5360 Jan 05 13:34	0°♓	
greatest brilliancy	5360 Jan 26 04:43	12°♓39'11	-4.9m
asc. node	5360 Jan 26 03:16	12°♓37'51	
retrograde	5360 Feb 05 03:37	14°♓32'25	
evening set	5360 Feb 20 19:13	9°♓43'23	
inferior conj	5360 Feb 25 18:12	6°♓46'18	7°00'21
minimum elong	5360 Feb 25 07:21	7°♓02'55	6°58'06
min. Earth dist.	5360 Feb 25 06:23	7°♓04'23	0.26788 AU
morning rise	5360 Feb 29 19:34	4°♓20'00	
	5360 Mar 10 11:55	30°℞♒	
direct	5360 Mar 17 05:22	29°♒03'48	
	5360 Mar 24 04:14	0°♓	
greatest brilliancy	5360 Mar 26 17:29	0°♓46'34	-4.9m
	5360 May 04 23:25	0°♈	
morning max el	5360 May 06 11:01	1°♈28'08	46°43'11
desc. node	5360 May 16 18:44	12°♈03'39	
	5360 Jun 02 07:43	0°♉	
	5360 Jun 28 16:14	0°♊	
	5360 Jul 24 06:34	0°♋	
	5360 Aug 18 11:11	0°♌	
asc. node	5360 Sep 06 19:59	23°♌19'15	
	5360 Sep 12 08:16	0°♍	

	5360 Oct 06 22:27	0°♎	
	5360 Oct 31 06:47	0°♏	
morning set	5360 Nov 02 01:03	2°♏10'46	
	5360 Nov 24 10:54	0°♐	
max. Earth dist.	5360 Dec 07 00:28	15°♐39'05	1.72056 AU
superior conj	5360 Dec 09 16:54	18°♐59'59	0°41'07
minimum elong	5360 Dec 10 01:33	19°♐26'59	0°40'45
	5360 Dec 18 12:22	0°♑	
desc. node	5360 Dec 27 11:23	11°♑11'38	
	5361 Jan 11 12:07	0°♒	
evening rise	5361 Jan 18 10:29	8°♒40'57	
	5361 Feb 04 10:46	0°♓	
	5361 Feb 28 09:32	0°♈	
	5361 Mar 24 10:51	0°♉	
	5361 Apr 17 18:16	0°♊	
asc. node	5361 Apr 19 12:48	2°♊10'10	
	5361 May 12 12:26	0°♋	
	5361 Jun 07 00:30	0°♌	
	5361 Jul 03 22:29	0°♍	
evening max el	5361 Jul 22 02:21	18°♍32'36	45°35'24
	5361 Aug 03 16:28	0°♎	
desc. node	5361 Aug 09 04:06	4°♎28'18	
greatest brilliancy	5361 Aug 29 13:43	16°♎34'22	-4.7m
retrograde	5361 Sep 08 20:59	18°♎28'47	
evening set	5361 Sep 26 19:27	12°♎26'21	
inferior conj	5361 Sep 30 07:58	10°♎15'50	-8°31'57
minimum elong	5361 Sep 30 05:15	10°♎20'06	8°31'50
min. Earth dist.	5361 Sep 30 13:18	10°♎07'30	0.29066 AU
morning rise	5361 Oct 03 14:59	8°♎13'31	
direct	5361 Oct 21 22:12	1°♎57'20	
greatest brilliancy	5361 Nov 01 15:24	4°♎03'21	-4.8m
asc. node	5361 Nov 30 05:35	23°♎32'42	
	5361 Dec 07 03:31	0°♏	
morning max el	5361 Dec 10 16:30	3°♏27'52	46°16'49
	5362 Jan 04 14:34	0°♐	
	5362 Jan 30 12:28	0°♑	
	5362 Feb 24 10:31	0°♒	
	5362 Mar 20 21:27	0°♓	
desc. node	5362 Mar 21 20:55	1°♓12'24	
	5362 Apr 14 03:09	0°♈	
	5362 May 08 07:07	0°♉	
	5362 Jun 01 11:40	0°♊	
morning set	5362 Jun 15 08:57	17°♊10'59	
	5362 Jun 25 17:55	0°♋	
asc. node	5362 Jul 12 22:15	21°♋11'43	
	5362 Jul 20 01:45	0°♌	
superior conj	5362 Jul 23 00:24	3°♌37'37	0°23'56
minimum elong	5362 Jul 22 19:26	3°♌22'17	0°23'40
max. Earth dist.	5362 Jul 24 04:29	5°♌04'06	1.73301 AU
	5362 Aug 13 10:33	0°♍	
evening rise	5362 Aug 28 09:57	18°♍25'06	
	5362 Sep 06 20:07	0°♎	
	5362 Oct 01 07:01	0°♏	
	5362 Oct 25 20:14	0°♐	
desc. node	5362 Nov 01 13:42	8°♐11'47	
	5362 Nov 19 12:34	0°♑	
	5362 Dec 14 09:00	0°♒	
	5363 Jan 08 12:58	0°♓	
	5363 Feb 03 11:09	0°♈	
asc. node	5363 Feb 22 15:00	20°♈53'51	
evening max el	5363 Feb 27 13:43	25°♈59'54	47°06'17
	5363 Mar 03 13:42	0°♉	
greatest brilliancy	5363 Apr 08 23:01	27°♉11'36	-4.9m
retrograde	5363 Apr 19 05:43	29°♉10'53	
evening set	5363 May 06 07:43	23°♉29'37	
inferior conj	5363 May 10 03:39	21°♉08'18	7°26'56
minimum elong	5363 May 10 13:37	20°♉52'47	7°25'09
min. Earth dist.	5363 May 10 00:10	21°♉13'44	0.27676 AU
morning rise	5363 May 14 19:50	18°♉18'18	
direct	5363 May 31 01:08	13°♉13'24	
greatest brilliancy	5363 Jun 09 14:43	14°♉55'36	-4.8m
desc. node	5363 Jun 14 06:23	16°♉49'56	
	5363 Jul 03 20:45	0°♊	
morning max el	5363 Jul 19 07:28	13°♊56'24	45°57'44
	5363 Aug 04 05:11	0°♋	
	5363 Aug 31 16:39	0°♌	
	5363 Sep 26 18:28	0°♍	
asc. node	5363 Oct 05 08:01	10°♍04'51	
	5363 Oct 22 00:41	0°♎	
	5363 Nov 15 17:29	0°♏	
	5363 Dec 10 01:17	0°♐	
	5364 Jan 03 03:29	0°♑	
morning set	5364 Jan 13 18:57	13°♑19'05	
desc. node	5364 Jan 24 23:06	27°♑19'24	
	5364 Jan 27 02:18	0°♒	
	5364 Feb 19 23:11	0°♓	
superior conj	5364 Feb 23 18:28	4°♓47'01	-1°04'16
minimum elong	5364 Feb 23 06:29	4°♓09'22	1°03'51
max. Earth dist.	5364 Feb 23 13:46	4°♓32'17	1.71141 AU
	5364 Mar 14 19:30	0°♈	
evening rise	5364 Apr 04 15:18	26°♈09'01	
	5364 Apr 07 17:02	0°♉	
	5364 May 01 17:51	0°♊	
asc. node	5364 May 17 00:41	18°♊56'43	
	5364 May 25 23:57	0°♋	
	5364 Jun 19 13:13	0°♌	
	5364 Jul 14 12:22	0°♍	
	5364 Aug 09 02:47	0°♎	
	5364 Sep 04 20:30	0°♏	
desc. node	5364 Sep 05 15:55	0°♏52'38	
evening max el	5364 Oct 01 15:17	27°♏33'52	45°49'43
	5364 Oct 04 04:59	0°♐	
greatest brilliancy	5364 Nov 10 07:31	26°♐00'46	-4.8m
retrograde	5364 Nov 19 12:34	27°♐33'59	
evening set	5364 Dec 05 01:20	22°♐57'28	
inferior conj	5364 Dec 10 10:36	19°♐45'37	-4°12'08
minimum elong	5364 Dec 10 19:10	19°♐32'26	4°09'44
min. Earth dist.	5364 Dec 11 07:35	19°♐13'19	0.27462 AU
morning rise	5364 Dec 16 12:12	16°♐09'28	
asc. node	5364 Dec 27 17:23	12°♐03'48	
direct	5364 Dec 31 09:28	11°♐47'23	
greatest brilliancy	5365 Jan 11 11:27	14°♐04'44	-4.9m
	5365 Feb 04 07:02	0°♑	
morning max el	5365 Feb 19 23:25	14°♑52'03	46°56'09
	5365 Mar 06 07:40	0°♒	
	5365 Apr 01 19:05	0°♓	
desc. node	5365 Apr 18 08:57	19°♓32'28	
	5365 Apr 27 03:02	0°♈	
	5365 May 21 23:33	0°♉	
	5365 Jun 15 15:30	0°♊	
	5365 Jul 10 05:49	0°♋	
	5365 Aug 03 19:00	0°♌	
asc. node	5365 Aug 09 10:09	6°♌53'30	
morning set	5365 Aug 23 07:38	23°♌55'26	
	5365 Aug 28 06:25	0°♍	
	5365 Sep 21 15:30	0°♎	
max. Earth dist.	5365 Sep 26 19:38	6°♎22'48	1.73239 AU
superior conj	5365 Sep 28 19:30	8°♎50'28	1°24'25
minimum elong	5365 Sep 28 16:41	8°♎41'48	1°24'24
	5365 Oct 15 22:36	0°♏	

evening rise	5365 Nov 04 13:23	24°♏16'00	
	5365 Nov 09 04:34	0°♐	
desc. node	5365 Nov 29 01:30	24°♐36'13	
	5365 Dec 03 10:07	0°♑	
	5365 Dec 27 15:31	0°♒	
	5366 Jan 20 21:26	0°♓	
	5366 Feb 14 06:13	0°♈	
	5366 Mar 10 23:06	0°♉	
asc. node	5366 Mar 22 02:57	13°♉18'08	
	5366 Apr 05 10:22	0°♊	
	5366 May 02 15:30	0°♋	
evening max el	5366 May 10 02:49	7°♋36'22	46°19'42
	5366 Jun 05 00:46	0°♌	
greatest brilliancy	5366 Jun 17 19:58	7°♌01'57	-4.8m
retrograde	5366 Jun 28 20:50	9°♌16'36	
desc. node	5366 Jul 11 18:14	5°♌59'18	
evening set	5366 Jul 13 21:51	4°♌52'14	
inferior conj	5366 Jul 20 07:05	1°♌02'32	-2°02'31
minimum elong	5366 Jul 20 02:38	1°♌09'30	2°01'14
min. Earth dist.	5366 Jul 19 20:58	1°♌18'22	0.28627 AU
	5366 Jul 21 23:09	30°℞♋	
morning rise	5366 Jul 26 07:46	27°♋24'51	
direct	5366 Aug 10 15:50	22°♋52'51	
greatest brilliancy	5366 Aug 20 16:08	24°♋40'40	-4.7m
	5366 Aug 31 14:35	0°♌	
morning max el	5366 Sep 28 07:49	22°♌29'35	45°42'54
	5366 Oct 05 23:24	0°♍	
asc. node	5366 Nov 01 19:53	28°♍41'23	
	5366 Nov 02 23:56	0°♎	
	5366 Nov 28 23:06	0°♏	
	5366 Dec 23 22:17	0°♐	
	5367 Jan 17 08:29	0°♑	
	5367 Feb 10 11:39	0°♒	
desc. node	5367 Feb 21 11:00	13°♒42'40	
	5367 Mar 06 11:07	0°♓	
	5367 Mar 30 09:04	0°♈	
morning set	5367 Mar 31 11:11	1°♈21'57	
	5367 Apr 23 07:21	0°♉	
superior conj	5367 May 10 13:59	21°♉35'52	-1°11'48
minimum elong	5367 May 11 00:24	22°♉08'20	1°11'31
max. Earth dist.	5367 May 14 08:23	26°♉17'42	1.72007 AU
	5367 May 17 07:44	0°♊	
	5367 Jun 10 11:24	0°♋	
asc. node	5367 Jun 14 12:28	5°♋00'15	
evening rise	5367 Jun 18 16:50	10°♋10'22	
	5367 Jul 04 18:50	0°♌	
	5367 Jul 29 06:18	0°♍	
	5367 Aug 22 22:43	0°♎	
	5367 Sep 16 22:14	0°♏	
desc. node	5367 Oct 04 03:48	20°♏24'25	
	5367 Oct 12 08:18	0°♐	
	5367 Nov 07 11:00	0°♑	
	5367 Dec 04 22:58	0°♒	
evening max el	5367 Dec 14 08:57	9°♒35'43	46°45'28
	5368 Jan 06 05:34	0°♓	
greatest brilliancy	5368 Jan 23 16:42	10°♓10'06	-4.9m
asc. node	5368 Jan 25 05:16	10°♓41'04	
retrograde	5368 Feb 02 16:46	12°♓04'02	
evening set	5368 Feb 18 03:52	7°♓20'27	
inferior conj	5368 Feb 23 06:36	4°♓18'07	6°44'14
minimum elong	5368 Feb 22 19:40	4°♓34'50	6°41'51
min. Earth dist.	5368 Feb 22 18:51	4°♓36'05	0.26770 AU
morning rise	5368 Feb 27 11:36	1°♓46'53	
	5368 Mar 01 18:52	30°℞♒	
direct	5368 Mar 14 18:24	26°♒35'48	
greatest brilliancy	5368 Mar 24 06:13	28°♒18'51	-4.9m
	5368 Mar 28 09:15	0°♓	
morning max el	5368 May 04 01:18	29°♓06'14	46°44'37
	5368 May 04 22:49	0°♈	
desc. node	5368 May 15 20:38	11°♈16'31	
	5368 Jun 02 00:13	0°♉	
	5368 Jun 28 06:07	0°♊	
	5368 Jul 23 19:06	0°♋	
	5368 Aug 17 22:55	0°♌	
asc. node	5368 Sep 05 22:06	22°♌51'21	
	5368 Sep 11 19:33	0°♍	
	5368 Oct 06 09:29	0°♎	
morning set	5368 Oct 30 17:49	0°♏00'20	
	5368 Oct 30 17:42	0°♏	
	5368 Nov 23 21:50	0°♐	
max. Earth dist.	5368 Dec 04 14:07	13°♐17'51	1.72100 AU
superior conj	5368 Dec 07 07:09	16°♐40'33	0°44'14
minimum elong	5368 Dec 07 16:12	17°♐08'44	0°43'51
	5368 Dec 17 23:23	0°♑	
desc. node	5368 Dec 26 13:21	10°♑43'17	
	5369 Jan 10 23:15	0°♒	
evening rise	5369 Jan 15 22:30	6°♒13'22	
	5369 Feb 03 22:01	0°♓	
	5369 Feb 27 20:58	0°♈	
	5369 Mar 23 22:33	0°♉	
	5369 Apr 17 06:23	0°♊	
asc. node	5369 Apr 18 14:47	1°♊39'06	
	5369 May 12 01:15	0°♋	
	5369 Jun 06 14:41	0°♌	
	5369 Jul 03 15:56	0°♍	
evening max el	5369 Jul 19 18:42	16°♍22'43	45°36'05
	5369 Aug 03 22:57	0°♎	
desc. node	5369 Aug 08 06:12	3°♎23'50	
greatest brilliancy	5369 Aug 27 04:33	14°♎24'02	-4.7m
retrograde	5369 Sep 06 12:56	16°♎19'12	
evening set	5369 Sep 24 09:41	10°♎19'45	
inferior conj	5369 Sep 28 00:15	8°♎05'52	-8°28'44
minimum elong	5369 Sep 27 20:49	8°♎11'15	8°28'34
min. Earth dist.	5369 Sep 28 04:13	7°♎59'38	0.29086 AU
morning rise	5369 Oct 01 07:54	6°♎02'24	
	5369 Oct 16 09:19	30°℞♍	
direct	5369 Oct 19 15:08	29°♍47'30	
	5369 Oct 22 22:01	0°♎	
greatest brilliancy	5369 Oct 30 06:16	1°♎51'27	-4.8m
asc. node	5369 Nov 29 07:33	22°♎36'40	
	5369 Dec 07 02:23	0°♏	
morning max el	5369 Dec 08 07:30	1°♏11'48	46°15'01
	5370 Jan 04 06:43	0°♐	
	5370 Jan 30 02:21	0°♑	
	5370 Feb 23 23:18	0°♒	
	5370 Mar 20 09:34	0°♓	
desc. node	5370 Mar 20 23:02	0°♓41'33	
	5370 Apr 13 14:51	0°♈	
	5370 May 07 18:31	0°♉	
	5370 May 31 22:51	0°♊	
morning set	5370 Jun 13 00:29	14°♊56'23	
	5370 Jun 25 04:56	0°♋	
asc. node	5370 Jul 12 00:19	20°♋44'26	
	5370 Jul 19 12:39	0°♌	
superior conj	5370 Jul 20 17:25	1°♌28'38	0°20'44
minimum elong	5370 Jul 20 13:03	1°♌15'10	0°20'31
max. Earth dist.	5370 Jul 22 01:31	3°♌07'30	1.73272 AU
	5370 Aug 12 21:25	0°♍	
evening rise	5370 Aug 26 04:21	16°♍20'36	
	5370 Sep 06 07:03	0°♎	
	5370 Sep 30 18:11	0°♏	

	5370 Oct 25 07:48	0°♐	
desc. node	5370 Oct 31 15:40	7°♐42'11	
	5370 Nov 19 00:42	0°♑	
	5370 Dec 13 21:59	0°♒	
	5371 Jan 08 03:20	0°♓	
	5371 Feb 03 04:14	0°♈	
asc. node	5371 Feb 21 17:08	20°♈04'13	
evening max el	5371 Feb 25 03:33	23°♈35'45	47°06'49
	5371 Mar 03 14:32	0°♉	
greatest brilliancy	5371 Apr 06 14:40	24°♉51'06	-4.9m
retrograde	5371 Apr 16 19:38	26°♉48'56	
evening set	5371 May 04 01:08	21°♉03'32	
inferior conj	5371 May 07 17:44	18°♉47'06	7°39'34
minimum elong	5371 May 08 03:22	18°♉32'05	7°37'57
min. Earth dist.	5371 May 07 14:14	18°♉52'34	0.27644 AU
morning rise	5371 May 12 05:51	16°♉02'41	
direct	5371 May 28 14:38	10°♉52'49	
greatest brilliancy	5371 Jun 07 04:02	12°♉34'35	-4.8m
desc. node	5371 Jun 13 08:23	15°♉13'59	
	5371 Jul 04 04:43	0°♊	
morning max el	5371 Jul 16 20:47	11°♊36'33	45°59'04
	5371 Aug 03 23:21	0°♋	
	5371 Aug 31 07:03	0°♌	
	5371 Sep 26 07:11	0°♍	
asc. node	5371 Oct 04 09:59	9°♍34'00	
	5371 Oct 21 12:32	0°♎	
	5371 Nov 15 04:54	0°♏	
	5371 Dec 09 12:29	0°♐	
	5372 Jan 02 14:36	0°♑	
morning set	5372 Jan 11 07:12	10°♑52'20	
desc. node	5372 Jan 24 01:13	26°♑51'12	
	5372 Jan 26 13:25	0°♒	
	5372 Feb 19 10:19	0°♓	
max. Earth dist.	5372 Feb 20 15:21	1°♓31'20	1.71150 AU
superior conj	5372 Feb 21 04:52	2°♓13'50	-1°01'29
minimum elong	5372 Feb 20 16:53	1°♓36'09	1°01'03
	5372 Mar 14 06:39	0°♈	
evening rise	5372 Apr 02 01:42	23°♈36'06	
	5372 Apr 07 04:13	0°♉	
	5372 May 01 05:06	0°♊	
asc. node	5372 May 16 02:37	18°♊27'39	
	5372 May 25 11:22	0°♋	
	5372 Jun 19 00:59	0°♌	
	5372 Jul 14 00:48	0°♍	
	5372 Aug 08 16:30	0°♎	
desc. node	5372 Sep 04 17:58	0°♏13'23	
	5372 Sep 04 13:00	0°♏	
evening max el	5372 Sep 29 04:19	25°♏14'50	45°48'23
	5372 Oct 04 05:59	0°♐	
greatest brilliancy	5372 Nov 07 21:19	23°♐42'12	-4.8m
retrograde	5372 Nov 17 02:01	25°♐15'23	
evening set	5372 Dec 02 17:53	20°♐34'17	
inferior conj	5372 Dec 08 00:40	17°♐26'06	-4°31'24
minimum elong	5372 Dec 08 09:41	17°♐12'13	4°28'57
min. Earth dist.	5372 Dec 08 22:27	16°♐52'34	0.27528 AU
morning rise	5372 Dec 14 00:39	13°♐52'09	
asc. node	5372 Dec 26 19:24	9°♐32'23	
direct	5372 Dec 28 23:45	9°♐26'35	
greatest brilliancy	5373 Jan 09 03:28	11°♐45'34	-4.9m
	5373 Feb 04 13:30	0°♑	
morning max el	5373 Feb 17 13:50	12°♑30'02	46°55'23
	5373 Mar 06 01:55	0°♒	
	5373 Apr 01 09:56	0°♓	
desc. node	5373 Apr 17 10:51	18°♓57'12	
	5373 Apr 26 16:18	0°♈	
	5373 May 21 11:54	0°♉	
	5373 Jun 15 03:14	0°♊	
	5373 Jul 09 17:06	0°♋	
	5373 Aug 03 06:00	0°♌	
asc. node	5373 Aug 08 12:14	6°♌26'20	
morning set	5373 Aug 21 00:59	21°♌48'01	
	5373 Aug 27 17:15	0°♍	
	5373 Sep 21 02:18	0°♎	
max. Earth dist.	5373 Sep 24 16:01	4°♎24'20	1.73263 AU
superior conj	5373 Sep 26 13:22	6°♎44'14	1°23'51
minimum elong	5373 Sep 26 09:54	6°♎33'32	1°23'50
	5373 Oct 15 09:25	0°♏	
evening rise	5373 Nov 02 05:40	22°♏04'15	
	5373 Nov 08 15:30	0°♐	
desc. node	5373 Nov 28 03:30	24°♐08'08	
	5373 Dec 02 21:14	0°♑	
	5373 Dec 27 02:55	0°♒	
	5374 Jan 20 09:15	0°♓	
	5374 Feb 13 18:36	0°♈	
	5374 Mar 10 12:26	0°♉	
asc. node	5374 Mar 21 04:51	12°♉42'26	
	5374 Apr 05 01:33	0°♊	
	5374 May 02 11:21	0°♋	
evening max el	5374 May 07 17:53	5°♋20'05	46°21'45
	5374 Jun 06 01:45	0°♌	
greatest brilliancy	5374 Jun 15 11:45	4°♌49'05	-4.8m
retrograde	5374 Jun 26 13:25	7°♌04'33	
desc. node	5374 Jul 10 20:19	3°♌03'24	
evening set	5374 Jul 11 13:28	2°♌40'17	
	5374 Jul 16 02:16	30°℞♋	
inferior conj	5374 Jul 17 22:50	28°♋50'35	-1°42'27
minimum elong	5374 Jul 17 19:04	28°♋56'28	1°41'21
min. Earth dist.	5374 Jul 17 12:46	29°♋06'18	0.28593 AU
morning rise	5374 Jul 24 01:06	25°♋11'10	
direct	5374 Aug 08 07:14	20°♋41'17	
greatest brilliancy	5374 Aug 18 07:22	22°♋29'23	-4.7m
	5374 Sep 01 15:26	0°♌	
morning max el	5374 Sep 26 00:01	20°♌20'07	45°42'37
	5374 Oct 05 18:56	0°♍	
asc. node	5374 Oct 31 21:49	28°♍05'02	
	5374 Nov 02 14:40	0°♎	
	5374 Nov 28 12:00	0°♏	
	5374 Dec 23 10:16	0°♐	
	5375 Jan 16 19:59	0°♑	
	5375 Feb 09 22:53	0°♒	
desc. node	5375 Feb 20 13:06	13°♒14'22	
	5375 Mar 05 22:12	0°♓	
morning set	5375 Mar 28 21:55	28°♓50'40	
	5375 Mar 29 20:01	0°♈	
	5375 Apr 22 18:14	0°♉	
superior conj	5375 May 08 02:49	19°♉12'14	-1°13'51
minimum elong	5375 May 08 12:55	19°♉43'46	1°13'37
max. Earth dist.	5375 May 11 20:38	23°♉52'29	1.71962 AU
	5375 May 16 18:33	0°♊	
	5375 Jun 09 22:13	0°♋	
asc. node	5375 Jun 13 14:31	4°♋33'11	
evening rise	5375 Jun 16 07:57	7°♋55'23	
	5375 Jul 04 05:43	0°♌	
	5375 Jul 28 17:21	0°♍	
	5375 Aug 22 10:08	0°♎	
	5375 Sep 16 10:19	0°♏	
desc. node	5375 Oct 03 05:43	19°♏52'25	
	5375 Oct 11 21:32	0°♐	
	5375 Nov 07 02:24	0°♑	
	5375 Dec 04 19:19	0°♒	
evening max el	5375 Dec 11 23:47	7°♒16'13	46°43'47

	5376 Jan 07 02:27	0°♓	
greatest brilliancy	5376 Jan 21 05:11	7°♓42'54	-4.9m
asc. node	5376 Jan 24 07:22	8°♓40'51	
retrograde	5376 Jan 31 06:00	9°♓36'53	
evening set	5376 Feb 15 12:56	4°♓58'53	
inferior conj	5376 Feb 20 19:10	1°♓51'25	6°27'27
minimum elong	5376 Feb 20 08:13	2°♓08'11	6°24'57
min. Earth dist.	5376 Feb 20 07:33	2°♓09'11	0.26748 AU
	5376 Feb 23 20:54	30°♑≈	
morning rise	5376 Feb 25 03:42	29°≈15'15	
direct	5376 Mar 12 07:34	24°≈09'37	
greatest brilliancy	5376 Mar 21 18:56	25°≈52'29	-4.9m
	5376 Mar 30 12:45	0°♓	
morning max el	5376 May 01 14:55	26°♓43'49	46°45'45
	5376 May 04 20:47	0°♈	
desc. node	5376 May 14 22:42	10°♈31'37	
	5376 Jun 01 16:06	0°♉	
	5376 Jun 27 19:39	0°♊	
	5376 Jul 23 07:23	0°♋	
	5376 Aug 17 10:28	0°♌	
asc. node	5376 Sep 05 00:04	22°♌23'32	
	5376 Sep 11 06:37	0°♍	
	5376 Oct 05 20:16	0°♎	
morning set	5376 Oct 28 10:16	27°♎49'49	
	5376 Oct 30 04:22	0°♏	
	5376 Nov 23 08:31	0°♐	
max. Earth dist.	5376 Dec 02 02:03	10°♐52'08	1.72144 AU
superior conj	5376 Dec 04 21:23	14°♐21'56	0°47'16
minimum elong	5376 Dec 05 06:45	14°♐51'06	0°46'53
	5376 Dec 17 10:09	0°♑	
desc. node	5376 Dec 25 15:26	10°♑16'08	
	5377 Jan 10 10:07	0°≈	
evening rise	5377 Jan 13 10:34	3°≈46'46	
	5377 Feb 03 08:59	0°♓	
	5377 Feb 27 08:04	0°♈	
	5377 Mar 23 09:52	0°♉	
	5377 Apr 16 18:06	0°♊	
asc. node	5377 Apr 17 16:45	1°♊09'14	
	5377 May 11 13:42	0°♋	
	5377 Jun 06 04:37	0°♌	
	5377 Jul 03 09:27	0°♍	
evening max el	5377 Jul 17 10:14	14°♍11'27	45°36'36
	5377 Aug 04 07:41	0°♎	
desc. node	5377 Aug 07 08:15	2°♎18'05	
greatest brilliancy	5377 Aug 24 19:52	12°♎14'26	-4.7m
retrograde	5377 Sep 04 04:22	14°♎09'48	
evening set	5377 Sep 21 23:27	8°♎13'52	
inferior conj	5377 Sep 25 16:22	5°♎56'14	-8°24'43
minimum elong	5377 Sep 25 12:12	6°♎02'47	8°24'28
min. Earth dist.	5377 Sep 25 19:23	5°♎51'31	0.29102 AU
morning rise	5377 Sep 29 00:54	3°♎51'11	
	5377 Oct 06 08:07	30°♑♍	
direct	5377 Oct 17 07:16	27°♍37'57	
greatest brilliancy	5377 Oct 27 21:25	29°♍40'22	-4.8m
	5377 Oct 28 18:00	0°♎	
asc. node	5377 Nov 28 09:40	21°♎42'56	
morning max el	5377 Dec 05 21:33	28°♎54'14	46°13'21
	5377 Dec 07 00:01	0°♏	
	5378 Jan 03 22:15	0°♐	
	5378 Jan 29 15:44	0°♑	
	5378 Feb 23 11:37	0°≈	
	5378 Mar 19 21:16	0°♓	
desc. node	5378 Mar 20 00:53	0°♓11'10	
	5378 Apr 13 02:06	0°♈	
	5378 May 07 05:28	0°♉	
	5378 May 31 09:35	0°♊	
morning set	5378 Jun 10 16:14	12°♊43'46	
	5378 Jun 24 15:29	0°♋	
asc. node	5378 Jul 11 02:23	20°♋18'29	
superior conj	5378 Jul 18 10:32	29°♋21'13	0°17'32
minimum elong	5378 Jul 18 06:48	29°♋09'44	0°17'20
	5378 Jul 18 23:07	0°♌	
max. Earth dist.	5378 Jul 19 21:13	1°♌08'05	1.73248 AU
	5378 Aug 12 07:54	0°♍	
evening rise	5378 Aug 23 22:39	14°♍16'53	
	5378 Sep 05 17:40	0°♎	
	5378 Sep 30 05:03	0°♏	
	5378 Oct 24 19:03	0°♐	
desc. node	5378 Oct 30 17:38	7°♐13'36	
	5378 Nov 18 12:32	0°♑	
	5378 Dec 13 10:42	0°≈	
	5379 Jan 07 17:29	0°♓	
	5379 Feb 02 21:14	0°♈	
asc. node	5379 Feb 20 19:05	19°♈14'28	
evening max el	5379 Feb 22 16:35	21°♈10'43	47°07'22
	5379 Mar 03 16:10	0°♉	
greatest brilliancy	5379 Apr 04 06:26	22°♉31'53	-4.9m
retrograde	5379 Apr 14 09:34	24°♉28'30	
evening set	5379 May 01 18:30	18°♉38'51	
inferior conj	5379 May 05 07:52	16°♉27'22	7°51'23
minimum elong	5379 May 05 17:05	16°♉13'00	7°49'58
min. Earth dist.	5379 May 05 04:26	16°♉32'44	0.27611 AU
morning rise	5379 May 09 15:52	13°♉48'50	
direct	5379 May 26 03:40	8°♉33'33	
greatest brilliancy	5379 Jun 04 17:38	10°♉15'27	-4.8m
desc. node	5379 Jun 12 10:26	13°♉43'06	
	5379 Jul 04 09:41	0°♊	
morning max el	5379 Jul 14 10:16	9°♊18'33	46°00'29
	5379 Aug 03 16:30	0°♋	
	5379 Aug 30 20:49	0°♌	
	5379 Sep 25 19:26	0°♍	
asc. node	5379 Oct 03 11:55	9°♍04'18	
	5379 Oct 21 00:01	0°♎	
	5379 Nov 14 15:59	0°♏	
	5379 Dec 08 23:22	0°♐	
	5380 Jan 02 01:23	0°♑	
morning set	5380 Jan 08 19:21	8°♑26'23	
desc. node	5380 Jan 23 03:12	26°♑23'39	
	5380 Jan 26 00:10	0°≈	
max. Earth dist.	5380 Feb 17 20:16	28°≈41'57	1.71162 AU
superior conj	5380 Feb 18 15:08	29°≈41'16	-0°58'34
minimum elong	5380 Feb 18 03:14	29°≈03'53	0°58'08
	5380 Feb 18 21:05	0°♓	
	5380 Mar 13 17:28	0°♈	
evening rise	5380 Mar 30 12:08	21°♈04'25	
	5380 Apr 06 15:04	0°♉	
	5380 Apr 30 16:00	0°♊	
asc. node	5380 May 15 04:43	18°♊00'14	
	5380 May 24 22:25	0°♋	
	5380 Jun 18 12:21	0°♌	
	5380 Jul 13 12:51	0°♍	
	5380 Aug 08 05:54	0°♎	
desc. node	5380 Sep 03 19:51	29°♎34'25	
	5380 Sep 04 05:24	0°♏	
evening max el	5380 Sep 26 18:03	22°♏58'36	45°46'55
	5380 Oct 04 07:59	0°♐	
greatest brilliancy	5380 Nov 05 10:23	21°♐23'24	-4.8m
retrograde	5380 Nov 14 15:45	22°♐57'06	
evening set	5380 Nov 30 10:22	18°♐11'14	
inferior conj	5380 Dec 05 14:32	15°♐06'43	-4°50'09
minimum elong	5380 Dec 05 23:57	14°♐52'15	4°47'40

min. Earth dist.	5380 Dec 06 12:49	14°♐32'28	0.27597 AU
morning rise	5380 Dec 11 12:45	11°♐35'25	
asc. node	5380 Dec 25 21:27	7°♐06'37	
direct	5380 Dec 26 14:24	7°♐06'00	
greatest brilliancy	5381 Jan 06 18:50	9°♐26'04	-4.9m
	5381 Feb 04 17:46	0°♑	
morning max el	5381 Feb 15 05:05	10°♑10'53	46°54'40
	5381 Mar 05 19:30	0°♒	
	5381 Apr 01 00:20	0°♓	
desc. node	5381 Apr 16 12:54	18°♓23'32	
	5381 Apr 26 05:11	0°♈	
	5381 May 20 23:54	0°♉	
	5381 Jun 14 14:37	0°♊	
	5381 Jul 09 04:04	0°♋	
	5381 Aug 02 16:40	0°♌	
asc. node	5381 Aug 07 14:10	5°♌59'45	
morning set	5381 Aug 18 18:42	19°♌42'46	
	5381 Aug 27 03:46	0°♍	
	5381 Sep 20 12:46	0°♎	
max. Earth dist.	5381 Sep 22 14:32	2°♎33'29	1.73288 AU
superior conj	5381 Sep 24 07:28	4°♎39'44	1°23'11
minimum elong	5381 Sep 24 03:24	4°♎27'09	1°23'09
	5381 Oct 14 19:57	0°♏	
evening rise	5381 Oct 30 22:09	19°♏53'49	
	5381 Nov 08 02:13	0°♐	
desc. node	5381 Nov 27 05:37	23°♐40'50	
	5381 Dec 02 08:13	0°♑	
	5381 Dec 26 14:15	0°♒	
	5382 Jan 19 21:00	0°♓	
	5382 Feb 13 06:55	0°♈	
	5382 Mar 10 01:43	0°♉	
asc. node	5382 Mar 20 06:50	12°♉07'16	
	5382 Apr 04 16:44	0°♊	
	5382 May 02 07:37	0°♋	
evening max el	5382 May 05 09:51	3°♋06'37	46°23'52
	5382 Jun 07 12:36	0°♌	
greatest brilliancy	5382 Jun 13 03:45	2°♌37'12	-4.8m
retrograde	5382 Jun 24 06:13	4°♌53'08	
evening set	5382 Jul 09 05:24	0°♌29'00	
desc. node	5382 Jul 09 22:20	0°♌05'25	
	5382 Jul 10 02:10	30°℞♋	
min. Earth dist.	5382 Jul 15 04:29	26°♋55'11	0.28554 AU
inferior conj	5382 Jul 15 14:39	26°♋39'19	-1°22'14
minimum elong	5382 Jul 15 11:37	26°♋44'04	1°21'20
morning rise	5382 Jul 21 18:22	22°♋58'20	
direct	5382 Aug 05 23:08	18°♋30'39	
greatest brilliancy	5382 Aug 15 22:03	20°♋18'15	-4.7m
	5382 Sep 02 09:14	0°♌	
morning max el	5382 Sep 23 16:20	18°♌11'47	45°42'23
	5382 Oct 05 13:36	0°♍	
asc. node	5382 Oct 30 23:57	27°♍30'18	
	5382 Nov 02 04:59	0°♎	
	5382 Nov 28 00:38	0°♏	
	5382 Dec 22 22:07	0°♐	
	5383 Jan 16 07:27	0°♑	
	5383 Feb 09 10:09	0°♒	
desc. node	5383 Feb 19 15:01	12°♒45'26	
	5383 Mar 05 09:18	0°♓	
morning set	5383 Mar 26 08:15	26°♓18'00	
	5383 Mar 29 07:00	0°♈	
	5383 Apr 22 05:05	0°♉	
superior conj	5383 May 05 15:18	16°♉47'31	-1°15'48
minimum elong	5383 May 06 01:01	17°♉17'52	1°15'35
max. Earth dist.	5383 May 09 10:46	21°♉33'05	1.71911 AU
	5383 May 16 05:21	0°♊	
	5383 Jun 09 09:01	0°♋	
asc. node	5383 Jun 12 16:34	4°♋06'08	
evening rise	5383 Jun 13 22:56	5°♋40'00	
	5383 Jul 03 16:35	0°♌	
	5383 Jul 28 04:23	0°♍	
	5383 Aug 21 21:32	0°♎	
	5383 Sep 15 22:22	0°♏	
desc. node	5383 Oct 02 07:47	19°♏21'02	
	5383 Oct 11 10:47	0°♐	
	5383 Nov 06 17:57	0°♑	
	5383 Dec 04 16:23	0°♒	
evening max el	5383 Dec 09 14:11	4°♒55'40	46°41'42
	5384 Jan 08 07:27	0°♓	
greatest brilliancy	5384 Jan 18 18:03	5°♓15'26	-4.9m
asc. node	5384 Jan 23 09:17	6°♓34'34	
retrograde	5384 Jan 28 18:30	7°♓08'26	
evening set	5384 Feb 12 21:58	2°♓35'57	
	5384 Feb 17 07:46	30°℞♒	
inferior conj	5384 Feb 18 07:32	29°♒23'37	6°09'45
minimum elong	5384 Feb 17 20:40	29°♒40'17	6°07'08
min. Earth dist.	5384 Feb 17 20:37	29°♒40'21	0.26733 AU
morning rise	5384 Feb 22 19:33	26°♒42'16	
direct	5384 Mar 09 20:14	21°♒42'06	
greatest brilliancy	5384 Mar 19 08:12	23°♒25'16	-4.9m
	5384 Mar 31 23:29	0°♓	
morning max el	5384 Apr 29 03:29	24°♓17'38	46°46'59
	5384 May 04 18:17	0°♈	
desc. node	5384 May 14 00:47	9°♈46'34	
	5384 Jun 01 07:58	0°♉	
	5384 Jun 27 09:13	0°♊	
	5384 Jul 22 19:44	0°♋	
	5384 Aug 16 22:04	0°♌	
asc. node	5384 Sep 04 02:01	21°♌55'26	
	5384 Sep 10 17:46	0°♍	
	5384 Oct 05 07:08	0°♎	
morning set	5384 Oct 26 03:13	25°♎40'32	
	5384 Oct 29 15:08	0°♏	
	5384 Nov 22 19:17	0°♐	
max. Earth dist.	5384 Nov 29 15:04	8°♐29'42	1.72190 AU
superior conj	5384 Dec 02 12:18	12°♐05'16	0°50'09
minimum elong	5384 Dec 02 21:54	12°♐35'12	0°49'47
	5384 Dec 16 21:00	0°♑	
desc. node	5384 Dec 24 17:25	9°♑48'17	
	5385 Jan 09 21:06	0°♒	
evening rise	5385 Jan 10 23:05	1°♒21'16	
	5385 Feb 02 20:09	0°♓	
	5385 Feb 26 19:26	0°♈	
	5385 Mar 22 21:32	0°♉	
	5385 Apr 16 06:12	0°♊	
asc. node	5385 Apr 16 18:50	0°♊38'35	
	5385 May 11 02:34	0°♋	
	5385 Jun 05 19:01	0°♌	
	5385 Jul 03 03:42	0°♍	
evening max el	5385 Jul 15 01:01	11°♍57'33	45°37'24
	5385 Aug 04 19:53	0°♎	
desc. node	5385 Aug 06 10:08	1°♎09'45	
greatest brilliancy	5385 Aug 22 11:25	10°♎04'37	-4.7m
retrograde	5385 Sep 01 19:55	12°♎00'26	
evening set	5385 Sep 19 13:12	6°♎08'03	
inferior conj	5385 Sep 23 08:41	3°♎46'36	-8°20'08
minimum elong	5385 Sep 23 03:49	3°♎54'16	8°19'47
min. Earth dist.	5385 Sep 23 11:00	3°♎42'58	0.29114 AU
morning rise	5385 Sep 26 18:21	1°♎39'40	
	5385 Sep 29 14:47	30°℞♍	
direct	5385 Oct 14 23:06	25°♍28'11	
greatest brilliancy	5385 Oct 25 13:20	27°♍29'58	-4.8m

	5385 Oct 31 03:59	0°♎	
asc. node	5385 Nov 27 11:37	20°♎49'31	
morning max el	5385 Dec 03 11:43	26°♎36'42	46°11'54
	5385 Dec 06 21:03	0°♏	
	5386 Jan 03 13:42	0°♐	
	5386 Jan 29 05:11	0°♑	
	5386 Feb 23 00:06	0°♒	
desc. node	5386 Mar 19 02:57	29°♒40'45	
	5386 Mar 19 09:11	0°♓	
	5386 Apr 12 13:41	0°♈	
	5386 May 06 16:48	0°♉	
	5386 May 30 20:42	0°♊	
morning set	5386 Jun 08 07:21	10°♊27'49	
	5386 Jun 24 02:26	0°♋	
asc. node	5386 Jul 10 04:17	19°♋50'51	
superior conj	5386 Jul 16 03:11	27°♋11'15	0°14'16
minimum elong	5386 Jul 16 00:07	27°♋01'48	0°14'05
behind sun begin	5386 Jul 15 13:13	26°♋28'14	
behind sun end	5386 Jul 16 11:00	27°♋35'23	
max. Earth dist.	5386 Jul 17 15:06	29°♋01'56	1.73217 AU
	5386 Jul 18 09:57	0°♌	
	5386 Aug 11 18:44	0°♍	
evening rise	5386 Aug 21 16:46	12°♍11'40	
	5386 Sep 05 04:38	0°♎	
	5386 Sep 29 16:16	0°♏	
	5386 Oct 24 06:40	0°♐	
desc. node	5386 Oct 29 19:44	6°♐44'20	
	5386 Nov 18 00:43	0°♑	
	5386 Dec 12 23:46	0°♒	
	5387 Jan 07 08:02	0°♓	
	5387 Feb 02 14:52	0°♈	
asc. node	5387 Feb 19 21:03	18°♈23'07	
evening max el	5387 Feb 20 05:18	18°♈44'07	47°07'43
	5387 Mar 03 19:41	0°♉	
greatest brilliancy	5387 Apr 01 21:31	20°♉10'23	-4.9m
retrograde	5387 Apr 11 23:32	22°♉06'30	
evening set	5387 Apr 29 11:35	16°♉12'19	
inferior conj	5387 May 02 21:50	14°♉05'46	8°02'28
minimum elong	5387 May 03 06:34	13°♉52'10	8°01'12
min. Earth dist.	5387 May 02 18:22	14°♉11'10	0.27587 AU
morning rise	5387 May 07 01:42	11°♉33'21	
direct	5387 May 23 16:35	6°♉12'05	
greatest brilliancy	5387 Jun 02 07:14	7°♉54'29	-4.8m
desc. node	5387 Jun 11 12:25	12°♉13'35	
	5387 Jul 04 13:33	0°♊	
morning max el	5387 Jul 12 00:36	7°♊00'48	46°01'58
	5387 Aug 03 09:53	0°♋	
	5387 Aug 30 10:55	0°♌	
	5387 Sep 25 08:02	0°♍	
asc. node	5387 Oct 02 14:03	8°♍34'09	
	5387 Oct 20 11:49	0°♎	
	5387 Nov 14 03:23	0°♏	
	5387 Dec 08 10:34	0°♐	
	5388 Jan 01 12:29	0°♑	
morning set	5388 Jan 06 08:03	6°♑01'16	
desc. node	5388 Jan 22 05:09	25°♑55'06	
	5388 Jan 25 11:14	0°♒	
max. Earth dist.	5388 Feb 15 05:00	26°♒03'42	1.71172 AU
superior conj	5388 Feb 16 01:52	27°♒09'18	-0°55'35
minimum elong	5388 Feb 15 14:10	26°♒32'31	0°55'07
	5388 Feb 18 08:09	0°♓	
	5388 Mar 13 04:32	0°♈	
evening rise	5388 Mar 27 23:02	18°♈33'17	
	5388 Apr 06 02:11	0°♉	
	5388 Apr 30 03:14	0°♊	
asc. node	5388 May 14 06:42	17°♊31'16	
	5388 May 24 09:51	0°♋	
	5388 Jun 18 00:12	0°♌	
	5388 Jul 13 01:26	0°♍	
	5388 Aug 07 19:55	0°♎	
desc. node	5388 Sep 02 21:58	28°♎54'18	
	5388 Sep 03 22:37	0°♏	
evening max el	5388 Sep 24 08:42	20°♏43'29	45°45'42
	5388 Oct 04 12:05	0°♐	
greatest brilliancy	5388 Nov 02 23:11	19°♐03'50	-4.8m
retrograde	5388 Nov 12 05:50	20°♐38'10	
evening set	5388 Nov 28 03:05	15°♐47'40	
inferior conj	5388 Dec 03 04:31	12°♐46'43	-5°08'20
minimum elong	5388 Dec 03 14:14	12°♐31'46	5°05'52
min. Earth dist.	5388 Dec 04 02:55	12°♐12'17	0.27665 AU
morning rise	5388 Dec 09 00:43	9°♐18'18	
direct	5388 Dec 24 05:33	4°♐45'02	
asc. node	5388 Dec 24 23:24	4°♐45'42	
greatest brilliancy	5389 Jan 04 09:41	7°♐05'16	-4.9m
	5389 Feb 04 20:42	0°♑	
morning max el	5389 Feb 12 20:53	7°♑52'22	46°53'55
	5389 Mar 05 13:00	0°♒	
	5389 Mar 31 14:51	0°♓	
desc. node	5389 Apr 15 14:59	17°♓49'21	
	5389 Apr 25 18:15	0°♈	
	5389 May 20 12:06	0°♉	
	5389 Jun 14 02:17	0°♊	
	5389 Jul 08 15:21	0°♋	
	5389 Aug 02 03:43	0°♌	
asc. node	5389 Aug 06 16:11	5°♌32'14	
morning set	5389 Aug 16 12:08	17°♌35'28	
	5389 Aug 26 14:40	0°♍	
	5389 Sep 19 23:36	0°♎	
max. Earth dist.	5389 Sep 20 11:52	0°♎37'48	1.73308 AU
superior conj	5389 Sep 22 01:16	2°♎33'08	1°22'24
minimum elong	5389 Sep 21 20:36	2°♎18'42	1°22'20
	5389 Oct 14 06:51	0°♏	
evening rise	5389 Oct 28 14:25	17°♏41'45	
	5389 Nov 07 13:15	0°♐	
desc. node	5389 Nov 26 07:31	23°♐11'58	
	5389 Dec 01 19:30	0°♑	
	5389 Dec 26 01:53	0°♒	
	5390 Jan 19 09:03	0°♓	
	5390 Feb 12 19:34	0°♈	
	5390 Mar 09 15:20	0°♉	
asc. node	5390 Mar 19 08:58	11°♉31'36	
	5390 Apr 04 08:22	0°♊	
	5390 May 02 04:48	0°♋	
evening max el	5390 May 03 02:14	0°♋53'31	46°25'55
	5390 Jun 09 19:03	0°♌	
greatest brilliancy	5390 Jun 10 20:07	0°♌25'13	-4.8m
retrograde	5390 Jun 21 22:47	2°♌40'51	
	5390 Jul 03 11:43	30°℞♋	
evening set	5390 Jul 06 21:33	28°♋16'56	
desc. node	5390 Jul 09 00:15	27°♋04'24	
inferior conj	5390 Jul 13 06:28	24°♋27'20	-1°01'48
minimum elong	5390 Jul 13 04:10	24°♋30'55	1°01'08
min. Earth dist.	5390 Jul 12 20:19	24°♋43'12	0.28518 AU
morning rise	5390 Jul 19 11:27	20°♋44'47	
direct	5390 Aug 03 15:10	16°♋19'23	
greatest brilliancy	5390 Aug 13 12:36	18°♋05'58	-4.7m
	5390 Sep 02 22:55	0°♌	
morning max el	5390 Sep 21 08:11	16°♌01'20	45°42'01
	5390 Oct 05 08:09	0°♍	
asc. node	5390 Oct 30 01:54	26°♍54'22	
	5390 Nov 01 19:28	0°♎	

	5390 Nov 27 13:28	0°♏	
	5390 Dec 22 10:10	0°♐	
	5391 Jan 15 19:05	0°♑	
	5391 Feb 08 21:33	0°♒	
desc. node	5391 Feb 18 17:03	12°♒16'23	
	5391 Mar 04 20:33	0°♓	
morning set	5391 Mar 23 18:36	23°♓44'53	
	5391 Mar 28 18:07	0°♈	
	5391 Apr 21 16:06	0°♉	
superior conj	5391 May 03 03:52	14°♉22'29	-1°17'36
minimum elong	5391 May 03 13:05	14°♉51'18	1°17'24
max. Earth dist.	5391 May 07 01:10	19°♉13'56	1.71858 AU
	5391 May 15 16:18	0°♊	
	5391 Jun 08 19:56	0°♋	
evening rise	5391 Jun 11 13:52	3°♋24'01	
asc. node	5391 Jun 11 18:29	3°♋38'16	
	5391 Jul 03 03:34	0°♌	
	5391 Jul 27 15:34	0°♍	
	5391 Aug 21 09:07	0°♎	
	5391 Sep 15 10:42	0°♏	
desc. node	5391 Oct 01 09:49	18°♏48'43	
	5391 Oct 11 00:24	0°♐	
	5391 Nov 06 10:00	0°♑	
	5391 Dec 04 14:27	0°♒	
evening max el	5391 Dec 07 03:50	2°♒32'47	46°39'44
	5392 Jan 10 01:27	0°♓	
greatest brilliancy	5392 Jan 16 07:27	2°♓48'22	-4.9m
asc. node	5392 Jan 22 11:18	4°♓22'56	
retrograde	5392 Jan 26 06:30	4°♓39'55	
evening set	5392 Feb 10 07:16	0°♓12'32	
	5392 Feb 10 16:18	30°℞♒	
inferior conj	5392 Feb 15 19:58	26°♒55'53	5°51'20
minimum elong	5392 Feb 15 09:16	27°♒12'19	5°48'40
min. Earth dist.	5392 Feb 15 10:06	27°♒11'01	0.26719 AU
morning rise	5392 Feb 20 11:23	24°♒09'25	
direct	5392 Mar 07 08:23	19°♒14'27	
greatest brilliancy	5392 Mar 16 22:09	20°♒58'41	-4.9m
	5392 Apr 02 00:19	0°♓	
morning max el	5392 Apr 26 15:30	21°♓49'48	46°48'12
	5392 May 04 15:05	0°♈	
desc. node	5392 May 13 02:42	9°♈01'40	
	5392 May 31 23:37	0°♉	
	5392 Jun 26 22:41	0°♊	
	5392 Jul 22 08:01	0°♋	
	5392 Aug 16 09:38	0°♌	
asc. node	5392 Sep 03 04:08	21°♌27'55	
	5392 Sep 10 04:52	0°♍	
	5392 Oct 04 18:01	0°♎	
morning set	5392 Oct 23 19:57	23°♎30'28	
	5392 Oct 29 01:56	0°♏	
	5392 Nov 22 06:07	0°♐	
max. Earth dist.	5392 Nov 27 04:16	6°♐07'35	1.72239 AU
superior conj	5392 Nov 30 03:01	9°♐47'49	0°52'59
minimum elong	5392 Nov 30 12:49	10°♐18'21	0°52'37
	5392 Dec 16 07:56	0°♑	
desc. node	5392 Dec 23 19:23	9°♑20'16	
evening rise	5393 Jan 08 11:23	28°♑55'08	
	5393 Jan 09 08:08	0°♒	
	5393 Feb 02 07:18	0°♓	
	5393 Feb 26 06:47	0°♈	
	5393 Mar 22 09:10	0°♉	
asc. node	5393 Apr 15 20:47	0°♊07'38	
	5393 Apr 15 18:17	0°♊	
	5393 May 10 15:26	0°♋	
	5393 Jun 05 09:30	0°♌	
	5393 Jul 02 22:18	0°♍	
evening max el	5393 Jul 12 15:32	9°♍43'22	45°38'20
desc. node	5393 Aug 05 12:16	0°♎00'25	
	5393 Aug 05 12:02	0°♎	
greatest brilliancy	5393 Aug 20 02:20	7°♎54'30	-4.7m
retrograde	5393 Aug 30 11:40	9°♎51'43	
evening set	5393 Sep 17 02:44	4°♎02'47	
inferior conj	5393 Sep 21 01:00	1°♎37'24	-8°14'45
minimum elong	5393 Sep 20 19:28	1°♎46'05	8°14'17
min. Earth dist.	5393 Sep 21 02:32	1°♎35'00	0.29129 AU
	5393 Sep 23 15:22	30°℞♍	
morning rise	5393 Sep 24 12:05	29°♍28'20	
direct	5393 Oct 12 14:55	23°♍18'44	
greatest brilliancy	5393 Oct 23 05:33	25°♍20'28	-4.8m
	5393 Nov 01 16:34	0°♎	
asc. node	5393 Nov 26 13:36	19°♎57'26	
morning max el	5393 Dec 01 02:33	24°♎21'04	46°10'20
	5393 Dec 06 17:19	0°♏	
	5394 Jan 03 04:56	0°♐	
	5394 Jan 28 18:31	0°♑	
	5394 Feb 22 12:28	0°♒	
desc. node	5394 Mar 18 05:04	29°♒10'48	
	5394 Mar 18 20:58	0°♓	
	5394 Apr 12 01:05	0°♈	
	5394 May 06 03:56	0°♉	
	5394 May 30 07:37	0°♊	
morning set	5394 Jun 05 22:19	8°♊11'53	
	5394 Jun 23 13:11	0°♋	
asc. node	5394 Jul 09 06:21	19°♋24'14	
superior conj	5394 Jul 13 19:50	25°♋01'47	0°10'57
minimum elong	5394 Jul 13 17:27	24°♋54'27	0°10'49
behind sun begin	5394 Jul 13 00:13	24°♋01'19	
behind sun end	5394 Jul 14 10:41	25°♋47'35	
max. Earth dist.	5394 Jul 15 08:19	26°♋54'14	1.73187 AU
	5394 Jul 17 20:37	0°♌	
	5394 Aug 11 05:23	0°♍	
evening rise	5394 Aug 19 11:03	10°♍07'34	
	5394 Sep 04 15:23	0°♎	
	5394 Sep 29 03:16	0°♏	
	5394 Oct 23 18:05	0°♐	
desc. node	5394 Oct 28 21:42	6°♐15'14	
	5394 Nov 17 12:46	0°♑	
	5394 Dec 12 12:47	0°♒	
	5395 Jan 06 22:40	0°♓	
	5395 Feb 02 08:50	0°♈	
evening max el	5395 Feb 17 18:55	16°♈20'04	47°08'11
asc. node	5395 Feb 18 23:11	17°♈31'34	
	5395 Mar 04 00:53	0°♉	
greatest brilliancy	5395 Mar 30 11:59	17°♉48'25	-4.9m
retrograde	5395 Apr 09 13:55	19°♉44'50	
evening set	5395 Apr 27 04:31	13°♉46'04	
inferior conj	5395 Apr 30 11:42	11°♉44'23	8°12'42
minimum elong	5395 Apr 30 19:55	11°♉31'37	8°11'37
min. Earth dist.	5395 Apr 30 07:51	11°♉50'23	0.27558 AU
morning rise	5395 May 04 11:28	9°♉18'19	
direct	5395 May 21 05:51	3°♉50'59	
greatest brilliancy	5395 May 30 20:15	5°♉33'33	-4.8m
desc. node	5395 Jun 10 14:26	10°♉47'58	
	5395 Jul 04 15:27	0°♊	
morning max el	5395 Jul 09 15:44	4°♊45'52	46°03'25
	5395 Aug 03 02:33	0°♋	
	5395 Aug 30 00:34	0°♌	
	5395 Sep 24 20:15	0°♍	
asc. node	5395 Oct 01 15:58	8°♍04'25	
	5395 Oct 19 23:17	0°♎	
	5395 Nov 13 14:27	0°♏	

	5395 Dec 07 21:26	0°♐	
	5395 Dec 31 23:18	0°♑	
morning set	5396 Jan 03 20:55	3°♑37'35	
desc. node	5396 Jan 21 07:16	25°♑27'47	
	5396 Jan 24 22:03	0°♒	
max. Earth dist.	5396 Feb 12 14:18	23°♒27'52	1.71188 AU
superior conj	5396 Feb 13 12:17	24°♒36'59	-0°52'26
minimum elong	5396 Feb 13 00:53	24°♒01'07	0°51'58
	5396 Feb 17 19:00	0°♓	
	5396 Mar 12 15:26	0°♈	
evening rise	5396 Mar 25 09:26	16°♈01'11	
	5396 Apr 05 13:06	0°♉	
	5396 Apr 29 14:13	0°♊	
asc. node	5396 May 13 08:38	17°♊03'02	
	5396 May 23 21:01	0°♋	
	5396 Jun 17 11:46	0°♌	
	5396 Jul 12 13:46	0°♍	
	5396 Aug 07 09:43	0°♎	
desc. node	5396 Sep 02 00:01	28°♎14'42	
	5396 Sep 03 15:49	0°♏	
evening max el	5396 Sep 22 00:09	18°♏31'34	45°44'30
	5396 Oct 04 17:31	0°♐	
greatest brilliancy	5396 Oct 31 12:16	16°♐46'23	-4.8m
retrograde	5396 Nov 09 19:50	18°♐20'59	
evening set	5396 Nov 25 20:04	13°♐26'08	
inferior conj	5396 Nov 30 18:41	10°♐28'41	-5°25'48
minimum elong	5396 Dec 01 04:39	10°♐13'20	5°23'20
min. Earth dist.	5396 Dec 01 17:03	9°♐54'15	0.27731 AU
morning rise	5396 Dec 06 12:39	7°♐03'13	
direct	5396 Dec 21 21:02	2°♐26'16	
asc. node	5396 Dec 24 01:25	2°♐32'00	
greatest brilliancy	5397 Jan 02 00:16	4°♐45'51	-4.9m
	5397 Feb 04 21:43	0°♑	
morning max el	5397 Feb 10 12:05	5°♑33'33	46°52'50
	5397 Mar 05 05:49	0°♒	
	5397 Mar 31 04:57	0°♓	
desc. node	5397 Apr 14 16:52	17°♓15'30	
	5397 Apr 25 07:00	0°♈	
	5397 May 20 00:01	0°♉	
	5397 Jun 13 13:37	0°♊	
	5397 Jul 08 02:17	0°♋	
	5397 Aug 01 14:24	0°♌	
asc. node	5397 Aug 05 18:15	5°♌05'57	
morning set	5397 Aug 14 05:35	15°♌29'18	
	5397 Aug 26 01:12	0°♍	
max. Earth dist.	5397 Sep 18 07:52	28°♍39'07	1.73326 AU
	5397 Sep 19 10:06	0°♎	
superior conj	5397 Sep 19 19:15	0°♎28'11	1°21'30
minimum elong	5397 Sep 19 13:59	0°♎11'58	1°21'25
	5397 Oct 13 17:24	0°♏	
evening rise	5397 Oct 26 06:59	15°♏31'42	
	5397 Nov 06 23:57	0°♐	
desc. node	5397 Nov 25 09:34	22°♐44'37	
	5397 Dec 01 06:26	0°♑	
	5397 Dec 25 13:09	0°♒	
	5398 Jan 18 20:45	0°♓	
	5398 Feb 12 07:54	0°♈	
	5398 Mar 09 04:44	0°♉	
asc. node	5398 Mar 18 10:51	10°♉55'56	
	5398 Apr 03 23:58	0°♊	
evening max el	5398 Apr 30 18:14	28°♊39'56	46°27'53
	5398 May 02 02:32	0°♋	
greatest brilliancy	5398 Jun 08 13:11	28°♋14'24	-4.8m
	5398 Jun 14 14:39	0°♌	
retrograde	5398 Jun 19 14:50	0°♌28'50	
	5398 Jun 24 11:58	30°℞♋	
evening set	5398 Jul 04 13:49	26°♋05'07	
desc. node	5398 Jul 08 02:21	24°♋01'29	
inferior conj	5398 Jul 10 22:14	22°♋15'56	-0°41'10
minimum elong	5398 Jul 10 20:42	22°♋18'20	0°40'43
min. Earth dist.	5398 Jul 10 12:26	22°♋31'17	0.28478 AU
morning rise	5398 Jul 17 04:15	18°♋31'46	
direct	5398 Aug 01 06:48	14°♋08'47	
greatest brilliancy	5398 Aug 11 03:23	15°♋54'32	-4.7m
	5398 Sep 03 08:38	0°♌	
morning max el	5398 Sep 18 23:05	13°♌49'34	45°41'45
	5398 Oct 05 01:50	0°♍	
asc. node	5398 Oct 29 03:50	26°♍19'44	
	5398 Nov 01 09:25	0°♎	
	5398 Nov 27 01:52	0°♏	
	5398 Dec 21 21:49	0°♐	
	5399 Jan 15 06:20	0°♑	
	5399 Feb 08 08:34	0°♒	
desc. node	5399 Feb 17 19:08	11°♒48'37	
	5399 Mar 04 07:26	0°♓	
morning set	5399 Mar 21 05:06	21°♓13'19	
	5399 Mar 28 04:53	0°♈	
	5399 Apr 21 02:49	0°♉	
superior conj	5399 Apr 30 16:21	11°♉58'07	-1°19'15
minimum elong	5399 May 01 01:00	12°♉25'08	1°19'06
max. Earth dist.	5399 May 04 14:10	16°♉51'15	1.71809 AU
	5399 May 15 02:59	0°♊	
	5399 Jun 08 06:38	0°♋	
evening rise	5399 Jun 09 04:24	1°♋07'24	
asc. node	5399 Jun 10 20:34	3°♋11'39	
	5399 Jul 02 14:19	0°♌	
	5399 Jul 27 02:30	0°♍	
	5399 Aug 20 20:28	0°♎	
	5399 Sep 14 22:48	0°♏	
desc. node	5399 Sep 30 11:45	18°♏16'53	
	5399 Oct 10 13:51	0°♐	
	5399 Nov 06 02:02	0°♑	
evening max el	5399 Dec 04 16:47	0°♒09'11	46°37'46
	5399 Dec 04 13:04	0°♒	
	5400 Jan 12 20:38	0°♓	
greatest brilliancy	5400 Jan 13 21:14	0°♓22'56	-4.9m
asc. node	5400 Jan 21 13:23	2°♓07'21	
retrograde	5400 Jan 23 18:27	2°♓13'10	
	5400 Feb 03 05:54	30°℞♒	
evening set	5400 Feb 07 16:55	27°♒50'10	
inferior conj	5400 Feb 13 08:35	24°♒29'50	5°32'14
minimum elong	5400 Feb 12 22:07	24°♒45'53	5°29'32
min. Earth dist.	5400 Feb 13 00:01	24°♒42'59	0.26706 AU
morning rise	5400 Feb 18 03:20	21°♒38'29	
direct	5400 Mar 05 20:27	16°♒48'11	
greatest brilliancy	5400 Mar 15 12:44	18°♒34'18	-4.9m
	5400 Apr 03 18:00	0°♓	
morning max el	5400 Apr 25 03:40	19°♓23'18	46°49'25
	5400 May 05 10:49	0°♈	
desc. node	5400 May 13 04:47	8°♈18'52	
	5400 Jun 01 14:43	0°♉	
	5400 Jun 27 11:49	0°♊	
	5400 Jul 22 20:04	0°♋	
	5400 Aug 16 21:00	0°♌	
asc. node	5400 Sep 03 06:04	21°♌00'21	
	5400 Sep 10 15:48	0°♍	
	5400 Oct 05 04:43	0°♎	
morning set	5400 Oct 22 12:45	21°♎21'14	
	5400 Oct 29 12:33	0°♏	
	5400 Nov 22 16:46	0°♐	
max. Earth dist.	5400 Nov 25 20:12	3°♐54'40	1.72288 AU

superior conj	5400 Nov 28 17:56	7°♐31'41	0°55'42
minimum elong	5400 Nov 29 03:52	8°♐02'35	0°55'20
	5400 Dec 16 18:41	0°♑	
desc. node	5400 Dec 23 21:30	8°♑53'10	
evening rise	5401 Jan 07 00:01	26°♑30'40	
	5401 Jan 09 19:00	0°♒	
	5401 Feb 02 18:19	0°♓	
	5401 Feb 26 18:00	0°♈	
	5401 Mar 22 20:38	0°♉	
asc. node	5401 Apr 15 22:47	29°♉37'25	
	5401 Apr 16 06:12	0°♊	
	5401 May 11 04:10	0°♋	
	5401 Jun 05 23:59	0°♌	
	5401 Jul 03 17:17	0°♍	
evening max el	5401 Jul 11 06:32	7°♍30'38	45°39'14
desc. node	5401 Aug 05 14:17	28°♍49'09	
	5401 Aug 07 09:47	0°♎	
greatest brilliancy	5401 Aug 18 16:49	5°♎44'06	-4.7m
retrograde	5401 Aug 29 04:02	7°♎43'21	
evening set	5401 Sep 15 16:08	1°♎57'58	
	5401 Sep 18 21:11	30°℞♍	
inferior conj	5401 Sep 19 17:20	29°♍28'26	-8°08'33
minimum elong	5401 Sep 19 11:11	29°♍38'04	8°07'59
min. Earth dist.	5401 Sep 19 17:51	29°♍27'38	0.29141 AU
morning rise	5401 Sep 23 06:09	27°♍16'58	
direct	5401 Oct 11 07:02	21°♍09'34	
greatest brilliancy	5401 Oct 21 21:38	23°♍11'18	-4.8m
	5401 Nov 03 18:05	0°♎	
asc. node	5401 Nov 26 15:42	19°♎06'59	
morning max el	5401 Nov 29 18:14	22°♎08'06	46°08'49
	5401 Dec 07 12:51	0°♏	
	5402 Jan 03 19:51	0°♐	
	5402 Jan 29 07:39	0°♑	
	5402 Feb 23 00:42	0°♒	
desc. node	5402 Mar 18 06:55	28°♒40'17	
	5402 Mar 19 08:40	0°♓	
	5402 Apr 12 12:26	0°♈	
	5402 May 06 15:00	0°♉	
	5402 May 30 18:28	0°♊	
morning set	5402 Jun 04 13:32	5°♊56'48	
	5402 Jun 23 23:52	0°♋	
asc. node	5402 Jul 09 08:24	18°♋57'46	
superior conj	5402 Jul 12 12:38	22°♋52'53	0°07'39
minimum elong	5402 Jul 12 10:58	22°♋47'43	0°07'33
behind sun begin	5402 Jul 11 14:15	21°♋43'49	
behind sun end	5402 Jul 13 07:41	23°♋51'36	
max. Earth dist.	5402 Jul 14 03:30	24°♋52'40	1.73161 AU
	5402 Jul 18 07:14	0°♌	
	5402 Aug 11 16:02	0°♍	
evening rise	5402 Aug 18 05:30	8°♍03'57	
	5402 Sep 05 02:11	0°♎	
	5402 Sep 29 14:20	0°♏	
	5402 Oct 24 05:34	0°♐	
desc. node	5402 Oct 28 23:42	5°♐46'08	
	5402 Nov 18 00:54	0°♑	
	5402 Dec 13 01:55	0°♒	
	5403 Jan 07 13:31	0°♓	
	5403 Feb 03 03:17	0°♈	
evening max el	5403 Feb 16 09:31	13°♈58'25	47°08'28
asc. node	5403 Feb 19 01:06	16°♈38'19	
	5403 Mar 05 08:25	0°♉	
greatest brilliancy	5403 Mar 29 01:54	15°♉25'26	-4.9m
retrograde	5403 Apr 08 04:40	17°♉22'33	
evening set	5403 Apr 25 21:14	11°♉19'29	
inferior conj	5403 Apr 29 01:30	9°♉22'20	8°22'03
minimum elong	5403 Apr 29 09:07	9°♉10'30	8°21'09
min. Earth dist.	5403 Apr 28 20:55	9°♉29'26	0.27528 AU
morning rise	5403 May 02 21:10	7°♉02'35	
direct	5403 May 19 19:35	1°♉29'26	
greatest brilliancy	5403 May 29 08:38	3°♉11'27	-4.8m
desc. node	5403 Jun 10 16:29	9°♉24'59	
	5403 Jul 05 16:07	0°♊	
morning max el	5403 Jul 08 07:12	2°♊31'32	46°04'57
	5403 Aug 03 18:58	0°♋	
	5403 Aug 30 14:10	0°♌	
	5403 Sep 25 08:32	0°♍	
asc. node	5403 Oct 01 17:56	7°♍34'29	
	5403 Oct 20 10:54	0°♎	
	5403 Nov 14 01:41	0°♏	
	5403 Dec 08 08:30	0°♐	
	5404 Jan 01 10:16	0°♑	
morning set	5404 Jan 02 09:55	1°♑13'54	
desc. node	5404 Jan 21 09:15	24°♑59'33	
	5404 Jan 25 09:02	0°♒	
max. Earth dist.	5404 Feb 10 23:27	20°♒51'08	1.71203 AU
superior conj	5404 Feb 11 22:45	22°♒04'22	-0°49'11
minimum elong	5404 Feb 11 11:45	21°♒29'48	0°48'43
	5404 Feb 18 06:01	0°♓	
	5404 Mar 13 02:30	0°♈	
evening rise	5404 Mar 23 19:51	13°♈28'28	
	5404 Apr 06 00:13	0°♉	
	5404 Apr 30 01:27	0°♊	
asc. node	5404 May 13 10:44	16°♊34'29	
	5404 May 24 08:28	0°♋	
	5404 Jun 17 23:36	0°♌	
	5404 Jul 13 02:21	0°♍	
	5404 Aug 07 23:52	0°♎	
desc. node	5404 Sep 02 01:55	27°♎33'37	
	5404 Sep 04 09:38	0°♏	
evening max el	5404 Sep 20 15:21	16°♏18'21	45°43'08
	5404 Oct 06 01:38	0°♐	
greatest brilliancy	5404 Oct 30 01:49	14°♐28'46	-4.8m
retrograde	5404 Nov 08 09:23	16°♐03'00	
evening set	5404 Nov 24 13:10	11°♐03'54	
inferior conj	5404 Nov 29 08:56	8°♐10'02	-5°42'35
minimum elong	5404 Nov 29 19:04	7°♐54'22	5°40'11
min. Earth dist.	5404 Nov 30 07:25	7°♐35'20	0.27797 AU
morning rise	5404 Dec 05 00:25	4°♐47'33	
direct	5404 Dec 20 12:18	0°♐06'52	
asc. node	5404 Dec 24 03:28	0°♐22'31	
greatest brilliancy	5404 Dec 31 15:04	2°♐25'46	-4.9m
	5405 Feb 05 21:56	0°♑	
morning max el	5405 Feb 09 02:19	3°♑11'23	46°51'48
	5405 Mar 05 22:37	0°♒	
	5405 Mar 31 19:10	0°♓	
desc. node	5405 Apr 14 18:59	16°♓41'44	
	5405 Apr 25 19:55	0°♈	
	5405 May 20 12:10	0°♉	
	5405 Jun 14 01:14	0°♊	
	5405 Jul 08 13:33	0°♋	
	5405 Aug 02 01:24	0°♌	
asc. node	5405 Aug 05 20:11	4°♌38'19	
morning set	5405 Aug 12 23:11	13°♌22'39	
	5405 Aug 26 12:02	0°♍	
max. Earth dist.	5405 Sep 17 03:01	26°♍37'00	1.73342 AU
superior conj	5405 Sep 18 13:27	28°♍23'06	1°20'29
minimum elong	5405 Sep 18 07:39	28°♍05'15	1°20'24
	5405 Sep 19 20:54	0°♎	
	5405 Oct 14 04:15	0°♏	
evening rise	5405 Oct 24 23:44	13°♏21'18	
	5405 Nov 07 11:00	0°♐	

desc. node	5405 Nov 25 11:40	22°♐16'17	
	5405 Dec 01 17:47	0°♑	
	5405 Dec 26 00:50	0°♒	
	5406 Jan 19 08:54	0°♓	
	5406 Feb 12 20:41	0°♈	
	5406 Mar 09 18:40	0°♉	
asc. node	5406 Mar 18 12:52	10°♉19'14	
	5406 Apr 04 16:15	0°♊	
evening max el	5406 Apr 29 09:09	26°♊22'14	46°29'46
	5406 May 03 01:41	0°♋	
greatest brilliancy	5406 Jun 07 06:27	26°♋02'13	-4.8m
retrograde	5406 Jun 18 06:14	28°♋15'10	
evening set	5406 Jul 03 06:06	23°♋51'16	
desc. node	5406 Jul 08 04:23	20°♋55'24	
min. Earth dist.	5406 Jul 09 04:47	20°♋17'14	0.28439 AU
inferior conj	5406 Jul 09 13:54	20°♋02'57	-0°20'23
minimum elong	5406 Jul 09 13:08	20°♋04'08	0°20'10
morning rise	5406 Jul 15 20:46	16°♋17'15	
direct	5406 Jul 30 21:54	11°♋56'24	
greatest brilliancy	5406 Aug 09 18:39	13°♋41'59	-4.7m
	5406 Sep 04 16:15	0°♌	
morning max el	5406 Sep 17 13:17	11°♌34'49	45°41'45
	5406 Oct 05 19:32	0°♍	
asc. node	5406 Oct 29 05:59	25°♍44'55	
	5406 Nov 01 23:34	0°♎	
	5406 Nov 27 14:34	0°♏	
	5406 Dec 22 09:49	0°♐	
	5407 Jan 15 18:00	0°♑	
	5407 Feb 08 20:02	0°♒	
desc. node	5407 Feb 17 21:04	11°♒18'59	
	5407 Mar 04 18:45	0°♓	
morning set	5407 Mar 19 15:07	18°♓38'46	
	5407 Mar 28 16:05	0°♈	
	5407 Apr 21 13:55	0°♉	
superior conj	5407 Apr 29 04:32	9°♉31'29	-1°20'46
minimum elong	5407 Apr 29 12:33	9°♉56'31	1°20'39
max. Earth dist.	5407 May 03 01:01	14°♉20'34	1.71758 AU
	5407 May 15 14:03	0°♊	
evening rise	5407 Jun 07 18:42	28°♊48'46	
	5407 Jun 08 17:42	0°♋	
asc. node	5407 Jun 10 22:35	2°♋43'36	
	5407 Jul 03 01:29	0°♌	
	5407 Jul 27 13:53	0°♍	
	5407 Aug 21 08:16	0°♎	
	5407 Sep 15 11:22	0°♏	
desc. node	5407 Sep 30 13:51	17°♏44'16	
	5407 Oct 11 03:47	0°♐	
	5407 Nov 06 18:42	0°♑	
evening max el	5407 Dec 03 05:08	27°♑43'19	46°35'44
	5407 Dec 05 13:06	0°♒	
greatest brilliancy	5408 Jan 12 10:24	27°♒55'23	-4.9m
asc. node	5408 Jan 21 15:18	29°♒44'33	
retrograde	5408 Jan 22 06:26	29°♒45'01	
evening set	5408 Feb 06 02:35	25°♒25'35	
inferior conj	5408 Feb 11 21:03	22°♒01'58	5°12'19
minimum elong	5408 Feb 11 10:53	22°♒17'31	5°09'37
min. Earth dist.	5408 Feb 11 13:39	22°♒13'17	0.26702 AU
morning rise	5408 Feb 16 19:07	19°♒06'04	
direct	5408 Mar 03 08:33	14°♒19'51	
greatest brilliancy	5408 Mar 13 03:17	16°♒08'09	-4.9m
	5408 Apr 04 07:59	0°♓	
morning max el	5408 Apr 22 16:30	16°♓56'51	46°50'38
	5408 May 05 06:32	0°♈	
desc. node	5408 May 12 06:51	7°♈35'10	
	5408 Jun 01 06:06	0°♉	
	5408 Jun 27 01:16	0°♊	
	5408 Jul 22 08:25	0°♋	
	5408 Aug 16 08:40	0°♌	
asc. node	5408 Sep 02 08:03	20°♌31'53	
	5408 Sep 10 03:04	0°♍	
	5408 Oct 04 15:45	0°♎	
morning set	5408 Oct 20 05:43	19°♎11'33	
	5408 Oct 28 23:29	0°♏	
	5408 Nov 22 03:43	0°♐	
max. Earth dist.	5408 Nov 23 14:17	1°♐47'31	1.72332 AU
superior conj	5408 Nov 26 09:08	5°♐15'32	0°58'18
minimum elong	5408 Nov 26 19:08	5°♐46'37	0°57'58
	5408 Dec 16 05:41	0°♑	
desc. node	5408 Dec 22 23:27	8°♑24'46	
evening rise	5409 Jan 04 12:57	24°♑06'22	
	5409 Jan 09 06:08	0°♒	
	5409 Feb 02 05:38	0°♓	
	5409 Feb 26 05:32	0°♈	
	5409 Mar 22 08:29	0°♉	
asc. node	5409 Apr 15 00:52	29°♉06'13	
	5409 Apr 15 18:32	0°♊	
	5409 May 10 17:23	0°♋	
	5409 Jun 05 15:02	0°♌	
	5409 Jul 03 13:15	0°♍	
evening max el	5409 Jul 08 22:03	5°♍18'13	45°40'20
desc. node	5409 Aug 04 16:12	27°♍34'35	
	5409 Aug 08 16:53	0°♎	
greatest brilliancy	5409 Aug 16 06:49	3°♎32'07	-4.7m
retrograde	5409 Aug 26 20:39	5°♎33'39	
	5409 Sep 12 23:55	30°℞♍	
evening set	5409 Sep 13 05:18	29°♍52'04	
inferior conj	5409 Sep 17 09:31	27°♍18'07	-8°01'45
minimum elong	5409 Sep 17 02:46	27°♍28'40	8°01'03
min. Earth dist.	5409 Sep 17 08:41	27°♍19'26	0.29148 AU
morning rise	5409 Sep 21 00:12	25°♍04'04	
direct	5409 Oct 08 23:28	18°♍59'13	
greatest brilliancy	5409 Oct 19 13:02	21°♍00'24	-4.8m
	5409 Nov 04 13:13	0°♎	
asc. node	5409 Nov 25 17:40	18°♎16'20	
morning max el	5409 Nov 27 10:26	19°♎55'51	46°07'26
	5409 Dec 07 08:04	0°♏	
	5410 Jan 03 10:44	0°♐	
	5410 Jan 28 20:49	0°♑	
	5410 Feb 22 13:00	0°♒	
desc. node	5410 Mar 17 09:01	28°♒10'08	
	5410 Mar 18 20:29	0°♓	
	5410 Apr 11 23:55	0°♈	
	5410 May 06 02:15	0°♉	
	5410 May 30 05:31	0°♊	
morning set	5410 Jun 02 04:15	3°♊39'24	
	5410 Jun 23 10:46	0°♋	
asc. node	5410 Jul 08 10:18	18°♋30'10	
superior conj	5410 Jul 10 04:55	20°♋41'36	0°04'18
minimum elong	5410 Jul 10 03:57	20°♋38'40	0°04'13
behind sun begin	5410 Jul 09 05:18	19°♋28'45	
behind sun end	5410 Jul 11 02:37	21°♋48'34	
max. Earth dist.	5410 Jul 11 23:42	22°♋53'34	1.73130 AU
	5410 Jul 17 18:02	0°♌	
	5410 Aug 11 02:52	0°♍	
evening rise	5410 Aug 15 23:34	5°♍58'44	
	5410 Sep 04 13:09	0°♎	
	5410 Sep 29 01:34	0°♏	
	5410 Oct 23 17:14	0°♐	
desc. node	5410 Oct 28 01:47	5°♐16'46	
	5410 Nov 17 13:13	0°♑	
	5410 Dec 12 15:14	0°♒	

	5411 Jan 07	04:35	0°♓		
	5411 Feb 02	22:11	0°♈		
evening max el	5411 Feb 14	00:35	11°♈38'04	47°08'40	
asc. node	5411 Feb 18	03:07	15°♈44'29		
	5411 Mar 05	18:35	0°♉		
greatest brilliancy	5411 Mar 26	15:35	13°♉02'22	-4.9m	
retrograde	5411 Apr 05	19:20	14°♉59'58		
evening set	5411 Apr 23	13:45	8°♉53'07		
inferior conj	5411 Apr 26	15:15	7°♉00'05	8°30'36	
minimum elong	5411 Apr 26	22:13	6°♉49'17	8°29'51	
min. Earth dist.	5411 Apr 26	09:45	7°♉08'37	0.27500 AU	
morning rise	5411 Apr 30	06:52	4°♉46'29		
	5411 May 10	21:13	30°℞♈		
direct	5411 May 17	09:36	29°♈07'52		
	5411 May 24	03:01	0°♉		
greatest brilliancy	5411 May 26	20:45	0°♉48'43	-4.8m	
desc. node	5411 Jun 09	18:29	8°♉04'28		
	5411 Jul 05	15:45	0°♊		
morning max el	5411 Jul 05	22:14	0°♊15'44	46°06'19	
	5411 Aug 03	11:11	0°♋		
	5411 Aug 30	03:44	0°♌		
	5411 Sep 24	20:48	0°♍		
asc. node	5411 Sep 30	20:04	7°♍05'03		
	5411 Oct 19	22:27	0°♎		
	5411 Nov 13	12:52	0°♏		
	5411 Dec 07	19:30	0°♐		
morning set	5411 Dec 30	23:02	28°♐50'41		
	5411 Dec 31	21:13	0°♑		
desc. node	5412 Jan 20	11:13	24°♑31'25		
	5412 Jan 24	19:57	0°♒		
max. Earth dist.	5412 Feb 08	05:44	18°♒05'42	1.71214 AU	
superior conj	5412 Feb 09	09:30	19°♒32'58	-0°45'52	
minimum elong	5412 Feb 08	23:00	18°♒59'59	0°45'24	
	5412 Feb 17	16:57	0°♓		
	5412 Mar 12	13:25	0°♈		
evening rise	5412 Mar 21	06:32	10°♈56'57		
	5412 Apr 05	11:11	0°♉		
	5412 Apr 29	12:31	0°♊		
asc. node	5412 May 12	12:44	16°♊06'08		
	5412 May 23	19:46	0°♋		
	5412 Jun 17	11:21	0°♌		
	5412 Jul 12	14:55	0°♍		
	5412 Aug 07	14:04	0°♎		
desc. node	5412 Sep 01	04:03	26°♎53'01		
	5412 Sep 04	03:46	0°♏		
evening max el	5412 Sep 18	05:39	14°♏03'19	45°41'53	
	5412 Oct 06	12:27	0°♐		
greatest brilliancy	5412 Oct 27	15:56	12°♐12'26	-4.8m	
retrograde	5412 Nov 05	22:35	13°♐45'54		
evening set	5412 Nov 22	06:20	8°♐42'25		
inferior conj	5412 Nov 26	23:16	5°♐52'18	-5°58'37	
minimum elong	5412 Nov 27	09:29	5°♐36'28	5°56'18	
min. Earth dist.	5412 Nov 27	22:04	5°♐17'01	0.27863 AU	
morning rise	5412 Dec 02	12:05	2°♐33'00		
	5412 Dec 07	16:21	30°℞♏		
direct	5412 Dec 18	03:08	27°♏48'13		
asc. node	5412 Dec 23	05:26	28°♏18'35		
	5412 Dec 28	23:16	0°♐		
greatest brilliancy	5412 Dec 29	06:24	0°♐07'00	-4.9m	
	5413 Feb 05	20:53	0°♑		
morning max el	5413 Feb 06	15:48	0°♑47'48	46°50'48	
	5413 Mar 05	14:54	0°♒		
	5413 Mar 31	09:00	0°♓		
desc. node	5413 Apr 13	21:00	16°♓08'41		
	5413 Apr 25	08:28	0°♈		
	5413 May 19	23:56	0°♉		
	5413 Jun 13	12:30	0°♊		
	5413 Jul 08	00:28	0°♋		
	5413 Aug 01	12:05	0°♌		
asc. node	5413 Aug 04	22:13	4°♌11'51		
morning set	5413 Aug 10	16:44	11°♌16'40		
	5413 Aug 25	22:36	0°♍		
max. Earth dist.	5413 Sep 14	20:33	24°♍30'45	1.73360 AU	
superior conj	5413 Sep 16	07:34	26°♍18'38	1°19'21	
minimum elong	5413 Sep 16	01:17	25°♍59'16	1°19'14	
	5413 Sep 19	07:25	0°♎		
	5413 Oct 13	14:51	0°♏		
evening rise	5413 Oct 22	16:25	11°♏11'39		
	5413 Nov 06	21:47	0°♐		
desc. node	5413 Nov 24	13:34	21°♐48'17		
	5413 Dec 01	04:51	0°♑		
	5413 Dec 25	12:16	0°♒		
	5414 Jan 18	20:48	0°♓		
	5414 Feb 12	09:15	0°♈		
	5414 Mar 09	08:23	0°♉		
asc. node	5414 Mar 17	15:00	9°♉43'38		
	5414 Apr 04	08:25	0°♊		
evening max el	5414 Apr 26	23:16	24°♊03'44	46°31'48	
	5414 May 03	01:17	0°♋		
greatest brilliancy	5414 Jun 04	23:45	23°♋51'41	-4.8m	
retrograde	5414 Jun 15	21:50	26°♋03'40		
evening set	5414 Jun 30	22:42	21°♋39'00		
inferior conj	5414 Jul 07	05:46	17°♋51'57	0°00'19	
minimum elong	5414 Jul 07	05:46	17°♋51'56	0°00'18	
transit middle	5414 Jul 07	05:46	17°♋51'56	0°00'18	
transit begin	5414 Jul 07	01:43	17°♋58'17		
transit end	5414 Jul 07	09:49	17°♋45'35		
min. Earth dist.	5414 Jul 06	21:24	18°♋05'04	0.28403 AU	
desc. node	5414 Jul 07	06:17	17°♋51'08		
morning rise	5414 Jul 13	13:21	14°♋05'04		
direct	5414 Jul 28	12:50	9°♋45'50		
greatest brilliancy	5414 Aug 07	10:34	11°♋31'54	-4.7m	
	5414 Sep 04	20:58	0°♌		
morning max el	5414 Sep 15	03:51	9°♌22'12	45°41'42	
	5414 Oct 05	12:23	0°♍		
asc. node	5414 Oct 28	07:55	25°♍10'48		
	5414 Nov 01	13:12	0°♎		
	5414 Nov 27	02:49	0°♏		
	5414 Dec 21	21:24	0°♐		
	5415 Jan 15	05:15	0°♑		
	5415 Feb 08	07:05	0°♒		
desc. node	5415 Feb 16	23:07	10°♒50'57		
	5415 Mar 04	05:40	0°♓		
morning set	5415 Mar 17	00:59	16°♓04'53		
	5415 Mar 28	02:54	0°♈		
	5415 Apr 21	00:40	0°♉		
superior conj	5415 Apr 26	16:43	7°♉05'56	-1°22'09	
minimum elong	5415 Apr 27	00:01	7°♉28'46	1°22'02	
max. Earth dist.	5415 Apr 30	08:49	11°♉41'29	1.71704 AU	
	5415 May 15	00:43	0°♊		
evening rise	5415 Jun 05	09:03	26°♊31'40		
	5415 Jun 08	04:21	0°♋		
asc. node	5415 Jun 10	00:31	2°♋16'41		
	5415 Jul 02	12:10	0°♌		
	5415 Jul 27	00:47	0°♍		
	5415 Aug 20	19:37	0°♎		
	5415 Sep 14	23:32	0°♏		
desc. node	5415 Sep 29	15:51	17°♏12'34		
	5415 Oct 10	17:25	0°♐		
	5415 Nov 06	11:15	0°♑		
evening max el	5415 Nov 30	18:01	25°♑20'13	46°33'48	

	5415 Dec 05 13:49	0°♒	
greatest brilliancy	5416 Jan 09 23:00	25°♒28'34	-4.9m
retrograde	5416 Jan 19 19:01	27°♒18'20	
asc. node	5416 Jan 20 17:20	27°♒17'17	
evening set	5416 Feb 03 12:31	23°♒01'53	
inferior conj	5416 Feb 09 09:29	19°♒35'15	4°51'51
minimum elong	5416 Feb 08 23:43	19°♒50'10	4°49'09
min. Earth dist.	5416 Feb 09 02:58	19°♒45'12	0.26702 AU
morning rise	5416 Feb 14 10:50	16°♒35'07	
direct	5416 Feb 29 21:02	11°♒52'43	
greatest brilliancy	5416 Mar 10 17:19	13°♒42'43	-4.9m
	5416 Apr 04 17:54	0°♓	
morning max el	5416 Apr 20 06:23	14°♓34'11	46°51'45
	5416 May 05 01:16	0°♈	
desc. node	5416 May 11 08:45	6°♈52'42	
	5416 May 31 20:51	0°♉	
	5416 Jun 26 14:10	0°♊	
	5416 Jul 21 20:15	0°♋	
	5416 Aug 15 19:50	0°♌	
asc. node	5416 Sep 01 10:10	20°♌05'16	
	5416 Sep 09 13:49	0°♍	
	5416 Oct 04 02:18	0°♎	
morning set	5416 Oct 17 22:53	17°♎03'55	
	5416 Oct 28 10:01	0°♏	
max. Earth dist.	5416 Nov 21 07:59	29°♏40'26	1.72379 AU
	5416 Nov 21 14:17	0°♐	
superior conj	5416 Nov 24 00:25	3°♐00'47	1°00'48
minimum elong	5416 Nov 24 10:24	3°♐31'50	1°00'29
	5416 Dec 15 16:21	0°♑	
desc. node	5416 Dec 22 01:27	7°♑57'34	
evening rise	5417 Jan 02 01:47	21°♑42'52	
	5417 Jan 08 16:56	0°♒	
	5417 Feb 01 16:37	0°♓	
	5417 Feb 25 16:45	0°♈	
	5417 Mar 21 20:01	0°♉	
asc. node	5417 Apr 14 02:48	28°♉35'33	
	5417 Apr 15 06:33	0°♊	
	5417 May 10 06:20	0°♋	
	5417 Jun 05 05:54	0°♌	
	5417 Jul 03 09:23	0°♍	
evening max el	5417 Jul 06 14:34	3°♍09'29	45°41'35
desc. node	5417 Aug 03 18:20	26°♍19'45	
	5417 Aug 10 13:28	0°♎	
greatest brilliancy	5417 Aug 13 21:17	1°♎22'31	-4.7m
retrograde	5417 Aug 24 13:34	3°♎25'53	
	5417 Sep 06 18:48	30°℞♍	
evening set	5417 Sep 10 18:43	27°♍48'26	
inferior conj	5417 Sep 15 01:56	25°♍09'53	-7°54'23
minimum elong	5417 Sep 14 18:40	25°♍21'16	7°53'33
min. Earth dist.	5417 Sep 14 23:32	25°♍13'38	0.29150 AU
morning rise	5417 Sep 18 18:38	22°♍52'56	
direct	5417 Oct 06 16:27	16°♍51'16	
greatest brilliancy	5417 Oct 17 03:53	18°♍50'52	-4.7m
	5417 Nov 05 02:36	0°♎	
asc. node	5417 Nov 24 19:39	17°♎28'03	
morning max el	5417 Nov 25 02:42	17°♎45'20	46°05'47
	5417 Dec 07 02:19	0°♏	
	5418 Jan 03 01:07	0°♐	
	5418 Jan 28 09:39	0°♑	
	5418 Feb 22 01:02	0°♒	
desc. node	5418 Mar 16 11:06	27°♒40'41	
	5418 Mar 18 08:02	0°♓	
	5418 Apr 11 11:09	0°♈	
	5418 May 05 13:14	0°♉	
	5418 May 29 16:18	0°♊	
morning set	5418 May 30 18:49	1°♊22'16	
	5418 Jun 22 21:25	0°♋	
superior conj	5418 Jul 07 21:05	18°♋30'41	0°00'53
minimum elong	5418 Jul 07 20:54	18°♋30'07	0°00'52
behind sun begin	5418 Jul 06 21:35	17°♋18'11	
behind sun end	5418 Jul 08 20:13	19°♋42'04	
asc. node	5418 Jul 07 12:23	18°♋03'50	
max. Earth dist.	5418 Jul 09 20:32	20°♋57'06	1.73095 AU
	5418 Jul 17 04:37	0°♌	
	5418 Aug 10 13:27	0°♍	
evening rise	5418 Aug 13 17:45	3°♍54'34	
	5418 Sep 03 23:51	0°♎	
	5418 Sep 28 12:31	0°♏	
	5418 Oct 23 04:37	0°♐	
desc. node	5418 Oct 27 03:44	4°♐47'53	
	5418 Nov 17 01:19	0°♑	
	5418 Dec 12 04:27	0°♒	
	5419 Jan 06 19:43	0°♓	
	5419 Feb 02 17:34	0°♈	
evening max el	5419 Feb 11 15:33	9°♈17'24	47°08'36
asc. node	5419 Feb 17 05:13	14°♈49'46	
	5419 Mar 06 08:20	0°♉	
greatest brilliancy	5419 Mar 24 05:39	10°♉39'20	-4.9m
retrograde	5419 Apr 03 09:27	12°♉36'33	
evening set	5419 Apr 21 05:55	6°♉26'32	
inferior conj	5419 Apr 24 04:48	4°♉37'18	8°38'20
minimum elong	5419 Apr 24 11:03	4°♉27'36	8°37'44
min. Earth dist.	5419 Apr 23 22:34	4°♉46'59	0.27467 AU
morning rise	5419 Apr 27 16:22	2°♉29'36	
	5419 May 02 05:56	30°℞♈	
direct	5419 May 14 23:19	26°♈45'55	
greatest brilliancy	5419 May 24 08:46	28°♈25'28	-4.8m
	5419 May 28 07:48	0°♉	
desc. node	5419 Jun 08 20:30	6°♉46'30	
morning max el	5419 Jul 03 12:07	27°♉57'11	46°07'45
	5419 Jul 05 14:17	0°♊	
	5419 Aug 03 03:00	0°♋	
	5419 Aug 29 17:03	0°♌	
	5419 Sep 24 08:51	0°♍	
asc. node	5419 Sep 29 21:59	6°♍35'27	
	5419 Oct 19 09:49	0°♎	
	5419 Nov 12 23:52	0°♏	
	5419 Dec 07 06:19	0°♐	
morning set	5419 Dec 28 12:33	26°♐29'19	
	5419 Dec 31 08:00	0°♑	
desc. node	5420 Jan 19 13:19	24°♑04'05	
	5420 Jan 24 06:47	0°♒	
max. Earth dist.	5420 Feb 05 10:09	15°♒14'44	1.71238 AU
superior conj	5420 Feb 06 20:23	17°♒02'16	-0°42'27
minimum elong	5420 Feb 06 10:27	16°♒31'05	0°42'00
	5420 Feb 17 03:50	0°♓	
	5420 Mar 12 00:21	0°♈	
evening rise	5420 Mar 18 16:51	8°♈24'09	
	5420 Apr 04 22:11	0°♉	
	5420 Apr 28 23:38	0°♊	
asc. node	5420 May 11 14:39	15°♊37'26	
	5420 May 23 07:08	0°♋	
	5420 Jun 16 23:10	0°♌	
	5420 Jul 12 03:36	0°♍	
	5420 Aug 07 04:28	0°♎	
desc. node	5420 Aug 31 06:03	26°♎11'32	
	5420 Sep 03 22:24	0°♏	
evening max el	5420 Sep 15 19:20	11°♏46'54	45°40'51
	5420 Oct 07 02:50	0°♐	
greatest brilliancy	5420 Oct 25 06:28	9°♐57'11	-4.8m
retrograde	5420 Nov 03 12:02	11°♐30'01	

evening set	5420 Nov 19 23:43	6°♐21'52	
inferior conj	5420 Nov 24 13:52	3°♐35'43	-6°13'55
minimum elong	5420 Nov 25 00:07	3°♐19'51	6°11'41
min. Earth dist.	5420 Nov 25 13:06	2°♐59'44	0.27928 AU
morning rise	5420 Nov 29 23:54	0°♐19'57	
	5420 Nov 30 14:11	30°℞♏	
direct	5420 Dec 15 17:44	25°♏30'36	
asc. node	5420 Dec 22 07:28	26°♏20'20	
greatest brilliancy	5420 Dec 26 22:16	27°♏49'53	-4.8m
	5420 Dec 31 14:37	0°♐	
morning max el	5421 Feb 04 05:12	28°♐24'20	46°49'40
	5421 Feb 05 18:47	0°♑	
	5421 Mar 05 06:54	0°♒	
	5421 Mar 30 22:47	0°♓	
desc. node	5421 Apr 12 22:54	15°♓34'58	
	5421 Apr 24 21:07	0°♈	
	5421 May 19 11:52	0°♉	
	5421 Jun 12 23:57	0°♊	
	5421 Jul 07 11:34	0°♋	
	5421 Jul 31 22:58	0°♌	
asc. node	5421 Aug 04 00:15	3°♌44'49	
morning set	5421 Aug 08 09:50	9°♌08'43	
	5421 Aug 25 09:20	0°♍	
max. Earth dist.	5421 Sep 12 14:36	22°♍25'32	1.73376 AU
superior conj	5421 Sep 14 01:30	24°♍13'04	1°18'07
minimum elong	5421 Sep 13 18:44	23°♍52'12	1°17'59
	5421 Sep 18 18:07	0°♎	
	5421 Oct 13 01:38	0°♏	
evening rise	5421 Oct 20 09:14	9°♏01'58	
	5421 Nov 06 08:44	0°♐	
desc. node	5421 Nov 23 15:35	21°♐20'12	
	5421 Nov 30 16:03	0°♑	
	5421 Dec 24 23:49	0°♒	
	5422 Jan 18 08:48	0°♓	
	5422 Feb 11 21:59	0°♈	
	5422 Mar 08 22:25	0°♉	
asc. node	5422 Mar 16 16:52	9°♉06'28	
	5422 Apr 04 01:10	0°♊	
evening max el	5422 Apr 24 12:55	21°♊42'55	46°33'41
	5422 May 03 02:36	0°♋	
greatest brilliancy	5422 Jun 02 16:25	21°♋38'25	-4.8m
retrograde	5422 Jun 13 13:26	23°♋49'58	
evening set	5422 Jun 28 15:06	19°♋24'01	
inferior conj	5422 Jul 04 21:16	15°♋38'37	0°21'24
minimum elong	5422 Jul 04 22:04	15°♋37'22	0°21'08
min. Earth dist.	5422 Jul 04 13:37	15°♋50'36	0.28369 AU
desc. node	5422 Jul 06 08:24	14°♋43'46	
morning rise	5422 Jul 11 05:28	11°♋50'58	
direct	5422 Jul 26 03:19	7°♋32'48	
greatest brilliancy	5422 Aug 05 02:14	9°♋19'45	-4.7m
	5422 Sep 05 00:29	0°♌	
morning max el	5422 Sep 12 18:48	7°♌09'18	45°41'48
	5422 Oct 05 05:16	0°♍	
asc. node	5422 Oct 27 09:53	24°♍36'04	
	5422 Nov 01 03:01	0°♎	
	5422 Nov 26 15:18	0°♏	
	5422 Dec 21 09:14	0°♐	
	5423 Jan 14 16:43	0°♑	
	5423 Feb 07 18:20	0°♒	
desc. node	5423 Feb 16 01:09	10°♒22'17	
	5423 Mar 03 16:46	0°♓	
morning set	5423 Mar 14 11:17	13°♓31'43	
	5423 Mar 27 13:55	0°♈	
	5423 Apr 20 11:38	0°♉	
superior conj	5423 Apr 24 04:55	4°♉39'36	-1°23'20
minimum elong	5423 Apr 24 11:25	4°♉59'58	1°23'16
max. Earth dist.	5423 Apr 27 16:34	9°♉01'22	1.71663 AU
	5423 May 14 11:41	0°♊	
evening rise	5423 Jun 02 23:06	24°♊12'31	
	5423 Jun 07 15:20	0°♋	
asc. node	5423 Jun 09 02:35	1°♋49'04	
	5423 Jul 01 23:16	0°♌	
	5423 Jul 26 12:08	0°♍	
	5423 Aug 20 07:27	0°♎	
	5423 Sep 14 12:13	0°♏	
desc. node	5423 Sep 28 17:47	16°♏39'15	
	5423 Oct 10 07:38	0°♐	
	5423 Nov 06 04:36	0°♑	
evening max el	5423 Nov 28 07:50	22°♑58'31	46°31'56
	5423 Dec 05 16:21	0°♒	
greatest brilliancy	5424 Jan 07 11:24	23°♒00'45	-4.9m
retrograde	5424 Jan 17 08:07	24°♒50'49	
asc. node	5424 Jan 19 19:25	24°♒43'19	
evening set	5424 Jan 31 22:48	20°♒37'11	
inferior conj	5424 Feb 06 21:55	17°♒07'46	4°30'43
minimum elong	5424 Feb 06 12:39	17°♒21'54	4°28'06
min. Earth dist.	5424 Feb 06 16:06	17°♒16'38	0.26697 AU
morning rise	5424 Feb 12 02:26	14°♒03'35	
direct	5424 Feb 27 10:02	9°♒25'03	
greatest brilliancy	5424 Mar 08 06:45	11°♒16'01	-4.9m
	5424 Apr 05 01:21	0°♓	
morning max el	5424 Apr 17 20:42	12°♓12'09	46°52'48
	5424 May 04 19:44	0°♈	
desc. node	5424 May 10 10:51	6°♈10'41	
	5424 May 31 11:40	0°♉	
	5424 Jun 26 03:18	0°♊	
	5424 Jul 21 08:26	0°♋	
	5424 Aug 15 07:24	0°♌	
asc. node	5424 Aug 31 12:05	19°♌36'43	
	5424 Sep 09 01:01	0°♍	
	5424 Oct 03 13:18	0°♎	
morning set	5424 Oct 15 15:48	14°♎54'18	
	5424 Oct 27 20:56	0°♏	
max. Earth dist.	5424 Nov 19 00:33	27°♏28'42	1.72423 AU
	5424 Nov 21 01:14	0°♐	
superior conj	5424 Nov 21 15:35	0°♐44'37	1°03'13
minimum elong	5424 Nov 22 01:29	1°♐15'24	1°02'54
	5424 Dec 15 03:24	0°♑	
desc. node	5424 Dec 21 03:32	7°♑29'26	
evening rise	5424 Dec 30 14:37	19°♑18'10	
	5425 Jan 08 04:08	0°♒	
	5425 Feb 01 03:59	0°♓	
	5425 Feb 25 04:19	0°♈	
	5425 Mar 21 07:52	0°♉	
asc. node	5425 Apr 13 04:49	28°♉04'16	
	5425 Apr 14 18:54	0°♊	
	5425 May 09 19:37	0°♋	
	5425 Jun 04 21:17	0°♌	
	5425 Jul 03 06:41	0°♍	
evening max el	5425 Jul 04 07:14	0°♍59'50	45°42'34
desc. node	5425 Aug 02 20:19	25°♍00'46	
greatest brilliancy	5425 Aug 11 12:19	29°♍11'50	-4.7m
	5425 Aug 13 22:25	0°♎	
retrograde	5425 Aug 22 06:00	1°♎16'04	
	5425 Aug 30 05:26	30°℞♍	
evening set	5425 Sep 08 07:55	25°♍43'14	
inferior conj	5425 Sep 12 18:12	22°♍59'50	-7°46'11
minimum elong	5425 Sep 12 10:27	23°♍11'58	7°45'14
min. Earth dist.	5425 Sep 12 14:33	23°♍05'33	0.29151 AU
morning rise	5425 Sep 16 13:02	20°♍39'34	
direct	5425 Oct 04 09:18	14°♍41'36	

greatest brilliancy	5425 Oct 14 18:26	16°♍39'12	-4.7m
	5425 Nov 05 13:15	0°♎	
morning max el	5425 Nov 22 18:09	15°♎31'28	46°04'12
asc. node	5425 Nov 23 21:45	16°♎39'23	
	5425 Dec 06 20:37	0°♏	
	5426 Jan 02 15:44	0°♐	
	5426 Jan 27 22:45	0°♑	
	5426 Feb 21 13:21	0°♒	
desc. node	5426 Mar 15 12:57	27°♒09'33	
	5426 Mar 17 19:53	0°♓	
	5426 Apr 10 22:40	0°♈	
	5426 May 05 00:29	0°♉	
morning set	5426 May 28 09:39	29°♉05'09	
	5426 May 29 03:20	0°♊	
	5426 Jun 22 08:18	0°♋	
superior conj	5426 Jul 05 13:29	16°♋19'43	-0°02'32
minimum elong	5426 Jul 05 14:02	16°♋21'25	0°02'31
behind sun begin	5426 Jul 04 14:49	15°♋09'43	
behind sun end	5426 Jul 06 13:16	17°♋33'05	
asc. node	5426 Jul 06 14:25	17°♋36'38	
max. Earth dist.	5426 Jul 07 18:24	19°♋02'59	1.73061 AU
	5426 Jul 16 15:27	0°♌	
	5426 Aug 10 00:20	0°♍	
evening rise	5426 Aug 11 11:58	1°♍49'32	
	5426 Sep 03 10:53	0°♎	
	5426 Sep 27 23:51	0°♏	
	5426 Oct 22 16:26	0°♐	
desc. node	5426 Oct 26 05:45	4°♐17'59	
	5426 Nov 16 13:51	0°♑	
	5426 Dec 11 18:09	0°♒	
	5427 Jan 06 11:26	0°♓	
	5427 Feb 02 13:55	0°♈	
evening max el	5427 Feb 09 05:42	6°♈53'35	47°08'27
asc. node	5427 Feb 16 07:07	13°♈52'25	
	5427 Mar 07 03:15	0°♉	
greatest brilliancy	5427 Mar 21 20:24	8°♉16'05	-4.9m
retrograde	5427 Mar 31 23:09	10°♉12'13	
evening set	5427 Apr 18 21:51	3°♉59'38	
inferior conj	5427 Apr 21 18:23	2°♉13'49	8°45'08
minimum elong	5427 Apr 21 23:52	2°♉05'18	8°44'41
min. Earth dist.	5427 Apr 21 11:45	2°♉24'09	0.27431 AU
morning rise	5427 Apr 25 02:03	0°♉11'46	
	5427 Apr 25 09:59	30°℞♈	
direct	5427 May 12 12:30	24°♈23'16	
greatest brilliancy	5427 May 21 21:16	26°♈01'58	-4.8m
	5427 May 30 12:19	0°♉	
desc. node	5427 Jun 07 22:33	5°♉30'25	
morning max el	5427 Jul 01 01:14	25°♉36'04	46°09'22
	5427 Jul 05 12:08	0°♊	
	5427 Aug 02 18:43	0°♋	
	5427 Aug 29 06:25	0°♌	
	5427 Sep 23 21:04	0°♍	
asc. node	5427 Sep 28 23:58	6°♍05'30	
	5427 Oct 18 21:25	0°♎	
	5427 Nov 12 11:08	0°♏	
	5427 Dec 06 17:26	0°♐	
morning set	5427 Dec 26 01:55	24°♐06'34	
	5427 Dec 30 19:04	0°♑	
desc. node	5428 Jan 18 15:17	23°♑35'32	
	5428 Jan 23 17:51	0°♒	
max. Earth dist.	5428 Feb 02 14:49	12°♒23'53	1.71261 AU
superior conj	5428 Feb 04 07:09	14°♒30'31	-0°38'56
minimum elong	5428 Feb 03 21:51	14°♒01'21	0°38'31
	5428 Feb 16 14:56	0°♓	
	5428 Mar 11 11:30	0°♈	
evening rise	5428 Mar 16 03:08	5°♈50'40	
	5428 Apr 04 09:23	0°♉	
	5428 Apr 28 10:58	0°♊	
asc. node	5428 May 10 16:46	15°♊08'43	
	5428 May 22 18:42	0°♋	
	5428 Jun 16 11:10	0°♌	
	5428 Jul 11 16:26	0°♍	
	5428 Aug 06 19:06	0°♎	
desc. node	5428 Aug 30 07:59	25°♎29'05	
	5428 Sep 03 17:38	0°♏	
evening max el	5428 Sep 13 08:35	9°♏29'15	45°39'43
	5428 Oct 07 22:27	0°♐	
greatest brilliancy	5428 Oct 22 20:30	7°♐40'54	-4.8m
retrograde	5428 Nov 01 01:41	9°♐13'46	
evening set	5428 Nov 17 17:03	4°♐00'31	
inferior conj	5428 Nov 22 04:26	1°♐18'29	-6°28'28
minimum elong	5428 Nov 22 14:38	1°♐02'39	6°26'20
min. Earth dist.	5428 Nov 23 04:03	0°♐41'53	0.28000 AU
	5428 Nov 24 07:14	30°℞♏	
morning rise	5428 Nov 27 11:36	28°♏06'36	
direct	5428 Dec 13 08:17	23°♏12'04	
asc. node	5428 Dec 21 09:29	24°♏25'42	
greatest brilliancy	5428 Dec 24 14:24	25°♏32'27	-4.8m
	5429 Jan 02 06:26	0°♐	
morning max el	5429 Feb 01 19:30	26°♐02'25	46°48'38
	5429 Feb 05 16:13	0°♑	
	5429 Mar 04 22:52	0°♒	
	5429 Mar 30 12:35	0°♓	
desc. node	5429 Apr 12 01:02	15°♓01'45	
	5429 Apr 24 09:47	0°♈	
	5429 May 18 23:50	0°♉	
	5429 Jun 12 11:26	0°♊	
	5429 Jul 06 22:43	0°♋	
	5429 Jul 31 09:51	0°♌	
asc. node	5429 Aug 03 02:12	3°♌17'29	
morning set	5429 Aug 06 03:17	7°♌01'45	
	5429 Aug 24 20:03	0°♍	
max. Earth dist.	5429 Sep 10 11:15	20°♍28'26	1.73392 AU
superior conj	5429 Sep 11 19:50	22°♍08'46	1°16'46
minimum elong	5429 Sep 11 12:37	21°♍46'33	1°16'37
	5429 Sep 18 04:48	0°♎	
	5429 Oct 12 12:24	0°♏	
evening rise	5429 Oct 18 02:32	6°♏53'51	
	5429 Nov 05 19:43	0°♐	
desc. node	5429 Nov 22 17:43	20°♐52'17	
	5429 Nov 30 03:21	0°♑	
	5429 Dec 24 11:29	0°♒	
	5430 Jan 17 20:58	0°♓	
	5430 Feb 11 10:55	0°♈	
	5430 Mar 08 12:39	0°♉	
asc. node	5430 Mar 15 18:54	8°♉29'21	
	5430 Apr 03 18:16	0°♊	
evening max el	5430 Apr 22 03:14	19°♊23'55	46°35'45
	5430 May 03 05:16	0°♋	
greatest brilliancy	5430 May 31 08:40	19°♋24'56	-4.8m
retrograde	5430 Jun 11 05:37	21°♋36'46	
evening set	5430 Jun 26 07:45	17°♋09'10	
min. Earth dist.	5430 Jul 02 05:37	13°♋36'54	0.28333 AU
inferior conj	5430 Jul 02 12:51	13°♋25'36	0°42'26
minimum elong	5430 Jul 02 14:26	13°♋23'08	0°41'55
desc. node	5430 Jul 05 10:24	11°♋37'59	
morning rise	5430 Jul 08 21:33	9°♋37'38	
direct	5430 Jul 23 18:09	5°♋20'05	
greatest brilliancy	5430 Aug 02 17:35	7°♋07'43	-4.7m
	5430 Sep 05 02:13	0°♌	
morning max el	5430 Sep 10 10:53	4°♌59'42	45°42'04

	5430 Oct 04 21:36	0°♍	
asc. node	5430 Oct 26 12:01	24°♍02'35	
	5430 Oct 31 16:30	0°♎	
	5430 Nov 26 03:33	0°♏	
	5430 Dec 20 20:54	0°♐	
	5431 Jan 14 04:05	0°♑	
	5431 Feb 07 05:31	0°♒	
desc. node	5431 Feb 15 03:07	9°♒53'27	
	5431 Mar 03 03:50	0°♓	
morning set	5431 Mar 11 21:10	10°♓57'16	
	5431 Mar 27 00:54	0°♈	
	5431 Apr 19 22:33	0°♉	
superior conj	5431 Apr 21 16:36	2°♉11'45	-1°24'23
minimum elong	5431 Apr 21 22:16	2°♉29'30	1°24'21
max. Earth dist.	5431 Apr 25 01:05	6°♉23'48	1.71618 AU
	5431 May 13 22:33	0°♊	
evening rise	5431 May 31 12:54	21°♊52'56	
	5431 Jun 07 02:11	0°♋	
asc. node	5431 Jun 08 04:36	1°♋21'43	
	5431 Jul 01 10:13	0°♌	
	5431 Jul 25 23:19	0°♍	
	5431 Aug 19 19:07	0°♎	
	5431 Sep 14 00:43	0°♏	
desc. node	5431 Sep 27 19:54	16°♏07'09	
	5431 Oct 09 21:41	0°♐	
	5431 Nov 05 21:56	0°♑	
evening max el	5431 Nov 25 22:30	20°♑40'05	46°29'54
	5431 Dec 05 20:02	0°♒	
greatest brilliancy	5432 Jan 04 23:41	20°♒33'52	-4.9m
retrograde	5432 Jan 14 21:05	22°♒23'55	
asc. node	5432 Jan 18 21:18	22°♒04'09	
evening set	5432 Jan 29 09:23	18°♒13'04	
inferior conj	5432 Feb 04 10:22	14°♒40'54	4°09'01
minimum elong	5432 Feb 04 01:39	14°♒54'11	4°06'30
min. Earth dist.	5432 Feb 04 05:15	14°♒48'41	0.26702 AU
morning rise	5432 Feb 09 17:55	11°♒32'42	
direct	5432 Feb 24 23:24	6°♒58'06	
greatest brilliancy	5432 Mar 05 20:09	8°♒49'27	-4.9m
	5432 Apr 05 06:33	0°♓	
morning max el	5432 Apr 15 10:53	9°♓49'53	46°53'39
	5432 May 04 13:42	0°♈	
desc. node	5432 May 09 12:54	5°♈29'11	
	5432 May 31 02:11	0°♉	
	5432 Jun 25 16:09	0°♊	
	5432 Jul 20 20:18	0°♋	
	5432 Aug 14 18:40	0°♌	
asc. node	5432 Aug 30 14:05	19°♌09'23	
	5432 Sep 08 11:54	0°♍	
	5432 Oct 02 23:59	0°♎	
morning set	5432 Oct 13 09:08	12°♎46'58	
	5432 Oct 27 07:33	0°♏	
max. Earth dist.	5432 Nov 16 15:50	25°♏14'06	1.72462 AU
superior conj	5432 Nov 19 07:26	28°♏31'41	1°05'28
minimum elong	5432 Nov 19 17:10	29°♏01'58	1°05'10
	5432 Nov 20 11:51	0°♐	
	5432 Dec 14 14:06	0°♑	
desc. node	5432 Dec 20 05:30	7°♑02'05	
evening rise	5432 Dec 28 03:59	16°♑56'22	
	5433 Jan 07 14:58	0°♒	
	5433 Jan 31 15:02	0°♓	
	5433 Feb 24 15:38	0°♈	
	5433 Mar 20 19:31	0°♉	
asc. node	5433 Apr 12 06:53	27°♉33'39	
	5433 Apr 14 07:05	0°♊	
	5433 May 09 08:50	0°♋	
	5433 Jun 04 12:42	0°♌	
evening max el	5433 Jul 01 23:26	28°♌49'44	45°43'46
	5433 Jul 03 04:29	0°♍	
desc. node	5433 Aug 01 22:15	23°♍40'10	
greatest brilliancy	5433 Aug 09 04:02	27°♍02'59	-4.7m
retrograde	5433 Aug 19 22:04	29°♍07'25	
evening set	5433 Sep 05 21:12	23°♍39'24	
inferior conj	5433 Sep 10 10:33	20°♍51'11	-7°37'26
minimum elong	5433 Sep 10 02:22	21°♍04'03	7°36'21
min. Earth dist.	5433 Sep 10 06:01	20°♍58'19	0.29145 AU
morning rise	5433 Sep 14 07:36	18°♍27'22	
direct	5433 Oct 02 01:51	12°♍33'20	
greatest brilliancy	5433 Oct 12 09:26	14°♍29'14	-4.7m
	5433 Nov 05 20:29	0°♎	
morning max el	5433 Nov 20 08:56	13°♎17'14	46°02'47
asc. node	5433 Nov 22 23:42	15°♎52'21	
	5433 Dec 06 14:01	0°♏	
	5434 Jan 02 05:44	0°♐	
	5434 Jan 27 11:19	0°♑	
	5434 Feb 21 01:12	0°♒	
desc. node	5434 Mar 14 15:05	26°♒40'38	
	5434 Mar 17 07:19	0°♓	
	5434 Apr 10 09:49	0°♈	
	5434 May 04 11:24	0°♉	
morning set	5434 May 25 24:00	26°♉47'12	
	5434 May 28 14:05	0°♊	
	5434 Jun 21 18:55	0°♋	
superior conj	5434 Jul 03 05:25	14°♋08'03	-0°05'56
minimum elong	5434 Jul 03 06:44	14°♋12'08	0°05'54
behind sun begin	5434 Jul 02 08:41	13°♋04'03	
behind sun end	5434 Jul 04 04:47	15°♋20'12	
max. Earth dist.	5434 Jul 05 14:08	17°♋03'08	1.73020 AU
asc. node	5434 Jul 05 16:20	17°♋09'55	
	5434 Jul 16 02:00	0°♌	
evening rise	5434 Aug 09 05:50	29°♌44'22	
	5434 Aug 09 10:55	0°♍	
	5434 Sep 02 21:36	0°♎	
	5434 Sep 27 10:51	0°♏	
	5434 Oct 22 03:55	0°♐	
desc. node	5434 Oct 25 07:50	3°♐49'20	
	5434 Nov 16 02:05	0°♑	
	5434 Dec 11 07:31	0°♒	
	5435 Jan 06 02:52	0°♓	
	5435 Feb 02 10:17	0°♈	
evening max el	5435 Feb 06 19:00	4°♈29'13	47°08'15
asc. node	5435 Feb 15 09:10	12°♈55'53	
	5435 Mar 08 03:50	0°♉	
greatest brilliancy	5435 Mar 19 11:27	5°♉54'49	-4.9m
retrograde	5435 Mar 29 12:37	7°♉49'42	
evening set	5435 Apr 16 13:30	1°♉34'59	
inferior conj	5435 Apr 19 08:08	29°♈52'03	8°50'53
minimum elong	5435 Apr 19 12:46	29°♈44'50	8°50'34
min. Earth dist.	5435 Apr 19 01:20	0°♉02'38	0.27402 AU
	5435 Apr 19 03:01	30°℞♈	
morning rise	5435 Apr 22 12:10	27°♈55'15	
direct	5435 May 10 01:20	22°♈01'55	
greatest brilliancy	5435 May 19 10:36	23°♈40'35	-4.8m
	5435 May 31 22:16	0°♉	
desc. node	5435 Jun 07 00:33	4°♉17'32	
morning max el	5435 Jun 28 14:19	23°♉15'26	46°10'52
	5435 Jul 05 08:53	0°♊	
	5435 Aug 02 09:58	0°♋	
	5435 Aug 28 19:26	0°♌	
	5435 Sep 23 08:56	0°♍	
asc. node	5435 Sep 28 02:06	5°♍36'56	
	5435 Oct 18 08:39	0°♎	

	5435 Nov 11 22:02	0°♏	
	5435 Dec 06 04:11	0°♐	
morning set	5435 Dec 23 15:33	21°♐45'44	
	5435 Dec 30 05:47	0°♑	
desc. node	5436 Jan 17 17:16	23°♑08'07	
	5436 Jan 23 04:35	0°♒	
max. Earth dist.	5436 Jan 30 21:40	9°♒40'59	1.71285 AU
superior conj	5436 Feb 01 18:15	12°♒00'59	-0°35'23
minimum elong	5436 Feb 01 09:41	11°♒34'03	0°34'59
	5436 Feb 16 01:40	0°♓	
	5436 Mar 10 22:15	0°♈	
evening rise	5436 Mar 13 13:52	3°♈19'49	
	5436 Apr 03 20:12	0°♉	
	5436 Apr 27 21:56	0°♊	
asc. node	5436 May 09 18:44	14°♊40'38	
	5436 May 22 05:57	0°♋	
	5436 Jun 15 22:55	0°♌	
	5436 Jul 11 05:07	0°♍	
	5436 Aug 06 09:43	0°♎	
desc. node	5436 Aug 29 10:08	24°♎47'16	
	5436 Sep 03 13:13	0°♏	
evening max el	5436 Sep 10 22:17	7°♏13'31	45°38'52
	5436 Oct 09 00:41	0°♐	
greatest brilliancy	5436 Oct 20 09:58	5°♐25'09	-4.8m
retrograde	5436 Oct 29 15:54	6°♐58'49	
evening set	5436 Nov 15 10:25	1°♐40'18	
	5436 Nov 18 05:40	30°℞♏	
inferior conj	5436 Nov 19 19:04	29°♏02'22	-6°42'13
minimum elong	5436 Nov 20 05:10	28°♏46'44	6°40'14
min. Earth dist.	5436 Nov 20 18:43	28°♏25'47	0.28069 AU
morning rise	5436 Nov 24 23:18	25°♏54'46	
direct	5436 Dec 10 23:22	20°♏54'44	
asc. node	5436 Dec 20 11:28	22°♏36'26	
greatest brilliancy	5436 Dec 22 06:18	23°♏16'05	-4.8m
	5437 Jan 03 09:32	0°♐	
morning max el	5437 Jan 30 10:51	23°♐44'21	46°47'33
	5437 Feb 05 12:31	0°♑	
	5437 Mar 04 14:13	0°♒	
	5437 Mar 30 01:56	0°♓	
desc. node	5437 Apr 11 03:02	14°♓29'19	
	5437 Apr 23 22:02	0°♈	
	5437 May 18 11:25	0°♉	
	5437 Jun 11 22:35	0°♊	
	5437 Jul 06 09:33	0°♋	
	5437 Jul 30 20:29	0°♌	
asc. node	5437 Aug 02 04:15	2°♌51'08	
morning set	5437 Aug 03 20:37	4°♌55'00	
	5437 Aug 24 06:35	0°♍	
max. Earth dist.	5437 Sep 08 08:27	18°♍33'28	1.73407 AU
superior conj	5437 Sep 09 13:51	20°♍04'02	1°15'19
minimum elong	5437 Sep 09 06:15	19°♍40'37	1°15'08
	5437 Sep 17 15:19	0°♎	
	5437 Oct 11 23:01	0°♏	
evening rise	5437 Oct 15 19:35	4°♏45'32	
	5437 Nov 05 06:32	0°♐	
desc. node	5437 Nov 21 19:36	20°♐24'13	
	5437 Nov 29 14:27	0°♑	
	5437 Dec 23 22:58	0°♒	
	5438 Jan 17 08:59	0°♓	
	5438 Feb 10 23:43	0°♈	
	5438 Mar 08 02:51	0°♉	
asc. node	5438 Mar 14 21:01	7°♉52'45	
	5438 Apr 03 11:29	0°♊	
evening max el	5438 Apr 19 18:36	17°♊08'06	46°37'51
	5438 May 03 09:17	0°♋	
greatest brilliancy	5438 May 29 00:31	17°♋11'41	-4.8m
retrograde	5438 Jun 08 22:05	19°♋24'01	
evening set	5438 Jun 24 00:34	14°♋54'41	
inferior conj	5438 Jun 30 04:22	11°♋12'58	1°03'22
minimum elong	5438 Jun 30 06:44	11°♋09'17	1°02'38
min. Earth dist.	5438 Jun 29 21:16	11°♋24'03	0.28300 AU
desc. node	5438 Jul 04 12:20	8°♋34'18	
morning rise	5438 Jul 06 13:25	7°♋25'00	
direct	5438 Jul 21 09:29	3°♋07'51	
greatest brilliancy	5438 Jul 31 08:19	4°♋55'29	-4.7m
	5438 Sep 05 02:31	0°♌	
morning max el	5438 Sep 08 03:29	2°♌51'40	45°42'08
	5438 Oct 04 13:37	0°♍	
asc. node	5438 Oct 25 13:56	23°♍28'43	
	5438 Oct 31 05:52	0°♎	
	5438 Nov 25 15:45	0°♏	
	5438 Dec 20 08:30	0°♐	
	5439 Jan 13 15:21	0°♑	
	5439 Feb 06 16:37	0°♒	
desc. node	5439 Feb 14 05:10	9°♒25'13	
	5439 Mar 02 14:49	0°♓	
morning set	5439 Mar 09 07:01	8°♓23'00	
	5439 Mar 26 11:49	0°♈	
superior conj	5439 Apr 19 04:12	29°♈43'42	-1°25'17
minimum elong	5439 Apr 19 08:59	29°♈58'39	1°25'15
	5439 Apr 19 09:25	0°♉	
max. Earth dist.	5439 Apr 22 11:21	3°♉51'39	1.71575 AU
	5439 May 13 09:21	0°♊	
evening rise	5439 May 29 02:41	19°♊33'22	
	5439 Jun 06 13:00	0°♋	
asc. node	5439 Jun 07 06:32	0°♋54'17	
	5439 Jun 30 21:07	0°♌	
	5439 Jul 25 10:30	0°♍	
	5439 Aug 19 06:48	0°♎	
	5439 Sep 13 13:20	0°♏	
desc. node	5439 Sep 26 21:53	15°♏34'15	
	5439 Oct 09 11:59	0°♐	
	5439 Nov 05 15:51	0°♑	
evening max el	5439 Nov 23 13:21	18°♑21'47	46°27'51
	5439 Dec 06 01:49	0°♒	
greatest brilliancy	5440 Jan 02 12:28	18°♒07'20	-4.9m
retrograde	5440 Jan 12 09:41	19°♒56'33	
asc. node	5440 Jan 17 23:23	19°♒18'30	
evening set	5440 Jan 26 20:16	15°♒48'28	
inferior conj	5440 Feb 01 22:49	12°♒13'51	3°46'58
minimum elong	5440 Feb 01 14:43	12°♒26'13	3°44'34
min. Earth dist.	5440 Feb 01 18:40	12°♒20'11	0.26703 AU
morning rise	5440 Feb 07 09:11	9°♒01'37	
direct	5440 Feb 22 12:32	4°♒31'06	
greatest brilliancy	5440 Mar 03 09:46	6°♒22'50	-4.9m
	5440 Apr 05 10:00	0°♓	
morning max el	5440 Apr 13 00:11	7°♓25'09	46°54'23
	5440 May 04 07:18	0°♈	
desc. node	5440 May 08 14:50	4°♈47'38	
	5440 May 30 16:37	0°♉	
	5440 Jun 25 05:00	0°♊	
	5440 Jul 20 08:13	0°♋	
	5440 Aug 14 06:00	0°♌	
asc. node	5440 Aug 29 16:12	18°♌42'02	
	5440 Sep 07 22:54	0°♍	
	5440 Oct 02 10:49	0°♎	
morning set	5440 Oct 11 02:25	10°♎39'06	
	5440 Oct 26 18:20	0°♏	
max. Earth dist.	5440 Nov 14 05:09	22°♏52'48	1.72509 AU
superior conj	5440 Nov 16 23:12	26°♏17'56	1°07'37

minimum elong	5440 Nov 17 08:44	26°♏47'34	1°07'21
	5440 Nov 19 22:41	0°♐	
	5440 Dec 14 01:03	0°♑	
desc. node	5440 Dec 19 07:31	6°♑34'08	
evening rise	5440 Dec 25 17:02	14°♑32'50	
	5441 Jan 07 02:05	0°♒	
	5441 Jan 31 02:20	0°♓	
	5441 Feb 24 03:10	0°♈	
	5441 Mar 20 07:24	0°♉	
asc. node	5441 Apr 11 08:49	27°♉01'53	
	5441 Apr 13 19:33	0°♊	
	5441 May 08 22:23	0°♋	
	5441 Jun 04 04:36	0°♌	
evening max el	5441 Jun 29 15:00	26°♌37'14	45°45'00
	5441 Jul 03 03:30	0°♍	
desc. node	5441 Aug 01 00:25	22°♍16'38	
greatest brilliancy	5441 Aug 06 20:05	24°♍53'50	-4.7m
retrograde	5441 Aug 17 13:53	26°♍58'25	
evening set	5441 Sep 03 10:31	21°♍35'06	
inferior conj	5441 Sep 08 03:00	18°♍42'14	-7°28'05
minimum elong	5441 Sep 07 18:25	18°♍55'45	7°26'50
min. Earth dist.	5441 Sep 07 21:52	18°♍50'18	0.29138 AU
morning rise	5441 Sep 12 02:20	16°♍14'46	
direct	5441 Sep 29 17:56	10°♍24'39	
greatest brilliancy	5441 Oct 10 01:02	12°♍19'30	-4.7m
	5441 Nov 06 01:47	0°♎	
morning max el	5441 Nov 17 23:06	11°♎00'50	46°01'17
asc. node	5441 Nov 22 01:43	15°♎05'27	
	5441 Dec 06 07:21	0°♏	
	5442 Jan 01 19:58	0°♐	
	5442 Jan 27 00:14	0°♑	
	5442 Feb 20 13:24	0°♒	
desc. node	5442 Mar 13 17:08	26°♒10'16	
	5442 Mar 16 19:05	0°♓	
	5442 Apr 09 21:16	0°♈	
	5442 May 03 22:37	0°♉	
morning set	5442 May 23 14:07	24°♉27'37	
	5442 May 28 01:07	0°♊	
	5442 Jun 21 05:51	0°♋	
superior conj	5442 Jun 30 21:21	11°♋55'26	-0°09'20
minimum elong	5442 Jun 30 23:27	12°♋01'54	0°09'15
behind sun begin	5442 Jun 30 04:01	11°♋01'53	
behind sun end	5442 Jul 01 18:52	13°♋01'54	
max. Earth dist.	5442 Jul 03 08:05	14°♋56'45	1.72980 AU
asc. node	5442 Jul 04 18:26	16°♋42'47	
	5442 Jul 15 12:53	0°♌	
evening rise	5442 Aug 06 23:47	27°♌38'28	
	5442 Aug 08 21:50	0°♍	
	5442 Sep 02 08:39	0°♎	
	5442 Sep 26 22:11	0°♏	
	5442 Oct 21 15:45	0°♐	
desc. node	5442 Oct 24 09:46	3°♐19'17	
	5442 Nov 15 14:43	0°♑	
	5442 Dec 10 21:26	0°♒	
	5443 Jan 05 19:04	0°♓	
	5443 Feb 02 08:03	0°♈	
evening max el	5443 Feb 04 07:44	2°♈01'42	47°07'56
asc. node	5443 Feb 14 11:16	11°♈56'15	
	5443 Mar 09 16:01	0°♉	
greatest brilliancy	5443 Mar 17 02:08	3°♉30'42	-4.9m
retrograde	5443 Mar 27 01:52	5°♉24'49	
	5443 Apr 12 17:52	30°℞♈	
evening set	5443 Apr 14 04:30	29°♈08'16	
inferior conj	5443 Apr 16 21:35	27°♈27'52	8°55'46
minimum elong	5443 Apr 17 01:21	27°♈22'01	8°55'33
min. Earth dist.	5443 Apr 16 14:41	27°♈38'37	0.27370 AU
morning rise	5443 Apr 19 22:18	25°♈36'05	
direct	5443 May 07 13:43	19°♈38'00	
greatest brilliancy	5443 May 16 23:51	21°♈17'12	-4.8m
	5443 Jun 01 23:20	0°♉	
desc. node	5443 Jun 06 02:34	3°♉05'16	
morning max el	5443 Jun 26 03:40	20°♉54'05	46°12'32
	5443 Jul 05 05:24	0°♊	
	5443 Aug 02 01:21	0°♋	
	5443 Aug 28 08:43	0°♌	
	5443 Sep 22 21:07	0°♍	
asc. node	5443 Sep 27 03:59	5°♍06'37	
	5443 Oct 17 20:12	0°♎	
	5443 Nov 11 09:15	0°♏	
	5443 Dec 05 15:16	0°♐	
morning set	5443 Dec 21 05:30	19°♐24'57	
	5443 Dec 29 16:51	0°♑	
desc. node	5444 Jan 16 19:23	22°♑39'59	
	5444 Jan 22 15:42	0°♒	
max. Earth dist.	5444 Jan 28 07:23	7°♒05'52	1.71317 AU
superior conj	5444 Jan 30 05:17	9°♒29'58	-0°31'45
minimum elong	5444 Jan 29 21:29	9°♒05'26	0°31'22
	5444 Feb 15 12:50	0°♓	
	5444 Mar 10 09:29	0°♈	
evening rise	5444 Mar 11 00:16	0°♈46'28	
	5444 Apr 03 07:31	0°♉	
	5444 Apr 27 09:24	0°♊	
asc. node	5444 May 08 20:42	14°♊11'08	
	5444 May 21 17:39	0°♋	
	5444 Jun 15 11:06	0°♌	
	5444 Jul 10 18:16	0°♍	
	5444 Aug 06 00:55	0°♎	
desc. node	5444 Aug 28 12:06	24°♎03'19	
	5444 Sep 03 09:51	0°♏	
evening max el	5444 Sep 08 13:01	4°♏59'21	45°38'08
	5444 Oct 10 14:41	0°♐	
greatest brilliancy	5444 Oct 17 22:59	3°♐08'27	-4.8m
retrograde	5444 Oct 27 06:40	4°♐43'25	
	5444 Nov 11 23:39	30°℞♏	
evening set	5444 Nov 13 03:56	29°♏19'49	
inferior conj	5444 Nov 17 09:49	26°♏45'48	-6°55'15
minimum elong	5444 Nov 17 19:45	26°♏30'27	6°53'24
min. Earth dist.	5444 Nov 18 09:03	26°♏09'54	0.28136 AU
morning rise	5444 Nov 22 11:03	23°♏42'44	
direct	5444 Dec 08 15:06	18°♏37'16	
asc. node	5444 Dec 19 13:30	20°♏50'45	
greatest brilliancy	5444 Dec 19 21:38	20°♏58'44	-4.8m
	5445 Jan 04 05:35	0°♐	
morning max el	5445 Jan 28 02:45	21°♐27'05	46°46'17
	5445 Feb 05 08:30	0°♑	
	5445 Mar 04 05:42	0°♒	
	5445 Mar 29 15:33	0°♓	
desc. node	5445 Apr 10 04:56	13°♓55'27	
	5445 Apr 23 10:39	0°♈	
	5445 May 17 23:25	0°♉	
	5445 Jun 11 10:08	0°♊	
	5445 Jul 05 20:46	0°♋	
	5445 Jul 30 07:27	0°♌	
asc. node	5445 Aug 01 06:18	2°♌23'47	
morning set	5445 Aug 01 13:48	2°♌46'48	
	5445 Aug 23 17:25	0°♍	
max. Earth dist.	5445 Sep 06 06:50	16°♍41'14	1.73418 AU
superior conj	5445 Sep 07 07:51	17°♍58'16	1°13'46
minimum elong	5445 Sep 06 23:53	17°♍33'45	1°13'33
	5445 Sep 17 02:09	0°♎	
	5445 Oct 11 09:58	0°♏	

evening rise	5445 Oct 13 12:50	2°♏36'56	
	5445 Nov 04 17:40	0°♐	
desc. node	5445 Nov 20 21:39	19°♐55'45	
	5445 Nov 29 01:51	0°♑	
	5445 Dec 23 10:44	0°♒	
	5446 Jan 16 21:17	0°♓	
	5446 Feb 10 12:51	0°♈	
	5446 Mar 07 17:29	0°♉	
asc. node	5446 Mar 13 22:54	7°♉14'13	
	5446 Apr 03 05:29	0°♊	
evening max el	5446 Apr 17 10:40	14°♊52'48	46°39'41
	5446 May 03 15:55	0°♋	
greatest brilliancy	5446 May 26 16:29	14°♋56'54	-4.8m
retrograde	5446 Jun 06 14:22	17°♋09'09	
evening set	5446 Jun 21 17:24	12°♋38'16	
inferior conj	5446 Jun 27 19:42	8°♋58'27	1°24'30
minimum elong	5446 Jun 27 22:50	8°♋53'33	1°23'32
min. Earth dist.	5446 Jun 27 12:42	9°♋09'22	0.28264 AU
desc. node	5446 Jul 03 14:27	5°♋30'23	
morning rise	5446 Jul 04 04:52	5°♋10'38	
direct	5446 Jul 19 00:58	0°♋54'01	
greatest brilliancy	5446 Jul 28 22:31	2°♋41'04	-4.7m
	5446 Sep 05 02:06	0°♌	
morning max el	5446 Sep 05 19:30	0°♌41'22	45°42'19
	5446 Oct 04 05:36	0°♍	
asc. node	5446 Oct 24 15:56	22°♍54'42	
	5446 Oct 30 19:19	0°♎	
	5446 Nov 25 04:04	0°♏	
	5446 Dec 19 20:15	0°♐	
	5447 Jan 13 02:46	0°♑	
	5447 Feb 06 03:50	0°♒	
desc. node	5447 Feb 13 07:12	8°♒56'32	
	5447 Mar 02 01:55	0°♓	
morning set	5447 Mar 06 17:21	5°♓49'55	
	5447 Mar 25 22:51	0°♈	
superior conj	5447 Apr 16 16:00	27°♈15'47	-1°26'01
minimum elong	5447 Apr 16 19:48	27°♈27'42	1°25'59
	5447 Apr 18 20:23	0°♉	
max. Earth dist.	5447 Apr 19 23:44	1°♉25'40	1.71536 AU
	5447 May 12 20:19	0°♊	
evening rise	5447 May 26 16:18	17°♊12'36	
	5447 Jun 05 23:59	0°♋	
asc. node	5447 Jun 06 08:39	0°♋26'48	
	5447 Jun 30 08:13	0°♌	
	5447 Jul 24 21:52	0°♍	
	5447 Aug 18 18:41	0°♎	
	5447 Sep 13 02:09	0°♏	
desc. node	5447 Sep 25 23:50	15°♏00'43	
	5447 Oct 09 02:33	0°♐	
	5447 Nov 05 10:16	0°♑	
evening max el	5447 Nov 21 03:33	16°♑01'48	46°25'44
	5447 Dec 06 09:57	0°♒	
greatest brilliancy	5447 Dec 31 01:59	15°♒41'50	-4.9m
retrograde	5448 Jan 09 21:51	17°♒29'31	
asc. node	5448 Jan 17 01:27	16°♒27'15	
evening set	5448 Jan 24 07:32	13°♒23'52	
inferior conj	5448 Jan 30 11:25	9°♒47'21	3°24'29
minimum elong	5448 Jan 30 04:00	9°♒58'41	3°22'14
min. Earth dist.	5448 Jan 30 08:39	9°♒51'34	0.26707 AU
morning rise	5448 Feb 05 00:24	6°♒31'06	
direct	5448 Feb 20 01:19	2°♒04'26	
greatest brilliancy	5448 Mar 01 00:07	3°♒57'14	-4.9m
	5448 Apr 05 11:51	0°♓	
morning max el	5448 Apr 10 12:30	4°♓58'01	46°55'12
	5448 May 04 00:28	0°♈	
desc. node	5448 May 07 16:56	4°♈07'10	
	5448 May 30 06:49	0°♉	
	5448 Jun 24 17:44	0°♊	
	5448 Jul 19 20:06	0°♋	
	5448 Aug 13 17:20	0°♌	
asc. node	5448 Aug 28 18:07	18°♌14'04	
	5448 Sep 07 09:53	0°♍	
	5448 Oct 01 21:36	0°♎	
morning set	5448 Oct 08 19:35	8°♎30'57	
	5448 Oct 26 05:03	0°♏	
max. Earth dist.	5448 Nov 11 19:43	20°♏35'45	1.72554 AU
superior conj	5448 Nov 14 15:04	24°♏04'49	1°09'40
minimum elong	5448 Nov 15 00:21	24°♏33'38	1°09'25
	5448 Nov 19 09:26	0°♐	
	5448 Dec 13 11:55	0°♑	
desc. node	5448 Dec 18 09:35	6°♑06'35	
evening rise	5448 Dec 23 06:19	12°♑10'24	
	5449 Jan 06 13:08	0°♒	
	5449 Jan 30 13:35	0°♓	
	5449 Feb 23 14:39	0°♈	
	5449 Mar 19 19:12	0°♉	
asc. node	5449 Apr 10 10:51	26°♉30'46	
	5449 Apr 13 07:54	0°♊	
	5449 May 08 11:52	0°♋	
	5449 Jun 03 20:34	0°♌	
evening max el	5449 Jun 27 05:47	24°♌23'17	45°46'10
	5449 Jul 03 03:20	0°♍	
desc. node	5449 Jul 31 02:21	20°♍50'24	
greatest brilliancy	5449 Aug 04 11:58	22°♍44'46	-4.7m
retrograde	5449 Aug 15 05:46	24°♍50'01	
evening set	5449 Aug 31 23:51	19°♍31'04	
inferior conj	5449 Sep 05 19:30	16°♍33'47	-7°18'01
minimum elong	5449 Sep 05 10:33	16°♍47'51	7°16'39
min. Earth dist.	5449 Sep 05 13:57	16°♍42'30	0.29132 AU
morning rise	5449 Sep 09 21:15	14°♍02'36	
direct	5449 Sep 27 09:47	8°♍16'19	
greatest brilliancy	5449 Oct 07 17:22	10°♍11'05	-4.7m
	5449 Nov 06 05:01	0°♎	
morning max el	5449 Nov 15 13:30	8°♎45'35	45°59'56
asc. node	5449 Nov 21 03:48	14°♎19'57	
	5449 Dec 06 00:06	0°♏	
	5450 Jan 01 09:48	0°♐	
	5450 Jan 26 12:48	0°♑	
	5450 Feb 20 01:19	0°♒	
desc. node	5450 Mar 12 18:59	25°♒40'08	
	5450 Mar 16 06:36	0°♓	
	5450 Apr 09 08:29	0°♈	
	5450 May 03 09:35	0°♉	
morning set	5450 May 21 04:17	22°♉08'48	
	5450 May 27 11:53	0°♊	
	5450 Jun 20 16:29	0°♋	
superior conj	5450 Jun 28 13:25	9°♋44'05	-0°12'43
minimum elong	5450 Jun 28 16:16	9°♋52'52	0°12'35
behind sun begin	5450 Jun 28 01:32	9°♋07'21	
behind sun end	5450 Jun 29 07:00	10°♋38'23	
max. Earth dist.	5450 Jul 01 01:25	12°♋49'23	1.72939 AU
asc. node	5450 Jul 03 20:27	16°♋16'18	
	5450 Jul 14 23:29	0°♌	
evening rise	5450 Aug 04 17:51	25°♌33'52	
	5450 Aug 08 08:27	0°♍	
	5450 Sep 01 19:26	0°♎	
	5450 Sep 26 09:17	0°♏	
	5450 Oct 21 03:22	0°♐	
desc. node	5450 Oct 23 11:48	2°♐50'09	
	5450 Nov 15 03:09	0°♑	
	5450 Dec 10 11:09	0°♒	

	5451 Jan 05 11:11	0°♓	
evening max el	5451 Feb 01 20:37	29°♓35'36	47°07'35
	5451 Feb 02 06:15	0°♈	
asc. node	5451 Feb 13 13:09	10°♈55'39	
	5451 Mar 11 22:52	0°♉	
greatest brilliancy	5451 Mar 14 16:03	1°♉06'25	-4.9m
retrograde	5451 Mar 24 15:24	3°♉00'43	
	5451 Apr 05 19:38	30°℞♈	
evening set	5451 Apr 11 18:57	26°♈42'39	
inferior conj	5451 Apr 14 10:56	25°♈04'10	8°59'37
minimum elong	5451 Apr 14 13:49	24°♈59'43	8°59'29
min. Earth dist.	5451 Apr 14 03:40	25°♈15'26	0.27341 AU
morning rise	5451 Apr 17 08:46	23°♈16'57	
direct	5451 May 05 02:20	17°♈14'28	
greatest brilliancy	5451 May 14 12:47	18°♈54'12	-4.8m
	5451 Jun 02 17:25	0°♉	
desc. node	5451 Jun 05 04:36	1°♉55'53	
morning max el	5451 Jun 23 17:54	18°♉35'49	46°14'22
	5451 Jul 05 00:54	0°♊	
	5451 Aug 01 16:09	0°♋	
	5451 Aug 27 21:29	0°♌	
	5451 Sep 22 08:51	0°♍	
asc. node	5451 Sep 26 06:00	4°♍37'56	
	5451 Oct 17 07:23	0°♎	
	5451 Nov 10 20:08	0°♏	
	5451 Dec 05 02:03	0°♐	
morning set	5451 Dec 18 19:35	17°♐05'38	
	5451 Dec 29 03:36	0°♑	
desc. node	5452 Jan 15 21:20	22°♑12'26	
	5452 Jan 22 02:27	0°♒	
max. Earth dist.	5452 Jan 25 18:51	4°♒37'23	1.71346 AU
superior conj	5452 Jan 27 16:21	7°♒00'12	-0°28'03
minimum elong	5452 Jan 27 09:22	6°♒38'16	0°27'43
	5452 Feb 14 23:37	0°♓	
evening rise	5452 Mar 08 10:49	28°♓14'47	
	5452 Mar 09 20:19	0°♈	
	5452 Apr 02 18:28	0°♉	
	5452 Apr 26 20:31	0°♊	
asc. node	5452 May 07 22:48	13°♊43'03	
	5452 May 21 05:02	0°♋	
	5452 Jun 14 22:59	0°♌	
	5452 Jul 10 07:07	0°♍	
	5452 Aug 05 15:53	0°♎	
desc. node	5452 Aug 27 14:03	23°♎19'58	
	5452 Sep 03 06:42	0°♏	
evening max el	5452 Sep 06 04:22	2°♏48'01	45°37'22
	5452 Oct 13 01:15	0°♐	
greatest brilliancy	5452 Oct 15 11:49	0°♐53'03	-4.7m
retrograde	5452 Oct 24 21:28	2°♐29'10	
	5452 Nov 05 02:40	30°℞♏	
evening set	5452 Nov 10 21:29	27°♏00'47	
inferior conj	5452 Nov 15 00:37	24°♏30'27	-7°07'35
minimum elong	5452 Nov 15 10:19	24°♏15'26	7°05'52
min. Earth dist.	5452 Nov 15 23:06	23°♏55'39	0.28204 AU
morning rise	5452 Nov 19 22:43	21°♏31'53	
direct	5452 Dec 06 07:08	16°♏21'12	
greatest brilliancy	5452 Dec 17 12:28	18°♏41'50	-4.8m
asc. node	5452 Dec 18 15:31	19°♏09'49	
	5453 Jan 04 20:03	0°♐	
morning max el	5453 Jan 25 18:35	19°♐10'42	46°44'56
	5453 Feb 05 03:34	0°♑	
	5453 Mar 03 20:38	0°♒	
	5453 Mar 29 04:42	0°♓	
desc. node	5453 Apr 09 07:05	13°♓23'35	
	5453 Apr 22 22:50	0°♈	
	5453 May 17 11:00	0°♉	
	5453 Jun 10 21:19	0°♊	
	5453 Jul 05 07:38	0°♋	
	5453 Jul 29 18:05	0°♌	
morning set	5453 Jul 30 07:01	0°♌39'43	
asc. node	5453 Jul 31 08:13	1°♌57'05	
	5453 Aug 23 03:54	0°♍	
max. Earth dist.	5453 Sep 04 04:58	14°♍49'20	1.73423 AU
superior conj	5453 Sep 05 01:55	15°♍53'51	1°12'05
minimum elong	5453 Sep 04 17:39	15°♍28'24	1°11'52
	5453 Sep 16 12:37	0°♎	
	5453 Oct 10 20:32	0°♏	
evening rise	5453 Oct 11 06:15	0°♏29'57	
	5453 Nov 04 04:27	0°♐	
desc. node	5453 Nov 19 23:45	19°♐28'26	
	5453 Nov 28 12:56	0°♑	
	5453 Dec 22 22:15	0°♒	
	5454 Jan 16 09:23	0°♓	
	5454 Feb 10 01:49	0°♈	
	5454 Mar 07 07:59	0°♉	
asc. node	5454 Mar 13 00:57	6°♉36'47	
	5454 Apr 02 23:33	0°♊	
evening max el	5454 Apr 15 02:29	12°♊37'43	46°41'32
	5454 May 04 00:35	0°♋	
greatest brilliancy	5454 May 24 08:48	12°♋43'22	-4.8m
retrograde	5454 Jun 04 06:11	14°♋54'46	
evening set	5454 Jun 19 10:20	10°♋22'20	
inferior conj	5454 Jun 25 10:56	6°♋44'31	1°45'38
minimum elong	5454 Jun 25 14:50	6°♋38'26	1°44'25
min. Earth dist.	5454 Jun 25 04:10	6°♋55'05	0.28227 AU
morning rise	5454 Jul 01 19:59	2°♋56'52	
desc. node	5454 Jul 02 16:26	2°♋29'49	
	5454 Jul 08 13:06	30°℞♊	
direct	5454 Jul 16 16:20	28°♊40'50	
	5454 Jul 25 03:08	0°♋	
greatest brilliancy	5454 Jul 26 12:37	0°♋27'01	-4.7m
morning max el	5454 Sep 03 10:43	28°♋29'53	45°42'36
	5454 Sep 05 00:19	0°♌	
	5454 Oct 03 20:59	0°♍	
asc. node	5454 Oct 23 18:01	22°♍22'06	
	5454 Oct 30 08:20	0°♎	
	5454 Nov 24 16:00	0°♏	
	5454 Dec 19 07:38	0°♐	
	5455 Jan 12 13:53	0°♑	
	5455 Feb 05 14:48	0°♒	
desc. node	5455 Feb 12 09:08	8°♒28'16	
	5455 Mar 01 12:49	0°♓	
greatest brilliancy	5455 Mar 03 10:19	2°♓22'53	-3.9m
morning set	5455 Mar 04 03:15	3°♓16'05	
	5455 Mar 25 09:41	0°♈	
superior conj	5455 Apr 14 03:19	24°♈46'59	-1°26'34
minimum elong	5455 Apr 14 06:06	24°♈55'42	1°26'34
max. Earth dist.	5455 Apr 17 10:38	28°♈55'40	1.71492 AU
	5455 Apr 18 07:10	0°♉	
	5455 May 12 07:03	0°♊	
evening rise	5455 May 24 05:23	14°♊50'49	
asc. node	5455 Jun 05 10:36	29°♊59'36	
	5455 Jun 05 10:44	0°♋	
	5455 Jun 29 19:07	0°♌	
	5455 Jul 24 09:04	0°♍	
	5455 Aug 18 06:25	0°♎	
	5455 Sep 12 14:49	0°♏	
desc. node	5455 Sep 25 01:57	14°♏28'09	
	5455 Oct 08 17:02	0°♐	
	5455 Nov 05 04:51	0°♑	
evening max el	5455 Nov 18 16:38	13°♑40'03	46°23'37

	5455 Dec 06 20:30	0°♒	
greatest brilliancy	5455 Dec 28 15:37	13°♒17'18	-4.9m
retrograde	5456 Jan 07 09:30	15°♒03'26	
asc. node	5456 Jan 16 03:20	13°♒31'00	
evening set	5456 Jan 21 18:58	10°♒59'29	
inferior conj	5456 Jan 28 00:00	7°♒21'35	3°01'32
minimum elong	5456 Jan 27 17:20	7°♒31'48	2°59'30
min. Earth dist.	5456 Jan 27 22:50	7°♒23'22	0.26719 AU
morning rise	5456 Feb 02 15:29	4°♒01'34	
	5456 Feb 13 08:20	30°℞♑	
direct	5456 Feb 17 13:45	29°♑38'09	
	5456 Feb 21 20:58	0°♒	
greatest brilliancy	5456 Feb 27 15:03	1°♒32'45	-4.9m
	5456 Apr 05 12:20	0°♓	
morning max el	5456 Apr 08 00:30	2°♓30'02	46°55'55
	5456 May 03 17:14	0°♈	
desc. node	5456 May 06 18:57	3°♈27'02	
	5456 May 29 20:49	0°♉	
	5456 Jun 24 06:19	0°♊	
	5456 Jul 19 07:49	0°♋	
	5456 Aug 13 04:31	0°♌	
asc. node	5456 Aug 27 20:07	17°♌46'49	
	5456 Sep 06 20:45	0°♍	
	5456 Oct 01 08:18	0°♎	
morning set	5456 Oct 06 12:43	6°♎22'58	
	5456 Oct 25 15:41	0°♏	
max. Earth dist.	5456 Nov 09 12:02	18°♏24'25	1.72597 AU
superior conj	5456 Nov 12 07:11	21°♏52'47	1°11'35
minimum elong	5456 Nov 12 16:09	22°♏20'37	1°11'21
	5456 Nov 18 20:06	0°♐	
	5456 Dec 12 22:41	0°♑	
desc. node	5456 Dec 17 11:32	5°♑39'03	
evening rise	5456 Dec 20 19:59	9°♑49'43	
	5457 Jan 06 00:03	0°♒	
	5457 Jan 30 00:44	0°♓	
	5457 Feb 23 02:03	0°♈	
	5457 Mar 19 06:59	0°♉	
asc. node	5457 Apr 09 12:54	25°♉59'35	
	5457 Apr 12 20:20	0°♊	
	5457 May 08 01:30	0°♋	
	5457 Jun 03 12:54	0°♌	
evening max el	5457 Jun 24 20:14	22°♌08'19	45°47'36
	5457 Jul 03 04:31	0°♍	
desc. node	5457 Jul 30 04:19	19°♍20'56	
greatest brilliancy	5457 Aug 02 03:12	20°♍34'36	-4.7m
retrograde	5457 Aug 12 21:55	22°♍41'17	
evening set	5457 Aug 29 13:02	17°♍26'19	
inferior conj	5457 Sep 03 11:50	14°♍24'44	-7°07'14
minimum elong	5457 Sep 03 02:35	14°♍39'15	7°05'43
min. Earth dist.	5457 Sep 03 05:41	14°♍34'23	0.29124 AU
morning rise	5457 Sep 07 16:07	11°♍49'56	
direct	5457 Sep 25 01:33	6°♍07'15	
greatest brilliancy	5457 Oct 05 09:40	8°♍02'19	-4.7m
	5457 Nov 06 06:50	0°♎	
morning max el	5457 Nov 13 04:36	6°♎31'58	45°58'45
asc. node	5457 Nov 20 05:44	13°♎34'30	
	5457 Dec 05 16:35	0°♏	
	5457 Dec 31 23:31	0°♐	
	5458 Jan 26 01:18	0°♑	
	5458 Feb 19 13:11	0°♒	
desc. node	5458 Mar 11 21:08	25°♒11'03	
	5458 Mar 15 18:04	0°♓	
	5458 Apr 08 19:41	0°♈	
	5458 May 02 20:36	0°♉	
morning set	5458 May 18 18:06	19°♉48'25	
	5458 May 26 22:45	0°♊	
	5458 Jun 20 03:16	0°♋	
superior conj	5458 Jun 26 05:02	7°♋30'48	-0°16'07
minimum elong	5458 Jun 26 08:38	7°♋41'56	0°15'58
behind sun begin	5458 Jun 26 07:31	7°♋38'30	
behind sun end	5458 Jun 26 09:45	7°♋45'23	
max. Earth dist.	5458 Jun 28 17:41	10°♋38'12	1.72899 AU
asc. node	5458 Jul 02 22:22	15°♋49'08	
	5458 Jul 14 10:12	0°♌	
evening rise	5458 Aug 02 11:32	23°♌27'43	
	5458 Aug 07 19:13	0°♍	
	5458 Sep 01 06:22	0°♎	
	5458 Sep 25 20:34	0°♏	
	5458 Oct 20 15:13	0°♐	
desc. node	5458 Oct 22 13:52	2°♐20'33	
	5458 Nov 14 15:50	0°♑	
	5458 Dec 10 01:11	0°♒	
	5459 Jan 05 03:43	0°♓	
evening max el	5459 Jan 30 10:27	27°♓11'56	47°07'21
	5459 Feb 02 05:26	0°♈	
asc. node	5459 Feb 12 15:14	9°♈54'02	
greatest brilliancy	5459 Mar 12 05:21	28°♈41'41	-4.9m
	5459 Mar 16 16:01	0°♉	
retrograde	5459 Mar 22 05:34	0°♉36'55	
	5459 Mar 27 16:04	30°℞♈	
evening set	5459 Apr 09 09:00	24°♈17'57	
min. Earth dist.	5459 Apr 11 16:19	22°♈53'04	0.27311 AU
inferior conj	5459 Apr 12 00:24	22°♈40'34	9°02'25
minimum elong	5459 Apr 12 02:22	22°♈37'32	9°02'22
morning rise	5459 Apr 14 19:49	20°♈57'15	
direct	5459 May 02 15:39	14°♈51'13	
greatest brilliancy	5459 May 12 01:16	16°♈30'48	-4.8m
	5459 Jun 03 06:58	0°♉	
desc. node	5459 Jun 04 06:36	0°♉48'09	
morning max el	5459 Jun 21 08:51	16°♉18'50	46°15'56
	5459 Jul 04 20:02	0°♊	
	5459 Aug 01 06:59	0°♋	
	5459 Aug 27 10:26	0°♌	
	5459 Sep 21 20:47	0°♍	
asc. node	5459 Sep 25 08:07	4°♍08'51	
	5459 Oct 16 18:45	0°♎	
	5459 Nov 10 07:14	0°♏	
	5459 Dec 04 13:02	0°♐	
morning set	5459 Dec 16 09:42	14°♐45'51	
	5459 Dec 28 14:35	0°♑	
desc. node	5460 Jan 14 23:20	21°♑44'17	
	5460 Jan 21 13:27	0°♒	
max. Earth dist.	5460 Jan 23 05:11	2°♒04'39	1.71371 AU
superior conj	5460 Jan 25 03:33	4°♒30'09	-0°24'19
minimum elong	5460 Jan 24 21:27	4°♒10'59	0°24'01
	5460 Feb 14 10:38	0°♓	
evening rise	5460 Mar 05 21:36	25°♓43'07	
	5460 Mar 09 07:23	0°♈	
	5460 Apr 02 05:36	0°♉	
	5460 Apr 26 07:48	0°♊	
asc. node	5460 May 07 00:45	13°♊14'01	
	5460 May 20 16:36	0°♋	
	5460 Jun 14 11:06	0°♌	
	5460 Jul 09 20:19	0°♍	
	5460 Aug 05 07:25	0°♎	
desc. node	5460 Aug 26 16:12	22°♎35'30	
	5460 Sep 03 04:47	0°♏	
evening max el	5460 Sep 03 19:59	0°♏36'23	45°36'36
greatest brilliancy	5460 Oct 13 01:16	28°♏37'36	-4.7m
	5460 Oct 18 23:19	0°♐	
retrograde	5460 Oct 22 11:59	0°♐14'07	

	5460 Oct 25 23:01	30°℞♏	
evening set	5460 Nov 08 15:03	24°♏41'21	
inferior conj	5460 Nov 12 15:29	22°♏14'33	-7°19'04
minimum elong	5460 Nov 13 00:53	21°♏59'58	7°17'31
min. Earth dist.	5460 Nov 13 13:15	21°♏40'47	0.28269 AU
morning rise	5460 Nov 17 10:21	19°♏20'23	
direct	5460 Dec 03 23:09	14°♏04'42	
greatest brilliancy	5460 Dec 15 03:04	16°♏23'55	-4.8m
asc. node	5460 Dec 17 17:29	17°♏31'33	
	5461 Jan 05 07:13	0°♐	
morning max el	5461 Jan 23 09:37	16°♐51'26	46°43'29
	5461 Feb 04 22:28	0°♑	
	5461 Mar 03 11:40	0°♒	
	5461 Mar 28 18:03	0°♓	
desc. node	5461 Apr 08 09:03	12°♓50'29	
	5461 Apr 22 11:14	0°♈	
	5461 May 16 22:47	0°♉	
	5461 Jun 10 08:40	0°♊	
	5461 Jul 04 18:41	0°♋	
morning set	5461 Jul 28 00:25	28°♋32'27	
	5461 Jul 29 04:56	0°♌	
asc. node	5461 Jul 30 10:17	1°♌30'07	
	5461 Aug 22 14:41	0°♍	
max. Earth dist.	5461 Sep 02 01:26	12°♍51'25	1.73430 AU
superior conj	5461 Sep 02 20:04	13°♍48'45	1°10'20
minimum elong	5461 Sep 02 11:33	13°♍22'33	1°10'06
	5461 Sep 15 23:24	0°♎	
evening rise	5461 Oct 08 23:37	28°♎21'51	
	5461 Oct 10 07:26	0°♏	
	5461 Nov 03 15:34	0°♐	
desc. node	5461 Nov 19 01:38	18°♐59'27	
	5461 Nov 28 00:22	0°♑	
	5461 Dec 22 10:08	0°♒	
	5462 Jan 15 21:52	0°♓	
	5462 Feb 09 15:14	0°♈	
	5462 Mar 06 23:02	0°♉	
asc. node	5462 Mar 12 03:02	5°♉57'59	
	5462 Apr 02 18:26	0°♊	
evening max el	5462 Apr 12 17:44	10°♊20'07	46°43'25
	5462 May 04 12:43	0°♋	
greatest brilliancy	5462 May 22 01:56	10°♋30'18	-4.8m
retrograde	5462 Jun 01 21:47	12°♋40'11	
evening set	5462 Jun 17 03:38	8°♋06'08	
inferior conj	5462 Jun 23 02:25	4°♋30'38	2°06'22
minimum elong	5462 Jun 23 07:03	4°♋23'24	2°04'58
min. Earth dist.	5462 Jun 22 20:06	4°♋40'31	0.28187 AU
morning rise	5462 Jun 29 11:07	0°♋43'13	
	5462 Jun 30 20:12	30°℞♊	
desc. node	5462 Jul 01 18:22	29°♊32'51	
direct	5462 Jul 14 07:31	26°♊27'43	
greatest brilliancy	5462 Jul 24 03:15	28°♊13'15	-4.7m
	5462 Jul 28 12:27	0°♋	
morning max el	5462 Sep 01 01:14	26°♋16'02	45°42'49
	5462 Sep 04 21:56	0°♌	
	5462 Oct 03 12:26	0°♍	
asc. node	5462 Oct 22 19:57	21°♍48'14	
	5462 Oct 29 21:36	0°♎	
	5462 Nov 24 04:15	0°♏	
	5462 Dec 18 19:21	0°♐	
	5463 Jan 12 01:19	0°♑	
	5463 Feb 05 02:05	0°♒	
desc. node	5463 Feb 11 11:14	7°♒59'36	
	5463 Mar 01 00:01	0°♓	
morning set	5463 Mar 01 13:05	0°♓41'00	
	5463 Mar 24 20:50	0°♈	
superior conj	5463 Apr 11 14:38	22°♈17'06	-1°26'57
minimum elong	5463 Apr 11 16:23	22°♈22'36	1°26'58
max. Earth dist.	5463 Apr 14 18:28	26°♈14'54	1.71450 AU
	5463 Apr 17 18:16	0°♉	
	5463 May 11 18:07	0°♊	
evening rise	5463 May 21 18:26	12°♊27'50	
asc. node	5463 Jun 04 12:35	29°♊31'27	
	5463 Jun 04 21:49	0°♋	
	5463 Jun 29 06:18	0°♌	
	5463 Jul 23 20:32	0°♍	
	5463 Aug 17 18:26	0°♎	
	5463 Sep 12 03:52	0°♏	
desc. node	5463 Sep 24 03:55	13°♏54'04	
	5463 Oct 08 08:03	0°♐	
	5463 Nov 05 00:22	0°♑	
evening max el	5463 Nov 16 05:09	11°♑15'59	46°21'29
	5463 Dec 07 11:17	0°♒	
greatest brilliancy	5463 Dec 26 05:18	10°♒51'50	-4.9m
retrograde	5464 Jan 04 21:29	12°♒36'49	
asc. node	5464 Jan 15 05:25	10°♒28'24	
evening set	5464 Jan 19 06:41	8°♒33'48	
inferior conj	5464 Jan 25 12:41	4°♒55'05	2°38'21
minimum elong	5464 Jan 25 06:46	5°♒04'07	2°36'31
min. Earth dist.	5464 Jan 25 13:08	4°♒54'23	0.26735 AU
morning rise	5464 Jan 31 06:31	1°♒31'45	
	5464 Feb 03 06:58	30°℞♑	
direct	5464 Feb 15 02:05	27°♑10'55	
greatest brilliancy	5464 Feb 25 06:13	29°♑07'50	-4.9m
	5464 Feb 27 10:21	0°♒	
morning max el	5464 Apr 05 13:10	0°♓02'49	46°56'35
	5464 Apr 05 12:03	0°♓	
	5464 May 03 10:00	0°♈	
desc. node	5464 May 05 20:55	2°♈46'18	
	5464 May 29 10:58	0°♉	
	5464 Jun 23 19:05	0°♊	
	5464 Jul 18 19:45	0°♋	
	5464 Aug 12 15:55	0°♌	
asc. node	5464 Aug 26 22:14	17°♌19'14	
	5464 Sep 06 07:48	0°♍	
	5464 Sep 30 19:11	0°♎	
morning set	5464 Oct 04 06:14	4°♎15'38	
	5464 Oct 25 02:31	0°♏	
max. Earth dist.	5464 Nov 07 06:40	16°♏19'32	1.72645 AU
superior conj	5464 Nov 09 23:33	19°♏40'51	1°13'22
minimum elong	5464 Nov 10 08:09	20°♏07'33	1°13'10
	5464 Nov 18 07:00	0°♐	
	5464 Dec 12 09:44	0°♑	
desc. node	5464 Dec 16 13:35	5°♑10'56	
evening rise	5464 Dec 18 09:45	7°♑28'30	
	5465 Jan 05 11:17	0°♒	
	5465 Jan 29 12:10	0°♓	
	5465 Feb 22 13:44	0°♈	
	5465 Mar 18 19:04	0°♉	
asc. node	5465 Apr 08 14:50	25°♉27'06	
	5465 Apr 12 09:06	0°♊	
	5465 May 07 15:33	0°♋	
	5465 Jun 03 05:49	0°♌	
evening max el	5465 Jun 22 11:31	19°♌54'46	45°49'10
	5465 Jul 03 07:22	0°♍	
desc. node	5465 Jul 29 06:29	17°♍48'25	
greatest brilliancy	5465 Jul 30 18:16	18°♍23'58	-4.7m
retrograde	5465 Aug 10 14:53	20°♍32'35	
evening set	5465 Aug 27 02:27	15°♍21'30	
inferior conj	5465 Sep 01 04:18	12°♍15'43	-6°55'56
minimum elong	5465 Aug 31 18:48	12°♍30'36	6°54'18
min. Earth dist.	5465 Aug 31 21:14	12°♍26'47	0.29111 AU

morning rise	5465 Sep 05 11:11	9°♍37'24	
direct	5465 Sep 22 17:43	3°♍58'25	
greatest brilliancy	5465 Oct 03 01:27	5°♍53'19	-4.7m
	5465 Nov 06 07:21	0°♎	
morning max el	5465 Nov 10 20:36	4°♎20'43	45°57'29
asc. node	5465 Nov 19 07:45	12°♎49'50	
	5465 Dec 05 08:51	0°♏	
	5465 Dec 31 13:16	0°♐	
	5466 Jan 25 13:57	0°♑	
	5466 Feb 19 01:14	0°♒	
desc. node	5466 Mar 10 23:10	24°♒40'56	
	5466 Mar 15 05:45	0°♓	
	5466 Apr 08 07:04	0°♈	
	5466 May 02 07:45	0°♉	
morning set	5466 May 16 07:36	17°♉26'34	
	5466 May 26 09:45	0°♊	
	5466 Jun 19 14:10	0°♋	
superior conj	5466 Jun 23 20:28	5°♋16'30	-0°19'30
minimum elong	5466 Jun 24 00:50	5°♋29'59	0°19'20
max. Earth dist.	5466 Jun 26 10:52	8°♋29'24	1.72859 AU
asc. node	5466 Jul 02 00:28	15°♋22'06	
	5466 Jul 13 21:04	0°♌	
evening rise	5466 Jul 31 05:19	21°♌21'27	
	5466 Aug 07 06:06	0°♍	
	5466 Aug 31 17:23	0°♎	
	5466 Sep 25 07:54	0°♏	
	5466 Oct 20 03:05	0°♐	
desc. node	5466 Oct 21 15:49	1°♐50'32	
	5466 Nov 14 04:34	0°♑	
	5466 Dec 09 15:21	0°♒	
	5467 Jan 04 20:37	0°♓	
evening max el	5467 Jan 28 01:07	24°♓49'59	47°06'46
	5467 Feb 02 05:54	0°♈	
asc. node	5467 Feb 11 17:17	8°♈50'07	
greatest brilliancy	5467 Mar 09 18:13	26°♈15'22	-4.9m
retrograde	5467 Mar 19 19:45	28°♈11'27	
evening set	5467 Apr 06 22:16	21°♈52'39	
min. Earth dist.	5467 Apr 09 04:27	20°♈29'33	0.27280 AU
inferior conj	5467 Apr 09 13:35	20°♈15'27	9°04'17
minimum elong	5467 Apr 09 14:35	20°♈13'53	9°04'16
morning rise	5467 Apr 12 07:02	18°♈35'16	
direct	5467 Apr 30 05:02	12°♈26'45	
greatest brilliancy	5467 May 09 12:58	14°♈05'24	-4.8m
desc. node	5467 Jun 03 08:39	29°♈41'45	
	5467 Jun 03 17:18	0°♉	
morning max el	5467 Jun 18 23:30	14°♉00'43	46°17'30
	5467 Jul 04 14:45	0°♊	
	5467 Jul 31 21:39	0°♋	
	5467 Aug 26 23:18	0°♌	
	5467 Sep 21 08:39	0°♍	
asc. node	5467 Sep 24 09:59	3°♍39'11	
	5467 Oct 16 06:03	0°♎	
	5467 Nov 09 18:14	0°♏	
	5467 Dec 03 23:55	0°♐	
morning set	5467 Dec 14 00:24	12°♐28'18	
	5467 Dec 28 01:26	0°♑	
desc. node	5468 Jan 14 01:26	21°♑16'52	
max. Earth dist.	5468 Jan 20 14:51	29°♑30'15	1.71403 AU
	5468 Jan 21 00:20	0°♒	
superior conj	5468 Jan 22 15:07	2°♒01'38	-0°20'34
minimum elong	5468 Jan 22 09:56	1°♒45'21	0°20'18
	5468 Feb 13 21:35	0°♓	
evening rise	5468 Mar 03 08:13	23°♓10'59	
	5468 Mar 08 18:25	0°♈	
	5468 Apr 01 16:46	0°♉	
	5468 Apr 25 19:07	0°♊	
asc. node	5468 May 06 02:44	12°♊44'57	
	5468 May 20 04:13	0°♋	
	5468 Jun 13 23:16	0°♌	
	5468 Jul 09 09:37	0°♍	
	5468 Aug 04 23:09	0°♎	
desc. node	5468 Aug 25 18:09	21°♎50'08	
evening max el	5468 Sep 01 11:14	28°♎24'05	45°35'55
	5468 Sep 03 03:40	0°♏	
greatest brilliancy	5468 Oct 10 15:30	26°♏23'45	-4.7m
retrograde	5468 Oct 20 02:12	28°♏00'04	
evening set	5468 Nov 06 08:42	22°♏23'15	
inferior conj	5468 Nov 10 06:32	19°♏59'56	-7°29'49
minimum elong	5468 Nov 10 15:33	19°♏45'55	7°28'26
min. Earth dist.	5468 Nov 11 03:48	19°♏26'52	0.28327 AU
morning rise	5468 Nov 14 22:04	17°♏10'11	
direct	5468 Dec 01 14:50	11°♏49'34	
greatest brilliancy	5468 Dec 12 17:56	14°♏07'30	-4.8m
asc. node	5468 Dec 16 19:32	15°♏57'51	
	5469 Jan 05 14:59	0°♐	
morning max el	5469 Jan 20 23:46	14°♐30'57	46°42'05
	5469 Feb 04 16:31	0°♑	
	5469 Mar 03 02:13	0°♒	
	5469 Mar 28 07:04	0°♓	
desc. node	5469 Apr 07 10:59	12°♓18'01	
	5469 Apr 21 23:25	0°♈	
	5469 May 16 10:26	0°♉	
	5469 Jun 09 19:54	0°♊	
	5469 Jul 04 05:36	0°♋	
morning set	5469 Jul 25 17:25	26°♋24'20	
	5469 Jul 28 15:38	0°♌	
asc. node	5469 Jul 29 12:18	1°♌03'29	
	5469 Aug 22 01:17	0°♍	
max. Earth dist.	5469 Aug 30 20:32	10°♍49'52	1.73434 AU
superior conj	5469 Aug 31 13:59	11°♍43'36	1°08'28
minimum elong	5469 Aug 31 05:16	11°♍16'45	1°08'12
	5469 Sep 15 10:01	0°♎	
evening rise	5469 Oct 06 16:59	26°♎14'25	
	5469 Oct 09 18:10	0°♏	
	5469 Nov 03 02:30	0°♐	
desc. node	5469 Nov 18 03:43	18°♐31'44	
	5469 Nov 27 11:35	0°♑	
	5469 Dec 21 21:44	0°♒	
	5470 Jan 15 10:03	0°♓	
	5470 Feb 09 04:21	0°♈	
	5470 Mar 06 13:53	0°♉	
asc. node	5470 Mar 11 04:56	5°♉19'22	
	5470 Apr 02 13:30	0°♊	
evening max el	5470 Apr 10 07:51	8°♊00'11	46°44'59
	5470 May 05 04:47	0°♋	
greatest brilliancy	5470 May 19 19:07	8°♋17'03	-4.8m
retrograde	5470 May 30 12:46	10°♋25'13	
evening set	5470 Jun 14 20:46	5°♋49'06	
inferior conj	5470 Jun 20 17:37	2°♋16'20	2°27'13
minimum elong	5470 Jun 20 22:58	2°♋07'58	2°25'37
min. Earth dist.	5470 Jun 20 12:05	2°♋25'00	0.28154 AU
	5470 Jun 24 10:13	30°℞♊	
morning rise	5470 Jun 27 01:44	28°♊29'22	
desc. node	5470 Jun 30 20:31	26°♊38'36	
direct	5470 Jul 11 21:58	24°♊13'56	
greatest brilliancy	5470 Jul 21 18:14	25°♊59'34	-4.7m
	5470 Jul 30 10:42	0°♋	
morning max el	5470 Aug 29 15:10	24°♋01'00	45°43'15
	5470 Sep 04 18:37	0°♌	
	5470 Oct 03 03:27	0°♍	
asc. node	5470 Oct 21 21:59	21°♍15'39	

	5470 Oct 29 10:29	0°♎	
	5470 Nov 23 16:08	0°♏	
	5470 Dec 18 06:43	0°♐	
	5471 Jan 11 12:24	0°♑	
	5471 Feb 04 13:00	0°♒	
desc. node	5471 Feb 10 13:14	7°♒31'44	
morning set	5471 Feb 26 23:18	28°♒08'23	
	5471 Feb 28 10:50	0°♓	
	5471 Mar 24 07:34	0°♈	
superior conj	5471 Apr 09 02:15	19°♈49'27	-1°27'10
minimum elong	5471 Apr 09 02:56	19°♈51'37	1°27'10
max. Earth dist.	5471 Apr 12 00:30	23°♈29'48	1.71412 AU
	5471 Apr 17 04:57	0°♉	
	5471 May 11 04:47	0°♊	
evening rise	5471 May 19 07:29	10°♊05'55	
asc. node	5471 Jun 03 14:41	29°♊04'45	
	5471 Jun 04 08:33	0°♋	
	5471 Jun 28 17:12	0°♌	
	5471 Jul 23 07:45	0°♍	
	5471 Aug 17 06:13	0°♎	
	5471 Sep 11 16:42	0°♏	
desc. node	5471 Sep 23 05:54	13°♏20'40	
	5471 Oct 07 22:56	0°♐	
	5471 Nov 04 20:07	0°♑	
evening max el	5471 Nov 13 17:43	8°♑53'18	46°19'30
	5471 Dec 08 06:26	0°♒	
greatest brilliancy	5471 Dec 23 18:32	8°♒27'00	-4.9m
retrograde	5472 Jan 02 09:55	10°♒11'28	
asc. node	5472 Jan 14 07:29	7°♒21'54	
evening set	5472 Jan 16 18:37	6°♒08'47	
inferior conj	5472 Jan 23 01:17	2°♒29'36	2°14'51
minimum elong	5472 Jan 22 20:12	2°♒37'21	2°13'15
min. Earth dist.	5472 Jan 23 03:13	2°♒26'39	0.26752 AU
	5472 Jan 27 05:02	30°℞♑	
morning rise	5472 Jan 28 21:23	29°♑03'22	
direct	5472 Feb 12 14:39	24°♑44'39	
greatest brilliancy	5472 Feb 22 21:04	26°♑43'48	-4.9m
	5472 Feb 29 20:10	0°♒	
morning max el	5472 Apr 03 02:51	27°♒39'35	46°57'24
	5472 Apr 05 10:13	0°♓	
	5472 May 03 01:55	0°♈	
desc. node	5472 May 04 23:00	2°♈07'51	
	5472 May 29 00:27	0°♉	
	5472 Jun 23 07:19	0°♊	
	5472 Jul 18 07:15	0°♋	
	5472 Aug 12 02:57	0°♌	
asc. node	5472 Aug 26 00:07	16°♌52'01	
	5472 Sep 05 18:33	0°♍	
	5472 Sep 30 05:45	0°♎	
morning set	5472 Oct 01 23:27	2°♎08'18	
	5472 Oct 24 13:02	0°♏	
max. Earth dist.	5472 Nov 05 02:09	14°♏18'20	1.72687 AU
superior conj	5472 Nov 07 15:39	17°♏29'06	1°15'03
minimum elong	5472 Nov 07 23:51	17°♏54'32	1°14'53
	5472 Nov 17 17:34	0°♐	
	5472 Dec 11 20:27	0°♑	
evening rise	5472 Dec 15 23:25	5°♑08'06	
desc. node	5472 Dec 15 15:38	4°♑43'54	
	5473 Jan 04 22:12	0°♒	
	5473 Jan 28 23:17	0°♓	
	5473 Feb 22 01:06	0°♈	
	5473 Mar 18 06:48	0°♉	
asc. node	5473 Apr 07 16:53	24°♉56'09	
	5473 Apr 11 21:30	0°♊	
	5473 May 07 05:14	0°♋	
	5473 Jun 02 22:32	0°♌	
evening max el	5473 Jun 20 03:32	17°♌44'20	45°50'38
	5473 Jul 03 11:21	0°♍	
desc. node	5473 Jul 28 08:24	16°♍13'19	
greatest brilliancy	5473 Jul 28 09:03	16°♍13'57	-4.7m
retrograde	5473 Aug 08 07:53	18°♍24'22	
evening set	5473 Aug 24 15:50	13°♍17'12	
inferior conj	5473 Aug 29 20:38	10°♍07'10	-6°43'58
minimum elong	5473 Aug 29 10:57	10°♍22'19	6°42'12
min. Earth dist.	5473 Aug 29 12:32	10°♍19'50	0.29101 AU
morning rise	5473 Sep 03 06:11	7°♍25'09	
direct	5473 Sep 20 10:13	1°♍50'06	
greatest brilliancy	5473 Sep 30 16:40	3°♍44'14	-4.7m
	5473 Nov 06 06:29	0°♎	
morning max el	5473 Nov 08 13:01	2°♎11'12	45°56'12
asc. node	5473 Nov 18 09:50	12°♎06'34	
	5473 Dec 05 00:35	0°♏	
	5473 Dec 31 02:38	0°♐	
	5474 Jan 25 02:15	0°♑	
	5474 Feb 18 12:57	0°♒	
desc. node	5474 Mar 10 01:02	24°♒11'22	
	5474 Mar 14 17:05	0°♓	
	5474 Apr 07 18:08	0°♈	
	5474 May 01 18:36	0°♉	
morning set	5474 May 13 21:16	15°♉06'08	
	5474 May 25 20:26	0°♊	
	5474 Jun 19 00:44	0°♋	
superior conj	5474 Jun 21 12:05	3°♋03'43	-0°22'52
minimum elong	5474 Jun 21 17:11	3°♋19'28	0°22'38
max. Earth dist.	5474 Jun 24 06:26	6°♋28'57	1.72816 AU
asc. node	5474 Jul 01 02:28	14°♋55'51	
	5474 Jul 13 07:34	0°♌	
evening rise	5474 Jul 28 23:17	19°♌16'43	
	5474 Aug 06 16:40	0°♍	
	5474 Aug 31 04:10	0°♎	
	5474 Sep 24 19:03	0°♏	
	5474 Oct 19 14:50	0°♐	
desc. node	5474 Oct 20 17:52	1°♐21'16	
	5474 Nov 13 17:13	0°♑	
	5474 Dec 09 05:29	0°♒	
	5475 Jan 04 13:40	0°♓	
evening max el	5475 Jan 25 16:00	22°♓29'07	47°06'09
	5475 Feb 02 07:23	0°♈	
asc. node	5475 Feb 10 19:11	7°♈44'51	
greatest brilliancy	5475 Mar 07 07:25	23°♈49'59	-4.9m
retrograde	5475 Mar 17 09:43	25°♈46'12	
evening set	5475 Apr 04 11:02	19°♈28'37	
min. Earth dist.	5475 Apr 06 16:43	18°♈06'12	0.27245 AU
inferior conj	5475 Apr 07 02:43	17°♈50'44	9°05'16
minimum elong	5475 Apr 07 02:47	17°♈50'37	9°05'15
morning rise	5475 Apr 09 18:40	16°♈12'49	
direct	5475 Apr 27 18:26	10°♈02'50	
greatest brilliancy	5475 May 07 00:41	11°♈40'17	-4.9m
desc. node	5475 Jun 02 10:41	28°♈37'42	
	5475 Jun 04 00:38	0°♉	
morning max el	5475 Jun 16 13:36	11°♉41'45	46°19'12
	5475 Jul 04 08:43	0°♊	
	5475 Jul 31 11:53	0°♋	
	5475 Aug 26 11:49	0°♌	
	5475 Sep 20 20:15	0°♍	
asc. node	5475 Sep 23 12:04	3°♍10'52	
	5475 Oct 15 17:11	0°♎	
	5475 Nov 09 05:08	0°♏	
	5475 Dec 03 10:45	0°♐	
morning set	5475 Dec 11 14:54	10°♐10'18	
	5475 Dec 27 12:15	0°♑	

desc. node	5476 Jan 13 03:24	20°♉49'05	
max. Earth dist.	5476 Jan 17 21:43	26°♉47'19	1.71434 AU
superior conj	5476 Jan 20 02:32	29°♉32'53	-0°16'46
minimum elong	5476 Jan 19 22:17	29°♉19'35	0°16'32
	5476 Jan 20 11:10	0°♒	
	5476 Feb 13 08:29	0°♓	
evening rise	5476 Feb 29 18:39	20°♓38'32	
	5476 Mar 08 05:24	0°♈	
	5476 Apr 01 03:52	0°♉	
	5476 Apr 25 06:24	0°♊	
asc. node	5476 May 05 04:50	12°♊16'21	
	5476 May 19 15:47	0°♋	
	5476 Jun 13 11:25	0°♌	
	5476 Jul 08 22:54	0°♍	
	5476 Aug 04 14:59	0°♎	
desc. node	5476 Aug 24 20:08	21°♎04'39	
evening max el	5476 Aug 30 01:40	26°♎10'17	45°35'15
	5476 Sep 03 03:24	0°♏	
greatest brilliancy	5476 Oct 08 06:02	24°♏10'45	-4.7m
retrograde	5476 Oct 17 16:12	25°♏46'48	
evening set	5476 Nov 04 02:20	20°♏05'50	
inferior conj	5476 Nov 07 21:45	17°♏45'55	-7°39'46
minimum elong	5476 Nov 08 06:18	17°♏32'34	7°38'32
min. Earth dist.	5476 Nov 08 18:46	17°♏13'09	0.28391 AU
morning rise	5476 Nov 12 09:56	15°♏00'35	
direct	5476 Nov 29 06:11	9°♏34'41	
greatest brilliancy	5476 Dec 10 09:36	11°♏52'08	-4.8m
asc. node	5476 Dec 15 21:33	14°♏27'15	
	5477 Jan 05 20:37	0°♐	
morning max el	5477 Jan 18 13:39	12°♐09'21	46°40'37
	5477 Feb 04 10:20	0°♑	
	5477 Mar 02 16:46	0°♒	
	5477 Mar 27 20:07	0°♓	
desc. node	5477 Apr 06 13:08	11°♓46'05	
	5477 Apr 21 11:38	0°♈	
	5477 May 15 22:05	0°♉	
	5477 Jun 09 07:10	0°♊	
	5477 Jul 03 16:34	0°♋	
morning set	5477 Jul 23 10:33	24°♋16'23	
	5477 Jul 28 02:24	0°♌	
asc. node	5477 Jul 28 14:15	0°♌36'24	
	5477 Aug 21 11:56	0°♍	
max. Earth dist.	5477 Aug 28 15:18	8°♍47'14	1.73435 AU
superior conj	5477 Aug 29 08:14	9°♍39'19	1°06'31
minimum elong	5477 Aug 28 23:20	9°♍11'56	1°06'14
	5477 Sep 14 20:40	0°♎	
evening rise	5477 Oct 04 10:46	24°♎08'16	
	5477 Oct 09 04:56	0°♏	
	5477 Nov 02 13:29	0°♐	
desc. node	5477 Nov 17 05:47	18°♐03'38	
	5477 Nov 26 22:56	0°♑	
	5477 Dec 21 09:34	0°♒	
	5478 Jan 14 22:34	0°♓	
	5478 Feb 08 17:52	0°♈	
	5478 Mar 06 05:15	0°♉	
asc. node	5478 Mar 10 07:00	4°♉40'01	
	5478 Apr 02 09:27	0°♊	
evening max el	5478 Apr 07 21:15	5°♊37'38	46°46'46
	5478 May 06 03:01	0°♋	
greatest brilliancy	5478 May 17 12:03	6°♋02'37	-4.8m
retrograde	5478 May 28 03:50	8°♋09'37	
evening set	5478 Jun 12 13:58	3°♋30'51	
inferior conj	5478 Jun 18 08:48	0°♋01'13	2°47'56
minimum elong	5478 Jun 18 14:50	29°♊51'47	2°46'08
min. Earth dist.	5478 Jun 18 04:05	0°♋08'36	0.28119 AU
	5478 Jun 18 09:35	30°℞♊	
morning rise	5478 Jun 24 16:10	26°♊15'07	
desc. node	5478 Jun 29 22:28	23°♊48'06	
direct	5478 Jul 09 12:01	21°♊59'08	
greatest brilliancy	5478 Jul 19 09:26	23°♊45'26	-4.7m
	5478 Jul 31 18:19	0°♋	
morning max el	5478 Aug 27 05:51	21°♋47'05	45°43'54
	5478 Sep 04 14:49	0°♌	
	5478 Oct 02 18:25	0°♍	
asc. node	5478 Oct 21 00:04	20°♍42'59	
	5478 Oct 28 23:26	0°♎	
	5478 Nov 23 04:08	0°♏	
	5478 Dec 17 18:15	0°♐	
	5479 Jan 10 23:42	0°♑	
	5479 Feb 04 00:12	0°♒	
desc. node	5479 Feb 09 15:12	7°♒02'51	
greatest brilliancy	5479 Feb 16 17:53	15°♒58'06	-3.9m
morning set	5479 Feb 24 09:11	25°♒33'34	
	5479 Feb 27 21:59	0°♓	
	5479 Mar 23 18:41	0°♈	
superior conj	5479 Apr 06 13:15	17°♈18'36	-1°27'12
minimum elong	5479 Apr 06 12:50	17°♈17'18	1°27'12
max. Earth dist.	5479 Apr 09 03:44	20°♈34'43	1.71377 AU
	5479 Apr 16 16:00	0°♉	
	5479 May 10 15:49	0°♊	
evening rise	5479 May 16 20:00	7°♊41'16	
asc. node	5479 Jun 02 16:38	28°♊36'30	
	5479 Jun 03 19:37	0°♋	
	5479 Jun 28 04:26	0°♌	
	5479 Jul 22 19:18	0°♍	
	5479 Aug 16 18:22	0°♎	
	5479 Sep 11 05:54	0°♏	
desc. node	5479 Sep 22 08:00	12°♏46'41	
	5479 Oct 07 14:17	0°♐	
	5479 Nov 04 16:44	0°♑	
evening max el	5479 Nov 11 07:21	6°♑33'01	46°17'37
	5479 Dec 09 08:40	0°♒	
greatest brilliancy	5479 Dec 21 07:13	6°♒01'30	-4.8m
retrograde	5479 Dec 30 22:52	7°♒46'05	
asc. node	5480 Jan 13 09:21	4°♒11'16	
evening set	5480 Jan 14 06:58	3°♒43'21	
inferior conj	5480 Jan 20 14:02	0°♒03'47	1°51'08
minimum elong	5480 Jan 20 09:49	0°♒10'14	1°49'48
min. Earth dist.	5480 Jan 20 17:04	29°♑59'10	0.26779 AU
	5480 Jan 20 16:31	30°℞♑	
morning rise	5480 Jan 26 12:14	26°♑35'01	
direct	5480 Feb 10 04:03	22°♑18'04	
greatest brilliancy	5480 Feb 20 11:37	24°♑18'48	-4.9m
	5480 Mar 02 09:40	0°♒	
morning max el	5480 Mar 31 17:38	25°♒17'50	46°57'50
	5480 Apr 05 08:04	0°♓	
	5480 May 02 18:06	0°♈	
desc. node	5480 May 04 01:00	1°♈27'59	
	5480 May 28 14:21	0°♉	
	5480 Jun 22 19:59	0°♊	
	5480 Jul 17 19:09	0°♋	
	5480 Aug 11 14:21	0°♌	
asc. node	5480 Aug 25 02:10	16°♌24'13	
	5480 Sep 05 05:39	0°♍	
morning set	5480 Sep 29 16:52	0°♎00'35	
	5480 Sep 29 16:40	0°♎	
	5480 Oct 23 23:54	0°♏	
max. Earth dist.	5480 Nov 02 21:03	12°♏14'23	1.72723 AU
superior conj	5480 Nov 05 08:11	15°♏17'42	1°16'36
minimum elong	5480 Nov 05 15:55	15°♏41'42	1°16'27

	5480 Nov 17 04:29	0°♐	
	5480 Dec 11 07:29	0°♑	
evening rise	5480 Dec 13 13:36	2°♑48'26	
desc. node	5480 Dec 14 17:34	4°♑15'31	
	5481 Jan 04 09:25	0°♒	
	5481 Jan 28 10:43	0°♓	
	5481 Feb 21 12:50	0°♈	
	5481 Mar 17 19:00	0°♉	
asc. node	5481 Apr 06 18:55	24°♉23'36	
	5481 Apr 11 10:27	0°♊	
	5481 May 06 19:37	0°♋	
	5481 Jun 02 16:14	0°♌	
evening max el	5481 Jun 17 20:17	15°♌33'59	45°52'16
	5481 Jul 03 18:06	0°♍	
greatest brilliancy	5481 Jul 26 00:17	14°♍02'58	-4.7m
desc. node	5481 Jul 27 10:22	14°♍33'28	
retrograde	5481 Aug 06 00:43	16°♍14'31	
evening set	5481 Aug 22 05:21	11°♍11'31	
min. Earth dist.	5481 Aug 27 03:50	8°♍11'30	0.29081 AU
inferior conj	5481 Aug 27 12:56	7°♍57'14	-6°31'26
minimum elong	5481 Aug 27 03:09	8°♍12'33	6°29'34
morning rise	5481 Sep 01 01:07	5°♍11'27	
	5481 Sep 14 02:09	30°℞♌	
direct	5481 Sep 18 02:57	29°♌40'40	
	5481 Sep 22 05:46	0°♍	
greatest brilliancy	5481 Sep 28 07:22	1°♍33'20	-4.7m
morning max el	5481 Nov 06 05:09	0°♎00'10	45°54'58
	5481 Nov 06 05:04	0°♎	
asc. node	5481 Nov 17 11:47	11°♎22'35	
	5481 Dec 04 16:25	0°♏	
	5481 Dec 30 16:11	0°♐	
	5482 Jan 24 14:45	0°♑	
	5482 Feb 18 00:53	0°♒	
desc. node	5482 Mar 09 03:12	23°♒41'56	
	5482 Mar 14 04:39	0°♓	
	5482 Apr 07 05:28	0°♈	
	5482 May 01 05:47	0°♉	
morning set	5482 May 11 10:39	12°♉43'37	
	5482 May 25 07:31	0°♊	
	5482 Jun 18 11:43	0°♋	
superior conj	5482 Jun 19 03:11	0°♋47'52	-0°26'14
minimum elong	5482 Jun 19 08:58	1°♋05'49	0°25'59
max. Earth dist.	5482 Jun 22 01:40	4°♋26'02	1.72773 AU
asc. node	5482 Jun 30 04:24	14°♋27'59	
	5482 Jul 12 18:31	0°♌	
evening rise	5482 Jul 26 16:39	17°♌08'49	
	5482 Aug 06 03:39	0°♍	
	5482 Aug 30 15:19	0°♎	
	5482 Sep 24 06:35	0°♏	
	5482 Oct 19 02:58	0°♐	
desc. node	5482 Oct 19 19:54	0°♐50'51	
	5482 Nov 13 06:17	0°♑	
	5482 Dec 08 20:05	0°♒	
	5483 Jan 04 07:21	0°♓	
evening max el	5483 Jan 23 06:39	20°♓07'01	47°05'27
	5483 Feb 02 10:33	0°♈	
asc. node	5483 Feb 09 21:18	6°♈37'49	
greatest brilliancy	5483 Mar 04 21:13	21°♈25'00	-4.9m
retrograde	5483 Mar 14 23:16	23°♈20'35	
evening set	5483 Apr 01 23:19	17°♈05'26	
min. Earth dist.	5483 Apr 04 05:27	15°♈42'15	0.27212 AU
inferior conj	5483 Apr 04 15:59	15°♈25'55	9°05'06
minimum elong	5483 Apr 04 15:07	15°♈27'17	9°05'05
morning rise	5483 Apr 07 07:02	13°♈49'14	
direct	5483 Apr 25 07:38	7°♈38'48	
greatest brilliancy	5483 May 04 13:04	9°♈15'24	-4.9m
desc. node	5483 Jun 01 12:40	27°♈34'30	
	5483 Jun 04 06:02	0°♉	
morning max el	5483 Jun 14 02:49	9°♉19'36	46°20'39
	5483 Jul 04 02:37	0°♊	
	5483 Jul 31 02:20	0°♋	
	5483 Aug 26 00:37	0°♌	
	5483 Sep 20 08:09	0°♍	
asc. node	5483 Sep 22 14:08	2°♍41'37	
	5483 Oct 15 04:33	0°♎	
	5483 Nov 08 16:16	0°♏	
	5483 Dec 02 21:46	0°♐	
morning set	5483 Dec 09 05:27	7°♐51'54	
	5483 Dec 26 23:15	0°♑	
desc. node	5484 Jan 12 05:23	20°♑20'48	
max. Earth dist.	5484 Jan 15 04:00	24°♑02'04	1.71468 AU
superior conj	5484 Jan 17 14:15	27°♑04'37	-0°12'57
minimum elong	5484 Jan 17 10:58	26°♑54'18	0°12'47
behind sun begin	5484 Jan 16 18:59	26°♑04'13	
behind sun end	5484 Jan 18 02:57	27°♑44'24	
	5484 Jan 19 22:12	0°♒	
	5484 Feb 12 19:33	0°♓	
evening rise	5484 Feb 27 05:28	18°♓06'44	
	5484 Mar 07 16:32	0°♈	
	5484 Mar 31 15:05	0°♉	
	5484 Apr 24 17:46	0°♊	
asc. node	5484 May 04 06:46	11°♊46'53	
	5484 May 19 03:30	0°♋	
	5484 Jun 12 23:46	0°♌	
	5484 Jul 08 12:31	0°♍	
	5484 Aug 04 07:25	0°♎	
desc. node	5484 Aug 23 22:15	20°♎17'58	
evening max el	5484 Aug 27 15:29	23°♎54'10	45°34'41
	5484 Sep 03 04:45	0°♏	
greatest brilliancy	5484 Oct 05 20:26	21°♏56'50	-4.7m
retrograde	5484 Oct 15 06:20	23°♏33'05	
evening set	5484 Nov 01 19:47	17°♏47'53	
inferior conj	5484 Nov 05 12:56	15°♏31'25	-7°48'53
minimum elong	5484 Nov 05 21:01	15°♏18'49	7°47'49
min. Earth dist.	5484 Nov 06 09:49	14°♏58'51	0.28451 AU
morning rise	5484 Nov 09 21:52	12°♏50'39	
direct	5484 Nov 26 21:15	7°♏19'15	
greatest brilliancy	5484 Dec 08 01:41	9°♏37'03	-4.8m
asc. node	5484 Dec 14 23:31	12°♏59'16	
	5485 Jan 06 00:27	0°♐	
morning max el	5485 Jan 16 03:41	9°♐47'58	46°39'13
	5485 Feb 04 03:48	0°♑	
	5485 Mar 02 07:12	0°♒	
	5485 Mar 27 09:07	0°♓	
desc. node	5485 Apr 05 15:04	11°♓13'30	
	5485 Apr 20 23:49	0°♈	
	5485 May 15 09:43	0°♉	
	5485 Jun 08 18:24	0°♊	
	5485 Jul 03 03:31	0°♋	
morning set	5485 Jul 21 03:36	22°♋08'03	
asc. node	5485 Jul 27 16:19	0°♌09'38	
	5485 Jul 27 13:11	0°♌	
	5485 Aug 20 22:39	0°♍	
max. Earth dist.	5485 Aug 26 09:57	6°♍44'00	1.73442 AU
superior conj	5485 Aug 27 02:14	7°♍34'07	1°04'27
minimum elong	5485 Aug 26 17:13	7°♍06'22	1°04'10
	5485 Sep 14 07:25	0°♎	
evening rise	5485 Oct 02 04:21	22°♎01'15	
	5485 Oct 08 15:47	0°♏	
	5485 Nov 02 00:33	0°♐	
desc. node	5485 Nov 16 07:40	17°♐34'49	

	5485 Nov 26 10:19	0°♑	
	5485 Dec 20 21:27	0°♒	
	5486 Jan 14 11:07	0°♓	
	5486 Feb 08 07:27	0°♈	
	5486 Mar 05 20:47	0°♉	
asc. node	5486 Mar 09 09:03	4°♉00'26	
	5486 Apr 02 05:56	0°♊	
evening max el	5486 Apr 05 11:00	3°♊16'08	46°48'37
	5486 May 07 09:34	0°♋	
greatest brilliancy	5486 May 15 04:29	3°♋47'55	-4.8m
retrograde	5486 May 25 19:21	5°♋54'35	
evening set	5486 Jun 10 07:18	1°♋12'44	
	5486 Jun 12 09:23	30°℞♊	
inferior conj	5486 Jun 16 00:01	27°♊46'32	3°08'16
minimum elong	5486 Jun 16 06:42	27°♊36'05	3°06'18
min. Earth dist.	5486 Jun 15 19:53	27°♊53'00	0.28086 AU
morning rise	5486 Jun 22 06:29	24°♊01'48	
desc. node	5486 Jun 29 00:25	21°♊02'57	
direct	5486 Jul 07 02:09	19°♊44'41	
greatest brilliancy	5486 Jul 17 00:29	21°♊31'46	-4.8m
	5486 Aug 01 16:45	0°♋	
morning max el	5486 Aug 24 21:22	19°♋35'41	45°44'26
	5486 Sep 04 10:14	0°♌	
	5486 Oct 02 09:05	0°♍	
asc. node	5486 Oct 20 01:57	20°♍10'09	
	5486 Oct 28 12:15	0°♎	
	5486 Nov 22 16:03	0°♏	
	5486 Dec 17 05:40	0°♐	
	5487 Jan 10 10:52	0°♑	
	5487 Feb 03 11:15	0°♒	
desc. node	5487 Feb 08 17:17	6°♒34'54	
greatest brilliancy	5487 Feb 18 06:57	18°♒35'15	-3.9m
morning set	5487 Feb 21 19:07	22°♒59'32	
	5487 Feb 27 08:58	0°♓	
	5487 Mar 23 05:36	0°♈	
superior conj	5487 Apr 04 00:12	14°♈48'02	-1°27'02
minimum elong	5487 Apr 03 22:42	14°♈43'19	1°27'03
max. Earth dist.	5487 Apr 06 09:12	17°♈47'02	1.71347 AU
	5487 Apr 16 02:53	0°♉	
	5487 May 10 02:40	0°♊	
evening rise	5487 May 14 08:32	5°♊17'11	
asc. node	5487 Jun 01 18:37	28°♊08'57	
	5487 Jun 03 06:31	0°♋	
	5487 Jun 27 15:28	0°♌	
	5487 Jul 22 06:39	0°♍	
	5487 Aug 16 06:18	0°♎	
	5487 Sep 10 19:01	0°♏	
desc. node	5487 Sep 21 09:58	12°♏12'37	
	5487 Oct 07 05:43	0°♐	
	5487 Nov 04 13:58	0°♑	
evening max el	5487 Nov 08 21:48	4°♑15'09	46°15'36
	5487 Dec 10 21:43	0°♒	
greatest brilliancy	5487 Dec 18 19:37	3°♒35'58	-4.8m
retrograde	5487 Dec 28 11:51	5°♒20'34	
evening set	5488 Jan 11 19:29	1°♒17'51	
asc. node	5488 Jan 12 11:28	0°♒56'24	
	5488 Jan 14 03:40	30°℞♑	
inferior conj	5488 Jan 18 02:37	27°♑38'00	1°27'10
minimum elong	5488 Jan 17 23:17	27°♑43'05	1°26'07
min. Earth dist.	5488 Jan 18 06:36	27°♑31'55	0.26803 AU
morning rise	5488 Jan 24 02:43	24°♑06'54	
direct	5488 Feb 07 17:41	19°♑51'51	
greatest brilliancy	5488 Feb 18 01:32	21°♑53'25	-4.9m
	5488 Mar 03 11:51	0°♒	
morning max el	5488 Mar 29 08:15	22°♒56'29	46°58'13
	5488 Apr 05 04:51	0°♓	
	5488 May 02 09:43	0°♈	
desc. node	5488 May 03 02:58	0°♈49'21	
	5488 May 28 03:49	0°♉	
	5488 Jun 22 08:16	0°♊	
	5488 Jul 17 06:42	0°♋	
	5488 Aug 11 01:25	0°♌	
asc. node	5488 Aug 24 04:15	15°♌57'28	
	5488 Sep 04 16:23	0°♍	
morning set	5488 Sep 27 10:25	27°♍54'21	
	5488 Sep 29 03:15	0°♎	
	5488 Oct 23 10:28	0°♏	
max. Earth dist.	5488 Oct 31 14:30	10°♏06'54	1.72765 AU
superior conj	5488 Nov 03 00:46	13°♏07'26	1°18'02
minimum elong	5488 Nov 03 07:59	13°♏29'48	1°17'54
	5488 Nov 16 15:08	0°♐	
	5488 Dec 10 18:18	0°♑	
evening rise	5488 Dec 11 03:34	0°♑28'50	
desc. node	5488 Dec 13 19:38	3°♑48'14	
	5489 Jan 03 20:25	0°♒	
	5489 Jan 27 21:56	0°♓	
	5489 Feb 21 00:20	0°♈	
	5489 Mar 17 06:56	0°♉	
asc. node	5489 Apr 05 20:50	23°♉51'36	
	5489 Apr 10 23:09	0°♊	
	5489 May 06 09:47	0°♋	
	5489 Jun 02 09:56	0°♌	
evening max el	5489 Jun 15 13:03	13°♌24'38	45°53'51
	5489 Jul 04 02:51	0°♍	
greatest brilliancy	5489 Jul 23 16:14	11°♍53'58	-4.7m
desc. node	5489 Jul 26 12:31	12°♍51'25	
retrograde	5489 Aug 03 17:15	14°♍05'46	
evening set	5489 Aug 19 19:02	9°♍07'04	
inferior conj	5489 Aug 25 05:17	5°♍48'38	-6°18'19
minimum elong	5489 Aug 24 19:26	6°♍04'05	6°16'22
min. Earth dist.	5489 Aug 24 19:26	6°♍04'06	0.29058 AU
morning rise	5489 Aug 29 20:05	2°♍58'57	
	5489 Sep 04 15:16	30°℞♌	
direct	5489 Sep 15 19:36	27°♌32'44	
greatest brilliancy	5489 Sep 25 22:07	29°♌23'44	-4.7m
	5489 Sep 27 12:54	0°♍	
morning max el	5489 Nov 03 20:24	27°♍48'19	45°53'41
	5489 Nov 06 02:17	0°♎	
asc. node	5489 Nov 16 13:48	10°♎40'34	
	5489 Dec 04 07:36	0°♏	
	5489 Dec 30 05:19	0°♐	
	5490 Jan 24 02:56	0°♑	
	5490 Feb 17 12:33	0°♒	
desc. node	5490 Mar 08 05:11	23°♒12'45	
	5490 Mar 13 15:58	0°♓	
	5490 Apr 06 16:31	0°♈	
	5490 Apr 30 16:38	0°♉	
morning set	5490 May 08 23:45	10°♉21'12	
	5490 May 24 18:13	0°♊	
superior conj	5490 Jun 16 18:10	28°♊32'50	-0°29'34
minimum elong	5490 Jun 17 00:39	28°♊52'54	0°29'17
	5490 Jun 17 22:19	0°♋	
max. Earth dist.	5490 Jun 19 21:16	2°♋25'17	1.72727 AU
asc. node	5490 Jun 29 06:30	14°♋01'46	
	5490 Jul 12 05:05	0°♌	
evening rise	5490 Jul 24 10:02	15°♌02'00	
	5490 Aug 05 14:17	0°♍	
	5490 Aug 30 02:09	0°♎	
	5490 Sep 23 17:46	0°♏	
desc. node	5490 Oct 18 21:51	0°♐21'20	
	5490 Oct 18 14:44	0°♐	

	5490 Nov 12 19:01	0°♑	
	5490 Dec 08 10:29	0°♒	
	5491 Jan 04 01:09	0°♓	
evening max el	5491 Jan 20 20:17	17°♓42'52	47°04'25
	5491 Feb 02 15:15	0°♈	
asc. node	5491 Feb 08 23:19	5°♈29'08	
greatest brilliancy	5491 Mar 02 11:17	19°♈00'06	-4.9m
retrograde	5491 Mar 12 12:03	20°♈54'34	
evening set	5491 Mar 30 10:44	14°♈42'52	
inferior conj	5491 Apr 02 05:00	13°♈00'53	9°03'55
minimum elong	5491 Apr 02 03:08	13°♈03'46	9°03'53
min. Earth dist.	5491 Apr 01 18:19	13°♈17'27	0.27177 AU
morning rise	5491 Apr 04 19:40	11°♈24'38	
direct	5491 Apr 22 20:01	5°♈14'22	
greatest brilliancy	5491 May 02 01:55	6°♈50'57	-4.9m
desc. node	5491 May 31 14:43	26°♈33'37	
	5491 Jun 04 09:20	0°♉	
morning max el	5491 Jun 11 15:11	6°♉55'51	46°22'20
	5491 Jul 03 19:46	0°♊	
	5491 Jul 30 16:14	0°♋	
	5491 Aug 25 12:58	0°♌	
	5491 Sep 19 19:39	0°♍	
asc. node	5491 Sep 21 16:00	2°♍12'55	
	5491 Oct 14 15:35	0°♎	
	5491 Nov 08 03:02	0°♏	
	5491 Dec 02 08:26	0°♐	
morning set	5491 Dec 06 20:27	5°♐35'59	
	5491 Dec 26 09:55	0°♑	
desc. node	5492 Jan 11 07:30	19°♑53'56	
max. Earth dist.	5492 Jan 12 13:11	21°♑26'54	1.71508 AU
superior conj	5492 Jan 15 02:18	24°♑38'25	-0°09'10
minimum elong	5492 Jan 14 23:59	24°♑31'08	0°09'02
behind sun begin	5492 Jan 14 02:33	23°♑23'59	
behind sun end	5492 Jan 15 21:24	25°♑38'17	
	5492 Jan 19 08:54	0°♒	
	5492 Feb 12 06:21	0°♓	
evening rise	5492 Feb 24 16:18	15°♓35'54	
	5492 Mar 07 03:26	0°♈	
	5492 Mar 31 02:07	0°♉	
	5492 Apr 24 04:59	0°♊	
asc. node	5492 May 03 08:45	11°♊18'10	
	5492 May 18 15:02	0°♋	
	5492 Jun 12 11:56	0°♌	
	5492 Jul 08 01:59	0°♍	
	5492 Aug 03 23:49	0°♎	
desc. node	5492 Aug 23 00:12	19°♎31'04	
evening max el	5492 Aug 25 05:21	21°♎39'14	45°34'18
	5492 Sep 03 07:04	0°♏	
greatest brilliancy	5492 Oct 03 10:22	19°♏43'45	-4.7m
retrograde	5492 Oct 12 21:02	21°♏21'04	
evening set	5492 Oct 30 13:13	15°♏31'35	
inferior conj	5492 Nov 03 04:17	13°♏18'22	-7°57'09
minimum elong	5492 Nov 03 11:50	13°♏06'37	7°56'15
min. Earth dist.	5492 Nov 04 00:45	12°♏46'29	0.28511 AU
morning rise	5492 Nov 07 10:04	10°♏42'20	
direct	5492 Nov 24 12:40	5°♏05'13	
greatest brilliancy	5492 Dec 05 17:53	7°♏23'38	-4.8m
asc. node	5492 Dec 14 01:35	11°♏35'35	
	5493 Jan 06 02:14	0°♐	
morning max el	5493 Jan 13 18:38	7°♐30'09	46°37'53
	5493 Feb 03 20:33	0°♑	
	5493 Mar 01 21:10	0°♒	
	5493 Mar 26 21:49	0°♓	
desc. node	5493 Apr 04 17:02	10°♓41'51	
	5493 Apr 20 11:46	0°♈	
	5493 May 14 21:11	0°♉	
	5493 Jun 08 05:30	0°♊	
	5493 Jul 02 14:19	0°♋	
morning set	5493 Jul 18 20:24	19°♋59'19	
asc. node	5493 Jul 26 18:20	29°♋43'12	
	5493 Jul 26 23:48	0°♌	
	5493 Aug 20 09:10	0°♍	
superior conj	5493 Aug 24 20:08	5°♍29'07	1°02'19
minimum elong	5493 Aug 24 11:03	5°♍01'09	1°02'00
max. Earth dist.	5493 Aug 24 06:30	4°♍47'10	1.73444 AU
	5493 Sep 13 17:58	0°♎	
evening rise	5493 Sep 29 22:07	19°♎55'29	
	5493 Oct 08 02:28	0°♏	
	5493 Nov 01 11:28	0°♐	
desc. node	5493 Nov 15 09:46	17°♐07'04	
	5493 Nov 25 21:35	0°♑	
	5493 Dec 20 09:11	0°♒	
	5494 Jan 13 23:31	0°♓	
	5494 Feb 07 20:54	0°♈	
	5494 Mar 05 12:18	0°♉	
asc. node	5494 Mar 08 10:57	3°♉20'40	
	5494 Apr 02 02:57	0°♊	
evening max el	5494 Apr 03 01:33	0°♊57'07	46°50'14
	5494 May 09 06:43	0°♋	
greatest brilliancy	5494 May 12 20:11	1°♋32'13	-4.8m
retrograde	5494 May 23 11:05	3°♋39'10	
	5494 Jun 05 23:36	30°℞♊	
evening set	5494 Jun 08 00:39	28°♊53'57	
inferior conj	5494 Jun 13 15:04	25°♊31'17	3°28'29
minimum elong	5494 Jun 13 22:22	25°♊19'53	3°26'23
min. Earth dist.	5494 Jun 13 11:14	25°♊37'14	0.28057 AU
morning rise	5494 Jun 19 20:29	21°♊48'23	
desc. node	5494 Jun 28 02:34	18°♊22'09	
direct	5494 Jul 04 16:47	17°♊29'41	
greatest brilliancy	5494 Jul 14 15:05	19°♊17'16	-4.8m
	5494 Aug 02 09:24	0°♋	
morning max el	5494 Aug 22 13:30	17°♋25'47	45°45'04
	5494 Sep 04 05:05	0°♌	
	5494 Oct 01 23:31	0°♍	
asc. node	5494 Oct 19 04:01	19°♍38'16	
	5494 Oct 28 00:53	0°♎	
	5494 Nov 22 03:49	0°♏	
	5494 Dec 16 17:00	0°♐	
	5495 Jan 09 21:59	0°♑	
	5495 Feb 02 22:14	0°♒	
desc. node	5495 Feb 07 19:15	6°♒06'43	
greatest brilliancy	5495 Feb 18 19:20	19°♒55'10	-3.9m
morning set	5495 Feb 19 05:36	20°♒27'25	
	5495 Feb 26 19:52	0°♓	
	5495 Mar 22 16:26	0°♈	
superior conj	5495 Apr 01 11:25	12°♈18'31	-1°26'43
minimum elong	5495 Apr 01 08:51	12°♈10'28	1°26'43
max. Earth dist.	5495 Apr 03 18:32	15°♈11'39	1.71318 AU
	5495 Apr 15 13:40	0°♉	
	5495 May 09 13:29	0°♊	
evening rise	5495 May 11 21:13	2°♊53'38	
asc. node	5495 May 31 20:42	27°♊41'44	
	5495 Jun 02 17:25	0°♋	
	5495 Jun 27 02:33	0°♌	
	5495 Jul 21 18:03	0°♍	
	5495 Aug 15 18:21	0°♎	
	5495 Sep 10 08:16	0°♏	
desc. node	5495 Sep 20 11:56	11°♏38'19	
	5495 Oct 06 21:25	0°♐	
	5495 Nov 04 12:03	0°♑	
evening max el	5495 Nov 06 12:40	1°♑58'26	46°13'34

	5495 Dec 13 06:56	0°♒	
greatest brilliancy	5495 Dec 16 08:23	1°♒11'17	-4.8m
retrograde	5495 Dec 26 00:41	2°♒55'19	
	5496 Jan 07 02:31	30°℞♑	
evening set	5496 Jan 09 08:24	28°♑52'37	
asc. node	5496 Jan 11 13:29	27°♑39'02	
inferior conj	5496 Jan 15 15:20	25°♑12'35	1°03'12
minimum elong	5496 Jan 15 12:54	25°♑16'18	1°02'26
min. Earth dist.	5496 Jan 15 20:23	25°♑04'53	0.26829 AU
morning rise	5496 Jan 21 17:06	21°♑39'12	
direct	5496 Feb 05 07:30	17°♑26'05	
greatest brilliancy	5496 Feb 15 15:35	19°♑28'04	-4.9m
	5496 Mar 04 07:06	0°♒	
morning max el	5496 Mar 26 22:12	20°♒33'18	46°58'38
	5496 Apr 05 00:58	0°♓	
desc. node	5496 May 02 05:04	0°♈11'24	
	5496 May 02 01:05	0°♈	
	5496 May 27 17:10	0°♉	
	5496 Jun 21 20:32	0°♊	
	5496 Jul 16 18:18	0°♋	
	5496 Aug 10 12:35	0°♌	
asc. node	5496 Aug 23 06:08	15°♌29'43	
	5496 Sep 04 03:17	0°♍	
morning set	5496 Sep 25 03:56	25°♍47'36	
	5496 Sep 28 14:00	0°♎	
	5496 Oct 22 21:10	0°♏	
max. Earth dist.	5496 Oct 29 06:38	7°♏54'58	1.72803 AU
superior conj	5496 Oct 31 17:28	10°♏57'13	1°19'20
minimum elong	5496 Nov 01 00:09	11°♏17'53	1°19'14
	5496 Nov 16 01:56	0°♐	
evening rise	5496 Dec 08 17:41	28°♐09'22	
	5496 Dec 10 05:15	0°♑	
desc. node	5496 Dec 12 21:40	3°♑20'24	
	5497 Jan 03 07:35	0°♒	
	5497 Jan 27 09:20	0°♓	
	5497 Feb 20 12:03	0°♈	
	5497 Mar 16 19:06	0°♉	
asc. node	5497 Apr 04 22:54	23°♉19'26	
	5497 Apr 10 12:05	0°♊	
	5497 May 06 00:15	0°♋	
	5497 Jun 02 04:11	0°♌	
evening max el	5497 Jun 13 05:02	11°♌12'53	45°55'22
	5497 Jul 04 14:57	0°♍	
greatest brilliancy	5497 Jul 21 08:44	9°♍45'07	-4.7m
desc. node	5497 Jul 25 14:25	11°♍05'07	
retrograde	5497 Aug 01 09:23	11°♍56'40	
evening set	5497 Aug 17 08:56	7°♍02'05	
inferior conj	5497 Aug 22 21:45	3°♍39'46	-6°04'46
minimum elong	5497 Aug 22 11:54	3°♍55'15	6°02'43
min. Earth dist.	5497 Aug 22 11:33	3°♍55'48	0.29036 AU
morning rise	5497 Aug 27 15:06	0°♍46'04	
	5497 Aug 28 23:30	30°℞♌	
direct	5497 Sep 13 11:58	25°♌24'22	
greatest brilliancy	5497 Sep 23 13:39	27°♌14'16	-4.7m
	5497 Sep 29 21:30	0°♍	
morning max el	5497 Nov 01 10:54	25°♍33'48	45°52'29
	5497 Nov 05 23:06	0°♎	
asc. node	5497 Nov 15 15:53	9°♎58'28	
	5497 Dec 03 22:52	0°♏	
	5497 Dec 29 18:37	0°♐	
	5498 Jan 23 15:18	0°♑	
	5498 Feb 17 00:24	0°♒	
desc. node	5498 Mar 07 07:05	22°♒42'34	
	5498 Mar 13 03:29	0°♓	
	5498 Apr 06 03:49	0°♈	
	5498 Apr 30 03:47	0°♉	
morning set	5498 May 06 12:48	7°♉57'41	
	5498 May 24 05:13	0°♊	
superior conj	5498 Jun 14 09:20	26°♊17'29	-0°32'51
minimum elong	5498 Jun 14 16:28	26°♊39'33	0°32'32
	5498 Jun 17 09:12	0°♋	
max. Earth dist.	5498 Jun 17 16:00	0°♋21'03	1.72676 AU
asc. node	5498 Jun 28 08:29	13°♋34'24	
	5498 Jul 11 15:55	0°♌	
evening rise	5498 Jul 22 03:34	12°♌54'52	
	5498 Aug 05 01:11	0°♍	
	5498 Aug 29 13:17	0°♎	
	5498 Sep 23 05:18	0°♏	
desc. node	5498 Oct 17 23:55	29°♏51'01	
	5498 Oct 18 02:55	0°♐	
	5498 Nov 12 08:12	0°♑	
	5498 Dec 08 01:24	0°♒	
	5499 Jan 03 19:42	0°♓	
evening max el	5499 Jan 18 08:56	15°♓15'28	47°03'27
	5499 Feb 02 22:25	0°♈	
asc. node	5499 Feb 08 01:13	4°♈17'31	
greatest brilliancy	5499 Feb 28 01:24	16°♈34'23	-4.9m
retrograde	5499 Mar 10 00:45	18°♈27'59	
evening set	5499 Mar 27 21:40	12°♈20'13	
inferior conj	5499 Mar 30 18:06	10°♈35'05	9°01'44
minimum elong	5499 Mar 30 15:17	10°♈39'28	9°01'37
min. Earth dist.	5499 Mar 30 07:25	10°♈51'38	0.27147 AU
morning rise	5499 Apr 02 08:59	8°♈58'29	
direct	5499 Apr 20 08:11	2°♈48'47	
greatest brilliancy	5499 Apr 29 15:20	4°♈26'08	-4.9m
desc. node	5499 May 30 16:46	25°♈33'11	
	5499 Jun 04 11:33	0°♉	
morning max el	5499 Jun 09 03:51	4°♉31'36	46°24'08
	5499 Jul 03 12:56	0°♊	
	5499 Jul 30 06:20	0°♋	
	5499 Aug 25 01:34	0°♌	
	5499 Sep 19 07:25	0°♍	
asc. node	5499 Sep 20 18:06	1°♍43'59	
	5499 Oct 14 02:55	0°♎	
	5499 Nov 07 14:10	0°♏	
	5499 Dec 01 19:29	0°♐	
morning set	5499 Dec 04 11:27	3°♐18'55	
	5499 Dec 25 20:58	0°♑	
max. Earth dist.	5500 Jan 10 00:31	18°♑57'22	1.71547 AU
desc. node	5500 Jan 10 09:26	19°♑25'18	
superior conj	5500 Jan 12 14:15	22°♑10'43	-0°05'21
minimum elong	5500 Jan 12 12:53	22°♑06'29	0°05'15
behind sun begin	5500 Jan 11 12:38	20°♑50'29	
behind sun end	5500 Jan 13 13:09	23°♑22'29	
	5500 Jan 18 19:59	0°♒	
	5500 Feb 11 17:30	0°♓	
evening rise	5500 Feb 22 03:06	13°♓03'55	
	5500 Mar 07 14:42	0°♈	
	5500 Mar 31 13:30	0°♉	
	5500 Apr 24 16:35	0°♊	
asc. node	5500 May 03 10:51	10°♊48'30	
	5500 May 19 03:00	0°♋	
	5500 Jun 13 00:36	0°♌	
	5500 Jul 08 15:59	0°♍	
	5500 Aug 04 16:57	0°♎	
desc. node	5500 Aug 23 02:13	18°♎42'38	
evening max el	5500 Aug 23 19:44	19°♎24'39	45°34'04
	5500 Sep 04 11:28	0°♏	
greatest brilliancy	5500 Oct 01 23:35	17°♏29'14	-4.7m
retrograde	5500 Oct 11 12:18	19°♏08'18	
evening set	5500 Oct 29 06:30	13°♏14'40	

inferior conj	5500 Nov 01 19:38	11°♏04'23	-8°04'41
minimum elong	5500 Nov 02 02:36	10°♏53'32	8°03'55
min. Earth dist.	5500 Nov 02 15:14	10°♏33'54	0.28572 AU
morning rise	5500 Nov 05 22:23	8°♏33'03	
direct	5500 Nov 23 04:36	2°♏50'22	
greatest brilliancy	5500 Dec 04 09:39	5°♏08'53	-4.8m
asc. node	5500 Dec 14 03:35	10°♏13'29	
	5501 Jan 07 03:14	0°♐	
morning max el	5501 Jan 12 10:28	5°♐13'27	46°36'23
	5501 Feb 04 13:27	0°♑	
	5501 Mar 02 11:26	0°♒	
	5501 Mar 27 10:49	0°♓	
desc. node	5501 Apr 04 19:11	10°♓09'45	
	5501 Apr 21 00:01	0°♈	
	5501 May 15 08:56	0°♉	
	5501 Jun 08 16:53	0°♊	
	5501 Jul 03 01:27	0°♋	
morning set	5501 Jul 17 13:09	17°♋49'18	
asc. node	5501 Jul 26 20:15	29°♋15'25	
	5501 Jul 27 10:45	0°♌	
	5501 Aug 20 20:03	0°♍	
max. Earth dist.	5501 Aug 23 04:04	2°♍52'23	1.73443 AU
superior conj	5501 Aug 23 14:03	3°♍23'08	1°00'05
minimum elong	5501 Aug 23 04:56	2°♍55'03	0°59'44
	5501 Sep 14 04:50	0°♎	
evening rise	5501 Sep 28 16:06	17°♎49'25	
	5501 Oct 08 13:27	0°♏	
	5501 Nov 01 22:41	0°♐	
desc. node	5501 Nov 15 11:50	16°♐38'21	
	5501 Nov 26 09:10	0°♑	
	5501 Dec 20 21:17	0°♒	
	5502 Jan 14 12:21	0°♓	
	5502 Feb 08 10:53	0°♈	
	5502 Mar 06 04:30	0°♉	
asc. node	5502 Mar 08 13:03	2°♉39'50	
evening max el	5502 Apr 01 16:47	28°♉38'37	46°51'58
	5502 Apr 03 01:14	0°♊	
greatest brilliancy	5502 May 11 11:27	29°♊14'50	-4.8m
	5502 May 13 15:38	0°♋	
retrograde	5502 May 22 02:55	1°♋22'09	
	5502 May 30 06:51	30°℞♊	
evening set	5502 Jun 06 18:01	26°♊33'36	
inferior conj	5502 Jun 12 05:56	23°♊14'25	3°48'34
minimum elong	5502 Jun 12 13:50	23°♊02'08	3°46'19
min. Earth dist.	5502 Jun 12 02:04	23°♊20'25	0.28026 AU
morning rise	5502 Jun 18 10:06	19°♊33'41	
desc. node	5502 Jun 28 04:30	15°♊45'10	
direct	5502 Jul 03 07:44	15°♊13'20	
greatest brilliancy	5502 Jul 13 04:55	17°♊00'36	-4.8m
	5502 Aug 03 22:20	0°♋	
morning max el	5502 Aug 21 05:40	15°♋14'59	45°45'42
	5502 Sep 04 23:47	0°♌	
	5502 Oct 02 14:03	0°♍	
asc. node	5502 Oct 19 06:04	19°♍05'45	
	5502 Oct 28 13:41	0°♎	
	5502 Nov 22 15:45	0°♏	
	5502 Dec 17 04:30	0°♐	
	5503 Jan 10 09:16	0°♑	
	5503 Feb 03 09:27	0°♒	
desc. node	5503 Feb 07 21:15	5°♒37'54	
morning set	5503 Feb 17 15:53	17°♒53'58	
	5503 Feb 27 07:01	0°♓	
	5503 Mar 23 03:32	0°♈	
superior conj	5503 Mar 30 22:05	9°♈46'19	-1°26'13
minimum elong	5503 Mar 30 18:26	9°♈34'51	1°26'12
max. Earth dist.	5503 Apr 02 03:59	12°♈35'41	1.71290 AU
	5503 Apr 16 00:44	0°♉	
evening rise	5503 May 10 09:16	0°♊27'12	
	5503 May 10 00:32	0°♊	
asc. node	5503 May 31 22:39	27°♊13'21	
	5503 Jun 03 04:32	0°♋	
	5503 Jun 27 13:51	0°♌	
	5503 Jul 22 05:43	0°♍	
	5503 Aug 16 06:40	0°♎	
	5503 Sep 10 21:50	0°♏	
desc. node	5503 Sep 20 14:03	11°♏03'40	
	5503 Oct 07 13:33	0°♐	
evening max el	5503 Nov 05 03:13	29°♐40'52	46°11'37
	5503 Nov 05 11:09	0°♑	
greatest brilliancy	5503 Dec 14 21:44	28°♑47'41	-4.8m
	5503 Dec 19 09:20	0°♒	
retrograde	5503 Dec 24 13:11	0°♒30'31	
	5503 Dec 29 13:50	30°℞♑	
evening set	5504 Jan 07 21:44	26°♑27'42	
asc. node	5504 Jan 11 15:23	24°♑20'13	
inferior conj	5504 Jan 14 04:15	22°♑47'49	0°39'17
minimum elong	5504 Jan 14 02:44	22°♑50'08	0°38'49
min. Earth dist.	5504 Jan 14 10:31	22°♑38'14	0.26858 AU
morning rise	5504 Jan 20 07:24	19°♑12'11	
direct	5504 Feb 03 21:03	15°♑00'55	
greatest brilliancy	5504 Feb 14 06:04	17°♑03'28	-4.9m
	5504 Mar 05 21:28	0°♒	
morning max el	5504 Mar 25 11:13	18°♒07'24	46°58'43
	5504 Apr 05 20:37	0°♓	
desc. node	5504 May 02 07:04	29°♓33'01	
	5504 May 02 16:25	0°♈	
	5504 May 28 06:36	0°♉	
	5504 Jun 22 08:53	0°♊	
	5504 Jul 17 05:58	0°♋	
	5504 Aug 10 23:48	0°♌	
asc. node	5504 Aug 23 08:13	15°♌02'26	
	5504 Sep 04 14:12	0°♍	
morning set	5504 Sep 23 21:19	23°♍40'14	
	5504 Sep 29 00:46	0°♎	
	5504 Oct 23 07:56	0°♏	
max. Earth dist.	5504 Oct 27 21:39	5°♏39'32	1.72839 AU
superior conj	5504 Oct 30 10:19	8°♏47'23	1°20'31
minimum elong	5504 Oct 30 16:25	9°♏06'16	1°20'26
	5504 Nov 16 12:45	0°♐	
evening rise	5504 Dec 07 08:03	25°♐50'49	
	5504 Dec 10 16:12	0°♑	
desc. node	5504 Dec 12 23:37	2°♑52'22	
	5505 Jan 03 18:41	0°♒	
	5505 Jan 27 20:39	0°♓	
	5505 Feb 20 23:42	0°♈	
	5505 Mar 17 07:16	0°♉	
asc. node	5505 Apr 05 00:56	22°♉47'05	
	5505 Apr 11 01:06	0°♊	
	5505 May 06 14:55	0°♋	
	5505 Jun 02 22:59	0°♌	
evening max el	5505 Jun 11 20:03	8°♌58'20	45°56'58
	5505 Jul 06 07:25	0°♍	
greatest brilliancy	5505 Jul 20 01:16	7°♍35'48	-4.7m
desc. node	5505 Jul 25 16:26	9°♍14'35	
retrograde	5505 Jul 31 01:12	9°♍47'12	
evening set	5505 Aug 15 22:45	4°♍56'22	
min. Earth dist.	5505 Aug 21 03:46	1°♍46'46	0.29012 AU
inferior conj	5505 Aug 21 14:04	1°♍30'34	-5°50'33
minimum elong	5505 Aug 21 04:16	1°♍45'58	5°48'26
	5505 Aug 24 00:02	30°℞♌	
morning rise	5505 Aug 26 09:59	28°♌32'55	

direct	5505 Sep 12 03:42	23°♌15'34	
greatest brilliancy	5505 Sep 22 05:32	25°♌05'07	-4.7m
	5505 Oct 02 09:48	0°♍	
morning max el	5505 Oct 31 00:56	23°♍18'22	45°51'25
	5505 Nov 06 19:09	0°♎	
asc. node	5505 Nov 15 17:50	9°♎16'49	
	5505 Dec 04 13:49	0°♏	
	5505 Dec 30 07:41	0°♐	
	5506 Jan 24 03:27	0°♑	
	5506 Feb 17 12:00	0°♒	
desc. node	5506 Mar 07 09:15	22°♒14'00	
	5506 Mar 13 14:45	0°♓	
	5506 Apr 06 14:52	0°♈	
	5506 Apr 30 14:41	0°♉	
morning set	5506 May 05 01:41	5°♉34'13	
	5506 May 24 15:59	0°♊	
superior conj	5506 Jun 13 00:13	24°♊01'44	-0°36'06
minimum elong	5506 Jun 13 07:57	24°♊25'42	0°35'45
max. Earth dist.	5506 Jun 16 07:59	28°♊08'49	1.72628 AU
	5506 Jun 17 19:53	0°♋	
asc. node	5506 Jun 28 10:27	13°♋07'27	
	5506 Jul 12 02:35	0°♌	
evening rise	5506 Jul 20 20:40	10°♌46'53	
	5506 Aug 05 11:55	0°♍	
	5506 Aug 30 00:14	0°♎	
	5506 Sep 23 16:39	0°♏	
desc. node	5506 Oct 18 01:56	29°♏21'10	
	5506 Oct 18 14:55	0°♐	
	5506 Nov 12 21:15	0°♑	
	5506 Dec 08 16:16	0°♒	
	5507 Jan 04 14:28	0°♓	
evening max el	5507 Jan 16 21:32	12°♓48'58	47°02'37
	5507 Feb 04 07:41	0°♈	
asc. node	5507 Feb 08 03:21	3°♈05'26	
greatest brilliancy	5507 Feb 26 15:08	14°♈09'28	-4.9m
retrograde	5507 Mar 08 13:51	16°♈03'03	
evening set	5507 Mar 26 08:11	9°♈59'35	
inferior conj	5507 Mar 29 07:17	8°♈10'43	8°58'29
minimum elong	5507 Mar 29 03:32	8°♈16'31	8°58'16
min. Earth dist.	5507 Mar 28 20:23	8°♈27'34	0.27115 AU
morning rise	5507 Mar 31 22:58	6°♈33'05	
direct	5507 Apr 18 20:34	0°♈24'37	
greatest brilliancy	5507 Apr 28 04:35	2°♈02'46	-4.9m
desc. node	5507 May 30 18:44	24°♈35'24	
	5507 Jun 05 11:52	0°♉	
morning max el	5507 Jun 07 17:16	2°♉10'25	46°25'48
	5507 Jul 04 05:20	0°♊	
	5507 Jul 30 19:57	0°♋	
	5507 Aug 25 13:47	0°♌	
	5507 Sep 19 18:52	0°♍	
asc. node	5507 Sep 20 20:09	1°♍15'54	
	5507 Oct 14 13:56	0°♎	
	5507 Nov 08 00:57	0°♏	
	5507 Dec 02 06:11	0°♐	
morning set	5507 Dec 03 02:27	1°♐03'01	
	5507 Dec 26 07:40	0°♑	
max. Earth dist.	5508 Jan 08 13:43	16°♑34'44	1.71586 AU
desc. node	5508 Jan 10 11:27	18°♑57'56	
superior conj	5508 Jan 11 02:12	19°♑44'09	-0°01'30
minimum elong	5508 Jan 11 01:49	19°♑42'55	0°01'28
behind sun begin	5508 Jan 10 00:34	18°♑23'51	
behind sun end	5508 Jan 12 03:03	21°♑02'00	
	5508 Jan 19 06:45	0°♒	
	5508 Feb 12 04:20	0°♓	
evening rise	5508 Feb 20 14:04	10°♓33'34	
	5508 Mar 07 01:36	0°♈	
	5508 Mar 31 00:29	0°♉	
	5508 Apr 24 03:44	0°♊	
asc. node	5508 May 02 12:47	10°♊19'46	
	5508 May 18 14:31	0°♋	
	5508 Jun 12 12:50	0°♌	
	5508 Jul 08 05:40	0°♍	
	5508 Aug 04 10:00	0°♎	
evening max el	5508 Aug 21 11:08	17°♎13'44	45°33'50
desc. node	5508 Aug 22 04:20	17°♎54'45	
	5508 Sep 04 17:22	0°♏	
greatest brilliancy	5508 Sep 29 12:42	15°♏15'55	-4.7m
retrograde	5508 Oct 09 03:54	16°♏56'42	
evening set	5508 Oct 26 23:42	10°♏59'27	
inferior conj	5508 Oct 30 11:02	8°♏51'41	-8°11'27
minimum elong	5508 Oct 30 17:25	8°♏41'47	8°10'48
min. Earth dist.	5508 Oct 31 05:26	8°♏23'06	0.28629 AU
morning rise	5508 Nov 03 10:52	6°♏24'49	
direct	5508 Nov 20 20:57	0°♏37'06	
greatest brilliancy	5508 Dec 02 00:43	2°♏54'47	-4.8m
asc. node	5508 Dec 13 05:34	8°♏55'13	
	5509 Jan 07 02:33	0°♐	
morning max el	5509 Jan 10 02:33	2°♐58'51	46°34'46
	5509 Feb 04 05:36	0°♑	
	5509 Mar 02 01:10	0°♒	
	5509 Mar 26 23:20	0°♓	
desc. node	5509 Apr 03 21:06	9°♓38'16	
	5509 Apr 20 11:49	0°♈	
	5509 May 14 20:13	0°♉	
	5509 Jun 08 03:47	0°♊	
	5509 Jul 02 12:06	0°♋	
morning set	5509 Jul 15 06:13	15°♋41'46	
asc. node	5509 Jul 25 22:21	28°♋49'37	
	5509 Jul 26 21:14	0°♌	
	5509 Aug 20 06:28	0°♍	
superior conj	5509 Aug 21 08:06	1°♍18'51	0°57'45
minimum elong	5509 Aug 20 23:00	0°♍50'52	0°57'25
max. Earth dist.	5509 Aug 21 02:35	1°♍01'52	1.73443 AU
	5509 Sep 13 15:18	0°♎	
evening rise	5509 Sep 26 10:06	15°♎44'41	
	5509 Oct 08 00:02	0°♏	
	5509 Nov 01 09:31	0°♐	
desc. node	5509 Nov 14 13:43	16°♐10'16	
	5509 Nov 25 20:24	0°♑	
	5509 Dec 20 09:03	0°♒	
	5510 Jan 14 00:52	0°♓	
	5510 Feb 08 00:36	0°♈	
	5510 Mar 05 20:35	0°♉	
asc. node	5510 Mar 07 15:05	1°♉59'33	
evening max el	5510 Mar 30 08:32	26°♉22'21	46°53'34
	5510 Apr 02 23:59	0°♊	
greatest brilliancy	5510 May 09 03:16	26°♊59'18	-4.8m
retrograde	5510 May 19 18:47	29°♊06'13	
evening set	5510 Jun 04 11:36	24°♊14'35	
inferior conj	5510 Jun 09 20:51	20°♊58'54	4°08'16
minimum elong	5510 Jun 10 05:17	20°♊45'47	4°05'55
min. Earth dist.	5510 Jun 09 16:55	21°♊05'02	0.27990 AU
morning rise	5510 Jun 15 23:29	17°♊20'28	
desc. node	5510 Jun 27 06:29	13°♊14'54	
direct	5510 Jun 30 22:49	12°♊58'38	
greatest brilliancy	5510 Jul 10 18:23	14°♊44'55	-4.8m
	5510 Aug 04 07:11	0°♋	
morning max el	5510 Aug 18 21:11	13°♋04'04	45°46'21
	5510 Sep 04 17:27	0°♌	
	5510 Oct 02 03:58	0°♍	
asc. node	5510 Oct 18 07:59	18°♍34'13	

	5510 Oct 28 02:01	0°♎	
	5510 Nov 22 03:18	0°♏	
	5510 Dec 16 15:39	0°♐	
	5511 Jan 09 20:14	0°♑	
	5511 Feb 02 20:19	0°♒	
desc. node	5511 Feb 06 23:21	5°♒10'26	
morning set	5511 Feb 15 02:09	15°♒21'36	
	5511 Feb 26 17:50	0°♓	
	5511 Mar 22 14:19	0°♈	
superior conj	5511 Mar 28 08:43	7°♈15'00	-1°25'32
minimum elong	5511 Mar 28 04:00	7°♈00'13	1°25'30
max. Earth dist.	5511 Mar 30 12:24	9°♈57'25	1.71264 AU
	5511 Apr 15 11:30	0°♉	
evening rise	5511 May 07 21:12	28°♉01'12	
	5511 May 09 11:19	0°♊	
asc. node	5511 May 31 00:39	26°♊46'02	
	5511 Jun 02 15:23	0°♋	
	5511 Jun 27 00:50	0°♌	
	5511 Jul 21 17:01	0°♍	
	5511 Aug 15 18:39	0°♎	
	5511 Sep 10 11:08	0°♏	
desc. node	5511 Sep 19 16:00	10°♏29'24	
	5511 Oct 07 05:38	0°♐	
evening max el	5511 Nov 02 16:53	27°♐21'57	46°09'28
	5511 Nov 05 10:59	0°♑	
greatest brilliancy	5511 Dec 12 11:41	26°♑25'21	-4.8m
retrograde	5511 Dec 22 01:12	28°♑06'26	
evening set	5512 Jan 05 11:14	24°♑02'58	
asc. node	5512 Jan 10 17:31	21°♑00'02	
inferior conj	5512 Jan 11 17:11	20°♑23'49	0°15'16
minimum elong	5512 Jan 11 16:35	20°♑24'43	0°15'07
transit middle	5512 Jan 11 16:35	20°♑24'43	0°15'07
transit begin	5512 Jan 11 14:52	20°♑27'21	
transit end	5512 Jan 11 18:18	20°♑22'05	
min. Earth dist.	5512 Jan 12 01:03	20°♑11'45	0.26891 AU
morning rise	5512 Jan 17 21:29	16°♑46'05	
direct	5512 Feb 01 10:05	12°♑36'12	
greatest brilliancy	5512 Feb 11 21:09	14°♑40'05	-4.9m
	5512 Mar 06 07:58	0°♒	
morning max el	5512 Mar 22 23:30	15°♒40'06	46°58'52
	5512 Apr 05 15:28	0°♓	
desc. node	5512 May 01 09:02	28°♓55'33	
	5512 May 02 07:19	0°♈	
	5512 May 27 19:43	0°♉	
	5512 Jun 21 21:00	0°♊	
	5512 Jul 16 17:25	0°♋	
	5512 Aug 10 10:48	0°♌	
asc. node	5512 Aug 22 10:15	14°♌35'36	
	5512 Sep 04 00:54	0°♍	
morning set	5512 Sep 21 14:59	21°♍34'29	
	5512 Sep 28 11:19	0°♎	
	5512 Oct 22 18:28	0°♏	
max. Earth dist.	5512 Oct 25 14:43	3°♏31'10	1.72881 AU
superior conj	5512 Oct 28 03:29	6°♏39'16	1°21'34
minimum elong	5512 Oct 28 08:58	6°♏56'14	1°21'30
	5512 Nov 15 23:24	0°♐	
evening rise	5512 Dec 04 22:38	23°♐33'28	
	5512 Dec 10 03:01	0°♑	
desc. node	5512 Dec 12 01:41	2°♑25'05	
	5513 Jan 03 05:43	0°♒	
	5513 Jan 27 07:58	0°♓	
	5513 Feb 20 11:22	0°♈	
	5513 Mar 16 19:26	0°♉	
asc. node	5513 Apr 04 02:52	22°♉14'28	
	5513 Apr 10 14:09	0°♊	
	5513 May 06 05:42	0°♋	
	5513 Jun 02 18:16	0°♌	
evening max el	5513 Jun 09 10:28	6°♌42'25	45°58'41
	5513 Jul 07 05:38	0°♍	
greatest brilliancy	5513 Jul 17 17:41	5°♍26'22	-4.7m
desc. node	5513 Jul 24 18:34	7°♍20'14	
retrograde	5513 Jul 28 17:21	7°♍38'11	
evening set	5513 Aug 13 12:42	2°♍50'35	
	5513 Aug 18 06:02	30°℞♌	
inferior conj	5513 Aug 19 06:26	29°♌21'41	-5°35'45
minimum elong	5513 Aug 18 20:44	29°♌36'56	5°33'36
min. Earth dist.	5513 Aug 18 20:05	29°♌37'58	0.28985 AU
morning rise	5513 Aug 24 04:55	26°♌20'19	
direct	5513 Sep 09 19:11	21°♌06'59	
greatest brilliancy	5513 Sep 19 21:44	22°♌56'47	-4.7m
	5513 Oct 03 11:04	0°♍	
morning max el	5513 Oct 28 15:35	21°♍04'56	45°50'32
	5513 Nov 06 14:25	0°♎	
asc. node	5513 Nov 14 19:51	8°♎36'17	
	5513 Dec 04 04:27	0°♏	
	5513 Dec 29 20:36	0°♐	
	5514 Jan 23 15:33	0°♑	
	5514 Feb 16 23:39	0°♒	
desc. node	5514 Mar 06 11:12	21°♒44'24	
	5514 Mar 13 02:08	0°♓	
	5514 Apr 06 02:03	0°♈	
	5514 Apr 30 01:41	0°♉	
morning set	5514 May 02 14:05	3°♉08'41	
	5514 May 24 02:52	0°♊	
superior conj	5514 Jun 10 14:48	21°♊44'38	-0°39'18
minimum elong	5514 Jun 10 23:06	22°♊10'24	0°38'57
max. Earth dist.	5514 Jun 13 22:33	25°♊51'49	1.72579 AU
	5514 Jun 17 06:41	0°♋	
asc. node	5514 Jun 27 12:32	12°♋40'31	
	5514 Jul 11 13:22	0°♌	
evening rise	5514 Jul 18 13:40	8°♌38'14	
	5514 Aug 04 22:48	0°♍	
	5514 Aug 29 11:19	0°♎	
	5514 Sep 23 04:08	0°♏	
desc. node	5514 Oct 17 03:53	28°♏50'53	
	5514 Oct 18 03:02	0°♐	
	5514 Nov 12 10:27	0°♑	
	5514 Dec 08 07:24	0°♒	
	5515 Jan 04 09:54	0°♓	
evening max el	5515 Jan 14 10:37	10°♓23'16	47°01'29
	5515 Feb 04 20:41	0°♈	
asc. node	5515 Feb 07 05:20	1°♈49'48	
greatest brilliancy	5515 Feb 24 03:57	11°♈41'57	-4.9m
retrograde	5515 Mar 06 03:08	13°♈36'13	
evening set	5515 Mar 23 17:47	7°♈37'34	
inferior conj	5515 Mar 26 20:06	5°♈44'09	8°53'59
minimum elong	5515 Mar 26 15:27	5°♈51'20	8°53'40
min. Earth dist.	5515 Mar 26 08:44	6°♈01'40	0.27088 AU
morning rise	5515 Mar 29 13:11	4°♈04'40	
	5515 Apr 06 10:14	30°℞♓	
direct	5515 Apr 16 09:03	27°♓58'13	
greatest brilliancy	5515 Apr 25 17:08	29°♓36'47	-4.9m
	5515 Apr 26 19:19	0°♈	
desc. node	5515 May 29 20:47	23°♈37'46	
	5515 Jun 05 11:35	0°♉	
morning max el	5515 Jun 05 07:20	29°♈49'32	46°27'32
	5515 Jul 03 21:48	0°♊	
	5515 Jul 30 09:45	0°♋	
	5515 Aug 25 02:14	0°♌	
	5515 Sep 19 06:33	0°♍	
asc. node	5515 Sep 19 22:01	0°♍46'28	

	5515 Oct 14 01:10	0°♎	
	5515 Nov 07 11:57	0°♏	
morning set	5515 Nov 30 18:00	28°♏48'16	
	5515 Dec 01 17:05	0°♐	
	5515 Dec 25 18:33	0°♑	
max. Earth dist.	5516 Jan 06 04:05	14°♑15'13	1.71625 AU
superior conj	5516 Jan 08 14:40	17°♑18'38	0°02'20
minimum elong	5516 Jan 08 15:14	17°♑20'24	0°02'19
behind sun begin	5516 Jan 07 14:10	16°♑01'54	
behind sun end	5516 Jan 09 16:18	18°♑38'55	
desc. node	5516 Jan 09 13:32	18°♑30'15	
	5516 Jan 18 17:42	0°♒	
	5516 Feb 11 15:24	0°♓	
evening rise	5516 Feb 18 01:19	8°♓03'21	
	5516 Mar 06 12:47	0°♈	
	5516 Mar 30 11:50	0°♉	
	5516 Apr 23 15:18	0°♊	
asc. node	5516 May 01 14:47	9°♊50'00	
	5516 May 18 02:30	0°♋	
	5516 Jun 12 01:35	0°♌	
	5516 Jul 07 19:56	0°♍	
	5516 Aug 04 03:55	0°♎	
evening max el	5516 Aug 19 03:04	15°♎02'50	45°33'41
desc. node	5516 Aug 21 06:14	17°♎04'17	
	5516 Sep 05 02:19	0°♏	
greatest brilliancy	5516 Sep 27 02:08	13°♏01'54	-4.7m
retrograde	5516 Oct 06 19:19	14°♏43'49	
evening set	5516 Oct 24 16:43	8°♏43'34	
inferior conj	5516 Oct 28 02:26	6°♏37'59	-8°17'28
minimum elong	5516 Oct 28 08:09	6°♏29'04	8°16'58
min. Earth dist.	5516 Oct 28 19:31	6°♏11'22	0.28678 AU
morning rise	5516 Oct 31 23:23	4°♏15'16	
	5516 Nov 09 14:40	30°℞♎	
direct	5516 Nov 18 13:20	28°♎23'03	
	5516 Nov 27 20:07	0°♏	
greatest brilliancy	5516 Nov 29 15:06	0°♏38'56	-4.8m
asc. node	5516 Dec 12 07:37	7°♏38'33	
	5517 Jan 07 01:13	0°♐	
morning max el	5517 Jan 07 18:17	0°♐42'44	46°33'17
	5517 Feb 03 21:44	0°♑	
	5517 Mar 01 15:00	0°♒	
	5517 Mar 26 12:05	0°♓	
desc. node	5517 Apr 02 23:04	9°♓06'08	
	5517 Apr 19 23:54	0°♈	
	5517 May 14 07:52	0°♉	
	5517 Jun 07 15:07	0°♊	
	5517 Jul 01 23:12	0°♋	
morning set	5517 Jul 12 22:45	13°♋31'06	
asc. node	5517 Jul 25 00:21	28°♋22'04	
	5517 Jul 26 08:11	0°♌	
superior conj	5517 Aug 19 01:37	29°♌11'38	0°55'19
minimum elong	5517 Aug 18 16:37	28°♌43'56	0°54'59
max. Earth dist.	5517 Aug 19 00:34	29°♌08'25	1.73436 AU
	5517 Aug 19 17:20	0°♍	
	5517 Sep 13 02:11	0°♎	
evening rise	5517 Sep 24 03:47	13°♎37'39	
	5517 Oct 07 11:03	0°♏	
	5517 Oct 31 20:49	0°♐	
desc. node	5517 Nov 13 15:49	15°♐41'29	
	5517 Nov 25 08:04	0°♑	
	5517 Dec 19 21:14	0°♒	
	5518 Jan 13 13:46	0°♓	
	5518 Feb 07 14:43	0°♈	
	5518 Mar 05 13:14	0°♉	
asc. node	5518 Mar 06 16:59	1°♉17'40	
evening max el	5518 Mar 27 23:46	24°♉03'47	46°54'53
	5518 Apr 03 00:10	0°♊	
greatest brilliancy	5518 May 06 19:26	24°♊42'41	-4.8m
retrograde	5518 May 17 09:59	26°♊48'19	
evening set	5518 Jun 02 05:10	21°♊53'38	
inferior conj	5518 Jun 07 11:38	18°♊41'35	4°27'37
minimum elong	5518 Jun 07 20:32	18°♊27'42	4°25'12
min. Earth dist.	5518 Jun 07 07:52	18°♊47'28	0.27959 AU
morning rise	5518 Jun 13 12:28	15°♊05'28	
desc. node	5518 Jun 26 08:36	10°♊47'51	
direct	5518 Jun 28 13:35	10°♊42'02	
greatest brilliancy	5518 Jul 08 08:01	12°♊27'22	-4.8m
	5518 Aug 04 14:19	0°♋	
morning max el	5518 Aug 16 11:45	10°♋49'04	45°47'00
	5518 Sep 04 11:18	0°♌	
	5518 Oct 01 18:14	0°♍	
asc. node	5518 Oct 17 10:03	18°♍01'53	
	5518 Oct 27 14:43	0°♎	
	5518 Nov 21 15:13	0°♏	
	5518 Dec 16 03:11	0°♐	
	5519 Jan 09 07:34	0°♑	
	5519 Feb 02 07:32	0°♒	
desc. node	5519 Feb 06 01:17	4°♒41'25	
morning set	5519 Feb 12 12:45	12°♒49'10	
	5519 Feb 26 04:57	0°♓	
	5519 Mar 22 01:22	0°♈	
superior conj	5519 Mar 25 19:45	4°♈44'08	-1°24'40
minimum elong	5519 Mar 25 14:04	4°♈26'14	1°24'37
max. Earth dist.	5519 Mar 27 18:58	7°♈12'32	1.71235 AU
	5519 Apr 14 22:31	0°♉	
evening rise	5519 May 05 09:19	25°♉34'49	
	5519 May 08 22:22	0°♊	
asc. node	5519 May 30 02:44	26°♊18'05	
	5519 Jun 02 02:32	0°♋	
	5519 Jun 26 12:11	0°♌	
	5519 Jul 21 04:46	0°♍	
	5519 Aug 15 07:09	0°♎	
	5519 Sep 10 01:03	0°♏	
desc. node	5519 Sep 18 17:59	9°♏53'40	
	5519 Oct 06 22:31	0°♐	
evening max el	5519 Oct 31 05:37	24°♐59'42	46°07'28
	5519 Nov 05 12:36	0°♑	
greatest brilliancy	5519 Dec 10 01:42	24°♑01'58	-4.8m
retrograde	5519 Dec 19 13:06	25°♑41'33	
evening set	5520 Jan 03 00:51	21°♑36'42	
inferior conj	5520 Jan 09 06:05	17°♑58'47	-0°08'39
minimum elong	5520 Jan 09 06:25	17°♑58'17	0°08'32
transit middle	5520 Jan 09 06:25	17°♑58'17	0°08'32
transit begin	5520 Jan 09 02:55	18°♑03'38	
transit end	5520 Jan 09 09:54	17°♑52'55	
min. Earth dist.	5520 Jan 09 15:44	17°♑44'00	0.26927 AU
asc. node	5520 Jan 09 19:30	17°♑38'13	
morning rise	5520 Jan 15 11:20	14°♑19'23	
direct	5520 Jan 29 22:49	10°♑10'10	
greatest brilliancy	5520 Feb 09 12:37	12°♑16'10	-4.9m
	5520 Mar 06 16:05	0°♒	
morning max el	5520 Mar 20 12:12	13°♒12'52	46°59'14
	5520 Apr 05 10:07	0°♓	
desc. node	5520 Apr 30 11:07	28°♓18'04	
	5520 May 01 22:15	0°♈	
	5520 May 27 08:56	0°♉	
	5520 Jun 21 09:15	0°♊	
	5520 Jul 16 05:04	0°♋	
	5520 Aug 09 22:02	0°♌	
asc. node	5520 Aug 21 12:10	14°♌07'33	
	5520 Sep 03 11:53	0°♍	

morning set	5520 Sep 19 08:20	19°♍26'48	
	5520 Sep 27 22:11	0°♎	
	5520 Oct 22 05:20	0°♏	
max. Earth dist.	5520 Oct 23 08:53	1°♏25'12	1.72921 AU
superior conj	5520 Oct 25 20:23	4°♏29'20	1°22'29
minimum elong	5520 Oct 26 01:13	4°♏44'20	1°22'27
	5520 Nov 15 10:21	0°♐	
evening rise	5520 Dec 02 13:05	21°♐14'54	
	5520 Dec 09 14:07	0°♑	
desc. node	5520 Dec 11 03:43	1°♑56'48	
	5521 Jan 02 17:02	0°♒	
	5521 Jan 26 19:32	0°♓	
	5521 Feb 19 23:17	0°♈	
	5521 Mar 16 07:52	0°♉	
asc. node	5521 Apr 03 04:56	21°♉41'39	
	5521 Apr 10 03:26	0°♊	
	5521 May 05 20:47	0°♋	
	5521 Jun 02 14:11	0°♌	
evening max el	5521 Jun 07 01:09	4°♌27'01	46°00'31
	5521 Jul 08 12:40	0°♍	
greatest brilliancy	5521 Jul 15 09:28	3°♍16'05	-4.7m
desc. node	5521 Jul 23 20:26	5°♍21'26	
retrograde	5521 Jul 26 09:57	5°♍29'06	
evening set	5521 Aug 11 02:49	0°♍44'15	
	5521 Aug 12 09:39	30°℞♌	
inferior conj	5521 Aug 16 22:51	27°♌12'29	-5°20'31
minimum elong	5521 Aug 16 13:17	27°♌27'29	5°18'18
min. Earth dist.	5521 Aug 16 12:14	27°♌29'08	0.28964 AU
morning rise	5521 Aug 21 23:54	24°♌07'37	
direct	5521 Sep 07 10:54	18°♌57'57	
greatest brilliancy	5521 Sep 17 14:00	20°♌48'09	-4.7m
	5521 Oct 04 05:52	0°♍	
morning max el	5521 Oct 26 07:17	18°♍53'29	45°49'33
	5521 Nov 06 09:26	0°♎	
asc. node	5521 Nov 13 21:55	7°♎55'38	
	5521 Dec 03 19:10	0°♏	
	5521 Dec 29 09:38	0°♐	
	5522 Jan 23 03:45	0°♑	
	5522 Feb 16 11:23	0°♒	
desc. node	5522 Mar 05 13:09	21°♒14'31	
	5522 Mar 12 13:34	0°♓	
	5522 Apr 05 13:17	0°♈	
	5522 Apr 29 12:46	0°♉	
morning set	5522 Apr 30 02:27	0°♉42'48	
	5522 May 23 13:47	0°♊	
superior conj	5522 Jun 08 05:30	19°♊27'48	-0°42'26
minimum elong	5522 Jun 08 14:22	19°♊55'16	0°42'05
max. Earth dist.	5522 Jun 11 13:21	23°♊35'24	1.72527 AU
	5522 Jun 16 17:29	0°♋	
asc. node	5522 Jun 26 14:30	12°♋13'16	
	5522 Jul 11 00:08	0°♌	
evening rise	5522 Jul 16 06:54	6°♌30'25	
	5522 Aug 04 09:40	0°♍	
	5522 Aug 28 22:26	0°♎	
	5522 Sep 22 15:40	0°♏	
desc. node	5522 Oct 16 05:57	28°♏20'35	
	5522 Oct 17 15:17	0°♐	
	5522 Nov 11 23:52	0°♑	
	5522 Dec 07 22:54	0°♒	
	5523 Jan 04 06:03	0°♓	
evening max el	5523 Jan 12 00:37	7°♓59'51	47°00'25
	5523 Feb 05 14:07	0°♈	
asc. node	5523 Feb 06 07:15	0°♈31'33	
greatest brilliancy	5523 Feb 21 16:20	9°♈13'54	-4.9m
retrograde	5523 Mar 03 16:51	11°♈09'04	
evening set	5523 Mar 21 03:01	5°♈15'48	
inferior conj	5523 Mar 24 08:50	3°♈17'19	8°48'37
minimum elong	5523 Mar 24 03:18	3°♈25'51	8°48'10
min. Earth dist.	5523 Mar 23 20:46	3°♈35'53	0.27058 AU
morning rise	5523 Mar 27 03:41	1°♈35'24	
	5523 Mar 29 21:48	30°℞♓	
direct	5523 Apr 13 21:55	25°♓31'48	
greatest brilliancy	5523 Apr 23 05:08	27°♓10'07	-4.9m
	5523 Apr 29 18:00	0°♈	
desc. node	5523 May 28 22:50	22°♈41'34	
morning max el	5523 Jun 02 21:55	27°♈30'07	46°29'17
	5523 Jun 05 10:12	0°♉	
	5523 Jul 03 13:51	0°♊	
	5523 Jul 29 23:15	0°♋	
	5523 Aug 24 14:25	0°♌	
	5523 Sep 18 18:01	0°♍	
asc. node	5523 Sep 19 00:08	0°♍18'24	
	5523 Oct 13 12:15	0°♎	
	5523 Nov 06 22:50	0°♏	
morning set	5523 Nov 28 09:28	26°♏33'34	
	5523 Dec 01 03:54	0°♐	
	5523 Dec 25 05:24	0°♑	
max. Earth dist.	5524 Jan 03 15:12	11°♑45'46	1.71663 AU
superior conj	5524 Jan 06 02:57	14°♑52'42	0°06'07
minimum elong	5524 Jan 06 04:28	14°♑57'28	0°06'04
behind sun begin	5524 Jan 05 04:54	13°♑43'40	
behind sun end	5524 Jan 07 04:03	16°♑11'17	
desc. node	5524 Jan 08 15:29	18°♑02'10	
	5524 Jan 18 04:38	0°♒	
	5524 Feb 11 02:24	0°♓	
evening rise	5524 Feb 15 12:15	5°♓32'21	
	5524 Mar 05 23:52	0°♈	
	5524 Mar 29 23:02	0°♉	
	5524 Apr 23 02:45	0°♊	
asc. node	5524 Apr 30 16:52	9°♊20'52	
	5524 May 17 14:21	0°♋	
	5524 Jun 11 14:12	0°♌	
	5524 Jul 07 10:06	0°♍	
	5524 Aug 03 21:53	0°♎	
evening max el	5524 Aug 16 19:04	12°♎53'10	45°33'36
desc. node	5524 Aug 20 08:17	16°♎14'19	
	5524 Sep 05 13:44	0°♏	
greatest brilliancy	5524 Sep 24 16:16	10°♏50'15	-4.7m
retrograde	5524 Oct 04 10:26	12°♏32'43	
evening set	5524 Oct 22 09:44	6°♏30'07	
inferior conj	5524 Oct 25 18:07	4°♏26'12	-8°22'37
minimum elong	5524 Oct 25 23:08	4°♏18'21	8°22'14
min. Earth dist.	5524 Oct 26 10:03	4°♏01'19	0.28729 AU
morning rise	5524 Oct 29 12:22	2°♏07'13	
	5524 Nov 02 06:55	30°℞♎	
direct	5524 Nov 16 05:51	26°♎10'56	
greatest brilliancy	5524 Nov 27 05:51	28°♎24'53	-4.8m
	5524 Nov 30 20:35	0°♏	
asc. node	5524 Dec 11 09:36	6°♏25'01	
morning max el	5525 Jan 05 09:24	28°♏25'45	46°31'29
	5525 Jan 06 22:46	0°♐	
	5525 Feb 03 13:29	0°♑	
	5525 Mar 01 04:38	0°♒	
	5525 Mar 26 00:37	0°♓	
desc. node	5525 Apr 02 01:13	8°♓35'07	
	5525 Apr 19 11:45	0°♈	
	5525 May 13 19:15	0°♉	
	5525 Jun 07 02:09	0°♊	
	5525 Jul 01 10:00	0°♋	
morning set	5525 Jul 10 15:24	11°♋21'40	
asc. node	5525 Jul 24 02:17	27°♋55'14	

	5525 Jul 25 18:49	0°♌	
superior conj	5525 Aug 16 19:28	27°♌06'22	0°52'51
minimum elong	5525 Aug 16 10:36	26°♌39'05	0°52'29
max. Earth dist.	5525 Aug 16 21:26	27°♌12'28	1.73425 AU
	5525 Aug 19 03:53	0°♍	
	5525 Sep 12 12:44	0°♎	
evening rise	5525 Sep 21 21:55	11°♎33'04	
	5525 Oct 06 21:44	0°♏	
	5525 Oct 31 07:45	0°♐	
desc. node	5525 Nov 12 17:52	15°♐13'40	
	5525 Nov 24 19:26	0°♑	
	5525 Dec 19 09:10	0°♒	
	5526 Jan 13 02:31	0°♓	
	5526 Feb 07 04:48	0°♈	
	5526 Mar 05 06:02	0°♉	
asc. node	5526 Mar 05 19:05	0°♉36'19	
evening max el	5526 Mar 25 14:13	21°♉43'27	46°56'15
	5526 Apr 03 01:21	0°♊	
greatest brilliancy	5526 May 04 12:09	22°♊27'11	-4.9m
retrograde	5526 May 15 00:44	24°♊31'03	
evening set	5526 May 30 22:48	19°♊33'10	
inferior conj	5526 Jun 05 02:25	16°♊25'03	4°46'39
minimum elong	5526 Jun 05 11:44	16°♊10'31	4°44'11
min. Earth dist.	5526 Jun 04 23:05	16°♊30'16	0.27925 AU
morning rise	5526 Jun 11 01:11	12°♊51'27	
desc. node	5526 Jun 25 10:32	8°♊26'47	
direct	5526 Jun 26 03:47	8°♊26'10	
greatest brilliancy	5526 Jul 05 22:03	10°♊11'02	-4.8m
	5526 Aug 04 18:50	0°♋	
morning max el	5526 Aug 14 01:50	8°♋33'50	45°47'50
	5526 Sep 04 04:19	0°♌	
	5526 Oct 01 07:54	0°♍	
asc. node	5526 Oct 16 12:04	17°♍30'47	
	5526 Oct 27 02:54	0°♎	
	5526 Nov 21 02:40	0°♏	
	5526 Dec 15 14:16	0°♐	
	5527 Jan 08 18:30	0°♑	
	5527 Feb 01 18:23	0°♒	
desc. node	5527 Feb 05 03:18	4°♒13'39	
morning set	5527 Feb 09 23:19	10°♒17'39	
	5527 Feb 25 15:47	0°♓	
	5527 Mar 21 12:10	0°♈	
superior conj	5527 Mar 23 06:22	2°♈12'40	-1°23'39
minimum elong	5527 Mar 22 23:43	1°♈51'45	1°23'33
max. Earth dist.	5527 Mar 24 21:19	4°♈15'05	1.71214 AU
	5527 Apr 14 09:19	0°♉	
evening rise	5527 May 02 20:46	23°♉07'04	
	5527 May 08 09:11	0°♊	
asc. node	5527 May 29 04:39	25°♊50'27	
	5527 Jun 01 13:24	0°♋	
	5527 Jun 25 23:14	0°♌	
	5527 Jul 20 16:13	0°♍	
	5527 Aug 14 19:21	0°♎	
	5527 Sep 09 14:41	0°♏	
desc. node	5527 Sep 17 20:06	9°♏19'18	
	5527 Oct 06 15:14	0°♐	
evening max el	5527 Oct 28 18:28	22°♐39'32	46°05'41
	5527 Nov 05 14:54	0°♑	
greatest brilliancy	5527 Dec 07 15:27	21°♑40'40	-4.8m
retrograde	5527 Dec 17 01:40	23°♑19'33	
evening set	5527 Dec 31 14:59	19°♑12'40	
inferior conj	5528 Jan 06 19:18	15°♑36'19	-0°32'13
minimum elong	5528 Jan 06 20:32	15°♑34'25	0°31'48
min. Earth dist.	5528 Jan 07 06:29	15°♑19'11	0.26970 AU
asc. node	5528 Jan 08 21:24	14°♑19'53	
morning rise	5528 Jan 13 01:22	11°♑55'45	
direct	5528 Jan 27 12:01	7°♑46'32	
greatest brilliancy	5528 Feb 07 04:20	9°♑54'49	-4.9m
	5528 Mar 06 21:15	0°♒	
morning max el	5528 Mar 18 02:03	10°♒49'51	46°59'15
	5528 Apr 05 03:57	0°♓	
desc. node	5528 Apr 29 13:05	27°♓41'17	
	5528 May 01 12:44	0°♈	
	5528 May 26 21:50	0°♉	
	5528 Jun 20 21:13	0°♊	
	5528 Jul 15 16:23	0°♋	
	5528 Aug 09 08:55	0°♌	
asc. node	5528 Aug 20 14:14	13°♌41'02	
	5528 Sep 02 22:30	0°♍	
morning set	5528 Sep 17 01:46	17°♍20'24	
	5528 Sep 27 08:42	0°♎	
max. Earth dist.	5528 Oct 21 04:31	29°♎24'55	1.72957 AU
	5528 Oct 21 15:51	0°♏	
superior conj	5528 Oct 23 13:33	2°♏21'24	1°23'17
minimum elong	5528 Oct 23 17:45	2°♏34'25	1°23'16
	5528 Nov 14 20:57	0°♐	
evening rise	5528 Nov 30 04:04	18°♐59'17	
	5528 Dec 09 00:51	0°♑	
desc. node	5528 Dec 10 05:39	1°♑29'28	
	5529 Jan 02 03:56	0°♒	
	5529 Jan 26 06:43	0°♓	
	5529 Feb 19 10:51	0°♈	
	5529 Mar 15 19:59	0°♉	
asc. node	5529 Apr 02 06:57	21°♉09'26	
	5529 Apr 09 16:31	0°♊	
	5529 May 05 11:51	0°♋	
	5529 Jun 02 10:36	0°♌	
evening max el	5529 Jun 04 16:45	2°♌14'14	46°02'23
	5529 Jul 10 10:42	0°♍	
greatest brilliancy	5529 Jul 13 00:49	1°♍05'26	-4.7m
desc. node	5529 Jul 22 22:29	3°♍18'20	
retrograde	5529 Jul 24 02:51	3°♍19'59	
	5529 Aug 06 02:34	30°℞♌	
evening set	5529 Aug 08 16:57	28°♌37'47	
min. Earth dist.	5529 Aug 14 03:59	25°♌20'39	0.28937 AU
inferior conj	5529 Aug 14 15:04	25°♌03'17	-5°04'43
minimum elong	5529 Aug 14 05:43	25°♌17'55	5°02'28
morning rise	5529 Aug 19 18:43	21°♌55'05	
direct	5529 Sep 05 02:49	16°♌49'04	
greatest brilliancy	5529 Sep 15 05:32	18°♌39'14	-4.7m
	5529 Oct 04 19:29	0°♍	
morning max el	5529 Oct 23 23:39	16°♍44'41	45°48'40
	5529 Nov 06 03:37	0°♎	
asc. node	5529 Nov 12 23:51	7°♎15'57	
	5529 Dec 03 09:23	0°♏	
	5529 Dec 28 22:15	0°♐	
	5530 Jan 22 15:34	0°♑	
	5530 Feb 15 22:45	0°♒	
desc. node	5530 Mar 04 15:17	20°♒46'20	
	5530 Mar 12 00:40	0°♓	
	5530 Apr 05 00:12	0°♈	
morning set	5530 Apr 27 14:49	28°♈17'43	
	5530 Apr 28 23:32	0°♉	
	5530 May 23 00:28	0°♊	
superior conj	5530 Jun 05 19:53	17°♊10'23	-0°45'33
minimum elong	5530 Jun 06 05:13	17°♊39'23	0°45'10
max. Earth dist.	5530 Jun 09 04:32	21°♊20'39	1.72483 AU
	5530 Jun 16 04:06	0°♋	
asc. node	5530 Jun 25 16:28	11°♋46'29	
	5530 Jul 10 10:46	0°♌	

evening rise	5530 Jul 13 23:43	4°♌21'39	
	5530 Aug 03 20:24	0°♍	
	5530 Aug 28 09:24	0°♎	
	5530 Sep 22 03:04	0°♏	
desc. node	5530 Oct 15 07:58	27°♏50'38	
	5530 Oct 17 03:24	0°♐	
	5530 Nov 11 13:10	0°♑	
	5530 Dec 07 14:23	0°♒	
	5531 Jan 04 02:33	0°♓	
evening max el	5531 Jan 09 15:45	5°♓40'10	46°59'20
asc. node	5531 Feb 05 09:24	29°♓12'16	
	5531 Feb 06 12:58	0°♈	
greatest brilliancy	5531 Feb 19 05:00	6°♈47'33	-4.9m
retrograde	5531 Mar 01 06:40	8°♈43'16	
evening set	5531 Mar 18 12:17	2°♈56'02	
inferior conj	5531 Mar 21 21:48	0°♈52'00	8°42'18
minimum elong	5531 Mar 21 15:27	1°♈01'46	8°41'41
min. Earth dist.	5531 Mar 21 09:02	1°♈11'39	0.27025 AU
	5531 Mar 23 07:41	30°℞♓	
morning rise	5531 Mar 24 18:46	29°♓07'01	
direct	5531 Apr 11 11:17	23°♓07'09	
greatest brilliancy	5531 Apr 20 17:10	24°♓44'42	-4.9m
	5531 May 01 11:51	0°♈	
desc. node	5531 May 28 00:48	21°♈47'15	
morning max el	5531 May 31 12:11	25°♈10'42	46°30'45
	5531 Jun 05 07:35	0°♉	
	5531 Jul 03 05:27	0°♊	
	5531 Jul 29 12:32	0°♋	
	5531 Aug 24 02:32	0°♌	
asc. node	5531 Sep 18 02:09	29°♌50'06	
	5531 Sep 18 05:26	0°♍	
	5531 Oct 12 23:16	0°♎	
	5531 Nov 06 09:39	0°♏	
morning set	5531 Nov 26 00:59	24°♏19'22	
	5531 Nov 30 14:38	0°♐	
	5531 Dec 24 16:10	0°♑	
max. Earth dist.	5532 Jan 01 00:40	9°♑11'33	1.71703 AU
superior conj	5532 Jan 03 15:30	12°♑28'02	0°09'52
minimum elong	5532 Jan 03 17:57	12°♑35'41	0°09'46
behind sun begin	5532 Jan 02 21:41	11°♑32'19	
behind sun end	5532 Jan 04 14:12	13°♑39'03	
desc. node	5532 Jan 07 17:31	17°♑34'41	
	5532 Jan 17 15:28	0°♒	
	5532 Feb 10 13:20	0°♓	
evening rise	5532 Feb 12 23:23	3°♓02'15	
	5532 Mar 05 10:53	0°♈	
	5532 Mar 29 10:11	0°♉	
	5532 Apr 22 14:07	0°♊	
asc. node	5532 Apr 29 18:48	8°♊51'35	
	5532 May 17 02:10	0°♋	
	5532 Jun 11 02:50	0°♌	
	5532 Jul 07 00:25	0°♍	
	5532 Aug 03 16:27	0°♎	
evening max el	5532 Aug 14 10:28	10°♎41'29	45°33'23
desc. node	5532 Aug 19 10:23	15°♎23'03	
	5532 Sep 06 05:27	0°♏	
greatest brilliancy	5532 Sep 22 06:53	8°♏38'28	-4.7m
retrograde	5532 Oct 02 01:05	10°♏21'03	
evening set	5532 Oct 20 02:26	4°♏16'34	
inferior conj	5532 Oct 23 09:45	2°♏14'01	-8°27'05
minimum elong	5532 Oct 23 14:03	2°♏07'19	8°26'48
min. Earth dist.	5532 Oct 24 00:53	1°♏50'21	0.28774 AU
morning rise	5532 Oct 27 01:29	29°♎58'30	
	5532 Oct 27 00:29	30°℞♎	
direct	5532 Nov 13 21:49	23°♎58'23	
greatest brilliancy	5532 Nov 24 21:04	26°♎11'01	-4.8m
	5532 Dec 02 15:34	0°♏	
asc. node	5532 Dec 10 11:35	5°♏13'16	
morning max el	5533 Jan 02 23:29	26°♏06'01	46°29'49
	5533 Jan 06 19:38	0°♐	
	5533 Feb 03 05:01	0°♑	
	5533 Feb 28 18:10	0°♒	
	5533 Mar 25 13:07	0°♓	
desc. node	5533 Apr 01 03:07	8°♓03'16	
	5533 Apr 18 23:37	0°♈	
	5533 May 13 06:39	0°♉	
	5533 Jun 06 13:14	0°♊	
	5533 Jun 30 20:51	0°♋	
morning set	5533 Jul 08 08:11	9°♋12'24	
asc. node	5533 Jul 23 04:23	27°♋28'44	
	5533 Jul 25 05:32	0°♌	
superior conj	5533 Aug 14 13:21	25°♌00'56	0°50'17
minimum elong	5533 Aug 14 04:39	24°♌34'13	0°49'55
max. Earth dist.	5533 Aug 14 17:03	25°♌12'21	1.73418 AU
	5533 Aug 18 14:33	0°♍	
	5533 Sep 11 23:27	0°♎	
evening rise	5533 Sep 19 15:59	9°♎27'46	
	5533 Oct 06 08:37	0°♏	
	5533 Oct 30 18:56	0°♐	
desc. node	5533 Nov 11 19:46	14°♐44'44	
	5533 Nov 24 07:01	0°♑	
	5533 Dec 18 21:20	0°♒	
	5534 Jan 12 15:31	0°♓	
	5534 Feb 06 19:12	0°♈	
asc. node	5534 Mar 04 21:06	29°♈53'41	
	5534 Mar 04 23:23	0°♉	
evening max el	5534 Mar 23 03:48	19°♉20'17	46°57'34
	5534 Apr 03 04:13	0°♊	
greatest brilliancy	5534 May 02 05:00	20°♊10'59	-4.9m
retrograde	5534 May 12 15:18	22°♊13'13	
evening set	5534 May 28 16:29	17°♊11'41	
inferior conj	5534 Jun 02 17:12	14°♊07'55	5°05'15
minimum elong	5534 Jun 03 02:53	13°♊52'47	5°02'45
min. Earth dist.	5534 Jun 02 14:33	14°♊12'04	0.27892 AU
morning rise	5534 Jun 08 13:42	10°♊37'10	
direct	5534 Jun 23 17:30	6°♊09'27	
desc. node	5534 Jun 24 12:33	6°♊10'11	
greatest brilliancy	5534 Jul 03 12:33	7°♊54'35	-4.8m
	5534 Aug 04 21:50	0°♋	
morning max el	5534 Aug 11 15:52	6°♋17'47	45°48'46
	5534 Sep 03 21:11	0°♌	
	5534 Sep 30 21:42	0°♍	
asc. node	5534 Oct 15 14:00	16°♍58'44	
	5534 Oct 26 15:20	0°♎	
	5534 Nov 20 14:25	0°♏	
	5534 Dec 15 01:41	0°♐	
	5535 Jan 08 05:44	0°♑	
	5535 Feb 01 05:31	0°♒	
desc. node	5535 Feb 04 05:24	3°♒45'22	
morning set	5535 Feb 07 09:51	7°♒45'10	
	5535 Feb 25 02:51	0°♓	
superior conj	5535 Mar 20 16:53	29°♓40'04	-1°22'25
minimum elong	5535 Mar 20 09:18	29°♓16'14	1°22'18
	5535 Mar 20 23:13	0°♈	
max. Earth dist.	5535 Mar 21 23:52	1°♈17'28	1.71198 AU
	5535 Apr 13 20:23	0°♉	
evening rise	5535 Apr 30 08:13	20°♉38'22	
	5535 May 07 20:17	0°♊	
asc. node	5535 May 28 06:40	25°♊22'12	
	5535 Jun 01 00:35	0°♋	
	5535 Jun 25 10:36	0°♌	

	5535 Jul 20 03:59	0°♍	
	5535 Aug 14 07:54	0°♎	
	5535 Sep 09 04:47	0°♏	
desc. node	5535 Sep 16 22:03	8°♏43'12	
	5535 Oct 06 08:43	0°♐	
evening max el	5535 Oct 26 07:41	20°♐19'11	46°03'45
	5535 Nov 05 19:30	0°♑	
greatest brilliancy	5535 Dec 05 04:29	19°♑16'55	-4.8m
retrograde	5535 Dec 14 14:31	20°♑55'43	
evening set	5535 Dec 29 05:06	16°♑46'27	
inferior conj	5536 Jan 04 08:17	13°♑11'50	-0°55'56
minimum elong	5536 Jan 04 10:26	13°♑08'33	0°55'14
min. Earth dist.	5536 Jan 04 20:46	12°♑52'45	0.27015 AU
asc. node	5536 Jan 07 23:32	11°♑00'08	
morning rise	5536 Jan 10 15:00	9°♑30'36	
direct	5536 Jan 25 01:36	5°♑20'57	
greatest brilliancy	5536 Feb 04 19:32	7°♑31'14	-4.9m
	5536 Mar 07 01:10	0°♒	
morning max el	5536 Mar 15 16:34	8°♒27'18	46°59'18
	5536 Apr 04 21:47	0°♓	
desc. node	5536 Apr 28 15:06	27°♓03'54	
	5536 May 01 03:24	0°♈	
	5536 May 26 10:58	0°♉	
	5536 Jun 20 09:27	0°♊	
	5536 Jul 15 04:02	0°♋	
	5536 Aug 08 20:09	0°♌	
asc. node	5536 Aug 19 16:16	13°♌13'18	
	5536 Sep 02 09:29	0°♍	
morning set	5536 Sep 14 19:25	15°♍13'42	
	5536 Sep 26 19:33	0°♎	
max. Earth dist.	5536 Oct 19 01:19	27°♎27'12	1.72993 AU
superior conj	5536 Oct 21 06:53	0°♏12'53	1°23'58
minimum elong	5536 Oct 21 10:25	0°♏23'48	1°23'57
	5536 Oct 21 02:43	0°♏	
	5536 Nov 14 07:55	0°♐	
evening rise	5536 Nov 27 19:05	16°♐42'34	
	5536 Dec 08 12:00	0°♑	
desc. node	5536 Dec 09 07:45	1°♑01'20	
	5537 Jan 01 15:19	0°♒	
	5537 Jan 25 18:24	0°♓	
	5537 Feb 18 22:54	0°♈	
	5537 Mar 15 08:36	0°♉	
asc. node	5537 Apr 01 08:52	20°♉35'32	
	5537 Apr 09 06:08	0°♊	
	5537 May 05 03:34	0°♋	
	5537 Jun 02 08:13	0°♌	
evening max el	5537 Jun 02 09:04	0°♌02'05	46°04'16
greatest brilliancy	5537 Jul 10 16:16	28°♌53'47	-4.8m
	5537 Jul 13 23:01	0°♍	
retrograde	5537 Jul 21 19:49	1°♍09'31	
desc. node	5537 Jul 22 00:37	1°♍09'29	
	5537 Jul 29 09:44	30°℞♌	
evening set	5537 Aug 06 07:17	26°♌30'02	
inferior conj	5537 Aug 12 07:15	22°♌52'51	-4°48'20
minimum elong	5537 Aug 11 22:11	23°♌07'02	4°46'06
min. Earth dist.	5537 Aug 11 19:35	23°♌11'07	0.28907 AU
morning rise	5537 Aug 17 13:25	19°♌41'21	
direct	5537 Sep 02 19:08	14°♌39'09	
greatest brilliancy	5537 Sep 12 20:31	16°♌28'37	-4.7m
	5537 Oct 05 06:03	0°♍	
morning max el	5537 Oct 21 16:04	14°♍35'10	45°47'49
	5537 Nov 05 21:43	0°♎	
asc. node	5537 Nov 12 01:54	6°♎35'59	
	5537 Dec 02 23:47	0°♏	
	5537 Dec 28 11:10	0°♐	
	5538 Jan 22 03:46	0°♑	
	5538 Feb 15 10:33	0°♒	
desc. node	5538 Mar 03 17:15	20°♒16'09	
	5538 Mar 11 12:13	0°♓	
	5538 Apr 04 11:34	0°♈	
morning set	5538 Apr 25 02:47	25°♈50'00	
	5538 Apr 28 10:44	0°♉	
	5538 May 22 11:31	0°♊	
superior conj	5538 Jun 03 09:58	14°♊50'51	-0°48'35
minimum elong	5538 Jun 03 19:44	15°♊21'11	0°48'12
max. Earth dist.	5538 Jun 06 21:52	19°♊11'24	1.72433 AU
	5538 Jun 15 15:04	0°♋	
asc. node	5538 Jun 24 18:34	11°♋19'05	
	5538 Jul 09 21:45	0°♌	
evening rise	5538 Jul 11 16:26	2°♌11'31	
	5538 Aug 03 07:29	0°♍	
	5538 Aug 27 20:44	0°♎	
	5538 Sep 21 14:49	0°♏	
desc. node	5538 Oct 14 09:56	27°♏19'34	
	5538 Oct 16 15:52	0°♐	
	5538 Nov 11 02:53	0°♑	
	5538 Dec 07 06:25	0°♒	
	5539 Jan 04 00:11	0°♓	
evening max el	5539 Jan 07 06:31	3°♓18'31	46°57'53
asc. node	5539 Feb 04 11:21	27°♓48'23	
	5539 Feb 07 21:46	0°♈	
greatest brilliancy	5539 Feb 16 17:49	4°♈19'38	-4.9m
retrograde	5539 Feb 26 19:45	6°♈15'05	
evening set	5539 Mar 15 21:01	0°♈34'37	
	5539 Mar 16 20:09	30°℞♓	
inferior conj	5539 Mar 19 10:29	28°♓24'33	8°34'48
minimum elong	5539 Mar 19 03:23	28°♓35'30	8°34'02
min. Earth dist.	5539 Mar 18 21:24	28°♓44'42	0.26993 AU
morning rise	5539 Mar 22 09:55	26°♓35'49	
direct	5539 Apr 09 00:16	20°♓40'23	
greatest brilliancy	5539 Apr 18 05:29	22°♓17'25	-4.9m
	5539 May 02 17:44	0°♈	
desc. node	5539 May 27 02:52	20°♈52'48	
morning max el	5539 May 29 01:21	22°♈47'00	46°32'19
	5539 Jun 05 04:45	0°♉	
	5539 Jul 02 21:10	0°♊	
	5539 Jul 29 02:02	0°♋	
	5539 Aug 23 14:50	0°♌	
asc. node	5539 Sep 17 04:02	29°♌20'47	
	5539 Sep 17 17:04	0°♍	
	5539 Oct 12 10:29	0°♎	
	5539 Nov 05 20:40	0°♏	
morning set	5539 Nov 23 16:51	22°♏05'40	
	5539 Nov 30 01:34	0°♐	
	5539 Dec 24 03:06	0°♑	
max. Earth dist.	5539 Dec 29 10:03	6°♑36'36	1.71745 AU
superior conj	5540 Jan 01 04:33	10°♑04'29	0°13'33
minimum elong	5540 Jan 01 07:52	10°♑14'51	0°13'24
behind sun begin	5539 Dec 31 17:40	9°♑30'27	
behind sun end	5540 Jan 01 22:04	10°♑59'15	
desc. node	5540 Jan 06 19:36	17°♑06'51	
	5540 Jan 17 02:29	0°♒	
evening rise	5540 Feb 10 10:46	0°♓32'22	
	5540 Feb 10 00:28	0°♓	
	5540 Mar 04 22:08	0°♈	
	5540 Mar 28 21:35	0°♉	
	5540 Apr 22 01:47	0°♊	
asc. node	5540 Apr 28 20:49	8°♊21'39	
	5540 May 16 14:18	0°♋	
	5540 Jun 10 15:49	0°♌	
	5540 Jul 06 15:09	0°♍	

	5540 Aug 03 11:43	0°♎	
evening max el	5540 Aug 12 00:55	8°♎27'07	45°33'24
desc. node	5540 Aug 18 12:18	14°♎29'54	
	5540 Sep 07 02:50	0°♏	
greatest brilliancy	5540 Sep 19 21:40	6°♏26'45	-4.7m
retrograde	5540 Sep 29 15:50	8°♏09'42	
evening set	5540 Oct 17 18:58	2°♏03'30	
inferior conj	5540 Oct 21 01:33	0°♏02'04	-8°30'44
minimum elong	5540 Oct 21 05:05	29°♎56'30	8°30'32
	5540 Oct 21 02:51	30℞♎	
min. Earth dist.	5540 Oct 21 16:03	29°♎39'20	0.28818 AU
morning rise	5540 Oct 24 15:02	27°♎49'43	
direct	5540 Nov 11 13:28	21°♎45'54	
greatest brilliancy	5540 Nov 22 12:59	23°♎58'04	-4.8m
	5540 Dec 03 20:59	0°♏	
asc. node	5540 Dec 09 13:40	4°♏03'31	
morning max el	5540 Dec 31 13:29	23°♏46'03	46°28'19
	5541 Jan 06 15:51	0°♐	
	5541 Feb 02 20:21	0°♑	
	5541 Feb 28 07:37	0°♒	
	5541 Mar 25 01:35	0°♓	
desc. node	5541 Mar 31 05:07	7°♓31'45	
	5541 Apr 18 11:29	0°♈	
	5541 May 12 18:07	0°♉	
	5541 Jun 06 00:25	0°♊	
	5541 Jun 30 07:48	0°♋	
morning set	5541 Jul 06 00:33	7°♋01'26	
asc. node	5541 Jul 22 06:21	27°♋01'34	
	5541 Jul 24 16:19	0°♌	
superior conj	5541 Aug 12 06:57	22°♌54'31	0°47'37
minimum elong	5541 Aug 11 22:30	22°♌28'30	0°47'16
max. Earth dist.	5541 Aug 12 11:41	23°♌09'04	1.73406 AU
	5541 Aug 18 01:15	0°♍	
	5541 Sep 11 10:10	0°♎	
evening rise	5541 Sep 17 10:01	7°♎22'27	
	5541 Oct 05 19:31	0°♏	
	5541 Oct 30 06:08	0°♐	
desc. node	5541 Nov 10 21:52	14°♐16'25	
	5541 Nov 23 18:38	0°♑	
	5541 Dec 18 09:29	0°♒	
	5542 Jan 12 04:30	0°♓	
	5542 Feb 06 09:38	0°♈	
asc. node	5542 Mar 03 23:02	29°♈10'46	
	5542 Mar 04 16:56	0°♉	
evening max el	5542 Mar 20 16:58	16°♉56'32	46°58'46
	5542 Apr 03 08:35	0°♊	
greatest brilliancy	5542 Apr 29 21:08	17°♊54'05	-4.9m
retrograde	5542 May 10 05:57	19°♊55'33	
evening set	5542 May 26 10:08	14°♊49'50	
inferior conj	5542 May 31 07:55	11°♊50'40	5°23'19
minimum elong	5542 May 31 17:55	11°♊35'05	5°20'48
min. Earth dist.	5542 May 31 05:50	11°♊53'56	0.27865 AU
morning rise	5542 Jun 06 01:59	8°♊23'15	
direct	5542 Jun 21 07:10	3°♊52'22	
desc. node	5542 Jun 23 14:39	3°♊58'34	
greatest brilliancy	5542 Jul 01 03:17	5°♊38'18	-4.8m
	5542 Aug 04 23:21	0°♋	
morning max el	5542 Aug 09 06:38	4°♋03'24	45°49'47
	5542 Sep 03 13:40	0°♌	
	5542 Sep 30 11:15	0°♍	
asc. node	5542 Oct 14 16:05	16°♍27'37	
	5542 Oct 26 03:32	0°♎	
	5542 Nov 20 01:57	0°♏	
	5542 Dec 14 12:53	0°♐	
	5543 Jan 07 16:46	0°♑	
	5543 Jan 31 16:28	0°♒	
desc. node	5543 Feb 03 07:19	3°♒17'02	
morning set	5543 Feb 04 20:43	5°♒14'23	
	5543 Feb 24 13:44	0°♓	
superior conj	5543 Mar 18 03:40	27°♓08'57	-1°21'02
minimum elong	5543 Mar 17 19:14	26°♓42'27	1°20'53
max. Earth dist.	5543 Mar 19 04:55	28°♓28'21	1.71183 AU
	5543 Mar 20 10:03	0°♈	
	5543 Apr 13 07:13	0°♉	
evening rise	5543 Apr 27 19:58	18°♉11'27	
	5543 May 07 07:08	0°♊	
asc. node	5543 May 27 08:46	24°♊54'57	
	5543 May 31 11:31	0°♋	
	5543 Jun 24 21:45	0°♌	
	5543 Jul 19 15:34	0°♍	
	5543 Aug 13 20:20	0°♎	
	5543 Sep 08 18:48	0°♏	
desc. node	5543 Sep 16 00:03	8°♏07'42	
	5543 Oct 06 02:18	0°♐	
evening max el	5543 Oct 23 21:50	18°♐02'15	46°02'03
	5543 Nov 06 01:39	0°♑	
greatest brilliancy	5543 Dec 02 17:08	16°♑54'24	-4.8m
retrograde	5543 Dec 12 03:49	18°♑33'29	
evening set	5543 Dec 26 19:39	14°♑21'46	
inferior conj	5544 Jan 01 21:26	10°♑48'49	-1°19'20
minimum elong	5544 Jan 02 00:28	10°♑44'12	1°18'20
min. Earth dist.	5544 Jan 02 10:48	10°♑28'26	0.27064 AU
asc. node	5544 Jan 07 01:30	7°♑44'25	
morning rise	5544 Jan 08 04:35	7°♑07'16	
direct	5544 Jan 22 15:54	2°♑57'04	
greatest brilliancy	5544 Feb 02 10:17	5°♑08'26	-4.9m
	5544 Mar 07 03:06	0°♒	
morning max el	5544 Mar 13 07:44	6°♒07'28	46°59'15
	5544 Apr 04 14:53	0°♓	
desc. node	5544 Apr 27 17:09	26°♓27'55	
	5544 Apr 30 17:33	0°♈	
	5544 May 25 23:39	0°♉	
	5544 Jun 19 21:15	0°♊	
	5544 Jul 14 15:16	0°♋	
	5544 Aug 08 07:00	0°♌	
asc. node	5544 Aug 18 18:10	12°♌46'13	
	5544 Sep 01 20:07	0°♍	
morning set	5544 Sep 12 13:01	13°♍07'50	
	5544 Sep 26 06:06	0°♎	
max. Earth dist.	5544 Oct 16 21:03	25°♎27'16	1.73025 AU
superior conj	5544 Oct 19 00:08	28°♎05'12	1°24'31
minimum elong	5544 Oct 19 02:58	28°♎13'56	1°24'31
	5544 Oct 20 13:15	0°♏	
	5544 Nov 13 18:32	0°♐	
evening rise	5544 Nov 25 10:02	14°♐26'50	
	5544 Dec 07 22:46	0°♑	
desc. node	5544 Dec 08 09:45	0°♑34'03	
	5545 Jan 01 02:21	0°♒	
	5545 Jan 25 05:44	0°♓	
	5545 Feb 18 10:38	0°♈	
	5545 Mar 14 20:55	0°♉	
asc. node	5545 Mar 31 10:58	20°♉03'04	
	5545 Apr 08 19:28	0°♊	
	5545 May 04 19:03	0°♋	
evening max el	5545 May 31 01:43	27°♋52'03	46°06'10
	5545 Jun 02 06:06	0°♌	
greatest brilliancy	5545 Jul 08 08:12	26°♌44'14	-4.8m
retrograde	5545 Jul 19 12:37	29°♌00'25	
desc. node	5545 Jul 21 02:27	28°♌57'27	
evening set	5545 Aug 03 21:52	24°♌23'44	
inferior conj	5545 Aug 09 23:29	20°♌43'55	-4°31'37

minimum elong	5545 Aug 09 14:45	20°♌57'36	4°29'25
min. Earth dist.	5545 Aug 09 11:19	21°♌02'58	0.28875 AU
morning rise	5545 Aug 15 08:04	17°♌29'05	
direct	5545 Aug 31 11:47	12°♌30'53	
greatest brilliancy	5545 Sep 10 11:23	14°♌19'10	-4.7m
	5545 Oct 05 13:13	0°♍	
morning max el	5545 Oct 19 07:53	12°♍25'24	45°46'53
	5545 Nov 05 15:00	0°♎	
asc. node	5545 Nov 11 03:56	5°♎57'30	
	5545 Dec 02 13:38	0°♏	
	5545 Dec 27 23:36	0°♐	
	5546 Jan 21 15:29	0°♑	
	5546 Feb 14 21:53	0°♒	
desc. node	5546 Mar 02 19:11	19°♒47'21	
	5546 Mar 10 23:19	0°♓	
	5546 Apr 03 22:30	0°♈	
morning set	5546 Apr 22 14:37	23°♈23'06	
	5546 Apr 27 21:31	0°♉	
	5546 May 21 22:10	0°♊	
superior conj	5546 Jun 01 00:01	12°♊32'20	-0°51'33
minimum elong	5546 Jun 01 10:09	13°♊03'49	0°51'10
max. Earth dist.	5546 Jun 04 15:57	17°♊05'32	1.72380 AU
	5546 Jun 15 01:39	0°♋	
asc. node	5546 Jun 23 20:31	10°♋52'29	
evening rise	5546 Jul 09 09:06	0°♌02'27	
	5546 Jul 09 08:19	0°♌	
	5546 Aug 02 18:09	0°♍	
	5546 Aug 27 07:38	0°♎	
	5546 Sep 21 02:12	0°♏	
desc. node	5546 Oct 13 12:00	26°♏49'47	
	5546 Oct 16 04:02	0°♐	
	5546 Nov 10 16:23	0°♑	
	5546 Dec 06 22:22	0°♒	
	5547 Jan 03 22:13	0°♓	
evening max el	5547 Jan 04 20:21	0°♓55'38	46°56'27
asc. node	5547 Feb 03 13:17	26°♓22'45	
	5547 Feb 09 21:31	0°♈	
greatest brilliancy	5547 Feb 14 07:10	1°♈53'32	-4.9m
retrograde	5547 Feb 24 08:19	3°♈48'03	
	5547 Mar 10 02:17	30°♓℞	
evening set	5547 Mar 13 05:35	28°♓14'41	
inferior conj	5547 Mar 16 23:12	25°♓58'23	8°26'19
minimum elong	5547 Mar 16 15:22	26°♓10'28	8°25'22
min. Earth dist.	5547 Mar 16 10:09	26°♓18'31	0.26963 AU
morning rise	5547 Mar 20 01:19	24°♓05'30	
direct	5547 Apr 06 12:44	18°♓14'44	
greatest brilliancy	5547 Apr 15 18:29	19°♓51'52	-4.9m
	5547 May 03 14:53	0°♈	
desc. node	5547 May 26 04:53	20°♈00'18	
morning max el	5547 May 26 13:32	20°♈21'41	46°33'52
	5547 Jun 05 00:49	0°♉	
	5547 Jul 02 12:18	0°♊	
	5547 Jul 28 15:03	0°♋	
	5547 Aug 23 02:43	0°♌	
asc. node	5547 Sep 16 06:10	28°♌53'21	
	5547 Sep 17 04:17	0°♍	
	5547 Oct 11 21:20	0°♎	
	5547 Nov 05 07:19	0°♏	
morning set	5547 Nov 21 08:38	19°♏52'37	
	5547 Nov 29 12:12	0°♐	
	5547 Dec 23 13:47	0°♑	
max. Earth dist.	5547 Dec 26 20:15	4°♑05'05	1.71790 AU
superior conj	5547 Dec 29 17:30	7°♑41'28	0°17'14
minimum elong	5547 Dec 29 21:39	7°♑54'27	0°17'02
desc. node	5548 Jan 05 21:31	16°♑39'21	
	5548 Jan 16 13:15	0°♒	
evening rise	5548 Feb 07 21:58	28°♒02'52	
	5548 Feb 09 11:18	0°♓	
	5548 Mar 04 09:05	0°♈	
	5548 Mar 28 08:42	0°♉	
	5548 Apr 21 13:12	0°♊	
asc. node	5548 Apr 27 22:53	7°♊52'40	
	5548 May 16 02:12	0°♋	
	5548 Jun 10 04:36	0°♌	
	5548 Jul 06 05:46	0°♍	
	5548 Aug 03 07:12	0°♎	
evening max el	5548 Aug 09 14:51	6°♎12'20	45°33'34
desc. node	5548 Aug 17 14:22	13°♎36'55	
	5548 Sep 08 07:41	0°♏	
greatest brilliancy	5548 Sep 17 12:05	4°♏15'40	-4.7m
retrograde	5548 Sep 27 06:55	5°♏59'40	
evening set	5548 Oct 15 11:09	29°♎52'03	
	5548 Oct 15 05:51	30°℞♎	
inferior conj	5548 Oct 18 17:23	27°♎51'14	-8°33'29
minimum elong	5548 Oct 18 20:09	27°♎46'54	8°33'22
min. Earth dist.	5548 Oct 19 07:09	27°♎29'42	0.28862 AU
morning rise	5548 Oct 22 04:57	25°♎41'47	
direct	5548 Nov 09 05:04	19°♎34'25	
greatest brilliancy	5548 Nov 20 05:12	21°♎46'41	-4.8m
	5548 Dec 04 17:47	0°♏	
asc. node	5548 Dec 08 15:38	2°♏56'15	
morning max el	5548 Dec 29 03:58	21°♏28'03	46°26'41
	5549 Jan 06 11:15	0°♐	
	5549 Feb 02 11:20	0°♑	
	5549 Feb 27 20:49	0°♒	
	5549 Mar 24 13:50	0°♓	
desc. node	5549 Mar 30 07:15	7°♓01'10	
	5549 Apr 17 23:09	0°♈	
	5549 May 12 05:22	0°♉	
	5549 Jun 05 11:24	0°♊	
	5549 Jun 29 18:35	0°♋	
morning set	5549 Jul 03 16:43	4°♋50'12	
asc. node	5549 Jul 21 08:18	26°♋34'48	
	5549 Jul 24 02:58	0°♌	
superior conj	5549 Aug 10 00:29	20°♌48'13	0°44'54
minimum elong	5549 Aug 09 16:18	20°♌23'02	0°44'32
max. Earth dist.	5549 Aug 10 06:06	21°♌05'31	1.73394 AU
	5549 Aug 17 11:49	0°♍	
	5549 Sep 10 20:47	0°♎	
evening rise	5549 Sep 15 04:09	5°♎17'56	
	5549 Oct 05 06:16	0°♏	
	5549 Oct 29 17:11	0°♐	
desc. node	5549 Nov 09 23:54	13°♐48'19	
	5549 Nov 23 06:07	0°♑	
	5549 Dec 17 21:36	0°♒	
	5550 Jan 11 17:32	0°♓	
	5550 Feb 06 00:15	0°♈	
asc. node	5550 Mar 03 01:08	28°♈27'32	
	5550 Mar 04 10:58	0°♉	
evening max el	5550 Mar 18 06:31	14°♉33'30	47°00'04
	5550 Apr 03 15:08	0°♊	
greatest brilliancy	5550 Apr 27 12:30	15°♊35'42	-4.9m
retrograde	5550 May 07 20:51	17°♊37'14	
evening set	5550 May 24 03:40	12°♊26'59	
inferior conj	5550 May 28 22:24	9°♊32'34	5°40'57
minimum elong	5550 May 29 08:38	9°♊16'37	5°38'28
min. Earth dist.	5550 May 28 20:29	9°♊35'33	0.27837 AU
morning rise	5550 Jun 03 13:53	6°♊09'03	
direct	5550 Jun 18 20:57	1°♊34'27	
desc. node	5550 Jun 22 16:34	1°♊51'16	
greatest brilliancy	5550 Jun 28 17:18	3°♊20'57	-4.8m

	5550 Aug 04 23:36	0°♋	
morning max el	5550 Aug 06 22:02	1°♋50'31	45°50'49
	5550 Sep 03 05:50	0°♌	
	5550 Sep 30 00:41	0°♍	
asc. node	5550 Oct 13 18:05	15°♍56'25	
	5550 Oct 25 15:41	0°♎	
	5550 Nov 19 13:27	0°♏	
	5550 Dec 14 00:03	0°♐	
	5551 Jan 07 03:47	0°♑	
	5551 Jan 31 03:24	0°♒	
morning set	5551 Feb 02 07:45	2°♒44'07	
desc. node	5551 Feb 02 09:21	2°♒49'07	
	5551 Feb 24 00:39	0°♓	
superior conj	5551 Mar 15 14:03	24°♓36'15	-1°19'28
minimum elong	5551 Mar 15 04:52	24°♓07'21	1°19'17
max. Earth dist.	5551 Mar 16 11:41	25°♓44'16	1.71174 AU
	5551 Mar 19 21:00	0°♈	
	5551 Apr 12 18:10	0°♉	
evening rise	5551 Apr 25 07:09	15°♉42'15	
	5551 May 06 18:06	0°♊	
asc. node	5551 May 26 10:39	24°♊26'42	
	5551 May 30 22:34	0°♋	
	5551 Jun 24 09:02	0°♌	
	5551 Jul 19 03:20	0°♍	
	5551 Aug 13 08:58	0°♎	
	5551 Sep 08 09:08	0°♏	
desc. node	5551 Sep 15 02:08	7°♏31'38	
	5551 Oct 05 20:29	0°♐	
evening max el	5551 Oct 21 12:41	15°♐46'47	46°00'23
	5551 Nov 06 10:23	0°♑	
greatest brilliancy	5551 Nov 30 05:54	14°♑32'13	-4.8m
retrograde	5551 Dec 09 17:12	16°♑11'12	
evening set	5551 Dec 24 10:30	11°♑57'13	
inferior conj	5551 Dec 30 10:39	8°♑25'56	-1°42'20
minimum elong	5551 Dec 30 14:32	8°♑20'01	1°41'06
min. Earth dist.	5551 Dec 31 00:41	8°♑04'29	0.27111 AU
morning rise	5552 Jan 05 17:58	4°♑44'13	
asc. node	5552 Jan 06 03:26	4°♑31'40	
direct	5552 Jan 20 06:20	0°♑33'36	
greatest brilliancy	5552 Jan 31 00:30	2°♑45'04	-4.9m
	5552 Mar 07 03:49	0°♒	
morning max el	5552 Mar 10 22:24	3°♒46'12	46°58'55
	5552 Apr 04 07:48	0°♓	
desc. node	5552 Apr 26 19:08	25°♓51'21	
	5552 Apr 30 07:46	0°♈	
	5552 May 25 12:31	0°♉	
	5552 Jun 19 09:17	0°♊	
	5552 Jul 14 02:43	0°♋	
	5552 Aug 07 18:05	0°♌	
asc. node	5552 Aug 17 20:17	12°♌19'07	
	5552 Sep 01 06:59	0°♍	
morning set	5552 Sep 10 06:25	11°♍00'43	
	5552 Sep 25 16:52	0°♎	
max. Earth dist.	5552 Oct 14 15:08	23°♎21'28	1.73056 AU
superior conj	5552 Oct 16 17:23	25°♎56'46	1°24'57
minimum elong	5552 Oct 16 19:30	26°♎03'21	1°24'58
	5552 Oct 20 00:03	0°♏	
	5552 Nov 13 05:25	0°♐	
evening rise	5552 Nov 23 01:05	12°♐10'35	
desc. node	5552 Dec 07 11:40	0°♑05'45	
	5552 Dec 07 09:49	0°♑	
	5552 Dec 31 13:36	0°♒	
	5553 Jan 24 17:17	0°♓	
	5553 Feb 17 22:35	0°♈	
	5553 Mar 14 09:29	0°♉	
asc. node	5553 Mar 30 12:57	19°♉29'26	
	5553 Apr 08 09:09	0°♊	
	5553 May 04 11:09	0°♋	
evening max el	5553 May 28 17:59	25°♋39'42	46°07'57
	5553 Jun 02 05:25	0°♌	
greatest brilliancy	5553 Jul 06 00:48	24°♌33'53	-4.8m
retrograde	5553 Jul 17 04:55	26°♌49'34	
desc. node	5553 Jul 20 04:32	26°♌38'56	
evening set	5553 Aug 01 12:30	22°♌15'41	
min. Earth dist.	5553 Aug 07 03:15	18°♌52'50	0.28841 AU
inferior conj	5553 Aug 07 15:37	18°♌33'26	-4°14'27
minimum elong	5553 Aug 07 07:16	18°♌46'33	4°12'17
morning rise	5553 Aug 13 02:30	15°♌15'13	
direct	5553 Aug 29 04:01	10°♌21'12	
greatest brilliancy	5553 Sep 08 02:18	12°♌08'16	-4.7m
	5553 Oct 05 18:41	0°♍	
morning max el	5553 Oct 16 22:37	10°♍11'55	45°46'00
	5553 Nov 05 08:17	0°♎	
asc. node	5553 Nov 10 05:54	5°♎18'10	
	5553 Dec 02 03:43	0°♏	
	5553 Dec 27 12:18	0°♐	
	5554 Jan 21 03:29	0°♑	
	5554 Feb 14 09:29	0°♒	
desc. node	5554 Mar 01 21:20	19°♒18'22	
	5554 Mar 10 10:40	0°♓	
	5554 Apr 03 09:39	0°♈	
morning set	5554 Apr 20 02:39	20°♈56'00	
	5554 Apr 27 08:32	0°♉	
	5554 May 21 09:06	0°♊	
superior conj	5554 May 29 14:06	10°♊13'00	-0°54'26
minimum elong	5554 May 30 00:32	10°♊45'24	0°54'03
max. Earth dist.	5554 Jun 02 09:27	14°♊56'52	1.72330 AU
	5554 Jun 14 12:33	0°♋	
asc. node	5554 Jun 22 22:30	10°♋24'56	
evening rise	5554 Jul 07 01:31	27°♋51'23	
	5554 Jul 08 19:15	0°♌	
	5554 Aug 02 05:12	0°♍	
	5554 Aug 26 18:57	0°♎	
	5554 Sep 20 13:59	0°♏	
desc. node	5554 Oct 12 13:58	26°♏18'30	
	5554 Oct 15 16:39	0°♐	
	5554 Nov 10 06:25	0°♑	
	5554 Dec 06 15:03	0°♒	
evening max el	5555 Jan 02 09:21	28°♒29'29	46°54'59
	5555 Jan 03 21:41	0°♓	
asc. node	5555 Feb 02 15:27	24°♓53'21	
greatest brilliancy	5555 Feb 11 20:59	29°♓26'52	-4.9m
	5555 Feb 13 12:18	0°♈	
retrograde	5555 Feb 21 20:41	1°♈20'19	
	5555 Mar 01 22:35	30°℞♓	
evening set	5555 Mar 10 14:06	25°♓54'02	
inferior conj	5555 Mar 14 11:59	23°♓31'35	8°16'58
minimum elong	5555 Mar 14 03:29	23°♓44'43	8°15'48
min. Earth dist.	5555 Mar 13 23:15	23°♓51'14	0.26930 AU
morning rise	5555 Mar 17 16:59	21°♓34'19	
direct	5555 Apr 04 00:45	15°♓48'15	
greatest brilliancy	5555 Apr 13 07:55	17°♓26'11	-4.9m
	5555 May 04 06:53	0°♈	
morning max el	5555 May 24 01:27	17°♈54'54	46°35'30
desc. node	5555 May 25 06:51	19°♈08'03	
	5555 Jun 04 20:29	0°♉	
	5555 Jul 02 03:28	0°♊	
	5555 Jul 28 04:17	0°♋	
	5555 Aug 22 14:54	0°♌	
asc. node	5555 Sep 15 08:09	28°♌24'25	
	5555 Sep 16 15:50	0°♍	

	5555 Oct 11 08:31	0°♎	
	5555 Nov 04 18:20	0°♏	
morning set	5555 Nov 19 00:23	17°♏38'29	
	5555 Nov 28 23:10	0°♐	
	5555 Dec 23 00:49	0°♑	
max. Earth dist.	5555 Dec 24 09:22	1°♑41'41	1.71838 AU
superior conj	5555 Dec 27 06:28	5°♑17'34	0°20'51
minimum elong	5555 Dec 27 11:27	5°♑33'05	0°20'38
desc. node	5556 Jan 04 23:33	16°♑11'08	
	5556 Jan 16 00:22	0°♒	
evening rise	5556 Feb 05 09:20	25°♒32'49	
	5556 Feb 08 22:31	0°♓	
	5556 Mar 03 20:24	0°♈	
	5556 Mar 27 20:10	0°♉	
	5556 Apr 21 00:54	0°♊	
asc. node	5556 Apr 27 00:48	7°♊22'24	
	5556 May 15 14:22	0°♋	
	5556 Jun 09 17:41	0°♌	
	5556 Jul 05 20:50	0°♍	
	5556 Aug 03 03:40	0°♎	
evening max el	5556 Aug 07 05:17	3°♎58'02	45°33'43
desc. node	5556 Aug 16 16:26	12°♎41'55	
	5556 Sep 10 02:35	0°♏	
greatest brilliancy	5556 Sep 15 02:02	2°♏03'13	-4.7m
retrograde	5556 Sep 24 22:36	3°♏48'59	
	5556 Oct 08 23:54	30°℞♎	
evening set	5556 Oct 13 03:05	27°♎40'13	
inferior conj	5556 Oct 16 09:18	25°♎39'35	-8°35'29
minimum elong	5556 Oct 16 11:17	25°♎36'29	8°35'25
min. Earth dist.	5556 Oct 16 22:01	25°♎19'41	0.28907 AU
morning rise	5556 Oct 19 19:17	23°♎32'40	
direct	5556 Nov 06 21:02	17°♎22'10	
greatest brilliancy	5556 Nov 17 21:14	19°♎34'30	-4.8m
	5556 Dec 05 09:37	0°♏	
asc. node	5556 Dec 07 17:37	1°♏49'51	
morning max el	5556 Dec 26 19:20	19°♏11'35	46°25'04
	5557 Jan 06 06:26	0°♐	
	5557 Feb 02 02:26	0°♑	
	5557 Feb 27 10:14	0°♒	
	5557 Mar 24 02:20	0°♓	
desc. node	5557 Mar 29 09:08	6°♓28'57	
	5557 Apr 17 11:04	0°♈	
	5557 May 11 16:53	0°♉	
	5557 Jun 04 22:36	0°♊	
	5557 Jun 29 05:33	0°♋	
morning set	5557 Jul 01 09:11	2°♋39'14	
asc. node	5557 Jul 20 10:24	26°♋07'59	
	5557 Jul 23 13:46	0°♌	
superior conj	5557 Aug 07 18:15	18°♌42'02	0°42'08
minimum elong	5557 Aug 07 10:22	18°♌17'48	0°41'46
max. Earth dist.	5557 Aug 08 02:35	19°♌07'40	1.73384 AU
	5557 Aug 16 22:34	0°♍	
	5557 Sep 10 07:36	0°♎	
evening rise	5557 Sep 12 22:33	3°♎13'35	
	5557 Oct 04 17:18	0°♏	
	5557 Oct 29 04:31	0°♐	
desc. node	5557 Nov 09 01:48	13°♐18'59	
	5557 Nov 22 17:53	0°♑	
	5557 Dec 17 10:00	0°♒	
	5558 Jan 11 06:54	0°♓	
	5558 Feb 05 15:18	0°♈	
asc. node	5558 Mar 02 03:06	27°♈42'38	
	5558 Mar 04 05:44	0°♉	
evening max el	5558 Mar 15 21:02	12°♉12'08	47°01'17
	5558 Apr 04 00:34	0°♊	
greatest brilliancy	5558 Apr 25 03:32	13°♊16'12	-4.9m
retrograde	5558 May 05 12:15	15°♊18'06	
evening set	5558 May 21 21:18	10°♊03'17	
inferior conj	5558 May 26 12:52	7°♊13'38	5°58'11
minimum elong	5558 May 26 23:17	6°♊57'26	5°55'44
min. Earth dist.	5558 May 26 10:46	7°♊16'53	0.27806 AU
morning rise	5558 Jun 01 01:34	3°♊54'28	
	5558 Jun 10 10:48	30°℞♉	
direct	5558 Jun 16 11:13	29°♉15'59	
desc. node	5558 Jun 21 18:36	29°♉48'20	
	5558 Jun 22 16:20	0°♊	
greatest brilliancy	5558 Jun 26 06:40	1°♊02'21	-4.8m
morning max el	5558 Aug 04 13:52	29°♊38'27	45°51'58
	5558 Aug 04 22:50	0°♋	
	5558 Sep 02 21:46	0°♌	
	5558 Sep 29 14:03	0°♍	
asc. node	5558 Oct 12 20:00	15°♍24'50	
	5558 Oct 25 03:53	0°♎	
	5558 Nov 19 01:04	0°♏	
	5558 Dec 13 11:23	0°♐	
	5559 Jan 06 14:57	0°♑	
morning set	5559 Jan 30 18:53	0°♒13'48	
	5559 Jan 30 14:29	0°♒	
desc. node	5559 Feb 01 11:26	2°♒20'54	
	5559 Feb 23 11:43	0°♓	
superior conj	5559 Mar 13 00:20	22°♓02'47	-1°17'44
minimum elong	5559 Mar 12 14:27	21°♓31'42	1°17'30
max. Earth dist.	5559 Mar 13 20:11	23°♓05'14	1.71165 AU
	5559 Mar 19 08:03	0°♈	
	5559 Apr 12 05:14	0°♉	
evening rise	5559 Apr 22 18:16	13°♉12'18	
	5559 May 06 05:12	0°♊	
asc. node	5559 May 25 12:42	23°♊58'29	
	5559 May 30 09:46	0°♋	
	5559 Jun 23 20:27	0°♌	
	5559 Jul 18 15:11	0°♍	
	5559 Aug 12 21:41	0°♎	
	5559 Sep 07 23:36	0°♏	
desc. node	5559 Sep 14 04:05	6°♏54'57	
	5559 Oct 05 15:05	0°♐	
evening max el	5559 Oct 19 03:34	13°♐31'33	45°58'30
	5559 Nov 06 22:11	0°♑	
greatest brilliancy	5559 Nov 27 19:15	12°♑10'47	-4.8m
retrograde	5559 Dec 07 06:13	13°♑48'51	
evening set	5559 Dec 22 01:35	9°♑32'36	
inferior conj	5559 Dec 27 23:58	6°♑03'13	-2°05'07
minimum elong	5559 Dec 28 04:39	5°♑56'02	2°03'38
min. Earth dist.	5559 Dec 28 14:55	5°♑40'19	0.27163 AU
morning rise	5560 Jan 03 07:09	2°♑21'18	
asc. node	5560 Jan 05 05:33	1°♑22'03	
	5560 Jan 08 09:14	30°℞♐	
direct	5560 Jan 17 20:37	28°♐10'13	
	5560 Jan 27 15:47	0°♑	
greatest brilliancy	5560 Jan 28 15:03	0°♑21'45	-4.9m
	5560 Mar 07 03:31	0°♒	
morning max el	5560 Mar 08 12:14	1°♒22'25	46°58'33
	5560 Apr 04 00:28	0°♓	
desc. node	5560 Apr 25 21:08	25°♓15'01	
	5560 Apr 29 21:53	0°♈	
	5560 May 25 01:18	0°♉	
	5560 Jun 18 21:16	0°♊	
	5560 Jul 13 14:08	0°♋	
	5560 Aug 07 05:07	0°♌	
asc. node	5560 Aug 16 22:16	11°♌51'48	
	5560 Aug 31 17:46	0°♍	
morning set	5560 Sep 08 00:12	8°♍55'05	

	5560 Sep 25 03:33	0°♎	
max. Earth dist.	5560 Oct 12 08:59	21°♎15'29	1.73085 AU
superior conj	5560 Oct 14 11:10	23°♎50'29	1°25'15
minimum elong	5560 Oct 14 12:35	23°♎54'53	1°25'16
	5560 Oct 19 10:43	0°♏	
	5560 Nov 12 16:11	0°♐	
evening rise	5560 Nov 20 16:36	9°♐56'14	
desc. node	5560 Dec 06 13:48	29°♐38'20	
	5560 Dec 06 20:47	0°♑	
	5560 Dec 31 00:50	0°♒	
	5561 Jan 24 04:51	0°♓	
	5561 Feb 17 10:34	0°♈	
	5561 Mar 13 22:06	0°♉	
asc. node	5561 Mar 29 14:53	18°♉55'30	
	5561 Apr 07 22:56	0°♊	
	5561 May 04 03:28	0°♋	
evening max el	5561 May 26 09:17	23°♋24'58	46°09'46
	5561 Jun 02 05:44	0°♌	
greatest brilliancy	5561 Jul 03 17:59	22°♌24'20	-4.8m
retrograde	5561 Jul 14 20:53	24°♌39'02	
desc. node	5561 Jul 19 06:38	24°♌15'50	
evening set	5561 Jul 30 03:17	20°♌07'39	
inferior conj	5561 Aug 05 07:46	16°♌23'27	-3°56'47
minimum elong	5561 Aug 04 23:51	16°♌35'53	3°54'41
min. Earth dist.	5561 Aug 04 19:38	16°♌42'30	0.28804 AU
morning rise	5561 Aug 10 20:51	13°♌01'50	
direct	5561 Aug 26 19:39	8°♌11'52	
greatest brilliancy	5561 Sep 05 17:45	9°♌58'19	-4.7m
	5561 Oct 05 22:01	0°♍	
morning max el	5561 Oct 14 12:50	7°♍57'52	45°45'24
	5561 Nov 05 00:55	0°♎	
asc. node	5561 Nov 09 07:55	4°♎40'07	
	5561 Dec 01 17:21	0°♏	
	5561 Dec 27 00:41	0°♐	
	5562 Jan 20 15:14	0°♑	
	5562 Feb 13 20:55	0°♒	
desc. node	5562 Feb 28 23:15	18°♒49'08	
	5562 Mar 09 21:54	0°♓	
	5562 Apr 02 20:43	0°♈	
morning set	5562 Apr 17 14:00	18°♈26'57	
	5562 Apr 26 19:27	0°♉	
	5562 May 20 19:54	0°♊	
superior conj	5562 May 27 03:43	7°♊52'32	-0°57'16
minimum elong	5562 May 27 14:21	8°♊25'37	0°56'52
max. Earth dist.	5562 May 31 00:50	12°♊42'06	1.72276 AU
	5562 Jun 13 23:17	0°♋	
asc. node	5562 Jun 22 00:35	9°♋58'13	
evening rise	5562 Jul 04 17:34	25°♋39'45	
	5562 Jul 08 06:00	0°♌	
	5562 Aug 01 16:05	0°♍	
	5562 Aug 26 06:05	0°♎	
	5562 Sep 20 01:34	0°♏	
desc. node	5562 Oct 11 15:58	25°♏47'58	
	5562 Oct 15 05:03	0°♐	
	5562 Nov 09 20:13	0°♑	
	5562 Dec 06 07:37	0°♒	
evening max el	5562 Dec 30 21:39	26°♒02'57	46°53'23
	5563 Jan 03 21:44	0°♓	
asc. node	5563 Feb 01 17:21	23°♓21'12	
greatest brilliancy	5563 Feb 09 10:24	27°♓00'27	-4.9m
retrograde	5563 Feb 19 09:03	28°♓53'23	
evening set	5563 Mar 07 22:25	23°♓33'46	
min. Earth dist.	5563 Mar 11 12:21	21°♓24'15	0.26908 AU
inferior conj	5563 Mar 12 00:42	21°♓05'14	8°06'23
minimum elong	5563 Mar 11 15:36	21°♓19'14	8°05'02
morning rise	5563 Mar 15 08:53	19°♓03'18	
direct	5563 Apr 01 12:40	13°♓21'52	
greatest brilliancy	5563 Apr 10 21:38	15°♓01'08	-4.9m
	5563 May 04 18:42	0°♈	
morning max el	5563 May 21 14:10	15°♈30'16	46°37'07
desc. node	5563 May 24 08:56	18°♈17'20	
	5563 Jun 04 15:28	0°♉	
	5563 Jul 01 18:16	0°♊	
	5563 Jul 27 17:12	0°♋	
	5563 Aug 22 02:47	0°♌	
asc. node	5563 Sep 14 10:03	27°♌56'07	
	5563 Sep 16 03:06	0°♍	
	5563 Oct 10 19:25	0°♎	
	5563 Nov 04 05:02	0°♏	
morning set	5563 Nov 16 16:32	15°♏26'39	
	5563 Nov 28 09:48	0°♐	
max. Earth dist.	5563 Dec 22 01:06	29°♐27'34	1.71880 AU
	5563 Dec 22 11:29	0°♑	
superior conj	5563 Dec 24 20:00	2°♑56'34	0°24'23
minimum elong	5563 Dec 25 01:44	3°♑14'27	0°24'08
desc. node	5564 Jan 04 01:38	15°♑44'15	
	5564 Jan 15 11:06	0°♒	
evening rise	5564 Feb 02 21:15	23°♒05'48	
	5564 Feb 08 09:20	0°♓	
	5564 Mar 03 07:22	0°♈	
	5564 Mar 27 07:20	0°♉	
	5564 Apr 20 12:24	0°♊	
asc. node	5564 Apr 26 02:50	6°♊53'08	
	5564 May 15 02:23	0°♋	
	5564 Jun 09 06:40	0°♌	
	5564 Jul 05 11:54	0°♍	
	5564 Aug 03 00:36	0°♎	
evening max el	5564 Aug 04 20:23	1°♎45'57	45°34'05
desc. node	5564 Aug 15 18:20	11°♎46'00	
greatest brilliancy	5564 Sep 12 15:26	29°♎50'52	-4.7m
	5564 Sep 13 02:14	0°♏	
retrograde	5564 Sep 22 14:38	1°♏38'44	
	5564 Oct 01 17:10	30°℞♎	
evening set	5564 Oct 10 18:38	25°♎29'19	
inferior conj	5564 Oct 14 01:03	23°♎28'24	-8°36'50
minimum elong	5564 Oct 14 02:15	23°♎26'30	8°36'48
min. Earth dist.	5564 Oct 14 12:27	23°♎10'35	0.28945 AU
morning rise	5564 Oct 17 09:45	21°♎23'36	
direct	5564 Nov 04 13:14	15°♎10'32	
greatest brilliancy	5564 Nov 15 12:29	17°♎22'14	-4.8m
	5564 Dec 05 21:01	0°♏	
asc. node	5564 Dec 06 19:42	0°♏46'10	
morning max el	5564 Dec 24 11:34	16°♏58'31	46°23'38
	5565 Jan 06 00:42	0°♐	
	5565 Feb 01 16:54	0°♑	
	5565 Feb 26 23:05	0°♒	
	5565 Mar 23 14:20	0°♓	
desc. node	5565 Mar 28 11:10	5°♓58'44	
	5565 Apr 16 22:32	0°♈	
	5565 May 11 04:02	0°♉	
	5565 Jun 04 09:30	0°♊	
	5565 Jun 28 16:15	0°♋	
morning set	5565 Jun 29 01:11	0°♋27'34	
asc. node	5565 Jul 19 12:22	25°♋41'29	
	5565 Jul 23 00:19	0°♌	
superior conj	5565 Aug 05 11:28	16°♌34'54	0°39'14
minimum elong	5565 Aug 05 03:58	16°♌11'47	0°38'54
max. Earth dist.	5565 Aug 05 23:50	17°♌12'57	1.73371 AU
	5565 Aug 16 09:04	0°♍	
	5565 Sep 09 18:10	0°♎	

evening rise	5565 Sep 10 16:37	1°♎09'03	
	5565 Oct 04 04:03	0°♏	
	5565 Oct 28 15:35	0°♐	
desc. node	5565 Nov 08 03:55	12°♐51'08	
	5565 Nov 22 05:24	0°♑	
	5565 Dec 16 22:08	0°♒	
	5566 Jan 10 19:59	0°♓	
	5566 Feb 05 06:05	0°♈	
asc. node	5566 Mar 01 05:04	26°♈58'37	
	5566 Mar 04 00:26	0°♉	
evening max el	5566 Mar 13 12:21	9°♉54'20	47°02'24
	5566 Apr 04 12:26	0°♊	
greatest brilliancy	5566 Apr 22 18:24	10°♊57'59	-4.9m
retrograde	5566 May 03 03:43	13°♊00'04	
evening set	5566 May 19 15:04	7°♊40'48	
inferior conj	5566 May 24 03:21	4°♊55'46	6°14'46
minimum elong	5566 May 24 13:54	4°♊39'22	6°12'22
min. Earth dist.	5566 May 24 00:50	4°♊59'40	0.27780 AU
morning rise	5566 May 29 13:05	1°♊41'03	
	5566 Jun 01 18:50	30°℞♉	
direct	5566 Jun 14 01:53	26°♉58'42	
desc. node	5566 Jun 20 20:42	27°♉51'08	
greatest brilliancy	5566 Jun 23 19:38	28°♉44'04	-4.8m
	5566 Jun 27 01:09	0°♊	
morning max el	5566 Aug 02 05:37	27°♊26'44	45°52'54
	5566 Aug 04 20:51	0°♋	
	5566 Sep 02 13:15	0°♌	
	5566 Sep 29 03:08	0°♍	
asc. node	5566 Oct 11 22:07	14°♍54'35	
	5566 Oct 24 15:49	0°♎	
	5566 Nov 18 12:24	0°♏	
	5566 Dec 12 22:25	0°♐	
	5567 Jan 06 01:50	0°♑	
morning set	5567 Jan 28 06:13	27°♑44'57	
	5567 Jan 30 01:18	0°♒	
desc. node	5567 Jan 31 13:21	1°♒53'00	
	5567 Feb 22 22:29	0°♓	
superior conj	5567 Mar 10 10:54	19°♓31'13	-1°15'50
minimum elong	5567 Mar 10 00:26	18°♓58'15	1°15'35
max. Earth dist.	5567 Mar 11 04:08	20°♓25'26	1.71151 AU
	5567 Mar 18 18:48	0°♈	
	5567 Apr 11 15:58	0°♉	
evening rise	5567 Apr 20 05:37	10°♉44'09	
	5567 May 05 15:57	0°♊	
asc. node	5567 May 24 14:46	23°♊31'23	
	5567 May 29 20:38	0°♋	
	5567 Jun 23 07:36	0°♌	
	5567 Jul 18 02:51	0°♍	
	5567 Aug 12 10:19	0°♎	
	5567 Sep 07 14:06	0°♏	
desc. node	5567 Sep 13 06:07	6°♏18'37	
	5567 Oct 05 10:04	0°♐	
evening max el	5567 Oct 16 17:48	11°♐15'09	45°56'41
	5567 Nov 07 13:44	0°♑	
greatest brilliancy	5567 Nov 25 09:08	9°♑50'33	-4.8m
retrograde	5567 Dec 04 18:37	11°♑27'11	
evening set	5567 Dec 19 16:50	7°♑08'22	
inferior conj	5567 Dec 25 13:19	3°♑41'17	-2°27'36
minimum elong	5567 Dec 25 18:46	3°♑32'54	2°25'53
min. Earth dist.	5567 Dec 26 05:27	3°♑16'29	0.27214 AU
morning rise	5567 Dec 31 20:05	29°♐59'19	
	5567 Dec 31 19:34	30°℞♐	
asc. node	5568 Jan 04 07:31	28°♐17'11	
direct	5568 Jan 15 10:27	25°♐47'27	
greatest brilliancy	5568 Jan 26 06:02	27°♐59'34	-4.9m
	5568 Jan 30 16:12	0°♑	
morning max el	5568 Mar 06 01:22	28°♑57'23	46°58'15
	5568 Mar 07 02:01	0°♒	
	5568 Apr 03 16:37	0°♓	
desc. node	5568 Apr 24 23:12	24°♓39'53	
	5568 Apr 29 11:36	0°♈	
	5568 May 24 13:44	0°♉	
	5568 Jun 18 08:54	0°♊	
	5568 Jul 13 01:17	0°♋	
	5568 Aug 06 15:57	0°♌	
asc. node	5568 Aug 16 00:11	11°♌24'53	
	5568 Aug 31 04:25	0°♍	
morning set	5568 Sep 05 17:48	6°♍49'10	
	5568 Sep 24 14:07	0°♎	
max. Earth dist.	5568 Oct 10 01:32	19°♎05'44	1.73117 AU
superior conj	5568 Oct 12 04:43	21°♎43'47	1°25'26
minimum elong	5568 Oct 12 05:25	21°♎45'56	1°25'26
	5568 Oct 18 21:19	0°♏	
	5568 Nov 12 02:53	0°♐	
evening rise	5568 Nov 18 07:51	7°♐41'26	
desc. node	5568 Dec 05 15:46	29°♐10'41	
	5568 Dec 06 07:40	0°♑	
	5568 Dec 30 12:01	0°♒	
	5569 Jan 23 16:21	0°♓	
	5569 Feb 16 22:31	0°♈	
	5569 Mar 13 10:42	0°♉	
asc. node	5569 Mar 28 16:58	18°♉22'09	
	5569 Apr 07 12:43	0°♊	
	5569 May 03 19:56	0°♋	
evening max el	5569 May 23 23:55	21°♋09'05	46°11'44
	5569 Jun 02 07:04	0°♌	
greatest brilliancy	5569 Jul 01 11:04	20°♌15'18	-4.8m
retrograde	5569 Jul 12 12:49	22°♌29'30	
desc. node	5569 Jul 18 08:29	21°♌48'55	
evening set	5569 Jul 27 18:20	17°♌59'58	
min. Earth dist.	5569 Aug 02 12:19	14°♌32'43	0.28771 AU
inferior conj	5569 Aug 03 00:03	14°♌14'17	-3°38'48
minimum elong	5569 Aug 02 16:36	14°♌25'59	3°36'48
morning rise	5569 Aug 08 15:15	10°♌49'29	
direct	5569 Aug 24 11:05	6°♌03'04	
greatest brilliancy	5569 Sep 03 09:54	7°♌49'40	-4.7m
	5569 Oct 05 23:44	0°♍	
morning max el	5569 Oct 12 03:19	5°♍44'30	45°44'42
	5569 Nov 04 17:17	0°♎	
asc. node	5569 Nov 08 09:59	4°♎02'25	
	5569 Dec 01 06:57	0°♏	
	5569 Dec 26 13:05	0°♐	
	5570 Jan 20 03:02	0°♑	
	5570 Feb 13 08:22	0°♒	
desc. node	5570 Feb 28 01:15	18°♒20'06	
	5570 Mar 09 09:08	0°♓	
	5570 Apr 02 07:48	0°♈	
morning set	5570 Apr 15 01:11	15°♈57'09	
	5570 Apr 26 06:23	0°♉	
	5570 May 20 06:44	0°♊	
superior conj	5570 May 24 17:25	5°♊32'11	-0°59'58
minimum elong	5570 May 25 04:13	6°♊05'47	0°59'36
max. Earth dist.	5570 May 28 13:35	10°♊18'54	1.72218 AU
	5570 Jun 13 10:04	0°♋	
asc. node	5570 Jun 21 02:32	9°♋30'59	
evening rise	5570 Jul 02 09:47	23°♋28'33	
	5570 Jul 07 16:47	0°♌	
	5570 Aug 01 02:58	0°♍	
	5570 Aug 25 17:15	0°♎	
	5570 Sep 19 13:16	0°♏	
desc. node	5570 Oct 10 18:03	25°♏17'13	

	5570 Oct 14 17:40	0°♐	
	5570 Nov 09 10:22	0°♑	
	5570 Dec 06 00:47	0°♒	
evening max el	5570 Dec 28 10:26	23°♒37'01	46°51'54
	5571 Jan 03 23:21	0°♓	
asc. node	5571 Jan 31 19:20	21°♓45'00	
greatest brilliancy	5571 Feb 06 23:20	24°♓32'39	-4.9m
retrograde	5571 Feb 16 21:51	26°♓25'46	
evening set	5571 Mar 05 06:37	21°♓12'30	
min. Earth dist.	5571 Mar 09 01:07	18°♓56'43	0.26884 AU
inferior conj	5571 Mar 09 13:19	18°♓37'58	7°54'48
minimum elong	5571 Mar 09 03:41	18°♓52'46	7°53'15
morning rise	5571 Mar 13 00:51	16°♓31'23	
direct	5571 Mar 30 00:50	10°♓54'34	
greatest brilliancy	5571 Apr 08 10:57	12°♓35'03	-4.9m
	5571 May 05 03:40	0°♈	
morning max el	5571 May 19 03:52	13°♈07'35	46°38'44
desc. node	5571 May 23 10:58	17°♈27'00	
	5571 Jun 04 10:08	0°♉	
	5571 Jul 01 09:03	0°♊	
	5571 Jul 27 06:11	0°♋	
	5571 Aug 21 14:45	0°♌	
asc. node	5571 Sep 13 12:12	27°♌28'14	
	5571 Sep 15 14:27	0°♍	
	5571 Oct 10 06:25	0°♎	
	5571 Nov 03 15:54	0°♏	
morning set	5571 Nov 14 08:50	13°♏14'43	
	5571 Nov 27 20:41	0°♐	
max. Earth dist.	5571 Dec 19 16:21	27°♐11'10	1.71927 AU
	5571 Dec 21 22:26	0°♑	
superior conj	5571 Dec 22 09:26	0°♑34'20	0°27'54
minimum elong	5571 Dec 22 15:51	0°♑54'24	0°27'36
desc. node	5572 Jan 03 03:34	15°♑15'56	
	5572 Jan 14 22:09	0°♒	
evening rise	5572 Jan 31 08:51	20°♒36'48	
	5572 Feb 07 20:29	0°♓	
	5572 Mar 02 18:39	0°♈	
	5572 Mar 26 18:50	0°♉	
	5572 Apr 20 00:12	0°♊	
asc. node	5572 Apr 25 04:53	6°♊22'57	
	5572 May 14 14:44	0°♋	
	5572 Jun 08 20:01	0°♌	
	5572 Jul 05 03:27	0°♍	
evening max el	5572 Aug 02 12:37	29°♍36'10	45°34'36
	5572 Aug 02 22:33	0°♎	
desc. node	5572 Aug 14 20:26	10°♎48'51	
greatest brilliancy	5572 Sep 10 05:06	27°♎38'57	-4.7m
retrograde	5572 Sep 20 06:55	29°♎28'42	
evening set	5572 Oct 08 10:07	23°♎19'27	
inferior conj	5572 Oct 11 17:06	21°♎17'33	-8°37'18
minimum elong	5572 Oct 11 17:32	21°♎16'52	8°37'18
min. Earth dist.	5572 Oct 12 02:55	21°♎02'13	0.28979 AU
morning rise	5572 Oct 15 00:51	19°♎14'15	
direct	5572 Nov 02 06:04	12°♎59'30	
greatest brilliancy	5572 Nov 13 03:20	15°♎09'38	-4.8m
asc. node	5572 Dec 05 21:39	29°♎43'26	
	5572 Dec 06 05:32	0°♏	
morning max el	5572 Dec 22 03:56	14°♏45'19	46°21'50
	5573 Jan 05 18:52	0°♐	
	5573 Feb 01 07:36	0°♑	
	5573 Feb 26 12:18	0°♒	
	5573 Mar 23 02:43	0°♓	
desc. node	5573 Mar 27 13:17	5°♓27'28	
	5573 Apr 16 10:24	0°♈	
	5573 May 10 15:32	0°♉	
	5573 Jun 03 20:43	0°♊	
morning set	5573 Jun 26 17:11	28°♊14'48	
	5573 Jun 28 03:16	0°♋	
asc. node	5573 Jul 18 14:19	25°♋13'57	
	5573 Jul 22 11:12	0°♌	
superior conj	5573 Aug 03 04:47	14°♌26'58	0°36'18
minimum elong	5573 Aug 02 21:41	14°♌05'09	0°35'58
max. Earth dist.	5573 Aug 03 21:55	15°♌19'44	1.73353 AU
	5573 Aug 15 19:54	0°♍	
evening rise	5573 Sep 08 10:57	29°♍04'19	
	5573 Sep 09 05:04	0°♎	
	5573 Oct 03 15:07	0°♏	
	5573 Oct 28 02:57	0°♐	
desc. node	5573 Nov 07 05:55	12°♐22'03	
	5573 Nov 21 17:14	0°♑	
	5573 Dec 16 10:39	0°♒	
	5574 Jan 10 09:35	0°♓	
	5574 Feb 04 21:35	0°♈	
asc. node	5574 Feb 28 07:10	26°♈12'35	
	5574 Mar 03 20:21	0°♉	
evening max el	5574 Mar 11 03:47	7°♉34'50	47°03'18
	5574 Apr 05 05:34	0°♊	
greatest brilliancy	5574 Apr 20 09:38	8°♊37'58	-4.9m
retrograde	5574 Apr 30 18:45	10°♊39'19	
evening set	5574 May 17 08:39	5°♊15'56	
inferior conj	5574 May 21 17:35	2°♊35'33	6°30'49
minimum elong	5574 May 22 04:09	2°♊19'06	6°28'31
min. Earth dist.	5574 May 21 14:47	2°♊39'54	0.27748 AU
	5574 May 25 23:52	30°℞♉	
morning rise	5574 May 27 00:03	29°♉25'25	
direct	5574 Jun 11 16:11	24°♉39'17	
desc. node	5574 Jun 19 22:36	25°♉56'17	
greatest brilliancy	5574 Jun 21 08:16	26°♉23'23	-4.8m
	5574 Jun 29 07:08	0°♊	
morning max el	5574 Jul 30 20:27	25°♊11'26	45°53'58
	5574 Aug 04 18:32	0°♋	
	5574 Sep 02 04:52	0°♌	
	5574 Sep 28 16:27	0°♍	
asc. node	5574 Oct 11 00:04	14°♍23'01	
	5574 Oct 24 04:01	0°♎	
	5574 Nov 18 00:01	0°♏	
	5574 Dec 12 09:43	0°♐	
	5575 Jan 05 12:59	0°♑	
morning set	5575 Jan 25 17:50	25°♑16'08	
	5575 Jan 29 12:25	0°♒	
desc. node	5575 Jan 30 15:24	1°♒24'36	
	5575 Feb 22 09:37	0°♓	
superior conj	5575 Mar 07 21:21	16°♓58'04	-1°13'47
minimum elong	5575 Mar 07 10:24	16°♓23'36	1°13'30
max. Earth dist.	5575 Mar 08 09:05	17°♓34'57	1.71148 AU
	5575 Mar 18 05:57	0°♈	
	5575 Apr 11 03:08	0°♉	
evening rise	5575 Apr 17 16:23	8°♉12'34	
	5575 May 05 03:11	0°♊	
asc. node	5575 May 23 16:40	23°♊02'18	
	5575 May 29 07:58	0°♋	
	5575 Jun 22 19:11	0°♌	
	5575 Jul 17 14:58	0°♍	
	5575 Aug 11 23:23	0°♎	
	5575 Sep 07 05:08	0°♏	
desc. node	5575 Sep 12 08:11	5°♏41'04	
	5575 Oct 05 05:55	0°♐	
evening max el	5575 Oct 14 07:28	8°♐56'43	45°55'03
	5575 Nov 08 10:51	0°♑	
greatest brilliancy	5575 Nov 22 23:34	7°♑31'02	-4.8m
retrograde	5575 Dec 02 07:09	9°♑06'19	

evening set	5575 Dec 17 08:31	4°♑44'26	
inferior conj	5575 Dec 23 03:02	1°♑20'05	-2°49'21
minimum elong	5575 Dec 23 09:13	1°♑10'34	2°47'28
min. Earth dist.	5575 Dec 23 20:32	0°♑53'09	0.27267 AU
	5575 Dec 25 07:18	30°℞♐	
morning rise	5575 Dec 29 09:10	27°♐38'25	
asc. node	5576 Jan 03 09:27	25°♐17'51	
direct	5576 Jan 13 00:13	23°♐25'14	
greatest brilliancy	5576 Jan 23 21:49	25°♐38'41	-4.9m
	5576 Feb 01 11:16	0°♑	
morning max el	5576 Mar 03 14:26	26°♑31'39	46°57'45
	5576 Mar 06 23:49	0°♒	
	5576 Apr 03 08:46	0°♓	
desc. node	5576 Apr 24 01:09	24°♓03'38	
	5576 Apr 29 01:33	0°♈	
	5576 May 24 02:31	0°♉	
	5576 Jun 17 20:56	0°♊	
	5576 Jul 12 12:48	0°♋	
	5576 Aug 06 03:06	0°♌	
asc. node	5576 Aug 15 02:19	10°♌57'36	
	5576 Aug 30 15:21	0°♍	
morning set	5576 Sep 03 11:10	4°♍41'43	
	5576 Sep 24 00:58	0°♎	
max. Earth dist.	5576 Oct 07 19:10	16°♎58'32	1.73148 AU
superior conj	5576 Oct 09 22:20	19°♎36'29	1°25'29
minimum elong	5576 Oct 09 22:19	19°♎36'27	1°25'30
	5576 Oct 18 08:09	0°♏	
	5576 Nov 11 13:50	0°♐	
evening rise	5576 Nov 15 23:27	5°♐27'03	
desc. node	5576 Dec 04 17:43	28°♐42'13	
	5576 Dec 05 18:48	0°♑	
	5576 Dec 29 23:23	0°♒	
	5577 Jan 23 04:02	0°♓	
	5577 Feb 16 10:37	0°♈	
	5577 Mar 12 23:31	0°♉	
asc. node	5577 Mar 27 18:57	17°♉47'43	
	5577 Apr 07 02:52	0°♊	
	5577 May 03 13:03	0°♋	
evening max el	5577 May 21 14:17	18°♋51'23	46°13'35
	5577 Jun 02 10:25	0°♌	
greatest brilliancy	5577 Jun 29 03:34	18°♌03'51	-4.8m
retrograde	5577 Jul 10 04:49	20°♌18'15	
desc. node	5577 Jul 17 10:34	19°♌15'12	
evening set	5577 Jul 25 09:15	15°♌50'06	
min. Earth dist.	5577 Jul 31 04:44	12°♌21'08	0.28737 AU
inferior conj	5577 Jul 31 16:05	12°♌03'20	-3°20'22
minimum elong	5577 Jul 31 09:08	12°♌14'14	3°18'27
morning rise	5577 Aug 06 09:21	8°♌35'41	
direct	5577 Aug 22 02:07	3°♌52'26	
greatest brilliancy	5577 Sep 01 02:00	5°♌39'42	-4.7m
	5577 Oct 06 00:28	0°♍	
morning max el	5577 Oct 09 18:24	3°♍31'57	45°44'13
	5577 Nov 04 09:31	0°♎	
asc. node	5577 Nov 07 11:56	3°♎24'20	
	5577 Nov 30 20:33	0°♏	
	5577 Dec 26 01:30	0°♐	
	5578 Jan 19 14:51	0°♑	
	5578 Feb 12 19:51	0°♒	
desc. node	5578 Feb 27 03:22	17°♒51'24	
	5578 Mar 08 20:22	0°♓	
	5578 Apr 01 18:51	0°♈	
morning set	5578 Apr 12 12:39	13°♈28'07	
	5578 Apr 25 17:19	0°♉	
	5578 May 19 17:37	0°♊	
superior conj	5578 May 22 07:07	3°♊11'36	-1°02'34
minimum elong	5578 May 22 18:01	3°♊45'32	1°02'13
max. Earth dist.	5578 May 26 00:58	7°♊51'16	1.72171 AU
	5578 Jun 12 20:56	0°♋	
asc. node	5578 Jun 20 04:33	9°♋03'38	
evening rise	5578 Jun 30 01:45	21°♋16'15	
	5578 Jul 07 03:41	0°♌	
	5578 Jul 31 13:59	0°♍	
	5578 Aug 25 04:33	0°♎	
	5578 Sep 19 01:06	0°♏	
desc. node	5578 Oct 09 19:59	24°♏45'47	
	5578 Oct 14 06:24	0°♐	
	5578 Nov 09 00:43	0°♑	
	5578 Dec 05 18:19	0°♒	
evening max el	5578 Dec 26 00:15	21°♒14'02	46°50'26
	5579 Jan 04 02:21	0°♓	
asc. node	5579 Jan 30 21:28	20°♓05'41	
greatest brilliancy	5579 Feb 04 11:45	22°♓04'38	-4.9m
retrograde	5579 Feb 14 11:10	23°♓58'29	
evening set	5579 Mar 02 14:54	18°♓51'26	
min. Earth dist.	5579 Mar 06 13:37	16°♓29'51	0.26859 AU
inferior conj	5579 Mar 07 01:56	16°♓10'59	7°42'20
minimum elong	5579 Mar 06 15:51	16°♓26'26	7°40'36
morning rise	5579 Mar 10 16:55	13°♓59'39	
direct	5579 Mar 27 13:32	8°♓27'45	
greatest brilliancy	5579 Apr 05 23:43	10°♓08'48	-4.9m
	5579 May 05 09:55	0°♈	
morning max el	5579 May 16 18:15	10°♈47'07	46°40'15
desc. node	5579 May 22 12:54	16°♈37'50	
	5579 Jun 04 04:09	0°♉	
	5579 Jun 30 23:31	0°♊	
	5579 Jul 26 19:00	0°♋	
	5579 Aug 21 02:38	0°♌	
asc. node	5579 Sep 12 14:10	26°♌59'55	
	5579 Sep 15 01:46	0°♍	
	5579 Oct 09 17:23	0°♎	
	5579 Nov 03 02:42	0°♏	
morning set	5579 Nov 12 00:58	11°♏02'37	
	5579 Nov 27 07:27	0°♐	
max. Earth dist.	5579 Dec 17 06:39	24°♐52'19	1.71969 AU
superior conj	5579 Dec 19 22:50	28°♐12'36	0°31'20
minimum elong	5579 Dec 20 05:54	28°♐34'39	0°31'02
	5579 Dec 21 09:15	0°♑	
desc. node	5580 Jan 02 05:37	14°♑48'26	
	5580 Jan 14 09:02	0°♒	
evening rise	5580 Jan 28 20:32	18°♒08'34	
	5580 Feb 07 07:30	0°♓	
	5580 Mar 02 05:47	0°♈	
	5580 Mar 26 06:09	0°♉	
	5580 Apr 19 11:49	0°♊	
asc. node	5580 Apr 24 06:49	5°♊53'00	
	5580 May 14 02:51	0°♋	
	5580 Jun 08 09:12	0°♌	
	5580 Jul 04 19:00	0°♍	
evening max el	5580 Jul 31 05:06	27°♍27'20	45°34'52
	5580 Aug 02 21:14	0°♎	
desc. node	5580 Aug 13 22:28	9°♎50'39	
greatest brilliancy	5580 Sep 07 19:04	25°♎27'27	-4.7m
retrograde	5580 Sep 17 22:40	27°♎18'23	
evening set	5580 Oct 06 01:08	21°♎10'10	
inferior conj	5580 Oct 09 08:59	19°♎06'42	-8°37'05
minimum elong	5580 Oct 09 08:38	19°♎07'15	8°37'05
min. Earth dist.	5580 Oct 09 17:19	18°♎53'40	0.29010 AU
morning rise	5580 Oct 12 16:03	17°♎04'17	
direct	5580 Oct 30 22:49	10°♎48'38	
greatest brilliancy	5580 Nov 10 17:52	12°♎56'46	-4.8m
asc. node	5580 Dec 04 23:39	28°♎42'37	

	5580 Dec 06 11:31	0°♏	
morning max el	5580 Dec 19 19:26	12°♏30'33	46°20'06
	5581 Jan 05 12:22	0°♐	
	5581 Jan 31 21:51	0°♑	
	5581 Feb 26 01:07	0°♒	
	5581 Mar 22 14:45	0°♓	
desc. node	5581 Mar 26 15:09	4°♓56'29	
	5581 Apr 15 21:57	0°♈	
	5581 May 10 02:43	0°♉	
	5581 Jun 03 07:37	0°♊	
morning set	5581 Jun 24 09:20	26°♊03'31	
	5581 Jun 27 13:57	0°♋	
asc. node	5581 Jul 17 16:26	24°♋47'56	
	5581 Jul 21 21:44	0°♌	
superior conj	5581 Jul 31 22:09	12°♌20'16	0°33'20
minimum elong	5581 Jul 31 15:32	11°♌59'52	0°33'00
max. Earth dist.	5581 Aug 01 20:21	13°♌28'37	1.73335 AU
	5581 Aug 15 06:25	0°♍	
evening rise	5581 Sep 06 05:14	27°♍00'21	
	5581 Sep 08 15:40	0°♎	
	5581 Oct 03 01:56	0°♏	
	5581 Oct 27 14:05	0°♐	
desc. node	5581 Nov 06 07:50	11°♐53'20	
	5581 Nov 21 04:51	0°♑	
	5581 Dec 15 22:58	0°♒	
	5582 Jan 09 22:59	0°♓	
	5582 Feb 04 12:58	0°♈	
asc. node	5582 Feb 27 09:08	25°♈26'39	
	5582 Mar 03 16:29	0°♉	
evening max el	5582 Mar 08 18:30	5°♉14'25	47°04'06
	5582 Apr 06 04:02	0°♊	
greatest brilliancy	5582 Apr 18 01:25	6°♊19'30	-4.9m
retrograde	5582 Apr 28 09:08	8°♊19'24	
evening set	5582 May 15 02:17	2°♊52'00	
inferior conj	5582 May 19 07:49	0°♊16'25	6°46'20
minimum elong	5582 May 19 18:20	0°♊00'01	6°44'09
min. Earth dist.	5582 May 19 05:03	0°♊20'44	0.27715 AU
	5582 May 19 18:20	30°℞♉	
morning rise	5582 May 24 10:46	27°♉10'57	
direct	5582 Jun 09 06:07	22°♉20'53	
greatest brilliancy	5582 Jun 18 21:24	24°♉04'09	-4.8m
desc. node	5582 Jun 19 00:40	24°♉06'58	
	5582 Jun 30 17:48	0°♊	
morning max el	5582 Jul 28 10:22	22°♊54'58	45°55'10
	5582 Aug 04 14:57	0°♋	
	5582 Sep 01 19:48	0°♌	
	5582 Sep 28 05:15	0°♍	
asc. node	5582 Oct 10 02:02	13°♍52'46	
	5582 Oct 23 15:48	0°♎	
	5582 Nov 17 11:17	0°♏	
	5582 Dec 11 20:44	0°♐	
	5583 Jan 04 23:52	0°♑	
morning set	5583 Jan 23 05:17	22°♑47'41	
	5583 Jan 28 23:14	0°♒	
desc. node	5583 Jan 29 17:29	0°♒57'13	
	5583 Feb 21 20:24	0°♓	
superior conj	5583 Mar 05 07:42	14°♓25'45	-1°11'34
minimum elong	5583 Mar 04 20:20	13°♓50'02	1°11'14
max. Earth dist.	5583 Mar 05 11:55	14°♓39'01	1.71144 AU
	5583 Mar 17 16:44	0°♈	
	5583 Apr 10 13:56	0°♉	
evening rise	5583 Apr 15 03:06	5°♉42'00	
	5583 May 04 14:01	0°♊	
asc. node	5583 May 22 18:44	22°♊34'51	
	5583 May 28 18:56	0°♋	
	5583 Jun 22 06:25	0°♌	
	5583 Jul 17 02:43	0°♍	
	5583 Aug 11 12:07	0°♎	
	5583 Sep 06 19:55	0°♏	
desc. node	5583 Sep 11 10:07	5°♏04'07	
	5583 Oct 05 01:58	0°♐	
evening max el	5583 Oct 11 20:15	6°♐37'24	45°53'18
	5583 Nov 09 15:20	0°♑	
greatest brilliancy	5583 Nov 20 13:28	5°♑11'34	-4.8m
retrograde	5583 Nov 29 19:39	6°♑46'04	
evening set	5583 Dec 15 00:07	2°♑20'27	
	5583 Dec 19 00:49	30°℞♐	
inferior conj	5583 Dec 20 16:34	28°♐59'09	-3°10'51
minimum elong	5583 Dec 20 23:26	28°♐48'36	3°08'49
min. Earth dist.	5583 Dec 21 11:27	28°♐30'08	0.27328 AU
morning rise	5583 Dec 26 21:54	25°♐18'18	
asc. node	5584 Jan 02 11:36	22°♐23'17	
direct	5584 Jan 10 13:49	21°♐02'59	
greatest brilliancy	5584 Jan 21 13:53	23°♐18'31	-4.9m
	5584 Feb 02 16:41	0°♑	
morning max el	5584 Mar 01 03:53	24°♑07'29	46°57'24
	5584 Mar 06 20:38	0°♒	
	5584 Apr 03 00:22	0°♓	
desc. node	5584 Apr 23 03:11	23°♓28'54	
	5584 Apr 28 15:01	0°♈	
	5584 May 23 14:49	0°♉	
	5584 Jun 17 08:31	0°♊	
	5584 Jul 11 23:54	0°♋	
	5584 Aug 05 13:53	0°♌	
asc. node	5584 Aug 14 04:15	10°♌30'53	
	5584 Aug 30 01:56	0°♍	
morning set	5584 Sep 01 04:44	2°♍35'52	
	5584 Sep 23 11:26	0°♎	
max. Earth dist.	5584 Oct 05 15:00	14°♎59'16	1.73178 AU
superior conj	5584 Oct 07 16:09	17°♎31'00	1°25'25
minimum elong	5584 Oct 07 15:26	17°♎28'49	1°25'26
	5584 Oct 17 18:38	0°♏	
	5584 Nov 11 00:27	0°♐	
evening rise	5584 Nov 13 15:19	3°♐14'35	
desc. node	5584 Dec 03 19:50	28°♐15'12	
	5584 Dec 05 05:39	0°♑	
	5584 Dec 29 10:32	0°♒	
	5585 Jan 22 15:32	0°♓	
	5585 Feb 15 22:35	0°♈	
	5585 Mar 12 12:12	0°♉	
asc. node	5585 Mar 26 20:54	17°♉13'43	
	5585 Apr 06 16:55	0°♊	
	5585 May 03 06:12	0°♋	
evening max el	5585 May 19 04:57	16°♋35'25	46°15'40
	5585 Jun 02 15:06	0°♌	
greatest brilliancy	5585 Jun 26 19:30	15°♌52'46	-4.8m
retrograde	5585 Jul 07 21:19	18°♌08'04	
desc. node	5585 Jul 16 12:39	16°♌37'55	
evening set	5585 Jul 23 00:22	13°♌40'52	
inferior conj	5585 Jul 29 08:07	9°♌53'13	-3°01'32
minimum elong	5585 Jul 29 01:43	10°♌03'13	2°59'44
min. Earth dist.	5585 Jul 28 20:54	10°♌10'47	0.28702 AU
morning rise	5585 Aug 04 03:25	6°♌23'02	
direct	5585 Aug 19 17:26	1°♌42'35	
greatest brilliancy	5585 Aug 29 17:52	3°♌30'29	-4.7m
	5585 Oct 05 23:37	0°♍	
morning max el	5585 Oct 07 10:24	1°♍22'41	45°43'49
	5585 Nov 04 01:07	0°♎	
asc. node	5585 Nov 06 13:57	2°♎47'48	
	5585 Nov 30 09:42	0°♏	
	5585 Dec 25 13:35	0°♐	

	5586 Jan 19 02:25	0°♉	
	5586 Feb 12 07:08	0°♒	
desc. node	5586 Feb 26 05:16	17°♒22'29	
	5586 Mar 08 07:28	0°♓	
	5586 Apr 01 05:48	0°♈	
morning set	5586 Apr 09 23:31	10°♈57'34	
	5586 Apr 25 04:08	0°♉	
	5586 May 19 04:20	0°♊	
superior conj	5586 May 19 20:18	0°♊49'47	-1°05'07
minimum elong	5586 May 20 07:13	1°♊23'47	1°04'46
max. Earth dist.	5586 May 23 13:11	5°♊26'38	1.72118 AU
	5586 Jun 12 07:36	0°♋	
asc. node	5586 Jun 19 06:36	8°♋37'02	
evening rise	5586 Jun 27 17:29	19°♋03'49	
	5586 Jul 06 14:22	0°♌	
	5586 Jul 31 00:49	0°♍	
	5586 Aug 24 15:41	0°♎	
	5586 Sep 18 12:47	0°♏	
desc. node	5586 Oct 08 21:59	24°♏15'01	
	5586 Oct 13 19:01	0°♐	
	5586 Nov 08 14:58	0°♑	
	5586 Dec 05 11:59	0°♒	
evening max el	5586 Dec 23 14:40	18°♒53'21	46°48'44
	5587 Jan 04 06:49	0°♓	
asc. node	5587 Jan 29 23:21	18°♓22'27	
greatest brilliancy	5587 Feb 01 23:40	19°♓36'21	-4.9m
retrograde	5587 Feb 12 00:21	21°♓30'54	
evening set	5587 Feb 27 23:08	16°♓30'07	
min. Earth dist.	5587 Mar 04 01:54	14°♓02'45	0.26838 AU
inferior conj	5587 Mar 04 14:22	13°♓43'40	7°28'52
minimum elong	5587 Mar 04 03:57	13°♓59'37	7°26'55
morning rise	5587 Mar 08 08:55	11°♓27'21	
direct	5587 Mar 25 02:36	6°♓00'43	
greatest brilliancy	5587 Apr 03 12:13	7°♓41'46	-4.9m
	5587 May 05 14:17	0°♈	
morning max el	5587 May 14 08:28	8°♈25'58	46°41'41
desc. node	5587 May 21 14:59	15°♈49'38	
	5587 Jun 03 21:49	0°♉	
	5587 Jun 30 13:50	0°♊	
	5587 Jul 26 07:41	0°♋	
	5587 Aug 20 14:22	0°♌	
asc. node	5587 Sep 11 16:04	26°♌31'48	
	5587 Sep 14 12:56	0°♍	
	5587 Oct 09 04:15	0°♎	
	5587 Nov 02 13:26	0°♏	
morning set	5587 Nov 09 17:27	8°♏51'57	
	5587 Nov 26 18:10	0°♐	
max. Earth dist.	5587 Dec 14 19:26	22°♐29'03	1.72010 AU
superior conj	5587 Dec 17 12:51	25°♐53'04	0°34'41
minimum elong	5587 Dec 17 20:30	26°♐16'55	0°34'21
	5587 Dec 20 19:59	0°♑	
desc. node	5588 Jan 01 07:39	14°♑21'08	
	5588 Jan 13 19:51	0°♒	
evening rise	5588 Jan 26 08:37	15°♒41'53	
	5588 Feb 06 18:26	0°♓	
	5588 Mar 01 16:54	0°♈	
	5588 Mar 25 17:30	0°♉	
	5588 Apr 18 23:31	0°♊	
asc. node	5588 Apr 23 08:52	5°♊23'09	
	5588 May 13 15:08	0°♋	
	5588 Jun 07 22:36	0°♌	
	5588 Jul 04 10:54	0°♍	
evening max el	5588 Jul 28 21:05	25°♍17'03	45°35'22
	5588 Aug 02 21:00	0°♎	
desc. node	5588 Aug 13 00:23	8°♎50'50	
greatest brilliancy	5588 Sep 05 09:51	23°♎17'05	-4.7m
retrograde	5588 Sep 15 14:11	25°♎08'34	
evening set	5588 Oct 03 16:05	19°♎01'54	
inferior conj	5588 Oct 07 01:05	16°♎56'25	-8°36'14
minimum elong	5588 Oct 06 23:57	16°♎58'12	8°36'12
min. Earth dist.	5588 Oct 07 08:11	16°♎45'17	0.29036 AU
morning rise	5588 Oct 10 07:45	14°♎54'23	
direct	5588 Oct 28 15:27	8°♎38'20	
greatest brilliancy	5588 Nov 08 08:48	10°♎44'36	-4.8m
asc. node	5588 Dec 04 01:44	27°♎43'25	
	5588 Dec 06 15:30	0°♏	
morning max el	5588 Dec 17 10:13	10°♏14'01	46°18'28
	5589 Jan 05 05:32	0°♐	
	5589 Jan 31 11:58	0°♑	
	5589 Feb 25 13:53	0°♒	
	5589 Mar 22 02:47	0°♓	
desc. node	5589 Mar 25 17:12	4°♓26'01	
	5589 Apr 15 09:32	0°♈	
	5589 May 09 14:00	0°♉	
	5589 Jun 02 18:40	0°♊	
morning set	5589 Jun 22 01:11	23°♊50'37	
	5589 Jun 27 00:48	0°♋	
asc. node	5589 Jul 16 18:22	24°♋20'45	
	5589 Jul 21 08:28	0°♌	
superior conj	5589 Jul 29 15:14	10°♌12'05	0°30'16
minimum elong	5589 Jul 29 09:07	9°♌53'14	0°29'58
max. Earth dist.	5589 Jul 30 16:57	11°♌31'17	1.73311 AU
	5589 Aug 14 17:07	0°♍	
evening rise	5589 Sep 03 23:21	24°♍55'22	
	5589 Sep 08 02:27	0°♎	
	5589 Oct 02 12:54	0°♏	
	5589 Oct 27 01:24	0°♐	
desc. node	5589 Nov 05 09:57	11°♐24'43	
	5589 Nov 20 16:40	0°♑	
	5589 Dec 15 11:31	0°♒	
	5590 Jan 09 12:41	0°♓	
	5590 Feb 04 04:43	0°♈	
asc. node	5590 Feb 26 11:06	24°♈39'47	
	5590 Mar 03 13:22	0°♉	
evening max el	5590 Mar 06 08:17	2°♉51'16	47°04'50
	5590 Apr 07 11:24	0°♊	
greatest brilliancy	5590 Apr 15 17:26	4°♊01'00	-4.9m
retrograde	5590 Apr 25 23:12	5°♊59'26	
evening set	5590 May 12 20:01	0°♊27'47	
	5590 May 13 14:37	30°℞♉	
inferior conj	5590 May 16 22:11	27°♉57'08	7°01'06
minimum elong	5590 May 17 08:35	27°♉40'54	6°59'01
min. Earth dist.	5590 May 16 19:38	28°♉01'07	0.27687 AU
morning rise	5590 May 21 21:29	24°♉56'35	
direct	5590 Jun 06 19:45	20°♉02'05	
greatest brilliancy	5590 Jun 16 11:15	21°♉45'12	-4.8m
desc. node	5590 Jun 18 02:43	22°♉21'26	
	5590 Jul 01 18:43	0°♊	
morning max el	5590 Jul 26 00:02	20°♊36'52	45°56'20
	5590 Aug 04 11:01	0°♋	
	5590 Sep 01 10:51	0°♌	
	5590 Sep 27 18:16	0°♍	
asc. node	5590 Oct 09 04:07	13°♍22'12	
	5590 Oct 23 03:48	0°♎	
	5590 Nov 16 22:45	0°♏	
	5590 Dec 11 07:55	0°♐	
	5591 Jan 04 10:57	0°♑	
morning set	5591 Jan 20 16:59	20°♑19'16	
	5591 Jan 28 10:17	0°♒	
desc. node	5591 Jan 28 19:22	0°♒28'27	
	5591 Feb 21 07:27	0°♓	

superior conj	5591 Mar 02 18:16	11°♓53'21	-1°09'13
minimum elong	5591 Mar 02 06:35	11°♓16'36	1°08'51
max. Earth dist.	5591 Mar 02 13:54	11°♓39'36	1.71142 AU
	5591 Mar 17 03:47	0°♈	
	5591 Apr 10 00:58	0°♉	
evening rise	5591 Apr 12 14:03	3°♉11'23	
	5591 May 04 01:05	0°♊	
asc. node	5591 May 21 20:46	22°♊06'36	
	5591 May 28 06:09	0°♋	
	5591 Jun 21 17:57	0°♌	
	5591 Jul 16 14:48	0°♍	
	5591 Aug 11 01:17	0°♎	
	5591 Sep 06 11:17	0°♏	
desc. node	5591 Sep 10 12:09	4°♏26'05	
	5591 Oct 04 23:05	0°♐	
evening max el	5591 Oct 09 09:19	4°♐18'05	45°51'48
	5591 Nov 11 08:54	0°♑	
greatest brilliancy	5591 Nov 18 02:54	2°♑51'18	-4.8m
retrograde	5591 Nov 27 08:51	4°♑25'51	
evening set	5591 Dec 12 16:01	29°♐56'05	
	5591 Dec 12 13:09	30°℞♐	
inferior conj	5591 Dec 18 06:16	26°♐37'59	-3°31'51
minimum elong	5591 Dec 18 13:46	26°♐26'28	3°29'39
min. Earth dist.	5591 Dec 19 02:06	26°♐07'31	0.27392 AU
morning rise	5591 Dec 24 10:39	22°♐58'30	
asc. node	5592 Jan 01 13:29	19°♐34'14	
direct	5592 Jan 08 03:55	18°♐40'29	
greatest brilliancy	5592 Jan 19 05:42	20°♐57'51	-4.9m
	5592 Feb 03 14:20	0°♑	
morning max el	5592 Feb 27 18:28	21°♑45'27	46°56'55
	5592 Mar 06 17:06	0°♒	
	5592 Apr 02 16:04	0°♓	
desc. node	5592 Apr 22 05:13	22°♓53'29	
	5592 Apr 28 04:40	0°♈	
	5592 May 23 03:21	0°♉	
	5592 Jun 16 20:21	0°♊	
	5592 Jul 11 11:16	0°♋	
	5592 Aug 05 00:57	0°♌	
asc. node	5592 Aug 13 06:12	10°♌03'15	
morning set	5592 Aug 29 22:19	0°♍29'10	
	5592 Aug 29 12:49	0°♍	
	5592 Sep 22 22:15	0°♎	
max. Earth dist.	5592 Oct 03 11:42	13°♎01'35	1.73207 AU
superior conj	5592 Oct 05 09:57	15°♎24'20	1°25'14
minimum elong	5592 Oct 05 08:32	15°♎19'58	1°25'14
	5592 Oct 17 05:29	0°♏	
	5592 Nov 10 11:25	0°♐	
evening rise	5592 Nov 11 07:13	1°♐01'16	
desc. node	5592 Dec 02 21:47	27°♐46'41	
	5592 Dec 04 16:50	0°♑	
	5592 Dec 28 21:59	0°♒	
	5593 Jan 22 03:22	0°♓	
	5593 Feb 15 10:54	0°♈	
	5593 Mar 12 01:19	0°♉	
asc. node	5593 Mar 25 22:58	16°♉38'51	
	5593 Apr 06 07:29	0°♊	
	5593 May 03 00:08	0°♋	
evening max el	5593 May 16 20:37	14°♋20'55	46°17'50
	5593 Jun 02 22:21	0°♌	
greatest brilliancy	5593 Jun 24 11:11	13°♌40'36	-4.8m
retrograde	5593 Jul 05 14:11	15°♌57'03	
desc. node	5593 Jul 15 14:29	13°♌55'47	
evening set	5593 Jul 20 15:45	11°♌30'43	
min. Earth dist.	5593 Jul 26 12:46	8°♌00'04	0.28667 AU
inferior conj	5593 Jul 27 00:09	7°♌42'15	-2°42'23
minimum elong	5593 Jul 26 18:22	7°♌51'18	2°40'45
morning rise	5593 Aug 01 21:24	4°♌09'47	
	5593 Aug 12 13:06	30°℞♋	
direct	5593 Aug 17 09:23	29°♋32'03	
	5593 Aug 22 08:51	0°♌	
greatest brilliancy	5593 Aug 27 09:13	1°♌19'59	-4.7m
morning max el	5593 Oct 05 02:52	29°♌13'43	45°43'18
	5593 Oct 05 22:11	0°♍	
	5593 Nov 03 16:51	0°♎	
asc. node	5593 Nov 05 16:00	2°♎10'34	
	5593 Nov 29 23:08	0°♏	
	5593 Dec 25 01:59	0°♐	
	5594 Jan 18 14:17	0°♑	
	5594 Feb 11 18:41	0°♒	
desc. node	5594 Feb 25 07:18	16°♒53'10	
	5594 Mar 07 18:50	0°♓	
	5594 Mar 31 17:01	0°♈	
morning set	5594 Apr 07 10:15	8°♈25'37	
	5594 Apr 24 15:16	0°♉	
superior conj	5594 May 17 09:19	28°♉26'14	-1°07'32
minimum elong	5594 May 17 20:09	29°♉00'01	1°07'13
	5594 May 18 15:23	0°♊	
max. Earth dist.	5594 May 21 02:40	3°♊04'43	1.72067 AU
	5594 Jun 11 18:37	0°♋	
asc. node	5594 Jun 18 08:32	8°♋09'00	
evening rise	5594 Jun 25 09:08	16°♋50'01	
	5594 Jul 06 01:23	0°♌	
	5594 Jul 30 11:57	0°♍	
	5594 Aug 24 03:07	0°♎	
	5594 Sep 18 00:49	0°♏	
desc. node	5594 Oct 08 00:04	23°♏43'26	
	5594 Oct 13 08:03	0°♐	
	5594 Nov 08 05:47	0°♑	
	5594 Dec 05 06:29	0°♒	
evening max el	5594 Dec 21 05:30	16°♒32'40	46°47'01
	5595 Jan 04 13:47	0°♓	
asc. node	5595 Jan 29 01:21	16°♓34'31	
greatest brilliancy	5595 Jan 30 12:05	17°♓07'56	-4.9m
retrograde	5595 Feb 09 13:23	19°♓02'27	
evening set	5595 Feb 25 07:39	14°♓08'07	
min. Earth dist.	5595 Mar 01 14:26	11°♓34'50	0.26815 AU
inferior conj	5595 Mar 02 02:53	11°♓15'45	7°14'29
minimum elong	5595 Mar 01 16:13	11°♓32'06	7°12'23
morning rise	5595 Mar 06 00:59	8°♓54'19	
direct	5595 Mar 22 15:45	3°♓33'20	
greatest brilliancy	5595 Apr 01 00:51	5°♓14'10	-4.9m
	5595 May 05 17:15	0°♈	
morning max el	5595 May 11 21:45	6°♈01'45	46°42'55
desc. node	5595 May 20 17:01	15°♈01'28	
	5595 Jun 03 15:21	0°♉	
	5595 Jun 30 04:15	0°♊	
	5595 Jul 25 20:32	0°♋	
	5595 Aug 20 02:18	0°♌	
asc. node	5595 Sep 10 18:13	26°♌03'47	
	5595 Sep 14 00:18	0°♍	
	5595 Oct 08 15:19	0°♎	
	5595 Nov 02 00:22	0°♏	
morning set	5595 Nov 07 10:03	6°♏40'59	
	5595 Nov 26 05:06	0°♐	
max. Earth dist.	5595 Dec 12 06:48	20°♐00'43	1.72057 AU
superior conj	5595 Dec 15 02:56	23°♐33'05	0°37'57
minimum elong	5595 Dec 15 11:06	23°♐58'32	0°37'36
	5595 Dec 20 06:59	0°♑	
desc. node	5595 Dec 31 09:37	13°♑52'44	
	5596 Jan 13 06:57	0°♒	
evening rise	5596 Jan 23 20:30	13°♒13'44	

	5596 Feb 06 05:39	0°♓	
	5596 Mar 01 04:16	0°♈	
	5596 Mar 25 05:05	0°♉	
	5596 Apr 18 11:26	0°♊	
asc. node	5596 Apr 22 10:53	4°♊52'35	
	5596 May 13 03:40	0°♋	
	5596 Jun 07 12:21	0°♌	
	5596 Jul 04 03:20	0°♍	
evening max el	5596 Jul 26 12:14	23°♍04'05	45°35'55
	5596 Aug 02 22:14	0°♎	
desc. node	5596 Aug 12 02:30	7°♎49'31	
greatest brilliancy	5596 Sep 03 01:06	21°♎06'45	-4.7m
retrograde	5596 Sep 13 05:31	22°♎58'32	
evening set	5596 Oct 01 06:43	16°♎53'58	
inferior conj	5596 Oct 04 17:13	14°♎46'04	-8°34'31
minimum elong	5596 Oct 04 15:19	14°♎49'04	8°34'28
min. Earth dist.	5596 Oct 04 23:24	14°♎36'22	0.29058 AU
morning rise	5596 Oct 07 23:50	12°♎43'54	
direct	5596 Oct 26 07:32	6°♎27'56	
greatest brilliancy	5596 Nov 06 00:13	8°♎32'56	-4.8m
asc. node	5596 Dec 03 03:40	26°♎45'07	
	5596 Dec 06 17:56	0°♏	
morning max el	5596 Dec 15 00:05	7°♏55'01	46°16'46
	5597 Jan 04 22:27	0°♐	
	5597 Jan 31 02:06	0°♑	
	5597 Feb 25 02:45	0°♒	
	5597 Mar 21 14:57	0°♓	
desc. node	5597 Mar 24 19:19	3°♓55'20	
	5597 Apr 14 21:14	0°♈	
	5597 May 09 01:21	0°♉	
	5597 Jun 02 05:45	0°♊	
morning set	5597 Jun 19 16:43	21°♊36'33	
	5597 Jun 26 11:42	0°♋	
asc. node	5597 Jul 15 20:20	23°♋53'30	
	5597 Jul 20 19:16	0°♌	
superior conj	5597 Jul 27 08:14	8°♌03'27	0°27'10
minimum elong	5597 Jul 27 02:39	7°♌46'16	0°26'53
max. Earth dist.	5597 Jul 28 11:41	9°♌27'59	1.73287 AU
	5597 Aug 14 03:54	0°♍	
evening rise	5597 Sep 01 17:30	22°♍50'22	
	5597 Sep 07 13:17	0°♎	
	5597 Oct 01 23:56	0°♏	
	5597 Oct 26 12:44	0°♐	
desc. node	5597 Nov 04 11:57	10°♐55'44	
	5597 Nov 20 04:30	0°♑	
	5597 Dec 15 00:07	0°♒	
	5598 Jan 09 02:30	0°♓	
	5598 Feb 03 20:47	0°♈	
asc. node	5598 Feb 25 13:12	23°♈52'13	
	5598 Mar 03 11:11	0°♉	
evening max el	5598 Mar 03 21:07	0°♉25'16	47°05'29
	5598 Apr 09 10:33	0°♊	
greatest brilliancy	5598 Apr 13 09:12	1°♊41'16	-4.9m
retrograde	5598 Apr 23 13:09	3°♊38'35	
	5598 May 07 01:01	30°℞♉	
evening set	5598 May 10 13:30	28°♉02'25	
inferior conj	5598 May 14 12:20	25°♉36'54	7°15'07
minimum elong	5598 May 14 22:34	25°♉20'58	7°13'12
min. Earth dist.	5598 May 14 10:02	25°♉40'29	0.27659 AU
morning rise	5598 May 19 07:51	22°♉41'41	
direct	5598 Jun 04 08:49	17°♉42'11	
greatest brilliancy	5598 Jun 14 01:08	19°♉25'45	-4.8m
desc. node	5598 Jun 17 04:39	20°♉39'11	
	5598 Jul 02 13:13	0°♊	
morning max el	5598 Jul 23 13:47	18°♊18'49	45°57'37
	5598 Aug 04 06:28	0°♋	
	5598 Sep 01 01:39	0°♌	
	5598 Sep 27 07:08	0°♍	
asc. node	5598 Oct 08 06:05	12°♍51'35	
	5598 Oct 22 15:41	0°♎	
	5598 Nov 16 10:06	0°♏	
	5598 Dec 10 18:59	0°♐	
	5599 Jan 03 21:52	0°♑	
morning set	5599 Jan 18 05:06	17°♑52'44	
desc. node	5599 Jan 27 21:27	0°♒00'54	
	5599 Jan 27 21:10	0°♒	
	5599 Feb 20 18:21	0°♓	
superior conj	5599 Feb 28 04:49	9°♓21'16	-1°06'42
minimum elong	5599 Feb 27 16:55	8°♓43'52	1°06'19
max. Earth dist.	5599 Feb 27 18:39	8°♓49'17	1.71151 AU
	5599 Mar 16 14:42	0°♈	
	5599 Apr 09 11:54	0°♉	
evening rise	5599 Apr 10 00:43	0°♉40'09	
	5599 May 03 12:05	0°♊	
asc. node	5599 May 20 22:40	21°♊38'08	
	5599 May 27 17:18	0°♋	
	5599 Jun 21 05:24	0°♌	
	5599 Jul 16 02:50	0°♍	
	5599 Aug 10 14:25	0°♎	
	5599 Sep 06 02:43	0°♏	
desc. node	5599 Sep 09 14:14	3°♏48'15	
	5599 Oct 04 20:49	0°♐	
evening max el	5599 Oct 06 23:12	2°♐01'22	45°50'24
	5599 Nov 14 03:50	0°♑	
greatest brilliancy	5599 Nov 15 15:58	0°♑31'37	-4.8m
retrograde	5599 Nov 24 22:41	2°♑06'39	
	5599 Dec 05 05:48	30°℞♐	
evening set	5599 Dec 10 08:08	27°♐32'42	
inferior conj	5599 Dec 15 20:01	24°♐17'48	-3°52'20
minimum elong	5599 Dec 16 04:05	24°♐05'24	3°50'01
min. Earth dist.	5599 Dec 16 16:25	23°♐46'29	0.27453 AU
morning rise	5599 Dec 21 23:14	20°♐40'08	
asc. node	5599 Dec 31 15:29	16°♐51'47	
direct	5600 Jan 05 18:33	16°♐19'17	
greatest brilliancy	5600 Jan 16 20:50	18°♐37'38	-4.9m
	5600 Feb 04 05:54	0°♑	
morning max el	5600 Feb 25 09:44	19°♑26'24	46°56'20
	5600 Mar 06 12:32	0°♒	
	5600 Apr 02 07:11	0°♓	
desc. node	5600 Apr 21 07:11	22°♓18'59	
	5600 Apr 27 17:56	0°♈	
	5600 May 22 15:36	0°♉	
	5600 Jun 16 07:57	0°♊	
	5600 Jul 10 22:24	0°♋	
	5600 Aug 04 11:47	0°♌	
asc. node	5600 Aug 12 08:19	9°♌36'53	
morning set	5600 Aug 27 15:42	28°♌22'34	
	5600 Aug 28 23:27	0°♍	
	5600 Sep 22 08:47	0°♎	
max. Earth dist.	5600 Oct 01 09:00	11°♎06'35	1.73233 AU
superior conj	5600 Oct 03 03:36	13°♎18'02	1°24'55
minimum elong	5600 Oct 03 01:29	13°♎11'32	1°24'55
	5600 Oct 16 16:04	0°♏	
evening rise	5600 Nov 08 23:07	28°♏48'47	
	5600 Nov 09 22:08	0°♐	
desc. node	5600 Dec 01 23:45	27°♐18'57	
	5600 Dec 04 03:46	0°♑	
	5600 Dec 28 09:10	0°♒	
	5601 Jan 21 14:51	0°♓	
	5601 Feb 14 22:52	0°♈	
	5601 Mar 11 14:05	0°♉	

asc. node	5601 Mar 25 00:58	16°♉04'51	
	5601 Apr 05 21:47	0°♊	
	5601 May 02 18:05	0°♋	
evening max el	5601 May 14 12:54	12°♋08'49	46°19'45
	5601 Jun 03 07:55	0°♌	
greatest brilliancy	5601 Jun 22 03:07	11°♌29'13	-4.8m
retrograde	5601 Jul 03 06:56	13°♌46'05	
desc. node	5601 Jul 14 16:38	11°♌09'15	
evening set	5601 Jul 18 07:12	9°♌20'45	
min. Earth dist.	5601 Jul 24 04:24	5°♌49'38	0.28631 AU
inferior conj	5601 Jul 24 16:02	5°♌31'28	-2°22'50
minimum elong	5601 Jul 24 10:53	5°♌39'31	2°21'22
morning rise	5601 Jul 30 15:07	1°♌56'50	
	5601 Aug 03 12:08	30°℞♋	
direct	5601 Aug 15 01:30	27°♋21'57	
greatest brilliancy	5601 Aug 24 23:55	29°♋09'10	-4.7m
	5601 Aug 27 06:00	0°♌	
morning max el	5601 Oct 02 18:56	27°♌04'44	45°42'48
	5601 Oct 05 19:31	0°♍	
	5601 Nov 03 07:59	0°♎	
asc. node	5601 Nov 04 17:57	1°♎34'28	
	5601 Nov 29 12:07	0°♏	
	5601 Dec 24 13:59	0°♐	