conjunction	2600 Jul 18 02:06	25°♋49'37	0°59'41	
minimum elong	2600 Jul 18 00:49	25°♋47'31	0°59'41	
	2600 Jul 24 10:40	0°♌		
max. Earth dist.	2600 Aug 04 12:20	7°♌13'25	2.62961 AU	
morning rise	2600 Sep 04 07:14	27°♌02'58		
	2600 Sep 08 22:15	0°♍		
	2600 Oct 26 12:09	0°♎		
	2600 Dec 14 02:21	0°♏		
	2601 Feb 02 14:47	0°♐		
	2601 Mar 31 15:44	0°♑		
desc. node	2601 Apr 06 02:08	2°♑24'59		
retrograde	2601 May 30 13:03	16°♑25'50		
opposition	2601 Jul 02 03:32	10°♑23'28	-4°24'16	
greatest brilliancy	2601 Jul 03 08:26	10°♑00'43	-2.5m	
min. Earth dist.	2601 Jul 10 02:52	7°♑53'51	0.43609 AU	
direct	2601 Aug 06 11:20	3°♑06'55		
	2601 Oct 17 10:36	0°♒		
	2601 Dec 01 10:23	0°♓		
	2602 Jan 12 04:49	0°♈		
asc. node	2602 Feb 05 18:03	17°♈44'11		
	2602 Feb 22 21:00	0°♉		
	2602 Apr 06 15:56	0°♊		
	2602 May 21 00:13	0°♋		
	2602 Jul 05 20:07	0°♌		
evening set	2602 Jul 10 05:54	2°♌50'44		
	2602 Aug 21 15:38	0°♍		
conjunction	2602 Aug 26 13:33	3°♍07'43	1°08'01	
minimum elong	2602 Aug 26 13:52	3°♍08'13	1°08'01	
max. Earth dist.	2602 Aug 28 17:41	4°♍30'41	2.67400 AU	
	2602 Oct 07 18:45	0°♎		
morning rise	2602 Oct 10 07:26	1°♎36'44		
	2602 Nov 23 15:59	0°♏		
	2603 Jan 09 01:51	0°♐		
desc. node	2603 Feb 22 01:03	28°♐36'54		
	2603 Feb 24 04:05	0°♑		
	2603 Apr 11 12:14	0°♒		
	2603 May 30 00:59	0°♓		
	2603 Aug 11 21:43	0°♈		
retrograde	2603 Aug 18 16:21	0°♈18'28		
	2603 Aug 25 09:55	30°℞♓		
min. Earth dist.	2603 Sep 15 14:38	25°♓44'18	0.37484 AU	
opposition	2603 Sep 18 10:15	24°♓58'32	-5°50'57	
greatest brilliancy	2603 Sep 18 01:07	25°♓04'43	-2.9m	
direct	2603 Oct 17 21:17	20°♓02'39		
	2603 Nov 28 17:50	0°♈		
asc. node	2603 Dec 24 16:58	12°♈36'55		
	2604 Jan 24 00:57	0°♉		
	2604 Mar 12 10:35	0°♊		
	2604 Apr 28 21:23	0°♋		
	2604 Jun 15 13:05	0°♌		
	2604 Aug 02 07:24	0°♍		
evening set	2604 Aug 16 13:03	8°♍58'36		
	2604 Sep 18 14:58	0°♎		
max. Earth dist.	2604 Sep 19 15:37	0°♎39'28	2.66383 AU	
conjunction	2604 Sep 30 22:44	7°♎54'40	0°49'54	
minimum elong	2604 Sep 30 23:50	7°♎56'26	0°49'53	
	2604 Nov 03 21:27	0°♏		
morning rise	2604 Nov 14 11:36	6°♏59'35		
	2604 Dec 18 18:11	0°♐		
desc. node	2605 Jan 08 23:51	14°♐33'22		
	2605 Jan 31 03:49	0°♑		
	2605 Mar 14 05:51	0°♒		
	2605 Apr 24 09:41	0°♓		
	2605 Jun 04 10:39	0°♈		
	2605 Jul 17 06:09	0°♉		
	2605 Sep 06 19:10	0°♊		
retrograde	2605 Oct 19 02:53	10°♊56'30		
asc. node	2605 Nov 10 16:44	7°♊15'39		
min. Earth dist.	2605 Nov 16 18:54	5°♊15'09	0.47908 AU	
opposition	2605 Nov 25 00:00	2°♊18'05	0°47'13	
greatest brilliancy	2605 Nov 24 17:30	2°♊23'57	-2.3m	
	2605 Dec 01 14:50	30°℞♉		
direct	2605 Dec 28 11:10	25°♉16'30		
	2606 Jan 26 04:52	0°♊		
	2606 Apr 02 11:41	0°♋		
	2606 May 25 05:05	0°♌		
	2606 Jul 14 03:51	0°♍		
	2606 Aug 31 07:56	0°♎		
evening set	2606 Sep 22 13:28	14°♎14'59		
max. Earth dist.	2606 Oct 14 22:22	28°♎53'33	2.60030 AU	
	2606 Oct 16 14:29	0°♏		
conjunction	2606 Nov 08 00:21	15°♏01'57	0°10'56	
minimum elong	2606 Nov 08 00:45	15°♏02'38	0°10'56	
behind sun begin	2606 Nov 07 09:56	14°♏37'32		
behind sun end	2606 Nov 08 15:34	15°♏27'45		
desc. node	2606 Nov 26 23:27	28°♏02'05		
	2606 Nov 29 19:27	0°♐		
morning rise	2606 Dec 26 00:50	18°♐28'40		
	2607 Jan 11 00:48	0°♑		
	2607 Feb 20 14:02	0°♒		
	2607 Mar 31 23:52	0°♓		
	2607 May 09 23:38	0°♈		
	2607 Jun 18 12:55	0°♉		
	2607 Jul 30 02:28	0°♊		
	2607 Sep 14 15:41	0°♋		
asc. node	2607 Sep 28 14:45	7°♋47'50		
retrograde	2607 Dec 01 04:38	28°♋06'45		
min. Earth dist.	2608 Jan 04 09:28	20°♋21'22	0.60116 AU	
opposition	2608 Jan 09 18:28	18°♋13'27	3°55'29	
greatest brilliancy	2608 Jan 08 23:27	18°♋32'20	-1.6m	
direct	2608 Feb 16 05:11	9°♋32'38		
	2608 Apr 25 20:24	0°♌		
	2608 Jun 21 16:24	0°♍		
	2608 Aug 11 02:09	0°♎		
	2608 Sep 27 00:52	0°♏		
desc. node	2608 Oct 13 22:22	11°♏16'53		
evening set	2608 Nov 01 06:04	23°♏48'40		
	2608 Nov 10 03:16	0°♐		
max. Earth dist.	2608 Nov 15 20:44	4°♐01'43	2.48967 AU	
	2608 Dec 21 19:30	0°♑		
conjunction	2608 Dec 22 21:03	0°♑47'12	-0°39'36	
minimum elong	2608 Dec 22 19:19	0°♑43'59	0°39'35	
	2609 Jan 30 14:43	0°♒		
morning rise	2609 Feb 19 04:01	15°♒06'25		
	2609 Mar 10 05:58	0°♓		
	2609 Apr 17 12:42	0°♈		
	2609 May 26 08:10	0°♉		
	2609 Jul 05 15:26	0°♊		
asc. node	2609 Aug 15 13:47	28°♊39'31		
	2609 Aug 17 13:42	0°♋		
	2609 Oct 04 05:18	0°♌		
	2609 Dec 07 09:09	0°♍		
retrograde	2610 Jan 04 22:00	4°♍36'00		
	2610 Jan 31 05:30	30°℞♌		
min. Earth dist.	2610 Feb 12 13:55	25°♌21'20	0.66884 AU	
opposition	2610 Feb 14 03:19	24°♌43'50	4°34'05	

greatest brilliancy	2610 Feb 13 20:40	24°♌50'30	-1.3m
direct	2610 Mar 26 05:00	15°♌09'00	
	2610 May 22 21:39	0°♍	
	2610 Jul 20 07:01	0°♎	
desc. node	2610 Aug 31 20:29	25°♎50'23	
	2610 Sep 07 08:22	0°♏	
	2610 Oct 21 23:37	0°♐	
	2610 Dec 02 13:39	0°♑	
evening set	2610 Dec 22 22:31	15°♑19'35	
	2611 Jan 11 00:52	0°♒	
max. Earth dist.	2611 Feb 10 08:28	23°♒43'15	2.37149 AU
	2611 Feb 18 07:28	0°♓	
conjunction	2611 Feb 24 02:57	4°♓35'26	-1°03'36
minimum elong	2611 Feb 24 04:09	4°♓37'49	1°03'37
	2611 Mar 28 07:42	0°♈	
	2611 May 05 22:59	0°♉	
morning rise	2611 May 06 04:31	0°♉10'34	
	2611 Jun 15 01:03	0°♊	
asc. node	2611 Jul 03 13:56	13°♊22'56	
	2611 Jul 27 06:50	0°♋	
	2611 Sep 10 09:31	0°♌	
	2611 Oct 29 20:44	0°♍	
	2611 Dec 31 04:14	0°♎	
retrograde	2612 Feb 08 10:43	7°♎50'18	
	2612 Mar 15 05:37	30°℞♍	
opposition	2612 Mar 19 02:55	28°♍28'36	3°47'11
greatest brilliancy	2612 Mar 19 10:12	28°♍21'25	-1.3m
min. Earth dist.	2612 Mar 21 10:30	27°♍33'40	0.67102 AU
direct	2612 Apr 29 11:19	18°♍28'12	
	2612 Jun 17 10:02	0°♎	
desc. node	2612 Jul 18 19:15	14°♎53'01	
	2612 Aug 14 13:42	0°♏	
	2612 Sep 30 08:04	0°♐	
	2612 Nov 11 12:12	0°♑	
	2612 Dec 21 01:33	0°♒	
	2613 Jan 28 07:27	0°♓	
evening set	2613 Mar 01 00:53	25°♓02'53	
	2613 Mar 07 08:14	0°♈	
	2613 Apr 15 02:39	0°♉	
conjunction	2613 May 07 01:33	16°♉31'12	-0°08'51
minimum elong	2613 May 07 02:16	16°♉32'33	0°08'50
behind sun begin	2613 May 06 03:20	15°♉49'54	
behind sun end	2613 May 08 01:13	17°♉15'10	
asc. node	2613 May 20 12:30	26°♉26'59	
	2613 May 25 09:16	0°♊	
max. Earth dist.	2613 Jun 21 16:03	19°♊31'41	2.48163 AU
	2613 Jul 06 16:29	0°♋	
morning rise	2613 Jul 07 08:31	0°♋27'42	
	2613 Aug 20 06:37	0°♌	
	2613 Oct 06 08:42	0°♍	
	2613 Nov 25 20:48	0°♎	
	2614 Jan 24 12:31	0°♏	
retrograde	2614 Mar 17 18:55	12°♏39'16	
opposition	2614 Apr 24 16:34	4°♏11'49	1°40'33
greatest brilliancy	2614 Apr 25 02:13	4°♏02'37	-1.6m
min. Earth dist.	2614 Apr 30 17:09	1°♏54'00	0.60761 AU
	2614 May 05 21:51	30°℞♎	
direct	2614 Jun 04 16:54	24°♎19'16	
desc. node	2614 Jun 05 18:17	24°♎19'42	
	2614 Jul 06 10:36	0°♏	
	2614 Sep 05 00:57	0°♐	
	2614 Oct 20 00:18	0°♑	
	2614 Nov 29 13:45	0°♒	
	2615 Jan 07 08:10	0°♓	
	2615 Feb 14 19:29	0°♈	
	2615 Mar 26 01:34	0°♉	
asc. node	2615 Apr 07 11:00	9°♉15'09	
	2615 May 05 20:51	0°♊	
evening set	2615 May 06 08:13	0°♊20'25	
	2615 Jun 17 15:11	0°♋	
conjunction	2615 Jul 01 14:27	9°♋30'10	0°47'42
minimum elong	2615 Jul 01 12:43	9°♋27'16	0°47'41
max. Earth dist.	2615 Jul 26 00:50	25°♋48'59	2.59760 AU
	2615 Aug 01 09:20	0°♌	
morning rise	2615 Aug 21 07:06	12°♌58'14	
	2615 Sep 16 21:10	0°♍	
	2615 Nov 03 21:03	0°♎	
	2615 Dec 23 18:03	0°♏	
	2616 Feb 16 04:11	0°♐	
desc. node	2616 Apr 22 16:49	24°♐24'15	
retrograde	2616 May 05 08:35	25°♐20'44	
opposition	2616 Jun 08 20:06	18°♐26'39	-2°18'08
greatest brilliancy	2616 Jun 09 12:47	18°♐12'18	-2.2m
min. Earth dist.	2616 Jun 17 06:33	15°♐33'16	0.48850 AU
direct	2616 Jul 16 16:21	9°♐58'13	
	2616 Sep 15 20:37	0°♑	
	2616 Nov 01 20:29	0°♒	
	2616 Dec 13 03:21	0°♓	
	2617 Jan 22 05:03	0°♈	
asc. node	2617 Feb 22 10:37	23°♈10'27	
	2617 Mar 03 18:26	0°♉	
	2617 Apr 14 17:10	0°♊	
	2617 May 28 10:24	0°♋	
evening set	2617 Jun 23 22:02	17°♋37'11	
	2617 Jul 12 20:01	0°♌	
conjunction	2617 Aug 11 20:56	19°♌23'40	1°08'18
minimum elong	2617 Aug 11 20:40	19°♌23'14	1°08'19
max. Earth dist.	2617 Aug 19 16:51	24°♌24'33	2.66329 AU
	2617 Aug 28 10:51	0°♍	
morning rise	2617 Sep 26 13:05	18°♍30'22	
	2617 Oct 14 16:08	0°♎	
	2617 Dec 01 00:55	0°♏	
	2618 Jan 17 12:58	0°♐	
	2618 Mar 06 19:29	0°♑	
desc. node	2618 Mar 10 16:41	2°♑22'03	
	2618 Apr 27 01:18	0°♒	
retrograde	2618 Jul 17 13:23	28°♒47'29	
opposition	2618 Aug 16 17:36	23°♒49'17	-6°48'05
greatest brilliancy	2618 Aug 17 10:10	23°♒38'09	-2.9m
min. Earth dist.	2618 Aug 19 09:11	23°♒06'38	0.37780 AU
direct	2618 Sep 16 08:19	18°♒34'46	
	2618 Oct 30 11:57	0°♓	
	2618 Dec 22 09:53	0°♈	
asc. node	2619 Jan 10 09:06	12°♈14'47	
	2619 Feb 06 05:20	0°♉	
	2619 Mar 23 08:08	0°♊	
	2619 May 08 03:54	0°♋	
	2619 Jun 23 21:52	0°♌	
evening set	2619 Aug 03 01:55	25°♌29'05	
	2619 Aug 10 04:59	0°♍	
max. Earth dist.	2619 Sep 11 16:39	20°♍37'17	2.67441 AU
conjunction	2619 Sep 17 20:38	24°♍33'01	0°59'39
minimum elong	2619 Sep 17 21:35	24°♍34'32	0°59'39
	2619 Sep 26 09:23	0°♎	
morning rise	2619 Nov 01 02:08	23°♎00'10	
	2619 Nov 11 19:57	0°♏	
	2619 Dec 27 04:11	0°♐	
desc. node	2620 Jan 26 15:52	20°♐37'10	
	2620 Feb 09 08:37	0°♑	

	2620 Mar 23 12:45	0°♒	
	2620 May 05 03:09	0°♓	
	2620 Jun 17 09:28	0°♈	
	2620 Aug 04 22:28	0°♉	
retrograde	2620 Sep 28 01:42	16°♉58'57	
min. Earth dist.	2620 Oct 24 22:53	12°♉06'51	0.42731 AU
opposition	2620 Nov 01 21:02	9°♉31'14	-1°33'36
greatest brilliancy	2620 Nov 01 11:03	9°♉39'26	-2.6m
asc. node	2620 Nov 27 07:43	3°♉39'36	
direct	2620 Dec 03 08:21	3°♉24'59	
	2621 Feb 19 13:11	0°♊	
	2621 Apr 13 14:54	0°♋	
	2621 Jun 02 14:23	0°♌	
	2621 Jul 21 11:13	0°♍	
	2621 Sep 07 05:11	0°♎	
evening set	2621 Sep 08 01:14	0°♎31'58	
max. Earth dist.	2621 Oct 04 17:47	17°♎43'47	2.63146 AU
conjunction	2621 Oct 23 16:43	0°♏10'17	0°28'07
minimum elong	2621 Oct 23 17:36	0°♏11'44	0°28'06
	2621 Oct 23 10:30	0°♏	
	2621 Dec 06 20:29	0°♐	
morning rise	2621 Dec 08 18:20	1°♐19'10	
desc. node	2621 Dec 13 14:28	4°♐40'18	
	2622 Jan 18 11:07	0°♑	
	2622 Feb 28 12:07	0°♒	
	2622 Apr 09 10:16	0°♓	
	2622 May 18 22:38	0°♈	
	2622 Jun 28 03:49	0°♉	
	2622 Aug 10 02:25	0°♊	
	2622 Oct 01 09:19	0°♋	
asc. node	2622 Oct 15 07:38	5°♋41'44	
retrograde	2622 Nov 15 19:14	11°♋49'32	
min. Earth dist.	2622 Dec 17 21:53	4°♋48'39	0.55809 AU
opposition	2622 Dec 24 15:41	2°♋11'31	3°06'52
greatest brilliancy	2622 Dec 23 20:13	2°♋30'29	-1.9m
	2622 Dec 30 10:41	30°℞♊	
direct	2623 Jan 29 16:42	24°♊02'41	
	2623 Mar 04 02:05	0°♋	
	2623 May 09 04:07	0°♌	
	2623 Jul 01 03:48	0°♍	
	2623 Aug 19 10:47	0°♎	
	2623 Oct 05 01:15	0°♏	
evening set	2623 Oct 16 15:12	7°♏43'13	
desc. node	2623 Oct 31 13:23	17°♏49'59	
max. Earth dist.	2623 Nov 02 10:17	19°♏06'50	2.53768 AU
	2623 Nov 18 03:41	0°♐	
conjunction	2623 Dec 04 13:56	11°♐35'48	-0°19'56
minimum elong	2623 Dec 04 13:04	11°♐34'15	0°19'55
	2623 Dec 30 00:11	0°♑	
morning rise	2624 Jan 26 17:35	20°♑38'46	
	2624 Feb 08 01:33	0°♒	
	2624 Mar 17 22:52	0°♓	
	2624 Apr 25 10:48	0°♈	
	2624 Jun 03 10:50	0°♉	
	2624 Jul 14 00:33	0°♊	
	2624 Aug 26 16:05	0°♋	
asc. node	2624 Sep 01 07:06	3°♋38'28	
	2624 Oct 16 03:32	0°♌	
retrograde	2624 Dec 22 10:36	21°♌16'30	
min. Earth dist.	2625 Jan 28 11:41	12°♌33'23	0.64979 AU
opposition	2625 Jan 31 13:39	11°♌19'11	4°31'09
greatest brilliancy	2625 Jan 31 01:09	11°♌31'44	-1.4m
direct	2625 Mar 11 18:29	2°♌01'49	
	2625 Jun 05 04:06	0°♍	
	2625 Jul 28 23:03	0°♎	
	2625 Sep 14 22:36	0°♏	
desc. node	2625 Sep 17 12:06	1°♏40'30	
	2625 Oct 29 07:01	0°♐	
evening set	2625 Nov 30 21:30	23°♐22'44	
	2625 Dec 09 20:57	0°♑	
max. Earth dist.	2625 Dec 19 20:11	7°♑26'20	2.40989 AU
	2626 Jan 18 10:31	0°♒	
conjunction	2626 Jan 27 21:36	7°♒20'14	-1°02'22
minimum elong	2626 Jan 27 20:15	7°♒17'37	1°02'22
	2626 Feb 25 19:35	0°♓	
	2626 Apr 04 21:22	0°♈	
morning rise	2626 Apr 05 18:36	0°♈41'40	
	2626 May 13 13:10	0°♉	
	2626 Jun 22 15:26	0°♊	
asc. node	2626 Jul 20 05:30	19°♊45'20	
	2626 Aug 04 00:08	0°♋	
	2626 Sep 18 16:03	0°♌	
	2626 Nov 09 10:23	0°♍	
retrograde	2627 Jan 25 20:56	25°♍10'09	
opposition	2627 Mar 06 21:17	15°♍34'01	4°14'09
greatest brilliancy	2627 Mar 06 23:42	15°♍31'37	-1.3m
min. Earth dist.	2627 Mar 07 16:27	15°♍14'56	0.67801 AU
direct	2627 Apr 16 21:27	5°♍40'41	
	2627 Jul 03 02:52	0°♎	
desc. node	2627 Aug 05 10:31	18°♎18'52	
	2627 Aug 24 18:22	0°♏	
	2627 Oct 09 09:43	0°♐	
	2627 Nov 20 06:10	0°♑	
	2627 Dec 29 17:39	0°♒	
evening set	2628 Feb 01 11:51	26°♒28'29	
	2628 Feb 05 22:52	0°♓	
	2628 Mar 14 22:22	0°♈	
conjunction	2628 Apr 09 21:19	20°♈14'16	-0°36'20
minimum elong	2628 Apr 10 00:18	20°♈20'01	0°36'17
	2628 Apr 22 14:23	0°♉	
max. Earth dist.	2628 May 31 09:20	29°♉00'52	2.42718 AU
	2628 Jun 01 17:42	0°♊	
asc. node	2628 Jun 06 04:53	3°♊15'05	
morning rise	2628 Jun 15 14:36	10°♊02'20	
	2628 Jul 13 22:30	0°♋	
	2628 Aug 27 14:15	0°♌	
	2628 Oct 14 05:55	0°♍	
	2628 Dec 05 22:50	0°♎	
retrograde	2629 Mar 02 01:26	28°♎47'23	
opposition	2629 Apr 09 19:35	19°♎55'16	2°40'23
greatest brilliancy	2629 Apr 10 06:44	19°♎44'27	-1.5m
min. Earth dist.	2629 Apr 14 10:27	18°♎07'40	0.63999 AU
direct	2629 May 21 04:28	9°♎54'14	
desc. node	2629 Jun 22 09:52	15°♎34'03	
	2629 Jul 26 11:43	0°♏	
	2629 Sep 15 15:26	0°♐	
	2629 Oct 29 00:29	0°♑	
	2629 Dec 08 00:34	0°♒	
	2630 Jan 15 11:54	0°♓	
	2630 Feb 22 17:26	0°♈	
	2630 Apr 02 17:28	0°♉	
evening set	2630 Apr 12 14:18	7°♉25'42	
asc. node	2630 Apr 24 03:53	16°♉01'58	
	2630 May 13 06:12	0°♊	
conjunction	2630 Jun 12 03:00	21°♊13'44	0°29'59
minimum elong	2630 Jun 12 01:23	21°♊10'54	0°29'57
	2630 Jun 24 18:37	0°♋	
max. Earth dist.	2630 Jul 14 12:40	13°♋27'19	2.55752 AU
morning rise	2630 Aug 05 04:18	27°♋53'21	

	2630 Aug 08 09:14	0°♌	
	2630 Sep 23 23:35	0°♍	
	2630 Nov 11 14:53	0°♎	
	2631 Jan 02 13:12	0°♏	
	2631 Mar 07 19:55	0°♐	
retrograde	2631 Apr 14 23:34	7°♐19'21	
desc. node	2631 May 10 09:15	3°♐18'12	
	2631 May 20 04:41	30°℞♏	
opposition	2631 May 21 00:18	29°♏42'14	-0°29'03
greatest brilliancy	2631 May 21 03:43	29°♏39'08	-2.0m
min. Earth dist.	2631 May 28 20:26	26°♏51'30	0.54004 AU
direct	2631 Jun 29 13:47	20°♏26'19	
	2631 Aug 09 12:42	0°♐	
	2631 Oct 02 11:16	0°♑	
	2631 Nov 14 05:52	0°♒	
	2631 Dec 24 00:50	0°♓	
	2632 Feb 01 05:05	0°♈	
asc. node	2632 Mar 11 02:04	29°♈15'42	
	2632 Mar 12 01:59	0°♉	
	2632 Apr 22 10:51	0°♊	
	2632 Jun 04 16:52	0°♋	
evening set	2632 Jun 06 05:02	1°♋01'19	
	2632 Jul 19 18:36	0°♌	
conjunction	2632 Jul 27 10:04	4°♌59'09	1°04'15
minimum elong	2632 Jul 27 09:08	4°♌57'39	1°04'14
max. Earth dist.	2632 Aug 10 04:56	13°♌55'16	2.64406 AU
	2632 Sep 04 06:29	0°♍	
morning rise	2632 Sep 12 12:56	5°♍16'01	
	2632 Oct 21 16:11	0°♎	
	2632 Dec 08 17:32	0°♏	
	2633 Jan 26 21:13	0°♐	
	2633 Mar 20 06:06	0°♑	
desc. node	2633 Mar 27 07:54	3°♑44'52	
	2633 Jun 06 01:25	0°♒	
retrograde	2633 Jun 15 18:52	0°♒33'54	
	2633 Jun 25 06:04	30°℞♑	
opposition	2633 Jul 17 04:55	25°♑00'27	-5°33'41
greatest brilliancy	2633 Jul 18 12:09	24°♑37'18	-2.7m
min. Earth dist.	2633 Jul 24 01:09	22°♑59'13	0.41032 AU
direct	2633 Aug 19 21:32	18°♑30'25	
	2633 Oct 02 12:50	0°♒	
	2633 Nov 22 16:51	0°♓	
	2634 Jan 05 05:52	0°♈	
asc. node	2634 Jan 27 01:36	15°♈22'56	
	2634 Feb 16 20:36	0°♉	
	2634 Apr 01 05:43	0°♊	
	2634 May 15 23:45	0°♋	
	2634 Jul 01 01:51	0°♌	
evening set	2634 Jul 19 03:34	11°♌35'19	
	2634 Aug 17 00:45	0°♍	
conjunction	2634 Sep 03 18:41	11°♍17'07	1°06'00
minimum elong	2634 Sep 03 19:16	11°♍18'04	1°06'00
max. Earth dist.	2634 Sep 02 22:58	10°♍45'47	2.67655 AU
	2634 Oct 03 03:52	0°♎	
morning rise	2634 Oct 18 04:42	9°♎36'56	
	2634 Nov 18 20:39	0°♏	
	2635 Jan 03 20:07	0°♐	
desc. node	2635 Feb 12 07:00	26°♐07'20	
	2635 Feb 18 02:44	0°♑	
	2635 Apr 03 23:52	0°♒	
	2635 May 19 09:18	0°♓	
	2635 Jul 08 03:35	0°♈	
retrograde	2635 Sep 03 20:14	18°♈21'33	
min. Earth dist.	2635 Sep 30 15:54	13°♈53'57	0.38704 AU
opposition	2635 Oct 05 23:55	12°♈21'16	-4°25'52
greatest brilliancy	2635 Oct 05 07:35	12°♈33'07	-2.9m
direct	2635 Nov 04 20:54	7°♈07'54	
asc. node	2635 Dec 15 01:28	16°♈13'59	
	2636 Jan 13 05:38	0°♉	
	2636 Mar 05 08:57	0°♊	
	2636 Apr 23 04:18	0°♋	
	2636 Jun 10 11:32	0°♌	
	2636 Jul 28 13:51	0°♍	
evening set	2636 Aug 24 17:55	17°♍06'08	
	2636 Sep 14 00:47	0°♎	
max. Earth dist.	2636 Sep 25 01:37	7°♎04'35	2.65463 AU
conjunction	2636 Oct 09 02:40	16°♎09'00	0°42'43
minimum elong	2636 Oct 09 03:45	16°♎10'46	0°42'43
	2636 Oct 30 06:50	0°♏	
morning rise	2636 Nov 23 00:21	15°♏47'16	
	2636 Dec 13 23:48	0°♐	
desc. node	2636 Dec 30 05:55	11°♐11'19	
	2637 Jan 26 02:07	0°♑	
	2637 Mar 08 18:13	0°♒	
	2637 Apr 18 09:16	0°♓	
	2637 May 28 17:14	0°♈	
	2637 Jul 09 04:31	0°♉	
	2637 Aug 24 11:19	0°♊	
retrograde	2637 Oct 29 18:48	23°♊15'07	
asc. node	2637 Oct 31 23:59	23°♊12'57	
min. Earth dist.	2637 Nov 28 16:20	17°♊04'00	0.50840 AU
opposition	2637 Dec 06 12:11	14°♊08'52	1°48'54
greatest brilliancy	2637 Dec 05 22:21	14°♊21'48	-2.1m
direct	2638 Jan 09 22:39	6°♊40'24	
	2638 Mar 24 20:12	0°♋	
	2638 May 19 05:52	0°♌	
	2638 Jul 09 01:37	0°♍	
	2638 Aug 26 14:17	0°♎	
evening set	2638 Oct 01 02:37	22°♎50'17	
	2638 Oct 11 23:37	0°♏	
max. Earth dist.	2638 Oct 21 08:50	6°♏14'49	2.58001 AU
conjunction	2638 Nov 17 06:04	24°♏30'46	-0°00'02
minimum elong	2638 Nov 17 06:01	24°♏30'41	0°00'03
behind sun begin	2638 Nov 16 11:41	23°♏59'07	
behind sun end	2638 Nov 18 00:21	25°♏02'17	
desc. node	2638 Nov 17 04:38	24°♏28'19	
	2638 Nov 25 04:08	0°♐	
morning rise	2639 Jan 05 17:46	29°♐36'37	
	2639 Jan 06 06:37	0°♑	
	2639 Feb 15 15:49	0°♒	
	2639 Mar 26 20:54	0°♓	
	2639 May 04 15:38	0°♈	
	2639 Jun 12 22:35	0°♉	
	2639 Jul 23 23:48	0°♊	
	2639 Sep 07 00:13	0°♋	
asc. node	2639 Sep 18 22:54	7°♋12'22	
	2639 Nov 04 06:28	0°♌	
retrograde	2639 Dec 09 12:12	7°♌09'12	
	2640 Jan 11 07:16	30°℞♋	
min. Earth dist.	2640 Jan 13 18:24	29°♋02'00	0.62105 AU
opposition	2640 Jan 18 08:28	27°♋12'09	4°13'51
greatest brilliancy	2640 Jan 17 15:06	27°♋29'30	-1.5m
direct	2640 Feb 25 11:31	18°♋16'49	
	2640 Apr 15 09:30	0°♌	
	2640 Jun 15 13:53	0°♍	
	2640 Aug 05 23:11	0°♎	
	2640 Sep 22 06:00	0°♏	
desc. node	2640 Oct 04 03:30	7°♏53'09	
	2640 Nov 05 10:46	0°♐	
evening set	2640 Nov 11 10:45	4°♐13'13	

max. Earth dist.	2640 Nov 26 01:51	14°♐39'12	2.46114 AU
	2640 Dec 17 02:26	0°♑	
conjunction	2641 Jan 04 00:45	13°♑23'26	-0°49'45
minimum elong	2641 Jan 03 22:45	13°♑19'39	0°49'44
	2641 Jan 25 19:58	0°♒	
	2641 Mar 05 09:03	0°♓	
morning rise	2641 Mar 06 17:49	1°♓04'18	
	2641 Apr 12 13:48	0°♈	
	2641 May 21 07:25	0°♉	
	2641 Jun 30 11:35	0°♊	
asc. node	2641 Aug 05 22:45	25°♊48'21	
	2641 Aug 12 02:23	0°♋	
	2641 Sep 27 17:33	0°♌	
	2641 Nov 23 09:24	0°♍	
retrograde	2642 Jan 12 12:52	12°♍27'13	
opposition	2642 Feb 21 17:34	2°♍39'42	4°30'04
min. Earth dist.	2642 Feb 20 24:00	2°♍57'18	0.67493 AU
greatest brilliancy	2642 Feb 21 14:12	2°♍43'04	-1.3m
	2642 Feb 28 11:48	30°℞♌	
direct	2642 Apr 03 04:46	22°♌57'15	
	2642 May 10 16:18	0°♍	
	2642 Jul 14 01:16	0°♎	
desc. node	2642 Aug 22 02:38	23°♎03'40	
	2642 Sep 02 03:09	0°♏	
	2642 Oct 17 02:23	0°♐	
	2642 Nov 27 18:37	0°♑	
evening set	2643 Jan 05 18:26	29°♑37'42	
	2643 Jan 06 05:57	0°♒	
	2643 Feb 13 11:46	0°♓	
conjunction	2643 Mar 12 15:07	21°♓27'36	-0°57'30
minimum elong	2643 Mar 12 17:52	21°♓33'01	0°57'29
	2643 Mar 23 11:13	0°♈	
max. Earth dist.	2643 Apr 20 01:12	21°♈30'53	2.37832 AU
	2643 May 01 02:09	0°♉	
morning rise	2643 May 22 06:42	16°♉02'08	
	2643 Jun 10 03:43	0°♊	
asc. node	2643 Jun 23 20:34	9°♊55'58	
	2643 Jul 22 07:48	0°♋	
	2643 Sep 05 04:18	0°♌	
	2643 Oct 23 18:03	0°♍	
	2643 Dec 19 16:21	0°♎	
retrograde	2644 Feb 16 10:57	15°♎38'44	
opposition	2644 Mar 26 20:31	6°♎26'28	3°26'01
greatest brilliancy	2644 Mar 27 05:45	6°♎17'23	-1.3m
min. Earth dist.	2644 Mar 29 23:38	5°♎12'35	0.66289 AU
	2644 Apr 13 15:40	30°℞♍	
direct	2644 May 07 06:46	26°♍24'22	
	2644 Jun 01 19:37	0°♎	
desc. node	2644 Jul 09 01:26	14°♎14'31	
	2644 Aug 07 21:56	0°♏	
	2644 Sep 24 20:24	0°♐	
	2644 Nov 06 09:26	0°♑	
	2644 Dec 16 02:16	0°♒	
	2645 Jan 23 09:35	0°♓	
	2645 Mar 02 11:11	0°♈	
evening set	2645 Mar 16 23:10	11°♈18'41	
	2645 Apr 10 06:33	0°♉	
asc. node	2645 May 10 19:29	22°♉51'05	
	2645 May 20 14:02	0°♊	
conjunction	2645 May 21 00:18	0°♊18'38	0°06'38
minimum elong	2645 May 20 23:48	0°♊17'44	0°06'38
behind sun begin	2645 May 19 23:58	29°♉34'25	
behind sun end	2645 May 21 23:38	1°♊01'01	
max. Earth dist.	2645 Jul 01 02:44	29°♊27'04	2.51028 AU
	2645 Jul 01 21:47	0°♋	
morning rise	2645 Jul 18 11:04	11°♋19'43	
	2645 Aug 15 10:40	0°♌	
	2645 Oct 01 06:32	0°♍	
	2645 Nov 19 21:22	0°♎	
	2646 Jan 14 11:10	0°♏	
retrograde	2646 Mar 27 10:58	21°♏30'38	
opposition	2646 May 03 18:16	13°♏19'09	0°58'22
greatest brilliancy	2646 May 04 00:48	13°♏13'01	-1.7m
min. Earth dist.	2646 May 10 11:36	10°♏47'28	0.58582 AU
desc. node	2646 May 27 00:04	5°♏38'00	
direct	2646 Jun 13 09:07	3°♏35'55	
	2646 Aug 28 00:47	0°♐	
	2646 Oct 13 19:11	0°♑	
	2646 Nov 23 22:48	0°♒	
	2647 Jan 02 00:03	0°♓	
	2647 Feb 09 15:54	0°♈	
	2647 Mar 21 01:51	0°♉	
asc. node	2647 Mar 28 19:41	5°♉46'28	
	2647 May 01 00:23	0°♊	
evening set	2647 May 18 12:37	12°♊25'19	
	2647 Jun 12 21:21	0°♋	
conjunction	2647 Jul 11 18:44	19°♋28'44	0°55'18
minimum elong	2647 Jul 11 17:13	19°♋26'13	0°55'17
	2647 Jul 27 16:50	0°♌	
max. Earth dist.	2647 Aug 01 05:57	2°♌58'48	2.61621 AU
morning rise	2647 Aug 30 00:02	21°♌36'06	
	2647 Sep 12 03:29	0°♍	
	2647 Oct 29 20:34	0°♎	
	2647 Dec 17 22:00	0°♏	
	2648 Feb 07 18:13	0°♐	
	2648 Apr 11 11:23	0°♑	
desc. node	2648 Apr 12 23:01	0°♑30'23	
retrograde	2648 May 18 23:58	7°♑15'58	
opposition	2648 Jun 21 11:47	0°♑49'42	-3°28'39
greatest brilliancy	2648 Jun 22 12:12	0°♑29'37	-2.4m
	2648 Jun 24 00:07	30°℞♐	
min. Earth dist.	2648 Jun 29 21:31	28°♐04'53	0.45914 AU
direct	2648 Jul 28 01:36	22°♐58'10	
	2648 Aug 30 14:48	0°♑	
	2648 Oct 24 07:25	0°♒	
	2648 Dec 06 06:08	0°♓	
	2649 Jan 16 02:52	0°♈	
asc. node	2649 Feb 12 18:22	20°♈15'41	
	2649 Feb 26 04:56	0°♉	
	2649 Apr 09 12:55	0°♊	
	2649 May 23 12:58	0°♋	
evening set	2649 Jul 03 09:12	26°♋55'06	
	2649 Jul 08 03:03	0°♌	
conjunction	2649 Aug 20 08:51	27°♌47'37	1°08'37
minimum elong	2649 Aug 20 08:56	27°♌47'45	1°08'37
	2649 Aug 23 19:51	0°♍	
max. Earth dist.	2649 Aug 25 00:57	0°♍46'25	2.67026 AU
morning rise	2649 Oct 04 11:10	26°♍29'40	
	2649 Oct 09 23:31	0°♎	
	2649 Nov 26 01:36	0°♏	
	2650 Jan 11 22:16	0°♐	
	2650 Feb 27 20:22	0°♑	
desc. node	2650 Feb 28 21:59	0°♑40'42	
	2650 Apr 16 19:39	0°♒	
	2650 Jun 08 23:24	0°♓	
retrograde	2650 Aug 04 23:30	16°♓44'03	
opposition	2650 Sep 04 02:05	11°♓43'01	-6°33'50
greatest brilliancy	2650 Sep 04 03:55	11°♓41'48	-2.9m
min. Earth dist.	2650 Sep 03 17:32	11°♓48'39	0.37201 AU

direct	2650 Oct 03 16:34	6°♓47'51	
	2650 Dec 10 19:23	0°♈	
asc. node	2650 Dec 31 16:41	12°♈05'57	
	2651 Jan 29 12:49	0°♉	
	2651 Mar 17 04:25	0°♊	
	2651 May 02 19:11	0°♋	
	2651 Jun 18 23:55	0°♌	
	2651 Aug 05 12:52	0°♍	
evening set	2651 Aug 11 09:50	3°♍42'39	
max. Earth dist.	2651 Sep 16 21:24	26°♍52'03	2.66954 AU
	2651 Sep 21 19:04	0°♎	
conjunction	2651 Sep 25 22:14	2°♎38'42	0°54'20
minimum elong	2651 Sep 25 23:18	2°♎40'24	0°54'20
	2651 Nov 07 03:44	0°♏	
morning rise	2651 Nov 09 06:13	1°♏22'48	
	2651 Dec 22 06:03	0°♐	
desc. node	2652 Jan 16 20:58	17°♐27'36	
	2652 Feb 04 00:04	0°♑	
	2652 Mar 17 13:19	0°♒	
	2652 Apr 28 06:37	0°♓	
	2652 Jun 09 02:02	0°♈	
	2652 Jul 23 10:50	0°♉	
	2652 Sep 25 22:46	0°♊	
retrograde	2652 Oct 10 10:32	1°♊28'27	
	2652 Oct 24 12:49	30°℞♉	
min. Earth dist.	2652 Nov 07 04:21	26°♉10'11	0.45530 AU
opposition	2652 Nov 15 10:43	23°♉18'26	-0°07'50
greatest brilliancy	2651 Oct 02 09:29	6°♎47'47	1.6m
asc. node	2652 Nov 17 16:34	22°♉32'01	
direct	2652 Dec 18 01:24	16°♉40'41	
	2653 Feb 07 12:52	0°♊	
	2653 Apr 06 17:51	0°♋	
	2653 May 28 02:47	0°♌	
	2653 Jul 16 13:42	0°♍	
	2653 Sep 02 13:44	0°♎	
evening set	2653 Sep 16 07:07	8°♎46'18	
max. Earth dist.	2653 Oct 10 12:25	24°♎30'10	2.61521 AU
	2653 Oct 18 20:31	0°♏	
conjunction	2653 Nov 01 07:50	8°♏58'22	0°18'26
minimum elong	2653 Nov 01 08:28	8°♏59'26	0°18'26
	2653 Dec 02 04:41	0°♐	
desc. node	2653 Dec 03 20:33	1°♐09'02	
morning rise	2653 Dec 18 08:48	11°♐17'09	
	2654 Jan 13 14:47	0°♑	
	2654 Feb 23 09:42	0°♒	
	2654 Apr 04 00:58	0°♓	
	2654 May 13 05:37	0°♈	
	2654 Jun 22 00:18	0°♉	
	2654 Aug 02 23:36	0°♊	
	2654 Sep 20 01:06	0°♋	
asc. node	2654 Oct 05 15:09	8°♋00'28	
retrograde	2654 Nov 24 17:46	21°♋47'10	
min. Earth dist.	2654 Dec 28 00:55	14°♋21'01	0.58300 AU
greatest brilliancy	2655 Jan 02 05:19	12°♋18'35	-1.7m
opposition	2655 Jan 03 01:14	11°♋58'57	3°38'11
direct	2655 Feb 08 21:16	3°♋31'36	
	2655 May 01 14:58	0°♌	
	2655 Jun 25 14:34	0°♍	
	2655 Aug 14 13:02	0°♎	
	2655 Sep 30 09:13	0°♏	
desc. node	2655 Oct 21 19:26	14°♏20'23	
evening set	2655 Oct 25 21:41	17°♏07'33	
max. Earth dist.	2655 Nov 10 08:10	27°♏45'58	2.51189 AU
	2655 Nov 13 13:01	0°♐	
conjunction	2655 Dec 15 05:00	22°♐35'13	-0°31'22
minimum elong	2655 Dec 15 03:36	22°♐32'42	0°31'21
	2655 Dec 25 08:09	0°♑	
	2656 Feb 03 06:51	0°♒	
morning rise	2656 Feb 09 00:39	4°♒24'00	
	2656 Mar 13 01:00	0°♓	
	2656 Apr 20 09:36	0°♈	
	2656 May 29 06:09	0°♉	
	2656 Jul 08 14:29	0°♊	
	2656 Aug 20 16:52	0°♋	
asc. node	2656 Aug 22 13:37	1°♋14'15	
	2656 Oct 08 03:30	0°♌	
retrograde	2656 Dec 30 05:13	29°♌27'36	
min. Earth dist.	2657 Feb 06 04:02	20°♌26'47	0.66168 AU
opposition	2657 Feb 08 10:16	19°♌32'22	4°34'31
greatest brilliancy	2657 Feb 08 00:53	19°♌41'46	-1.4m
direct	2657 Mar 20 03:25	10°♌04'54	
	2657 May 28 02:48	0°♍	
	2657 Jul 23 07:37	0°♎	
desc. node	2657 Sep 07 17:46	28°♎34'22	
	2657 Sep 09 22:48	0°♏	
	2657 Oct 24 12:37	0°♐	
	2657 Dec 05 03:47	0°♑	
evening set	2657 Dec 12 23:22	5°♑49'30	
max. Earth dist.	2658 Jan 10 01:57	27°♑12'05	2.38511 AU
	2658 Jan 13 16:56	0°♒	
conjunction	2658 Feb 11 19:30	22°♒43'46	-1°04'50
minimum elong	2658 Feb 11 19:26	22°♒43'38	1°04'50
	2658 Feb 21 00:58	0°♓	
	2658 Mar 31 01:34	0°♈	
morning rise	2658 Apr 23 01:19	17°♈57'31	
	2658 May 08 16:18	0°♉	
	2658 Jun 17 17:06	0°♊	
asc. node	2658 Jul 10 13:50	16°♊28'31	
	2658 Jul 29 22:06	0°♋	
	2658 Sep 13 03:34	0°♌	
	2658 Nov 02 06:56	0°♍	
	2659 Jan 10 20:13	0°♎	
retrograde	2659 Feb 02 14:58	2°♎54'10	
	2659 Feb 23 17:56	30°℞♍	
opposition	2659 Mar 14 11:13	23°♍25'28	3°59'38
greatest brilliancy	2659 Mar 14 16:25	23°♍20'19	-1.3m
min. Earth dist.	2659 Mar 16 02:04	22°♍46'56	0.67545 AU
direct	2659 Apr 24 16:36	13°♍27'48	
	2659 Jun 24 10:38	0°♎	
desc. node	2659 Jul 26 16:32	16°♎28'16	
	2659 Aug 18 21:36	0°♏	
	2659 Oct 04 05:21	0°♐	
	2659 Nov 15 07:12	0°♑	
	2659 Dec 24 20:33	0°♒	
	2660 Feb 01 02:24	0°♓	
evening set	2660 Feb 17 11:08	12°♓56'37	
	2660 Mar 10 02:14	0°♈	
	2660 Apr 17 18:50	0°♉	
conjunction	2660 Apr 25 13:49	5°♉55'17	-0°20'52
minimum elong	2660 Apr 25 15:36	5°♉58'41	0°20'51
asc. node	2660 May 27 12:54	29°♉41'56	
	2660 May 27 22:48	0°♊	
max. Earth dist.	2660 Jun 13 14:26	12°♊01'49	2.45741 AU
morning rise	2660 Jun 28 07:29	22°♊27'06	
	2660 Jul 09 03:19	0°♋	
	2660 Aug 22 16:23	0°♌	
	2660 Oct 08 21:50	0°♍	
	2660 Nov 29 02:27	0°♎	
	2661 Feb 01 09:34	0°♏	

retrograde	2661 Mar 10 20:58	7°♏04'47	
	2661 Apr 14 00:40	30°℞♎	
opposition	2661 Apr 18 04:18	28°♎25'29	2°07'19
greatest brilliancy	2661 Apr 18 14:58	28°♎15'14	-1.5m
min. Earth dist.	2661 Apr 23 13:32	26°♎21'09	0.62338 AU
direct	2661 May 29 09:17	18°♎28'04	
desc. node	2661 Jun 12 15:41	19°♎41'51	
	2661 Jul 15 20:39	0°♏	
	2661 Sep 09 03:47	0°♐	
	2661 Oct 23 09:56	0°♑	
	2661 Dec 02 17:52	0°♒	
	2662 Jan 10 09:05	0°♓	
	2662 Feb 17 17:08	0°♈	
	2662 Mar 28 19:30	0°♉	
asc. node	2662 Apr 14 11:15	12°♉27'41	
evening set	2662 Apr 26 09:10	21°♉14'14	
	2662 May 08 10:34	0°♊	
	2662 Jun 20 00:48	0°♋	
conjunction	2662 Jun 23 11:28	2°♋21'49	0°40'54
minimum elong	2662 Jun 23 09:41	2°♋18'46	0°40'53
max. Earth dist.	2662 Jul 21 10:08	21°♋13'59	2.58063 AU
	2662 Aug 03 16:04	0°♌	
morning rise	2662 Aug 14 13:14	7°♌07'34	
	2662 Sep 19 03:39	0°♍	
	2662 Nov 06 08:26	0°♎	
	2662 Dec 26 22:28	0°♏	
	2663 Feb 22 01:45	0°♐	
retrograde	2663 Apr 26 15:38	17°♐42'29	
desc. node	2663 Apr 30 13:59	17°♐36'41	
opposition	2663 May 31 21:15	10°♐27'53	-1°28'59
greatest brilliancy	2663 Jun 01 07:55	10°♐18'28	-2.1m
min. Earth dist.	2663 Jun 09 03:47	7°♐32'59	0.51215 AU
direct	2663 Jul 09 14:14	1°♐35'31	
	2663 Sep 23 19:20	0°♑	
	2663 Nov 07 12:09	0°♒	
	2663 Dec 18 01:00	0°♓	
	2664 Jan 26 15:28	0°♈	
asc. node	2664 Mar 01 10:54	26°♈02'23	
	2664 Mar 06 19:53	0°♉	
	2664 Apr 17 10:47	0°♊	
	2664 May 30 21:22	0°♋	
evening set	2664 Jun 16 11:35	11°♋08'12	
	2664 Jul 15 02:15	0°♌	
conjunction	2664 Aug 05 08:38	13°♌47'39	1°07'09
minimum elong	2664 Aug 05 08:05	13°♌46'47	1°07'08
max. Earth dist.	2664 Aug 15 17:43	20°♌28'23	2.65571 AU
	2664 Aug 30 14:57	0°♍	
morning rise	2664 Sep 20 14:35	13°♍21'20	
	2664 Oct 16 21:33	0°♎	
	2664 Dec 03 12:55	0°♏	
	2665 Jan 20 16:03	0°♐	
	2665 Mar 11 08:09	0°♑	
desc. node	2665 Mar 17 13:36	3°♑37'18	
	2665 May 06 00:22	0°♒	
retrograde	2665 Jul 03 06:50	16°♒20'20	
opposition	2665 Aug 02 20:54	11°♒10'57	-6°27'49
greatest brilliancy	2665 Aug 03 22:58	10°♒52'43	-2.8m
min. Earth dist.	2665 Aug 07 16:11	9°♒50'37	0.38930 AU
direct	2665 Sep 03 18:21	5°♒26'54	
	2665 Nov 11 06:49	0°♓	
	2665 Dec 28 08:01	0°♈	
asc. node	2666 Jan 17 09:35	13°♈35'54	
	2666 Feb 10 09:33	0°♉	
	2666 Mar 26 14:38	0°♊	
	2666 May 10 20:52	0°♋	
	2666 Jun 26 06:36	0°♌	
evening set	2666 Jul 27 18:03	20°♌03'55	
	2666 Aug 12 09:33	0°♍	
max. Earth dist.	2666 Sep 08 02:53	16°♍58'28	2.67644 AU
conjunction	2666 Sep 11 20:24	19°♍20'50	1°02'43
minimum elong	2666 Sep 11 21:13	19°♍22'08	1°02'43
	2666 Sep 28 13:17	0°♎	
morning rise	2666 Oct 26 02:24	17°♎40'50	
	2666 Nov 14 02:57	0°♏	
	2666 Dec 29 18:04	0°♐	
desc. node	2667 Feb 02 13:17	23°♐19'46	
	2667 Feb 12 09:37	0°♑	
	2667 Mar 28 05:58	0°♒	
	2667 May 10 19:52	0°♓	
	2667 Jun 24 21:46	0°♈	
	2667 Aug 20 20:05	0°♉	
retrograde	2667 Sep 18 16:31	5°♉29'29	
min. Earth dist.	2667 Oct 15 04:26	0°♉53'36	0.40698 AU
	2667 Oct 18 02:13	30°℞♈	
opposition	2667 Oct 22 07:49	28°♈40'49	-2°46'46
greatest brilliancy	2667 Oct 21 16:43	28°♈52'33	-2.7m
direct	2667 Nov 21 23:00	23°♈00'00	
asc. node	2667 Dec 05 07:47	24°♈07'47	
	2667 Dec 27 01:11	0°♉	
	2668 Feb 26 06:27	0°♊	
	2668 Apr 17 02:35	0°♋	
	2668 Jun 05 06:33	0°♌	
	2668 Jul 23 18:52	0°♍	
evening set	2668 Sep 01 21:59	25°♍13'35	
	2668 Sep 09 09:58	0°♎	
max. Earth dist.	2668 Sep 30 13:42	13°♎35'26	2.64293 AU
conjunction	2668 Oct 17 08:57	24°♎31'59	0°34'34
minimum elong	2668 Oct 17 09:57	24°♎33'37	0°34'34
	2668 Oct 25 16:25	0°♏	
morning rise	2668 Dec 01 19:55	24°♏54'52	
	2668 Dec 09 06:21	0°♐	
desc. node	2668 Dec 20 11:52	7°♐44'52	
	2669 Jan 21 02:55	0°♑	
	2669 Mar 03 10:58	0°♒	
	2669 Apr 12 16:30	0°♓	
	2669 May 22 12:12	0°♈	
	2669 Jul 02 03:17	0°♉	
	2669 Aug 15 00:29	0°♊	
	2669 Oct 13 00:08	0°♋	
asc. node	2669 Oct 22 07:41	2°♋33'02	
retrograde	2669 Nov 08 16:48	4°♋35'21	
	2669 Dec 04 01:49	30°℞♊	
min. Earth dist.	2669 Dec 09 20:12	27°♊56'12	0.53645 AU
greatest brilliancy	2669 Dec 16 08:49	25°♊26'19	-2.0m
opposition	2669 Dec 17 02:59	25°♊08'53	2°38'14
direct	2670 Jan 21 10:45	17°♊17'06	
	2670 Mar 13 19:16	0°♋	
	2670 May 12 20:10	0°♌	
	2670 Jul 03 19:49	0°♍	
	2670 Aug 21 19:15	0°♎	
	2670 Oct 07 08:32	0°♏	
evening set	2670 Oct 09 20:34	1°♏39'25	
max. Earth dist.	2670 Oct 28 03:13	13°♏54'39	2.55748 AU
desc. node	2670 Nov 07 10:25	20°♏56'09	
	2670 Nov 20 13:01	0°♐	
conjunction	2670 Nov 26 21:22	4°♐26'24	-0°11'25
minimum elong	2670 Nov 26 20:53	4°♐25'34	0°11'25
behind sun begin	2670 Nov 26 05:51	3°♐59'12	
behind sun end	2670 Nov 27 11:56	4°♐51'58	

	2671 Jan 01	13:09	0°♉		
morning rise	2671 Jan 17	05:28	11°♉33'27		
	2671 Feb 10	18:38	0°♒		
	2671 Mar 21	19:48	0°♓		
	2671 Apr 29	10:29	0°♈		
	2671 Jun 07	12:37	0°♉		
	2671 Jul 18	05:23	0°♊		
	2671 Aug 31	05:54	0°♋		
asc. node	2671 Sep 09	07:34	5°♋44'12		
	2671 Oct 22	15:52	0°♌		
retrograde	2671 Dec 17	13:30	15°♌48'46		
min. Earth dist.	2672 Jan 22	19:48	7°♌21'31	0.63807 AU	
opposition	2672 Jan 26	14:31	5°♌50'40	4°26'01	
greatest brilliancy	2672 Jan 25	23:35	6°♌05'38	-1.5m	
	2672 Feb 11	21:53	30°℞♋		
direct	2672 Mar 05	08:42	26°♋42'43		
	2672 Mar 29	22:38	0°♌		
	2672 Jun 08	23:17	0°♍		
	2672 Jul 31	16:34	0°♎		
	2672 Sep 17	10:07	0°♏		
desc. node	2672 Sep 24	09:15	4°♏34'39		
	2672 Oct 31	18:22	0°♐		
evening set	2672 Nov 22	04:19	15°♐12'35		
max. Earth dist.	2672 Dec 08	01:41	26°♐47'04	2.43254 AU	
	2672 Dec 12	10:14	0°♑		
conjunction	2673 Jan 17	01:27	26°♑53'48	-0°57'59	
minimum elong	2673 Jan 16	23:35	26°♑50'14	0°57'58	
	2673 Jan 21	02:16	0°♒		
	2673 Feb 28	13:26	0°♓		
morning rise	2673 Mar 23	07:51	17°♓55'53		
	2673 Apr 07	16:15	0°♈		
	2673 May 16	08:02	0°♉		
	2673 Jun 25	09:55	0°♊		
asc. node	2673 Jul 27	05:50	22°♊43'03		
	2673 Aug 06	19:04	0°♋		
	2673 Sep 21	17:11	0°♌		
	2673 Nov 13	20:18	0°♍		
retrograde	2674 Jan 20	04:28	20°♍14'07		
opposition	2674 Mar 01	07:10	10°♍32'22	4°22'03	
greatest brilliancy	2674 Mar 01	07:03	10°♍32'29	-1.3m	
min. Earth dist.	2674 Mar 01	09:31	10°♍30'01	0.67788 AU	
direct	2674 Apr 11	02:13	0°♍43'35		
	2674 Jul 07	04:46	0°♎		
desc. node	2674 Aug 12	07:46	20°♎31'37		
	2674 Aug 27	17:12	0°♏		
	2674 Oct 12	02:59	0°♐		
	2674 Nov 22	22:54	0°♑		
	2675 Jan 01	11:10	0°♒		
evening set	2675 Jan 20	11:15	14°♒49'57		
	2675 Feb 08	17:01	0°♓		
	2675 Mar 18	16:11	0°♈		
conjunction	2675 Mar 29	04:41	8°♈15'12	-0°46'49	
minimum elong	2675 Mar 29	08:03	8°♈21'46	0°46'47	
	2675 Apr 26	06:51	0°♉		
max. Earth dist.	2675 May 18	21:45	17°♉06'29	2.40342 AU	
	2675 Jun 05	08:11	0°♊		
morning rise	2675 Jun 06	01:20	0°♊31'21		
asc. node	2675 Jun 14	04:51	6°♊26'55		
	2675 Jul 17	10:57	0°♋		
	2675 Aug 31	02:46	0°♌		
	2675 Oct 18	00:28	0°♍		
	2675 Dec 10	23:29	0°♎		
retrograde	2676 Feb 24	17:15	23°♎34'48		
opposition	2676 Apr 03	18:36	14°♎33'05	3°00'49	
greatest brilliancy	2676 Apr 04	05:07	14°♎22'49	-1.4m	
min. Earth dist.	2676 Apr 07	17:10	13°♎00'41	0.65140 AU	
direct	2676 May 15	04:43	4°♎30'56		
desc. node	2676 Jun 29	06:46	14°♎44'42		
	2676 Jul 31	10:00	0°♏		
	2676 Sep 19	01:25	0°♐		
	2676 Nov 01	02:34	0°♑		
	2676 Dec 11	00:08	0°♒		
	2677 Jan 18	09:59	0°♓		
	2677 Feb 25	13:25	0°♈		
evening set	2677 Apr 01	07:14	26°♈51'16		
	2677 Apr 05	10:29	0°♉		
asc. node	2677 May 01	04:17	19°♉16'43		
	2677 May 15	19:44	0°♊		
conjunction	2677 Jun 02	21:11	12°♊58'25	0°20'38	
minimum elong	2677 Jun 02	19:53	12°♊56'06	0°20'38	
	2677 Jun 27	04:31	0°♋		
max. Earth dist.	2677 Jul 09	05:05	8°♋14'46	2.53717 AU	
morning rise	2677 Jul 28	18:23	21°♋25'41		
	2677 Aug 10	16:55	0°♌		
	2677 Sep 26	07:57	0°♍		
	2677 Nov 14	06:55	0°♎		
	2678 Jan 06	09:37	0°♏		
	2678 Mar 26	05:13	0°♐		
retrograde	2678 Apr 06	16:18	0°♐45'45		
	2678 Apr 17	15:27	30°℞♏		
opposition	2678 May 13	07:42	22°♏52'12	0°10'23	
greatest brilliancy	2678 May 13	09:05	22°♏50'55	-1.8m	
desc. node	2678 May 17	06:21	21°♏24'20		
min. Earth dist.	2678 May 20	16:56	20°♏08'33	0.56139 AU	
direct	2678 Jun 22	10:01	13°♏22'09		
	2678 Aug 18	02:57	0°♐		
	2678 Oct 07	00:55	0°♑		
	2678 Nov 18	00:24	0°♒		
	2678 Dec 27	10:52	0°♓		
	2679 Feb 04	08:41	0°♈		
	2679 Mar 15	23:26	0°♉		
asc. node	2679 Mar 19	02:24	2°♉19'24		
	2679 Apr 26	02:26	0°♊		
evening set	2679 May 29	23:46	23°♊44'36		
	2679 Jun 08	02:58	0°♋		
conjunction	2679 Jul 21	10:42	28°♋57'32	1°01'06	
minimum elong	2679 Jul 21	09:31	28°♋55'35	1°01'05	
	2679 Jul 23	00:47	0°♌		
max. Earth dist.	2679 Aug 07	02:11	9°♌49'27	2.63269 AU	
morning rise	2679 Sep 07	09:43	29°♌57'50		
	2679 Sep 07	11:04	0°♍		
	2679 Oct 24	23:08	0°♎		
	2679 Dec 12	09:37	0°♏		
	2680 Jan 31	12:20	0°♐		
	2680 Mar 26	22:35	0°♑		
desc. node	2680 Apr 03	04:53	3°♑25'27		
retrograde	2680 Jun 03	01:19	20°♑18'12		
opposition	2680 Jul 05	09:08	14°♑21'23	-4°40'55	
greatest brilliancy	2680 Jul 06	15:26	13°♑57'48	-2.5m	
min. Earth dist.	2680 Jul 13	05:11	11°♑55'37	0.43104 AU	
direct	2680 Aug 09	11:29	7°♑12'52		
	2680 Oct 13	10:40	0°♒		
	2680 Nov 28	12:25	0°♓		
	2681 Jan 09	14:23	0°♈		
asc. node	2681 Feb 03	01:23	17°♈36'38		
	2681 Feb 20	09:19	0°♉		
	2681 Apr 04	05:03	0°♊		
	2681 May 18	13:17	0°♋		
	2681 Jul 03	09:00	0°♌		
evening set	2681 Jul 12	12:41	5°♌54'16		

	2681 Aug 19 04:33	0°♍	
conjunction	2681 Aug 28 16:34	6°♍02'55	1°07'33
minimum elong	2681 Aug 28 16:58	6°♍03'32	1°07'33
max. Earth dist.	2681 Aug 30 07:16	7°♍04'29	2.67491 AU
	2681 Oct 05 07:45	0°♎	
morning rise	2681 Oct 12 08:10	4°♎28'29	
	2681 Nov 21 04:40	0°♏	
	2682 Jan 06 12:59	0°♐	
desc. node	2682 Feb 19 03:56	28°♐29'14	
	2682 Feb 21 11:24	0°♑	
	2682 Apr 08 11:17	0°♒	
	2682 May 26 01:52	0°♓	
	2682 Jul 24 18:52	0°♈	
retrograde	2682 Aug 22 07:32	5°♈06'25	
min. Earth dist.	2682 Sep 19 00:50	0°♈34'25	0.37641 AU
	2682 Sep 21 02:57	30°℞♓	
opposition	2682 Sep 22 08:24	29°♓39'42	-5°33'51
greatest brilliancy	2682 Sep 21 21:26	29°♓47'15	-2.9m
direct	2682 Oct 21 21:37	24°♓41'24	
	2682 Nov 20 11:37	0°♈	
asc. node	2682 Dec 22 01:11	13°♈41'58	
	2683 Jan 20 11:19	0°♉	
	2683 Mar 10 13:06	0°♊	
	2683 Apr 27 05:24	0°♋	
	2683 Jun 13 23:30	0°♌	
	2683 Jul 31 19:23	0°♍	
evening set	2683 Aug 19 15:44	11°♍52'42	
	2683 Sep 17 04:25	0°♎	
max. Earth dist.	2683 Sep 22 05:05	3°♎13'03	2.66237 AU
conjunction	2683 Oct 04 00:33	10°♎48'28	0°47'56
minimum elong	2683 Oct 04 01:39	10°♎50'15	0°47'56
	2683 Nov 02 12:19	0°♏	
morning rise	2683 Nov 17 14:11	9°♏57'47	
	2683 Dec 17 10:00	0°♐	
desc. node	2684 Jan 07 03:10	14°♐11'28	
	2684 Jan 29 19:46	0°♑	
	2684 Mar 11 21:01	0°♒	
	2684 Apr 21 22:49	0°♓	
	2684 Jun 01 19:26	0°♈	
	2684 Jul 14 03:58	0°♉	
	2684 Sep 01 12:47	0°♊	
retrograde	2684 Oct 21 18:22	14°♊43'39	
asc. node	2684 Nov 08 00:11	12°♊31'17	
min. Earth dist.	2684 Nov 19 16:25	8°♊55'56	0.48469 AU
opposition	2684 Nov 27 19:30	5°♊58'55	1°04'33
greatest brilliancy	2684 Nov 27 10:43	6°♊06'54	-2.3m
	2684 Dec 18 12:33	30°℞♉	
direct	2684 Dec 31 10:28	28°♉51'52	
	2685 Jan 13 22:09	0°♊	
	2685 Mar 29 23:12	0°♋	
	2685 May 22 08:16	0°♌	
	2685 Jul 11 12:51	0°♍	
	2685 Aug 28 20:23	0°♎	
evening set	2685 Sep 24 16:55	17°♎12'27	
	2685 Oct 14 05:40	0°♏	
max. Earth dist.	2685 Oct 16 16:14	1°♏36'58	2.59679 AU
conjunction	2685 Nov 10 06:26	18°♏08'08	0°07'59
minimum elong	2685 Nov 10 06:43	18°♏08'37	0°08'00
behind sun begin	2685 Nov 09 13:12	17°♏38'50	
behind sun end	2685 Nov 11 00:15	18°♏38'26	
desc. node	2685 Nov 24 01:43	27°♏36'09	
	2685 Nov 27 12:52	0°♐	
morning rise	2685 Dec 28 12:34	21°♐51'07	
	2686 Jan 08 19:48	0°♑	
	2686 Feb 18 09:54	0°♒	
	2686 Mar 29 19:45	0°♓	
	2686 May 07 18:28	0°♈	
	2686 Jun 16 05:06	0°♉	
	2686 Jul 27 12:48	0°♊	
	2686 Sep 11 09:29	0°♋	
asc. node	2686 Sep 25 22:57	8°♋22'06	
	2686 Nov 19 17:40	0°♌	
retrograde	2686 Dec 03 07:20	1°♌12'36	
	2686 Dec 16 07:48	30°℞♋	
min. Earth dist.	2687 Jan 06 17:05	23°♋23'22	0.60513 AU
opposition	2687 Jan 11 23:13	21°♋18'07	4°01'40
greatest brilliancy	2687 Jan 11 04:12	21°♋37'01	-1.6m
direct	2687 Feb 18 13:29	12°♋34'37	
	2687 Apr 22 16:01	0°♌	
	2687 Jun 19 17:24	0°♍	
	2687 Aug 09 11:47	0°♎	
	2687 Sep 25 15:12	0°♏	
desc. node	2687 Oct 12 00:21	10°♏53'54	
evening set	2687 Nov 04 16:33	27°♏05'22	
	2687 Nov 08 20:46	0°♐	
max. Earth dist.	2687 Nov 19 08:59	7°♐23'45	2.48431 AU
	2687 Dec 20 15:14	0°♑	
conjunction	2687 Dec 26 16:02	4°♑27'46	-0°42'20
minimum elong	2687 Dec 26 14:14	4°♑24'24	0°42'19
	2688 Jan 29 11:50	0°♒	
morning rise	2688 Feb 23 14:22	19°♒24'50	
	2688 Mar 08 03:38	0°♓	
	2688 Apr 15 10:02	0°♈	
	2688 May 24 04:09	0°♉	
	2688 Jul 03 08:43	0°♊	
asc. node	2688 Aug 12 22:44	28°♊33'36	
	2688 Aug 15 01:50	0°♋	
	2688 Oct 01 05:16	0°♌	
	2688 Nov 30 17:27	0°♍	
retrograde	2689 Jan 06 20:53	7°♍25'31	
	2689 Feb 09 23:27	30°℞♌	
min. Earth dist.	2689 Feb 14 16:08	28°♌08'23	0.67025 AU
opposition	2689 Feb 16 02:33	27°♌33'53	4°33'24
greatest brilliancy	2689 Feb 15 20:27	27°♌39'59	-1.3m
direct	2689 Mar 28 06:45	17°♌57'44	
	2689 May 18 05:29	0°♍	
	2689 Jul 17 08:31	0°♎	
desc. node	2689 Aug 28 23:48	25°♎38'27	
	2689 Sep 04 20:14	0°♏	
	2689 Oct 19 16:37	0°♐	
	2689 Nov 30 09:37	0°♑	
evening set	2689 Dec 26 00:57	19°♑18'40	
	2690 Jan 08 22:23	0°♒	
	2690 Feb 16 05:28	0°♓	
max. Earth dist.	2690 Feb 25 20:49	7°♓37'02	2.36996 AU
conjunction	2690 Feb 27 19:29	9°♓09'20	-1°02'36
minimum elong	2690 Feb 27 21:07	9°♓12'34	1°02'35
	2690 Mar 26 05:15	0°♈	
	2690 May 03 19:21	0°♉	
morning rise	2690 May 09 22:38	4°♉41'12	
	2690 Jun 12 19:28	0°♊	
asc. node	2690 Jun 30 20:57	13°♊04'40	
	2690 Jul 24 22:20	0°♋	
	2690 Sep 07 20:20	0°♌	
	2690 Oct 26 21:02	0°♍	
	2690 Dec 25 17:28	0°♎	
retrograde	2691 Feb 10 11:40	10°♎38'12	
opposition	2691 Mar 22 02:29	1°♎18'00	3°41'13
greatest brilliancy	2691 Mar 22 10:03	1°♎10'32	-1.3m

min. Earth dist.	2691 Mar 24 13:00	0°♎20'12	0.66982 AU
	2691 Mar 25 09:32	30°℞♍	
direct	2691 May 02 11:20	21°♍17'27	
	2691 Jun 13 03:47	0°♎	
desc. node	2691 Jul 16 22:49	15°♎13'03	
	2691 Aug 12 15:38	0°♏	
	2691 Sep 28 21:34	0°♐	
	2691 Nov 10 06:54	0°♑	
	2691 Dec 19 22:48	0°♒	
	2692 Jan 27 05:36	0°♓	
evening set	2692 Mar 04 14:55	29°♓30'23	
	2692 Mar 05 06:01	0°♈	
	2692 Apr 12 23:09	0°♉	
conjunction	2692 May 10 09:06	20°♉36'30	-0°04'55
minimum elong	2692 May 10 09:29	20°♉37'12	0°04'55
behind sun begin	2692 May 09 07:37	19°♉49'18	
behind sun end	2692 May 11 11:21	21°♉25'02	
asc. node	2692 May 17 19:35	26°♉05'28	
	2692 May 23 03:50	0°♊	
max. Earth dist.	2692 Jun 24 10:01	23°♊04'11	2.48720 AU
	2692 Jul 04 08:40	0°♋	
morning rise	2692 Jul 10 02:33	3°♋57'58	
	2692 Aug 17 20:01	0°♌	
	2692 Oct 03 18:02	0°♍	
	2692 Nov 22 21:09	0°♎	
	2693 Jan 19 20:28	0°♏	
retrograde	2693 Mar 20 02:47	15°♏38'05	
opposition	2693 Apr 26 21:34	7°♏13'15	1°29'15
greatest brilliancy	2693 Apr 27 06:22	7°♏04'52	-1.6m
min. Earth dist.	2693 May 03 00:48	4°♏53'16	0.60383 AU
	2693 May 17 23:08	30°℞♎	
desc. node	2693 Jun 02 21:16	27°♎28'33	
direct	2693 Jun 06 19:48	27°♎22'25	
	2693 Jun 27 20:25	0°♏	
	2693 Sep 01 22:44	0°♐	
	2693 Oct 17 12:30	0°♑	
	2693 Nov 27 07:21	0°♒	
	2694 Jan 05 04:01	0°♓	
	2694 Feb 12 15:48	0°♈	
	2694 Mar 23 21:10	0°♉	
asc. node	2694 Apr 04 19:44	8°♉55'40	
	2694 May 03 15:00	0°♊	
evening set	2694 May 09 06:18	4°♊02'42	
	2694 Jun 15 07:28	0°♋	
conjunction	2694 Jul 04 03:35	12°♋48'23	0°49'54
minimum elong	2694 Jul 04 01:54	12°♋45'33	0°49'54
max. Earth dist.	2694 Jul 27 22:22	28°♋38'49	2.60123 AU
	2694 Jul 29 23:42	0°♌	
morning rise	2694 Aug 23 12:51	15°♌59'39	
	2694 Sep 14 09:30	0°♍	
	2694 Nov 01 06:28	0°♎	
	2694 Dec 20 20:59	0°♏	
	2695 Feb 12 09:51	0°♐	
desc. node	2695 Apr 20 20:01	26°♐53'20	
retrograde	2695 May 09 07:59	28°♐50'31	
opposition	2695 Jun 12 15:46	22°♐01'38	-2°35'05
greatest brilliancy	2695 Jun 13 10:26	21°♐45'43	-2.2m
min. Earth dist.	2695 Jun 21 04:07	19°♐08'25	0.48293 AU
direct	2695 Jul 20 07:26	13°♐39'53	
	2695 Sep 12 11:21	0°♑	
	2695 Oct 30 22:37	0°♒	
	2695 Dec 11 14:28	0°♓	
	2696 Jan 20 19:31	0°♈	
asc. node	2696 Feb 20 18:47	22°♈57'07	
	2696 Mar 01 09:57	0°♉	
	2696 Apr 12 08:35	0°♊	
	2696 May 26 01:03	0°♋	
evening set	2696 Jun 26 06:50	20°♋45'55	
	2696 Jul 10 09:47	0°♌	
conjunction	2696 Aug 14 00:59	22°♌21'16	1°08'31
minimum elong	2696 Aug 14 00:49	22°♌21'00	1°08'30
max. Earth dist.	2696 Aug 21 04:11	26°♌55'13	2.66478 AU
	2696 Aug 25 23:52	0°♍	
morning rise	2696 Sep 28 14:05	21°♍22'25	
	2696 Oct 12 04:26	0°♎	
	2696 Nov 28 11:54	0°♏	
	2697 Jan 14 20:39	0°♐	
	2697 Mar 03 19:15	0°♑	
desc. node	2697 Mar 07 19:12	2°♑27'49	
	2697 Apr 23 01:56	0°♒	
	2697 Jun 27 16:22	0°♓	
retrograde	2697 Jul 21 14:46	3°♓24'49	
	2697 Aug 14 18:43	30°℞♒	
opposition	2697 Aug 20 15:50	28°♒28'05	-6°48'45
greatest brilliancy	2697 Aug 21 06:02	28°♒18'39	-2.9m
min. Earth dist.	2697 Aug 22 19:26	27°♒53'52	0.37587 AU
direct	2697 Sep 19 23:05	23°♒19'12	
	2697 Oct 22 22:08	0°♓	
	2697 Dec 18 20:37	0°♈	
asc. node	2698 Jan 07 16:49	12°♈34'30	
	2698 Feb 03 08:01	0°♉	
	2698 Mar 20 16:29	0°♊	
	2698 May 05 14:31	0°♋	
	2698 Jun 21 09:35	0°♌	
evening set	2698 Aug 05 04:48	28°♌23'59	
	2698 Aug 07 17:28	0°♍	
max. Earth dist.	2698 Sep 13 07:10	23°♍12'26	2.67363 AU
conjunction	2698 Sep 19 22:07	27°♍25'49	0°58'14
minimum elong	2698 Sep 19 23:06	27°♍27'23	0°58'13
	2698 Sep 23 22:38	0°♎	
morning rise	2698 Nov 03 03:44	25°♎55'28	
	2698 Nov 09 09:48	0°♏	
	2698 Dec 24 18:04	0°♐	
desc. node	2699 Jan 23 18:12	20°♐18'15	
	2699 Feb 06 21:39	0°♑	
	2699 Mar 21 23:45	0°♒	
	2699 May 03 10:06	0°♓	
	2699 Jun 15 06:55	0°♈	
	2699 Aug 01 07:51	0°♉	
retrograde	2699 Oct 02 01:13	21°♉08'12	
min. Earth dist.	2699 Oct 29 00:47	16°♉11'16	0.43237 AU
opposition	2699 Nov 06 01:03	13°♉32'16	-1°11'51
greatest brilliancy	2699 Nov 05 17:14	13°♉38'46	-2.6m
asc. node	2699 Nov 25 16:34	8°♉18'40	
direct	2699 Dec 07 18:58	7°♉19'53	
	2700 Feb 16 11:53	0°♊	
	2700 Apr 11 14:43	0°♋	
	2700 May 31 21:33	0°♌	
	2700 Jul 19 21:55	0°♍	
	2700 Sep 05 18:25	0°♎	
evening set	2700 Sep 11 02:37	3°♎24'21	
max. Earth dist.	2700 Oct 07 04:32	20°♎13'52	2.62857 AU
	2700 Oct 22 01:51	0°♏	
conjunction	2700 Oct 26 19:50	3°♏08'36	0°25'30
minimum elong	2700 Oct 26 20:39	3°♏09'57	0°25'30
	2700 Dec 05 13:22	0°♐	
desc. node	2700 Dec 11 17:39	4°♐16'11	
morning rise	2700 Dec 12 01:39	4°♐30'04	
	2701 Jan 17 04:51	0°♑	

	2701 Feb 27 05:57	0°♒	
	2701 Apr 08 03:26	0°♓	
	2701 May 17 14:06	0°♈	
	2701 Jun 26 15:32	0°♉	
	2701 Aug 08 04:39	0°♊	
	2701 Sep 27 15:54	0°♋	
asc. node	2701 Oct 13 15:49	7°♋08'49	
retrograde	2701 Nov 19 00:16	15°♋05'46	
min. Earth dist.	2701 Dec 21 08:55	8°♋00'12	0.56312 AU
opposition	2701 Dec 27 23:55	5°♋25'18	3°16'31
greatest brilliancy	2701 Dec 27 03:53	5°♋44'50	-1.8m
	2702 Jan 12 19:43	30°℞♊	
direct	2702 Feb 02 04:30	27°♊12'57	
	2702 Feb 24 07:29	0°♋	
	2702 May 06 19:48	0°♌	
	2702 Jun 29 09:26	0°♍	
	2702 Aug 17 22:22	0°♎	
	2702 Oct 03 16:40	0°♏	
evening set	2702 Oct 19 20:16	10°♏45'56	
desc. node	2702 Oct 29 16:28	17°♏25'54	
max. Earth dist.	2702 Nov 05 09:55	22°♏02'10	2.53307 AU
	2702 Nov 16 21:56	0°♐	
conjunction	2702 Dec 08 00:26	14°♐54'33	-0°22'55
minimum elong	2702 Dec 07 23:26	14°♐52'46	0°22'54
	2702 Dec 28 20:23	0°♑	
morning rise	2703 Jan 30 15:41	24°♑27'31	
	2703 Feb 06 22:44	0°♒	
	2703 Mar 17 20:09	0°♓	
	2703 Apr 25 07:11	0°♈	
	2703 Jun 03 05:13	0°♉	
	2703 Jul 13 15:20	0°♊	
	2703 Aug 25 23:36	0°♋	
asc. node	2703 Aug 31 13:55	3°♋39'36	
	2703 Oct 14 12:37	0°♌	
retrograde	2703 Dec 26 10:38	24°♌11'58	
min. Earth dist.	2704 Feb 01 15:53	15°♌25'54	0.65246 AU
opposition	2704 Feb 04 14:57	14°♌14'39	4°32'48
greatest brilliancy	2704 Feb 04 02:57	14°♌26'41	-1.4m
direct	2704 Mar 14 23:03	4°♌55'23	
	2704 Jun 02 14:26	0°♍	
	2704 Jul 27 04:47	0°♎	
	2704 Sep 13 11:46	0°♏	
desc. node	2704 Sep 15 15:03	1°♏23'22	
	2704 Oct 28 00:33	0°♐	
evening set	2704 Dec 04 14:21	26°♐57'17	
	2704 Dec 08 17:22	0°♑	
max. Earth dist.	2704 Dec 24 07:13	11°♑38'20	2.40506 AU
	2705 Jan 17 08:39	0°♒	
conjunction	2705 Feb 01 02:46	11°♒26'55	-1°03'21
minimum elong	2705 Feb 01 01:39	11°♒24'45	1°03'20
	2705 Feb 24 18:23	0°♓	
	2705 Apr 03 19:49	0°♈	
morning rise	2705 Apr 10 13:21	5°♈16'52	
	2705 May 12 10:11	0°♉	
	2705 Jun 21 10:00	0°♊	
asc. node	2705 Jul 18 13:41	19°♊31'06	
	2705 Aug 02 14:53	0°♋	
	2705 Sep 17 00:09	0°♌	
	2705 Nov 07 00:16	0°♍	
retrograde	2706 Jan 28 20:41	27°♍58'47	
opposition	2706 Mar 09 20:33	18°♍23'39	4°10'10
greatest brilliancy	2706 Mar 09 23:27	18°♍20'46	-1.3m
min. Earth dist.	2706 Mar 10 18:42	18°♍01'36	0.67787 AU
direct	2706 Apr 19 22:24	8°♍29'31	
	2706 Jun 30 10:42	0°♎	
desc. node	2706 Aug 03 13:43	18°♎21'23	
	2706 Aug 23 01:27	0°♏	
	2706 Oct 08 00:46	0°♐	
	2706 Nov 19 01:19	0°♑	
	2706 Dec 28 14:59	0°♒	
	2707 Feb 04 21:07	0°♓	
evening set	2707 Feb 06 00:02	0°♓53'12	
	2707 Mar 14 20:32	0°♈	
conjunction	2707 Apr 15 11:20	24°♈37'21	-0°32'44
minimum elong	2707 Apr 15 14:06	24°♈42'41	0°32'42
	2707 Apr 22 11:32	0°♉	
	2707 Jun 01 13:05	0°♊	
asc. node	2707 Jun 05 13:15	2°♊55'26	
max. Earth dist.	2707 Jun 05 19:27	3°♊06'44	2.43286 AU
morning rise	2707 Jun 20 15:32	13°♊48'43	
	2707 Jul 13 15:21	0°♋	
	2707 Aug 27 03:35	0°♌	
	2707 Oct 13 13:17	0°♍	
	2707 Dec 04 14:35	0°♎	
	2708 Feb 16 23:13	0°♏	
retrograde	2708 Mar 05 05:36	1°♏40'48	
	2708 Mar 21 10:32	30°℞♎	
opposition	2708 Apr 12 21:43	22°♎50'41	2°31'10
greatest brilliancy	2708 Apr 13 08:35	22°♎40'09	-1.5m
min. Earth dist.	2708 Apr 17 15:18	21°♎00'36	0.63719 AU
direct	2708 May 24 06:04	12°♎50'17	
desc. node	2708 Jun 20 12:43	17°♎00'26	
	2708 Jul 23 12:31	0°♏	
	2708 Sep 13 22:31	0°♐	
	2708 Oct 27 16:18	0°♑	
	2708 Dec 06 20:07	0°♒	
	2709 Jan 14 08:54	0°♓	
	2709 Feb 21 14:27	0°♈	
	2709 Apr 01 13:30	0°♉	
evening set	2709 Apr 16 19:55	11°♉28'30	
asc. node	2709 Apr 22 11:35	15°♉40'34	
	2709 May 12 00:40	0°♊	
conjunction	2709 Jun 15 21:21	24°♊45'08	0°33'00
minimum elong	2709 Jun 15 19:38	24°♊42'09	0°32'59
	2709 Jun 23 11:10	0°♋	
max. Earth dist.	2709 Jul 17 13:09	16°♋23'52	2.56212 AU
	2709 Aug 06 23:41	0°♌	
morning rise	2709 Aug 08 12:50	1°♌01'08	
	2709 Sep 22 11:23	0°♍	
	2709 Nov 09 22:05	0°♎	
	2709 Dec 31 08:29	0°♏	
	2710 Mar 02 15:18	0°♐	
retrograde	2710 Apr 18 15:03	10°♐35'32	
desc. node	2710 May 08 11:06	8°♐07'24	
opposition	2710 May 24 13:27	3°♐02'20	-0°44'13
greatest brilliancy	2710 May 24 18:37	2°♐57'40	-2.0m
min. Earth dist.	2710 Jun 01 12:15	0°♐10'22	0.53495 AU
	2710 Jun 02 00:05	30°℞♏	
direct	2710 Jul 02 23:34	23°♏50'47	
	2710 Aug 04 01:44	0°♐	
	2710 Sep 30 09:54	0°♑	
	2710 Nov 12 17:29	0°♒	
	2710 Dec 22 17:07	0°♓	
	2711 Jan 30 23:00	0°♈	
asc. node	2711 Mar 10 10:49	28°♈58'43	
	2711 Mar 11 19:53	0°♉	
	2711 Apr 22 03:49	0°♊	
	2711 Jun 04 08:30	0°♋	
evening set	2711 Jun 10 17:37	4°♋19'23	
	2711 Jul 19 08:56	0°♌	

conjunction	2711 Jul 31 16:08	8°♌01'11	1°05'11
minimum elong	2711 Jul 31 15:20	7°♌59'52	1°05'11
max. Earth dist.	2711 Aug 13 18:02	16°♌29'03	2.64642 AU
	2711 Sep 03 19:41	0°♍	
morning rise	2711 Sep 16 14:37	8°♍08'51	
	2711 Oct 21 04:00	0°♎	
	2711 Dec 08 02:34	0°♏	
	2712 Jan 25 23:22	0°♐	
	2712 Mar 17 11:58	0°♑	
desc. node	2712 Mar 25 10:22	4°♑19'37	
	2712 May 22 00:06	0°♒	
retrograde	2712 Jun 20 13:40	4°♒50'10	
	2712 Jul 19 15:32	30°℞♑	
opposition	2712 Jul 21 20:12	29°♑21'43	-5°48'03
greatest brilliancy	2712 Jul 23 03:06	28°♑59'01	-2.7m
min. Earth dist.	2712 Jul 28 07:18	27°♑28'17	0.40581 AU
direct	2712 Aug 24 04:22	23°♑00'48	
	2712 Sep 26 08:12	0°♒	
	2712 Nov 20 05:41	0°♓	
	2713 Jan 03 10:10	0°♈	
asc. node	2713 Jan 25 09:41	15°♈23'20	
	2713 Feb 15 06:38	0°♉	
	2713 Mar 30 17:59	0°♊	
	2713 May 14 12:41	0°♋	
	2713 Jun 29 14:52	0°♌	
evening set	2713 Jul 22 07:44	14°♌32'50	
	2713 Aug 15 13:55	0°♍	
conjunction	2713 Sep 06 19:58	14°♍08'49	1°05'10
minimum elong	2713 Sep 06 20:38	14°♍09'52	1°05'09
max. Earth dist.	2713 Sep 05 12:02	13°♍18'02	2.67686 AU
	2713 Oct 01 17:23	0°♎	
morning rise	2713 Oct 21 04:51	12°♎27'39	
	2713 Nov 17 10:18	0°♏	
	2714 Jan 02 09:01	0°♐	
desc. node	2714 Feb 10 10:21	25°♐54'42	
	2714 Feb 16 13:13	0°♑	
	2714 Apr 02 05:06	0°♒	
	2714 May 17 03:00	0°♓	
	2714 Jul 04 06:09	0°♈	
retrograde	2714 Sep 08 09:03	23°♈06'56	
min. Earth dist.	2714 Oct 04 23:47	18°♈39'59	0.39015 AU
opposition	2714 Oct 10 19:15	16°♈57'57	-4°02'54
greatest brilliancy	2714 Oct 10 02:40	17°♈10'06	-2.8m
direct	2714 Nov 09 17:25	11°♈40'09	
asc. node	2714 Dec 13 07:48	18°♈13'09	
	2715 Jan 09 11:50	0°♉	
	2715 Mar 04 04:18	0°♊	
	2715 Apr 22 09:30	0°♋	
	2715 Jun 09 20:46	0°♌	
	2715 Jul 28 01:21	0°♍	
evening set	2715 Aug 28 19:45	19°♍58'59	
	2715 Sep 13 14:03	0°♎	
max. Earth dist.	2715 Sep 28 14:13	9°♎37'14	2.65270 AU
conjunction	2715 Oct 13 04:08	19°♎03'10	0°40'30
minimum elong	2715 Oct 13 05:12	19°♎04'54	0°40'29
	2715 Oct 29 21:43	0°♏	
morning rise	2715 Nov 27 03:37	18°♏48'12	
	2715 Dec 13 15:56	0°♐	
desc. node	2715 Dec 29 09:06	10°♐48'18	
	2716 Jan 25 18:57	0°♑	
	2716 Mar 07 10:56	0°♒	
	2716 Apr 17 00:53	0°♓	
	2716 May 27 05:59	0°♈	
	2716 Jul 07 10:11	0°♉	
	2716 Aug 21 18:03	0°♊	
asc. node	2716 Oct 30 07:34	26°♊47'42	
retrograde	2716 Nov 02 05:43	26°♊51'28	
min. Earth dist.	2716 Dec 02 09:31	20°♊35'08	0.51365 AU
greatest brilliancy	2716 Dec 09 12:01	17°♊55'08	-2.1m
opposition	2716 Dec 10 03:28	17°♊40'36	2°03'25
direct	2717 Jan 13 17:04	10°♊07'45	
	2717 Mar 21 16:04	0°♋	
	2717 May 17 05:06	0°♌	
	2717 Jul 07 09:03	0°♍	
	2717 Aug 25 02:07	0°♎	
evening set	2717 Oct 04 06:27	25°♎49'35	
	2717 Oct 10 14:34	0°♏	
max. Earth dist.	2717 Oct 24 02:13	8°♏58'36	2.57601 AU
desc. node	2717 Nov 15 07:28	24°♏04'05	
conjunction	2717 Nov 20 13:10	27°♏40'54	-0°03'06
minimum elong	2717 Nov 20 13:02	27°♏40'40	0°03'05
behind sun begin	2717 Nov 19 16:58	27°♏05'59	
behind sun end	2717 Nov 21 09:06	28°♏15'23	
	2717 Nov 23 21:24	0°♐	
	2718 Jan 05 01:30	0°♑	
morning rise	2718 Jan 09 08:27	3°♑07'42	
	2718 Feb 14 11:36	0°♒	
	2718 Mar 25 16:51	0°♓	
	2718 May 03 10:53	0°♈	
	2718 Jun 11 15:48	0°♉	
	2718 Jul 22 12:30	0°♊	
	2718 Sep 05 01:34	0°♋	
asc. node	2718 Sep 17 07:45	7°♋31'53	
	2718 Oct 30 14:15	0°♌	
retrograde	2718 Dec 12 13:21	10°♌10'44	
min. Earth dist.	2719 Jan 17 00:14	2°♌00'19	0.62445 AU
opposition	2719 Jan 21 11:28	0°♌13'20	4°18'14
greatest brilliancy	2719 Jan 20 18:22	0°♌30'24	-1.5m
	2719 Jan 22 00:51	30°℞♋	
direct	2719 Feb 28 18:19	21°♋15'42	
	2719 Apr 11 20:52	0°♌	
	2719 Jun 14 10:23	0°♍	
	2719 Aug 05 07:18	0°♎	
	2719 Sep 21 19:54	0°♏	
desc. node	2719 Oct 03 06:15	7°♏32'42	
	2719 Nov 05 04:25	0°♐	
evening set	2719 Nov 15 22:30	7°♐33'59	
max. Earth dist.	2719 Nov 30 14:54	18°♐04'39	2.45584 AU
	2719 Dec 16 22:34	0°♑	
conjunction	2720 Jan 08 22:07	17°♑10'53	-0°52'00
minimum elong	2720 Jan 08 20:08	17°♑07'07	0°52'00
	2720 Jan 25 17:28	0°♒	
	2720 Mar 04 06:55	0°♓	
morning rise	2720 Mar 11 07:58	5°♓31'58	
	2720 Apr 11 11:07	0°♈	
	2720 May 20 03:16	0°♉	
	2720 Jun 29 04:51	0°♊	
asc. node	2720 Aug 04 06:02	25°♊37'24	
	2720 Aug 10 15:14	0°♋	
	2720 Sep 25 21:07	0°♌	
	2720 Nov 19 21:58	0°♍	
retrograde	2721 Jan 15 12:16	15°♍17'22	
opposition	2721 Feb 24 17:02	5°♍30'42	4°28'08
min. Earth dist.	2721 Feb 24 02:37	5°♍45'06	0.67574 AU
greatest brilliancy	2721 Feb 24 14:16	5°♍33'28	-1.3m
	2721 Mar 11 13:24	30°℞♌	
direct	2721 Apr 06 06:29	25°♌47'10	
	2721 May 04 11:28	0°♍	
	2721 Jul 11 21:19	0°♎	
desc. node	2721 Aug 20 05:09	22°♎55'48	

	2721 Aug 31 12:56	0°♏	
	2721 Oct 15 18:28	0°♐	
	2721 Nov 26 14:26	0°♑	
	2722 Jan 05 03:51	0°♒	
evening set	2722 Jan 09 23:31	3°♒44'20	
	2722 Feb 12 10:28	0°♓	
conjunction	2722 Mar 17 06:19	25°♓57'09	-0°55'23
minimum elong	2722 Mar 17 09:18	26°♓03'04	0°55'21
	2722 Mar 22 09:38	0°♈	
	2722 Apr 29 23:17	0°♉	
max. Earth dist.	2722 Apr 29 18:10	29°♈50'13	2.38224 AU
morning rise	2722 May 26 16:50	20°♉12'30	
	2722 Jun 08 22:44	0°♊	
asc. node	2722 Jun 22 04:50	9°♊38'08	
	2722 Jul 20 23:56	0°♋	
	2722 Sep 03 16:10	0°♌	
	2722 Oct 21 21:39	0°♍	
	2722 Dec 16 12:41	0°♎	
retrograde	2723 Feb 19 13:17	18°♎29'11	
opposition	2723 Mar 30 21:20	9°♎18'37	3°18'56
greatest brilliancy	2723 Mar 31 06:43	9°♎09'25	-1.4m
min. Earth dist.	2723 Apr 03 03:33	8°♎01'51	0.66086 AU
	2723 Apr 30 17:23	30°℞♍	
direct	2723 May 11 07:53	29°♍16'41	
	2723 May 22 09:04	0°♎	
desc. node	2723 Jul 08 03:50	14°♎50'56	
	2723 Aug 06 17:12	0°♏	
	2723 Sep 24 07:06	0°♐	
	2723 Nov 06 02:21	0°♑	
	2723 Dec 15 22:20	0°♒	
	2724 Jan 23 07:04	0°♓	
	2724 Mar 01 08:53	0°♈	
evening set	2724 Mar 21 10:51	15°♈38'52	
	2724 Apr 09 03:28	0°♉	
asc. node	2724 May 09 04:40	22°♉31'33	
	2724 May 19 09:23	0°♊	
conjunction	2724 May 25 01:08	4°♊06'24	0°10'16
minimum elong	2724 May 25 00:23	4°♊05'04	0°10'15
behind sun begin	2724 May 24 04:28	3°♊29'01	
behind sun end	2724 May 25 20:19	4°♊41'05	
	2724 Jun 30 14:59	0°♋	
max. Earth dist.	2724 Jul 04 08:08	2°♋33'59	2.51548 AU
morning rise	2724 Jul 21 23:20	14°♋36'10	
	2724 Aug 14 01:17	0°♌	
	2724 Sep 29 17:40	0°♍	
	2724 Nov 18 01:44	0°♎	
	2725 Jan 11 16:34	0°♏	
retrograde	2725 Mar 30 19:55	24°♏32'14	
opposition	2725 May 07 00:52	16°♏23'41	0°45'50
greatest brilliancy	2725 May 07 06:09	16°♏18'45	-1.7m
min. Earth dist.	2725 May 13 21:37	13°♏49'27	0.58138 AU
desc. node	2725 May 25 03:18	10°♏04'00	
direct	2725 Jun 16 13:48	6°♏42'44	
	2725 Aug 25 12:13	0°♐	
	2725 Oct 12 04:04	0°♑	
	2725 Nov 22 14:21	0°♒	
	2725 Dec 31 18:12	0°♓	
	2726 Feb 08 10:49	0°♈	
	2726 Mar 19 20:26	0°♉	
asc. node	2726 Mar 27 02:45	5°♉25'19	
	2726 Apr 29 18:01	0°♊	
evening set	2726 May 22 08:04	15°♊59'50	
	2726 Jun 11 13:43	0°♋	
conjunction	2726 Jul 15 05:00	22°♋39'33	0°57'02
minimum elong	2726 Jul 15 03:34	22°♋37'10	0°57'01
	2726 Jul 26 07:46	0°♌	
max. Earth dist.	2726 Aug 03 23:27	5°♌40'10	2.61968 AU
morning rise	2726 Sep 02 03:29	24°♌31'52	
	2726 Sep 10 16:52	0°♍	
	2726 Oct 28 07:44	0°♎	
	2726 Dec 16 04:29	0°♏	
	2727 Feb 05 11:43	0°♐	
	2727 Apr 06 22:35	0°♑	
desc. node	2727 Apr 12 02:03	1°♑59'13	
retrograde	2727 May 24 06:13	10°♑54'50	
opposition	2727 Jun 26 11:55	4°♑34'08	-3°45'46
greatest brilliancy	2727 Jun 27 14:15	4°♑12'43	-2.4m
min. Earth dist.	2727 Jul 04 20:34	1°♑51'29	0.45377 AU
	2727 Jul 11 02:43	30°℞♐	
direct	2727 Aug 01 20:54	26°♐49'46	
	2727 Aug 23 17:38	0°♑	
	2727 Oct 22 23:49	0°♒	
	2727 Dec 05 13:34	0°♓	
	2728 Jan 15 15:16	0°♈	
asc. node	2728 Feb 12 01:23	20°♈03'24	
	2728 Feb 25 19:03	0°♉	
	2728 Apr 08 03:17	0°♊	
	2728 May 22 02:58	0°♋	
evening set	2728 Jul 06 17:07	0°♌00'51	
	2728 Jul 06 16:35	0°♌	
	2728 Aug 22 09:09	0°♍	
conjunction	2728 Aug 23 12:04	0°♍42'54	1°08'26
minimum elong	2728 Aug 23 12:15	0°♍43'12	1°08'26
max. Earth dist.	2728 Aug 27 11:38	3°♍15'16	2.67154 AU
morning rise	2728 Oct 07 11:34	29°♍20'07	
	2728 Oct 08 12:39	0°♎	
	2728 Nov 24 13:59	0°♏	
	2729 Jan 10 08:28	0°♐	
	2729 Feb 26 01:25	0°♑	
desc. node	2729 Feb 27 01:08	0°♑37'55	
	2729 Apr 14 12:29	0°♒	
	2729 Jun 04 20:01	0°♓	
retrograde	2729 Aug 09 19:48	21°♓30'23	
min. Earth dist.	2729 Sep 08 04:16	16°♓40'20	0.37200 AU
opposition	2729 Sep 09 01:48	16°♓26'01	-6°23'47
greatest brilliancy	2729 Sep 09 01:07	16°♓26'28	-2.9m
direct	2729 Oct 08 16:16	11°♓31'41	
	2729 Dec 07 01:11	0°♈	
asc. node	2729 Dec 30 01:16	12°♈46'38	
	2730 Jan 27 08:33	0°♉	
	2730 Mar 15 10:04	0°♊	
	2730 May 01 04:34	0°♋	
	2730 Jun 17 10:59	0°♌	
	2730 Aug 04 01:08	0°♍	
evening set	2730 Aug 14 12:35	6°♍36'52	
max. Earth dist.	2730 Sep 19 13:03	29°♍28'48	2.66850 AU
	2730 Sep 20 08:35	0°♎	
conjunction	2730 Sep 28 23:39	5°♎31'22	0°52'37
minimum elong	2730 Sep 29 00:43	5°♎33'06	0°52'36
	2730 Nov 05 18:22	0°♏	
morning rise	2730 Nov 12 07:58	4°♏18'36	
	2730 Dec 20 21:18	0°♐	
desc. node	2731 Jan 15 00:20	17°♐07'11	
	2731 Feb 02 15:05	0°♑	
	2731 Mar 17 03:03	0°♒	
	2731 Apr 27 17:34	0°♓	
	2731 Jun 08 07:05	0°♈	
	2731 Jul 21 23:24	0°♉	
	2731 Sep 16 12:37	0°♊	

retrograde	2731 Oct 15 04:12	5°♊25'30	
min. Earth dist.	2731 Nov 12 04:15	0°♊00'57	0.46080 AU
	2731 Nov 12 05:22	30°℞♉	
asc. node	2731 Nov 17 00:39	28°♉19'33	
opposition	2731 Nov 20 09:38	27°♉07'55	0°11'38
greatest brilliancy	2727 Mar 16 02:49	20°♐18'50	6.7m
direct	2731 Dec 23 04:30	20°♉24'18	
	2732 Feb 03 18:21	0°♊	
	2732 Apr 04 11:20	0°♋	
	2732 May 26 07:30	0°♌	
	2732 Jul 14 23:06	0°♍	
	2732 Sep 01 02:10	0°♎	
evening set	2732 Sep 19 09:55	11°♎42'20	
max. Earth dist.	2732 Oct 13 02:49	27°♎07'32	2.61207 AU
	2732 Oct 17 11:29	0°♏	
conjunction	2732 Nov 04 12:35	12°♏01'21	0°15'37
minimum elong	2732 Nov 04 13:07	12°♏02'16	0°15'36
behind sun begin	2732 Nov 04 08:13	11°♏54'01	
behind sun end	2732 Nov 04 18:02	12°♏10'31	
	2732 Nov 30 21:43	0°♐	
desc. node	2732 Dec 01 22:55	0°♐43'32	
morning rise	2732 Dec 21 18:17	14°♐33'58	
	2733 Jan 12 09:16	0°♑	
	2733 Feb 22 04:53	0°♒	
	2733 Apr 02 19:58	0°♓	
	2733 May 11 23:19	0°♈	
	2733 Jun 20 14:56	0°♉	
	2733 Aug 01 07:10	0°♊	
	2733 Sep 17 09:51	0°♋	
asc. node	2733 Oct 03 23:17	8°♋52'27	
retrograde	2733 Nov 27 21:11	24°♋57'43	
min. Earth dist.	2733 Dec 31 09:34	17°♋27'43	0.58736 AU
greatest brilliancy	2734 Jan 05 11:16	15°♋27'48	-1.7m
opposition	2734 Jan 06 07:23	15°♋07'58	3°45'51
direct	2734 Feb 12 07:52	6°♋37'32	
	2734 Apr 28 20:15	0°♌	
	2734 Jun 23 17:02	0°♍	
	2734 Aug 12 22:51	0°♎	
	2734 Sep 28 23:17	0°♏	
desc. node	2734 Oct 19 21:19	13°♏57'10	
evening set	2734 Oct 29 06:32	20°♏20'22	
	2734 Nov 12 06:04	0°♐	
max. Earth dist.	2734 Nov 13 13:50	0°♐55'27	2.50675 AU
conjunction	2734 Dec 18 20:38	26°♐08'00	-0°34'18
minimum elong	2734 Dec 18 19:08	26°♐05'15	0°34'16
	2734 Dec 24 03:22	0°♑	
	2735 Feb 02 03:26	0°♒	
morning rise	2735 Feb 13 05:36	8°♒30'33	
	2735 Mar 12 22:08	0°♓	
	2735 Apr 20 06:25	0°♈	
	2735 May 29 01:34	0°♉	
	2735 Jul 08 06:57	0°♊	
	2735 Aug 20 03:34	0°♋	
asc. node	2735 Aug 21 22:53	1°♋12'26	
	2735 Oct 06 23:07	0°♌	
	2735 Dec 14 11:48	0°♍	
retrograde	2736 Jan 03 03:56	2°♍19'17	
	2736 Jan 21 16:30	30°℞♌	
min. Earth dist.	2736 Feb 10 06:59	23°♌15'43	0.66352 AU
opposition	2736 Feb 12 10:06	22°♌24'30	4°34'49
greatest brilliancy	2736 Feb 12 01:18	22°♌33'19	-1.3m
direct	2736 Mar 23 06:27	12°♌55'26	
	2736 May 25 00:12	0°♍	
	2736 Jul 21 10:32	0°♎	
desc. node	2736 Sep 05 20:55	28°♎20'54	
	2736 Sep 08 10:39	0°♏	
	2736 Oct 23 05:12	0°♐	
	2736 Dec 03 23:12	0°♑	
evening set	2736 Dec 16 22:24	9°♑40'24	
	2737 Jan 12 13:56	0°♒	
max. Earth dist.	2737 Jan 18 01:09	4°♒13'57	2.38088 AU
conjunction	2737 Feb 16 09:04	27°♒11'34	-1°04'45
minimum elong	2737 Feb 16 09:23	27°♒12'11	1°04'45
	2737 Feb 19 22:30	0°♓	
	2737 Mar 29 22:48	0°♈	
morning rise	2737 Apr 27 22:10	22°♈36'50	
	2737 May 07 12:26	0°♉	
	2737 Jun 16 11:17	0°♊	
asc. node	2737 Jul 08 21:21	16°♊12'11	
	2737 Jul 28 13:16	0°♋	
	2737 Sep 11 13:31	0°♌	
	2737 Oct 31 04:11	0°♍	
	2738 Jan 03 19:48	0°♎	
retrograde	2738 Feb 05 14:33	5°♎41'33	
	2738 Mar 07 13:48	30°℞♍	
opposition	2738 Mar 17 10:09	26°♍14'09	3°54'30
greatest brilliancy	2738 Mar 17 15:45	26°♍08'36	-1.3m
min. Earth dist.	2738 Mar 19 04:16	25°♍32'25	0.67474 AU
direct	2738 Apr 27 16:58	16°♍16'01	
	2738 Jun 21 01:51	0°♎	
desc. node	2738 Jul 24 20:02	16°♎39'53	
	2738 Aug 17 01:51	0°♏	
	2738 Oct 02 19:30	0°♐	
	2738 Nov 14 02:03	0°♑	
	2738 Dec 23 17:46	0°♒	
	2739 Jan 31 00:25	0°♓	
evening set	2739 Feb 22 02:14	17°♓27'30	
	2739 Mar 09 23:56	0°♈	
	2739 Apr 17 15:19	0°♉	
conjunction	2739 May 01 01:58	10°♉12'29	-0°16'54
minimum elong	2739 May 01 03:25	10°♉15'14	0°16'53
asc. node	2739 May 26 19:45	29°♉20'25	
	2739 May 27 17:23	0°♊	
max. Earth dist.	2739 Jun 18 16:08	15°♊50'18	2.46324 AU
morning rise	2739 Jul 03 05:21	26°♊06'17	
	2739 Jul 08 19:34	0°♋	
	2739 Aug 22 05:38	0°♌	
	2739 Oct 08 06:29	0°♍	
	2739 Nov 28 00:12	0°♎	
	2740 Jan 28 12:13	0°♏	
retrograde	2740 Mar 14 02:31	10°♏00'33	
opposition	2740 Apr 21 07:51	1°♏23'36	1°56'55
greatest brilliancy	2740 Apr 21 17:56	1°♏13'55	-1.5m
	2740 Apr 24 22:48	30°℞♎	
min. Earth dist.	2740 Apr 26 20:20	29°♎16'32	0.62002 AU
direct	2740 Jun 01 11:59	21°♎27'28	
desc. node	2740 Jun 10 18:14	21°♎59'08	
	2740 Jul 11 12:23	0°♏	
	2740 Sep 07 06:14	0°♐	
	2740 Oct 21 23:57	0°♑	
	2740 Dec 01 12:35	0°♒	
	2741 Jan 09 05:44	0°♓	
	2741 Feb 16 14:04	0°♈	
	2741 Mar 27 15:36	0°♉	
asc. node	2741 Apr 12 19:45	12°♉07'16	
evening set	2741 Apr 30 10:45	25°♉05'29	
	2741 May 07 05:03	0°♊	
	2741 Jun 18 17:19	0°♋	
conjunction	2741 Jun 27 03:01	5°♋45'46	0°43'28

minimum elong	2741 Jun 27 01:13	5°♋42'42	0°43'27
max. Earth dist.	2741 Jul 24 10:09	24°♋08'37	2.58468 AU
	2741 Aug 02 06:31	0°♌	
morning rise	2741 Aug 17 20:21	10°♌11'52	
	2741 Sep 17 15:54	0°♍	
	2741 Nov 04 17:15	0°♎	
	2741 Dec 24 23:11	0°♏	
	2742 Feb 18 18:55	0°♐	
desc. node	2742 Apr 28 16:59	21°♐03'30	
retrograde	2742 Apr 30 11:20	21°♐04'38	
opposition	2742 Jun 04 13:50	13°♐54'53	-1°45'12
greatest brilliancy	2742 Jun 05 02:29	13°♐43'47	-2.1m
min. Earth dist.	2742 Jun 12 22:56	10°♐59'11	0.50662 AU
direct	2742 Jul 13 03:21	5°♐08'01	
	2742 Sep 21 05:08	0°♑	
	2742 Nov 05 19:14	0°♒	
	2742 Dec 16 14:41	0°♓	
	2743 Jan 25 07:40	0°♈	
asc. node	2743 Feb 28 18:54	25°♈46'06	
	2743 Mar 06 12:43	0°♉	
	2743 Apr 17 03:11	0°♊	
	2743 May 30 12:48	0°♋	
evening set	2743 Jun 20 22:19	14°♋20'53	
	2743 Jul 14 16:35	0°♌	
conjunction	2743 Aug 09 13:53	16°♌47'14	1°07'39
minimum elong	2743 Aug 09 13:28	16°♌46'32	1°07'39
max. Earth dist.	2743 Aug 19 06:53	23°♌01'40	2.65755 AU
	2743 Aug 30 04:20	0°♍	
morning rise	2743 Sep 24 16:15	16°♍13'50	
	2743 Oct 16 09:56	0°♎	
	2743 Dec 02 23:29	0°♏	
	2744 Jan 19 22:18	0°♐	
	2744 Mar 09 03:09	0°♑	
desc. node	2744 Mar 15 16:17	3°♑52'04	
	2744 May 02 00:07	0°♒	
retrograde	2744 Jul 08 04:34	20°♒45'46	
opposition	2744 Aug 07 15:36	15°♒40'10	-6°35'36
greatest brilliancy	2744 Aug 08 16:04	15°♒23'19	-2.8m
min. Earth dist.	2744 Aug 12 01:04	14°♒27'49	0.38607 AU
direct	2744 Sep 08 03:19	10°♒04'14	
	2744 Nov 07 17:37	0°♓	
	2744 Dec 26 04:58	0°♈	
asc. node	2745 Jan 15 16:51	13°♈43'55	
	2745 Feb 08 16:08	0°♉	
	2745 Mar 25 00:57	0°♊	
	2745 May 09 08:41	0°♋	
	2745 Jun 24 19:04	0°♌	
evening set	2745 Jul 30 22:08	23°♌00'35	
	2745 Aug 10 22:31	0°♍	
max. Earth dist.	2745 Sep 10 16:50	19°♍32'09	2.67611 AU
conjunction	2745 Sep 14 22:30	22°♍13'57	1°01'32
minimum elong	2745 Sep 14 23:23	22°♍15'21	1°01'31
	2745 Sep 27 02:47	0°♎	
morning rise	2745 Oct 29 04:11	20°♎35'11	
	2745 Nov 12 16:46	0°♏	
	2745 Dec 28 07:35	0°♐	
desc. node	2746 Jan 31 15:11	23°♐01'45	
	2746 Feb 10 21:44	0°♑	
	2746 Mar 26 15:08	0°♒	
	2746 May 08 23:02	0°♓	
	2746 Jun 22 09:30	0°♈	
	2746 Aug 14 01:39	0°♉	
retrograde	2746 Sep 22 21:28	9°♉52'12	
min. Earth dist.	2746 Oct 19 09:22	5°♉12'48	0.41136 AU
opposition	2746 Oct 26 17:38	2°♉54'40	-2°23'36
greatest brilliancy	2746 Oct 26 04:07	3°♉05'19	-2.7m
	2746 Nov 05 15:23	30°℞♈	
direct	2746 Nov 26 14:45	27°♈08'02	
asc. node	2746 Dec 03 16:29	27°♈27'30	
	2746 Dec 18 05:32	0°♉	
	2747 Feb 23 17:15	0°♊	
	2747 Apr 16 05:22	0°♋	
	2747 Jun 04 14:51	0°♌	
	2747 Jul 23 06:01	0°♍	
evening set	2747 Sep 05 23:48	28°♍06'20	
	2747 Sep 08 23:15	0°♎	
max. Earth dist.	2747 Oct 04 01:40	16°♎07'14	2.64029 AU
conjunction	2747 Oct 21 11:38	27°♎28'52	0°32'06
minimum elong	2747 Oct 21 12:35	27°♎30'26	0°32'05
	2747 Oct 25 07:29	0°♏	
morning rise	2747 Dec 06 01:59	28°♏02'19	
	2747 Dec 08 22:43	0°♐	
desc. node	2747 Dec 19 14:32	7°♐20'45	
	2748 Jan 20 19:54	0°♑	
	2748 Mar 02 03:54	0°♒	
	2748 Apr 11 08:37	0°♓	
	2748 May 21 02:21	0°♈	
	2748 Jun 30 12:53	0°♉	
	2748 Aug 12 21:21	0°♊	
	2748 Oct 06 21:26	0°♋	
asc. node	2748 Oct 20 16:14	4°♋41'37	
retrograde	2748 Nov 11 23:54	7°♋58'41	
min. Earth dist.	2748 Dec 13 09:19	1°♋14'56	0.54175 AU
	2748 Dec 16 15:47	30°℞♊	
opposition	2748 Dec 20 13:57	28°♊29'11	2°49'42
greatest brilliancy	2748 Dec 19 18:51	28°♊47'33	-1.9m
direct	2749 Jan 25 01:58	20°♊33'32	
	2749 Mar 09 07:00	0°♋	
	2749 May 10 15:41	0°♌	
	2749 Jul 02 02:18	0°♍	
	2749 Aug 20 06:54	0°♎	
	2749 Oct 05 23:41	0°♏	
evening set	2749 Oct 13 00:35	4°♏39'42	
max. Earth dist.	2749 Oct 30 21:16	16°♏39'57	2.55313 AU
desc. node	2749 Nov 05 13:29	20°♏32'09	
	2749 Nov 19 06:50	0°♐	
conjunction	2749 Nov 30 06:01	7°♐40'36	-0°14'26
minimum elong	2749 Nov 30 05:24	7°♐39'31	0°14'26
behind sun begin	2749 Nov 29 19:42	7°♐22'25	
behind sun end	2749 Nov 30 15:07	7°♐56'37	
	2749 Dec 31 08:43	0°♑	
morning rise	2750 Jan 21 00:13	15°♑14'14	
	2750 Feb 09 15:05	0°♒	
	2750 Mar 20 16:13	0°♓	
	2750 Apr 28 05:57	0°♈	
	2750 Jun 06 06:02	0°♉	
	2750 Jul 16 18:52	0°♊	
	2750 Aug 29 10:56	0°♋	
asc. node	2750 Sep 07 14:08	5°♋51'09	
	2750 Oct 19 13:34	0°♌	
retrograde	2750 Dec 20 13:52	18°♌47'11	
min. Earth dist.	2751 Jan 26 01:04	10°♌16'39	0.64127 AU
opposition	2751 Jan 29 16:39	8°♌49'05	4°28'46
greatest brilliancy	2751 Jan 29 02:10	9°♌03'33	-1.4m
	2751 Mar 02 03:29	30°℞♋	
direct	2751 Mar 09 14:42	29°♋38'50	
	2751 Mar 17 07:23	0°♌	
	2751 Jun 07 14:16	0°♍	
	2751 Jul 30 23:05	0°♎	
	2751 Sep 16 23:17	0°♏	

desc. node	2751 Sep 23 12:09	4°♏16'32	
	2751 Oct 31 11:41	0°♐	
evening set	2751 Nov 26 18:27	18°♐40'22	
	2751 Dec 12 06:19	0°♑	
max. Earth dist.	2751 Dec 12 21:35	0°♑28'11	2.42743 AU
	2752 Jan 21 00:02	0°♒	
conjunction	2752 Jan 22 02:57	0°♒51'49	-0°59'36
minimum elong	2752 Jan 22 01:14	0°♒48'30	0°59'35
	2752 Feb 28 11:48	0°♓	
morning rise	2752 Mar 28 01:52	22°♓31'06	
	2752 Apr 06 14:09	0°♈	
	2752 May 15 04:25	0°♉	
	2752 Jun 24 03:38	0°♊	
asc. node	2752 Jul 25 13:24	22°♊30'30	
	2752 Aug 05 08:38	0°♋	
	2752 Sep 19 23:07	0°♌	
	2752 Nov 11 02:36	0°♍	
retrograde	2753 Jan 23 03:26	23°♍04'10	
opposition	2753 Mar 04 06:35	13°♍23'21	4°18'56
greatest brilliancy	2753 Mar 04 07:01	13°♍22'54	-1.3m
min. Earth dist.	2753 Mar 04 12:16	13°♍17'40	0.67828 AU
direct	2753 Apr 14 04:10	3°♍33'28	
	2753 Jul 04 18:13	0°♎	
desc. node	2753 Aug 10 10:57	20°♎30'03	
	2753 Aug 26 01:10	0°♏	
	2753 Oct 10 18:08	0°♐	
	2753 Nov 21 17:54	0°♑	
	2753 Dec 31 08:17	0°♒	
evening set	2754 Jan 24 20:40	19°♒08'40	
	2754 Feb 07 15:02	0°♓	
	2754 Mar 17 14:04	0°♈	
conjunction	2754 Apr 02 20:17	12°♈44'35	-0°43'43
minimum elong	2754 Apr 02 23:36	12°♈51'03	0°43'41
	2754 Apr 25 03:41	0°♉	
max. Earth dist.	2754 May 24 00:04	21°♉47'03	2.40876 AU
	2754 Jun 04 03:09	0°♊	
morning rise	2754 Jun 10 06:16	4°♊28'46	
asc. node	2754 Jun 12 13:30	6°♊09'09	
	2754 Jul 16 03:11	0°♋	
	2754 Aug 29 15:10	0°♌	
	2754 Oct 16 06:05	0°♍	
	2754 Dec 08 09:08	0°♎	
retrograde	2755 Feb 27 19:42	26°♎27'14	
opposition	2755 Apr 07 20:00	17°♎27'16	2°52'30
greatest brilliancy	2755 Apr 08 06:26	17°♎17'05	-1.4m
min. Earth dist.	2755 Apr 11 21:51	15°♎51'54	0.64909 AU
direct	2755 May 19 06:37	7°♎25'27	
desc. node	2755 Jun 28 09:46	15°♎46'08	
	2755 Jul 29 20:25	0°♏	
	2755 Sep 18 10:15	0°♐	
	2755 Oct 31 18:52	0°♑	
	2755 Dec 10 19:48	0°♒	
	2756 Jan 18 06:58	0°♓	
	2756 Feb 25 10:22	0°♈	
	2756 Apr 04 06:29	0°♉	
evening set	2756 Apr 05 15:58	1°♉03'35	
asc. node	2756 Apr 29 12:02	18°♉55'51	
	2756 May 14 14:09	0°♊	
conjunction	2756 Jun 06 18:45	16°♊38'21	0°23'59
minimum elong	2756 Jun 06 17:18	16°♊35'47	0°23'58
	2756 Jun 25 20:58	0°♋	
max. Earth dist.	2756 Jul 12 05:40	11°♋13'04	2.54215 AU
morning rise	2756 Aug 01 04:56	24°♋38'32	
	2756 Aug 09 07:06	0°♌	
	2756 Sep 24 19:09	0°♍	
	2756 Nov 12 12:43	0°♎	
	2757 Jan 04 00:12	0°♏	
	2757 Mar 14 02:52	0°♐	
retrograde	2757 Apr 10 03:58	3°♐55'31	
	2757 May 05 07:16	30°℞♏	
desc. node	2757 May 15 08:10	26°♏36'07	
opposition	2757 May 16 17:40	26°♏05'26	-0°03'42
greatest brilliancy	2758 Jun 22 08:32	10°♋32'46	1.6m
min. Earth dist.	2757 May 24 06:17	23°♏19'39	0.55672 AU
direct	2757 Jun 25 18:05	16°♏38'37	
	2757 Aug 14 14:07	0°♐	
	2757 Oct 05 05:08	0°♑	
	2757 Nov 16 14:23	0°♒	
	2757 Dec 26 04:32	0°♓	
	2758 Feb 03 03:28	0°♈	
	2758 Mar 14 17:57	0°♉	
asc. node	2758 Mar 17 10:45	2°♉00'38	
	2758 Apr 24 19:50	0°♊	
evening set	2758 Jun 02 14:51	27°♊08'46	
	2758 Jun 06 18:57	0°♋	
	2758 Jul 21 15:22	0°♌	
conjunction	2758 Jul 24 18:30	2°♌03'12	1°02'22
minimum elong	2758 Jul 24 17:24	2°♌01'25	1°02'22
max. Earth dist.	2758 Aug 09 19:08	12°♌29'43	2.63547 AU
	2758 Sep 06 00:20	0°♍	
morning rise	2758 Sep 10 12:26	2°♍52'21	
	2758 Oct 23 10:40	0°♎	
	2758 Dec 10 17:35	0°♏	
	2759 Jan 29 11:19	0°♐	
	2759 Mar 24 13:47	0°♑	
desc. node	2759 Apr 02 07:16	4°♑19'03	
retrograde	2759 Jun 08 15:58	24°♑19'03	
opposition	2759 Jul 10 18:18	18°♑27'41	-4°57'36
greatest brilliancy	2759 Jul 12 01:25	18°♑03'39	-2.6m
min. Earth dist.	2759 Jul 18 07:57	16°♑07'59	0.42596 AU
direct	2759 Aug 14 12:58	11°♑27'50	
	2759 Oct 10 23:11	0°♒	
	2759 Nov 27 11:42	0°♓	
	2760 Jan 08 23:20	0°♈	
asc. node	2760 Feb 02 10:02	17°♈31'26	
	2760 Feb 19 22:01	0°♉	
	2760 Apr 02 19:01	0°♊	
	2760 May 17 03:20	0°♋	
	2760 Jul 01 22:47	0°♌	
evening set	2760 Jul 15 17:35	8°♌52'59	
	2760 Aug 17 18:13	0°♍	
conjunction	2760 Aug 31 17:51	8°♍54'05	1°06'58
minimum elong	2760 Aug 31 18:20	8°♍54'51	1°06'59
max. Earth dist.	2760 Sep 01 17:27	9°♍31'39	2.67555 AU
	2760 Oct 03 21:31	0°♎	
morning rise	2760 Oct 15 07:56	7°♎17'32	
	2760 Nov 19 18:14	0°♏	
	2761 Jan 05 01:15	0°♐	
desc. node	2761 Feb 17 07:32	28°♐20'14	
	2761 Feb 19 20:14	0°♑	
	2761 Apr 06 12:37	0°♒	
	2761 May 23 08:25	0°♓	
	2761 Jul 17 01:11	0°♈	
retrograde	2761 Aug 27 00:51	9°♈58'42	
min. Earth dist.	2761 Sep 23 10:07	5°♈30'22	0.37820 AU
opposition	2761 Sep 27 08:17	4°♈24'59	-5°14'31
greatest brilliancy	2761 Sep 26 19:27	4°♈33'54	-2.9m
	2761 Oct 17 10:15	30°℞♓	
direct	2761 Oct 26 20:28	29°♓24'16	

	2761 Nov 05 08:48	0°♈	
asc. node	2761 Dec 20 08:23	14°♈58'39	
	2762 Jan 17 15:40	0°♉	
	2762 Mar 08 13:59	0°♊	
	2762 Apr 25 13:07	0°♋	
	2762 Jun 12 10:13	0°♌	
	2762 Jul 30 07:52	0°♍	
evening set	2762 Aug 22 17:19	14°♍43'58	
	2762 Sep 15 18:23	0°♎	
max. Earth dist.	2762 Sep 24 19:48	5°♎47'43	2.66084 AU
conjunction	2762 Oct 07 01:18	13°♎39'49	0°45'56
minimum elong	2762 Oct 07 02:24	13°♎41'36	0°45'55
	2762 Nov 01 03:40	0°♏	
morning rise	2762 Nov 20 16:18	12°♏54'31	
	2762 Dec 16 02:22	0°♐	
desc. node	2763 Jan 05 06:14	13°♐48'03	
	2763 Jan 28 12:31	0°♑	
	2763 Mar 11 13:18	0°♒	
	2763 Apr 21 13:26	0°♓	
	2763 Jun 01 06:12	0°♈	
	2763 Jul 13 05:08	0°♉	
	2763 Aug 29 22:55	0°♊	
retrograde	2763 Oct 26 07:29	18°♊27'57	
asc. node	2763 Nov 07 07:40	17°♊23'18	
min. Earth dist.	2763 Nov 24 11:51	12°♊35'00	0.49005 AU
opposition	2763 Dec 02 13:51	9°♊37'30	1°21'14
greatest brilliancy	2763 Dec 02 02:54	9°♊47'32	-2.2m
direct	2764 Jan 05 08:17	2°♊25'37	
	2764 Mar 27 06:52	0°♋	
	2764 May 20 10:33	0°♌	
	2764 Jul 09 21:43	0°♍	
	2764 Aug 27 09:02	0°♎	
evening set	2764 Sep 27 19:54	20°♎08'39	
	2764 Oct 12 21:06	0°♏	
max. Earth dist.	2764 Oct 19 05:59	4°♏13'08	2.59312 AU
conjunction	2764 Nov 13 12:01	21°♏13'21	0°05'04
minimum elong	2764 Nov 13 12:12	21°♏13'39	0°05'03
behind sun begin	2764 Nov 12 17:03	20°♏41'01	
behind sun end	2764 Nov 14 07:20	21°♏46'19	
desc. node	2764 Nov 22 04:34	27°♏11'02	
	2764 Nov 26 06:26	0°♐	
morning rise	2765 Jan 01 00:31	25°♐14'15	
	2765 Jan 07 14:51	0°♑	
	2765 Feb 17 05:46	0°♒	
	2765 Mar 28 15:43	0°♓	
	2765 May 06 13:34	0°♈	
	2765 Jun 14 21:55	0°♉	
	2765 Jul 26 00:22	0°♊	
	2765 Sep 09 06:39	0°♋	
asc. node	2765 Sep 24 07:56	8°♋52'06	
	2765 Nov 09 23:35	0°♌	
retrograde	2765 Dec 06 09:10	4°♌16'35	
	2765 Dec 31 04:56	30°℞♋	
min. Earth dist.	2766 Jan 09 23:48	26°♋24'00	0.60893 AU
greatest brilliancy	2766 Jan 14 08:20	24°♋40'17	-1.6m
opposition	2766 Jan 15 03:13	24°♋21'33	4°07'21
direct	2766 Feb 21 21:38	15°♋35'17	
	2766 Apr 19 03:43	0°♌	
	2766 Jun 17 17:02	0°♍	
	2766 Aug 07 21:02	0°♎	
	2766 Sep 24 05:34	0°♏	
desc. node	2766 Oct 10 03:19	10°♏32'27	
	2766 Nov 07 14:33	0°♐	
evening set	2766 Nov 08 02:16	0°♐20'26	
max. Earth dist.	2766 Nov 22 14:12	10°♐33'07	2.47900 AU
	2766 Dec 19 11:14	0°♑	
conjunction	2766 Dec 30 09:48	8°♑06'05	-0°44'55
minimum elong	2766 Dec 30 07:56	8°♑02'35	0°44'53
	2767 Jan 28 09:04	0°♒	
morning rise	2767 Feb 27 23:43	23°♒41'48	
	2767 Mar 08 01:13	0°♓	
	2767 Apr 15 07:05	0°♈	
greatest brilliancy	2767 Apr 27 22:03	9°♈51'41	1.2m
	2767 May 23 23:46	0°♉	
	2767 Jul 03 01:42	0°♊	
asc. node	2767 Aug 12 06:31	28°♊25'31	
	2767 Aug 14 14:02	0°♋	
	2767 Sep 30 06:29	0°♌	
	2767 Nov 27 04:48	0°♍	
retrograde	2768 Jan 10 19:50	10°♍16'17	
min. Earth dist.	2768 Feb 18 19:17	0°♍56'31	0.67154 AU
opposition	2768 Feb 20 02:14	0°♍25'34	4°32'23
greatest brilliancy	2768 Feb 19 20:47	0°♍31'01	-1.3m
	2768 Feb 21 03:50	30°℞♌	
direct	2768 Mar 31 09:05	20°♌48'03	
	2768 May 13 22:45	0°♍	
	2768 Jul 15 07:26	0°♎	
desc. node	2768 Aug 27 02:27	25°♎27'56	
	2768 Sep 03 06:44	0°♏	
	2768 Oct 18 08:54	0°♐	
	2768 Nov 29 05:21	0°♑	
evening set	2768 Dec 30 02:13	23°♑15'55	
	2769 Jan 07 20:07	0°♒	
	2769 Feb 15 03:56	0°♓	
conjunction	2769 Mar 04 09:11	13°♓36'51	-1°01'21
minimum elong	2769 Mar 04 11:11	13°♓40'47	1°01'20
max. Earth dist.	2769 Mar 13 10:53	20°♓47'03	2.36978 AU
	2769 Mar 25 03:19	0°♈	
	2769 May 02 16:05	0°♉	
morning rise	2769 May 14 12:57	9°♉03'17	
	2769 Jun 11 14:05	0°♊	
asc. node	2769 Jun 29 04:52	12°♊47'37	
	2769 Jul 23 13:56	0°♋	
	2769 Sep 06 07:19	0°♌	
	2769 Oct 24 22:16	0°♍	
	2769 Dec 21 20:58	0°♎	
retrograde	2770 Feb 13 12:18	13°♎28'03	
opposition	2770 Mar 25 02:31	4°♎09'29	3°35'00
greatest brilliancy	2770 Mar 25 10:23	4°♎01'44	-1.3m
min. Earth dist.	2770 Mar 27 16:38	3°♎08'18	0.66831 AU
	2770 Apr 04 23:19	30°℞♍	
direct	2770 May 05 12:38	24°♍08'46	
	2770 Jun 07 20:59	0°♎	
desc. node	2770 Jul 15 00:48	15°♎37'08	
	2770 Aug 10 14:16	0°♏	
	2770 Sep 27 09:04	0°♐	
	2770 Nov 09 00:03	0°♑	
	2770 Dec 18 18:57	0°♒	
	2771 Jan 26 03:09	0°♓	
	2771 Mar 05 03:43	0°♈	
evening set	2771 Mar 10 04:27	3°♈56'47	
greatest brilliancy	2771 Mar 16 13:27	8°♈55'54	1.2m
	2771 Apr 12 19:59	0°♉	
conjunction	2771 May 15 13:54	24°♉35'07	-0°01'05
minimum elong	2771 May 15 13:59	24°♉35'17	0°01'05
behind sun begin	2771 May 14 11:27	23°♉46'21	
behind sun end	2771 May 16 16:32	25°♉24'08	
asc. node	2771 May 17 04:54	25°♉46'54	
	2771 May 22 22:58	0°♊	

max. Earth dist.	2771 Jun 28 17:14	26°♊16'36	2.49260 AU
	2771 Jul 04 01:29	0°♋	
morning rise	2771 Jul 14 17:46	7°♋22'03	
	2771 Aug 17 10:00	0°♌	
	2771 Oct 03 04:01	0°♍	
	2771 Nov 21 22:55	0°♎	
	2772 Jan 17 13:33	0°♏	
retrograde	2772 Mar 23 09:21	18°♏37'26	
opposition	2772 Apr 30 02:41	10°♏15'22	1°17'42
greatest brilliancy	2772 Apr 30 10:35	10°♏07'52	-1.6m
min. Earth dist.	2772 May 06 09:47	7°♏52'19	0.59972 AU
desc. node	2772 May 31 24:00	0°♏58'28	
direct	2772 Jun 10 00:12	0°♏26'17	
	2772 Aug 30 17:10	0°♐	
	2772 Oct 15 23:00	0°♑	
	2772 Nov 25 23:31	0°♒	
	2773 Jan 03 22:30	0°♓	
	2773 Feb 11 10:55	0°♈	
	2773 Mar 22 15:53	0°♉	
asc. node	2773 Apr 03 03:11	8°♉35'12	
	2773 May 02 08:37	0°♊	
evening set	2773 May 13 04:23	7°♊45'14	
	2773 Jun 13 23:36	0°♋	
conjunction	2773 Jul 07 15:21	16°♋04'02	0°51'59
minimum elong	2773 Jul 07 13:43	16°♋01'17	0°51'58
	2773 Jul 28 14:12	0°♌	
max. Earth dist.	2773 Jul 30 17:20	1°♌24'08	2.60506 AU
morning rise	2773 Aug 26 17:03	18°♌58'08	
	2773 Sep 12 22:10	0°♍	
	2773 Oct 30 16:27	0°♎	
	2773 Dec 19 01:10	0°♏	
	2774 Feb 09 20:04	0°♐	
desc. node	2774 Apr 18 23:11	29°♐03'47	
	2774 Apr 22 22:44	0°♑	
retrograde	2774 May 13 09:29	2°♑21'04	
	2774 Jun 01 20:02	30°℞♐	
opposition	2774 Jun 16 12:03	25°♐37'27	-2°52'00
greatest brilliancy	2774 Jun 17 08:50	25°♐19'55	-2.3m
min. Earth dist.	2774 Jun 25 00:45	22°♐45'06	0.47738 AU
direct	2774 Jul 23 23:43	17°♐21'47	
	2774 Sep 08 13:58	0°♑	
	2774 Oct 28 22:55	0°♒	
	2774 Dec 10 00:43	0°♓	
	2775 Jan 19 09:17	0°♈	
asc. node	2775 Feb 19 01:18	22°♈42'06	
	2775 Mar 01 00:46	0°♉	
	2775 Apr 11 23:18	0°♊	
	2775 May 25 15:11	0°♋	
evening set	2775 Jun 30 16:27	23°♋56'05	
	2775 Jul 09 23:20	0°♌	
conjunction	2775 Aug 18 05:05	25°♌18'52	1°08'37
minimum elong	2775 Aug 18 05:01	25°♌18'46	1°08'37
max. Earth dist.	2775 Aug 24 15:32	29°♌25'48	2.66642 AU
	2775 Aug 25 12:57	0°♍	
morning rise	2775 Oct 02 14:52	24°♍13'47	
	2775 Oct 11 17:04	0°♎	
	2775 Nov 27 23:24	0°♏	
	2776 Jan 14 05:12	0°♐	
	2776 Mar 01 20:43	0°♑	
desc. node	2776 Mar 05 22:10	2°♑31'33	
	2776 Apr 20 08:09	0°♒	
	2776 Jun 18 14:13	0°♓	
retrograde	2776 Jul 26 15:27	8°♓04'27	
opposition	2776 Aug 25 14:36	3°♓07'55	-6°47'01
greatest brilliancy	2776 Aug 26 02:28	3°♓00'03	-2.9m
min. Earth dist.	2776 Aug 27 06:27	2°♓41'32	0.37436 AU
	2776 Sep 07 06:19	30°℞♒	
direct	2776 Sep 24 18:37	28°♒03'13	
	2776 Oct 12 00:27	0°♓	
	2776 Dec 16 02:59	0°♈	
asc. node	2777 Jan 06 01:09	12°♈58'16	
	2777 Feb 01 09:33	0°♉	
	2777 Mar 19 00:23	0°♊	
	2777 May 04 00:53	0°♋	
	2777 Jun 19 21:09	0°♌	
	2777 Aug 06 05:59	0°♍	
evening set	2777 Aug 08 08:35	1°♍19'59	
max. Earth dist.	2777 Sep 15 22:12	25°♍47'58	2.67303 AU
conjunction	2777 Sep 22 23:58	0°♎18'49	0°56'43
minimum elong	2777 Sep 23 00:59	0°♎20'26	0°56'42
	2777 Sep 22 12:12	0°♎	
morning rise	2777 Nov 06 05:29	28°♎50'16	
	2777 Nov 08 00:15	0°♏	
	2777 Dec 23 08:46	0°♐	
desc. node	2778 Jan 21 21:08	19°♐58'46	
	2778 Feb 05 11:39	0°♑	
	2778 Mar 20 11:47	0°♒	
	2778 May 01 18:15	0°♓	
	2778 Jun 13 06:33	0°♈	
	2778 Jul 29 03:01	0°♉	
retrograde	2778 Oct 05 23:00	25°♉17'43	
min. Earth dist.	2778 Nov 02 04:02	20°♉14'50	0.43758 AU
opposition	2778 Nov 10 04:57	17°♉32'51	-0°50'09
greatest brilliancy	2778 Nov 09 23:22	17°♉37'34	-2.6m
asc. node	2778 Nov 24 01:00	13°♉25'53	
direct	2778 Dec 12 03:22	11°♉14'13	
	2779 Feb 13 02:38	0°♊	
	2779 Apr 09 12:52	0°♋	
	2779 May 30 04:01	0°♌	
	2779 Jul 18 08:10	0°♍	
	2779 Sep 04 07:19	0°♎	
evening set	2779 Sep 14 05:19	6°♎19'11	
max. Earth dist.	2779 Oct 09 19:11	22°♎50'39	2.62574 AU
	2779 Oct 20 17:02	0°♏	
conjunction	2779 Oct 29 23:32	6°♏08'16	0°22'49
minimum elong	2779 Oct 30 00:17	6°♏09'31	0°22'48
	2779 Dec 04 06:25	0°♐	
desc. node	2779 Dec 09 19:54	3°♐50'12	
morning rise	2779 Dec 15 09:10	7°♐41'16	
	2780 Jan 15 23:10	0°♑	
	2780 Feb 26 00:43	0°♒	
	2780 Apr 05 21:51	0°♓	
	2780 May 15 06:57	0°♈	
	2780 Jun 24 04:45	0°♉	
	2780 Aug 05 09:05	0°♊	
	2780 Sep 23 09:39	0°♋	
asc. node	2780 Oct 10 23:28	8°♋25'07	
retrograde	2780 Nov 21 05:46	18°♋22'08	
min. Earth dist.	2780 Dec 23 19:47	11°♋12'32	0.56793 AU
greatest brilliancy	2780 Dec 29 12:09	8°♋59'35	-1.8m
opposition	2780 Dec 30 08:37	8°♋39'37	3°25'46
direct	2781 Feb 04 18:08	0°♋23'39	
	2781 May 03 08:08	0°♌	
	2781 Jun 26 13:42	0°♍	
	2781 Aug 15 08:56	0°♎	
	2781 Oct 01 07:09	0°♏	
evening set	2781 Oct 22 03:36	13°♏54'02	
desc. node	2781 Oct 26 18:18	17°♏01'25	
max. Earth dist.	2781 Nov 07 09:36	24°♏59'15	2.52827 AU
	2781 Nov 14 15:16	0°♐	

conjunction	2781 Dec 10 13:23	18°♐19'34	-0°25'57
minimum elong	2781 Dec 10 12:15	18°♐17'33	0°25'56
	2781 Dec 26 15:50	0°♑	
morning rise	2782 Feb 02 16:07	28°♑22'17	
	2782 Feb 04 19:30	0°♒	
	2782 Mar 15 17:27	0°♓	
	2782 Apr 23 04:05	0°♈	
	2782 Jun 01 00:34	0°♉	
	2782 Jul 11 07:29	0°♊	
	2782 Aug 23 09:07	0°♋	
asc. node	2782 Aug 28 22:44	3°♋40'34	
	2782 Oct 11 02:51	0°♌	
retrograde	2782 Dec 28 09:47	27°♌05'24	
min. Earth dist.	2783 Feb 03 20:06	18°♌16'05	0.65479 AU
opposition	2783 Feb 06 15:34	17°♌08'35	4°34'06
greatest brilliancy	2783 Feb 06 04:10	17°♌20'00	-1.4m
direct	2783 Mar 18 03:02	7°♌47'16	
	2783 May 30 20:59	0°♍	
	2783 Jul 25 09:28	0°♎	
	2783 Sep 12 00:15	0°♏	
desc. node	2783 Sep 13 17:40	1°♏06'58	
	2783 Oct 26 17:23	0°♐	
	2783 Dec 07 12:56	0°♑	
evening set	2783 Dec 08 10:28	0°♑39'47	
max. Earth dist.	2783 Dec 29 18:14	16°♑38'04	2.39980 AU
	2784 Jan 16 05:45	0°♒	
conjunction	2784 Feb 05 12:53	15°♒45'45	-1°04'06
minimum elong	2784 Feb 05 12:05	15°♒44'12	1°04'06
	2784 Feb 23 16:06	0°♓	
	2784 Apr 01 17:16	0°♈	
morning rise	2784 Apr 14 11:42	10°♈00'50	
	2784 May 10 06:31	0°♉	
	2784 Jun 19 04:20	0°♊	
asc. node	2784 Jul 15 21:40	19°♊16'16	
	2784 Jul 31 05:55	0°♋	
	2784 Sep 14 09:16	0°♌	
	2784 Nov 03 17:39	0°♍	
	2785 Jan 19 12:28	0°♎	
retrograde	2785 Jan 30 19:20	0°♎45'59	
	2785 Feb 10 15:48	30°℞♍	
opposition	2785 Mar 11 19:21	21°♍12'08	4°05'52
greatest brilliancy	2785 Mar 11 22:46	21°♍08'45	-1.3m
min. Earth dist.	2785 Mar 12 21:18	20°♍46'23	0.67765 AU
direct	2785 Apr 21 23:16	11°♍17'10	
	2785 Jun 26 14:00	0°♎	
desc. node	2785 Jul 31 17:08	18°♎26'08	
	2785 Aug 20 07:43	0°♏	
	2785 Oct 05 15:37	0°♐	
	2785 Nov 16 20:26	0°♑	
	2785 Dec 26 12:13	0°♒	
	2786 Feb 02 19:02	0°♓	
evening set	2786 Feb 09 14:12	5°♓22'32	
	2786 Mar 12 18:03	0°♈	
conjunction	2786 Apr 19 02:54	29°♈04'37	-0°28'56
minimum elong	2786 Apr 19 05:24	29°♈09'23	0°28'54
	2786 Apr 20 07:48	0°♉	
	2786 May 30 07:30	0°♊	
asc. node	2786 Jun 02 19:57	2°♊34'28	
max. Earth dist.	2786 Jun 09 09:46	7°♊21'21	2.43879 AU
morning rise	2786 Jun 23 17:17	17°♊37'53	
	2786 Jul 11 07:21	0°♋	
	2786 Aug 24 16:26	0°♌	
	2786 Oct 10 20:54	0°♍	
	2786 Dec 01 08:40	0°♎	
	2787 Feb 06 23:21	0°♏	
retrograde	2787 Mar 08 09:13	4°♏34'39	
	2787 Apr 04 09:42	30°℞♎	
opposition	2787 Apr 16 00:19	25°♎46'45	2°21'42
greatest brilliancy	2787 Apr 16 10:51	25°♎36'33	-1.5m
min. Earth dist.	2787 Apr 20 21:42	23°♎53'23	0.63434 AU
direct	2787 May 27 08:55	15°♎47'11	
desc. node	2787 Jun 18 15:17	18°♎38'55	
	2787 Jul 20 05:13	0°♏	
	2787 Sep 12 03:58	0°♐	
	2787 Oct 26 07:23	0°♑	
	2787 Dec 05 15:20	0°♒	
	2788 Jan 13 05:48	0°♓	
	2788 Feb 20 11:28	0°♈	
	2788 Mar 30 09:30	0°♉	
asc. node	2788 Apr 19 19:43	15°♉20'06	
evening set	2788 Apr 20 01:00	15°♉29'53	
	2788 May 09 18:56	0°♊	
conjunction	2788 Jun 18 15:50	28°♊17'02	0°35'56
minimum elong	2788 Jun 18 14:04	28°♊13'58	0°35'55
	2788 Jun 21 03:20	0°♋	
max. Earth dist.	2788 Jul 19 12:56	19°♋19'59	2.56659 AU
	2788 Aug 04 13:40	0°♌	
morning rise	2788 Aug 10 21:48	4°♌10'20	
	2788 Sep 19 22:52	0°♍	
	2788 Nov 07 05:31	0°♎	
	2788 Dec 28 05:41	0°♏	
	2789 Feb 25 08:33	0°♐	
retrograde	2789 Apr 21 07:10	13°♐51'13	
desc. node	2789 May 05 13:51	12°♐34'49	
opposition	2789 May 27 02:34	6°♐22'25	-0°59'28
greatest brilliancy	2789 May 27 09:33	6°♐16'09	-2.0m
min. Earth dist.	2789 Jun 04 04:39	3°♐28'41	0.52974 AU
	2789 Jun 15 06:35	30°℞♏	
direct	2789 Jul 05 10:27	27°♏15'07	
	2789 Jul 26 05:49	0°♐	
	2789 Sep 27 05:25	0°♑	
	2789 Nov 10 03:38	0°♒	
	2789 Dec 20 08:22	0°♓	
	2790 Jan 28 16:08	0°♈	
asc. node	2790 Mar 07 19:03	28°♈41'44	
	2790 Mar 09 13:16	0°♉	
	2790 Apr 19 20:29	0°♊	
	2790 Jun 01 23:57	0°♋	
evening set	2790 Jun 13 06:29	7°♋37'50	
	2790 Jul 16 23:03	0°♌	
conjunction	2790 Aug 02 22:44	11°♌04'20	1°06'00
minimum elong	2790 Aug 02 22:01	11°♌03'11	1°06'00
max. Earth dist.	2790 Aug 15 11:04	19°♌09'33	2.64864 AU
	2790 Sep 01 08:36	0°♍	
morning rise	2790 Sep 18 16:55	11°♍03'09	
	2790 Oct 18 15:38	0°♎	
	2790 Dec 05 11:48	0°♏	
	2791 Jan 23 02:50	0°♐	
	2791 Mar 14 23:02	0°♑	
desc. node	2791 Mar 23 13:25	4°♑48'10	
	2791 May 14 14:46	0°♒	
retrograde	2791 Jun 25 06:19	9°♒02'39	
opposition	2791 Jul 26 09:46	3°♒39'10	-6°00'55
greatest brilliancy	2791 Jul 27 16:08	3°♒17'08	-2.7m
min. Earth dist.	2791 Aug 01 13:11	1°♒52'54	0.40157 AU
	2791 Aug 08 16:44	30°℞♑	
direct	2791 Aug 28 07:48	27°♑27'22	
	2791 Sep 16 19:54	0°♒	
	2791 Nov 17 14:50	0°♓	
	2792 Jan 01 13:06	0°♈	

asc. node	2792 Jan 23 17:19	15°♈24'48	
	2792 Feb 13 15:45	0°♉	
	2792 Mar 28 05:30	0°♊	
	2792 May 12 01:00	0°♋	
	2792 Jun 27 03:25	0°♌	
evening set	2792 Jul 24 12:16	17°♌31'21	
	2792 Aug 13 02:39	0°♍	
max. Earth dist.	2792 Sep 06 23:00	15°♍47'41	2.67692 AU
conjunction	2792 Sep 08 21:48	17°♍02'06	1°04'13
minimum elong	2792 Sep 08 22:32	17°♍03'16	1°04'13
	2792 Sep 29 06:22	0°♎	
morning rise	2792 Oct 23 05:56	15°♎20'53	
	2792 Nov 14 23:22	0°♏	
	2792 Dec 30 21:26	0°♐	
desc. node	2793 Feb 07 12:24	25°♐40'00	
	2793 Feb 13 23:40	0°♑	
	2793 Mar 30 11:22	0°♒	
	2793 May 14 00:08	0°♓	
	2793 Jun 29 22:51	0°♈	
retrograde	2793 Sep 11 19:49	27°♈41'42	
min. Earth dist.	2793 Oct 08 06:19	23°♈13'39	0.39357 AU
opposition	2793 Oct 14 10:34	21°♈24'10	-3°40'02
greatest brilliancy	2793 Oct 13 18:27	21°♈36'08	-2.8m
direct	2793 Nov 13 13:02	16°♈01'34	
asc. node	2793 Dec 10 16:47	20°♈27'06	
	2794 Jan 04 06:45	0°♉	
	2794 Feb 28 22:33	0°♊	
	2794 Apr 19 14:27	0°♋	
	2794 Jun 07 05:52	0°♌	
	2794 Jul 25 12:47	0°♍	
evening set	2794 Aug 30 21:26	22°♍51'21	
	2794 Sep 11 03:21	0°♎	
max. Earth dist.	2794 Sep 30 04:29	12°♎12'26	2.65044 AU
conjunction	2794 Oct 15 06:09	21°♎58'18	0°38'13
minimum elong	2794 Oct 15 07:11	22°♎00'00	0°38'13
	2794 Oct 27 12:33	0°♏	
morning rise	2794 Nov 29 08:24	21°♏52'11	
	2794 Dec 11 07:50	0°♐	
desc. node	2794 Dec 26 11:18	10°♐24'11	
	2795 Jan 23 11:18	0°♑	
	2795 Mar 06 03:03	0°♒	
	2795 Apr 15 15:59	0°♓	
	2795 May 25 18:43	0°♈	
	2795 Jul 05 17:10	0°♉	
	2795 Aug 19 06:55	0°♊	
asc. node	2795 Oct 28 16:37	29°♊53'42	
	2795 Oct 29 16:37	0°♋	
retrograde	2795 Nov 05 14:30	0°♋20'36	
	2795 Nov 12 10:07	30°℞♊	
min. Earth dist.	2795 Dec 06 00:02	23°♊59'42	0.51912 AU
opposition	2795 Dec 13 16:28	21°♊05'57	2°16'49
greatest brilliancy	2795 Dec 12 23:40	21°♊21'48	-2.1m
direct	2796 Jan 17 10:41	13°♊28'48	
	2796 Mar 17 06:43	0°♋	
	2796 May 14 04:18	0°♌	
	2796 Jul 04 16:53	0°♍	
	2796 Aug 22 14:26	0°♎	
evening set	2796 Oct 06 09:31	28°♎46'38	
	2796 Oct 08 06:06	0°♏	
max. Earth dist.	2796 Oct 25 16:18	11°♏35'48	2.57189 AU
desc. node	2796 Nov 12 10:38	23°♏39'27	
	2796 Nov 21 15:20	0°♐	
conjunction	2796 Nov 22 20:09	0°♐49'59	-0°06'05
minimum elong	2796 Nov 22 19:55	0°♐49'35	0°06'06
behind sun begin	2796 Nov 22 00:44	0°♐16'18	
behind sun end	2796 Nov 23 15:06	1°♐22'53	
	2797 Jan 02 21:02	0°♑	
morning rise	2797 Jan 12 00:11	6°♑40'10	
	2797 Feb 12 07:49	0°♒	
	2797 Mar 23 12:56	0°♓	
	2797 May 01 05:58	0°♈	
	2797 Jun 09 08:43	0°♉	
	2797 Jul 20 01:10	0°♊	
	2797 Sep 02 04:14	0°♋	
asc. node	2797 Sep 14 14:31	7°♋45'39	
	2797 Oct 25 16:59	0°♌	
retrograde	2797 Dec 14 14:11	13°♌10'14	
min. Earth dist.	2798 Jan 19 06:30	4°♌55'58	0.62810 AU
opposition	2798 Jan 23 14:10	3°♌12'40	4°22'03
greatest brilliancy	2798 Jan 22 21:30	3°♌29'17	-1.5m
	2798 Jan 31 22:31	30°℞♋	
direct	2798 Mar 03 01:01	24°♋12'17	
	2798 Apr 05 10:09	0°♌	
	2798 Jun 11 06:09	0°♍	
	2798 Aug 02 15:34	0°♎	
	2798 Sep 19 10:03	0°♏	
desc. node	2798 Sep 30 09:25	7°♏12'43	
	2798 Nov 02 22:21	0°♐	
evening set	2798 Nov 18 09:44	10°♐53'29	
max. Earth dist.	2798 Dec 03 00:03	21°♐22'46	2.45062 AU
	2798 Dec 14 19:06	0°♑	
conjunction	2799 Jan 11 19:17	20°♑57'26	-0°54'06
minimum elong	2799 Jan 11 17:19	20°♑53'42	0°54'05
	2799 Jan 23 15:31	0°♒	
	2799 Mar 03 05:27	0°♓	
morning rise	2799 Mar 15 22:19	9°♓59'01	
	2799 Apr 10 09:08	0°♈	
	2799 May 18 23:41	0°♉	
	2799 Jun 27 22:35	0°♊	
asc. node	2799 Aug 02 13:26	25°♊25'40	
	2799 Aug 09 04:36	0°♋	
	2799 Sep 24 01:50	0°♌	
	2799 Nov 16 18:57	0°♍	
retrograde	2800 Jan 18 10:45	18°♍06'50	
opposition	2800 Feb 27 16:36	8°♍21'07	4°25'50
min. Earth dist.	2800 Feb 27 06:04	8°♍31'38	0.67665 AU
greatest brilliancy	2800 Feb 27 14:30	8°♍23'13	-1.3m
	2800 Mar 24 12:34	30°℞♌	
direct	2800 Apr 08 08:50	28°♌36'10	
	2800 Apr 24 00:38	0°♍	
	2800 Jul 08 15:56	0°♎	
desc. node	2800 Aug 17 08:07	22°♎49'14	
	2800 Aug 28 22:31	0°♏	
	2800 Oct 13 10:26	0°♐	
	2800 Nov 24 10:03	0°♑	
	2801 Jan 03 01:32	0°♒	
evening set	2801 Jan 13 04:59	7°♒52'29	
	2801 Feb 10 09:02	0°♓	
conjunction	2801 Mar 20 21:51	0°♈27'07	-0°52'59
minimum elong	2801 Mar 21 01:02	0°♈33'23	0°52'58
	2801 Mar 20 08:04	0°♈	
	2801 Apr 27 20:38	0°♉	
max. Earth dist.	2801 May 05 13:34	5°♉53'38	2.38673 AU
morning rise	2801 May 30 02:00	24°♉20'01	
	2801 Jun 06 18:08	0°♊	
asc. node	2801 Jun 19 13:38	9°♊20'26	
	2801 Jul 18 16:30	0°♋	
	2801 Sep 01 04:34	0°♌	
	2801 Oct 19 02:18	0°♍	

	2801 Dec 12 15:11	0°♎	
retrograde	2802 Feb 21 13:58	21°♎19'01	
opposition	2802 Apr 01 21:40	12°♎10'12	3°11'30
greatest brilliancy	2802 Apr 02 07:10	12°♎00'53	-1.4m
min. Earth dist.	2802 Apr 05 07:54	10°♎49'42	0.65901 AU
direct	2802 May 13 09:33	2°♎08'08	
desc. node	2802 Jul 05 06:42	15°♎32'44	
	2802 Aug 03 10:34	0°♏	
	2802 Sep 21 17:49	0°♐	
	2802 Nov 03 19:34	0°♑	
	2802 Dec 13 18:34	0°♒	
	2803 Jan 21 04:31	0°♓	
	2803 Feb 28 06:19	0°♈	
evening set	2803 Mar 25 22:37	19°♈59'15	
	2803 Apr 07 23:58	0°♉	
asc. node	2803 May 07 12:30	22°♉10'17	
	2803 May 18 04:16	0°♊	
conjunction	2803 May 29 02:23	7°♊55'06	0°13'53
minimum elong	2803 May 29 01:24	7°♊53'22	0°13'53
behind sun begin	2803 May 28 12:52	7°♊30'47	
behind sun end	2803 May 29 13:57	8°♊15'56	
	2803 Jun 29 07:49	0°♋	
max. Earth dist.	2803 Jul 07 08:24	5°♋32'35	2.52072 AU
morning rise	2803 Jul 25 12:13	17°♋54'02	
	2803 Aug 12 15:36	0°♌	
	2803 Sep 28 04:34	0°♍	
	2803 Nov 16 06:11	0°♎	
	2804 Jan 09 00:58	0°♏	
retrograde	2804 Apr 02 05:01	27°♏36'56	
opposition	2804 May 09 08:31	19°♏31'37	0°32'51
greatest brilliancy	2804 May 09 12:25	19°♏27'59	-1.8m
min. Earth dist.	2804 May 16 09:08	16°♏54'31	0.57708 AU
desc. node	2804 May 22 05:13	14°♏51'09	
direct	2804 Jun 18 20:35	9°♏52'59	
	2804 Aug 21 17:52	0°♐	
	2804 Oct 09 12:01	0°♑	
	2804 Nov 20 06:01	0°♒	
	2804 Dec 29 12:50	0°♓	
	2805 Feb 06 06:12	0°♈	
	2805 Mar 17 15:17	0°♉	
asc. node	2805 Mar 24 10:52	5°♉05'42	
	2805 Apr 27 11:33	0°♊	
evening set	2805 May 25 01:35	19°♊30'55	
	2805 Jun 09 05:40	0°♋	
conjunction	2805 Jul 17 14:14	25°♋49'21	0°58'39
minimum elong	2805 Jul 17 12:53	25°♋47'07	0°58'38
	2805 Jul 23 22:07	0°♌	
max. Earth dist.	2805 Aug 05 18:01	8°♌24'12	2.62288 AU
morning rise	2805 Sep 04 06:55	27°♌28'35	
	2805 Sep 08 05:40	0°♍	
	2805 Oct 25 18:22	0°♎	
	2805 Dec 13 10:39	0°♏	
	2806 Feb 02 05:55	0°♐	
	2806 Apr 01 07:04	0°♑	
desc. node	2806 Apr 09 04:13	3°♑20'04	
retrograde	2806 May 27 16:25	14°♑44'13	
opposition	2806 Jun 29 16:08	8°♑28'57	-4°03'16
greatest brilliancy	2806 Jun 30 20:01	8°♑06'25	-2.4m
min. Earth dist.	2806 Jul 07 20:47	5°♑50'37	0.44837 AU
direct	2806 Aug 04 18:21	0°♑52'24	
	2806 Oct 19 09:31	0°♒	
	2806 Dec 02 18:40	0°♓	
	2807 Jan 13 02:50	0°♈	
asc. node	2807 Feb 09 10:13	19°♈55'01	
	2807 Feb 23 09:03	0°♉	
	2807 Apr 06 17:49	0°♊	
	2807 May 20 17:08	0°♋	
	2807 Jul 05 06:11	0°♌	
evening set	2807 Jul 09 23:24	3°♌03'30	
	2807 Aug 20 22:21	0°♍	
conjunction	2807 Aug 26 14:05	3°♍36'25	1°08'07
minimum elong	2807 Aug 26 14:20	3°♍36'50	1°08'08
max. Earth dist.	2807 Aug 29 22:09	5°♍43'59	2.67249 AU
	2807 Oct 07 01:40	0°♎	
morning rise	2807 Oct 10 11:39	2°♎10'22	
	2807 Nov 23 02:24	0°♏	
	2808 Jan 08 18:54	0°♐	
	2808 Feb 24 07:01	0°♑	
desc. node	2808 Feb 25 04:26	0°♑34'28	
	2808 Apr 11 06:58	0°♒	
	2808 May 31 03:30	0°♓	
retrograde	2808 Aug 13 16:58	26°♓25'53	
min. Earth dist.	2808 Sep 11 14:57	21°♓42'23	0.37230 AU
opposition	2808 Sep 13 04:17	21°♓17'21	-6°11'08
greatest brilliancy	2808 Sep 13 00:37	21°♓19'49	-2.9m
direct	2808 Oct 12 16:55	16°♓23'22	
	2808 Dec 01 10:17	0°♈	
asc. node	2808 Dec 27 08:50	13°♈36'06	
	2809 Jan 23 23:51	0°♉	
	2809 Mar 12 14:01	0°♊	
	2809 Apr 28 13:18	0°♋	
	2809 Jun 14 21:52	0°♌	
	2809 Aug 01 13:22	0°♍	
evening set	2809 Aug 16 14:48	9°♍30'00	
	2809 Sep 17 22:04	0°♎	
max. Earth dist.	2809 Sep 21 03:44	2°♎03'59	2.66738 AU
conjunction	2809 Oct 01 00:32	8°♎23'16	0°50'47
minimum elong	2809 Oct 01 01:37	8°♎25'01	0°50'47
	2809 Nov 03 09:00	0°♏	
morning rise	2809 Nov 14 09:42	7°♏14'31	
	2809 Dec 18 12:42	0°♐	
desc. node	2810 Jan 12 03:02	16°♐45'10	
	2810 Jan 31 06:29	0°♑	
	2810 Mar 14 17:27	0°♒	
	2810 Apr 25 05:30	0°♓	
	2810 Jun 05 13:39	0°♈	
	2810 Jul 18 15:41	0°♉	
	2810 Sep 09 05:41	0°♊	
retrograde	2810 Oct 17 20:56	9°♊23'03	
asc. node	2810 Nov 14 07:42	4°♊09'53	
min. Earth dist.	2810 Nov 15 02:55	3°♊53'29	0.46618 AU
opposition	2810 Nov 23 08:41	0°♊58'22	0°30'51
greatest brilliancy	2810 Nov 23 04:19	1°♊02'14	-2.4m
	2810 Nov 26 03:22	30°℞♉	
direct	2810 Dec 26 06:56	24°♉09'22	
	2811 Jan 27 14:06	0°♊	
	2811 Apr 02 01:32	0°♋	
	2811 May 24 11:11	0°♌	
	2811 Jul 13 08:10	0°♍	
	2811 Aug 30 14:32	0°♎	
evening set	2811 Sep 22 12:30	14°♎37'57	
max. Earth dist.	2811 Oct 15 16:50	29°♎44'18	2.60873 AU
	2811 Oct 16 02:22	0°♏	
conjunction	2811 Nov 07 16:49	15°♏03'48	0°12'46
minimum elong	2811 Nov 07 17:17	15°♏04'34	0°12'46
behind sun begin	2811 Nov 07 05:07	14°♏44'04	
behind sun end	2811 Nov 08 05:27	15°♏25'04	
	2811 Nov 29 14:37	0°♐	
desc. node	2811 Nov 30 01:32	0°♐18'49	

morning rise	2811 Dec 25 03:46	17°♐51'27	
	2812 Jan 11 03:35	0°♑	
	2812 Feb 20 23:59	0°♒	
	2812 Mar 31 15:04	0°♓	
	2812 May 09 17:28	0°♈	
	2812 Jun 18 06:22	0°♉	
	2812 Jul 29 16:12	0°♊	
	2812 Sep 13 23:23	0°♋	
asc. node	2812 Oct 01 07:42	9°♋38'00	
retrograde	2812 Nov 30 01:15	28°♋07'42	
min. Earth dist.	2813 Jan 02 18:33	20°♋33'53	0.59161 AU
opposition	2813 Jan 08 13:35	18°♋16'56	3°52'57
greatest brilliancy	2813 Jan 07 17:27	18°♋36'47	-1.7m
direct	2813 Feb 14 18:21	9°♋43'15	
	2813 Apr 24 20:19	0°♌	
	2813 Jun 20 18:24	0°♍	
	2813 Aug 10 08:28	0°♎	
	2813 Sep 26 13:35	0°♏	
desc. node	2813 Oct 17 00:17	13°♏35'18	
evening set	2813 Oct 31 14:39	23°♏31'17	
	2813 Nov 09 23:35	0°♐	
max. Earth dist.	2813 Nov 15 12:57	3°♐52'49	2.50162 AU
conjunction	2813 Dec 21 11:38	29°♐39'10	-0°37'06
minimum elong	2813 Dec 21 10:02	29°♐36'14	0°37'05
	2813 Dec 21 23:01	0°♑	
	2814 Jan 31 00:17	0°♒	
morning rise	2814 Feb 16 10:33	12°♒37'11	
	2814 Mar 10 19:21	0°♓	
	2814 Apr 18 03:10	0°♈	
	2814 May 26 20:56	0°♉	
	2814 Jul 05 23:33	0°♊	
	2814 Aug 17 14:51	0°♋	
asc. node	2814 Aug 19 06:45	1°♋07'14	
	2814 Oct 03 20:59	0°♌	
	2814 Dec 05 19:56	0°♍	
retrograde	2815 Jan 05 03:13	5°♍11'26	
	2815 Feb 02 04:30	30°℞♌	
min. Earth dist.	2815 Feb 12 11:04	26°♌04'44	0.66528 AU
opposition	2815 Feb 14 10:14	25°♌17'34	4°34'40
greatest brilliancy	2815 Feb 14 02:07	25°♌25'40	-1.3m
direct	2815 Mar 26 09:19	15°♌46'41	
	2815 May 21 13:34	0°♍	
	2815 Jul 19 11:56	0°♎	
desc. node	2815 Sep 03 23:19	28°♎07'10	
	2815 Sep 06 22:05	0°♏	
	2815 Oct 21 21:58	0°♐	
	2815 Dec 02 19:17	0°♑	
evening set	2815 Dec 20 20:25	13°♑28'27	
	2816 Jan 11 11:53	0°♒	
max. Earth dist.	2816 Jan 25 00:42	10°♒29'58	2.37726 AU
	2816 Feb 18 21:05	0°♓	
conjunction	2816 Feb 20 20:31	1°♓33'33	-1°04'24
minimum elong	2816 Feb 20 21:14	1°♓34'59	1°04'24
	2816 Mar 27 20:58	0°♈	
morning rise	2816 May 01 16:14	27°♈08'48	
	2816 May 05 09:15	0°♉	
	2816 Jun 14 05:54	0°♊	
asc. node	2816 Jul 06 04:57	15°♊55'16	
	2816 Jul 26 04:44	0°♋	
	2816 Sep 08 23:53	0°♌	
	2816 Oct 28 02:57	0°♍	
	2816 Dec 28 14:08	0°♎	
retrograde	2817 Feb 07 14:14	8°♎30'38	
	2817 Mar 17 02:02	30°℞♍	
opposition	2817 Mar 19 10:00	29°♍04'52	3°49'01
greatest brilliancy	2817 Mar 19 16:02	28°♍58'53	-1.3m
min. Earth dist.	2817 Mar 21 08:14	28°♍19'11	0.67375 AU
direct	2817 Apr 29 18:39	19°♍06'07	
	2817 Jun 16 05:25	0°♎	
desc. node	2817 Jul 21 21:45	16°♎53'30	
	2817 Aug 14 03:49	0°♏	
	2817 Sep 30 08:26	0°♐	
	2817 Nov 11 20:11	0°♑	
	2817 Dec 21 14:43	0°♒	
	2818 Jan 28 22:38	0°♓	
evening set	2818 Feb 25 15:47	21°♓54'28	
	2818 Mar 07 22:12	0°♈	
	2818 Apr 15 12:36	0°♉	
conjunction	2818 May 04 10:10	14°♉20'03	-0°13'02
minimum elong	2818 May 04 11:17	14°♉22'08	0°13'01
behind sun begin	2818 May 03 18:58	13°♉51'30	
behind sun end	2818 May 05 03:36	14°♉52'44	
asc. node	2818 May 24 04:56	29°♉01'27	
	2818 May 25 12:51	0°♊	
max. Earth dist.	2818 Jun 21 03:40	19°♊11'47	2.46879 AU
morning rise	2818 Jul 05 23:53	29°♊37'48	
	2818 Jul 06 12:38	0°♋	
	2818 Aug 19 19:43	0°♌	
	2818 Oct 05 16:07	0°♍	
	2818 Nov 24 23:54	0°♎	
	2819 Jan 23 09:42	0°♏	
retrograde	2819 Mar 17 07:41	12°♏57'11	
opposition	2819 Apr 24 12:07	4°♏22'53	1°46'15
greatest brilliancy	2819 Apr 24 21:37	4°♏13'48	-1.6m
min. Earth dist.	2819 Apr 30 04:54	2°♏12'12	0.61630 AU
	2819 May 06 05:40	30°℞♎	
direct	2819 Jun 04 16:21	24°♎27'56	
desc. node	2819 Jun 08 20:42	24°♎34'33	
	2819 Jul 06 01:55	0°♏	
	2819 Sep 05 05:58	0°♐	
	2819 Oct 20 12:20	0°♑	
	2819 Nov 30 05:57	0°♒	
	2820 Jan 08 01:12	0°♓	
	2820 Feb 15 10:07	0°♈	
	2820 Mar 25 11:11	0°♉	
asc. node	2820 Apr 10 03:37	11°♉46'14	
evening set	2820 May 03 11:41	28°♉55'12	
	2820 May 04 23:27	0°♊	
	2820 Jun 16 10:06	0°♋	
conjunction	2820 Jun 29 16:48	9°♋05'54	0°45'53
minimum elong	2820 Jun 29 15:02	9°♋02'54	0°45'52
max. Earth dist.	2820 Jul 26 03:42	26°♋51'48	2.58885 AU
	2820 Jul 30 21:27	0°♌	
morning rise	2820 Aug 20 01:49	13°♌12'37	
	2820 Sep 15 04:44	0°♍	
	2820 Nov 02 02:55	0°♎	
	2820 Dec 22 01:37	0°♏	
	2821 Feb 14 19:33	0°♐	
desc. node	2821 Apr 25 20:11	24°♐06'11	
retrograde	2821 May 03 08:36	24°♐26'14	
opposition	2821 Jun 07 06:04	17°♐21'22	-2°01'25
greatest brilliancy	2821 Jun 07 20:47	17°♐08'34	-2.1m
min. Earth dist.	2821 Jun 15 16:48	14°♐25'11	0.50113 AU
direct	2821 Jul 15 16:17	8°♐39'23	
	2821 Sep 17 09:42	0°♑	
	2821 Nov 03 00:57	0°♒	
	2821 Dec 14 03:27	0°♓	
	2822 Jan 22 22:57	0°♈	
asc. node	2822 Feb 26 01:23	25°♈28'42	
	2822 Mar 04 04:38	0°♉	

	2822 Apr 14 18:46	0°♊		
	2822 May 28 03:39	0°♋		
evening set	2822 Jun 23 09:46	17°♋35'01		
	2822 Jul 12 06:38	0°♌		
conjunction	2822 Aug 11 18:56	19°♌46'33	1°08'03	
minimum elong	2822 Aug 11 18:36	19°♌46'02	1°08'03	
max. Earth dist.	2822 Aug 20 21:16	25°♌36'57	2.65957 AU	
	2822 Aug 27 17:42	0°♍		
morning rise	2822 Sep 26 17:16	19°♍05'17		
	2822 Oct 13 22:28	0°♎		
	2822 Nov 30 10:22	0°♏		
	2823 Jan 17 05:13	0°♐		
	2823 Mar 07 00:13	0°♑		
desc. node	2823 Mar 13 19:15	4°♑04'07		
	2823 Apr 28 11:39	0°♒		
retrograde	2823 Jul 13 04:50	25°♒13'20		
opposition	2823 Aug 12 10:45	20°♒10'46	-6°41'30	
greatest brilliancy	2823 Aug 13 09:42	19°♒55'10	-2.8m	
min. Earth dist.	2823 Aug 16 10:40	19°♒05'40	0.38323 AU	
direct	2823 Sep 12 15:46	14°♒41'52		
	2823 Nov 03 14:51	0°♓		
	2823 Dec 23 23:27	0°♈		
asc. node	2824 Jan 14 01:12	13°♈56'10		
	2824 Feb 06 21:42	0°♉		
	2824 Mar 22 10:36	0°♊		
	2824 May 06 19:53	0°♋		
	2824 Jun 22 06:56	0°♌		
evening set	2824 Aug 02 02:09	25°♌57'41		
	2824 Aug 08 11:01	0°♍		
max. Earth dist.	2824 Sep 12 04:19	22°♍02'25	2.67591 AU	
conjunction	2824 Sep 16 23:55	25°♍06'28	1°00'15	
minimum elong	2824 Sep 17 00:50	25°♍07'55	1°00'15	
	2824 Sep 24 16:03	0°♎		
morning rise	2824 Oct 31 05:03	23°♎28'18		
	2824 Nov 10 06:37	0°♏		
	2824 Dec 25 21:20	0°♐		
desc. node	2825 Jan 28 18:08	22°♐44'51		
	2825 Feb 08 10:14	0°♑		
	2825 Mar 24 00:51	0°♒		
	2825 May 06 03:11	0°♓		
	2825 Jun 19 00:23	0°♈		
	2825 Aug 07 23:56	0°♉		
retrograde	2825 Sep 25 23:45	14°♉14'41		
min. Earth dist.	2825 Oct 22 15:07	9°♉30'31	0.41605 AU	
opposition	2825 Oct 30 02:44	7°♉07'25	-2°00'25	
greatest brilliancy	2825 Oct 29 14:55	7°♉16'54	-2.7m	
direct	2825 Nov 30 05:16	1°♉14'29		
asc. node	2825 Dec 01 01:28	1°♉14'46		
	2826 Feb 19 23:20	0°♊		
	2826 Apr 13 06:33	0°♋		
	2826 Jun 01 22:11	0°♌		
	2826 Jul 20 16:27	0°♍		
	2826 Sep 06 12:01	0°♎		
evening set	2826 Sep 08 01:59	1°♎00'20		
max. Earth dist.	2826 Oct 05 18:03	18°♎46'43	2.63785 AU	
	2826 Oct 22 22:18	0°♏		
conjunction	2826 Oct 23 14:13	0°♏26'11	0°29'34	
minimum elong	2826 Oct 23 15:06	0°♏27'40	0°29'34	
	2826 Dec 06 15:13	0°♐		
morning rise	2826 Dec 08 07:38	1°♐09'16		
desc. node	2826 Dec 16 16:52	6°♐55'45		
	2827 Jan 18 13:24	0°♑		
	2827 Feb 28 21:39	0°♒		
	2827 Apr 10 01:41	0°♓		
	2827 May 19 17:30	0°♈		
	2827 Jun 28 23:39	0°♉		
	2827 Aug 10 20:41	0°♊		
	2827 Oct 02 05:07	0°♋		
asc. node	2827 Oct 18 23:43	6°♋34'34		
retrograde	2827 Nov 15 07:13	11°♋21'17		
min. Earth dist.	2827 Dec 16 21:46	4°♋33'15	0.54693 AU	
greatest brilliancy	2827 Dec 23 04:39	2°♋08'12	-1.9m	
opposition	2827 Dec 24 00:30	1°♋49'05	3°00'45	
	2827 Dec 28 20:21	30°℞♊		
direct	2828 Jan 28 17:45	23°♊49'17		
	2828 Mar 02 16:58	0°♋		
	2828 May 07 08:36	0°♌		
	2828 Jun 29 07:31	0°♍		
	2828 Aug 17 17:34	0°♎		
	2828 Oct 03 13:59	0°♏		
evening set	2828 Oct 15 06:26	7°♏44'19		
max. Earth dist.	2828 Nov 01 16:38	19°♏28'53	2.54866 AU	
desc. node	2828 Nov 02 15:35	20°♏08'01		
	2828 Nov 16 23:54	0°♐		
conjunction	2828 Dec 02 16:29	10°♐59'30	-0°17'30	
minimum elong	2828 Dec 02 15:44	10°♐58'11	0°17'30	
	2828 Dec 29 03:48	0°♑		
morning rise	2829 Jan 23 20:20	18°♑58'47		
	2829 Feb 07 11:27	0°♒		
	2829 Mar 18 12:58	0°♓		
	2829 Apr 26 02:10	0°♈		
	2829 Jun 04 00:31	0°♉		
	2829 Jul 14 09:44	0°♊		
	2829 Aug 26 18:04	0°♋		
asc. node	2829 Sep 04 22:41	5°♋57'32		
	2829 Oct 15 18:48	0°♌		
retrograde	2829 Dec 22 13:51	21°♌43'09		
min. Earth dist.	2830 Jan 28 06:27	13°♌08'44	0.64406 AU	
opposition	2830 Jan 31 17:54	11°♌45'22	4°31'05	
greatest brilliancy	2830 Jan 31 04:02	11°♌59'13	-1.4m	
direct	2830 Mar 11 19:09	2°♌32'41		
	2830 Jun 04 02:45	0°♍		
	2830 Jul 28 04:51	0°♎		
	2830 Sep 14 11:54	0°♏		
desc. node	2830 Sep 20 14:40	3°♏58'52		
	2830 Oct 29 04:20	0°♐		
evening set	2830 Nov 29 11:07	22°♐14'27		
	2830 Dec 10 01:35	0°♑		
max. Earth dist.	2830 Dec 16 03:41	4°♑30'10	2.42185 AU	
	2831 Jan 18 20:53	0°♒		
conjunction	2831 Jan 25 08:08	4°♒59'09	-1°01'03	
minimum elong	2831 Jan 25 06:35	4°♒56'10	1°01'02	
	2831 Feb 26 09:18	0°♓		
morning rise	2831 Apr 01 22:26	27°♓12'51		
	2831 Apr 05 11:27	0°♈		
	2831 May 14 00:41	0°♉		
	2831 Jun 22 21:49	0°♊		
asc. node	2831 Jul 23 22:14	22°♊18'24		
	2831 Aug 03 23:16	0°♋		
	2831 Sep 18 07:01	0°♌		
	2831 Nov 08 14:36	0°♍		
retrograde	2832 Jan 26 01:39	25°♍51'15		
opposition	2832 Mar 06 05:19	16°♍11'42	4°15'24	
greatest brilliancy	2832 Mar 06 06:23	16°♍10'38	-1.3m	
min. Earth dist.	2832 Mar 06 15:13	16°♍01'51	0.67850 AU	
direct	2832 Apr 16 04:59	6°♍20'36		
	2832 Jul 01 05:13	0°♎		
desc. node	2832 Aug 07 14:09	20°♎29'18		
	2832 Aug 23 08:54	0°♏		

	2832 Oct 08	09:26	0°♐		
	2832 Nov 19	13:07	0°♑		
	2832 Dec 29	05:32	0°♒		
evening set	2833 Jan 28	08:16	23°♒31'55		
	2833 Feb 05	12:57	0°♓		
	2833 Mar 15	11:38	0°♈		
conjunction	2833 Apr 06	14:08	17°♈18'44	-0°40'20	
minimum elong	2833 Apr 06	17:21	17°♈25'00	0°40'18	
	2833 Apr 23	00:07	0°♉		
max. Earth dist.	2833 May 28	16:14	26°♉52'57	2.41452 AU	
	2833 Jun 01	21:46	0°♊		
asc. node	2833 Jun 09	20:17	5°♊48'25		
morning rise	2833 Jun 13	12:10	8°♊28'00		
	2833 Jul 13	19:26	0°♋		
	2833 Aug 27	04:05	0°♌		
	2833 Oct 13	13:06	0°♍		
	2833 Dec 04	23:14	0°♎		
retrograde	2834 Mar 01	21:21	29°♎17'51		
opposition	2834 Apr 09	21:10	20°♎20'02	2°43'53	
greatest brilliancy	2834 Apr 10	07:31	20°♎09'58	-1.4m	
min. Earth dist.	2834 Apr 14	03:17	18°♎40'50	0.64669 AU	
direct	2834 May 21	08:50	10°♎18'28		
desc. node	2834 Jun 25	12:24	16°♎54'50		
	2834 Jul 26	02:48	0°♏		
	2834 Sep 15	18:33	0°♐		
	2834 Oct 29	11:19	0°♑		
	2834 Dec 08	15:58	0°♒		
	2835 Jan 16	04:36	0°♓		
	2835 Feb 23	08:00	0°♈		
	2835 Apr 03	03:04	0°♉		
evening set	2835 Apr 10	00:47	5°♉14'16		
asc. node	2835 Apr 27	19:45	18°♉33'57		
	2835 May 13	08:58	0°♊		
conjunction	2835 Jun 10	16:40	20°♊17'56	0°27'16	
minimum elong	2835 Jun 10	15:04	20°♊15'09	0°27'15	
	2835 Jun 24	13:38	0°♋		
max. Earth dist.	2835 Jul 15	04:32	14°♋08'06	2.54694 AU	
morning rise	2835 Aug 04	15:53	27°♋51'36		
	2835 Aug 07	21:27	0°♌		
	2835 Sep 23	06:44	0°♍		
	2835 Nov 10	19:30	0°♎		
	2836 Jan 01	17:58	0°♏		
	2836 Mar 06	07:37	0°♐		
retrograde	2836 Apr 12	17:22	7°♐04'48		
desc. node	2836 May 12	10:52	1°♐41'26		
	2836 May 17	06:39	30°℞♏		
opposition	2836 May 19	04:07	29°♏18'42	-0°17'54	
greatest brilliancy	2836 May 19	06:11	29°♏16'49	-1.9m	
min. Earth dist.	2836 May 26	20:18	26°♏30'29	0.55182 AU	
direct	2836 Jun 28	03:00	19°♏55'02		
	2836 Aug 09	11:22	0°♐		
	2836 Oct 02	07:25	0°♑		
	2836 Nov 14	03:33	0°♒		
	2836 Dec 23	21:48	0°♓		
	2837 Jan 31	22:08	0°♈		
	2837 Mar 12	12:33	0°♉		
asc. node	2837 Mar 14	19:24	1°♉42'10		
	2837 Apr 22	13:27	0°♊		
	2837 Jun 04	11:06	0°♋		
evening set	2837 Jun 05	05:35	0°♋31'34		
	2837 Jul 19	06:00	0°♌		
conjunction	2837 Jul 27	02:07	5°♌08'23	1°03'31	
minimum elong	2837 Jul 27	01:08	5°♌06'46	1°03'30	
max. Earth dist.	2837 Aug 11	14:08	15°♌13'15	2.63810 AU	
	2837 Sep 03	13:35	0°♍		
morning rise	2837 Sep 12	15:09	5°♍47'02		
	2837 Oct 20	22:19	0°♎		
	2837 Dec 08	02:12	0°♏		
	2838 Jan 26	12:21	0°♐		
	2838 Mar 20	13:35	0°♑		
desc. node	2838 Mar 30	10:28	5°♑04'21		
retrograde	2838 Jun 12	03:58	28°♑18'46		
opposition	2838 Jul 14	03:11	22°♑32'48	-5°13'17	
greatest brilliancy	2838 Jul 15	10:47	22°♑08'37	-2.6m	
min. Earth dist.	2838 Jul 21	11:33	20°♑18'51	0.42100 AU	
direct	2838 Aug 17	12:19	15°♑42'07		
	2838 Oct 05	22:45	0°♒		
	2838 Nov 24	08:25	0°♓		
	2839 Jan 06	06:50	0°♈		
asc. node	2839 Jan 30	17:50	17°♈26'54		
	2839 Feb 17	09:37	0°♉		
	2839 Apr 01	08:07	0°♊		
	2839 May 15	16:45	0°♋		
	2839 Jun 30	12:03	0°♌		
evening set	2839 Jul 18	23:11	11°♌53'22		
	2839 Aug 16	07:22	0°♍		
conjunction	2839 Sep 03	20:08	11°♍47'45	1°06'18	
minimum elong	2839 Sep 03	20:41	11°♍48'37	1°06'17	
max. Earth dist.	2839 Sep 04	04:22	12°♍00'49	2.67596 AU	
	2839 Oct 02	10:38	0°♎		
morning rise	2839 Oct 18	08:59	10°♎09'52		
	2839 Nov 18	07:08	0°♏		
	2840 Jan 03	13:05	0°♐		
desc. node	2840 Feb 15	09:27	28°♐08'11		
	2840 Feb 18	05:13	0°♑		
	2840 Apr 03	15:32	0°♒		
	2840 May 19	20:34	0°♓		
	2840 Jul 10	15:27	0°♈		
retrograde	2840 Aug 30	17:08	14°♈41'57		
min. Earth dist.	2840 Sep 26	18:06	10°♈15'26	0.38034 AU	
opposition	2840 Oct 01	04:13	9°♈01'19	-4°54'26	
greatest brilliancy	2840 Sep 30	14:21	9°♈11'01	-2.9m	
direct	2840 Oct 30	17:03	3°♈57'41		
asc. node	2840 Dec 17	16:53	16°♈25'37		
	2841 Jan 13	14:57	0°♉		
	2841 Mar 05	13:25	0°♊		
	2841 Apr 22	19:53	0°♋		
	2841 Jun 09	20:06	0°♌		
	2841 Jul 27	19:38	0°♍		
evening set	2841 Aug 24	19:42	17°♍37'25		
	2841 Sep 13	07:40	0°♎		
max. Earth dist.	2841 Sep 26	10:58	8°♎24'09	2.65898 AU	
conjunction	2841 Oct 09	03:27	16°♎34'39	0°43'49	
minimum elong	2841 Oct 09	04:32	16°♎36'24	0°43'48	
	2841 Oct 29	18:12	0°♏		
morning rise	2841 Nov 22	20:27	15°♏56'23		
	2841 Dec 13	17:43	0°♐		
desc. node	2842 Jan 02	07:50	13°♐24'05		
	2842 Jan 26	04:02	0°♑		
	2842 Mar 09	04:18	0°♒		
	2842 Apr 19	03:01	0°♓		
	2842 May 29	16:39	0°♈		
	2842 Jul 10	07:48	0°♉		
	2842 Aug 25	20:06	0°♊		
retrograde	2842 Oct 28	19:18	22°♊06'46		
asc. node	2842 Nov 04	16:44	21°♊45'40		
min. Earth dist.	2842 Nov 27	04:49	16°♊09'28	0.49559 AU	
opposition	2842 Dec 05	06:23	13°♊11'35	1°36'53	
greatest brilliancy	2842 Dec 04	17:33	13°♊23'23	-2.2m	

direct	2843 Jan 08 05:35	5°♊54'56	
	2843 Mar 24 10:44	0°♋	
	2843 May 18 11:52	0°♌	
	2843 Jul 08 05:57	0°♍	
	2843 Aug 25 21:08	0°♎	
evening set	2843 Sep 30 22:32	23°♎04'56	
	2843 Oct 11 12:05	0°♏	
max. Earth dist.	2843 Oct 21 20:06	6°♏50'34	2.58923 AU
conjunction	2843 Nov 16 17:42	24°♏19'39	0°02'06
minimum elong	2843 Nov 16 17:48	24°♏19'50	0°02'06
behind sun begin	2843 Nov 15 21:55	23°♏45'49	
behind sun end	2843 Nov 17 13:41	24°♏53'52	
desc. node	2843 Nov 20 07:31	26°♏46'51	
	2843 Nov 24 23:37	0°♐	
morning rise	2844 Jan 04 13:36	28°♐40'47	
	2844 Jan 06 09:26	0°♑	
	2844 Feb 16 00:57	0°♒	
	2844 Mar 26 10:42	0°♓	
	2844 May 04 07:30	0°♈	
	2844 Jun 12 13:32	0°♉	
	2844 Jul 23 11:07	0°♊	
	2844 Sep 06 04:53	0°♋	
asc. node	2844 Sep 21 14:46	9°♋16'39	
	2844 Nov 02 22:21	0°♌	
retrograde	2844 Dec 08 12:01	7°♌20'53	
	2845 Jan 10 19:10	30°℞♋	
min. Earth dist.	2845 Jan 12 08:10	29°♋23'48	0.61303 AU
opposition	2845 Jan 17 07:29	27°♋25'24	4°12'26
greatest brilliancy	2845 Jan 16 12:58	27°♋43'48	-1.6m
direct	2845 Feb 24 05:43	18°♋36'03	
	2845 Apr 14 04:33	0°♌	
	2845 Jun 14 15:00	0°♍	
	2845 Aug 05 05:27	0°♎	
	2845 Sep 21 19:22	0°♏	
desc. node	2845 Oct 07 06:26	10°♏12'15	
	2845 Nov 05 07:58	0°♐	
evening set	2845 Nov 10 11:31	3°♐35'24	
max. Earth dist.	2845 Nov 24 16:55	13°♐38'40	2.47383 AU
	2845 Dec 17 07:09	0°♑	
conjunction	2846 Jan 02 03:45	11°♑45'08	-0°47'22
minimum elong	2846 Jan 02 01:50	11°♑41'33	0°47'21
	2846 Jan 26 06:26	0°♒	
morning rise	2846 Mar 03 10:11	28°♒01'01	
	2846 Mar 05 23:00	0°♓	
greatest brilliancy	2846 Mar 30 04:17	19°♓00'46	1.2m
	2846 Apr 13 04:15	0°♈	
	2846 May 21 19:18	0°♉	
	2846 Jun 30 18:25	0°♊	
asc. node	2846 Aug 09 13:23	28°♊16'19	
	2846 Aug 12 01:56	0°♋	
	2846 Sep 27 08:13	0°♌	
	2846 Nov 22 07:25	0°♍	
retrograde	2847 Jan 12 18:54	13°♍07'55	
min. Earth dist.	2847 Feb 20 23:44	3°♍44'37	0.67293 AU
opposition	2847 Feb 22 02:12	3°♍18'11	4°30'56
greatest brilliancy	2847 Feb 21 21:30	3°♍22'53	-1.3m
	2847 Mar 02 13:44	30°℞♌	
direct	2847 Apr 03 11:36	23°♌38'54	
	2847 May 08 19:15	0°♍	
	2847 Jul 13 04:37	0°♎	
desc. node	2847 Aug 25 04:51	25°♎18'21	
	2847 Sep 01 16:34	0°♏	
	2847 Oct 17 00:41	0°♐	
	2847 Nov 28 00:41	0°♑	
evening set	2848 Jan 03 04:16	27°♑15'46	
	2848 Jan 06 17:32	0°♒	
	2848 Feb 14 02:16	0°♓	
conjunction	2848 Mar 07 23:43	18°♓06'01	-0°59'49
minimum elong	2848 Mar 08 02:05	18°♓10'41	0°59'48
	2848 Mar 23 01:29	0°♈	
max. Earth dist.	2848 Mar 28 12:16	4°♈17'20	2.37112 AU
	2848 Apr 30 13:05	0°♉	
morning rise	2848 May 18 02:38	13°♉23'17	
	2848 Jun 09 08:58	0°♊	
asc. node	2848 Jun 26 13:40	12°♊31'36	
	2848 Jul 21 05:42	0°♋	
	2848 Sep 03 18:29	0°♌	
	2848 Oct 22 00:21	0°♍	
	2848 Dec 17 10:29	0°♎	
retrograde	2849 Feb 15 12:19	16°♎18'02	
opposition	2849 Mar 27 02:35	7°♎01'13	3°28'20
greatest brilliancy	2849 Mar 27 10:47	6°♎53'09	-1.3m
min. Earth dist.	2849 Mar 29 21:15	5°♎55'41	0.66691 AU
	2849 Apr 15 22:11	30°℞♍	
direct	2849 May 07 14:16	26°♍59'52	
	2849 May 30 18:28	0°♎	
desc. node	2849 Jul 12 03:29	16°♎05'37	
	2849 Aug 07 11:37	0°♏	
	2849 Sep 24 20:37	0°♐	
	2849 Nov 06 17:26	0°♑	
	2849 Dec 16 15:10	0°♒	
	2850 Jan 24 00:32	0°♓	
greatest brilliancy	2850 Feb 07 21:07	11°♓44'06	1.2m
	2850 Mar 03 01:04	0°♈	
evening set	2850 Mar 13 17:45	8°♈22'58	
	2850 Apr 10 16:25	0°♉	
asc. node	2850 May 14 12:50	25°♉26'18	
conjunction	2850 May 18 18:34	28°♉33'26	0°02'49
minimum elong	2850 May 18 18:23	28°♉33'04	0°02'49
behind sun begin	2850 May 17 16:13	27°♉45'04	
behind sun end	2850 May 19 20:32	29°♉21'01	
	2850 May 20 17:49	0°♊	
max. Earth dist.	2850 Jun 30 19:28	29°♊20'26	2.49809 AU
	2850 Jul 01 18:11	0°♋	
morning rise	2850 Jul 17 09:24	10°♋46'43	
	2850 Aug 15 00:02	0°♌	
	2850 Sep 30 14:11	0°♍	
	2850 Nov 19 01:25	0°♎	
	2851 Jan 13 12:39	0°♏	
retrograde	2851 Mar 26 17:07	21°♏38'46	
opposition	2851 May 03 08:50	13°♏19'41	1°05'39
greatest brilliancy	2851 May 03 15:44	13°♏13'09	-1.7m
min. Earth dist.	2851 May 09 20:08	10°♏53'13	0.59579 AU
desc. node	2851 May 30 02:15	4°♏51'46	
direct	2851 Jun 13 06:00	3°♏32'05	
	2851 Aug 28 08:42	0°♐	
	2851 Oct 14 09:29	0°♑	
	2851 Nov 24 16:21	0°♒	
	2852 Jan 02 17:52	0°♓	
	2852 Feb 10 06:49	0°♈	
	2852 Mar 20 11:08	0°♉	
asc. node	2852 Mar 31 10:57	8°♉14'22	
	2852 Apr 30 02:32	0°♊	
evening set	2852 May 16 00:54	11°♊23'59	
	2852 Jun 11 15:51	0°♋	
conjunction	2852 Jul 10 02:37	19°♋18'30	0°53'56
minimum elong	2852 Jul 10 01:02	19°♋15'52	0°53'56
	2852 Jul 26 04:47	0°♌	
max. Earth dist.	2852 Aug 01 10:26	4°♌06'16	2.60870 AU

morning rise	2852 Aug 28 21:43	21°♌57'14	
	2852 Sep 10 10:59	0°♍	
	2852 Oct 28 02:43	0°♎	
	2852 Dec 16 05:56	0°♏	
	2853 Feb 06 08:46	0°♐	
	2853 Apr 12 18:52	0°♑	
desc. node	2853 Apr 16 01:02	1°♑00'25	
retrograde	2853 May 16 14:40	5°♑58'25	
	2853 Jun 17 10:48	30°℞♐	
opposition	2853 Jun 19 11:00	29°♐19'58	-3°09'20
greatest brilliancy	2853 Jun 20 09:41	29°♐00'55	-2.3m
min. Earth dist.	2853 Jun 27 21:45	26°♐30'08	0.47192 AU
direct	2853 Jul 26 16:36	21°♐10'50	
	2853 Sep 02 17:29	0°♑	
	2853 Oct 25 20:09	0°♒	
	2853 Dec 07 10:22	0°♓	
	2854 Jan 16 23:26	0°♈	
asc. node	2854 Feb 16 10:19	22°♈30'15	
	2854 Feb 26 16:27	0°♉	
	2854 Apr 09 15:04	0°♊	
	2854 May 23 06:17	0°♋	
evening set	2854 Jul 03 00:25	27°♋01'47	
	2854 Jul 07 13:39	0°♌	
conjunction	2854 Aug 20 08:05	28°♌13'34	1°08'35
minimum elong	2854 Aug 20 08:07	28°♌13'37	1°08'35
	2854 Aug 23 02:41	0°♍	
max. Earth dist.	2854 Aug 26 05:08	1°♍58'52	2.66771 AU
morning rise	2854 Oct 04 15:10	27°♍03'36	
	2854 Oct 09 06:17	0°♎	
	2854 Nov 25 11:35	0°♏	
	2855 Jan 11 14:34	0°♐	
	2855 Feb 27 23:25	0°♑	
desc. node	2855 Mar 04 01:08	2°♑33'21	
	2855 Apr 17 17:49	0°♒	
	2855 Jun 12 07:23	0°♓	
retrograde	2855 Jul 31 15:41	12°♓54'41	
opposition	2855 Aug 30 17:10	7°♓57'22	-6°42'47
greatest brilliancy	2855 Aug 31 01:56	7°♓51'33	-2.9m
min. Earth dist.	2855 Aug 31 17:30	7°♓41'13	0.37311 AU
direct	2855 Sep 29 17:55	2°♓56'21	
	2855 Dec 13 00:52	0°♈	
asc. node	2856 Jan 04 09:19	13°♈28'10	
	2856 Jan 30 08:44	0°♉	
	2856 Mar 16 07:46	0°♊	
	2856 May 01 11:31	0°♋	
	2856 Jun 17 09:13	0°♌	
	2856 Aug 03 18:59	0°♍	
evening set	2856 Aug 10 10:38	4°♍12'14	
max. Earth dist.	2856 Sep 17 09:23	28°♍16'43	2.67231 AU
	2856 Sep 20 02:09	0°♎	
conjunction	2856 Sep 25 00:12	3°♎08'31	0°55'08
minimum elong	2856 Sep 25 01:14	3°♎10'10	0°55'07
	2856 Nov 05 15:09	0°♏	
morning rise	2856 Nov 08 06:07	1°♏42'44	
	2856 Dec 21 00:07	0°♐	
desc. node	2857 Jan 19 00:03	19°♐37'48	
	2857 Feb 03 02:34	0°♑	
	2857 Mar 18 01:00	0°♒	
	2857 Apr 29 03:52	0°♓	
	2857 Jun 10 08:21	0°♈	
	2857 Jul 25 05:26	0°♉	
retrograde	2857 Oct 08 19:35	29°♉27'58	
min. Earth dist.	2857 Nov 05 05:47	24°♉20'37	0.44283 AU
opposition	2857 Nov 13 09:09	21°♉34'32	-0°28'33
greatest brilliancy	2857 Nov 13 05:53	21°♉37'19	-2.5m
asc. node	2857 Nov 21 07:52	19°♉00'37	
direct	2857 Dec 15 11:01	15°♉10'03	
	2858 Feb 08 05:11	0°♊	
	2858 Apr 06 08:45	0°♋	
	2858 May 27 09:49	0°♌	
	2858 Jul 15 18:22	0°♍	
	2858 Sep 01 20:19	0°♎	
evening set	2858 Sep 16 07:11	9°♎12'16	
max. Earth dist.	2858 Oct 11 11:01	25°♎29'01	2.62280 AU
	2858 Oct 18 08:18	0°♏	
conjunction	2858 Nov 01 02:25	9°♏06'33	0°20'07
minimum elong	2858 Nov 01 03:05	9°♏07'40	0°20'06
	2858 Dec 01 23:31	0°♐	
desc. node	2858 Dec 06 22:31	3°♐24'52	
morning rise	2858 Dec 17 16:21	10°♐52'11	
	2859 Jan 13 17:32	0°♑	
	2859 Feb 23 19:44	0°♒	
	2859 Apr 04 16:42	0°♓	
	2859 May 14 00:30	0°♈	
	2859 Jun 22 19:02	0°♉	
	2859 Aug 03 15:25	0°♊	
	2859 Sep 20 11:46	0°♋	
asc. node	2859 Oct 09 07:28	9°♋31'57	
retrograde	2859 Nov 24 11:50	21°♋36'52	
min. Earth dist.	2859 Dec 27 06:37	14°♋22'54	0.57255 AU
opposition	2860 Jan 02 16:26	11°♋52'47	3°34'32
greatest brilliancy	2860 Jan 01 19:43	12°♋13'03	-1.8m
direct	2860 Feb 08 06:18	3°♋33'08	
	2860 Apr 29 16:49	0°♌	
	2860 Jun 23 17:00	0°♍	
	2860 Aug 12 19:16	0°♎	
	2860 Sep 28 21:43	0°♏	
desc. node	2860 Oct 23 21:28	16°♏39'03	
evening set	2860 Oct 24 10:10	17°♏00'32	
max. Earth dist.	2860 Nov 09 04:51	27°♏48'28	2.52337 AU
	2860 Nov 12 08:48	0°♐	
conjunction	2860 Dec 13 01:44	21°♐43'34	-0°28'53
minimum elong	2860 Dec 13 00:29	21°♐41'18	0°28'52
	2860 Dec 24 11:22	0°♑	
	2861 Feb 02 16:09	0°♒	
morning rise	2861 Feb 05 16:23	2°♒17'30	
	2861 Mar 13 14:26	0°♓	
	2861 Apr 21 00:35	0°♈	
	2861 May 29 19:34	0°♉	
	2861 Jul 08 23:30	0°♊	
	2861 Aug 20 19:02	0°♋	
asc. node	2861 Aug 26 07:08	3°♋39'58	
	2861 Oct 07 19:56	0°♌	
retrograde	2861 Dec 30 09:55	29°♌59'01	
min. Earth dist.	2862 Feb 06 00:58	21°♌06'02	0.65699 AU
opposition	2862 Feb 08 16:01	20°♌02'59	4°34'57
greatest brilliancy	2862 Feb 08 05:19	20°♌13'41	-1.4m
direct	2862 Mar 20 05:50	10°♌39'37	
	2862 May 26 22:02	0°♍	
	2862 Jul 22 12:41	0°♎	
	2862 Sep 09 12:10	0°♏	
desc. node	2862 Sep 10 20:22	0°♏51'47	
	2862 Oct 24 10:09	0°♐	
	2862 Dec 05 08:46	0°♑	
evening set	2862 Dec 11 04:38	4°♑18'34	
max. Earth dist.	2863 Jan 03 09:47	21°♑46'42	2.39504 AU
	2863 Jan 14 03:19	0°♒	
conjunction	2863 Feb 08 20:06	19°♒58'33	-1°04'36
minimum elong	2863 Feb 08 19:36	19°♒57'35	1°04'35

	2863 Feb 21 14:15	0°♓	
	2863 Mar 31 14:59	0°♈	
morning rise	2863 Apr 19 06:54	14°♈37'57	
	2863 May 09 02:54	0°♉	
	2863 Jun 17 22:31	0°♊	
asc. node	2863 Jul 14 05:30	19°♊01'24	
	2863 Jul 29 20:45	0°♋	
	2863 Sep 12 18:24	0°♌	
	2863 Nov 01 12:41	0°♍	
	2864 Jan 08 09:56	0°♎	
retrograde	2864 Feb 02 18:44	3°♎35'07	
	2864 Feb 26 08:35	30°℞♍	
opposition	2864 Mar 13 18:55	24°♍02'55	4°01'12
greatest brilliancy	2864 Mar 13 22:55	23°♍58'57	-1.3m
min. Earth dist.	2864 Mar 15 01:20	23°♍32'46	0.67715 AU
direct	2864 Apr 24 00:23	14°♍07'01	
	2864 Jun 22 09:24	0°♎	
desc. node	2864 Jul 28 18:46	18°♎32'53	
	2864 Aug 17 11:31	0°♏	
	2864 Oct 03 04:58	0°♐	
	2864 Nov 14 14:39	0°♑	
	2864 Dec 24 09:08	0°♒	
	2865 Jan 31 17:10	0°♓	
evening set	2865 Feb 13 02:18	9°♓47'23	
	2865 Mar 10 16:08	0°♈	
	2865 Apr 18 04:49	0°♉	
conjunction	2865 Apr 22 14:01	3°♉21'24	-0°25'12
minimum elong	2865 Apr 22 16:13	3°♉25'37	0°25'10
	2865 May 28 02:39	0°♊	
asc. node	2865 May 31 04:56	2°♊16'12	
max. Earth dist.	2865 Jun 12 06:50	11°♊02'58	2.44438 AU
morning rise	2865 Jun 26 15:30	21°♊19'01	
	2865 Jul 08 24:00	0°♋	
	2865 Aug 22 05:52	0°♌	
	2865 Oct 08 05:18	0°♍	
	2865 Nov 28 04:53	0°♎	
	2866 Jan 30 23:11	0°♏	
retrograde	2866 Mar 10 13:02	7°♏29'14	
	2866 Apr 14 19:31	30°℞♎	
opposition	2866 Apr 18 03:10	28°♎43'57	2°11'56
greatest brilliancy	2866 Apr 18 13:25	28°♎34'04	-1.5m
min. Earth dist.	2866 Apr 23 05:07	26°♎46'31	0.63102 AU
direct	2866 May 29 12:02	18°♎45'00	
desc. node	2866 Jun 15 17:31	20°♎31'17	
	2866 Jul 15 10:17	0°♏	
	2866 Sep 09 06:50	0°♐	
	2866 Oct 23 20:44	0°♑	
	2866 Dec 03 09:10	0°♒	
	2867 Jan 11 01:40	0°♓	
	2867 Feb 18 07:54	0°♈	
	2867 Mar 29 05:25	0°♉	
asc. node	2867 Apr 18 04:10	14°♉59'48	
evening set	2867 Apr 24 05:04	19°♉28'27	
	2867 May 08 13:35	0°♊	
	2867 Jun 19 20:10	0°♋	
conjunction	2867 Jun 22 08:00	1°♋43'29	0°38'41
minimum elong	2867 Jun 22 06:12	1°♋40'22	0°38'40
max. Earth dist.	2867 Jul 22 05:09	22°♋02'09	2.57097 AU
	2867 Aug 03 04:24	0°♌	
morning rise	2867 Aug 14 04:29	7°♌14'27	
	2867 Sep 18 11:10	0°♍	
	2867 Nov 05 14:02	0°♎	
	2867 Dec 26 05:08	0°♏	
	2868 Feb 21 16:02	0°♐	
retrograde	2868 Apr 24 00:50	17°♐06'29	
desc. node	2868 May 02 17:13	16°♐38'28	
opposition	2868 May 29 15:40	9°♐42'09	-1°14'46
greatest brilliancy	2868 May 30 00:34	9°♐34'13	-2.0m
min. Earth dist.	2868 Jun 06 19:50	6°♐47'10	0.52437 AU
direct	2868 Jul 07 20:23	0°♐38'38	
	2868 Sep 23 21:54	0°♑	
	2868 Nov 07 12:41	0°♒	
	2868 Dec 17 22:47	0°♓	
	2869 Jan 26 08:28	0°♈	
asc. node	2869 Mar 05 01:55	28°♈23'34	
	2869 Mar 07 05:54	0°♉	
	2869 Apr 17 12:37	0°♊	
	2869 May 30 15:09	0°♋	
evening set	2869 Jun 15 19:21	10°♋56'03	
	2869 Jul 14 13:17	0°♌	
conjunction	2869 Aug 05 04:26	14°♌05'32	1°06'42
minimum elong	2869 Aug 05 03:50	14°♌04'34	1°06'43
max. Earth dist.	2869 Aug 17 02:55	21°♌47'36	2.65107 AU
	2869 Aug 29 21:55	0°♍	
morning rise	2869 Sep 20 18:03	13°♍54'59	
	2869 Oct 16 03:51	0°♎	
	2869 Dec 02 21:53	0°♏	
	2870 Jan 20 07:45	0°♐	
	2870 Mar 11 13:54	0°♑	
desc. node	2870 Mar 20 16:14	5°♑11'05	
	2870 May 08 04:25	0°♒	
retrograde	2870 Jun 29 01:58	13°♒16'50	
opposition	2870 Jul 30 00:21	7°♒58'03	-6°12'17
greatest brilliancy	2870 Jul 31 06:15	7°♒36'43	-2.7m
min. Earth dist.	2870 Aug 04 21:16	6°♒18'01	0.39764 AU
direct	2870 Aug 31 14:01	1°♒55'00	
	2870 Nov 13 19:02	0°♓	
	2870 Dec 29 14:49	0°♈	
asc. node	2871 Jan 21 01:16	15°♈28'01	
	2871 Feb 11 00:22	0°♉	
	2871 Mar 26 16:47	0°♊	
	2871 May 10 13:11	0°♋	
	2871 Jun 25 15:57	0°♌	
evening set	2871 Jul 27 17:13	20°♌30'04	
	2871 Aug 11 15:33	0°♍	
max. Earth dist.	2871 Sep 09 09:13	18°♍15'35	2.67707 AU
conjunction	2871 Sep 11 23:36	19°♍54'46	1°03'11
minimum elong	2871 Sep 12 00:23	19°♍56'02	1°03'11
	2871 Sep 27 19:48	0°♎	
morning rise	2871 Oct 26 06:38	18°♎12'48	
	2871 Nov 13 13:07	0°♏	
	2871 Dec 29 10:41	0°♐	
desc. node	2872 Feb 05 14:58	25°♐24'30	
	2872 Feb 12 11:06	0°♑	
	2872 Mar 27 18:51	0°♒	
	2872 May 10 23:30	0°♓	
	2872 Jun 25 23:24	0°♈	
	2872 Aug 27 23:18	0°♉	
retrograde	2872 Sep 15 03:10	2°♉15'02	
	2872 Oct 03 03:14	30°℞♈	
min. Earth dist.	2872 Oct 11 14:31	27°♈43'46	0.39734 AU
greatest brilliancy	2872 Oct 17 09:24	25°♈59'31	-2.8m
opposition	2872 Oct 18 00:46	25°♈47'54	-3°16'39
direct	2872 Nov 17 08:49	20°♈19'42	
asc. node	2872 Dec 08 01:35	22°♈59'58	
	2872 Dec 29 04:13	0°♉	
	2873 Feb 25 14:19	0°♊	
	2873 Apr 16 18:38	0°♋	
	2873 Jun 04 14:41	0°♌	
	2873 Jul 23 00:07	0°♍	

evening set	2873 Sep 02 00:03	25°♍44'59	
	2873 Sep 08 16:42	0°♎	
max. Earth dist.	2873 Oct 01 21:38	14°♎51'57	2.64838 AU
conjunction	2873 Oct 17 08:35	24°♎53'48	0°35'51
minimum elong	2873 Oct 17 09:35	24°♎55'26	0°35'50
	2873 Oct 25 03:44	0°♏	
morning rise	2873 Dec 01 12:59	24°♏55'14	
	2873 Dec 09 00:23	0°♐	
desc. node	2873 Dec 23 13:35	9°♐58'57	
	2874 Jan 21 04:34	0°♑	
	2874 Mar 03 20:13	0°♒	
	2874 Apr 13 08:08	0°♓	
	2874 May 23 08:27	0°♈	
	2874 Jul 03 01:23	0°♉	
	2874 Aug 15 23:18	0°♊	
	2874 Oct 14 21:50	0°♋	
asc. node	2874 Oct 26 00:01	2°♋39'47	
retrograde	2874 Nov 08 00:53	3°♋50'42	
	2874 Dec 01 04:34	30°℞♊	
min. Earth dist.	2874 Dec 08 15:18	27°♊25'07	0.52457 AU
greatest brilliancy	2874 Dec 15 12:08	24°♊49'29	-2.0m
opposition	2874 Dec 16 06:06	24°♊32'29	2°29'51
direct	2875 Jan 20 06:00	16°♊50'37	
	2875 Mar 13 10:17	0°♋	
	2875 May 12 01:20	0°♌	
	2875 Jul 02 23:32	0°♍	
	2875 Aug 21 01:46	0°♎	
	2875 Oct 06 20:44	0°♏	
evening set	2875 Oct 09 14:24	1°♏48'01	
max. Earth dist.	2875 Oct 28 11:13	14°♏22'31	2.56775 AU
desc. node	2875 Nov 10 12:37	23°♏14'12	
	2875 Nov 20 08:35	0°♐	
conjunction	2875 Nov 26 04:40	4°♐03'09	-0°09'09
minimum elong	2875 Nov 26 04:17	4°♐02'29	0°09'09
behind sun begin	2875 Nov 25 11:03	3°♐32'30	
behind sun end	2875 Nov 26 21:32	4°♐32'31	
	2876 Jan 01 16:13	0°♑	
morning rise	2876 Jan 15 16:40	10°♑15'05	
	2876 Feb 11 04:10	0°♒	
	2876 Mar 21 09:36	0°♓	
	2876 Apr 29 01:59	0°♈	
	2876 Jun 07 02:45	0°♉	
	2876 Jul 17 15:07	0°♊	
	2876 Aug 30 08:55	0°♋	
asc. node	2876 Sep 11 22:35	7°♋57'54	
	2876 Oct 21 07:42	0°♌	
retrograde	2876 Dec 16 16:22	16°♌09'56	
min. Earth dist.	2877 Jan 21 13:46	7°♌51'15	0.63137 AU
opposition	2877 Jan 25 16:59	6°♌12'18	4°25'34
greatest brilliancy	2877 Jan 25 00:51	6°♌28'24	-1.5m
	2877 Feb 12 08:31	30°℞♋	
direct	2877 Mar 05 06:32	27°♋09'13	
	2877 Mar 27 22:05	0°♌	
	2877 Jun 07 22:59	0°♍	
	2877 Jul 30 22:19	0°♎	
	2877 Sep 16 22:56	0°♏	
desc. node	2877 Sep 27 11:22	6°♏52'56	
	2877 Oct 31 15:00	0°♐	
evening set	2877 Nov 21 00:07	14°♐21'06	
max. Earth dist.	2877 Dec 05 19:20	25°♐01'53	2.44502 AU
	2877 Dec 12 14:20	0°♑	
conjunction	2878 Jan 14 20:35	24°♑54'43	-0°56'06
minimum elong	2878 Jan 14 18:41	24°♑51'06	0°56'06
	2878 Jan 21 12:20	0°♒	
	2878 Mar 01 03:00	0°♓	
morning rise	2878 Mar 19 16:14	14°♓35'06	
	2878 Apr 08 06:34	0°♈	
	2878 May 16 20:02	0°♉	
	2878 Jun 25 16:42	0°♊	
asc. node	2878 Jul 30 22:36	25°♊15'34	
	2878 Aug 06 18:48	0°♋	
	2878 Sep 21 08:10	0°♌	
	2878 Nov 12 22:52	0°♍	
retrograde	2879 Jan 20 09:47	20°♍55'04	
opposition	2879 Mar 01 15:36	11°♍10'38	4°23'12
min. Earth dist.	2879 Mar 01 09:40	11°♍16'34	0.67725 AU
greatest brilliancy	2879 Mar 01 14:13	11°♍12'01	-1.3m
direct	2879 Apr 11 09:20	1°♍24'12	
	2879 Jul 06 07:48	0°♎	
desc. node	2879 Aug 15 10:38	22°♎43'56	
	2879 Aug 27 07:03	0°♏	
	2879 Oct 12 01:43	0°♐	
	2879 Nov 23 05:01	0°♑	
	2880 Jan 01 22:27	0°♒	
evening set	2880 Jan 17 14:15	12°♒09'58	
	2880 Feb 09 06:40	0°♓	
	2880 Mar 18 05:24	0°♈	
conjunction	2880 Mar 24 17:24	5°♈06'56	-0°50'16
minimum elong	2880 Mar 24 20:43	5°♈13'27	0°50'13
	2880 Apr 25 16:50	0°♉	
max. Earth dist.	2880 May 11 16:25	12°♉11'40	2.39171 AU
morning rise	2880 Jun 02 12:34	28°♉31'33	
	2880 Jun 04 12:32	0°♊	
asc. node	2880 Jun 16 20:40	9°♊01'07	
	2880 Jul 16 08:22	0°♋	
	2880 Aug 29 16:45	0°♌	
	2880 Oct 16 07:35	0°♍	
	2880 Dec 08 22:23	0°♎	
retrograde	2881 Feb 23 15:01	24°♎09'03	
opposition	2881 Apr 03 22:14	15°♎02'22	3°03'44
greatest brilliancy	2881 Apr 04 07:54	14°♎52'55	-1.4m
min. Earth dist.	2881 Apr 07 13:00	13°♎37'37	0.65703 AU
direct	2881 May 15 10:59	5°♎00'03	
desc. node	2881 Jul 02 09:23	16°♎21'18	
	2881 Jul 31 00:20	0°♏	
	2881 Sep 19 03:26	0°♐	
	2881 Nov 01 12:18	0°♑	
	2881 Dec 11 14:36	0°♒	
	2882 Jan 19 01:50	0°♓	
	2882 Feb 26 03:33	0°♈	
evening set	2882 Mar 29 10:37	24°♈20'06	
	2882 Apr 05 20:03	0°♉	
asc. node	2882 May 04 19:35	21°♉48'35	
	2882 May 15 22:34	0°♊	
conjunction	2882 Jun 01 04:01	11°♊45'11	0°17'30
minimum elong	2882 Jun 01 02:51	11°♊43'05	0°17'29
	2882 Jun 26 23:57	0°♋	
max. Earth dist.	2882 Jul 09 09:11	8°♋33'13	2.52592 AU
morning rise	2882 Jul 28 01:45	21°♋13'59	
	2882 Aug 10 05:18	0°♌	
	2882 Sep 25 15:11	0°♍	
	2882 Nov 13 11:06	0°♎	
	2883 Jan 05 12:47	0°♏	
	2883 Mar 25 14:15	0°♐	
retrograde	2883 Apr 05 16:42	0°♐43'02	
	2883 Apr 16 10:19	30°℞♏	
opposition	2883 May 12 17:10	22°♏41'22	0°19'33
greatest brilliancy	2883 May 12 19:36	22°♏39'07	-1.8m
min. Earth dist.	2883 May 19 21:14	20°♏01'36	0.57254 AU

desc. node	2883 May 20 07:52	19°♏51'55	
direct	2883 Jun 22 03:42	13°♏05'01	
	2883 Aug 18 15:49	0°♐	
	2883 Oct 07 17:50	0°♑	
	2883 Nov 18 20:30	0°♒	
	2883 Dec 28 06:43	0°♓	
	2884 Feb 05 01:13	0°♈	
	2884 Mar 15 09:58	0°♉	
asc. node	2884 Mar 21 19:28	4°♉47'12	
	2884 Apr 25 05:02	0°♊	
evening set	2884 May 27 19:04	23°♊01'34	
	2884 Jun 06 21:30	0°♋	
conjunction	2884 Jul 19 23:41	28°♋59'40	1°00'07
minimum elong	2884 Jul 19 22:25	28°♋57'34	1°00'08
	2884 Jul 21 12:17	0°♌	
max. Earth dist.	2884 Aug 07 11:32	11°♌06'52	2.62598 AU
	2884 Sep 05 18:15	0°♍	
morning rise	2884 Sep 06 10:43	0°♍26'20	
	2884 Oct 23 05:05	0°♎	
	2884 Dec 10 17:33	0°♏	
	2885 Jan 30 02:44	0°♐	
	2885 Mar 27 09:14	0°♑	
desc. node	2885 Apr 06 07:09	4°♑29'16	
retrograde	2885 May 30 23:57	18°♑32'36	
opposition	2885 Jul 02 19:46	12°♑22'46	-4°20'10
greatest brilliancy	2885 Jul 04 00:54	11°♑59'24	-2.5m
min. Earth dist.	2885 Jul 10 21:21	9°♑48'30	0.44298 AU
direct	2885 Aug 07 13:06	4°♑54'36	
	2885 Oct 15 13:29	0°♒	
	2885 Nov 29 21:41	0°♓	
	2886 Jan 10 13:02	0°♈	
asc. node	2886 Feb 06 18:15	19°♈47'12	
	2886 Feb 20 22:04	0°♉	
	2886 Apr 04 07:42	0°♊	
	2886 May 18 06:57	0°♋	
	2886 Jul 02 19:33	0°♌	
evening set	2886 Jul 12 06:25	6°♌07'23	
	2886 Aug 18 11:20	0°♍	
conjunction	2886 Aug 28 17:04	6°♍31'46	1°07'43
minimum elong	2886 Aug 28 17:26	6°♍32'20	1°07'43
max. Earth dist.	2886 Aug 31 12:06	8°♍18'29	2.67326 AU
	2886 Oct 04 14:24	0°♎	
morning rise	2886 Oct 12 12:31	5°♎02'32	
	2886 Nov 20 14:35	0°♏	
	2887 Jan 06 05:30	0°♐	
	2887 Feb 21 13:42	0°♑	
desc. node	2887 Feb 22 06:21	0°♑26'56	
	2887 Apr 09 04:40	0°♒	
	2887 May 27 22:56	0°♓	
	2887 Aug 04 21:32	0°♈	
retrograde	2887 Aug 18 13:43	1°♈13'17	
	2887 Sep 01 08:06	30°℞♓	
min. Earth dist.	2887 Sep 15 23:34	26°♓35'28	0.37292 AU
opposition	2887 Sep 18 03:31	26°♓00'38	-5°56'38
greatest brilliancy	2887 Sep 17 21:26	26°♓04'42	-2.9m
direct	2887 Oct 17 12:49	21°♓06'37	
	2887 Nov 25 17:46	0°♈	
asc. node	2887 Dec 25 16:54	14°♈31'42	
	2888 Jan 21 12:35	0°♉	
	2888 Mar 09 17:07	0°♊	
	2888 Apr 25 21:33	0°♋	
	2888 Jun 12 08:25	0°♌	
	2888 Jul 30 01:22	0°♍	
evening set	2888 Aug 18 17:04	12°♍23'21	
	2888 Sep 15 11:20	0°♎	
max. Earth dist.	2888 Sep 22 16:03	4°♎35'45	2.66597 AU
conjunction	2888 Oct 03 02:02	11°♎16'35	0°48'54
minimum elong	2888 Oct 03 03:08	11°♎18'20	0°48'52
	2888 Oct 31 23:20	0°♏	
morning rise	2888 Nov 16 12:33	10°♏13'07	
	2888 Dec 16 03:41	0°♐	
desc. node	2889 Jan 09 04:43	16°♐22'12	
	2889 Jan 28 21:26	0°♑	
	2889 Mar 12 07:33	0°♒	
	2889 Apr 22 17:37	0°♓	
	2889 Jun 02 21:30	0°♈	
	2889 Jul 15 12:13	0°♉	
	2889 Sep 03 14:19	0°♊	
retrograde	2889 Oct 20 12:10	13°♊12'07	
asc. node	2889 Nov 11 16:44	9°♊40'28	
min. Earth dist.	2889 Nov 17 22:32	7°♊38'18	0.47173 AU
opposition	2889 Nov 26 05:10	4°♊41'22	0°48'52
greatest brilliancy	2889 Nov 25 22:20	4°♊47'28	-2.4m
	2889 Dec 11 06:45	30°℞♉	
direct	2889 Dec 29 08:30	27°♉47'05	
	2890 Jan 17 12:54	0°♊	
	2890 Mar 29 14:18	0°♋	
	2890 May 21 14:56	0°♌	
	2890 Jul 10 17:32	0°♍	
	2890 Aug 28 03:17	0°♎	
evening set	2890 Sep 24 14:34	17°♎31'56	
	2890 Oct 13 17:42	0°♏	
max. Earth dist.	2890 Oct 17 08:46	2°♏23'24	2.60515 AU
conjunction	2890 Nov 09 21:21	18°♏06'09	0°09'55
minimum elong	2890 Nov 09 21:43	18°♏06'45	0°09'54
behind sun begin	2890 Nov 09 05:55	17°♏40'05	
behind sun end	2890 Nov 10 13:30	18°♏33'27	
desc. node	2890 Nov 27 04:20	29°♏53'50	
	2890 Nov 27 07:55	0°♐	
morning rise	2890 Dec 27 14:30	21°♐11'07	
	2891 Jan 08 22:08	0°♑	
	2891 Feb 18 19:01	0°♒	
	2891 Mar 30 09:51	0°♓	
	2891 May 08 11:08	0°♈	
	2891 Jun 16 21:31	0°♉	
	2891 Jul 28 01:45	0°♊	
	2891 Sep 11 16:43	0°♋	
asc. node	2891 Sep 29 15:11	10°♋15'46	
	2891 Nov 19 11:55	0°♌	
retrograde	2891 Dec 03 05:35	1°♌14'29	
	2891 Dec 16 10:54	30°℞♋	
min. Earth dist.	2892 Jan 06 04:16	23°♋35'36	0.59607 AU
opposition	2892 Jan 11 18:50	21°♋22'47	3°59'25
greatest brilliancy	2892 Jan 10 22:53	21°♋42'31	-1.7m
direct	2892 Feb 18 03:09	12°♋45'45	
	2892 Apr 20 15:43	0°♌	
	2892 Jun 17 19:32	0°♍	
	2892 Aug 07 18:21	0°♎	
	2892 Sep 24 04:19	0°♏	
desc. node	2892 Oct 14 03:35	13°♏13'21	
evening set	2892 Nov 02 22:03	26°♏40'07	
	2892 Nov 07 17:40	0°♐	
max. Earth dist.	2892 Nov 17 12:05	6°♐49'17	2.49657 AU
	2892 Dec 19 19:24	0°♑	
conjunction	2892 Dec 24 02:36	3°♑09'16	-0°39'48
minimum elong	2892 Dec 24 00:54	3°♑06'09	0°39'47
	2893 Jan 28 21:57	0°♒	
morning rise	2893 Feb 19 16:15	16°♒44'19	
	2893 Mar 08 17:16	0°♓	

	2893 Apr 16 00:24	0°♈	
	2893 May 24 16:27	0°♉	
	2893 Jul 03 16:07	0°♊	
	2893 Aug 15 02:15	0°♋	
asc. node	2893 Aug 16 13:39	1°♋00'04	
	2893 Sep 30 20:23	0°♌	
	2893 Nov 29 10:10	0°♍	
retrograde	2894 Jan 07 03:13	8°♍03'00	
	2894 Feb 11 19:55	30℞♌	
min. Earth dist.	2894 Feb 14 16:04	28°♌52'19	0.66714 AU
opposition	2894 Feb 16 10:24	28°♌09'58	4°34'10
greatest brilliancy	2894 Feb 16 03:04	28°♌17'19	-1.3m
direct	2894 Mar 28 11:22	18°♌37'10	
	2894 May 16 17:51	0°♍	
	2894 Jul 16 12:32	0°♎	
desc. node	2894 Sep 01 01:52	27°♎54'10	
	2894 Sep 04 09:18	0°♏	
	2894 Oct 19 14:33	0°♐	
	2894 Nov 30 15:12	0°♑	
evening set	2894 Dec 23 18:06	17°♑16'30	
	2895 Jan 09 09:49	0°♒	
max. Earth dist.	2895 Feb 02 08:08	18°♒36'26	2.37423 AU
	2895 Feb 16 19:53	0°♓	
conjunction	2895 Feb 24 07:33	5°♓54'31	-1°03'47
minimum elong	2895 Feb 24 08:39	5°♓56'42	1°03'47
	2895 Mar 26 19:34	0°♈	
	2895 May 04 06:37	0°♉	
morning rise	2895 May 06 09:05	1°♉36'59	
	2895 Jun 13 01:03	0°♊	
asc. node	2895 Jul 04 13:54	15°♊39'49	
	2895 Jul 24 20:38	0°♋	
	2895 Sep 07 10:43	0°♌	
	2895 Oct 26 03:10	0°♍	
	2895 Dec 24 06:52	0°♎	
retrograde	2896 Feb 10 14:19	11°♎19'16	
opposition	2896 Mar 21 09:42	1°♎55'11	3°43'14
greatest brilliancy	2896 Mar 21 16:14	1°♎48'44	-1.3m
min. Earth dist.	2896 Mar 23 12:38	1°♎04'55	0.67282 AU
	2896 Mar 26 06:54	30℞♍	
direct	2896 May 01 19:13	21°♍55'31	
	2896 Jun 10 18:24	0°♎	
desc. node	2896 Jul 19 00:21	17°♎10'58	
	2896 Aug 11 04:42	0°♏	
	2896 Sep 27 21:07	0°♐	
	2896 Nov 09 14:07	0°♑	
	2896 Dec 19 11:19	0°♒	
	2897 Jan 26 20:22	0°♓	
evening set	2897 Mar 01 05:11	26°♓21'53	
	2897 Mar 05 19:57	0°♈	
	2897 Apr 13 09:29	0°♉	
conjunction	2897 May 07 18:08	18°♉27'05	-0°09'07
minimum elong	2897 May 07 18:55	18°♉28'32	0°09'07
behind sun begin	2897 May 06 19:59	17°♉45'40	
behind sun end	2897 May 08 17:51	19°♉11'22	
asc. node	2897 May 21 13:09	28°♉41'01	
	2897 May 23 08:07	0°♊	
max. Earth dist.	2897 Jun 23 10:34	22°♊25'04	2.47443 AU
	2897 Jul 04 05:40	0°♋	
morning rise	2897 Jul 08 18:33	3°♋09'20	
	2897 Aug 17 09:49	0°♌	
	2897 Oct 03 01:54	0°♍	
	2897 Nov 22 00:29	0°♎	
	2898 Jan 18 18:40	0°♏	
retrograde	2898 Mar 19 13:47	15°♏54'28	
opposition	2898 Apr 26 16:16	7°♏23'01	1°35'14
greatest brilliancy	2898 Apr 27 01:07	7°♏14'35	-1.6m
min. Earth dist.	2898 May 02 13:16	5°♏08'38	0.61276 AU
	2898 May 18 05:50	30℞♎	
desc. node	2898 Jun 05 23:20	27°♎29'10	
direct	2898 Jun 06 19:57	27°♎28'53	
	2898 Jun 27 08:56	0°♏	
	2898 Sep 02 03:52	0°♐	
	2898 Oct 18 00:39	0°♑	
	2898 Nov 27 23:38	0°♒	
	2899 Jan 05 21:02	0°♓	
	2899 Feb 13 06:22	0°♈	
	2899 Mar 24 06:43	0°♉	
asc. node	2899 Apr 08 11:18	11°♉25'05	
	2899 May 03 17:33	0°♊	
evening set	2899 May 07 11:30	2°♊42'47	
	2899 Jun 15 02:26	0°♋	
conjunction	2899 Jul 03 06:17	12°♋26'03	0°48'12
minimum elong	2899 Jul 03 04:32	12°♋23'04	0°48'11
max. Earth dist.	2899 Jul 28 19:09	29°♋32'18	2.59280 AU
	2899 Jul 29 11:54	0°♌	
morning rise	2899 Aug 23 07:28	16°♌14'30	
	2899 Sep 13 17:07	0°♍	
	2899 Oct 31 12:10	0°♎	
	2899 Dec 20 04:02	0°♏	
	2900 Feb 11 23:37	0°♐	
desc. node	2900 Apr 23 21:59	26°♐51'58	
retrograde	2900 May 07 08:35	27°♐54'20	
opposition	2900 Jun 11 00:33	20°♐54'13	-2°18'03
greatest brilliancy	2900 Jun 11 17:16	20°♐39'43	-2.2m
min. Earth dist.	2900 Jun 19 10:34	17°♐59'20	0.49575 AU
direct	2900 Jul 19 05:15	12°♐17'32	
	2900 Sep 14 04:49	0°♑	
	2900 Nov 01 04:38	0°♒	
	2900 Dec 12 15:48	0°♓	
	2901 Jan 21 14:28	0°♈	
asc. node	2901 Feb 24 10:38	25°♈15'38	
	2901 Mar 02 21:00	0°♉	
	2901 Apr 13 10:43	0°♊	
	2901 May 26 18:39	0°♋	
evening set	2901 Jun 26 19:01	20°♋45'05	
	2901 Jul 10 20:36	0°♌	
conjunction	2901 Aug 14 22:45	22°♌44'02	1°08'19
minimum elong	2901 Aug 14 22:32	22°♌43'40	1°08'20
max. Earth dist.	2901 Aug 23 13:19	28°♌15'08	2.66129 AU
	2901 Aug 26 06:52	0°♍	
morning rise	2901 Sep 29 17:53	21°♍56'31	
	2901 Oct 12 10:53	0°♎	
	2901 Nov 28 21:14	0°♏	
	2902 Jan 15 12:18	0°♐	
	2902 Mar 04 22:05	0°♑	
desc. node	2902 Mar 11 21:35	4°♑14'01	
	2902 Apr 25 05:23	0°♒	
retrograde	2902 Jul 18 07:18	29°♒54'07	
opposition	2902 Aug 17 10:49	24°♒53'47	-6°45'20
greatest brilliancy	2902 Aug 18 07:32	24°♒39'45	-2.9m
min. Earth dist.	2902 Aug 20 21:41	23°♒57'44	0.38058 AU
direct	2902 Sep 17 10:57	19°♒31'28	
	2902 Oct 29 08:06	0°♓	
	2902 Dec 21 12:56	0°♈	
asc. node	2903 Jan 12 09:43	14°♈13'26	
	2903 Feb 05 01:33	0°♉	
	2903 Mar 21 19:49	0°♊	
	2903 May 06 07:12	0°♋	
	2903 Jun 21 19:04	0°♌	
evening set	2903 Aug 06 04:47	28°♌51'57	

	2903 Aug 07 23:44	0°♍	
max. Earth dist.	2903 Sep 15 13:55	24°♍29'22	2.67552 AU
conjunction	2903 Sep 21 00:23	27°♍57'07	0°58'53
minimum elong	2903 Sep 21 01:21	27°♍58'39	0°58'53
	2903 Sep 24 05:29	0°♎	
morning rise	2903 Nov 04 05:26	26°♎20'28	
	2903 Nov 09 20:44	0°♏	
	2903 Dec 25 11:37	0°♐	
desc. node	2904 Jan 27 20:54	22°♐26'19	
	2904 Feb 07 23:35	0°♑	
	2904 Mar 22 11:39	0°♒	
	2904 May 04 08:48	0°♓	
	2904 Jun 16 18:13	0°♈	
	2904 Aug 03 19:11	0°♉	
retrograde	2904 Sep 30 00:40	18°♉39'14	
min. Earth dist.	2904 Oct 26 20:16	13°♉51'14	0.42080 AU
opposition	2904 Nov 03 12:17	11°♉22'18	-1°36'50
greatest brilliancy	2904 Nov 03 02:16	11°♉30'26	-2.7m
asc. node	2904 Nov 29 07:58	5°♉35'24	
direct	2904 Dec 04 17:54	5°♉23'25	
	2905 Feb 16 22:34	0°♊	
	2905 Apr 11 05:59	0°♋	
	2905 May 31 05:06	0°♌	
	2905 Jul 19 02:58	0°♍	
	2905 Sep 05 00:58	0°♎	
evening set	2905 Sep 11 04:02	3°♎53'39	
max. Earth dist.	2905 Oct 08 10:57	21°♎26'40	2.63529 AU
	2905 Oct 21 13:16	0°♏	
conjunction	2905 Oct 26 16:43	3°♏23'10	0°27'00
minimum elong	2905 Oct 26 17:33	3°♏24'33	0°26'59
	2905 Dec 05 07:51	0°♐	
morning rise	2905 Dec 11 13:18	4°♐16'19	
desc. node	2905 Dec 14 19:20	6°♐30'46	
	2906 Jan 17 07:09	0°♑	
	2906 Feb 27 15:52	0°♒	
	2906 Apr 08 19:30	0°♓	
	2906 May 18 09:42	0°♈	
	2906 Jun 27 11:50	0°♉	
	2906 Aug 08 22:37	0°♊	
	2906 Sep 28 08:05	0°♋	
asc. node	2906 Oct 17 07:22	8°♋13'59	
retrograde	2906 Nov 18 16:19	14°♋43'35	
min. Earth dist.	2906 Dec 20 11:36	7°♋50'28	0.55188 AU
opposition	2906 Dec 27 11:05	5°♋08'58	3°11'17
greatest brilliancy	2906 Dec 26 14:39	5°♋28'44	-1.9m
	2907 Jan 11 10:32	30°℞♊	
direct	2907 Feb 01 08:49	27°♊05'01	
	2907 Feb 23 21:17	0°♋	
	2907 May 05 22:58	0°♌	
	2907 Jun 28 12:10	0°♍	
	2907 Aug 17 04:17	0°♎	
	2907 Oct 03 04:30	0°♏	
evening set	2907 Oct 19 11:57	10°♏47'59	
desc. node	2907 Nov 01 18:21	19°♏44'41	
max. Earth dist.	2907 Nov 05 12:07	22°♏17'34	2.54402 AU
	2907 Nov 16 17:12	0°♐	
conjunction	2907 Dec 07 02:47	14°♐17'59	-0°20'31
minimum elong	2907 Dec 07 01:55	14°♐16'26	0°20'31
	2907 Dec 28 23:02	0°♑	
morning rise	2908 Jan 28 16:44	22°♑44'16	
	2908 Feb 07 07:50	0°♒	
	2908 Mar 17 09:45	0°♓	
	2908 Apr 24 22:29	0°♈	
	2908 Jun 02 19:19	0°♉	
	2908 Jul 13 01:13	0°♊	
	2908 Aug 25 02:31	0°♋	
asc. node	2908 Sep 03 07:23	6°♋01'46	
	2908 Oct 13 05:10	0°♌	
retrograde	2908 Dec 25 15:50	24°♌39'32	
min. Earth dist.	2909 Jan 31 12:32	16°♌01'02	0.64672 AU
opposition	2909 Feb 03 19:26	14°♌42'06	4°32'59
greatest brilliancy	2909 Feb 03 06:12	14°♌55'21	-1.4m
direct	2909 Mar 14 22:32	5°♌27'08	
	2909 Jun 01 11:33	0°♍	
	2909 Jul 26 09:46	0°♎	
	2909 Sep 13 00:29	0°♏	
desc. node	2909 Sep 18 17:01	3°♏41'02	
	2909 Oct 27 21:26	0°♐	
evening set	2909 Dec 03 02:59	25°♐46'17	
	2909 Dec 08 21:32	0°♑	
max. Earth dist.	2909 Dec 20 18:53	8°♑48'15	2.41655 AU
	2910 Jan 17 18:29	0°♒	
conjunction	2910 Jan 29 12:10	9°♒03'23	-1°02'15
minimum elong	2910 Jan 29 10:50	9°♒00'48	1°02'16
	2910 Feb 25 07:29	0°♓	
	2910 Apr 04 09:16	0°♈	
morning rise	2910 Apr 06 18:03	1°♈51'38	
	2910 May 12 21:15	0°♉	
	2910 Jun 21 16:11	0°♊	
asc. node	2910 Jul 22 05:56	22°♊03'55	
	2910 Aug 02 14:07	0°♋	
	2910 Sep 16 15:28	0°♌	
	2910 Nov 06 05:29	0°♍	
retrograde	2911 Jan 29 01:52	28°♍40'16	
opposition	2911 Mar 10 04:55	19°♍02'19	4°11'36
greatest brilliancy	2911 Mar 10 06:39	19°♍00'35	-1.3m
min. Earth dist.	2911 Mar 10 19:25	18°♍47'53	0.67843 AU
direct	2911 Apr 20 05:24	9°♍10'04	
	2911 Jun 29 10:47	0°♎	
desc. node	2911 Aug 06 15:26	20°♎29'13	
	2911 Aug 22 14:48	0°♏	
	2911 Oct 07 23:47	0°♐	
	2911 Nov 19 08:00	0°♑	
	2911 Dec 29 03:00	0°♒	
evening set	2912 Feb 02 19:10	27°♒52'59	
	2912 Feb 05 11:31	0°♓	
	2912 Mar 14 10:04	0°♈	
conjunction	2912 Apr 11 04:31	21°♈44'00	-0°36'55
minimum elong	2912 Apr 11 07:34	21°♈49'55	0°36'52
	2912 Apr 21 21:26	0°♉	
	2912 May 31 17:08	0°♊	
max. Earth dist.	2912 Jun 02 08:42	1°♊12'49	2.41996 AU
asc. node	2912 Jun 08 04:46	5°♊29'24	
morning rise	2912 Jun 17 14:46	12°♊19'28	
	2912 Jul 12 12:11	0°♋	
	2912 Aug 25 17:23	0°♌	
	2912 Oct 11 20:40	0°♍	
	2912 Dec 02 15:40	0°♎	
	2913 Feb 13 08:10	0°♏	
retrograde	2913 Mar 05 01:07	2°♏10'47	
	2913 Mar 23 14:27	30°℞♎	
opposition	2913 Apr 12 23:27	23°♎15'32	2°35'00
greatest brilliancy	2913 Apr 13 09:46	23°♎05'31	-1.4m
min. Earth dist.	2913 Apr 17 10:10	21°♎32'02	0.64377 AU
direct	2913 May 24 10:47	13°♎14'07	
desc. node	2913 Jun 23 14:16	18°♎14'42	
	2913 Jul 23 01:35	0°♏	
	2913 Sep 14 00:14	0°♐	
	2913 Oct 28 01:53	0°♑	

	2913 Dec 07 10:36	0°♒	
	2914 Jan 15 01:07	0°♓	
	2914 Feb 22 05:00	0°♈	
	2914 Apr 01 23:31	0°♉	
evening set	2914 Apr 14 08:02	9°♉21'31	
asc. node	2914 Apr 26 04:22	18°♉13'25	
	2914 May 12 04:01	0°♊	
conjunction	2914 Jun 14 11:50	23°♊51'37	0°30'22
minimum elong	2914 Jun 14 10:09	23°♊48'41	0°30'21
	2914 Jun 23 06:46	0°♋	
max. Earth dist.	2914 Jul 17 22:48	16°♋54'27	2.55163 AU
	2914 Aug 06 12:19	0°♌	
morning rise	2914 Aug 08 00:36	1°♌00'04	
	2914 Sep 21 18:53	0°♍	
	2914 Nov 09 03:09	0°♎	
	2914 Dec 30 14:03	0°♏	
	2915 Mar 02 03:53	0°♐	
retrograde	2915 Apr 17 08:44	10°♐15'23	
desc. node	2915 May 11 14:04	6°♐35'57	
opposition	2915 May 23 15:11	2°♐33'23	-0°32'21
greatest brilliancy	2915 May 23 18:54	2°♐29'59	-1.9m
	2915 May 30 15:10	30°℞♏	
min. Earth dist.	2915 May 31 09:30	29°♏43'33	0.54665 AU
direct	2915 Jul 02 10:37	23°♏12'41	
	2915 Aug 05 09:12	0°♐	
	2915 Oct 01 06:44	0°♑	
	2915 Nov 13 14:52	0°♒	
	2915 Dec 23 13:24	0°♓	
	2916 Jan 31 15:15	0°♈	
	2916 Mar 11 05:49	0°♉	
asc. node	2916 Mar 13 02:17	1°♉22'53	
	2916 Apr 21 06:02	0°♊	
	2916 Jun 03 02:38	0°♋	
evening set	2916 Jun 08 20:45	3°♋55'38	
	2916 Jul 17 20:22	0°♌	
conjunction	2916 Jul 30 09:18	8°♌12'58	1°04'32
minimum elong	2916 Jul 30 08:25	8°♌11'31	1°04'32
max. Earth dist.	2916 Aug 14 04:09	17°♌48'53	2.64099 AU
	2916 Sep 02 02:50	0°♍	
morning rise	2916 Sep 15 17:04	8°♍40'29	
	2916 Oct 19 10:09	0°♎	
	2916 Dec 06 11:18	0°♏	
	2917 Jan 24 14:42	0°♐	
	2917 Mar 17 18:59	0°♑	
desc. node	2917 Mar 28 12:55	5°♑42'02	
	2917 May 27 16:52	0°♒	
retrograde	2917 Jun 16 17:27	2°♒19'29	
	2917 Jul 06 06:33	30°℞♑	
opposition	2917 Jul 18 12:11	26°♑38'59	-5°28'04
greatest brilliancy	2917 Jul 19 20:18	26°♑14'47	-2.6m
min. Earth dist.	2917 Jul 25 16:54	24°♑29'49	0.41623 AU
direct	2917 Aug 21 12:21	19°♑57'27	
	2917 Oct 01 01:28	0°♒	
	2917 Nov 22 01:58	0°♓	
	2918 Jan 04 12:47	0°♈	
asc. node	2918 Jan 29 01:10	17°♈23'50	
	2918 Feb 15 20:04	0°♉	
	2918 Mar 30 20:15	0°♊	
	2918 May 14 05:18	0°♋	
	2918 Jun 29 00:39	0°♌	
evening set	2918 Jul 22 05:27	14°♌55'25	
	2918 Aug 14 20:06	0°♍	
conjunction	2918 Sep 06 22:31	14°♍41'56	1°05'30
minimum elong	2918 Sep 06 23:09	14°♍42'56	1°05'31
max. Earth dist.	2918 Sep 06 16:36	14°♍32'31	2.67648 AU
	2918 Sep 30 23:35	0°♎	
morning rise	2918 Oct 21 09:21	13°♎01'29	
	2918 Nov 16 20:03	0°♏	
	2919 Jan 02 01:05	0°♐	
desc. node	2919 Feb 13 11:48	27°♐56'10	
	2919 Feb 16 14:36	0°♑	
	2919 Apr 02 19:23	0°♒	
	2919 May 18 11:47	0°♓	
	2919 Jul 07 06:02	0°♈	
retrograde	2919 Sep 05 07:25	19°♈25'26	
min. Earth dist.	2919 Oct 02 03:59	14°♈58'32	0.38287 AU
opposition	2919 Oct 06 23:32	13°♈36'49	-4°33'02
greatest brilliancy	2919 Oct 06 09:10	13°♈47'01	-2.9m
direct	2919 Nov 05 16:45	8°♈29'19	
asc. node	2919 Dec 17 01:26	18°♈06'08	
	2920 Jan 11 05:54	0°♉	
	2920 Mar 03 10:41	0°♊	
	2920 Apr 21 01:33	0°♋	
	2920 Jun 08 05:12	0°♌	
	2920 Jul 26 06:46	0°♍	
evening set	2920 Aug 27 22:01	20°♍31'19	
	2920 Sep 11 20:33	0°♎	
max. Earth dist.	2920 Sep 29 00:44	10°♎58'48	2.65738 AU
conjunction	2920 Oct 12 05:08	19°♎29'05	0°41'38
minimum elong	2920 Oct 12 06:13	19°♎30'50	0°41'38
	2920 Oct 28 08:43	0°♏	
morning rise	2920 Nov 25 23:36	18°♏56'39	
	2920 Dec 12 09:25	0°♐	
desc. node	2920 Dec 31 10:37	13°♐01'18	
	2921 Jan 24 20:11	0°♑	
	2921 Mar 07 20:03	0°♒	
	2921 Apr 17 17:20	0°♓	
	2921 May 28 03:52	0°♈	
	2921 Jul 08 11:45	0°♉	
	2921 Aug 22 23:44	0°♊	
retrograde	2921 Nov 01 08:51	25°♊46'29	
asc. node	2921 Nov 03 00:25	25°♊45'17	
min. Earth dist.	2921 Nov 30 22:52	19°♊43'59	0.50127 AU
opposition	2921 Dec 08 23:10	16°♊46'30	1°52'08
greatest brilliancy	2921 Dec 08 08:40	16°♊59'56	-2.2m
direct	2922 Jan 12 04:31	9°♊24'31	
	2922 Mar 21 08:12	0°♋	
	2922 May 16 11:24	0°♌	
	2922 Jul 06 13:13	0°♍	
	2922 Aug 24 08:30	0°♎	
evening set	2922 Oct 04 02:22	26°♎04'02	
	2922 Oct 10 02:31	0°♏	
max. Earth dist.	2922 Oct 24 16:20	9°♏38'54	2.58548 AU
desc. node	2922 Nov 18 09:36	26°♏21'50	
conjunction	2922 Nov 20 00:25	27°♏28'25	-0°00'57
minimum elong	2922 Nov 20 00:22	27°♏28'20	0°00'58
behind sun begin	2922 Nov 19 04:22	26°♏54'00	
behind sun end	2922 Nov 20 20:23	28°♏02'41	
	2922 Nov 23 16:33	0°♐	
	2923 Jan 05 04:13	0°♑	
morning rise	2923 Jan 08 02:55	2°♑07'58	
	2923 Feb 14 20:49	0°♒	
	2923 Mar 26 06:47	0°♓	
	2923 May 04 02:45	0°♈	
	2923 Jun 12 06:35	0°♉	
	2923 Jul 22 23:29	0°♊	
	2923 Sep 05 05:50	0°♋	
asc. node	2923 Sep 20 22:45	9°♋38'16	
	2923 Oct 30 06:52	0°♌	

retrograde	2923 Dec 12 15:40	10°♌24'21	
min. Earth dist.	2924 Jan 16 16:28	2°♌22'28	0.61674 AU
opposition	2924 Jan 21 11:18	0°♌28'15	4°17'09
greatest brilliancy	2924 Jan 20 17:09	0°♌46'20	-1.6m
	2924 Jan 22 15:45	30°℞♋	
direct	2924 Feb 28 11:54	21°♋35'59	
	2924 Apr 09 13:36	0°♌	
	2924 Jun 12 11:10	0°♍	
	2924 Aug 03 13:04	0°♎	
	2924 Sep 20 08:30	0°♏	
desc. node	2924 Oct 05 08:17	9°♏51'11	
	2924 Nov 04 00:44	0°♐	
evening set	2924 Nov 13 23:33	6°♐56'36	
max. Earth dist.	2924 Nov 28 05:32	17°♐03'14	2.46836 AU
	2924 Dec 16 02:24	0°♑	
conjunction	2925 Jan 06 01:04	15°♑32'05	-0°49'47
minimum elong	2925 Jan 05 23:07	15°♑28'26	0°49'45
	2925 Jan 25 03:17	0°♒	
	2925 Mar 04 20:35	0°♓	
morning rise	2925 Mar 07 23:11	2°♓26'04	
	2925 Apr 12 01:40	0°♈	
	2925 May 20 15:36	0°♉	
	2925 Jun 29 12:20	0°♊	
asc. node	2925 Aug 07 22:58	28°♊08'49	
	2925 Aug 10 15:32	0°♋	
	2925 Sep 25 12:42	0°♌	
	2925 Nov 18 23:02	0°♍	
retrograde	2926 Jan 15 18:55	15°♍56'43	
min. Earth dist.	2926 Feb 24 03:22	6°♍30'01	0.67394 AU
opposition	2926 Feb 25 01:22	6°♍08'02	4°29'11
greatest brilliancy	2926 Feb 24 21:23	6°♍12'01	-1.3m
	2926 Mar 13 22:09	30°℞♌	
direct	2926 Apr 06 11:35	26°♌27'08	
	2926 May 02 04:13	0°♍	
	2926 Jul 11 00:42	0°♎	
desc. node	2926 Aug 23 07:23	25°♎09'22	
	2926 Aug 31 02:17	0°♏	
	2926 Oct 15 16:26	0°♐	
	2926 Nov 26 19:50	0°♑	
	2927 Jan 05 14:35	0°♒	
evening set	2927 Jan 07 09:30	1°♒22'45	
	2927 Feb 13 00:03	0°♓	
conjunction	2927 Mar 13 18:02	22°♓43'44	-0°57'56
minimum elong	2927 Mar 13 20:42	22°♓49'01	0°57'56
	2927 Mar 22 23:05	0°♈	
max. Earth dist.	2927 Apr 14 14:06	17°♈44'42	2.37374 AU
	2927 Apr 30 09:41	0°♉	
morning rise	2927 May 23 17:17	17°♉45'01	
	2927 Jun 09 03:50	0°♊	
asc. node	2927 Jun 25 21:22	12°♊13'10	
	2927 Jul 20 21:58	0°♋	
	2927 Sep 03 06:46	0°♌	
	2927 Oct 21 04:41	0°♍	
	2927 Dec 15 09:18	0°♎	
retrograde	2928 Feb 19 13:14	19°♎05'44	
opposition	2928 Mar 30 02:21	9°♎50'52	3°21'26
greatest brilliancy	2928 Mar 30 10:51	9°♎42'32	-1.3m
min. Earth dist.	2928 Apr 02 01:18	8°♎41'12	0.66540 AU
	2928 May 05 04:45	30°℞♍	
direct	2928 May 10 14:10	29°♍48'56	
	2928 May 16 01:43	0°♎	
desc. node	2928 Jul 10 06:25	16°♎37'57	
	2928 Aug 05 07:29	0°♏	
	2928 Sep 23 08:11	0°♐	
	2928 Nov 05 11:11	0°♑	
	2928 Dec 15 11:54	0°♒	
	2929 Jan 22 22:25	0°♓	
	2929 Mar 01 22:47	0°♈	
evening set	2929 Mar 18 07:55	12°♈49'43	
	2929 Apr 09 13:03	0°♉	
asc. node	2929 May 12 19:32	25°♉03'14	
	2929 May 19 12:43	0°♊	
conjunction	2929 May 23 00:06	2°♊32'37	0°06'41
minimum elong	2929 May 22 23:36	2°♊31'42	0°06'40
behind sun begin	2929 May 21 23:29	1°♊47'38	
behind sun end	2929 May 23 23:43	3°♊15'42	
	2929 Jun 30 10:58	0°♋	
max. Earth dist.	2929 Jul 04 00:46	2°♋29'19	2.50362 AU
morning rise	2929 Jul 21 01:43	14°♋12'07	
	2929 Aug 13 14:20	0°♌	
	2929 Sep 29 01:06	0°♍	
	2929 Nov 17 05:35	0°♎	
	2930 Jan 10 18:09	0°♏	
retrograde	2930 Mar 30 02:21	24°♏39'06	
opposition	2930 May 06 15:06	16°♏23'21	0°53'26
greatest brilliancy	2930 May 06 20:56	16°♏17'52	-1.7m
min. Earth dist.	2930 May 13 05:34	13°♏54'08	0.59167 AU
desc. node	2930 May 28 04:55	9°♏04'32	
direct	2930 Jun 16 10:25	6°♏37'20	
	2930 Aug 25 20:26	0°♐	
	2930 Oct 12 19:00	0°♑	
	2930 Nov 23 08:55	0°♒	
	2931 Jan 01 13:19	0°♓	
	2931 Feb 09 03:04	0°♈	
	2931 Mar 20 06:53	0°♉	
asc. node	2931 Mar 30 19:37	7°♉54'17	
	2931 Apr 29 20:55	0°♊	
evening set	2931 May 20 21:25	15°♊01'25	
	2931 Jun 11 08:25	0°♋	
conjunction	2931 Jul 14 14:01	22°♋32'34	0°55'47
minimum elong	2931 Jul 14 12:30	22°♋30'02	0°55'46
	2931 Jul 25 19:31	0°♌	
max. Earth dist.	2931 Aug 05 02:12	6°♌45'59	2.61212 AU
morning rise	2931 Sep 02 02:17	24°♌56'04	
	2931 Sep 09 23:56	0°♍	
	2931 Oct 27 13:21	0°♎	
	2931 Dec 15 11:50	0°♏	
	2932 Feb 05 01:11	0°♐	
	2932 Apr 06 16:50	0°♑	
desc. node	2932 Apr 14 03:50	2°♑41'07	
retrograde	2932 May 20 17:21	9°♑35'17	
opposition	2932 Jun 23 09:52	3°♑01'58	-3°26'21
greatest brilliancy	2932 Jun 24 10:17	2°♑41'36	-2.3m
min. Earth dist.	2932 Jul 01 19:15	0°♑14'44	0.46635 AU
	2932 Jul 02 13:40	30°℞♐	
direct	2932 Jul 30 07:49	25°♐00'09	
	2932 Aug 27 06:53	0°♑	
	2932 Oct 23 13:59	0°♒	
	2932 Dec 05 18:22	0°♓	
	2933 Jan 15 12:25	0°♈	
asc. node	2933 Feb 14 18:53	22°♈19'18	
	2933 Feb 25 07:17	0°♉	
	2933 Apr 08 06:13	0°♊	
	2933 May 21 20:56	0°♋	
evening set	2933 Jul 06 08:23	0°♌07'51	
	2933 Jul 06 03:34	0°♌	
	2933 Aug 21 15:58	0°♍	
conjunction	2933 Aug 23 11:39	1°♍09'48	1°08'27
minimum elong	2933 Aug 23 11:47	1°♍10'00	1°08'27

max. Earth dist.	2933 Aug 28 21:42	4°♍37'20	2.66892 AU
morning rise	2933 Oct 07 16:05	29°♍55'16	
	2933 Oct 07 19:04	0°♎	
	2933 Nov 23 23:29	0°♏	
	2934 Jan 10 00:11	0°♐	
	2934 Feb 26 03:33	0°♑	
desc. node	2934 Mar 02 03:01	2°♑30'56	
	2934 Apr 15 08:19	0°♒	
	2934 Jun 07 12:29	0°♓	
retrograde	2934 Aug 05 13:46	17°♓39'11	
opposition	2934 Sep 04 17:03	12°♓40'49	-6°36'10
greatest brilliancy	2934 Sep 04 22:46	12°♓37'02	-2.9m
min. Earth dist.	2934 Sep 05 02:12	12°♓34'45	0.37217 AU
direct	2934 Oct 04 12:11	7°♓42'56	
	2934 Dec 09 14:49	0°♈	
asc. node	2935 Jan 02 17:00	14°♈01'53	
	2935 Jan 28 05:41	0°♉	
	2935 Mar 15 13:45	0°♊	
	2935 Apr 30 21:02	0°♋	
	2935 Jun 16 20:20	0°♌	
	2935 Aug 03 07:07	0°♍	
evening set	2935 Aug 14 13:24	7°♍06'47	
	2935 Sep 19 15:13	0°♎	
max. Earth dist.	2935 Sep 20 19:55	0°♎45'47	2.67128 AU
conjunction	2935 Sep 29 01:53	6°♎01'58	0°53'25
minimum elong	2935 Sep 29 02:56	6°♎03'40	0°53'25
	2935 Nov 05 05:02	0°♏	
morning rise	2935 Nov 12 08:31	4°♏40'00	
	2935 Dec 20 14:25	0°♐	
desc. node	2936 Jan 18 01:34	19°♐16'10	
	2936 Feb 02 16:32	0°♑	
	2936 Mar 16 13:39	0°♒	
	2936 Apr 27 13:45	0°♓	
	2936 Jun 08 12:07	0°♈	
	2936 Jul 22 15:10	0°♉	
	2936 Sep 20 02:45	0°♊	
retrograde	2936 Oct 12 14:46	3°♊28'58	
	2936 Nov 03 18:40	30°℞♉	
min. Earth dist.	2936 Nov 09 04:10	28°♉17'46	0.44807 AU
opposition	2936 Nov 17 09:57	25°♉28'20	-0°08'07
greatest brilliancy	2935 Nov 17 04:50	7°♏50'37	1.7m
asc. node	2936 Nov 19 16:36	24°♉41'57	
direct	2936 Dec 19 16:16	18°♉58'21	
	2937 Feb 03 17:48	0°♊	
	2937 Apr 04 02:54	0°♋	
	2937 May 25 14:48	0°♌	
	2937 Jul 14 03:55	0°♍	
	2937 Aug 31 08:46	0°♎	
evening set	2937 Sep 19 09:33	12°♎06'58	
max. Earth dist.	2937 Oct 14 04:35	28°♎11'03	2.61951 AU
	2937 Oct 16 23:01	0°♏	
conjunction	2937 Nov 04 06:40	12°♏08'10	0°17'20
minimum elong	2937 Nov 04 07:15	12°♏09'09	0°17'20
	2937 Nov 30 15:56	0°♐	
desc. node	2937 Dec 05 00:53	3°♐00'23	
morning rise	2937 Dec 21 01:25	14°♐08'10	
	2938 Jan 12 11:00	0°♑	
	2938 Feb 22 13:33	0°♒	
	2938 Apr 03 10:14	0°♓	
	2938 May 12 16:50	0°♈	
	2938 Jun 21 08:33	0°♉	
	2938 Aug 01 22:12	0°♊	
	2938 Sep 17 19:48	0°♋	
asc. node	2938 Oct 07 15:47	10°♋30'30	
retrograde	2938 Nov 27 18:16	24°♋49'38	
min. Earth dist.	2938 Dec 30 18:21	17°♋30'07	0.57730 AU
opposition	2939 Jan 05 23:35	15°♋03'58	3°42'28
greatest brilliancy	2939 Jan 05 02:47	15°♋24'23	-1.8m
direct	2939 Feb 11 16:40	6°♋40'45	
	2939 Apr 27 21:52	0°♌	
	2939 Jun 22 19:23	0°♍	
	2939 Aug 12 05:03	0°♎	
	2939 Sep 28 11:54	0°♏	
desc. node	2939 Oct 23 00:19	16°♏16'46	
evening set	2939 Oct 28 16:16	20°♏06'51	
	2939 Nov 12 02:08	0°♐	
max. Earth dist.	2939 Nov 13 03:38	0°♐44'09	2.51844 AU
conjunction	2939 Dec 17 14:28	25°♐08'43	-0°31'46
minimum elong	2939 Dec 17 13:06	25°♐06'15	0°31'45
	2939 Dec 24 06:52	0°♑	
	2940 Feb 02 12:50	0°♒	
morning rise	2940 Feb 10 18:14	6°♒16'18	
	2940 Mar 12 11:21	0°♓	
	2940 Apr 19 20:47	0°♈	
	2940 May 28 14:03	0°♉	
	2940 Jul 07 14:55	0°♊	
	2940 Aug 19 04:41	0°♋	
asc. node	2940 Aug 24 13:52	3°♋36'52	
	2940 Oct 05 14:48	0°♌	
	2940 Dec 11 09:27	0°♍	
retrograde	2941 Jan 02 11:18	2°♍53'37	
	2941 Jan 23 03:01	30°℞♌	
min. Earth dist.	2941 Feb 09 06:34	23°♌56'28	0.65934 AU
opposition	2941 Feb 11 16:54	22°♌58'02	4°35'20
greatest brilliancy	2941 Feb 11 06:55	23°♌08'03	-1.4m
direct	2941 Mar 23 08:07	13°♌32'36	
	2941 May 23 17:02	0°♍	
	2941 Jul 20 14:43	0°♎	
	2941 Sep 07 23:29	0°♏	
desc. node	2941 Sep 08 22:33	0°♏36'52	
	2941 Oct 23 02:30	0°♐	
	2941 Dec 04 04:20	0°♑	
evening set	2941 Dec 14 23:30	7°♑59'32	
max. Earth dist.	2942 Jan 08 20:12	26°♑46'55	2.39065 AU
	2942 Jan 13 00:51	0°♒	
conjunction	2942 Feb 13 04:21	24°♒13'29	-1°04'50
minimum elong	2942 Feb 13 04:13	24°♒13'14	1°04'50
	2942 Feb 20 12:39	0°♓	
	2942 Mar 30 13:09	0°♈	
morning rise	2942 Apr 24 02:54	19°♈15'22	
	2942 May 07 23:48	0°♉	
	2942 Jun 16 17:09	0°♊	
asc. node	2942 Jul 12 13:43	18°♊46'28	
	2942 Jul 28 11:54	0°♋	
	2942 Sep 11 03:59	0°♌	
	2942 Oct 30 09:28	0°♍	
	2943 Jan 01 21:44	0°♎	
retrograde	2943 Feb 05 19:39	6°♎24'32	
	2943 Mar 09 18:06	30°℞♍	
opposition	2943 Mar 17 18:38	26°♍53'53	3°56'12
greatest brilliancy	2943 Mar 17 23:11	26°♍49'22	-1.3m
min. Earth dist.	2943 Mar 19 05:29	26°♍19'21	0.67664 AU
direct	2943 Apr 28 00:13	16°♍56'54	
	2943 Jun 19 21:07	0°♎	
desc. node	2943 Jul 27 20:56	18°♎42'24	
	2943 Aug 16 14:29	0°♏	
	2943 Oct 02 18:07	0°♐	
	2943 Nov 14 08:41	0°♑	
	2943 Dec 24 05:45	0°♒	
	2944 Jan 31 14:58	0°♓	

evening set	2944 Feb 18 15:51	14°♓15'45	
	2944 Mar 09 13:59	0°♈	
	2944 Apr 17 01:46	0°♉	
conjunction	2944 Apr 27 01:50	7°♉38'58	-0°21'20
minimum elong	2944 Apr 27 03:43	7°♉42'33	0°21'19
	2944 May 26 21:56	0°♊	
asc. node	2944 May 29 13:14	1°♊56'21	
max. Earth dist.	2944 Jun 15 21:10	14°♊31'48	2.45007 AU
morning rise	2944 Jun 30 13:46	24°♊59'30	
	2944 Jul 07 16:53	0°♋	
	2944 Aug 20 19:35	0°♌	
	2944 Oct 06 14:08	0°♍	
	2944 Nov 26 02:40	0°♎	
	2945 Jan 26 04:52	0°♏	
retrograde	2945 Mar 13 18:32	10°♏24'19	
opposition	2945 Apr 21 06:20	1°♏41'40	2°01'49
greatest brilliancy	2945 Apr 21 16:12	1°♏32'10	-1.5m
	2945 Apr 25 15:54	30°℞♎	
min. Earth dist.	2945 Apr 26 12:13	29°♎40'34	0.62784 AU
direct	2945 Jun 01 14:11	21°♎43'03	
desc. node	2945 Jun 13 20:12	22°♎38'20	
	2945 Jul 11 00:22	0°♏	
	2945 Sep 07 09:01	0°♐	
	2945 Oct 22 10:30	0°♑	
	2945 Dec 02 03:32	0°♒	
	2946 Jan 09 21:55	0°♓	
	2946 Feb 17 04:26	0°♈	
	2946 Mar 28 01:13	0°♉	
asc. node	2946 Apr 16 11:30	14°♉37'45	
evening set	2946 Apr 28 08:32	23°♉25'39	
	2946 May 07 08:00	0°♊	
	2946 Jun 18 12:49	0°♋	
conjunction	2946 Jun 26 00:27	5°♋10'23	0°41'23
minimum elong	2946 Jun 25 22:38	5°♋07'15	0°41'22
max. Earth dist.	2946 Jul 24 22:10	24°♋45'47	2.57533 AU
	2946 Aug 01 19:07	0°♌	
morning rise	2946 Aug 17 11:58	10°♌19'58	
	2946 Sep 16 23:33	0°♍	
	2946 Nov 03 22:46	0°♎	
	2946 Dec 24 05:25	0°♏	
	2947 Feb 18 07:30	0°♐	
retrograde	2947 Apr 28 21:06	20°♐26'52	
desc. node	2947 May 01 18:49	20°♐23'44	
opposition	2947 Jun 03 06:54	13°♐06'43	-1°30'35
greatest brilliancy	2947 Jun 03 17:41	12°♐57'07	-2.0m
min. Earth dist.	2947 Jun 11 11:20	10°♐12'00	0.51920 AU
direct	2947 Jul 12 06:37	4°♐07'25	
	2947 Sep 22 09:55	0°♑	
	2947 Nov 06 21:01	0°♒	
	2947 Dec 17 13:30	0°♓	
	2948 Jan 26 01:30	0°♈	
asc. node	2948 Mar 03 10:35	28°♈07'20	
	2948 Mar 05 23:18	0°♉	
	2948 Apr 16 05:21	0°♊	
	2948 May 29 06:44	0°♋	
evening set	2948 Jun 19 06:55	14°♋11'05	
	2948 Jul 13 03:45	0°♌	
conjunction	2948 Aug 08 09:57	17°♌05'55	1°07'18
minimum elong	2948 Aug 08 09:27	17°♌05'06	1°07'17
max. Earth dist.	2948 Aug 19 17:50	24°♌23'50	2.65329 AU
	2948 Aug 28 11:26	0°♍	
morning rise	2948 Sep 23 19:39	16°♍47'19	
	2948 Oct 14 16:22	0°♎	
	2948 Dec 01 08:21	0°♏	
	2949 Jan 18 13:15	0°♐	
	2949 Mar 09 06:33	0°♑	
desc. node	2949 Mar 18 17:51	5°♑29'53	
	2949 May 03 15:06	0°♒	
retrograde	2949 Jul 04 03:11	17°♒42'36	
opposition	2949 Aug 03 19:32	12°♒28'17	-6°22'35
greatest brilliancy	2949 Aug 05 00:33	12°♒07'48	-2.8m
min. Earth dist.	2949 Aug 09 06:53	10°♒55'50	0.39382 AU
direct	2949 Sep 05 02:43	6°♒33'48	
	2949 Nov 10 13:15	0°♓	
	2949 Dec 27 13:48	0°♈	
asc. node	2950 Jan 19 09:53	15°♈34'55	
	2950 Feb 09 08:16	0°♉	
	2950 Mar 25 04:11	0°♊	
	2950 May 09 01:50	0°♋	
	2950 Jun 24 04:59	0°♌	
evening set	2950 Jul 30 20:55	23°♌25'54	
	2950 Aug 10 04:50	0°♍	
max. Earth dist.	2950 Sep 11 20:54	20°♍45'14	2.67699 AU
conjunction	2950 Sep 15 00:32	22°♍45'28	1°02'03
minimum elong	2950 Sep 15 01:22	22°♍46'48	1°02'03
	2950 Sep 26 09:31	0°♎	
morning rise	2950 Oct 29 06:39	21°♎03'20	
	2950 Nov 12 03:13	0°♏	
	2950 Dec 28 00:29	0°♐	
desc. node	2951 Feb 03 17:47	25°♐08'10	
	2951 Feb 10 23:18	0°♑	
	2951 Mar 27 03:20	0°♒	
	2951 May 10 00:25	0°♓	
	2951 Jun 24 04:54	0°♈	
	2951 Aug 18 17:46	0°♉	
retrograde	2951 Sep 20 09:58	6°♉53'14	
min. Earth dist.	2951 Oct 16 22:52	2°♉19'43	0.40130 AU
opposition	2951 Oct 23 16:28	0°♉16'09	-2°52'12
greatest brilliancy	2951 Oct 23 01:54	0°♉27'20	-2.8m
	2951 Oct 24 13:35	30°℞♈	
direct	2951 Nov 23 03:38	24°♈42'21	
asc. node	2951 Dec 07 08:06	25°♈59'49	
	2951 Dec 23 03:00	0°♉	
	2952 Feb 24 01:29	0°♊	
	2952 Apr 14 21:19	0°♋	
	2952 Jun 02 22:58	0°♌	
	2952 Jul 21 11:14	0°♍	
evening set	2952 Sep 05 01:32	28°♍36'56	
	2952 Sep 07 05:53	0°♎	
max. Earth dist.	2952 Oct 04 11:37	17°♎26'35	2.64628 AU
conjunction	2952 Oct 20 10:08	27°♎48'07	0°33'27
minimum elong	2952 Oct 20 11:06	27°♎49'42	0°33'27
	2952 Oct 23 18:45	0°♏	
morning rise	2952 Dec 04 16:56	27°♏57'41	
	2952 Dec 07 16:53	0°♐	
desc. node	2952 Dec 21 16:29	9°♐34'51	
	2953 Jan 19 22:00	0°♑	
	2953 Mar 02 13:49	0°♒	
	2953 Apr 12 01:01	0°♓	
	2953 May 21 23:09	0°♈	
	2953 Jul 01 10:59	0°♉	
	2953 Aug 13 18:56	0°♊	
	2953 Oct 08 02:58	0°♋	
asc. node	2953 Oct 24 07:27	5°♋07'07	
retrograde	2953 Nov 11 12:40	7°♋21'08	
min. Earth dist.	2953 Dec 12 07:49	0°♋49'53	0.52988 AU
	2953 Dec 14 13:00	30°℞♊	
opposition	2953 Dec 19 19:28	27°♊59'22	2°42'27
greatest brilliancy	2953 Dec 19 00:29	28°♊17'28	-2.0m

direct	2954 Jan 23 23:45	20°♊12'53	
	2954 Mar 08 21:22	0°♋	
	2954 May 09 19:59	0°♌	
	2954 Jul 01 05:22	0°♍	
	2954 Aug 19 12:49	0°♎	
	2954 Oct 05 11:15	0°♏	
evening set	2954 Oct 12 18:44	4°♏48'44	
max. Earth dist.	2954 Oct 31 07:57	17°♏12'24	2.56347 AU
desc. node	2954 Nov 08 15:10	22°♏50'17	
	2954 Nov 19 01:39	0°♐	
conjunction	2954 Nov 29 12:58	7°♐16'24	-0°12'10
minimum elong	2954 Nov 29 12:28	7°♐15'31	0°12'10
behind sun begin	2954 Nov 28 22:34	6°♐51'16	
behind sun end	2954 Nov 30 02:21	7°♐39'47	
	2954 Dec 31 11:09	0°♑	
morning rise	2955 Jan 19 09:31	13°♑51'37	
	2955 Feb 10 00:14	0°♒	
	2955 Mar 21 06:03	0°♓	
	2955 Apr 28 21:57	0°♈	
	2955 Jun 06 20:59	0°♉	
	2955 Jul 17 05:39	0°♊	
	2955 Aug 29 14:59	0°♋	
asc. node	2955 Sep 11 07:42	8°♋09'12	
	2955 Oct 19 06:49	0°♌	
retrograde	2955 Dec 20 19:13	19°♌09'25	
min. Earth dist.	2956 Jan 25 20:21	10°♌46'29	0.63444 AU
opposition	2956 Jan 29 19:12	9°♌11'40	4°28'33
greatest brilliancy	2956 Jan 29 03:32	9°♌27'20	-1.5m
direct	2956 Mar 08 10:28	0°♌06'15	
	2956 Jun 05 12:56	0°♍	
	2956 Jul 29 04:16	0°♎	
	2956 Sep 15 11:44	0°♏	
desc. node	2956 Sep 25 13:51	6°♏34'11	
	2956 Oct 30 07:57	0°♐	
evening set	2956 Nov 24 13:31	17°♐46'38	
max. Earth dist.	2956 Dec 09 18:19	28°♐47'23	2.43951 AU
	2956 Dec 11 09:58	0°♑	
conjunction	2957 Jan 18 20:44	28°♑49'42	-0°57'54
minimum elong	2957 Jan 18 18:55	28°♑46'15	0°57'53
	2957 Jan 20 09:28	0°♒	
	2957 Feb 28 00:39	0°♓	
morning rise	2957 Mar 24 09:01	19°♓09'14	
	2957 Apr 07 03:50	0°♈	
	2957 May 15 16:03	0°♉	
	2957 Jun 24 10:29	0°♊	
asc. node	2957 Jul 29 06:33	25°♊03'37	
	2957 Aug 05 08:50	0°♋	
	2957 Sep 19 14:57	0°♌	
	2957 Nov 10 07:01	0°♍	
retrograde	2958 Jan 23 10:34	23°♍44'54	
opposition	2958 Mar 04 15:05	14°♍01'50	4°20'11
greatest brilliancy	2958 Mar 04 14:22	14°♍02'33	-1.3m
min. Earth dist.	2958 Mar 04 13:23	14°♍03'31	0.67764 AU
direct	2958 Apr 14 09:12	4°♍14'13	
	2958 Jul 03 19:41	0°♎	
desc. node	2958 Aug 13 12:28	22°♎40'24	
	2958 Aug 25 14:08	0°♏	
	2958 Oct 10 16:21	0°♐	
	2958 Nov 21 23:54	0°♑	
	2958 Dec 31 19:42	0°♒	
evening set	2959 Jan 21 21:34	16°♒22'59	
	2959 Feb 08 04:56	0°♓	
	2959 Mar 18 03:31	0°♈	
conjunction	2959 Mar 30 08:48	9°♈36'53	-0°47'24
minimum elong	2959 Mar 30 12:10	9°♈43'29	0°47'23
	2959 Apr 25 13:47	0°♉	
max. Earth dist.	2959 May 19 12:09	18°♉13'08	2.39659 AU
	2959 Jun 04 07:31	0°♊	
morning rise	2959 Jun 07 19:30	2°♊34'41	
asc. node	2959 Jun 16 04:54	8°♊42'52	
	2959 Jul 16 00:40	0°♋	
	2959 Aug 29 05:20	0°♌	
	2959 Oct 15 13:37	0°♍	
	2959 Dec 07 09:13	0°♎	
retrograde	2960 Feb 27 18:28	27°♎00'46	
opposition	2960 Apr 06 23:34	17°♎56'21	2°55'40
greatest brilliancy	2960 Apr 07 09:20	17°♎46'49	-1.4m
min. Earth dist.	2960 Apr 10 18:25	16°♎27'38	0.65464 AU
direct	2960 May 18 11:17	7°♎53'53	
desc. node	2960 Jun 30 11:09	17°♎17'41	
	2960 Jul 28 08:58	0°♏	
	2960 Sep 17 10:59	0°♐	
	2960 Oct 31 03:40	0°♑	
	2960 Dec 10 09:44	0°♒	
	2961 Jan 17 22:45	0°♓	
	2961 Feb 25 00:53	0°♈	
evening set	2961 Apr 02 20:20	28°♈35'02	
	2961 Apr 04 16:45	0°♉	
asc. node	2961 May 03 04:34	21°♉28'41	
	2961 May 14 17:48	0°♊	
conjunction	2961 Jun 05 02:20	15°♊27'02	0°20'54
minimum elong	2961 Jun 05 00:59	15°♊24'37	0°20'53
	2961 Jun 25 17:10	0°♋	
max. Earth dist.	2961 Jul 12 08:26	11°♋29'13	2.53087 AU
morning rise	2961 Jul 31 12:41	24°♋27'38	
	2961 Aug 08 20:07	0°♌	
	2961 Sep 24 02:57	0°♍	
	2961 Nov 11 17:34	0°♎	
	2962 Jan 03 04:24	0°♏	
	2962 Mar 13 13:06	0°♐	
retrograde	2962 Apr 09 05:22	3°♐48'37	
	2962 May 03 21:54	30°℞♏	
opposition	2962 May 16 01:41	25°♏50'37	0°06'10
greatest brilliancy	2962 May 16 02:31	25°♏49'50	-1.8m
desc. node	2962 May 18 10:47	24°♏57'30	
min. Earth dist.	2962 May 23 08:04	23°♏08'53	0.56765 AU
direct	2962 Jun 25 08:46	16°♏16'34	
	2962 Aug 15 04:51	0°♐	
	2962 Oct 05 21:50	0°♑	
	2962 Nov 17 09:48	0°♒	
	2962 Dec 26 23:37	0°♓	
	2963 Feb 03 19:24	0°♈	
	2963 Mar 15 04:09	0°♉	
asc. node	2963 Mar 21 02:59	4°♉27'26	
	2963 Apr 24 22:27	0°♊	
evening set	2963 Jun 01 12:24	26°♊30'57	
	2963 Jun 06 13:42	0°♋	
	2963 Jul 21 03:06	0°♌	
conjunction	2963 Jul 24 08:04	2°♌06'51	1°01'29
minimum elong	2963 Jul 24 06:54	2°♌04'56	1°01'28
max. Earth dist.	2963 Aug 10 23:26	13°♌39'13	2.62914 AU
	2963 Sep 05 07:40	0°♍	
morning rise	2963 Sep 10 12:54	3°♍20'14	
	2963 Oct 22 16:44	0°♎	
	2963 Dec 10 01:47	0°♏	
	2964 Jan 29 02:10	0°♐	
	2964 Mar 23 23:28	0°♑	
desc. node	2964 Apr 04 09:41	5°♑27'07	
retrograde	2964 Jun 04 07:06	22°♑19'56	

opposition	2964 Jul 06	23:18	16°♋15'38	-4°36'28	
greatest brilliancy	2964 Jul 08	05:45	15°♋51'32	-2.5m	
min. Earth dist.	2964 Jul 14	23:39	13°♋44'29	0.43769 AU	
direct	2964 Aug 11	08:51	8°♋56'03		
	2964 Oct 12	11:15	0°♒		
	2964 Nov 27	23:27	0°♓		
	2965 Jan 08	22:39	0°♈		
asc. node	2965 Feb 05	01:29	19°♈38'51		
	2965 Feb 19	10:37	0°♉		
	2965 Apr 02	21:12	0°♊		
	2965 May 16	20:31	0°♋		
	2965 Jul 01	08:56	0°♌		
evening set	2965 Jul 15	13:22	9°♌10'47		
	2965 Aug 17	00:38	0°♍		
conjunction	2965 Aug 31	19:50	9°♍26'01	1°07'12	
minimum elong	2965 Aug 31	20:16	9°♍26'43	1°07'11	
max. Earth dist.	2965 Sep 03	02:43	10°♍53'20	2.67422 AU	
	2965 Oct 03	03:41	0°♎		
morning rise	2965 Oct 15	12:45	7°♎52'53		
	2965 Nov 19	03:31	0°♏		
	2966 Jan 04	16:58	0°♐		
	2966 Feb 19	21:36	0°♑		
desc. node	2966 Feb 20	08:30	0°♑17'44		
	2966 Apr 07	04:39	0°♒		
	2966 May 25	01:45	0°♓		
	2966 Jul 23	02:02	0°♈		
retrograde	2966 Aug 23	09:46	5°♈59'22		
min. Earth dist.	2966 Sep 20	10:01	1°♈24'27	0.37404 AU	
opposition	2966 Sep 23	01:54	0°♈41'23	-5°40'15	
greatest brilliancy	2966 Sep 22	18:01	0°♈46'42	-2.9m	
	2966 Sep 25	15:32	30°℞♓		
direct	2966 Oct 22	11:30	25°♓46'06		
	2966 Nov 17	16:57	0°♈		
asc. node	2966 Dec 24	01:19	15°♈34'57		
	2967 Jan 18	21:55	0°♉		
	2967 Mar 08	19:20	0°♊		
	2967 Apr 25	05:29	0°♋		
	2967 Jun 11	18:49	0°♌		
	2967 Jul 29	13:20	0°♍		
evening set	2967 Aug 22	19:38	15°♍16'55		
	2967 Sep 15	00:46	0°♎		
max. Earth dist.	2967 Sep 26	02:49	7°♎04'38	2.66470 AU	
conjunction	2967 Oct 07	03:44	14°♎09'41	0°46'54	
minimum elong	2967 Oct 07	04:49	14°♎11'27	0°46'54	
	2967 Oct 31	14:07	0°♏		
morning rise	2967 Nov 20	15:06	13°♏10'37		
	2967 Dec 15	19:21	0°♐		
desc. node	2968 Jan 08	07:30	15°♐59'48		
	2968 Jan 28	13:13	0°♑		
	2968 Mar 10	22:30	0°♒		
	2968 Apr 21	06:37	0°♓		
	2968 Jun 01	06:25	0°♈		
	2968 Jul 13	11:05	0°♉		
	2968 Aug 30	17:29	0°♊		
retrograde	2968 Oct 24	04:57	17°♊00'28		
asc. node	2968 Nov 10	00:50	14°♊55'31		
min. Earth dist.	2968 Nov 21	19:06	11°♊21'26	0.47739 AU	
opposition	2968 Nov 30	01:21	8°♊23'46	1°06'27	
greatest brilliancy	2968 Nov 29	16:12	8°♊31'59	-2.3m	
direct	2969 Jan 02	10:53	1°♊23'47		
	2969 Mar 26	23:08	0°♋		
	2969 May 19	17:20	0°♌		
	2969 Jul 09	02:05	0°♍		
	2969 Aug 26	15:23	0°♎		
evening set	2969 Sep 27	18:06	20°♎29'07		
	2969 Oct 12	08:31	0°♏		
max. Earth dist.	2969 Oct 20	05:30	5°♏11'10	2.60170 AU	
conjunction	2969 Nov 13	03:01	21°♏11'09	0°06'59	
minimum elong	2969 Nov 13	03:16	21°♏11'34	0°07'00	
behind sun begin	2969 Nov 12	09:12	20°♏40'58		
behind sun end	2969 Nov 13	21:20	21°♏42'11		
desc. node	2969 Nov 25	06:17	29°♏27'55		
	2969 Nov 26	00:58	0°♐		
morning rise	2969 Dec 31	01:18	24°♐31'24		
	2970 Jan 07	16:48	0°♑		
	2970 Feb 17	14:33	0°♒		
	2970 Mar 29	05:24	0°♓		
	2970 May 07	05:43	0°♈		
	2970 Jun 15	13:38	0°♉		
	2970 Jul 26	12:30	0°♊		
	2970 Sep 09	12:57	0°♋		
asc. node	2970 Sep 27	23:12	10°♋49'27		
	2970 Nov 09	18:08	0°♌		
retrograde	2970 Dec 06	10:45	4°♌22'24		
	2970 Dec 31	10:18	30°℞♋		
min. Earth dist.	2971 Jan 09	14:04	26°♋38'28	0.60018 AU	
greatest brilliancy	2971 Jan 14	04:32	24°♋49'08	-1.6m	
opposition	2971 Jan 15	00:21	24°♋29'29	4°05'30	
direct	2971 Feb 21	10:50	15°♋49'23		
	2971 Apr 18	01:58	0°♌		
	2971 Jun 16	18:23	0°♍		
	2971 Aug 07	02:39	0°♎		
	2971 Sep 23	17:34	0°♏		
desc. node	2971 Oct 13	04:53	12°♏50'37		
evening set	2971 Nov 07	08:06	29°♏56'11		
	2971 Nov 07	10:18	0°♐		
max. Earth dist.	2971 Nov 21	21:12	10°♐05'53	2.49129 AU	
	2971 Dec 19	14:28	0°♑		
conjunction	2971 Dec 28	20:38	6°♑47'49	-0°42'30	
minimum elong	2971 Dec 28	18:52	6°♑44'34	0°42'30	
	2972 Jan 28	18:36	0°♒		
morning rise	2972 Feb 25	00:43	20°♒58'49		
	2972 Mar 07	14:38	0°♓		
	2972 Apr 14	21:35	0°♈		
	2972 May 23	12:24	0°♉		
	2972 Jul 02	09:28	0°♊		
	2972 Aug 13	14:49	0°♋		
asc. node	2972 Aug 14	22:53	0°♋54'46		
	2972 Sep 28	22:05	0°♌		
	2972 Nov 25	01:58	0°♍		
retrograde	2973 Jan 10	04:10	10°♍54'09		
min. Earth dist.	2973 Feb 17	19:54	1°♍40'07	0.66862 AU	
opposition	2973 Feb 19	10:08	1°♍01'49	4°33'16	
greatest brilliancy	2973 Feb 19	03:28	1°♍08'30	-1.3m	
	2973 Feb 22	00:02	30°℞♌		
direct	2973 Mar 31	11:49	21°♌27'22		
	2973 May 12	07:23	0°♍		
	2973 Jul 14	11:01	0°♎		
desc. node	2973 Aug 30	03:48	27°♎42'23		
	2973 Sep 02	19:17	0°♏		
	2973 Oct 18	06:01	0°♐		
	2973 Nov 29	09:54	0°♑		
evening set	2973 Dec 27	20:25	21°♑16'10		
	2974 Jan 08	06:22	0°♒		
max. Earth dist.	2974 Feb 13	20:21	28°♒31'34	2.37174 AU	
	2974 Feb 15	17:14	0°♓		
conjunction	2974 Mar 01	00:25	10°♓29'54	-1°02'50	
minimum elong	2974 Mar 01	01:58	10°♓32'57	1°02'50	
	2974 Mar 25	16:51	0°♈		

	2974 May 03 03:00	0°♉	
morning rise	2974 May 11 04:34	6°♉11'39	
	2974 Jun 11 19:39	0°♊	
asc. node	2974 Jul 02 21:42	15°♊22'41	
	2974 Jul 23 12:29	0°♋	
	2974 Sep 05 22:04	0°♌	
	2974 Oct 24 05:01	0°♍	
	2974 Dec 20 13:55	0°♎	
retrograde	2975 Feb 13 15:29	14°♎07'28	
opposition	2975 Mar 25 09:08	4°♎45'09	3°37'05
greatest brilliancy	2975 Mar 25 16:04	4°♎38'19	-1.3m
min. Earth dist.	2975 Mar 27 15:54	3°♎51'06	0.67169 AU
	2975 Apr 06 21:36	30°℞♍	
direct	2975 May 05 18:18	24°♍44'48	
	2975 Jun 06 06:15	0°♎	
desc. node	2975 Jul 18 03:06	17°♎32'35	
	2975 Aug 10 03:40	0°♏	
	2975 Sep 27 09:07	0°♐	
	2975 Nov 09 07:43	0°♑	
	2975 Dec 19 07:39	0°♒	
	2976 Jan 26 17:43	0°♓	
	2976 Mar 04 17:07	0°♈	
evening set	2976 Mar 05 21:40	0°♈56'11	
	2976 Apr 12 05:31	0°♉	
conjunction	2976 May 12 04:17	22°♉39'19	-0°05'05
minimum elong	2976 May 12 04:41	22°♉40'04	0°05'05
behind sun begin	2976 May 11 02:35	21°♉51'28	
behind sun end	2976 May 13 06:48	23°♉28'36	
asc. node	2976 May 19 19:31	28°♉18'52	
	2976 May 22 02:24	0°♊	
max. Earth dist.	2976 Jun 26 23:21	25°♊50'06	2.48026 AU
	2976 Jul 02 21:48	0°♋	
morning rise	2976 Jul 12 14:04	6°♋43'35	
	2976 Aug 15 23:17	0°♌	
	2976 Oct 01 11:32	0°♍	
	2976 Nov 20 02:04	0°♎	
	2977 Jan 15 12:19	0°♏	
retrograde	2977 Mar 22 21:45	18°♏52'55	
opposition	2977 Apr 29 21:11	10°♏24'28	1°23'54
greatest brilliancy	2977 Apr 30 05:16	10°♏16'47	-1.6m
min. Earth dist.	2977 May 05 21:02	8°♏07'25	0.60902 AU
desc. node	2977 Jun 04 01:44	0°♏45'09	
direct	2977 Jun 09 22:43	0°♏31'27	
	2977 Aug 30 22:36	0°♐	
	2977 Oct 16 11:51	0°♑	
	2977 Nov 26 16:47	0°♒	
	2978 Jan 04 16:36	0°♓	
	2978 Feb 12 02:30	0°♈	
	2978 Mar 23 02:10	0°♉	
asc. node	2978 Apr 06 19:29	11°♉04'58	
	2978 May 02 11:30	0°♊	
evening set	2978 May 11 11:41	6°♊30'42	
	2978 Jun 13 18:31	0°♋	
conjunction	2978 Jul 06 20:34	15°♋47'40	0°50'26
minimum elong	2978 Jul 06 18:51	15°♋44'47	0°50'25
	2978 Jul 28 02:03	0°♌	
max. Earth dist.	2978 Jul 31 12:51	2°♌16'57	2.59667 AU
morning rise	2978 Aug 26 13:45	19°♌17'52	
	2978 Sep 12 05:19	0°♍	
	2978 Oct 29 21:37	0°♎	
	2978 Dec 18 07:35	0°♏	
	2979 Feb 09 08:31	0°♐	
desc. node	2979 Apr 22 00:21	29°♐17'42	
	2979 Apr 25 17:50	0°♑	
retrograde	2979 May 11 07:46	1°♑23'40	
	2979 May 26 04:00	30°℞♐	
opposition	2979 Jun 14 19:45	24°♐28'11	-2°34'40
greatest brilliancy	2979 Jun 15 14:20	24°♐12'08	-2.2m
min. Earth dist.	2979 Jun 23 05:53	21°♐34'26	0.49024 AU
direct	2979 Jul 22 17:57	15°♐57'37	
	2979 Sep 10 12:32	0°♑	
	2979 Oct 30 05:47	0°♒	
	2979 Dec 11 02:43	0°♓	
	2980 Jan 20 05:01	0°♈	
asc. node	2980 Feb 22 19:03	25°♈02'16	
	2980 Feb 29 12:45	0°♉	
	2980 Apr 11 02:19	0°♊	
	2980 May 24 09:28	0°♋	
evening set	2980 Jun 29 04:55	23°♋56'06	
	2980 Jul 08 10:27	0°♌	
conjunction	2980 Aug 17 03:46	25°♌43'26	1°08'29
minimum elong	2980 Aug 17 03:38	25°♌43'15	1°08'28
	2980 Aug 23 19:57	0°♍	
max. Earth dist.	2980 Aug 25 04:49	0°♍52'36	2.66299 AU
morning rise	2980 Oct 01 19:30	24°♍49'35	
	2980 Oct 09 23:16	0°♎	
	2980 Nov 26 08:23	0°♏	
	2981 Jan 12 20:24	0°♐	
	2981 Mar 01 22:36	0°♑	
desc. node	2981 Mar 08 23:28	4°♑18'50	
	2981 Apr 21 07:54	0°♒	
	2981 Jun 24 09:57	0°♓	
retrograde	2981 Jul 22 05:09	4°♓30'32	
	2981 Aug 19 15:27	30°℞♒	
opposition	2981 Aug 21 08:58	29°♒32'07	-6°47'06
greatest brilliancy	2981 Aug 22 03:04	29°♒19'54	-2.9m
min. Earth dist.	2981 Aug 24 05:49	28°♒45'46	0.37811 AU
direct	2981 Sep 21 02:14	24°♒15'58	
	2981 Oct 21 06:00	0°♓	
	2981 Dec 17 22:34	0°♈	
asc. node	2982 Jan 09 17:06	14°♈32'05	
	2982 Feb 02 03:54	0°♉	
	2982 Mar 19 04:07	0°♊	
	2982 May 03 17:57	0°♋	
	2982 Jun 19 06:52	0°♌	
	2982 Aug 05 12:13	0°♍	
evening set	2982 Aug 08 08:27	1°♍48'03	
max. Earth dist.	2982 Sep 17 02:02	27°♍00'42	2.67484 AU
	2982 Sep 21 18:38	0°♎	
conjunction	2982 Sep 23 02:17	0°♎50'27	0°57'24
minimum elong	2982 Sep 23 03:17	0°♎52'02	0°57'23
morning rise	2982 Nov 06 07:09	29°♎15'39	
	2982 Nov 07 10:28	0°♏	
	2982 Dec 23 01:30	0°♐	
desc. node	2983 Jan 24 22:30	22°♐06'13	
	2983 Feb 05 12:45	0°♑	
	2983 Mar 20 22:55	0°♒	
	2983 May 02 16:05	0°♓	
	2983 Jun 14 16:17	0°♈	
	2983 Jul 31 07:57	0°♉	
retrograde	2983 Oct 04 00:43	22°♉53'19	
min. Earth dist.	2983 Oct 30 21:32	18°♉02'34	0.42555 AU
opposition	2983 Nov 07 18:34	15°♉28'10	-1°14'15
greatest brilliancy	2983 Nov 07 10:36	15°♉34'42	-2.6m
asc. node	2983 Nov 27 16:27	10°♉17'27	
direct	2983 Dec 09 03:56	9°♉23'42	
	2984 Feb 13 16:25	0°♊	
	2984 Apr 08 04:38	0°♋	
	2984 May 28 11:44	0°♌	
	2984 Jul 16 13:19	0°♍	

	2984 Sep 02 13:51	0°♎	
evening set	2984 Sep 13 05:59	6°♎46'48	
max. Earth dist.	2984 Oct 10 02:01	24°♎03'42	2.63243 AU
	2984 Oct 19 04:10	0°♏	
conjunction	2984 Oct 28 20:07	6°♏21'49	0°24'22
minimum elong	2984 Oct 28 20:53	6°♏23'06	0°24'21
	2984 Dec 03 00:16	0°♐	
desc. node	2984 Dec 11 21:39	6°♐06'02	
morning rise	2984 Dec 13 20:33	7°♐26'56	
	2985 Jan 15 00:27	0°♑	
	2985 Feb 25 09:25	0°♒	
	2985 Apr 06 12:38	0°♓	
	2985 May 16 01:29	0°♈	
	2985 Jun 25 00:20	0°♉	
	2985 Aug 06 02:40	0°♊	
	2985 Sep 24 01:00	0°♋	
asc. node	2985 Oct 14 16:24	9°♋39'49	
retrograde	2985 Nov 21 00:00	18°♋01'04	
min. Earth dist.	2985 Dec 23 00:49	11°♋02'07	0.55694 AU
opposition	2985 Dec 29 19:59	8°♋24'01	3°20'58
greatest brilliancy	2985 Dec 28 23:07	8°♋44'17	-1.9m
direct	2986 Feb 03 20:42	0°♋16'11	
	2986 May 02 11:46	0°♌	
	2986 Jun 25 16:48	0°♍	
	2986 Aug 14 15:12	0°♎	
	2986 Sep 30 19:21	0°♏	
evening set	2986 Oct 21 16:45	13°♏49'52	
desc. node	2986 Oct 29 20:53	19°♏20'25	
max. Earth dist.	2986 Nov 07 11:01	25°♏11'22	2.53932 AU
	2986 Nov 14 10:56	0°♐	
conjunction	2986 Dec 09 13:23	17°♐36'27	-0°23'29
minimum elong	2986 Dec 09 12:23	17°♐34'40	0°23'28
	2986 Dec 26 18:44	0°♑	
morning rise	2987 Jan 31 14:49	26°♑32'44	
	2987 Feb 05 04:35	0°♒	
	2987 Mar 16 06:37	0°♓	
	2987 Apr 23 18:37	0°♈	
	2987 Jun 01 13:42	0°♉	
	2987 Jul 11 16:21	0°♊	
	2987 Aug 23 11:12	0°♋	
asc. node	2987 Sep 01 14:19	6°♋02'25	
	2987 Oct 10 19:06	0°♌	
retrograde	2987 Dec 28 17:15	27°♌35'02	
min. Earth dist.	2988 Feb 03 18:00	18°♌52'30	0.64952 AU
opposition	2988 Feb 06 20:40	17°♌37'41	4°34'22
greatest brilliancy	2988 Feb 06 08:02	17°♌50'21	-1.4m
direct	2988 Mar 17 01:17	8°♌20'41	
	2988 May 28 16:57	0°♍	
	2988 Jul 23 14:10	0°♎	
	2988 Sep 10 12:56	0°♏	
desc. node	2988 Sep 15 19:27	3°♏23'41	
	2988 Oct 25 14:31	0°♐	
evening set	2988 Dec 05 18:45	29°♐18'05	
	2988 Dec 06 17:37	0°♑	
max. Earth dist.	2988 Dec 24 09:42	13°♑06'03	2.41152 AU
	2989 Jan 15 16:23	0°♒	
conjunction	2989 Feb 01 16:11	13°♒07'29	-1°03'15
minimum elong	2989 Feb 01 15:05	13°♒05'20	1°03'14
	2989 Feb 23 06:04	0°♓	
	2989 Apr 02 07:29	0°♈	
morning rise	2989 Apr 10 13:31	6°♈29'15	
	2989 May 10 18:07	0°♉	
	2989 Jun 19 10:39	0°♊	
asc. node	2989 Jul 19 13:38	21°♊49'14	

	2989 Jul 31 04:59	0°♋	
	2989 Sep 14 00:12	0°♌	
	2989 Nov 02 22:42	0°♍	
	2990 Jan 15 03:38	0°♎	
retrograde	2990 Jan 31 02:59	1°♎29'24	
	2990 Feb 15 05:29	30°℞♍	
opposition	2990 Mar 12 04:30	21°♍52'44	4°07'23
greatest brilliancy	2990 Mar 12 06:49	21°♍50'25	-1.3m
min. Earth dist.	2990 Mar 12 22:54	21°♍34'25	0.67841 AU
direct	2990 Apr 22 05:00	11°♍59'29	
	2990 Jun 25 11:40	0°♎	
desc. node	2990 Aug 03 17:57	20°♎32'36	
	2990 Aug 19 19:54	0°♏	
	2990 Oct 05 13:44	0°♐	
	2990 Nov 17 02:26	0°♑	
	2990 Dec 26 23:55	0°♒	
	2991 Feb 03 09:34	0°♓	
evening set	2991 Feb 06 05:55	2°♓14'58	
	2991 Mar 13 08:10	0°♈	
conjunction	2991 Apr 15 18:27	26°♈08'16	-0°33'20
minimum elong	2991 Apr 15 21:19	26°♈13'47	0°33'19
	2991 Apr 20 18:37	0°♉	
	2991 May 30 12:33	0°♊	
max. Earth dist.	2991 Jun 06 10:15	5°♊04'41	2.42550 AU
asc. node	2991 Jun 06 13:30	5°♊10'39	
morning rise	2991 Jun 21 16:43	16°♊09'11	
	2991 Jul 11 05:03	0°♋	
	2991 Aug 24 06:46	0°♌	
	2991 Oct 10 04:33	0°♍	
	2991 Nov 30 10:04	0°♎	
	2992 Feb 05 04:09	0°♏	
retrograde	2992 Mar 07 05:28	5°♏03'36	
	2992 Apr 04 16:14	30°℞♎	
opposition	2992 Apr 15 01:16	26°♎10'38	2°25'44
greatest brilliancy	2992 Apr 15 11:24	26°♎00'48	-1.5m
min. Earth dist.	2992 Apr 19 15:21	24°♎23'51	0.64110 AU
direct	2992 May 26 11:15	16°♎09'17	
desc. node	2992 Jun 20 16:59	19°♎45'27	
	2992 Jul 18 17:11	0°♏	
	2992 Sep 11 05:20	0°♐	
	2992 Oct 25 16:33	0°♑	
	2992 Dec 05 05:22	0°♒	
	2993 Jan 12 21:32	0°♓	
	2993 Feb 20 01:39	0°♈	
	2993 Mar 30 19:26	0°♉	
evening set	2993 Apr 17 14:31	13°♉27'43	
asc. node	2993 Apr 23 12:01	17°♉52'05	
	2993 May 09 22:31	0°♊	
conjunction	2993 Jun 17 07:10	27°♊26'01	0°33'25
minimum elong	2993 Jun 17 05:24	27°♊22'55	0°33'23
	2993 Jun 20 23:27	0°♋	
max. Earth dist.	2993 Jul 19 20:10	19°♋46'33	2.55632 AU
	2993 Aug 04 02:53	0°♌	
morning rise	2993 Aug 10 09:52	4°♌09'57	
	2993 Sep 19 06:48	0°♍	
	2993 Nov 06 10:41	0°♎	
	2993 Dec 27 11:00	0°♏	
	2994 Feb 24 19:39	0°♐	
retrograde	2994 Apr 20 01:05	13°♐29'03	
desc. node	2994 May 08 15:38	11°♐17'30	
opposition	2994 May 26 02:52	5°♐50'45	-0°47'07
greatest brilliancy	2994 May 26 08:17	5°♐45'49	-1.9m
min. Earth dist.	2994 Jun 02 22:22	3°♐00'19	0.54177 AU
	2994 Jun 12 02:49	30°℞♏	
direct	2994 Jul 04 18:05	26°♏33'26	

	2994 Jul 28 07:30	0°♐	
	2994 Sep 28 03:40	0°♑	
	2994 Nov 11 02:04	0°♒	
	2994 Dec 21 05:33	0°♓	
	2995 Jan 29 09:03	0°♈	
	2995 Mar 09 23:38	0°♉	
asc. node	2995 Mar 11 10:52	1°♉05'43	
	2995 Apr 19 22:55	0°♊	
	2995 Jun 01 18:10	0°♋	
evening set	2995 Jun 12 10:18	7°♋16'31	
	2995 Jul 16 10:32	0°♌	
conjunction	2995 Aug 02 15:57	11°♌16'49	1°05'27
minimum elong	2995 Aug 02 15:10	11°♌15'33	1°05'26
max. Earth dist.	2995 Aug 16 16:39	20°♌22'30	2.64354 AU
	2995 Aug 31 15:50	0°♍	
morning rise	2995 Sep 18 18:56	11°♍34'19	
	2995 Oct 17 21:45	0°♎	
	2995 Dec 04 20:14	0°♏	
	2996 Jan 22 17:14	0°♐	
	2996 Mar 14 03:04	0°♑	
desc. node	2996 Mar 25 14:22	6°♑15'16	
	2996 May 16 16:00	0°♒	
retrograde	2996 Jun 20 13:21	6°♒30'16	
opposition	2996 Jul 22 01:19	0°♒55'21	-5°42'14
greatest brilliancy	2996 Jul 23 09:50	0°♒31'13	-2.6m
	2996 Jul 25 03:47	30°℞♑	
min. Earth dist.	2996 Jul 29 00:09	28°♑52'02	0.41160 AU
direct	2996 Aug 24 19:06	24°♑23'03	
	2996 Sep 23 06:52	0°♒	
	2996 Nov 18 14:47	0°♓	
	2997 Jan 01 17:30	0°♈	
asc. node	2997 Jan 26 10:21	17°♈24'45	
	2997 Feb 13 06:29	0°♉	
	2997 Mar 28 08:49	0°♊	
	2997 May 11 18:25	0°♋	
	2997 Jun 26 13:42	0°♌	
evening set	2997 Jul 24 09:36	17°♌53'13	
	2997 Aug 12 09:11	0°♍	
conjunction	2997 Sep 08 23:45	17°♍33'41	1°04'38
minimum elong	2997 Sep 09 00:27	17°♍34'47	1°04'37
max. Earth dist.	2997 Sep 08 07:08	17°♍07'17	2.67678 AU
	2997 Sep 28 12:52	0°♎	
morning rise	2997 Oct 23 09:14	15°♎51'54	
	2997 Nov 14 09:25	0°♏	
	2997 Dec 30 13:40	0°♐	
desc. node	2998 Feb 10 14:29	27°♐43'24	
	2998 Feb 14 00:44	0°♑	
	2998 Mar 31 00:17	0°♒	
	2998 May 15 05:15	0°♓	
	2998 Jul 02 10:11	0°♈	
retrograde	2998 Sep 08 19:31	24°♈14'23	
min. Earth dist.	2998 Oct 05 14:47	19°♈47'00	0.38578 AU
opposition	2998 Oct 10 20:17	18°♈16'32	-4°09'59
greatest brilliancy	2998 Oct 10 05:23	18°♈27'20	-2.9m
direct	2998 Nov 09 16:56	13°♈04'30	
asc. node	2998 Dec 14 08:32	20°♈04'01	
	2999 Jan 06 07:45	0°♉	
	2999 Mar 01 05:32	0°♊	
	2999 Apr 19 06:46	0°♋	
	2999 Jun 06 14:31	0°♌	
	2999 Jul 24 18:18	0°♍	
evening set	2999 Aug 30 23:19	23°♍22'52	
	2999 Sep 10 09:49	0°♎	
max. Earth dist.	2999 Oct 01 11:37	13°♎28'10	2.65563 AU
conjunction	2999 Oct 15 06:20	22°♎22'04	0°39'24
minimum elong	2999 Oct 15 07:22	22°♎23'46	0°39'23
	2999 Oct 26 23:35	0°♏	
morning rise	2999 Nov 29 02:35	21°♏56'12	
	2999 Dec 11 01:36	0°♐	
desc. node	2999 Dec 29 13:26	12°♐37'39	
	3000 Jan 23 13:02	0°♑	
	3000 Mar 06 12:46	0°♒	
	3000 Apr 16 08:51	0°♓	
	3000 May 26 16:30	0°♈	
	3000 Jul 06 17:44	0°♉	
	3000 Aug 20 09:19	0°♊	
asc. node	3000 Nov 01 07:36	29°♊19'55	
retrograde	3000 Nov 04 23:02	29°♊25'38	
min. Earth dist.	3000 Dec 04 17:55	23°♊17'10	0.50679 AU
opposition	3000 Dec 12 15:39	20°♊20'49	2°06'56
greatest brilliancy	3000 Dec 11 23:35	20°♊35'49	-2.1m
direct	3001 Jan 16 01:27	12°♊53'42	
	3001 Mar 17 21:58	0°♋	
	3001 May 14 09:47	0°♌	
	3001 Jul 04 20:29	0°♍	
	3001 Aug 22 20:14	0°♎	
evening set	3001 Oct 07 06:02	29°♎02'16	
	3001 Oct 08 17:19	0°♏	
max. Earth dist.	3001 Oct 27 13:27	12°♏28'06	2.58149 AU
desc. node	3001 Nov 16 11:47	25°♏56'41	
	3001 Nov 22 09:41	0°♐	
conjunction	3001 Nov 23 07:11	0°♐37'01	-0°03'59
minimum elong	3001 Nov 23 07:00	0°♐36'42	0°03'59
behind sun begin	3001 Nov 22 11:14	0°♐02'41	
behind sun end	3001 Nov 24 02:46	1°♐10'44	
	3002 Jan 03 23:03	0°♑	
morning rise	3002 Jan 11 16:34	5°♑36'04	
	3002 Feb 13 16:43	0°♒	
	3002 Mar 25 03:02	0°♓	
	3002 May 02 22:26	0°♈	
	3002 Jun 11 00:25	0°♉	
	3002 Jul 21 13:06	0°♊	
	3002 Sep 03 09:16	0°♋	
asc. node	3002 Sep 19 07:55	9°♋57'13	
	3002 Oct 26 10:24	0°♌	
retrograde	3002 Dec 15 18:58	13°♌27'07	
min. Earth dist.	3003 Jan 19 23:58	5°♌20'56	0.62021 AU
opposition	3003 Jan 24 14:53	3°♌30'20	4°21'24
greatest brilliancy	3003 Jan 23 21:01	3°♌48'10	-1.5m
	3003 Feb 02 19:18	30°℞♋	
direct	3003 Mar 03 17:30	24°♋35'37	
	3003 Apr 04 20:31	0°♌	
	3003 Jun 11 05:37	0°♍	
	3003 Aug 02 20:26	0°♎	
	3003 Sep 19 21:55	0°♏	
desc. node	3003 Oct 04 10:25	9°♏30'10	
	3003 Nov 03 17:57	0°♐	
evening set	3003 Nov 18 10:45	10°♐15'48	
max. Earth dist.	3003 Dec 02 20:51	20°♐32'03	2.46285 AU
	3003 Dec 15 22:06	0°♑	
conjunction	3004 Jan 10 21:50	19°♑17'51	-0°52'00
minimum elong	3004 Jan 10 19:54	19°♑14'13	0°52'00
	3004 Jan 25 00:26	0°♒	
	3004 Mar 03 18:15	0°♓	
morning rise	3004 Mar 12 12:37	6°♓52'19	
	3004 Apr 10 23:00	0°♈	
	3004 May 19 11:44	0°♉	
	3004 Jun 28 06:12	0°♊	
asc. node	3004 Aug 06 06:46	27°♊57'43	

	3004 Aug 09 05:24	0°♋	
	3004 Sep 23 18:16	0°♌	
	3004 Nov 15 22:10	0°♍	
retrograde	3005 Jan 18 19:39	18°♍46'52	
min. Earth dist.	3005 Feb 27 06:46	9°♍17'19	0.67484 AU
opposition	3005 Feb 28 00:55	8°♍59'09	4°27'00
greatest brilliancy	3005 Feb 27 21:36	9°♍02'29	-1.3m
	3005 Mar 29 21:49	30°℞♌	
direct	3005 Apr 09 11:55	29°♌17'03	
	3005 Apr 20 14:26	0°♍	
	3005 Jul 08 17:50	0°♎	
desc. node	3005 Aug 21 09:13	25°♎01'16	
	3005 Aug 29 10:59	0°♏	
	3005 Oct 14 07:55	0°♐	
	3005 Nov 25 15:12	0°♑	
	3006 Jan 04 12:11	0°♒	
evening set	3006 Jan 11 13:57	5°♒27'33	
	3006 Feb 11 22:34	0°♓	
conjunction	3006 Mar 18 10:16	27°♓15'59	-0°55'50
minimum elong	3006 Mar 18 13:13	27°♓21'49	0°55'49
	3006 Mar 21 21:22	0°♈	
max. Earth dist.	3006 Apr 24 12:14	26°♈18'39	2.37698 AU
	3006 Apr 29 06:50	0°♉	
morning rise	3006 May 28 05:47	22°♉01'21	
	3006 Jun 07 23:00	0°♊	
asc. node	3006 Jun 24 04:49	11°♊53'49	
	3006 Jul 19 14:22	0°♋	
	3006 Sep 01 19:08	0°♌	
	3006 Oct 19 09:30	0°♍	
	3006 Dec 12 12:54	0°♎	
retrograde	3007 Feb 22 16:27	21°♎56'26	
opposition	3007 Apr 03 03:11	12°♎43'36	3°14'08
greatest brilliancy	3007 Apr 03 11:54	12°♎35'02	-1.3m
min. Earth dist.	3007 Apr 06 05:44	11°♎30'21	0.66349 AU
direct	3007 May 14 13:51	2°♎41'28	
desc. node	3007 Jul 09 07:48	17°♎16'23	
	3007 Aug 03 22:50	0°♏	
	3007 Sep 22 17:33	0°♐	
	3007 Nov 05 03:29	0°♑	
	3007 Dec 15 07:43	0°♒	
	3008 Jan 22 19:53	0°♓	
	3008 Feb 29 20:31	0°♈	
evening set	3008 Mar 22 20:34	17°♈12'42	
	3008 Apr 08 10:00	0°♉	
asc. node	3008 May 11 04:36	24°♉43'39	
	3008 May 18 08:03	0°♊	
conjunction	3008 May 27 02:14	6°♊24'21	0°10'22
minimum elong	3008 May 27 01:28	6°♊22'57	0°10'21
behind sun begin	3008 May 26 05:28	5°♊46'34	
behind sun end	3008 May 27 21:28	6°♊59'19	
	3008 Jun 29 04:05	0°♋	
max. Earth dist.	3008 Jul 07 07:44	5°♋40'15	2.50882 AU
morning rise	3008 Jul 24 15:12	17°♋32'04	
	3008 Aug 12 04:53	0°♌	
	3008 Sep 27 12:13	0°♍	
	3008 Nov 15 10:25	0°♎	
	3009 Jan 08 03:24	0°♏	
retrograde	3009 Apr 02 13:33	27°♏41'59	
opposition	3009 May 09 22:14	19°♏29'33	0°40'52
greatest brilliancy	3009 May 10 02:51	19°♏25'13	-1.7m
min. Earth dist.	3009 May 16 15:08	16°♏58'11	0.58710 AU
desc. node	3009 May 26 07:11	13°♏39'00	
direct	3009 Jun 19 14:13	9°♏45'29	
	3009 Aug 23 01:38	0°♐	
	3009 Oct 11 01:53	0°♑	
	3009 Nov 21 23:23	0°♒	
	3009 Dec 31 06:54	0°♓	
	3010 Feb 07 21:44	0°♈	
	3010 Mar 19 01:25	0°♉	
asc. node	3010 Mar 29 03:25	7°♉34'32	
	3010 Apr 28 14:33	0°♊	
evening set	3010 May 24 17:35	18°♊38'33	
	3010 Jun 10 00:39	0°♋	
conjunction	3010 Jul 18 00:29	25°♋44'59	0°57'29
minimum elong	3010 Jul 17 23:03	25°♋42'35	0°57'29
	3010 Jul 24 10:11	0°♌	
max. Earth dist.	3010 Aug 07 15:29	9°♌21'38	2.61561 AU
morning rise	3010 Sep 05 05:39	27°♌52'57	
	3010 Sep 08 12:56	0°♍	
	3010 Oct 26 00:09	0°♎	
	3010 Dec 13 18:20	0°♏	
	3011 Feb 02 19:56	0°♐	
	3011 Apr 02 21:29	0°♑	
desc. node	3011 Apr 13 06:16	4°♑08'32	
retrograde	3011 May 25 20:06	13°♑13'21	
opposition	3011 Jun 28 09:04	6°♑45'18	-3°43'06
greatest brilliancy	3011 Jun 29 11:11	6°♑23'43	-2.4m
min. Earth dist.	3011 Jul 06 19:03	3°♑59'31	0.46083 AU
	3011 Jul 22 05:30	30°℞♐	
direct	3011 Aug 04 00:06	28°♐51'03	
	3011 Aug 17 01:10	0°♑	
	3011 Oct 22 03:47	0°♒	
	3011 Dec 05 00:31	0°♓	
	3012 Jan 14 23:55	0°♈	
asc. node	3012 Feb 14 01:27	22°♈07'17	
	3012 Feb 24 20:43	0°♉	
	3012 Apr 06 20:04	0°♊	
	3012 May 20 10:31	0°♋	
	3012 Jul 04 16:45	0°♌	
evening set	3012 Jul 09 16:56	3°♌15'47	
	3012 Aug 20 04:52	0°♍	
conjunction	3012 Aug 26 15:31	4°♍06'56	1°08'13
minimum elong	3012 Aug 26 15:45	4°♍07'18	1°08'12
max. Earth dist.	3012 Aug 31 11:36	7°♍12'02	2.67036 AU
	3012 Oct 06 07:42	0°♎	
morning rise	3012 Oct 10 16:47	2°♎46'57	
	3012 Nov 22 11:25	0°♏	
	3013 Jan 08 10:03	0°♐	
	3013 Feb 24 08:29	0°♑	
desc. node	3013 Feb 28 05:04	2°♑27'22	
	3013 Apr 13 01:29	0°♒	
	3013 Jun 03 11:52	0°♓	
retrograde	3013 Aug 10 14:09	22°♓24'16	
opposition	3013 Sep 09 16:40	17°♓24'09	-6°27'11
greatest brilliancy	3013 Sep 09 19:48	17°♓22'06	-2.9m
min. Earth dist.	3013 Sep 09 12:31	17°♓26'53	0.37169 AU
direct	3013 Oct 09 07:04	12°♓28'33	
	3013 Dec 05 16:56	0°♈	
asc. node	3014 Jan 01 01:05	14°♈41'49	
	3014 Jan 26 00:06	0°♉	
	3014 Mar 13 18:34	0°♊	
	3014 Apr 29 05:45	0°♋	
	3014 Jun 15 06:49	0°♌	
	3014 Aug 01 18:48	0°♍	
evening set	3014 Aug 17 16:37	10°♍02'32	
	3014 Sep 18 04:04	0°♎	
max. Earth dist.	3014 Sep 23 07:14	3°♎16'20	2.67034 AU
conjunction	3014 Oct 02 03:33	8°♎55'37	0°51'39
minimum elong	3014 Oct 02 04:38	8°♎57'21	0°51'38

	3014 Nov 03 18:59	0°♏	
morning rise	3014 Nov 15 10:12	7°♏36'12	
	3014 Dec 19 04:58	0°♐	
desc. node	3015 Jan 16 04:19	18°♐56'05	
	3015 Feb 01 06:51	0°♑	
	3015 Mar 16 02:43	0°♒	
	3015 Apr 27 00:08	0°♓	
	3015 Jun 07 16:54	0°♈	
	3015 Jul 21 04:41	0°♉	
	3015 Sep 13 08:57	0°♊	
retrograde	3015 Oct 17 11:23	7°♊29'54	
min. Earth dist.	3015 Nov 14 03:32	2°♊13'56	0.45356 AU
asc. node	3015 Nov 19 01:06	0°♊33'03	
	3015 Nov 20 15:01	30°℞♉	
opposition	3015 Nov 22 10:43	29°♉22'02	0°11'57
greatest brilliancy	3018 May 20 08:15	12°♌43'36	1.3m
direct	3015 Dec 24 23:36	22°♉46'00	
	3016 Jan 30 04:07	0°♊	
	3016 Apr 01 18:12	0°♋	
	3016 May 23 18:36	0°♌	
	3016 Jul 12 12:42	0°♍	
	3016 Aug 29 20:41	0°♎	
evening set	3016 Sep 22 12:12	15°♎02'43	
	3016 Oct 15 13:31	0°♏	
max. Earth dist.	3016 Oct 16 21:48	0°♏52'55	2.61652 AU
conjunction	3016 Nov 07 10:58	15°♏10'04	0°14'31
minimum elong	3016 Nov 07 11:28	15°♏10'54	0°14'31
behind sun begin	3016 Nov 07 02:54	14°♏56'34	
behind sun end	3016 Nov 07 20:03	15°♏25'15	
	3016 Nov 29 08:32	0°♐	
desc. node	3016 Dec 03 03:01	2°♐35'12	
morning rise	3016 Dec 24 09:50	17°♐22'49	
	3017 Jan 11 05:04	0°♑	
	3017 Feb 21 08:18	0°♒	
	3017 Apr 02 04:50	0°♓	
	3017 May 11 10:16	0°♈	
	3017 Jun 19 23:11	0°♉	
	3017 Jul 31 06:26	0°♊	
	3017 Sep 15 08:26	0°♋	
asc. node	3017 Oct 05 23:41	11°♋21'36	
retrograde	3017 Nov 30 23:58	28°♋02'40	
min. Earth dist.	3018 Jan 03 05:17	20°♋37'55	0.58186 AU
greatest brilliancy	3018 Jan 08 09:38	18°♋35'40	-1.7m
opposition	3018 Jan 09 06:35	18°♋15'01	3°50'04
direct	3018 Feb 15 02:11	9°♋48'28	
	3018 Apr 24 21:36	0°♌	
	3018 Jun 20 20:24	0°♍	
	3018 Aug 10 14:03	0°♎	
	3018 Sep 27 01:26	0°♏	
desc. node	3018 Oct 21 01:24	15°♏52'41	
evening set	3018 Nov 01 00:20	23°♏17'37	
	3018 Nov 10 18:56	0°♐	
max. Earth dist.	3018 Nov 16 10:25	3°♐54'40	2.51351 AU
conjunction	3018 Dec 21 05:19	28°♐38'42	-0°34'39
minimum elong	3018 Dec 21 03:51	28°♐36'01	0°34'37
	3018 Dec 23 02:03	0°♑	
	3019 Feb 01 09:34	0°♒	
morning rise	3019 Feb 14 21:49	10°♒18'40	
	3019 Mar 12 08:46	0°♓	
	3019 Apr 19 17:55	0°♈	
	3019 May 28 09:49	0°♉	
	3019 Jul 07 07:52	0°♊	
	3019 Aug 18 16:14	0°♋	
asc. node	3019 Aug 23 22:45	3°♋34'00	
	3019 Oct 04 13:11	0°♌	
	3019 Dec 05 09:49	0°♍	
retrograde	3020 Jan 06 11:52	5°♍46'16	
	3020 Feb 05 01:08	30°℞♌	
min. Earth dist.	3020 Feb 13 10:12	26°♌45'56	0.66129 AU
opposition	3020 Feb 15 17:02	25°♌50'56	4°35'25
greatest brilliancy	3020 Feb 15 07:37	26°♌00'22	-1.4m
direct	3020 Mar 26 09:46	16°♌23'48	
	3020 May 20 04:59	0°♍	
	3020 Jul 18 15:54	0°♎	
	3020 Sep 06 10:30	0°♏	
desc. node	3020 Sep 07 00:28	0°♏22'11	
	3020 Oct 21 18:33	0°♐	
	3020 Dec 02 23:27	0°♑	
evening set	3020 Dec 18 22:11	11°♑48'50	
	3021 Jan 11 21:45	0°♒	
max. Earth dist.	3021 Jan 15 02:59	2°♒28'25	2.38605 AU
conjunction	3021 Feb 17 16:56	28°♒38'30	-1°04'49
minimum elong	3021 Feb 17 17:10	28°♒38'58	1°04'48
	3021 Feb 19 10:23	0°♓	
	3021 Mar 29 10:50	0°♈	
morning rise	3021 Apr 29 00:03	23°♈55'14	
	3021 May 06 20:35	0°♉	
	3021 Jun 15 12:09	0°♊	
asc. node	3021 Jul 10 22:04	18°♊30'22	
	3021 Jul 27 04:00	0°♋	
	3021 Sep 09 15:11	0°♌	
	3021 Oct 28 09:27	0°♍	
	3021 Dec 28 00:36	0°♎	
retrograde	3022 Feb 08 20:23	9°♎11'34	
	3022 Mar 19 23:53	30°℞♍	
opposition	3022 Mar 20 17:43	29°♍42'19	3°50'53
greatest brilliancy	3022 Mar 20 22:44	29°♍37'21	-1.3m
min. Earth dist.	3022 Mar 22 07:55	29°♍04'26	0.67596 AU
direct	3022 Apr 30 23:21	19°♍44'38	
	3022 Jun 15 23:06	0°♎	
desc. node	3022 Jul 26 00:02	18°♎54'45	
	3022 Aug 14 16:55	0°♏	
	3022 Oct 01 07:28	0°♐	
	3022 Nov 13 03:02	0°♑	
	3022 Dec 23 02:36	0°♒	
	3023 Jan 30 12:47	0°♓	
evening set	3023 Feb 23 07:34	18°♓48'31	
	3023 Mar 09 11:36	0°♈	
	3023 Apr 16 22:21	0°♉	
conjunction	3023 May 02 15:30	12°♉00'08	-0°17'18
minimum elong	3023 May 02 17:02	12°♉03'02	0°17'17
	3023 May 26 16:51	0°♊	
asc. node	3023 May 28 19:58	1°♊34'10	
max. Earth dist.	3023 Jun 20 19:45	18°♊15'35	2.45604 AU
morning rise	3023 Jul 05 12:28	28°♊40'48	
	3023 Jul 07 09:36	0°♋	
	3023 Aug 20 09:33	0°♌	
	3023 Oct 05 23:49	0°♍	
	3023 Nov 25 02:46	0°♎	
	3024 Jan 23 05:12	0°♏	
retrograde	3024 Mar 17 00:33	13°♏18'31	
opposition	3024 Apr 24 09:23	4°♏38'24	1°51'25
greatest brilliancy	3024 Apr 24 18:44	4°♏29'23	-1.5m
min. Earth dist.	3024 Apr 29 17:55	2°♏34'43	0.62465 AU
	3024 May 06 18:59	30°℞♎	
direct	3024 Jun 04 15:13	24°♎40'31	
desc. node	3024 Jun 11 22:30	25°♎00'34	
	3024 Jul 05 13:00	0°♏	
	3024 Sep 05 09:34	0°♐	
	3024 Oct 20 23:59	0°♑	

	3024 Nov 30 22:04	0°♒	
	3025 Jan 08 18:32	0°♓	
	3025 Feb 16 01:25	0°♈	
	3025 Mar 26 21:23	0°♉	
asc. node	3025 Apr 14 19:34	14°♉16'26	
evening set	3025 May 02 11:58	27°♉21'37	
	3025 May 06 02:38	0°♊	
	3025 Jun 17 05:31	0°♋	
conjunction	3025 Jun 29 17:27	8°♋37'44	0°43'59
minimum elong	3025 Jun 29 15:37	8°♋34'35	0°43'58
max. Earth dist.	3025 Jul 27 20:20	27°♋37'53	2.57958 AU
	3025 Jul 31 09:49	0°♌	
morning rise	3025 Aug 20 19:48	13°♌25'59	
	3025 Sep 15 12:03	0°♍	
	3025 Nov 02 08:00	0°♎	
	3025 Dec 22 07:18	0°♏	
	3026 Feb 15 06:46	0°♐	
desc. node	3026 Apr 29 20:57	23°♐44'30	
retrograde	3026 May 02 16:03	23°♐47'22	
opposition	3026 Jun 06 22:13	16°♐31'28	-1°46'25
greatest brilliancy	3026 Jun 07 10:52	16°♐20'15	-2.1m
min. Earth dist.	3026 Jun 15 03:48	13°♐36'49	0.51388 AU
direct	3026 Jul 15 16:29	7°♐37'17	
	3026 Sep 19 16:18	0°♑	
	3026 Nov 05 03:36	0°♒	
	3026 Dec 16 03:18	0°♓	
	3027 Jan 24 18:01	0°♈	
asc. node	3027 Mar 02 19:24	27°♈51'51	
	3027 Mar 05 16:27	0°♉	
	3027 Apr 15 21:59	0°♊	
	3027 May 28 22:13	0°♋	
evening set	3027 Jun 23 18:10	17°♋25'31	
	3027 Jul 12 18:00	0°♌	
conjunction	3027 Aug 12 15:33	20°♌06'43	1°07'45
minimum elong	3027 Aug 12 15:10	20°♌06'05	1°07'45
max. Earth dist.	3027 Aug 23 06:40	26°♌57'14	2.65532 AU
	3027 Aug 28 00:38	0°♍	
morning rise	3027 Sep 27 21:10	19°♍40'09	
	3027 Oct 14 04:34	0°♎	
	3027 Nov 30 18:51	0°♏	
	3028 Jan 17 19:38	0°♐	
	3028 Mar 07 02:19	0°♑	
desc. node	3028 Mar 16 20:13	5°♑44'41	
	3028 Apr 29 19:18	0°♒	
retrograde	3028 Jul 09 00:06	22°♒06'44	
opposition	3028 Aug 08 13:45	16°♒56'30	-6°31'02
greatest brilliancy	3028 Aug 09 17:23	16°♒37'08	-2.8m
min. Earth dist.	3028 Aug 13 13:44	15°♒32'39	0.39010 AU
direct	3028 Sep 09 13:55	11°♒10'14	
	3028 Nov 06 21:00	0°♓	
	3028 Dec 25 09:57	0°♈	
asc. node	3029 Jan 17 17:41	15°♈43'48	
	3029 Feb 07 14:29	0°♉	
	3029 Mar 23 14:21	0°♊	
	3029 May 07 13:29	0°♋	
	3029 Jun 22 17:11	0°♌	
evening set	3029 Aug 03 00:49	26°♌23'06	
	3029 Aug 08 17:20	0°♍	
max. Earth dist.	3029 Sep 14 11:46	23°♍21'07	2.67672 AU
conjunction	3029 Sep 18 02:25	25°♍38'54	1°00'49
minimum elong	3029 Sep 18 03:19	25°♍40'20	1°00'48
	3029 Sep 24 22:26	0°♎	
morning rise	3029 Nov 01 07:49	23°♎57'17	
	3029 Nov 10 16:27	0°♏	

	3029 Dec 26 13:31	0°♐	
desc. node	3030 Feb 01 19:22	24°♐50'28	
	3030 Feb 09 11:07	0°♑	
	3030 Mar 25 12:18	0°♒	
	3030 May 08 03:28	0°♓	
	3030 Jun 21 16:56	0°♈	
	3030 Aug 12 13:48	0°♉	
retrograde	3030 Sep 24 14:06	11°♉20'12	
min. Earth dist.	3030 Oct 21 02:39	6°♉45'07	0.40534 AU
opposition	3030 Oct 28 03:46	4°♉34'21	-2°28'30
greatest brilliancy	3030 Oct 27 14:23	4°♉44'43	-2.8m
	3030 Nov 15 02:26	30°℞♈	
direct	3030 Nov 27 17:26	28°♈55'18	
asc. node	3030 Dec 05 16:33	29°♈20'02	
	3030 Dec 10 17:58	0°♉	
	3031 Feb 21 09:24	0°♊	
	3031 Apr 13 22:51	0°♋	
	3031 Jun 02 06:24	0°♌	
	3031 Jul 20 21:38	0°♍	
	3031 Sep 06 18:24	0°♎	
evening set	3031 Sep 09 03:19	1°♎30'18	
max. Earth dist.	3031 Oct 07 23:18	19°♎58'34	2.64378 AU
	3031 Oct 23 09:02	0°♏	
conjunction	3031 Oct 24 13:05	0°♏45'55	0°30'57
minimum elong	3031 Oct 24 14:00	0°♏47'25	0°30'56
	3031 Dec 07 08:29	0°♐	
morning rise	3031 Dec 08 22:56	1°♐05'28	
desc. node	3031 Dec 20 18:18	9°♐10'34	
	3032 Jan 19 14:20	0°♑	
	3032 Mar 01 06:14	0°♒	
	3032 Apr 10 16:50	0°♓	
	3032 May 20 13:17	0°♈	
	3032 Jun 29 21:02	0°♉	
	3032 Aug 11 17:41	0°♊	
	3032 Oct 03 05:48	0°♋	
asc. node	3032 Oct 22 16:48	7°♋14'20	
retrograde	3032 Nov 14 21:32	10°♋45'48	
min. Earth dist.	3032 Dec 15 22:40	4°♋08'32	0.53514 AU
greatest brilliancy	3032 Dec 22 10:38	1°♋39'39	-2.0m
opposition	3032 Dec 23 06:30	1°♋20'37	2°53'57
	3032 Dec 26 19:59	30°℞♊	
direct	3033 Jan 27 13:52	23°♊29'55	
	3033 Mar 03 10:35	0°♋	
	3033 May 07 13:21	0°♌	
	3033 Jun 29 10:54	0°♍	
	3033 Aug 17 23:43	0°♎	
	3033 Oct 04 01:42	0°♏	
evening set	3033 Oct 15 22:41	7°♏48'57	
max. Earth dist.	3033 Nov 03 06:15	20°♏05'01	2.55896 AU
desc. node	3033 Nov 06 17:22	22°♏26'00	
	3033 Nov 17 18:41	0°♐	
conjunction	3033 Dec 02 21:45	10°♐30'52	-0°15'11
minimum elong	3033 Dec 02 21:07	10°♐29'47	0°15'10
behind sun begin	3033 Dec 02 13:41	10°♐16'44	
behind sun end	3033 Dec 03 04:34	10°♐42'49	
	3033 Dec 30 05:58	0°♑	
morning rise	3034 Jan 23 04:01	17°♑32'11	
	3034 Feb 08 19:56	0°♒	
	3034 Mar 20 01:51	0°♓	
	3034 Apr 27 17:01	0°♈	
	3034 Jun 05 14:18	0°♉	
	3034 Jul 15 19:32	0°♊	
	3034 Aug 27 21:24	0°♋	
asc. node	3034 Sep 09 14:51	8°♋16'10	
	3034 Oct 16 11:59	0°♌	

retrograde	3034 Dec 23 20:29	22°♌08'02	
min. Earth dist.	3035 Jan 29 02:02	13°♌41'20	0.63768 AU
opposition	3035 Feb 01 21:18	12°♌09'58	4°31'02
greatest brilliancy	3035 Feb 01 06:06	12°♌25'11	-1.5m
direct	3035 Mar 12 14:47	3°♌02'27	
	3035 Jun 04 00:30	0°♍	
	3035 Jul 28 09:41	0°♎	
	3035 Sep 15 00:17	0°♏	
desc. node	3035 Sep 24 16:12	6°♏15'44	
	3035 Oct 30 00:50	0°♐	
evening set	3035 Nov 29 02:26	21°♐11'30	
	3035 Dec 11 05:44	0°♑	
max. Earth dist.	3035 Dec 14 19:30	2°♑37'11	2.43425 AU
	3036 Jan 20 06:57	0°♒	
conjunction	3036 Jan 23 20:57	2°♒44'46	-0°59'30
minimum elong	3036 Jan 23 19:16	2°♒41'33	0°59'29
	3036 Feb 27 22:46	0°♓	
morning rise	3036 Mar 29 02:45	23°♓44'34	
	3036 Apr 06 01:32	0°♈	
	3036 May 14 12:19	0°♉	
	3036 Jun 23 04:20	0°♊	
asc. node	3036 Jul 27 13:20	24°♊49'27	
	3036 Aug 03 22:54	0°♋	
	3036 Sep 17 22:12	0°♌	
	3036 Nov 07 18:48	0°♍	
retrograde	3037 Jan 26 11:10	26°♍34'48	
opposition	3037 Mar 07 14:35	16°♍52'38	4°16'48
greatest brilliancy	3037 Mar 07 14:27	16°♍52'46	-1.3m
min. Earth dist.	3037 Mar 07 16:18	16°♍50'55	0.67815 AU
direct	3037 Apr 17 09:33	7°♍03'57	
	3037 Jul 01 04:35	0°♎	
desc. node	3037 Aug 11 14:46	22°♎38'36	
	3037 Aug 23 20:46	0°♏	
	3037 Oct 09 06:49	0°♐	
	3037 Nov 20 18:37	0°♑	
	3037 Dec 30 16:51	0°♒	
evening set	3038 Jan 26 05:41	20°♒38'02	
	3038 Feb 07 03:15	0°♓	
	3038 Mar 17 01:54	0°♈	
conjunction	3038 Apr 04 00:49	14°♈07'08	-0°44'20
minimum elong	3038 Apr 04 04:11	14°♈13'42	0°44'18
	3038 Apr 24 11:12	0°♉	
max. Earth dist.	3038 May 24 19:06	23°♉03'17	2.40172 AU
	3038 Jun 03 03:04	0°♊	
morning rise	3038 Jun 12 02:29	6°♊36'22	
asc. node	3038 Jun 14 13:30	8°♊24'10	
	3038 Jul 14 17:30	0°♋	
	3038 Aug 27 18:24	0°♌	
	3038 Oct 13 20:26	0°♍	
	3038 Dec 04 23:14	0°♎	
retrograde	3039 Mar 02 21:57	29°♎52'13	
opposition	3039 Apr 11 00:42	20°♎49'45	2°47'16
greatest brilliancy	3039 Apr 11 10:27	20°♎40'13	-1.4m
min. Earth dist.	3039 Apr 14 22:31	19°♎18'04	0.65240 AU
direct	3039 May 22 11:34	10°♎47'14	
desc. node	3039 Jun 29 13:31	18°♎21'37	
	3039 Jul 26 13:49	0°♏	
	3039 Sep 16 18:29	0°♐	
	3039 Oct 30 19:23	0°♑	
	3039 Dec 10 05:09	0°♒	
	3040 Jan 17 19:43	0°♓	
	3040 Feb 24 22:04	0°♈	
	3040 Apr 03 13:09	0°♉	
evening set	3040 Apr 07 06:10	2°♉50'05	
asc. node	3040 May 01 12:34	21°♉07'27	
	3040 May 13 12:46	0°♊	
conjunction	3040 Jun 09 00:52	19°♊09'13	0°24'17
minimum elong	3040 Jun 08 23:22	19°♊06'32	0°24'16
	3040 Jun 24 10:13	0°♋	
max. Earth dist.	3040 Jul 15 11:26	14°♋31'40	2.53586 AU
morning rise	3040 Aug 03 23:54	27°♋41'48	
	3040 Aug 07 10:52	0°♌	
	3040 Sep 22 14:44	0°♍	
	3040 Nov 10 00:17	0°♎	
	3040 Dec 31 21:51	0°♏	
	3041 Mar 06 15:51	0°♐	
retrograde	3041 Apr 12 18:42	6°♐56'55	
desc. node	3041 May 16 12:14	0°♐07'10	
	3041 May 16 20:09	30°℞♏	
opposition	3041 May 19 11:12	29°♏02'13	-0°07'43
greatest brilliancy	3040 Oct 09 16:47	10°♍45'55	1.7m
min. Earth dist.	3041 May 26 19:19	26°♏19'18	0.56306 AU
direct	3041 Jun 28 14:46	19°♏30'56	
	3041 Aug 11 04:35	0°♐	
	3041 Oct 04 00:45	0°♑	
	3041 Nov 15 23:24	0°♒	
	3041 Dec 25 17:10	0°♓	
	3042 Feb 02 14:12	0°♈	
	3042 Mar 13 22:43	0°♉	
asc. node	3042 Mar 19 10:58	4°♉07'53	
	3042 Apr 23 15:57	0°♊	
evening set	3042 Jun 05 04:43	29°♊58'11	
	3042 Jun 05 05:46	0°♋	
	3042 Jul 19 17:43	0°♌	
conjunction	3042 Jul 27 16:42	5°♌14'33	1°02'44
minimum elong	3042 Jul 27 15:37	5°♌12'46	1°02'44
max. Earth dist.	3042 Aug 13 12:53	16°♌14'24	2.63207 AU
	3042 Sep 03 20:53	0°♍	
morning rise	3042 Sep 13 15:54	6°♍15'49	
	3042 Oct 21 04:14	0°♎	
	3042 Dec 08 09:55	0°♏	
	3043 Jan 27 02:01	0°♐	
	3043 Mar 21 19:15	0°♑	
desc. node	3043 Apr 03 10:53	6°♑18'34	
retrograde	3043 Jun 09 20:40	26°♑16'32	
opposition	3043 Jul 12 06:44	20°♑18'00	-4°52'38
greatest brilliancy	3043 Jul 13 14:23	19°♑53'17	-2.5m
min. Earth dist.	3043 Jul 20 04:16	17°♑50'48	0.43261 AU
direct	3043 Aug 16 10:06	13°♑07'10	
	3043 Oct 09 20:34	0°♒	
	3043 Nov 26 22:37	0°♓	
	3044 Jan 08 07:41	0°♈	
asc. node	3044 Feb 04 10:19	19°♈33'25	
	3044 Feb 18 23:22	0°♉	
	3044 Apr 01 11:07	0°♊	
	3044 May 15 10:26	0°♋	
	3044 Jun 29 22:31	0°♌	
evening set	3044 Jul 18 19:00	12°♌11'32	
	3044 Aug 15 14:00	0°♍	
conjunction	3044 Sep 03 22:09	12°♍19'21	1°06'34
minimum elong	3044 Sep 03 22:41	12°♍20'12	1°06'34
max. Earth dist.	3044 Sep 05 17:19	13°♍28'01	2.67497 AU
	3044 Oct 01 17:03	0°♎	
morning rise	3044 Oct 18 13:10	10°♎43'34	
	3044 Nov 17 16:35	0°♏	
	3045 Jan 03 04:39	0°♐	
desc. node	3045 Feb 18 10:57	0°♑08'27	
	3045 Feb 18 05:46	0°♑	
	3045 Apr 05 05:17	0°♒	

	3045 May 22 07:52	0°♓	
	3045 Jul 15 18:46	0°♈	
retrograde	3045 Aug 28 05:26	10°♈55'32	
min. Earth dist.	3045 Sep 24 23:03	6°♈22'59	0.37558 AU
opposition	3045 Sep 28 03:23	5°♈30'47	-5°21'16
greatest brilliancy	3045 Sep 27 17:41	5°♈37'26	-2.9m
direct	3045 Oct 27 15:58	0°♈33'18	
asc. node	3045 Dec 22 08:59	16°♈51'13	
	3046 Jan 16 00:13	0°♉	
	3046 Mar 06 19:31	0°♊	
	3046 Apr 23 12:46	0°♋	
	3046 Jun 10 05:02	0°♌	
	3046 Jul 28 01:10	0°♍	
evening set	3046 Aug 25 21:11	18°♍08'58	
	3046 Sep 13 14:01	0°♎	
max. Earth dist.	3046 Sep 28 13:50	9°♎34'08	2.66328 AU
conjunction	3046 Oct 10 04:33	17°♎01'41	0°44'52
minimum elong	3046 Oct 10 05:38	17°♎03'26	0°44'51
	3046 Oct 30 04:43	0°♏	
morning rise	3046 Nov 23 16:57	16°♏07'26	
	3046 Dec 14 10:59	0°♐	
desc. node	3047 Jan 06 10:11	15°♐37'02	
	3047 Jan 27 05:13	0°♑	
	3047 Mar 10 13:55	0°♒	
	3047 Apr 20 20:15	0°♓	
	3047 May 31 16:10	0°♈	
	3047 Jul 12 11:35	0°♉	
	3047 Aug 28 07:34	0°♊	
retrograde	3047 Oct 28 22:21	20°♊51'38	
asc. node	3047 Nov 09 07:41	19°♊53'21	
min. Earth dist.	3047 Nov 26 17:29	15°♊06'31	0.48305 AU
opposition	3047 Dec 04 22:10	12°♊08'38	1°23'48
greatest brilliancy	3047 Dec 04 10:50	12°♊18'57	-2.3m
direct	3048 Jan 07 12:32	5°♊03'01	
	3048 Mar 24 02:09	0°♋	
	3048 May 17 17:58	0°♌	
	3048 Jul 07 09:50	0°♍	
	3048 Aug 25 03:00	0°♎	
evening set	3048 Sep 30 20:45	23°♎25'29	
	3048 Oct 10 22:58	0°♏	
max. Earth dist.	3048 Oct 22 23:26	7°♏54'54	2.59819 AU
conjunction	3048 Nov 16 08:08	24°♏15'59	0°04'04
minimum elong	3048 Nov 16 08:16	24°♏16'12	0°04'04
behind sun begin	3048 Nov 15 12:54	23°♏43'20	
behind sun end	3048 Nov 17 03:38	24°♏49'06	
desc. node	3048 Nov 23 08:25	29°♏03'05	
	3048 Nov 24 17:38	0°♐	
morning rise	3049 Jan 03 12:02	27°♐52'37	
	3049 Jan 06 11:07	0°♑	
	3049 Feb 16 09:50	0°♒	
	3049 Mar 28 00:55	0°♓	
	3049 May 06 00:33	0°♈	
	3049 Jun 14 06:16	0°♉	
	3049 Jul 25 00:10	0°♊	
	3049 Sep 07 11:39	0°♋	
asc. node	3049 Sep 26 07:52	11°♋19'34	
	3049 Nov 03 17:26	0°♌	
retrograde	3049 Dec 09 14:10	7°♌30'09	
	3050 Jan 12 04:00	30°℞♋	
min. Earth dist.	3050 Jan 12 22:21	29°♋42'01	0.60413 AU
greatest brilliancy	3050 Jan 17 09:29	27°♋55'41	-1.6m
opposition	3050 Jan 18 05:14	27°♋36'03	4°11'05
direct	3050 Feb 24 18:30	18°♋53'19	
	3050 Apr 14 00:07	0°♌	
	3050 Jun 14 15:24	0°♍	
	3050 Aug 05 10:25	0°♎	
	3050 Sep 22 06:46	0°♏	
desc. node	3050 Oct 11 06:54	12°♏29'12	
	3050 Nov 06 03:04	0°♐	
evening set	3050 Nov 10 17:19	3°♐10'48	
max. Earth dist.	3050 Nov 25 07:35	13°♐24'39	2.48598 AU
	3050 Dec 18 09:39	0°♑	
conjunction	3051 Jan 01 14:04	10°♑25'36	-0°45'04
minimum elong	3051 Jan 01 12:15	10°♑22'13	0°45'02
	3051 Jan 27 15:13	0°♒	
morning rise	3051 Mar 01 09:37	25°♒15'04	
	3051 Mar 07 11:47	0°♓	
	3051 Apr 14 18:26	0°♈	
	3051 May 23 08:00	0°♉	
	3051 Jul 02 02:39	0°♊	
	3051 Aug 13 03:32	0°♋	
asc. node	3051 Aug 14 07:00	0°♋47'11	
	3051 Sep 28 00:56	0°♌	
	3051 Nov 22 08:14	0°♍	
retrograde	3052 Jan 14 04:06	13°♍46'07	
min. Earth dist.	3052 Feb 21 22:48	4°♍29'27	0.67002 AU
opposition	3052 Feb 23 09:46	3°♍54'24	4°31'59
greatest brilliancy	3052 Feb 23 03:42	4°♍00'29	-1.3m
	3052 Mar 04 13:04	30°℞♌	
direct	3052 Apr 03 13:18	24°♌18'39	
	3052 May 06 20:34	0°♍	
	3052 Jul 12 07:21	0°♎	
desc. node	3052 Aug 28 06:03	27°♎32'13	
	3052 Sep 01 04:43	0°♏	
	3052 Oct 16 21:37	0°♐	
	3052 Nov 28 05:10	0°♑	
evening set	3052 Dec 31 21:05	25°♑11'43	
	3053 Jan 07 03:41	0°♒	
	3053 Feb 14 15:21	0°♓	
max. Earth dist.	3053 Feb 27 18:17	10°♓21'28	2.36989 AU
conjunction	3053 Mar 05 14:14	14°♓58'06	-1°01'38
minimum elong	3053 Mar 05 16:09	15°♓01'51	1°01'37
	3053 Mar 24 14:42	0°♈	
	3053 May 01 23:40	0°♉	
morning rise	3053 May 15 20:33	10°♉38'37	
	3053 Jun 10 14:20	0°♊	
asc. node	3053 Jul 01 05:08	15°♊04'48	
	3053 Jul 22 04:20	0°♋	
	3053 Sep 04 09:33	0°♌	
	3053 Oct 22 07:47	0°♍	
	3053 Dec 17 05:54	0°♎	
retrograde	3054 Feb 16 17:51	16°♎57'52	
opposition	3054 Mar 28 09:26	7°♎37'11	3°30'38
greatest brilliancy	3054 Mar 28 16:39	7°♎30'04	-1.3m
min. Earth dist.	3054 Mar 30 19:17	6°♎40'03	0.67030 AU
	3054 Apr 19 12:30	30°℞♍	
direct	3054 May 08 18:14	27°♍36'37	
	3054 May 29 10:01	0°♎	
desc. node	3054 Jul 16 04:42	17°♎58'28	
	3054 Aug 07 23:28	0°♏	
	3054 Sep 25 19:42	0°♐	
	3054 Nov 08 00:36	0°♑	
	3054 Dec 18 03:52	0°♒	
	3055 Jan 25 15:29	0°♓	
	3055 Mar 04 15:06	0°♈	
evening set	3055 Mar 11 10:58	5°♈22'17	
	3055 Apr 12 02:38	0°♉	
conjunction	3055 May 17 09:48	26°♉40'20	-0°01'13
minimum elong	3055 May 17 09:52	26°♉40'26	0°01'12

behind sun begin	3055 May 16 07:02	25°♉50'41	
behind sun end	3055 May 18 12:42	27°♉30'08	
asc. node	3055 May 19 04:51	28°♉00'02	
	3055 May 21 21:48	0°♊	
max. Earth dist.	3055 Jul 01 14:17	29°♊16'49	2.48563 AU
	3055 Jul 02 14:55	0°♋	
morning rise	3055 Jul 17 06:11	10°♋10'07	
	3055 Aug 15 13:38	0°♌	
	3055 Sep 30 22:09	0°♍	
	3055 Nov 19 05:17	0°♎	
	3056 Jan 13 12:59	0°♏	
retrograde	3056 Mar 26 06:35	21°♏52'11	
opposition	3056 May 03 02:21	13°♏26'33	1°12'20
greatest brilliancy	3056 May 03 09:33	13°♏19'42	-1.6m
min. Earth dist.	3056 May 09 04:48	11°♏07'11	0.60494 AU
desc. node	3056 Jun 02 03:30	4°♏22'51	
direct	3056 Jun 13 01:17	3°♏35'04	
	3056 Aug 28 13:20	0°♐	
	3056 Oct 14 21:17	0°♑	
	3056 Nov 25 08:41	0°♒	
	3057 Jan 03 11:17	0°♓	
	3057 Feb 10 22:10	0°♈	
	3057 Mar 21 21:40	0°♉	
asc. node	3057 Apr 05 04:00	10°♉44'59	
	3057 May 01 06:00	0°♊	
evening set	3057 May 15 10:21	10°♊14'02	
	3057 Jun 12 11:33	0°♋	
conjunction	3057 Jul 10 08:52	19°♋03'52	0°52'29
minimum elong	3057 Jul 10 07:12	19°♋01'04	0°52'28
	3057 Jul 26 17:19	0°♌	
max. Earth dist.	3057 Aug 03 05:57	4°♌58'45	2.60043 AU
morning rise	3057 Aug 29 18:07	22°♌16'15	
	3057 Sep 10 18:40	0°♍	
	3057 Oct 28 08:22	0°♎	
	3057 Dec 16 12:57	0°♏	
	3058 Feb 06 22:03	0°♐	
	3058 Apr 15 01:25	0°♑	
desc. node	3058 Apr 20 02:55	1°♑23'43	
retrograde	3058 May 15 05:45	4°♑51'41	
	3058 Jun 12 15:09	30°℞♐	
opposition	3058 Jun 18 14:40	28°♐01'06	-2°51'11
greatest brilliancy	3058 Jun 19 11:11	27°♐43'33	-2.2m
min. Earth dist.	3058 Jun 27 02:31	25°♐07'36	0.48462 AU
direct	3058 Jul 26 07:06	19°♐36'59	
	3058 Sep 06 05:06	0°♑	
	3058 Oct 28 04:55	0°♒	
	3058 Dec 09 12:42	0°♓	
	3059 Jan 18 18:53	0°♈	
asc. node	3059 Feb 21 01:44	24°♈46'47	
	3059 Feb 28 03:56	0°♉	
	3059 Apr 10 17:34	0°♊	
	3059 May 24 00:14	0°♋	
evening set	3059 Jul 03 14:17	27°♋05'37	
	3059 Jul 08 00:34	0°♌	
conjunction	3059 Aug 21 07:40	28°♌40'11	1°08'31
minimum elong	3059 Aug 21 07:39	28°♌40'09	1°08'32
	3059 Aug 23 09:31	0°♍	
max. Earth dist.	3059 Aug 28 15:34	3°♍21'38	2.66478 AU
morning rise	3059 Oct 05 19:45	27°♍39'34	
	3059 Oct 09 12:18	0°♎	
	3059 Nov 25 20:18	0°♏	
	3060 Jan 12 05:33	0°♐	
	3060 Feb 29 01:03	0°♑	
desc. node	3060 Mar 07 01:56	4°♑21'14	
	3060 Apr 18 16:10	0°♒	
	3060 Jun 16 09:42	0°♓	
retrograde	3060 Jul 27 04:43	9°♓06'27	
opposition	3060 Aug 26 06:53	4°♓09'26	-6°46'25
greatest brilliancy	3060 Aug 26 22:24	3°♓59'05	-2.9m
min. Earth dist.	3060 Aug 28 14:55	3°♓32'07	0.37609 AU
	3060 Sep 13 07:57	30°℞♒	
direct	3060 Sep 25 16:06	28°♒58'54	
	3060 Oct 08 00:26	0°♓	
	3060 Dec 15 03:45	0°♈	
asc. node	3061 Jan 08 01:11	14°♈54'48	
	3061 Jan 31 05:02	0°♉	
	3061 Mar 17 11:55	0°♊	
	3061 May 02 04:24	0°♋	
	3061 Jun 17 18:30	0°♌	
	3061 Aug 04 00:44	0°♍	
evening set	3061 Aug 11 11:47	4°♍43'21	
max. Earth dist.	3061 Sep 19 15:35	29°♍33'45	2.67429 AU
	3061 Sep 20 08:04	0°♎	
conjunction	3061 Sep 26 03:44	3°♎42'32	0°55'51
minimum elong	3061 Sep 26 04:46	3°♎44'11	0°55'51
	3061 Nov 06 00:41	0°♏	
morning rise	3061 Nov 09 08:05	2°♏09'00	
	3061 Dec 21 15:59	0°♐	
desc. node	3062 Jan 23 00:59	21°♐46'30	
	3062 Feb 04 02:33	0°♑	
	3062 Mar 19 10:49	0°♒	
	3062 May 01 00:14	0°♓	
	3062 Jun 12 16:19	0°♈	
	3062 Jul 28 05:56	0°♉	
retrograde	3062 Oct 08 00:59	27°♉04'46	
min. Earth dist.	3062 Nov 03 23:14	22°♉09'50	0.43065 AU
opposition	3062 Nov 11 23:33	19°♉31'18	-0°52'04
greatest brilliancy	3062 Nov 11 17:51	19°♉36'01	-2.6m
asc. node	3062 Nov 26 01:24	15°♉24'30	
direct	3062 Dec 13 15:16	13°♉20'43	
	3063 Feb 10 01:08	0°♊	
	3063 Apr 07 01:31	0°♋	
	3063 May 27 17:34	0°♌	
	3063 Jul 15 23:08	0°♍	
	3063 Sep 02 02:23	0°♎	
evening set	3063 Sep 17 08:06	9°♎40'36	
max. Earth dist.	3063 Oct 13 15:00	26°♎37'33	2.62980 AU
	3063 Oct 18 18:59	0°♏	
conjunction	3063 Nov 01 23:29	9°♏20'31	0°21'40
minimum elong	3063 Nov 02 00:12	9°♏21'41	0°21'40
	3063 Dec 02 16:58	0°♐	
desc. node	3063 Dec 10 23:40	5°♐40'18	
morning rise	3063 Dec 18 03:15	10°♐36'23	
	3064 Jan 14 18:20	0°♑	
	3064 Feb 25 03:43	0°♒	
	3064 Apr 05 06:29	0°♓	
	3064 May 14 17:52	0°♈	
	3064 Jun 23 13:23	0°♉	
	3064 Aug 04 07:48	0°♊	
	3064 Sep 21 01:21	0°♋	
asc. node	3064 Oct 13 00:09	10°♋55'20	
retrograde	3064 Nov 24 06:22	21°♋19'21	
min. Earth dist.	3064 Dec 26 13:06	14°♋15'01	0.56188 AU
greatest brilliancy	3065 Jan 01 07:26	12°♋00'24	-1.8m
opposition	3065 Jan 02 04:46	11°♋39'35	3°30'08
direct	3065 Feb 07 08:29	3°♋28'07	
	3065 Apr 29 20:22	0°♌	
	3065 Jun 23 19:43	0°♍	
	3065 Aug 13 00:50	0°♎	
	3065 Sep 29 09:02	0°♏	

evening set	3065 Oct 24 23:13	16°♏56'32	
desc. node	3065 Oct 27 22:02	18°♏55'51	
max. Earth dist.	3065 Nov 10 14:37	28°♏15'05	2.53468 AU
	3065 Nov 13 03:38	0°♐	
conjunction	3065 Dec 13 01:14	20°♐59'04	-0°26'28
minimum elong	3065 Dec 13 00:07	20°♐57'05	0°26'27
	3065 Dec 25 13:41	0°♑	
morning rise	3066 Feb 04 13:30	0°♒23'38	
	3066 Feb 04 01:00	0°♒	
	3066 Mar 15 03:36	0°♓	
	3066 Apr 22 15:14	0°♈	
	3066 May 31 08:48	0°♉	
	3066 Jul 10 08:21	0°♊	
	3066 Aug 21 21:05	0°♋	
asc. node	3066 Aug 30 22:43	6°♋03'16	
	3066 Oct 08 12:23	0°♌	
	3066 Dec 22 19:08	0°♍	
retrograde	3066 Dec 31 17:40	0°♍30'43	
	3067 Jan 09 09:13	30°℞♌	
min. Earth dist.	3067 Feb 06 22:04	21°♌45'11	0.65196 AU
opposition	3067 Feb 09 21:43	20°♌33'20	4°35'26
greatest brilliancy	3067 Feb 09 09:34	20°♌45'31	-1.4m
direct	3067 Mar 21 04:58	11°♌14'33	
	3067 May 26 16:34	0°♍	
	3067 Jul 22 16:38	0°♎	
	3067 Sep 09 23:56	0°♏	
desc. node	3067 Sep 14 21:05	3°♏07'35	
	3067 Oct 25 06:10	0°♐	
	3067 Dec 06 12:16	0°♑	
evening set	3067 Dec 10 13:55	2°♑59'03	
max. Earth dist.	3067 Dec 30 02:54	17°♑31'51	2.40632 AU
	3068 Jan 15 12:52	0°♒	
conjunction	3068 Feb 07 00:23	17°♒22'40	-1°04'02
minimum elong	3068 Feb 06 23:34	17°♒21'04	1°04'03
	3068 Feb 23 03:25	0°♓	
	3068 Apr 01 04:50	0°♈	
morning rise	3068 Apr 15 10:59	11°♈12'12	
	3068 May 09 14:34	0°♉	
	3068 Jun 18 05:13	0°♊	
asc. node	3068 Jul 17 22:15	21°♊35'21	
	3068 Jul 29 20:25	0°♋	
	3068 Sep 12 10:03	0°♌	
	3068 Oct 31 18:53	0°♍	
	3069 Jan 06 03:19	0°♎	
retrograde	3069 Feb 03 02:50	4°♎17'25	
	3069 Feb 28 20:20	30°℞♍	
opposition	3069 Mar 15 03:16	24°♍41'53	4°02'52
greatest brilliancy	3069 Mar 15 06:04	24°♍39'06	-1.3m
min. Earth dist.	3069 Mar 16 00:45	24°♍20'30	0.67820 AU
direct	3069 Apr 25 04:52	14°♍47'52	
	3069 Jun 22 06:09	0°♎	
desc. node	3069 Aug 01 20:38	20°♎38'36	
	3069 Aug 17 23:49	0°♏	
	3069 Oct 04 03:05	0°♐	
	3069 Nov 15 20:22	0°♑	
	3069 Dec 25 20:17	0°♒	
	3070 Feb 02 06:53	0°♓	
evening set	3070 Feb 10 20:33	6°♓46'15	
	3070 Mar 12 05:22	0°♈	
	3070 Apr 19 14:52	0°♉	
conjunction	3070 Apr 20 11:58	0°♉40'38	-0°29'30
minimum elong	3070 Apr 20 14:33	0°♉45'36	0°29'27
	3070 May 29 07:07	0°♊	
asc. node	3070 Jun 04 20:27	4°♊49'56	
max. Earth dist.	3070 Jun 10 22:02	9°♊16'07	2.43146 AU
morning rise	3070 Jun 25 19:46	20°♊01'42	
	3070 Jul 09 21:22	0°♋	
	3070 Aug 22 20:02	0°♌	
	3070 Oct 08 12:56	0°♍	
	3070 Nov 28 06:38	0°♎	
	3071 Jan 30 11:12	0°♏	
retrograde	3071 Mar 11 10:04	7°♏56'44	
	3071 Apr 16 19:05	30°℞♎	
opposition	3071 Apr 19 03:14	29°♎05'54	2°16'13
greatest brilliancy	3071 Apr 19 13:03	28°♎56'22	-1.5m
min. Earth dist.	3071 Apr 23 19:56	27°♎16'35	0.63835 AU
direct	3071 May 30 11:57	19°♎05'06	
desc. node	3071 Jun 19 19:04	21°♎28'13	
	3071 Jul 15 21:43	0°♏	
	3071 Sep 10 08:57	0°♐	
	3071 Oct 25 06:52	0°♑	
	3071 Dec 05 00:11	0°♒	
	3072 Jan 12 18:09	0°♓	
	3072 Feb 19 22:28	0°♈	
	3072 Mar 29 15:21	0°♉	
evening set	3072 Apr 21 21:42	17°♉34'43	
asc. node	3072 Apr 21 19:43	17°♉31'00	
	3072 May 08 16:47	0°♊	
	3072 Jun 19 15:44	0°♋	
conjunction	3072 Jun 21 03:11	1°♋01'47	0°36'24
minimum elong	3072 Jun 21 01:22	0°♋58'37	0°36'23
max. Earth dist.	3072 Jul 22 23:21	22°♋49'04	2.56099 AU
	3072 Aug 02 17:01	0°♌	
morning rise	3072 Aug 13 19:28	7°♌20'54	
	3072 Sep 17 18:33	0°♍	
	3072 Nov 04 18:37	0°♎	
	3072 Dec 25 09:45	0°♏	
	3073 Feb 21 01:26	0°♐	
retrograde	3073 Apr 23 16:38	16°♐44'22	
desc. node	3073 May 06 17:26	15°♐39'51	
opposition	3073 May 29 15:41	9°♐09'53	-1°02'09
greatest brilliancy	3073 May 29 22:50	9°♐03'24	-2.0m
min. Earth dist.	3073 Jun 06 13:03	6°♐18'42	0.53668 AU
	3073 Jul 05 07:43	30°℞♏	
direct	3073 Jul 08 02:28	29°♏56'49	
	3073 Jul 10 21:50	0°♐	
	3073 Sep 25 20:54	0°♑	
	3073 Nov 09 11:50	0°♒	
	3073 Dec 19 20:58	0°♓	
	3074 Jan 28 02:33	0°♈	
	3074 Mar 08 17:26	0°♉	
asc. node	3074 Mar 09 19:27	0°♉48'34	
	3074 Apr 18 15:55	0°♊	
	3074 May 31 09:50	0°♋	
evening set	3074 Jun 15 23:56	10°♋36'59	
	3074 Jul 15 00:47	0°♌	
conjunction	3074 Aug 05 23:09	14°♌21'21	1°06'14
minimum elong	3074 Aug 05 22:28	14°♌20'15	1°06'14
max. Earth dist.	3074 Aug 19 06:06	22°♌57'35	2.64593 AU
	3074 Aug 30 04:51	0°♍	
morning rise	3074 Sep 21 21:22	14°♍29'02	
	3074 Oct 16 09:31	0°♎	
	3074 Dec 03 05:48	0°♏	
	3075 Jan 20 21:27	0°♐	
	3075 Mar 12 16:03	0°♑	
desc. node	3075 Mar 24 16:49	6°♑42'47	
	3075 May 11 06:33	0°♒	
retrograde	3075 Jun 26 07:58	10°♒41'14	
opposition	3075 Jul 27 14:38	5°♒11'34	-5°55'18

greatest brilliancy	3075 Jul 28 23:03	4°♒47'42	-2.7m
min. Earth dist.	3075 Aug 03 05:22	3°♒15'10	0.40698 AU
	3075 Aug 16 18:14	30℞♑	
direct	3075 Aug 30 01:10	28°♑48'09	
	3075 Sep 12 04:56	0°♒	
	3075 Nov 16 22:39	0°♓	
	3075 Dec 31 20:14	0°♈	
asc. node	3076 Jan 25 17:59	17°♈25'31	
	3076 Feb 12 15:43	0°♉	
	3076 Mar 26 20:38	0°♊	
	3076 May 10 07:06	0°♋	
	3076 Jun 25 02:32	0°♌	
evening set	3076 Jul 27 14:48	20°♌52'45	
	3076 Aug 10 22:06	0°♍	
max. Earth dist.	3076 Sep 10 22:38	19°♍43'45	2.67698 AU
conjunction	3076 Sep 12 02:26	20°♍27'58	1°03'37
minimum elong	3076 Sep 12 03:12	20°♍29'10	1°03'37
	3076 Sep 27 01:59	0°♎	
morning rise	3076 Oct 26 10:35	18°♎45'10	
	3076 Nov 12 22:37	0°♏	
	3076 Dec 29 02:19	0°♐	
desc. node	3077 Feb 08 15:58	27°♐27'39	
	3077 Feb 12 11:29	0°♑	
	3077 Mar 29 06:52	0°♒	
	3077 May 13 02:43	0°♓	
	3077 Jun 29 04:04	0°♈	
retrograde	3077 Sep 13 05:19	28°♈53'45	
min. Earth dist.	3077 Oct 09 21:31	24°♈26'47	0.38875 AU
opposition	3077 Oct 15 13:34	22°♈47'27	-3°46'41
greatest brilliancy	3077 Oct 14 22:30	22°♈58'29	-2.9m
direct	3077 Nov 14 11:19	17°♈31'06	
asc. node	3077 Dec 12 16:45	22°♈17'12	
	3078 Jan 01 18:27	0°♉	
	3078 Feb 26 22:19	0°♊	
	3078 Apr 17 11:11	0°♋	
	3078 Jun 04 23:20	0°♌	
	3078 Jul 23 05:28	0°♍	
evening set	3078 Sep 03 01:23	26°♍16'01	
	3078 Sep 08 22:44	0°♎	
max. Earth dist.	3078 Oct 03 23:07	15°♎59'04	2.65348 AU
conjunction	3078 Oct 18 08:49	25°♎17'54	0°37'04
minimum elong	3078 Oct 18 09:50	25°♎19'33	0°37'04
	3078 Oct 25 14:01	0°♏	
morning rise	3078 Dec 02 07:15	24°♏59'52	
	3078 Dec 09 17:10	0°♐	
desc. node	3078 Dec 27 14:43	12°♐12'35	
	3079 Jan 22 05:08	0°♑	
	3079 Mar 05 04:47	0°♒	
	3079 Apr 15 00:01	0°♓	
	3079 May 25 05:30	0°♈	
	3079 Jul 05 01:23	0°♉	
	3079 Aug 18 00:41	0°♊	
	3079 Oct 18 08:36	0°♋	
asc. node	3079 Oct 30 16:50	2°♋26'15	
retrograde	3079 Nov 08 10:06	2°♋58'45	
	3079 Nov 28 13:50	30℞♊	
min. Earth dist.	3079 Dec 08 11:26	26°♊44'11	0.51222 AU
opposition	3079 Dec 16 06:04	23°♊49'21	2°20'40
greatest brilliancy	3079 Dec 15 12:35	24°♊05'47	-2.1m
direct	3080 Jan 19 19:09	16°♊17'42	
	3080 Mar 13 03:16	0°♋	
	3080 May 11 07:10	0°♌	
	3080 Jul 02 03:22	0°♍	
	3080 Aug 20 07:45	0°♎	
	3080 Oct 06 08:01	0°♏	
evening set	3080 Oct 09 09:13	1°♏59'50	
max. Earth dist.	3080 Oct 29 08:00	15°♏13'10	2.57734 AU
desc. node	3080 Nov 13 13:48	25°♏31'27	
	3080 Nov 20 02:48	0°♐	
conjunction	3080 Nov 25 14:26	3°♐46'45	-0°06'59
minimum elong	3080 Nov 25 14:09	3°♐46'17	0°06'59
behind sun begin	3080 Nov 24 19:34	3°♐14'11	
behind sun end	3080 Nov 26 08:45	4°♐18'24	
	3081 Jan 01 17:44	0°♑	
morning rise	3081 Jan 14 08:03	9°♑08'22	
	3081 Feb 11 12:12	0°♒	
	3081 Mar 22 22:34	0°♓	
	3081 Apr 30 17:14	0°♈	
	3081 Jun 08 17:26	0°♉	
	3081 Jul 19 02:20	0°♊	
	3081 Aug 31 13:39	0°♋	
asc. node	3081 Sep 16 15:17	10°♋10'59	
	3081 Oct 22 01:55	0°♌	
retrograde	3081 Dec 17 20:14	16°♌28'00	
min. Earth dist.	3082 Jan 22 05:59	8°♌18'15	0.62390 AU
opposition	3082 Jan 26 17:47	6°♌30'40	4°24'59
greatest brilliancy	3082 Jan 26 00:15	6°♌48'11	-1.5m
	3082 Feb 14 17:07	30℞♋	
direct	3082 Mar 05 23:33	27°♋33'39	
	3082 Mar 26 21:22	0°♌	
	3082 Jun 07 22:14	0°♍	
	3082 Jul 31 03:14	0°♎	
	3082 Sep 17 11:01	0°♏	
desc. node	3082 Oct 01 12:48	9°♏10'06	
	3082 Nov 01 11:07	0°♐	
evening set	3082 Nov 20 21:25	13°♐34'12	
max. Earth dist.	3082 Dec 05 11:28	23°♐59'45	2.45757 AU
	3082 Dec 13 17:58	0°♑	
conjunction	3083 Jan 13 18:33	23°♑03'31	-0°54'06
minimum elong	3083 Jan 13 16:39	22°♑59'55	0°54'04
	3083 Jan 22 21:56	0°♒	
	3083 Mar 02 16:15	0°♓	
morning rise	3083 Mar 17 02:57	11°♓20'09	
	3083 Apr 09 20:29	0°♈	
	3083 May 18 07:44	0°♉	
	3083 Jun 26 23:40	0°♊	
asc. node	3083 Aug 04 13:21	27°♊45'14	
	3083 Aug 07 18:48	0°♋	
	3083 Sep 21 23:54	0°♌	
	3083 Nov 13 02:18	0°♍	
retrograde	3084 Jan 21 19:21	21°♍37'26	
min. Earth dist.	3084 Mar 01 09:19	12°♍05'31	0.67589 AU
opposition	3084 Mar 02 00:25	11°♍50'25	4°24'26
greatest brilliancy	3084 Mar 01 21:40	11°♍53'10	-1.3m
direct	3084 Apr 11 13:25	2°♍07'08	
	3084 Jul 05 08:22	0°♎	
desc. node	3084 Aug 18 11:35	24°♎55'34	
	3084 Aug 26 18:52	0°♏	
	3084 Oct 11 22:51	0°♐	
	3084 Nov 23 10:05	0°♑	
	3085 Jan 02 09:25	0°♒	
evening set	3085 Jan 14 18:11	9°♒33'01	
	3085 Feb 09 20:53	0°♓	
	3085 Mar 19 19:39	0°♈	
conjunction	3085 Mar 22 01:25	1°♈46'05	-0°53'31
minimum elong	3085 Mar 22 04:34	1°♈52'17	0°53'29
	3085 Apr 27 04:05	0°♉	
max. Earth dist.	3085 May 03 07:11	4°♉43'15	2.38071 AU
morning rise	3085 May 31 16:43	26°♉14'00	

	3085 Jun 05 18:16	0°♊	
asc. node	3085 Jun 21 13:40	11°♊36'46	
	3085 Jul 17 06:45	0°♋	
	3085 Aug 30 07:29	0°♌	
	3085 Oct 16 14:43	0°♍	
	3085 Dec 08 20:32	0°♎	
retrograde	3086 Feb 24 18:45	24°♎47'26	
opposition	3086 Apr 05 03:46	15°♎36'12	3°06'33
greatest brilliancy	3086 Apr 05 12:34	15°♎27'33	-1.4m
min. Earth dist.	3086 Apr 08 09:04	14°♎20'15	0.66172 AU
direct	3086 May 16 14:28	5°♎34'00	
desc. node	3086 Jul 06 10:11	18°♎01'33	
	3086 Jul 31 11:14	0°♏	
	3086 Sep 20 02:19	0°♐	
	3086 Nov 02 19:27	0°♑	
	3086 Dec 13 03:08	0°♒	
	3087 Jan 20 16:48	0°♓	
	3087 Feb 27 17:39	0°♈	
evening set	3087 Mar 27 08:22	21°♈34'40	
	3087 Apr 07 06:24	0°♉	
asc. node	3087 May 09 13:11	24°♉23'53	
	3087 May 17 02:58	0°♊	
conjunction	3087 May 31 03:46	10°♊15'10	0°14'00
minimum elong	3087 May 31 02:46	10°♊13'21	0°14'00
behind sun begin	3087 May 30 14:24	9°♊50'58	
behind sun end	3087 May 31 15:07	10°♊35'42	
	3087 Jun 27 20:57	0°♋	
max. Earth dist.	3087 Jul 10 14:52	8°♋51'44	2.51407 AU
morning rise	3087 Jul 28 04:27	20°♋51'49	
	3087 Aug 10 19:14	0°♌	
	3087 Sep 25 23:15	0°♍	
	3087 Nov 13 15:31	0°♎	
	3088 Jan 05 15:26	0°♏	
	3088 Mar 24 11:47	0°♐	
retrograde	3088 Apr 04 23:18	0°♐45'45	
	3088 Apr 15 22:39	30°℞♏	
opposition	3088 May 12 05:03	22°♏36'11	0°28'05
greatest brilliancy	3088 May 12 08:20	22°♏33'06	-1.7m
min. Earth dist.	3088 May 19 00:18	20°♏03'01	0.58293 AU
desc. node	3088 May 23 08:46	18°♏29'15	
direct	3088 Jun 21 18:34	12°♏54'15	
	3088 Aug 19 00:50	0°♐	
	3088 Oct 08 08:16	0°♑	
	3088 Nov 19 14:13	0°♒	
	3088 Dec 29 01:00	0°♓	
	3089 Feb 05 16:46	0°♈	
	3089 Mar 16 20:08	0°♉	
asc. node	3089 Mar 26 11:15	7°♉14'37	
	3089 Apr 26 08:08	0°♊	
evening set	3089 May 27 12:30	22°♊13'09	
	3089 Jun 07 16:44	0°♋	
conjunction	3089 Jul 20 10:49	28°♋57'13	0°59'05
minimum elong	3089 Jul 20 09:28	28°♋54'59	0°59'04
	3089 Jul 22 00:41	0°♌	
max. Earth dist.	3089 Aug 09 08:25	12°♌03'30	2.61890 AU
	3089 Sep 06 01:47	0°♍	
morning rise	3089 Sep 07 09:29	0°♍50'48	
	3089 Oct 23 10:51	0°♎	
	3089 Dec 11 00:51	0°♏	
	3090 Jan 30 15:40	0°♐	
	3090 Mar 28 17:52	0°♑	
desc. node	3090 Apr 10 07:34	5°♑26'11	
retrograde	3090 May 29 02:45	16°♑57'34	
opposition	3090 Jul 01 10:48	10°♑35'05	-3°59'56
greatest brilliancy	3090 Jul 02 14:42	10°♑12'19	-2.4m
min. Earth dist.	3090 Jul 09 20:05	7°♑51'36	0.45550 AU
direct	3090 Aug 06 20:50	2°♑48'32	
	3090 Oct 18 12:18	0°♒	
	3090 Dec 02 05:44	0°♓	
	3091 Jan 12 11:44	0°♈	
asc. node	3091 Feb 11 10:23	21°♈58'21	
	3091 Feb 22 10:56	0°♉	
	3091 Apr 05 10:48	0°♊	
	3091 May 19 00:49	0°♋	
	3091 Jul 03 06:25	0°♌	
evening set	3091 Jul 12 23:19	6°♌19'07	
	3091 Aug 18 18:05	0°♍	
conjunction	3091 Aug 29 17:53	7°♍01'05	1°07'51
minimum elong	3091 Aug 29 18:12	7°♍01'35	1°07'51
max. Earth dist.	3091 Sep 02 23:05	9°♍42'24	2.67147 AU
	3091 Oct 04 20:39	0°♎	
morning rise	3091 Oct 13 16:50	5°♎37'14	
	3091 Nov 20 23:44	0°♏	
	3092 Jan 06 20:23	0°♐	
	3092 Feb 22 14:03	0°♑	
desc. node	3092 Feb 26 07:33	2°♑23'21	
	3092 Apr 09 20:11	0°♒	
	3092 May 29 21:02	0°♓	
retrograde	3092 Aug 14 15:56	27°♓20'14	
opposition	3092 Sep 13 20:12	22°♓16'49	-6°15'20
min. Earth dist.	3092 Sep 13 02:18	22°♓28'41	0.37169 AU
greatest brilliancy	3092 Sep 13 20:36	22°♓16'34	-2.9m
direct	3092 Oct 13 09:57	17°♓22'24	
	3092 Nov 29 21:37	0°♈	
asc. node	3092 Dec 29 09:39	15°♈30'42	
	3093 Jan 22 15:10	0°♉	
	3093 Mar 10 22:49	0°♊	
	3093 Apr 26 14:52	0°♋	
	3093 Jun 12 17:59	0°♌	
	3093 Jul 30 07:11	0°♍	
evening set	3093 Aug 19 18:06	12°♍54'10	
	3093 Sep 15 17:36	0°♎	
max. Earth dist.	3093 Sep 24 20:28	5°♎48'45	2.66927 AU
conjunction	3093 Oct 04 03:54	11°♎46'03	0°49'48
minimum elong	3093 Oct 04 04:59	11°♎47'47	0°49'48
	3093 Nov 01 09:40	0°♏	
morning rise	3093 Nov 17 11:08	10°♏30'09	
	3093 Dec 16 20:24	0°♐	
desc. node	3094 Jan 13 06:43	18°♐33'38	
	3094 Jan 29 22:17	0°♑	
	3094 Mar 13 17:02	0°♒	
	3094 Apr 24 11:52	0°♓	
	3094 Jun 04 23:16	0°♈	
	3094 Jul 17 21:35	0°♉	
	3094 Sep 06 21:49	0°♊	
retrograde	3094 Oct 20 07:54	11°♊31'55	
asc. node	3094 Nov 16 07:57	6°♊27'19	
min. Earth dist.	3094 Nov 17 04:50	6°♊09'47	0.45918 AU
opposition	3094 Nov 25 11:33	3°♊16'15	0°31'49
greatest brilliancy	3094 Nov 25 07:04	3°♊20'11	-2.4m
	3094 Dec 05 11:55	30°℞♉	
direct	3094 Dec 28 05:46	26°♉34'05	
	3095 Jan 21 06:42	0°♊	
	3095 Mar 30 06:35	0°♋	
	3095 May 21 22:01	0°♌	
	3095 Jul 10 21:48	0°♍	
	3095 Aug 28 09:06	0°♎	
evening set	3095 Sep 25 14:09	17°♎56'23	
	3095 Oct 14 04:30	0°♏	
max. Earth dist.	3095 Oct 19 11:29	3°♏28'10	2.61340 AU

conjunction	3095 Nov 10 14:48	18°♏10'32	0°11'42
minimum elong	3095 Nov 10 15:13	18°♏11'13	0°11'41
behind sun begin	3095 Nov 10 01:33	17°♏48'19	
behind sun end	3095 Nov 11 04:52	18°♏34'09	
	3095 Nov 28 01:35	0°♐	
desc. node	3095 Dec 01 05:04	2°♐09'11	
morning rise	3095 Dec 27 18:20	20°♐37'06	
	3096 Jan 09 23:37	0°♑	
	3096 Feb 20 03:41	0°♒	
	3096 Mar 31 00:17	0°♓	
	3096 May 09 04:42	0°♈	
	3096 Jun 17 15:02	0°♉	
	3096 Jul 28 16:19	0°♊	
	3096 Sep 12 01:18	0°♋	
asc. node	3096 Oct 03 07:43	12°♋05'49	
	3096 Nov 19 12:39	0°♌	
retrograde	3096 Dec 03 03:56	1°♌14'29	
	3096 Dec 16 06:43	30°℞♋	
min. Earth dist.	3097 Jan 05 14:36	23°♋45'37	0.58624 AU
opposition	3097 Jan 11 13:11	21°♋25'06	3°57'07
greatest brilliancy	3097 Jan 10 16:05	21°♋45'55	-1.7m
direct	3097 Feb 17 12:16	12°♋55'32	
	3097 Apr 20 15:08	0°♌	
	3097 Jun 17 20:38	0°♍	
	3097 Aug 07 23:11	0°♎	
	3097 Sep 24 15:21	0°♏	
desc. node	3097 Oct 18 03:36	15°♏29'58	
evening set	3097 Nov 03 07:48	26°♏26'45	
	3097 Nov 08 12:05	0°♐	
max. Earth dist.	3097 Nov 18 15:51	7°♐02'23	2.50842 AU
	3097 Dec 20 21:26	0°♑	
conjunction	3097 Dec 23 19:25	2°♑07'22	-0°37'24
minimum elong	3097 Dec 23 17:51	2°♑04'31	0°37'24
	3098 Jan 30 06:20	0°♒	
morning rise	3098 Feb 18 01:32	14°♒21'56	
	3098 Mar 10 06:07	0°♓	
	3098 Apr 17 14:59	0°♈	
	3098 May 26 05:39	0°♉	
	3098 Jul 05 01:10	0°♊	
	3098 Aug 16 04:33	0°♋	
asc. node	3098 Aug 21 07:19	3°♋29'07	
	3098 Oct 01 13:40	0°♌	
	3098 Nov 29 06:38	0°♍	
retrograde	3099 Jan 08 11:27	8°♍39'11	
	3099 Feb 14 13:38	30°℞♌	
min. Earth dist.	3099 Feb 15 13:25	29°♌36'14	0.66318 AU
opposition	3099 Feb 17 17:16	28°♌44'14	4°35'00
greatest brilliancy	3099 Feb 17 08:25	28°♌53'07	-1.3m
direct	3099 Mar 29 12:44	19°♌15'39	
	3099 May 16 05:31	0°♍	
	3099 Jul 16 15:25	0°♎	
	3099 Sep 04 21:05	0°♏	
desc. node	3099 Sep 05 02:42	0°♏08'53	
	3099 Oct 20 10:42	0°♐	
	3099 Dec 01 18:59	0°♑	
evening set	3099 Dec 22 19:15	15°♑34'36	
	3100 Jan 10 19:14	0°♒	
max. Earth dist.	3100 Jan 22 12:35	9°♒01'58	2.38183 AU
	3100 Feb 18 08:36	0°♓	
conjunction	3100 Feb 22 03:44	2°♓59'20	-1°04'30
minimum elong	3100 Feb 22 04:23	3°♓00'36	1°04'30
	3100 Mar 28 08:46	0°♈	
morning rise	3100 May 03 19:06	28°♈30'29	
	3100 May 05 17:24	0°♉	
	3100 Jun 14 07:01	0°♊	
asc. node	3100 Jul 09 05:33	18°♊12'56	
	3100 Jul 25 19:55	0°♋	
	3100 Sep 08 02:22	0°♌	
	3100 Oct 26 10:21	0°♍	
	3100 Dec 23 21:29	0°♎	
retrograde	3101 Feb 11 21:27	12°♎01'06	
opposition	3101 Mar 23 17:25	2°♎33'17	3°45'11
greatest brilliancy	3101 Mar 23 22:46	2°♎27'58	-1.3m
min. Earth dist.	3101 Mar 25 10:37	1°♎52'27	0.67509 AU
	3101 Mar 30 05:41	30°℞♍	
direct	3101 May 03 23:45	22°♍35'17	
	3101 Jun 11 05:46	0°♎	
desc. node	3101 Jul 24 01:17	19°♎10'01	
	3101 Aug 12 16:19	0°♏	
	3101 Sep 29 19:15	0°♐	
	3101 Nov 11 20:32	0°♑	
	3101 Dec 21 23:13	0°♒	